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European Economy appears twice a year. It contains important reports and communications from the Commission to the Council and the Parliament on the economic situation and developments, in particular its *Broad economic policy guidelines* and the *EU Economic review*. As a complement to *European Economy*, the series *Reports and studies* focuses on problems concerning economic policy.

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- Series A — 'Economic trends' appears monthly except in August and describes in a more succinct way financial and economic developments in the European Union.

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Abbreviations and symbols used

Member States

B	Belgium
DK	Denmark
D	Germany
EL	Greece
E	Spain
F	France
IRL	Ireland
I	Italy
L	Luxembourg
NL	The Netherlands
A	Austria
P	Portugal
FIN	Finland
S	Sweden
UK	United Kingdom
D_90	Germany prior to unification in 1990

EU	European Union
EU-12–	European Community, 12 Member States excluding East Germany
EU-12+	European Community, 12 Member States including East Germany
EU-15	European Community, 15 Member States
EUR-11	Group of 11 Member States participating in monetary union (B, D, E, F, IRL, I, L, NL, A, P, FIN)

Currencies

ECU	European currency unit
EUR	Euro
ATS	Austrian schilling
BEF	Belgian franc
DEM	German mark (Deutschmark)
DKK	Danish krone
ESP	Spanish peseta
FIM	Finnish markka
FRF	French franc
GBP	Pound sterling
GRD	Greek drachma
IEP	Irish pound (punt)
ITL	Italian lira
LUF	Luxembourg franc
NLG	Dutch guilder
PTE	Portuguese escudo
SEK	Swedish krona
CAD	Canadian dollar
CHF	Swiss franc
JPY	Japanese yen
SUR	Russian rouble
USD	US dollar

Other abbreviations

CPI	Consumer price index
ECB	European Central Bank
ECSC	European Coal and Steel Community
EDF	European Development Fund
EIB	European Investment Bank
EMCF	European Monetary Cooperation Fund
EMS	European Monetary System
EMU	Economic and monetary union
ERM	Exchange rate mechanism
Euratom	European Atomic Energy Community
Eurostat	Statistical Office of the European Communities
FDI	Foreign direct investment
GDP (GNP)	Gross domestic (national) product
GFCF	Gross fixed capital formation
HICP	Harmonised index of consumer prices
ILO	International Labour Organisation
IMF	International Monetary Fund
LDCs	Less developed countries
Mio	million
Mrd	1 000 million
NCI	New Community Instrument
OCTs	overseas countries and territories
OECD	Organisation for Economic Cooperation and Development
OPEC	Organisation of Petroleum Exporting Countries
PPS	purchasing power standard
SMEs	small and medium-sized enterprises
VAT	value added tax
:	not available
–	none

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Favourable outlook clouded by oil price shock

Encouraging macro-economic setting …

The EU has not enjoyed such a favourable economic situation for a decade. Following a subdued economic performance during 1991–96, the EU has experienced a strong pick-up in economic growth during the past three years. After a temporary and mild slowdown in the wake of the Asian and Russian economic and financial crises, the recovery gained significant momentum from the second half of 1999, with growth reaching a high speed of 3.5 % in the first half of 2000. A distinctive and welcome feature of this upswing has been the strong gains in employment and the substantial decline in the unemployment rate. Core inflation has remained low, reflecting both continued wage moderation and better functioning product and service markets.

… as policy resolve starts to bear fruit.

While this performance has clearly benefited from a supportive macroeconomic policy mix and a favourable external environment, it is also increasingly the result of the structural policies that have been in place for some time which are now bearing fruit in a buoyant macroeconomic setting.

Growth to settle at relatively high path.

However, since the summer of 2000, there is mounting evidence that the pace of economic growth is moderating somewhat as the prolonged surge in oil prices is having more substantial effects than initially suspected. Furthermore, with the economy growing above potential and a resurgence of inflationary risks due to higher import prices, the ECB and other European central banks have raised policy rates with a view to preventing negative spillover effects from higher import prices into domestically-generated inflation. The demand-restraining impact of the monetary policy tightening will increasingly take effect. Nevertheless expectations are for growth to settle at a relatively high rate of about three over the next two years, as good employment prospects and high confidence combine with a supportive external environment. Other reasons why the pace of economic growth in the EU is expected to remain robust are the demand stimulus, stemming from tax reductions and some additional government spending in response to the strong growth of tax revenues, and the supply-boosting structural reforms.

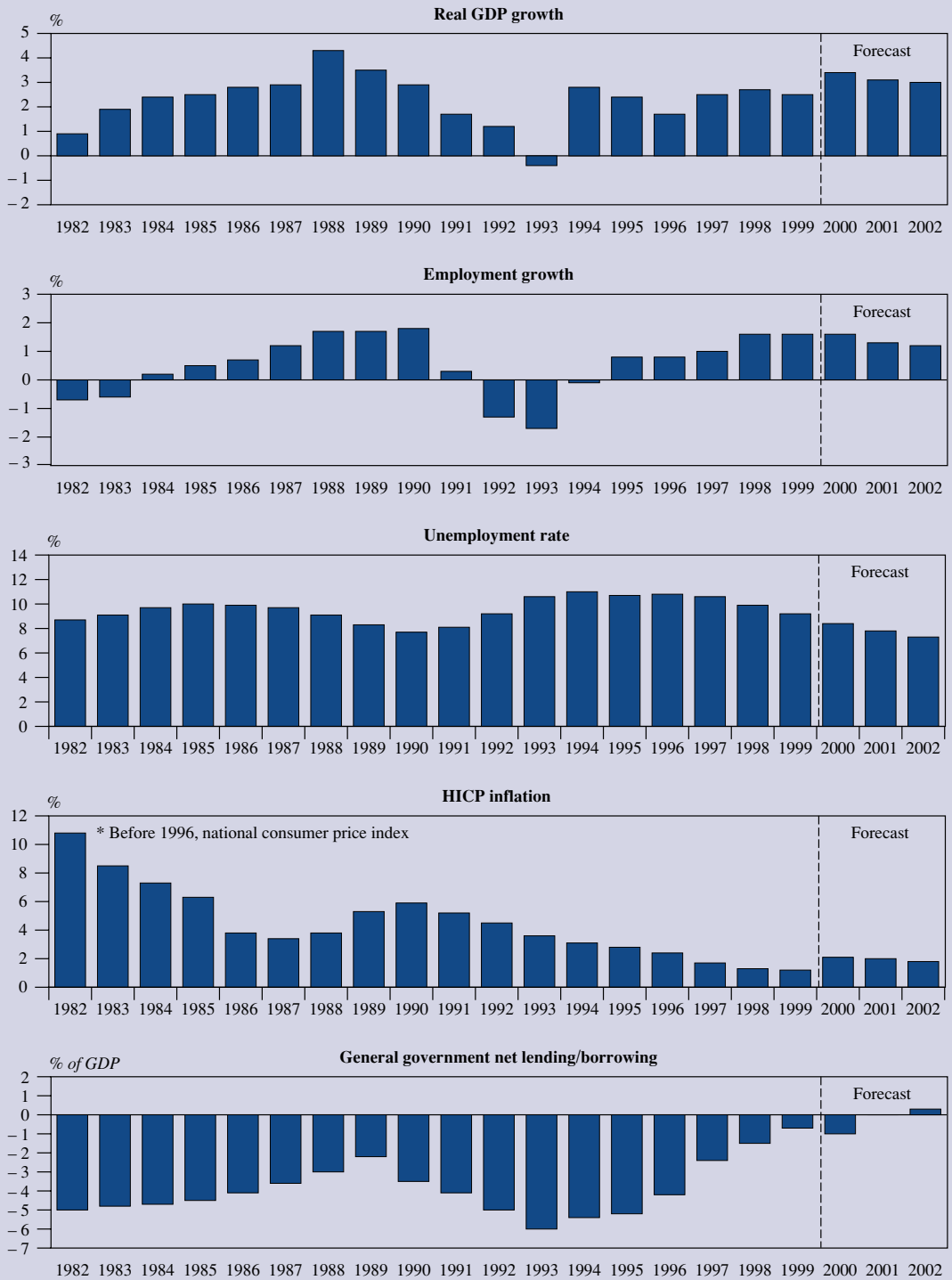
With continued strong job creation …

In this climate of sustained economic growth and continued moderate wage increases, job creation will remain dynamic. With continued employment growth of about 1.25 % over the next two years, an equivalent of 4 million net jobs will be created. New jobs are overwhelmingly concentrated in the services sector, with part-time employment and fixed-term contracts playing a prominent role. Although rising steadily, the employment rate is still low, both in historical and international terms. The improved employment situation combines with active labour market measures to draw people into the labour market, contributing to a steady growth of the labour force. As a result, the employment gains will not result in as large a fall in the number of unemployed. Nevertheless, the unemployment rate will continue its downward path, approaching 7 % in 2002, the best performance for more than two decades.

… in relatively benign inflation setting.

Although headline inflation has edged up in response to higher oil and commodity prices, the impact of which was compounded in the euro area by the weakening of the euro, underlying inflation remains relatively subdued in the EU. In certain Member States with mature recoveries, however, inflationary pressures have become a cause of concern. The benign inflation environment reflects in part the continued slack in

Graph 1: **Economic outlook in the EU**



NB: General government net lending/borrowing excluding UMTS.
Source: Commission services.

both product and labour markets. Other factors too are playing a significant role, including continued wage moderation, increased competition thanks to deregulation and liberalisation of certain network industries (especially telecommunications, electricity and gas) and technological advances.

Risks and uncertainties.

While the overall outlook remains broadly encouraging, there are significant risks and uncertainties. Whereas at the beginning of this year upside risks were seen to be predominant, now the uncertainties surrounding economic prospects are rather more evenly distributed.

Will steep rise in oil prices …

A major uncertainty at this juncture concerns the future evolution of oil prices and their likely impact on economic activity in the EU. Oil prices have more than tripled since the low reached in late 1998 and they have been extremely volatile since the summer. With many oil producers facing capacity constraints, relatively low stocks and the continued strength of global demand, upward pressures on oil prices will remain strong in the near future. However, in the absence of major supply disruptions, expectations centre on a gradual decline in oil prices from the spring of 2001, falling gradually to well below USD 30 per barrel in 2002.

… impair the recovery?

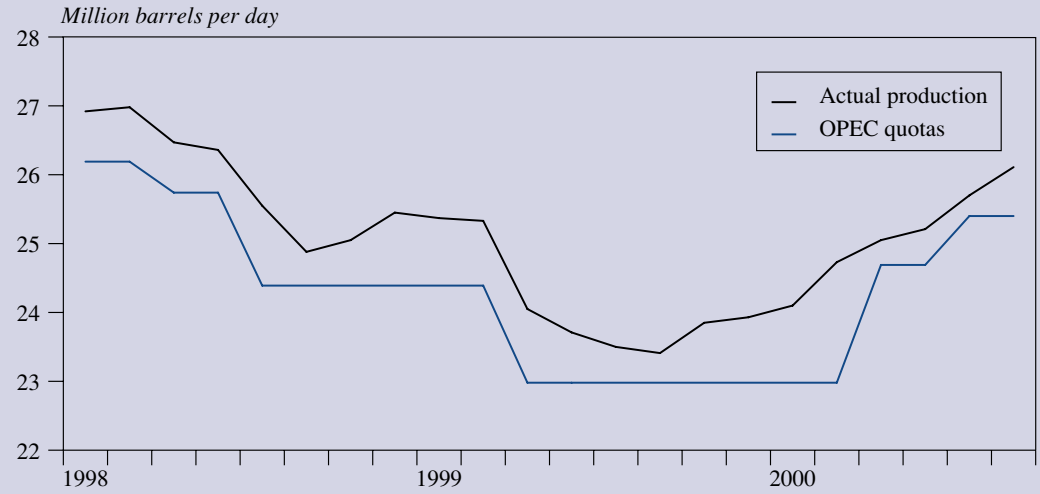
There are several reasons to believe that the adverse consequences of the surge in oil prices will not be as pronounced as on similar occasions in the past. Firstly, despite the steep rise, oil prices in real terms are still below the levels recorded after the second oil price shock in 1979–80, although they match the levels of the mid-1970s. Secondly, thanks to energy conservation measures, the substitution by other energy sources for oil and the shift of economic activity to services, the dependence of the EU economy on oil has been almost halved during the last three decades. As a result, the supply-side impact of higher oil prices is likely to remain modest. Thirdly, with a stability culture being firmly established, as reflected in continued low inflation expectations, the economy is now less prone to engage in a detrimental cost-push inflation spiral. These reasons notwithstanding, the observed rise in oil prices will have more than a negligible economic impact as the deterioration in the terms of trade and the resulting loss to net income are considerable. The EU economy will be able to weather this adverse shock provided consumer and business confidence is maintained and the right policy measures are taken. In this context, it will be essential to ensure the continuation of a balanced policy mix. Wage increases need to remain moderate, thereby averting second-round effects on core inflation. At present, there is no evidence of any slippage in salaries to compensate for the loss in purchasing power and in several countries moderate wage agreements extend to the end of 2001. Moreover, tax cuts and lower social security contributions could temper wage claims and contain unit labour costs. Furthermore, governments should refrain from resorting to discretionary budgetary actions, especially reductions in energy taxes, to compensate households and businesses for the induced income losses, whilst allowing for income support to socially vulnerable groups. Finally, from a more medium-term perspective, measures should be taken — including, where appropriate, common responses — to reduce further the oil dependence of the economy.

Smooth unwinding of global economic and financial imbalances?

A second important uncertainty relates to the series of global economic and financial imbalances, which have been building up for several years. These imbalances could considerably hamper economic prospects in the EU if they were to unwind in a disorderly fashion. They include firstly the uneven growth pattern among the major currency areas and the associated rising current account imbalances, especially the

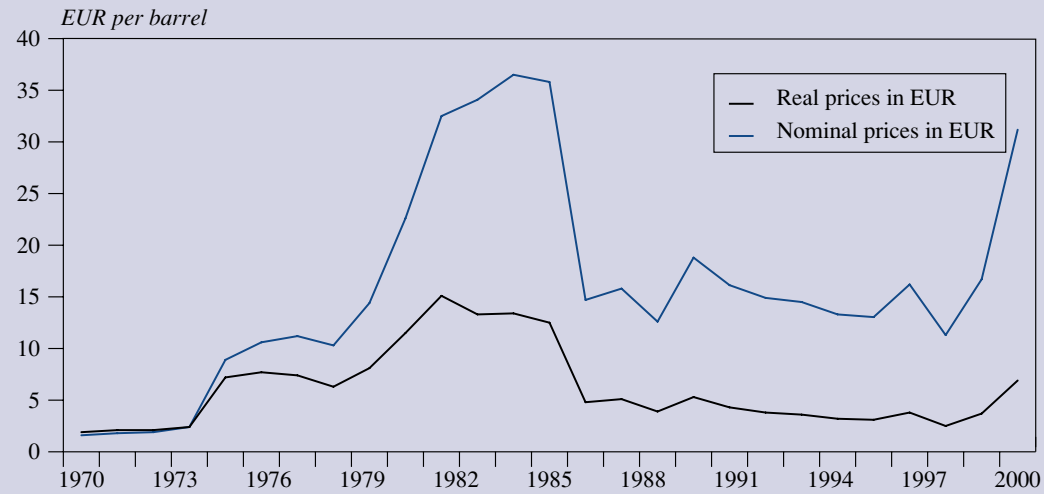
Graph 2: **Oil price shock**

OPEC quotas and actual production of oil, excluding Iraq



Source: IEA.

Brent oil prices



Source: Commission services.

Impact of a USD 12 increase in oil prices, euro area

(% p.a.)

	Year 1	Year 2	Year 3
GDP growth	– 0.2	– 0.4	– 0.2
Inflation	0.7	0.4	0.2

Source: Commission services.

record current account deficit in the United States. A second and related imbalance concerns the significant misalignments of the key currencies relative to fundamentals. Finally, the still very high equity market valuations, particularly in the United States, constitute an additional cause for concern. Whilst sustained, domestically-driven growth in the EU would contribute to a smooth unwinding of these imbalances, a smooth return to sustainable demand growth in the United States will be essential.

Productivity acceleration in the EU?

A third uncertainty concerns whether, and with what speed, traits of the 'new economy' are entering the EU, allowing the EU to experience an acceleration in productivity growth in the coming years similar to that which has occurred in the United States. Structural reforms and the promotion of a knowledge-based economy are now at the heart of the Union's reform agenda. The achievements in the field of liberalisation and privatisation are already substantial. Furthermore, deeper integration of product, service and financial markets, labour market reforms and the adoption of new technologies are acting to raise the productive potential of the EU economy. As a result, competition has intensified, prices have come down and the functioning of markets has improved. The macroeconomic impact in terms of productivity improvements and the expansion of potential is difficult to measure. But it is likely that all these developments are being more successful than is currently recognised in shifting the production frontier upward, increasing productivity and promoting stronger, non-inflationary growth.

Euro area: ensuring a continued appropriate policy mix

The best economic prospects for 10 years …

Following the successful convergence process and the launch of the euro on 1 January 1999, economic conditions have improved significantly in the euro area. Indeed, the economy seems to have entered a new phase of strong growth and enjoys favourable medium-term prospects. Furthermore, recent and prospective developments indicate an expansion more broadly based across the Member States with a gradual convergence of economic growth at a high rate. However, recoveries in certain countries are more advanced and are continuing at an exceptionally strong pace, leading increasingly to concerns about overheating. Despite the strength of economic activity and notwithstanding the surge in oil prices and the depreciation of the euro, core inflation remains well contained in the euro area as a whole and there is little evidence so far that rising import prices are spilling over into the wage formation process.

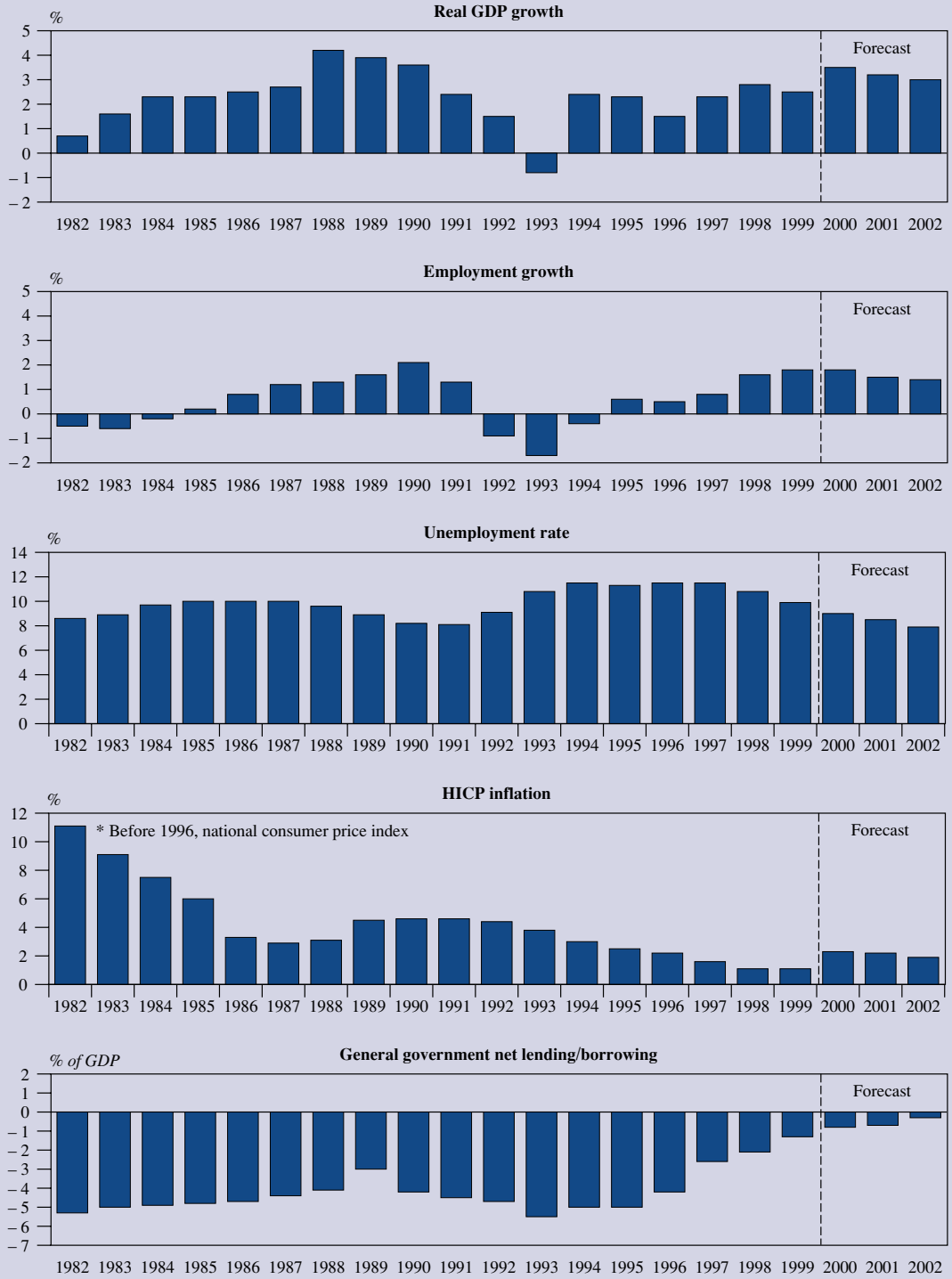
… reflect a sustained revival of domestic demand and a favourable international environment.

Domestic demand has been the main engine of economic growth in the euro area over the last couple of years, expanding at a steady annual rate of 3 %, and that is expected to continue for some time. The strength of domestic demand reveals both the adequacy of the macroeconomic policy mix and the progress made on structural reforms in recent years. With domestic demand providing a solid underlying base, movements in the pace of economic growth in the euro area in recent years have largely reflected changing conditions in global demand. The marked shift in the external environment from adverse to distinctly supportive, reflected both in a strengthening of world trade and an undervalued euro exchange rate, has triggered a resurgence in exports.

Sustaining and prolonging the recovery.

With the recovery now having taken root and with prospects for euro-area real GDP growth of about 3 % over the next two years, the most pressing challenge is to implement policies that sustain the recovery. This will involve fostering a long-lasting, **domestic-driven** expansion free of inflationary bottlenecks, whilst making the economy less vulnerable to external disturbances. A sustained expansion of domestic demand in the euro area is not only needed to achieve higher living standards and

Graph 3: **Economic outlook in the euro area**



NB: General government net lending/borrowing excluding UMTS.
Source: Commission services.

employment, it is also necessary to achieve a smooth re-balancing of global growth patterns.

Avoiding policy-mix mistakes of the past.

Structural reforms aimed at strengthening the supply side — building on the strategy adopted by the Lisbon European Council — will be crucial in sustaining the current expansion over the medium term and making the economy more shock-resilient. However, an adequate macroeconomic policy mix is a pre-requisite for keeping the economy on a growth path of at least 3 %, in a setting of continued price stability. In light of the experience of the late 1980s when an unbalanced macroeconomic policy mix choked off the recovery, the current and prospective policy mix raise two concerns. Firstly, while monetary conditions have remained accommodative, as the tightening stance of interest-rate policy has been entirely offset by a protracted weakening of the euro, this configuration carries the risk of creating an unbalanced growth pattern with exports rather than domestic demand being the most dynamic component of final demand. Secondly, tax cuts and additional government spending, in response to buoyant tax intake, risk generating a fiscal stimulus at a time of already robust demand growth.

Tightening cycle of monetary policy.

In response to a progressive strengthening of the upward risks to price stability in the medium term, the ECB has raised its key official interest rate by a cumulative 225 basis points since late 1999. With wage growth generally appropriate in euro-area Member States, the inflationary impact, including the potential second-round effects, of the unexpectedly high and enduring increases in oil prices combined with the protracted weakness of the euro, emerged as the main source of concern in the second pillar of the Eurosystem's strategy. Meanwhile, money growth has remained above the 4.5 % reference value and credit to the private sector has continued to grow at a fast pace. In an environment of improving growth prospects, these developments warranted a gradual move to a less accommodating stance of monetary policy. This pre-emptive monetary tightening, which has implied a considerable increase in real short-term interest rates measured on the basis of core inflation, has been successful in keeping inflationary expectations low despite rising headline inflation.

Evolution of the euro exchange rate is source of concern …

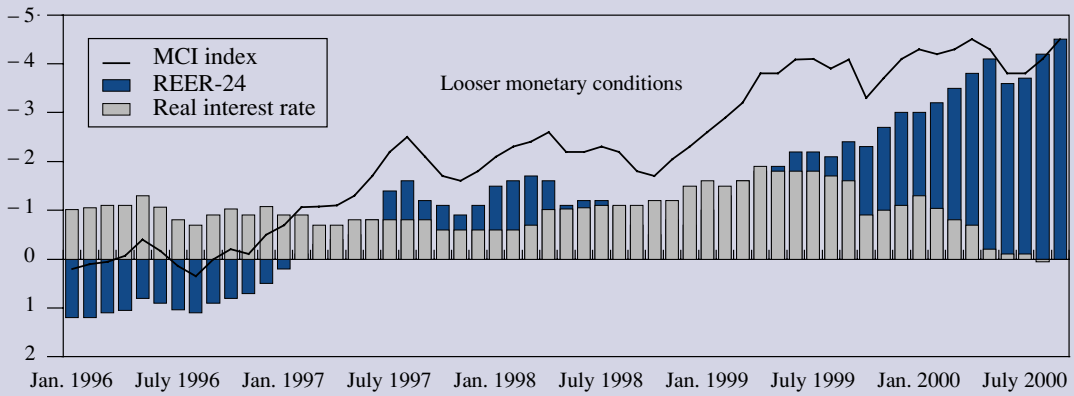
The current level of the euro implies a significant undervaluation relative to fundamentals. The marked weakness of the euro, especially against the dollar, can primarily be attributed to the relative cyclical positions of the euro area and the United States. However, several other factors are widely seen to be at play, including a re-balancing of portfolios towards higher expected real returns in the United States, structural deficiencies in the euro area and the markets' adverse perceptions of the economic policy management of the euro area. The negative, medium-term internal and external economic implications of a prolonged overshooting of the euro exchange rate are likely to more than offset the short-term benefits reaped in terms of higher exports. Growing recognition of these important economic consequences led to a concerted exchange rate intervention by the G7 central banks in September 2000, followed by unilateral interventions by the ECB in early November.

… requiring determined action.

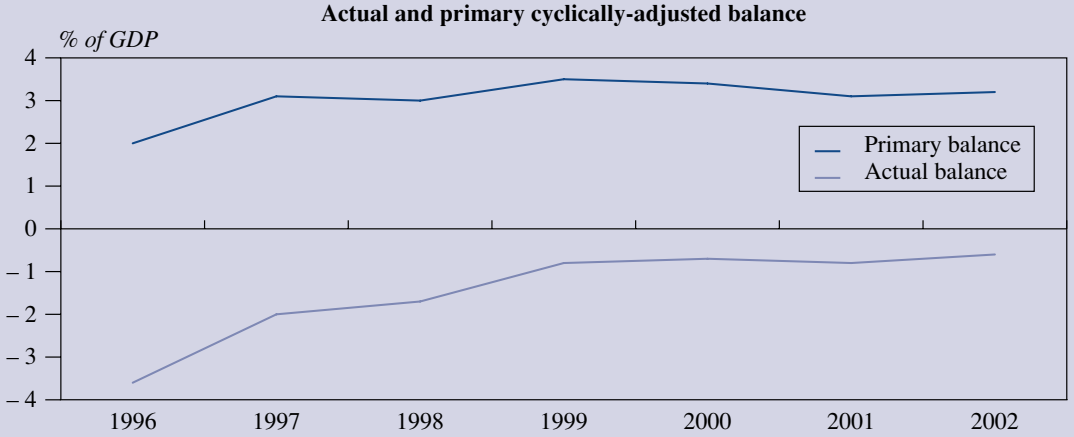
With the improvement of the relative cyclical position in the euro area and the associated reversal of capital flows, the euro exchange rate is expected to strengthen. Furthermore, concrete measures taken in the economic policy field and actions to enhance the effectiveness of the euro area's economic policy-making will support the euro exchange rate. As governments seem to receive less credit from financial markets than might be deserved for the reforms they have been implementing, a strong

Graph 4: **Policy mix, euro area**

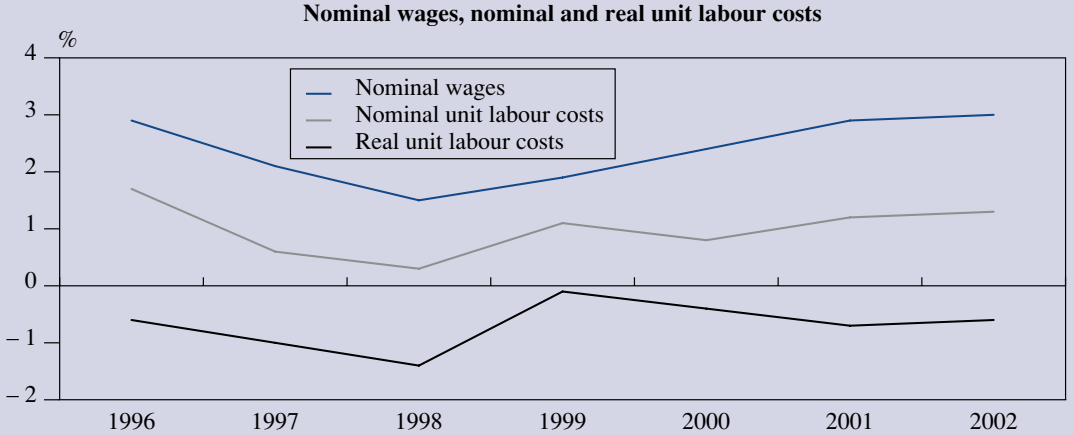
Monetary conditions index and its components



Actual and primary cyclically-adjusted balance



Nominal wages, nominal and real unit labour costs



Source: Commission services.

and unambiguous commitment to economic reforms would certainly help improve markets' perception. Furthermore, greater willingness on the part of euro-area countries to adjust their economic policies to ensure policy-mix consistency both at the euro area and national levels would be instrumental in reversing the euro's fortunes.

Shift in budgetary strategy.

The *2000 Broad economic policy guidelines* recommended that somewhat more needed to be done in the area of budgetary consolidation over the next two years. Fiscal policy needs to be geared to taking advantage of the upswing and moving more rapidly to a position of structural balance. Meanwhile, the emphasis of the authorities' budgetary strategy appears, in many cases, to have shifted towards reducing the tax burden and restructuring expenditure rather than to speeding up the move toward structural budget balance.

Non-compensated tax cuts and reforms prevail …

In their updated stability programmes and in the specific announcements made in the context of their budgets for 2001, most Member States have outlined their intentions to reduce the overall tax burden and to reform their tax systems. The Commission has identified in the spring of this year four largely consensual criteria ([1]) for assessing whether tax reforms can achieve a sustainable reduction in the tax burden whilst at the same time maintaining the commitment to fiscal discipline. The reforms being introduced or announced generally go in the right direction because they mainly concern direct taxes which typically have large distortionary effects on incentives to work and invest. However, they do contain two drawbacks. Firstly, they are insufficiently complemented with reforms of benefit systems. Secondly, tax cuts and reforms are often not accompanied by an offsetting curb on government spending, so that they do not comply with the commitment to avoid pro-cyclical tax cuts.

… and lead to a halt in the consolidation process.

Like last year, general government budget balances in 2000 are likely to be significantly better than foreseen in budget plans. For the euro area as a whole, the actual budget deficit (excluding UMTS receipts) is now estimated to fall to 0.8 % of GDP, half a percentage point less than in 1999. But this improvement is entirely due to strong growth and a further lowering of the debt interest burden. The underlying position, stripping out cyclical influences and interest payments, shows no improvement. In 2001, the underlying position may even deteriorate somewhat owing to plans for tax cuts not fully matched by expenditure restraint. Nevertheless, continued support from the cycle and falling debt servicing should result in a stabilisation of the actual deficit at about the level reached in the year 2000. But this expected outcome falls short of earlier ambitions laid out in the updated stability programmes once the better growth performance than anticipated in these updates is taken into account.

Windfall gains in UMTS licenses.

An additional one-off factor benefits government budgets. Non-recurrent windfall gains from the allocation of third generation mobile phone licences (UMTS) account for extraordinary revenues, which are estimated at 1.25 % of GDP in the euro area as a whole. Most of these proceeds support the 2000 budgets, only a minor part will be booked in 2001. As a corollary, the overall 'headline' budget balance, including the UMTS windfalls gains, could turn slightly positive in 2000 before sliding back into a deficit position in 2001.

([1]) These four criteria are: (i) Member States must meet or make progress towards the medium-term target of 'close-to-balance or in surplus'; (ii) reforms must not be pro-cyclical; (iii) account must be taken of the level of government debt and of long-term budgetary sustainability; and (iv) tax reductions should form part of a comprehensive reform package.

Non-euro Member States: prolonging the expansion

Denmark: achieving 'soft landing'.

In Denmark, following the implementation of a restrictive fiscal package in 1999, the economy has slowed somewhat from the high growth rates of more than 3 % p.a. registered in the period 1994–98. While private consumption has clearly reacted to the withdrawal of fiscal stimulus, investment has temporarily rebounded in 2000. This is primarily the result of a surge in repair construction activity in the aftermath of the storm of last winter but is also due to strong equipment investment on the back of rising business profits. Growth in 2000 is thus estimated to be around 2.5 % and a slight deceleration to some 2.25 % is expected for the period 2001–02. With the economy operating close to its potential and the labour market strained, prices and wages have increased above the EU average but, as growth comes down to more sustainable levels, some cooling is likely to be underway. Danish cost competitiveness has suffered over recent years from an increase in unit labour costs relative to its trading partners but should start to improve slightly from next year onwards. Fiscal policy is expected to be broadly neutral in the near term. Following the negative outcome of the referendum on Danish participation in the euro, the government made clear that no fundamental changes in economic policy are to be expected. This implies, in particular, that membership of ERM2 will continue, with Denmark following the current cycle of interest rate tightening. Due to the continued favourable fundamentals of the Danish economy, it is to be expected that the rise in the interest rate differential vis-à-vis the euro area related to the referendum outcome will narrow to a more 'normal' margin in the coming months.

Sweden: continued robust growth with stable inflation.

The Swedish economy is expanding robustly with GDP growth in 2000 and 2001 expected to exceed 3.5 %. This is being sustained mostly by domestic demand, but the external side is also contributing positively. Growth is above trend but positive developments in the labour market, with employment growing by about 2 %, have made such growth possible, over the short term, without any substantial increase in inflationary pressures. Inflation is expected to be within the inflation target of 2 %, ± 1 percentage point. Estimates of the output gap range from a further narrowing to moving into positive in 2000. Monetary policy has not been tightened since last February, because inflationary pressures do not seem to threaten the inflation target. Tax cuts have been implemented in 2000 and announced for 2001, with a view to lowering the very high tax burden, thus suggesting an easing of fiscal policy. Despite this, a higher surplus in public finances is expected this year and next. In summary, without any severe and widespread supply constraints and with inflation — which is among the lowest in the EU at present — within the target range, the macroeconomic policy mix is not considered to be particularly loose.

United Kingdom: balanced growth.

The economy has grown continuously for around nine years and has exhibited stability in both inflation and growth compared to its history over the past few decades. The economy is now operating around potential and is growing at an annual rate of about 3 %. There are no major sectoral imbalances and despite the strength of sterling, exports are continuing to grow rapidly. Unemployment is at its lowest for 25 years. Despite a strong labour market, wage pressures are largely absent. Monetary policy operates to secure a 2.5 % inflation target based on the retail prices index excluding mortgage interest payments (RPIX). In the middle of 1999, a cycle of interest rate rises commenced to head off inflationary pressures especially from the domestic demand side, but since February of this year the repo rate has remained at 6 % as inflationary pressures have subsided. Indeed, inflation is now among the lowest in the EU and the cycle of interest rate rises may have come to an end.

With this stable economic framework, the economy is expected to continue to grow at around 3 % in 2001 — somewhat above the generally estimated trend growth of 2.5 %. This is because the employment rate is expected to rise helped by measures such as 'the New Deal', and also labour productivity is expected to increase as a result, in part, of strong business investment (and particularly inward investment) in recent years.

The public finances are governed by strict fiscal rules and are now well in surplus. Despite modest rises from previous plans in some areas of public expenditure, the fiscal stance remains appropriately tight as tax revenues have risen and debt interest payments are falling.

2. The impact of the 'new economy' on the EU

The 'new economy' — an elusive notion.

The dynamism of the EU economy in recent years, which has been characterised by strong growth, a falling unemployment rate and low inflation, has led many observers and policy-makers to ask whether the recovery will mirror the 'new economy' experienced since the mid-1990s in the United States. In popular debate, the 'new economy' has several connotations, whereas the definition that seems to emerge from economic research comprises three main features: a permanent increase in productivity growth; a reduction in structural unemployment with low inflation; and a greater stability in output growth. Several, interrelated, driving forces are shaping the emergence of the 'new economy', including technological advances, globalisation, financial market liberalisation and integration, flexible labour markets and improved macroeconomic management.

Key role attributed to ICT.

In the current debate on the 'new economy', attention is primarily being focused on information and communication technologies (ICT). ICT have the ability to store, process and transmit information. Their increasing use in the business process contributes to lower production and transactions costs and generates productivity growth. In this respect, the strong economic expansion in the United States and the resurgence in US productivity growth since the mid-1990s seem to be linked to the rapid advancements in the ICT-sector and the pervasive diffusion of ICT. Indeed, supportive evidence suggests that ICT accounts for up to three-quarters of the estimated 1 percentage point rise in US productivity growth witnessed in the second half of the 1990s. Of this contribution, close to half a percentage point can be attributed to investment in ICT equipment (capital deepening) and about a quarter of 1 percentage point to total factor productivity growth (i.e. output growth that cannot be attributed to the accumulation of factor inputs) in the ICT sector.

First promising signs are becoming visible in the EU.

In the EU, ICT markets have expanded strongly in recent years with total ICT **spending** amounting to 7 % of GDP in 1999, compared to an estimated level of 8 % of GDP in the United States. As a result, ICT expenditure per capita in the EU is still less than 60 % of that in the United States, with the gap being less pronounced in communication technology than in information technology. ICT **production** too experienced a rapid increase, exceeding 4 % of GDP in 1999 (compared with close to 7 % of GDP in the United States). Using the traditional macroeconomic data and methods there is limited evidence to date that ICT is an important source of output and productivity growth in the EU. Nevertheless there are signs that the driving forces of productivity growth identified in the US economy are at work in the European Union too and more strongly so in some Member States, especially in Ireland, Finland and Sweden. The

results obtained from a growth-accounting approach reveal that in the EU technical progress in the ICT sector and the accumulation of ICT capital (excluding software) contributed about 0.5 to 0.7 percentage points to output growth in the EU in the second half of the 1990s. This value is similar to the estimates for the United States in the first half of the 1990s and is consistent with the gap in ICT expenditure per capita between the United States and the EU. This suggests that the EU would be lagging the United States in the macroeconomic contribution of ICT to GDP growth by about half a decade. Accordingly, it is unsurprising to see no evidence yet of accelerating productivity in the ICT producing sector spilling over into other sectors in the EU. On the other hand, the pick-up between the first and the second half of the 1990s in labour productivity growth generated by ICT penetration in the EU is estimated at 0.2 to 0.3 percentage points.

Some specific factors explain limited evidence so far.

The limited evidence so far in the EU certainly reflects the fact that, by US standards, investment in ICT equipment has been low and the diffusion of new technologies is still modest. However, there are four specific factors that might be affecting the observed impact of the new economy in the EU. Firstly, the available statistics in most Member States are not well-suited to accounting for the potential role that ICT may have played in productivity growth. Secondly, compared to the United States, the ICT-producing sector in the EU is still relatively small and the impact of this sector on aggregate productivity figures is thus bound to be more limited. Indeed, preliminary calculations suggest that total factor productivity growth in the EU in the 1990s was lower than in the 1980s, although the last few years have shown some improvements. Thirdly, the current expansion phase of the cycle has been accompanied by a substantial increase in employment. While this development is clearly desirable, as it signifies that more workers, many of them low-skilled, are being brought into the labour force, it temporarily depressed aggregate labour productivity growth. Fourthly, even in the United States, the evidence of a higher speed limit to economic growth was not compelling until 2000. The gap in the introduction of ICT in the EU means that any clear empirical support in favour of the emergence of a new economy growth pattern will only become available in the coming years.

Reasons for EU gap unresolved.

As regards the level of development of the ICT industry, there is not yet an empirically robust model to explain the US lead. It is possible that the US has a comparative advantage in the production of ICT goods, for instance, due to a favourable endowment with engineers at a critical point of time. As ICT displays network effects as well as first-mover advantages, small comparative advantages at an early stage may have grown rapidly, driven by the positive feed-back from research, innovation and sectoral specialisation. In this context, the EU–US bilateral ICT trade flows can be considered as evidence in favour of a comparative advantage in the United States.

Indicative is that the Union has a permanent deficit in ICT trade with the United States, which even increased in the 1990s. Furthermore, the United States is concentrating R & D in the high-tech sector and in particular in the computer hardware sector, which suggests the emergence of specialisation patterns. From this perspective, the scope for catch-up of the EU would depend on the potential of so called second-mover advantages in the IT sector and on its favourable market position as regards communication technologies.

Structural obstacles to new technologies?

Alternatively, it is often suggested that structural rigidities have impeded the diffusion of ICT in the EU. In this context, the debate has focused on several structural differences between the EU and the United States, which are potentially harmful for new

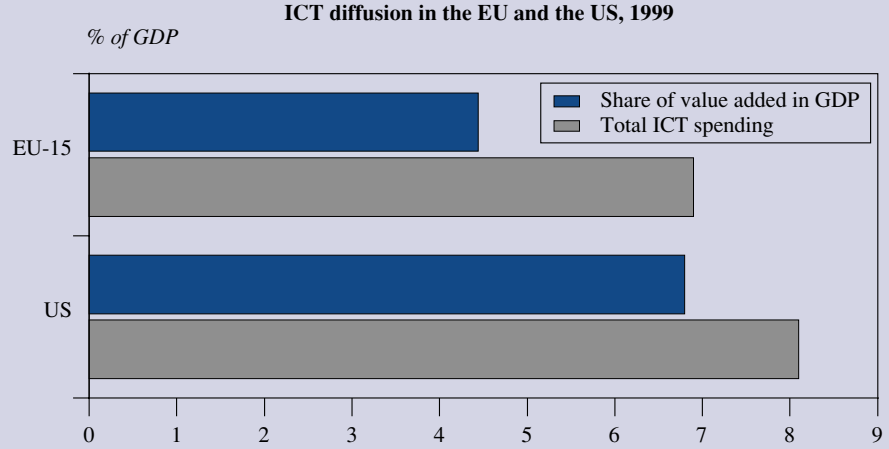
Graph 5: **Patterns of economic growth**

Growth performance during the 1980s and 1990s: EU versus US

	EU			US		
	1980–90	1991–95	1995–99	1980–90	1991–95	1995–99
Real GDP per capita of which:	2.05	1.02	1.97	2.19	2.15	3.25
Labour utilisation	– 0.26	– 0.99	0.46	0.9	0.71	1.21
of which contribution:						
— employment	– 0.24	– 0.50	0.35	0.19	0.48	0.60
— hours	– 0.52	– 0.20	– 0.25	0.01	0.10	0.08
— participation	0.10	– 0.34	0.37	0.75	0.21	0.29
— demographic	0.40	– 0.05	– 0.01	– 0.05	– 0.08	0.24
Hourly labour productivity	2.31	2.00	1.51	1.30	1.44	2.05
of which contribution:						
— capital deepening	0.65	0.96	0.53	0.24	0.21	0.50
— total factor productivity	1.65	1.04	0.98	1.06	1.23	1.54

Source: Commission services.

ICT diffusion in the EU and the US, 1999



Source: Credit Suisse First Boston.

Growth sources in the EU and contribution of ICT sector

	1991–95	1995–99	Change
Labour productivity growth	2	1.5	– 0.5
Capital deepening	1	0.5	– 0.5
— ICT capital	0.2 – 0.3	0.3 – 0.5	0.1 – 0.2
— capital/labour substitution	0.4	– 0.1	– 0.5
— other capital	0.3 – 0.4	0.1 – 0.3	– 0.1 to – 0.2
TFP growth	1	1	0
— ICT sector	0.1	0.2	0.1
— other sectors	0.9	0.8	– 0.1
Memo ICT share	0.3 – 0.4	0.5 – 0.7	0.2 – 0.3

Source: Commission services.

technologies. A less favourable environment for the diffusion of new technologies might be caused, for instance, by an insufficient supply of well-trained computer specialists, less mature financial markets that impair the ability of young and innovative enterprises to raise funds, and administrative burdens for establishing new enterprises. To the extent that the full exploitation of the productivity- enhancing aspects of ICT investment requires a reorganisation of the labour force at the firm level, relatively higher costs for hiring and firing labour might have distorted the incentive to implement labour-saving technologies in the EU.

Preconditions are taking shape.

Although evidence that the 'new economy' (with respect to the ICT features) has entered the EU is still limited at the macroeconomic level, there are signs that the Union may be on the brink of its arrival. Indeed, in many respects, the preconditions for its development are taking shape in the EU. The gradual shift to a more service-based economy has been associated with an increased use of ICT, reinforcing this trend. Furthermore, the penetration of equipment and the use of ICT are increasing, and more rapidly so than in the United States, starting from a much lower level though. A much larger share of the economy's resources is devoted to the acquisition of ICT equipment in the late 1990s than in the early 1990s. The quality of the labour force has increased substantially over the last two decades. The market capitalisation of the high-tech stock market has expanded noticeably and investment in venture capital has more than trebled in the last three years. Finally, the EU is currently benefiting from a unique driving force, namely the interaction of the creation of a single market and the adoption of a single currency.

Embracing the 'new economy' requires a comprehensive strategy.

Although the EU is lagging the US in embracing the 'new economy', the extent of the lag is not that significant and the catch-up could occur quite rapidly. The crucial question for the EU in this context is whether and under what conditions the US experience of sustained higher, non-inflationary growth could be replicated here. While stability-oriented sound macroeconomic policies are necessary to generate an environment conducive to investment and economic growth, reaping the full benefits of rapid technological change essentially requires appropriate microeconomic conditions in a number of areas. In general, barriers to the development and adoption of new technologies have to be removed and the framework conditions for a flexible reallocation of resources into dynamic fields of economic activity have to be improved upon in Europe.

Encouraging entrepreneurship.

The development of the new economy in the United States has been closely linked to entrepreneurship. Indeed, fully exploiting new ICT opportunities demands the spur of new enterprises or the reinvention of existing ones. While the framework conditions for business start-ups have considerably improved in a number of countries in recent years, the Union still suffers from significantly higher administrative burdens affecting enterprises.

Promoting competition.

The efficiency of markets for goods and services and the incentives for innovation created by competition policy and other regulatory frameworks can have an important influence on growth. The liberalisation and the promotion of competitive markets have usually been instrumental in ensuring the price decline of ICT products, especially of new telecommunication services, fostering their penetration in the market. Broadly speaking, a lack of competitive pressure permits enterprises to play safe with respect to both product and process innovations and disregard consumer needs in the face of new technological developments. Rigorous competition can thus contribute to the faster development of new technologies and a more rapid diffusion of innova-

tions. It should be also noted that because of the prevalence of network effects, increasing economies of scale may be present in some of the ICT sectors, which may drive the emergence of more frequent mergers and acquisitions.

Enhancing efficient financial markets.

Financial markets have an important role to play in the context of the 'new economy', in particular as regards the financing of new innovative business start-ups. In many of these cases, equity is a better source of finance than traditional debt, given the often fairly high risk, the usually inadequate collateral and the frequently limited cash flow. While, undoubtedly, some progress in stimulating venture finance has been made, there still appears to be a pressing need to better develop the risk capital market which remains small and fragmented, and often not supportive enough of early stage and technological investments. The integration of financial markets can be expected to improve the allocative efficiency of the EU financial system, thereby facilitating the access to investment capital and providing the stimulus for the diffusion of new technologies.

Fostering incentives for R & D.

On aggregate the EU lags behind the United States and Japan in terms of R & D expenditures and, especially, innovative capacity. Moreover, spillover barriers to the diffusion of knowledge appear to be more prominent in Europe dragging down the returns on R & D investment. For example, cooperation between public and private institutions in the form of R & D clusters appear to be less widespread in the EU than in the United States.

Ensuring the necessary human capital …

Obviously, the requirements of the digital age pose new challenges for learning and the acquisition of skills. In order to empower young people to participate fully in the knowledge society, new forms of education and training incorporating ICT tools need to be used by students and in schools. In the first instance, that implies the provision of access to hardware and software and the teaching of how to use the technology properly. However, that alone is not enough. It is equally important, in parallel, to learn how to use information, to communicate and to innovate with these new possibilities. In addition, teacher training and support must be improved and educational systems as a whole may require a strategic rethink if they are to meet the challenges posed by the information society.

… and supply of qualified labour.

From a short-term perspective, ensuring a sufficient supply of ICT professionals is of particular importance. Failing to do so will imply that job opportunities and growth will be lost. However, the challenge is clearly wider than just meeting the demand for ICT professionals as is sometimes suggested. Digital literacy constitutes an essential element of the adaptability of the workforce and the employability of all citizens. Harvesting the benefits afforded by a new set of technological and organisational complementarities may indeed require a higher degree of versatility, initiative, communication skills, and cognitive and social competences.

Ensuring flexible labour markets.

Given that endogenous economic trends entail the risk of growing labour market segmentation, reform policies should be designed in a way such as to remove, rather than to promote, existing insider–outsider distinctions in the labour market. Increasing the flexibility of work arrangements, such as part-time and temporary contracts, could help create employment opportunities, especially for non-core groups, but it is important for these jobs to provide stepping-stones to wider opportunities rather than into a persistent precarious situation with permanently low pay. Equally, work can be made more accessible through more flexible work arrangements, such as telework, removing some of the constraints from distance and time as a barrier to employment.

Furthermore, an efficient and flexible working of the labour market, in general, is indispensable to reap the efficiency gains of ICT, to facilitate a swift reallocation of labour between enterprises into the new opportunities, and to foster 'info-inclusion' for all.

3. Economic growth and environmental sustainability

Progress in decoupling growth from the use of natural resources …

Almost all economic activity consumes resources — renewable or otherwise — and generates pollution. Economic growth gives rise to a potential sustainability problem if renewable resources are consumed faster than they can be renewed, or if non-renewable resources are consumed at a rate which makes their depletion an issue while no substitute is available. Notwithstanding the fears expressed 30 years ago at the time of the first oil price shock, and despite continuously growing demand, the depletion of natural resources does not seem to be an issue at present at least as far as raw materials and non-renewable energy resources are concerned: indeed, over the past decades, declared resources have risen over time and the prices of most such commodities have declined in real terms, suggesting reduced, rather than increased relative scarcity. For natural resources, for which there are no markets, such as biodiversity, clean air, and to a certain extent, water and soil, the situation is more critical.

… and effective pollution control has resulted in a partial decoupling of growth and pollution.

Pollution — the waste by-product of economic activity — threatens sustainability by damaging natural resources, in particular air, water and soil. It causes a variety of human health problems. A surprisingly large amount of environmental damage can be traced back to the burning of fossil fuels. However, triggered by tighter environmental legislation, here too, encouraging trends have emerged in recent years in the European Union, as emissions of pollutants such as sulphur dioxide and nitrous oxides — implicated in environmental problems such as acid rain or eutrophication — have begun to decline. In contrast, emissions of greenhouse gases, which may lead to dangerous climate change continue to rise. In the EU, the pollution intensity of growth has significantly declined over the last decade, and is expected to do so also in the foreseeable future thanks to vigorous environmental policies.

As pollution control is getting more expensive …

Traditionally, environmental policy-making has tended to rely on 'command and control' methods. Judged in their own terms, these have been successful. However, the more efforts have to be undertaken to get pollution under control and to further decouple economic activity and pollution, the higher the related abatement costs, and the higher the need for paying more attention to the cost-effectiveness of proposed measures.

… it is important to consider the use of market-based instruments, …

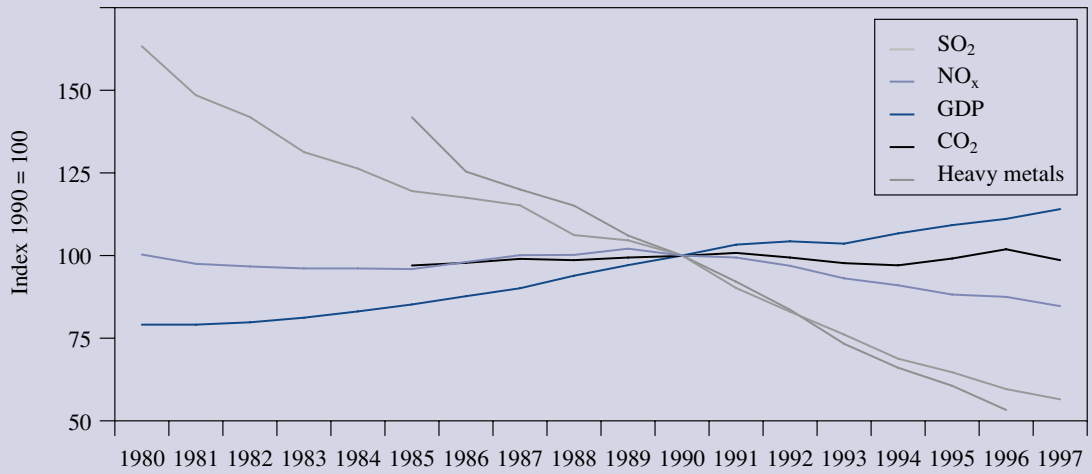
As concerns about the cost of regulation rise, there is increased interest in using markets to support environmental policy. Market-based instruments can ensure that pollution abatement takes place where it is cheapest, allowing a given environmental policy objective to be achieved at least cost. To be effective, economic instruments for environmental policy must operate in markets that are price-sensitive. This requires the availability of substitutes in either production or consumption. The evidence is that energy use — a major source of environmental degradation — is indeed sensitive to price changes, albeit with a certain time lag. Consequently, market-based instruments will be an effective means of tackling many environmental problems.

… especially in the context of a European climate policy.

The reliance on market based instruments like fiscal (dis)incentives or emission trading is best suited when it is not relevant by whom emissions are reduced as long as they are reduced at all. This is e.g. the case for global greenhouse gas emissions. Therefore, a European climate policy largely based on market-based instruments like

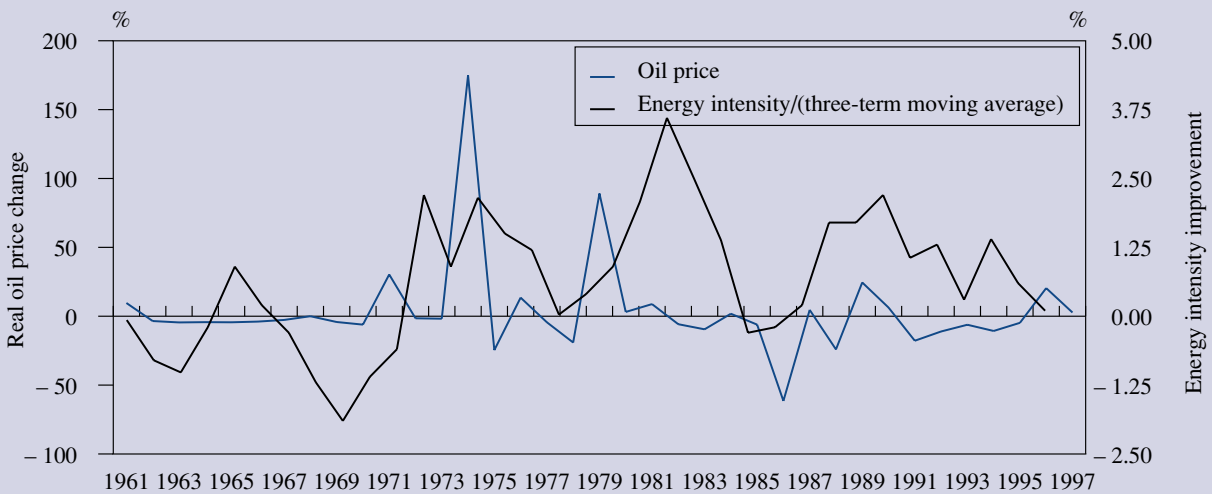
Graph 6: **Trends in economic activity, pollution and energy intensity**

Trends in pollution and economic activity, 1980–97



Source: European Environment Agency, Eurostat, Co-operative programme for monitoring and evaluation of the long range transmission of air-pollutants in Europe (CLRTAP/EMEP).

Oil price and energy intensity, 1961–97



Source: Commission services.

emission trading could lead to substantial cost savings as compared to a traditional policy relying on inflexible command-and-control measures.

The European economy will become more efficient …

The argument that economic growth and the environment are complementary derives from the observation that as a negative externality, environmental degradation represents an inefficient use of resources. In these circumstances, achieving a 'double dividend' of environmental improvements and higher economic welfare requires that environmental taxes are used to move the overall system of taxation towards its optimal design. In the specific context of climate change, modelling exercises show that using the revenues from a tax on greenhouse gas emissions to reduce labour taxes could bring about higher levels of GDP and employment.

… if economic and environmental policies are well integrated.

More generally, ensuring that environmental quality and economic growth are complementary rather than competing objectives will require careful design of both economic and environmental policies. The substantial decoupling of economic growth from environmental pressure which has occurred in Europe in recent decades did not occur spontaneously, but resulted from vigorous environmental policy. Moreover, although economic activity has become less pollution intensive in Europe there is no reason to relax on the environmental consequences of economic growth. For the future, environmental policies need to take more account of their economic consequences. Similarly, structural reforms, which seek to push the European economy onto a higher growth path, may accentuate environmental difficulties if environmental issues are neglected in the design and implementation of these policies. Subsequent action to remedy damage that might have been more cost-effectively averted, could hamper the achievement of economic policy targets.

Credible gradualism and international cooperation are key to sustainable development.

Both economic and environmental policies must be crafted in a way to avoid disruptive shocks. Experience with both policies has shown that credible gradualism is the best approach to achieve long-term economic and environmental objectives in a politically acceptable manner. Moreover, often the lack of consensus at the international level with respect to adequate policy responses to environmental pressure result in a welfare-reducing lack of action at the European and Member State level. Alternatively, national policies are designed in a way so as to maintain a level playing field with respect to the international competitiveness of its polluting industries, and by this introduce environmentally perverse incentives. Such approaches are not conducive to environmental sustainability in the longer run.

4. Real convergence and catching-up in the EU

Economic and social cohesion a key EU objective.

The objective of economic and social cohesion aimed at reducing disparities between Member States, regions and social groups is not only of major importance for the present EU-15, but will also become crucial in the context of eastern enlargement. Questions such as whether — and under what conditions — income levels of poor economies tend to converge to those of richer economies have not yet been clearly answered by economists. A closer look at the experience of catching-up within the EU is thus an interesting exercise that may deliver some lessons for candidate countries.

A mixed picture from the literature.

Economic theory does not provide unambiguous predictions about the convergence or divergence of per capita income levels across countries or regions and arrives at different predictions on convergence. Similarly, the relevance and proper interpretation of the available empirical evidence have been questioned, not least because of

the methodological difficulties involved in the estimation of growth convergence models. Compared to this aggregate vision of the growth process, more recent models of the so-called 'new economic geography' adopt a more differentiated view, suggesting that the location of production may vary for different types of regions and industries. They thus underline that the process of convergence may be more complex than indicated by changes in any single aggregate growth measure.

Evidence of long-run catching-up at the country level …

When looking at the data, there is evidence of long-term catching-up in the EU at the level of Member States, but the situation is less clear-cut at the regional level. The four countries whose per capita income was significantly below the EU average during the 1990s — the so-called 'cohesion countries', Greece, Spain, Ireland and Portugal — can be said to have succeeded in catching up, at least to some extent, to the EU average. However, the experience of these four countries in this period has varied, in that Ireland's income level is now above the EU average due to continuously high growth since the end of the 1980s, Portugal has caught up from 40 % of the EU average in 1960 to 60 % in 1990 and then to almost 80 % in 1999. The long-term performance of both Greece and Spain improved less, mainly due to a phase of income divergence between 1976 and 1985 in the case of Spain and the second half of the 1970s and during the 1980s in the case of Greece.

… but limited progress at the regional level.

Most statistical indicators on regional disparities show that convergence at the regional level in the EU was rather slow in the 1980s and 1990s. One explanation is that this period saw some severe economic downturns, which tend to hit the less diversified, poorer regions more than others. More important, however, is that the catching-up processes in the cohesion countries did not always affect all regions equally. Catching-up countries, enjoying a high national growth rate, often see a widening of interregional income disparities as the process tends to be driven by a few growth poles. Although regional convergence may increase as development proceeds, the early stages of the catching-up process thus tend to be characterised by a potential trade-off between national and regional convergence. The cohesion countries show some evidence of such a trade-off, as those countries experiencing higher aggregate growth rates have also seen a widening of regional disparities, while regional convergence tends to be associated with low national growth.

No clear trend on specialisation and concentration …

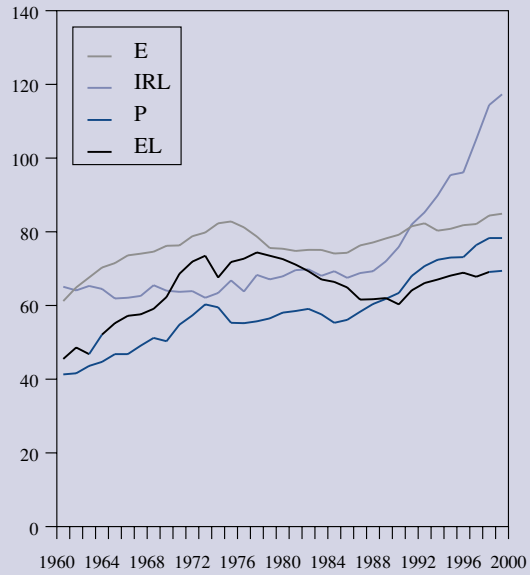
In view of the long-term processes of catching-up, in addition to the ongoing process of market integration in Europe, there is a general presumption that industries tend to become more spatially concentrated and that Member States and regions become more specialised. According to a recent study on the changes in the manufacturing sector between 1970 and 1997, a number of industries that were initially spatially dispersed have become more concentrated. These are mainly slow-growing and unskilled labour-intensive industries (e.g. textile, clothing, leather) the importance of which in the centre of the EU has decreased and which have thus become relatively more concentrated in southern Europe (Italy, Portugal, Spain). Amongst industries that were initially spatially concentrated, around half remained concentrated (e.g. aircraft, motor vehicles, electrical apparatus). Significant dispersion has occurred in a number of medium and high technology industries with high skill intensity and relatively high growth (e.g. office machinery, radio, TV and communication, professional instruments).

… which is a slow and long process.

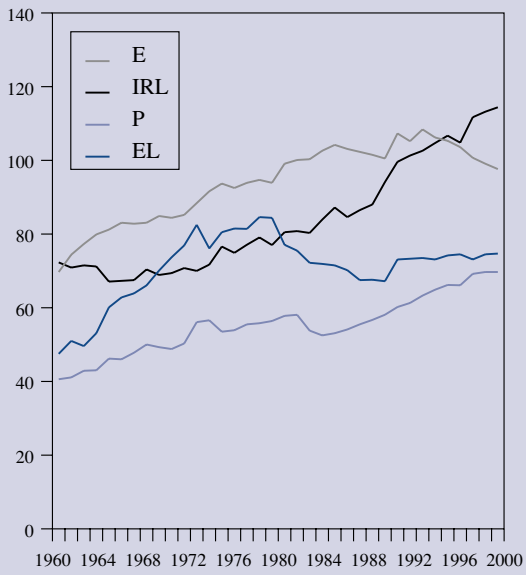
The overall magnitude of these changes is, however, rather modest and the results of three different studies on concentration and specialisation portray a less dramatic

Graph 7: **Patterns of catching up in the EU**

GDP per capita (PPS, EU-15 = 100)

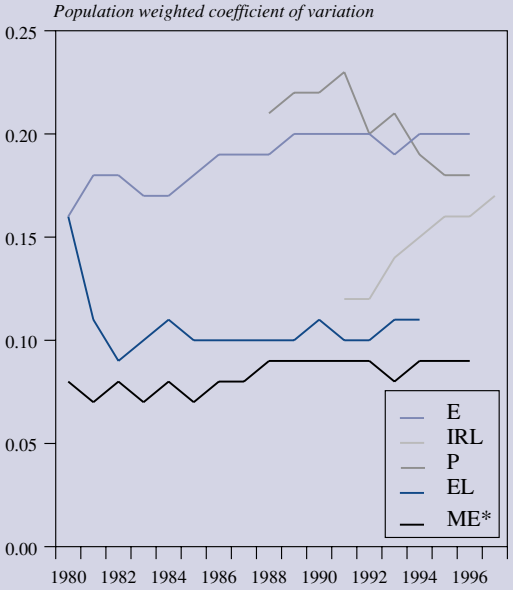


GDP per civilian employee (PPS, EU-15 = 100)



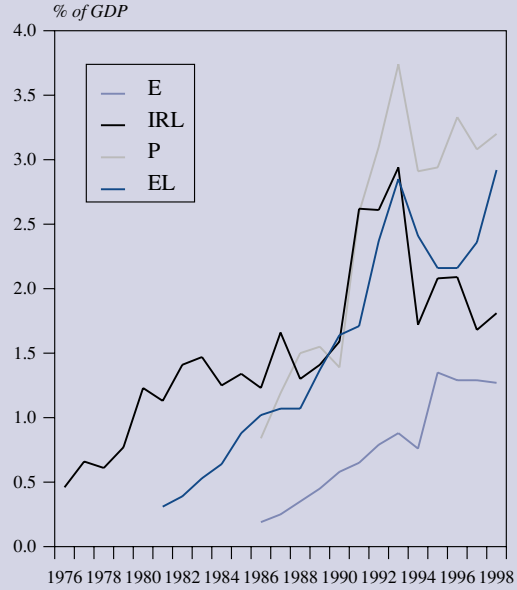
Regional dispersion in the cohesion countries and southern Italy

Population weighted coefficient of variation



EU Structural Funds (Objective 1) and Cohesion Fund

% of GDP



* ME = Mezzogiorno.
NB: EU-15 average 1960–90 excluding GDR, 1991–2000 including eastern Germany; 1999 and 2000 estimations and forecasts.
Source: Commission services, Court of Auditors — annual reports and own calculations.

view for several reasons. First, the location and relocation of production involve a high level of investment and are therefore long-term processes with a strong degree of sluggishness, possibly also due to 'lock-in' effects once a certain pattern of specialisation and concentration has developed. Significant changes are therefore difficult to identify over the last 20 or 30 years for the EU as a whole, but can be observed for smaller economies experiencing high growth in the 1990s, such as Ireland, Portugal and Finland. Secondly, the general process of structural change from manufacturing to services tends to make regions more similar in terms of their specialisation. While further concentration in some traded goods sectors cannot be excluded in the medium to long run, the overall effect will always be limited by the increasing importance of non-traded goods whose production follows the spatial pattern of purchasing power and — given the absence of significant geographical labour mobility in the EU — counteracts possible agglomeration forces. Thirdly, among the determinants of location, the importance of market access and human capital endowments have been confirmed, whereas the concentration effects of economies of scale seem to be diminishing. In this respect, and in combination with their traditional advantage of low labour costs relative to the rest of the EU, the cohesion countries are becoming more attractive locations.

Key forces of a successful catching-up process are macroeconomic stability, …

Among the various determinants of the catching-up process, the following seem to have been of crucial importance for the cohesion countries. Macroeconomic stability has proved to be a necessary — although not a sufficient — condition for sustained growth. The historically unique degree of stability in the cohesion countries provides improved conditions for private investment, which have already contributed to above EU average growth rates in recent years. Ireland is a perfect example of how real and nominal convergence went hand in hand, where in the mid-1980s a long-term process of a consistent, stability-oriented macroeconomic policy-mix was started, including monetary and exchange rate policy, fiscal consolidation and moderate wage policies.

structural reforms, …

In the context of accession, the single market and EMU, structural reforms have provided more efficient product, capital and labour markets in all cohesion countries and have made their economies more competitive and flexible.

and endowments of public and human capital.

Efforts to close the cohesion countries' gaps in endowments of public and human capital benefit from considerable contributions from the EU in the form of the Structural Funds and the Cohesion Fund. Simulations based on macro-models confirm that these funds do not only have the standard demand-side effects on income, but also have the more important supply-side effects — due to gains in productivity and competitiveness arising from the increased stocks of infrastructure and human capital — which continue to induce a higher level of income even when payments have ceased.

Lessons for enlargement.

The challenge posed by real convergence will be significantly amplified in the next decades by enlargement to central and east European countries. The analysis of patterns of catching-up experienced in the EU leads to the conclusion that there are two basic requirements for catching-up. Firstly, there should be an appropriate mix of national policies and conditions which remove impediments to the efficient allocation and accumulation of resources. Secondly, the available means for public investment need to be prioritised. In particular, due consideration is to be given to the two major objectives of national convergence and the reduction of regional disparities while recognising that the latter is likely to be a longer term endeavour.

Chapter 2

Prospects for sustained growth in the euro area

Contents

Graphs

1. The best economic situation for a decade

Following the successful convergence process and since the launch of the euro on 1 January 1999, economic conditions in the euro area have improved significantly. The growth pause, that coincided with the formal coming into being of EMU, has since mid-1999, given way to robust expansion and vigorous employment creation in a setting of price stability under the combined impact of an appropriate policy mix, a resurgence in export growth and continued strong domestic demand growth. Largely because of the substantial increase in oil prices, growth is expected to slow moderately, with headline inflation moving up. Nevertheless, assuming that oil prices stabilise at their currently high levels until the middle of next year before declining slightly thereafter, prospects for 2001 and 2002 remain favourable. This section analyses recent and prospective economic developments in the euro area and assesses the sustainability of the recovery over the medium term, in particular, the resilience of the euro-area economy to high oil prices and other external shocks as well as the ability of supply to match sustained growth in demand.

1.1. Conditions are in place for a continued robust economic performance

Growth momentum dented by rise in oil prices

The economy of the euro area has shifted up a gear since mid-1999, recovering strongly from the slowdown induced by the 1997–98 global financial crisis. GDP growth remained at or above an annualised 3.5 % during the four quarters to mid-2000, allowing the euro area to achieve its best growth performance in a decade. The rapid expansion was underpinned by strong domestic demand and a sharp pick up in exports (Table 1). Domestic demand has proved remarkably robust in the past few years, supporting the economy through the global financial crisis. Both investment and consumption have been more resilient than generally expected, indicating that the expansion of the euro area is firmly rooted in improving domestic fundamentals, with a culture of macroeconomic stability and more efficient

Table 1

Recent trends in real GDP growth, euro area

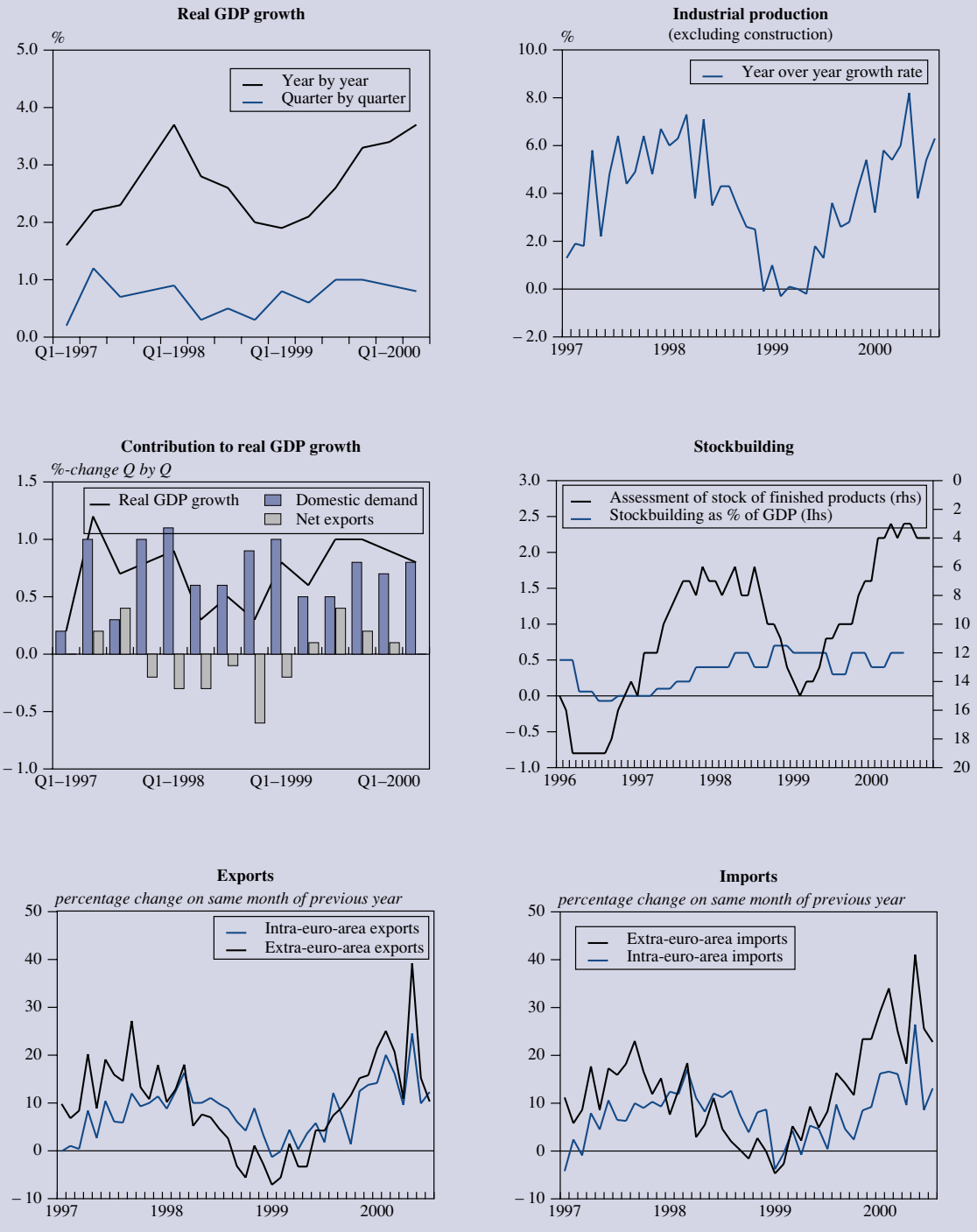
(annual % change)

	1997	1998	1999	2000*	1999 Q1	1999 Q2	1999 Q3	1999 Q4	2000 Q1	2000 Q2
Real GDP	2.3	2.8	2.5	3.5	1.9	2.1	2.6	3.3	3.4	3.7
Domestic demand	1.8	3.5	3.0	3.1	3.2	3.0	3.0	2.9	2.6	3.0
— Private consumption	1.7	3.0	2.8	2.6	3.0	2.7	2.6	2.6	2.3	2.8
— Government consumption	1.0	1.2	1.6	1.5	1.5	1.5	1.6	1.6	1.7	1.5
— Investment	2.3	5.1	5.4	5.5	4.1	5.7	5.7	5.4	5.5	4.7
Exports G & S	10.3	6.9	4.5	10.9	0.3	2.4	5.7	10.2	12.7	12.3
Imports G & S	9.1	9.7	6.4	10.0	4.1	5.1	7.1	9.2	10.7	10.6

* European Commission autumn 2000 forecasts.

Source: Commission services.

Graph 1: **Recent economic developments, euro area**



Source: Commission services.

labour and product markets. A resurgence in exports since mid-1999 has contributed to the growth momentum in the euro area. World import demand has accelerated on the back of an improving world economy and the euro-area's trade performance has been further stimulated by a weakening of the exchange rate.

Notwithstanding the euro area's strong recent performance, the increase in oil prices is casting a shadow on short-term growth prospects. The rise in oil prices has proved to be stronger and more persistent than expected earlier. From the low reached in December 1998, the USD price per barrel more than tripled to peak rates above USD 35 in autumn 2000. In the euro area, the impact has been compounded by the depreciation of the euro. As a result, households and companies have to bear a substantial deterioration of the terms of trade representing a drain on total income of about 1.3 % of GDP in 2000. A negative terms-of-trade shock of that order had not been registered since the late 1970s/early 1980s. These negative external developments have already had a substantial impact on headline inflation pushing it close to 3 % and have led the ECB to lift interest rates.

The impact of high oil prices on the economy is already visible. High oil prices have clearly weighed on confidence with both business and consumer confidence showing some decline since the summer (Graph 1). Nevertheless, confidence levels are still high and remain compatible with above-trend growth during the second half of 2000. Furthermore, after a sharp deceleration in June, industrial production rebounded strongly from July to August. Hence, although growth seems to have reached a peak in the summer, indicators currently foreshadow a modest deceleration only through the second half of 2000.

There are strong reasons to believe that the current oil shock will not derail the recovery of the euro area and, provided that oil prices do not climb further, the short-term growth outlook remains good. Although output growth is expected to moderate somewhat from the second half of 2000, the economy should be able to stay on a growth path of about 3 % in 2001 and 2002. More effective labour and product markets, and assuming the continuation of a balanced policy mix, will help the economy to absorb the terms-of-trade shock with relatively limited damage. The positive contribution from trade to growth should wear off in the next two years as the competitive effect of a weak euro wanes and world demand decelerates. On the other hand, the euro area will continue to benefit from robust domestic demand.

A number of factors have fuelled households' spending in the past years and will allow private consumption to continue to grow at around 2.75 % in the coming years. Firstly, households' perception of the labour market have steadily improved, which has resulted in the reduction of precautionary savings. Secondly, real wage growth, which was moderate but positive throughout the past years, is anticipated to accelerate slightly in the years ahead, thus remaining supportive to consumption. Thirdly, taxation is becoming more favourable to labour income. Labour taxation had a depressing impact on disposable income during most of the 1990s but the trend was reversed recently and the tax cuts announced in most Member States will underpin growth in real disposable income in 2001 and 2002.

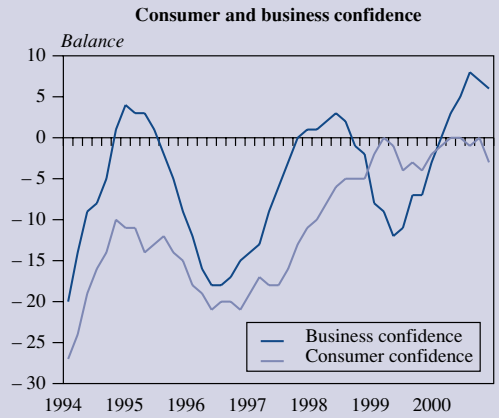
Gross fixed capital formation has been growing by over 5 % annually since its recovery in 1998 and has been surprisingly little affected by the growth slow-down in 1998/99. Investment is anticipated to continue to benefit from robust, although slightly slower, growth in 2001 and 2002. The outlook is determined by opposing forces. The key factor on the positive side is the projected strong growth in demand. According to investment surveys, demand factors are the most important drivers of industrial investment. The degree of capacity utilisation has steadily increased since autumn 1999, exceeding its earlier peak levels of the 1990s. GDP growth above potential will therefore continue to fuel investment demand in the years ahead. Moreover, efforts to modernise the capital stock, particularly in the field of ICT, will also underpin investment.

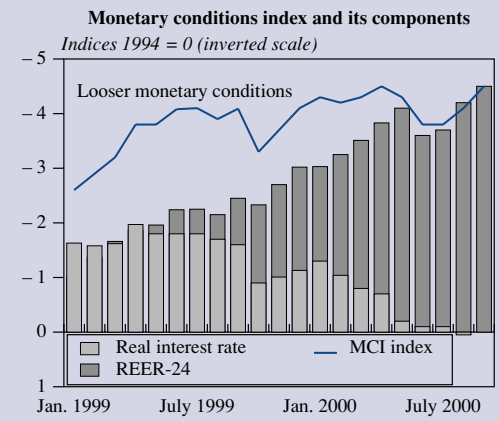
On the negative side, increasing short-term interest rates and high oil prices will have a mildly dampening effect. However, the current level of real interest rates, especially on the long end, remains low by historical standards. Also, with steadily rising aggregate demand, firms can finance a larger share of investment by means of generated cash flow and depend less on the prevailing financial conditions for external funds. As for oil prices, profitability in the euro area has increased steadily throughout the second half of the 1990s and is sufficiently high to allow companies to absorb the oil price shock more easily than in the past.

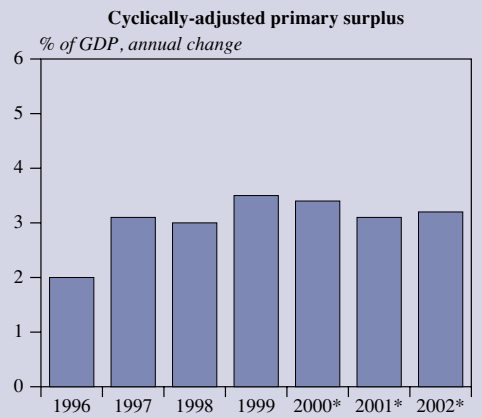
An improving labour market situation

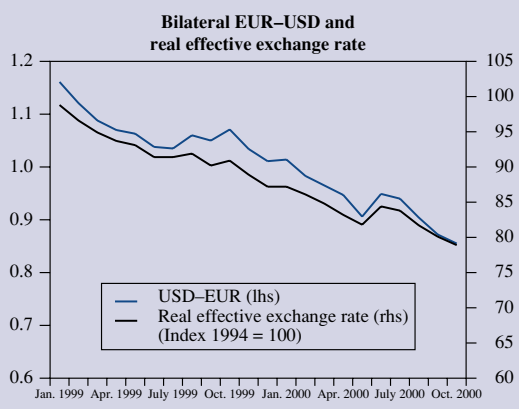
The euro area has registered robust growth in employment since 1998, with over six million jobs created in three years (Graph 3). Most of this rise in employment

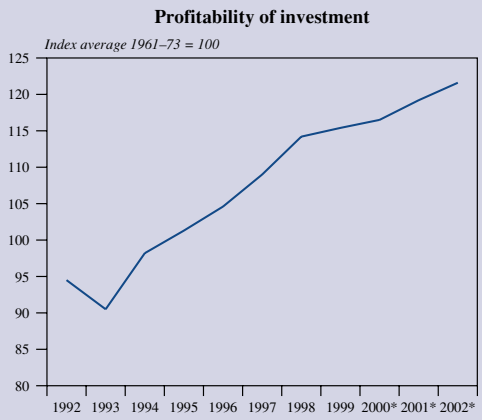
Graph 2: **Forces acting on economic activity in the euro area**











* = European Commisson's autumn 2000 forecasts.
Source: Commission services.

can be attributed to a growth in jobs in the services sector, though jobs gains were also registered in industry. This good performance, especially when compared with the dismal record of the first half of the 1990s, has been associated with both a rebound in economic activity and significant structural changes in the labour market ([1]). A more effective labour market combined with GDP growth above potential is therefore expected to continue to boost job creation in the future. Labour supply will continue to expand relatively rapidly due to demographic reasons but will meet only part of these employment needs. Consequently unemployment will continue to edge down steadily bringing the jobless rate below 8 % in 2002, thereby reaching a 20-year low. Apart from contributing to a much better labour market situation, progress towards better functioning labour markets has led to important changes in the nature and quality of jobs, the key features of which are briefly presented below.

The emergence of the knowledge-based economy — A highly educated workforce is conducive to a strong and sustained employment performance. The high education sectors — defined as those with more than 40 % of workers with tertiary education — remain relatively small, representing about a quarter of the total labour force. Nevertheless, they made by far the largest contribution to employment growth during the second half of the 1990s, accounting for about 75 % of net job creation. Strikingly, economies which create skill-intensive jobs also create other jobs. Hence, there is strong evidence that without a strong boost in knowledge-based employment and activity, overall job creation remains weak and fragile. From a policy perspective, this trend underlines the need for improving the educational and skill level of the present and future workforce.

Increased flexibility — A key feature of the euro-area labour market is a steady increase in more flexible forms of contractual arrangements in the 1990s. Both temporary and part-time employment progressed gradually over the past decade and now account for about 13 % and 18 % of the total labour force, respectively. In recent years, the growth in temporary employment has represented almost half of the additional number of people in paid employment. Similarly, the economy generated more new part-time than new full-time jobs during most of the 1990s, the trend being only reversed in 1999. To some extent, the trend towards more flexible contractual arrangements represents a better match between job opportunities and the needs of employees, as is evidenced by the fact that most part-time work remains voluntary. Nevertheless, increased flexibility has also been, to a large extent, used by employers to circumvent some of the rigidities of the labour market, particularly in the case of low-skill jobs.

Slow but steady progress on long-term unemployment — The share of long-term unemployed — i.e. in unemployment for a year or more — in the total workforce has edged down slowly but steadily since late 1997: accounting for 52 % of the total number of jobless at the end of 1997, the share of long-term unemployment declined to 48 % in the second quarter of 2000. This suggests that the combined effect of a strengthening in active policies and labour market reforms in Member States is starting to have a visible impact. Nevertheless, the share of long-term unemployed in the workforce remains too high, at about 4.4 %, and is, in any case, much higher than in the early 1990s. Such a high rate is one of the main causes of structural imbalances in the euro-area labour market with pockets of structural unemployment going hand in hand with skill shortages and bottlenecks in labour supply in certain sectors.

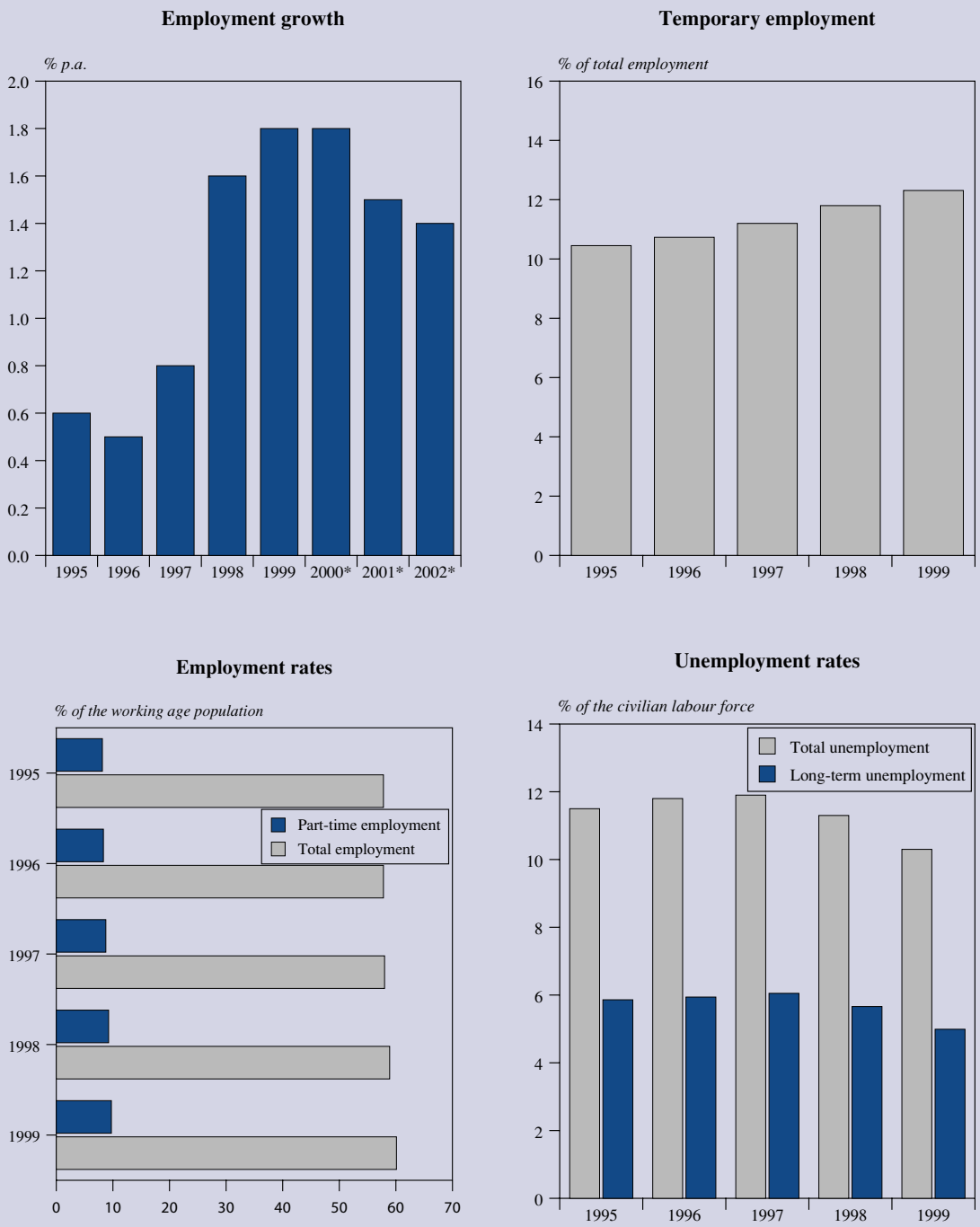
Tax-benefit reforms still needed — There is substantial evidence that the euro-area unemployment problem is closely linked to excessive taxation of labour and to a poor design of social benefit systems. Progress on this front remains so far disappointing. Although total taxation on labour peaked in 1997, it has declined only modestly since. Progress on this front should accelerate in the next couple of years, however. Most Member States have announced tax reforms that will bring the fiscal burden on labour down further. A large number of Member States are considering reductions of social security contributions while almost all of them are envisaging cuts in personal income taxes. On a more negative note, progress in reforming benefit systems remains limited. A few Member States are in the process of a comprehensive review of their tax-benefit systems in order to improve their incentive structures, reinforce control systems and make the eligibility conditions tighter. In the majority of Member States, however, reforms have so far been modest and piecemeal.

Headline inflation has picked up markedly, but core inflation remains subdued

Inflation has been on a clear upward trend in the euro area during most of 2000. Year-on-year headline HICP

([1]) For detailed analysis see European Commission (2000b).

Graph 3: **Employment developments in the euro area**



Source: Commission services.

inflation accelerated from 1.7 % at the end of 1999 to 2.8 % in September 2000 and has, since the middle of the year, constantly exceeded the upper band of the ECB's medium-term price objective (Graph 4). This acceleration is essentially due to surging oil prices and, to a lesser extent, a further weakening of the external value of the euro. Consumer energy prices in the euro area increased by 16 % during the 12 months to September 2000. Given the weight of energy products in the HICP basket, this represents a contribution of 1.4 % to the headline inflation rate.

In contrast, core inflation has remained relatively stable during the first half of 2000 before edging up modestly during the summer to reach 1.4 % in September. The gentle ascent since the summer indicates that persistently high oil prices and a weak euro are impacting on core consumer inflation. Data on energy sensitive services such as transport and tourism, for example, show modest upward trends throughout the same period. Furthermore, industrial producer prices are displaying a more markedly upward trend, with a 6.2 % increase in the year to September 2000. Given that producer prices have been shown to lead consumer price developments, in particular for industrial goods, with lags of about 12 months, the acceleration points to rising core consumer price inflation sometime at the end of 2000 and in 2001.

Notwithstanding these upward pressures on prices, the outlook for inflation in 2001 and 2002 remains relatively benign. According to the autumn 2000 forecasts of the Commission services, the HICP annual inflation rate in the euro area is forecast to accelerate from 1.1 % in 1999 to 2.3 % in 2000, before declining to 2.2 % and 1.9 % in 2001 and 2002, respectively. Hence, inflation will remain above the ECB's medium-term price objective until 2002 but current upward pressures on prices will remain largely in check. Real growth in the euro area is anticipated to decelerate slightly but to remain on an above-trend course. The factors which underpin the benign assessment of inflation prospects are related primarily to the expected trends in oil prices and wage behaviour but also to utilities deregulation and structural changes on the supply side.

Oil prices. The current imbalances between supply and demand on the oil market are anticipated to lessen progressively after the winter of 2001, resulting in oil prices well below USD 30 in the second half of 2002. Although some pass-through of past increases in import and energy prices will push core inflation higher throughout 2001, the gradual decrease in oil prices will help to contain increases in headline inflation.

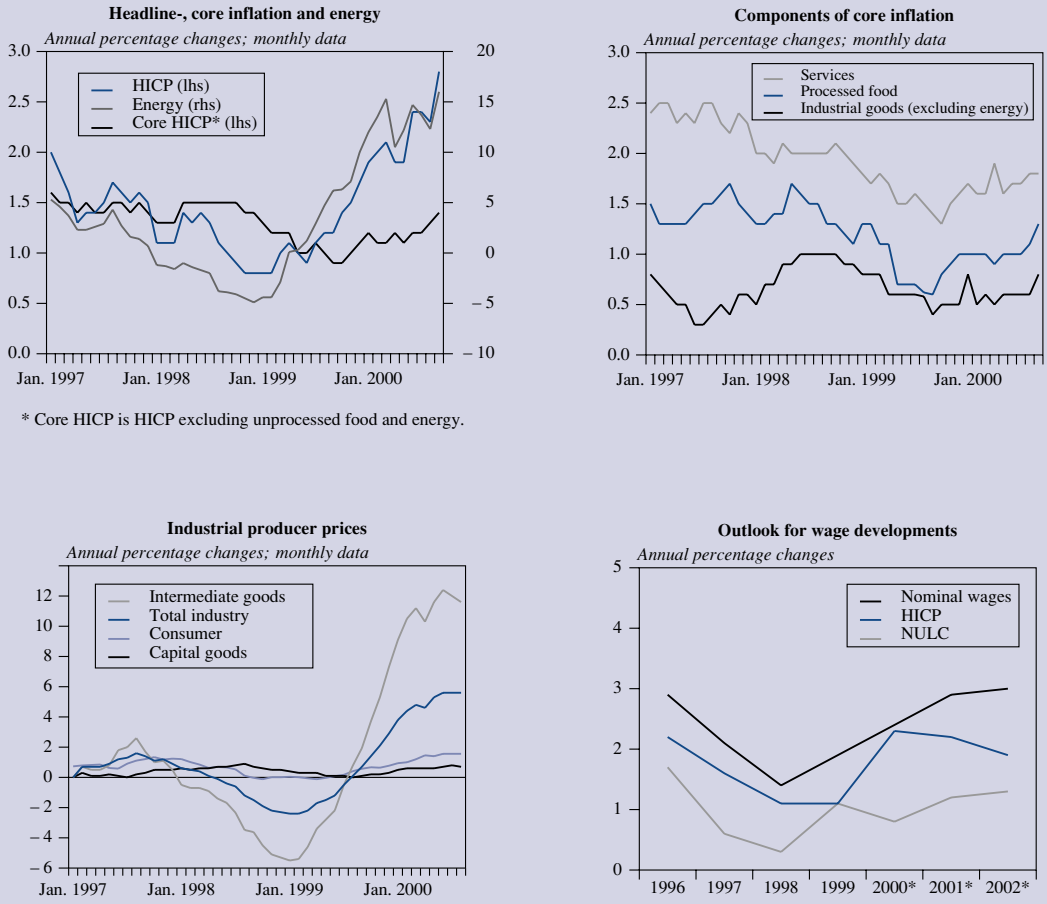
Labour markets. Notwithstanding the past acceleration in price inflation, sustained reductions in the aggregate unemployment rate and relatively rapid employment growth, wage increases in the euro area have so far remained moderate. An increasingly flexible labour market and a reduction in tax pressure on labour have contributed to continued wage moderation and are likely to continue to do so. Besides, in several Member States, wage developments in 2001 will be largely determined by wage settlements concluded before oil prices became an issue and which cover the period 2000 and 2001. Overall, wages are expected to increase only modestly in 2001 and 2002.

Structural changes on the supply side. Deregulation in the markets for telecommunications and electricity is estimated to have lowered the inflation rate by 0.2–0.3 % in 2000 and will continue to bring inflation down by a similar amount in 2001 and 2002. In addition, the introduction of new technologies and increased use of the Internet in business-to-business applications — resulting in cost savings, intense price competition and business restructuring throughout the economy — may also be contributing to the low underlying inflation pressure in the euro area. Finally, reduced rigidities in the product market and increased competition following the introduction of the euro will also help to contain price increases.

Labour productivity. Growth in labour productivity has picked up markedly in 2000 but remains below its previously observed long-term average. It is not anticipated to accelerate markedly in 2001 and 2002. Hence the benign outlook for inflation does not rest on a surge on productivity comparable to what happened in the United States in the past few years. Growth in unit labour costs will remain modest as a result of 'old-economy' wage moderation rather than any 'new-economy' feature.

Overall, the current increase in headline inflation is largely considered as temporary and should be absorbed smoothly provided that policy mistakes of the past are not repeated, i.e. provided that the policy mix does not turn strongly pro-cyclical and that wage moderation prevails. The decline in long-term interest rates since February and the flattening of the yield curve suggest that inflation expectations remain well contained at this stage. However, there are several important upside risks to the inflation outlook. Firstly, the increase in oil prices could be larger and more prolonged than currently

Graph 4: **Inflation trends in the euro area**



* Core HICP is HICP excluding unprocessed food and energy.

* = Autumn 2000 forecast.
Source: Commission services.

Year-on-year inflation in consumer prices

	Weight	September 1999		September 2000	
		Y-o-y growth	Contribution to total	Y-o-y growth	Contribution to total
Total HICP	100	1.2		2.8	
Core inflation	70.2	0.9	0.7	1.4	1.0
Energy:	9.0	6.2	0.6	16.0	1.4
- Fuel	4.8	14.1	0.7	24.7	1.2
- Gas	1.3	– 1.0	0.0	13.8	0.2
- Electricity	2.2	– 0.9	0.0	1.8	0.0

Source: Commission services.

assumed, thereby increasing the likelihood of second-round effects. Secondly, the labour market could deliver less wage moderation than currently assumed. Despite several years of strong employment growth there is, at present, only limited evidence of bottlenecks on the labour market. Nevertheless, given the robust employment growth projected for 2001 and 2002, more widespread signs of labour shortages could emerge in the euro area by the end of the forecasting period. Overall, the inflation forecast is based on the assumption that past structural reforms and changes have improved the efficiency of product and labour markets in the euro area and that further progress will be registered in the years to come. With actual output still below potential output, this assumption has been little tested so far but there remains uncertainty about the supply response of the economy to sustained demand growth.

1.2. Maintaining sustained economic growth

With economic activity in the euro area expanding at a relatively buoyant pace, the focus of policy making is shifting from recovery management to achieving a long-lasting, sustained, non-inflationary recovery. A durable, **domestic-driven** expansion is needed to achieve a high employment rate over the medium term, to bring the unemployment rate down to acceptable levels and, from a global perspective, to contribute to a re-balancing of the uneven global demand patterns.

At the present juncture, essentially three factors can be identified that may prevent the euro-area economy from expanding at a sustained rate in the next few years and beyond. Firstly, whilst the observed surge in oil prices is unlikely to derail the current recovery, a further and permanent hike in oil prices or inappropriate policy responses to the present increase could have detrimental growth effects. Secondly, a disorderly unwinding of the global economic and financial imbalances that have been building up for several years, could choke off the recovery. Thirdly, sustained growth of domestic demand that is not met with a corresponding enhancement of the productive potential will eventually lead to bottlenecks and inflationary pressures, requiring restrictive macroeconomic policies that in turn will jeopardise the expansion. Each of these factors will be briefly discussed below ([1]).

([1]) Higher oil prices, trends in the euro exchange rate and the macroeconomic policy mix are discussed more in detail in Sections 2, 3 and 4, respectively.

Coping with the rise in oil prices

Oil prices are now more than three times higher than at the beginning of 1999 and have recently stabilised at levels not seen since the Gulf War. As the oil price rise has already weakened economic activity in the euro area, there is some concern that it may impair the ongoing recovery. As analysed in more detail in Section 2, there are several reasons to believe that the current oil price shock will not have a major adverse impact on economic activity. The current increase in oil prices is comparatively smaller than in the case of previous oil price shocks and is estimated to be only temporary. Furthermore the economy of the euro area is now quite different from what it was in the 1970s and the 1980s and will respond more adequately to high oil prices than in the past. Overall, the oil price hike essentially affects demand as the economy has to absorb a substantial terms-of-trade shock and will have minor supply effects. Model simulations suggest that the rise in oil prices is likely to curb annual real GDP growth by about a quarter to half of a percentage point in 2000 and 2001, which is considerably less than during previous oil price shocks.

However, there are two risks that would put pressure on macroeconomic policy and could derail the recovery, if they were to materialise. Firstly, the increase in oil prices might turn out to be both larger and more prolonged than currently envisaged. The Commission services' autumn forecasts assume that the price of Brent crude will stay close to its current level, i.e. above USD 30, during winter 2001 before declining progressively to USD 26 in the second half of 2002. Given the oil market's tendency to respond to imbalances between supply and demand with large price fluctuations, a further surge in oil prices cannot be excluded. Furthermore, most previous large increases in oil prices have proved to be rather stretched out. Secondly, the impact of the current oil shock could be substantially more harmful if wage earners or producers were to attempt to recover oil-induced losses in real income. So far there has neither been a wage response nor is there evidence of endeavours on behalf of firms to safeguard profit margins, although in the case of wages the real test will come when existing settlements expire. Similarly, governments could be tempted to adopt an expansionary stance of fiscal policy to offset the oil-induced weakening of domestic demand. If these two risks were to occur, implying a substantial increase in inflation, monetary policy would have to react strongly to maintain price stability in the medium term.

Improving resilience to external shocks

Since mid-1999, a propitious external environment — namely a vigorous upswing in global demand and the prolonged weakness of the euro — have supported the strong pace of economic activity in the euro area. It is questionable, though, that rising exports could provide a continued stimulus over the medium term. Indeed, a series of economic and financial imbalances, which are largely intertwined, have been building up in the world economy over the past number of years. These imbalances appear unlikely to be sustainable and will inevitably need to be unwound. They include an uneven growth performance among leading economies, large current account imbalances, a serious misalignment of major currencies relative to their long-term equilibrium values and stock markets that remain largely overvalued by historical standards.

In this context, it should be noted that in the past decade, euro-area growth was hit twice by an external shock just as it reached a cruising altitude of 3–3.5 %; in 1995 by a bout of dollar weakness combined with a sharp rise in long-term interest rates and in 1998/99 by the financial crises in emerging economies. Compared with these previous episodes, the euro area is likely to withstand better external turbulences. The euro area is a relatively closed economic entity with extra-euro-area exports accounting for about 16 % of GDP. Furthermore, with the launch of a single currency, disruptive intra-euro-area exchange rate fluctuations and associated sharp increases of short-term interest rates are ruled out. There is actually substantive evidence that the anticipation of the single currency and, later its launch, have already helped the euro area to absorb the 1998/99 external shock more smoothly. Finally, the resilience of domestic demand and strong employment growth should allow the euro area to weather an orderly adjustment of these imbalances. An abrupt and discordant unwinding, however, could threaten the durability of the expansion in the euro area.

Whilst the transition to more sustainable patterns of global economic and financial conditions will depend on several factors, a smooth return to sustainable demand growth in the United States will play a key role. Although recent indicators seem to suggest that the long-awaited soft-landing of the US economy has begun to take hold, in light of the existing imbalances of the US economy a less benign outcome cannot be entirely excluded (Table 2). Whilst the US economy is characterised by fundamental strength, soundness and flexibility, including a relatively low level of inflation and fiscal surpluses, it also displays a number of significant imbalances; a large and growing current account deficit, a low and still declining level of personal saving, an increasingly tight labour market and a level of stock prices, despite the recent falls, which is high by most standards. As a result, the US economy is vulnerable to sudden changes in market sentiment. A sharp downward revision of growth perspectives in the United States by financial markets could cause a fall in equity prices that would spill over into the rest of the economy through wealth effects, lower business and consumer confidence and reduced investment. It would also be likely to trigger a fall in the willingness of foreign investors to hold dollar denominated assets. A change of sentiment against the dollar in the foreign exchange rate market might lead to massive portfolio shifts into alternative investment currencies and a sharp depreciation of the dollar.

If the latter scenario was to materialise, the euro area is unlikely to remain unaffected. The combination of lower exports to the United States, stock market contagion and an abrupt, strong appreciation of the euro would have important negative implications for the euro area, although the impact could be mitigated by an adjustment of the monetary policy stance in the euro area. Nevertheless, the euro-area economy is likely to have to absorb most of the US current account adjustment, which should preferably occur through imports rather than through distortive exchange rate movements. Hence, efforts to sustain and strengthen domestic-driven growth in the euro area in the medium term will be crucial.

Rising supply in tandem with demand

Whilst measures of the output gap are notoriously uncertain, current indications suggest that the overall euro area is currently operating slightly below potential. It is likely, however, that a continuation of the existing pace of growth (i.e. of about 3 %) and under the assumption of broadly unchanged supply-side conditions compared to the recent past, a situation of modest excess demand may emerge in the near future. For the euro area to be able to grow at a pace of 3 % (or more) over the medium term, its productive potential will need to be enhanced.

In the past, labour market rigidities — characterised *inter alia* by a mismatch between the supply of and demand for labour, a low degree of wage differentiation and rapid wage responses to cyclical improvements and

Table 2

World economic outlook, 1998–2002*

(annual percentage change, unless otherwise indicated)

		Commission projections			
	1998	1999	2000*	2001*	2002*
Real GDP growth					
United States	4.4	4.3	5.1	3.3	3.0
Japan	– 2.5	0.2	1.4	1.9	2.2
EU-15	2.7	2.5	3.4	3.1	3.0
Euro area	2.8	2.5	3.5	3.2	3.0
Trade volume (1)					
World	5.2	5.9	10.7	8.6	8.1
World excluding EU-15	3.5	6.3	10.7	8.4	8.2
Commodity prices					
Oil (2)	– 33.4	40.0	62.7	3.6	– 9.2
Non-oil commodities (3)	– 14.7	– 6.7	3.7	3.6	2.3
Current account balances (% of GDP)					
United States	– 2.3	– 3.4	– 4.2	– 4.3	– 4.2
Japan	3.2	2.5	2.0	2.0	1.9
EU-15	0.8	0.2	– 0.3	– 0.4	– 0.2
Euro area	1.0	0.4	– 0.1	– 0.2	– 0.1

* Commission services autumn 2000 forecast.

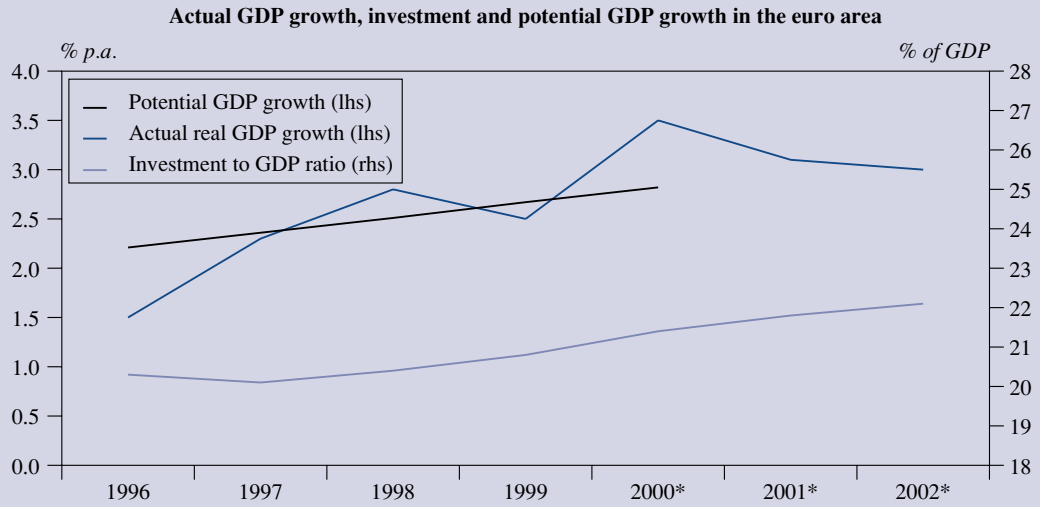
(1) Average of growth of exports and imports.
(2) Change in price in USD/barrel, Brent blend.
(3) Change in an average price based on world commodity export weights.

Source: Commission services.

declining unemployment — were a major cause of the rather short-lived nature of recoveries in the euro area. However, thanks to the more resolute implementation of reforms during the last decade, labour seems to have become less of an obstacle to sustained growth. Indeed, the increase in labour force growth in recent years to close to 1 % per year compares with a virtual standstill during the first half of the 1990s. This increase reflects essentially a rise in the female participation rate. Moreover, as shown in Graph 5, the rapid decline in the unemployment rate since 1997 has not been accompanied by a rise in wage growth. This contrasts with the rather stable inverse relationship between unemployment and wage growth until the second half of the 1990s and is suggestive of a decline in the non-accelerating inflation rate of unemployment (NAIRU) in the euro area. Furthermore, a higher quality of labour input, as evidenced in recent empirical analyses, as well as greater working-time flexibility may have increased the contribution to potential growth from labour. Finally, the cost of unskilled labour has been lowered by targeted cuts in social security contributions. A prolongation of the above trends through further labour market reforms in line with the employment guidelines and continued appropriate wage behaviour will enhance the chances of maintaining high rates of growth without triggering bottlenecks or inflationary pressures stemming from the labour market.

Despite rising import prices, due in particular to the hike in oil prices, trends in core inflation have remained benign in the euro area. Adequate wage behaviour aside, this is at least partially attributable to product market reforms, in particular the opening of previously sheltered sectors through deregulation and liberalisation. For instance, prices are still falling in sectors where international competition is fierce and energy intensity is low (e.g. textiles), where a process of deregulation is gradually increasing competitive pressures (e.g. utilities, postal services) and where liberalisation unleashed high productivity growth (e.g. telecommunications). Important indirect benefits may accrue if cheaper telecommunica-

Graph 5: **Scope for sustained growth in the euro area**



* = European Commission autumn 2000 forecasts.
Source: Commission services.

tions services and Internet usage lead to higher price transparency, competition and business efficiency throughout the economy. Stronger competition also makes it more difficult for businesses and labour unions with market power to maintain prices and wages above market-clearing levels. At the macroeconomic level, a reduction in market power, as well as increased competition, may result in a lower NAIRU and a higher growth of potential output.

Investment growth has picked up markedly in recent years. Although the expected modest deceleration in the coming years is unwelcome and somewhat surprising, investment growth will remain quite buoyant, thereby contributing to lifting potential GDP growth and avoiding capacity constraints. Furthermore, investment could prove stronger than currently expected. Indeed, investment opportunities have steadily brightened in the euro area. Capital profitability is estimated to have reached 8.5 % in 2000 ([1]). Interest rates are low compared to historical standards, even though the trend of declining short-term and long-term real interest rates reverted. Given the high degree of capacity utilisation and the rapid pace of technical progress, investment conditions in the euro area are clearly brighter than actual capital formation suggests. Finally, the envisaged tax reforms and reductions in many euro-area Member States and the further liberalisation and deregulation of network industries are likely to influence positively investment decisions.

In addition, it is possible that investment growth based on national accounting data significantly underestimates the acceleration in productive capacity. To exploit the opportunities provided by technical advances in the ICT sector, firms must heavily invest in both ICT capital, for which prices have declined considerably in quality-adjusted terms, and in intangible assets to adapt production and decision-making processes to the new equipment. Both items are poorly captured by official statistics and although the euro area is lagging the United States in terms of ICT diffusion, there is some evidence that the driving forces of productivity growth identified for the US economy are at work on this side of the Atlantic also (see Chapter 3). Since the gap with the United States is limited in terms of magnitude and time, there is some reason for optimism that a positive surprise on capital formation will herald an acceleration of productivity growth in forthcoming years.

Recently revised estimates by the Commission services point to a gradual acceleration in the euro area's potential growth rate during the 1990s from 2 ¾ % in 1996 to 2.75 % in 2000. The increase is mainly due to two factors. Firstly, assuming a relatively optimistic view regarding the impact of ICT on productivity growth and with probable substitution effects between ICT capital and other forms of capital being taken into account, ICT investment and production in the euro area may have added 0.3–0.4 percentage points to the potential rate of growth ([2]). Secondly, the rebound in investment during the second half of the 1990s led to a modernisation of the capital stock, thereby increasing capital productivity. Although both effects are surrounded by a considerable margin of uncertainty, they nevertheless suggest that the productive capacity in the euro area has expanded, and may continue to do so, thereby allowing supply to increase broadly in tandem with demand growth which is a prerequisite for keeping non-inflationary growth on track over the medium term.

([1]) Measured as the net return on net capital, profitability is still about 3 percentage points lower than in the United States.

([2]) In Chapter 3 positive effects from the impact of productivity growth in the ICT sector and the effect of ICT capital deepening on the euro area economy are derived.

2. How vulnerable is the euro-area economy to higher oil prices?

After having hit a historical low in late 1998, oil prices have increased sharply through most of 1999 and 2000. In autumn 2000, oil prices were flirting with levels not seen since 1990 when the Gulf War temporarily disrupted the market. Hence, the price for the European benchmark Brent light more than trebled in less than two years, rebounding from USD 10 per barrel in December 1998 to an average of USD 32.6 in September 2000 ([1]), falling only slightly to USD 31.5 in October (Graph 6).

The current increase in the level of prices seems to justify the use of the 'oil shock' label. Over the past three decades, the economy of the euro area had to cope with three other major surges in oil prices: in 1973 and 1974 after OPEC began to impose oligopolistic supply restrictions, in 1979 and 1980 following the political change in Iran and in 1990 in the wake of Iraq's invasion of Kuwait. The third episode was very short-lived and oil prices reverted rapidly to previous levels. Consequently, only the 1973 and 1979 price surges can be considered as outright oil shocks. Since these two oil price shocks preceded serious recession or slowdown, the extent of the vulnerability of the euro-area economy to higher oil prices has become a key concern.

2.1. Recent and prospective developments in world oil markets

The volatility of oil prices in the past few years is the result of a number of factors that culminated into imbalances between supply and demand. Since the oil market is characterised by low short-run price elasticities, small imbalances between supply and demand tend to trigger significant price swings.

In 1997, OPEC's decision to increase production while the world economy was beginning to slow, due to the crisis in the emerging markets, translated into strong downward pressures on oil prices. During 1998, the cartel tried to engineer several output cuts but these half-hearted efforts did not prevent prices from sliding further. Table 3 illustrates this imbalance between supply and demand. Excess supply translated into a significant increase of stocks in 1997 and, even more so, in 1998 when stocks absorbed about 2.5 % of production.

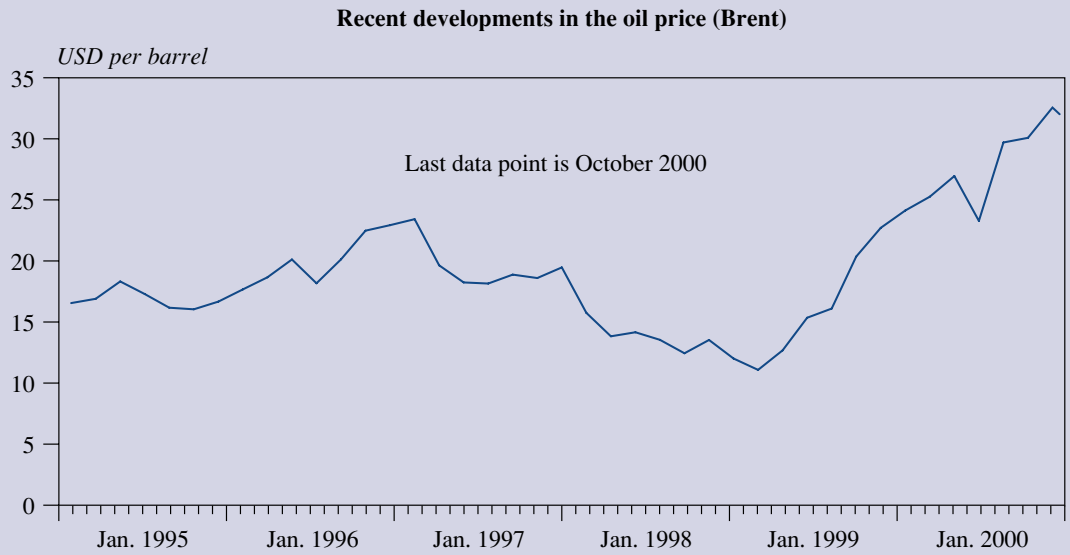
At its meeting in March 1999, OPEC managed to agree upon more substantial production cuts. At that time, the oil price had dropped to USD 10 per barrel, giving OPEC members a strong incentive to cooperate. The impact of the cartel's production cuts was reinforced by output reductions in some non-OPEC countries such as Mexico and Norway. In the meantime, world demand for energy picked up steam on the back of a progressive recovery of the world economy. Insufficient supply entailed a significant decrease in stocks through the first quarter of 2000 and a steady increase in oil prices to about USD 30 by March 2000.

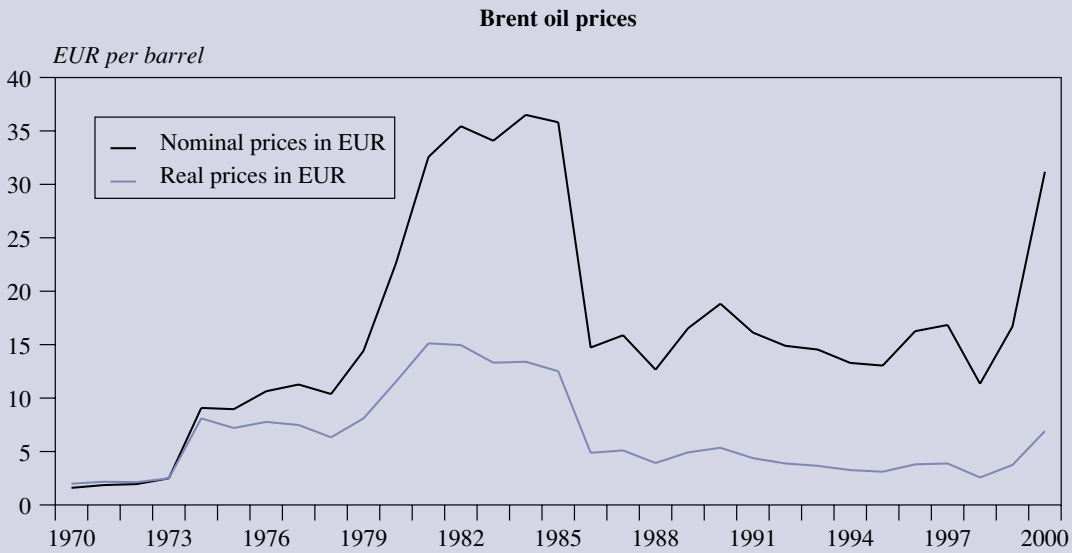
Against this background, OPEC has made several efforts to cool off the market. Early in the year, it introduced a price-band concept with a target price of USD 25 and lower and upper bounds of USD 22 and USD 28, respectively. Price movements out of the band during a certain period of time should lead to direct market intervention. Due to stubbornly high oil prices, the cartel announced several increases in its production target; by 1.75 million barrels a day in March, 0.7 million in June, 0.8 million in September and 0.5 million in October. Altogether, these increases are worth about 5 % of world production but they have, so far, failed to bring the oil price significantly down.

The short-term outlook for the oil market is surrounded by a high degree of uncertainty but oil prices are unlikely to decline soon. With the world economy enjoying a

([1]) Daily peaks even exceeded USD 35 on several occasions in September.

Graph 6: **Trends in oil prices**





Source: Commission services.

sustained expansion, energy demand is unlikely to taper off rapidly. Furthermore, oil inventories are exceptionally low, particularly in the United States, and need to be rebuilt. On the supply side, both OPEC's recent efforts to raise production quotas and the US Government's decision to release some of its strategic reserves have so far failed to bring prices substantially down. This indicates that tensions between supply and demand remain strong.

Short-term divergences in interests between OPEC members are an additional factor that is likely to support oil prices. Any increase in oil demand will have to be met by OPEC since producers outside the cartel are facing capacity shortages due to a low level of investment in the years of low oil prices. Table 3 shows that OPEC's spare capacity is mostly located in Saudi Arabia. Consequently, many OPEC members are currently operating at full capacity and have little to gain from an increase in OPEC's overall output that would bring lower prices.

Furthermore, although there is still some spare capacity for the industry as a whole, this capacity represents only about 3.5 % of world production. Hence, risks of shortages in case of disruption due to a military conflict or a major technical accident are not negligible. Tensions in the Middle East and uncertainties surrounding Iraq's export policy have added to these risks which will exert upward pressure on prices in the months to come.

Nevertheless, there are several reasons to believe that excessively high oil prices will not persist over the medium-run. Firstly, persistently high oil prices would accelerate investment in energy-saving technologies,

Table 3

World oil markets: supply, demand and production capacity
The oil market — Supply and demand

(million barrels per day)

	1996	1997	1998	1999	2000			
					Total *	Q1	Q2	Q3
Supply	72.0	74.3	75.5	74.1	n.a.	75.1	76.1	77.1
— OPEC	28.4	29.9	30.8	29.4	n.a.	29.3	30.7	31.4
— Non-OPEC	43.6	44.5	44.7	44.6	45.8	45.7	45.4	45.6
Demand	71.6	73.1	73.5	74.7	75.7	75.2	73.7	75.5
— OECD	45.9	46.7	46.8	47.6	47.9	47.8	46.2	47.6
— Non-OECD	25.7	26.5	26.7	27.1	27.8	27.4	27.6	27.8
Changes in stocks	0.5	1.2	1.9	– 0.7				

* IEA estimate for 2000 as a whole.

OPEC crude oil production and capacity

(million barrels per day)

	Production (Sept 2000)	Production capacity	Spare capacity
Algeria	0.82	0.90	0.08
Indonesia	1.31	1.35	0.04
Iran	3.65	3.73	0.08
Kuwait	2.17	2.20	0.03
Libya	1.43	1.45	0.02
Nigeria	1.98	2.20	0.22
Qatar	0.70	0.75	0.05
Saudi Arabia	8.85	10.50	1.65
UAE	2.28	2.40	0.12
Venezuela	2.93	2.95	0.02
Subtotal	26.11	28.43	2.32
Iraq	2.87	3.00	0.13
Total	28.98	31.43	2.45

Source: International Energy Agency — monthly oil market report.

stimulate the use of alternative energies and would therefore dampen oil consumption. Secondly, although OPEC is currently talking with a more or less single voice, its members continue to have structurally divergent interests over the long run. Finally, the development of non-OPEC oil production, which always reacts with a lag to price fluctuations, will progressively make output curbs by OPEC less effective. Overall, the Commission services autumn forecast assumes that the oil price will stay at around USD 32 during the winter 2000–01 before weakening gradually to USD 26 by the second half of 2002.

2.2. The macroeconomic impact of higher oil prices

The present section examines the potential impact of higher oil prices on the economy of the euro area by comparing the current situation with the two previous oil price shocks.

A smaller shock

The current oil price shock is smaller than its two predecessors, both because of a smaller surge in oil prices and because of reduced oil dependence of the euro-area economy.

The recent increase in the oil price is substantial and has been aggravated by the weakness of the euro. Nevertheless, it is somewhat artificially inflated by the choice of an unusually low point of comparison. Using annual averages, the price of the Brent in US dollars climbed by close to 130 % from its low of 1998 to 2000. The increase even exceeded 170 % in euro terms. Nevertheless, oil prices were exceptionally low in 1998, about 40 % below their average for the decade. Taking 1997 as a starting point reduces the rebound in the Brent price to 50 % in US dollars and 80 % in euro. The current increase can therefore be considered as significantly less steep than in the case of the 1973 and 1979 crises which saw price surges of 400 and 140 % respectively (Table 4).

A relatively moderate picture also emerges when looking at price levels in real terms. Although the real price of oil can now be considered to be high and is close to its level observed in the mid-1970s, it still remains about 50 % below its 1982 peak level.

In the euro area, there is a substantial fiscal wedge between the prices of crude oil and refined products (Graph 7). Given that taxation on fuel products takes largely the form of excise duties (i.e. duties calculated per physical unit rather than *ad valorem*), the fiscal wedge acts as a cushion to the fluctuation of crude prices. Furthermore, the fiscal wedge has increased steadily over the past two decades, thereby making final prices less sensitive to crude oil prices.

Another factor that reduces the exposure of the euro area to crude oil prices is a structural decrease in the use of energy and oil. Indeed, EU imports of oil per unit of output have gone down by 25 % since the early 1970s, and the use of oil per unit of output has been halved (Table 5).

Finally, the smaller increase of oil prices and the reduced dependence on oil translate into a relatively moderate terms-of-trade shock. Higher oil prices entail a deterioration of the terms of trade, i.e. a decrease of the ratio of export prices to import prices. In other words, the euro area has to face an increase in net trans-

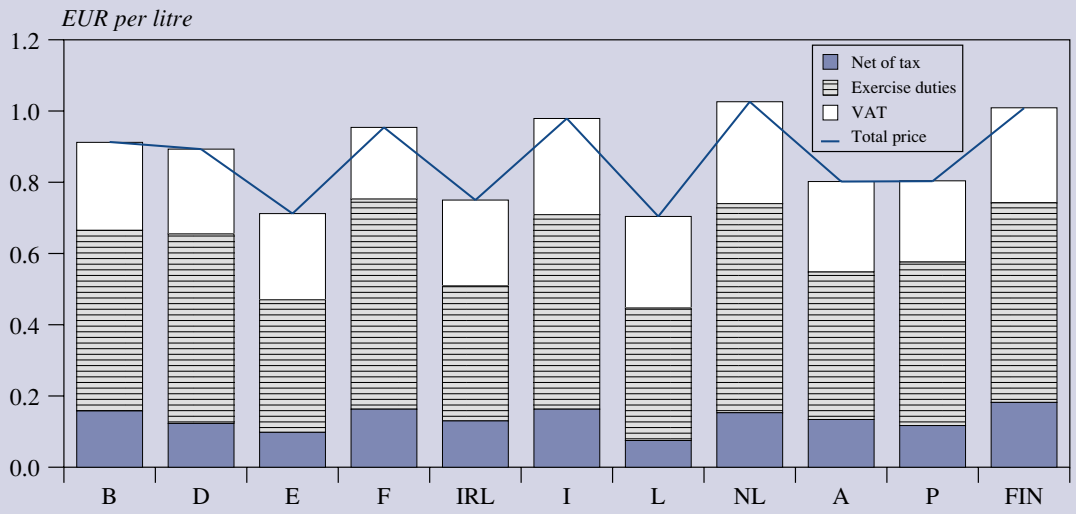
Table 4

The increase in the oil price (UK-Brent, annual average)

	First oil shock	Second oil shock	Third oil shock	
	1972–74	1978–80	1998–2000	1997–2000
Change in oil price level				
In USD	from 2.2 to 10.9	from 13.2 to 31.5	from 12.7 to 29	from 19.1 to 29
In EUR/ECU	from 2.0 to 9.1	from 10.4 to 22.6	from 11.3 to 31.2	from 16.8 to 31.2
Change in %				
In USD	398	138	128	52
In EUR/ECU	365	118	175	85

Source: Commission services.

Graph 7: **Prices of premium unleaded petrol, July 1999**



Source: Commission services.

Table 5

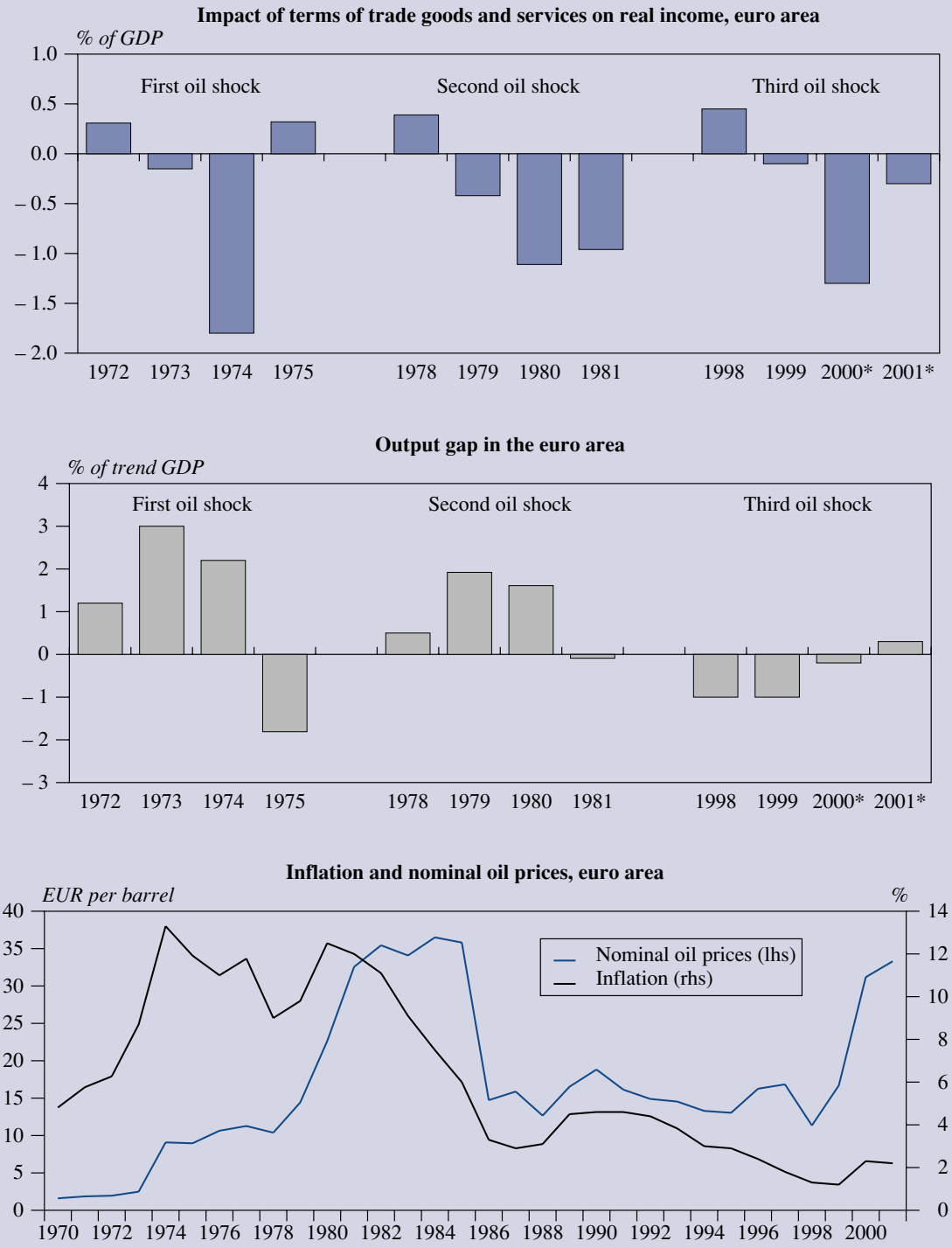
The dependence of the euro area on oil

	1972	1978	1998
Share of energy imports (1)			
— In total imports (%)	20.5	10.7	4.7
— In GDP (%)	1.6	2.0	1.2
Energy use (toe per 1995 million EUR)			
Share of total energy in GDP	275	260	197
Share of oil in GDP	164	146	86

(1) EU as a whole.

Source: Commission services.

Graph 8: **Macroeconomic performance around oil price shocks**



* Forecasts. Also the figures for 2000 and 2001 in the graph 'Inflation and nominal oil prices, euro area' is forecast.
Source: Commission services.

fers to oil producing countries. These additional transfers are borne by households through a reduction in real income and, possibly, by companies through lower profits. Graph 8 shows that the estimated direct impact of the terms-of-trade shock in GDP in 2000 (– 1.3 %) and 2001 (– 0.3 %) is comparable to what happened in 1979 and 1980 (– 1.5 %) ([1]) and below what was registered during the first oil shock (– 2 %). Moreover, the terms-of-trade deterioration incurred in 2000 and 2001 is the joint result of a depreciating euro and higher oil prices. About half of it comes from higher oil prices in US dollars (– 0.7 % in 2000 and – 0.1 % in 2001), the rest being attributable to the currency effect on oil prices (– 0.3 % in 2000 and – 0.1 % in 2001) and the currency effect on other imports (– 0.3 % in 2000 and – 0.1 % in 2001).

A sounder macroeconomic environment

Another factor that will substantially alleviate the burden of higher energy prices is the fact that the macroeconomic environment is now much sounder than it used to be. The first and, to a much lower degree, the second oil shock were preceded and accompanied by serious economic imbalances that magnified the impact of higher oil prices.

A better business cycle position. The 1973 and 1974 and 1979 and 1980 surges in oil prices were both preceded by a clear slowdown in GDP growth. Although recent leading indicators are pointing to a temporary lull in growth, the recovery in the euro area is still in an early stage. Besides, the recent deterioration of activity indicators is largely coincident with the surge in oil prices.

In 1973, the increase in oil prices hit an economy that was in an advanced stage of overheating, as a result of several years of quite strong economic growth. Capacity utilisation was high and the output gap was largely positive. The case for overheating is less clear for the second oil shock but the output gap nevertheless moved into positive territory in 1979. In contrast, the output gap is still negative in 2000 and there are currently no signs of overheating.

Lower inflation and moderate wage behaviour. Both in 1973 and in 1979, the surge in oil prices hit an economy that already had to cope with serious difficulties on the inflation front. The first oil shock unfolded as inflation in the euro area was on a clear upward trend. In the case of the second oil shock, inflation was not accelerating but was running in the double-digit area. In comparison, current inflation is low and, although it has picked up through 2000, the acceleration is essentially attributable to the direct impact of higher oil prices. Core inflation is still subdued and remains significantly lower than headline inflation.

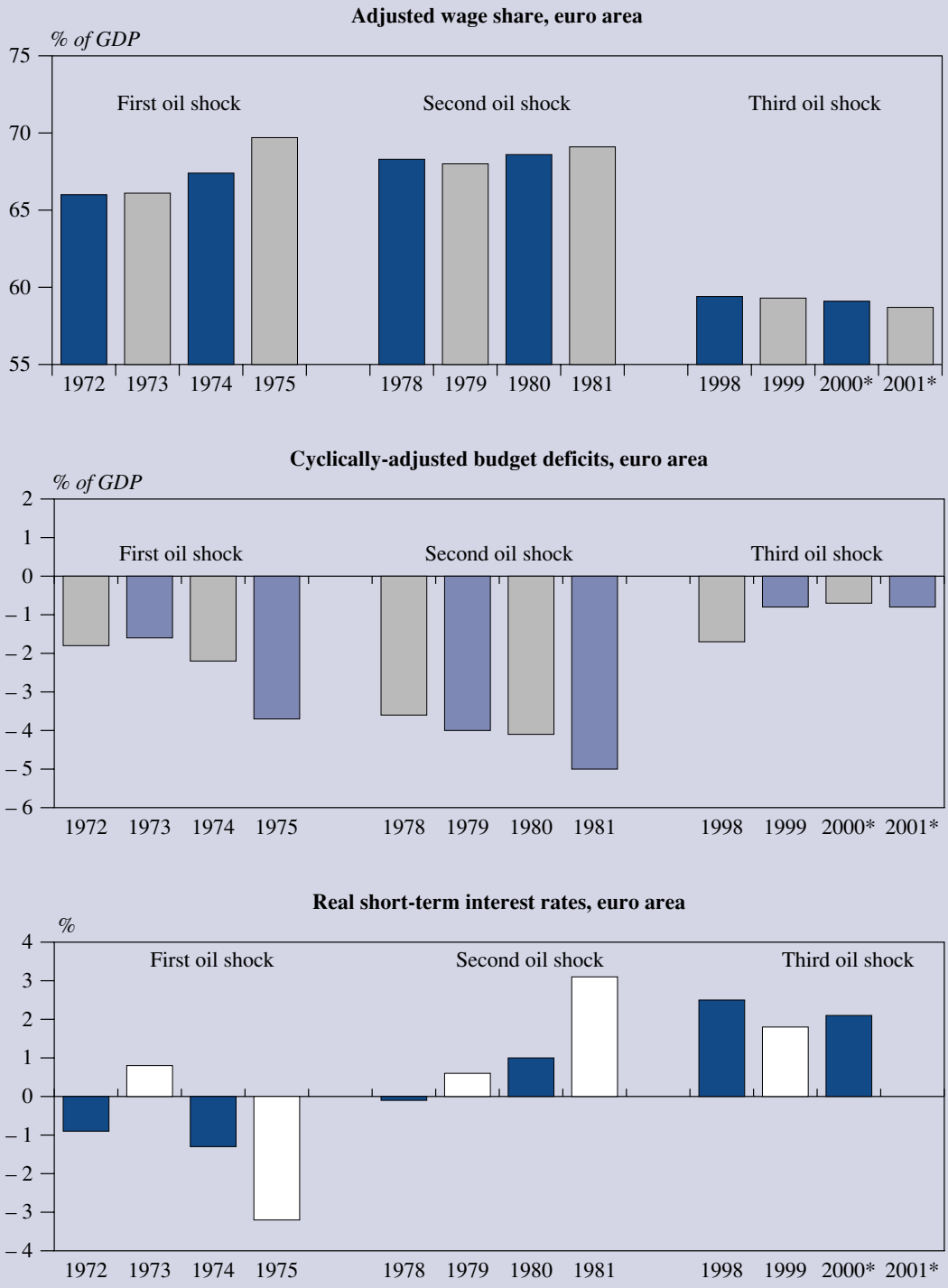
The effects of the first oil shock were amplified by adverse reactions on the wage front. Workers resisted cuts in real wages, thereby setting in motion a vicious wage-price spiral and raising the share of wages in value added. The end result was a combination of higher inflation and higher unemployment. The situation was aggravated by a structural slowdown in labour productivity that was first judged to be temporary and therefore led to inadequate wage increases. Wage settlements remained more modest in 1979 and 1980, which is probably one of the main reasons why the second shock was absorbed less painfully. The share of wages in GDP nevertheless increased somewhat in 1980 and 1981 (Graph 9).

The situation in the labour market is currently much more favourable. The acceleration of HICP inflation due to higher oil prices has, so far, not spilled over into the wages formation process indicating that workers seem to be willing to bear a large share of the deterioration in the terms of trade. Hence, according to the Commission services' autumn forecast, growth in wage compensation per employee will pick up only moderately to 2.4 % in 2000 and 2.9 % in 2001. Given projected productivity growth, this means that unit labour costs will rise less rapidly in 2000 and 2001 than in 1999 and will continue to decrease in real terms. The economy of the euro area has been undergoing some structural changes that should allow it to cope more effectively with surging energy prices. Among other things, there are signs that the labour market has gained in flexibility through an increased use of interim employment and short-term contracts.

A more adequate policy mix. There is strong evidence that the policy mix around the first oil shock seriously aggravated the negative impact of higher oil prices. The first oil shock was preceded by a monetary tightening

([1]) The late 1970s/early 1980s have actually registered two deteriorations in the terms of trade: a first one in 1979–80 on the back of higher oil prices and a second one in 1981 essentially attributable to the appreciation of the dollar. Oil prices increased somewhat further in 1981 but their contribution to the terms-of-trade shock remained modest.

Graph 9: **Macroeconomic policy around oil price shocks**



* Forecasts.
Source: Commission services.

aimed at curbing accelerating inflation. This tightening probably goes a long way in explaining the growth slowdown observed already before the hike of oil prices. Monetary conditions were then relaxed significantly in 1974 and 1975 to cope with the recession. Cyclically-adjusted deficits also increased so that the entire policy mix became strongly counter-cyclical, a factor which certainly delayed the necessary adjustment in the labour market.

The policy reaction was somewhat better during the second oil shock. To some extent, a monetary tightening also took place before the increase in oil prices but the monetary stance was not reversed subsequently. Besides, fiscal policy remained broadly neutral in 1979 and 1980 ([1]).

So far, the current situation looks more favourable. Monetary conditions are somewhat unbalanced due to the prolonged weakness of the euro. Nevertheless, the ECB's recent tightening remains largely offset by the euro depreciation and monetary conditions are less tight than in 1973 and 1979. Furthermore, while the stance of budgetary policy risks becoming pro-cyclical in 2001, the expected fiscal easing is more moderate compared to previous episodes.

General impact

There are strong reasons to believe that the current oil shock will inflict relatively limited damage only to the economy of the euro area. Simulations run with the QUEST model of the European Commission indicate that a USD 12 increase in oil prices would *ceteris paribus* entail a growth slowdown of 0.8 percentage points over three years and an acceleration of inflation of 1.3 points over the same period (Table 6). Nevertheless, it is worth stressing that such a moderate result rests on three critical assumptions. Firstly, the surge in oil prices does not weigh substantially on consumer and business confidence; secondly, the labour market responds adequately to higher oil prices and delivers the requested wage moderation; and finally, governments do not resort to fiscal actions to offset the impact of the shock.

([1]) The policy mix became more unbalanced in 1981 as the economy was hit by the terms-of-trade deterioration consecutive to the appreciation of the dollar. Fiscal policy was relaxed moderately. Interest rates were lifted substantially but this was largely offset by a lower exchange rate.

2.3. Adequate policy responses

Higher oil prices inevitably take their toll on economic activity. One of the main lessons drawn from past experiences with such shocks is that there is not much macroeconomic policies can do to alleviate the burden. Policies aimed at sustaining domestic demand, to the extent that they delay the necessary adjustment of real wages, can only bring a temporary relief at the cost of accelerating inflation.

If not much relief is to be expected from monetary or fiscal policy, more can be done at the microeconomic level. A number of microeconomic measures have been envisaged in the euro area to respond to the rise in oil prices. These may be grouped into five categories:

- actions aiming at reducing fuel and transport costs;
- actions which enable service providers to pass on increased fuel costs to their clients;
- financial assistance not directly related to transport or fuel use;
- the strengthening of competition and transparency in the oil industry sector of the euro area; and
- actions making Europe's economy less oil dependent.

The first type of measure is the least desirable from an economic perspective. A rise in the market price of fuel is a signal that it is relatively scarce and that its consumption should decrease. Actions such as cuts in excise duties blunt the message coming from higher prices. Besides, tax cuts amount, in the end, to transferring tax revenue to OPEC countries. They encourage the cartel to keep prices artificially high since the effect of crude increases on consumer prices would be offset by tax reductions. Finally, if tax cuts are targeted at particular sectors they may raise issues of State aid ([2]).

For the economy to get the proper price signals, higher input prices ought to result in higher end-user prices. The fact that sectors such as road transport, fisheries and taxies have been unable to pass on higher fuel costs to their clients suggests the existence of deficiencies in the functioning of these markets, which points to the need for regulatory and structural reforms.

([2]) Tax cuts also raise the broader issue of tax harmonisation on fuel products within the European Union. For this matter see European Commission (2000).

Table 6

Impact of a USD 12 increase in oil prices, euro area

(% p.a.)

	Year 1	Year 2	Year 3
GDP growth	– 0.2	– 0.4	– 0.2
Inflation	0.7	0.4	0.2

Source: Commission services.

Financial support directed at those who are more vulnerable to a sudden increase in fuel costs does not interfere directly with the signal delivered by higher prices. Accordingly, it may be the most appropriate means of addressing the issue. However, if given to enterprises it must be compatible with State aid, competition and internal market regulations.

There is some evidence that there may be a lack of competition in the oil industry sector in the euro area. It is essential to promote a more transparent and competitive structure in the fuel distribution industry. A critical factor lies in the development of a genuine internal market for refined products enabling all distributors to be supplied easily and competitively, including from sources other than national refiners.

From a more long-term perspective, high oil prices underline the need to develop a new strategy aimed at reducing the euro-area's oil dependence. Such a strategy should be geared to the gradual substitution of oil by other sources of energy, greater use of renewable and alternative energies, demand management, and greater energy efficiency and energy savings. In this respect, special attention should be paid to the key transport sector, which accounts for 47 % of gross domestic consumption of oil. Curbing that sector's steadily rising oil consumption will require a modal shift towards cleaner transport modes. In the case of freight transport, this will mean a shift towards rail and short-distance sea transport. In the case of passenger transport, this will have to be achieved through the promotion of clean forms of urban transport and through disincentives on the use of personal motor cars. Overall, it is worth underlining that policy measures targeted at reducing oil consumption achieve a double objective: they improve the protection of the environment and they reduce the economy's vulnerability to future oil price rises.

A final measure that has been mooted deserves separate consideration. This is the suggestion that Member States should release part of their strategic reserves to the market. This could be effective in temporarily lowering oil and fuel prices, especially in a situation where a speculative bubble has grown out of a temporary supply constraint, or when temporary capacity constraints on oil production and refineries exist. However, it would also reduce pressure on OPEC and other oil-producing nations to increase output. Besides, reserves were created to face crisis situation rather than to manipulate prices. In any case, to the extent that strong demand or lack of competition at the level of oil industries has contributed to the rise in prices, using strategic reserves would only have a temporary impact.

3. The euro weakness: causes and economic implications

3.1. Trend in the euro's external value

Since its launch, the euro has experienced a depreciating trend, which has been only occasionally and briefly interrupted. Starting at 1.17 per US dollar, the euro fell below parity with the dollar for the first time in December 1999 and below USD 0.90 in May 2000. Following the release of economic data pointing to a slowdown of the US economy and accelerating growth in the euro area, the euro recovered by mid-June to USD 1.02. Subsequently, it continued to decline until September to below 0.85 (Graph 10). After the coordinated G7 exchange rate intervention on 22 September, the euro/dollar exchange rate stabilised at about USD 0.87 before tumbling to below 0.84 in October, a level corresponding to a decline of close to 30 % compared to January 1999. The euro rebounded at the end of October following news that pointed to a slowing US economy.

The euro has experienced an even larger depreciation against the Japanese yen. From 132 yen per euro on 4 January 1999, the euro fell to a low of JPY 90 in September 2000, before it rebounded to JPY 95. Despite foreign market interventions to stop the rise of the yen in December 1999 and March 2000, the Japanese currency has remained on an upward trend against the euro. Against the pound sterling, the euro touched a low of GBP 0.58 at the beginning of May but it then recovered to GBP 0.6. However, the euro fell back to pre-intervention levels by mid-October, and has been trading at JPY 92 and GBP 0.58 at end-October.

By October 2000, the nominal effective exchange rate of the euro was 16 % below the starting level, and at the lowest level seen since 1989. As a result of relatively low price and cost inflation in the euro area compared to its trading partners, the real effective exchange depreciation was larger, at around 20 %.

G7 central banks intervened on Friday 22 September in support of the euro, in the first joint action since 1995. The G7 central banks referred to a 'shared concern for the potential implications of developments in the euro exchange rate for the world economy'. The intervention lifted the euro from USD 0.86 to USD 0.90 in a few minutes, a gain of more than 5 %. The euro then edged down to USD 0.89. Although the possibility of intervention had been stated in the previous weeks by euro-area authorities, foreign exchange market participants were surprised by the timing of the action (ahead of the G7 meeting in Prague rather than after it) and by the involvement of the United States.

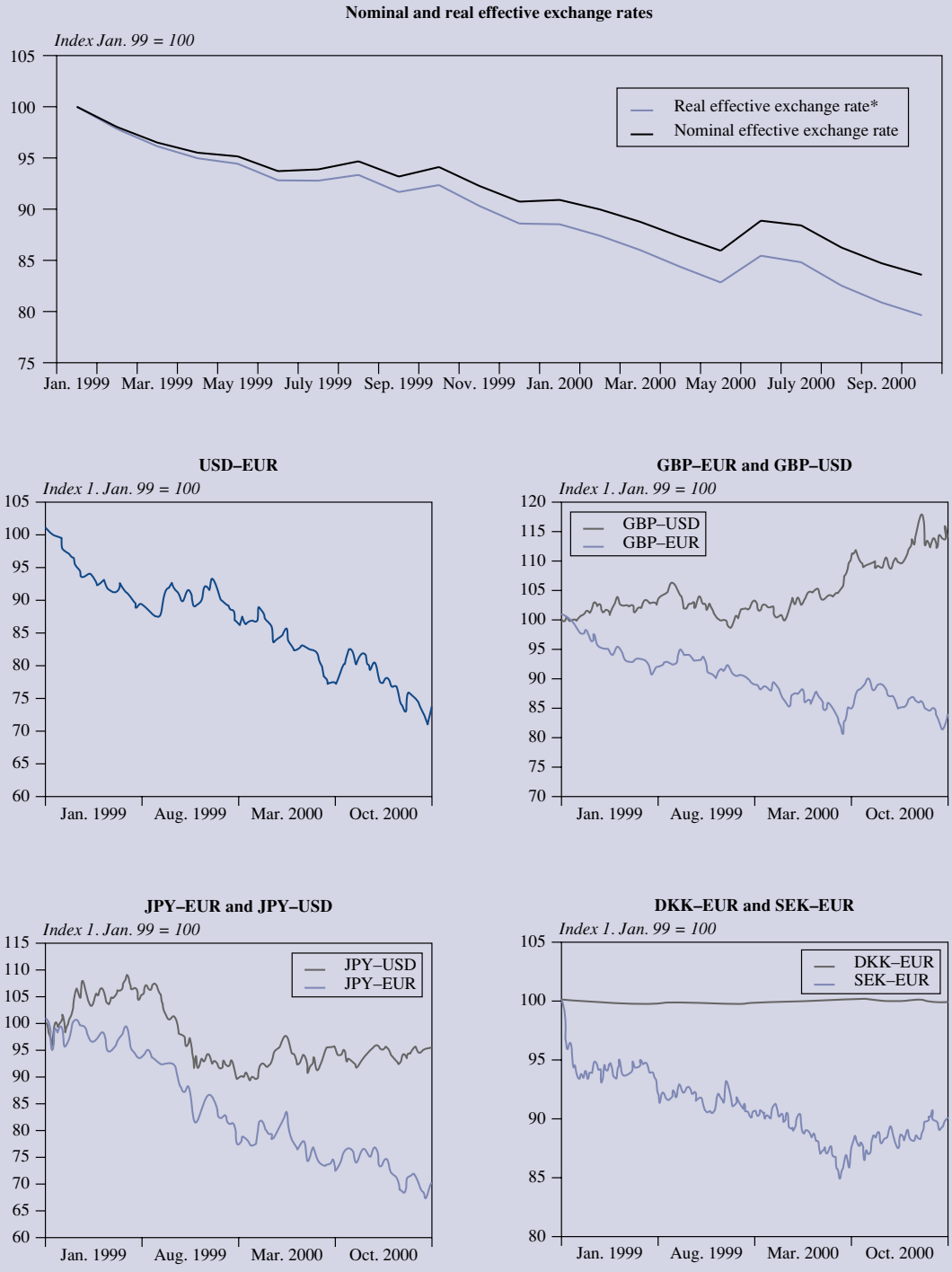
For the following three weeks, the intervention appeared to have succeeded in putting a floor under the euro exchange rate. However, in mid-October, the euro experienced a renewed bout of weakness falling below pre-intervention levels amid increasing volatility in financial markets. But at the end of October the euro turned higher when new data suggested a weakening in the cyclical strength of the US economy. The ECB gave additional support through renewed intervention in early November.

3.2. Possible explanations for the depreciation in the euro

Several, non-mutually exclusive, factors have contributed to the depreciation in the euro. Their relative importance, although difficult to assess accurately, has changed over time.

The relative cyclical position in favour of the United States. The favourable assessment of the US economy is the main factor for the dollar strength. In the first almost two years of EMU, most of the fall in the euro can be explained by a quite high initial level of the euro exchange rate and by the surprising buoyancy of the US economy in contrast to uncertain prospects for the euro-area economy. Evidence can be drawn from a historically high degree of co-movement of expected output

Graph 10: **Trends in the euro exchange rate**



* REER is based on UCL, weighted against IC24.
Source: Commission services.

growth and the USD–EUR exchange rate (see Graph 11). Conversely, the mini-recovery in the euro in May/June 2000, the drop in September and the strengthening in late October seem also due — at least partially — to a reassessment of the relative cyclical position of the United States and the euro area. The surprisingly strong performance of the US economy seems to have had wider implications on long-term expectations. The high growth of labour productivity has led to an upward revision of the potential growth rate of the US economy, which is now assessed to be above 4 %. This is appreciably higher than estimates of the potential growth rate of the euro area and might have induced some analysts to revise their expectations for the long-term equilibrium exchange rate.

*Interest rate differentials and portfolio flow*s. Higher interest rates in the US than in the euro area — as justified by a more advanced cyclical position — have attracted portfolio inflows into the US. Graph 12 reproduces developments in the real interest rate differential between the euro area and the United States and the USD–EUR exchange rate. The co-movement between the real spread and the real USD–EUR exchange rate seems to have broken from mid-1999, as the euro has continued to depreciate against the dollar despite a narrowing interest rate differential ([1]). This indicates either that the long-term expected level of the euro has shifted down, roughly in proportion to the spot exchange rate, or that the long-term expected exchange rate remains higher but that a risk premium on euro-denominated bonds has emerged.

Relative medium-term prospects and long-term capital flows. The United States has recently absorbed a disproportionately large share of world savings. In 1999, two thirds of all capital exported from countries running a current account surplus were directed toward US capital markets. In 1992 the corresponding figure was 17 % ([2]). The increase in capital inflows was accompanied by a shift in investor preferences from Treasury to private sector securities and from fixed income securities toward equities. The advances in labour productivity have brought about expectations of continuing strong profit growth and thus supported high equity and corporate bond valuations. Profitability in the US economy in the 1990s exceeded that in the euro area in terms of the rate of return, both in absolute terms and when real long-term interest rates are subtracted (see Graph 13). Foreign corporations, in particular European ones, poured direct investments into the United States at an unprecedented rate (see Graph 14) ([3]). Although profitability in the euro area has steadily improved in recent years and is forecast to improve further, the upward revision in potential growth in the United States might have underpinned the notion that in a long-run perspective, profit expectations in the United States remain superior to those in the euro area. Such considerations have so far prevailed over concerns related to a ballooning US current account deficit (3.4 % of GDP in 1999 and an estimated at 4.2 % of GDP in 2000).

Perceived structural rigidities in the euro area. Conversely, concerns about structural rigidities in the euro-area economy and the willingness of euro-area governments to tackle them may have raised doubts about the capacity of the euro-area economy to sustain strong growth into the medium term. Whilst structural reforms are progressing, many market participants appear to consider that Member States efforts are still insufficient to raise the euro area's medium-term growth potential.

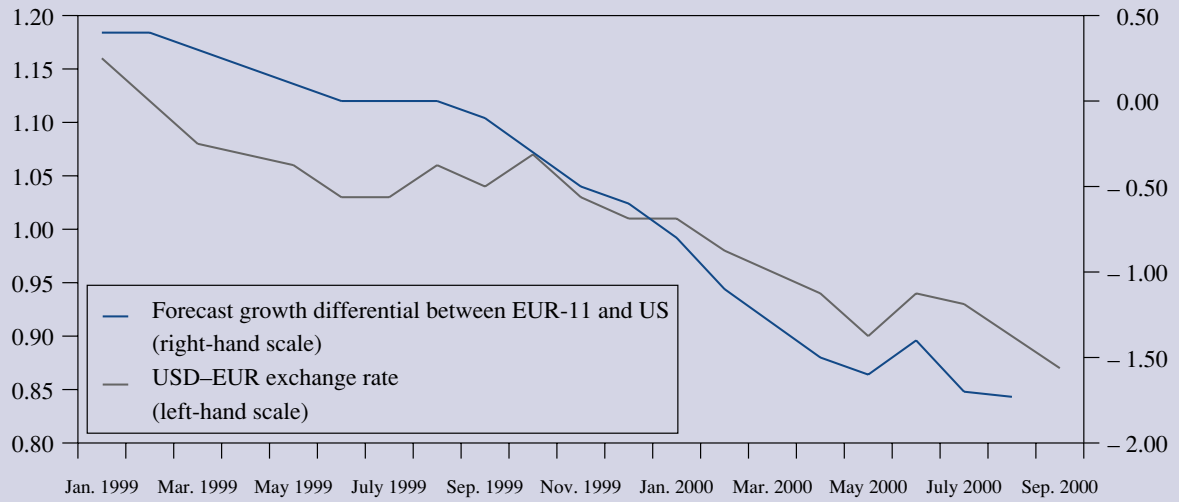
Adverse market sentiment. In August–September 2000, the depreciation in the exchange rate seemed increasingly driven by adverse market sentiment rather than by economic news. Despite almost a consensus that the euro is undervalued in a medium-term perspective and despite the improvement in the cyclical outlook for the euro-area economy, the repeated failure of the euro to recover and the absence of official intervention in the foreign exchange market may have caused expectations of further depreciation. A number of aborted recoveries

([1]) It should be taken into account, however, that yields on US long-term government bonds have been influenced by special supply factors, namely the current and projected reduction in the issuance of government bonds as a result of the growing US budget surplus. See Section 4.1.

([2]) The data is from the IMF (2000a).

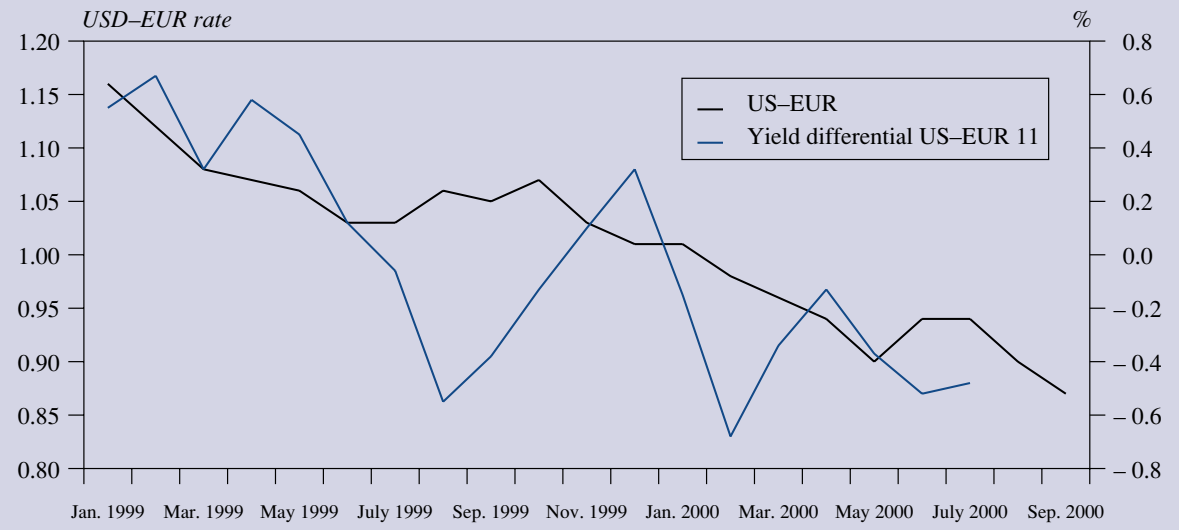
([3]) While the euro-area balance of financial accounts was negative already in 1998, when the euro appreciated, there had been large net portfolio inflows into the area in the second half of 1998, notably from Japanese investors, in anticipation of an appreciation of the euro. Note that euro-area financial account figures for the first six months of 2000 are affected by the large Mannesmann–Vodafone takeover operation. The operation is recorded as large direct investment inflow offset by a large portfolio investment outflow.

Graph 11: **Consensus forecast for 2000 GDP growth and the USD–EUR exchange rate**



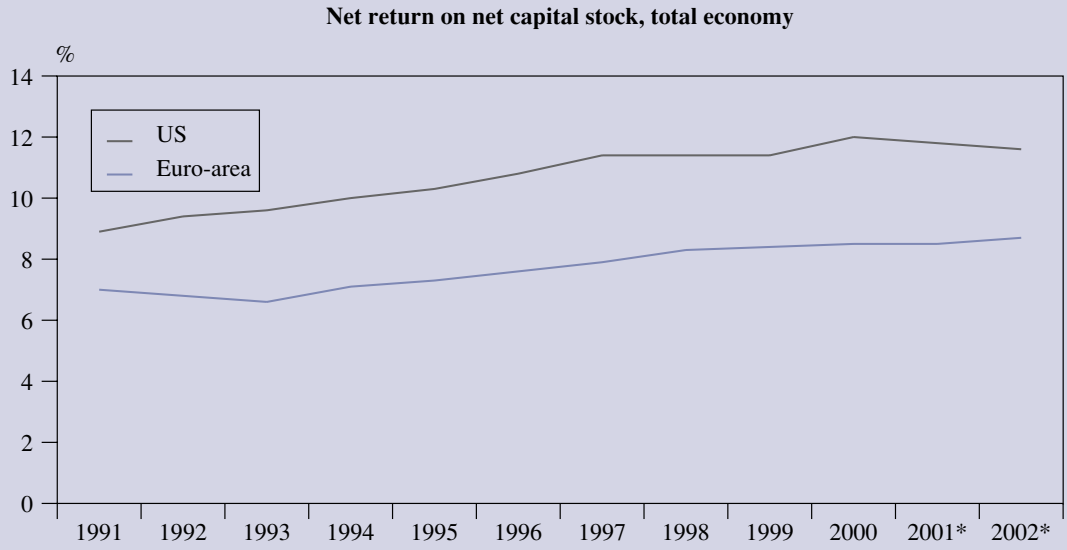
Source: Commission services.

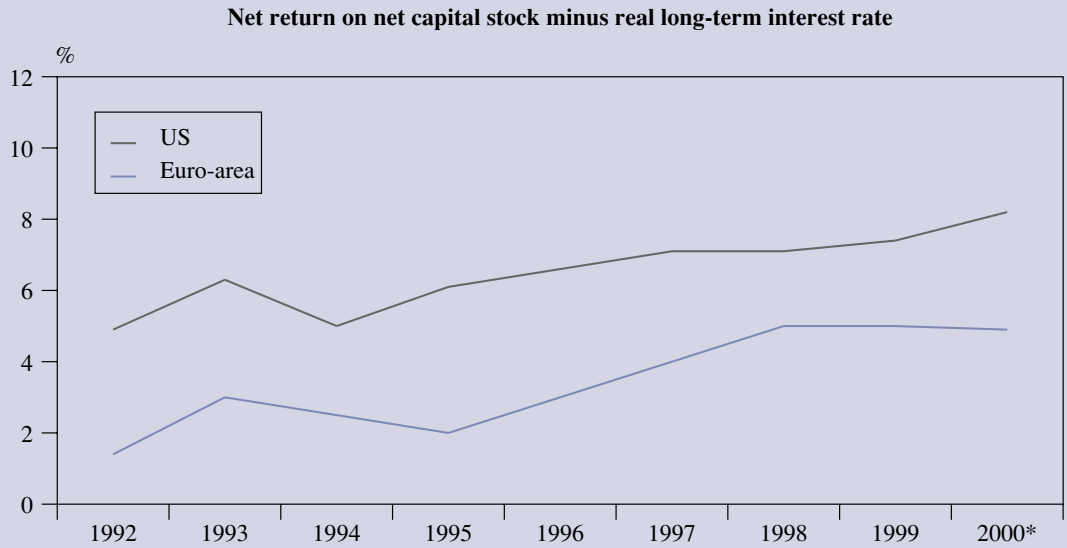
Graph 12: **US–EUR–11 10-year real yield differential and USD–EUR exchange rate**



Source: Commission services.

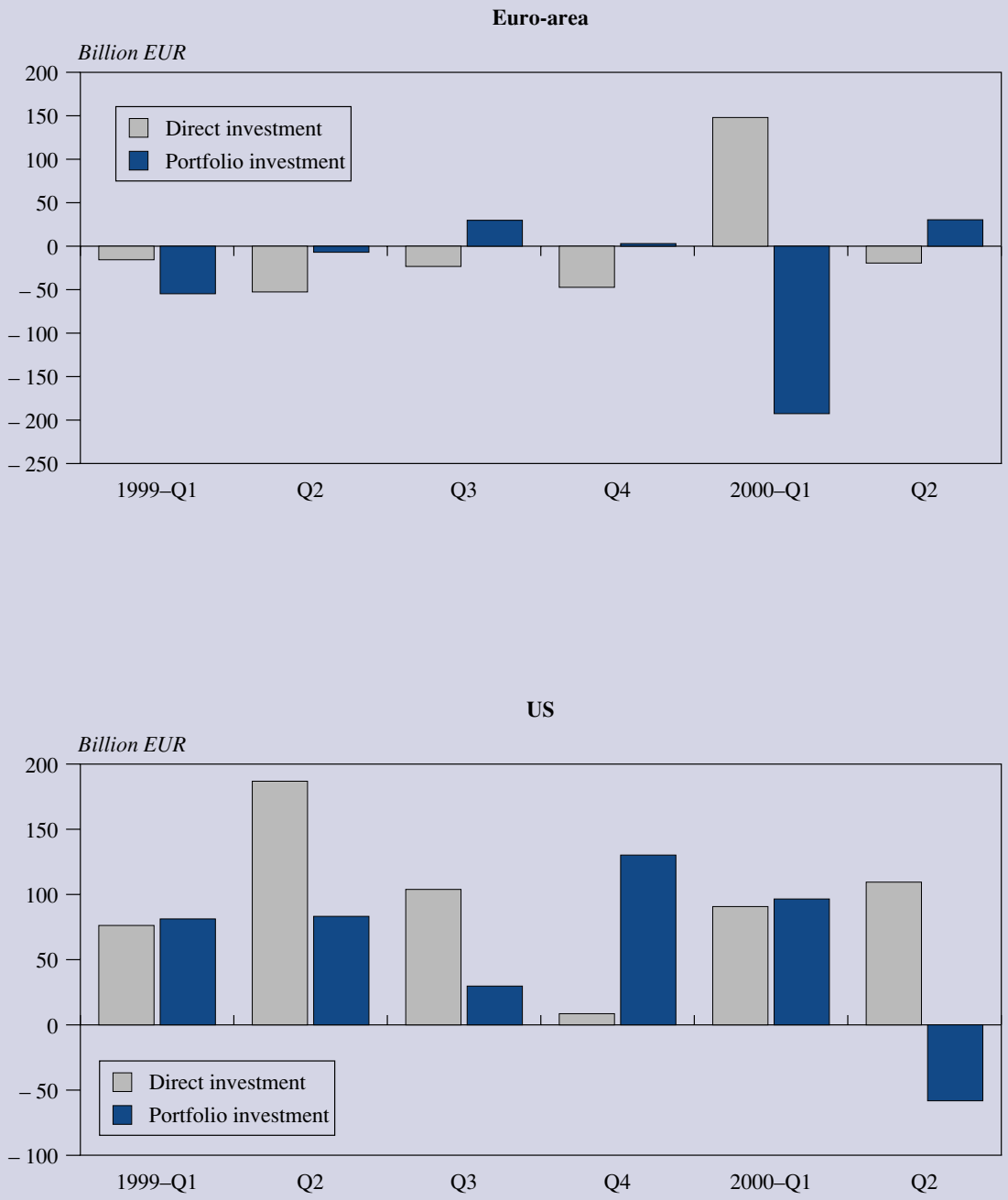
Graph 13: **Profitability**





* = European Commission autumn 2000 forecasts.
Source: Commission services.

Graph 14: **Direct and portfolio investment in the euro area and the United States**



NB: Positive figures are inflow.
Source: ECB and US Department of Commerce.

of the euro — most recently from May to June — inflicted losses on investors exposed in euro and perhaps increased the risk on euro denominated assets. One aim of the joint G7 intervention on 22 September was to restore a two-way risk on the euro exchange rate market.

Some shortcomings on the economic policy side may have compounded the above factors, by raising questions on the coherence and effectiveness of the economic policy framework in EMU. The complexity of the EMU framework and some difficulties in communicating policy decisions may have puzzled market participants. The commitment to a strong currency and the political will to implement the necessary structural reforms have often been questioned. For instance, the recent drive towards tax reforms has had a mixed reception, as in some cases the supply-enhancing element of the tax reductions was assessed to be insufficient and the risk of a pro-cyclical relaxation of fiscal policy emerged. Finally, the perception by some market participants of a possible rapid adoption of the euro by accession countries from central and eastern Europe, which could exacerbate challenges of economic management in the euro area and in the countries concerned, may also have played a role.

3.3. Medium-term prospects

The real exchange rate of the euro is at its lowest level in 15 years ([1]). A recent Economic and Financial Affairs DG study on real equilibrium exchange rates suggests that the medium-term equilibrium could be about 20 to 25 % above the present level, an estimate in line with those of the IMF and other international institutions ([2]). The main drivers of the equilibrium exchange rate in these models are relative productivity and foreign asset positions. More details on the theoretical framework and on the results of the study are provided in Box 1. Although exchange rates are not expected to normally be at their equilibrium level, the extent of the current deviation of the euro from its estimated equilibrium value is hard to rationalise on the basis of cyclical developments, raising expectations that in the future the euro will tend to appreciate toward equilibrium.

An adjustment in the current configuration of exchange rates is also required by the large current account imbalances between the major trading areas. In particular, the narrowing of the large US current account deficit will require a rise in US savings relative to investment, a slowing down of US domestic demand relative to the rest of the world, and a weaker dollar. As growth prospects are still fragile in Japan, the euro might appreciate also against the yen. However, model-based calculations and recognition of global current account imbalances offer little guidance on the short-term path of exchange rates. There is a risk that the adjustment in the exchange rates will occur not gradually but abruptly, if, for example, there is a downward revision of the prospects for corporate profitability in the United States. Such a reassessment would immediately lower equity and corporate bond valuations and could lead to capital inflows into the United States to dry up or even reverse. In this scenario, the USD–EUR exchange rate could experience a sudden fall ([3]). A smooth movement of current spot exchange rates toward their medium-term equilibrium levels would require a gradual adjustment in the external accounts supported by a steady recovery in the economies of the euro area and Japan and a soft landing in the US economy.

3.4. Impact of a weak euro on growth and inflation

The depreciation of the euro, together with buoyant world demand, is raising euro-area exports and thus supporting output growth in the short term. However, notwithstanding its positive impact on output through higher exports, the negative internal and external economic implications of a protracted overshooting of the exchange rate are likely to offset any short-term benefits.

- Firstly, the persistent weakness in the euro exchange rate raises short-term inflation risks in the euro area (see sections on the oil price hike and on monetary policy).

- Secondly, the sizeable depreciation in the exchange rate could undermine financial market and public confidence in EMU, possibly leading to the appearance of a large exchange risk premium on euro-denominated assets.

([1]) Based on unit labour costs for the whole economy.
([2]) Alberola et al. (1999).
([3]) IMF (2000b) p. 45 ff. presents model simulations of a scenario of 'harder landing' in the United States.

Box 1: Estimation of equilibrium exchange rates

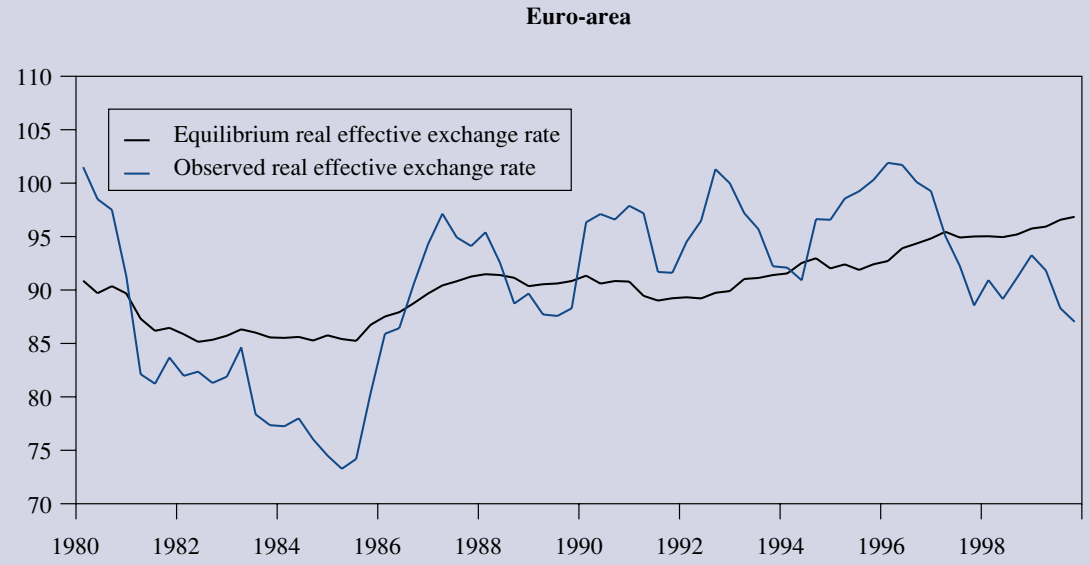
The decline in the external value of the euro has revamped interest in 'equilibrium' exchange rates that may be used as benchmarks for assessing the under- or over-valuation of a currency relative to a medium/long-term equilibrium. While the Commission services have always used different approaches to assess exchange rates, its publications have mostly contained results based on (relative) PPP. However, research on other approaches has continued and a project on the estimation of equilibrium exchange rates for the euro and other currencies has currently been carried out ([1]).

The work is based on the macroeconomic balance approach developed by the IMF. The real equilibrium exchange rate is the exchange rate that is consistent with internal equilibrium (i.e. a closed output gap at an interest rate equal to the long-run equilibrium interest rate) and external equilibrium (a constant ratio of net foreign assets to GDP at stable real exchange rates). Internal and external balance are interrelated through the level of net foreign assets. High external assets would stimulate domestic private demand through wealth and income effects. In order to preserve the demand/supply equilibrium, the real exchange rate would have to be higher compared to a situation where the level of foreign assets was lower. An economy can be in external equilibrium with a low/negative net foreign asset ratio if the exchange rate is sufficiently low. Then, the economy can generate sufficient trade surpluses in order to cover the interest payments on foreign debt. Thus the model assumes a positive relationship between the net foreign asset to GDP ratio and the real equilibrium exchange rate. A further explanatory variable is the relative productivity of the non-tradable versus the tradable sector across countries (Balassa–Samuelson effect). This variable is supposed to explain trends in real exchange rates which are not related to external trends.

The key explanatory variables in the estimated equations are the ratio of relative non-tradable to tradable prices at home and abroad, the net foreign asset position, budget deficits and corporate tax rates to capture savings and investment aspects. The empirical analysis indicates a modest appreciation in the equilibrium exchange rate of the euro area in the 1990s which can be explained main-

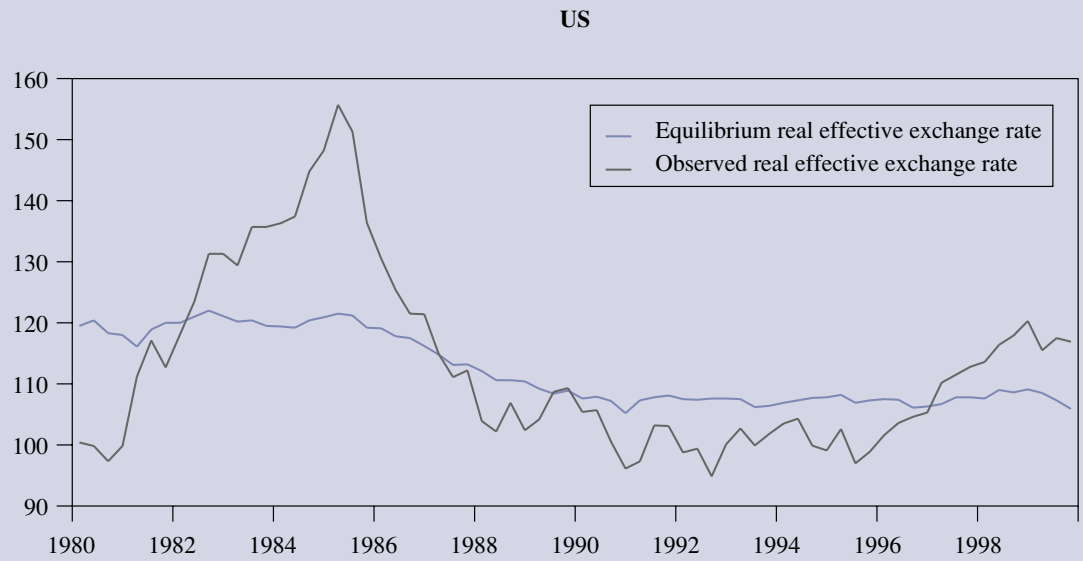
([1]) Hansen and Roeger (2000).

Equilibrium and observed real effective exchange rate



Source: Commission services.

Equilibrium and observed real effective exchange rate



Source: Commission services.

ly by an increase in the net foreign asset position. Assuming that the estimated equilibrium rates for the most recent period for which data were available (third quarter 1999) can be projected to May 2000, preliminary results indicate that in May the euro was undervalued by about 20 to 25 % and the USD overvalued by about 10 to 15 % ([2]).

([2]) Similar results have been reported by Deutsche Bundesbank (2000).

It is important to stress that since economies are rarely in internal and external equilibrium there can be no presumption that exchange rates ought to be at their equilibrium level. With reference to the more recent period, some overvaluation of the USD relative to its equilibrium rate would be justified in view of the strong US domestic demand and the need to restrain inflationary pressure in the United States. On the other hand, the undervaluation of the euro would seem excessive in view of the current robust growth performance, notwithstanding continued slack in the euro-area economy.

- Thirdly, to the extent that some euro area countries are more exposed to extra euro-area trade, they will be more sensitive to the level of the euro exchange rate. In the present circumstances, currency weakness may work in favour of cyclical convergence within the euro area in some cases (e.g. Germany) but it may exacerbate overheating worries and require countervailing policy action in other countries (e.g. Ireland).
- Fourthly, the task of monetary policy is complicated because interest rate hikes aiming at counteracting inflationary pressures of external origin by reducing domestic demand may have a perverse impact on the euro exchange rate, if financial markets are more concerned about sustained growth than about (a limited) rise in inflation.

The Commission services' econometric model, the query evaluation and search technique (QUEST) was used to make an attempt to assess the effects of the euro depreciation on the euro-area economy. The simulations presented below assume that a combination of factors related to the strong performance of the US economy and its increased attractiveness as a location for investment provide an explanation for the depreciation in the

euro ([1]). In the first simulation, two types of assumptions are made so that the model replicates the exchange rate developments between summer 1999 and summer 2000. US growth has been stronger than envisaged a year ago and this is simulated by a positive stock market shock that lowers the equity risk premium in the US and increases share prices by approximately 20%. In addition, a residual exchange rate shock is given through the risk premium in the uncovered interest rate parity, such that the pattern of the depreciation in the euro, ultimately to USD 0.95 in the second quarter of 2000, is replicated by the model. Furthermore, it is assumed in the simulation that interest rates remain 125 basis points above the baseline level over the following two years in response *inter alia* to the inflationary pressures caused by the weakening of the euro.

The depreciation in the euro improves competitiveness in the euro area and leads to a larger trade surplus, by 1.2 to 1.7% of GDP (Table 7). At the same time, however, the assumed capital outflow and the higher interest rates depress domestic demand. Consumer spending is not much affected in 2000 but it falls by more than 1% below the baseline in 2001. Investment falls sharply as a result of the capital outflow from the euro area and of the higher interest rates. Therefore, while the overall effect on euro-area GDP is positive in the short-term (GDP in 2000 would be 0.7% above the baseline), growth is unbalanced with domestic demand falling and the export sector growing. Inflation is also higher, by a full percentage point in 2000. In the medium term, the positive effect on output is reversed, as higher inflation gradually erodes the improvements in price competitiveness and the negative domestic demand effect comes to dominate. Most worrying are the implications of such a scenario for the trade imbalances. The US trade deficit would widen, giving rise to a further build-up of its foreign indebtedness.

The second simulation looks at the effects of an additional decline of the euro by 10%, which is approximately equivalent to a fall from USD 0.95 to USD 0.85, as experienced between summer and autumn 2000, and considers the impact of a consequent monetary policy

([1]) The exchange rate is an endogenous variable in the QUEST model. Consequently, a depreciation of the exchange rate of the size observed over the last year could have been simulated in various different ways, each with different results in terms of overall macroeconomic impact.

Table 7

Tracking the past: the simulated effects of the depreciation in the euro and higher interest rates

	1999	2000	2001	2002
Assumptions				
USD–EUR exchange rate	2.0	9.0	11.0	5.0
EUR-11 interest rate	0.0	0.8	1.2	1.2
US				
GDP	1.0	1.8	0.6	– 0.1
Domestic demand	1.2	2.7	1.5	0.5
— Consumption	*0.7*	*1.9*	*1.2*	*0.6*
— Investment	*2.9*	*6.4*	*3.4*	*0.8*
Inflation (consumer prices)	0.6	1.0	0.1	– 0.2
Trade balance (% of GDP)	– 0.1	– 0.4	– 0.5	– 0.4
EUR-11				
GDP	0.2	0.7	– 0.1	0.1
Domestic demand	0.3	– 0.9	– 2.5	– 1.5
— Consumption	*0.1*	*0.3*	*–1.3*	*–0.5*
— Investment	*0.4*	*– 4.0*	*– 6.3*	*–4.3*
Inflation (consumer prices)	0.2	0.9	0.4	– 0.1
Trade balance (% of GDP)	0.0	1.2	1.7	1.5

NB: Percentage difference from the baseline, except for interest rate, the inflation rate and the trade balance (percentage points).

Source: Commission services.

tightening ([1]). The effect of this further 10 % depreciation on growth in the euro area is positive in the short run (Table 8, upper panel). Exports are boosted by the improvement in competitiveness, but the positive effect on GDP is partly offset by the negative effect on domestic demand. Investment in particular falls sharply, as international investors shift funds to the US equity market. As the depreciation of the euro is assumed to last for several years, it leads to a sharp increase in import prices and this is reflected in higher consumer prices. In the first year, euro-area inflation is 0.7 percentage points higher, in the second year 1.2 percentage points higher.

An inflationary impulse of this size is likely to be accompanied by an increase in interest rates. Table 8 (lower panel) shows a scenario where an interest rate hike of 50 basis points is followed by a second (unanticipated) hike of 50 basis points at the start of the second year. The interest rate hikes have a negative impact on consumption and investment spending, as they raise the cost of capital and reinforce the negative impact on investment spending of the capital outflow. They also reverse the depreciation in the euro from 10 to 8.5 %, slightly reducing the boost to net exports. In sum, the initial positive GDP effect of the depreciation is considerably reduced. Furthermore, the rise in interest rates effectively limits the increase in the rate of consumer price inflation.

The above scenarios illustrate the difficulty which monetary authorities might face when a depreciation is due to factors such as those portrayed in these simulations. When the depreciation is not the consequence of an expansionary monetary stance, but is related to growth differentials and perceived differences in investment opportunities, a rise in interest rates is unlikely to prop up the currency. Rather, interest rate hikes in response to a depreciation would result in weaker domestic demand, and would only partly alleviate the inflationary pressure stemming from the depreciation.

([1]) As in the previous simulation, the further depreciation in the euro is assumed to be partly due to a further fall in the equity risk premium in the United States and an additional increase in the financial wealth of US households, which lead to a much stronger growth in domestic demand in the US and to a capital outflow from the euro area induced by a preference for dollar-denominated assets.

Table 8

Simulated effects of a further 10 % depreciation in the euro

Without change in interest rates

Year:	1	2	3	4
EUR-11				
GDP	0.8	1.0	0.3	– 0.4
Domestic demand	– 0.2	– 1.2	– 2.2	– 2.1
— Consumption	*0.1*	*– 0.3*	*– 1.2*	*– 1.1*
— Investment	*– 1.3*	*– 3.9*	*– 5.6*	*– 4.8*
Inflation (consumer prices)	0.7	1.2	0.8	– 0.4
Trade balance (% of GDP)	0.7	1.6	1.5	1.1
Dollar exchange rate	9.9	9.9	9.6	5.9

With two interest rate hikes of 50 basis points in year 1 and year 2

Year:	1	2	3	4
EUR-11				
GDP	0.1	0.2	0.3	0.1
Domestic demand	– 0.7	– 1.8	– 2.2	– 1.7
— Consumption	*0.1*	*– 0.6*	*– 1.4*	*– 0.9*
— Investment	*– 2.5*	*– 4.9*	*– 5.3*	*– 4.2*
Inflation (consumer prices)	0.2	0.6	0.9	– 0.1
Trade balance (% of GDP)	0.6	1.5	1.5	1.1
Dollar exchange rate	8.4	8.0	8.8	5.7

NB: Differences from baseline in percentage, except for the inflation rate and the trade balance (percentage points).

Source: Commission services.

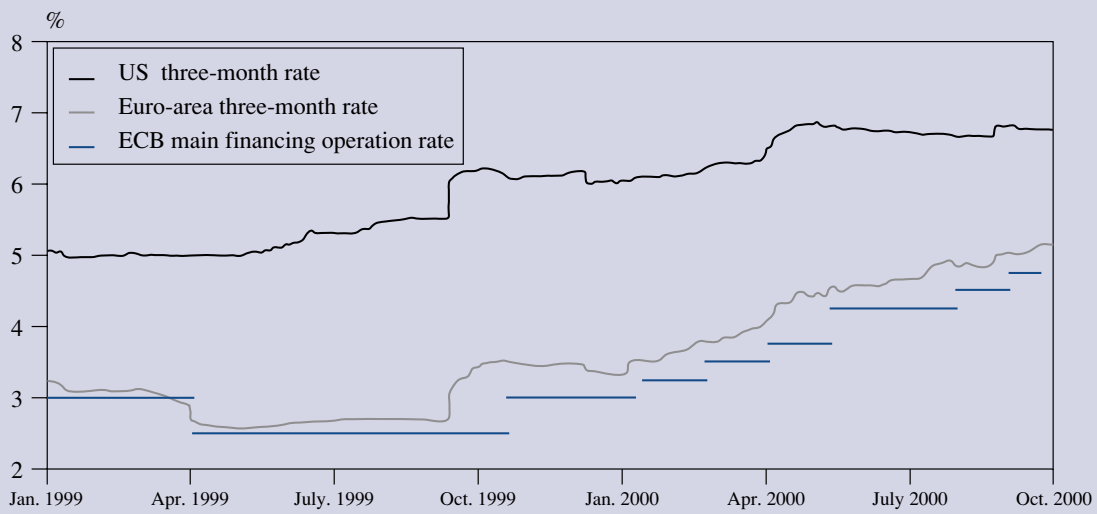
4. Appropriateness of the macroeconomic policy mix

4.1. Changing balance of inflation risks triggers ECB policy moves

Since the launch of the euro, the ECB has moved its key interest rates eight times — the 50 basis point reduction in April 1999 being followed by seven successive increases. Since late 1999, the ECB's main refinancing rate has moved up by a cumulative 225 basis points, which has taken the rate from 3 % in January to 4.75 % in October (Graph 15). The successive hikes in interest rates aimed at counteracting emerging upside risks to price stability in the medium term. The inflationary impact of higher oil prices and the depreciation in the exchange rate including the potential second-round effects emerged as the main sources of concern for the second pillar of the Eurosystem's strategy. Meanwhile, money growth remained above the 4.5 % reference value and credit to the private sector continued to grow at a fast pace.

In terms of monetary policy tools, two main decisions were taken as regards the ECB's monetary management in 2000. The switch to a variable rate tender in the ECB's main refinancing operation in June was a response to severe overbidding, which had developed in the context of the previous fixed-rate tender procedure. The overbidding had led to liquidity being allotted in terms of availability of collateral instead of the needs of credit institutions. In order to steer money market interest rates, the ECB announced a minimum bid rate

Graph 15: **Short-term interest rates, 1999–2000**



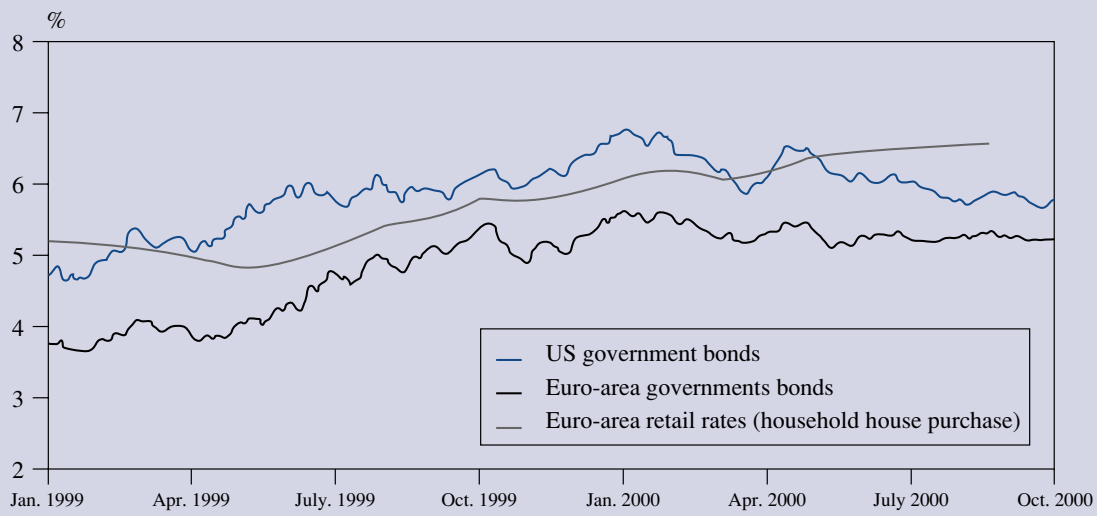
Source: Commission services and ECB.

replacing the main refinancing rate as the signalling device. Unless money market participants expected changes of the interest rate, the marginal rate remained close to this minimum bid rate in the ECB's weekly main refinancing operations. The second major event in the euro-area's management of monetary policy was the concerted intervention on foreign exchange markets in September 2000. The intervention conducted jointly by the ECB and the monetary authorities of the United States, Japan, Canada and the United Kingdom was motivated by the assessment that the euro exchange rate had fallen out of line with its fundamental value, thereby threatening the development of the world economy ([1]).

In general, the ECB was successful in preparing markets towards its interest rate actions. As a result, market participants mostly anticipated the hikes and the rate rises triggered only muted responses on capital markets (Graph 16). Following the protracted rise in long-term government bond yields observed throughout 1999 and in early 2000, long-term interest rates declined in spring by about 30 basis points. The fact that over recent months bond yields remained contained within a relatively narrow range between 5.1 and 5.3 % indicates stable inflation expectations despite rising headline inflation rates. Estimates on inflation premiums, derived from the yield difference of conventional bonds over French index-linked bonds, point to almost constant long-term inflation expectations in the course of the year. Thus, real long-term interest rates seem to have fallen in parallel with nominal bond rates. However, the information drawn from the behaviour of long-term government bond yields is distorted by a particular element, namely the anticipation of future bond supply shortages. The latter effect was even more pronounced in the US bond market as investors have expected the supply of US Treasury bonds to shrink as a result of the debt-buyback programme. In consequence, the nominal US long-term interest rate declined from 6.7 % in January to 5.7 % in October and the interest rate spread over euro-area bonds decreased to 40 basis points. In contrast to government bond yields, retail bank interest rates in the euro area have been firmly on an upward trend during 2000. For instance, lending interest rates to enterprises with a maturity of up to one year rose by 90 basis points between January and August, and those to households for house purchases increased by 50 basis points entailing higher capital costs for the private sector.

([1]) For more details, see Section 3.1.

Graph 16: **Long-term interest rates, 1999–2000**



Source: Commission services and ECB.

Indicators, such as the Taylor rule and the monetary condition index (MCI), that combine the stance of financial variables suggest that monetary conditions remained rather accommodating. The Taylor rule describes how short-term interest rates could be adjusted in a systematic way to deviations of actual inflation from the target and the size of the output gap. According to this indicator, monetary policy appears now broadly neutral as the actual rate is reaching the corridor for the 'optimal' short-term interest rate ([1]). If, however, the core inflation rate is used instead of the headline inflation rate to calculate the Taylor rule, monetary policy must be considered as tight. Another tool to depict the stance of monetary policy is the monetary condition index (MCI), calculated as a weighted average of movements in the real short-term interest rate and in the real effective exchange rate (see Box 2 for more details on the euro-area MCI and the Taylor rule) ([2]). Despite the hikes in official interest rates, monetary conditions in the euro area are still easier than at the beginning of 1999 as the rise in real interest rates has been offset by the expansionary effect of the depreciation in the euro exchange rate.

([1]) The corridor reflects different assumptions about the determinants of the Taylor rule implied interest rate.

([2]) MCIs are subject to serious caveats and should be seen mainly as a way of summarising information. The main limitations are that MCIs do not discriminate between different causes of exchange rate movements and the estimation of weights is highly imprecise. Moreover, MCIs provide information on the stance of monetary policy only relative to a (arbitrarily) chosen base period.

Box 2: Assessing the stance of monetary policy in the euro area: The monetary conditions index (MCI) and the Taylor rule

Several central banks and private financial institutions calculate a monetary conditions index (MCI) to assess the stance of monetary policy. Empirically, a MCI is a weighted average of changes in an interest rate and an exchange rate relative to their value in a base period. The relative weights of the interest rate and exchange rate reflect the estimated relative effects of those variables on aggregate demand or prices over some period, often approximately two years.

There is considerable debate over how a MCI should be used when assessing monetary policy. The calculation of a MCI assumes an underlying model relating economic activity and inflation to the variables in the MCI. Because MCIs are typically not robust to changes in the underlying model specification, they should be used with caution. The level of any index of monetary conditions in itself is uninformative since the index is measured relative to a given base period. It is merely the degree of tightening or easing between two points in time that can be inferred. The graph below shows the MCI for the euro area with a relative weight of 6 to 1, interest rate to exchange rate. That is, a 1 percentage point rise (fall) in the real short-term interest rate is assumed to be equivalent to a 6% appreciation (depreciation) in the real effective exchange rate of the euro. A decline in the interest rate increases aggregate demand and lowers the MCI, as does a depreciation of the real effective exchange rate. A fall in the index is interpreted as a loosening of monetary conditions.

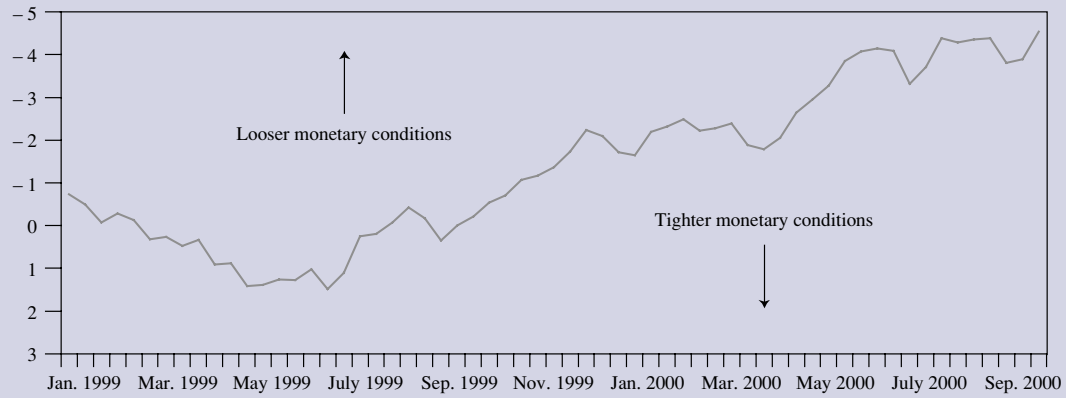
The second graph displays the contribution to the MCI from the real interest rate and the real effective exchange rate. At the beginning of 1999 both the decline in the real interest rate and the depreciation in the euro contributed to the fall in the MCI and loosening monetary conditions. From mid-1999 onwards, the two variables have moved in opposite directions, offsetting each other's movement to some extent. Although the ECB repo rate now stands 225 basis points above its trough of 1999, the depreciation in the real effective exchange rate has contributed to overall looser monetary conditions.

Furthermore, the Taylor rule can be used as a benchmark for assessing monetary policy in the euro area. The Taylor rule describes how the short-term interest rate could be adjusted in a systematic way in response to developments in the economy to keep inflation close to the target. According to this rule, the appropriate short-term interest rate is conditional on two variables, the actual rate of inflation and the size of the output gap. Any deviation of both variables from their target value should lead to adjustments of the short-term interest rates according to the weights of both variables in the Taylor rule.

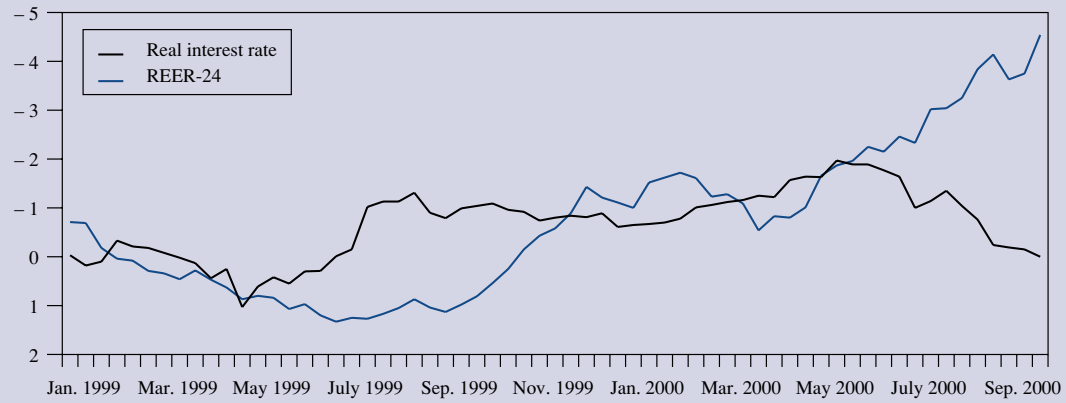
The graph below shows, that the original Taylor rule with a feedback parameter of 1.5 on inflation and 0.5 on the output gap tracks the development of the interest rate in the euro area quite well. It seems that the short-term interest rate in the euro area is reaching the corridor for the 'optimal' short term interest rate implied by the Taylor rule with the corridor reflecting different assumptions about the determinants of the Taylor rule implied interest rate. As the actual rate is about to enter the corridor, monetary policy now appears broadly neutral.

Monetary conditions index in the euro area (Indices 1994 = 0 (Inverted scale))

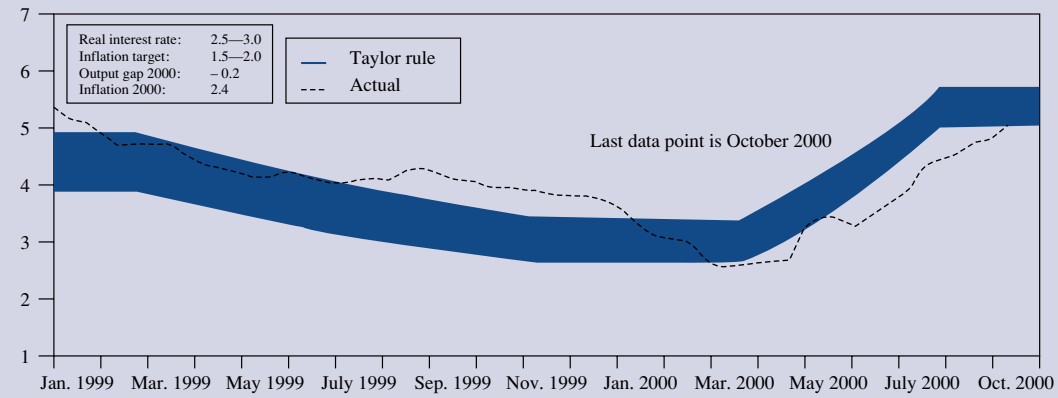
Euro-area MCI



Contributions to MCI



Short-term interest rate: actual and implied by the Taylor rule, euro area



Source: Commission services.

The easier monetary conditions have supported the pick-up of growth in the euro area. However, as they resulted from the combination of higher interest rates and a weaker euro, the pattern of growth in the euro area has also probably been affected. The simulations in Section 3.4 suggest that higher external demand may be partly offset by lower domestic demand. Furthermore, in the medium term, the overall effect on growth may even be negative, as the negative impact on domestic demand dominates. To the extent that the depreciation in the euro is due to cyclical divergence between the euro area and the United States, a rise in interest rates in an attempt to support the currency could even backfire if it was perceived as stifling the euro-area recovery. The risk of creating an even more unbalanced growth pattern with weak domestic demand and higher export growth would be serious.

The ECB has repeatedly made clear that the exchange rate is not a target of the Eurosystem's monetary policy per se, although its impact on inflation is taken into account in monetary policy decisions. Indeed, the focus on monetary policy in response to developments in the euro exchange rate is probably misplaced. As monetary policy is not at the origin of the present difficulties, the recovery in the euro exchange rate rests on concrete measures being taken in other areas of economic policy, so as to dispel the uncertainty about economic management in the euro area and create the prospect for sustainable high economic growth into the medium term. The current recovery should be exploited as an opportunity for accelerating structural reform and fiscal consolidation.

Beyond the euro-area perspective, the importance of the country dimension should also be recognised by policy actors. The feeling that some euro-area countries are unwilling to adjust their economic policies certainly does not help the currency. Policy mix consistency is important at both the euro and the national level and not only in the larger Member States. A complacent attitude to an inappropriate policy mix in smaller Member States (even in those which individually have little impact on aggregate euro-area conditions) will be detrimental to the credibility of EMU.

4.2. Current budgetary plans lack ambition

Considerable progress was achieved in consolidating government finances in the course of the 1990s. The upward trend in public expenditures as a share of GDP had been reversed while increases in taxation lifted government receipts as a percentage of GDP to a peak in 1999. Deficits were reduced visibly and a number of Member States achieved surpluses. Since 1999, however, progress with consolidation is less pronounced. While budgets are benefiting from strong growth, no improvement in the underlying position is expected on the basis of current budget plans.

Continued expenditure restraint, but temporarily outpaced by tax reductions

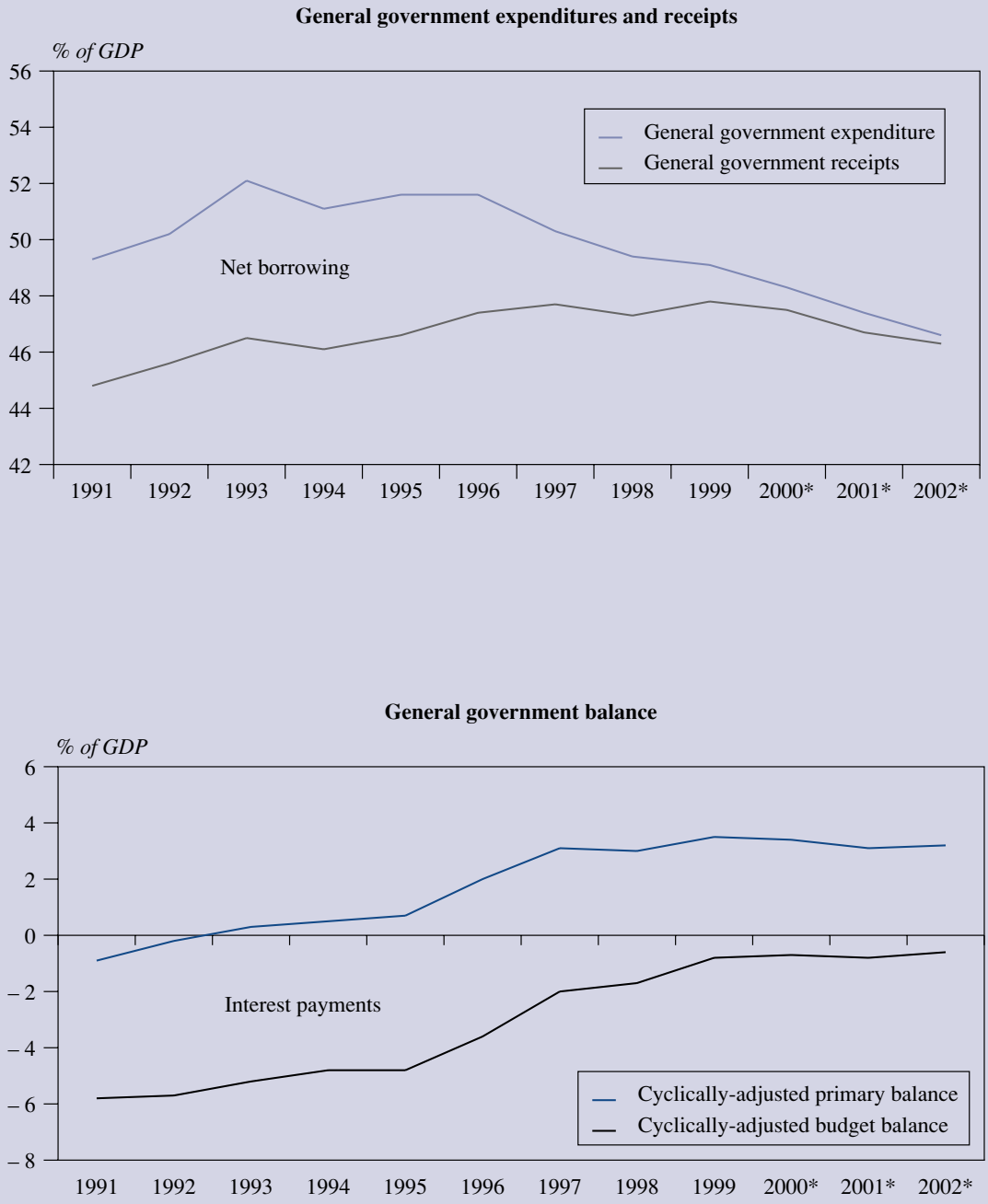
Government spending appears to be generally under control according to current information. Moreover, present plans indicate that euro-area Member States intend to pursue their policy of keeping nominal spending increases below the rise in the value of GDP. Expenditure restraint is an essential precondition to create the leeway for a sustainable easing of the tax burden. At the same it leaves room for still sizeable growth of public spending and allows its reorientation towards more productive uses. It is estimated that current government expenditure will grow by an annual 3% from 2000 to 2002, more than in the preceding three years, while public investment could expand at almost twice that rate and continue to edge higher as a percentage of GDP (Graph 17).

Turning to government receipts, revenues are developing favourably in 2000. They are driven by strong growth and exceed earlier expectations, notwithstanding discretionary measures adopted in several Member States to reduce the burden of taxation. In view of previous progress with consolidation, currently strong tax intakes and still high levels of taxation, additional measures were adopted over recent months for easing the tax burden further in 2001, and to a larger extent than in 2000. The emphasis of these tax cuts will be on direct taxes. For 2002, additional but clearly less substantial tax relief is scheduled to be phased in.

Slight easing in the budgetary stance in 2001

Overall, general government finances in 2000 are likely to turn out significantly better than initially foreseen in budget plans. For the euro area as a whole, the deficit is now estimated to fall to 0.8% of GDP (excluding UMTS receipts), half a percentage point less than in 1999. However, this improvement is essentially due to strong growth which has boosted tax proceeds. Moreover, a further lowering of the debt interest burden

Graph 17: **Budgetary outlook in the euro area**



* Forecasts.
NB: Data exclude mobile phone licences (UMTS) proceeds.
Source: Commission services.

has helped. The underlying position, stripping out cyclical influences and interest payments, is expected to have hardly changed (Table 9).

The underlying budgetary position looks set to deteriorate in 2001, when — in contrast with the preceding year — tax cuts will become effective that are not fully matched by expenditure restraint. The cyclically-adjusted primary surplus is forecast to erode and fall back to about 3 % of GDP. Nevertheless, some further lowering in debt service charges and continued support from the cycle should result in a stabilisation of the overall deficit at about the level already reached in 2000.

The headline deficit is forecast to resume its path towards balance in 2002. The underlying position in terms of the cyclically-adjusted primary surplus should stabilise as no further tax measures uncompensated by expenditure restraint are foreseen while the overall balance will benefit from ongoing solid growth.

Less progress with consolidation than envisaged earlier

The emphasis in current budget plans on reducing the tax burden suggests that earlier consolidation ambitions as set out in the 1999/2000 updates of the stability programmes may not be fully met, once the better growth performance than anticipated in these updates is taken into account. This would be regrettable since it implies that chances to make further headway with consolidation in good times of strong economic growth are being missed. Moreover, it adds to concerns about a pro-cyclical policy stance. In the current setting, a pro-cyclical fiscal stance augments the risk of second-round effects that would amplify and extend the impact on inflation of higher import prices, with potentially detrimental effects for a well-balanced policy mix.

Earlier episodes of pro-cyclical budgets in a period of expansion above trend, contributing to signs of overheating and ultimately triggering a response from monetary authorities should not be repeated. Also the Euro Group noted in July 2000 that tax reductions must avoid a pro-cyclical fiscal push. Instead, efforts should focus on creating the conditions, on both the macro- and micro-economic sides, for a sustained period of strong growth.

Windfall gains from mobile phone licences

The analysis above abstracted from a one-off event that benefits government budgets in 2000 and 2001. Non-recurrent windfall gains from the allocation of third generation mobile phone licences (UMTS) account for extraordinary revenue, of a cautiously estimated 1.25 % of GDP in the euro area as a whole (see also Box 3). Proceeds of more than 1 % of GDP will support the 2000 budgets, the remainder will be booked in 2001. As a corollary, the overall 'headline' budget balance, including the UMTS proceeds, could turn slightly positive in 2000 before sliding back into a deficit position in 2001. This temporary improvement in the headline balance is not indicative of a policy tightening. Its counterpart are non-distortionary lump-sum fees paid by the purchasers of the licences; the payments are sunk costs and should not affect the operators' future business decisions.

Table 9

Budgetary outlook in the euro area ([1])

(% of GDP)

	1999	2000*	2001*	2002*
Actual budget balance	– 1.3	0.3	– 0.5	– 0.3
Actual budget balance excluding UMTS proceeds	– 1.3	– 0.8	– 0.7	– 0.3
Cyclically-adjusted balance	– 0.8	– 0.7	– 0.8	– 0.6
Cyclically-adjusted primary balance	3.5	3.4	3.1	3.2
Gross debt	72.1	69.8	67.5	65.2

* = Forecasts for 2000–02.

([1]) Euro area excluding Greece 1999–2000, including Greece 2001–02.

Source: Commission services.

Box 3: Revenues from mobile phone licences

Member States have been allocating third-generation mobile phone licences (UMTS) to allow the coordinated and progressive introduction of UMTS services ([1]). The allocation of these licences creates opportunities for businesses. The emergence of a new high-tech and high value-added business sector will have positive effects both on the growth potential of the economy and demand, in view of expected substantial follow-up investments by the companies, which obtain the licences. For the public sector the allocation results in an improvement of government finances.

Member States have followed different procedures for allocating the licences. Some countries have opted for auctions, whereby licences are essentially awarded on the basis of the value of the bid. Others have chosen a comparative bidding procedure, often called 'beauty contest', where regulators review business plans and take account of other factors, such as the applicant's track record in providing similar services, when deciding which company will be offered the opportunity of buying a licence for a set fee. These two procedures are not mutually exclusive and in some instances elements of the two have been combined.

Any system of charging for licences should be aimed at an efficient spectrum allocation; i.e. it should not exacerbate the existing barriers to entry into the mobile communications market, which arise from high set-up costs even in the absence of spectrum pricing. This can not be guaranteed by auctions. However, beauty contests also have microeconomic drawbacks. Governments or regulators face the difficult task of deciding between the competing efficiency claims of bidders. Incumbents are likely to have an inherent advantage over new entrants with no track record. In any case, neither system can eliminate the need for regulatory control to ensure that the allocated frequencies are adequately used.

([1]) Following the decision of the European Parliament and of the Council of 14 December 1998 on the coordinated introduction of a third-generation mobile and wireless communication system (UMTS) in the Community (OJ L17, 22.1.1999, p. 1).

Proceeds from UMTS licences

Member States	Procedure	Amounts raised ([1])		Stage of process
		Billion EUR	% of GDP	
B	Auction	0.6	0.2	Expected for 2001
D	Auction	50.8	2.5	Completed
EL	Not yet decided	0.0	0.0	Expected for 2001
E	Beauty contest	0.5	0.1	Completed
F	Beauty contest	16.0	1.1	Set for 2001
IRL	Not yet decided	0.0	0.0	Expected for 2001
I	Combination	13.8	1.2	Completed
L	Beauty contest	0.0	0.0	Expected for 2001
NL	Auction	2.7	0.7	Completed
A	Auction	0.7	0.4	Set for November 2000
P	Combination	0.4	0.4	Set for end 2000
FIN	Beauty contest	0.0	0.0	Completed
Euro area			1.3	
DK	Auction	6.7 ([2])	0.5	Expected for 2001
S	Beauty contest	0.0	0.0	Set for end 2000
UK	Auction	22.5 ([3])	2.4	Completed
EU-15			1.5	

([1]) Actual amounts as far as known, otherwise conservative estimates by Economic and Financial Affairs DG.
([2]) In DKK.
([3]) In STG.

Source: Commission services.

The amounts actually raised in the allocation process vary. Some Member States have awarded licences for free or for a modest fee, others received more substantial amounts. The table shows the proceeds; where not known yet, conservative estimates are given. Overall, an amount equivalent to 1.5 % of GDP is expected, as a minimum, for the EU as a whole.

As a result of the allocation of the licences the public finance situation improves. In order to ensure a consistent and transparent treatment of the proceeds within the framework of the European national accounts, Eurostat decided ([2]) that these proceeds are to be recorded as revenue with a corresponding impact on the government balance in the year when the licence is allocated. More precisely, Eurostat decided that in general, unless the characteristics of the contract suggest proceeding differently, the transaction is to be recorded as the sale of a non-financial asset. Such a sale, like e.g. the sale of land, is by convention recorded in the government accounts as negative expenditure.

([2]) See Eurostat news release No 81/2000 of 14 July.

4.3. Main features of tax reforms in Member States

By altering incentives to work, save and invest, tax systems affect private factor accumulation and consequently growth and employment. High labour taxes at the lower end of the wage scale, together with steep tax breaks and high withdrawal of income-tested benefits, are a source of poverty traps and lower human capital accumulation. Whereas a reduction of the total tax burden may have a positive impact on private investment, a larger impact can be achieved if tax cuts concern highly distorting taxes that directly affect capital and labour, namely social security contributions, personal income taxes and corporate taxes. In addition, targeted tax cuts at the lower end of the wage scale would improve incentives for firms to demand unskilled labour and for workers to take up low-productivity jobs.

Over and above macroeconomic aspects, an important criterion for assessing whether tax reforms can achieve a sustainable reduction in the tax burden while at same time maintaining the commitment to fiscal discipline that was presented in the Commission services report, 'Public finance in EMU — 2000' suggested that tax reductions should form part of a comprehensive reform package.

The comprehensiveness of reforms is a decisive element to improve long-term growth prospects. By taking a comprehensive approach to reform, Member States can create positive growth effects, which piecemeal adjustments may not have, and exploit the mutually supporting impact of consistent policy strategies acting in different fields. Comprehensive reforms which provide incentives for labour force participation and human capital formation, and which stimulate economic dynamism can also enhance the innovative potential of an economy and, thereby, allow us to move onto a higher growth path, promote entrepreneurial spirits and private sector led investment and innovation.

In their updated stability programmes, as well as in their recent announcements in the context of budget plans for 2001, Member States have indicated their intention to reform their tax systems and reduce the overall tax burden. Although there is some variation across Member States, the lowering of the tax burden will generally be achieved by cutting direct taxation on personal and corporate income rather than through significant reductions in social security contributions or indirect taxes (Graph 18).

Reforms aim at lowering the tax burden on labour, particularly at the lower end of the wage scale

Most Member States have already cut personal income taxes (reductions in marginal rates, increases in both family allowances and minimum exempted income) and reduced both employers' and employees' social security contributions, other Member States have announced similar measures. As a result, the tax burden on labour, as measured by the implicit tax rate of employed labour, is expected to fall by almost 1.5 percentage points between 1999 and 2002 in the euro area.

Most initiatives involve an across-the-board reduction of taxes on personal income. Reforms already implemented or planned in Germany, Spain, France, Italy, the Netherlands and Finland, are good examples of broad

reforms of personal income tax codes. Personal income taxes will also be reduced in some Member States (Belgium, Spain) through the indexation of tax brackets for inflation. Moreover, reforms in Germany, Spain, Ireland, Luxembourg, and the Netherlands also provide for a significant reduction of average and marginal tax rates at the top end of the income scale. In several Member States (Ireland, Italy, Luxembourg, the Netherlands), the personal income tax system is being simplified by reducing the number of brackets and/or by enlarging the standard rate band.

In most cases, the tax reforms aim at improving incentives for firms to offer low-paid jobs and for workers to take up those positions. Some countries (Austria, Finland) have reduced the tax rates for middle and lower incomes. A majority of Member States (especially Germany, Spain, Luxembourg and the Netherlands) is reducing the tax burden at the bottom end of the income distribution by increasing the minimum exempted income and some family allowances. In the Netherlands, family allowances have been transformed into tax credits to improve incentives for taking up jobs.

Such measures are being supplemented with targeted reductions of social security contributions and other non-wage labour costs. For the most part, cuts in social security contributions are being targeted more at employers than employees (Belgium, Germany, Greece, Spain, France, Ireland, Italy, the Netherlands and Finland). Some Member States are granting tax rebates to employers for providing new jobs (Greece, Italy), or more specifically to recruit young workers (Belgium), long-term unemployed or low-paid workers (the Netherlands and Finland).

The reforms also entail the lowering of the tax burden on capital

Although the reform of personal income taxes will mainly affect the tax burden on labour, the tax burden on capital will indirectly be reduced as personal income taxes are paid on both types of income, labour and capital. However, several Member States (Germany, France, Ireland and Luxembourg) have also introduced measures to achieve a general reduction in corporate income taxes. In a majority of cases, the reduction of capital taxes consists of targeted tax cuts affecting capital gains with a view to improving the functioning of capital markets. The combined effects of personal income tax cuts and the reform of taxation on corporate income will reduce the implicit tax rate on other production factors for the euro area as whole by three quarters of a percentage point between 1999 and 2002.

Indirect taxes not much affected by the reforms

There is no clear pattern to measures regarding indirect taxes. Only in Italy and the Netherlands have general increases in VAT rates been announced, whereas in France, VAT rates will be cut by 1 percentage point. Changes in indirect taxes in other Member States are relatively marginal and affect only a small share of the total tax base, e.g. Belgium, Greece, Spain, France, Italy, Luxembourg and Portugal have lowered VAT on some labour-intensive sectors. Energy and environmental taxes will rise in some countries (Germany, France and the Netherlands), but some Member States (Spain, France, Ireland and Italy) have introduced tax relief to partially compensate sectors affected by the increase in oil prices (e.g. transport, agriculture, fisheries). Consequently, the implicit tax rate on consumption is not expected to change significantly.

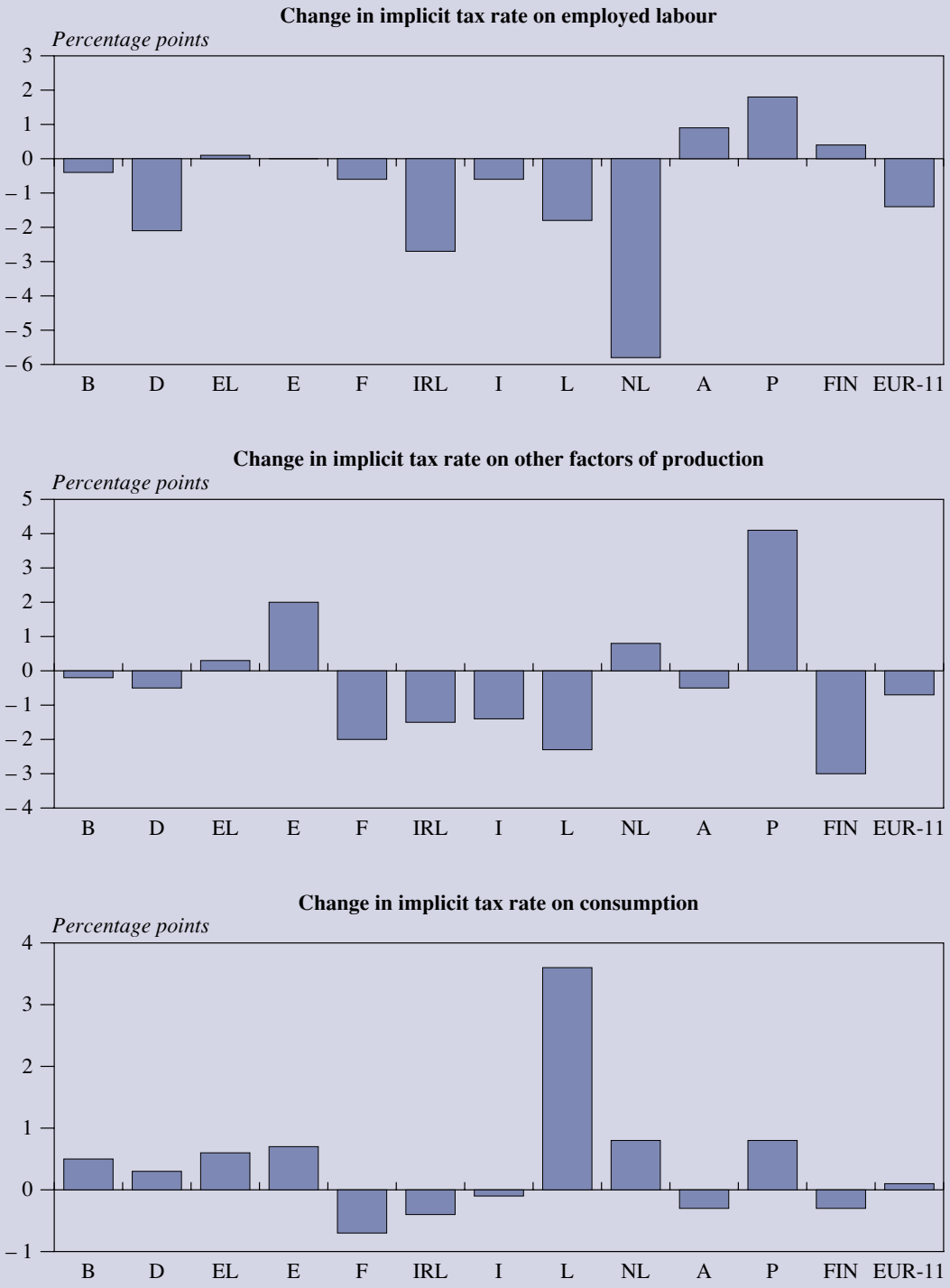
The tax reforms go in the right direction, but further efforts are still needed in the fields of spending reform and tax coordination

The reforms introduced or announced to date mainly concern direct taxes, which typically have large distortionary effects. Lowering the tax burden on both capital and labour, and especially low-paid labour, is expected to enhance physical and human capital accumulation, increase participation and boost the demand for labour.

General reductions of personal income taxes may contribute to wage moderation by reducing the tax wedge on labour. Moreover, in a number of Member States, the reforms will enhance incentives to participate in the labour market at the top end of the wage scale. This could particularly impact on high-skilled second earners, most of whom are women. In addition, cuts targeted at the lower end of the wage scale will mitigate risks of unemployment and poverty traps. They will have a positive effect on the demand for low-productivity workers, as long as tax reductions are effectively passed on to firms. Also, the lowering of taxes on labour will contribute to making work pay by increasing the after-tax take-home pay.

As regards capital, the reforms are bound to improve the functioning of capital markets, and in particular enhance incentives for investing in risk, venture and intangible capital. Finally, through simplification, the reforms

Graph 18: **Changes in tax burden, 1999–2002**



Source: Commission services.

should improve the efficiency of the taxation systems across the EU.

Past experience has shown that for tax cuts to be permanent (and hence not to be reversed when the economy slows down), they need to be accompanied with spending reforms that tackle head on the underlying reasons for the high tax burden. Having demonstrated a capacity to undertake fiscal consolidation in the run-up to EMU when the economic environment was less than favourable, Member States must now demonstrate their continuing willingness to pursue responsible fiscal behaviour during 'good' times.

Overall, the reforms should contribute positively to growth. However, the magnitude of such effects depends on accompanying measures. In particular, the potentially positive impact on growth could be offset if the reduction in the tax burden is financed through deficit spending. The full benefits of tax reforms will only materialise if they are framed in a comprehensive reform package, which includes reform of benefit systems as well as measures to improve the functioning of product, labour and capital markets.

Aside from improving incentives for investment and enhancing the functioning of capital markets, Member States may be lowering the tax burden on capital to prevent their economies from becoming less attractive to investors. In the absence of some form of tax coordination, such as that proposed in the package for saving and business taxation, the constraints stemming from tax competition are likely to remain a medium-term limitation for tax reforms in the Member States. Adoption of such a fiscal package would broaden the tax base and enable further reductions in tax burdens in the future.

5. Differences in the outlook across Member States

According to the Commission services' autumn 2000 forecast the euro area's GDP has grown in real terms by 3.5% in 2000 with the Member States displaying growth rates between 2.9 and 10.5%. Unemployment falls by almost 1 percentage point during 2000, from 9.9% in the previous year to 9.0% in 2000, but it varies between 1.9% (Luxembourg) and 14.2% (Spain). Consumer price inflation in the euro area as measured by the harmonised index will be higher than expected earlier at slightly above 2%. It will differ significantly across the Member States (between 1.8% in France and 5.2% in Ireland). While annual headline inflation has been beyond the upper range of the ECB's medium-term target for price stability since June 2000, energy prices lifted it to above 2% in Austria, France and Germany in September. These observations indicate that the picture for the euro area as a whole hides some developments at the level of the Member States that appear less (or more) favourable. This applies to growth differentials that cannot be explained by catching-up processes as well as to inflation diversity across the Member States.

Economic growth differences

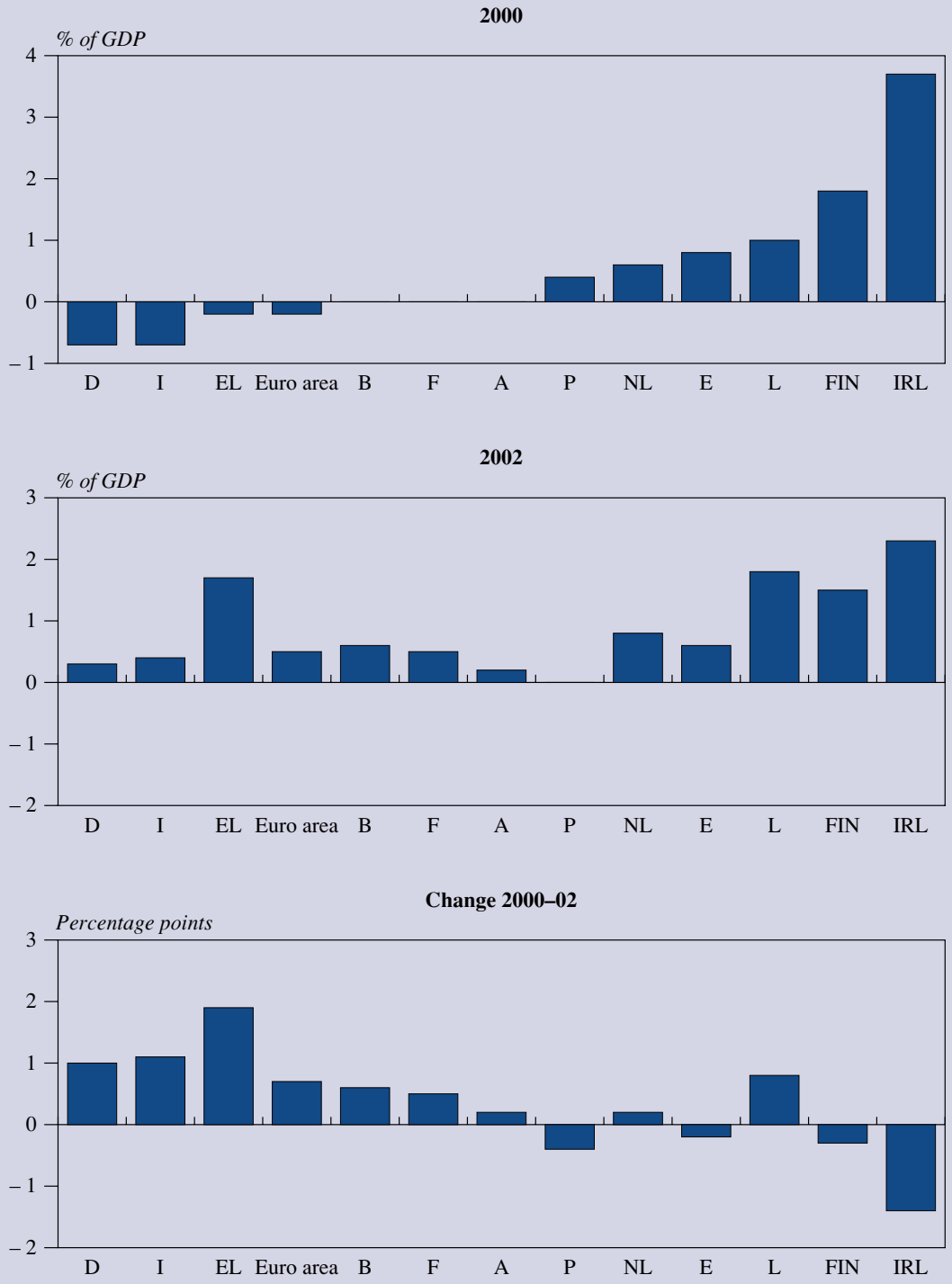
At first sight, growth patterns across Member States appear more balanced than a year ago. Economic growth in Germany and Italy, which were the laggards in the past, caught up though it remains below the euro-area average this year and is forecast to stay there over the forecast horizon. But as economic growth in France is only accelerating slightly in 2000 and forecast to slow somewhat from then on, differences in economic growth among the three biggest euro-area economies mostly disappear. In fact, starting from quite dissimilar positions in 1999, growth convergence continues among the three largest economies of the euro area. Economic growth in Spain, the fourth largest economy, displays a similar annual profile but still grows at a faster speed. Some of the other cyclically more mature economies have registered unexpected strong economic growth. Quarterly rates of real economic growth of well over 4% have been released for Belgium, the Netherlands and Finland. Strong growth is also expected for Ireland, Luxembourg and Portugal, raising the risk of overheating in those countries.

For the euro area as a whole, the output gap — defined here as the deviation of actual GDP from trend GDP in% — is almost closed in 2000. This, however, masks important differences across Member States (Graph19). On the one hand, still negative output gaps are recorded in Germany and Italy. On the other hand, Ireland, Finland, Luxembourg and Spain have considerable higher actual than trend GDP, implying a large positive output gap. Among these, the considerable positive output gaps in Ireland, Finland and Spain are expected to decline in 2001 and 2002. In general, a convergence of the cyclical situation is expected as those countries with a small positive or a negative output gap are forecast to grow faster than trend growth. Cyclical de-synchronisation, which has been a matter of concern in the first year of EMU, is thus expected to decline in importance over time.

Differences in the vulnerability to external developments and the adjustment of macroeconomic policies in the run-up to EMU have in the past been responsible for some growth differences. Since the impact of these factors gradually fades out, attention should shift to disparities in potential growth rates to assess the severity of differences in actual growth.

- Since industrial specialisation patterns are not expected to change rapidly, sector-specific developments are likely to continue to influence, or even determine, cross-country growth differences. Chapter 3 reveals the variation of ICT production in countries, which have contributed to high economic growth in Ireland, Finland and the Netherlands. On the other hand, the high dependence of Italy's manufacturing exports on sectors such as textiles, cloth-

Graph 19: **Output gap relative to trend GDP**



Source: Commission services.

ing and footwear might be partially blamed for the country's poor growth performance ([1]). The persistent problems in the east German construction sector are still depressing Germany's growth performance, while the country appears to have benefited in particular from its manufacturing sector's export-orientation in 2000.

- Income convergence is normally stimulated by economic integration. The introduction of the euro and the increasing pressure from international competition in formerly less exposed sectors of the economy are likely to have been the major reasons for the acceleration of the convergence process in Spain, Portugal, and Ireland. Starting from a lower GDP per capita level, they tend to benefit from the catching-up process and are forecast to generate continuously higher rates of growth in the forthcoming years relative to the average of the EU as a whole.
- Any assessment of potential growth has to rely on the overall efficiency of labour markets. In the recent past, rising employment has accompanied relatively strong output growth in the Netherlands, Finland, Spain and Ireland (see also Chapter 5). While countries with high unemployment rates and low participation rates have scope for raising employment, persistent unemployment is sometimes seen to be accompanied by a higher share of structural unemployment making it difficult to expand employment without creating tensions in the labour market. Furthermore, the labour force is not homogenous. The increasing importance of jobs in computer-related branches has increased risks of skill-shortages in some Member States restricting their means of benefiting from growth in these branches.

Inflation diversity

Whereas headline inflation indicates strong price pressure under the present circumstances, inflation rates that disregard changes in prices of energy and unprocessed food (core inflation) are obviously somewhat lower. Increased competition spurred by the euro and more competitive retailing as well as more deregulation, in particular in the markets for telecommunications and electricity, exerted downward pressure on prices. In fact, prices for industrial goods have accelerated decisively less than the overall price level in the past decade. The recent occurrence of upward pressure on prices is indicated by the development of producer price indices. Producer prices for intermediate goods, which are considered to set the direction for other industrial goods, may have peaked at 13.1 % in September. Accounting for factors on both sides, the autumn 2000 Commission services forecast yielded an outcome for HICP inflation of 2.2 and 1.9 % in 2001 and 2002 respectively (Table 10).

Notwithstanding increased synchronisation of the Member States' business cycles, inflation dispersion has widened across the euro area. Among the constituent economies, only France, Austria and Germany are expected to record in 2000 an annual increase of the HICP below or at the 2 % level. Several countries are close to 3 %, while Spain (3.4 %), Luxembourg (3.8 %) and Ireland (5.2 %) deviate substantially from the average. Core inflation rates are decisively lower than headline inflation in all Member States. However, the 2 % level has been surpassed in Luxembourg, Finland, Spain, and Portugal, and markedly in Ireland.

Inflation differences have not diminished in 2000 contrary to prior expectations. To a substantial degree their persistence is related to differences among Member States in their exposure towards the oil price and exchange rate developments. Concerning the proportion of energy in consumer expenditure, a clear North–South pattern emerges, with energy having a considerably lower share in Italy, Portugal and Spain than in Belgium, Germany, Luxembourg, and Finland. Subsequently, HICP inflation has increased in the former countries by somewhat less than in the others. The direct effect of higher energy prices was between 1 and 2 percentage points in the latter. Among Member States, production is the most energy-intensive in Belgium, Greece and Portugal, which may give rise to more significant second-round effects. Italy and Austria have the lowest energy usage in relation to GDP. As a large importer of energy, the terms-of-trade effect depresses real income in particular in Ireland, thereby reducing the scope for wage growth. At the opposite side, the Netherlands, being an energy net exporter — have a positive terms-of-trade effect, which might induce higher wage claims. In addition to direct effects, the transmission within and across economies has enhanced the total impact. Furthermore, changes in indirect taxes are estimated to add no more than 0.1 percentage points to headline

([1]) See European Commission (1999a), Section 5 for an extensive elaboration.

inflation in 2000 and to add some 0.2 percentage points in 2001 assuming a full pass-through of indirect tax changes to consumer prices. For instance, energy taxes were raised in Germany and VAT was reduced in France.

The pass-through of exchange rate movements onto import prices is generally smaller for large countries and vice versa. So far there is little evidence that even the smaller Member States with a relatively high exposure to extra-euro-area imports (notably Ireland, Belgium and the Netherlands) have suffered an inflationary shock to goods prices. Differences in the pass-through of import to consumer prices depend on differences in the cyclical conditions and domestic cost pressures as well as on market structures. Competitive markets tend to have smaller profit margins and thus, are less able to act as buffer. Therefore the pass-through can be expected to be stronger, the more competitive the pricing behaviour.

Some more persistent inflation differences are caused by differences in price levels, which give scope for price level convergence in a currency area ([1]). Market integration under the single market programme has led to a clear trend reduction in price divergences across the EU over the last decade. High dispersion is still observable for services. In fact, inflation differentials for services are higher than for goods. Moreover, differences in the relative productivity between tradable and non-tradable may cause sustainable differences in euro-area inflation. Estimates in the academic literature of the Balassa–Samuelson effect reveal that an inflation difference of more than 1 percentage point within the euro area may appear.

Upside risks to prices are particularly pronounced in cyclically mature countries as core inflation rates generally remain above average in those Member States that are cyclically advanced. Some concerns have been expressed as to whether the economic expansion in

([1]) See European Commission (1999b), Study 4.

Table 10

Headline and core inflation ([1])

(HICP, annual percentage change)

	Headline inflation				Core inflation	
	Sep. 1999	Sep. 2000	2001*	2002*	Sep. 1999	Sep. 2000
B	1.3	3.9	2.0	1.5	0.9	1.6
D	0.8	2.6	1.8	1.7	0.0	0.9
E	2.5	3.7	2.9	2.2	2.3	2.7
F	0.6	2.3	1.6	1.7	0.6	0.7
IRL	2.6	5.5	3.7	3.1	2.3	4.9
I	1.9	2.6	2.2	1.8	1.8	1.9
L	1.6	4.2	2.9	1.9	1.3	2.2
NL	2.0	2.9	3.9	2.8	1.8	1.4
A	0.6	2.2	1.8	1.6	0.5	1.0
P	1.9	3.6	2.9	2.3	2.3	3.1
FIN	1.4	3.4	2.5	2.2	1.2	2.3
EUR-11	1.2	2.8	2.2	1.9	0.9	1.4
			Dispersion across the euro area			
Min.	0.6	2.2	1.6	1.5	0.0	0.7
Max.	2.6	5.5	3.9	3.1	2.3	4.9
Range	2.0	3.3	2.3	1.6	2.3	4.5
STD ([2])	0.7	1.0	0.8	0.5	0.8	1.2

* = Forecasts autumn 2000.
([1]) Core inflation is HICP inflation excluding unprocessed food and energy.
([2]) Standard deviation.

Source: Commission services.

Ireland, Finland, the Netherlands, Spain, and Portugal is already showing signs of overheating. Indicators such as equity and property prices, credit growth and wage inflation do not show clear directions. Planned tax cuts will have pro-cyclical effects in Ireland, the Netherlands, Finland and Spain. Across Member States, higher inflation goes hand in hand with higher nominal unit labour costs, indicating that inflationary pressure may show up in domestic costs rather than in consumer prices when goods markets are highly integrated. Sizeable real exchange rate movements within the currency area, measured by relative unit labour costs, may act as an adjustment mechanism for cyclical and structural differences.

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Chapter 3

Economic growth in the EU: is a ‘new’ pattern emerging?

Contents

Graphs

1. Introduction

The past decade witnessed a remarkable difference in economic performance between the EU and the United States. With an average annual growth rate of 2 % in the 1990s, the pace of growth was moderate in the EU and accelerated to a range of 3–3.5 only at the very end of the decade. In contrast, in the United States, real GDP grew on average by 3.2 % per annum over the last decade and by 4.5 % between 1996 and 2000. Other economic performance indicators depicted substantially better results in the United States, than in the EU. In the United Statesthe standard of living and labour productivity increased considerably and the unemployment rate fell to about 4 %.

The strong performance of the US economy has sparked a debate on the emergence of a new growth pattern. Considering the duration of the economic expansion, support for the hypothesis that the US performance essentially reflects an unusual strong and lasting cyclical recovery driven by favourable demand forces has considerably diminished. The adherents of the so-called 'new economy' paradigm argue that the supply-side pattern of the economy has fundamentally changed via the impact of technical progress in information and communication technologies (ICT). According to this approach, the macroeconomic outcome of the 'new economy' is the simultaneous attainment of a permanently higher growth of labour productivity, a permanent reduction in structural and cyclical unemployment, and a smoother business cycle ([1]).

The concept of the 'new economy' considers ICT to be key to a leap in technical progress, comparable to the industrial revolutions of the past ([2]). Technical advances in ICT have indeed a potentially strong impact on economic activity. Firstly, enhanced processing power and sharply falling information costs allow for sizeable productivity gains and propels the value of innovation. In consequence, the adoption and use of new technologies is seen to be stimulating the development and implementation of further technical change. Secondly, being a general-purpose technology, there is hardly any business area unaffected by the spread of ICT. Accordingly, productivity increases and the scope for innovations are widespread, rather than restricted to specific sectors of the economy.

Besides ICT, further driving forces behind a new growth pattern have been at work in the United Statesand the EU, with macroeconomic stability universally viewed as a precondition for sustained, higher growth. At the structural level, increased competition, spurred by the liberalisation and globalisation of goods, services and financial markets, appears to be a crucial driving factor, as does increased flexibility and reduced rigidities in labour markets. Early research on the 'new economy' has commonly seen both ICT and globalisation as being the primary driving forces ([3]). They argue that globalisation contributed to economic growth primarily by increasing competitive pressure on economic actors, thereby enforcing a move towards a more efficient allocation of resources and creating incentives to innovate. Furthermore, labour markets conditions need to be conducive to the promotion of innovation and to the adoption of new technologies ([4]).

Two controversies currently surround the 'new economy'. A first debate emerged questioning the significance of ICT in economic activity and the empirical validation of the transmission channels from the diffusion of ICT to output growth. A second debate is focusing on

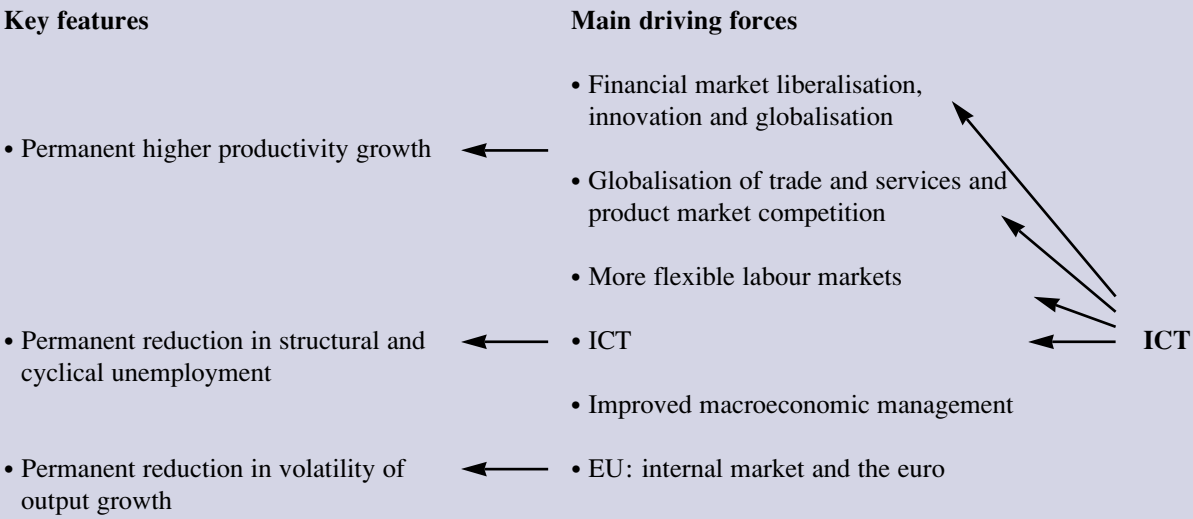
([1]) For overviews, see Stiroh (1999), Browne (2000) and OECD (2000).

([2]) Technical progress has been enormous in other fields, for instance in biotechnology. But breakthroughs in other areas are too recent to be subject of a quantitative evaluation. This also holds for new developments in the ICT sector, namely the spread of the Internet since the mid-1990s, as there is not yet a database to undertake an empirical assessment of its impact on aggregate economic activity in the EU.

([3]) See Stiroh (1999) and Shepard (1997).

([4]) See European Central Bank (2000), OECD (2000).

Graph 1: **The new economy: key features and main drivers**



the sustainability of this impact on macroeconomic variables such as GDP growth and employment. Meanwhile, even sceptics of the 'new economy' view acknowledge that ICT had an impact on economic growth figures in the United States. But some economists doubt that ICT usage has a significant and durable spillover to general economic activity. Instead, the growth enhancing effect is considered to be restricted to productivity growth in the ICT sector itself and some capital-deepening caused by it ([1]). Thus, the effect of ICT has not been the creation of a higher degree of labour utilisation per se but the prolongation of the cycle and an increase of labour income in the United States. Accordingly, higher economic growth and low unemployment, being the perceived macroeconomic consequence of ICT, would only be transitory phenomena.

This chapter's attention is restricted to the first of these controversies. It reviews the relative importance of different sources of growth in the EU over the past decade and, subsequently, empirically assesses the importance of ICT in the EU, and its contribution to economic growth. Having identified a gap in ICT diffusion levels in the EU relative to the United States, and a consistently smaller contribution of ICT to economic growth in the EU, the conditions for a convergence towards the US level are discussed. This is done, firstly by analysing two competing hypotheses about the reason for the gap and secondly by elaborating on the importance of human capital, and the design of financial markets, for the spread of ICT in the EU.

([1]) See for instance Gordon (2000).

2. Setting the stage: a simple growth-accounting exercise

This section reviews the main cross-country patterns of economic growth and productivity performance over the past two decades, using a standard growth-accounting framework ([1]). It examines first the development of real growth in GDP per capita, decomposed into changes in labour inputs and their productivity, and then proceeds to look at the contribution from capital inputs and to explore how labour productivity has been influenced by changes in the capital/labour ratio and total factor productivity growth.

From a mechanical point of view, real GDP per capita can be decomposed in the following way:

$$GDP/POP = GDP/H \times H/L \times L/LF \times LF/WAP \times WAP/POP$$

where H denotes average hours worked, L is employment, LF is the labour force and WAP denotes the working-age population. Thus, growth in GDP per capita adds up to the sum of hourly productivity growth and the rate of change in labour inputs, which by itself can be broken down into changes in average working time, the employment rate (here defined as 1 minus the unemployment rate), the labour force participation rate and a demographic component reflecting the age structure of the population. Since reliable statistics on hours worked are not available for all Member States, in some cases the above growth decomposition will be done using a breakdown into productivity per person employed, together with the remaining three different components of labour inputs.

([1]) Needless to say that international comparisons of productivity and growth patterns face a number of measurement problems; for a detailed discussion see Scarpetta et al. (2000). Moreover, given the mechanical nature of simple growth accounting exercises, their main purpose is to establish aggregate stylised facts which do not easily lend themselves to straightforward causal explanations.

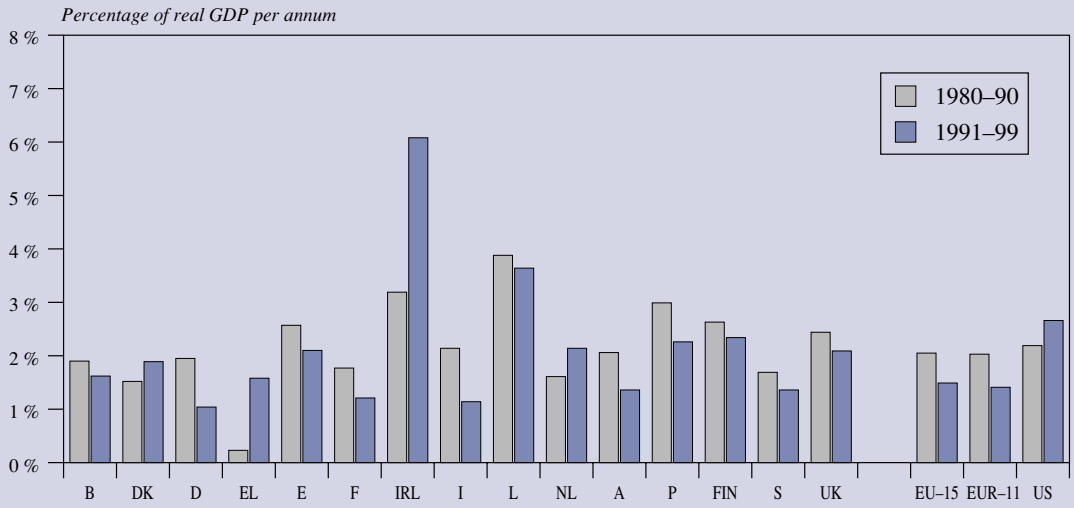
Graph 2 illustrates the cross-country patterns of real per capita GDP growth in the 1980s and the 1990s, with the past decade subdivided into its first and second half. Overall, real per capita GDP growth has accelerated by approximately half a percentage point in the United States in the past decade when compared to the 1980s, while for the EU the opposite holds true, with growth slowing down by approximately the same order of magnitude. Within the EU, the growth performance of Ireland has been truly outstanding; but apart from Ireland, in the 1990s, only Greece, Denmark and the Netherlands have seen higher average per capita growth than in the previous decade.

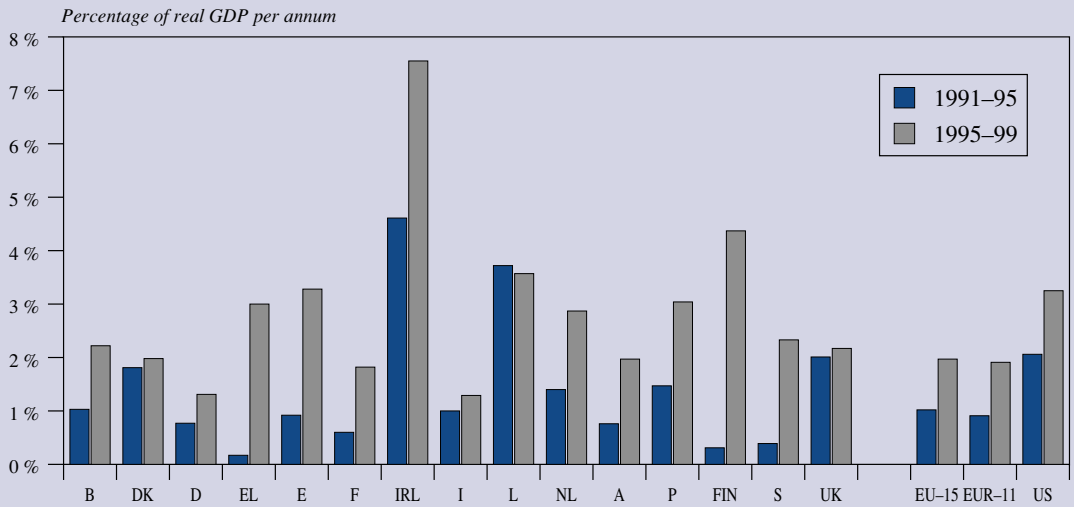
When the attention is restricted to the past decade, one sees that there has been an apparently general acceleration of growth in the second half of the 1990s, with the pick-up of growth rates particularly pronounced in the United States, but the EU countries, in general, have also seen an increase in growth rates, mainly reflecting the cyclical recovery from the downturn in the first half of the 1990s. The gap in GDP per capita between Europe and the United States, however, has clearly widened again in recent years, both in terms of levels and in terms of rates of growth.

2.1. The contribution of labour utilisation

Measures of labour inputs and the utilisation of the potential work force are important factors in the explanation of cross-country differences in growth performance over the past two decades. This is illustrated in Graph 3 suggesting that in the EU declining labour inputs/utilisation have significantly dragged down overall growth rates. Indeed, for the EU as a whole, the contribution to growth from labour inputs has been negative both in the 1980s and in the 1990s, principally due to falling average hours worked and a decline in employment rates. In contrast, the United States has managed to achieve both a significant reduction in unemployment

Graph 2: **Growth performance during 1980s and 1990s**





Source: Commission services.

and to score better on the other components of labour inputs as well ([1]).

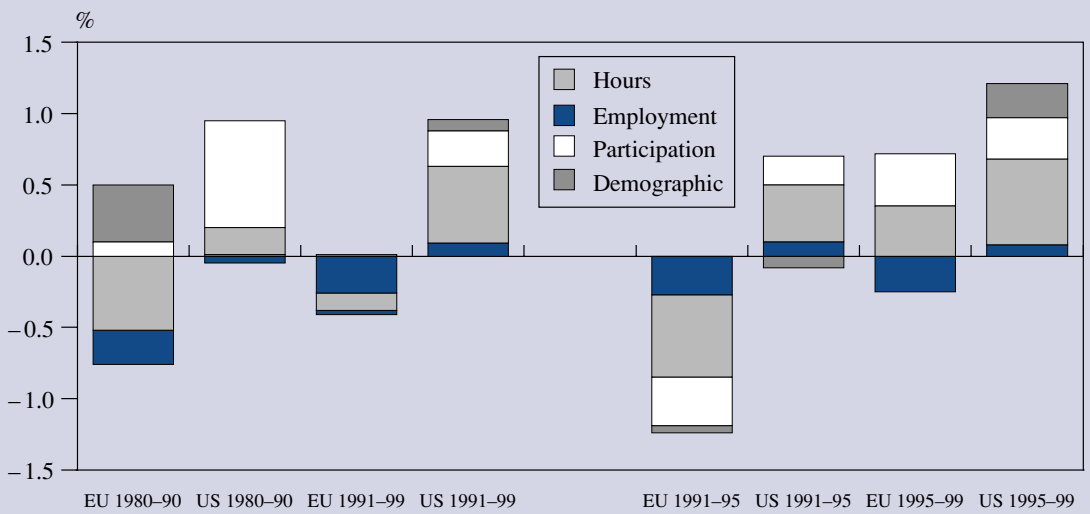
The sobering European performance in terms of labour utilisation has been reversed to some extent in the more recent past. In fact, when looking at the second half of the 1990s, rising employment rates and increasing labour force participation have had a positive impact on growth, more than offsetting the continued downward trend in average hours worked. Still, compared to the United States, the growth contribution from labour inputs in the EU — including hours worked — has only been about a third of that achieved across the Atlantic.

Across the individual EU countries, labour input and utilisation developments have been fairly divergent in the past two decades. Graph 4 shows the contribution of labour inputs (on a head-count basis) to growth in real GDP per capita for all EU Member States. However, the divergent trends in average hours worked per employee, while having fallen almost everywhere across Europe, could affect the interpretation of labour input developments in different countries. Anyway, on a head-count basis the majority of EU countries had experienced, on average, a negative contribution from labour inputs to per capita growth in the past decade; only Ireland, the Netherlands, Greece and Spain could register a positive contribution exceeding half a percentage point. However, the improved performance in terms of employment and labour force participation in the second half of the 1990s is also clearly reflected in the data.

Different degrees of labour utilisation are also an important explanatory factor for the divergences in level terms of per capita GDP across countries and major regions. This is illustrated in Graph 5, which indicates that for the EU as a whole, lower labour utilisation accounts for about two-thirds of the difference with US levels of GDP per capita. Indeed, several EU countries, such as Belgium, (West) Germany, France, Italy, Luxembourg and the Netherlands match or even exceed US productivity levels on an hourly basis, but realise a lower GDP per capita because of lower labour market participation, lower employment rates and/or fewer hours worked; only for Portugal and Greece is it labour productivity rather than labour utilisation that accounts for the bigger part of the gap in per capita GDP levels.

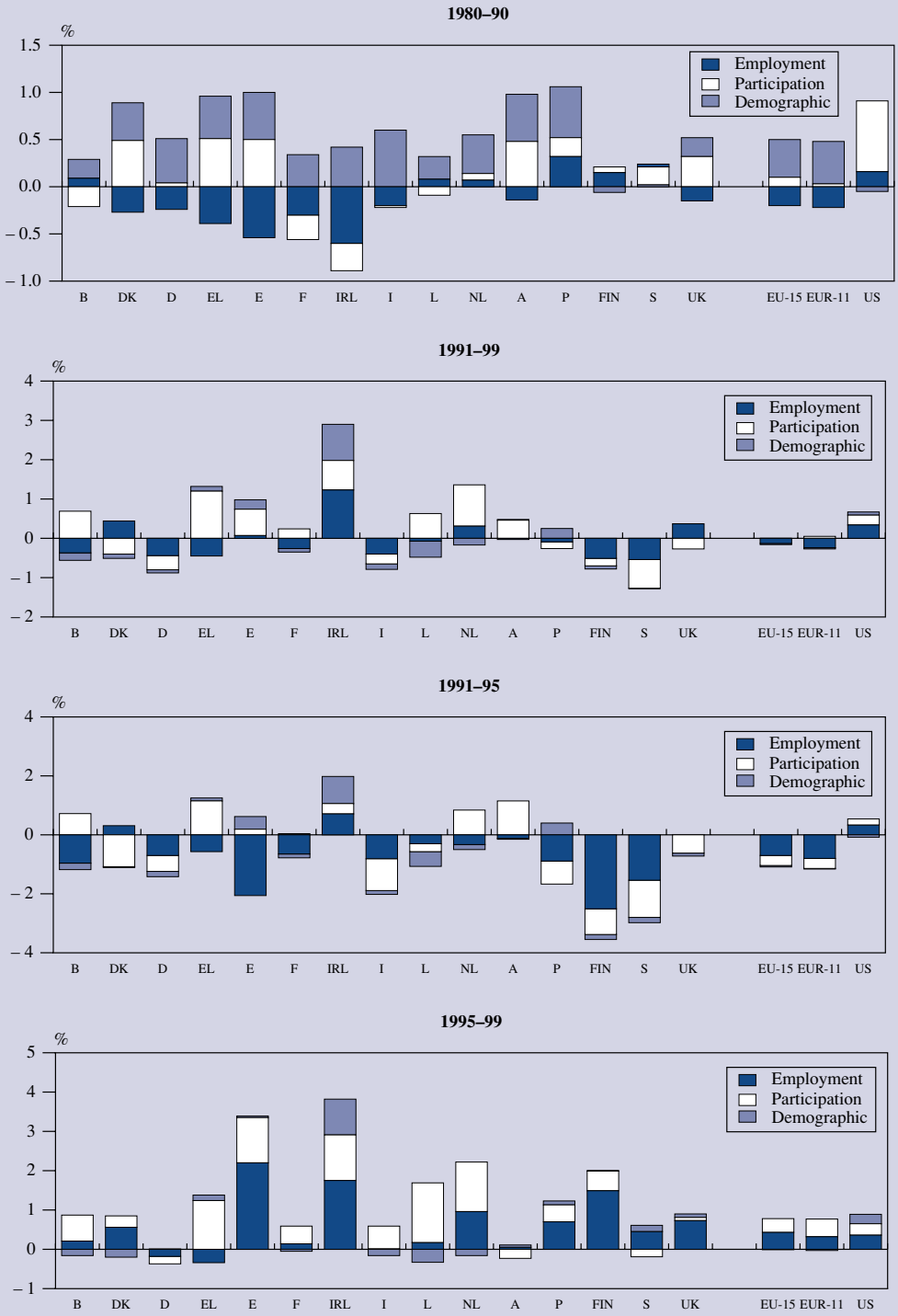
([1]) A similar decomposition of growth sources has been conducted by the OECD on the basis of cyclically-adjusted data with broadly similar conclusions. See Scarpetta et al. (2000), Elmeskov and Scarpetta (2000).

Graph 3: **Contribution of labour imputs to growth of real GDP per capita, EU versus United States**



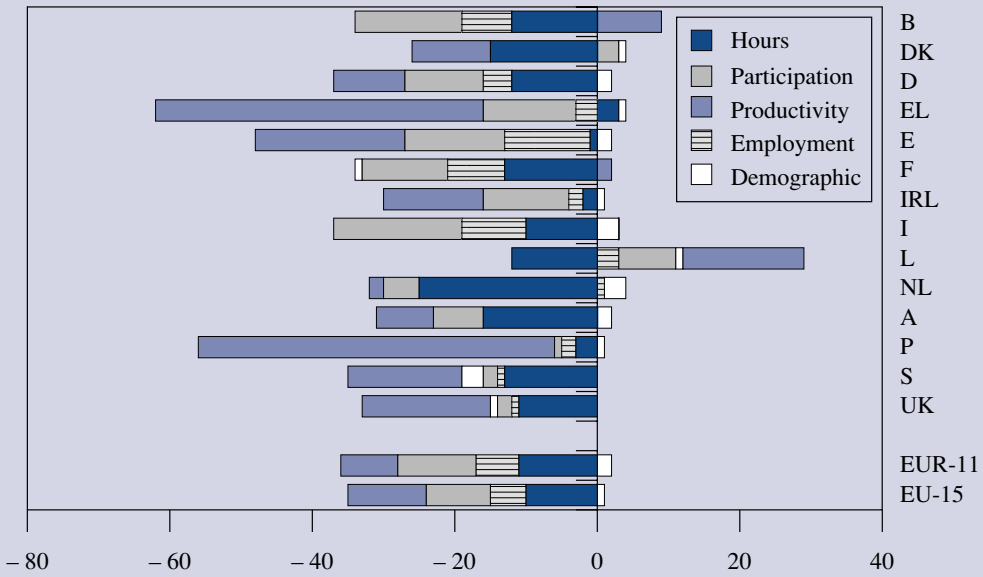
Source: Commission services.

Graph 4: **Contribution of labour inputs to growth of real GDP per capita in the Member States**



Source: Commission services.

Graph 5: **Breakdown of the level gap in real GDP per capita (US level = 100), 1998**



Source: OECD.

The graph is clearly illustrative of the important contribution to growth that could be derived from a greater utilisation of labour. Indeed, mobilising the Union's labour potential has been recognised as an essential element of the strategic goal for the EU, set in Lisbon, to become, by 2010, the world's most competitive and dynamic knowledge-based economy, with more and better jobs and increased social cohesion. In fact, achieving a target overall employment rate of 70 % in the EU at the end of the decade, translates at given demographic projections, on average, into a required rate of annual growth in employment of about 1.25 % for the EU as a whole.

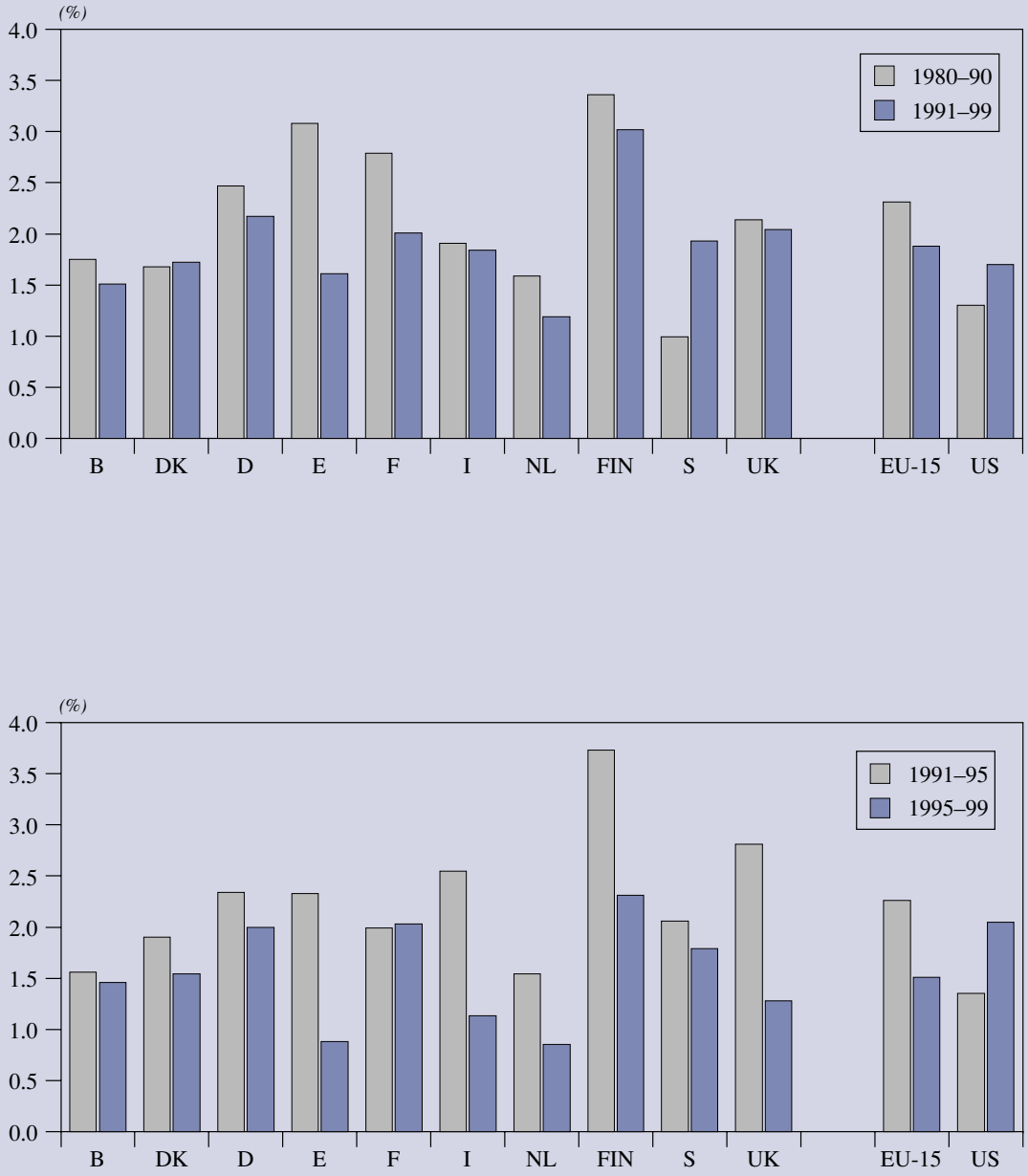
2.2. The impact of labour productivity

However, since labour inputs cannot be increased infinitely, increasing labour productivity must be the engine of economic growth over the longer term. Rising labour productivity, defined as GDP per hour worked, was indeed the main contributor to economic growth in the United States, accounting for about 60 % of per capita GDP growth in the past two decades. In the EU, which had experienced declining labour utilisation, on average, over that period, hourly labour productivity rose faster than per capita GDP.

Compared to the previous decade, hourly labour productivity growth has slowed down in the EU in the 1990s, while it has picked up in the United States, in particular in the second half of the 1990s. Note that in the EU, given the decline in working hours, labour productivity growth had been higher on an hourly basis than per person employed, while this difference is negligible for the United States. Both in the 1980s and the 1990s, labour productivity growth in the EU had been, on average, faster than in the United States; however, in the second half of the 1990s, this picture has been reversed with labour productivity growth in the United Statessignificantly higher than in the EU (see Graph 6).

However, in interpreting these trends it should be kept in mind that relatively strong past growth of labour productivity in the EU has, to some extent, been the result of not employing the least productive workers and of a substitution towards capital forced by high labour costs. To illustrate this point, labour productivity growth can be decomposed into a component reflecting 'capital deepening' and the growth rate of total factor produc-

Graph 6: **Hourly labour productivity growth**



Source: Commission services.

tivity (TFP) as a measure of genuine technological change ([1]).

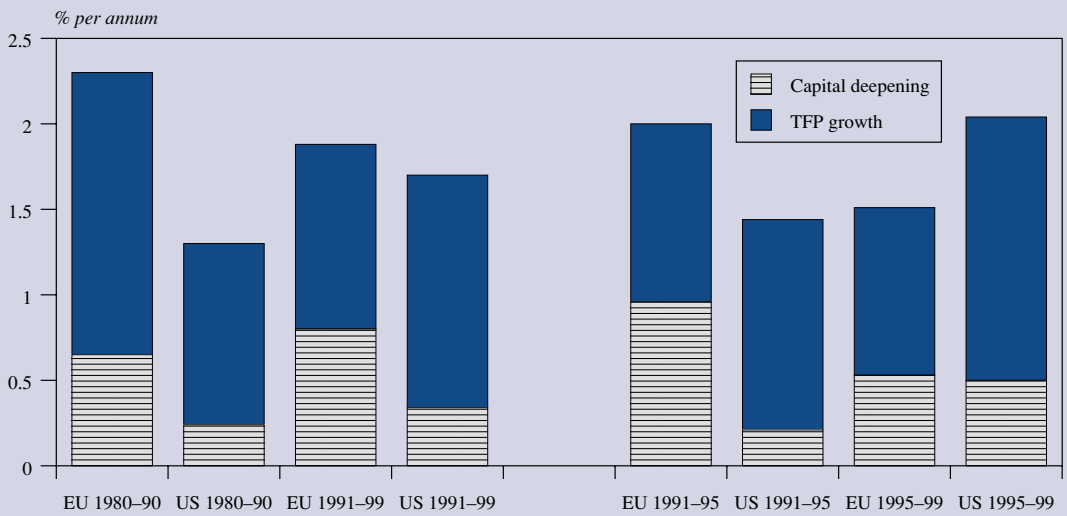
This decomposition, as shown in Graph 7, clearly reveals that over the past two decades the capital/labour ratio increased at a significantly faster rate in the EU than in the United States, thus contributing more than twice as much to the growth of labour productivity. The process of capital deepening had been particularly pronounced in the first half of the 1990s in several European countries (in particular in Spain, Portugal and Finland), again mainly driven by losses in employment rather than an acceleration of investment. In the second half of the 1990s, the rate of growth of the capital/labour ratio slowed down almost uniformly across Europe, bringing the process of unfavourable capital-labour substitution to a halt. The United States, in contrast, has seen acceleration in capital deepening in the second half of the 1990s, driven by rapid investment in ICT equipment, but this occurred in conjunction with strong employment growth.

Confirming this broad interpretation, Graph 8 looks at the development of labour productivity in the past decade from a slightly different perspective, i.e. by comparing actual growth in labour productivity with a hypothetical 'balanced' productivity evolution along a steady-state growth path ([2]). The graph serves to illustrate that the anti-labour bias in the EU, as regards the factor intensities of growth, has disappeared in the second half of the 1990s; however, it also clearly demonstrates the failure, from an overall EU perspective, to achieve a pick-up in underlying productivity growth similar to that attained in the United States.

([1]) A broad measure of TFP growth is applied here, computed as the residual growth after controlling for aggregate hours worked and the gross capital stock, but not adjusting for any change in the quality of inputs. For a review of the determinants of TFP, see Box 1.

([2]) 'Balanced' labour productivity growth is calculated as TFP growth divided by the share of labour in national income. Thus, the 'balanced' figures abstract from changes in labour productivity due to capital-labour substitution in the economy. Obviously, when looking at fairly short periods cyclical influences show up in the data as well.

Graph 7: **Decomposition of hourly labour productivity growth**

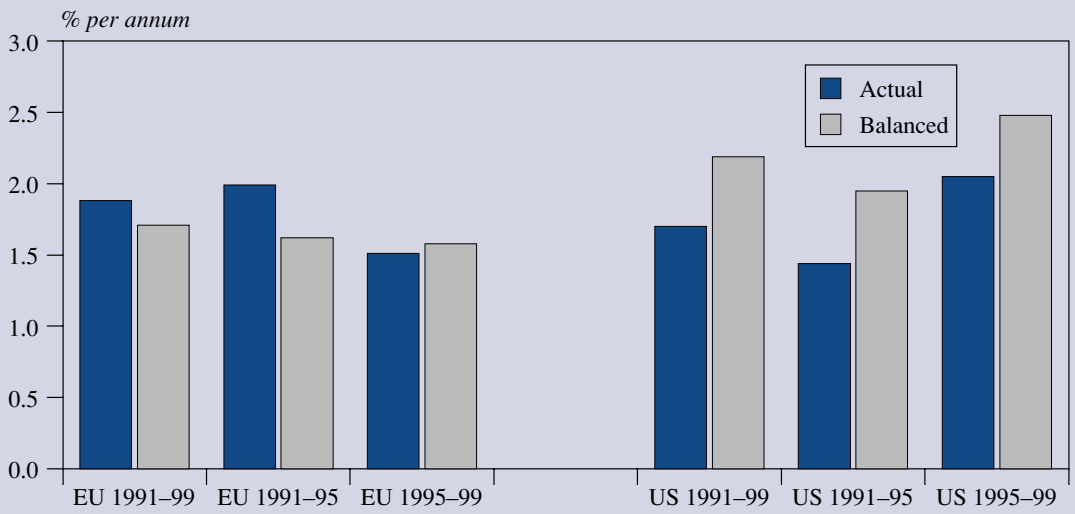


Source: Commission services.

Thus, what is probably most troublesome about the recent European growth performance is the slowdown in total factor productivity growth to about 1% in the 1990s, down by half a percentage point when compared to the 1980s, when TFP growth had been faster in Europe than in the United States. In the United States, TFP growth has clearly accelerated in the course of the 1990s, giving an additional boost to the pick-up in labour productivity. In fact, since productivity growth rates have climbed higher in the course of the second half of the 1990s, the average picture in the graphs presented above may fail to give a full account of the impressive acceleration in US productivity growth.

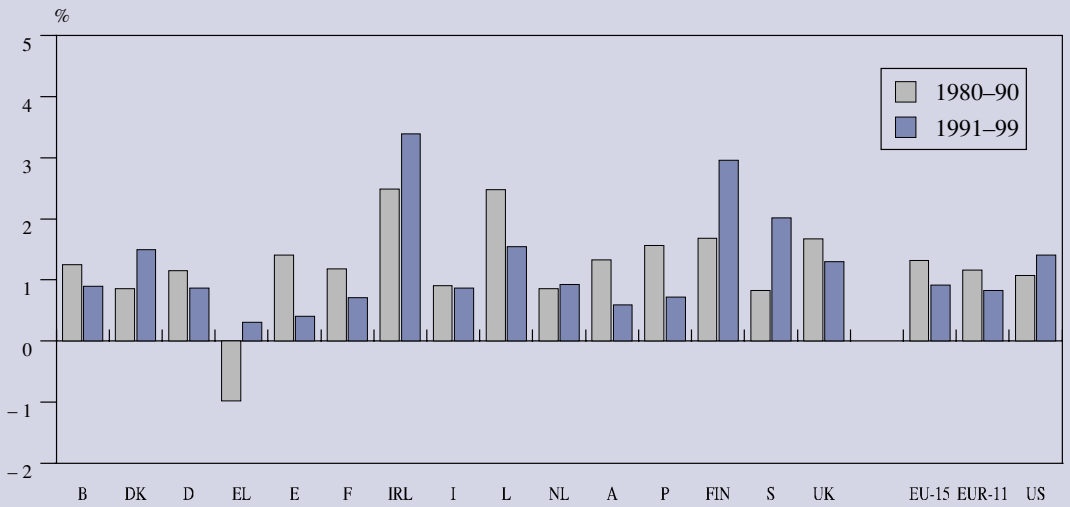
However, the aggregate picture masks considerable differences across EU Member States. Graph 9 identifies a number of countries where TFP growth has accelerated significantly in the 1990s, such as Ireland, Finland and Sweden, exceeding those in the United States. Conversely, TFP growth rates have slowed down in several countries, including more or less all of the major economies in the EU. Moreover, with the notable exception of Ireland, in all the countries with above average TFP growth in the past decade, it has slowed down somewhat in the second half of the 1990s.

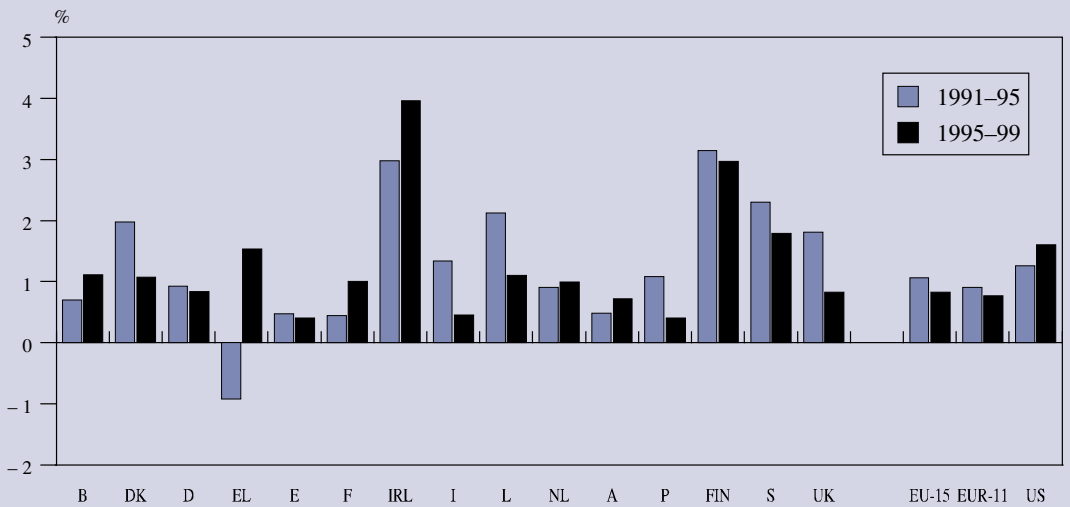
Graph 8: **Labour productivity in the 1990s: actual versus 'balanced' growth**



Source: Commission services.

Graph 9: **Total factor productivity growth**





Source: Commission services.

Box 1: Determinants of TFP growth in the 1980s and 1990s

The productivity growth decomposition of Section 2 clearly shows that TFP growth accounts for more than 50 % of the labour productivity growth in the EU and the United States. Productivity growth in the United States is higher now than in the EU not because the United States has accumulated more capital in recent years but because the US economy has managed to achieve higher rates of TFP growth or technical progress. The crucial question for growth therefore seems to be how to explain TFP growth. This is in fact a very difficult area. TFP or the 'Solow residual' is often regarded as a 'measure of ignorance' by economists, because it is likely driven by factors which are hard to quantify such as knowledge or changes in the degree of factor utilisation, for example. On top of it, TFP also captures measurement errors in capital and physical labour, due to inappropriate aggregation over different types of capital goods or skills, for example. At a theoretical level, there exist various models stressing different channels. This box reviews some recent empirical results.

Differences in TFP growth rates across countries are related to either output or input factors. Since individual production sectors exhibit specific TFP growth rates, output-related TFP differentials can be the result of differences in the sectoral composition across countries. For example, countries with a large service sector tend to have lower rates of TFP growth because measured technical progress in the service sector is practically zero (see, for example, Jorgenson and Stiroh (2000b) for some recent evidence on sectoral TFP differentials). However, input-related differences can also occur, because countries differ in the share of resources devoted to knowledge production. Especially endogenous growth models (Aghion and Howitt (1998), Lucas (1988), Romer (1986), and Helpman (1998)) stress knowledge production or the accumulation of intangible capital such as human capital or R & D as important sources of productivity growth. With the emergence of endogenous growth theory, new interest arose in establishing an empirical link between human capital, R & D and technical progress. A seminal contribution to the recent empirical literature is Coe and Helpman (1995). They use an international data set of OECD countries and exploit both the time series and cross-country variation of R & D spending and TFP. Their approach is also interesting since the international data allow to assess the importance of international knowledge spillover ([1]).

Rather than exploring the link between R & D and TFP, several economists look at intermediate steps and try to estimate determinants of 'knowledge output' more directly by using measures of knowledge output such as patents, for example. Recent studies by Stern, Porter and Furman (2000) and Porter and Stern (2000), for example, follow this approach. Similar to the empirical work summarised above they use time series and cross-section data for OECD countries.

These results are particularly interesting since they provide a broader picture on what the authors call 'national innovative capacity' or infrastructure required for knowledge production. Both, R & D and spending for higher education have significantly positive effect on knowledge production. Also private and university based research impact positively on knowledge. Results are less strong

([1]) Of course, the domestic R & D effect includes spillover between firms and sectors at the national level.

Results from international TFP regressions

	R&D (domestic)	R&D (international)	Human capital	Period
Coe and Helpman	0.08–0.1	0.06–0.09		(1971–90)
Engelbrecht	0.06–0.08	0.06–0.09	0.08–0.14	(1971–85)
Economic and Financial Affairs DG	0.11	0.08		(1973–97)

Dependent variable is log of TFP. All equations include unreported country specific constants. All results reported are significant at the 5 per cent level. Estimation method: SUR. Countries included: OECD countries.

Source: Coe and Helpman (1995), Engelbrecht (1997), Commission services.

Results from international patent data
(Elasticity between independent variable [columns] and dependent variable [rows])

	Patent stock	Total scientists and engineers	Share of GDP spend on secondary and tertiary education	Share of private R&D funding	Share of university R&D	Strength of protection for intellectual property	Openness	Strength of venture capital markets
Patents (1)	0.59	0.46	0.06	0.009	0.009	0.07	(ns)	(ns)
TFP	0.11							
Market share of high-tech industries (2)	0.13	0.50	0.15	0.038	0.040	(ns)	0.25	(ns)

(1) US-Patents granted to establishments in country j in t+3. US patents are chosen to provide an internationally comparable measure of innovations with substantial commercial importance.
(2) Share of exports in high technology industries.
Sample: 17 OECD countries from 1973–93.
ns: not significant at 10 % level.

Source: Stern, Porter and Furman (2000).

concerning venture capital financing and openness. Consistent with figures reported in the tables above are the results on the determinants of market share in the high-tech sector, which can be interpreted as sources of comparative advantage. Not surprisingly, those factors that are crucial for knowledge creation are also important for determining comparative advantage. Finally, knowledge and TFP are significantly positively correlated. It is interesting to notice that factors like commitment to enforcement of property rights, legal systems which reduce moral hazard and opportunism and openness are also variables which are found to be 'robust' explanatory variables in cross-country growth regressions (see, for example Sala-I-Martin (1997)).

How well do output and input-related approaches explain TFP over the last two decades?

Here, the evolution of TFP is analysed from a slightly broader perspective as not only R & D is considered but also other variables, which might be relevant such as the impact of a declining manufacturing share, technological catching up and physical investment. The following table gives the result of a cross-country regression aiming to explain the rate of TFP growth by selected economic variables.

The manufacturing share has a significant effect on aggregate TFP. The estimated coefficient suggests that manufacturing sector TFP has grown on average by 4.4 % p.a. over the period 1980–98. Therefore the still declining share of manufacturing must be taken into account when looking at the declining growth rates of aggregate TFP in Europe. The ICT production share is also significant and the estimate implies a growth rate in the ICT sector TFP of more than 20 %.

The growth rate of the R & D capital stock (2) is also significant at the 5 % level. The output elasticity of R & D capital is estimated to be 0.1. A causal interpretation seems possible, since lagged R & D is significant. Using foreign R & D does not improve the result.

The physical investment share (real) is not significant in the regression if one controls for sectoral effects and R & D. This result is in contrast to embodiment effects of physical capital which have been found in regressions of the level of TFP explained by the age of the capital stock over longer time periods (including the 1960s). This result suggests that the role of physical capital for growth is diminishing over time.

The human capital indicators used here do not effect TFP growth. There is substantial controversy on the effect of human capital indicators such as share of population with secondary and tertiary education or university degree, as used in this estimate (see de la Fuente and Doménech (2000)) on the growth rate of technical progress. While there is little doubt that human capital has an effect on the

(2) The capital stock has been constructed as suggested by Coe and Helpman (1995).

Determinants of TFP growth

Estimate	Share of manufacturing	ICT production share	R&D, lagged 1 period	Human capital	Catch up	United States, Sweden, Finland dummy	Physical inventories	Adj. R^2; Durbin-Watson
(1)	0.044**	–	0.10**	ns	ns	0.94**	ns	0.40; 1.6
(2)	–	0.25*	0.15**	ns	ns	0.80**	ns	0.36; 1.5

The dependent variable in both estimates is the growth rate of total factor productivity.
** significant at 5 % level.
* significant at 10 % level.
ns: not significant at 10 % level.

Source: Commission services.

level of per capita income (see, for example, the seminal contribution of Mankiw, Romer, Weil (1992)), it is less clear whether human capital indicators also explain changes in growth rates. For example, Hamilton and Monteagudo (1998) find that the productivity slowdown observed in many countries since the 1970s is hard to reconcile with rising levels of educational attainment. These results probably say more about the quality of the indicators used than about the actual effect of human capital investment itself (Box 5 reports empirical evidence on the link between education and growth).

If there were technological convergence then one would expect countries with relatively low GDP per capita to display faster TFP growth. However the regression results do not show any evidence of such an effect. Of course, the fact that high income countries such as the United States and Scandinavian countries exhibit accelerating TFP growth over the 1990s, can serve as an indication that technological divergence can occur over extended periods of time.

Finally, it must be stressed as well that the factors discussed so far cannot explain fully the extraordinary TFP performance of countries like the United States, Sweden, Finland and the United Kingdom in the 1990s. Also, allowing for higher ICT production shares does not explain their performance. This is clearly shown by the high significance of a 1990s dummy for these four countries. Most likely it is due more to sector specific developments in these countries, as evidenced by the productivity acceleration in these countries' high-tech sector.

2.3. Conclusions

In a nutshell, three major conclusions may be derived from this simple growth-accounting exercise:

- A low and declining degree of labour utilisation has dragged the European growth performance down significantly in the past two decades. The United States, in contrast, has been much more successful in mobilising its labour force potential.

- Labour productivity growth had been faster in the past in the EU than in the United States, but this came, to some extent, at the price of capital-deepening associated with an unfavourable substitution of capital for labour. More recently, labour productivity growth in the EU has fallen behind US achievements. This has been largely due to a slowdown in total factor productivity growth, which — in contrast — has significantly accelerated in the United States.

- There is no common European fate, however, to be shared by all EU Member States. Several EU countries, albeit almost exclusively smaller ones, have managed to improve significantly on their growth performances resulting from a better utilisation of potential labour inputs and/or higher productivity growth.

3. Technical progress and new growth patterns

As discussed in Section 2, during the 1990s, the United States was more successful than the EU in enhancing the utilisation of labour as well as in accelerating the productivity of the labour force. The smaller contribution from labour utilisation is a direct consequence of high non-employment in the EU. This issue was analysed in detail in Study 1 of *European Economy: 1999 Review*. Section 3 of the present chapter is devoted to the second source of growth differences and in particular to the impact of technical progress on labour productivity growth in the EU. This does not, however, imply that the conclusions of the study on unemployment in last year's edition have lost validity.

Although the development of computers had started in the 1940s, the rise of the 'computer age' only started in the 1970s, with evidence of the impact of ICT on aggregate productivity figures only having been recently observed ([1]). This lag between the technical leap of the microprocessor since the early 1970s and the first evidence on the aggregate level — measured *ex post* — in the second half of the 1990s, appears to be rather short in comparison to the 'great inventions of the past'. The period between 1860 and 1900 witnessed the development of a cluster of important interventions such as the internal combustion engine, electricity, petroleum and petrochemical chemicals, telegraph and telephone. Their diffusion is thought to have contributed to the pick up of productivity growth only after 1913 ([2]).

([1]) In this context, the 'Solow paradox' saying, 'computers are visible everywhere but in the productivity statistics' from 1987 has become famous (Solow 1987). Still Oliner and Sichel (1994) and Jorgensen and Stiroh (1995) detected only a modest contribution of computers to growth. In their most recent contributions, Oliner and Sichel (2000) and Jorgensen and Stiroh (2000a) find strong support for a sizeable impact of ICT on economic growth in the United States (see Box 3).

([2]) For a comparison of the economic impact of computers and the Internet with the 'great interventions of the past' see Gordon (2000). For the reasons why the diffusion on new technologies has usually been slow, see David (1990).

The ICT sector has undergone a considerable change since the mid-1990s with the development of the Internet representing a second major breakthrough. However, this second wave is very recent, with the consequence that the data situation does not yet allow empirical assessment of its impact on aggregate economic activity.

3.1. The potential impact of ICT on economic activity

This section deals with the ways in which ICT is affecting the organisation of economic activity, and, more specifically, the impact these technologies may have on productivity and economic growth. A distinction is made between the effects emanating from ICT-producing industries and those pertaining to ICT-using industries. In keeping with that distinction, the growth-accounting exercise reported later in the section tries to shed some light on the relative importance of these effects in generating output growth and productivity.

The distinction between ICT-producing and ICT-using industries should not be taken to mean that their effects could be looked at in isolation. On the contrary, they are deeply intertwined, but the distinction is nonetheless useful from an expositional point of view, in that it helps to visualise the mechanics of the ICT impact as it may manifest itself.

The potential impact of ICT production

ICT production stands out from other, more traditional industries, because of the speed with which new innovations occur. In a clear sign of the interdependence with ICT using industries, prospective sales of ICT applications in a thriving global market compel ICT producers to invest huge sums in developing new, high-performing products. This incessant battle between companies to be the first to introduce a new product is reinforcing competition in ICT markets while, simultaneously, cutting the life span of ICT products shorter.

Beyond competition on time-to-market, ICT is likely gaining ground because of increasing returns to scale in production. Development costs may be very steep for ICT equipment, but once the product is ready, unit costs will start falling precipitously. Take a sophisticated computer program, which takes several months to develop. As soon as it is completed and fully tested, it can easily be loaded on to a CD-ROM, and then reproduced in virtually unlimited numbers at very low costs per unit.

Analogously, ICT markets may be benefiting from network effects. When one more member is connected to a network — such as the Internet or a widely marketed computer program — this person can connect to all existing members. In turn, this means that the value of belonging to the network, measured as the number of interconnections that can be established, increases more than proportionately with the number of individuals belonging to the network ([1]). The upshot is that diffusion of ICT and, consequently, its production, has most likely to attain a critical mass before yielding maximum benefits.

The combined effects of increasing R & D expenditures, fiercer competition, and potentially increasing returns to scale are pushing up the demands on ICT producers to enhance efficiency. Therefore, we should expect to see rising productivity in the ICT-producing industries as they react to pressure from accelerating competitive forces.

The epitome of productivity advances in the ICT sector is reflected in what is popularly referred to as 'Moore's law'. Named after one of the founders of Intel, a US computer chip-maker, Mr Moore predicted back in the 1960s that the computational power of computers would double every 18 to 24 months. Remarkably, at almost any point in time since then, the number of transistors embedded in one microprocessor has in fact been twice that of 18 to 24 months before.

Such persistent computer capacity increases are reflected in the prices on computers, which are falling steadily, while quality is improving dramatically. Clearly, that increases the attraction of deploying ICT equipment broadly across industries in the economy, and given that many of these technologies have a wide range of applications, the impact on the whole economy is potentially very large.

([1]) For the importance of network effects see Shapiro and Varian (1999).

The potential impact from the pervasive deployment of ICT

It is evident how ICT may boost productivity in ICT-using firms as increasingly powerful computers are deployed for carrying out the same tasks. But, by enabling the interconnection of firms and households, ICT may also be unleashing entirely new productive forces. Because access to timely, strategic information is more and more decisive in competitive markets, and given that ICT can facilitate the production, storage, and transmission of information, it may be a catalyst for economic gains, for those who learn to master the technology. It follows from this, that the ICT impact on the organisation of firms may be pervasive, affecting both internal and external business processes.

Internally, fully integrated IT solutions such as ERP (enterprise resource planning) or integrated management systems (IMS) make it possible for firms to connect all divisions to a streamlined information system. In turn, this allows employees firm-wide to feed into and extract information from a shared pool of data, thereby cutting business processes such as order handling, production, and shipping much shorter. Moreover, it reduces the need for centralised control, allowing organisations to have leaner, more decentralised structures.

Externally, companies are progressively embracing electronic commerce, especially in the business-to-business (B2B) domain. E-commerce business solutions are multiplying and should allow for easier and more reliable management of supply chains and customer relations. ICT is also creeping into procurement, which is being opened up to competitive bidding in on-line exchanges. Buying in bulk and soliciting bids in a transparent auction process may retrench procurement costs, chiefly through dis-intermediation and lower search costs.

Moreover, firms may find it worthwhile to re-examine their supply chains with a view to outsourcing non-core activities, even R & D. In doing so, they can focus on what they are good at. This may lead to a more efficient division of labour as those companies that take over as sub-suppliers build up economies of scale through aggregation.

In theory, there are no geographic bounds either on ICT-based collaboration within a firm or between firms. As such, ICT is also an important enabler of globalisation.

But, merely investing in ICT is not enough. Besides the level of ICT spending, the productivity gains will be

determined by the way the equipment is employed, notably the accompanying investments in organisational restructuring. Firm-level studies have found that ICT capital is significantly more productive in decentralised organisations than in centralised ones and that it generates productivity gains only when combined with a reorganisation of labour ([1]).

When employed successfully, ICT should, however, have a deepening effect on product markets by crossing over geographical borders and creating almost unparalleled transparency. With ICT, consumers may search for products and prices on the web, thus avoiding the hassle of physically making the trip to rival sellers. That should squeeze margins in product markets, leading to lower prices, diminished price dispersion, engendering greater price responsiveness.

Also, the network effects that may be a means of propulsion in ICT production are mirrored in ICT usage. If the connection of internal divisions by ICT is productivity enhancing, so may be the fitting of compatible ICT equipment in the interface between customers and suppliers. The more are connected, the greater the benefits.

With positive spillover at the macro level, these network effects may involve increasing returns to scale, even in those cases where there are no scale economies at the firm level. For the whole economy, efficiency gains of this kind, therefore, should show up in faster expansion in that component of aggregate growth, which is not accounted for by increases in the quantity or quality of capital or labour. In other words, total factor productivity growth should increase.

In that sense, ICT potentially resembles some of the great inventions of the past — electricity, the internal combustion engine, chemical engineering, radio and television. Like these inventions, ICT has taken several decades to be widely deployed, so even if ICT does not qualify as a great invention, its economic impact should also be examined over the long term.

3.2. Empirical evidence for the EU

From the outset, it should be stressed that the empirical assessment of the role of ICT in the economy is complicated by serious statistical problems. Firstly, investment and output data for the ICT sector are not readily available on a timely basis for many countries, the United States being a notable exception. Statistical offices in the EU generally do not provide a breakdown of capital and investment in detailed products and services, therefore individual capital stock series are not available for most EU countries. Secondly, real output in the ICT sector may be mis-measured or, at least, measured in a different way across countries. For instance, the United States and a few other countries (for instance France) construct quality-adjusted prices or hedonic prices for computing equipment. Other countries do not apply this type of adjustment and therefore data may understate investment and output gains in real terms (see Box 2). Thirdly, rapid technological progress makes it difficult to calculate economic depreciation with the result that estimates of capital services provided by ICT equipment are subject to increased uncertainty. For these reasons, growth-accounting for EU countries will necessarily be based on various assumptions concerning the evolution of the ICT capital stock and investment goods prices ([2]).

The data used for the empirical analysis below originates from REED Electronics Yearbook, a private data supplier that has collected nominal data on ICT investment and production for 17 industrial countries. The sample consists of the United States, Norway and Switzerland and the EU Member States excluding Luxembourg. It covers the time period 1988–98 for the European States and 1985–99 for the United States. The ICT aggregate comprises hardware (computer systems, peripherals and office equipment such as photocopiers, electronic calculators, electronic cash registers, etc.), semiconductors and telecom equipment (facsimile machines, switching and transmission equipment, telephone, videophones, answering machines, accessories and parts) ([3]). The shortcomings of this data set are the exclusion of software and ICT services as well as the non-availability of the distinction between business spending and consumer expenditure. Thus, the comparison with the empirical results obtained for the US in the literature using US official statistics is not always straightforward.

([1]) See Hitt and Brynjolfsson (1997), Brynjolfsson, et al. (1998), Cohen and Debonneuil (2000).

([2]) For an overview of the methodological problems see Van Ark (2000).

([3]) Not included in telecom in the definition of ICT applied in this chapter are radio communication equipment, public broadcasting, consumer video equipment and consumer audio equipment.

Box 2: **Price measurement in the ICT sector**

The measurement of prices in the ICT sector has a decisive influence on any quantitative evaluation of the new economy, since a non-trivial share of cross-country differences can be explained by differences in measurement procedures. The calculation of ICT prices suffers from the non-availability of similar products over time. New products often are of a significantly better quality and existing products sometimes vanish rapidly from the market. Thus, instead of obtaining prices for similar products over time, statisticians have to assess the value of quality improvements and disentangle it from market prices.

Statistical offices have employed different methods to capture rapid technical progress in this area. Some assume that all price change is due to quality improvements, others estimate the value of quality improvements on the basis of the judgements by producers and experts. If a separately traded item exists that represents the quality improvement, sometimes its price is taken to capture the value of the quality. A rather complex method called hedonic adjustment is applied in the United States. This approach decomposes the product into its economically meaningful characteristics and estimates the value of each product attribute. An implicit price is calculated for each attribute, for instance, for a PC's processing power, its data storage capacity, presence of software, etc. usually by means of regression analysis. The information is then used to link products of different quality over time to obtain a price series.

This approach is not yet applied on a large scale in the EU. Only France and Sweden use hedonic adjustment for some specific items as microcomputers, servers and printers. Statistics on the base of hedonic adjustment show significantly larger price declines for ICT goods than 'conventional' methods. For instance, PC prices in the United States and France decreased by about 80 % between 1992 and 1999, whereas in Germany they fell by 50 % and in Italy and the United Kingdom they declined by a modest 20 to 30 % ([1]). While generally considered superior to alternative approaches, hedonic adjustment is very costly as it requires high survey costs, and a very good knowledge

([1]) According to the calculations of Credit Suisse First Boston (2000).

Change of the producer price index in the manufacturing of office machinery and computers between 1991 and 1999

Source: Commission services.

of the market and products concerned. Moreover, the regression will have to be re-estimated frequently.

Since ICT prices have fallen spectacularly in the last decade, the measurement issue has become economically important. Bundesbank calculations suggest that real expenditure on IT equipment in Germany would have grown by 27.5 % annually since 1991 if the US deflator was applied, instead of 6 % with the official deflator. Credit Suisse First Boston (2000) calculates that if the German deflator were applied to the US ICT sector, the sector's contribution to US growth would shrink from 1.1 by 0.6 percentage points. Cecchetti (2000) estimates that by applying the US deflator to European data, GDP growth in the past five years would have been 25 basis points higher. Tentative Eurostat calculations suggest GDP to be around 10 basis points higher in some Member States ([2]).

In this chapter, real data was obtained by deducting the smoothed difference between the US ICT deflator and the US BIP deflator from the respective European investment goods deflator.

([2]) See Deutsche Bundesbank (2000), Credit Suisse First Boston (2000), Cecchetti (2000), Eurostat (1999).

Price change of ICT investment goods (relative to output price)

	1980–90	1990–95	1995–98
Hardware prices	– 17.6	– 16.6	– 29.6
Software prices	– 3.3	– 3.4	– 4.2
Communication prices	– 1.8	– 3.5	– 3.8

Source: Jorgensen and Stiroh (2000a), Commission services.

ICT data has also been collected by organisations such as the OECD, EITO, IDC and assembled by private banks as for instance CSFB ([1]). Although the data sets differ in their coverage of products, they do not reveal large differences in both the hierarchy across Member States and the general trend over time. Concerning the recent developments in ICT diffusion in the European Union, the data from REED suffers from a lack of timeliness. The EITO data is more recent and even includes estimates for the years 2000 and 2001. Furthermore, it includes the important components of software and services, which account for a considerable market share in the ICT market (see Table 1). Its focus is on spending figures, thus giving an indication of the demand for ICT products, while the REED data file is based on output data.

([1]) The main problem with official statistics in the EU is that the sectoral breakdown combines 'new economy' activities with traditional industries. For instance, the production of computer and the production of office equipment are in the same aggregate. The provision of telecommunication services shares the group with traditional postal services.

Production and take-up of ICT: EU versus United States

Despite the inherent problems of measuring the role of ICT in the economy, it is evident that ICT production has expanded forcefully in the EU during the last decade. Output in overall ICT sectors in the EU combined to just over 4 % of GDP in 1999. This is still rather low compared to the share observed in the United States. While the ICT sector in the EU grew faster than GDP, its US counterpart boasted growth rates nearly twice as high (see Table 2).

Just as the presence of an extensive ICT-producing sector might have an impact on economic growth in and of itself, there is reason to believe that close interaction between ICT-producing and ICT-using communities will be rewarding for the economy overall. In other words, one should expect those countries with dynamic ICT industries to have a better platform for benefiting from the use of ICT in the rest of the economy, other things being equal. Moreover, it is highly probable that there is an accelerator effect in the diffusion of ICT.

Worldwide, the technical progress witnessed in ICT has lead to drastic price declines and higher performance,

Table 1

ICT market value in the EU

(million euro)

	1997	1998	1999	2000	2001
1. Computer hardware	63.4	67.8	73.0	78.1	93.1
2. Office equipment	9.0	9.1	9.2	9.4	9.5
3. Data communication hardware	8.2	9.5	10.7	12.0	13.3
4. IT hardware (4 = 1 + 2 + 3)	80.5	86.4	92.9	99.4	105.9
5. Software products	32.2	36.3	41.2	46.9	53.7
6. Services	56.8	64.2	73.0	82.4	91.9
7. Software and services (7 = 5 + 6)	89.0	100.4	114.1	129.3	145.5
8. Total IT market (8 = 4 + 7)	**169.6**	**186.8**	**207.1**	**228.7**	**251.4**
9. End-user equipment	17.4	24.3	33.6	42.3	49.7
10. Network equipment	19.1	20.5	21.9	23.8	25.4
11. Carrier services	150.1	165.9	182.9	198.4	211.0
12. Total telecom (12 = 9 + 10 + 11)	**186.6**	**210.6**	**238.5**	**264.5**	**286.1**
13. Total ICT (13 = 8 + 12)	**356.2**	**397.5**	**445.5**	**493.2**	**537.5**

Source: EITO 2000.

Table 2

Overall ICT sectors in the EU and the United States

(Share of value added in GDP)

	1995	1996	1997	1998	1999	1995/99 Annual change
B	3.3	3.5	3.5	3.8	4.1	8.6
D	3.4	3.3	3.6	3.7	3.9	5.1
E	2.8	3.0	3.2	3.4	3.6	12.6
F	3.8	3.9	4.0	4.1	4.3	6.2
IRL	6.5	6.7	7.5	7.3	7.6	17.8
I	3.3	3.3	3.3	3.5	3.7	10.3
NL	4.3	4.4	4.5	4.7	5.0	7.9
A	4.7	4.4	4.2	4.4	4.8	1.0
P	3.4	3.5	3.7	4.0	4.3	12.5
FIN	4.3	4.6	5.5	5.5	5.8	21.4
S	4.3	4.8	5.4	5.9	6.5	16.3
UK	5.2	5.2	5.2	5.4	5.6	7.3
EUR-11	3.6	3.7	3.8	4.0	4.2	7.7
US	5.3	5.5	6.1	6.4	6.8	12.9

Source: Credit Suisse First Boston.

which in turn has fuelled ICT expenditure. European ICT markets expanded in recent years with total spending up from 5.3% in 1992 to 7.2% in 2000 ([1]). Nevertheless, this has only narrowed, but not eliminated the lag relative to the United States, which suggests that there is still some tardiness in the build-up of a European ICT capital stock (see Graph 10). Spending on a narrow ICT hardware aggregate that includes only those assets, which could be classified as business investment, amounted to about 1.5% of GDP in the EU and 2.5% of GDP in the United States in 1998 (see Graph 11) ([2]). Production of and spending in this narrow

([1]) The production of hardware (computers and office machines), communications, software (both in manufacturing and services).

([2]) The aggregate comprises computer systems, peripherals and office equipment such as photocopiers, electronic calculators, electronic cash registers, etc., as well as semiconductors. The following telecommunication hardware was included: facsimile machines, switching and transmission equipment, telephone, videophones, answering machines, accessories and parts.

hardware aggregate has only moderately increased in the EU over the past decade, although it has notably picked up in some Member States, in particular in the Scandinavian countries, Ireland, the United Kingdom and Portugal. The available information on ICT investment shares in the EU Member States suggests that countries like Sweden, the Netherlands, the United Kingdom and Finland come close to US levels. The Irish ICT investment share even exceeds the one in the United States, reflecting the remarkable growth performance of this country over the recent years (see Graph 11) ([1]).

Some of the most important indicators of pervasiveness for individual technologies relate to the use of computers, access to the Internet, and mobile phones. It can be argued that these technologies are among the most enabling in the ICT cluster. After all, without at least one of these, an individual has positively no connection to digital networks. Moreover, the convergence of these technologies is liable to engender mutually supplementary or even complementary features.

Based on the diffusion within the EU of these three technologies, Member States may be grouped into three segments: the Nordic countries which demonstrate tremendous penetration capability, especially in mobile phone technology, the United Kingdom, Germany, France, and the Benelux countries, all enjoying intermediate diffusion, and then the lowest take-up rates are found in Southern Europe with some notable exceptions, typically in mobile phones (see Table 3).

Compared with the United States, however, IT expenditure per capita in Europe is only half that in the United States. Analogously, EU average penetration rates are indisputably lower, though the Nordic countries once again stand out. They have similar, or in some cases even higher, take-up rates than in the United States.

The big picture remains unchanged. In production as well as diffusion, the EU is lagging behind the United States. Europe would therefore have to beef up its efforts considerably in order to catch up with, or overtake, the US lead. This might make good sense, because the ICT lag may be what is impeding growth contributions from ICT in the EU, the analysis of which we now turn to.

([1]) Daveri (2000) calculates ICT investment for 11 EU countries on the basis of a data set from WITSA/IDC and OECD. His shares are slightly higher than reported here, which is mainly due to adding an estimate for investment in software.

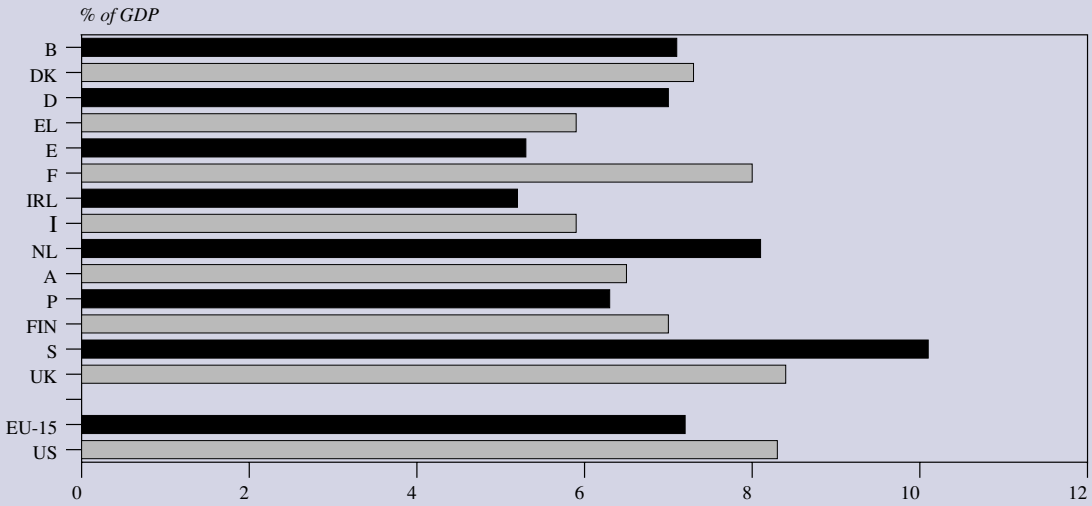
Table 3

Indicators of ICT penetration, 1998

	Use or access to PC	Use or access to www	Business PCs per 100 white collar workers	PCs per 100 population	Mobile phone penetration	Mobile phone at home or at work
B	36	10	57	18		30
DK	65	44	74	43	43	48
D	29	9	55	27	19	23
EL	15	5	49	7		
E	31	8	57	9	22	28
F	28	8	59	20	22	28
IRL	27	12	93	20	28	29
I	35	13	50	11	38	45
L	45	22				42
NL	65	35	69	35	28	30
A	31	11	68	22	33	41
P	25	6	27	8	33	31
FIN	50	37	72	32	60	66
S	67	55	93	46	59	65
UK	43	22	65	25	27	34
EU-15	35	14	60	20		33
US			118	51	34	

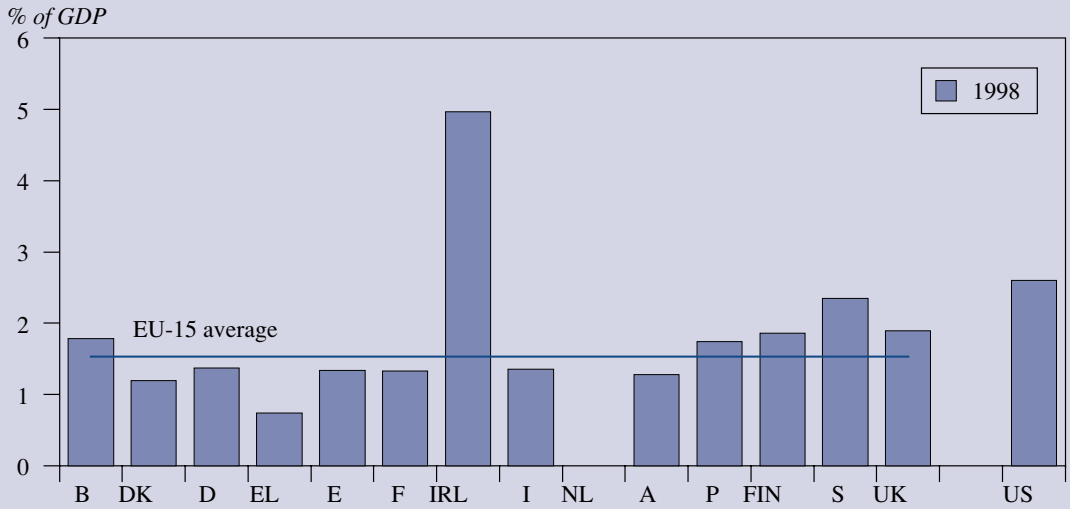
Source: Eurobarometer, EITO.

Graph 10: **ICT spending in the EU and the United States, 2000**



Source: Credit Suisse First Boston (2000) based on data from EITO.

Graph 11: **Nominal ICT investment shares in the EU and United States, 1998**



Source: REED Electronics Yearbook.

Evidence on the link between ICT and productivity growth

The macroeconomic performance of the US economy in the 1990s has been remarkable, including high output growth, a decline in unemployment and a less volatile contribution of inventories to growth. Corresponding to these macroeconomic features of the 'new economy', Graph 12 displays some stylised facts for the United States and the EU. The graphs include a (quadratic) trend line to emphasise long-term developments. While the trend lines point to the correct direction for the United States, the macroeconomic features of a 'new economy' are not yet detectable in the aggregate figures for the EU. The downward trend of labour productivity growth has not yet rebounded ([1]). Rates of unemployment have only recently declined and it is still too early to ascertain whether this is due essentially to cyclical or to permanent forces. Although on a downward trend, the contribution of inventories to growth seems to have become more volatile in the 1990s compared to the 1980s.

Instead of focusing on evidence at the macroeconomic level, this section analyses the support for the 'new economy' within a production theoretic framework. The growth-accounting approach allows for the pinpointing of the different channels through which the production and usage of ICT can have an effect on economic growth ([2]):

- The first channel is the avenue of **ICT capital accumulation**. Investment in ICT boosts an economy's productive potential because it raises the stock of capital. When integrated into a growth-accounting exercise, additional investment in ICT would show up in capital deepening, thus contributing to higher labour productivity even if TFP growth remains constant.

- The second channel focuses on the **rapid technical progress** currently occurring **in the production of ICT goods**. Technical progress in the production of ICT goods as illustrated by Moore's Law affects TFP growth. The magnitude will depend on both the speed of technical progress and the share of the ICT sector in overall production.

- The third channel relates to **possible externalities** (either embodiment effects or economy-wide network externalities) as the usage of ICT increases productivity in business' outside the ICT sector. This effect is a crucial ingredient of the 'new economy view' and should become visible in higher TFP growth outside the ICT sector itself.

The first and the third channels are related to the usage of ICT, whilst the second channel relies on technical progress in the production of ICT. One methodological limitation of the first channel is that substitution between ICT capital and other forms of capital is not explicitly considered. Thus, if the productivity of ICT investment and the productivity of other forms of capital were equal, the substitution between the two types of capital would not boost output. However, the incentive to invest in ICT might stem from higher productivity in the production of ICT, which causes ICT prices to fall and subsequently raises their profitability relative to other capital goods. This mechanism is the subject of channel 2. Whether or not the usage of ICT spills over to the productivity of other factors is analysed in channel 3.

Apart from these supply-side channels, demand effects are important as the increase in demand for information technology may spur demand for other forms of capital and labour. This is the case, for instance, because other factors are used in the production of ICT goods. It will also be the case if ICT investment enhances other production factor's productivity. Furthermore, to the extent that ICT capital replaces other inputs, the substitution towards ICT capital could also have negative effects on growth. Most studies concentrate on the three channels outlined above and leave out a discussion of the latter effect. Analysing these requires a more structural macroeconomic analysis with explicit consideration of supply and demand of production factors. Some tentative results of such an exercise are presented in Box 5.

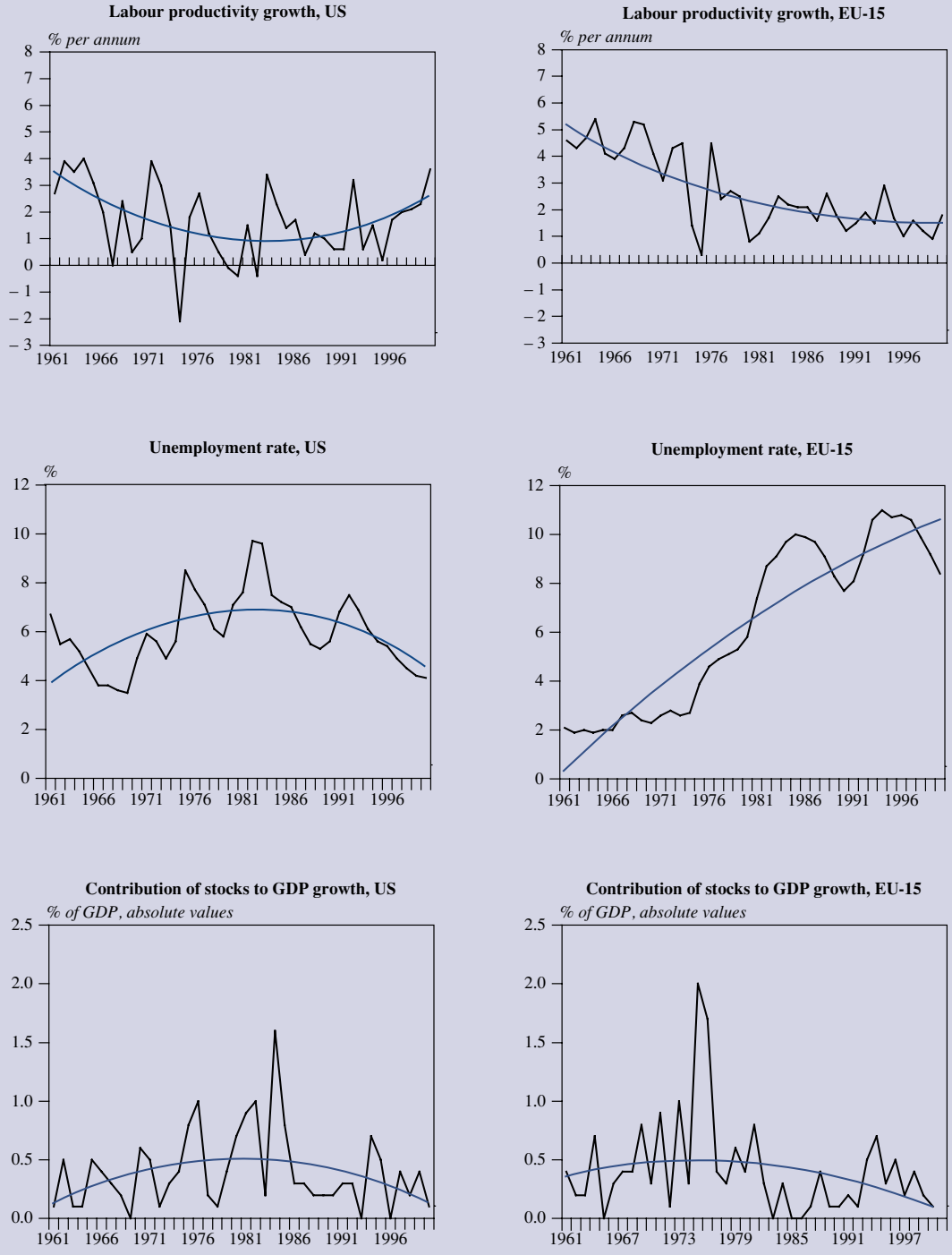
The growth contribution from ICT investment (channel 1)

Strong investment in ICT since 1996 has been a major component of capital stock growth in the United States. For example, Jorgenson and Stiroh (2000a) report annual growth rates of computer capital of 18 % over the

([1]) It must, however, be noticed that the picture for the EU is rather diverse. Also in Europe, there exist countries which have experienced an acceleration of productivity growth in the second half of the 1990s. In particular, this is true for the Scandinavian countries, Ireland and to a lesser extent the United Kingdom.

([2]) For the relation of the growth-accounting approach with growth theories, see Stiroh (2000).

Graph 12: **Macroeconomic features of the new economy**



Source: Commission services.

Box 3: ICT and productivity growth, evidence for the United States

According to the results of recent academic research, ICT has been a decisive determinant of the remarkable economic performance in the United States since 1995. In the second half of the 1990s, the United States experienced an economic expansion with labour productivity growth atypically accelerating at a mature stage of the cycle, i.e. it was around 1 percentage points higher in the second half than in the first half of the 1990s. Indeed, evidence from various growth-accounting studies suggests that this acceleration of labour productivity has decisively been driven by ICT accumulation and rapid technical progress in ICT manufacturing. In general, studies on the United States tend to identify a causal link that runs from technical progress in ICT production, via lower prices to increased ICT investment.

Comparing the results presented in the table below is complicated by the fact that they are based on different data sets and methods. For instance, Oliner and Sichel (2000) focus on private non-farm business GDP while Jorgensen and Stiroh (2000a) use private domestic output. Also the definition of the ICT sector applied in the studies differs ([1]). Furthermore, the numbers cannot be directly compared with those presented in this chapter for the EU. The most important difference consists in the inclusion of software capital in most of the US studies, which is not possible for the EU due to data limitations. An important share of ICT investment has been spend in software in the United States and according to the studies by Oliner and Sichel (2000) and Jorgensen and Stiroh (2000a), this investment in software has contributed 0.2 to 0.3 percentage points to GDP growth since 1995.

The most important determinant of the acceleration in labour productivity growth in the United States seems to have been the investment in ICT capital (channel 1). This effect is estimated to range from 0.2 to 0.5 percentage points, thus explaining up to 50 % of the acceleration in US labour productivity growth. While the empirical evidence does not confirm that other capital has been replaced by ICT capital in the recent past, substitution seems to have been at work in the early 1990s. For instance, Jorgensen and Stiroh (1995) find that declining computer prices had given rise to the substitution of computer capital for other inputs. The studies by Oliner and Sichel (2000) and Jorgensen and Stiroh (2000a) reveal that the contribution of other forms of capital equipment to labour productivity growth has considerably declined in the first half of the 1990s. It is only in the period since 1996 that other capital's contribution has rebounded to former levels.

([1]) For a comparison, see US Department of Commerce (2000), p. 38.

United States: Sources of the acceleration in labour-productivity growth ([1])

	Jorgenson & Stiroh 1990–95/1995–98	Oliner & Sichel 1990–95/1995–99	Whelan 1974–95/1996–98	Council of Economic Advisers 1973–95/1995–99	US Congr. Budget Office 1974–99/1996–99	Gordon 1972–95/1995–99
Acceleration in labour productivity growth, of which:	0.9	1.0	1.0	1.5	1.1	1.3
Capital deepening	0.3	0.5	n.a.	0.5	0.4	0.3
— Information technology	0.2	0.5	0.5	n.a.	0.4	n.a.
— Other	0.1	0.0	n.a.	n.a.	n.a	n.a.
Labour quality	– 0.1	– 0.1	n.a.	0.1	n.a	0.1
Total factor productivity	0.7	0.7	n.a.	0.9	n.a	0.3
— Production of IT goods*	0.2	0.3	0.3	0.2	0.2	0.3
— Other	0.5	0.4	n.a.	0.7	n.a	0.0
All other factors	n.a.	n.a.	0.3	n.a.	n.a	0.6 ([2])

([1]) Percentage points.
([2]) Includes cyclical effects (0.5) and contribution of price-measurement changes.
* Information Technology goods.

Source: Council of Economic Advisers (2000); Gordon (2000); Jorgensen and Stiroh (2000a); Oliner and Sichel (2000); US Congressional Budget Office (2000) and Whelan (2000). Differences are due to rounding.

The calculations unambiguously point to a positive contribution of TFP growth in the ICT manufacturing sector (channel 2) to the acceleration of labour productivity growth. Although only accounting for a share of around 8 % in US production, the acceleration of productivity in the ICT manufacturing sector was estimated to have contributed 0.2 to 0.3 percentage points to labour productivity growth. In particular, productivity growth in ICT hardware and semiconductor production has resulted in declining prices of more than 25 % annually, which further stimulated businesses to invest in ICT equipment.

Little evidence has been reported so far on the spillover effects from the usage of ICT capital to productivity growth in other business sectors (channel 3). The results do not suggest that TFP has increased strongly in ICT using sectors (other non-farm business) even if one ignores that the considerable increase in TFP in the remaining 92 % of US non-farm business may be a purely cyclical phenomenon as stressed by Gordon (2000). But those sectors that have heavily invested in ICT, are not similar to those that have shown high sectoral TFP growth.

In fact, the analysis of Jorgensen and Sichel (2000) reveals that services and FIRE (finance, insurance, real estate) had negative sectoral contribution to TFP growth in the period 1995–98. Agriculture and textile mill production were among those sectors with high sectoral TFP growth without having strongly accumulated capital. Gordon (2000) sees no proof for a structural acceleration of labour productivity growth outside the durable manufacturing sector. His view is partially supported by the Digital Economy 2000 report, which found evidence that ICT using services had negative productivity gains, while non-ICT intensive services had positive labour productivity growth. However, the expected relation holds for goods industries. Those with a higher ICT usage had productivity growth of 2.4 % while the non-intensive ICT goods industries had labour productivity growth of only 1.3 % ([1]).

Whether, or to what extent, ICT usage raises productivity in sectors outside the ICT-producing sector constitutes the core of controversy about the 'new economy'. Measurement presents the most important problem for an empirical assessment because most of the computer investment is concentrated in sectors where output is least well measured or even the concept of output is not well defined, for instance in FIRE. As these service sectors have substituted ICT equipment capital for labour, and given the measurement procedure, the incorrect measure of output combined with maintaining or increasing the use of inputs results in apparent productivity declines ([2]).

([1]) See US Department of Commerce (2000), p. 40.
([2]) See Grilliches (1994).

US growth and its contributory factors

	1959–73	1974–90	1991–95	1996–99
		Oliner and Sichel (2000)		
GDP growth*		3.06	2.75	4.82
of which:				
— ICT capital**		0.49	0.57	1.10
— Other capital		0.86	0.44	0.75
— TFP		0.33	0.48	1.16

		Jorgenson and Stiroh (2000a)		
GDP growth*	4.32	3.13	2.74	4.76
of which:				
— ICT capital**	0.15	0.35	0.40	0.84
— Other capital	1.26	0.81	0.51	0.92
— TFP	1.01	0.33	0.36	0.99

* Oliner and Sichel use private non-farm business GDP while Jorgenson and Stiroh use private domestic output.
** Hardware, software and communication equipment.

Source: Jorgenson and Stiroh (2000a); Oliner and Sichel (2000).

However, it is hard to tell how serious the problem is. For instance, Triplett (1999) argues that most of the computer using services do not show up in aggregate statistics because they are intermediates. Business services do not constitute a problem for aggregate productivity measurement because any error is netted out in the aggregate productivity measure. For example, since consulting services help to increase the production of final output, any productivity improvement should show up in aggregate TFP, even though the value added growth rate of consulting services may be biased downwards. So, even if there is a measurement problem it is only the fraction of services, which is directly included in private consumption, that constitutes a problem.

Studies at the firm level find that ICT contributes a lot to productivity growth, thus confirming the results at the aggregate level. According to the estimates of Brynjolfsson and Yang (1998), the stock market values investment in IT capital equal to investment in other capital equipment by a factor of 10. The positive impact of ICT appears to incrementally increase if its introduction is complemented by organisational changes (1). Breshnahan et al. (1999) present evidence that skills, educational attainment and greater use of delegated decision making raises the value of IT investment. Brynjolfsson and Hitt (2000) argue that as a consequence of the problems relating to the appropriate measurement of investment in intangible assets, studies on the macroeconomic level may severely underestimate the benefits afforded by computers.

(1) For evidence at the firm level on the relation between ICT usage, productivity and the degree of centralisation, see Hitt and Brynjolfsson (1997) and Brynjolfsson et al. (1998).

period 1990–95 and of 34 % for 1995–98, while other forms of capital had only grown by 1.8 and 2.9 %, respectively. The underlying reason for the increase of ICT capital intensity in production can be associated with the sharp decline in the relative price of ICT capital services. The price decline has been pronounced in the case of computer hardware, thus raising the incentive to invest in computers relative to other forms of capital. Software demand increased rapidly despite relatively small changes in relative prices (1). Declining prices in the telecommunication sector and enhanced demand for telecommunication equipment were driven by technical progress as well as by liberalisation and deregulation and enhanced demand for telecommunication equipment.

For the G7 countries, an OECD study has presented first estimates of the output contribution of ICT capital (2). Because of data limitations, the analysis is restricted to the period 1985–96. Furthermore, it drew heavily on the US experience. For example, in order to obtain investment in real terms, the nominal series were corrected by the US deflator for ICT goods relative to the deflator for investment goods (3). Also assumptions concerning the depreciation of the ICT capital stock were made on the basis of US data. Since no capital stock series for ICT were available, assumptions on the initial stock had to be made.

The OECD analysis confirms the findings of the various US studies (see Table 4). The ICT income share of ICT capital rose considerably in the United States between 1980 and 1996. A similar development was detected in the EU Member States. The income share practically tripled in Europe, thereby converging from a third in 1980 to a half of the US level in 1996. This means that, if the EU and the United States experienced the same rate of the ICT capital stock accumulation, the ICT capital contribution to GDP would be only half the size in the EU (4).

(1) There are two possible explanations for this. First, software is likely to be complementary to hardware and therefore the demand for software benefits from rising hardware demand. Second, in US national accounts, only the deflator of pre-packaged software is quality-adjusted while the price of business own account software is based on input cost indexes which implicitly assume no change in the quality of software producing inputs. This latter components makes up about two thirds of total software production. Therefore it is unclear so far, whether the rising software share is real or only is the result of a statistical measurement problem.

(2) See Schreyer (2000).

(3) This procedure has become common practice in the absence of quality-adjusted ICT price series for most EU countries. It assumes that the relative prices of ICT equipment and other capital goods behave similar in the US and the EU.

(4) The considerable difference between the income shares of ICT capital in the United States, reported by the US studies, and the OECD, is likely due to the fact that the US studies look at non-farm business output while the OECD study uses the broader concept of GDP. A second difference is that the OECD study does not include software capital.

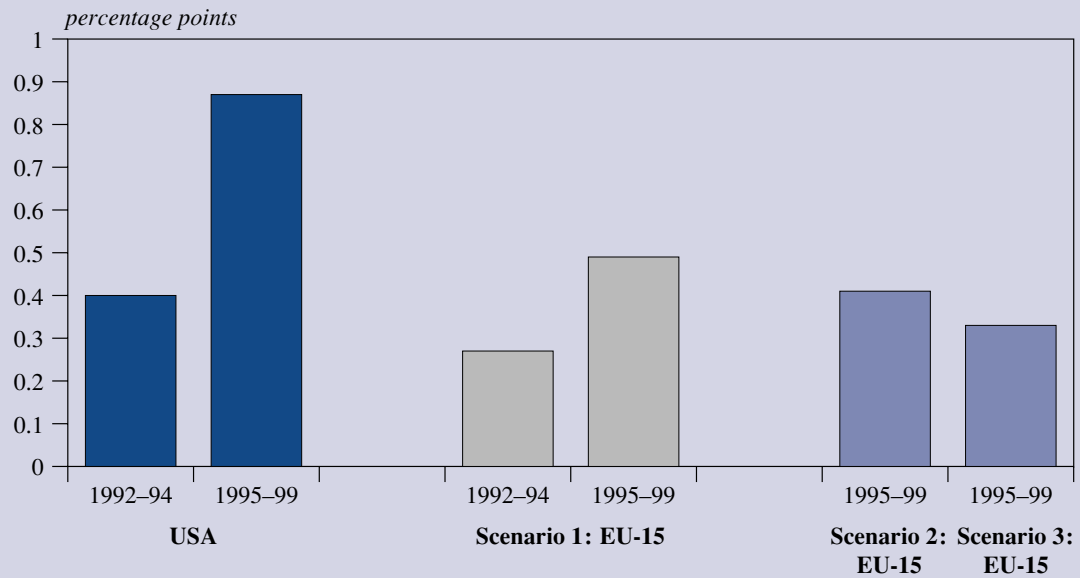
Table 4

ICT contribution to output growth

	WD	F	I	UK	USA
Average annual rate of growth of constant spending on:					
IT equipment					
1985–90	18.8	16.2	20.8	25.5	19.6
1990–96	18.6	11.0	12.9	17.6	23.8
Communication equipment					
1985–90	18.4	19.0	25.6	20.3	16.7
1990–96	3.4	2.1	9.2	2.2	5.1
ICT income shares					
— 1980	0.3	0.3	0.5	0.4	0.8
— 1990	0.7	0.9	0.8	1.0	1.3
— 1996	0.8	0.9	0.9	1.5	1.7
ICT contribution					
— 1980–85	0.17	0.12	0.13	0.16	0.28
— 1986–90	0.23	0.17	0.18	0.27	0.34
— 1991–96	0.17	0.19	0.21	0.29	0.42

Source: Schreyer (2000).

Graph 13: **Contribution of ICT investment to output growth, EU versus United States**



Scenario 1 bases on the assumptions of an ICT price decline in the EU equal to that in the US and an elasticity between ICT capital and other factors of production of minus 1.5.
Scenario 2 bases on the assumptions of an ICT price decline in the EU equal to half of that in the US and an elasticity of substitution between ICT capital and other factors of production of minus 1.5.
Scenario 2 bases on the assumptions of an ICT price decline in the EU equal to half of that in the US and an elasticity of substitution between ICT capital and other factors of production of minus 1.
In terms of caution, scenario 1 is the most optimistic scenario and scenario 3 the most cautious one.

Source: Commission services.

Instead of replicating the growth-accounting exercise, a slightly different approach is employed in the present analysis. Given the information on nominal ICT spending, it is possible to assess empirically the growth contribution of ICT capital, conditional on estimates of the evolution of relative ICT prices, the depreciation rate and the initial capital stock or, alternatively, the elasticity of substitution between ICT and non-ICT factors of production. The assumptions inherent in the estimates are briefly discussed in Box 4.

A comparison of the periods 1992–94 and 1995–99 reveals that the contribution of ICT to output growth in the EU has increased considerably (Graph 13). Starting from a figure of less than 0.3 percentage points in the early 1990s, the contribution to growth rose to 0.5 percentage points in the second half of the 1990s. The contribution in the second period exceeds that of the United States in the first period, which suggests that the European lag in the diffusion of ICT might be less than five years. Table 5 presents results for the EU Member States revealing that those countries with a large investment share show growth contributions similar to the United States ([1]). The Irish experience is a good reflection of this. The growth contribution of ICT to the Irish economy by far exceeds that in the United States, while that of the larger Member States amounts to only half of the contribution evident in the United States.

This assessment should, however, be regarded with caution. Scenarios 2 and 3 give results under modified assumptions (See Graph 13 and the columns for scenarios 2 and 3 in Table 5). Firstly, taking into account that productivity growth in the EU might be lower than in the United States, scenario 2 displays growth contributions under the assumption that the price decline in the EU's ICT sector was only 50 % of the US rate. Secondly,

([1]) The ICT contribution to output growth in the United States is smaller in these figures than in those published by the US studies. Two reasons account for the difference. First, the estimates in the US literature include software capital. Second, they use a narrower concept of GDP. Also in line with the results obtained here, the literature indicates that the ICT contribution has doubled between the first and the second half of the 1990s.

Table 5

Contribution of ICT investment to output growth in the EU Member States

(percentage points)

	Scenario 1		Scenario 2	Scenario 3
	1992–94	1995–99	1995–99	1995–99
B	0.35	0.60	0.51	0.42
DK	0.22	0.38	0.32	0.27
D	0.25	0.41	0.35	0.28
EL	0.12	0.21	0.18	0.15
E	0.19	0.39	0.33	0.27
F	0.24	0.42	0.35	0.29
IRL	0.84	1.91	1.64	1.43
I	0.25	0.42	0.36	0.29
NL	0.41	0.67	0.56	0.47
A	0.24	0.41	0.34	0.28
P	0.25	0.55	0.47	0.39
FIN	0.31	0.63	0.53	0.45
S	0.30	0.68	0.57	0.47
UK	0.35	0.64	0.54	0.44
EU-15	0.27	0.49	0.41	0.33

Scenario 1 bases on the assumptions an ICT price decline in the EU equal to that in the United States and an elasticity of substitution between ICT capital and other factors of production of en rule 1.5.
Scenario 2 bases on the assumptions of an ICT price decline in the EU equal to half of that in the United States and an elasticity of substitution between ICT capital and other factors of production of en rule 1.5.
Scenario 3 bases on the assumptions of an ICT price decline in the EU equal to half of that in the United States and an elasticity of substitution between ICT capital and other factors of production of en rule 1.
In terms of caution, scenario 1 is the most optimistic scenario and scenario 3 the most cautious one.

Source: Commission services.

since the increase of the ICT investment share was smaller for most EU countries, the price elasticity of EU ICT investment may be lower than in the United States. For that reason, scenario 3 presents results under the additional assumption that the elasticity of substitution in the EU is only one. If this was the case, the contribution from ICT in the EU through this channel would not yet have reached the level of the United States in 1992–94 ([1]).

Technical progress in the production of ICT goods and services (channel 2)

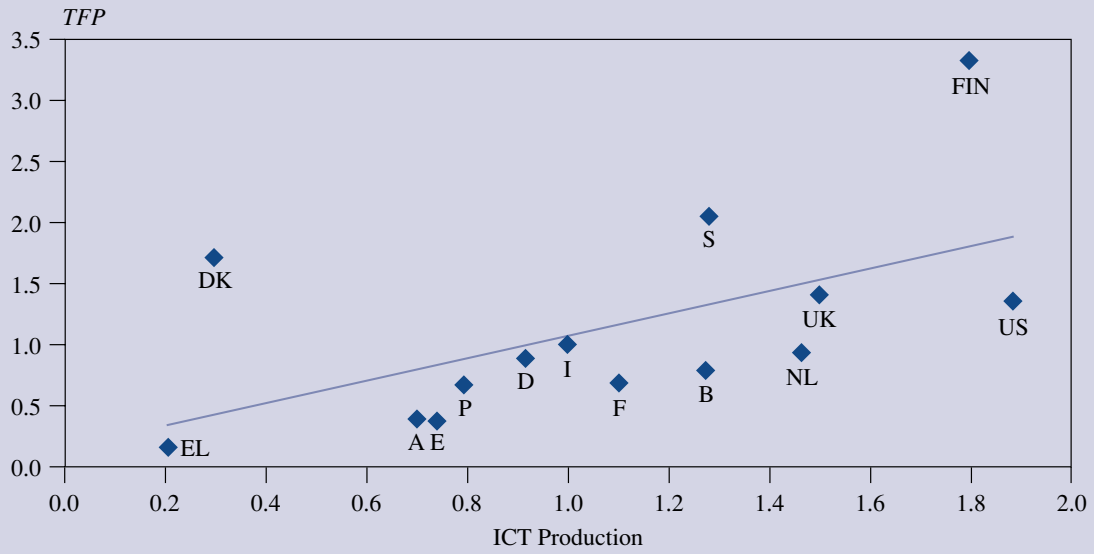
The US evidence suggests that the ICT production channel may be almost as important as the ICT accumulation channel. Again, this issue cannot be analysed with any great accuracy for the EU because of the lack of data. However, with the available data it is possible to draw a broad picture of the TFP contribution of ICT production. Graph 14 suggests a relationship between the ICT production share and aggregate TFP growth. Consequently, TFP growth in Ireland and some Scandinavian countries might have been propelled by a rising ICT production share.

A first estimate of the ICT production's contribution to TFP growth is calculated under the assumption that sectoral rates of TFP growth in the computer hardware, telecom equipment and semiconductor sectors are identical in the United States and Europe. According to the figures provided by Oliner and Sichel (2000), TFP growth in the US computer sector increased from 11.3 to 16.6 % and the rate in the semiconductor sector increased from 22.3 to 45 % between the first and the second half of the 1990s ([2]). Applying these productivity growth rates to the corresponding sectors in the EU yields the following contributions of the ICT production sector to TFP growth (see scenario 1 in Table 6).

([1]) The results of the main scenario are on average close to those recently obtained by Daveri (2000) on the basis of estimates of the ICT capital stock in 11 EU countries with a different data set (WITSA/IDC data). The results differ, however, for Member States. Daveri (2000) has higher estimates of the growth contribution from ICT capital for Denmark and the United Kingdom and lower ones for Ireland and Italy. In particular Ireland is not featuring an extraordinarily high contribution from ICT in his calculations. He also calculates a conservative estimate by correcting his ICT investment series for the probable investment of the public sector. The results of his conservative estimate are comparable on average to the results obtained under scenario 2.

([2]) No figures are reported for TFP in the production of telecommunication equipment. Here it is assumed that TFP growth is identical to the computer sector.

Graph 14: **TFP growth and ICT production share (1992–98)**



NB: Ireland not shown in the chart for reasons of scaling.
Source: REED Electronics Yearbook.

Box 4: Assumptions underlying the estimation of the contribution of ICT capital deepening to economic growth in the EU

To measure the contribution of ICT investment to economic growth, it is essential to determine the real growth rate of ICT and the (nominal) revenue share of ICT capital in output. This share consists of two components: first, the ICT capital to output ratio and, second, the marginal product of ICT capital of which the latter cannot be measured directly. To estimate its value, one usually has to rely on the assumption of perfect competition implying a factor's marginal productivity to be equal to the factor's price ([1]).

An important assumption refers to the deflation of nominal ICT investment so as to obtain a real series. Since more appropriate methods for quality adjustment of ICT investment goods are used in the United States, it has become common practice to use relative US price ratios as proxies for relative prices in EU countries and to discard the price information provided by national sources ([2]). Using the US information seems plausible given the characteristics of ICT goods and the information of similar price declines for computers, reported in those EU countries, which also use hedonic methods. Nevertheless, some caution is warranted.

Assuming similar relative ICT investment prices implies similar relative productivity developments between ICT and non-ICT goods in the EU and the United States. This seems hard to reconcile with sectoral productivity developments (see section on channel 2). One would also have to assume similar market structures. Also, identical relative price developments would imply a similar composition of investment (both in ICT and non-ICT) in the United States and the EU. Given these uncertainties, results will be reported both under the assumption of identical relative price changes for the United States and for the EU countries, as well as under the alternative scenario wherein Europe experienced only 50 % of the acceleration of price reductions as the United States did between the first and the second half of the 1990s.

Estimates of capital costs are crucial components of any growth-accounting exercise. Aside from the prices of investment goods, information on the rate of depreciation as well as the internal rate of return or the required rate of interest of capital owners is required. Concerning depreciation, the US estimate of a depreciation rate of around 30 % was adopted. The internal rate of return is approximated by the average real interest rate across all countries in the sample ([3]).

Finally, concerning the lack of ICT capital stock data, the usual procedure would be to make assumptions as to the initial capital stock. This is a reasonable strategy only if long investment series are available, since the measurement error diminishes over time with depreciation. Since this condition is not fulfilled for most EU countries, the growth rate of the ICT capital stock was estimated by using the elasticity of substitution implied by existing studies. Both the studies by Oliner and Sichel (2000) and Schreyer (2000) suggest an elasticity of substitution larger than one for ICT goods while the results reported by Jorgenson and Stiroh (2000a) are more consistent with an elasticity of substitution of about one. For the results reported below, an upper bound of 1.5 was chosen for the price elasticity. The evolution of nominal investment shares in the United States and the EU suggests that investment reacts more slowly to price changes and consequently a value of one seems more plausible for Europe ([4]). Therefore, results under both assumptions are presented.

([1]) In the United States, the revenue share has increased only slightly in the second half of the 1990s, in comparison to the first half of the decade. This implies that an increased ICT capital to output ratio has been nearly fully offset by a declining marginal product of ICT capital. Such counterbalancing movements of factor-output ratios and marginal products are not exceptional. For example, relatively constant factor shares are also observed between capital and labour despite large differences in the trend growth rate of wages and capital costs.

([2]) See for example Deutsche Bundesbank (2000).

([3]) One might argue that the internal rate of return differs between the EU and the United States because of different modes of financing. For example, the internal rate of return could be lower in the United States, because of a higher share of equity financing and lower risk premia. However, the opposite case could also be made. Average stock returns seem to be higher in the United States than in the EU, which would require an adjustment of rates of return in the opposite direction. However, errors in the internal rate of return are negligible, because ICT capital costs are dominated by ICT price movements and depreciation.

([4]) An economic reason for a smaller price elasticity in Europe could be the presence of more severe adjustment costs for capital.

Comparing the second with the first half of the 1990s, the growth contribution from TFP growth in the ICT producing sector has doubled in the EU and the United States. The contribution of this sector in the EU amounts to half the size of that in the United States, under the assumption that ICT plants in the United States and the EU experienced the same rate of technical progress. This result is solely due to the fact that the production shares of computers and semiconductors are considerably lower in the EU. Thus, differences among Member States and between the EU and the United States can to a large extent be explained by the different size of the ICT production sector.

However, it is questionable, whether technical progress in individual ICT producing sectors has been similar on both sides of the Atlantic. Productivity figures from high tech manufacturing sectors, as published by the OECD ([1]), suggest that the United States actually moved ahead relative to the EU in the 1990's, and that only the Scandinavian countries were able to advance productivity in the high-tech sector at a pace similar to that in the United States ([2]). As some kind of lower bound for the contribution of TFP growth in the ICT sector, scenario 3 in Table 6 shows values under the assumption that the acceleration of TFP growth in the EU's ICT sector has only been 50 % of that realised in the United States. In this case, the contribution from this channel would be 0.2 percentage points in the EU.

Productivity gains from using ICT (channel 3)

Evidence for productivity gains from the use of ICT is usually drawn from the residual of TFP growth after the calculation of the contribution of the ICT sector. Consequently, the precision of any estimate for the EU depends on the accuracy of the results for the contribution of all other growth sources. Since TFP growth calculations for the EU show smaller values in the second half of the 1990s than in the first half of the decade and in the 1980s, there is no acceleration against which the increasing ICT usage could be assessed.

([1]) OECD Main industrial indicators. High-tech manufacturing is defined to include: computers, telecom, biotech and aircraft.

([2]) Unfortunately, sectoral data for Ireland are not available.

Table 6

Contribution of ICT sectors to aggregate TFP growth

	1990–95	Scenario 1 1995–98	Scenario 2 1995–98	Scenario 3 1995–98
B	0.16	0.22	0.14	0.18
DK	0.04	0.06	0.04	0.05
D	0.13	0.19	0.12	0.16
EL	0.02	0.04	0.03	0.03
E	0.09	0.14	0.09	0.12
F	0.14	0.25	0.15	0.20
IRL	1.09	2.17	1.41	1.79
I	0.13	0.19	0.12	0.15
NL	0.18	0.27	0.18	0.22
A	0.10	0.18	0.11	0.14
P	0.11	0.22	0.13	0.17
FIN	0.16	0.38	0.25	0.31
S	0.15	0.27	0.17	0.22
UK	0.17	0.33	0.21	0.27
EU-15	0.14	0.24	0.15	0.19
US	0.23	0.50	0.50	0.50

Scenario 1 bases on the assumption of an acceleration of TFP growth in the EU's ICT sector to be equal to that in the ICT sector in the United States.
Scenario 2 bases on the assumption of no acceleration of TFP growth in the EU's ICT sector.
Scenario 3 bases on the assumption of an acceleration of TFP growth in the EU's ICT sector to be equal to half of that in the ICT sector in the United States. In terms of caution, scenario 1 is the most optimistic scenario and scenario 2 the most cautious one.

Source: Commission services.

In fact, the existence of spillover effects from ICT usage to productivity in the economy outside the ICT sector is still disputed in the United States. While TFP growth in the United States has accelerated in the business sector excluding computer production and semiconductor production, it is not obvious that this increase is due to the usage of ICT. The sectoral decomposition of TFP has revealed so far little evidence that sectors with high ICT investment rates exhibit exceptionally fast TFP growth (see Box 3 on the evidence for the United States).

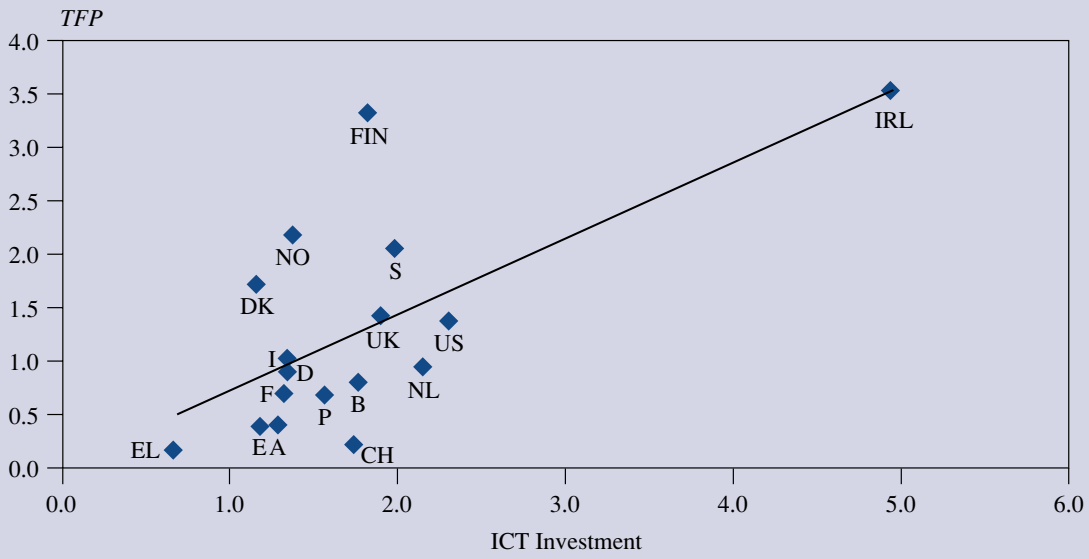
Graph 15 suggests that a high ICT investment share is associated with high TFP growth in a cross-country perspective. Consequently, countries with high investment in ICT are likely to have a higher TFP growth. However, this result is likely to be caused by cross-country differences in the ICT production share ([1]). To obtain a more reliable result, actual TFP growth must be decomposed into the TFP growth in the ICT sector and that in the rest of the economy. This is done in Table 7 presenting regression results from a panel of 16 countries with observations from 1988 to 1998. Here, aggregate TFP growth is corrected for the impact of ICT production under various hypotheses concerning the size of TFP growth in the ICT sector.

Under the assumption that TFP growth in the ICT sector is not different from that in the manufacturing industry, the regression yields a positive relation between ICT usage and TFP growth in the rest of the economy. Expressed in numbers, a one percentage point increase in the ICT investment share would contribute a quarter percentage point to TFP growth. In view of the results in channel 2, the estimate is likely to be upward biased ([2]). The second scenario presents the result under the hypothesis that the acceleration of productivity growth in the ICT sector in all countries was equal to that of the

([1]) The correlation could be spurious if both variables are correlated with a third factor, for instance the ICT production share. Indeed the correlation between ICT production and ICT investment across countries is quite large. A second reason why the correlation between ICT investment and aggregate TFP should not be taken as evidence is the measurement problem of calculating TFP without properly distinguishing between ICT and non-ICT capital.

([2]) In the United States, TPF growth in the ICT sector is higher than in the overall economy. If TFP growth in the EU's ICT sector is only half of that in the United States, this will be, nevertheless, significantly higher than in the manufacturing sector; i.e. 50 % of TFP growth in the ICT sector would be 11 %.

Graph 15: **TFP growth and ICT investment share (1992–98)**



Source: Commission services.

ICT sector in the United States. The results of the third scenario are obtained under the more realistic assumption that EU productivity growth in the ICT sector was 50 % of that realised in the United States. With such a difference between TFP growth in the ICT sector and in the manufacturing sector, the contribution of ICT usage shrinks to 0.1 percentage points. Moreover, this value is not significantly different from zero. Thus, if one admits that the ICT sector's TFP growth has contributed a disproportionately large amount to productivity growth in the EU (channel 2), the spillover hypothesis has to be rejected.

However, before deriving premature conclusions with regard to this point, it must be noted that the measurement problem — which forms an important ingredient of the controversy about the new economy in the United States — is equally valid for the EU (see Box 3) ([1]). Studies at the firm level provide evidence for the United States that ICT usage raises productivity and that the value of investment in ICT is particularly high if it is complemented by organisational changes. Thus, it will be important to undertake comparable studies for the EU.

Conclusions for the EU

Even in the United States, the evidence for a higher speed limit of economic growth was not compelling until 2000. The gap in the introduction of ICT in the EU means that any clear empirical support in favour of the emergence of a new, ICT-driven growth pattern will only become available in the coming years. Meanwhile, optimism on the scope of the 'new economy' may be drawn from the fact that the driving forces of productivity growth identified for the US economy are at work in the EU too. The results obtained from a growth-accounting approach reveal that in the EU technical progress in the ICT sector and the accumulation of ICT capital (excluding software) contributed 0.5 to 0.7 percentage points to output growth in the second half of the 1990s. This value is similar to the estimates for the United States in the first half of the last decade (see Table 8) and tentatively suggest that the EU is lagging the United States in the macroeconomic contribution of ICT to GDP growth by half a decade.

The pick-up of labour productivity growth caused by ICT penetration is estimated to amount to 0.2 to 0.3 percentage points between the first and the second half of the 1990s. This is modest in comparison to the US experience. In fact, the ICT-production sector, and therein especially the production of semiconductors, is responsible for a large part of the productivity gains in the United States. In the EU, this sector is still relatively small and the impact of this sector on aggregate productivity figures is thus bound to be more limited. This implies that accomplishing the same rate of technical progress as the United States would yield a smaller contribution to output growth in the EU. Secondly, what is more crucial for the EU are the benefits arising from the usage of ICT. However, these are difficult to pinpoint even in the United States. The limited evidence so far in the EU certainly reflects the fact that, by US standards, investment in ICT equipment has been low and the diffusion of new technologies is still modest.

Overall, the growth enhancing effect of ICT was overshadowed by other forces (see Table 8). Two factors are crucial. Firstly, employment growth and the substitution

([1]) See Van Ark (2000).

Table 7

The size of macroeconomic TFP spillover

Hypotheses:	Contribution of a 1 % Point Increase of ICT Investment Share to TFP growth (% points)
1) Scenario 1	0.25 (2.75)
2) Scenario 2	0.11 (1.27)
3) Scenario 3	0.14 (1.54)

Scenario 1 assumes TFP growth in the manufacturing sector to be equal to TFP growth in the ICT sector in all countries.
Scenario 2 assumes an acceleration TFP growth in the EU's ICT sector to be equal to that in the ICT sector in the United States.
Scenario 3 assumes an acceleration of TFP growth in the EU's ICT sector to be equal to half of that in the ICT sector in the United States.
In terms of caution, scenario 1 is the most optimistic scenario. The number in brackets is the t-value.

Source: Commission services.

Table 8

Growth sources in the EU and the contribution of the ICT sector

	1991–95	1995–99	Acceleration
Labour productivity growth	2	1.5	– 0.5
Capital deepening	1	0.5	– 0.5
— ICT capital	0.2 – 0.3	0.3 – 0.5	0.1 – 0.2
— capital/labour substitution	0.4	– 0.1	– 0.5
— other capital	0.3 – 0.4	0.1 – 0.3	– 0.1 to – 0.2
TFP growth	1	1	0
— ICT sector	0.1	0.2	0.1
— other sectors	0.9	0.8	– 0.1
Memo: ICT share	0.3 – 0.4	0.5 – 0.7	0.2 – 0.3

Source: Commission services.

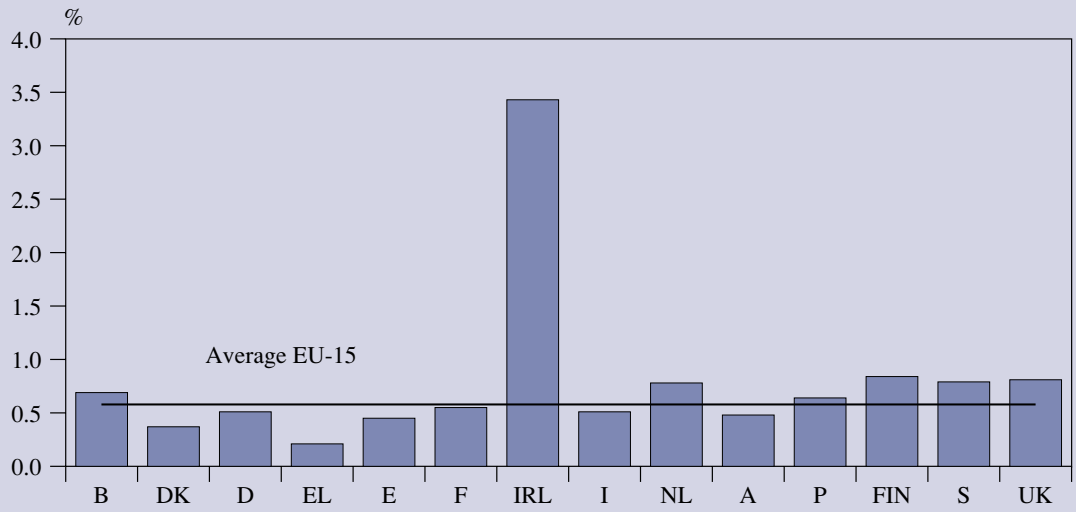
of capital through labour reduced measured labour productivity growth. This development is clearly desirable, as it signifies that more workers, many of them low-skilled, are being brought into the labour force. Secondly, ICT investment essentially substituted for other forms of capital rather than adding to the capital stock ([1]). Given the EU's lag in ICT penetration this should not be overemphasised however. It is consistent with the experience of the United States in the first half of the 1990s when substitution effects seemed to have been predominant; a situation that was reversed in the second half of the 1990s. It is also in line with the experience of other industrial revolutions, namely that the changeover towards new technologies tends to depress overall productivity during the transition phase and economic benefits become visible only thereafter.

Graph 16 depicts the contribution of ICT to output growth in the EU Member States under the cautious assumption of TFP growth in the EU's ICT sector being half that realised in the US ICT sector. Not surprisingly, those countries with a higher investment in ICT and a larger share of ICT production also show a higher ICT contribution to output growth. Belgium, Ireland, the Netherlands, Finland, Sweden and the United Kingdom benefited from a disproportionately high contribution from ICT investment and TFP growth in the ICT sector ([2]).

([1]) See also Van der Wiel (2000), who found the prevalence of a substitution effect in a growth-accounting study for the Netherlands. Offsetting developments between the contribution of ICT and other forms capital in the EU countries are also visible in Daveri (2000).

([2]) Daveri (2000) finds a considerably lower contribution of ICT investment in Ireland.

Graph 16: **Contribution of ICT to output growth in the EU Member States, 1995–99**



NB: The estimate bases on the assumptions of scenario 2 in Table 5 and scenario 3 in Table 6.
Source: Commission services.

4. Conditions for the diffusion of new technologies

The evidence presented above unambiguously points to the existence of a gap between the EU and the United States as concerns the level of development of the ICT industry and the contribution of ICT to economic growth, illustrating the more advantageous position held by the United States. The growth-accounting exercise gives a useful depiction of the direct productivity and growth effects of ICT investment and production. However, it must be emphasised that growth-accounting is a descriptive tool and says little about the underlying reasons for certain investment and production patterns in particular countries. Hard evidence in favour or against conditions for the spread of new technologies is hardly available. This section presents possible reasons for differences in the EU and the United States, firstly in the form of a theoretical review of causes mentioned in the literature and, secondly, as the outcome of some macro-econometric simulations. Both approaches have their shortcomings. The section closes with a discussion of two specific conditions for the take-up of new technologies, namely the endowment of human capital and a growth-supportive financial system.

The question regarding the sources of the slower diffusion of ICT in the EU has important ramifications for policy-making. Unless specific factors can be identified, justifying the EU's lag, it is reasonable to assume that the diffusion of ICT will follow the developments of the United States. ICT prices have practically converged, which means that the equilibrium ICT capital stock of the EU will be similar to that of the United States, the only difference being the speed of adjustment. To the extent that network effects are crucial for the diffusion of ICT — though no empirical evidence redolent of this has been presented so far, neither for the US nor for the EU — favourable circumstances in the United States may have facilitated the attainment of a critical mass of ICT capital stock earlier than the EU. The EU would be likely to follow a similar path, only with a delay of several years.

4.1. Accounting for differences between the United States and the EU: comparative advantages versus institutional factors

In the following section, two competing, though not mutually exclusive, hypotheses are explored. In both cases doubts are cast on the validity of the positive assessment of developments. First, it may be that the United States has a persistent comparative advantage in the production of IT goods, for instance, due to a favourable endowment with engineers at a critical point of time. In this case, the scope for catch-up would depend on the potential of so called second-mover advantages in the IT sector and on the EU's favourable market position as regards communication technologies ([1]). Secondly, it is also possible that technological opportunities are equal in both economic areas but that particular structural features have created obstacles to the diffusion of ICT in the European Union. In this case, the EU could not expect to realise a similar economic performance to that of the United States, unless the structural rigidities are removed. Both aforementioned hypotheses are not mutually exclusive as structural rigidities in the past may have caused the emergence of a comparative disadvantage in the EU. They, however, serve as a useful framework for the analysis of 'knowledge production', the take-up of technical progress and labour division in the international economy.

([1]) Catching up with the United States may prove to be a profitable approach. While being a first mover may have its advantages, implementing existing US technology is also attractive: with rapidly falling prices, acquiring equipment later reduces costs; a second mover also has the advantage of being able to choose solutions that are certain to work. A more efficient ICT build up may therefore take place in the EU, leading to higher growth rates. The EU will not overtake the United States this way, but it will reduce the gap. However, Europe is missing out on crucial pioneering knowledge by being imitative rather than innovative.

The **comparative advantage** approach stresses differences in endowments and specialisation across countries as being a basic source for uneven sectoral developments. According to this view, there exists a large degree of cross country specialisation in the tradable sector, meaning for instance that the United States could simply have established a comparative advantage in the production and use of ICT goods ([1]). This advantage could be based on various reasons ranging from systematic ones (endowment of human capital, industry policy, spillover effects from military applications) to historical coincidence (path-breaking inventions, location of market dominating enterprises).

As ICT are featuring network effects as well as first-mover advantages, small differences in initial conditions may rapidly grow to sizeable comparative advantages driven by a positive feed-back of research, innovation and sectoral specialisation ([2]). The emergence of the Internet is a particularly strong example for the working on network effects. Internet access creates a new demand for various communication services; Internet use creates a demand for applications. As Internet penetration is deeper in the United States, this effect helps to explain the high level of ICT investments in general.

The EU–US bilateral ICT trade flows may be considered as evidence in favour of the comparative advantage hypothesis. Indicative of a comparative disadvantage is that Europe has a permanent deficit in ICT trade with the United States, which has even increased in the 1990s (see Table 9). Specialisation of US manufacturing in high tech products and especially in computer hardware and its components, becomes evident in R & D expenditure. OECD figures show a clear specialisation pattern emerging between the EU and the United States (see Table 10). The United States is concentrating R & D in the high tech sector and in particular in the computer hardware sector, whereas the differences in R & D spending in the medium and low tech sectors are less pronounced between the United States and the EU. Combining these results with empirical evidence on the link between business R & D and TFP (see Box 1) suggests that the TFP growth observed in US ICT sectors could to a large part be due to the research effort devoted to the US ICT sector.

The **institutional** approach focuses on structural differences between the EU and the United States, which are potentially detrimental to the adoption of new technologies, and subsequently cause differences in the adoption of technologies, which are equally available in both economic entities. In this context, labour market rigidities are discussed as an obstacle to technical change because the introduction of ICT offers wide opportunities to restructure production and to reduce the size of the labour force. Labour market rigidities may distort the incentive to implement labour-saving technologies in the EU. In the United States, the relatively lower costs of dismissing labour has made investment in ICT more profitable and has also given an enormous stimulus to the implementation of labour saving technologies. The incentive might have been lower for European entrepreneurs given the relatively high number of unemployed and the lesser flexibility of European labour markets, making it socially more costly to reduce employment within firms ([3]).

Another structural feature is the intensity of competition, pressurising businesses to innovate and to find ways of

([1]) See for example Bernard and Jones (1996).

([2]) The Council of Economic Advisers (2000) pp. 120–121 gives a case study of the US telephone market demonstrating that network effects determine the market outcome if one network is large relative to its competitors.

([3]) For this line of argument see Greenspan (2000), who argues that labour market rigidities are a main reason for the lag of the EU in the take-up of ICT. See also Bassanini et al. (2000).

Table 9

Bilateral EU–US imports as a share of total sales

	1993	1998
EU-imports from US	18.5	23.4
US-imports from the EU	6.3	6.1

Source: OECD, REEDS.

Table 10

Sectoral R & D intensity (R & D expenditures in % of total output)

	EU		USA	
Years:	**1980**	**1995**	**1980**	**1995**
High tech	9.1	8.3	13.5	12.3
— Office and Computing Machinery	6.2	4.2	12.7	14.7
Medium High tech	1.8	2.6	3.1	4.0
— Machinery and Equipment	1.3	2.0	1.3	2.1
Medium low tech	0.4	0.6	0.7	0.7
Low tech	0.1	0.2	0.2	0.4

Source: OECD Main industrial indicator.

cutting costs. Accordingly, the more intense competition in the United States favours technical progress and, correspondingly, the more entrepreneurial culture in the United States favours a more rapid expansion of new sectors. Structural disadvantages of the EU, which are frequently mentioned, are less mature financial markets that impair the capability of young and innovative enterprises to raise funds, insufficient linkages between public and private R & D efforts and administrative burdens for establishing new enterprises.

While theoretical reasoning permits easy exploration of links between economic structures and the slow-diffusion of technical progress in the EU, the jury is still out with regard to the empirical support for these and other institutional differences (see also Box 5). Bassanini et al. (2000) has presented tentative evidence in the form of bilateral relations confirming negative linkages between TFP growth and both employment protection and administrative burdens on a cross-country basis. Apparently, there is also an adverse relation between Internet penetration and telecommunication costs. All this evidence is suggesting a causal relation; it is, however, premature to conclude that these relations are neither caused by third factors nor insignificant causes.

4.2. New requirements to invest in people and skills

The acquisition of human capital has long been recognised as an absolutely essential determinant of economic development ([1]). Evidently, the process of economic growth is driven by the accumulation of knowledge and the necessary skills enabling people to reap the benefits of technological progress. High levels of human capital endowments do not only enhance productive potential, they are also significant to the evolution of adaptable and efficiently performing labour markets, by facilitating skills upgrading and learning in adulthood; a feature that is all the more important in a world of rapidly changing tastes and technologies.

The implementation of ICT requires an adequately educated workforce with natural science and engineering professionals playing a crucial role. In fact, Graph 17 demonstrates that most Member States are well equipped with a percentage of the labour force having attained secondary and even tertiary education. It is probably not surprising that those countries with an advanced position in terms of ICT diffusion, namely Finland, Sweden and Ireland are also endowed with a large share of graduates in natural science and engineering.

([1]) The idea that education and training can be treated in an analogous way to investment in physical capital has a long history, going back to Adam Smith. Modern theoretical analysis of investment in human capital started in the early 1960s with the seminal work by Becker, Mincer, Schultz and Oi; motivated to some extent by attempts to 'explain' the Solow residual, the exogenous rate of labour-augmenting technical progress in Solow's (1956) original contribution.

Box 5: The macroeconomic implications of TFP acceleration in the ICT sector

Empirically discriminating between the 'comparative advantage approach' and the 'institutional approach' involves the overcoming of major methodological difficulties, even if a sound and comprehensive database were available. This section presents the results of some macro-econometric simulations, which may shed some tentative light on this issue. Detailed information on the model simulation can be found in Roeger (2000).

A neo-classical growth model was used, which is the standard vehicle employed in many growth and convergence studies and which is also consistent with the technological and market structure assumptions underlying the growth-accounting studies. Structural differences between the EU and the United States are modelled as differences in wage behaviour and higher adjustment costs in the EU relative to the United States, in capital and labour markets. Technical progress is modelled as a durable acceleration of TFP growth in the ICT producing sector. The model is calibrated for the United States and the EU over the period 1981 to 1993 and disaggregated into an ICT and non-ICT sector for both countries ([1]). This period was selected for the baseline in order to check whether the model is capable of mimicking the economic performance caused by the acceleration of TFP growth in ICT producing sectors in the past.

A first simulation was run under the assumption that the United States is enjoying a permanently higher TFP growth of 11 % in the ICT sector ([2]). In this scenario, US GDP growth increases continuously and is 0.8 percentage points higher after five years (1998) and about 1 percentage point higher after 10 years (2003). Sector specific technical progress increases the ICT's nominal output share by about 0.6 percentage points after five years and continues to rise further. Also, the ICT investment share increases, however at a slightly lower rate. Despite the simplicity of the model, this scenario broadly characterises developments in the United States over the last five years.

Concerning the growth performance of the EU, different simulations were run with different assumptions regarding the growth rate of TFP in the EU's ICT producing sector. The most credible results were obtained under the assumption that TFP growth in the ICT sector was 50 % of that in the United States. The results are roughly consistent with the increase in both ICT production and the investment share of ICT. This scenario also yields a relatively close fit to the change in GDP growth over the last five years. Overall, the assumption of the growth-accounting exercise that TFP growth in the EU's ICT sector is half of that in the US ICT sector, may be regarded as a useful approximation of the actual difference ([3]).

The long run implication of the most plausible scenario is an increase of the GDP growth path by 0.5 percentage points in the EU. The real growth rate is 0.2 percentage points higher after five years and another 0.1 percentage points higher after 10 years. Indeed, the relative slow adjustment speed towards the higher growth rate is remarkable in the EU. In the United States, 60 % of the increase in the long-term growth rate is accomplished after five years whereas only 40 % is reached in the EU over the same duration.

The main scenario based on the assumption of 50 years increase of TFP growth. Additional simulations with different duration of TFP growth indicate that GDP growth is likely to grow faster and would be substantially higher in the decade following the technological shock independent of its duration.

Overall, the scenario does not allow one to clearly distinguish between the merits of the comparative advantage and the institutional hypothesis. Evidence can be found for both. On the one hand, the slower adjustment speed in the EU is indicative of obstacles caused by the structural rigidities in capital and labour markets imposed by the model. On the other hand, the simulation does not reveal that institutional rigidities matter for growth differences in the very long run, as the long-run growth difference is proportional to the size of the initial TFP shock. While not affecting the rate of growth yielded in the model, the imposed institutional rigidities cause significant differences in the employment performance between the United States and the EU. The employment pay-off of stronger growth is considerably smaller in the EU.

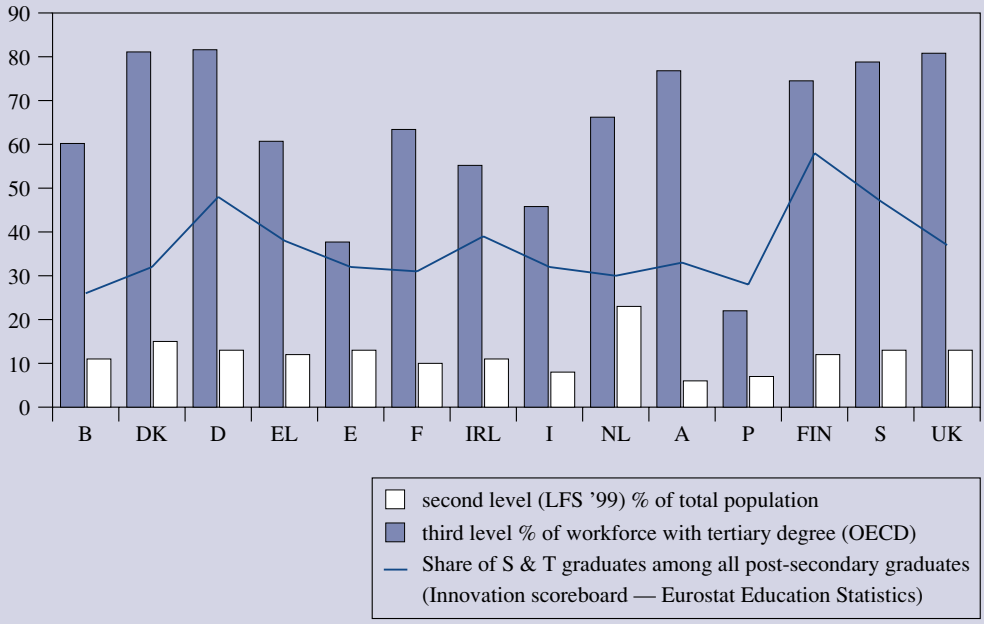
These results are certainly contingent on the model's assumptions, in particular as regards the modelling of institutional rigidities and the duration of the TFP shock. Such a simulation is, nevertheless, useful in providing some indication of the orientation of long-run responses and on the likely magnitude of the impact of technical progress on economic growth.

([1]) The model used is a stripped down version of the Ecoomic and Financial Affairs DG's QUEST Model.

([2]) This value was derived from the study by Oliner and Sichel (2000).

([3]) Further simulations with zero TFP growth in the EU's ICT sector on the one hand, and with TFP growth equal to those in the US ICT sector on the other hand, did not yield satisfying results. Either GDP growth and the evolution of the ICT production share were considerably too low or too high to be in line with the actual development.

Graph 17: **Education level in the labour force**



Source: Commission services.

There can be little doubt that even in the most advanced countries, an appropriately targeted expansion of education and training almost certainly performs an essential role in economic growth. Clearly, Europe's education and training systems must adapt to the knowledge society to adequately equip people with the skills needed to live and work in the new information economy, to minimise skill shortages and to prevent 'info-exclusion'.

However it would be difficult, to say much more than that at a general level. The returns to investments at different levels of education are likely to differ significantly across countries, depending, *inter alia*, on initial conditions, the distribution of income and the structure of education systems, to name just a few decisive factors. Moreover, the likely existence of positive feedback externalities between market structures, human capital accumulation, multiple-skill formation, and investments in ICT and R & D introduces additional difficulties to the identification of the fields of intervention promising the highest rates of return. Thus, one is probably ill advised to look for one-size-fits-all policy approaches with respect to human capital formation.

Bearing these caveats in mind, it is nevertheless tempting to outline the major implications of the ICT revolution for human capital accumulation and skill formation. Reaping the benefits from a new set of technological and organisational complementarities may indeed require a higher degree of versatility, initiative, cognitive and social competence, communication skills and so on. As a result, workers commanding these multiple-skill characteristics will see their earnings rise, while those of single-skill workers will fall even further behind, a process tellingly labelled as 'the digital divide'. Given that well-educated people are also better equipped to exploit complementarities across a wider range of skills ([1]), the education premium may well rise well above the direct effect of education on productivity at any particular skill. Thus, if not addressed by appropriate education and training policies, in particular fostering life-long learning, serious consequences may emerge for the evolution of earnings differentials, inequality and social cohesion in general ([2]).

([1]) This of course requires schooling to deliver with respect to the acquisition of multiple skills suggesting, *inter alia*, that educational systems should not require students to specialise in too narrow fields at relatively early ages.

([2]) Note that artificially compressing skill premia may send wrong signals to market participants resulting in inefficient human capital investment decisions. For a broad based discussion of the driving forces behind recent developments in earnings inequality, see Snower (1999).

As already indicated, education and training policies will have to make a significant contribution to developing new skills, in particular so as to assure the sufficient supply of ICT professionals, otherwise job opportunities and growth will be lost. Already now a significant number of companies feel impeded by a shortage of specialists in this field, with bottlenecks expected to tighten unless appropriate action is taken. However, the challenge is clearly wider than just meeting the demand for ICT professionals. Digital literacy constitutes an essential element of the adaptability of the workforce and the employability of all citizens. Equally, work can be made more accessible through more flexible work arrangements, such as telework, removing some of the constraints from distance and time as a barrier to employment. Finally, an efficient and flexible working of the labour market, in general, is indispensable to reaping the efficiency gains of ICT, to the allowance for a swift reallocation of labour between enterprises exploiting the new opportunities, and to the fostering of 'info-inclusion' for all.

4.3. Is the EU financial structure supportive of the new economy?

An efficient financial sector is widely assessed as having a crucial role in enabling high and sustainable rates of economic growth. In particular in periods of fast technical progress, an efficiently structured financial sector apparently contributes to the embodiment of technical advances in capital formation. In particular, the allocation of capital to new firms is often seen as an essential pre-condition for the emergence of the new economy in the EU. The provision of capital to new firms appears crucial as these have lower opportunity costs of introducing new technologies than old firms and thus serve as drivers of technological change ([1]).

While observers sometimes refer to a 'financial revolution', which was spurred by the rise of risk capital markets in the United States, the EU's financial structure is often assessed as being less conducive to growth ([2]). In particular the larger role of bank loans relative to equity financing is critically viewed ([3]). However, the EU financial system is experiencing significant structural change under the influence of several mutually reinforcing influences currently underway such as the process of globalisation, the introduction of the euro and the process of structural reform (for some stylised facts of the EU financial system see Graph 18).

To the extent that the economic activity of enterprises is modified by the emergence of new technologies, their demand for financial services is likely to be affected. Especially, firms active in the ICT sector apparently have other financial needs, distinct from those of traditional manufacturers. Although sound evidence is not yet available and thus, this section cannot avoid being to some extent speculative, the following 'stylised developments' can be claimed to matter for the financing of 'new economy business'.

The characteristics of such firms might be described along the following lines. Most enterprises in the ICT sector are young and rely on innovative or R & D intensive activity. Their production is in general less capital-intensive than that of traditional industries but the ICT equipment used is subject to rapid depreciation and will need to be replaced or updated on a frequent basis. The field of business is perceived as risky because future supply and demand conditions are unknown. Some 'new economy' firms have long gestation periods, not generating significant cash flows for a considerable time, which adds to the uncertainty of their profitability. It is however, expected that some of these ICT-intensive firms have the potential for fast and strong growth. Consequently, their corporate structure will evolve in parallel to their entrepreneurial success or failure. With regard to more mature firms, their entry into the ICT sector implies an increase in their exposure towards technical and organisational change. The restructuring of large corporations and the prevalence of M & As may be expected to be more frequent than in the past.

From a corporate point of view, the difference between a bank bias and a market bias consists in the concentration of lenders. Bank systems are characterised by a few lenders. Market systems are characterised by a large number of lenders. This distinction reflects differences in the incentive to engage in the selection of information and corporate control ([4]). The specific characteristics of information may cause banks to be superior in some cases and the provision of finance through markets in others. Once the acquisition of information is costly and if its accumulation is determined by economies of scale, banks may be more efficient because the evaluation by

([1]) See Hobijn and Jovanovic, Bassanini et al. (2000).
([2]) See Cohen and Debonneuil (2000), Bassanini et al. (2000), Tsuru (2000).
([3]) See Tsuru (2000). The main arguments in favour and against bank loans are given below.
([4]) For an overview see Carlin and Mayer (1999a, 1999b), Beck and Levine (2000).

numerous agents of financial markets implies a duplication of research efforts ([1]). On the other hand, banks are often blamed for having a bias towards conservative investments, while financial markets spur innovation. It is in particular the requirement of collateral that leads to a bias in bank lending in favour of already established enterprise at the expense of young enterprises. Direct lending from the markets appears to be more supportive of enterprises, which are not endowed with collateral. Financing through markets is in particular thought to be

([1]) Furthermore, investment in information acquisition may be lower than socially desirable in a market system because of free-riding behaviour. The so-called information paradox appears if it is more profitable to unveil information from the activity of other agents than to invest in information acquisition.

Box 6: Empirical evidence on the link between education and growth

There is an impressive array of micro-econometric studies of the relationship between schooling and earnings at the individual level. The traditional workhorse of these studies has been the 'Mincerian' wage equation, basically relating individual earnings to individuals' years of schooling and a quadratic term in work experience to allow for on-the-job-training in a log-linear fashion. The Mincerian earnings function has proven to fit the data rather well, despite often dramatically different economic and educational systems across countries. Typically, an additional year of education is found to be associated with 5–15 % higher earnings, depending on time and country. Perhaps even more importantly, a growing body of research lends fairly strong support to the view that this reflects a genuine causal effect of schooling on productivity, rather than resulting from a spurious correlation between education and earnings caused by unobserved variables like e.g. inherent abilities ([1]).

A recent example of a growth-accounting exercise for several advanced industrialised countries has been provided by the OECD ([2]) The results shown in the graph below indicate that over the period 1985–96 the accumulation of human capital has contributed positively to productivity in almost all countries accounting for between zero and one percentage point of trend growth in labour productivity ([3]). The finding of a relatively modest impact from shifts in labour quality on growth is not uncommon in the growth-accounting literature ([4]).

Cross-country growth regressions directly test for the productivity implications of education by including measures of human capital (both in terms of initial levels and changes over time) among a broader set of explanatory variables and to estimate its contribution to aggregate productivity from cross-sectional data. While cross-country regressions tend to find strong positive links between initial levels of education and subsequent growth, the empirical estimates often suggest implausibly high rates of return ([5]).

In a nutshell, thus, it may be fair to argue that the balance of the evidence points to productivity effects of education at the aggregate level that are at least as large as those identified in micro-econometric studies on the individual returns to education. Several reputable studies in line with strong theoretical priors rather back the assertion that social returns to human capital accumulation substantially exceed the private returns, but robust empirical support is admittedly somewhat harder to come by.

([1]) For useful surveys of the available evidence, see for example Psacharopoulos (1994), Griliches (1997) or Krueger and Lindahl (1999). For a more sceptical view see Weiss (1995). Recent neat summary discussions on how to interpret the empirical link between schooling and earnings at the individual level can be found in Card (1999), Krueger and Lindahl (1999) and Temple (2000).

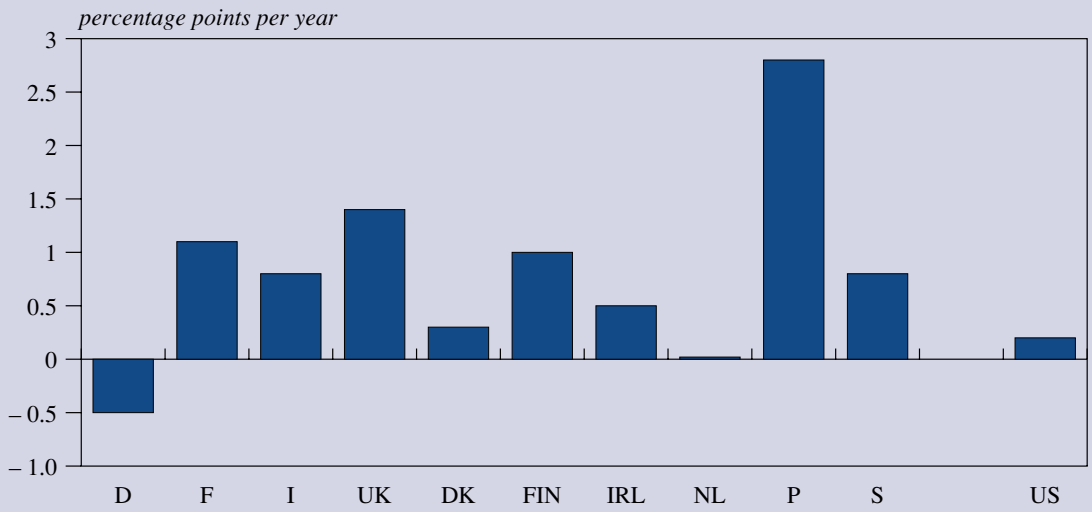
([2]) See Scarpetta et al. (2000), Elmeskov and Scarpetta (2000).

([3]) The result for Germany reflects the discrete fall in the average education level of the workforce because of unification. For the Netherlands, the estimated value is essentially zero.

([4]) For example, the well-known results from Maddison (1987, 1991) suggest that changes in the quality of labour typically added between 0.1 and 0.5 percentage points to annual growth rates between 1950 and 1984 in a sample of six industrialised countries. For the United States, where more studies are available, a review of the evidence indicates that increases in educational attainment may account for perhaps a third of total factor productivity growth in the post-war period.

([5]) Topel (1999) has argued that a typical estimates, such as from Barro and Sala-i-Martin (1995), would imply a more than 30 % rate of return, vastly too large for the model they purport to estimate. The most recent study by Scarpetta et al. (2000) also finds fairly high returns to human capital formation in an overall growth regression framework.

The contribution of human capital to labour productivity growth, 1985–96



Source: OECD.

superior if the economy needs to deal with more speculative investments in an uncertain environment. Similarly, banks reduce the costs of monitoring firms and managers. But a long-term relationship between an enterprise and a bank is not necessarily supportive of a tight budget constraint as bank managers might collude with managers and hinder effective outside control. Stock markets stimulate greater corporate control by facilitating takeovers and making it easier to relate managers' compensation to the firm's performance ([1]).

The features of technology-intensive enterprise give rise to specific financial demands over their life cycle ([2]).

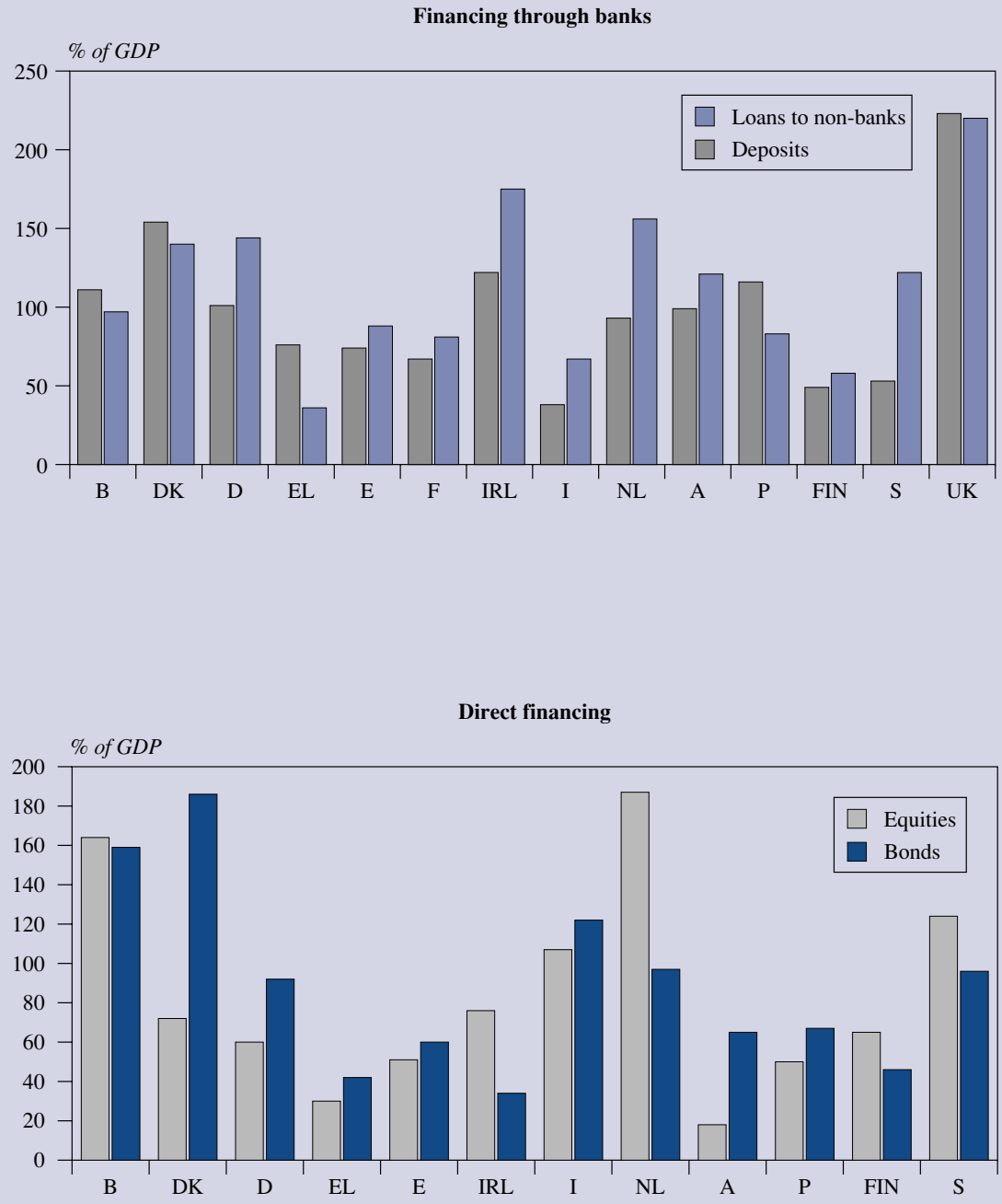
- Financial engagement with a new economy-firm is risky and firms have no collateral at their disposal as they invest mainly in intangible assets. To the extent that investors acting on markets are less risk-averse than banks, firms might find it favourable to offer equity on markets.
- Small firms may prefer a single provider of capital to avoid the disclosure of firm-specific information related to innovations and R & D. Moreover, single lenders allow avoiding the duplication of evaluation and monitoring costs.
- To the extent that firms have projects with long gestation periods and expect uncertain cash flow in the start-up phase, financing through bank loans makes the enterprise vulnerable towards the renewing of the credit terms and the need to pay interest. Equity financing avoids this vulnerability. Asset holders will obtain cash flow only once the enterprise is sufficiently profitable to generate them.
- At a certain stage, the superiority of financial markets in aggregating information in an uncertain business environment may become important ([3]). Those firms

([1]) Concentrated ownership encourages activities that require irreversible investments by other stakeholders, for instance in specialised equipment or skills. This commitment is beneficial for investment with long gestation periods.

([2]) See also Stultz (2000).

([3]) The larger the number of participants with an independent opinion on the determinants of future developments, the more likely does the aggregate view reflect the true probability distribution.

Graph 18: **Relative importance of different financial instruments, 1997**



NB: Due to large differences in scale Luxembourg is excluded.
Source: ECB.

acting under very uncertain demand and supply conditions may find it easier to obtain funds on markets than getting finance from single lenders.

- Firms undergoing high growth are faced with growing financial requirements. Banks are perceived to be superior in providing tailor-made and flexible financing conditions to enterprises. At a later stage financing via markets might be more appropriate because having corporate control 'at arm's length' is considered to more flexible, which is a value for enterprises seeking restructuring.
- Mature firms involved in restructuring or M & A often need large sums beyond the budgetary constraint of single institutions. A liquid public market for equity or corporate debt would be more responsive to their needs.

Generally, 'new economy enterprises' demand a financial system that is sufficiently flexible to provide them with the different financial instruments stipulated by the particularities of their life cycle. Exit clauses from bank financing to market financing and vice versa might be appropriate for their financial needs. Concerning their risk attributes, reliance on equity financing instead of debt might be more important for the 'new economy' ICT enterprises than for the more traditional industries. However, debt financing through banks is more flexible and may not be conclusively regarded as less useful.

At the end of the century, the financial sector in the EU is actively changing, most tangibly in the increasing concentration of banks, in the increasing spread of strategic alliances and mergers among equity market organisations, and in the creation and growth of new forms of financial intermediaries such as pension funds, venture capitalists and risk capital markets. Overall, the change in the EU's financial structure is epitomised by the catchwords of dis-intermediation and securisation on the one hand and economic integration on the other hand. There is a general trend of growing market-based elements and a decline of intermediation through banks.

Are the changes in financial needs of young enterprises reflected in the changing structure of the EU's financial system? Whether banks have adjusted their lending practices is difficult to observe. An increase in the availability of uncollaterised debt or a shift towards lending to small, nascent firms would be indicative of their adjustment. The changeover to investment banking appears to be more beneficial to large corporates, better suiting their demands for the financing of re-structuring and M & A, than to young enterprises. The increasing involvement of business angels and venture capitalists in EU financial markets is a promising sign, as is the increased potential for equity financing in the so-called new markets. In general, these market segments appears not yet sufficiently active in the EU. Risk capital markets in the EU have flourished in recent years. Given that they have grown from a very low base, they are still considerably smaller than their US counterparts. The growth of the corporate bond market may be beneficial for young enterprises once they embark on the process of fast growth.

Given the diverse financial needs of 'new economy businesses' the facilitation capacity of the financial structure appears to be crucial. In this respect, the strengthening of market-based elements of the EU's financial structure first implies a step towards structural completeness and secondly a better adaptation towards the needs of the new economy. In particular in times of rapid technical change, a market-based system has the main merit of aggregating views on new technologies and injecting them into public prices, which then, stimulate market participants to acquire information. Information acquisition by banks does not give rise to information acquisition by other agents, thus dismisses the possibility for positive spillover effects.

5. Implications for economic policies

Divergence in economic performance between the United States and the EU has in the past been mainly discussed in terms of employment differences. In the past two decades, the EU was less successful in mobilising its labour force potential than the United States. Different degrees of labour utilisation are an important explanatory factor for the divergences both in level terms of GDP per capita between the EU and the United States and in terms of economic growth during the 1990s. The return to full employment has therefore become the central objective of economic and social policy in the EU. Whereas the impact of lower employment growth in the EU on output growth was partially offset by relatively higher labour productivity growth, the United States has also outperformed the EU in this respect since the mid-1990s. With total employment growing by about 1.25 % per annum since 1996, increasing labour utilisation was key to the accomplishment of higher rates of economic growth in the EU. However, in the EU rising employment was accompanied by lower aggregate labour productivity growth in the second half of the 1990s as more workers, many of them low-skilled, are being brought into the labour force. This effect was virtually absent in the United States where both labour utilisation and labour productivity growth contributed to accelerating rates of economic growth.

With further evidence becoming increasingly available, it is generally accepted by now that the innovation and spread of new technologies in the area of information and communication has played a decisive role in the remarkable labour productivity performance of the United States since the early 1990s, giving rise to the notion of a 'new economy'. This chapter has provided tentative evidence that the driving forces of productivity growth identified for the US economy are also at work in the European Union. The results obtained from a growth-accounting approach reveal that in the EU technical progress in the ICT sector and the accumulation of ICT capital (excluding software) contributed about 0.5 to 0.7 percentage points to output growth in the second half of the 1990s. This value is similar to the estimates for the United States in the first half of the 1990s and is consistent with the gap in ICT expenditure per capita between the United States and the EU. This suggests that the EU is lagging the United States in the macroeconomic contribution of ICT to GDP growth by about half a decade.

Based on observations of such divergence in productivity performance, economists are progressively trying to map out how ICT affects the economy in order to quantify its propagation mechanisms. This knowledge may make policy-makers better equipped, when designing economic policy; an ambition that has received additional impetus in Europe as a result of the Lisbon Special European Council on the 23 and 24 March 2000. At that juncture, priorities in Community policy were set out for the years to come, motivated by the goal of establishing in the EU, by 2010, 'the most competitive and dynamic knowledge-based economy in the world capable of sustainable economic growth with more and better jobs and greater social cohesion'. Without explicitly using the term, the policy goals expounded by the Heads of State and Government largely correspond to plotting the course for Europe toward a 'new economy'. In macroeconomic terms, the defining characteristics of the 'new economy' involve a higher rate of potential output growth, driven mainly by heavy investment in ICT and increases in the rate of total factor productivity growth, associated with lower unemployment and stable inflation.

The nature of ICT equipment is such that unless firms invest considerably in complementary assets, they will never fully exploit the productivity enhancing aspects of ICT investments. Accompanying investments are needed in adapting production and decision-making processes, in developing new products, new work practices, new business processes, and in upgrading worker skills. Until these investments are made and implemented,

often involving outlays of much greater magnitude in capital spending on ICT, the pay-off to investments in ICT will be minimal ([1]). And unless econometric analyses account for these intangible investments, it is likely that they will fail to capture the correlation properly.

There is not yet an empirically robust model to explain the US lead. It is well possible that the United States had a comparative advantage in the production of ICT goods and as ICT is featuring network effects as well as first-mover advantages, small comparative advantages at an early stage may have grown rapidly driven by the positive feed-back of research, innovation and sectoral specialisation. Alternatively, it is often suggested that structural rigidities have created obstacles to the diffusion of ICT in the EU. Conditions in labour, goods and financial markets may have been less supportive of innovation and the adoption of new technologies.

Thus, even if the analyses provided here stop short of setting down exactly what the critical determinants of ICT production and diffusion are, and what their relative magnitude may be, they serve to highlight several target areas that are important either as facilitators of stability and innovation or as hindrances to economic and technological progress. Indeed, the interdependence of and complementarities between various policies calls for the implementation of a comprehensive, integrated policy approach as recommended by the Lisbon European Council that features the following elements:

- *Macroeconomic stability* — Stability-oriented macroeconomic policies are necessary to the creation of an environment, which is supportive of investment and economic growth, because it reduces overall levels of uncertainty. The policy targets are low inflation, budgetary discipline, and limited cyclical volatility.

- *Entrepreneurship* — In the United States, the emergence of the 'new economy' has been closely linked to entrepreneurship, which is a requisite for starting new firms or reinventing existing ones. Firms may, however, have reservations about embracing new ICT technologies because the costs are too high or the rewards too low. Either way, the equation can be influenced through incentive-improving measures and measures to reduce administrative burdens, which continue to hamper entrepreneurial activity in the EU.

- *Market efficiency* — The efficiency of markets for goods and services and the incentives for innovation created by competition have an important influence on growth. With inefficient, non-competitive markets, firms have little incentive to invest in the development of new products. This is why enforcing competition policy rigorously and deregulating markets may lift productivity and growth.

- *Capital supply* — Financial markets have an important role to play in the 'new economy' especially as they provide funding for innovative start-ups. For a new company starting out with a limited track record, little collateral, and a business plan that contains considerable risk, venture capital is usually a superior form of funding. But, while European venture capital markets have broadened in recent years, there seems to be a pressing need for overcoming market fragmentation across Europe and for further inducing the supply of capital to early-stage investments.

- *R & D supply* — Europe has a strong point in basic research and inventions, but lags behind the United States in terms of innovative capacity and the ability to commercialise innovation. Spillover barriers seem to impede the diffusion of knowledge throughout Europe, thereby dragging down the returns on R & D investment. For example, R & D clusters and cooperation between public and private research appear to be less common in Europe than in the United States. Without access to or knowledge of new, relevant technologies, firms will have great difficulty adopting them. In response to this, it is important to reinforce research and development in new technologies and to improve the accessibility of these technologies.

- *Technical skills and human resources* — Both the production and implementation of ICT are associated with increasing demand for skills and training. ICT professionals must have multitasking capability, be skilled in communication, and be able to plan, manage, and execute the implementation of ICT. Meeting higher demand for skills requires substantial investments in the educational system, in lifelong learning, and in new forms of ICT-based education and training.

([1]) Brynjolfson and Hitt (2000) report that average spending on computer hardware accounted for less than 4 % of the typical start-up cost of new firms. In addition, they report firm-level evidence that firms adopting decentralised organisational structures outperform other firms in terms of IT contribution to productivity.

- *ICT user proficiency* — Beyond merely having a sufficient supply of ICT professionals, it is important that the user community have the skills essential to allow them to navigate in the 'new economy'. In the workplace as well as in the private domain, many activities are progressively being transformed into ICT-based undertakings, which, in turn, translates into a greater requirement for user proficiency in, for instance, the operation of ICT equipment. Making sure that the population will not be characterised by a 'digital divide' will demand additional resources in cultivating ICT user proficiency.

- *Organisation and work practice* — The promotion of organisational change is a vital ingredient in achieving ICT-powered growth. Firms may use ICT to abandon vertical integration and to start shedding non-core activities, which make them more agile and better able to compete in an increasingly competitive marketplace. Changing the organisational structure of firms and introducing new, flexible work practices may also go some way toward combating insider–outsider segmentation in the labour market. Similarly, new work arrangements, such as part-time, temporary contracts, and telework could help create new employment opportunities.

From the above, it is evident that ICT-related policy initiatives can make up only part of a much wider structural reform agenda. Rather than stand-alone measures, ICT-initiatives should therefore be construed as pieces in the groundwork that underpins the Cardiff and Luxembourg processes. These political processes, aiming at strengthening the supply-side of European economies, are based on the premise that structural policy should be coordinated in accordance with the annual *Broad economic policy guidelines* (BEPGs).

The implementation of such a range of strategies that are profoundly interdependent will result in the evolution of a whole that is much greater than the sum of its parts. But, as the European Union advances its various strategies, and as it tries to close the gap with the United States, it is important to acknowledge the potential downsides of treading in the exact same path as the United States. By being imitative than rather than innovative, the EU is missing out on crucial pioneering knowledge. Thus, the EU should try to take advantage of its particular strengths such as in the telecom sector. Interestingly, figures on telecommunication spending show that Europe has recently overtaken the United States, not least because of the European penchant for mobile communication. Therefore, one of the major challenges for the EU is to use such revealed competitive advantage as a lever for expanding overall ICT activities.

In conclusion, while ICT markets are booming and policies are gradually coming into existence that will allow Europe to exploit the benefits of the new economy, more work remains to be done. Additional structural reforms and targeted ICT policies are needed to increase the dynamism of European economies. Moreover, even if Europe succeeds in bringing about a 'new economy', it is important not to abandon old economic virtues and to recognise that the new economy is not a panacea to cure all economic ills. If not handled properly, the 'new economy' may even inflict some new ills such as a 'digital divide' that splits the population and leaves markets underdeveloped.

Box 7: Policy initiatives related to the 'new economy'

As a result of the Lisbon Special European Council on 23 and 24 March 2000, the priorities of Community policy were laid out for the years to come, motivated by the goal of accomplishing the state wherein, by 2010, the EU be 'the most competitive and dynamic knowledge-based economy in the world capable of sustainable economic growth with more and better jobs and greater social cohesion'. The *Broad economic policy guidelines 2000* reinforce the commitment of EU governments to enhance 'readiness' and 'adaptability' to technological change and to beef up efforts toward making the business environment in Europe even more conducive to innovation, business creation, and to human resource development. The guidelines urge Member States to create more incentives to invest resources in R & D and innovation and to invest in upgrading skills.

The Commission launched the *eEurope* initiative on 8 December 1999 with the adoption of the Communication 'eEurope — an information society for all'. The initiative aims at accelerating the uptake of digital technologies across Europe and ensuring that all Europeans have the necessary skills to use them. It plays a central role in the agenda of economic and social renewal for Europe set out by the Commission for the European Council in Lisbon. A salient component of the EU strategy involves the drawing up of a comprehensive *eEurope action plan*. This action plan has the aim of bringing Europe on-line, in an all-inclusive manner. It provides a policy framework for the coordination of actions at the EU and national level. Measures to ensure cheaper and faster Internet access, to heighten, 'digital literacy', to connect all schools to the Internet, and to accelerate the use of e-commerce in Europe are intended to permeate through society, thus preventing the creation of a social divide, which differentiates between the information-rich and the information-poor.

Alongside the eEurope initiative, the Community has launched a package of *'Strategies for jobs in the information society'*, in which lifelong learning is emphasised and where Member States are encouraged to carry out wholesale upgrading of education and training efforts. The importance of organisational flexibility and the streamlining of business processes is embedded in calls for large-scale enabling of telework, the stimulation of entrepreneurship, and in the taking of public services online.

On the financing side, the Community strategy is based on two long-standing commitments of Member States and the Commission — the *Financial Services Action Plan*, which aims to create fully integrated capital markets in the EU, and the *Risk Capital Action Plan*, where the objective is to stimulate risk capital funding to innovative companies in Europe. Some of the main features of the financial action plans are calls for the removal of quantitative restrictions on institutional investors' equity investment and the removal of regulatory impediments to cross-border investment.

An exercise which is currently in its formative stages, and which will facilitate the monitoring of progress is the *'Innovation scoreboard'*. This scoreboard will comprise indicators on innovation that are able to capture critical developments in the economy and that reflect the commercial impact of innovation.

The strategy for creating a *European research area*, where research networks are linked to each other across national borders, aims to remedy current fragmentation. It seeks to enhance collaboration and speed up the diffusion of information by means of instituting interactive communication tools. Building a European dimension to scientific careers is also high on the agenda as are measures to increase the attractiveness of doing research in Europe, which should help curb, or even reverse, the 'brain drain' from Europe to the United States.

The European Commission's work on *e-commerce* is publicly available through a special Commission web site called the 'e-confidence forum' (http://econfidence.jrc.it/). The website is both a general portal for the Commission's e-commerce work and a forum for discussion and comment. It deals with issues like consumer protection, dispute resolution and an e-commerce code of conduct.

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Chapter 4

Economic growth and environmental sustainability — a European perspective

Contents

1. Introduction

All sectors of activity consume resources, be they renewable or not. A potential sustainability problem arises once the speed of resource consumption exceeds that of renewal, for example in the context of water consumption or fishing, or once non-renewable resources are consumed at a rate which makes their depletion an issue while no substitute is available. This issue has often been discussed in the context of oil or coal resources for example.

However, often price signals have given the right incentives to look for substitutes or to slow down demand in order to alleviate pressure coming from looming scarcity. This was easiest there where enforceable (and tradable) property rights were assigned, it was most problematic there where these rights were non-existent or non-enforceable or where the interests of future generations were involved.

Moreover, all sectors of activity generate pollution, though some activities are more polluting than others and some types of pollution are caused by only one, or a few sectors. Based on the evidence presented in the following sections, this review concludes that a surprisingly large number of environmental problems can be traced back to the burning of fossil fuels.

This is an important result. Fossil fuels — or more precisely the energy services derived from burning them — are at the core of much of contemporary society. They provide power for industry. We use them to fuel our cars and heat our homes. Substitute energy resources are either themselves potential sources of additional problems, or are simply unavailable.

Since we cannot resolve Europe's pollution problems in the short- and medium-term by stopping the use of fossil fuel — except at the cost of major social and economic disruption — we must seek other solutions. There are two complementary and competing options. We can become more efficient in our use of energy. This requires process improvements (for example, turbines with higher ratios of power output to energy input, more fuel-efficient cars, better insulated buildings, etc.). We can also prevent or limit the damage caused by pollution by capturing it instead of releasing it to the environment. This relies on the use of end-of-pipe technologies (such as filters or catalytic converters), and developing such technologies, where they do not yet exist. These two parallel approaches — process improvement and end-of-pipe sequestration — can also be used to tackle other sources of environmental problems.

From a policy perspective there is no reason to prescribe one approach over the other. The fundamental objective of environmental policy is to reduce the impacts of human activity on the environment. From this point of view, it is the objective which is important, rather than the means by which we achieve it. From an economic standpoint, achieving the objective in a cost-effective way is what matters. Environmental policy-making to date has, however, largely relied on 'command and control' types of instruments. These have tended to mandate the use of a kind of 'best available technology', or imposed emission limit values. While this form of regulation has been successful in its own terms — emissions of all the regulated pollutants examined in this review have fallen over time — it is at least open to question whether these environmental improvements could not have been achieved at lower cost. In the light of concerns about the cost of regulation, policy-makers are expressing increased interest in using market-based instruments to achieve environmental policy goals. These instruments — including for example taxes, charges, and tradable emission permits — may be used either in conjunction with conventional regulation or as an alternative to it. The effectiveness of market-based approaches and the potential for their more widespread use is discussed in a later section of this review.

This study first identifies the fundamental *raison d'être* for environmental policy. It then reviews the links

between resource consumption, emission trends and economic activity, and looks at the driving forces behind these trends and remedies to stop potentially unsustainable developments. Finally it considers the economic implications of effective environmental policy.

2. Environmental pressure — the issue

At first glance, environmental pressure seems to be of relevance because of environmental degradation, a loss in bio-diversity or soil erosion and a loss in landscape. However, if one looks at cost–benefit analysis underpinning new environmental legislative initiatives, its results are principally driven by public health concerns. Indeed, it is the impact on human health of air, water or soil pollution or exposure to dangerous or toxic substances that triggers and may easily justify tougher environmental legislation.

In principle, man-made environmental degradation and the exploitation of (non-renewable) mineral resources and fossil fuels would be as much a non-issue as would be the harvesting and exploitation of renewable resources, were it not for the speed and the intensity of these activities. Indeed, environmental degradation was not an issue as long as this 'demand' for natural resources was not resulting in a kind of scarcity of these resources. It was not until the industrial revolution that air pollution became an issue, because 'demand' for clean air was nothing to bother about thanks to abundant 'supply' by nature. It was not until industrial and global forms of fishing became dominant that the eradication of traditional fish stocks turned into a real threat globally.

On the other hand, alarming environmental degradation is not a recent issue. Local hot spots of pollution were always present, and deforestation in Europe began thousands of years ago. It still is an issue, although pressure on forests has been alleviated, mainly because wood has been substituted by fossil fuels as the main energy source.

Focus on environmental pressure in Europe has changed over the last decades. While local and regional pollution dominated the political discussion until the 1980s, cross-border pollution like acidification or the depletion of the global ozone layer has gained importance since. Nevertheless, in some fields environmental pressure could be reduced, both relative to growing economic activity as well as in absolute terms.

Seen from an economic angle, environmental resources are simply a production factor, and it is the price for this factor that will in the end determine demand. If there is excess demand, in a market economy the appropriate response is a price increase in order to crowd out this excess demand and to stimulate substitution and innovation processes. It is only in the absence of effective and competitive markets and the absence of substitution processes that this mechanism does not work. Unfortunately, the latter situation is often the case where environmental resources are concerned, because enforceable and tradable property rights for environmental products are not explicitly defined and allocated to economic agents.

Climate change adds a new dimension to environmental pressure as it comes with substantial distributional implications. Climate change leads to a change in regional climate conditions, creating both losing and winning regions. This makes it different from issues such as the depletion of the ozone layer or acidification, which are harmful for almost everyone.

Box 1: **Effects of environmental pressure**

Water, soil and air pollution has many effects on the environment, humanity and its possessions. They impair the health and reduce the life expectancy of the citizen, induce species death, destroy ecosystems and damage man-made capital, such as buildings. Air emissions are often, though not exclusively, a by-product of combustion processes such as electricity generation or activities with a substantial combustion component, like steel, cement and paper-making. Ammonia emissions are an example of an exception to this rule, being amongst other things a by-product of animal husbandry. Water and soil pollution are typically a by-product of farming and the result of inappropriate waste management.

Airborne **sulphur dioxide, nitrogen oxides and ammonia** increase soil, water body and water course acidity and thus kill plant, animal and other species. Deposition is through acid rain and so called 'occult' acid deposition (mists, fogs, drizzle, winter smog). These aerosols cause health affecting small dust particles and reduce atmospheric visibility. Sulphur dioxide thus diminishes ecosystem variety, endangering traditional European landscapes and damages the health and reduces the life expectancy of the general public. With current and planned regulation, at least 5 % of the Union's territory in 2010 will continue to suffer deposition greater than its ability to absorb. Thus some fragile plant, animal and moss species will continue to disappear and the variety of eco-systems lessen. Man-made capital such as culturally and historically important (often) limestone buildings, will continue to be dissolved by acid attack.

Health is also damaged by secondary dust particles from nitrate aerosols created from emissions of nitrogen oxides. Nitrogen oxides and ammonia concentrations are implicated in eutrophication. This leads to the death of fish and other species in surface water and contaminates the water table. Nitrate poisoning of soil causes crop losses. In extreme circumstances, eutrophication can lead to the biological process causing the botulism toxin to be synthesised and released.

Sulphur dioxide, nitrogen oxides and ammonia are also a human health issue. They cause the precipitation of dusts, through sulphate and nitrate aerosol formation. These dusts are toxic and termed 'secondary particulate(s)'. Nitrogen oxides are also a component, in conjunction with non-methane volatile organic compounds (NMVOC) in photochemical smog and ozone formation. The effects here are both chronic, through the aggravation of conditions such as bronchitis and fatal, particularly for those at risk, such as asthmatics and those with cardiac problems. There is evidence to show, moreover, that exposure to particulates reduces the life expectancy of the whole population and not just the more vulnerable groups.

Heavy metals are both an ecosystem and a health issue. The pollutants are persistent; they generally do not degrade and thus remain biologically accessible, so that they may be ingested by living creatures in perpetuity. They are also often bio-accumulative, in that they tend to build up in the body and are, of course, toxic. Heavy metal toxicity appears in many forms, all debilitating and ultimately fatal. The main pollutant pathways into humans are through inhalation and the food chain. Heavy metals are normally inhaled as dusts, often termed 'primary particulate(s)' and in the case of mercury, may be breathed in, in the gaseous form.

The stratospheric ozone layer protects life on earth from harmful ultraviolet-B radiation emitted by the sun. The ozone layer tends to be destroyed by stratospheric concentration of (man made) **chlorine and bromine compounds** such as chlorofluorocarbons (CFCs), halons, hydrofluorocarbons (HCFCs), carbon tetrachloride, methyl chloroform and methyl bromide. Aircraft emissions of water and nitrogen oxides act as catalysts for this destruction.

Greenhouse gas emissions due to human activity are widely believed to contribute to potentially damaging climate change. Substantial change in ambient temperatures, rises in sea levels, changes in rainfall patterns, and more extreme weather events, which might include the loss of the warming effect from the Gulf Stream, are among the projected consequences. The major pollutants here are carbon dioxide, methane, and nitrous oxide. They are implicated in climate change, by adding to the existing layer of greenhouse gases and radiating additional warmth back to the earth's surface.

3. Trends in resource consumption, emissions and economic growth

Over the whole post-war period, the European economy has steadily and moderately grown, abstracting from cyclical developments and some short periods with an absolute decline in overall economic activity. However, once the post-war reconstruction of the European economies was achieved and also as a result of the base effect, annual growth rates edged down. While they were on average about 5 % in the 1960s and still reached 3 % in the next decade, they came down to 2.5 % in the 1980s before reaching a mere 2 % in the last decade.

Until the 1980s, economic growth was driven by the rapid growth of the secondary sector, i.e. construction and manufacturing, while the primary sector of agriculture and mining activities suffered from a saturation of the demand for its products, with (coal) mining even being exposed to an almost complete crowding out as it was no longer competitive. Energy production, although rapidly growing, shifted from domestic coal as the dominant input source to imported oil, nuclear energy and natural gas. This had major impacts on regional economic structures and employment, especially in those regions that were also exposed to a concentration of energy-intensive heavy industry. The environmental effects were generally benign, however, as coal is one of the dirtiest fossil fuels. Although increased use of nuclear energy has in practice caused only occasional environmental problems, the long-term safe storage and/or disposal of nuclear waste has not been satisfactorily resolved.

For two decades now, the service sector has superseded the secondary sector as the engine for economic growth. Transport, communication, financial and banking services as well as social and personal services have been driving economic and employment growth. Nevertheless, the sectoral structure of the European economy changes only gradually. In the absence of changes in resource use and technology, this suggests similarly slow change in the pollution intensity of economic activity.

Environmental degradation or the exposure of the population to hazardous substances is the direct consequence of economic activity. Given the level of these threats it is of interest to analyse what the current trends are, in how far there has been at least a decoupling of economic activity and environmental pressure, and to identify the driving forces behind environmental degradation.

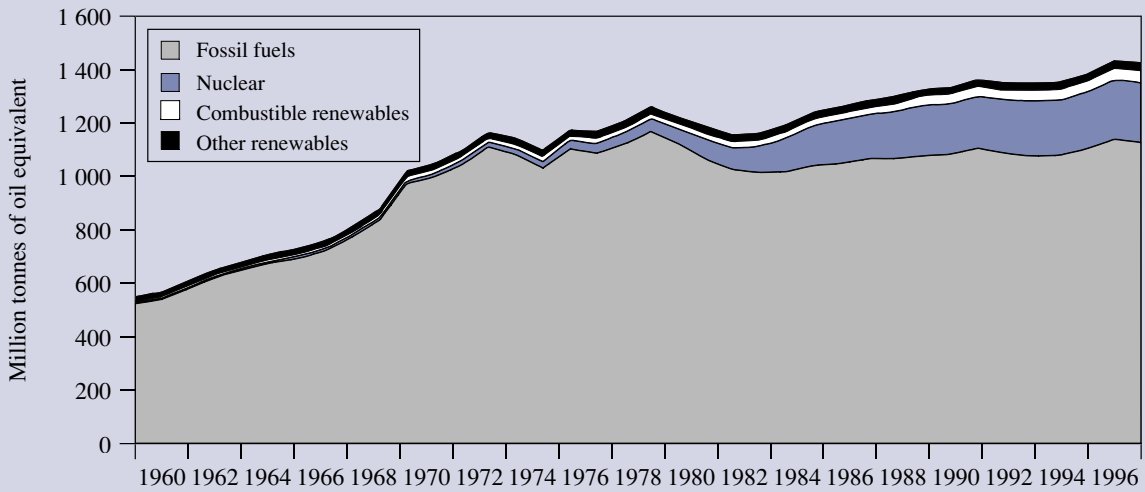
3.1. Resource intensity and the European economy

The normal expectation is that higher levels of economic activity go hand in hand with higher levels of resource use, and that scarce resources become more expensive over time. Since the publication of the Club of Rome report on the limits to growth in 1972, which highlighted this issue, one would therefore have expected raw materials to have become scarce and their prices to have risen in real terms to reflect this.

Demand for raw materials and non-renewable energy resources is still rising globally. The European economy contributes to this. Despite an annual average improvement in the energy intensity of economic activity of approximately 0.8 % over the last four decades, total energy demand continued to grow. Graph 1 shows developments in the use of renewable and non-renewable energy resources in the European economy. Trends in the use of other (non-energy) raw materials are flatter. This is mainly due to the reduced importance of heavy industry in Europe relative to the less raw-material intensive service sector.

Nevertheless, growing demand for non-renewable resources does not automatically translate into increased scarcity of these resources, in case supply (or discovery) is growing at a faster rate. Indeed evidence suggests that declared resources have not become scarce but have in general risen over time. In 1975, the world reserves of natural gas were estimated at 56.9 billion tonnes of oil

Graph 1: **Total primary energy supply by fuel type, 1960–97**



Source: International Energy Agency.

equivalent and in 1995, 125.7 billion tonnes of oil equivalent. A similar story of stability or increase in declared reserves also applies to oil, coal, aluminium, copper, iron, mercury and silver for example.

This conclusion on resource scarcity is supported by evidence from a major recent 'Resources for the future' project which has analysed productivity change in a number of natural resource industries (see Simpson, 1999). It notes that natural resources are neither 'scarce nor expensive and their price tags have declined — as much as 40 % in the past 40 years'. This is against a background of a more than quadrupling of economic activity over the same period.

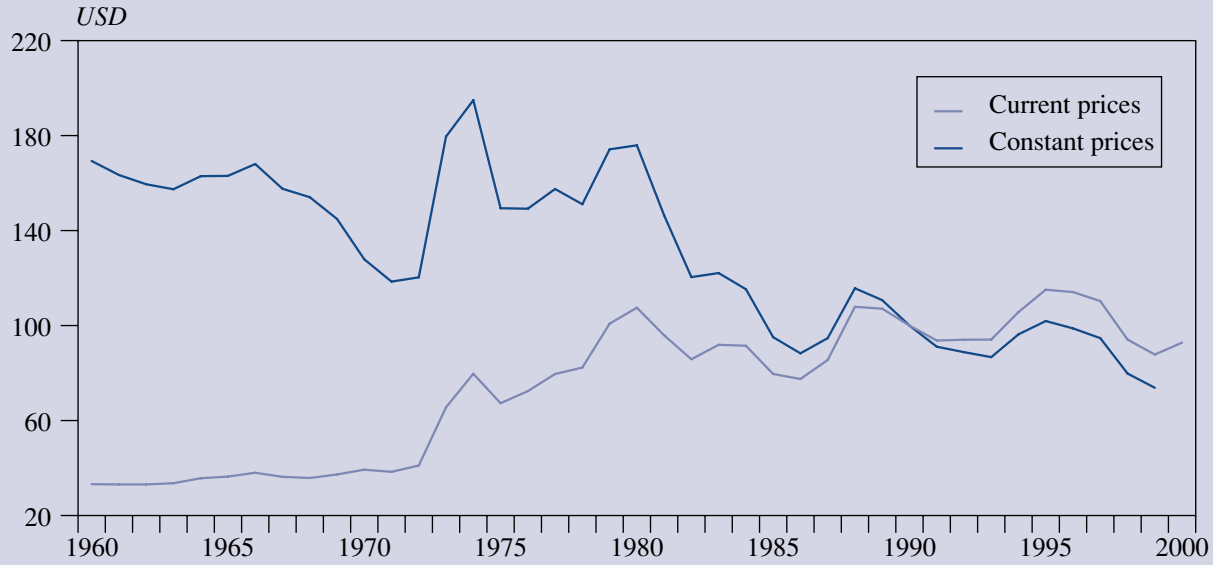
The IMF non-energy commodity price data illustrate a conclusion of long standing on the price scarcity of productive resources drawn from the environment (see Graph 2). Evidence for key metals such as steel bars, aluminium, copper, zinc, nickel and manganese shows a fall in real prices for all between 1960 and 1998.

These conclusions do not, however, support a policy of insouciant optimism towards the exploitation of the environment, as the externalities associated with the extraction and use of the resources are ignored in the price data. Moreover, the analysis relates solely to marketed resources only and excludes many common property and global commons type issues such as fisheries, global warming, the stratospheric ozone layer and clean air. Nevertheless, the main resource and waste management issue appears to be the environmental damage from the process of disposal, rather than the depletion of non-renewable resources, at least at present.

This conclusion is not necessarily at odds with the consensus behind the 'environmental Kuznet's curve' (EKC) analysis as 'material intensity' and 'pollution intensity' of economic activity are different issues. Basically, this EKC asserts that as economic growth takes place, pollution for a time gets worse and then after a turning point, gets better. Expressed in graphic form, this shows an inverted 'U', when pollution is plotted against income.

It is important to realise however, that the process of betterment embodied in the EKC analysis is not wholly autonomous. Environmental regulation often represents the only way in which the demand for a better environment can be expressed and met.

Graph 2: **Non-energy commodity price index, 1960–98 (1990 = 100)**



NB: The constant price index is deflated by the GDP-based price deflator for manufactured products.
Sources: IMF, Commission services.

3.2. Pollution intensity of the European economy

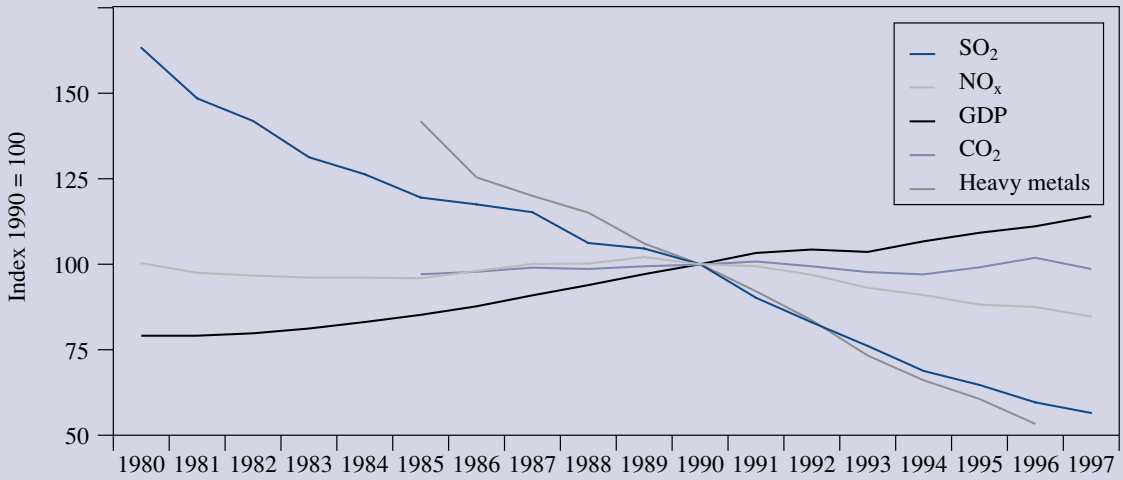
Environmental pollution is often said to be a clear manifestation of an outright market failure, that is, economic agents fail to take account of the environmental costs of polluting activities. However, markets can only function effectively on the basis of enforceable and tradable property rights. It is precisely the absence of these rights in respect of environmental assets that is at the heart of much pollution. Consequently, pollution may be regarded as the result of a government or regulatory failure. As long as the authorities do not either effectively manage environmental resources themselves, or assign enforceable, tradable property rights, pollution is bound to occur, and a decoupling of environmental damage from economic growth can hardly be expected to arise.

Against this background it is interesting to look more closely at the correlation between economic activity and pollution in Europe. Graph 3 shows how total emissions of some major air pollutants (nitrogen oxides, sulphur dioxide, heavy metals and carbon dioxide) and GDP have changed over time, for the EU taken as a whole. These emissions are arguably the most important air pollutants and can be used as indicators of air quality.

Given the rising trend in GDP, the pollution intensity of each unit of production has fallen within the Union, for all pollutants over the whole observation period for which figures were available. When expressed in per capita terms, the decline in pollutant level is also evident for sulphur dioxide and heavy metals for the whole period, while the falling trend is evident for nitrogen oxides only following the 1989/90 break point. Carbon dioxide emissions per head have remained relatively stationary, but are likely to rise without further policy intervention. Even expressed in absolute quantities, sulphur dioxide (SO_2) and heavy metal emissions have fallen substantially between 1980 and 1997. Nitrogen oxides (NO_x) have followed a less clear downward path, with emissions showing an upward kink in 1989 and then falling after 1990. Carbon dioxide (CO_2) emissions have followed an upward trend.

As regards the relationship between particular economic sectors and individual pollutants, the energy sector has historically contributed more than 50 % of total sul-

Graph 3: **Trends in pollution and economic activity, 1980–97**



Source: European Environment Agency, Eurostat, Cooperative programme for monitoring and evaluation of the long range transmission of air pollutants in Europe (CLRTAP/EMEP).

phur dioxide emissions, and about 30 % of total carbon dioxide emissions, while the road transport sector has been the main emitter of nitrogen oxides. For other important air emissions the picture is more mixed. However, it is once again the transport sector together with the solvent industry that generate most of the emissions of non-methane volatile organic compounds (NMVOCs), while the agricultural sector is the major emitter of methane and nitrous oxides.

Trends for most local and regional air pollutants are encouraging. Mainly due to the impact of regulation (in other words, active public management of environmental resources), they have been declining (despite buoyant economic growth), and are predicted to do so in the foreseeable future as well (see Table 1). Given the likely increase in GDP over the next decade, air pollution intensity of economic activity will decline dramatically. However, this is only partly true for greenhouse gases. Although pollution intensity will also decline for all of them, the absolute amount of emissions will continue to increase, further contributing to climate change. A reason for this might be that environmental policy so far has mainly focused on traditional air pollutants, turning to greenhouse gas emissions only recently.

What holds for air pollution is not necessarily true for other environmental pressures. Indeed, when turning to waste generation, the picture emerging is not that clear. Waste is the counterpart to production: most goods eventually have to be collected and disposed of. There continues to exist a more or less strong correlation between economic activity and waste generation. However, as important as the total amount of waste is its toxicity and its management. Indeed, if waste is adequately recycled and safely disposed of, the issue is manageable. Nevertheless, the close relationship between hazardous waste production and national income should be a cause for concern and vigilance.

With respect to water resources two issues are important: the overall abstraction and use of water relative to supply, and its pollution. Common to all European countries is the need to satisfy the water demand of households, industry and agriculture and the requirement to protect the aquatic environment and ecosystems. Also

Table 1

Pollution intensity of economic activity 1990–2010 (1990 = 100)

Pollutant	1990	1995	2000	2005	2010
Sulphur	100	56.5	38.4	29.5	19.5
	(100)	*(60.9)*	*(46.8)*	*(40.4)*	*(30.1)*
NO_2	100	87.7	66.3	48.4	35.1
	(100)	*(90.5)*	*(77.3)*	*(63.9)*	*(51.9)*
NMVOC	100	82.7	61.1	44.7	34.3
	(100)	*(89.1)*	*(74.4)*	*(61.5)*	*(53.1)*
CO_2	100	90.2	—	—	67.8
	(100)	*(97.6)*			*(105.6)*

NB: Pollution intensity is expressed in kilotonnes of pollutant per billion (10^9) euro of GDP for the EU-15.
The index in italics between brackets describes the trends in total emissions for EU-15.

Source: Commission services.

common to many countries is a limitation of water resources and the problems faced by the water supply sector, both in terms of quantity and quality.

Indeed, it is the fact that water resources are unevenly distributed across Europe as well as the peak demand in summer at times when supply is drying off that creates regional and seasonal challenges to efficient water management. Moreover, as several economic activities as well as private households still dispose of parts of their waste in water the adequate management of wastewater has to head off environmental degradation and public health hazards.

The analysis so far has shown that in the given regulatory context, environmental pressure is mainly a result of combustion processes, intensive farming and a potentially inadequate management of industrial and household waste. The outlook for environmental stress is a mixed one. For certain pollutants, absolute reductions in emissions are predicted, for others trends still go in the wrong direction, adding to environmental stress. Moreover, where emissions decline this might not be sufficient to spontaneously fall to levels that are environmentally sustainable or, even better, environmentally sound.

In principle, to get an idea of future environmental stress one could analyse economic prospects of the different polluting sectors and branches, after having ranked them by the pollution intensity of their production. However, due to data limitations and the fact that this pollution intensity is permanently changing, such an approach is open to criticism. Nevertheless, in the absence of better information it could at least give some indications and point to economic activities that deserve close monitoring. Indeed, using a data set established by the World Bank easily singles out 'dirty' and 'clean' manufacturing sectors (see Scherp and Suardi, 1997).

It does not come as a big surprise that it is the chemical industry that stands out far above other sectors of manufacturing with respect to environmental risk. However, other sectors for which Europe is still an important production location, such as tanneries and leather finishing, iron and steel, and pulp, paper and paperboard also have a substantial environmental impact. Nevertheless, this photographic snapshot of the late 1980s definitely overestimates environmental stress coming from these sectors since, as the above analysis has shown, a certain decoupling of economic activity and environmental pressure has been achieved over the last decade, and certain polluting activities have become substantially less polluting. As a consequence, and as a result of environmental legislation in place and proposed, manufacturing activity in Europe should not be expected to exert substantial additional environmental pressure over the foreseeable future. However, this might require that environmental regulations are forcefully implemented and compliance carefully checked and enforced. Moreover, environmental achievements are always at risk in case of major accidents.

The other three major polluting economic activities besides domestic heating (agriculture, mining and transport services) have a totally diverging outlook. While

Box 2: **European energy outlook to 2020 — the baseline scenario**

Key assumptions: population of the present 15 EU Member States increases by 12 million by 2010 and stabilises thereafter. The world economy is expected to grow slightly above 3 % annually throughout the projection period to 2020, whereas EU economic growth is assumed to develop linearly over time by around EUR 430 per capita per year, i.e. 2.4 % per annum until 2010 and 1.8 % per annum thereafter. The main policy assumptions of the baseline scenario are: further integration and liberalisation of electricity and gas supply in the EU; further efficiency improvements in the end-use and conversion sector; the continuation of support for renewables, co-generation, and natural gas supply infrastructure; the extension of the lifetime of nuclear power plants to 40 years; and stringent regulation of acid rain emissions. However, the baseline scenario does not include any new policies that specially address the climate change issue.

EU primary energy demand is expected to continue to grow throughout the outlook period: close to 1 % per year over the period to 2010 and 0.4 % per year thereafter. The EU energy system remains dominated by fossil fuels over the next 20 years; their share rises marginally from their level of just under 80 % in 1995. The use of solid fuels is expected to continue falling to 2010. Natural gas is by far the fastest growing primary fuel. Its share in primary energy consumption increases to 26 % by 2010, but stabilises thereafter. The share of oil in primary consumption remains relatively stable at 41 %.

Economic implications: due to efficiency and productivity gains throughout the energy system, the cost of energy to the consumer stabilises or even decreases. Facilitated by liberalisation, the average electricity price is projected to decrease in 2010–20 by 15 % below the current level. The share of energy costs in total production costs (for companies) or in total income (for private and public households) continuously decreases.

Environmental trends: the rising share of fossil fuels is likely to increase CO_2 emissions by an average of 0.6 % per year in the period 1995–2020. The transport sector contributes nearly two thirds to the total increase up to 2010 (+ 220 million tonnes CO_2). Beyond 2010, electricity and steam generation are projected to contribute most to the increase in the CO_2 emissions. The baseline scenario suggests that, in 2010, CO_2 emissions are expected to exceed the 1990 level by 7 %. But conventional emissions of sulphur dioxide, nitrogen oxides and hydrocarbons of the energy system, from power generation in particular, are expected to decline rapidly over the whole period.

agricultural activities might have reached their peak level in Europe, or are at best growing only slowly, and mining activities are definitely on a declining trend, the outlook for transport services is one of buoyant growth.

The energy system — that is, energy production and energy use — is a driving force for local, regional and global air pollution and, as a secondary effect, of water pollution. In consequence, its likely development provides some insight into future environmental pressure, and the need for environmental policy measures targeting the energy system. A study recently published by the Commission (1999) comes to the result that the predicted rising share of fossil fuels is likely to increase CO_2 emissions by 7 % in 2010 as compared to 1990, while at the same time conventional emissions of the energy system (namely SO_2, NO_x and hydrocarbons) are expected to decline rapidly over the whole period.

Given the importance of the energy system for environmental pressure it is not surprising that this sector is the target of close environmental monitoring and regulation. This comprises both traditional command-and-control regulations and market-based instruments, as well as voluntary commitments of car manufacturers to improve the energy efficiency of cars, and publicly financed or prescribed campaigns to inform the end-user about environmentally relevant features of the product they intend to buy.

4. The role of price signals and economic instruments

Stripped to its essentials, environmental policy is about how we deal with pollution. Uncontrolled pollution, normally regarded as unwarranted by-product of economic activity, is an externality. The effective management of environmental resources can take different forms. These are prescribing specific behaviour or technology, regulating the quantity of emissions, or influencing the price of polluting activities or products. By creating a market for an externality, either by assigning enforceable and tradable property rights or placing a price on it, the externality can be internalised.

To be effective, an economic instrument must operate in competitive markets which are responsive to price signals. Any instrument that changes the prices of environmentally harmful activities relative to other activities will have some effect on behaviour, except in the extreme case where demand for the activity is completely unresponsive to price changes. As has been shown in previous sections, many environmental problems have their source in fossil fuel consumption. This suggests that if economic instruments are to be effective in addressing environmental problems, fossil fuel use must be sensitive to price signals.

4.1. Price signals at the aggregate level

A first, overall indicator may be derived by comparing price signals and energy consumption in Europe and the United States. Over the last 20 years, European industrial energy prices have typically been of the order of 25–50 % higher than in the USA, while the difference in after tax petrol prices was even larger (see Table 2). Therefore, it is not surprising that the US economy is considerably more energy-intensive, requiring 75 % more energy to produce a unit of GDP.

Price signals come from the market and from policy-makers. The latter can influence prices by taxing prod-

Table 2

Tax component of unleaded petrol prices, September 2000

(EUR/1 000 litres)

	Retail price	of which tax	% tax in retail price
B	1.119	701	63
DK	1.134	745	66
D	1.055	708	67
EL	824	420	51
E	836	487	58
F	1.144	777	68
IRL	959	545	57
I	1.120	707	63
L	863	465	54
NL	1.220	778	64
A	966	575	60
P	888	418	47
FIN	1.204	777	65
S	1.175	768	65
UK	1.309	992	76
US	476	113	24

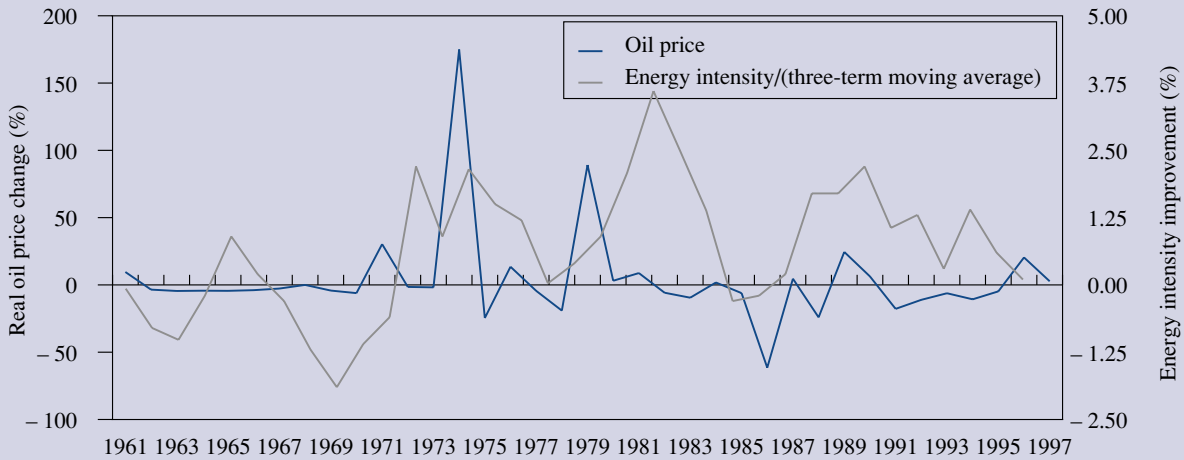
Source: Commission services; International Energy Agency.

ucts, levying charges or providing subsidies. For the consumer, the after-tax price of energy is the relevant issue. In Europe, traditional energy taxes in the form of excise duties play a relatively important role, both for the general budget and for energy use. Indeed, revenues from energy and transport taxes amount to almost 3 % in the EU, compared with just 1 % of GDP in the USA.

Another indicator on the effects of price signals might be the absence or presence of a correlation between price developments and energy intensity changes over time. Graph 4 shows developments in real (pre-tax) oil prices and energy intensity in Europe over the last 40 years. Four 'spikes' in energy intensity improvements have occurred in this period. Three of these periods of unusually sudden improvements appear to coincide with oil price rises: the two price shocks of the 1970s, and the price increase linked to the Gulf War. The fourth spike may be related to the six-day war in 1967; otherwise, the 1960s are a period of moderately declining oil prices and deteriorating energy intensity. This broad picture makes no attempt to separate the effect of structural changes from changes in process energy intensity. The impact of the oil price shocks of the 1970s was to reduce the output of the energy-intensive industries, but also to heighten awareness of possibilities for energy efficiency improvements. The aggregate impact does, however, support the view that economy-wide energy use is sensitive to price changes, and that accordingly, economic instruments which give clear price signals should be an effective means of changing energy use. A further, equally important lesson from the oil crises should also be kept in mind. Sudden large increases in energy prices led to substantial economic disruption: in 1974 and 1975 GDP growth slowed sharply — GDP even declined in 1975; the sustained period of low unemployment was ended.

While the relative share of energy as an input to the economy is now less than it was thirty years ago, a sharp increase in energy prices could still be expected to have negative short-term effects on overall economic activity. A policy of regular, moderate real increases in price is to be preferred to one of irregular larger tax rises since it should substantially avoid this type of economic disruption and will provide economic agents with clear signals about the direction of policy. This approach is also likely to be more politically sustainable (see European Commission, 2000).

Graph 4: **Oil price and energy intensity, 1961–97**



Source: Commission services.

4.2. Price signals at the sectoral level

What holds for the economy as a whole should also in principle hold for individual sectors, e.g. the transport sector.

Sweden's experience with energy taxation provides an example of sectoral responsiveness to energy price changes (see Graph 5). From 1986 to 1992, Swedish industry improved its energy intensity by an average of 1.7 % per year. In 1993, taxes were cut, and industrial energy intensity deteriorated by 7 %. Over the period 1992 to 1994 industrial emissions of CO_2 rose by 21 %, of which 13 % is estimated to be due to the changes in energy taxation. In the specific case of the pulp and paper industry, a study by the Swedish environmental protection agency noted that energy intensity fell continuously from 1973 to 1992, only to rise after the cut in energy prices; the reversal in trend could not be attributed to any factor other than the change in energy prices.

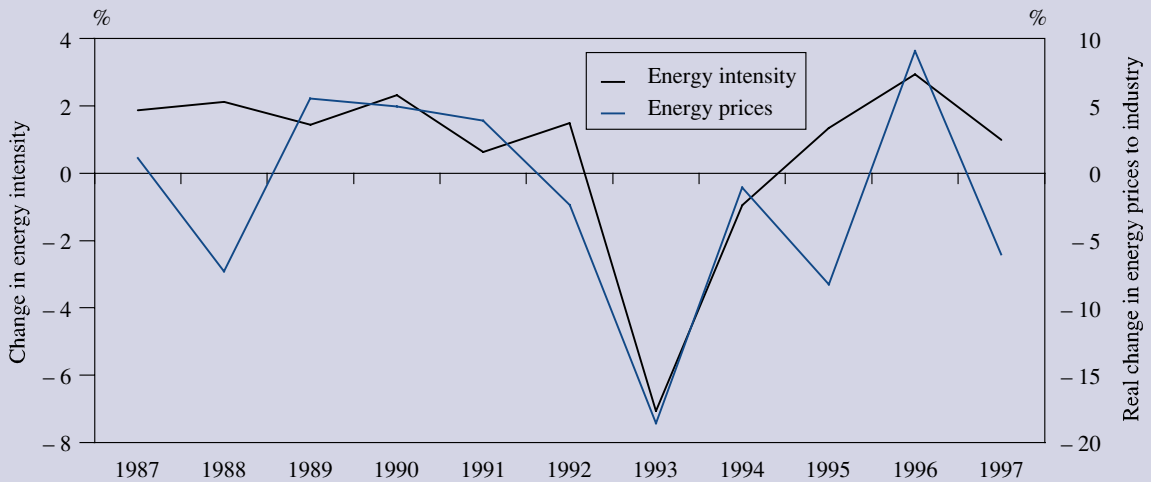
The transport sector is one of the most important with respect to energy consumption and environmental externalities. In consequence, it is exposed to both targeted environmental regulations and numerous different taxes in all Member States.

Taxes on transport can be divided into two broad categories: taxes on car ownership, and taxes on car use. The former are mainly purchase taxes; the latter include fuel excise duties and road pricing.

A recent report for the European Conference of Ministers for Transport examined the effect of different forms of transport taxes (Infras, 2000). The report concludes that appropriately designed taxation, using a combination of ownership and use taxes, could be an effective means of influencing behaviour. For example, high purchase taxes used in isolation reduce car ownership per capita and encourage the purchase of smaller cars, but do nothing to discourage the use of cars, given that they have been bought. This requires a signal from fuel prices or annual vehicle taxes. In addition, high purchase taxes may increase the average life of the car fleet, so that newer, more fuel-efficient cars are slower to penetrate the market.

However, it is difficult to identify the precise impact of any measure in isolation, both because measures tend to be introduced as a package, and because their impact may be felt over several years. More generally, the environmental impacts associated with the introduction of an economic incentive — or any form of regulatory

Graph 5: **Energy prices and industrial energy intensity, Sweden 1987–97**



Source: Commission services.

measure — may be difficult to distinguish from those due to structural or technological changes which would have happened anyway.

Nevertheless, in comparing the US situation (low fuel taxes) and Europe (relatively high fuel taxes) one finds once again clear indications that price signals matter. Per kilometre emissions of carbon dioxide from cars are on average 22 % less in Europe than in the USA. Moreover, this environmental benefit has not undermined the ability of taxes on transport and transport use to provide a reliable, stable, and substantial contribution to public finances.

Based on an analysis of measures taken in several countries, a number of key influences on the success of price-based measures may be identified. These include the availability of substitutes, risk averseness of consumers when it comes for opting for new technologies pushed by the government rather than by supplying industries, and the provision of information, in particular for consumers. Lack of international coordination was identified as a factor that constrains countries from making full use of fuel taxes as a means to influence transportation demand.

Of course, price signals work best where substitutes are available at little or no extra cost. In situations where the market penetration of an environmentally benign technology is perceived by governments as too slow, tiny fiscal incentives combined with the provision of information could tip the balance in favour of accelerated market penetration.

This was clearly the case with the phasing out of leaded fuel in Europe. Here, differentiation of fuel taxes on environmental grounds has been a strategy successfully pursued throughout the Community. It enabled most Member States to meet the deadline of 31 December 1999 for the complete phase-out of leaded petrol ([1]). Indeed, several Member States achieved a complete switch to unleaded petrol before the adoption of Community legislation: Austria, Sweden and Finland by 1995, Denmark by 1996, Germany and the Netherlands by 1997. Those Member States where the price differential was smallest tended also to be those where unleaded petrol was slowest to penetrate the market.

The creation of a price advantage for unleaded fuel appears to have been an effective instrument to influence consumer behaviour, but an attempt by Austria to encourage the early purchase of cars fitted with catalytic converters by reducing the annual vehicle tax was judged to be less successful. The reasons advanced for this relative failure essentially relate to risk averseness in combination with lack of information on the part of car buyers, and limited availability of substitutes: drivers feared that vehicles fitted with catalytic converters

([1]) This deadline was imposed by Directive 98/70, OJ L 350 of 28 December 1998; differentiation of duties on leaded and unleaded petrol from 1 January 1993 was required by Directive 92/82, OJ L 316 of 31 October 1992; in practice leaded petrol was more expensive than unleaded petrol in all Member States by that date.

Table 3

Member States ranked by rate of penetration of unleaded petrol, 1998

(%)

	Share of unleaded in total petrol deliveries	Difference in price between unleaded and leaded petrol (second half of 1998)
Spain	48	5.5
Greece	48	7.2
Portugal	54	3.7
Italy	56	5.6
France	61	4.3
United Kingdom	78	9.2
Belgium	83	8.8
Ireland	85	16.9
Luxembourg	90	12.8

Source: IEA, Commission Services.

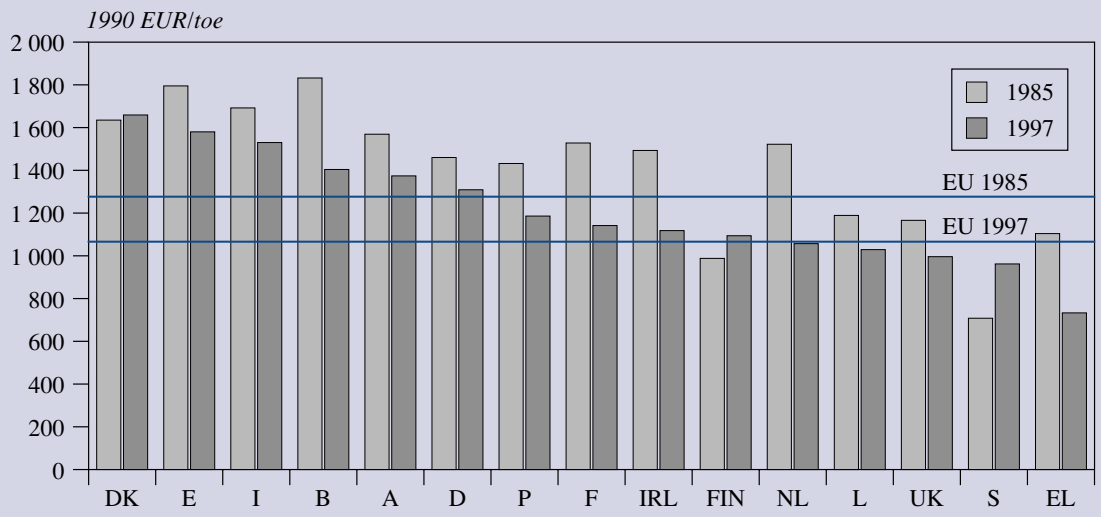
would have a shorter life-span; since most drivers had only an approximate idea of their annual running costs, a very large tax difference would have been necessary to convince them to change; finally, there were relatively few outlets for unleaded petrol at the time the measure was introduced.

Differentiated road charging to deal with congestion has also proved to be a success in France (as shown in Box 3). However, the successful French experience contrasts with the situation in some other countries where direct charging for road use faces significant opposition, notwithstanding the existence of significant levels of traffic congestion. In the Netherlands, for example, plans to introduce charges in urban areas have faltered in the face of doubts about the existence of adequate substitutes: public transport is argued to not have sufficient additional capacity, leading to fears that the main impact of the measures would simply be to transfer the congestion problem onto other roads.

Box 3: **Road pricing in France**

Road pricing is well established on most of France's motorway network, where tolls are charged based on distance travelled, the number of axles and the height of the vehicle, the latter two variables presumably serving as proxies for wear and tear caused by use of the road by larger, heavier vehicles. The existence of toll stations, and the fact that users are accustomed to motorway charges, has facilitated the introduction of more closely targeted road pricing measures. On some of the more congested routes tolls are differentiated according to the day and time the journey takes place. Reductions in peak-time congestion of 60 % have been recorded, due *inter alia* to a shift in traffic flows of about 15 % from congested to less congested routes. Information to road users has played an important part in the success of these measures. Drivers need to know in advance how the toll varies depending on the time of day the journey takes place: it is too late to inform them after they have entered the motorway network. Additionally, the purpose of the surcharge needs to be carefully explained: drivers intuitively expect that they should pay less for using a congested route, since the service they receive is inferior!

Graph 6: **Real electricity prices to households**



Source: Energy in Europe — Annual energy review, European Commission.

In the absence of price differentiation real prices have an important role to play. Here, a lack of active policy could lead to an erosion of price signals. Indeed, from 1985 to 1997, the real price of energy charged to end-users, whether domestic or industrial, fell substantially in the European Union. Much of the reduction in oil and gas prices occurred immediately following the sharp drop in the crude oil price in 1986; since then end-use prices for these fuels have fluctuated without a clear positive or negative trend. Electricity prices in contrast have undergone a steady decline. By 1997, electricity prices charged to households and industry were 15 and 30 % lower in real terms respectively than in 1985.

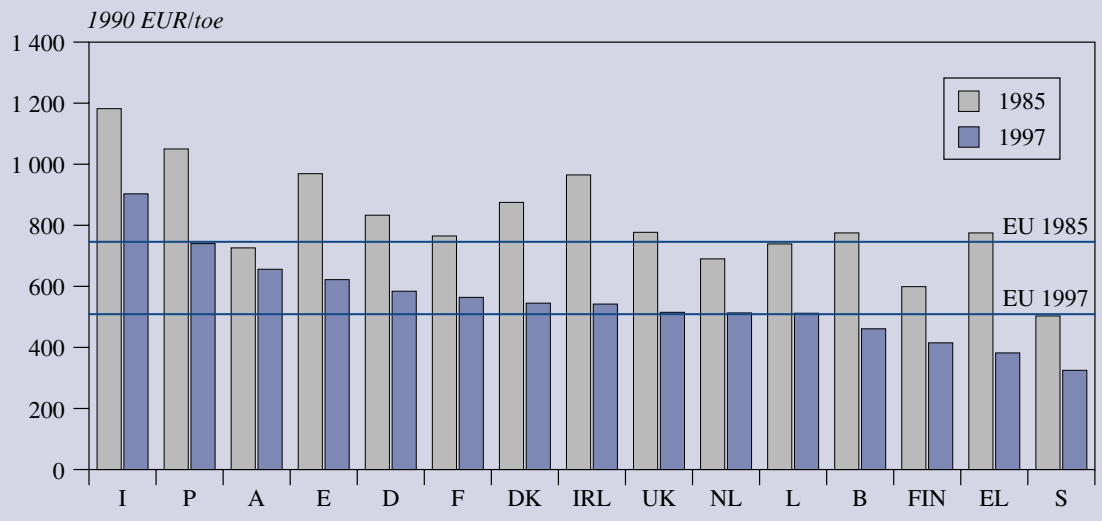
In addition to relatively low prices for the basic fuel inputs, energy market liberalisation in several Member States may have contributed to the downward trend. However, the reduction in real prices was common to all Member States, with the exception of prices paid by households in Sweden and Denmark. Given these trends in real prices after taxes, one should not be surprised that affected energy demand did not decline.

The difference in the price trend between households and industry is partly due to differences in taxation policies. All Member States now tax household electricity consumption, whereas in 1985 neither Ireland nor the United Kingdom did. The share of taxation in the price charged to households has risen from an (unweighted) average of 15 % in 1985 to 21 % in 1997. In individual Member States the tax component of the price ranges from almost 60 % in Denmark to less than 5 % in Portugal. Industrial electricity consumption in contrast is tax- exempt in most Member States. Some (e.g. Sweden) have even abolished previous taxes. Those countries that do tax industrial electricity use do so at lower rates than for households.

4.3. Criteria for the use of market-based instruments

In principle, market-based instruments are an attempt to align private with social costs and reducing environmental externalities by exploiting information and incentives contained in price signals. There is a broad range of market-based instruments, from 'strong' ones that allow a high degree of flexibility to the polluter to reach a given environmental target, to 'weak' ones that are very close to traditional or modern command and control instruments.

Graph 7: **Real electricity prices to industrial consumers**



Source: (1999) Energy in Europe — Annual energy review, European Commission.

Box 4: Energy-intensive industry and the environment

Energy use in manufactuing industry

Illustrative impact on total costs of a EUR 10 per barrel oil tax, based on energy price of EUR 25 per barrel of oil equivalent

(%)

	Share of energy in total costs	Impact of tax on total costs
Manufacturing	2.0	0.8
Food products, beverages and tobacco	1.5	0.6
Textiles and textile products	2.0	0.8
Leather and leather products	1.1	0.4
Wood and wood products	2.0	0.8
Pulp, paper and paper products, publishing and print	2.0	0.8
Coke, refined petroleum products and nuclear fuel	1.1	0.4
Chemicals, chemical products and man-made fibres	3.1	1.2
Rubber and plastic products	2.7	1.1
Other non-metallic mineral products of which:	6.4	2.6
— Cement	19.2	7.7
Basic metals and fabricated metal products	3.4	1.3
Machinery and equipement n.e.c.	0.9	0.3
Electrical and optical equipment	0.9	0.3
Transport equipement	0.9	0.4
Manufacturing n.e.c.	1.3	0.5

Source: Commission services.

It is sometimes claimed that a decision by the Community to implement a policy of tightening environmental legislation or increasing energy prices would cause significant damage to the international competitiveness of Community industry. Examination of the available data on energy-intensive industries does not support this claim ([1]). The most energy-intensive (energy intensity is calculated as the ratio of purchases of energy to total purchases including personnel costs) sector identified is cement manufacturing, in which energy purchases account for approximately 20 % of total purchases including personnel costs. It is a matter of simple arithmetic to calculate the 'static' effect of an increase in energy prices, due to the imposition of a measure such as a carbon tax. For example, taking a price of EUR 25 per barrel of oil as being representative of energy prices faced by cement firms, a carbon tax of EUR 10 per barrel would increase energy costs by 40 %. In the case of a cement firm for which energy represents 20 % of its costs, this would imply an increase in total costs of 8 % (i.e. 40 % of 20 %). This represents something of an extreme case, since even within the building materials sector cement manufacture is exceptionally energy-intensive. Overall, energy represents no more than about 2 % of manufacturing industry costs. Table 5 gives data on energy costs in 15 manufacturing industry sectors. Finally if the 'carbon constraint' were to be implemented via a system of tradable emission permits in which most or all of the permits were grandfathered, firms would only face higher energy costs on their additional energy use, so that the impact on their total costs would be considerably smaller than the already generally small numbers shown in the table above.

([1]) The compilation of structural business statistics, including data on energy costs, is governed by Council regulations 58/97 of 20 December 1996 and Commission regulation 2700/98 of 17 December 1998. The detailed data available so far cover eight Member States: Belgium, Denmark, Spain, Ireland, Italy, the Netherlands, Portugal and Finland. However, for confidentiality reasons, data are not available for all of these countries at a disaggregated sectoral level.

Market-based instruments, to really generate additional welfare improvements, can only be applied in situations that allow a certain flexibility in how much, where or by whom pollution is abated. This, in principle, excludes their use in cases of a well-identified threat to public health generated by single point sources. In such situations a product ban or strict limit values are the instruments of first choice. Examples might be limit values for radiation emissions from nuclear power plants or pollution of local ambient air by large point sources.

However, as soon as only the total amount of pollution from several point or diffuse sources matters the case for market-based instruments can be made. In such a situation, one has the choice between instruments that regulate the quantity of pollution (e.g. emission trading) or those that regulate the price attached to polluting activities (e.g. taxes, charges, subsidies). These instruments work best on markets characterised a high degree of competition which are sensitive to price signals and driven by profit oriented actors. Moreover, the benefits of opting for market-based instruments are highest when differences in marginal abatement costs are high. A high responsiveness to price signals, on the other hand, requires that substitutes for the regulated technology or product are available at little additional cost.

Market-based instruments that regulate the quantity of pollution but that leave it to the market to decide who should adjust and where adjustment should take place (the best known examples of such an instrument are emission trading schemes) are best suited for situations in which the regulator wants to have certainty about the achievement of environmental targets, and where it does not matter who undertakes abatement efforts. Normally such instruments work by assigning the right to emit up to a certain quantity of pollutants in a given period. In case of over-achievement the owner of the right to pollute can try to sell this right to someone who intends to pollute more than he initially was allowed to do. In the end, pollution abatement will take place where abatement costs are lowest. As for other instruments, reliable monitoring and forceful non-compliance regimes must be in place to make this instrument effective.

Instruments that regulate the price of pollution, be it through a green tax, a charge, a subsidy or any other kind of incentive payment intend to reduce pollution to the point where marginal abatement costs are equal to the tax rate. This might lead to substantially differing abatement efforts of individual economic agents. To be environmentally effective, however, demand must be price sensitive, and the affected market should be aiming at profit maximisation. Once again, reliable monitoring and non-compliance regimes must be in place. A challenge with this system is to identify the appropriate tax or subsidy rate. Ideally, it should be set equal to the benefits of cleanup at the margin, but policy-makers are more likely to think in terms of the desired level of total cleanup, and they do not know beforehand how firms will respond to a given level of taxation or subsidisation. Moreover, given the revenue-raising effect of taxation there exists the risk of 'budgetary capture', that is, tax rates or tax bases are modified to suit a certain budgetary target rather than to influence environmentally relevant behaviour. This seems to have happened to some extent to the more traditional excise duties on fossil fuels. Finally, from an environmental point of view price signals could also turn out to be problematic when they are eroding over time. While product standards or specific or absolute limit values remain valid over time, the effect of a price signal fixed in absolute terms diminishes with rising income and price levels.

5. Economic implications of effective environmental policies

In principle, environmental policies interfere into activities perceived as efficient under the existing institutional and regulatory framework. For those economic agents that have, for example, to comply with more stringent limit values, or to pay environmental taxes or charges, this legislation comes at a cost. It is therefore natural that they complain about negative implications for their national or international competitiveness. Society at large also often perceives environmental policy as burdening enterprises with additional costs. On the other hand, most environmentalists and environmental policy-makers regard environmental policy as welfare increasing, redistributing rather than increasing costs of pollution or pollution abatement.

Given these contradictory perceptions one might analyse what the real economic and welfare implications of such interventions are. In fact, the Treaty provisions concerning environmental policies foresee that, in preparing its policy on the environment, the Community shall take account of the potential benefits and costs of action or lack of action. However, a precise valuation of costs and benefits is often impossible, as no markets and therefore no market values exist for large parts of the impacts of environmental policies. Nevertheless, most of the important European environmental policy initiatives have been preceded or accompanied by an estimation of costs and benefits of action and non-action. This holds for example for the Community's acidification strategy, policies on ambient air quality including emission standards for road vehicles, or the European climate policy which is in the phase of being designed.

5.1. Case studies

Traditionally, the estimation of the effects of environmental legislation has been limited to estimating the abatement costs shouldered by industries affected by a tightening of environmental legislation. This very incomplete approach is one reason why environmental legislation is perceived as expensive and harmful for the competitiveness of regulated industries. It was not before one started to quantify tentatively in monetary terms the environmental and public-health related benefits of such policies that the public perception of the costs of environmental regulation began to become more neutral.

Nowadays, important legislative projects are often preceded by careful and comprehensive estimations of costs and benefits of action and non-action. These analyses do not limit themselves to estimating the effects on regulated industries and the environmental improvements, but also try to analyse knock-on effects on other parts of the environment and the economy, including welfare gains from changed behaviour and changes in taxation. The following sections briefly summarise the approach and results of such analyses relating to the European acidification strategy, the European policy targeting ambient air pollution, and climate change policies.

The European acidification strategy

Since the early 1980s several initiatives have been taken at Member State and European level to reduce the amount of acidic emissions, mainly generated by power stations and other stationary source. At the European level the most important initiatives in this context have been the large combustion plant directive, entering into force in 1988, several directives on the sulphur content of combustion fuels and the national emission ceilings directive recently proposed by the Commission ([1]).

([1]) Council Directive 88/609/EEC of 24 November 1988 on the limitation of emissions of certain pollutants into the air from large combustion plants; Official Journal L 336, 7.12.1988; Council Directive 75/716/EEC of 24 November 1975 on the approximation of the laws of the Member States relating to the sulphur content of certain liquid fuels; Official Journal L 307, 27.11.1975; this was amended by Directive 87/219, which was repealed and replaced by Directive 93/12, itself modified by Directive 99/32; Proposal for a directive of the European Parliament and of the Council on national emission ceilings for certain atmospheric pollutants, COM/99/0125 final, Official Journal C 056E, 29.2.2000.

These initiatives have and will lead to a substantial reduction in acid emissions. However, this reduction comes at a price that is potentially damaging for the profitability of those industries and enterprises that have to undertake the abatement efforts, although negligible in macroeconomic dimensions.

In estimating the cost implications of such legislative proposals a 'bottom-up' approach is usually chosen, that is, the abatement costs necessary to meet new limit values or quality standards are calculated. To get an idea of the benefits of the proposals, the environmental impact (i.e. emission reductions) has to be estimated and benefits in terms of less damage to crops, materials and buildings and public health (morbidity and mortality) must be quantified.

However, when presenting its legislative proposal the Commission limited its analysis of the benefits to the positive and direct environmental impact, that is, the reductions in acidic air emissions compared with a 'business as usual' scenario (European Commission, 1983). These effects were estimated to be substantial. As regards the costs of the necessary abatement efforts, it was estimated that for new plants the necessary abatement measures may add up to 10 to 15 % to the costs of generated energy. In the end emission reduction costs were much lower, partly resulting from new technologies, but also due to switching to low-sulphur fuels following privatisation and market liberalisation.

The expected costs and benefits of the amendment of this directive proposed in 1998 were also calculated: an investment in abatement technologies of about EUR 2 billion over a 10-year period (2000–10) is expected to generate a social return (mainly as a result of reduced chronic mortality) of almost EUR 40 billion over the same period (European Commission, 1998).

There is widespread consensus that the more inflexible the environmental regulation, the higher the cost of implementation and the lower the environmental achievement resulting from the regulation. Research funded by the European Commission and conducted by a consortium of leading European academics confirms this ([1]). Their conclusions on the 'large combustion plant' directive are shown in Table 4. The analysis shows the importance of flexibility in the light of unexpected events, such as the use of gas in combined cycle gas turbine plants, a consequence of electricity market liberalisation in the United Kingdom.

([1]) Research DG contract ENV4-CT97-0569 led by CERNA at the Ecole des Mines, Paris.

Table 4

Summary assessment of cost effectiveness of implementation of the LCP Directive in the electricity sectors in the case study countries

	Germany	Netherlands	France	United Kingdom
Cost effectiveness	**Low**	**Medium/Low**	**High**	**High**
Explanatory factors	Uniform standards and compliance timetable, and very short time span to comply (environmental emergency) Regional monopolies (market structure allows costs to be passed on) Long-term coal contracts Strict monitoring	Uniform standards + cost reducing voluntary agreement Intra industry coordination via SEP (market structure: coordinated oligopoly)	Implementation restricted to voluntary action (largely 'business as usual') State monopoly (market structure-facilitates investment in nuclear power)	Very flexible pollution abatement allocation (company bubbles) Dynamic market structure (impact of privatisation) Phasing out of long-term coal contracts

Source: Commission services — Research DG contract No ENV4–CT97–0569 'The implementation of environmental policy issues' (IMPOL).

These conclusions are consistent with other work in the area, which includes analysis undertaken at the behest of the Congress of the United States of America by 'Resources for the future'. This suggests that regulators generally tend to overestimate the costs of regulation. In particular, 'for all the economic incentive policies in our sample the cost was overestimated or the quantity of emissions reductions was underestimated'. The greater the polluters' scope to be flexible in reducing their pollution and in particular to employ technical innovations, they conclude, the lower the actual cost of the abatement measure. These findings mirror the conclusions of a European study prepared for the Swedish Ministry of the Environment. This found that 'industry's actual (compliance) costs tend to be lower than their predictions'. It notes in particular, that the 'potential for innovation in industry is often underestimated, such that the costs of compliance are consequently overestimated'. The authors essentially conclude that the less rigid and more target-orientated the regulation, the lower the cost and the greater the likelihood of overachievement of environmental norms.

The researchers draw similar conclusions on the 'municipal waste incineration' directive ([1]). The measure was judged to have had low cost-effectiveness in general. This is attributed to the inflexibility of the instrument. It is also worth noting that there have been problems of enforcement with the measure, partly due to its prescriptive style and approach.

Ambient air quality

As atmospheric emissions from road transport are — besides domestic heating and large combustion plants — the main source of ambient air pollution, substantial efforts have been undertaken to reduce these emissions. Most policies and measures related to product standards and emission standards, so that the European Commission had to draft legislation to avoid a distortion of the internal market. The more recent parts of this legislation were to a large extent prepared under the so-called 'Auto–Oil' programme, that was supposed to prescribe fuel quality and emission standards. Abatement costs of measures proposed in the first Auto–Oil programme have been estimated in a much more sophisticated way (European Commission, 1996) than was the case for the large combustion plant directive (see Table 5).

Nevertheless, these are still far from being point estimates. Given uncertainties about abatement costs, scale effects and their development over time, the estimated increases in annual costs ranged from less than 2 % to more than 12 % as a result of improved fuel quality for diesel in passenger cars. However, when it came to estimation of the benefits of these policy proposals, the Commission and its consultants limited the analysis to the positive effects on ambient air emissions and ambient air quality.

In fact, the Auto–Oil I directives deliver significant environmental benefits: without new vehicle and fuel standards, and depending on individual pollutants, emissions would have been 50–100 % higher by 2010, and absolute levels would have begun to rise again around 2010. This approach provided policy-makers with an indication of the costs of achieving certain environmental improvements. However, it stopped short of analysing the cost–benefit ratios. An estimation of the benefits of the changes in population exposure to the four main pollutants (nitrogen dioxide, carbon monoxide, benzene and small dust particles) due to implementation of the Auto–Oil I directive was subsequently performed: the monetary value of benefits is in a range of EUR 3 billion—EUR 15 billion per year, based on health and mortality costs. The tools used to show the overall economic implications of abatement policies, including second-round effects and the effects of fiscal and non-technical measures, are general equilibrium models like Tremove used in the Auto–Oil II programme.

Fiscal and non-technical measures, as tested in the Auto–Oil II programme, affect not only emissions of air pollutants, but produce other benefits, mainly through a change in the behaviour of transport users (better use of existing infrastructure, shift to less environmentally damaging modes of transport, decrease in the need for travel). Reductions in congestion and accidents can cut the cost to society of some measures by 50 %. Moreover fiscal measures may bring substantial additional societal benefits if the increased revenue is used to replace more distorting taxes.

Changes in behaviour, however, tend to be limited by the inelastic characteristics of transport demand in the short- to medium-term. A successful policy needs to be

([1]) Council Directive 89/429/EEC of 21 June 1989 on the reduction of air pollution from existing municipal waste-incineration plants; Official Journal L 203, 15.7.1989.

Table 5

Abatement costs of measures proposed under Auto-Oil I

Measure	Cost to industry	Cost to motorist
Improved vehicle technology: petrol passenger cars	EUR 574 to EUR 3 262 million/year	+ 0.5 % to 2.5 % in purchase price
Improved vehicle technology: diesel passenger cars	EUR 345 to EUR 605 million/year	+ 0.5 % to 2.5 % in purchase price
Improved fuel quality: petrol	EUR 327 to EUR 1 450 million/year	EUR 3.77 to EUR 11.89 per year and motorist
Improved fuel quality: diesel in passenger cars and LGV	EUR 260 to EUR 1 742 million/year	EUR 1.69 to EUR 12.47 per year and motorist
Inspection and maintenance programme: improved emission control	EUR 290 to EUR 1 112 million/year	
Total	EUR 1 796 to EUR 8 171 million/year	+ 0.5 % to 2.5 % in purchase price EUR 5.46 to EUR 24.36 per year and motorist

Source: Commission services — COM(96) 248 Final, pp. 35–39.

targeted to each transport mode and agent category, and combine several cost-effective instruments.

Climate policy

At Kyoto in 1997, the European Community and its Member States committed themselves to reducing their emissions of greenhouse gases during the period 2008–12 by 8 % compared with their 1990 levels. Member States subsequently agreed to reallocate this reduction among themselves under the 'burden-sharing agreement', which sought to take account of differences between Member States in their expected rates of economic growth and energy intensity changes.

Studies undertaken for the Commission have examined the economic impact of policies to reduce greenhouse gas emissions (see Heady, Markandya et al., 2000). One such exercise quantified the extent to which economic instruments, both within Member States and at Community level, can reduce the cost of these policies (see Capros and Mantzos, 2000). If Member States were to seek to achieve their 'burden-sharing agreement' targets by requiring each sector of the economy to achieve the same proportionate reduction in its greenhouse gas emissions, the annual cost would be EUR 21 billion (in 1999 prices). If Member States implemented measures such as emissions trading within their own borders, the Community-wide annual cost would fall to EUR 9 billion. Finally, if emissions could be traded throughout the Community, the cost of achieving the Kyoto targets would be EUR 6 billion per year.

Under this scenario, the marginal abatement cost of 1 tonne of carbon dioxide — and hence the price of tradable emission permits — would be EUR 33. Such a price would be equivalent to a carbon tax of EUR 13.6 on a barrel of oil, or rather less than the rise in oil prices over the last 18 months. This price is also approximately equivalent to the tax increases proposed in the Commission's 1992 draft carbon/energy tax directive. Economic analyses of this proposal, assuming that the tax revenue was recycled through cuts in labour taxation, confirm that after 10 years it would have reduced carbon dioxide emissions consistent with the Community's commitments under the Kyoto Protocol, and also show

Member State commitments to reduce greenhouse gas emissions under the 'Burden sharing agreement'

Luxembourg	– 28 %
Denmark	– 21 %
Germany	– 21 %
Austria	– 13 %
United Kingdom	– 12.5 %
Belgium	– 7.5 %
Italy	– 6.5 %
Netherlands	– 6 %
Finland	0 %
France	0 %
Sweden	4 %
Ireland	13 %
Spain	15 %
Greece	25 %
Portugal	27 %

that it would have had small positive impacts on GDP and employment. Additional environmental and health benefits could also be expected from the lower levels of emissions of other pollutants which would follow from reduced consumption of fossil fuels (see above).

5.2 Macroeconomic implications

As shown above, an economic impact assessment of new environmental regulation regularly constitutes part of the preparatory work for legislative proposals at the level of the European Union. However, it has also been shown that this impact assessment is limited in scope, either because it focuses solely on sectoral cost implications of new abatement efforts or because it neglects the benefits in the form of hoped-for positive environmental effects. Moreover, only a minority of impact assessments also contains a macroeconomic impact assessment, that is, the potential impact on economic growth, overall employment or inflation.

The reason for this is that macroeconomic models that can adequately simulate the more sectoral and specific 'shocks' generated by new or tighter environmental legislation barely exist. Indeed, most models try to simulate the effects of specific environmental measures or policies as a tax shock, such as an increase in indirect taxation with the revenues recycled. The assumed level of tax increases is derived from the above-mentioned abatement cost estimates or derived from the price elasticity of demand for environmental services.

A review of such macroeconomic assessments shows that most models arrive at quite modest impacts of new environmental legislation on economic growth, employment and inflation. In the end other assumptions (stance of monetary policy, wage developments, competition on product markets, indexing of transfer incomes, modes of recycling tax revenues, etc.) determine whether tighter environmental legislation or higher environmental taxes lead to additional growth and employment ('double dividend') or not. However, what comes clearly out of such model simulations is that a more ambitious environmental policy is neither a job or growth machine nor a job or growth killer.

Indeed, according to macroeconomic models, even an ambitious, and in the traditional definition 'costly' climate policy entailing abatement efforts in Europe of about 0.3 % of GDP annually over a 10-year period would hardly affect macroeconomic aggregates (see European Commission, 1997). A policy aiming at a reduction in European greenhouse gas emissions by more than 20 % as compared to a business-as-usual scenario would, according to model simulations, lead to a change in European GDP levels of up to 1.5 % after 10 years, with the simulated change being either negative or positive, depending on the model specifications and specific detailed assumptions.

Nevertheless, one should not forget that such models estimate the economic and welfare effects net of changes in environmental resources. Given that the purpose of the analysed legislative initiatives is to slow down or even reverse the depletion of environmental assets and a deterioration in public health it is a major shortcoming of such economic estimations that they are at present not able to estimate a kind of 'green GDP'. However, as markets for most relevant environmental assets are non-existent, no market prices are available. Numerous efforts to create green GDP figures have failed so far, and prospects for generating green accounts are still far from promising.

6. Conclusions

Empirical evidence for Europe shows that economic growth does not have to go hand in hand with a deterioration of the status of the environment. Indeed, economic activity and environmental pollution have been successfully decoupled for several pollutants. This has been one major conclusion of this chapter. However, this decoupling has not been achieved by markets spontaneously. On the contrary, it required permanent policy intervention, which often has been perceived as a cost-push by those economic agents that had to shoulder the adjustment burden. The decoupling of economic growth and environmental pressure that has occurred in Europe over the last two decades for important pollutants has been the result of comprehensive policy interventions driven by environmental concerns. These policy interventions were designed both at the national and the European level.

The European competence for environmental policies was found where cross-border pollution was threatening the environment and/or where single market and competition considerations were sufficiently important that one could not leave Member States alone to design their preferred policies. In this context, European policies have been very successful with respect to improving air quality; policies relating to the protection of soil and water, habitats and biodiversity have also got their European mark.

So far, most of these policies have been characterised by the dominance of a regulatory approach, that is, prescribing best available technologies (not entailing excessive cost) or emission standards and limit values. However, large differences in marginal abatement costs either require very differentiated regulations that might be in contradiction to a level playing field, or better use of market and incentive-based instruments, as the latter better exploit the information and incentives contained in different abatement costs. It has been shown in this chapter that using price signals in a more comprehensive and consistent way could be a very effective tool of environmental policy in the long run. So far, however, actual price signals very often worked to the detriment of environmentally sustainable developments, as policy-makers allowed a gradual erosion of these signals in real terms.

In general, the pollution content of production in Europe has declined for two reasons: structural change and less polluting technologies. It was especially the second that was triggered by environmental policy, while the first was more driven by shifts in demand, newly emerging industries and delocalisation of dirty and declining industries.

At present, a large part of environmental pressure is caused by the (dirty) burning of fossil fuels. While for some of the environmental problems related to this more or less expensive end-of-pipe technologies exist, for others, like climate change, process innovation is the only currently cost-effective alternative from an environmental perspective. In consequence, the dependency of our economic structures on burning these fuels has to be reconsidered and reduced. This is a major challenge, and the economic effects of the policy responses to meet this challenge will crucially depend on their design and the perception of it by society. If badly designed, it could be perceived as a cost push, damaging for the European industry and economic growth. If well designed, it could be perceived as a visionary policy triggering technical progress and new markets.

So far, model simulations and cost benefit analyses of existing environmental policies show that they were in general welfare increasing with largely positive benefit-cost ratios, while their impact on macroeconomic aggregates were quite negligible. Often, however, they pushed new markets, created employment in environmental industries, and improved overall welfare. Nevertheless, more careful preparation of environmental legislation could even make policies more cost-effective. This, however, would require better data on the effects of policies, and on dose-response relations to better value the welfare gains of environmental policies.

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Chapter 5

Real convergence and catching-up in the EU

Contents

1. Introduction

Beyond the issue of economic growth, the question of real convergence has, since the end of the 1980s, captured the attention of policy-makers and researchers. Interest in convergence is twofold. Firstly, the questions raised, such as whether the spatial dispersion of per capita incomes tends to decline over time, and whether poor economies tend to grow faster than rich ones and converge to the same levels of income per capita, are key economic questions, especially in the EU. The objective of economic and social cohesion aimed at reducing disparities between Member States, regions and individuals is laid down in article 158 of the Treaty and has been given increased emphasis since the end of the 1980s. It is not only of major importance for the present catching-up economies, but will also become crucial in the context of eastern enlargement. Secondly, testing the existence of convergence has been considered as a main way of testing the validity of theories of economic growth and subsequently of assessing whether growth can be positively influenced by policies. It thus has implications for national and EU policies, in particular the EU's proactive cohesion policy channelled mainly through the Cohesion and Structural Funds.

Before addressing real convergence, the distinction between its two spatial components — international and interregional convergence — has to be recalled. At the EU level the former applies to convergence of the less developed Member States with the rest of the Union (national convergence towards the EU average). The latter targets convergence of the less developed regions, be it to the EU average or, within a country, to the national average.

The main issue is whether convergence occurs across countries and regions. Neither economic theory nor the relatively limited empirical evidence available provide an unambiguous answer. Section 2 summarises the theoretical and empirical literature. Focussing more specifically on the EU context, Section 3 examines the patterns of national and regional catching-up. In terms of income, an overall process of convergence can clearly be identified for cohesion countries, although differences in catching-up patterns are significant and to a lesser extent for less developed regions in the EU. Tension can, however, be detected between national convergence and within country regional convergence. In terms of underlying sectoral structures, no drastic changes in specialisation and concentration over the last 20 or 30 years have been found by recent empirical analyses. Section 4 complements this description of national and regional growth patterns with a brief review of the main policy aspects that affect long run growth. Their general positive influence can be seen in EU catching up countries which had to undergo very significant adjustments. Section 5 concludes.

2. Real convergence and catching-up: theory and evidence

Economic theory does not provide unambiguous predictions about the convergence or divergence of per capita income levels across countries or regions. Nor are they provided by the empirical evidence available, which has been questioned in terms of its relevance and proper interpretation, not least because of the econometric difficulties involved in the estimation of growth convergence models.

The study of growth has traditionally been approached through an aggregate production function. Using this methodology, two main groups of models — the neo-classical and the new endogenous growth models — arrive at very different predictions of convergence through the identification of mechanisms able to generate either convergence or divergence. Compared to this aggregate and across-the-board vision of the growth process, the more recent models of the so-called 'new economic geography' adopt a more differentiated view, suggesting that location matters and that different sectors may exhibit different dynamics over time. They thus emphasise that the process of convergence may be more complex than indicated by changes in any single aggregate measure.

2.1. The aggregate approach to convergence: contrasting views

Aggregate growth models identify at least two factors which can have contrasting implications for income dynamics: technological progress and production properties. In the classical approach, either initial (Solow (1956)) or extended to include human capital, output per worker can rise only if the ratio of capital per worker increases or if technology (i.e. total factor productivity) improves. The first mechanism generating convergence derives from the diminishing returns to capital property of the production function. Poor economies with lower ratios of capital per worker and thus higher returns to capital will experience faster rates of capital accumulation and faster growth. This process will be reinforced by the free movement of factors, especially capital that will flow from richer countries. Due to the production property, the only way to increase output per worker in the long run is to have sustained productivity growth. The second convergence mechanism rests on the assumption that technological progress is exogenous and can be acquired by all economies at no cost.

However, these two factors can be subject to opposite assumptions leading to divergence. In the case of increasing returns to capital, rich economies will benefit. Similarly, if economies differ in their ability to generate or adopt new technologies, their long-term growth rates could differ permanently, reflecting differences in structural characteristics. The new, more sophisticated growth models developed in the 1980s focus on such possibilities via two main approaches explaining growth as an endogenous process. The first strand (initiated by Romer (1986) and Lucas (1988)) drops the assumption of diminishing marginal productivity of capital. Accumulation of capital extended to knowledge, human and public capital has permanent effects on the rate of growth. The second strand (Romer (1990), Grossman and Helpman (1991), Aghion and Howitt (1992), and others) emphasises the endogenous development of technological progress, i.e. various forms of knowledge, as the engine of growth. Both cases allow for the possibility of persistence or even increases in inequality.

The neo-classical and endogenous models target an aggregate measure of convergence, i.e. income (generally real GDP) per capita. They focus on some of the factors which influence growth, i.e. those reflected in total factor productivity and broad capital accumulation. However, labour input and utilisation (e.g. employment rates, labour force participation, average working time) should not be overlooked. As illustrated in Section 2 of Chapter 3 on the decomposition of real GDP growth, they have also had an important impact on GDP per capita differences across countries and regions over the

past two decades in the EU. While the deviation of unemployment rates between Member States has declined in the second half of the 1990s, disparities have increased at the regional level.

Since the neo-classical and endogenous models have different views on the mechanisms and processes generating growth, they have different implications for convergence and public policy. In the latter, per capita output can grow without bound but convergence need not occur. However, government policy can positively affect the long-run growth rate through economic incentives for the accumulation of various forms of capital and through a context which is more conducive to innovation. In the basic neo-classical models, policy does not have an impact on the long-run growth rate but can alleviate obstacles impeding the realisation of potential high returns e.g. investors' uncertainty and inadequate functioning of markets. Macroeconomic stability, structural reforms and openness are thus recommended for convergence to operate.

The neo-classical model predicts the equalisation of per capita incomes in the long run i.e. that poorer economies will grow faster than rich ones and converge to the same long-run equilibrium level of income. This so-called absolute convergence is a necessary condition for the dispersion of per capita incomes to decline over time. It is thus of major interest to policy-makers in the EU who are concerned with the existence of disparities, especially the relatively large ones between rich and poor economies, be they between countries or within a country, such as between northern and southern Italy or between western and eastern Germany. If economies do indeed converge to the same level of income, the role for regional policy is limited, although it might accelerate the speed of convergence. However, the neo-classical model itself predicts absolute convergence only under certain conditions, in particular similarity in fundamentals. If fundamentals differ, there can only be conditional convergence: an economy will only converge to its own long-run equilibrium level income. Since these can be very different across economies, disparities could persist even in the long run. Conditional convergence would thus suggest that the factors described by the endogenous growth theory may indeed be relevant. It would also point to a greater need for a pro-active regional policy. Provided that policy can affect the long-term determinants of relative income levels as highlighted by the new models, it would be instrumental in achieving absolute convergence in the long run. As fundamentals can change and converge over time, absolute convergence is in any case not precluded.

Significant empirical work has been conducted to test for convergence and the predictions of theories (Box 1 briefly defines the concepts of convergence and the methods used). The classical approach, as represented by Barro and Sala-i-Martin (1991), enjoyed consensus until the mid 1990s. This provides a unified framework for convergence across different economies based on three main conclusions. Firstly, while convergence is only conditional at national level, it is also absolute in most regional samples. Secondly, the speed of convergence is extremely slow (around 2 % per year) implying that the convergence process will take decades. Thirdly, such speed is remarkably stable across samples, suggesting an impressive regularity of convergence mechanisms within very different economies. The finding of a negative partial correlation between growth rates and initial levels of income is interpreted as evidence in favour of the neo-classical theory (as this correlation could be positive in some endogenous growth models). However, this framework has been challenged by recent studies which give a very different view of the convergence process. They find that economies do not display slow convergence to a common income level but fast convergence towards very dispersed income levels, implying the persistence of inequality. Using econometric specifications that allow for unobserved differences across economies, they find rates of convergence of up to 12 % per year in cross-country analyses ([1]) and even stronger rates (up to 20 %) for regional convergence ([2]). These studies suggest that differences in technical efficiency are substantial and persistent across economies and that it is these — rather than differences in factor stocks — that explain the dispersion of income levels. However, since the techniques they use are not exempt from criticism, the empirical work on convergence is still far from conclusive and does not shed more light on the explanation of growth mechanisms. The theoretical work in the economics of growth seems to be ahead of the empirical work.

Empirical results on absolute and conditional regional convergence in the EU and an illustration of the two aforementioned strands of research are given in Box 2.

([1]) For example Canova and Marcet (1995), Islam (1995), Caselli et al. (1996).
([2]) For example Raymond and Garcia (1994), Canova and Marcet (1995), De la Fuente (1996a), Tondl (1999), and others.

Box 1: Testing for convergence

Barro and Sala-i-Martin (1991) have defined three concepts of convergence based on the evolution of per capita income differences. σ convergence implies that the dispersion of per capita income levels in a group of economies tends to decrease over time, and tracks the evolution of the distribution of income. ß convergence relates to the mobility of the economies within a given distribution. There is absolute ß convergence if poor economies tend to grow faster than rich ones, under the assumption that all economies in the sample share the same economic fundamentals and only differ in terms of their initial level of income. Absolute convergence thus implies that all economies converge to the same long-run equilibrium level of income per capita ('steady state'). If economies differ in their fundamentals and thus in their steady states, conditional ß convergence implies that an economy grows faster the further it is from its own steady state. Since steady states can be very different across economies, inequalities can persist with conditional convergence while absolute convergence leads to equalisation. However, underlying fundamentals and thus steady states can change over time and gradually converge, implying absolute convergence in the long run.

σ convergence is tested by examining the time-path of some measure of dispersion of income per capita (generally the standard deviation). ß convergence involves the estimation of a growth convergence equation, using cross-section data or, more recently, pooled data. Absolute convergence is evidenced by a negative correlation between an economy's initial level of per capita income and its average growth rate in the ensuing period without conditioning for variables that would proxy differences in fundamentals and steady states across economies. Conditional convergence implies controlling for such differences through appropriately identified and measured variables. Unconditional and conditional convergence equations will yield different estimates of the convergence rate ß since the former captures the speed at which an economy approaches a steady state which would imply changes in its structural characteristics, while in the latter the steady state is determined by the values of its current characteristics.

The use of convergence regressions and the results obtained have been subject to criticisms. Some are linked to the cross-sectoral averaging method, which assumes the homogeneity of economies at different stages of the growth process and linear relationships between growth and the explanatory factors, missing important interactions. Others point to the difficulty of properly identifying and quantifying all differences between economies (institutions, education level, industrial structures). They plead for the inclusion of fixed effects in the regressions that would account for the existence of systematic differences without having to make them explicit. Such techniques have been used in conjunction with either panel data (e.g. Canova and Marcet (1995)) or cross national data (e.g. Caselli et al. (1996)).

Box 2: Regional ß convergence in the EU: some main examples of empirical research

Although regional convergence has been investigated relatively recently, it has led to a wide range of empirical estimates based on different time periods, groups of countries and regions, data sets and model specifications. Thus, only some of the main results on regional convergence are briefly reported below. Until a few years ago, the 'classical approach' to convergence analysis as represented by Barro and Sala-i-Martin was shared by most researchers. The key finding is an indication of both absolute and conditional convergence at a very slow rate in similar economies. Barro and Sala-i-Martin have investigated, *inter alia*, regional ß convergence within a number of individual EU Member States i.e. convergence to the national mean rather than to a common EU level. They found (Sala-i-Martin 1995) both absolute and conditional convergence at very similar rates (from 1–2.1 % per annum for absolute convergence, 1–3 % for conditional convergence) within Germany, the United Kingdom, France and Italy for the period 1950–90 and within Spain from 1955 to 1987. Conditional convergence was faster within the United Kingdom (3 %) and Spain (2.3 %) than in Italy (1 %). Using a similar approach, Neven and Gouyette (1994) investigated ß convergence for all NUTS II level EU regions for the period 1980–89 in terms of per

capita income relative to the EU average. Absolute convergence was found to be very weak (0.5 % per annum). Using a sample of 142 regions and accounting for regional differences in steady states, the rate of ß convergence reaches 1.1 % and is associated with a strong catching up of southern regions in the first part of the decade, whereas convergence occurred mainly among the northern regions in the second part. Absolute ß convergence should lead to a fluid distribution in which the relative positions of the different regions change rapidly. However, in the EU, there is some suggestive evidence of persistence and immobility in cross-regional growth experiences. Although the poorest 10 % of regions (in terms of population) have converged to the EU-15 GDP per capita over the period 1987–97, there have been few changes in the regions making up this group which is still dominated by Portuguese and Greek regions. Conversely, the 10 % of regions with the highest GDP per capita includes the same northern capital city regions. Recent studies suggest that, at least in the EU case, convergence is not absolute and results from a bias arising from the use of econometric specifications that do not adequately allow for differences across regions. They model region–specific unobservable factors by employing panel data estimation techniques that use observations for several points in time and thus build on richer information than the conventional cross-section regressions. Such an approach is illustrated by Canova and Marcet (1995) who study convergence of NUTS II level regions from nine Member States for the period 1980–92 using a Bayesian procedure. They found that EU regions converged to their own steady state at a rate of 23 % on average, with lower rates of convergence in parts of France, the Netherlands and the United Kingdom and much higher rates in parts of Portugal and Greece. Their regional convergence view is in sharp contrast with the classical one. Instead of slow convergence to a common income level, regional economies seem to be converging extremely fast but to very different steady states, implying the possible persistence of inequality. Tondl (1999) uses both the traditional cross-section regression analysis and a cross-section time series analysis with panel data estimation accounting for region-specific effects. She undertakes a thorough analysis both in terms of spatial and time-period coverage, targeting all EU-15 NUTS II level regions from 1960 to 1994, as well as regions in the EU-9 for the 1950s. The cross-section regression yields impressive evidence of ß convergence among the EU-9 regions in the 1950s (2 %) and the 1960s (3 %). For the period 1960-73, using another data set, the convergence speed is about 1.7 % per annum for the EU-9 regions and reaches some 2 % when the regions of Spain, Greece and Portugal are added, indicating catching-up by the latter, particularly since 1966. Over the next two decades (1975–94), the speed of convergence slowed down. Convergence continued at a slower rate in the period 1975–80 (1.2 % for EU-9, 1.4 % for EU-12), practically ceased from 1980 to 1986 (0.5 % for EU-9, suggesting club convergence) and after 1986 regained the level experienced in 1975-80. Convergence among all EU-12 regions is estimated at 1.3 % in 1986–92, with a convergence rate of 1.4 % among the cohesion regions. An alternative panel data methodology allowing for the estimation of individual regional factors in convergence reflecting regional steady-states differences is also used. In this case, the convergence coefficient reflects the convergence of each region towards its own steady state and is higher than in the cross-section analysis: it reaches 0.19 for the period 1975–94. It is particularly high (0.56) in 1980–86 while hardly any convergence could be detected from the cross-section analysis, implying that regional steady states drifted apart, became more dispersed and specific. This, in turn, suggests that the relevance of factors described by the endogenous growth theory may have increased.

Panel data estimations are not exempt from criticism. Thus, the only conclusions that can be inferred from the current state of the art are the evidence of some sort of convergence across EU regions and the limited ability of models to explain the actual features of persistence, immobility and diversity in growth experiences, i.e. why a great majority of regions remains either rich or poor.

2.2. Convergence as a more differentiated process

Aggregate growth theories have tended to describe a disembodied economy, paying little attention to microeconomic conditions and to the location of economic activities. The ‘new economic geography’ that has emerged since 1990 is concerned with the spatial implications of growth, not its origins. While traditional economics has explained income disparities in terms of differences in factors of production or technology, the new geography shows that even in economies with similar underlying structures, the distribution of activity may not be uniform, as evidenced by the existence of agglomerations. It brings together in a common analytical framework the dispersion/convergence forces highlighted by traditional trade theory and divergence forces in order to analyse their relative strengths and evolution.

This approach shares some features of the new growth theory, in particular the concept of cumulative causation identified by development economists (e.g. Myrdal, 1957; Hirschman, 1958) and the crucial role played by increasing returns. The latter are essential, at the level of individual firms, for explaining the uneven distribution of activity. In their absence, firms producing in regions with relatively high concentrations of firms would face stronger competition and lower relative profitability leading to spatial dispersion.

Models, with some variations, have been developed during the 1990s (see Fujita et al., 1999) in order to analyse the interactions between increasing returns, transportation costs/ market access and the movement of productive factors, using the Dixit-Stiglitz (1977) model of monopolistic competition and the Samuelson 'iceberg' form for transportation costs ([1]). This approach has been applied to regional, urban and international economies. It is of particular interest for the EU in considering how a gradual integration can affect differences in production structures and possibly income levels and whether it will lead to increased and spatially concentrated specialisation as evidenced in the USA.

The most recent models suggest a possible evolution of the spatial pattern of activities that can be stylised via a U-shaped relationship between trade costs and agglomeration. With the beginning of integration and high trade costs, firms will serve mainly local final demand and industry will be dispersed. With the lowering of trade costs, firms will tend to exploit economies of scale by concentrating production close to markets where there are more customers and suppliers, allowing for cost and demand benefits. In particular, firms will tend to be close to other firms supplying intermediate goods in order to reduce their production costs (forward or cost linkages) and this proximity will raise the sales and profits of intermediate goods industries (demand or backward linkages). Such gains will outweigh higher wage costs. Concentration will develop endogenously as more firms and workers are attracted. However, when trade costs are further reduced and tend to disappear, higher wage costs in agglomerations will lead industries to move to regions where they can benefit from labour cost advantages. The likelihood of dispersion is increased by low labour mobility — as seems to be the case in the EU — as it preserves wage differentials. According to Puga and Venables (1996), industry could spread in a series of waves with labour intensive industries relocating first and then upstream, downstream and weakly linked industries, creating in turn demand for intermediate and capital goods. Although they are very cautious as regards welfare implications, the new economic geography models suggest that differences in income may result from the spatial pattern of agglomeration of economic activities. Partial integration tends to bring larger gains for more advanced economies as firms will exploit economies of scale by concentrating. This will tend to increase differences between rich and poor economies. However, the same forces that foster divergence can eventually reverse it. With integration going far enough, poor economies which have maintained their labour cost advantages would be able to catch up. The type of industries they will attract may not, however, be neutral for their convergence process. If traditional labour-intensive industries alone were to relocate, technological progress might be less significant and according to aggregate growth theories, limit the long-run growth rate of initially poor economies. The available empirical evidence on the evolution of the location of industries in the EU, reviewed in Section 3.3, gives a more optimistic picture.

Compared with both the classical and new growth models, the new economic geography models show that the behaviour of different sectors can lead to distinctly different spatial convergence and time profiles and that the process of convergence is more complex than suggested by an aggregate view.

([1]) The 'iceberg' assumption is that a share of the good 'melts' during the transport. It means that there is no need for a more complicated modelling of a transport sector.

3. Patterns of catching-up in the EU

In a nutshell, there is evidence of long-term catching-up in the EU at the level of Member States, but the situation is less clear-cut at the regional — or sub-national — level. Section 3.1 describes a number of different perspectives on income convergence at the EU level, while Section 3.2 addresses the specific issue of a potential trade-off between national and regional convergence, and Section 3.3 describes changes in industrial specialisation.

3.1. Income convergence at EU level

There are many possible ways of looking at income or real convergence. A choice must first be made as to the administrative level and the respective reference analysed. Below we take a twofold perspective by looking at the convergence of Member States and of regions towards the EU average. A major constraint is the availability of data at the regional level, and we therefore focus on GDP per capita in purchasing power standards (PPS), which has been used as the main criterion for Structural Funds eligibility in the last decade so that the relevant data are provided by Eurostat. The standard view is that the poorest regions are on the periphery of the EU and the richest regions in the core of the EU. Whether this view is still correct is the main issue of this section.

Long-run convergence of 'cohesion countries'

The four countries whose per capita income was significantly below the EU average during the 1990s — Greece, Spain, Ireland and Portugal — are also referred to as 'cohesion countries'. The label arises from one of the main objectives defined in the EC Treaty, economic and social cohesion, and from one of the instruments used to achieve this objective, the Cohesion Fund, for which only these four countries are eligible.

Compared to their starting levels in 1960, all four countries can be said to have succeeded in catching-up, at least to some extent, to the EU-15 average (Graph 1). However, the experience of the four countries in this period has been very different.

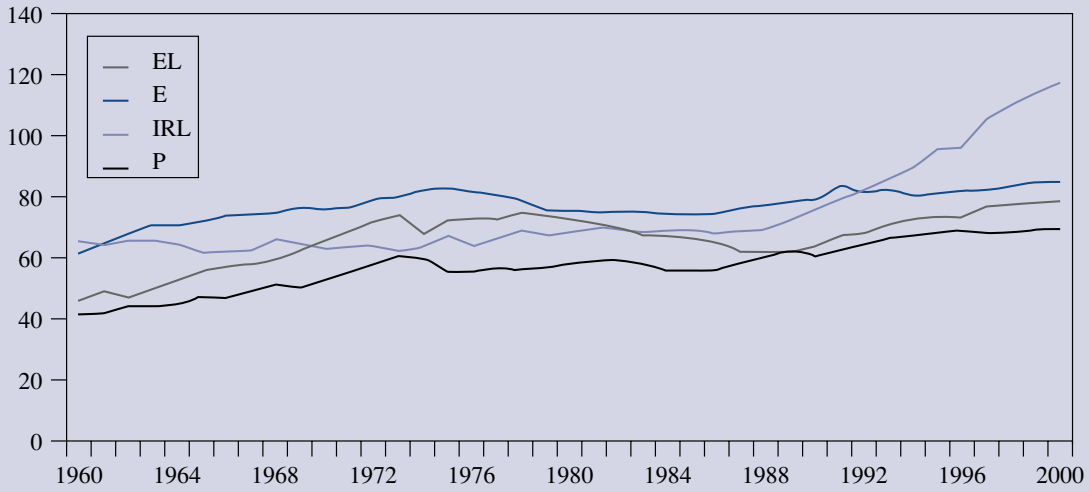
- Ireland's income level is now above the EU average, due to continuously high growth since the end of the 1980s. However, the income level is about 10 percentage points lower if measured in terms of GNP per capita, mainly due to the significant presence of multinational firms whose repatriated profits are not included in GNP.
- Portugal's catching-up from 40 % of EU average in 1960 to almost 80 % in 1999 more or less stagnated between 1973 and 1986.
- Spanish GDP growth was slower than the EU average between 1976 and 1985 and again in the early 1990s so that it was only in the mid-1990s that the income level of the early 1970s of above 80 % was reached once more.
- Greece experienced a phase of income divergence during the 1980s when its GDP per capita relative the EU average declined from above 70 to 60 %.

In order to gain an initial perspective of the factors underlying these developments, without implying direct causality, a simple decomposition of GDP per capita by productivity and employment may be useful:

$$\frac{\text{income}}{\text{population}} = \frac{\text{income}}{\text{employment}} * \frac{\text{employment}}{\text{population}}$$

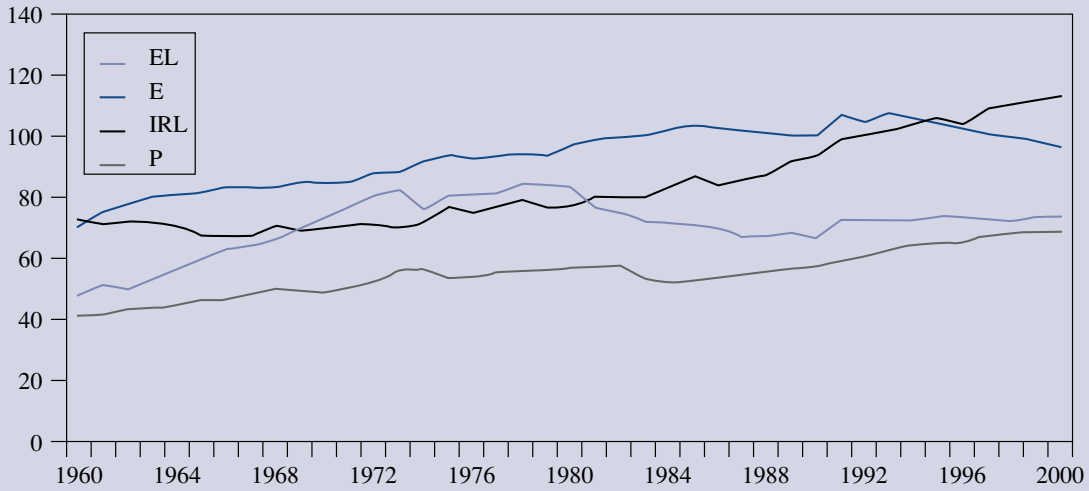
Spain and Ireland had already reached the EU average level of productivity, measured in terms of GDP per employee, in the beginning of the 1980s and the 1990s respectively (Graph 2). In Greece and Portugal, the evolution of productivity closely followed changes in income, although the relative level is somewhat lower for Portugal than for Greece.

Graph 1: **GDP per capita in cohesion countries** (PPS, EU-15 = 100)



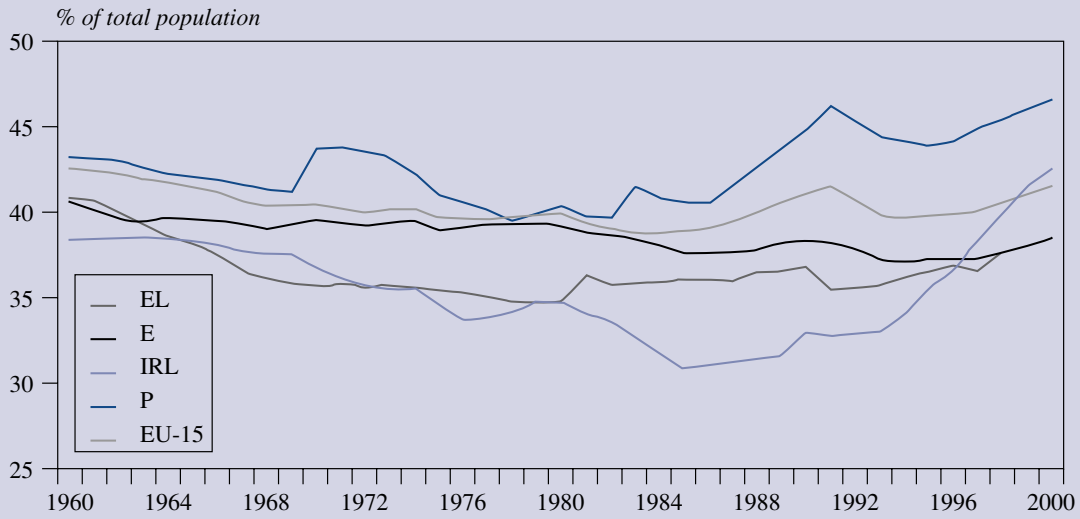
NB: EU-15 average 1960–90 excluding GDR, 1991–2000 including East Germany; 1999 and 2000 estimations and forecasts.
Source: Commission services.

Graph 2: **GDP per civilian employee in cohesion countries** (PPS, EU-15 = 100)



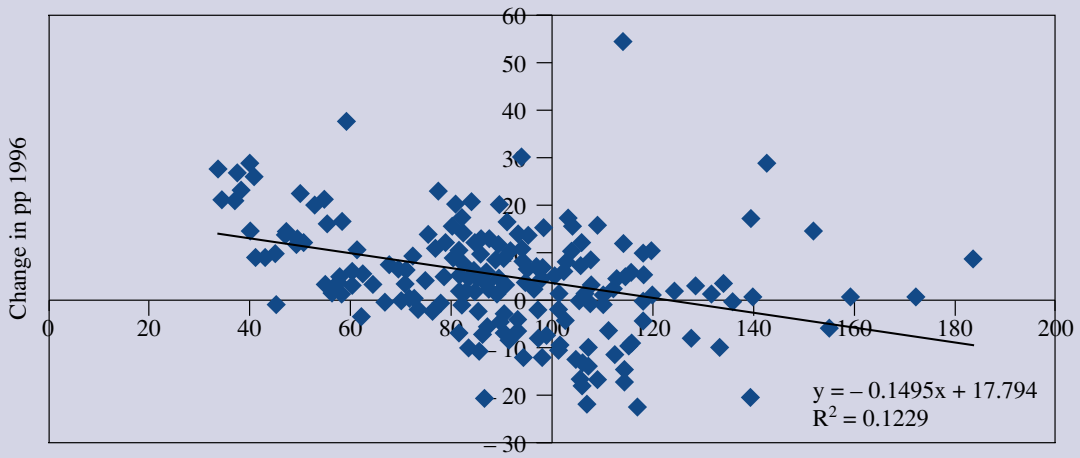
NB: EU-15 average 1960–90 excluding GDR, 1991–2000 including East Germany; 1999 and 2000 estimations and forecasts.
Source: Commission services.

Graph 3: **Civilian employment in cohesion countries and EU-15**



NB: 1999 and 2000 are estimations and forecasts.
Source: Commission services.

Graph 4: **GDP per capita in 188 NUTS 2 regions, 1980 and 1996** (PPS, EU-15 = 100)



NB: National data were used for Denmark, Ireland and Luxembourg; Groningen was excluded as an extreme case; where no data were available for 1980, the first year of data availability was taken instead which was 1991 for eastern Germany and Berlin, 1986 for eastern Netherlands, 1988 for Austria, 1981 for Portugal (1988 for Açores and Madeira), 1988 for Finland, 1985 for Sweden and 1981 for English regions (1994 for London).
Source: Eurostat Regio database (ESA79 methodology) and own calculations.

Convergence of income and productivity has been strongly supported by growth in employment in Ireland and Portugal in the 1990s, where civilian employment relative to total population is now over 40 % and higher than the EU average (Graph 3). In contrast, employment is traditionally low in Greece and Spain, as is also reflected in their above EU average unemployment rates, and employment has only recently started to grow again.

Slow convergence of regions in the EU

As indicated in Section 2, a standard empirical approach in the convergence literature is to regress the growth rates in a given period onto the initial level of income of the countries or regions in the sample. A similar approach is applied in Graph 4 by regressing the change in relative GDP per capita of 188 regions between 1980 and 1996 onto their relative GDP per capita in 1980 (or the first year of data availability). Absolute convergence would require all dots to be in the lower right and the upper left fields of the graph. Examples of upwards convergence are Ireland, the eastern German *Länder* (where the first year of data availability is 1991), many British regions as well as most Greek, Spanish and Portuguese regions; downwards convergence occurred in several French and Swedish regions. However, many dots also appear in the upper right field (e.g. Luxembourg, Denmark, several western German and North Italian regions) and in the lower left field (e.g. some French, Finnish and UK regions), which both reflect cases of regional divergence within the EU. Consequently, the regression equation indicates only little convergence. The unweighted standard deviation for the same sample decreased only slightly from 26.5 in 1980 to 25.0 in 1996.

Other statistical indicators confirm the general conclusion that convergence at the regional or sub-national level in the EU was rather slow in the 1980s and 1990s. One explanation is that this period saw some severe economic downturns, which tend to hit the less diversified, poorer regions more than others. Moreover, catching-up processes in the cohesion countries did not always affect all regions equally, as will be further discussed below.

3.2. The trade-off between national and regional convergence

Catching-up countries enjoying a high national growth rate often see a widening of interregional disparities in terms of per capita income, as national growth tends to be driven by growth-pole effects which emerge in capital cities and other major agglomerations. Although regional convergence may increase as development proceeds, the early stages of the catching-up process tend to be characterised by a potential trade-off between national and regional convergence. The cohesion countries show some evidence of such a trade-off, as those countries experiencing higher aggregate growth rates have also seen a widening of regional disparities, while regional convergence tends to be associated with low national growth.

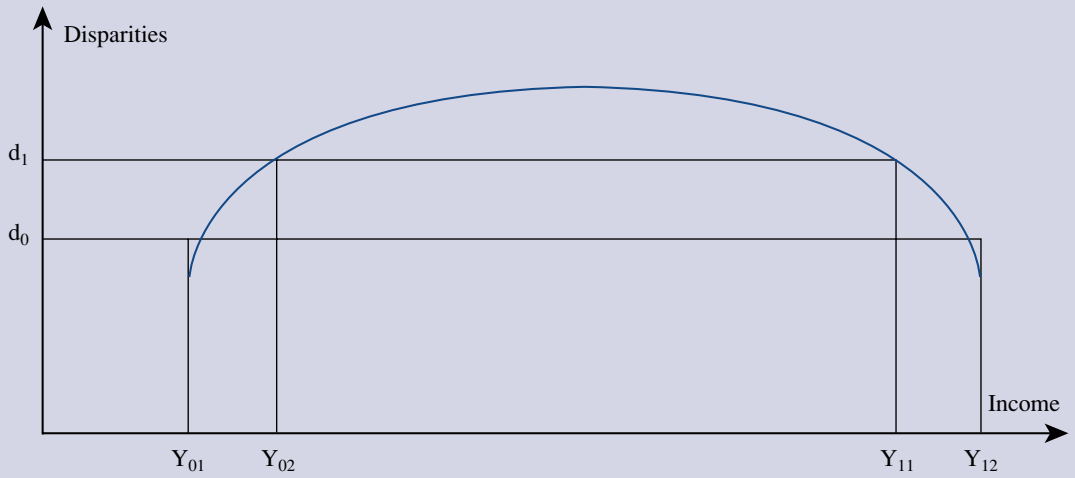
One hypothesis is that regional disparities in catching-up countries follow the shape of an inverted-U curve over the national growth path (Graph 5) ([1]). Thus the same forces which drive high growth in such economies are seen to generate first a widening and then a narrowing of regional disparities in the per capita distribution of income. The higher national rate of growth in catching-up economies tends to be generated by the emergence of a limited number of growth poles, which see the emergence of agglomeration economies, in the form of knowledge spillovers and economies of scale. Private capital and skilled workers are attracted by the new opportunities proliferating in the growth pole regions, leading to cumulative rises in productivity and growth. By definition, the more rapid growth of certain regions leads to a widening of interregional disparities.

Over time, however, diseconomies, such as congestion and high factor costs, tend to emerge in the growth pole regions. Capital is therefore likely to move to other regions where marginal returns are higher, assuming that their factor costs are lower. Similarly, the spatial concentration of knowledge spillovers may fall due to technological diffusion, particularly if there are improvements in country-wide communications. Moreover, while the early phases of the catching-up process may be characterised by strong disparities in per capita income between urban and rural areas, over time the reallocation of productive factors across sectors, not least the decline of agriculture, tends to reduce the disparities between urban and rural areas.

Policy-makers' decisions — particularly relating to the location of public investment — may also contribute to the rise and fall of regional disparities during the catch-

([1]) For an examination of this spatial version of the Kuznets curve, see Williamson (1965). For more recent studies, see Martin (1999) and Lucas (2000).

Graph 5: **The Williamson hypothesis of the relation between national development and regional disparities**



Source: Commission services.

ing-up process. In early stages, public investment tends to be focused on the growth pole regions, either because priority is given to the objective of maximising national growth, or simply due to the emergence of increased pressure for public infrastructure in the rapidly developing regions (e.g. for transport, communications, water supply, health and education systems). In later stages, greater political priority may be given to the objective of spatial equity, by directing public investment to slower growing regions. This policy shift may be stimulated by the need to reduce diseconomies of agglomeration in the original growth pole regions, as well as by the perceived desirability of providing the conditions, such as public and human capital, needed to attract private investment to other regions.

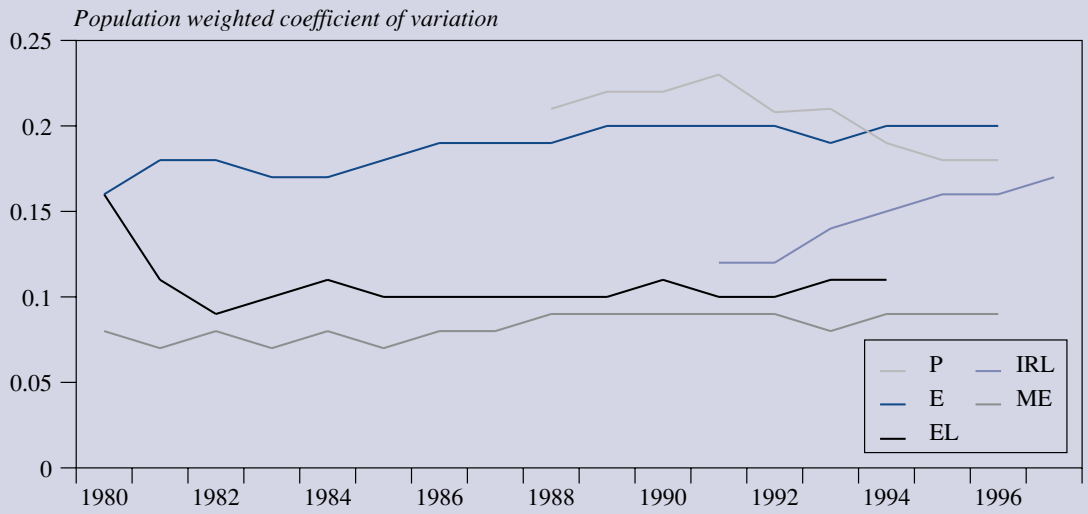
The cohesion countries show some evidence of a trade-off between national and regional convergence ([1]). Despite differences in the evolution of national growth paths and interregional disparities in the 1980s and 1990s (Graph 6), there appears, in general, to be a correlation between high growth rates and a rise in regional disparities (Graph 7 and Table 1). Ireland and Spain have seen higher growth rates and a widening of regional disparities, while Greece has experienced a low growth rate and a fall in regional dispersion.

Ireland provides a good illustration of growth pole effects as the strong national growth rate in the 1990s was driven by the particularly rapid growth of the eastern and southern regions, not least Dublin and the surrounding area, which have accounted for a growing share of national gross value added or GVA (Table 1). Although the higher growth rates of these regions have led to a widening of regional disparities within Ireland, all regions converged towards the EU-15 average level of GVA per capita in 1991–97.

Spain also demonstrates the potential impact of growth pole effects on both national growth rates and regional disparities, although less dramatically than Ireland does. Spain's national growth path in 1980–96 was driven by the particularly rapid growth of some of the regions with the highest levels of per capita income, particularly Madrid and Cataluña. Although this has led to a gradual rise in regional disparities within Spain, all Spanish regions except Asturias and Cantabria converged towards EU-15 average level of GDP per capita in this

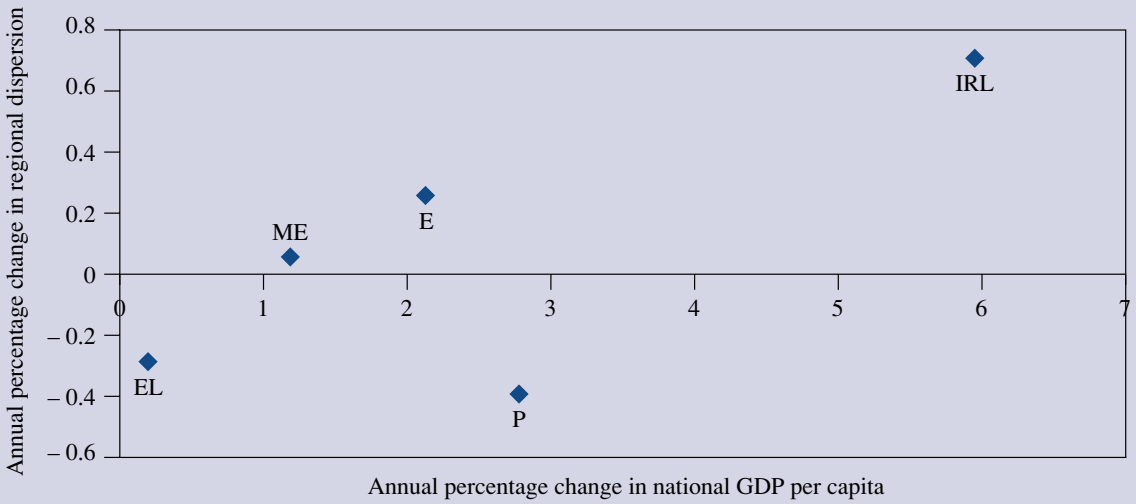
([1]) See also Quah (1999) and Petrakos and Saratis (2000).

Graph 6: **Regional dispersion in the cohesion countries and southern Italy**



Source: Eurostat and Istat data, own calculations. ME = Mezzogiorno.

Graph 7: **National GDP per capita growth and regional dispersion of GDP per capita in the cohesion countries and southern Italy**



NB: Data are for 1980–96, except Ireland (1991–97) and Portugal (1988–96). ME = Mezzogiorno.
Source: Commission services, Istat and Central Statistics Office Dublin, own calculations.

Table 1

Gross value added (GVA) per capita in Irish NUTS II regions, 1991–97

	1991	1992	1993	1994	1995	1996	1997
Border, Midland and Western Ireland							
IRL = 100	78.7	78.8	76.7	74.2	73.4	73.4	71.4
EU-15 = 100	59.8	62.2	62.9	67.5	70.4	71.2	74.3
Southern and Eastern Ireland							
IRL = 100	107.8	107.8	108.5	109.4	109.7	109.6	110.3
EU-15 = 100	82.0	85.2	89.0	99.6	105.3	106.3	114.7

Source: Central Statistics Office, Dublin 1999.

period, with the main phase of convergence occurring in 1987–91. However, despite major progress in job creation in recent years, regional differences in unemployment remain significant, ranging from 7.1 % in La Rioja to as high as 26.8 % in Andalucia in April 1999.

The mirror-image of the trade-off between national growth and regional equity can be seen in Greece. Average national growth in per capita income was only 0.2 % in 1980–94, so that Greece diverged from the rest of the EU. This very low national growth rate is correlated with a lack of growth in the major agglomerations of Athens and Thessaloniki. The level of GDP per capita fell in these regions, as well as in Continental Greece, particularly in the early 1980s, leading to a reduction in interregional disparities. While some of the island regions converged towards the EU-15 average in 1979–94, it was only with the resumption of steady growth in Athens and Thessaloniki in 1991 that Greece started to converge towards the EU-15 level of GDP per capita. At the same time, regional disparities rose gradually in 1991–94. Even so, GDP per capita in the Athens region in 1994 was still below its 1979 level as a share of the EU-15 average.

Portuguese data show a different pattern, as the annual average growth rate of GDP per capita was relatively strong, at 2.8 %, in 1988–96, yet regional dispersion fell slightly, largely due to the below-average growth of the richest NUTS II region, Lisboa e Vale do Tejo. However, Portugal's NUTS II regions' borders are defined horizontally, which conceals the main pattern of disparities between the industrialised coastal areas and the less developed hinterland. More disaggregated NUTS III data are only available for 1991–96, and show positive growth in GDP per capita across all regions, but particularly in a number of regions located along the western coastline. As these regions grew more rapidly than two of Portugal's richest regions — the metropolitan areas of Grande Lisboa and Grande Porto — there was a move towards regional convergence in this period. An earlier study of regional and national convergence in the cohesion countries in the 1980s, using a different dataset, found evidence of strong national growth and a rise in regional disparities due to the more rapid growth of the main growth poles (Quah, 1999). This may indicate that a shift has occurred in Portugal in the 1990s, with a number of other coastal regions catching up with Lisboa and Porto, which led the national convergence process in the 1980s. However, regional disparities remain significant, due in part to the division between coastal and inland areas. Moreover, the islands of the Açores and Madeira still have lower income levels, with GDP per capita at around 70 and 77 % of the national average respectively.

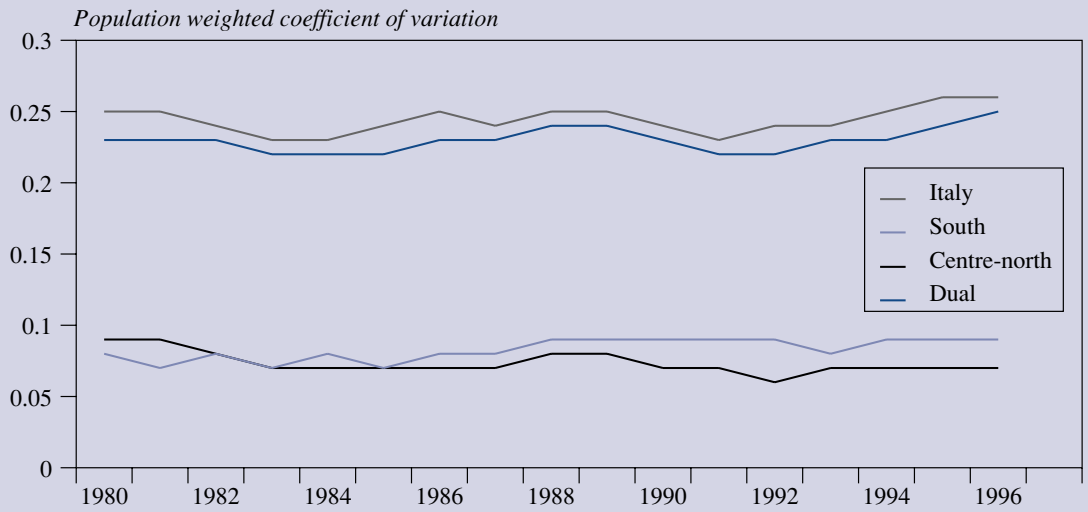
The potential correlation between regional convergence and low national growth is also seen in Germany and Italy, two EU Member States with significant regional disparities. Italy's high level of regional inequality is almost entirely due to its polarisation into the two distinctive economies of the centre–north and the south. GDP per capita in the centre–north is about 20 % above the national average and in the south about one third below the national average. This picture has changed very little in the last 20 years. Differences in unemployment are even more pronounced, ranging from 3.9 % in Trentino/Alto Adige to 28.7 % in Calabria in April 1999. However, interregional disparities within the centre–north and the south respectively are remarkably low (Graph 8). In 1980–96, southern Italy's aggregate growth rate in per capita GDP was only 1.2 %, leading

to further divergence from the rest of the EU-15. The lack of significant growth pole effects in southern Italy in this period is a key factor for the stagnation of inter-regional disparities.

Although the real convergence of southern Italy has been a specific national policy objective since 1950, public intervention has overwhelmingly taken the form of income transfers to households, largely in the form of pensions and public employment, rather than investment in human or physical capital (European Commission, 1993; Alesina et al., 1999). Moreover, particularly in the 1960s and 1970s, much of the public investment in the South occurred via the expansion of State-owned enterprises, which led to the development of a productive sector concentrated in traditional industrial sectors, and characterised by a lack of international competitiveness and by low productivity. Other national policies have also had perverse effects, particularly the introduction of a national wage agreement in the late 1960s, equalising wage levels throughout Italy, despite the south's lower productivity levels. While the wage agreement has been partly offset by subsidies to labour in the south (and by the growth of the informal economy), the consequent wage rigidities have reduced incentives for labour mobility, and have also significantly affected the south's capacity to deal with exogenous shocks, which have thus had long-lasting effects. Another reason for the south's ongoing divergence is its inadequate level of productivity gains, not least due to the insufficient growth of human capital. Disincentives to private investors also remain, in the form of poor quality public infrastructure, an inefficient public administration, and organised criminality. Fiscal transfers were reduced in the late 1990s and a new development strategy has since been launched, based on investment in public and human capital and improving incentives for investors.

Since the complete transformation of the eastern German economy following unification, regional disparities have also become significant in Germany. As can be seen in Graph 9, eastern German growth rates in 1992–96 were higher than those in western Germany, so that GDP per capita converged from about 30 % to around 60 % of the western level. Since 1997, however, eastern German GDP growth rates have continuously been below western Germany's rates. One reason for this stalled convergence is the consolidation of the construction sector, which had built up over-capacities during the boom years. A further reason is the process of wage convergence which has occurred more rapidly than productivity convergence, so that eastern Germany's

Graph 8: **Regional dispersion of GVA per capita in Italy**



NB: South and centre–north refer to differences among NUTS2 regions within each area, whereas dual refers to disparities between the south and centre–north.
Source: Istat, own calculations.

unit labour costs are almost 25 % above those in western Germany. This is not only hampering economic development, but has also contributed to unemployment rates of above 20 % in many eastern German regions. Regional disparities within eastern Germany were high in 1991–92 but have gradually fallen as the aggregate growth rate has dropped. However, some differentiation emerged in the late 1990s due to several growth poles around Berlin, in Saxony and in Thuringia which are out-performing other eastern German regions (*Sachverständigenrat* (1999), pp. 132 ff.).

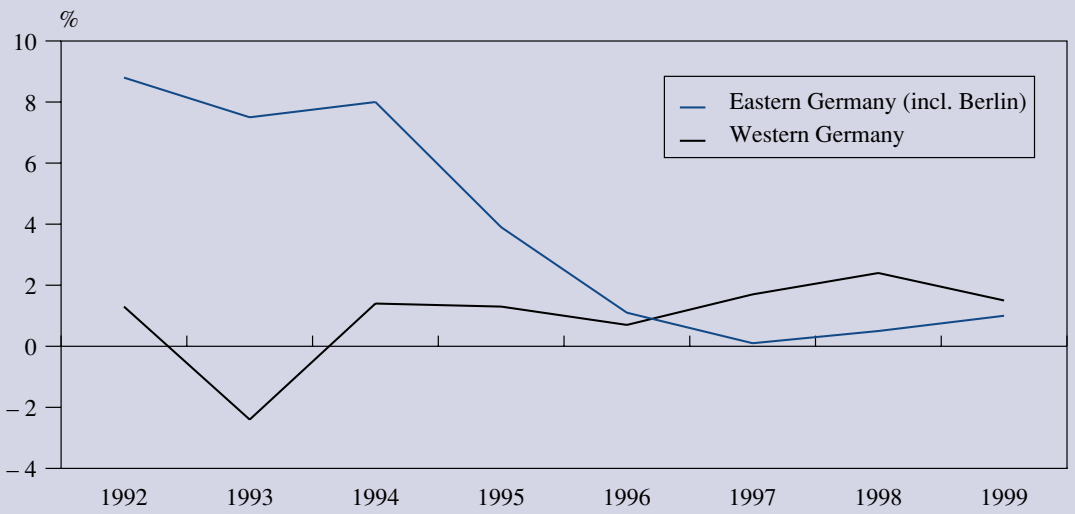
Policy-makers should take the potential trade-off between national growth and regional equity into account when making decisions about the location of public investment, particularly in early stages of catching-up when both public finances and institutional capacities typically face constraints. One study (De la Fuente, 1996b) of national and regional convergence in Spain found that, if public investment in 1981–90 had been distributed solely according to an efficiency criterion, national GDP would have been 1.58 % higher, and regional disparities 18.29 % higher. If, on the other hand, investment had been distributed solely according to an equity criterion, GDP would have been 1.62 % lower, and disparities 13.54 % lower.

The tension between two possible policy objectives may be relevant, not only for the cohesion countries, but also for the catching-up strategies of the candidate countries of central Europe (Graph 10). Although data for the CEECs are still limited, the regional dispersion of GDP per capita in countries such as the Czech Republic, Hungary and Poland seems to be higher than in the cohesion countries. Regional disparities also appear to be rising in many of the CEECs, due to the rapid growth of their major agglomerations. The possibility of a trade-off between national and regional convergence suggests that policy-makers in the candidate countries may face a choice between, on the one hand, more rapid national convergence towards EU-15 levels of GDP per capita and, on the other, moves towards greater regional convergence.

3.3. Changes in industrial specialisation

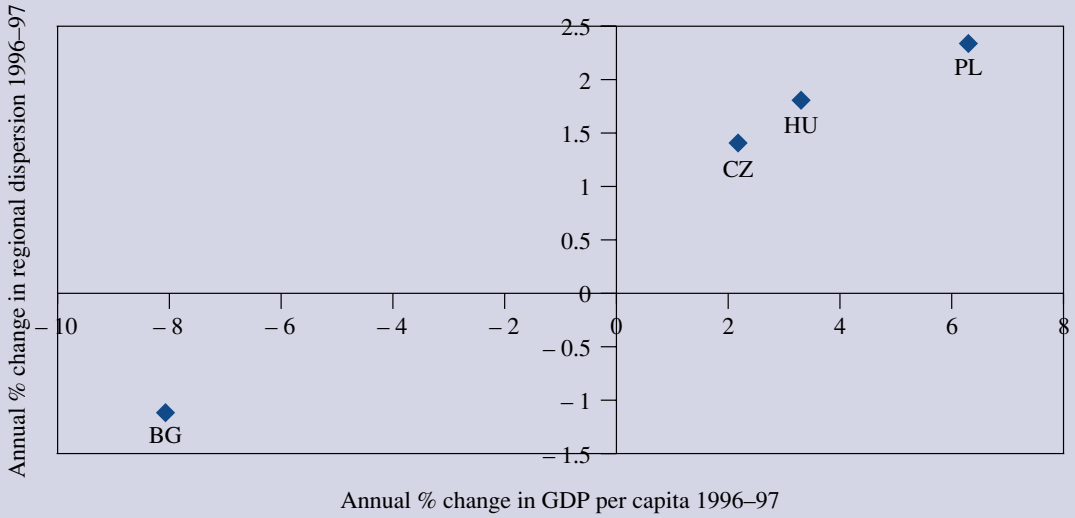
Processes of economic growth imply almost by definition changes in the sectoral structure of an economy. In addition, some authors (e.g. Krugman, 1993), inspired by arguments of the new economic geography, maintain that the euro in combination with the single market would lead to a degree of market integration compara-

Graph 9: **Annual change of real GDP in eastern and western Germany, 1992–99**



Source: Arbeitskreis 'Volkswirtschaftliche Gesamtrechnungen der Länder', August 2000.

Graph 10: **National GDP per capita growth and regional dispersion of GDP per capita in the central European candidate countries**



ble to that of the USA and would cause a similar degree of regional specialisation as in US manufacturing. The result would be greater vulnerability to regional asymmetric shocks following sector-specific shocks. Given that the empirical evidence was not very clear on this issue, three studies were recently carried out for the Commission.

The first study (by Aiginger et al., 1999) used data for manufacturing value added and exports for all EU Member States between 1988 and 1998 in order to analyse the specialisation of countries and the geographical concentration of industries. Using various indicators, the overall speed of change in the degree of specialisation and concentration was not dramatic, although it seemed to have increased slightly during the 1990s. Fears of extremely fast and disadvantageous types of specialisation and concentration were thus not substantiated by the results. Highly concentrated industries tend to be spreading across countries, with low-income countries catching up in terms of endowments and shares of fast-moving industries. The strongest trend towards structural change was witnessed in Ireland and Portugal, due to their favourable structure and growth performance during the period considered (see Table 2). In general, the vertical and horizontal division of labour within firms increased in the sense that high-tech industries in the core are disseminating technology and skills to the periphery. The geographical concentration of labour-intensive industries increased, in most cases via a slow shift of activities towards low-wage countries. At the same time, in the countries where labour-intensive industries were concentrating, a second group of industries was actively expanding in mainstream and engineering sectors. To remain competitive, firms in less dynamic industries are cooperating with low-wage countries, retaining the higher quality jobs and producing for the quality segment of the market.

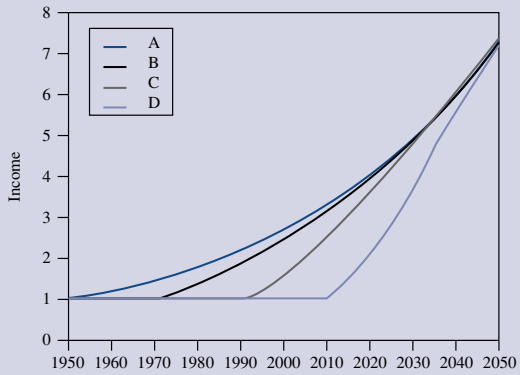
The second study (by Midelfart-Knarvik et al., 2000) was based on production data for 14 EU Member States (excluding Luxembourg) and 36 manufacturing industries between 1970 and 1997. In spite of some differences in data and methodology, many of the results of the first study were confirmed. Most European countries showed decreasing specialisation during the 1970s, but this trend was reversed from the early 1980s onwards, as countries have become slightly more different from the average of the rest of the EU and, in bilateral comparisons, from most of their EU partners. However,

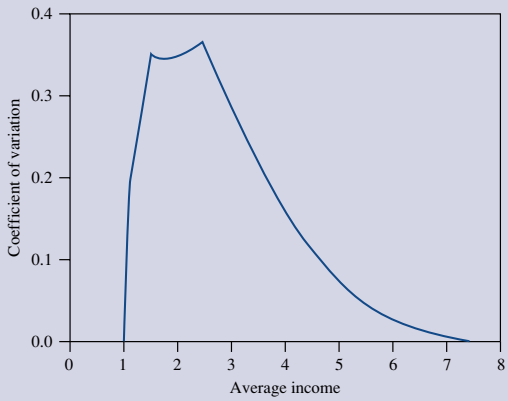
Box 3: **A simple model illustrating the trade-off between national and regional convergence**

In a recent article, Lucas (2000) presented a simple growth model in order to run a numerical simulation illustrating the long-term dynamics of world income growth and inequality. A simplified version of this model can also be used to illustrate the basic arguments of the policy trade-off between national and regional convergence. The graphs below give detailed results of the two simulations.

Let us take an economy with four regions A, B, C and D, each with an income of 1 unit. In 1951 region A, which can be thought of as the capital region, 'takes off' with a growth rate of 2 % so that in 2050 its income is 7.2 units. Every 20 years, regions B, C and D subsequently start catching up with a growth rate of 2 % plus a factor ß (= 0.025) times the income gap to region A in each pre-

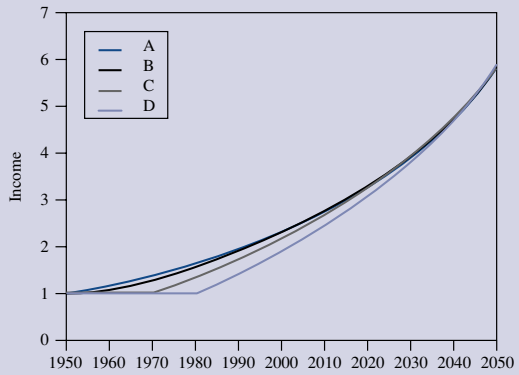
Simulation 1 — without regional policy

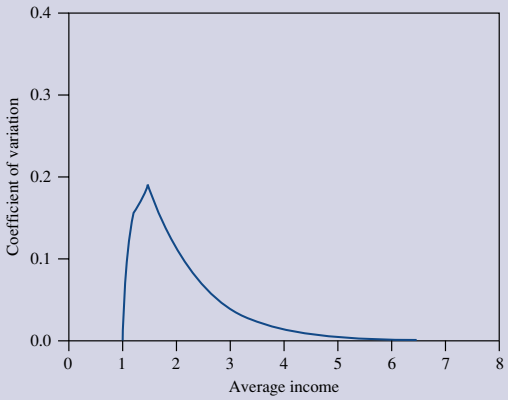




Source: Own calculations.

Simulation 2 — with regional policy





Source: Own calculations.

ceding year. Thus, region B takes off in 1971, region C takes off in 1991 and region D takes off in 2011, so that by 2050 all regions have more or less reached region A's income. The later the take-off, the higher the growth rate due to the increased income gap which Lucas calls the 'late entrant bonus' and interprets as a process of knowledge spillover. It could also be thought of as a distance factor because the greater a region's distance to region A, the longer the spillover effects take to materialise. Taking the coefficient of variation as a measure of regional income inequality, it peaks at a value of about 0.4 in 2010 at an average income of 2.5 units.

Now let us assume that this level of income inequality would be seen as unacceptable. Thus region A is 'taxed' by a factor τ (= 0.02) times the standard deviation of each preceding year so that it contributes to the development of the other three regions. This 'tax' could be interpreted as foregone investment in infrastructure which would have reduced congestion and allowed for higher growth in region A. As a consequence of these regional policy efforts, region B takes off in 1961, region C in 1971 and region D in 1981 with the same growth rates as described above i.e. 2 % plus a factor relative to the income gap to region A. In 2050, the income of all regions is 5.8 units, while the coefficient of variation peaks in 1980 at a value of about 0.2. Due to the assumption that only region A is 'taxed', its income is even lower than that of region B after 1988 and that of region C after 2009.

Comparing the two simulations, it is clear that the long-run income of all regions is higher in simulation 1 (by 1.4 units in 2050) while in the short to medium run income inequality is much lower in simulation 2. Average income at the middle of the period — in the year 2000 — is higher in simulation 2 than in simulation 1 (2.2 units compared to 1.9). In the year 2000, region A is worse off in simulation 2, with an income of 2.3 compared to 2.7 in simulation 1, whereas regions C and D gain in simulation 2 as their income is about 40 and 90 % higher respectively. Region B's income in 2000 is about the same in the two simulations. After 2032 the income of all regions is higher in simulation 1 than in simulation 2.

To sum up, the differences in terms of growth between the two simulations arise not only from the 'taxation' of region A to finance a regional policy, but are also due to the resulting lower growth dynamics of region A which generates a lower level of spill-over effects to the three other regions since the 'late entrant bonus' to their growth rates is lower. Thus, the lower regional disparities are accompanied by lower long-term growth.

although some specialisation can be identified during the last two decades, this process is rather slow and not uniform. Many, although not all, industries have experienced some changes in their spatial concentration. A number of industries that were initially spatially dispersed have become more concentrated (see Table 3). These are mainly slow-growing and unskilled labour-intensive industries (e.g. textile, clothing, leather) whose importance in the centre of the EU has decreased and which have thus become relatively more concentrated in southern Europe (Italy, Portugal, Spain). Amongst industries that were initially spatially concentrated, around half remained concentrated (e.g. aircraft, motor vehicles, electrical apparatus). Significant dispersion has occurred in a number of medium and high technology industries with high skill intensity and relatively high growth (e.g. office machinery, radio, TV and communication, professional instruments). These activities have typically spread out from the central European countries to the benefit of Ireland and Finland in particular but also of southern countries.

Guided by models of both comparative advantage and new economic geography, the study identified the underlying forces that determined industrial location via an econometric analysis which systematically relates location to industry-specific and country-specific characteristics. It showed that a high proportion of the cross-country variation in industrial structure can be explained by a combination of factor cost and geographical considerations. The econometric analysis produced four interesting results:

- The location of R & D-intensive industries has become increasingly responsive to countries' endowments of researchers, with these industries moving into researcher abundant locations;
- The location of non-manual labour-intensive industries was, and remains, sensitive to the proportion of countries' labour forces with secondary and higher education;
- The location of industries with strong forward and backward linkages has become increasingly sensitive to the centrality/peripherality of countries. Thus central locations are increasingly attracting industries higher up the value added chain, i.e. those industries which are highly dependent on intermediate inputs;

- Industries that have a high degree of increasing returns to scale tend to locate in central regions, but this effect diminished markedly over the period.

A third study (by Hallet, 2000) replicated some of the statistical indices of the previous study, but used data for gross value added of 17 sectors, including five services, in 119 EU regions between 1980 and 1995. A surprising result was that regions had an increasingly similar pattern of specialisation which reflected the general structural change from manufacturing into services. This is rather good news in that it reduces the probability of region-specific shocks and does not support expectations that the probability of such shocks would increase due to European integration.

The results on regional concentration showed that agriculture and the processing of its products, as well as day-to-day services, were spatially dispersed, following patterns of arable land and of settlement, whereas manufacturing industries with high economies of scale were concentrated in fewer locations. Clustering seemed to prevail in traditional manufacturing branches which depended on raw materials only available in specific locations. Most branches followed the general core-periphery pattern of GDP, although there were a few exceptions. Banking and insurance services tended to be located in wealthier core regions, whereas the more traditional labour-intensive branches were also located in peripheral, lower income regions. Altogether, three groups of branches could be distinguished: (i) agricul-

Table 2

Change in sectoral shares in national gross value added (GVA) in manufacturing in Ireland and Portugal in percentage points, 1988 and 1998

	1988	1998
	Ireland	
Sectors with largest increase:		
Chemicals and chemical products	16.39	27.18
Publishing, printing and reproduction	4.94	8.73
Medical, precision and optical instruments, watches	3.72	5.13
Electrical machinery and apparatus nec	2.76	4.17
Radio, TV and communication equipment	2.12	3.09
Sectors with largest decrease:		
Machinery and equipment nec	4.72	3.44
Office machinery and computers	10.34	8.89
Basic metals	2.54	0.57
Tobacco products	3.19	1.15
Food products and beverages	27.88	20.07
	Portugal	
Sectors with largest increase:		
Motor vehicles, trailers and semi-trailers	3.01	7.67
Other non-metallic mineral products	7.10	8.91
Electrical machinery and apparatus nec	2.62	4.34
Furniture; manufacturing nec	1.44	3.04
Publishing, printing and reproduction	3.48	4.89
Sectors with largest decrease:		
Machinery and equipment nec	3.82	2.91
Office machinery and computers	2.42	1.39
Basic metals	5.01	2.38
Tobacco products	13.43	9.36
Food products and beverages	10.50	5.26

Source: Aiginger et al. (1999).

Table 3

Industries grouped by levels and changes in concentration

(average 1994–97 compared to average 1970–73)

Concentrated industries that have remained concentrated over time	Concentrated industries that have become less concentrated
Motor vehicles	Beverages
Motor cycles	Tobacco
Aircraft	Office & Computing Machinery
Electrical apparatus	Machinery & Equipment
Chemical products nec	Radio-TV & Communication
Petroleum and coal products	Professional Instruments
Dispersed industries that have become more concentrated over time	**Dispersed industries that have stayed dispersed**
Textiles	Food
Wearing apparel	Wood products
Leather and products	Paper and products
Furniture	Printing & publishing
Transport equipment nec	Metal products
	Non-metallic minerals nec
	Shipbuilding
Residual group	
Footwear	Pottery and china
Industrial chemicals	Glass and products
Drugs and medicines	Iron and steel
Petroleum refineries	Non-ferrous metals
Rubber products	Railroad equipment
Plastic products	Other manufacturing

Source: Midelfart-Knarvik et al. (2000), p. 19.

ture with a low degree of concentration; (ii) traded goods (including fuel and power products, almost all manufacturing goods, credit and insurance services and other market services) with a high degree of concentration and clustering; (iii) non-traded goods (including building and construction, trade and tourism, transport and communication services as well as non-market services) which tend to follow the spatial pattern of purchasing power, due to the nature of these activities.

Looking at the results of all three studies together suggests that European integration and catching-up will not have dramatic spatial effects in terms of concentration and specialisation for several reasons:

- The location and relocation of production involve a high level of investment and are therefore long-term processes with a strong degree of sluggishness, possibly also due to 'lock-in' effects once a certain pattern of specialisation and concentration has developed. Significant changes are therefore difficult to identify over the last 20 or 30 years, even though several important location factors in the EU have changed due to the completion of the single market, several EU enlargements, the opening up of Eastern Europe and a general trend towards globalisation. However, in countries with a high pace of catching-up, in particular Ireland, patterns of specialisation have changed considerably.
- The general process of structural change from manufacturing to services tends to make regions more similar in terms of their specialisation. While further concentration in some traded goods sectors cannot be excluded in the medium to long run, the overall effect will always be limited by the increasing importance of non-traded goods whose production follows the spatial pattern of purchasing power and — given the absence of significant geographical labour mobility in the EU — counteracts possible agglomeration forces.
- Among the determinants of location, the importance of market access and human capital endowments has been confirmed, whereas the centripetal effects of economies of scale seem to be diminishing. In this respect, and in combination with their traditional advantage of low labour costs relative to the rest of the EU, the cohesion countries are becoming more attractive locations.

4. The determinants of catching-up in the EU

The two extremes of Ireland's excellent catching-up performance and the Mezzogiorno's rather weak performance over the past 20 years underline the importance, not only of stable macroeconomic conditions, but also of the general policy framework, such as secure property rights, productivity-oriented wage policies, a young and well educated workforce, and attractive conditions for FDI ([1]). Indeed, as outlined in Section 2, macroeconomic stability, the functioning of markets and endowments of physical and human capital are generally considered to be among the most important determinants of catching-up. The first two groups of determinants are closely linked to the EMU process and the single market, while the third group of determinants is supported by EU Structural Funds. All of these determinants are important for a process of sustained growth in any Member State, but they have proved to be of particular importance for the four cohesion countries because their starting conditions one or two decades ago with respect to these determinants were less favourable than elsewhere in the EU.

While a precise quantification of the relative importance of each of the determinants is close to impossible, the evidence confirms that they are all necessary conditions, but that each one alone is not a sufficient condition for catching-up due to their strong mutual dependence. This holds in particular for the EU Structural Funds whose impact can vary considerably — even when there are similar aid intensities — depending on both the general economic conditions and the specific institutional set-up of Structural Funds spending. Differences in the efficiency of Structural Funds spending arise not only from differences in management, but also from the strategic priorities given to infrastructure, education and training, and aid to the private sector. Frequently expressed recommendations in evaluation reports on Structural Funds programmes are to define the objectives more clearly, to enhance cooperation between the different administrative levels, to improve the process of project selection and generally to strengthen monitoring, control and evaluation. On the development strategy, the efficiency of direct subsidies to the private sector is often questioned, not least because of uncertainties about the size of dead-weight effects.

([1]) For a direct comparison of the cases of Ireland and the Mezzogiorno see Braunerhjelm et al. (2000), pp. 88ff.

4.1. Macroeconomic stability

Private investment, which is indispensable for catching-up, has to face several risks, including those linked to changes in prices and exchange rates. While the level of inflation is not a risk in itself, there is strong evidence that higher inflation rates bring about greater volatility of inflation and real exchange rates, thus imposing additional risks for private investment. There is thus consensus among most economists that price stability is a necessary condition for long-term growth and employment.

Bearing in mind the differences in catching-up as described in Section 3, the development of inflation in the cohesion countries confirms this view (see Graph 11). Ireland is a good example of how real and nominal convergence go hand in hand. In the mid-1980s, a long-term process of a consistent, stability-oriented macroeconomic policy-mix was started in Ireland, including monetary and exchange rate policy, fiscal consolidation and moderate wage policies. In the other three countries, it was only in the 1990s that inflation rates fell below 5 %, reinforced by efforts to fulfil the criteria for participation in EMU, which include a high degree of price stability, a sustainable government financial position in terms of public deficit and debt, observance of normal fluctuation margins within the exchange rate mechanism of the European monetary system, and convergence of long-term interest rates. It was decided in May 1998 that Spain, Ireland and Portugal fulfilled these criteria, followed by Greece in June 2000, which allowed them to

adopt the euro as their currency at the beginning of 1999 and 2001 respectively. The historically unique degree of stability in these countries provides improved conditions for private investment, which have already contributed to above EU average growth rates in recent years ([1]).

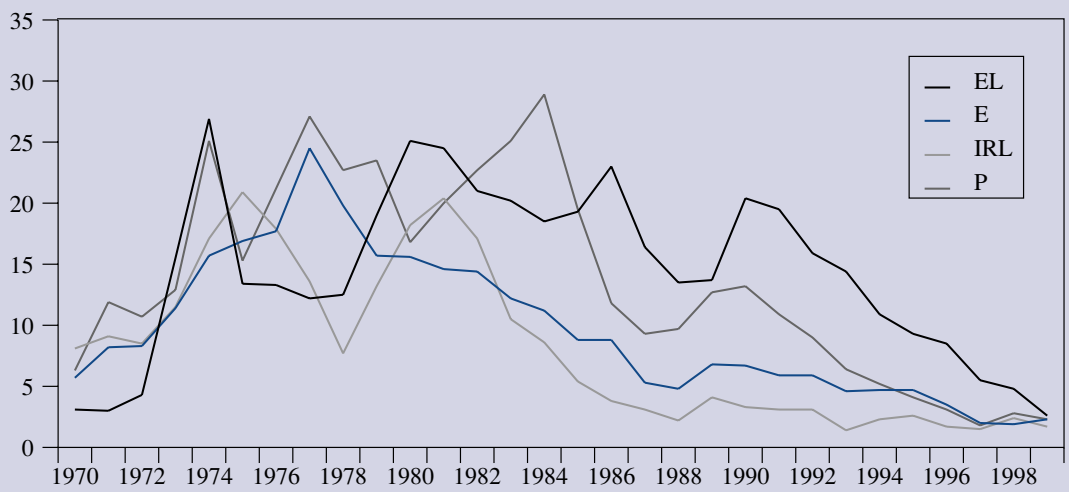
In order to ensure that these achievements in terms of stabilisation are not merely temporary, procedures of multilateral economic surveillance within the EU have been reinforced in recent years. In view of the economic interdependence between Member States, the Treaty lays down obligations regarding the coordination of economic policies. Each different area — such as exchange rate policy, budgetary policies, employment policies, structural reform and macroeconomic dialogue — has its own coordination procedures. The overall coordination of these individual areas is undertaken via the annual *Broad economic policy guidelines* which serve as a reference for the assessment of Member States' economic policies, and which take up the conclusions and recommendations of the respective documents. While the Stability and Growth Pact is mainly about strengthening the surveillance of Member States' budgetary positions and the Cologne process deals with the macroeconomic dialogue between the various policy actors, the Cardiff and Luxembourg processes focus on the efficiency and flexibility of product, capital and labour markets by monitoring structural reforms in Member States. Progress achieved through these processes is less visible in terms of clear results, although a consensus on best practice is emerging, reinforced by peer pressure on Member States.

([1]) See Buti and Sapir (1998), pp. 189ff., and Muscatelli and Trecrocchi (2000) on nominal and real convergence in EMU.

4.2. Functioning of markets

Structural reforms aimed at enhancing the efficiency of product, capital and labour markets have also been important for the catching-up of cohesion countries since the mid-1980s. Although taking place at varying speeds in different Member States, the liberalisation of markets and the privatisation of public enterprises have not only contributed to budgetary consolidation by reducing the need for subsidies and raising revenues from privatisation, but — even more importantly — have also improved the efficiency and competitiveness

Graph 11: **Annual percentage change of national consumer price index**



Source: Commission services.

of these economies. Without sufficiently flexible markets whose functioning has improved since the 1980s, Ireland's high growth rates would hardly have been sustainable. The creation of more efficient product and capital markets in the 1990s has enabled the Portuguese economy to move rapidly towards macroeconomic stabilisation without creating major imbalances. Labour market reforms in Spain in the second half of the 1990s have allowed for higher growth in both employment and GDP.

An important driving force behind structural reforms has been EU market integration, which has progressed considerably for all cohesion countries since the 1980s and has increased pressure for more efficient and flexible markets ([1]).

- Although preferential trade agreements already existed, accession to the EC by Greece in 1981 and Spain and Portugal in 1986 implied the implementation of the *aquis communautaire* after only a few years of transition.

- Completion of the single market obliged Member States to remove non-tariff barriers by the end of 1992, including traditionally protected areas such as public procurement and financial services.

- Preparations for EMU and the introduction of the euro at the beginning of 1999 have also increased market integration by reducing transaction costs, particularly for financial markets.

As mentioned above, Member States' progress on structural reforms is regularly scrutinised in the context of multilateral surveillance, in particular the Cardiff and Luxembourg processes.

4.3. Physical and human capital

Various indicators show that the cohesion countries are characterised by an insufficient endowment of physical and human capital relative to most other Member States (see e.g. European Commission (1999), pp. 121 ff.). The quantity and quality of transport and telecommunications infrastructure is generally below the EU-15 average. A low level of energy efficiency, low connection rates to wastewater treatment systems and a high share of landfill waste disposal indicate the insufficient use of the relevant technologies. Human capital endowments, reflected in attainment levels in education and training, tend to be lower than in the rest of the EU.

Having recognised that the reduction of these gaps is essential for the catching-up of their economies, all cohesion countries have made major efforts in the 1990s. However, closing these gaps requires a continuously high level of public and private investment over a longer period than one decade. These efforts benefit from considerable contributions from the EU in the form of the Structural Funds and — to a lesser extent in financial terms — the Cohesion Fund, not only in the form of financing but also through an institutional framework which helps to enhance the efficiency of public spending by reinforcing elements such as programming, evaluation, monitoring and financial control. In the less developed regions of the EU ('Objective 1'), the Structural Funds co-finance programmes in the fields of physical infrastructure, education and training as well as the general conditions for the private sector. In the cohesion countries, the Cohesion Fund finances projects on the environment and trans-European transport networks. The Structural Funds and Cohesion Fund together have a certain macroeconomic importance in these countries, reaching levels of about 3 % of GDP in Greece and Portugal (Graph 12).

Several studies have been carried out to gain an insight into the contribution of the Structural Funds to catching-up ([2]). More recently, two different models have been used to generate simulations for the ex ante evaluation of the macroeconomic impact of Structural Funds' assistance in the four cohesion countries in the programming period 2000–06 ([3]). The results are, however, difficult to compare directly and need to be interpreted in terms of the channels of impact that the models emphasise or neglect (see also Box 4):

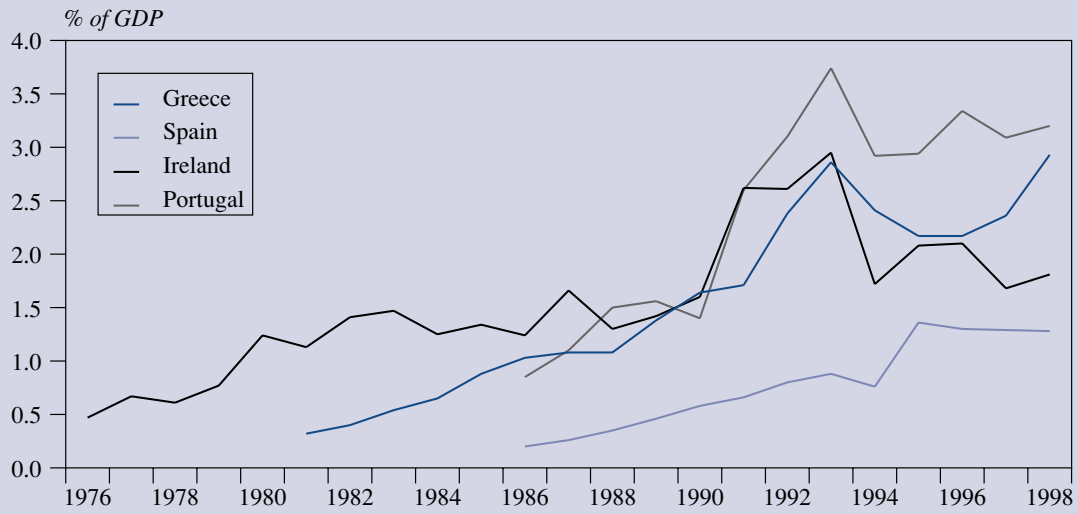
- The Hermin simulations focus not only on the standard demand-side effects, but also on supply-side effects due to gains in productivity and competitiveness arising from the increased stocks of infrastructure and human capital.

([1]) For a summary of the various EU policies on cohesion see European Commission (1996).

([2]) See for example Barry et al. (1998) and Roeger (1996).

([3]) More detailed results of these simulations are published in each of the Objective 1 Community support frameworks 2000–06 ('CSF') for the programming of Structural Funds in these four countries.

Graph 12: **EU Structural Funds (Objective 1) and Cohesion Fund**



Source: Court of Auditors — annual reports.

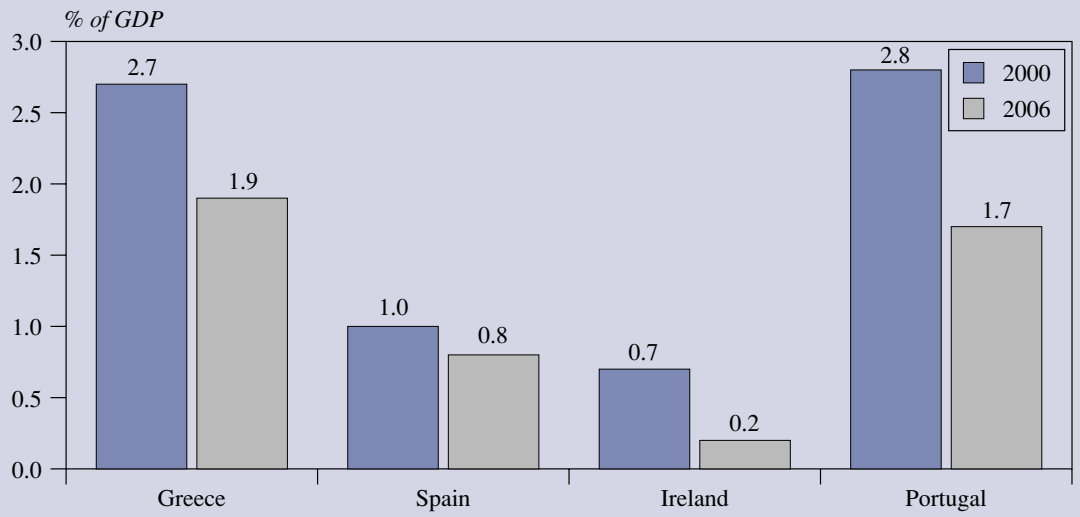
- The QUEST II simulations confirm that these long-term effects, which improve the production structure of an economy and are the main objective of the EU Structural Funds, continue to induce a higher level of GDP even when payments are assumed to stop. However, the QUEST II simulations also suggest that some of the initial positive effects of the CSF may be reduced by a deterioration of the trade balance and a certain crowding-out of private investment as a consequence of an appreciation of the real exchange rate and an increase in real interest rates.

Compared with the results for Greece and Portugal, those for Ireland and Spain may seem rather low, although this is due to the differing importance of Structural Funds relative to GDP (see Graph 13). In the case of Spain, the main explanation is that — unlike the other countries — not the whole territory is eligible for Objective 1 assistance, yet the evaluation of the macro-economic impact focuses on the Spanish economy as a whole. For Ireland, apart from increased GDP, the explanation is similar, in that Objective 1 assistance in 2000–06 will be 'phased out' for a major part of the country, the South and the East, so that the importance of the Structural Funds for Ireland as a whole will decrease.

The ESRI Institute, Dublin, carried out various Hermin simulations for the Commission, but we here present only those examining the impact of the EU Structural Funds and national public co-financing expenditure. Funding is assumed to terminate after the year 2006 in order to allow for a better identification of the continuing supply-side effects. The values chosen for the externalities are based on estimates available in the relevant literature and are at the lower end of the range of estimates. The externalities are phased in over a five-year period from the year 2000. Graph 14 gives the results for the demand-side and supply-side effects taken together, expressed as the deviation of real GDP from the baseline level.

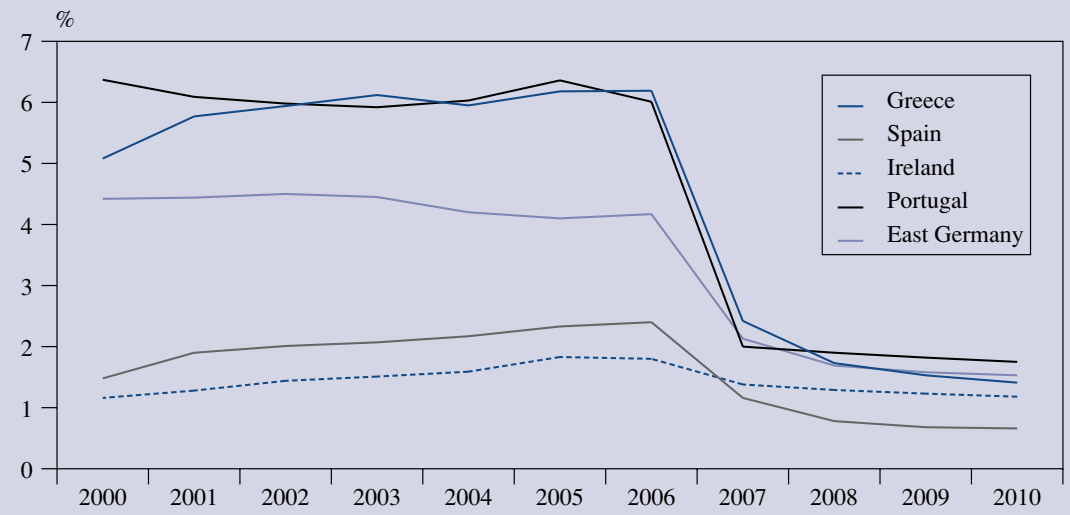
The results for Greece and Portugal are comparable, at around 6 % during the programming period, including demand-side effects, and dropping to below 2 % of continuing supply-side effects after 2006 when payments are assumed to stop. Due to the differing degrees of openness of their economies, the demand-side effects are higher in Spain than in Ireland, so that the overall impact on GDP is lower in Ireland than in Spain until 2006 and higher from then onwards. Other variables tend to follow these patterns of GDP, i.e. there are increases

Graph 13: **EU Structural Funds (Objective 1)**



NB: Estimates and projections according to QUEST II baseline scenario.
Source: Commission services.

Graph 14: **Hermin simulation results on the impact of the Structural Funds programmes 2000–06 — Deviation of real GDP from baseline**



Source: ESRI.

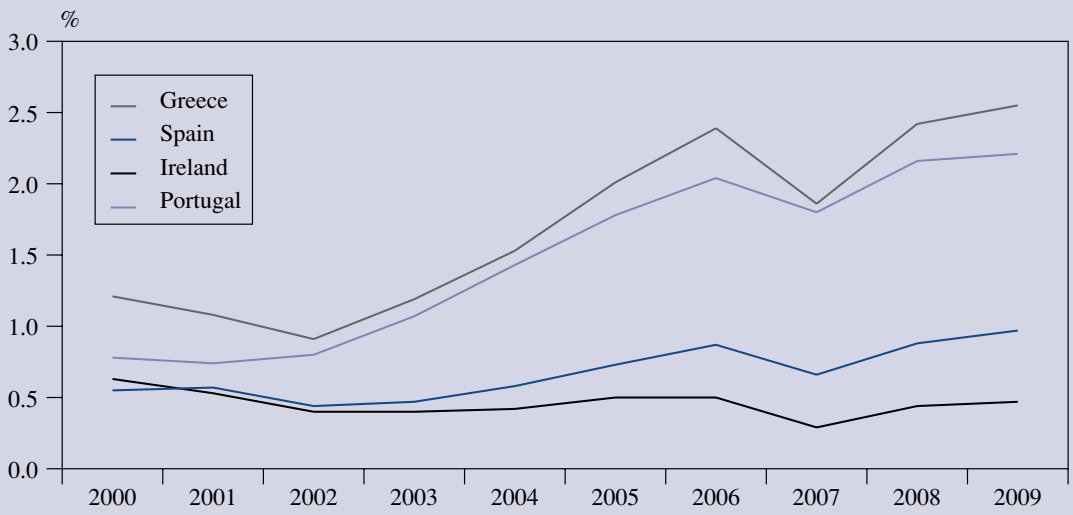
in consumption, investment and employment. Prices, the public deficit and trade deficit tend to increase until 2006 as a consequence of higher demand, and to decrease afterwards due to improved competitiveness.

In addition, a Hermin model for eastern Germany has recently been developed and applied to simulate the macroeconomic impact of the Structural Funds programme 2000–06 (Bradley et al. (2000)). Given the specific circumstances of eastern Germany, in particular the short time series available and the strong dependence on the western German economy, several methodological difficulties had to be overcome (see Box 4). The impact on real GDP is estimated to be above 4 % during the programming period and to drop to about 1.5 % in the form of continuing supply-side effects, once payments are assumed to terminate after 2006.

The results of the QUEST II simulations for Greece, Spain, Ireland and Portugal for real GDP (see Graph 15) are low compared to the Hermin simulations, essentially because of the assumption of forward-looking expectations and the endogenous determination of real interest and exchange rates. In the longer run (after about five years), the increase in GDP turns out to be higher than the induced short-term demand effect due to positive supply-side effects, which are of a more permanent nature and continue beyond the period of CSF payments.

Once more, the GDP effects are similar for Greece and Portugal on the one hand, and for Spain and Ireland on the other. The long-term employment effects are modest due to the downward effect of productivity improvements on prices, which drive up real wages. The relatively strong openness of the cohesion countries is reflected in the deterioration of the trade balance in the initial years and in the reduction of private investment, which is crowded out instead of being complementary to public investment. The mechanism generating these effects is the appreciation of the real exchange rate — due to the effects on the price level — which squeezes profits and reduces private investment.

Graph 15: **QUEST II simulation results on the impact of the Structural Funds programmes 2000–06 — Deviation of real GDP from baseline**



Source: Commission services.

Box 4: Hermin and QUEST II

The Hermin models for Greece, Spain, Ireland and Portugal were developed in the 1990s in order to gain comparable results for the macroeconomic impact of the Structural Funds. Each national model consists of three broad sub-components (a supply side, an absorption side and an income distribution side) which function as an integrated system of equations. While conventional Keynesian mechanisms are at the core of the model, the supply sub-component also determines output in manufacturing via price and cost competitiveness. Interest and exchange rates are exogenous to the model. Hermin identifies three channels through which the Structural Funds affect an economy's long-run supply potential: through increased investment in physical infrastructure, through increases in human capital and through direct assistance to the private productive sector. These channels are introduced into the models in the standard way (through expenditure and income shocks) and also via two types of policy externalities. The first externality arises through increased total or embodied factor productivity likely to be associated with improved infrastructure or a higher level of human capital. The second type is associated with the role of improved infrastructure and training in attracting productive activities through FDI and in enhancing the ability of endogenous industries to compete in the international market.

The Hermin model for eastern Germany is innovative and differs from other Hermin models in several respects. First, as for other existing Hermin models for transition economies such as the Czech Republic, Slovenia and Romania, the relatively short history of the transition process provides limited time series data. Many model parameters could only be estimated by applying calibration techniques on the basis of regressions on six annual data observations and checking the reliability of the outcome in comparison with the observed data and the parameters used for the models for Greece, Ireland and Portugal. Where this proved to be impossible, the behavioural equations of the model were simplified. Because of a lack of data, East Berlin was not taken into account in the model. On the one hand, the recourse to calibration methods brings about some uncertainty as to the reliability of the model parameters, while on the other hand, the parameters might actually reflect much better the present situation of a rapidly changing economy. Secondly, the model for eastern Germany is specific in that it is a region which depends to a great extent on developments in the German economy as a whole. This fact has been taken into account in several model features, such as the following examples:

- Output in manufacturing depends, among other factors, on external demand of which 80 % is from western Germany;
- Changes in prices basically follow those in western Germany; wages are indirectly linked by assuming convergence to western German levels over time;
- East–west net migration is modelled to depend on the expected earnings in eastern Germany relative to western Germany;
- Contrary to national models, the eastern German model has no constraints on the accumulation of public sector deficit or debt; the federal budget share of national public co-financing of the CSF is modelled as a capital inflow from western Germany;

The baseline projection assumes that the convergence process of eastern Germany to western Germany for many variables (prices, wages, employment growth, unemployment rate) will conclude and stabilise in the years 2006 and 2007.

QUEST II is the Commission services' multi-country business cycle and growth model designed to analyse the economies of the Member States of the European Union and their interactions with the rest of the world. The QUEST II model is forward-looking in basing its behavioural equations on the intertemporal optimisation of households and firms. About 40 % of households' consumption depends on current disposable income and about 60 % on the life-cycle hypothesis, and households foresee future tax payments arising from higher public expenditure. In contrast to most other macro-models, real interest and exchange rates are determined endogenously, so that possible crowding-out effects can be taken into account. The supply-side of the economy is modelled explicitly with a neo-classical production function. The macroeconomic impact of the Structural Funds programme is modelled in terms of an increase in the public capital stock, whose marginal product is assumed to be 50 % higher than that of private capital and which is assumed to have positive externalities. Results are presented as a deviation from the baseline scenario i.e. the change in performance compared to a situation without EU Structural Funds or national public co-financing expenditure. Payments are simulated to stop after 2006 so that only the supply-side effects continue.

5. Conclusions

The challenge posed by real convergence will be drastically amplified in the next decades in terms of both an extension in spatial scope and increased intensity due to enlargement to eastern and central European countries whose average GDP per capita is only 38 % of the EU-15 level.

Neither theory nor the available empirical evidence provide definitive and clear-cut guidelines on how to maximise long-run growth. However, an interpretation of theory and evidence focused on an analysis of patterns of catching-up experienced in the EU-15, allows two basic requirements to be derived as regards means and objectives.

Firstly, high long-run growth requires an appropriate mix of national policies and conditions that remove impediments to accumulation and an efficient allocation of resources. Such a mix includes macroeconomic stability, supportive institutions, the smooth functioning of markets, openness and other elements. Public investment programmes co-financed by EU structural transfers are a significant ingredient in this panoply. However, their efficiency is conditional upon the implementation of adequate national policies as evidenced by some striking differences in growth performances in the EU-15 despite similar relative magnitudes in Structural Funds allocations.

Secondly, the available EU and national funds for investment should be concentrated on a clearly-defined hierarchy of objectives. Attempts to pursue simultaneously a wide range of objectives are likely to dilute the potential impact of public support. In particular, in the early stages of catching-up, policy decisions on the emphasis to be given to the two major objectives of national and regional convergence have to take into account the consideration that the latter is likely to be a longer term endeavour.

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Statistical Annex

Statistical Annex

Long-term macroeconomic series

Notes on the statistical annex

General remarks

This edition of *European Economy* gives in its statistical annex updated time series of annual data.

Unless otherwise stated, data for Member States are based on the ESA 95 system. These data start in the early 1990s (D, IRL, S) or in 1995 (E, EL, L, P, A), with the exception of B, DK, F, I, NL, FIN and UK, where most data have been reported for longer periods. ESA 79 data are used for the earlier years. For public finance data, time series according to the former definitions up to 1995 (tables 55A to 77A) are presented in parallel with the ESA 95 data (tables 55B to 77B). The latter start at the earliest in 1970, they are gradually becoming available and cannot be linked with the former definitions series. See also the explanatory notes on the respective tables.

For the USA and Japan the definitions are as in the SNA.

Data sources are Eurostat, national publications and the OECD.

Figures for 2000, 2001 and 2002 are forecasts made by Commission staff using the definitions and latest figures available from national sources. These series are not fully comparable with the corresponding figures for earlier years; however, the discontinuities of the levels of these series have been eliminated. The forecasts for 2000–02 are based on data up to 26 October 2000.

Due to the introduction of the euro in 11 Member States (B, D, E, F, IRL, I, L, NL, P, A, FIN) since the beginning of 1999, the following conventions have been adopted for the tables: series in national currencies will continue in the same denomination as before until 2001. Historical series established in ECU are left unchanged until 1998. From 1999 onwards the euro will be used for the statistical continuation of the ECU series.

See also the explanatory notes on the tables for specific definitions.

Tables 55 to 77

Member States have provided figures for the last statistical period according to ESA 95 specifications starting from the years mentioned below:

1970	B, UK
1971	DK
1975	FIN
1978	F
1988	A
1990	IRL, L
1991	D
1993	S
1995	GR, E, I, NL, P

Tables are presented both according to the former specifications (tables A, period 1970–95) and to the ESA 95 specifications (tables B) depending on data availability.

See also the explanatory notes on the tables for specific definitions.

List of tables

Prices

Wage costs

Foreign trade and current balance

Saving

Money, interest rates and exchange rates

General government (% of GDP at market prices)

Symbols and abbreviations

—	nil
:	not available

%	percent or percentage
Mio	million
Mrd	1 000 million
EUR	euro
ECU	European currency unit
EUA	European unit of account
UA	unit of account
PPS	purchasing power standard
GDP	gross domestic product, at market prices
D_90	Germany prior to unification in 1990
EU-15	all member countries
EUR-11	B, D, E, F, IRL, I, L, NL, A, P, FIN
EUR-12	B, D, EL, E, F, IRL, I, L, NL, A, P, FIN

Table 1

Total population (national accounts)

(1 000)

	B	DK	D (1)	EL	E	F	IRL	I	L	NL
1960	9 154	4 581	55 433	8 327	30 470	46 717	2 834	50 200	314.9	11 483
1961	9 184	4 612	56 185	8 398	30 760	47 207	2 819	50 536	316.9	11 637
1962	9 221	4 648	56 837	8 448	31 087	48 060	2 830	50 879	320.8	11 801
1963	9 290	4 685	57 389	8 480	31 418	48 897	2 850	51 252	324.1	11 964
1964	9 378	4 722	57 971	8 510	31 752	49 403	2 864	51 675	327.8	12 125
1965	9 464	4 760	58 619	8 551	32 089	49 860	2 876	52 112	331.5	12 293
1966	9 528	4 800	59 148	8 614	32 430	50 275	2 884	52 519	333.9	12 455
1967	9 581	4 838	59 286	8 716	32 774	50 669	2 900	52 901	335.0	12 597
1968	9 619	4 865	59 500	8 741	33 123	51 044	2 913	53 236	335.9	12 726
1969	9 646	4 892	60 067	8 773	33 475	51 456	2 926	53 538	337.5	12 873
1970	9 656	4 929	60 651	8 793	33 831	51 920	2 950	53 822	339.2	13 032
1971	9 673	4 963	61 284	8 769	34 190	52 410	2 978	54 073	342.4	13 194
1972	9 711	4 992	61 672	8 889	34 498	52 870	3 024	54 381	346.6	13 330
1973	9 742	5 022	61 976	8 929	34 810	53 297	3 073	54 751	350.5	13 438
1974	9 772	5 045	62 054	8 962	35 147	53 647	3 124	55 111	355.1	13 543
1975	9 801	5 060	61 829	9 046	35 515	53 891	3 177	55 441	359.0	13 660
1976	9 818	5 073	61 531	9 167	35 937	54 107	3 228	55 718	360.8	13 773
1977	9 830	5 088	61 400	9 309	36 367	54 353	3 272	55 955	361.4	13 856
1978	9 840	5 104	61 326	9 430	36 778	54 593	3 314	56 155	362.1	13 939
1979	9 848	5 117	61 359	9 548	37 108	54 831	3 368	56 318	362.9	14 034
1980	9 859	5 123	61 566	9 642	37 386	55 113	3 401	56 434	364.2	14 148
1981	9 859	5 122	61 682	9 730	37 741	55 425	3 443	56 502	365.2	14 247
1982	9 856	5 119	61 638	9 790	37 944	55 747	3 480	56 544	365.5	14 312
1983	9 856	5 114	61 423	9 847	38 123	56 042	3 505	56 564	365.5	14 368
1984	9 855	5 112	61 175	9 896	38 279	56 311	3 529	56 577	365.9	14 423
1985	9 858	5 114	61 024	9 934	38 419	56 587	3 540	56 593	366.7	14 488
1986	9 862	5 121	61 066	9 964	38 537	56 864	3 541	56 596	368.4	14 567
1987	9 870	5 127	61 077	9 984	38 632	57 173	3 547	56 602	370.8	14 664
1988	9 902	5 130	61 449	10 005	38 717	57 523	3 531	56 629	373.9	14 760
1989	9 938	5 133	62 063	10 038	38 792	57 865	3 510	56 672	377.6	14 846
1990	9 967	5 141	63 253	10 089	38 851	58 171	3 506	56 719	381.9	14 947
1991	10 005	5 154	64 074	10 200	38 920	58 464	3 526	56 751	387.1	15 068
1991	10 005	5 154	79 984	10 200	38 920	58 464	3 526	56 751	387.1	15 068
1992	10 045	5 171	80 594	10 322	39 008	58 754	3 555	56 856	392.5	15 182
1993	10 085	5 189	81 179	10 380	39 086	59 006	3 574	57 043	398.1	15 290
1994	10 116	5 205	81 422	10 426	39 150	59 221	3 586	57 196	403.8	15 381
1995	10 137	5 228	81 661	10 454	39 210	59 430	3 601	57 292	409.7	15 460
1996	10 157	5 262	81 896	10 476	39 270	59 634	3 626	57 387	415.6	15 523
1997	10 181	5 284	82 052	10 499	39 324	59 839	3 661	57 502	421.0	15 605
1998	10 203	5 301	82 029	10 516	39 371	60 049	3 705	57 583	426.5	15 700
1999	10 213	5 319	82 086	10 533	39 418	60 300	3 745	57 641	433.0	15 805
2000	10 223	5 338	82 158	10 542	39 466	60 558	3 787	57 682	438.3	15 910
2001	10 234	5 355	82 117	10 563	39 514	60 817	3 826	57 722	443.9	16 011
2002	10 244	5 370	82 073	10 584	39 571	61 078	3 862	57 757	449.4	16 107

(1) 1960–91: including D_90.

(1 000)

	A	P	FIN	S	UK	EUR-11 (1)	EUR-12 (2)	EU-15 (3)	US	JP
1960	7 048	8 682	4 430	7 480	52 372	226 765	235 092	299 525	180 671	94 161
1961	7 074	8 677	4 461	7 520	52 807	228 856	237 254	302 193	183 691	94 999
1962	7 130	8 665	4 491	7 562	53 292	231 322	239 770	305 272	186 538	95 897
1963	7 176	8 727	4 523	7 604	53 625	233 810	242 290	308 204	189 242	96 816
1964	7 224	8 768	4 549	7 661	53 991	236 036	244 546	310 920	191 889	97 836
1965	7 271	8 774	4 564	7 734	54 350	238 253	246 804	313 648	194 303	98 896
1966	7 322	8 754	4 581	7 808	54 643	240 230	248 844	316 095	196 560	99 815
1967	7 377	8 748	4 606	7 868	54 959	241 774	250 490	318 155	198 712	100 885
1968	7 415	8 760	4 626	7 912	55 214	243 297	252 038	320 029	200 706	102 046
1969	7 441	8 743	4 624	7 968	55 461	245 126	253 899	322 220	202 677	103 308
1970	7 467	8 692	4 606	8 043	55 632	246 966	255 759	324 363	205 052	104 722
1971	7 500	8 644	4 612	8 098	55 907	248 900	257 669	326 637	207 661	105 762
1972	7 544	8 631	4 640	8 122	56 079	250 647	259 536	328 729	209 896	107 206
1973	7 586	8 634	4 666	8 137	56 210	252 322	261 251	330 620	211 909	108 710
1974	7 599	8 755	4 691	8 161	56 224	253 798	262 760	332 190	213 854	110 049
1975	7 579	9 094	4 712	8 192	56 215	255 057	264 103	333 570	215 973	111 940
1976	7 566	9 356	4 726	8 222	56 206	256 120	265 287	334 788	218 035	113 089
1977	7 568	9 456	4 739	8 251	56 179	257 157	266 467	335 985	220 239	114 154
1978	7 562	9 559	4 753	8 275	56 167	258 180	267 610	337 156	222 585	115 174
1979	7 549	9 662	4 765	8 294	56 227	259 205	268 753	338 391	225 056	116 133
1980	7 549	9 767	4 779	8 311	56 330	260 366	270 008	339 772	227 726	117 060
1981	7 564	9 852	4 800	8 320	56 352	261 480	271 210	341 004	229 966	117 884
1982	7 571	9 912	4 827	8 325	56 318	262 197	271 987	341 749	232 188	118 693
1983	7 552	9 955	4 856	8 329	56 377	262 608	272 455	342 275	234 307	119 483
1984	7 553	9 989	4 882	8 337	56 506	262 940	272 836	342 791	236 348	120 235
1985	7 558	10 011	4 902	8 350	56 685	263 347	273 281	343 430	238 466	121 049
1986	7 566	10 011	4 918	8 370	56 852	263 895	273 859	344 202	240 651	121 672
1987	7 576	9 994	4 932	8 398	57 009	264 438	274 422	344 955	242 804	122 264
1988	7 596	9 968	4 947	8 436	57 158	265 395	275 400	346 125	245 021	122 783
1989	7 624	9 937	4 964	8 493	57 358	266 589	276 627	347 610	247 342	123 255
1990	7 718	9 896	4 986	8 559	57 561	268 396	278 485	349 746	249 911	123 611
1991	7 823	9 867	5 014	8 617	57 808	269 898	280 098	351 677	252 643	124 043
1991	7 823	9 867	5 014	8 617	57 808	285 808	296 008	367 587	252 643	124 043
1992	7 884	9 862	5 042	8 668	58 007	287 175	297 497	369 343	255 407	124 452
1993	7 993	9 876	5 067	8 719	58 191	288 596	298 976	371 075	258 120	124 764
1994	8 031	9 902	5 088	8 781	58 395	289 497	299 923	372 303	260 682	125 034
1995	8 047	9 917	5 108	8 827	58 606	290 272	300 726	373 387	263 168	125 570
1996	8 059	9 927	5 125	8 841	58 802	291 019	301 495	374 400	265 557	125 864
1997	8 072	9 946	5 140	8 846	59 009	291 742	302 241	375 380	266 792	126 166
1998	8 078	9 968	5 153	8 851	59 237	292 266	302 782	376 171	269 092	126 486
1999	8 092	9 988	5 165	8 854	59 468	292 887	303 420	377 061	271 525	126 730
2000	8 100	10 003	5 175	8 859	59 700	293 501	304 043	377 940	274 185	126 982
2001	8 100	10 018	5 183	8 867	59 933	293 986	304 549	378 704	276 605	127 211
2002	8 100	10 033	5 191	8 878	60 167	294 465	305 050	379 464	279 172	127 369

(1) EU-15 excluding DK, EL, S, UK; 1960–91: including D_90.
(2) EU-15 excluding DK, S, UK; 1960–91: including D_90.
(3) 1960–91: including D_90.

Table 2

Employment, persons; total economy (national accounts)

(annual percentage change)

	B	DK	D (1)	EL	E	F	IRL	I	L	NL
1961	0.7	1.5	1.4	0.4	0.2	0.1	– 0.2	0.2	1.1	2.3
1962	1.3	1.5	0.3	– 1.0	0.8	0.2	0.7	– 1.1	0.3	2.9
1963	0.1	1.2	0.2	– 1.4	0.5	1.0	0.6	– 1.6	– 0.4	2.0
1964	0.6	2.1	0.1	– 1.3	0.5	1.1	0.5	– 0.4	1.7	2.4
1965	– 0.1	1.8	0.6	– 0.7	0.5	0.4	– 0.2	– 1.7	0.9	1.5
1966	0.2	0.5	– 0.3	– 0.9	0.5	0.8	– 0.3	– 1.6	0.5	1.7
1967	– 0.4	– 0.6	– 3.3	– 1.2	0.8	0.3	– 0.6	1.2	– 1.1	0.6
1968	– 0.2	0.8	0.1	– 1.2	0.8	– 0.3	0.3	– 0.2	– 0.4	1.6
1969	1.4	1.2	1.6	– 0.3	0.9	1.5	0.3	0.5	1.4	2.4
1970	1.5	0.7	1.3	– 0.1	0.7	1.5	– 1.2	0.2	2.0	1.3
1961–70	0.5	1.1	0.2	– 0.8	0.6	0.6	0.0	– 0.5	0.6	1.9
1971	0.6	0.6	0.4	0.3	0.5	0.5	– 0.4	– 0.1	3.2	0.9
1972	– 0.2	2.1	0.4	0.5	0.3	0.6	0.3	– 0.6	2.7	– 0.8
1973	0.9	1.3	1.1	1.0	2.0	1.4	1.4	2.2	1.9	0.6
1974	1.6	– 0.3	– 1.2	0.1	0.7	0.9	1.4	2.0	2.8	0.6
1975	– 1.4	– 1.3	– 2.7	0.1	– 1.6	– 0.9	– 0.8	0.1	1.2	– 0.1
1976	– 0.5	1.7	– 0.5	1.2	– 1.1	0.8	– 0.8	1.5	– 0.1	0.6
1977	– 0.4	– 0.2	0.1	0.8	– 0.7	0.8	1.8	1.0	– 0.1	0.6
1978	0.2	0.8	0.8	0.4	– 1.7	0.5	2.5	0.5	– 0.6	1.2
1979	1.0	0.9	1.7	1.1	– 1.7	0.5	3.2	1.5	0.5	2.1
1980	– 0.1	– 0.7	1.6	1.4	– 3.0	0.3	1.0	1.9	0.7	1.1
1971–80	0.2	0.5	0.2	0.7	– 0.6	0.5	0.9	1.0	1.2	0.7
1981	– 1.9	– 1.5	– 0.1	5.2	– 2.6	– 0.4	– 0.9	0.0	0.3	– 0.6
1982	– 1.3	0.3	– 1.2	– 1.1	– 0.9	0.1	0.0	0.6	– 0.3	– 1.6
1983	– 1.0	0.2	– 1.4	0.5	– 0.5	– 0.3	– 1.9	0.6	– 0.3	– 1.2
1984	0.1	1.5	0.2	– 0.2	– 2.4	– 0.2	– 1.9	0.4	0.6	0.9
1985	0.5	2.3	0.7	2.5	– 1.4	– 0.8	– 2.6	0.9	0.9	1.8
1986	0.6	2.3	1.4	0.3	1.4	0.4	0.7	0.8	2.5	2.4
1987	0.6	0.4	0.7	– 0.1	4.5	0.8	0.9	0.4	2.7	1.8
1988	1.7	– 0.7	0.8	1.7	3.4	0.9	0.0	0.9	3.0	2.3
1989	1.2	– 0.7	1.5	0.4	3.4	1.7	– 0.2	0.7	3.5	2.1
1990	0.9	– 0.7	3.0	1.3	3.6	1.0	4.3	1.6	4.2	2.8
1981–90	0.1	0.3	0.5	1.0	0.8	0.3	– 0.2	0.7	1.7	1.1
1991	0.1	– 0.6	2.5	– 2.3	1.0	0.1	0.0	1.9	4.1	1.8
1992	– 0.5	– 0.8	– 1.5	1.4	– 1.5	– 0.5	1.0	– 0.5	2.5	1.5
1993	– 0.8	– 1.5	– 1.4	1.0	– 2.9	– 1.2	0.6	– 2.5	1.8	0.0
1994	– 0.4	1.4	– 0.2	1.9	– 0.5	0.0	3.1	– 1.5	2.5	0.5
1995	0.7	0.5	0.2	0.9	1.8	0.8	5.1	– 0.1	2.5	1.4
1996	0.4	0.7	– 0.3	– 0.4	1.2	0.3	3.8	0.6	2.7	2.3
1997	0.8	1.0	– 0.2	– 0.3	2.8	0.3	5.6	0.4	3.1	3.2
1998	1.2	2.0	0.9	3.4	3.7	1.2	5.0	1.0	4.4	3.0
1999	1.3	1.1	1.1	– 0.7	3.5	1.8	6.4	1.2	5.0	2.8
2000	1.3	0.9	1.5	1.2	3.1	1.9	5.0	1.4	5.5	2.7
1991–2000	0.4	0.5	0.3	0.6	1.2	0.5	3.5	0.2	3.4	1.9
2001	1.4	0.4	1.0	1.5	2.4	1.6	3.3	1.2	4.5	2.6
2002	1.4	0.4	0.9	1.6	2.3	1.6	2.6	1.2	4.1	2.3

(1) 1961–91: including D_90.

(annual percentage change)

	A	P	FIN	S	UK	EUR-11 (1)	EUR-12 (2)	EU-15 (3)	US	JP
1961	0.8	0.7	1.9	0.9	1.4	0.7	0.7	0.8	0.1	1.4
1962	0.4	0.5	– 0.4	0.7	0.9	0.2	0.2	0.4	2.1	1.3
1963	– 0.6	0.2	0.4	0.0	0.2	0.1	0.1	0.1	1.0	0.9
1964	– 0.1	– 0.1	0.0	0.1	1.2	0.4	0.3	0.5	2.1	1.3
1965	– 0.6	0.2	1.2	1.0	1.0	0.0	0.0	0.3	3.0	1.6
1966	– 1.0	– 0.1	0.2	0.9	0.6	– 0.1	– 0.1	0.1	4.6	2.1
1967	– 1.8	– 0.6	– 1.8	– 1.0	– 1.5	– 0.6	– 0.6	– 0.8	2.3	1.9
1968	– 1.2	– 0.6	– 1.3	1.1	– 0.5	0.0	0.0	– 0.1	2.5	1.7
1969	– 0.1	– 0.6	1.5	1.2	0.1	1.1	1.1	0.9	2.8	0.8
1970	0.4	2.3	2.1	1.9	– 0.4	1.0	1.0	0.8	– 0.2	1.1
1961–70	– 0.4	0.2	0.4	0.7	0.3	0.3	0.3	0.3	2.0	1.4
1971	1.1	2.7	– 0.6	– 0.2	– 0.9	0.5	0.5	0.2	– 0.2	0.7
1972	0.7	0.0	1.0	0.3	– 0.1	0.2	0.2	0.2	2.4	0.5
1973	1.7	– 0.4	2.0	0.4	1.9	1.4	1.4	1.5	4.2	2.3
1974	0.9	– 0.7	0.4	2.0	0.6	0.5	0.4	0.5	1.7	– 0.4
1975	– 0.5	– 1.2	– 1.3	2.0	– 0.1	– 1.2	– 1.2	– 0.9	– 1.6	– 0.2
1976	0.3	– 0.4	– 0.9	0.3	– 0.8	0.2	0.2	0.0	2.5	0.8
1977	1.0	0.3	– 1.8	0.0	0.1	0.4	0.4	0.3	3.5	1.2
1978	0.3	– 1.6	– 0.9	0.5	1.1	0.2	0.2	0.4	4.8	1.0
1979	0.4	2.2	2.2	1.2	1.5	1.0	1.0	1.1	3.4	1.0
1980	1.0	– 0.4	2.9	1.2	– 0.2	0.6	0.6	0.5	0.6	0.7
1971–80	0.7	0.1	0.3	0.8	0.3	0.4	0.4	0.4	2.1	0.7
1981	– 0.2	1.1	1.3	0.2	– 3.9	– 0.5	– 0.3	– 1.0	0.9	0.8
1982	– 1.4	– 1.9	1.1	– 0.2	– 1.8	– 0.5	– 0.5	– 0.7	– 1.2	0.8
1983	– 1.0	– 1.1	0.4	0.2	– 1.3	– 0.6	– 0.5	– 0.6	1.0	1.5
1984	– 0.1	– 1.5	0.5	0.8	2.1	– 0.2	– 0.2	0.2	4.4	0.3
1985	0.3	0.0	0.1	1.0	1.2	0.2	0.2	0.5	2.3	0.6
1986	0.3	– 2.7	– 0.3	0.6	– 0.1	0.8	0.8	0.7	1.7	0.5
1987	– 0.1	2.3	0.5	0.8	1.8	1.2	1.1	1.2	2.8	0.4
1988	0.3	2.2	1.0	1.4	3.5	1.3	1.3	1.7	2.9	1.2
1989	1.4	1.9	0.9	1.5	2.7	1.6	1.6	1.7	2.3	1.5
1990	1.9	1.7	– 0.5	0.9	1.2	2.1	2.1	1.8	1.3	1.7
1981–90	0.1	0.2	0.5	0.7	0.5	0.5	0.6	0.5	1.8	0.9
1991	1.6	2.8	– 5.6	– 1.5	– 3.0	1.3	1.2	0.3	– 1.0	2.0
1992	0.4	– 1.6	– 7.2	– 4.4	– 2.6	– 0.9	– 0.9	– 1.3	0.1	1.1
1993	– 0.5	– 2.0	– 6.3	– 5.2	– 1.2	– 1.7	– 1.6	– 1.7	2.0	0.4
1994	0.1	– 1.0	– 1.1	– 0.8	0.7	– 0.4	– 0.3	– 0.1	2.3	0.1
1995	0.2	– 0.7	1.6	1.3	1.5	0.6	0.6	0.8	2.2	0.2
1996	– 0.6	1.6	1.4	– 0.6	2.6	0.5	0.5	0.8	1.7	0.5
1997	0.5	1.7	3.3	– 0.6	2.0	0.8	0.8	1.0	2.3	1.1
1998	0.8	2.7	2.1	1.3	1.2	1.6	1.6	1.6	2.2	– 0.7
1999	1.4	1.8	2.2	2.3	1.3	1.8	1.7	1.6	1.9	– 0.8
2000	0.9	1.5	1.9	2.0	0.9	1.9	1.8	1.7	1.5	– 0.1
1991–2000	0.5	0.6	– 0.9	– 0.6	0.3	0.5	0.5	0.5	1.5	0.4
2001	0.7	0.8	1.4	1.4	0.7	1.5	1.5	1.3	0.9	0.2
2002	0.6	0.8	1.0	1.0	0.7	1.4	1.4	1.2	0.7	0.3

(1) EU-15 excluding DK, EL, S, UK; 1961–91: including D_90.
(2) EU-15 excluding DK, S, UK; 1961–91: including D_90.
(3) 1961–91: including D_90.

Table 3

Unemployment rate; total
Member States: definition Eurostat

(percentage of civilian labour force)

	B	DK	D (1)	EL	E	F	IRL	I	L	NL
1960	2.3	1.3	1.0	5.6	2.4	1.4	5.6	5.7	0.0	0.7
1961	1.9	1.2	0.7	5.5	2.4	1.3	5.2	5.1	0.0	0.5
1962	1.7	1.2	0.6	4.8	1.6	1.4	5.1	4.4	0.0	0.5
1963	1.5	1.6	0.6	4.8	2.0	1.6	5.4	3.6	0.0	0.5
1964	1.4	1.2	0.5	4.6	2.8	1.2	5.2	4.0	0.0	0.5
1965	1.6	0.9	0.4	4.8	2.6	1.5	5.0	5.0	0.0	0.6
1966	1.7	1.1	0.5	5.0	2.2	1.6	5.1	5.4	0.0	0.8
1967	2.4	1.0	1.4	5.4	3.0	2.1	5.5	5.0	0.0	1.7
1968	2.8	1.0	1.0	5.6	3.0	2.6	5.8	5.3	0.0	1.5
1969	2.2	0.9	0.6	5.2	2.5	2.3	5.5	5.3	0.0	1.1
1970	1.8	0.6	0.5	4.2	2.6	2.4	6.3	5.1	0.0	1.0
1961–70	1.9	1.1	0.7	5.0	2.5	1.8	5.4	4.8	0.0	0.9
1971	1.7	0.9	0.6	3.1	3.4	2.7	6.0	5.1	0.0	1.3
1972	2.2	0.8	0.8	2.1	2.9	2.8	6.7	6.0	0.0	2.3
1973	2.2	0.7	0.8	2.0	2.6	2.7	6.2	5.9	0.0	2.4
1974	2.3	2.8	1.8	2.1	3.1	2.8	5.8	5.0	0.0	2.9
1975	4.2	3.9	3.3	2.3	4.5	4.0	7.9	5.5	0.0	5.5
1976	5.5	5.1	3.3	1.9	4.9	4.4	9.8	6.2	0.0	5.8
1977	6.3	5.9	3.2	1.7	5.3	4.9	9.7	6.7	0.0	5.6
1978	6.8	6.7	3.1	1.8	7.1	5.1	9.0	6.7	1.2	5.6
1979	7.0	4.8	2.7	1.9	8.8	5.8	7.8	7.2	2.4	5.7
1980	7.4	5.2	2.7	2.7	11.6	6.2	8.0	7.1	2.4	6.4
1971–80	4.6	3.7	2.2	2.2	5.4	4.1	7.7	6.1	0.6	4.4
1981	9.5	8.3	3.9	4.0	14.4	7.3	10.8	7.4	2.4	8.9
1982	11.2	8.9	5.6	5.8	16.3	8.0	12.5	8.0	2.4	11.9
1983	11.0	9.0	6.9	7.1	17.5	8.1	13.9	7.5	3.5	9.7
1984	11.1	8.5	7.1	7.2	20.2	9.7	15.5	8.0	3.1	9.3
1985	10.4	7.2	7.2	7.0	21.6	10.2	16.8	8.3	2.9	8.3
1986	10.3	5.4	6.6	6.6	21.2	10.3	16.8	9.0	2.6	8.3
1987	10.0	5.4	6.3	6.7	20.6	10.5	16.6	9.8	2.5	8.1
1988	9.0	6.1	6.2	6.8	19.5	9.9	16.2	9.8	2.0	7.6
1989	7.5	7.3	5.6	6.7	17.2	9.4	14.7	9.8	1.8	6.9
1990	6.7	7.7	4.8	6.4	16.2	9.0	13.4	9.0	1.7	6.2
1981–90	9.7	7.4	6.0	6.4	18.5	9.2	14.7	8.7	2.5	8.5
1991	6.6	8.4	4.2	7.0	16.4	9.5	14.7	8.6	1.7	5.8
1991	6.6	8.4	5.6	7.0	16.4	9.5	14.7	8.6	1.7	5.8
1992	7.2	9.2	6.6	7.9	18.4	10.4	15.4	8.8	2.1	5.6
1993	8.8	10.2	7.9	8.6	22.7	11.7	15.6	10.2	2.6	6.5
1994	10.0	8.2	8.5	8.9	24.1	12.3	14.3	11.1	3.2	7.1
1995	9.9	7.2	8.2	9.2	22.9	11.7	12.3	11.6	2.9	6.9
1996	9.7	6.8	8.9	9.6	22.2	12.4	11.7	11.7	3.0	6.3
1997	9.4	5.6	9.9	9.8	20.8	12.3	9.9	11.7	2.7	5.2
1998	9.5	5.2	9.4	10.9	18.8	11.8	7.6	11.8	2.7	4.0
1999	9.1	5.2	8.8	11.7	15.9	11.3	5.7	11.3	2.3	3.3
2000	8.6	4.8	8.3	11.2	14.2	9.9	4.2	10.5	1.9	2.6
1991–2000	8.9	7.1	8.2	9.5	19.6	11.3	11.1	10.7	2.5	5.3
2001	8.0	4.6	7.8	10.6	12.9	9.0	3.6	10.0	1.6	2.3
2002	7.4	4.5	7.1	10.1	12.0	8.2	3.3	9.6	1.4	2.1

(1) 1960–91: including D_90.

(percentage of civilian labour force)

	A	P	FIN	S	UK	EUR-11 (1)	EUR-12 (2)	EU-15 (3)	US	JP
1960	2.5	1.7	1.7	1.7	1.4	2.5	2.6	2.3	5.5	1.7
1961	1.9	2.0	1.5	1.5	1.2	2.2	2.3	2.1	6.7	1.4
1962	1.9	2.3	1.6	1.5	1.7	1.9	2.0	1.9	5.5	1.3
1963	2.1	2.4	1.8	1.7	2.1	1.9	2.0	2.0	5.7	1.3
1964	2.0	2.5	1.8	1.6	1.4	1.9	2.0	1.9	5.2	1.1
1965	1.9	2.5	1.6	1.2	1.2	2.1	2.2	2.0	4.5	1.2
1966	1.8	2.5	1.8	1.6	1.1	2.2	2.3	2.0	3.8	1.3
1967	1.9	2.5	3.5	2.1	2.0	2.7	2.8	2.6	3.8	1.3
1968	2.0	2.6	4.7	2.2	2.1	2.8	2.9	2.7	3.6	1.2
1969	2.1	2.6	3.4	1.9	2.0	2.5	2.6	2.4	3.5	1.1
1970	1.4	2.6	2.3	1.5	2.2	2.4	2.4	2.3	4.9	1.1
1961–70	1.9	2.5	2.4	1.7	1.7	2.3	2.3	2.2	4.7	1.2
1971	1.3	2.5	2.7	2.5	2.7	2.6	2.6	2.6	5.9	1.2
1972	1.2	2.5	3.0	2.7	3.1	2.9	2.8	2.8	5.6	1.4
1973	1.1	2.6	2.8	2.5	2.2	2.8	2.7	2.6	4.9	1.3
1974	1.3	1.7	2.1	2.0	2.0	2.9	2.9	2.7	5.6	1.4
1975	1.8	4.4	2.7	1.6	3.2	4.2	4.2	3.9	8.5	1.9
1976	1.8	6.2	3.8	1.6	4.8	4.7	4.6	4.6	7.7	2.0
1977	1.6	7.3	5.8	1.8	5.1	5.0	4.9	4.9	7.1	2.0
1978	2.1	7.9	7.2	2.2	5.0	5.4	5.3	5.1	6.1	2.2
1979	2.1	7.9	5.9	2.1	4.6	5.7	5.6	5.3	5.8	2.1
1980	1.9	7.6	4.6	2.0	5.6	6.1	6.0	5.8	7.1	2.0
1971–80	1.6	5.1	4.1	2.1	3.8	4.2	4.2	4.0	6.4	1.8
1981	2.5	7.3	4.8	2.6	8.9	7.3	7.2	7.4	7.6	2.2
1982	3.5	7.2	5.3	3.3	10.3	8.6	8.5	8.7	9.7	2.4
1983	4.1	8.2	5.4	3.7	11.1	8.9	8.9	9.1	9.6	2.6
1984	3.8	8.9	5.2	3.3	11.1	9.8	9.7	9.7	7.5	2.7
1985	3.6	9.2	4.9	2.9	11.5	10.1	9.9	10.0	7.2	2.6
1986	3.1	8.8	5.2	2.7	11.5	10.0	9.9	9.9	7.0	2.8
1987	3.8	7.3	4.8	2.2	10.6	10.0	9.9	9.7	6.2	2.8
1988	3.6	5.9	4.2	1.8	8.7	9.6	9.5	9.1	5.5	2.5
1989	3.1	5.2	3.1	1.6	7.3	8.9	8.8	8.3	5.3	2.3
1990	3.2	4.8	3.2	1.7	7.0	8.2	8.1	7.7	5.6	2.1
1981–90	3.4	7.3	4.6	2.6	9.8	9.1	9.0	9.0	7.1	2.5
1991	3.4	4.2	6.6	3.1	8.8	8.1	8.1	8.1	6.8	2.1
1991	3.4	4.2	6.6	3.1	8.8	8.2	8.2	8.2	6.8	2.1
1992	3.4	4.3	11.7	5.6	10.0	9.1	9.1	9.2	7.5	2.2
1993	4.0	5.7	16.3	9.1	10.5	10.8	10.8	10.7	6.9	2.5
1994	3.8	6.9	16.6	9.4	9.6	11.6	11.5	11.1	6.1	2.9
1995	3.9	7.3	15.4	8.8	8.7	11.3	11.2	10.7	5.6	3.1
1996	4.3	7.3	14.6	9.6	8.2	11.5	11.5	10.8	5.4	3.4
1997	4.4	6.8	12.7	9.9	7.0	11.5	11.4	10.6	4.9	3.4
1998	4.5	5.2	11.4	8.3	6.3	10.8	10.8	9.9	4.5	4.1
1999	3.8	4.5	10.2	7.2	6.1	9.9	10.0	9.2	4.2	4.7
2000	3.3	4.0	9.8	6.5	5.6	9.0	9.1	8.4	4.1	4.9
1991–2000	3.9	5.6	12.5	7.7	8.1	10.4	10.4	9.9	5.6	3.3
2001	3.0	4.2	9.3	5.7	5.3	8.4	8.5	7.8	4.3	4.9
2002	2.7	4.3	9.1	5.4	5.1	7.8	7.9	7.3	4.7	4.8

(1) EU-15 excluding DK, EL, S, UK; 1960–91: including D_90.
(2) EU-15 excluding DK, S, UK; 1960–91: including D_90.
(3) 1960–91: including D_90.

Table 4

Gross domestic product at current market prices

(national currency)

	B Mrd BEF	DK Mrd DKK	D (1) Mrd DEM	EL Mrd GRD	E Mrd ESP	F Mrd FRF	IRL Mrd IEP	I 1 000 Mrd ITL	L Mrd LUF	NL Mrd NLG
1960	566	42.5	302.7	113	719	308.5	0.690	24.9	30.43	46.90
1961	601	47.2	331.7	129	820	334.3	0.743	27.6	30.44	49.51
1962	643	53.1	360.8	136	947	375.1	0.805	31.1	32.05	53.30
1963	691	56.6	382.4	154	1 118	421.1	0.865	35.6	34.20	57.83
1964	774	64.7	420.2	174	1 262	466.9	0.985	38.9	39.04	68.04
1965	843	72.6	459.2	201	1 464	503.9	1.049	41.9	40.91	75.99
1966	905	79.7	488.2	224	1 698	545.9	1.105	45.4	42.98	82.75
1967	971	87.6	494.4	242	1 923	589.7	1.207	50.0	43.26	90.78
1968	1 038	97.5	533.3	263	2 171	639.7	1.362	54.2	47.33	100.66
1969	1 151	110.9	597.0	303	2 486	732.0	1.573	59.8	54.81	114.00
1970	1 280	122.5	675.3	342	2 745	816.5	1.772	67.3	64.15	127.93
1971	1 402	135.4	749.8	380	3 098	909.7	2.027	73.2	65.33	144.38
1972	1 570	155.7	823.1	440	3 636	1 016.5	2.447	80.0	73.67	162.69
1973	1 784	178.6	917.3	575	4 384	1 162.5	2.954	96.9	89.53	186.53
1974	2 092	200.0	983.9	659	5 368	1 340.6	3.267	122.4	109.15	211.62
1975	2 315	223.4	1 026.6	793	6 303	1 510.3	4.147	139.0	101.10	233.56
1976	2 631	259.2	1 120.5	986	7 585	1 749.7	5.087	175.1	116.33	266.31
1977	2 846	288.0	1 195.3	1 155	9 624	1 973.2	6.233	213.4	119.54	290.39
1978	3 056	321.1	1 283.6	1 409	11 780	2 245.7	7.391	251.8	130.79	313.00
1979	3 269	357.3	1 388.4	1 747	13 780	2 552.2	8.667	308.8	142.36	333.16
1980	3 555	385.8	1 472.0	2 093	15 833	2 882.2	10.251	386.5	154.93	355.80
1981	3 724	422.4	1 535.0	2 499	17 793	3 239.1	12.441	462.5	165.15	372.99
1982	4 024	482.2	1 588.1	3 141	20 588	3 706.8	14.659	543.8	185.07	388.43
1983	4 262	531.7	1 668.5	3 746	23 520	4 100.9	16.209	633.4	203.60	403.31
1984	4 601	583.5	1 750.9	4 656	26 639	4 460.8	17.991	725.7	225.72	422.42
1985	4 904	634.0	1 823.2	5 678	29 438	4 771.2	19.527	813.9	239.23	443.09
1986	5 141	685.6	1 925.3	6 781	33 742	5 135.4	20.711	900.4	264.87	455.88
1987	5 353	720.9	1 990.5	7 636	37 730	5 416.4	22.153	984.7	273.57	459.03
1988	5 729	748.3	2 096.0	9 289	41 921	5 837.1	23.880	1 092.8	304.13	476.56
1989	6 231	788.6	2 224.4	11 038	47 020	6 270.3	26.661	1 196.8	345.66	504.96
1990	6 595	825.3	2 426.0	13 315	52 345	6 620.9	28.598	1 320.8	365.21	537.87
1991	6 909	857.7	2 647.6	16 443	57 337	6 884.1	29.675	1 440.6	393.40	564.95
1991	6 909	857.7	2 938.0	16 443	57 337	6 884.1	29.675	1 440.6	393.40	564.95
1992	7 274	887.9	3 155.2	19 012	61 698	7 126.0	31.529	1 517.6	428.54	589.43
1993	7 430	900.2	3 235.4	21 412	63 627	7 226.5	34.054	1 563.3	469.32	605.43
1994	7 793	965.7	3 394.4	24 297	67 655	7 499.7	36.624	1 653.4	515.14	639.60
1995	8 134	1 009.8	3 523.0	27 235	72 842	7 752.4	41.409	1 787.3	538.45	666.04
1996	8 328	1 060.9	3 586.5	29 935	77 245	7 951.4	45.634	1 902.3	563.51	694.30
1997	8 727	1 112.0	3 666.5	33 104	82 060	8 207.1	52.760	1 983.9	624.58	735.43
1998	9 082	1 163.8	3 784.4	35 873	87 545	8 536.3	60.582	2 067.7	665.74	780.48
1999	9 423	1 215.8	3 877.2	38 147	93 693	8 818.8	69.052	2 128.2	731.82	823.98
2000	9 842	1 283.9	3 989.1	40 644	100 786	9 178.1	79.635	2 231.1	802.00	879.48
2001	10 319	1 343.8	4 144.1	43 580	107 603	9 567.0	89.634	2 343.3	871.33	947.08
2002	10 862	1 408.0	4 304.5	46 969	113 891	10 009.7	99.561	2 459.2	954.06	1 016.22

(1) 1960–91: including D_90.

(national currency)

	A	P	FIN	S	UK	EUR-11 (1)	EUR-12 (2)	EU-15 (3)	US	JP
	Mrd ATS	Mrd PTE	Mrd FIM	Mrd SEK	Mrd GBP	Mrd EUR	Mrd EUR	Mrd EUR	Mrd USD	Mrd JPY
1960	169.8	84	16.65	75.4	25.62	215.1	218.7	306.2	517.5	16 010
1961	188.4	90	18.88	82.1	27.10	236.4	240.5	332.8	535.5	19 337
1962	200.3	96	20.21	89.0	28.41	261.3	265.5	363.1	575.8	21 943
1963	215.9	104	21.95	96.5	30.37	288.0	292.8	397.4	607.5	25 113
1964	236.3	113	24.76	107.6	33.19	319.2	324.7	439.7	653.1	29 541
1965	256.9	126	27.38	118.4	35.74	348.4	354.7	479.5	708.7	32 866
1966	279.9	139	29.36	128.8	38.04	376.9	383.9	517.5	777.6	38 170
1967	297.7	155	32.20	139.8	40.07	403.2	410.8	551.3	821.8	44 731
1968	319.8	171	36.92	148.3	43.43	447.5	456.1	597.9	898.4	52 975
1969	349.2	188	42.14	161.1	46.76	502.5	512.3	667.1	971.6	62 229
1970	391.8	209	47.03	180.4	51.41	566.0	577.2	748.0	1 025.5	73 345
1971	437.4	234	51.67	195.0	57.35	628.5	640.6	828.2	1 114.0	80 701
1972	499.9	273	60.27	213.4	64.24	707.7	720.8	923.8	1 224.6	92 394
1973	566.5	332	73.37	237.5	73.91	838.4	853.9	1 069.3	1 369.1	112 498
1974	644.8	399	92.59	268.2	83.58	971.0	989.4	1 230.3	1 484.3	134 244
1975	683.9	444	106.08	315.0	105.50	1 086.0	1 105.9	1 386.9	1 617.7	148 327
1976	755.5	552	120.02	356.3	124.92	1 259.0	1 283.1	1 595.6	1 805.1	166 573
1977	835.7	736	132.14	387.5	145.48	1 401.9	1 429.3	1 769.5	2 011.5	185 622
1978	882.4	926	145.59	432.0	167.81	1 543.9	1 574.0	1 947.6	2 274.7	204 404
1979	962.9	1 169	169.30	484.2	197.42	1 732.7	1 767.1	2 204.6	2 544.1	221 547
1980	1 034.5	1 478	195.29	549.9	230.53	1 910.1	1 945.3	2 473.3	2 771.2	240 176
1981	1 101.2	1 766	221.31	602.4	253.25	2 067.0	2 107.5	2 725.6	3 104.1	257 963
1982	1 182.1	2 177	248.77	658.6	276.94	2 262.5	2 310.6	2 971.0	3 228.2	270 601
1983	1 259.7	2 708	277.08	737.6	302.62	2 436.5	2 484.4	3 173.5	3 501.5	281 767
1984	1 322.4	3 313	310.79	825.7	324.15	2 644.1	2 696.8	3 444.1	3 896.1	300 543
1985	1 393.8	4 147	338.04	897.4	355.35	2 822.3	2 876.0	3 696.0	4 174.4	320 419
1986	1 465.0	5 201	361.33	981.0	381.82	3 068.7	3 118.0	3 913.2	4 411.4	335 457
1987	1 521.1	6 092	392.52	1 060.0	419.46	3 241.9	3 290.8	4 122.6	4 698.4	349 760
1988	1 594.0	7 279	444.48	1 154.1	467.76	3 471.3	3 526.7	4 484.2	5 061.3	373 973
1989	1 706.9	8 603	495.96	1 276.4	513.28	3 794.1	3 855.8	4 895.9	5 439.0	399 998
1990	1 846.2	10 127	523.03	1 408.2	556.22	4 137.6	4 203.7	5 275.1	5 750.0	430 040
1991	1 980.9	11 628	499.36	1 498.8	584.54	4 422.4	4 495.4	5 638.1	5 929.9	458 299
1991	1 980.9	11 628	499.36	1 498.8	584.54	4 564.0	4 637.0	5 779.7	5 929.9	458 299
1992	2 094.4	13 111	486.92	1 493.0	608.17	4 811.0	4 887.9	6 024.3	6 261.0	471 021
1993	2 163.7	13 835	492.61	1 497.6	639.36	4 857.8	4 937.6	6 040.0	6 582.1	475 381
1994	2 278.3	15 033	522.31	1 596.4	677.59	5 073.2	5 157.5	6 333.1	6 992.5	479 260
1995	2 370.7	16 255	564.57	1 713.3	713.98	5 308.9	5 398.8	6 581.6	7 337.5	483 220
1996	2 450.0	17 389	585.87	1 756.4	756.06	5 534.4	5 632.3	6 911.8	7 750.2	500 310
1997	2 513.5	18 582	635.53	1 813.1	805.40	5 648.0	5 755.0	7 276.5	8 255.6	509 645
1998	2 614.7	19 993	691.17	1 890.2	851.65	5 874.4	5 982.9	7 609.1	8 727.9	498 499
1999	2 712.0	21 313	723.61	1 972.1	891.58	6 127.4	6 244.5	7 985.4	9 236.1	495 145
2000	2 828.0	22 344	781.96	2 077.7	941.07	6 409.3	6 530.2	8 485.5	9 923.1	496 487
2001	2 945.2	23 517	834.91	2 195.5	993.10	6 727.0	6 854.9	8 904.0	10 508.4	511 973
2002	3 059.1	24 710	886.32	2 318.3	1 050.56	7 056.5	7 194.3	9 356.4	11 090.5	528 093

(1) 1960–98: ECU; EU-15 excluding DK, EL, S, UK; 1960–91: including D_90.
(2) 1960–98: ECU; EU-15 excluding DK, S, UK; 1960–91: including D_90.
(3) 1960–98: ECU; 1960–91: including D_90.

Table 5

Gross domestic product at current market prices

(Mrd ECU/EUR (1))

	B	DK	D (2)	EL	E	F	IRL	I	L	NL
1960	10.7	5.8	68.2	3.6	11.4	59.2	1.8	37.6	0.6	11.7
1961	11.3	6.4	77.0	4.0	12.8	63.4	2.0	41.4	0.6	12.7
1962	12.0	7.2	84.3	4.2	14.8	71.0	2.1	46.4	0.6	13.8
1963	12.9	7.7	89.4	4.8	17.4	79.7	2.3	53.2	0.6	14.9
1964	14.5	8.8	98.2	5.4	19.7	88.4	2.6	58.2	0.7	17.6
1965	15.8	9.8	107.3	6.2	22.8	95.4	2.7	62.7	0.8	19.6
1966	16.9	10.8	114.1	7.0	26.5	103.4	2.9	67.9	0.8	21.4
1967	18.2	11.8	116.1	7.6	29.5	112.2	3.1	75.1	0.8	23.6
1968	20.2	12.6	129.6	8.5	30.1	125.9	3.2	84.3	0.9	27.0
1969	22.5	14.5	148.3	9.9	34.7	138.4	3.7	93.7	1.1	30.8
1970	25.0	16.0	180.5	11.2	38.5	143.8	4.2	105.4	1.3	34.6
1971	27.6	17.5	205.7	12.1	42.7	157.6	4.7	113.1	1.3	39.5
1972	31.8	20.0	230.1	13.1	50.5	179.7	5.5	122.3	1.5	45.2
1973	37.3	24.1	280.0	15.6	61.0	212.6	5.9	135.2	1.9	54.4
1974	45.6	27.8	318.8	18.4	78.0	236.3	6.4	154.5	2.4	66.7
1975	50.8	31.4	336.7	19.8	89.7	283.9	7.4	171.7	2.2	74.5
1976	61.0	38.3	398.0	24.1	101.5	327.4	8.2	188.3	2.7	90.1
1977	69.6	42.0	451.3	27.4	110.8	352.0	9.5	211.9	2.9	103.7
1978	76.3	45.7	502.2	30.1	120.9	391.2	11.1	233.1	3.3	113.6
1979	81.4	49.6	552.9	34.4	149.8	437.8	12.9	271.2	3.5	121.2
1980	87.6	49.3	583.2	35.2	158.8	491.1	15.2	325.0	3.8	128.9
1981	90.2	53.3	610.6	40.5	173.3	536.3	18.0	366.1	4.0	134.4
1982	90.0	59.1	668.4	48.1	191.4	576.4	21.3	410.8	4.1	148.6
1983	93.8	65.4	734.9	48.0	184.5	605.7	22.7	469.2	4.5	159.0
1984	101.2	71.6	782.3	52.7	210.5	649.2	24.8	525.3	5.0	167.4
1985	109.2	79.1	818.9	53.7	228.0	702.2	27.3	562.1	5.3	176.5
1986	117.4	86.4	904.7	49.3	245.5	755.2	28.2	615.9	6.0	189.9
1987	124.4	91.4	960.9	48.9	265.4	781.7	28.6	658.7	6.4	196.7
1988	131.9	94.1	1 010.4	55.4	304.7	829.5	30.8	710.9	7.0	204.1
1989	143.6	98.0	1 074.5	61.7	360.6	892.7	34.3	792.3	8.0	216.2
1990	155.4	105.0	1 182.2	66.1	404.5	957.6	37.2	867.8	8.6	232.6
1991	163.6	108.4	1 291.0	73.0	446.3	987.2	38.6	939.6	9.3	244.5
1991	163.6	108.4	1 432.6	73.0	446.3	987.2	38.6	939.6	9.3	244.5
1992	174.9	113.7	1 561.7	77.0	465.6	1 040.5	41.4	951.2	10.3	259.1
1993	183.6	118.5	1 670.8	79.7	426.7	1 089.4	42.6	849.0	11.6	278.3
1994	196.5	128.0	1 763.8	84.4	425.7	1 139.3	46.1	863.4	13.0	296.3
1995	211.0	137.8	1 880.2	89.9	446.9	1 188.1	50.8	839.0	14.0	317.3
1996	211.9	144.2	1 878.2	98.0	480.5	1 224.6	57.5	971.1	14.3	324.5
1997	215.3	148.6	1 866.5	107.0	494.7	1 241.1	70.6	1 028.3	15.4	332.7
1998	223.6	155.2	1 921.9	108.5	523.6	1 293.1	77.1	1 063.8	16.4	351.6
1999	233.6	163.5	1 982.4	117.1	563.1	1 344.4	87.7	1 099.1	18.1	373.9
2000	244.0	172.2	2 039.6	120.9	605.7	1 399.2	101.1	1 152.3	19.9	399.1
2001	255.8	179.9	2 118.9	127.9	646.7	1 458.5	113.8	1 210.2	21.6	429.8
2002	269.3	188.4	2 200.9	137.8	684.5	1 526.0	126.4	1 270.1	23.7	461.1

(1) 1960–98: ECU.
(2) 1960–91: D_90.

(Mrd ECU/EUR ([1]))

	A	P	FIN	S	UK	EUR-11 ([2])	EUR-12 ([3])	EU-15 ([4])	US	JP
1960	6.2	2.8	4.9	13.8	67.9	215.1	218.7	306.2	490.0	42.1
1961	6.8	2.9	5.5	14.9	71.1	236.4	240.5	332.8	501.7	50.3
1962	7.2	3.1	5.9	16.1	74.3	261.3	265.5	363.1	538.2	57.0
1963	7.8	3.4	6.4	17.4	79.5	288.0	292.8	397.4	567.9	65.2
1964	8.5	3.7	7.2	19.4	86.9	319.2	324.7	439.7	610.5	76.7
1965	9.2	4.1	8.0	21.4	93.6	348.4	354.7	479.5	662.5	85.3
1966	10.1	4.5	8.6	23.3	99.6	376.9	383.9	517.5	726.9	99.1
1967	10.8	5.1	8.8	25.4	103.4	403.2	410.8	551.3	771.8	116.7
1968	12.0	5.8	8.5	27.9	101.3	447.5	456.1	597.9	873.2	143.0
1969	13.1	6.4	9.8	30.5	109.8	502.5	512.3	667.1	950.5	169.1
1970	14.7	7.1	11.0	34.1	120.7	566.0	577.2	748.0	1 003.2	199.3
1971	16.7	7.9	11.8	36.3	133.8	628.5	640.6	828.2	1 063.2	221.8
1972	19.3	9.0	13.0	39.9	143.1	707.7	720.8	923.8	1 091.7	272.0
1973	23.5	11.0	15.6	44.1	147.1	838.4	853.9	1 069.3	1 111.5	337.7
1974	28.7	13.3	20.4	50.3	162.8	971.0	989.4	1 230.3	1 234.7	395.2
1975	31.7	14.1	23.2	61.3	188.4	1 086.0	1 105.9	1 386.9	1 303.8	411.2
1976	37.7	16.4	27.8	73.2	201.0	1 259.0	1 283.1	1 595.6	1 614.5	502.9
1977	44.4	16.9	28.8	75.7	222.5	1 401.9	1 429.3	1 769.5	1 762.7	607.0
1978	47.8	16.6	27.8	75.1	252.8	1 543.9	1 574.0	1 947.6	1 785.3	765.3
1979	52.6	17.4	31.8	82.5	305.5	1 732.7	1 767.1	2 204.6	1 856.4	737.4
1980	57.6	21.2	37.8	93.5	385.2	1 910.1	1 945.3	2 473.3	1 990.3	762.4
1981	62.2	25.8	46.2	106.9	457.9	2 067.0	2 107.5	2 725.6	2 780.3	1 051.3
1982	70.8	27.9	52.8	107.2	494.1	2 262.5	2 310.6	2 971.0	3 295.0	1 111.1
1983	78.9	27.4	56.0	108.1	515.5	2 436.5	2 484.4	3 173.5	3 933.3	1 333.2
1984	84.0	28.6	65.8	126.8	548.8	2 644.1	2 696.8	3 444.1	4 937.8	1 606.4
1985	89.1	31.8	72.0	137.6	603.3	2 822.3	2 876.0	3 696.0	5 470.4	1 774.6
1986	97.9	35.4	72.6	140.2	568.6	3 068.7	3 118.0	3 913.2	4 482.4	2 033.1
1987	104.4	37.5	77.5	145.0	595.3	3 241.9	3 290.8	4 122.6	4 069.8	2 099.4
1988	109.3	42.8	89.9	159.4	704.0	3 471.3	3 526.7	4 484.2	4 280.2	2 469.1
1989	117.2	49.6	105.0	179.8	762.3	3 794.1	3 855.8	4 895.9	4 936.7	2 632.6
1990	127.9	55.9	107.7	187.3	779.2	4 137.6	4 203.7	5 275.1	4 515.4	2 341.5
1991	137.3	65.1	99.8	200.4	833.8	4 422.4	4 495.4	5 638.1	4 785.4	2 752.7
1991	137.3	65.1	99.8	200.4	833.8	4 564.0	4 637.0	5 779.7	4 785.4	2 752.7
1992	147.3	75.0	83.9	198.2	824.5	4 811.0	4 887.9	6 024.3	4 823.2	2 868.2
1993	158.8	73.4	73.6	164.2	819.7	4 857.8	4 937.6	6 040.0	5 620.9	3 652.6
1994	168.3	76.3	84.4	174.2	873.3	5 073.2	5 157.5	6 333.1	5 878.4	3 950.3
1995	179.8	82.9	98.9	183.6	861.5	5 308.9	5 398.8	6 581.6	5 609.7	3 928.2
1996	182.4	88.8	100.5	206.3	929.0	5 534.4	5 632.3	6 911.8	6 103.7	3 623.2
1997	181.8	93.6	108.1	209.6	1 163.4	5 648.0	5 755.0	7 276.5	7 279.8	3 717.9
1998	188.7	99.1	115.5	212.0	1 259.0	5 874.4	5 982.9	7 609.1	7 785.2	3 404.7
1999	197.1	106.3	121.7	223.9	1 353.5	6 127.4	6 244.5	7 985.4	8 666.0	4 081.4
2000	205.5	111.5	131.5	247.4	1 535.6	6 409.3	6 530.2	8 485.5	10 643.1	4 978.4
2001	214.0	117.3	140.4	260.9	1 608.3	6 727.0	6 854.9	8 904.0	11 620.8	5 318.1
2002	222.3	123.3	149.1	275.4	1 698.3	7 056.5	7 194.3	9 356.4	12 276.4	5 495.0

([1]) 1960–98: ECU.
([2]) EU-15 excluding DK, EL, S, UK; 1960–91: including D_90.
([3]) EU-15 excluding DK, S, UK; 1960–91: including D_90.
([4]) 1960–91: including D_90.

Table 6

Gross domestic product at current market prices

(Mrd PPS)

	B	DK	D [1]	EL	E	F	IRL	I	L	NL
1960	9.0	5.8	67.9	3.7	18.2	48.5	1.8	44.3	0.6	13.4
1961	9.7	6.3	73.2	4.3	21.0	52.7	1.9	49.5	0.6	14.3
1962	10.6	7.0	79.9	4.5	23.9	58.7	2.1	54.8	0.6	15.5
1963	11.6	7.3	85.9	5.2	27.2	64.6	2.3	60.5	0.6	16.8
1964	13.0	8.4	95.7	6.0	30.2	71.9	2.5	65.0	0.7	19.0
1965	14.0	9.1	105.3	6.9	33.5	78.7	2.6	70.0	0.8	20.8
1966	15.0	9.7	112.3	7.7	37.3	85.9	2.8	77.0	0.8	22.2
1967	16.0	10.4	115.3	8.3	40.1	92.6	3.0	85.0	0.8	24.1
1968	17.2	11.1	125.3	9.2	44.0	99.5	3.4	93.3	0.9	26.4
1969	19.3	12.4	141.7	10.8	50.5	112.0	3.8	104.2	1.1	29.6
1970	22.0	13.6	159.4	12.6	56.3	126.8	4.1	117.5	1.2	33.5
1971	24.5	15.0	176.3	14.6	63.3	142.7	4.6	128.6	1.3	37.6
1972	27.5	16.9	196.4	17.2	73.1	159.2	5.2	141.3	1.4	41.4
1973	31.9	19.1	224.4	20.3	85.9	183.1	6.0	164.3	1.8	47.4
1974	37.4	21.3	253.3	21.4	102.2	212.6	7.0	193.7	2.2	55.6
1975	41.8	23.9	283.2	25.7	116.4	240.1	8.4	214.6	2.1	63.0
1976	48.4	27.9	326.6	30.1	131.7	274.1	9.3	250.3	2.4	72.3
1977	52.7	30.5	363.6	33.6	146.6	306.2	10.9	278.8	2.5	80.1
1978	58.2	33.4	402.4	38.7	159.8	340.0	12.5	310.7	2.8	88.1
1979	65.3	37.7	459.6	43.8	175.2	385.0	14.1	359.9	3.1	98.7
1980	75.5	41.6	514.3	48.8	196.7	433.5	16.1	412.8	3.5	110.7
1981	82.9	44.7	565.4	52.8	215.6	481.8	18.3	455.5	3.8	120.9
1982	89.9	49.7	606.2	56.5	237.0	535.2	20.3	495.3	4.2	129.4
1983	94.7	53.1	647.8	58.7	254.4	570.5	21.2	526.6	4.5	138.2
1984	102.7	58.1	703.4	63.2	272.7	612.5	23.4	571.5	4.9	150.7
1985	109.4	62.9	750.7	67.8	292.6	649.9	25.2	615.5	5.4	162.5
1986	114.9	67.5	792.4	70.3	311.5	686.4	26.1	650.9	6.0	172.2
1987	120.8	69.1	823.5	70.3	337.0	720.8	28.0	686.5	6.2	178.9
1988	131.7	72.9	889.8	76.4	369.2	785.5	30.4	743.3	7.0	191.2
1989	143.7	76.8	970.7	83.5	407.1	861.5	34.0	805.0	8.1	210.8
1990	154.8	81.3	1 075.9	87.6	442.8	926.8	38.4	860.8	8.5	230.1
1991	166.0	87.9	1 190.3	96.0	488.8	995.2	41.9	926.9	9.4	243.5
1991	166.0	87.9	1 320.8	96.0	488.8	995.2	41.9	926.9	9.4	243.5
1992	177.9	89.7	1 411.4	103.3	496.8	1 026.0	45.7	961.4	10.2	255.1
1993	184.7	94.9	1 426.1	107.7	504.4	1 019.2	48.0	944.9	11.0	262.9
1994	194.3	103.1	1 525.3	115.2	518.6	1 053.0	53.3	1 002.6	12.0	280.0
1995	200.9	108.9	1 585.9	121.7	541.4	1 088.8	59.2	1 046.0	12.6	298.1
1996	207.9	115.9	1 660.5	129.3	576.2	1 122.0	63.0	1 096.0	13.1	306.7
1997	219.3	122.6	1 719.8	134.1	609.2	1 149.8	73.6	1 136.7	14.3	340.6
1998	229.5	127.4	1 786.1	140.2	645.4	1 203.7	81.0	1 176.4	15.3	359.1
1999	239.6	133.1	1 862.8	148.8	688.3	1 264.1	90.3	1 218.3	16.9	379.7
2000	254.2	141.3	1 963.4	159.0	735.6	1 346.7	101.0	1 279.3	18.5	407.4
2001	266.6	147.0	2 050.7	168.9	774.8	1 412.0	110.4	1 337.4	19.9	431.3
2002	281.4	153.4	2 145.1	180.6	815.8	1 483.3	119.9	1 401.2	21.7	457.7

([1]) 1960–91: D_90.

(Mrd PPS)

	A	P	FIN	S	UK	EUR-11 (1)	EUR-12 (2)	EU-15 (3)	US	JP
1960	6.8	3.6	4.0	9.5	64.6	218.0	221.7	301.6	297.7	54.0
1961	7.4	3.9	4.4	10.4	68.3	238.6	242.8	327.8	314.0	62.3
1962	7.9	4.3	4.7	11.3	72.1	263.0	267.5	357.8	347.4	70.6
1963	8.6	4.7	5.1	12.4	78.9	288.0	293.2	391.9	379.1	80.3
1964	9.5	5.3	5.6	13.9	86.9	318.4	324.4	433.6	419.3	93.2
1965	10.2	6.0	6.1	15.0	93.0	348.1	355.0	472.2	466.2	102.9
1966	11.2	6.4	6.5	15.9	98.4	377.5	385.2	509.3	516.1	117.7
1967	11.9	7.2	6.9	17.0	103.7	402.8	411.1	542.1	544.6	134.6
1968	12.8	8.0	7.2	18.1	111.2	438.0	447.2	587.6	588.1	155.2
1969	14.3	8.8	8.3	20.0	119.5	493.6	504.4	656.3	638.2	182.9
1970	16.4	10.1	9.6	22.8	131.0	557.0	569.6	737.0	684.7	216.0
1971	18.5	11.5	10.5	24.7	143.4	619.4	634.0	817.2	760.3	242.1
1972	21.0	13.3	12.1	27.0	158.7	692.0	709.2	911.8	857.1	280.4
1973	24.1	16.2	14.1	30.6	185.8	799.1	819.4	1 054.9	989.9	330.4
1974	28.2	18.4	16.4	35.6	205.8	927.0	948.4	1 211.1	1 108.7	367.6
1975	31.8	19.9	18.7	41.4	231.4	1 040.1	1 065.8	1 362.5	1 251.2	429.1
1976	36.4	23.3	20.5	45.8	260.5	1 195.3	1 225.4	1 559.6	1 447.2	488.6
1977	41.3	26.7	22.3	48.8	288.7	1 331.5	1 365.0	1 733.0	1 640.0	552.1
1978	44.2	29.5	24.5	53.3	320.7	1 472.8	1 511.4	1 918.9	1 860.3	624.5
1979	51.1	34.1	28.6	60.7	361.2	1 674.8	1 718.5	2 178.1	2 104.0	721.9
1980	57.9	39.5	33.4	68.3	391.5	1 893.9	1 942.7	2 444.0	2 325.7	822.4
1981	63.5	44.1	37.4	75.0	424.4	2 089.3	2 142.1	2 686.3	2 617.0	931.9
1982	70.0	48.8	41.8	82.0	467.7	2 278.1	2 334.6	2 934.0	2 774.0	1 039.4
1983	75.6	51.1	45.1	87.7	509.5	2 429.8	2 488.5	3 138.8	3 039.4	1 117.0
1984	80.1	53.0	49.2	96.3	551.3	2 624.2	2 687.4	3 393.1	3 443.7	1 225.9
1985	85.7	57.0	53.1	102.7	598.5	2 807.0	2 874.7	3 638.8	3 739.5	1 338.6
1986	90.5	61.2	56.1	108.4	643.2	2 968.1	3 038.4	3 857.4	3 987.2	1 420.6
1987	94.2	66.7	59.9	114.5	687.9	3 122.4	3 192.7	4 064.2	4 220.7	1 515.4
1988	101.2	74.6	65.3	121.9	753.6	3 389.3	3 465.7	4 414.1	4 579.8	1 676.4
1989	111.1	82.6	72.3	131.4	810.2	3 706.8	3 790.3	4 808.8	4 990.3	1 850.2
1990	121.8	90.4	75.9	139.7	855.0	4 026.0	4 113.5	5 189.6	5 323.7	2 038.6
1991	131.6	99.5	72.6	141.8	866.3	4 365.6	4 461.6	5 557.7	5 499.7	2 223.4
1991	131.6	99.5	72.6	141.8	866.3	4 496.1	4 592.1	5 688.2	5 499.7	2 223.4
1992	138.5	104.8	70.8	140.8	912.6	4 698.6	4 801.9	5 945.0	5 800.4	2 332.0
1993	144.7	109.7	75.0	141.2	929.9	4 730.6	4 838.3	6 004.4	6 099.5	2 405.2
1994	152.2	118.4	79.0	150.0	976.0	4 988.8	5 103.9	6 333.1	6 500.5	2 461.5
1995	156.6	123.9	87.4	159.8	990.7	5 200.6	5 322.3	6 581.6	6 823.6	2 553.3
1996	166.3	130.1	90.4	165.8	1 068.8	5 432.1	5 561.3	6 911.8	7 287.2	2 751.0
1997	174.1	143.2	99.1	174.4	1 165.7	5 679.6	5 813.8	7 276.5	7 844.1	2 850.7
1998	182.4	151.7	106.1	181.8	1 223.1	5 936.6	6 076.8	7 609.1	8 335.3	2 819.4
1999	191.9	160.9	110.7	191.3	1 288.9	6 223.4	6 372.1	7 985.4	8 894.8	2 895.0
2000	203.3	169.1	120.4	205.4	1 380.7	6 599.1	6 758.1	8 485.5	9 675.7	3 021.0
2001	212.3	176.5	127.7	216.9	1 451.6	6 919.6	7 088.5	8 904.0	10 201.9	3 133.4
2002	221.5	184.8	134.9	227.9	1 527.2	7 267.3	7 447.9	9 356.4	10 707.3	3 260.9

(1) EU-15 excluding DK, EL, S, UK; 1960–91: including D_90.
(2) EU-15 excluding DK, S, UK; 1960–91: including D_90.
(3) 1960–91: including D_90.

Table 7

Gross domestic product at current market prices

(national currency; annual percentage change)

	B	DK	D (1)	EL	E	F	IRL	I	L	NL
1961	6.2	11.0	9.6	14.4	13.9	8.4	7.7	11.2	0.0	5.6
1962	6.9	12.7	8.8	5.0	15.6	12.2	8.3	12.4	5.3	7.7
1963	7.6	6.4	6.0	13.1	18.0	12.3	7.5	14.5	6.7	8.5
1964	11.9	14.3	9.9	13.1	12.9	10.9	13.8	9.5	14.2	17.7
1965	9.0	12.3	9.3	15.3	16.0	7.9	6.5	7.6	4.8	11.7
1966	7.4	9.8	6.3	11.6	16.0	8.3	5.4	8.4	5.1	8.9
1967	7.2	9.9	1.3	8.0	13.2	8.0	9.2	10.2	0.6	9.7
1968	6.9	11.3	7.9	8.8	12.9	8.5	12.8	8.4	9.4	10.9
1969	10.9	13.7	11.9	15.1	14.5	14.4	15.5	10.4	15.8	13.3
1970	11.2	10.5	13.1	13.1	10.4	11.5	12.6	12.5	17.1	12.2
1961–70	8.5	11.2	8.4	11.7	14.3	10.2	9.9	10.5	7.7	10.6
1971	9.6	10.5	11.0	11.0	12.9	11.4	14.4	8.7	1.8	12.9
1972	11.9	15.0	9.8	15.7	17.4	11.7	20.7	9.2	12.8	12.7
1973	13.6	14.7	11.4	30.7	20.6	14.4	20.7	21.1	21.5	14.7
1974	17.3	12.0	7.3	14.6	22.5	15.3	10.6	26.3	21.9	13.4
1975	10.7	11.7	4.3	20.3	17.4	12.7	26.9	13.6	– 7.4	10.4
1976	13.7	16.0	9.1	24.4	20.3	15.9	22.7	26.0	15.1	14.0
1977	8.2	11.1	6.7	17.1	26.9	12.8	22.5	21.8	2.8	9.0
1978	7.4	11.5	7.4	22.0	22.4	13.8	18.6	18.0	9.4	7.8
1979	7.0	11.3	8.2	24.0	17.0	13.6	17.3	22.6	8.8	6.4
1980	8.8	8.0	6.0	19.8	14.9	12.9	18.3	25.2	8.8	6.8
1971–80	10.8	12.2	8.1	19.9	19.2	13.4	19.2	19.1	9.2	10.8
1981	4.8	9.5	4.3	19.4	12.4	12.4	21.4	19.7	6.6	4.8
1982	8.0	14.2	3.5	25.7	15.7	14.4	17.8	17.6	12.1	4.1
1983	5.9	10.3	5.1	19.2	14.2	10.6	10.6	16.5	10.0	3.8
1984	8.0	9.7	4.9	24.3	13.3	8.8	11.0	14.6	10.9	4.7
1985	6.6	8.6	4.1	22.0	10.5	7.0	8.5	12.2	6.0	4.9
1986	4.8	8.1	5.6	19.4	14.6	7.6	6.1	10.6	10.7	2.9
1987	4.1	5.2	3.4	12.6	11.8	5.5	7.0	9.4	3.3	0.7
1988	7.0	3.8	5.3	21.6	11.1	7.8	7.8	11.0	11.2	3.8
1989	8.8	5.4	6.1	18.8	12.2	7.4	11.6	9.5	13.7	6.0
1990	5.8	4.7	9.1	20.6	11.3	5.6	7.3	10.4	5.7	6.5
1981–90	6.4	7.9	5.1	20.3	12.7	8.7	10.8	13.1	9.0	4.2
1991	4.8	3.9	9.1	23.5	9.5	4.0	3.8	9.1	7.7	5.0
1992	5.3	3.5	7.4	15.6	7.6	3.5	6.2	5.3	8.9	4.3
1993	2.2	1.4	2.5	12.6	3.1	1.4	8.0	3.0	9.5	2.7
1994	4.9	7.3	4.9	13.5	6.3	3.8	7.5	5.8	9.8	5.6
1995	4.4	4.6	3.8	12.1	7.7	3.4	13.1	8.1	4.5	4.1
1996	2.4	5.1	1.8	9.9	6.0	2.6	10.2	6.4	4.7	4.2
1997	4.8	4.8	2.2	10.6	6.2	3.2	15.6	4.3	10.8	5.9
1998	4.1	4.7	3.2	8.4	6.7	4.0	14.8	4.2	6.6	6.1
1999	3.8	4.5	2.5	6.3	7.0	3.3	14.0	2.9	9.9	5.6
2000	4.4	5.6	2.9	6.5	7.6	4.1	15.3	4.8	9.6	6.7
1991–2000	4.1	4.5	4.0	11.8	6.8	3.3	10.8	5.4	8.2	5.0
2001	4.9	4.7	3.9	7.2	6.8	4.2	12.6	5.0	8.6	7.7
2002	5.3	4.8	3.9	7.8	5.8	4.6	11.1	4.9	9.5	7.3

(1) 1961–91: including D_90.

(national currency; annual percentage change)

	A	P	FIN	S	UK	EUR-11 (1)	EUR-12 (2)	EU-15 (3)	US	JP
1961	11.0	7.6	13.4	8.8	5.8	9.7	9.7	8.9	3.5	20.8
1962	6.3	6.4	7.1	8.5	4.8	10.6	10.5	9.3	7.5	13.5
1963	7.8	8.5	8.6	8.3	6.9	10.6	10.7	9.8	5.5	14.4
1964	9.5	8.5	12.8	11.5	9.3	10.9	10.9	10.7	7.5	17.6
1965	8.7	11.7	10.6	10.0	7.7	9.4	9.5	9.2	8.5	11.3
1966	8.9	9.6	7.2	8.8	6.4	8.5	8.5	8.1	9.7	16.1
1967	6.4	11.8	9.7	8.5	5.3	7.1	7.1	6.8	5.7	17.2
1968	7.4	10.7	14.6	6.1	8.4	9.0	9.0	8.8	9.3	18.4
1969	9.2	9.7	14.1	8.6	7.7	12.4	12.5	11.5	8.1	17.5
1970	12.2	11.3	11.6	12.0	9.9	12.2	12.2	11.7	5.5	17.9
1961–70	8.7	9.5	10.9	9.1	7.2	10.0	10.0	9.5	7.1	16.4
1971	11.6	12.0	9.9	8.1	11.6	10.9	10.9	10.9	8.6	10.0
1972	14.3	16.4	16.7	9.4	12.0	11.6	11.7	11.8	9.9	14.5
1973	13.3	21.7	21.7	11.3	15.0	15.9	16.2	15.8	11.8	21.8
1974	13.8	20.2	26.2	13.0	13.1	16.3	16.2	15.5	8.4	19.3
1975	6.1	11.2	14.6	17.4	26.2	10.8	11.0	13.8	9.0	10.5
1976	10.5	24.3	13.1	13.1	18.4	16.4	16.6	16.8	11.6	12.3
1977	10.6	33.5	10.1	8.8	16.5	14.5	14.6	14.6	11.4	11.4
1978	5.6	25.8	10.2	11.5	15.3	13.2	13.4	13.7	13.1	10.1
1979	9.1	26.2	16.3	12.1	17.6	13.9	14.2	14.6	11.8	8.4
1980	7.4	26.5	15.4	13.6	16.8	13.5	13.7	14.1	8.9	8.4
1971–80	10.2	21.6	15.3	11.8	16.2	13.7	13.8	14.2	10.5	12.6
1981	6.5	19.5	13.3	9.5	9.9	11.1	11.3	11.0	12.0	7.4
1982	7.3	23.3	12.4	9.3	9.4	11.4	11.7	11.3	4.0	4.9
1983	6.6	24.4	11.4	12.0	9.3	10.4	10.6	10.4	8.5	4.1
1984	5.0	22.3	12.2	11.9	7.1	9.5	9.8	9.4	11.3	6.7
1985	5.4	25.2	8.8	8.7	9.6	7.9	8.3	8.5	7.1	6.6
1986	5.1	25.4	6.9	9.3	7.5	8.4	8.6	8.4	5.7	4.7
1987	3.8	17.1	8.6	8.1	9.9	6.4	6.5	7.1	6.5	4.3
1988	4.8	19.5	13.2	8.9	11.5	8.2	8.5	8.9	7.7	6.9
1989	7.1	18.2	11.6	10.6	9.7	8.4	8.6	8.8	7.5	7.0
1990	8.2	17.7	5.5	10.3	8.4	8.6	8.9	8.7	5.7	7.5
1981–90	6.0	21.2	10.4	9.9	9.2	9.0	9.3	9.3	7.6	6.0
1991	7.3	14.8	– 4.5	6.4	5.1	7.3	7.7	7.2	3.1	6.6
1992	5.7	12.8	– 2.5	– 0.4	4.0	5.8	6.0	5.5	5.6	2.8
1993	3.3	5.5	1.2	0.3	5.1	2.6	2.8	3.1	5.1	0.9
1994	5.3	8.7	6.0	6.6	6.0	5.2	5.4	5.5	6.2	0.8
1995	4.1	8.1	8.1	7.3	5.4	5.3	5.4	5.5	4.9	0.8
1996	3.3	7.0	3.8	2.5	5.9	3.8	3.9	4.2	5.6	3.5
1997	2.6	6.9	8.5	3.2	6.5	4.0	4.1	4.5	6.5	1.9
1998	4.0	7.6	8.8	4.3	5.7	4.5	4.6	4.8	5.7	– 2.2
1999	3.7	6.6	4.7	4.3	4.7	3.8	3.9	4.0	5.8	– 0.7
2000	4.3	4.8	8.1	5.4	5.6	4.7	4.7	4.9	7.4	0.3
1991–2000	4.4	8.2	4.1	4.0	5.4	4.7	4.9	4.9	5.6	1.4
2001	4.1	5.3	6.8	5.7	5.5	5.0	5.1	5.1	5.9	3.1
2002	3.9	5.1	6.2	5.6	5.8	4.9	5.0	5.1	5.5	3.1

(1) PPS weighted; EU-15 excluding DK, EL, S, UK; 1961–91: including D_90.
(2) PPS weighted; EU-15 excluding DK, S, UK; 1961–91: including D_90.
(3) PPS weighted; 1961–91: including D_90.

Table 8

Gross domestic product at current market prices per head of population

(ECU/EUR [1]; EU-15 = 100 [2])

	B	DK	D [3]	EL	E	F	IRL	I	L	NL
1960	114.6	124.4	120.4	41.9	36.4	123.9	63.2	73.4	179.0	99.5
1961	111.4	125.9	124.4	43.7	37.8	122.0	62.8	74.4	163.4	99.1
1962	109.5	130.1	124.7	42.1	39.9	124.2	62.6	76.7	157.0	98.0
1963	107.9	126.7	120.8	43.8	43.0	126.5	61.6	80.5	153.0	96.8
1964	109.1	131.0	119.8	45.0	43.8	126.5	63.6	79.7	157.4	102.5
1965	109.0	135.1	119.7	47.8	46.5	125.2	62.4	78.7	150.9	104.4
1966	108.5	137.3	117.8	49.4	49.9	125.6	61.3	79.0	147.0	104.8
1967	109.8	140.8	113.0	50.1	52.0	127.8	62.0	82.0	140.0	107.9
1968	112.3	139.0	116.6	52.2	48.7	132.1	58.4	84.7	146.6	113.7
1969	112.8	142.8	119.2	54.3	50.1	129.9	61.0	84.5	153.5	115.6
1970	112.5	140.6	129.1	55.0	49.3	120.1	61.2	84.9	160.5	115.0
1971	112.4	138.8	132.3	54.4	49.2	118.6	62.6	82.5	147.9	118.0
1972	116.5	142.5	132.8	52.3	52.1	120.9	64.1	80.0	153.2	120.6
1973	118.4	148.2	139.7	53.8	54.2	123.3	59.2	76.4	165.2	125.2
1974	125.9	148.8	138.7	55.5	59.9	118.9	55.0	75.7	180.8	133.0
1975	124.7	149.1	131.0	52.7	60.7	126.7	56.1	74.5	148.6	131.2
1976	130.3	158.6	135.7	55.2	59.2	126.9	53.2	70.9	156.7	137.3
1977	134.4	156.7	139.6	55.9	57.9	123.0	55.3	71.9	153.6	142.1
1978	134.2	155.1	141.7	55.3	56.9	124.1	58.2	71.8	156.1	141.1
1979	126.8	148.7	138.3	55.3	62.0	122.6	59.0	73.9	149.9	132.6
1980	122.0	132.2	130.1	50.2	58.4	122.4	61.3	79.1	144.0	125.2
1981	114.4	130.2	123.8	52.1	57.4	121.1	65.4	81.1	137.0	118.0
1982	105.0	132.8	124.7	56.5	58.0	118.9	70.3	83.6	130.3	119.4
1983	102.6	137.9	129.0	52.5	52.2	116.6	69.8	89.5	132.2	119.3
1984	102.3	139.5	127.3	53.0	54.7	114.7	69.9	92.4	135.1	115.5
1985	102.9	143.7	124.7	50.2	55.1	115.3	71.7	92.3	135.0	113.2
1986	104.7	148.4	130.3	43.6	56.0	116.8	70.1	95.7	144.4	114.7
1987	105.4	149.2	131.6	41.0	57.5	114.4	67.4	97.4	143.4	112.2
1988	102.8	141.6	126.9	42.8	60.7	111.3	67.3	96.9	144.6	106.7
1989	102.6	135.5	122.9	43.7	66.0	109.5	69.4	99.3	149.8	103.4
1990	103.4	135.5	123.9	43.4	69.0	109.1	70.4	101.4	149.4	103.2
1991	102.0	131.2	125.7	44.6	71.5	105.3	68.4	103.3	150.1	101.2
1991	104.0	133.8	113.9	45.5	72.9	107.4	69.7	105.3	153.1	103.2
1992	106.7	134.8	118.8	45.7	73.2	108.6	71.5	102.6	160.9	104.6
1993	111.9	140.3	126.4	47.2	67.1	113.4	73.2	91.4	179.0	111.8
1994	114.2	144.6	127.3	47.6	63.9	113.1	75.7	88.7	189.1	113.3
1995	118.1	149.5	130.6	48.8	64.7	113.4	80.0	83.1	193.4	116.4
1996	113.0	148.4	124.2	50.7	66.3	111.2	85.9	91.7	186.9	113.2
1997	109.1	145.1	117.4	52.6	64.9	107.0	99.5	92.3	188.8	110.0
1998	108.3	144.7	115.8	51.0	65.8	106.5	102.8	91.3	190.0	110.7
1999	108.0	145.2	114.0	52.5	67.5	105.3	110.6	90.0	197.9	111.7
2000	106.3	143.7	110.6	51.1	68.4	102.9	118.9	89.0	202.0	111.7
2001	106.3	142.9	109.7	51.5	69.6	102.0	126.5	89.2	207.0	114.2
2002	106.6	142.3	108.8	52.8	70.2	101.3	132.8	89.2	213.5	116.1

([1]) 1960–98: ECU.
([2]) 1960–91: including D_90.
([3]) 1960–91: D_90.

(ECU/EUR [1]; EU-15 = 100 [2])

	A	P	FIN	S	UK	EUR-11 [3]	EUR-12 [4]	EU-15 [2]	US	JP
1960	85.8	31.2	108.8	180.5	126.8	92.8	91.0	100.0	265.3	43.7
1961	87.1	30.8	112.5	179.4	122.2	93.8	92.0	100.0	248.0	48.1
1962	84.9	30.4	110.5	178.8	117.3	94.9	93.1	100.0	242.6	49.9
1963	83.9	30.2	110.0	177.8	115.0	95.5	93.7	100.0	232.7	52.2
1964	83.2	29.7	112.4	179.4	113.8	95.6	93.9	100.0	224.9	55.4
1965	83.1	30.7	114.7	180.9	112.6	95.7	94.0	100.0	223.0	56.4
1966	83.9	31.4	114.3	182.0	111.3	95.8	94.2	100.0	225.9	60.6
1967	84.1	33.4	109.8	186.1	108.5	96.2	94.6	100.0	224.1	66.7
1968	86.3	35.4	98.9	188.5	98.2	98.5	96.9	100.0	232.9	75.0
1969	85.3	35.4	102.5	184.7	95.6	99.0	97.5	100.0	226.5	79.1
1970	85.6	35.5	103.1	183.9	94.1	99.4	97.9	100.0	212.2	82.5
1971	87.9	36.1	100.8	176.9	94.4	99.6	98.1	100.0	201.9	82.7
1972	90.9	36.9	99.4	175.0	90.8	100.5	98.8	100.0	185.1	90.3
1973	95.7	39.3	103.3	167.8	80.9	102.7	101.1	100.0	162.2	96.0
1974	102.0	41.1	117.5	166.3	78.2	103.3	101.7	100.0	155.9	97.0
1975	100.7	37.3	118.6	179.9	80.6	102.4	100.7	100.0	145.2	88.3
1976	104.6	36.8	123.6	186.8	75.0	103.1	101.5	100.0	155.4	93.3
1977	111.3	33.9	115.3	174.2	75.2	103.5	101.8	100.0	152.0	101.0
1978	109.4	30.0	101.2	157.2	77.9	103.5	101.8	100.0	138.9	115.0
1979	106.9	27.7	102.5	152.6	83.4	102.6	100.9	100.0	126.6	97.5
1980	104.8	29.9	108.5	154.6	93.9	100.8	99.0	100.0	120.1	89.5
1981	102.8	32.8	120.4	160.8	101.7	98.9	97.2	100.0	151.3	111.6
1982	107.6	32.4	125.9	148.1	100.9	99.3	97.7	100.0	163.2	107.7
1983	112.7	29.7	124.4	140.0	98.6	100.1	98.3	100.0	181.1	120.3
1984	110.8	28.5	134.1	151.4	96.7	100.1	98.4	100.0	207.9	133.0
1985	109.5	29.5	136.5	153.1	98.9	99.6	97.8	100.0	213.2	136.2
1986	113.8	31.1	129.8	147.4	88.0	102.3	100.1	100.0	163.8	147.0
1987	115.3	31.4	131.5	144.5	87.4	102.6	100.3	100.0	140.3	143.7
1988	111.0	33.1	140.3	145.8	95.1	101.0	98.8	100.0	134.8	155.2
1989	109.1	35.4	150.2	150.3	94.4	101.0	99.0	100.0	141.7	151.7
1990	109.8	37.5	143.3	145.1	89.7	102.2	100.1	100.0	119.8	125.6
1991	109.4	41.2	124.2	145.1	90.0	102.2	100.1	100.0	118.1	138.4
1991	111.6	42.0	126.6	147.9	91.7	101.6	99.6	100.0	120.5	141.1
1992	114.6	46.7	102.0	140.2	87.1	102.7	100.7	100.0	115.8	141.3
1993	122.1	45.7	89.2	115.7	86.5	103.4	101.5	100.0	133.8	179.9
1994	123.2	45.3	97.5	116.6	87.9	103.0	101.1	100.0	132.6	185.7
1995	126.8	47.4	109.8	118.0	83.4	103.8	101.8	100.0	120.9	177.5
1996	122.6	48.5	106.3	126.4	85.6	103.0	101.2	100.0	124.5	155.9
1997	116.2	48.5	108.5	122.2	101.7	99.9	98.2	100.0	140.8	152.0
1998	115.5	49.2	110.8	118.4	105.1	99.4	97.7	100.0	143.0	133.1
1999	115.0	50.3	111.3	119.4	107.5	98.8	97.2	100.0	150.7	152.1
2000	113.0	49.6	113.2	124.4	114.6	97.3	95.7	100.0	172.9	174.6
2001	112.4	49.8	115.2	125.2	114.1	97.3	95.7	100.0	178.7	177.8
2002	111.3	49.8	116.5	125.8	114.5	97.2	95.6	100.0	178.3	175.0

([1]) 1960–98: ECU.
([2]) 1960–91: including D_90.
([3]) EU-15 excluding DK, EL, S, UK; 1960–91: including D_90.
([4]) EU-15 excluding DK, S, UK; 1960–91: including D_90.

Table 9

Gross domestic product at current market prices per head of population

(PPS; EU-15 = 100 (1))

	B	DK	D (2)	EL	E	F	IRL	I	L	NL
1960	97.2	125.1	121.6	43.8	59.4	103.1	63.1	87.7	177.5	116.2
1961	97.3	126.5	120.1	47.1	63.0	103.0	63.7	90.2	168.0	113.1
1962	98.4	128.0	120.0	45.3	65.7	104.2	63.2	91.8	157.8	111.9
1963	98.3	123.1	117.7	48.7	68.2	103.9	63.4	92.8	154.2	110.2
1964	99.2	127.2	118.4	50.5	68.2	104.4	62.3	90.1	156.8	112.2
1965	98.4	127.5	119.3	53.9	69.4	104.8	61.2	89.2	152.6	112.6
1966	97.8	126.0	117.9	55.2	71.4	106.0	59.7	91.0	147.8	110.7
1967	98.3	125.9	114.1	56.2	71.7	107.2	61.1	94.3	144.9	112.2
1968	97.5	124.5	114.6	57.4	72.4	106.1	63.0	95.5	145.0	113.0
1969	98.4	124.9	115.8	60.5	74.0	106.9	63.0	95.6	154.9	112.9
1970	100.2	121.4	115.6	63.2	73.3	107.5	61.6	96.1	159.2	113.2
1971	101.2	120.7	115.0	66.6	74.0	108.8	61.6	95.0	147.6	113.8
1972	102.2	121.7	114.8	69.7	76.4	108.5	62.2	93.7	150.0	111.9
1973	102.5	118.9	113.5	71.2	77.4	107.7	60.8	94.0	160.3	110.6
1974	105.0	115.6	112.0	65.4	79.8	108.7	61.5	96.4	171.8	112.6
1975	104.4	115.7	112.1	69.6	80.2	109.1	64.5	94.8	142.6	113.0
1976	105.7	117.9	113.9	70.5	78.7	108.7	61.8	96.4	142.1	112.7
1977	103.9	116.2	114.8	69.9	78.1	109.2	64.5	96.6	132.7	112.1
1978	103.9	114.9	115.3	72.0	76.4	109.4	66.4	97.2	135.5	111.1
1979	103.0	114.6	116.4	71.2	73.4	109.1	65.2	99.3	133.9	109.3
1980	106.5	112.8	116.1	70.4	73.1	109.3	66.0	101.7	133.7	108.8
1981	106.7	110.8	116.4	68.9	72.5	110.4	67.5	102.3	132.4	107.8
1982	106.3	113.1	114.6	67.2	72.8	111.8	67.9	102.0	134.5	105.3
1983	104.8	113.3	115.0	65.0	72.8	111.0	66.1	101.5	133.9	104.9
1984	105.3	114.8	116.2	64.5	72.0	109.9	67.0	102.0	136.2	105.6
1985	104.8	116.1	116.1	64.4	71.9	108.4	67.3	102.6	137.8	105.9
1986	104.0	117.6	115.8	62.9	72.1	107.7	65.8	102.6	145.4	105.5
1987	103.9	114.4	114.4	59.8	74.0	107.0	67.0	102.9	142.5	103.5
1988	104.3	111.4	113.5	59.9	74.8	107.1	67.5	102.9	146.7	101.6
1989	104.5	108.2	113.1	60.1	75.9	107.6	70.0	102.7	155.9	102.6
1990	104.6	106.6	114.6	58.5	76.8	107.4	73.7	102.3	150.4	103.7
1991	105.0	108.0	117.5	59.6	79.5	107.7	75.2	103.3	153.3	102.2
1991	107.2	110.3	106.7	60.8	81.2	110.0	76.8	105.5	156.5	104.4
1992	110.0	107.8	108.8	62.2	79.1	108.5	79.8	105.1	161.2	104.4
1993	113.2	113.1	108.6	64.1	79.7	106.8	83.0	102.4	170.5	106.3
1994	112.9	116.5	110.1	64.9	77.9	104.5	87.5	103.1	174.3	107.0
1995	112.4	118.1	110.2	66.0	78.3	103.9	93.3	103.6	174.0	109.4
1996	110.9	119.3	109.8	66.8	79.5	101.9	94.0	103.5	171.0	107.0
1997	111.1	119.6	108.1	65.9	79.9	99.1	103.7	102.0	174.8	112.6
1998	111.2	118.8	107.6	65.9	81.0	99.1	108.0	101.0	176.8	113.1
1999	110.8	118.1	107.2	66.7	82.5	99.0	113.9	99.8	184.1	113.4
2000	110.7	117.9	106.4	67.2	83.0	99.0	118.8	98.8	188.0	114.1
2001	110.8	116.7	106.2	68.0	83.4	98.7	122.7	98.5	190.9	114.6
2002	111.4	115.9	106.0	69.2	83.6	98.5	126.0	98.4	196.1	115.2

(1) 1960–91: including D_90.
(2) 1960–91: D_90.

(PPS; EU-15 = 100 ([1]))

	A	P	FIN	S	UK	EUR-11 ([2])	EUR-12 ([3])	EU-15 ([1])	US	JP
1960	96.1	40.6	88.6	126.5	122.5	95.5	93.6	100.0	163.6	57.0
1961	96.5	40.9	90.6	127.3	119.2	96.1	94.4	100.0	157.6	60.5
1962	94.6	42.2	89.4	127.4	115.4	97.0	95.2	100.0	158.9	62.8
1963	94.3	42.7	88.4	128.6	115.7	96.9	95.2	100.0	157.5	65.2
1964	94.6	43.4	88.1	129.9	115.5	96.7	95.1	100.0	156.7	68.3
1965	93.5	45.2	89.4	129.1	113.7	97.0	95.5	100.0	159.3	69.1
1966	95.1	45.6	88.4	126.6	111.8	97.5	96.1	100.0	163.0	73.2
1967	94.6	48.0	87.5	126.5	110.7	97.8	96.3	100.0	160.8	78.3
1968	94.1	50.0	85.2	124.6	109.7	98.0	96.6	100.0	159.6	82.8
1969	94.5	49.2	88.6	123.3	105.7	98.9	97.5	100.0	154.6	86.9
1970	96.9	51.1	91.8	124.9	103.6	99.3	98.0	100.0	147.0	90.8
1971	98.8	53.4	91.3	122.1	102.6	99.5	98.4	100.0	146.3	91.5
1972	100.6	55.7	94.1	119.9	102.0	99.5	98.5	100.0	147.2	94.3
1973	99.5	58.7	94.7	118.0	103.6	99.3	98.3	100.0	146.4	95.3
1974	101.7	57.7	95.6	119.7	100.4	100.2	99.0	100.0	142.2	91.6
1975	102.7	53.7	97.3	123.6	100.8	99.8	98.8	100.0	141.8	93.8
1976	103.3	53.6	93.1	119.5	99.5	100.2	99.2	100.0	142.5	92.7
1977	105.7	54.7	91.1	114.6	99.6	100.4	99.3	100.0	144.4	93.8
1978	102.6	54.2	90.5	113.2	100.3	100.2	99.2	100.0	146.8	95.3
1979	105.1	54.8	93.4	113.6	99.8	100.4	99.3	100.0	145.2	96.6
1980	106.6	56.3	97.0	114.3	96.6	101.1	100.0	100.0	142.0	97.7
1981	106.6	56.8	99.0	114.5	95.6	101.4	100.3	100.0	144.5	100.3
1982	107.8	57.3	100.8	114.8	96.7	101.2	100.0	100.0	139.2	102.0
1983	109.2	56.0	101.2	114.8	98.6	100.9	99.6	100.0	141.5	101.9
1984	107.2	53.6	101.9	116.7	98.6	100.8	99.5	100.0	147.2	103.0
1985	107.0	53.7	102.2	116.1	99.6	100.6	99.3	100.0	148.0	104.4
1986	106.7	54.5	101.8	115.5	101.0	100.4	99.0	100.0	147.8	104.2
1987	105.5	56.6	103.1	115.7	102.4	100.2	98.7	100.0	147.5	105.2
1988	104.5	58.7	103.6	113.3	103.4	100.1	98.7	100.0	146.6	107.1
1989	105.3	60.1	105.3	111.8	102.1	100.5	99.0	100.0	145.8	108.5
1990	106.3	61.6	102.5	110.0	100.1	101.1	99.5	100.0	143.6	111.1
1991	106.4	63.8	91.7	104.2	94.8	102.4	100.8	100.0	137.7	113.4
1991	108.7	65.2	93.6	106.4	96.8	101.7	100.3	100.0	140.7	115.8
1992	109.1	66.0	87.3	100.9	97.7	101.6	100.3	100.0	141.1	116.4
1993	111.9	68.6	91.5	100.1	98.8	101.3	100.0	100.0	146.0	119.1
1994	111.4	70.3	91.3	100.4	98.3	101.3	100.0	100.0	146.6	115.7
1995	110.4	70.9	97.1	102.7	95.9	101.6	100.4	100.0	147.1	115.4
1996	111.7	71.0	95.5	101.6	98.5	101.1	99.9	100.0	148.6	118.4
1997	111.3	74.3	99.4	101.7	101.9	100.4	99.2	100.0	151.7	116.6
1998	111.6	75.3	101.7	101.6	102.1	100.4	99.2	100.0	153.1	110.2
1999	112.0	76.0	101.2	102.0	102.3	100.3	99.2	100.0	154.7	107.9
2000	111.8	75.3	103.6	103.3	103.0	100.1	99.0	100.0	157.2	106.0
2001	111.5	74.9	104.8	104.0	103.0	100.1	99.0	100.0	156.9	104.8
2002	110.9	74.7	105.4	104.1	102.9	100.1	99.0	100.0	155.5	103.8

([1]) 1960–91: including D_90.
([2]) EU-15 excluding DK, EL, S, UK; 1960–91: including D_90.
([3]) EU-15 excluding DK, S, UK; 1960–91: including D_90.

Table 10

Gross domestic product at 1995 market prices

(national currency; annual percentage change)

	B	DK	D (1)	EL	E	F	IRL	I	L	NL
1961	5.0	6.4	4.6	13.2	11.8	5.5	5.0	8.2	3.8	3.1
1962	5.2	5.7	4.7	0.4	9.3	6.7	3.2	6.2	1.4	4.0
1963	4.4	0.6	2.8	11.8	8.8	5.3	4.7	5.6	3.4	3.6
1964	6.9	9.3	6.7	9.4	6.2	6.5	3.8	2.8	7.9	8.3
1965	3.6	4.6	5.4	10.8	6.3	4.8	1.9	3.3	1.9	5.2
1966	3.1	2.7	2.8	6.5	7.2	5.2	0.9	6.0	1.1	2.7
1967	3.9	3.4	– 0.3	5.7	4.3	4.7	5.8	7.2	0.2	5.3
1968	4.2	4.0	5.5	7.2	6.6	4.3	8.2	6.5	4.2	6.4
1969	6.6	6.3	7.5	11.6	8.9	7.0	5.9	6.1	10.0	6.4
1970	6.2	2.0	5.0	8.9	4.2	5.7	2.7	5.3	1.7	5.8
1961–70	4.9	4.5	4.4	8.5	7.3	5.6	4.2	5.7	3.5	5.1
1971	3.8	2.7	3.1	7.8	4.6	4.8	3.5	1.9	2.7	4.5
1972	5.3	5.3	4.3	10.2	8.1	4.4	6.5	2.9	6.6	3.1
1973	6.1	3.6	4.8	8.1	7.8	5.4	4.7	6.5	8.3	5.0
1974	4.2	– 0.9	0.2	– 6.4	5.6	3.1	4.3	4.7	4.2	4.1
1975	– 1.3	– 0.7	– 1.3	6.4	0.5	– 0.3	5.7	– 2.1	– 6.6	0.2
1976	5.7	6.4	5.3	6.9	3.3	4.2	1.3	6.5	2.5	4.8
1977	0.6	1.1	2.8	2.9	2.8	3.2	8.1	2.9	1.6	2.3
1978	2.8	1.8	3.0	7.2	1.5	3.4	7.1	3.7	4.1	2.4
1979	2.3	3.1	4.2	3.3	0.0	3.3	3.1	5.7	2.3	2.2
1980	4.4	– 0.6	1.0	0.7	1.3	1.6	3.1	3.5	0.8	1.2
1971–80	3.4	2.2	2.7	4.6	3.5	3.3	4.7	3.6	2.6	3.0
1981	– 0.1	– 2.1	0.1	– 1.6	– 0.2	1.2	3.3	0.5	– 0.6	– 0.5
1982	0.3	2.7	– 0.9	– 1.1	1.6	2.6	2.3	0.5	1.1	– 1.2
1983	0.3	1.7	1.8	– 1.1	2.2	1.5	– 0.2	1.2	3.0	1.7
1984	2.7	3.5	2.8	2.0	1.5	1.6	4.3	2.8	6.2	3.3
1985	1.9	3.6	2.0	2.5	2.6	1.5	3.1	3.0	2.9	3.1
1986	1.8	4.0	2.3	0.5	3.2	2.4	0.3	2.5	7.8	2.8
1987	2.7	0.0	1.5	– 2.3	5.6	2.5	4.7	3.0	2.3	1.4
1988	4.6	1.2	3.7	4.3	5.2	4.6	4.3	3.9	10.4	2.6
1989	3.6	0.2	3.6	3.8	4.7	4.2	6.2	2.9	9.8	4.7
1990	2.8	1.0	5.7	0.0	3.7	2.6	7.6	2.0	2.2	4.1
1981–90	2.0	1.6	2.2	0.7	3.0	2.5	3.6	2.2	4.5	2.2
1991	1.9	1.1	5.0	3.1	2.3	1.0	1.9	1.4	6.1	2.3
1992	1.6	0.6	2.2	0.7	0.7	1.5	3.3	0.8	4.5	2.0
1993	– 1.5	0.0	– 1.1	– 1.6	– 1.2	– 0.9	2.7	– 0.9	8.7	0.8
1994	3.0	5.5	2.3	2.0	2.3	2.1	5.8	2.2	4.2	3.2
1995	2.6	2.8	1.7	2.1	2.7	1.7	9.7	2.9	3.8	2.3
1996	1.2	2.5	0.8	2.4	2.4	1.1	7.7	1.1	2.9	3.0
1997	3.4	3.1	1.4	3.5	3.9	1.9	10.7	1.8	7.3	3.8
1998	2.4	2.5	2.1	3.1	4.3	3.1	8.6	1.5	5.0	4.1
1999	2.7	1.7	1.6	3.4	4.0	2.9	9.8	1.4	7.5	3.9
2000	3.9	2.6	3.1	4.1	4.1	3.3	10.5	2.9	7.8	4.3
1991–2000	2.1	2.2	1.9	2.3	2.5	1.8	7.0	1.5	5.8	3.0
2001	3.3	2.3	2.8	4.5	3.5	3.1	8.2	2.8	6.5	4.0
2002	3.2	2.4	2.8	4.8	3.3	2.8	7.1	2.7	6.0	3.5

(1) 1961–91: including D_90.

(national currency; annual percentage change)

	A	P	FIN	S	UK	EUR-11 (1)	EUR-12 (2)	EU-15 (3)	US	JP
1961	5.3	5.2	7.6	5.7	2.5	6.2	6.3	5.4	2.3	11.9
1962	2.4	6.6	3.0	4.3	1.2	5.7	5.6	4.7	6.1	8.6
1963	4.1	5.9	3.3	5.3	4.7	4.7	4.8	4.8	4.4	8.8
1964	6.0	7.3	5.2	6.8	5.5	5.8	5.9	5.9	5.9	11.2
1965	2.9	7.6	5.3	3.8	2.5	4.7	4.8	4.3	6.5	5.7
1966	5.6	3.9	2.4	2.1	1.9	4.5	4.5	3.9	6.7	10.2
1967	3.0	8.1	2.2	3.4	2.3	3.6	3.7	3.4	2.5	11.1
1968	4.5	9.2	2.3	3.6	4.1	5.5	5.6	5.2	4.8	11.9
1969	6.3	3.4	9.6	5.0	2.1	7.0	7.1	6.1	3.1	12.0
1970	7.1	7.6	7.5	6.5	2.4	5.4	5.5	4.9	0.2	10.3
1961–70	4.7	6.4	4.8	4.6	2.9	5.3	5.4	4.9	4.2	10.1
1971	5.1	6.6	2.1	0.9	2.0	3.6	3.7	3.3	3.4	4.4
1972	6.2	8.0	7.6	2.3	3.6	4.6	4.7	4.5	5.5	8.4
1973	4.9	11.2	6.7	4.0	7.3	5.8	5.9	6.0	5.9	8.0
1974	3.9	1.1	3.0	3.2	– 1.7	3.0	2.7	1.9	– 0.6	– 1.2
1975	– 0.4	– 4.3	1.2	2.6	– 0.7	– 0.9	– 0.7	– 0.6	– 0.3	3.1
1976	4.6	6.9	– 0.1	1.1	2.8	4.9	5.0	4.5	5.6	4.0
1977	4.7	5.5	0.3	– 1.6	2.4	2.9	2.9	2.7	4.7	4.4
1978	– 0.4	2.8	2.3	1.8	3.4	2.9	3.0	3.0	5.6	5.3
1979	5.5	5.6	6.8	3.8	2.7	3.8	3.8	3.6	3.2	5.5
1980	2.3	4.6	5.1	1.7	– 2.2	2.1	2.0	1.3	– 0.2	2.8
1971–80	3.6	4.7	3.5	2.0	1.9	3.3	3.3	3.0	3.2	4.4
1981	– 0.1	1.6	2.1	0.0	– 1.3	0.5	0.4	0.1	2.5	3.2
1982	1.9	2.1	3.1	1.0	1.8	0.7	0.7	0.9	– 2.1	3.1
1983	2.8	– 0.2	2.7	1.8	3.7	1.6	1.5	1.9	4.3	2.3
1984	0.3	– 1.9	3.4	4.0	2.4	2.3	2.3	2.4	7.3	3.9
1985	2.2	2.8	3.1	1.9	3.8	2.3	2.3	2.5	3.8	4.4
1986	2.3	4.1	2.5	2.3	4.2	2.5	2.5	2.8	3.4	2.9
1987	1.7	6.4	4.2	3.1	4.4	2.7	2.6	2.9	3.4	4.2
1988	3.2	7.5	4.7	2.3	5.2	4.2	4.2	4.3	4.2	6.2
1989	4.2	5.1	5.1	2.4	2.1	3.9	3.9	3.5	3.5	4.8
1990	4.6	4.4	0.0	1.4	0.7	3.6	3.5	2.9	1.7	5.1
1981–90	2.3	3.2	3.1	2.0	2.7	2.4	2.4	2.4	3.2	4.0
1991	3.4	2.3	– 6.3	– 1.1	– 1.5	2.4	2.4	1.7	– 0.5	3.8
1992	1.3	2.5	– 3.3	– 1.4	0.1	1.5	1.5	1.2	3.1	1.0
1993	0.5	– 1.1	– 1.1	– 2.2	2.3	– 0.8	– 0.8	– 0.4	2.7	0.3
1994	2.4	2.2	4.0	4.1	4.4	2.4	2.4	2.8	4.1	0.6
1995	1.7	2.9	3.8	3.7	2.8	2.3	2.3	2.4	2.7	1.5
1996	2.0	3.6	4.0	1.1	2.6	1.5	1.5	1.7	3.6	5.0
1997	1.3	3.7	6.3	2.0	3.5	2.3	2.4	2.5	4.5	1.6
1998	3.3	3.6	5.5	3.0	2.6	2.8	2.8	2.7	4.4	– 2.5
1999	2.8	3.0	4.0	3.8	2.2	2.5	2.5	2.5	4.3	0.2
2000	3.5	3.0	4.8	4.0	3.1	3.5	3.5	3.4	5.1	1.4
1991–2000	2.2	2.6	2.1	1.7	2.2	2.0	2.0	2.0	3.4	1.3
2001	2.9	2.7	4.3	3.7	3.0	3.1	3.2	3.1	3.3	1.9
2002	2.8	2.7	3.8	3.2	3.0	3.0	3.0	3.0	3.0	2.2

(1) PPS weighted; EU-15 excluding DK, EL, S, UK; 1961–91: including D_90.
(2) PPS weighted; EU-15 excluding DK, S, UK; 1961–91: including D_90.
(3) PPS weighted; 1961–91: including D_90.

Table 11

Gross domestic product at 1995 market prices per person employed

(national currency; annual percentage change)

	B	DK	D (1)	EL	E	F	IRL	I	L	NL
1961	4.3	4.8	3.2	12.8	11.6	5.4	5.2	8.0	2.7	1.6
1962	3.8	4.1	4.3	1.4	8.4	6.5	2.5	7.3	1.1	1.9
1963	4.3	– 0.6	2.6	13.4	8.2	4.3	4.2	7.3	3.8	2.2
1964	6.3	7.1	6.6	10.9	5.6	5.4	3.3	3.3	6.0	6.4
1965	3.7	2.7	4.8	11.5	5.7	4.4	2.1	5.1	1.0	4.4
1966	2.9	2.2	3.1	7.5	6.7	4.4	1.2	7.7	0.6	1.9
1967	4.2	4.1	3.0	7.0	3.5	4.4	6.4	5.9	1.3	5.6
1968	4.4	3.1	5.4	8.5	5.7	4.6	7.9	6.7	4.6	5.4
1969	5.1	5.0	5.8	11.9	8.0	5.4	5.6	5.6	8.5	4.7
1970	4.6	1.3	3.7	9.0	3.6	4.2	3.9	5.1	– 0.3	4.6
1961–70	4.4	3.4	4.2	9.3	6.7	4.9	4.2	6.2	2.9	3.9
1971	3.1	2.1	2.6	7.5	4.1	4.3	3.9	2.0	– 0.5	3.9
1972	5.5	3.1	3.8	9.6	7.8	3.8	6.2	3.5	3.8	4.0
1973	5.2	2.3	3.6	7.0	5.7	4.0	3.2	4.3	6.3	5.0
1974	2.6	– 0.6	1.4	– 6.5	4.9	2.2	2.8	2.6	1.4	3.9
1975	0.1	0.6	1.5	6.3	2.2	0.6	6.5	– 2.3	– 7.7	0.8
1976	6.1	4.6	5.9	5.6	4.4	3.4	2.2	4.9	2.7	4.8
1977	1.0	1.3	2.7	2.1	3.6	2.4	6.2	1.9	1.6	2.1
1978	2.7	1.1	2.2	6.8	3.3	2.8	4.5	3.2	4.7	1.6
1979	1.4	2.2	2.5	2.2	1.8	2.9	– 0.1	4.1	1.8	0.7
1980	4.6	0.1	– 0.6	– 0.7	4.5	1.5	2.1	1.6	0.1	0.5
1971–80	3.2	1.7	2.6	3.9	4.2	2.8	3.7	2.6	1.4	2.7
1981	1.8	– 0.6	0.2	– 6.4	2.5	1.8	4.2	0.5	– 0.9	0.8
1982	1.6	2.4	0.3	– 0.1	2.5	2.6	2.3	– 0.1	1.4	1.5
1983	1.3	1.6	3.2	– 1.6	2.7	1.9	1.7	0.6	3.3	3.6
1984	2.6	2.0	2.6	2.2	4.0	2.0	6.3	2.4	5.6	3.2
1985	1.3	1.3	1.3	0.0	4.1	2.4	5.9	2.1	2.0	1.2
1986	1.2	1.6	0.9	0.2	1.8	2.2	– 0.4	1.7	5.1	0.7
1987	2.1	– 0.3	0.7	– 2.2	1.1	1.9	3.8	2.5	– 0.3	– 0.3
1988	2.8	2.0	2.9	2.6	1.7	3.7	4.3	2.9	7.2	1.0
1989	2.4	0.8	2.1	3.4	1.3	2.5	6.5	2.6	6.1	2.7
1990	1.8	1.7	2.7	– 1.3	0.1	1.7	3.2	1.0	– 1.9	1.7
1981–90	1.9	1.2	1.7	– 0.3	2.2	2.3	3.8	1.6	2.7	1.6
1991	1.8	1.7	2.5	5.6	1.3	1.0	1.9	0.6	2.0	0.9
1992	2.1	1.4	3.8	– 0.7	2.3	2.3	2.4	1.4	2.0	1.0
1993	– 0.8	1.5	0.3	– 2.5	1.8	0.8	2.1	2.2	6.8	0.9
1994	3.4	4.0	2.5	0.1	2.8	2.4	2.6	3.2	1.6	3.6
1995	1.9	2.3	1.5	1.2	0.9	1.2	4.5	2.9	1.3	0.8
1996	0.8	1.9	1.1	2.8	1.2	1.3	4.1	0.8	0.2	0.5
1997	2.6	2.1	1.6	3.9	0.7	1.8	6.1	1.5	4.0	0.7
1998	1.2	0.5	1.1	– 0.3	0.5	2.1	3.0	0.4	0.6	1.0
1999	1.4	0.6	0.5	4.1	0.4	1.1	3.2	0.5	2.4	0.9
2000	2.6	1.7	1.7	2.9	1.0	1.3	5.2	1.5	2.2	1.6
1991–2000	1.7	1.8	1.6	1.7	1.3	1.5	3.5	1.5	2.3	1.2
2001	1.9	1.9	1.7	3.0	1.1	1.5	4.7	1.6	1.9	1.4
2002	1.8	2.0	1.9	3.1	1.0	1.2	4.4	1.5	1.9	1.2

(1) 1961–91: including D_90.

(national currency; annual percentage change)

	A	P	FIN	S	UK	EUR-11 (1)	EUR-12 (2)	EU-15 (3)	US	JP
1961	4.5	4.5	5.6	4.7	1.1	5.5	5.6	4.6	2.7	10.3
1962	2.0	6.0	3.4	3.6	0.4	5.5	5.5	4.3	3.9	7.2
1963	4.7	5.6	2.9	5.3	4.5	4.7	4.8	4.7	3.5	7.9
1964	6.2	7.4	5.3	6.8	4.2	5.5	5.6	5.4	4.0	9.8
1965	3.5	7.4	4.1	2.8	1.5	4.7	4.9	4.1	3.1	4.0
1966	6.7	3.9	2.2	1.1	1.3	4.7	4.7	3.9	2.0	8.0
1967	4.8	8.7	4.1	4.4	3.8	4.3	4.4	4.3	0.0	9.0
1968	5.8	9.8	3.7	2.5	4.7	5.6	5.6	5.3	2.4	10.1
1969	6.4	4.0	8.0	3.8	1.9	5.9	6.0	5.2	0.5	11.1
1970	6.7	5.2	5.2	4.5	2.8	4.3	4.4	4.1	1.0	9.1
1961–70	5.1	6.2	4.4	3.9	2.6	5.1	5.2	4.6	2.3	8.6
1971	3.9	3.8	2.7	1.1	2.9	3.1	3.2	3.1	3.9	3.7
1972	5.5	8.0	6.6	1.9	3.7	4.4	4.5	4.3	3.0	7.9
1973	3.2	11.7	4.6	3.6	5.3	4.4	4.5	4.5	1.5	5.6
1974	3.0	1.8	2.6	1.2	– 2.3	2.5	2.3	1.4	– 2.1	– 0.8
1975	0.1	– 3.2	2.5	0.6	– 0.6	0.4	0.5	0.3	1.8	3.3
1976	4.2	7.3	0.8	0.8	3.7	4.8	4.8	4.5	2.7	3.1
1977	3.6	5.2	2.2	– 1.6	2.2	2.6	2.5	2.4	1.2	3.2
1978	– 0.7	4.5	3.3	1.3	2.3	2.7	2.8	2.7	0.5	4.3
1979	5.0	3.4	4.5	2.6	1.2	2.8	2.8	2.5	– 0.1	4.4
1980	1.3	5.0	2.1	0.5	– 2.0	1.5	1.4	0.8	– 0.4	2.1
1971–80	2.9	4.7	3.2	1.2	1.6	2.9	2.9	2.6	1.2	3.7
1981	0.1	0.6	0.9	– 0.2	2.7	1.0	0.8	1.1	1.5	2.4
1982	3.4	4.1	2.0	1.2	3.6	1.3	1.3	1.7	– 0.4	2.2
1983	3.9	1.0	2.3	1.5	5.1	2.2	2.1	2.5	3.4	0.8
1984	0.4	– 0.4	2.9	3.2	0.4	2.6	2.6	2.2	2.3	3.6
1985	1.9	2.8	3.0	0.9	2.6	2.1	2.1	2.1	1.4	3.8
1986	2.0	7.0	2.8	1.7	4.3	1.7	1.7	2.1	1.7	2.4
1987	1.8	4.0	3.7	2.3	2.5	1.5	1.5	1.6	0.4	3.7
1988	2.8	5.2	3.7	0.9	1.6	2.9	2.9	2.6	1.2	5.0
1989	2.8	3.2	4.2	0.9	– 0.6	2.4	2.4	1.8	1.0	3.3
1990	2.6	2.6	0.6	0.4	– 0.5	1.6	1.6	1.2	0.6	3.4
1981–90	2.2	3.0	2.6	1.3	2.2	1.9	1.9	1.9	1.3	3.1
1991	1.8	– 0.4	– 0.6	0.4	1.6	1.3	1.5	1.5	0.6	1.8
1992	0.9	4.2	4.2	3.2	2.7	2.6	2.5	2.5	3.2	0.0
1993	1.0	1.0	5.4	3.2	3.6	1.1	1.0	1.5	0.6	– 0.1
1994	2.3	3.3	5.2	4.9	3.6	2.8	2.7	2.9	1.5	0.5
1995	1.5	3.6	2.2	2.3	1.2	1.8	1.7	1.7	0.2	1.3
1996	2.6	2.0	2.6	1.6	– 0.1	1.2	1.2	1.0	1.7	4.6
1997	0.8	2.0	2.9	2.6	1.4	1.6	1.6	1.6	2.0	0.5
1998	2.5	0.9	3.3	1.7	1.5	1.2	1.1	1.2	2.1	– 1.8
1999	1.4	1.2	1.8	1.4	0.9	0.8	0.9	0.9	2.3	1.0
2000	2.6	1.5	2.8	2.0	2.2	1.6	1.7	1.8	3.6	1.6
1991–2000	1.7	1.9	3.0	2.3	1.9	1.6	1.6	1.7	1.8	0.9
2001	2.2	1.8	2.8	2.3	2.3	1.7	1.7	1.8	2.4	1.6
2002	2.2	1.8	2.8	2.2	2.3	1.6	1.7	1.8	2.3	1.9

(1) PPS weighted; EU-15 excluding DK, EL, S, UK; 1961–91: including D_90.
(2) PPS weighted; EU-15 excluding DK, S, UK; 1961–91: including D_90.
(3) PPS weighted; 1961–91: including D_90.

Table 12

Industrial production; construction excluded

(annual percentage change)

	B	DK	D (1)	EL	E	F	IRL	I	L	NL
1961	6.3	5.1	6.4	:	:	5.3	:	10.8	3.0	4.5
1962	5.7	8.9	4.1	:	10.2	6.2	:	9.7	– 4.7	4.6
1963	7.8	1.2	3.5	10.1	8.8	3.8	:	8.8	1.1	6.0
1964	6.0	11.5	7.7	10.8	12.8	5.9	:	1.1	9.5	10.1
1965	2.5	6.6	5.5	8.6	15.8	1.6	:	4.8	0.7	5.4
1966	2.0	2.9	0.9	15.6	14.7	5.9	:	11.0	– 3.7	5.6
1967	1.6	4.0	– 2.4	4.8	2.8	2.7	:	8.1	– 0.4	4.4
1968	5.5	7.4	9.7	7.7	8.3	3.2	:	5.8	6.0	12.1
1969	9.8	12.3	12.8	11.9	15.8	11.2	:	3.6	12.6	11.4
1970	3.1	2.6	5.8	10.2	7.3	5.5	:	6.4	0.6	9.7
1961–70	5.0	6.2	5.3	:	:	5.1	:	7.0	2.3	7.3
1971	1.6	2.3	1.0	11.4	6.6	6.5	:	– 0.4	– 1.2	5.6
1972	7.5	4.4	3.6	16.0	16.4	5.6	:	4.4	4.2	5.1
1973	6.2	3.3	6.4	15.3	10.9	6.7	:	9.7	12.0	7.6
1974	4.1	– 0.7	– 1.7	– 1.4	7.5	2.4	:	4.5	3.4	4.7
1975	– 9.8	– 6.0	– 6.2	4.4	– 2.6	– 7.3	:	– 9.0	– 19.6	– 5.1
1976	7.7	9.7	6.8	10.4	4.4	8.9	:	12.3	3.7	7.7
1977	0.5	0.8	2.7	2.0	5.5	1.5	8.0	1.1	0.6	0.4
1978	2.4	2.2	1.9	7.6	2.6	2.3	8.1	1.9	3.1	0.8
1979	4.5	3.7	5.1	6.1	0.5	4.4	7.8	6.7	3.4	3.9
1980	– 1.2	0.2	0.0	1.0	0.6	2.2	– 1.4	5.5	– 2.2	– 0.8
1971–80	2.2	1.9	1.9	7.1	5.1	3.2	:	3.5	0.4	2.9
1981	– 2.8	0.1	– 1.8	0.8	– 0.7	– 0.9	5.6	– 2.2	– 5.6	– 2.0
1982	0.0	2.7	– 3.3	1.0	– 1.1	– 0.8	– 0.8	– 3.0	2.2	– 3.8
1983	1.8	3.3	0.6	– 0.3	2.5	– 0.7	8.1	– 2.3	5.5	1.8
1984	2.5	9.5	3.0	2.3	0.9	0.3	9.8	3.2	11.6	5.0
1985	2.5	4.2	4.9	3.2	1.7	2.1	3.3	0.1	– 1.1	4.8
1986	0.8	6.0	1.8	– 0.3	3.4	0.7	2.3	4.2	1.9	0.2
1987	2.2	– 3.0	0.5	– 1.2	4.6	1.2	8.9	2.6	– 0.6	1.1
1988	5.8	2.1	3.5	5.0	3.1	4.6	10.6	6.8	8.7	0.0
1989	3.4	2.1	5.0	1.8	5.1	3.7	11.5	3.9	7.9	5.1
1990	1.5	0.8	5.2	– 2.4	– 0.3	1.5	4.8	6.3	2.5	2.4
1981–90	1.8	2.7	1.9	1.0	1.9	1.2	6.3	1.9	3.2	1.4
1991	– 1.9	0.2	2.9	– 1.0	– 0.7	– 1.2	3.2	– 0.4	0.4	1.8
1992	– 0.4	3.0	– 2.3	– 1.1	– 3.0	– 1.2	9.2	– 1.3	– 0.8	– 0.2
1993	– 5.2	– 2.7	– 7.6	– 2.8	– 4.7	– 3.9	5.6	– 2.1	– 4.3	– 1.1
1994	2.1	10.7	3.6	1.2	7.7	4.0	11.8	6.1	5.9	4.8
1995	6.5	4.2	1.2	1.8	4.8	2.0	18.9	5.0	2.0	4.8
1996	0.5	1.6	0.6	1.2	– 1.3	0.9	7.6	– 1.9	0.1	2.5
1997	4.7	5.3	3.5	1.3	7.0	3.7	14.8	3.9	5.8	3.1
1998	3.4	2.2	4.2	7.1	5.5	5.2	15.2	1.0	– 0.1	1.4
1999	0.8	1.8	1.6	3.9	2.5	2.1	10.5	0.0	11.5	0.5
2000	3.8	4.9	2.5	5.0	5.3	4.8	9.8	3.9	:	0.0
1992–2000	1.8	3.4	0.7	1.9	2.6	1.9	11.4	1.6	:	1.7
2001	3.3	2.9	2.5	3.0	4.6	3.2	8.2	3.2	:	0.0
2002	3.2	2.7	3.0	3.0	4.6	2.5	6.7	3.0	:	0.0

(1) 1961–91: including D_90.

(annual percentage change)

	A	P	FIN	S	UK	EU-10 (1)	EU-11 (2)	EU-14 (3)	US	JP
1961	4.7	8.1	11.1	8.1	0.4	:	:	:	0.6	19.8
1962	2.1	0.9	6.5	6.4	1.1	:	:	:	8.1	8.3
1963	4.4	3.7	3.7	6.2	3.8	:	:	:	6.1	11.2
1964	7.8	8.5	6.7	9.0	7.2	:	:	:	6.8	15.9
1965	4.5	5.0	7.0	7.2	2.9	:	:	:	9.9	3.7
1966	4.6	5.1	4.8	2.8	1.3	:	:	:	8.8	13.2
1967	0.6	– 1.9	3.9	3.6	– 0.6	:	:	:	2.1	19.5
1968	7.4	10.7	5.4	4.4	5.0	:	:	:	5.6	15.6
1969	11.2	7.9	14.1	7.1	3.3	:	:	:	4.7	15.8
1970	8.9	6.1	11.8	6.0	0.6	:	:	:	– 3.4	13.9
1961–70	5.6	5.4	7.5	6.1	2.5	:	:	:	4.9	13.6
1971	6.1	7.8	4.7	1.1	– 0.6	:	:	:	1.4	2.6
1972	7.7	13.1	8.8	2.2	1.7	:	:	:	9.6	7.3
1973	5.0	11.6	7.2	6.5	9.0	:	:	:	8.2	15.0
1974	4.9	2.9	4.6	4.3	– 2.0	:	:	:	– 1.5	– 4.1
1975	– 6.2	– 4.9	– 3.9	– 2.1	– 5.5	:	:	:	– 8.9	– 10.9
1976	6.4	3.4	1.0	– 0.6	3.4	:	:	:	9.2	11.1
1977	4.0	13.1	0.6	– 5.5	5.2	2.3	2.3	2.5	8.1	4.1
1978	2.4	7.0	5.1	– 1.9	2.7	2.2	2.2	2.2	6.0	6.3
1979	7.4	7.1	10.6	6.0	3.9	4.9	4.9	4.8	3.3	7.4
1980	2.8	4.9	7.8	0.0	– 6.6	1.8	1.8	0.3	– 2.8	4.6
1971–80	4.0	6.5	4.6	1.0	1.0	:	:	:	3.1	4.1
1981	– 1.1	2.3	2.6	– 2.4	– 3.1	– 1.4	– 1.4	– 1.7	1.7	1.0
1982	– 0.4	7.7	0.9	– 0.6	1.9	– 2.1	– 2.1	– 1.4	– 5.4	0.3
1983	0.9	3.7	3.2	4.5	3.7	0.2	0.2	0.9	3.7	3.2
1984	4.9	2.4	4.7	5.7	0.0	2.5	2.5	2.2	8.9	9.3
1985	4.8	– 1.2	3.4	2.9	5.6	2.8	2.8	3.3	1.6	3.8
1986	1.2	7.3	1.6	0.1	1.4	2.1	2.0	1.9	1.2	– 0.2
1987	0.9	4.4	4.6	2.5	4.2	1.7	1.7	2.1	4.6	3.5
1988	4.5	3.7	4.3	1.3	5.1	4.4	4.4	4.4	4.5	9.3
1989	5.9	6.8	2.4	3.7	2.1	4.5	4.4	4.0	1.8	5.8
1990	6.7	9.0	– 0.1	6.8	0.0	3.8	3.7	3.1	– 0.1	4.2
1981–90	2.8	4.6	2.7	2.4	2.1	1.8	1.8	1.9	2.2	4.0
1991	2.0	0.0	– 9.0	– 5.0	– 3.3	0.5	0.5	– 0.3	– 2.1	1.8
1992	– 1.2	– 2.4	1.3	– 2.3	0.4	– 1.6	– 1.6	– 1.2	3.2	– 5.7
1993	– 1.5	– 5.2	5.4	– 0.9	2.2	– 4.6	– 4.5	– 3.4	3.4	– 3.5
1994	4.0	– 0.2	11.5	10.9	5.1	4.8	4.7	5.0	5.4	1.3
1995	4.9	11.6	6.3	10.6	1.8	3.3	3.3	3.3	4.9	3.3
1996	1.0	5.3	3.7	1.7	1.0	0.3	0.3	0.5	4.4	2.3
1997	6.3	2.6	9.3	7.0	1.1	4.3	4.3	3.8	6.4	3.6
1998	8.2	5.6	7.8	3.7	0.7	4.1	4.1	3.5	4.1	– 6.6
1999	5.6	3.1	5.8	2.0	0.5	1.8	1.8	1.6	3.5	0.8
2000	3.2	1.3	9.5	8.5	1.7	3.7	3.8	3.6	:	:
1992–2000	3.4	2.3	6.7	4.5	1.6	1.7	1.7	1.8	:	:
2001	4.1	2.6	8.2	6.5	2.3	3.2	3.2	3.1	:	:
2002	4.1	2.6	7.3	5.5	2.0	3.2	3.2	3.0	:	:

(1) EU-15 excluding DK, EL, L, S, UK; 1961–91: including D_90.
(2) EU-15 excluding DK, L, S, UK; 1961–91: including D_90.
(3) EU-15 excluding L; 1961–91: including D_90.

Table 13

Private final consumption expenditure at current prices

(% of GDP at market prices)

	B	DK	D (1)	EL	E	F	IRL	I	L	NL
1960	60.7	59.6	56.8	77.7	66.6	57.4	80.1	56.8	52.7	47.7
1961	59.5	59.8	56.8	73.6	66.1	57.8	78.4	55.8	55.6	48.7
1962	58.5	59.6	56.8	74.3	65.5	57.7	78.0	56.0	55.6	49.3
1963	58.9	59.1	56.7	71.5	66.6	58.0	77.4	57.2	56.2	50.4
1964	56.3	58.0	55.6	70.6	65.7	57.0	75.9	56.7	55.4	48.5
1965	56.4	56.7	56.1	68.4	66.4	56.5	75.0	56.3	56.8	48.5
1966	56.1	57.4	56.3	67.8	65.7	56.3	75.1	57.3	56.8	48.5
1967	55.3	57.7	57.2	68.1	65.1	56.4	73.3	57.7	57.7	48.0
1968	56.0	56.6	56.4	67.7	64.2	56.7	74.2	56.8	56.4	47.3
1969	54.7	55.3	55.4	64.5	62.0	56.2	72.9	56.4	52.2	47.8
1970	52.6	55.3	54.6	64.4	62.3	55.2	72.0	56.6	49.3	47.7
1961–70	56.4	57.5	56.2	69.1	65.0	56.8	75.2	56.7	55.2	48.5
1971	53.1	53.7	54.5	63.0	62.5	55.0	71.1	56.9	53.5	47.3
1972	53.0	51.4	54.9	60.3	62.1	55.0	67.9	57.3	52.3	46.7
1973	53.4	52.5	54.0	56.9	61.8	54.4	67.3	57.6	47.7	46.5
1974	52.8	52.3	54.2	61.2	62.4	54.8	71.5	57.4	45.0	46.4
1975	54.1	53.4	56.8	61.8	62.5	55.9	67.0	59.1	56.4	47.8
1976	53.9	54.5	56.4	60.3	63.9	55.6	67.4	58.0	55.3	48.2
1977	54.9	54.7	57.1	63.2	63.2	55.5	67.0	57.4	58.2	48.9
1978	54.6	54.0	56.6	63.4	62.1	55.1	66.6	56.4	56.6	49.4
1979	55.8	54.2	56.3	62.8	62.6	55.3	68.2	56.8	56.5	49.8
1980	56.0	53.7	56.9	64.5	63.5	55.8	68.7	58.1	57.4	49.6
1971–80	54.2	53.4	55.8	61.7	62.7	55.3	68.3	57.5	53.9	48.1
1981	57.4	54.0	57.6	66.2	63.9	57.0	68.9	58.2	59.4	48.6
1982	58.2	53.0	57.7	65.7	63.2	57.2	62.6	58.6	58.9	48.6
1983	58.1	52.1	57.5	67.0	62.4	56.9	62.5	57.9	58.2	49.1
1984	57.3	51.9	57.2	64.7	61.5	56.7	61.6	58.2	56.8	48.7
1985	58.1	51.9	56.9	63.8	61.8	57.0	62.4	58.3	57.3	49.2
1986	57.1	52.3	55.4	64.5	60.9	56.3	62.8	58.3	55.0	49.3
1987	56.9	50.9	55.7	69.0	60.9	56.7	62.1	58.3	56.5	50.4
1988	55.7	50.2	55.0	69.2	60.4	55.6	62.5	57.8	54.6	49.3
1989	55.3	49.9	54.9	70.1	60.7	55.3	61.7	58.4	52.3	48.8
1990	55.5	49.1	54.4	71.5	60.1	55.3	59.1	57.5	54.3	48.8
1981–90	57.0	51.5	56.2	67.2	61.6	56.4	62.6	58.2	56.3	49.1
1991	55.9	49.3	54.7	71.2	60.1	55.5	59.5	58.1	55.1	49.4
1991	55.9	49.3	56.8	71.2	60.1	55.5	59.5	58.1	55.1	49.4
1992	55.3	49.5	56.7	72.9	60.8	55.5	59.4	59.3	51.8	49.6
1993	55.1	50.0	57.5	73.4	60.8	55.8	57.8	58.5	50.1	49.6
1994	54.9	51.1	56.8	73.3	60.5	55.6	57.6	58.9	47.9	49.5
1995	54.1	50.5	56.9	73.1	59.8	55.5	54.5	58.7	47.9	49.0
1996	54.4	50.3	57.4	73.7	59.6	55.8	54.0	58.3	48.6	49.9
1997	53.8	50.7	57.6	72.2	59.3	55.0	51.5	58.9	46.3	49.4
1998	54.0	51.1	57.5	71.8	59.2	55.0	50.2	59.0	45.2	49.5
1999	53.6	50.5	57.8	71.1	59.3	54.8	49.0	59.5	43.4	49.9
2000	54.0	49.6	58.1	70.7	59.4	54.8	49.6	59.6	42.2	50.1
1991–2000	54.5	50.3	57.3	72.3	59.9	55.3	54.3	58.9	47.8	49.6
2001	53.7	49.2	58.3	69.9	59.1	54.8	49.5	59.5	41.9	50.4
2002	53.0	48.7	58.3	68.6	58.8	54.7	49.0	59.2	41.0	50.4

(1) 1960–91: D_90.

(% of GDP at market prices)

	A	P	FIN	S	UK	EUR-11 (1)	EUR-12 (2)	EU-15 (3)	US	JP
1960	59.3	71.9	58.4	57.0	65.4	57.7	58.0	59.6	64.2	58.7
1961	58.4	72.5	57.0	56.4	65.0	57.5	57.8	59.3	64.0	57.0
1962	59.2	68.6	58.7	55.8	65.7	57.5	57.8	59.3	63.2	57.7
1963	59.5	68.3	59.3	55.7	65.5	58.0	58.2	59.5	63.1	58.8
1964	58.3	67.1	59.9	53.8	63.9	56.9	57.1	58.3	63.0	57.6
1965	58.8	66.8	59.6	53.7	63.1	56.9	57.1	58.1	62.7	58.5
1966	57.6	66.9	59.1	53.6	62.6	57.1	57.3	58.1	62.0	58.0
1967	58.3	64.4	58.7	53.3	62.5	57.3	57.5	58.2	61.9	56.8
1968	57.8	67.4	56.0	53.2	62.1	56.8	57.0	57.7	62.2	54.7
1969	56.3	68.0	55.5	52.9	61.2	56.1	56.2	56.9	62.3	53.5
1970	54.3	64.9	54.4	51.3	60.7	55.4	55.5	56.2	63.3	52.3
1961–70	57.9	67.5	57.8	54.0	63.2	56.9	57.2	58.2	62.8	56.5
1971	54.5	67.2	53.7	51.1	61.0	55.4	55.5	56.2	63.1	53.6
1972	53.9	63.1	54.1	51.4	61.7	55.4	55.5	56.2	62.9	54.0
1973	53.4	63.8	52.8	51.0	61.4	54.9	55.0	55.6	62.3	53.6
1974	53.1	71.5	51.0	51.5	62.6	55.2	55.3	56.0	62.8	54.3
1975	55.8	75.9	53.5	50.0	61.0	56.9	57.0	57.1	63.7	57.1
1976	56.3	73.8	54.2	51.1	59.9	56.6	56.7	56.8	63.7	57.5
1977	56.7	70.8	54.4	51.5	58.8	56.7	56.8	56.8	63.6	57.7
1978	54.9	66.9	54.6	51.2	58.8	56.1	56.2	56.3	62.9	57.7
1979	54.8	66.4	53.4	50.5	59.3	56.3	56.4	56.5	62.7	58.7
1980	54.9	66.2	52.6	49.6	58.9	56.9	57.0	57.0	63.6	58.8
1971–80	54.8	68.6	53.4	50.9	60.3	56.0	56.1	56.4	63.1	56.3
1981	55.8	68.5	52.5	50.6	59.5	57.5	57.7	57.7	62.6	58.1
1982	56.5	68.5	53.4	51.5	59.6	57.7	57.8	57.8	64.4	59.4
1983	57.8	68.2	53.4	50.0	60.0	57.4	57.6	57.6	65.3	60.2
1984	57.2	69.6	52.5	48.8	60.0	57.1	57.3	57.3	64.1	59.4
1985	57.1	66.8	52.9	49.3	59.8	57.2	57.3	57.3	65.0	58.9
1986	56.4	64.0	52.9	49.6	61.7	56.5	56.6	57.0	65.6	58.6
1987	56.3	63.3	52.8	50.6	61.7	56.7	56.9	57.2	66.1	58.9
1988	56.4	63.1	51.4	50.5	62.5	56.0	56.2	56.9	66.3	58.3
1989	56.1	62.0	50.7	49.5	62.4	56.0	56.2	56.8	66.1	58.2
1990	55.7	62.7	50.4	49.1	62.5	55.7	55.9	56.5	66.6	58.0
1981–90	56.5	65.7	52.3	49.9	61.0	56.8	57.0	57.2	65.2	58.8
1991	55.0	63.5	53.8	51.3	63.1	56.0	56.3	57.0	67.0	57.1
1991	55.0	63.5	53.8	51.3	63.1	56.6	56.9	57.4	67.0	57.1
1992	55.6	64.5	54.9	51.9	63.8	57.0	57.2	57.8	67.2	57.8
1993	56.0	66.1	54.6	53.0	64.6	57.0	57.3	58.0	67.7	58.6
1994	55.9	65.6	53.4	52.0	64.1	56.7	57.0	57.7	67.4	59.7
1995	56.2	64.4	51.7	50.2	63.7	56.5	56.8	57.4	67.7	60.1
1996	57.2	64.5	52.7	50.3	64.3	56.8	57.1	57.7	67.6	59.8
1997	57.3	63.8	50.9	50.7	64.3	56.6	56.9	57.8	67.0	60.0
1998	57.0	64.5	50.1	50.3	64.8	56.6	56.9	57.9	67.0	61.1
1999	56.6	64.8	50.3	50.5	65.8	56.7	57.0	58.2	67.9	62.0
2000	57.3	65.5	49.7	50.8	65.6	56.9	57.1	58.3	68.1	62.8
1991–2000	56.4	64.7	52.2	51.1	64.4	56.7	57.0	57.8	67.5	59.9
2001	57.4	65.6	49.2	50.5	65.2	56.9	57.1	58.2	67.6	62.2
2002	57.6	65.4	48.3	50.2	64.7	56.7	56.9	58.0	67.1	62.3

(1) EU-15 excluding DK, EL, S, UK; 1960–91: including D_90.
(2) EU-15 excluding DK, S, UK; 1960–91: including D_90.
(3) 1960–91: including D_90.

Table 14

Private final consumption expenditure at current prices per head of population

(ECU/EUR [1]; EU-15 = 100 [2])

	B	DK	D [3]	EL	E	F	IRL	I	L	NL
1960	116.7	124.5	114.7	54.7	40.7	119.3	84.8	69.8	158.3	79.7
1961	111.8	126.9	119.1	54.2	42.1	119.0	83.1	70.0	153.2	81.4
1962	107.9	130.7	119.3	52.8	44.1	120.9	82.3	72.5	147.0	81.4
1963	106.8	125.9	115.0	52.6	48.1	123.1	80.2	77.4	144.3	82.0
1964	105.2	130.3	114.1	54.5	49.3	123.6	82.8	77.4	149.4	85.1
1965	105.8	131.7	115.6	56.2	53.2	121.6	80.5	76.2	147.4	87.1
1966	104.7	135.4	114.1	57.6	56.3	121.6	79.1	77.9	143.5	87.3
1967	104.2	139.5	110.9	58.6	58.1	123.8	78.0	81.1	138.6	88.9
1968	108.9	136.4	114.0	61.3	54.2	129.8	75.1	83.4	143.3	93.2
1969	108.4	138.9	116.2	61.6	54.6	128.4	78.2	83.8	140.7	97.1
1970	105.4	138.3	125.5	63.0	54.7	117.9	78.4	85.6	140.8	97.8
1971	106.2	132.7	128.5	60.9	54.8	116.2	79.3	83.6	141.0	99.3
1972	110.0	130.3	129.8	56.1	57.6	118.3	77.6	81.6	142.7	100.2
1973	113.8	139.9	135.7	55.1	60.3	120.6	71.6	79.2	141.8	104.7
1974	118.7	139.0	134.3	60.6	66.8	116.3	70.2	77.6	145.3	110.2
1975	118.1	139.3	130.2	57.0	66.5	124.0	65.8	77.1	146.7	109.7
1976	123.8	152.4	134.8	58.7	66.7	124.4	63.1	72.5	152.6	116.7
1977	129.9	151.1	140.3	62.3	64.5	120.2	65.3	72.7	157.4	122.4
1978	130.1	148.7	142.4	62.2	62.7	121.5	68.8	72.0	156.8	123.9
1979	125.1	142.4	137.7	61.5	68.6	119.9	71.2	74.3	149.7	116.8
1980	119.9	124.6	129.9	56.8	65.0	120.0	73.9	80.7	144.9	109.0
1981	113.9	122.1	123.6	59.8	63.6	119.7	78.2	81.8	141.2	99.4
1982	105.8	121.7	124.5	64.2	63.5	117.6	76.1	84.7	132.7	100.5
1983	103.6	124.8	128.9	61.2	56.6	115.2	75.7	90.0	133.7	101.7
1984	102.3	126.3	127.0	59.8	58.8	113.6	75.2	93.8	133.9	98.2
1985	104.3	130.1	123.7	55.9	59.4	114.7	78.0	93.8	135.0	97.1
1986	104.8	136.1	126.6	49.3	59.9	115.4	77.2	98.0	139.3	99.2
1987	104.9	132.8	128.1	49.4	61.2	113.4	73.1	99.1	141.7	98.9
1988	100.8	125.1	122.8	52.0	64.5	108.7	74.0	98.5	138.9	92.5
1989	99.9	118.9	118.7	53.8	70.5	106.5	75.4	102.1	137.9	88.8
1990	101.5	117.6	119.4	54.9	73.4	106.9	73.7	103.3	143.7	89.2
1991	100.2	113.6	120.5	55.8	75.4	102.5	71.5	105.2	145.2	87.7
1991	101.3	114.9	112.5	56.4	76.3	103.7	72.3	106.4	146.9	88.7
1992	102.2	115.4	116.5	57.7	76.9	104.2	73.4	105.2	144.4	89.8
1993	106.2	120.9	125.2	59.7	70.3	109.0	72.9	92.1	154.6	95.6
1994	108.7	128.1	125.3	60.4	67.0	108.9	75.5	90.5	156.8	97.1
1995	111.3	131.6	129.5	62.1	67.4	109.8	76.0	85.1	161.4	99.6
1996	106.4	129.2	123.5	64.6	68.5	107.6	80.3	92.6	157.3	97.8
1997	101.5	127.3	117.0	65.7	66.5	101.7	88.6	94.0	151.2	94.1
1998	101.0	127.7	115.2	63.2	67.2	101.2	89.1	93.1	148.2	94.7
1999	99.6	125.9	113.3	64.2	68.8	99.2	93.2	92.2	147.5	95.8
2000	98.4	122.2	110.2	61.9	69.6	96.6	101.1	90.9	146.3	95.9
2001	98.1	120.8	109.9	61.8	70.7	96.0	107.5	91.1	148.7	98.9
2002	97.5	119.6	109.4	62.5	71.2	95.7	112.3	91.1	150.8	100.9

([1]) 1960–98: ECU.
([2]) 1960–91: including D_90.
([3]) 1960–91: D_90.

(ECU/EUR [1]; EU-15 = 100 [2])

	A	P	FIN	S	UK	EUR-11 [3]	EUR-12 [4]	EU-15 [2]	US	JP
1960	85.3	37.6	106.6	172.5	139.1	89.7	88.5	100.0	285.7	43.1
1961	85.8	37.7	108.2	170.7	134.0	91.0	89.7	100.0	267.6	46.3
1962	84.8	35.1	109.4	168.3	129.8	92.0	90.6	100.0	258.3	48.5
1963	83.9	34.6	109.5	166.2	126.4	93.0	91.6	100.0	246.5	51.6
1964	83.2	34.2	115.4	165.3	124.6	93.3	91.9	100.0	243.1	54.8
1965	84.1	35.2	117.6	167.1	122.2	93.7	92.4	100.0	240.5	56.8
1966	83.2	36.1	116.2	167.8	119.9	94.1	92.8	100.0	240.7	60.5
1967	84.1	36.9	110.7	170.2	116.5	94.7	93.4	100.0	238.2	65.1
1968	86.5	41.4	95.9	173.8	105.7	97.0	95.7	100.0	251.1	71.1
1969	84.4	42.3	100.0	171.6	102.9	97.6	96.4	100.0	248.2	74.4
1970	82.7	41.0	99.8	167.9	101.7	98.0	96.8	100.0	238.9	76.8
1971	85.2	43.1	96.3	160.9	102.6	98.2	96.9	100.0	226.6	78.9
1972	87.2	41.5	95.7	160.2	99.7	99.1	97.6	100.0	207.3	86.8
1973	91.9	45.1	98.1	153.8	89.3	101.4	99.9	100.0	181.6	92.6
1974	96.7	52.5	106.9	152.8	87.3	101.7	100.3	100.0	174.8	94.0
1975	98.4	49.6	111.1	157.3	86.1	102.0	100.4	100.0	161.8	88.4
1976	103.6	47.9	118.1	168.1	79.2	102.8	101.3	100.0	174.3	94.5
1977	111.2	42.3	110.6	158.0	77.9	103.3	101.9	100.0	170.2	102.6
1978	106.8	35.7	98.1	142.9	81.3	103.1	101.7	100.0	155.1	117.8
1979	103.6	32.5	96.9	136.3	87.4	102.2	100.7	100.0	140.5	101.2
1980	101.0	34.8	100.2	134.5	97.1	100.6	99.1	100.0	134.1	92.4
1981	99.5	38.9	109.5	141.1	105.0	98.7	97.3	100.0	164.3	112.5
1982	105.1	38.4	116.4	132.0	104.1	99.0	97.8	100.0	181.9	110.7
1983	113.1	35.2	115.3	121.5	102.7	99.7	98.3	100.0	205.3	125.9
1984	110.6	34.7	122.9	128.9	101.2	99.8	98.4	100.0	232.8	138.0
1985	109.1	34.4	125.8	131.7	103.1	99.4	97.8	100.0	241.6	140.0
1986	112.7	34.9	120.3	128.1	95.2	101.3	99.5	100.0	188.7	151.2
1987	113.5	34.7	121.2	127.8	94.2	101.6	99.7	100.0	162.0	147.9
1988	110.2	36.8	126.8	129.5	104.4	99.4	97.7	100.0	157.2	159.0
1989	107.7	38.7	134.1	130.8	103.7	99.6	97.9	100.0	164.9	155.4
1990	108.3	41.6	127.7	125.9	99.3	100.7	99.0	100.0	141.2	128.8
1991	105.6	45.9	117.2	130.7	99.7	100.5	98.9	100.0	138.9	138.8
1991	106.9	46.4	118.5	132.2	100.8	100.2	98.6	100.0	140.4	140.4
1992	110.3	52.0	96.9	126.0	96.2	101.2	99.7	100.0	134.7	141.3
1993	117.9	52.0	84.0	105.8	96.3	101.6	100.2	100.0	156.0	181.7
1994	119.4	51.5	90.1	105.2	97.7	101.2	99.8	100.0	154.9	192.1
1995	124.1	53.3	99.1	103.3	92.6	102.2	100.8	100.0	142.8	186.0
1996	121.4	54.2	96.9	110.2	95.4	101.4	100.1	100.0	145.8	161.6
1997	115.3	53.6	95.5	107.2	113.2	97.9	96.7	100.0	163.1	157.9
1998	113.7	54.8	95.8	102.9	117.6	97.2	96.0	100.0	165.7	140.6
1999	111.9	56.0	96.3	103.8	121.6	96.3	95.2	100.0	175.8	162.0
2000	111.1	55.7	96.5	108.4	128.8	94.8	93.7	100.0	201.8	187.9
2001	110.8	56.1	97.3	108.5	127.9	95.1	93.9	100.0	207.5	189.9
2002	110.6	56.2	97.1	108.9	127.8	95.1	93.9	100.0	206.5	187.9

([1]) 1960–98: ECU.
([2]) 1960–91: including D_90.
([3]) EU-15 excluding DK, EL, S, UK; 1960–91: including D_90.
([4]) EU-15 excluding DK, S, UK; 1960–91: including D_90.

Table 15

Private final consumption expenditure at current prices per head of population

(PPS; EU-15 = 100 ([1]))

	B	DK	D ([2])	EL	E	F	IRL	I	L	NL
1960	98.8	124.9	115.6	57.0	66.2	99.1	84.5	83.3	156.7	92.9
1961	97.5	127.1	114.7	58.2	70.0	100.2	84.0	84.7	157.0	92.7
1962	96.6	128.2	114.4	56.6	72.4	101.0	82.9	86.5	147.3	92.6
1963	96.8	121.8	111.6	58.2	75.9	100.8	82.1	88.8	144.8	93.0
1964	95.2	125.9	112.2	60.8	76.4	101.5	80.7	87.1	148.1	92.8
1965	95.0	123.7	114.5	63.0	78.8	101.2	78.5	86.0	148.3	93.5
1966	93.8	123.7	113.6	64.0	80.2	102.2	76.7	89.3	143.6	91.8
1967	92.8	124.1	111.4	65.3	79.7	103.3	76.5	92.9	142.8	91.9
1968	93.9	121.3	111.3	66.9	79.9	103.5	80.4	93.2	140.6	92.0
1969	93.9	120.7	112.1	68.3	80.1	104.9	80.3	94.1	141.1	94.2
1970	93.1	118.5	111.5	71.8	80.6	104.7	78.3	96.1	138.6	95.4
1971	94.8	114.4	110.7	74.0	81.6	105.7	77.3	95.5	139.4	95.0
1972	95.6	110.3	111.2	74.1	83.6	105.2	74.5	94.7	138.4	92.1
1973	97.3	110.7	108.8	71.8	84.9	103.9	72.6	96.2	135.8	91.4
1974	97.6	106.4	106.8	70.4	87.7	104.8	77.4	97.4	136.1	91.9
1975	97.7	106.8	110.2	74.4	86.8	105.5	74.8	96.9	139.1	93.4
1976	99.2	111.9	111.8	74.0	87.4	105.3	72.5	97.4	136.7	94.6
1977	99.4	110.9	114.3	77.1	86.1	105.6	75.3	96.6	134.6	95.6
1978	99.8	109.1	114.7	80.3	83.4	106.2	77.8	96.6	134.9	96.6
1979	100.8	108.9	114.9	78.5	80.6	105.9	78.1	99.0	132.7	95.5
1980	103.9	105.5	115.0	79.0	80.8	106.3	79.0	103.0	133.5	94.0
1981	105.5	103.2	115.4	78.5	79.8	108.4	80.2	102.6	135.6	90.2
1982	106.4	103.1	113.7	75.9	79.1	110.0	73.0	102.8	136.2	88.1
1983	105.1	101.9	114.1	75.2	78.4	109.0	71.2	101.5	134.5	88.8
1984	104.7	103.3	115.2	72.4	76.8	108.1	71.6	102.9	134.1	89.2
1985	105.6	104.5	114.4	71.3	77.0	107.2	72.8	103.7	137.0	90.3
1986	103.3	107.0	111.6	70.7	76.5	105.6	71.9	104.2	139.1	90.6
1987	102.5	101.0	110.4	71.5	78.2	105.2	72.1	103.9	139.5	90.5
1988	101.4	97.7	109.1	72.3	78.8	103.8	73.7	103.9	140.0	87.4
1989	101.0	94.3	108.4	73.6	80.4	103.9	75.5	104.9	142.6	87.5
1990	102.0	91.9	109.6	73.4	81.1	104.4	76.6	103.4	143.5	89.0
1991	102.5	93.0	112.1	74.1	83.4	104.3	78.2	104.8	147.5	88.1
1991	104.0	94.2	104.9	75.1	84.5	105.7	79.2	106.2	149.5	89.3
1992	104.7	91.7	106.0	78.0	82.7	103.5	81.5	107.1	143.7	89.1
1993	106.7	96.7	106.7	80.5	83.0	101.9	82.1	102.4	146.2	90.2
1994	106.7	102.4	107.5	81.8	81.0	99.9	86.6	104.4	143.4	91.0
1995	105.1	103.1	108.4	83.4	81.0	99.8	87.9	105.2	144.1	92.8
1996	103.6	103.1	108.4	84.7	81.5	97.9	87.3	103.8	142.8	91.8
1997	103.0	104.6	107.4	82.0	81.6	93.9	92.0	103.5	139.4	95.9
1998	103.3	104.5	106.7	81.5	82.6	93.9	93.3	102.6	137.4	96.4
1999	101.8	102.1	106.1	81.3	83.8	93.0	95.7	101.8	136.9	97.0
2000	102.4	100.1	105.9	81.3	84.4	92.9	100.9	100.8	135.9	97.8
2001	102.0	98.5	106.2	81.5	84.5	92.8	104.1	100.4	137.0	99.1
2002	101.7	97.2	106.4	81.7	84.6	92.8	106.4	100.3	138.3	99.9

([1]) 1960–91: including D_90.
([2]) 1960–91: D_90.

(PPS; EU-15 = 100 ([1]))

	A	P	FIN	S	UK	EUR-11 ([2])	EUR-12 ([3])	EU-15 ([1])	US	JP
1960	95.3	48.9	86.6	120.7	134.1	92.5	91.2	100.0	175.9	56.0
1961	94.7	49.9	86.9	120.7	130.3	93.3	92.1	100.0	169.6	58.0
1962	94.1	48.6	88.3	119.5	127.3	94.1	92.8	100.0	168.7	60.8
1963	93.8	48.8	87.6	119.6	126.6	94.3	93.1	100.0	166.1	64.1
1964	94.1	49.8	90.0	119.1	125.8	94.4	93.2	100.0	168.5	67.2
1965	94.0	51.6	91.2	118.6	122.7	95.1	94.0	100.0	170.9	69.2
1966	93.7	52.1	89.4	116.2	119.8	95.8	94.7	100.0	172.7	72.6
1967	94.2	52.8	87.7	115.0	118.2	96.1	95.1	100.0	170.1	76.0
1968	93.5	58.0	82.1	114.0	117.2	96.4	95.4	100.0	170.8	78.0
1969	92.9	58.4	85.9	113.8	113.1	97.3	96.3	100.0	168.2	81.2
1970	92.9	58.5	88.1	113.1	111.1	97.7	96.8	100.0	164.2	83.8
1971	95.0	63.3	86.5	110.1	110.5	98.0	97.1	100.0	162.8	86.5
1972	95.5	62.0	89.8	108.7	111.0	98.0	97.2	100.0	163.4	89.8
1973	94.2	66.5	88.8	106.8	112.8	97.7	96.8	100.0	161.8	90.6
1974	95.1	72.6	85.8	108.4	110.6	98.3	97.3	100.0	157.2	87.6
1975	99.1	70.5	90.1	106.8	106.3	99.2	98.3	100.0	156.2	92.7
1976	101.1	68.8	87.8	106.2	103.8	99.7	98.8	100.0	157.9	92.8
1977	104.5	67.5	86.5	102.9	102.1	100.1	99.3	100.0	160.0	94.3
1978	99.2	63.8	86.9	102.0	103.7	99.7	99.0	100.0	162.5	96.7
1979	101.0	63.9	87.5	100.7	103.8	99.8	99.0	100.0	159.9	99.5
1980	102.0	64.9	88.9	98.7	99.1	100.9	100.1	100.0	157.3	100.1
1981	102.5	67.1	89.4	99.8	98.1	101.2	100.3	100.0	155.9	100.5
1982	104.7	67.5	92.6	101.7	99.2	101.0	100.1	100.0	154.2	104.3
1983	108.9	66.0	93.2	99.0	102.0	100.5	99.6	100.0	159.4	105.9
1984	106.3	64.6	92.7	98.8	102.5	100.5	99.5	100.0	163.7	106.2
1985	105.9	62.2	93.7	99.3	103.3	100.3	99.3	100.0	166.8	106.6
1986	104.8	60.8	93.7	99.7	108.4	99.2	98.1	100.0	168.9	106.4
1987	103.0	62.1	94.3	101.5	109.5	99.0	98.0	100.0	169.0	107.4
1988	102.9	64.7	92.9	99.9	112.7	98.4	97.4	100.0	169.6	108.8
1989	103.3	65.2	93.3	96.7	111.4	98.8	97.8	100.0	168.5	110.4
1990	104.1	67.8	90.8	94.8	110.0	99.2	98.2	100.0	168.1	113.2
1991	102.2	70.8	86.0	93.3	104.5	100.4	99.4	100.0	161.0	113.1
1991	103.6	71.8	87.2	94.6	105.9	100.0	99.1	100.0	163.2	114.7
1992	104.4	73.2	82.4	90.2	107.2	99.8	99.0	100.0	163.2	115.8
1993	107.3	77.6	85.6	90.8	109.2	99.2	98.5	100.0	169.1	119.5
1994	107.2	79.3	83.8	89.9	108.3	99.2	98.6	100.0	170.0	118.8
1995	107.2	79.0	86.9	89.1	105.7	99.7	99.2	100.0	172.3	119.9
1996	109.9	78.8	86.5	87.9	108.9	99.1	98.6	100.0	172.8	121.8
1997	109.9	81.6	87.2	88.9	112.9	98.3	97.7	100.0	175.1	120.6
1998	109.5	83.5	87.7	87.9	113.9	98.1	97.6	100.0	176.7	116.0
1999	108.6	84.4	87.3	88.4	115.5	97.8	97.3	100.0	179.9	114.5
2000	109.7	84.4	88.2	89.8	115.6	97.8	97.2	100.0	183.2	113.8
2001	109.7	84.2	88.3	90.1	115.2	97.9	97.3	100.0	181.8	111.7
2002	110.0	84.1	87.6	90.0	114.7	98.0	97.4	100.0	179.8	111.3

([1]) 1960–91: including D_90.
([2]) EU-15 excluding DK, EL, S, UK; 1960–91: including D_90.
([3]) EU-15 excluding DK, S, UK; 1960–91: including D_90.

Table 16

Private final consumption expenditure at 1995 prices

(national currency; annual percentage change)

	B	DK	D (1)	EL	E	F	IRL	I	L	NL
1961	1.6	7.3	6.1	6.8	11.0	5.9	3.1	7.5	5.0	5.2
1962	3.9	5.9	5.7	4.1	8.8	7.1	3.5	7.1	4.4	6.1
1963	4.5	0.0	2.8	5.7	11.3	6.9	4.2	9.3	4.6	7.0
1964	2.6	7.8	5.3	10.1	4.3	5.6	4.3	3.3	9.2	5.9
1965	4.3	3.4	6.9	7.1	6.8	4.0	0.8	3.3	4.0	7.5
1966	2.6	4.3	3.1	7.1	7.2	4.8	1.5	7.2	1.6	3.2
1967	2.8	2.9	1.1	7.0	6.0	5.1	3.8	7.4	0.0	5.4
1968	5.3	1.9	4.7	7.8	6.0	4.0	9.0	5.2	4.3	6.6
1969	5.3	6.3	8.0	6.4	7.2	6.0	5.4	6.6	5.2	7.9
1970	4.4	3.5	7.7	9.0	4.7	4.3	– 1.0	7.6	6.1	7.4
1961–70	3.7	4.3	5.1	7.1	7.3	5.4	3.4	6.4	4.4	6.2
1971	4.9	– 0.8	5.5	5.6	5.1	4.9	3.2	3.6	5.6	3.7
1972	5.9	1.7	4.7	6.1	8.3	4.9	5.1	3.6	4.8	3.0
1973	8.1	4.8	2.9	6.2	7.8	5.3	7.2	6.7	5.8	4.5
1974	2.8	– 2.9	0.5	– 1.3	5.1	1.2	1.6	3.8	4.5	3.3
1975	0.9	3.7	3.1	7.7	1.8	2.8	0.8	0.7	5.3	3.4
1976	5.1	6.8	3.9	5.9	5.6	4.9	2.7	5.0	3.1	5.6
1977	2.6	1.3	4.5	8.8	1.5	2.7	6.7	3.2	2.3	4.2
1978	2.5	0.6	3.7	8.0	0.9	3.7	8.9	2.9	2.9	4.4
1979	5.1	1.4	3.3	5.7	1.3	3.1	4.4	6.9	3.5	2.3
1980	2.4	– 2.3	1.2	0.4	0.6	0.8	0.4	6.2	2.8	– 0.4
1971–80	4.0	1.4	3.3	5.3	3.8	3.4	4.1	4.2	4.1	3.4
1981	– 1.1	– 1.8	– 0.6	– 0.6	– 1.3	1.5	1.7	1.4	1.7	– 4.2
1982	1.4	1.8	– 1.3	3.1	– 0.1	2.8	– 6.9	1.1	0.4	– 1.2
1983	– 1.0	0.8	1.5	1.9	0.3	0.5	0.8	0.3	0.5	1.0
1984	1.1	1.9	1.8	0.5	– 0.2	0.5	2.0	3.0	1.4	1.1
1985	2.2	3.4	1.7	0.6	3.5	1.6	4.6	3.1	2.7	2.9
1986	3.1	5.9	3.5	– 1.4	3.3	3.6	2.9	4.0	5.7	3.0
1987	1.8	– 1.6	3.4	2.8	5.8	3.0	3.3	3.8	4.6	2.7
1988	3.7	0.0	2.7	5.9	4.9	2.7	4.4	4.0	4.6	0.8
1989	3.9	– 0.1	2.8	6.0	5.7	3.0	5.9	3.7	5.1	3.3
1990	3.2	0.1	5.4	2.6	3.6	2.7	0.6	2.1	5.7	4.6
1981–90	1.8	1.0	2.1	2.1	2.5	2.2	1.9	2.7	3.2	1.4
1991	3.0	1.6	5.6	2.8	2.9	0.7	1.8	2.9	6.3	3.0
1992	2.2	1.9	2.7	2.4	2.2	0.9	2.9	1.9	– 0.9	1.8
1993	– 1.0	0.5	0.1	– 0.8	– 2.2	– 0.4	2.9	– 3.7	1.7	0.5
1994	2.0	6.5	1.0	2.0	0.9	1.2	4.4	1.5	2.4	2.3
1995	1.0	1.2	2.0	2.7	1.6	1.2	4.1	1.7	2.4	2.1
1996	0.7	2.5	1.0	2.4	2.2	1.3	6.4	1.2	4.4	4.0
1997	2.1	3.7	0.7	2.8	3.1	0.2	7.5	3.0	3.8	3.0
1998	3.3	3.5	2.0	3.1	4.5	3.3	7.8	2.3	2.3	4.4
1999	1.9	0.6	2.6	2.9	4.7	2.1	7.8	1.7	4.1	4.4
2000	2.5	0.5	1.7	2.9	4.1	2.6	10.1	2.1	3.6	4.3
1991–2000	1.8	2.2	1.9	2.3	2.4	1.3	5.5	1.5	3.0	3.0
2001	2.4	1.3	2.6	3.1	3.2	2.8	8.0	2.4	5.0	4.3
2002	2.4	1.7	2.4	3.2	2.9	2.8	6.5	2.5	5.0	4.2

(1) 1961–91: including D_90.

(national currency; annual percentage change)

	A	P	FIN	S	UK	EUR-11 (1)	EUR-12 (2)	EU-15 (3)	US	JP
1961	5.1	7.8	7.6	5.3	2.2	6.6	6.6	5.5	2.0	10.4
1962	3.3	– 1.2	6.0	3.3	2.3	6.3	6.3	5.2	4.9	7.5
1963	5.5	6.9	4.4	4.4	4.8	6.4	6.4	5.9	4.1	8.8
1964	3.4	5.8	5.5	4.0	3.1	4.7	4.9	4.5	6.0	10.8
1965	4.9	6.0	5.6	4.2	1.4	5.2	5.3	4.4	6.3	5.8
1966	4.3	4.0	2.5	1.9	1.8	4.8	4.8	4.1	5.7	10.0
1967	3.5	6.0	2.1	2.3	2.4	4.3	4.4	3.9	3.0	10.4
1968	4.0	11.1	0.1	4.1	2.8	5.0	5.0	4.5	5.7	8.5
1969	2.9	5.4	10.7	4.4	0.6	6.9	6.8	5.5	3.7	10.3
1970	4.2	2.9	7.6	3.5	2.9	6.1	6.2	5.4	2.3	7.4
1961–70	4.1	5.4	5.2	3.8	2.4	5.6	5.7	4.9	4.4	9.0
1971	6.7	8.4	1.7	0.1	3.2	4.8	4.8	4.3	3.8	5.5
1972	6.1	2.9	8.4	3.4	6.3	4.9	5.0	5.1	6.0	9.0
1973	5.4	13.0	5.9	2.6	5.5	5.5	5.5	5.4	4.9	8.8
1974	3.0	9.1	1.8	3.4	– 1.5	2.4	2.3	1.5	– 0.8	– 0.1
1975	3.2	1.7	3.1	2.8	– 0.2	2.3	2.4	1.9	2.2	4.4
1976	4.5	2.3	0.6	4.2	0.5	4.6	4.7	3.9	5.8	2.9
1977	5.5	0.6	– 0.7	– 1.0	– 0.4	3.2	3.4	2.6	4.3	4.0
1978	– 1.6	– 2.0	2.1	– 0.7	5.4	2.9	3.0	3.3	4.4	5.3
1979	4.4	0.0	5.5	2.4	4.4	3.8	3.9	3.9	2.5	6.5
1980	1.6	3.7	2.2	– 0.8	0.0	2.2	2.1	1.6	– 0.3	1.1
1971–80	3.8	3.9	3.0	1.6	2.3	3.7	3.7	3.4	3.3	4.7
1981	0.8	2.9	1.2	– 0.3	0.1	0.2	0.2	0.1	1.3	1.5
1982	2.6	2.4	5.3	0.7	1.0	0.7	0.7	0.8	1.2	4.4
1983	5.0	– 1.4	3.1	– 2.0	4.6	0.8	0.8	1.4	5.5	3.3
1984	– 1.3	– 2.9	3.2	1.5	1.9	1.3	1.3	1.4	5.4	2.6
1985	1.9	0.7	3.8	2.7	3.9	2.3	2.3	2.6	5.0	3.3
1986	2.2	5.6	4.0	4.4	6.6	3.6	3.4	4.0	4.2	3.5
1987	2.9	5.3	5.1	4.6	5.3	3.6	3.6	3.9	3.3	4.2
1988	3.3	6.9	5.3	2.4	7.5	3.4	3.5	4.1	4.0	5.3
1989	3.7	2.6	4.6	1.2	3.2	3.6	3.6	3.4	2.7	4.8
1990	3.8	5.9	– 0.6	– 0.4	0.7	3.5	3.5	2.8	1.8	4.4
1981–90	2.5	2.7	3.5	1.5	3.5	2.3	2.3	2.4	3.4	3.7
1991	2.8	3.7	– 3.8	0.9	– 1.7	3.0	3.0	2.1	– 0.2	2.5
1992	3.0	4.3	– 4.4	– 1.4	0.5	2.0	2.0	1.7	2.9	2.1
1993	0.7	1.5	– 3.1	– 3.1	2.9	– 1.1	– 1.0	– 0.4	3.4	1.2
1994	1.8	2.2	2.6	1.8	2.9	1.4	1.4	1.7	3.8	1.9
1995	2.9	1.6	4.4	0.6	1.7	1.8	1.8	1.8	3.0	2.1
1996	3.2	3.9	4.2	1.4	3.6	1.6	1.6	2.0	3.2	2.9
1997	1.4	3.3	3.5	1.7	3.9	1.7	1.7	2.1	3.6	0.5
1998	2.9	6.0	4.9	2.4	4.0	3.0	3.0	3.2	4.7	– 0.5
1999	2.3	4.6	3.6	4.1	4.3	2.8	2.8	3.0	5.3	1.2
2000	3.1	3.0	3.7	4.9	3.4	2.6	2.6	2.8	5.2	1.7
1991–2000	2.4	3.4	1.5	1.3	2.5	1.9	1.9	2.0	3.5	1.5
2001	2.2	2.4	3.0	3.5	2.9	2.8	2.8	2.8	2.9	1.7
2002	2.4	2.4	2.1	3.1	2.8	2.7	2.7	2.7	2.4	2.0

(1) PPS weighted; EU-15 excluding DK, EL, S, UK; 1961–91: including D_90.
(2) PPS weighted; EU-15 excluding DK, S, UK; 1961–91: including D_90.
(3) PPS weighted; 1961–91: including D_90.

Table 17

Final consumption expenditure of general government at current prices

(% of GDP at market prices)

	B	DK	D [1]	EL	E	F	IRL	I	L	NL
1960	16.3	13.7	13.4	10.9	9.0	16.0	13.1	13.7	11.1	19.6
1961	15.6	14.9	13.8	10.3	8.9	16.2	13.1	13.6	11.3	20.4
1962	16.1	15.6	14.6	10.7	8.8	16.5	13.2	14.1	12.4	21.2
1963	17.0	15.9	15.5	10.3	9.2	16.8	13.4	15.0	14.0	22.4
1964	16.4	16.0	14.8	10.6	8.9	16.7	14.0	15.4	12.3	22.7
1965	16.7	16.8	15.2	10.5	9.1	16.6	14.3	16.3	12.4	22.6
1966	17.2	17.6	15.5	10.5	9.4	16.5	14.3	16.0	13.0	23.1
1967	17.6	18.4	16.2	11.6	10.2	16.6	14.1	15.5	13.7	23.7
1968	17.8	19.2	15.5	11.5	9.9	17.3	14.1	15.6	13.7	23.2
1969	17.8	19.4	15.6	11.2	9.9	17.1	14.3	15.3	12.5	23.3
1970	17.6	20.5	15.8	11.0	10.2	17.3	15.4	14.8	11.9	23.7
1961–70	17.0	17.4	15.2	10.8	9.4	16.8	14.0	15.2	12.7	22.6
1971	18.4	21.9	16.9	10.9	10.4	17.6	16.1	16.6	13.3	24.5
1972	19.0	21.9	17.1	10.4	10.3	17.5	16.1	17.3	13.4	24.5
1973	19.0	21.9	17.8	9.6	10.3	17.5	16.5	16.4	12.8	24.0
1974	19.2	24.1	19.3	11.8	10.7	18.1	18.1	15.7	13.0	24.9
1975	21.4	25.3	20.5	12.9	11.3	19.5	19.6	16.1	17.0	26.5
1976	21.4	24.7	19.8	12.6	12.2	19.9	19.0	15.3	16.7	26.3
1977	21.8	24.6	19.7	13.3	12.4	20.2	18.0	15.7	18.0	26.6
1978	22.6	25.2	19.7	13.1	12.9	20.7	18.1	16.2	17.8	27.2
1979	22.8	25.7	19.7	13.4	13.4	20.8	19.1	16.6	18.2	27.9
1980	23.0	27.3	20.2	13.4	14.3	21.5	21.0	16.8	19.0	27.5
1971–80	20.9	24.3	19.1	12.1	11.8	19.3	18.1	16.3	15.9	26.0
1981	24.3	28.4	20.7	14.7	15.0	22.4	21.0	18.2	19.8	27.5
1982	24.0	28.7	20.6	14.4	15.3	23.1	20.9	18.3	18.7	27.7
1983	23.6	27.9	20.2	14.9	15.8	23.3	20.4	18.7	17.9	27.1
1984	23.6	26.6	20.0	15.3	15.5	23.7	19.7	18.4	17.5	25.7
1985	23.0	25.9	20.1	16.0	15.9	23.7	19.5	18.6	17.9	25.0
1986	22.8	24.6	19.9	15.2	15.9	23.4	19.8	18.3	17.2	24.6
1987	22.7	25.8	20.0	15.4	16.3	23.1	18.6	19.1	18.5	25.2
1988	21.3	26.3	19.7	14.1	16.0	22.7	17.1	19.5	17.5	24.4
1989	20.5	25.9	18.8	15.0	16.4	22.3	15.9	19.3	16.8	23.8
1990	20.3	25.6	18.3	15.1	16.9	22.3	16.4	20.2	18.0	23.5
1981–90	22.6	26.6	19.8	15.0	15.9	23.0	18.9	18.9	18.0	25.5
1991	21.0	25.7	17.6	14.2	17.5	22.5	17.4	20.3	17.8	23.7
1991	21.0	25.7	19.2	14.2	17.5	22.5	17.4	20.3	17.8	23.7
1992	21.0	25.8	19.8	13.7	18.5	23.1	17.8	20.1	17.6	24.4
1993	21.5	26.8	19.9	14.3	19.0	24.5	17.6	19.9	17.4	24.8
1994	21.4	25.9	19.7	13.8	18.3	24.1	17.4	19.1	16.8	24.1
1995	21.5	25.8	19.8	15.3	18.1	23.9	16.4	17.9	17.7	24.0
1996	21.8	25.9	19.9	14.5	17.9	24.2	15.8	18.1	18.2	23.1
1997	21.3	25.6	19.5	15.2	17.6	24.2	15.2	18.2	17.3	22.9
1998	21.2	25.8	19.1	15.3	17.5	23.5	14.5	18.0	16.8	22.8
1999	21.4	25.7	19.0	15.0	17.3	23.7	14.0	18.1	17.7	22.8
2000	21.2	25.3	18.9	15.1	16.9	23.4	13.4	17.9	17.6	22.9
1991–2000	21.3	25.8	19.5	14.6	17.9	23.7	15.9	18.8	17.5	23.6
2001	21.0	25.2	18.7	14.9	16.6	23.0	12.9	17.6	17.5	22.7
2002	20.7	25.1	18.6	14.6	16.5	22.5	12.5	17.3	17.2	22.4

[1] 1960–91: D_90.

(% of GDP at market prices)

	A	P	FIN	S	UK	EUR-11 (1)	EUR-12 (2)	EU-15 (3)	US	JP
1960	13.3	10.3	12.4	16.2	16.7	14.3	14.3	14.9	16.9	8.0
1961	12.9	12.1	12.2	16.3	17.0	14.5	14.4	15.1	17.6	7.7
1962	13.2	12.5	13.1	17.2	17.4	15.0	14.9	15.6	17.7	8.0
1963	13.6	12.0	14.0	17.7	17.1	15.7	15.6	16.0	17.4	8.2
1964	13.7	11.9	14.1	17.6	16.7	15.5	15.4	15.8	16.9	8.0
1965	13.7	11.6	14.2	18.2	17.0	15.7	15.6	16.0	16.4	8.2
1966	14.0	11.8	14.9	19.3	17.4	15.8	15.7	16.3	17.4	8.0
1967	14.9	12.7	15.5	20.0	18.3	16.1	16.0	16.7	18.7	7.6
1968	15.1	12.7	15.9	21.0	18.0	16.2	16.1	16.7	18.6	7.4
1969	15.5	12.6	15.1	21.2	17.5	16.1	16.0	16.5	18.3	7.3
1970	15.1	13.5	15.1	22.0	17.9	16.1	16.0	16.7	18.5	7.4
1961–70	14.2	12.4	14.4	19.0	17.4	15.7	15.6	16.1	17.8	7.8
1971	15.2	13.2	15.8	23.1	18.3	17.0	16.9	17.5	18.1	8.0
1972	15.0	13.0	15.9	23.3	18.6	17.2	17.0	17.7	17.8	8.2
1973	15.5	12.5	15.6	23.3	18.5	17.2	17.1	17.6	17.0	8.3
1974	16.2	13.7	15.8	23.8	20.4	17.9	17.7	18.5	17.5	9.1
1975	17.7	14.6	17.8	24.4	22.4	19.0	18.9	19.7	18.0	10.0
1976	18.1	13.4	18.8	25.5	22.1	18.9	18.8	19.7	17.3	9.9
1977	17.8	13.7	19.3	28.2	20.7	19.1	19.0	19.7	17.0	9.8
1978	18.5	13.6	19.0	28.6	20.4	19.5	19.3	20.0	16.4	9.7
1979	18.4	13.5	18.5	29.0	20.1	19.5	19.4	20.0	16.2	9.7
1980	18.4	14.1	18.7	29.6	21.6	20.0	19.8	20.6	16.7	9.8
1971–80	17.1	13.5	17.5	25.9	20.3	18.5	18.4	19.1	17.2	9.2
1981	18.9	14.6	19.2	29.9	22.2	20.7	20.6	21.4	16.8	9.9
1982	19.3	14.5	19.3	29.8	22.1	20.8	20.7	21.4	17.6	9.9
1983	19.3	14.7	19.8	29.2	22.0	20.8	20.7	21.4	17.5	9.9
1984	19.4	14.6	19.7	28.3	21.7	20.7	20.6	21.2	17.2	9.8
1985	19.6	15.1	20.6	28.2	20.9	20.7	20.6	21.1	17.5	9.6
1986	19.9	14.9	21.0	27.8	21.0	20.5	20.4	20.8	17.6	9.7
1987	19.9	14.8	21.3	27.0	20.5	20.6	20.5	20.9	17.6	9.4
1988	19.6	15.3	20.4	26.3	19.7	20.3	20.2	20.5	17.1	9.1
1989	19.3	15.9	20.2	26.5	19.5	19.9	19.8	20.1	16.7	9.1
1990	18.9	16.4	21.6	27.7	19.9	19.9	19.8	20.2	16.9	9.0
1981–90	19.4	15.1	20.3	28.1	21.0	20.5	20.4	20.9	17.2	9.5
1991	19.2	18.2	24.8	27.5	20.8	20.0	19.9	20.4	17.0	9.0
1991	19.2	18.2	24.8	27.5	20.8	20.4	20.3	20.7	17.0	9.0
1992	19.6	18.2	25.4	28.2	21.2	20.8	20.6	21.1	16.6	9.2
1993	20.5	18.9	24.3	28.4	20.6	21.2	21.1	21.3	16.0	9.4
1994	20.6	18.5	23.4	27.4	20.1	20.9	20.7	20.9	15.5	9.5
1995	20.4	18.6	22.8	26.3	19.8	20.6	20.5	20.7	15.1	9.8
1996	20.3	18.9	23.2	27.1	19.4	20.6	20.5	20.7	14.8	9.7
1997	19.7	19.2	22.4	26.7	18.4	20.4	20.3	20.3	14.5	9.7
1998	19.6	19.2	21.6	26.7	18.2	20.0	20.0	20.0	14.1	10.2
1999	19.8	20.0	21.5	27.0	18.4	20.1	20.0	20.0	14.1	10.3
2000	19.4	20.8	20.6	26.3	18.3	19.8	19.8	19.8	13.9	10.0
1991–2000	19.9	19.0	23.0	27.2	19.5	20.5	20.4	20.5	15.2	9.7
2001	18.8	20.6	20.0	26.0	18.5	19.5	19.5	19.6	13.8	9.9
2002	18.3	20.4	19.6	25.7	18.6	19.3	19.2	19.4	13.8	9.6

(1) EU-15 excluding DK, EL, S, UK; 1960–91: including D_90.
(2) EU-15 excluding DK, S, UK; 1960–91: including D_90.
(3) 1960–91: including D_90.

Table 18

Final consumption expenditure of general government at 1995 prices

(national currency; annual percentage change)

	B	DK	D (1)	EL	E	F	IRL	I	L	NL
1961	1.9	5.3	6.1	4.4	5.6	4.8	2.1	4.4	1.3	2.8
1962	8.6	9.9	9.5	6.7	6.7	4.7	3.1	3.9	2.4	3.3
1963	11.6	2.9	6.2	4.2	9.7	3.4	4.0	4.3	5.8	4.7
1964	4.2	7.3	1.8	9.3	1.3	4.2	3.0	4.2	– 0.8	1.7
1965	5.5	3.4	4.9	9.0	3.6	3.2	3.7	4.0	2.5	1.5
1966	4.7	5.8	3.2	6.3	2.0	2.7	1.0	4.0	5.8	1.7
1967	5.7	7.6	3.6	8.5	2.4	4.3	4.5	4.4	4.2	2.4
1968	3.5	4.7	0.6	1.3	1.9	5.6	5.8	5.2	5.6	2.2
1969	6.3	6.8	4.3	7.7	4.4	4.1	6.9	2.8	3.3	4.5
1970	3.1	6.9	4.3	5.9	5.8	4.2	11.3	2.6	4.1	5.7
1961–70	5.5	6.0	4.4	6.3	4.3	4.1	4.5	4.0	3.4	3.1
1971	5.5	5.5	5.1	4.9	4.3	3.9	8.6	4.9	3.0	4.7
1972	5.9	5.7	4.2	5.7	5.2	3.5	7.5	4.9	4.2	1.5
1973	5.3	4.0	5.0	6.6	6.4	3.4	6.7	2.8	3.4	1.3
1974	3.4	3.5	4.0	12.3	9.3	1.2	7.6	2.5	3.8	2.3
1975	4.5	2.0	3.9	11.9	5.2	4.4	8.7	2.5	3.3	4.2
1976	3.7	4.4	1.5	5.1	6.9	4.2	2.7	2.3	2.8	4.2
1977	2.3	2.3	1.3	6.5	3.9	2.4	2.0	3.0	2.9	4.2
1978	6.0	6.3	3.9	3.5	5.4	5.2	8.2	3.3	1.8	3.8
1979	2.5	5.6	3.4	5.8	4.2	3.4	4.6	2.7	2.2	3.5
1980	1.8	3.7	2.6	0.2	4.2	2.6	7.1	2.1	3.1	1.4
1971–80	4.1	4.3	3.5	6.2	5.5	3.4	6.3	3.1	3.0	3.1
1981	3.1	2.0	1.8	6.8	3.5	3.4	0.3	2.2	1.4	2.8
1982	– 0.7	2.7	– 0.9	– 2.0	5.3	4.7	3.3	2.5	1.5	2.6
1983	0.6	0.1	0.2	3.6	3.9	2.2	– 0.4	3.6	1.9	1.6
1984	0.2	– 0.2	2.5	2.7	2.4	2.8	– 0.7	1.8	2.2	0.6
1985	2.9	2.1	2.1	3.8	5.5	2.2	1.8	3.0	2.0	2.4
1986	1.3	0.9	2.5	– 1.1	5.4	2.4	2.6	2.6	2.7	2.4
1987	2.7	2.1	1.5	0.2	8.9	2.2	– 4.8	4.8	4.7	2.8
1988	– 0.7	– 0.2	2.1	– 5.5	4.0	3.2	– 5.0	4.0	4.9	1.2
1989	1.1	– 0.8	– 1.6	5.4	8.3	1.6	– 1.3	0.2	3.9	2.8
1990	– 0.3	– 0.2	2.2	0.6	6.6	2.5	5.4	2.5	3.1	2.0
1981–90	1.0	0.8	1.2	1.4	5.4	2.7	0.1	2.7	2.8	2.1
1991	3.6	0.6	0.4	– 1.5	5.6	2.7	2.7	1.7	3.9	2.4
1992	1.5	0.8	5.0	– 3.0	4.0	3.8	3.0	0.6	1.5	3.6
1993	– 0.1	4.1	0.1	2.6	2.4	4.6	0.1	– 0.2	3.7	2.2
1994	1.4	3.0	2.4	– 1.1	– 0.3	0.7	4.1	– 0.9	2.0	1.1
1995	1.2	2.1	1.5	5.6	1.8	– 0.1	3.8	– 2.2	2.2	0.7
1996	2.4	3.4	1.8	0.9	1.3	2.3	3.2	1.0	4.4	– 0.4
1997	0.1	1.3	– 0.9	3.0	2.9	2.1	5.6	0.8	2.1	3.2
1998	1.4	3.0	0.5	1.7	3.7	0.1	5.3	0.7	2.8	3.4
1999	3.4	1.4	– 0.1	– 0.1	2.9	2.6	5.2	0.6	12.8	2.5
2000	1.1	1.1	1.6	0.8	1.3	1.3	4.1	0.9	4.0	3.2
1991–2000	1.6	2.1	1.2	0.9	2.5	2.0	3.7	0.3	3.9	2.2
2001	1.5	1.4	1.2	0.6	2.2	1.3	4.1	1.0	3.8	2.5
2002	1.5	1.4	1.6	0.6	2.6	1.3	3.9	0.8	3.6	2.1

(1) 1961–91: including D_90.

(national currency; annual percentage change)

	A	P	FIN	S	UK	EUR-11 (1)	EUR-12 (2)	EU-15 (3)	US	JP
1961	1.8	26.7	5.8	3.4	3.5	5.0	5.0	4.6	4.7	5.4
1962	2.4	8.5	7.9	6.3	3.1	6.2	6.2	5.5	5.7	7.5
1963	4.0	3.0	7.0	9.5	1.8	5.3	5.3	4.6	1.6	7.6
1964	4.9	6.8	2.0	3.0	1.6	3.1	3.2	2.9	1.1	3.0
1965	0.7	7.4	4.7	4.8	2.6	3.8	3.9	3.7	2.4	3.1
1966	4.6	6.6	4.6	5.5	2.7	3.2	3.3	3.3	10.7	4.5
1967	4.0	13.6	4.6	4.7	5.7	4.0	4.1	4.5	8.1	3.4
1968	3.1	8.4	5.9	6.8	0.4	3.4	3.4	2.9	2.7	4.7
1969	2.3	3.2	3.4	5.2	– 1.8	4.0	4.0	2.9	0.1	4.1
1970	3.3	12.7	5.5	8.1	1.7	4.2	4.3	4.0	– 1.2	4.8
1961–70	3.1	9.5	5.1	5.7	2.1	4.2	4.2	3.9	3.5	4.8
1971	3.3	6.4	5.8	2.2	3.0	4.7	4.7	4.3	– 2.1	4.9
1972	4.1	8.6	7.8	2.4	4.4	4.2	4.2	4.2	0.5	5.0
1973	3.0	7.8	5.6	2.6	4.4	3.9	4.0	4.0	– 1.0	5.4
1974	5.7	17.3	4.5	3.1	1.8	3.5	3.6	3.3	2.3	– 0.4
1975	4.0	6.6	6.9	4.7	5.4	4.0	4.1	4.4	2.2	12.6
1976	4.3	7.0	5.8	3.5	1.8	3.2	3.3	3.0	0.1	4.2
1977	2.8	12.2	4.2	3.0	– 1.4	2.6	2.7	1.9	1.7	4.2
1978	0.8	4.4	2.7	3.3	1.8	4.2	4.2	3.8	2.5	5.2
1979	3.5	6.4	3.6	4.7	1.6	3.3	3.4	3.2	1.9	4.2
1980	2.1	8.0	3.8	2.2	1.6	2.6	2.6	2.4	1.9	3.1
1971–80	3.3	8.4	5.1	3.2	2.4	3.6	3.7	3.4	1.0	4.8
1981	1.9	5.5	3.9	2.3	0.2	2.6	2.7	2.2	2.0	4.5
1982	3.0	3.7	2.4	1.0	0.6	2.2	2.1	1.9	2.4	2.9
1983	1.7	3.8	3.1	0.8	2.1	2.0	2.0	1.9	3.4	2.5
1984	0.8	0.2	2.0	2.2	1.2	2.1	2.1	1.9	2.9	2.3
1985	1.3	6.4	4.3	2.2	– 0.2	2.7	2.7	2.2	5.5	0.3
1986	1.8	7.2	3.4	1.3	1.6	2.8	2.7	2.4	4.9	5.1
1987	0.2	3.8	4.4	1.0	0.0	3.1	3.1	2.4	3.7	1.6
1988	1.1	8.6	1.9	0.6	0.0	2.8	2.7	2.1	1.3	2.3
1989	1.4	6.6	2.2	2.1	0.8	1.2	1.3	1.2	1.3	2.0
1990	1.3	5.4	4.0	2.6	2.5	2.7	2.7	2.6	2.6	1.5
1981–90	1.5	5.1	3.2	1.6	0.9	2.4	2.4	2.1	3.0	2.5
1991	2.2	10.3	2.1	2.8	2.9	2.3	2.3	2.4	0.5	2.0
1992	2.0	1.1	– 2.4	0.0	0.5	3.2	3.1	2.5	0.1	2.0
1993	2.7	0.9	– 4.2	0.2	– 0.8	1.5	1.5	1.1	– 1.1	2.4
1994	2.5	2.1	0.3	– 0.9	1.4	1.0	0.9	1.0	– 0.2	2.4
1995	0.0	2.2	2.0	– 0.6	1.6	0.4	0.5	0.6	– 0.2	3.3
1996	1.2	– 0.3	2.5	0.9	1.7	1.6	1.5	1.6	0.6	1.9
1997	– 1.4	2.6	4.1	– 1.0	– 1.4	1.0	1.1	0.6	1.3	1.5
1998	2.8	3.0	1.7	2.2	1.1	1.2	1.2	1.2	1.6	1.5
1999	3.2	3.8	2.0	1.8	3.3	1.6	1.6	1.8	2.1	1.3
2000	0.5	2.7	0.7	– 0.8	2.2	1.5	1.5	1.5	2.3	– 0.1
1991–2000	1.6	2.8	0.9	0.4	1.2	1.5	1.5	1.4	0.7	1.8
2001	– 0.2	1.0	1.0	0.8	4.0	1.4	1.4	1.8	2.1	0.3
2002	– 0.4	1.0	1.0	0.8	4.0	1.5	1.5	1.8	2.3	0.0

(1) PPS weighted; EU-15 excluding DK, EL, S, UK; 1961–91: including D_90.
(2) PPS weighted; EU-15 excluding DK, S, UK; 1961–91: including D_90.
(3) PPS weighted; 1961–91: including D_90.

Table 19

Gross fixed capital formation at current prices; total economy

(% of GDP at market prices)

	B	DK	D [1]	EL	E	F	IRL	I	L	NL
1960	21.8	22.7	24.3	20.7	21.6	21.5	14.4	27.5	19.4	26.9
1961	23.3	24.4	25.2	20.4	22.7	22.8	16.3	28.3	22.5	27.6
1962	24.0	24.3	25.7	22.4	23.2	22.7	17.9	28.9	24.1	27.3
1963	23.3	23.1	25.6	19.5	23.4	23.6	19.5	29.3	27.9	26.5
1964	25.2	25.7	26.6	21.3	25.0	24.5	20.5	27.1	31.3	28.4
1965	25.2	25.3	26.1	22.1	26.4	24.8	21.4	23.5	26.0	28.0
1966	25.9	25.3	25.4	23.1	26.6	25.2	19.8	22.9	24.7	29.2
1967	25.8	25.4	23.1	22.1	26.7	25.5	20.0	23.8	22.2	29.3
1968	24.3	24.5	22.4	25.1	27.1	25.1	20.9	24.8	20.5	29.9
1969	24.0	25.8	23.3	26.4	27.5	25.0	23.3	25.7	20.6	27.4
1970	25.6	25.9	25.5	25.5	27.5	24.9	22.7	26.1	21.4	28.7
1961–70	24.7	25.0	24.9	22.8	25.6	24.4	20.2	26.0	24.1	28.2
1971	24.9	25.4	26.2	26.6	25.2	25.3	23.6	25.3	26.3	28.2
1972	24.1	25.8	25.4	30.6	26.4	25.3	23.7	24.5	25.8	26.3
1973	24.1	26.0	23.9	30.9	27.9	25.9	25.2	26.3	25.3	25.4
1974	25.6	25.2	21.6	23.8	29.6	26.4	24.6	27.4	22.8	24.2
1975	25.3	22.1	20.4	23.7	27.9	24.7	22.7	26.4	25.8	23.2
1976	24.8	24.0	20.1	24.2	26.3	24.5	24.2	25.3	23.1	21.4
1977	24.3	23.2	20.3	27.5	25.3	23.5	24.1	25.0	23.3	23.1
1978	24.3	22.9	20.6	30.6	23.9	22.9	26.8	24.3	22.3	23.4
1979	23.2	22.2	21.7	32.7	22.8	23.0	29.8	24.4	22.6	23.0
1980	23.7	20.1	22.6	28.4	23.5	23.8	28.2	25.9	25.2	22.9
1971–80	24.4	23.7	22.3	27.9	25.9	24.5	25.3	25.5	24.3	24.1
1981	20.4	16.8	21.6	26.0	23.2	23.1	28.7	25.5	23.6	20.9
1982	19.2	17.5	20.4	23.5	22.9	22.5	25.6	23.8	23.2	20.0
1983	17.7	17.9	20.4	25.2	22.0	21.2	22.4	22.6	19.7	20.0
1984	17.4	18.9	20.0	20.4	19.8	20.4	20.7	22.3	18.6	20.4
1985	17.8	20.7	19.5	21.9	20.3	20.3	18.4	21.8	16.4	21.0
1986	17.7	22.5	19.4	22.8	20.6	20.4	17.8	20.9	20.1	21.8
1987	18.3	22.0	19.4	21.6	22.0	21.0	16.6	20.9	22.9	22.2
1988	20.2	20.5	19.6	21.5	23.9	21.9	15.9	21.3	24.8	22.7
1989	21.9	20.5	20.2	22.6	25.5	22.5	17.1	21.3	23.6	22.9
1990	23.1	19.9	20.9	23.1	25.9	22.6	18.7	21.5	24.6	22.3
1981–90	19.4	19.7	20.1	22.9	22.6	21.6	20.2	22.2	21.8	21.4
1991	21.5	19.1	21.3	22.6	25.2	22.0	17.1	21.0	26.5	21.8
1991	21.5	19.1	23.8	22.6	25.2	22.0	17.1	21.0	26.5	21.8
1992	21.3	17.9	24.0	21.3	23.1	20.9	16.9	20.5	23.3	21.4
1993	20.5	17.1	23.0	20.3	21.0	19.4	15.5	18.4	24.2	20.5
1994	20.0	17.3	23.1	18.6	21.0	19.1	16.5	18.0	20.9	20.0
1995	20.2	18.6	22.4	18.6	22.0	18.8	17.2	18.3	21.7	20.3
1996	20.1	18.6	21.8	19.5	21.6	18.5	18.8	18.3	20.3	21.1
1997	20.6	19.4	21.4	20.0	21.9	18.0	20.3	18.1	20.1	21.5
1998	20.9	20.2	21.3	21.6	22.9	18.3	21.9	18.4	19.2	21.5
1999	21.3	19.7	21.3	22.5	24.2	19.0	23.4	18.9	22.4	22.2
2000	21.8	20.7	21.6	23.6	25.7	19.5	24.3	19.8	20.8	22.9
1991–2000	20.8	18.9	22.4	20.9	22.9	19.3	19.2	19.0	21.9	21.3
2001	22.1	20.4	21.6	24.9	26.4	20.0	25.0	20.5	20.7	23.0
2002	22.4	20.6	21.7	26.3	27.1	20.3	25.4	21.0	20.2	23.1

([1]) 1960–91: D_90.

(% of GDP at market prices)

	A	P	FIN	S	UK	EUR-11 (1)	EUR-12 (2)	EU-15 (3)	US	JP
1960	22.7	23.5	29.4	24.3	17.1	23.9	23.9	22.4	17.8	29.0
1961	23.8	23.6	29.0	24.9	18.0	24.9	24.9	23.4	17.3	31.9
1962	23.4	22.7	28.6	25.5	17.8	25.2	25.2	23.6	17.6	32.2
1963	23.7	24.1	26.6	25.9	17.4	25.4	25.3	23.7	18.1	31.6
1964	24.0	23.1	26.2	26.3	18.9	25.9	25.8	24.5	18.6	31.7
1965	24.8	23.2	27.3	26.4	19.0	25.3	25.2	24.1	19.1	29.8
1966	25.3	25.4	27.5	26.5	19.1	25.2	25.2	24.1	18.9	30.3
1967	24.2	27.0	26.1	26.5	19.8	24.8	24.7	23.9	18.1	31.9
1968	23.4	22.5	24.0	25.6	20.1	24.5	24.5	23.8	18.3	33.2
1969	22.8	22.9	24.7	24.8	19.4	24.8	24.8	23.9	18.5	34.5
1970	23.5	23.6	27.3	24.1	19.5	25.7	25.7	24.6	17.9	35.5
1961–70	23.9	23.8	26.7	25.6	18.9	25.2	25.1	24.0	18.2	32.2
1971	25.3	25.1	28.5	23.5	19.6	25.8	25.8	24.7	18.4	34.2
1972	27.5	27.5	29.0	23.7	19.2	25.4	25.5	24.5	19.2	34.1
1973	25.9	27.2	29.9	23.4	20.6	25.4	25.5	24.8	19.6	36.4
1974	25.8	26.4	31.0	22.9	21.7	25.1	25.1	24.6	19.0	34.8
1975	24.2	26.3	32.7	22.4	20.7	24.0	24.0	23.4	17.9	32.5
1976	23.7	25.5	29.2	22.6	20.4	23.3	23.3	22.9	18.2	31.2
1977	24.7	26.9	28.4	22.5	19.4	23.0	23.1	22.6	19.5	30.2
1978	22.8	28.4	25.4	20.8	19.2	22.7	22.8	22.3	20.8	30.4
1979	22.9	27.0	24.7	21.2	19.4	22.9	23.1	22.5	21.3	31.7
1980	23.6	29.0	26.7	21.6	18.8	23.8	23.9	23.0	20.4	31.6
1971–80	24.6	26.9	28.6	22.4	19.9	24.1	24.2	23.5	19.4	32.7
1981	23.4	31.3	26.5	20.2	17.1	23.1	23.1	21.9	20.1	30.6
1982	21.4	31.6	26.7	20.0	17.1	22.0	22.1	21.1	19.0	29.5
1983	20.8	29.6	26.9	20.0	17.0	21.3	21.4	20.5	18.8	28.0
1984	20.4	23.9	25.3	20.1	18.1	20.7	20.7	20.2	19.7	27.7
1985	21.1	22.1	25.4	20.7	18.1	20.5	20.5	20.1	19.7	27.5
1986	21.0	22.4	25.0	19.9	18.0	20.3	20.4	20.1	19.5	27.3
1987	21.5	24.8	25.6	20.8	18.8	20.7	20.7	20.5	18.7	28.3
1988	22.1	26.5	26.9	21.7	20.5	21.4	21.4	21.3	18.5	29.6
1989	22.5	25.6	29.5	23.7	21.6	22.1	22.1	22.0	18.2	30.6
1990	22.8	25.5	28.6	23.1	20.6	22.4	22.4	22.1	17.5	31.7
1981–90	21.7	26.4	26.6	21.0	18.7	21.4	21.5	21.0	19.0	29.1
1991	23.5	24.3	24.4	20.8	17.9	22.0	22.0	21.3	16.3	31.4
1991	23.5	24.3	24.4	20.8	17.9	22.7	22.7	21.9	16.3	31.4
1992	23.0	23.2	19.9	18.3	16.5	22.1	22.1	21.2	16.4	30.5
1993	22.3	21.6	16.4	15.3	15.8	20.8	20.8	19.9	16.9	29.5
1994	23.3	21.7	15.5	15.1	15.8	20.7	20.6	19.7	17.4	28.6
1995	23.3	21.9	16.3	15.5	16.3	20.6	20.5	19.8	17.8	28.5
1996	23.3	22.4	17.0	15.7	16.6	20.3	20.2	19.6	18.4	29.5
1997	23.5	23.9	18.0	14.9	16.7	20.1	20.1	19.4	18.9	28.6
1998	23.5	24.7	18.7	15.8	17.4	20.4	20.4	19.8	19.7	26.8
1999	23.7	24.9	19.1	16.6	17.8	20.8	20.9	20.2	20.3	26.1
2000	24.1	25.7	19.1	16.9	17.9	21.4	21.5	20.7	21.1	25.9
1991–2000	23.4	23.4	18.4	16.5	16.9	21.0	21.0	20.2	18.3	28.5
2001	24.3	26.4	19.3	17.4	18.1	21.8	21.9	21.0	21.7	26.8
2002	24.6	27.1	19.5	18.0	18.4	22.1	22.2	21.4	22.1	27.2

(1) EU-15 excluding DK, EL, S, UK; 1960–91: including D_90.
(2) EU-15 excluding DK, S, UK; 1960–91: including D_90.
(3) 1960–91: including D_90.

Table 20

Gross fixed capital formation at 1995 prices; total economy

(national currency; annual percentage change)

	B	DK	D (1)	EL	E	F	IRL	I	L	NL
1961	12.4	13.9	6.5	13.2	17.9	10.9	16.9	11.6	9.0	6.0
1962	5.9	6.7	3.8	5.1	11.4	8.5	14.8	9.8	7.8	3.4
1963	0.1	– 2.4	1.2	– 6.5	11.4	8.8	12.0	8.1	14.2	1.1
1964	14.7	23.5	11.2	19.3	15.0	10.5	10.8	– 5.8	22.1	19.2
1965	4.1	4.7	4.7	15.6	16.4	7.0	10.5	– 8.4	– 13.9	5.3
1966	6.8	4.3	1.2	5.4	13.1	7.3	– 3.0	4.3	– 5.1	8.0
1967	2.9	5.4	– 7.0	– 1.3	6.0	6.0	6.8	11.7	– 7.9	8.5
1968	– 1.3	1.9	3.3	23.1	9.5	5.5	13.2	10.8	– 4.2	11.2
1969	5.3	11.8	9.6	16.5	10.0	9.2	20.5	7.8	10.5	– 2.2
1970	8.4	2.2	8.9	– 2.4	3.4	4.6	– 3.3	3.0	7.5	9.2
1961–70	5.8	7.0	4.2	8.4	11.3	7.8	9.6	5.1	3.4	6.8
1971	– 1.9	1.9	5.9	11.6	– 3.0	7.3	8.9	– 0.8	10.7	0.7
1972	3.4	9.3	2.7	23.8	14.2	6.0	7.8	0.9	7.0	– 3.0
1973	7.0	3.5	– 0.3	6.8	13.0	8.5	16.2	8.4	11.8	4.6
1974	6.9	– 8.9	– 9.7	– 32.7	6.2	1.3	– 11.6	1.9	– 7.0	– 3.0
1975	– 1.9	– 12.4	– 5.4	10.1	– 4.5	– 6.4	– 3.6	– 7.1	– 7.4	– 4.1
1976	4.0	16.2	3.6	7.1	– 0.8	3.3	10.1	– 1.0	– 4.2	– 3.3
1977	0.0	– 3.2	3.6	12.3	– 0.9	– 1.8	4.8	1.4	– 0.1	9.9
1978	2.8	0.6	4.1	12.5	– 2.7	2.1	18.3	0.6	1.1	2.4
1979	– 2.7	– 0.4	6.7	5.2	– 4.4	4.0	14.5	5.2	3.8	– 1.5
1980	5.6	– 12.1	2.2	– 15.2	0.7	4.2	– 3.7	8.4	12.7	– 0.2
1971–80	2.3	– 0.9	1.2	2.8	1.6	2.7	5.7	1.7	2.6	0.2
1981	– 13.0	– 19.6	– 5.0	– 9.8	– 2.5	– 0.6	7.3	– 3.1	– 7.4	– 10.0
1982	– 6.4	7.0	– 5.4	– 2.3	2.1	0.0	– 3.4	– 4.9	– 0.5	– 4.1
1983	– 5.8	1.8	3.1	5.2	– 2.4	– 2.2	– 9.0	– 1.1	– 11.8	2.5
1984	2.7	10.9	0.1	– 15.9	– 6.9	– 0.8	– 2.7	3.4	0.1	5.8
1985	6.9	14.3	– 0.5	9.5	6.1	3.1	– 7.8	0.4	– 9.5	7.0
1986	3.2	16.4	3.3	– 0.5	9.9	6.0	0.0	2.3	31.0	7.0
1987	6.2	– 0.8	1.8	– 6.0	14.0	6.0	– 2.3	4.2	17.9	0.8
1988	15.7	– 3.2	4.4	6.7	13.9	9.5	– 1.6	6.7	15.0	4.5
1989	12.6	– 0.6	6.3	7.1	13.6	7.3	15.6	4.2	7.0	4.9
1990	8.5	– 2.2	8.5	5.0	6.6	3.3	12.1	4.0	2.7	1.6
1981–90	2.7	1.9	1.6	– 0.4	5.2	3.1	0.5	1.6	3.7	1.9
1991	– 4.1	– 3.4	6.0	4.8	1.6	– 1.5	– 7.0	1.0	31.6	0.2
1992	1.7	– 2.1	4.5	– 3.2	– 4.4	– 1.6	0.0	– 1.4	– 9.0	0.6
1993	– 3.1	– 3.8	– 4.5	– 3.5	– 10.5	– 6.4	– 5.1	– 10.9	28.4	– 3.0
1994	– 0.1	7.7	4.0	– 2.8	2.5	1.5	11.8	0.1	– 14.9	2.4
1995	4.9	12.0	– 0.7	4.2	8.2	2.0	13.3	6.0	3.5	4.6
1996	0.8	3.5	– 0.8	8.4	2.1	0.0	16.5	3.6	– 3.5	6.3
1997	6.7	7.9	0.6	7.8	5.0	– 0.1	17.8	1.2	10.5	6.6
1998	4.6	6.9	3.0	11.8	9.7	6.3	14.7	4.1	1.5	4.1
1999	4.8	0.3	3.3	7.3	8.9	7.1	12.5	4.4	26.6	6.5
2000	4.6	7.9	3.4	8.6	6.7	6.2	9.4	7.1	– 1.7	6.8
1991–2000	2.0	3.6	1.8	4.2	2.8	1.3	8.0	1.4	6.2	3.4
2001	4.5	1.3	3.5	10.6	5.4	5.4	7.8	6.2	5.7	5.4
2002	4.5	3.3	3.6	10.9	5.9	4.6	6.5	5.8	4.8	5.0

(1) 1961–91: including D_90.

(national currency; annual percentage change)

	A	P	FIN	S	UK	EUR-11 (1)	EUR-12 (2)	EU-15 (3)	US	JP
1961	12.6	6.7	9.2	8.0	9.4	9.9	9.9	9.9	1.5	23.1
1962	2.7	1.7	0.5	6.3	0.7	6.7	6.7	5.7	8.2	14.6
1963	3.4	15.3	– 3.0	6.8	1.5	5.4	5.2	4.6	7.9	12.1
1964	9.6	4.0	6.1	7.6	16.0	7.7	7.8	9.3	9.4	15.6
1965	5.2	10.3	10.4	4.0	5.2	3.7	3.8	4.1	9.7	5.1
1966	8.8	17.9	3.9	4.6	2.7	5.5	5.5	5.0	5.6	13.8
1967	0.1	5.2	– 1.2	5.3	9.0	2.9	2.8	3.9	– 1.1	17.8
1968	2.9	– 9.3	– 5.2	0.6	5.8	6.0	6.3	5.9	5.9	20.3
1969	4.9	8.1	12.7	4.3	– 0.6	8.1	8.2	6.8	3.6	18.8
1970	9.8	11.4	12.5	3.3	2.9	6.1	5.9	5.3	– 3.2	16.4
1961–70	5.9	6.9	4.4	5.1	5.2	6.2	6.2	6.0	4.7	15.7
1971	13.8	10.2	3.8	– 0.6	2.0	3.4	3.6	3.2	5.8	4.7
1972	12.1	14.0	6.5	4.2	0.0	4.5	4.9	4.3	9.3	10.1
1973	0.3	10.3	8.5	2.7	6.5	6.0	6.0	6.0	7.8	11.6
1974	4.0	– 6.1	3.5	– 3.0	– 2.0	– 1.1	– 2.0	– 2.2	– 5.4	– 8.5
1975	– 5.0	– 10.6	5.9	3.1	– 1.9	– 5.5	– 5.2	– 4.6	– 9.4	– 0.7
1976	3.8	1.3	– 8.0	1.9	1.7	1.2	1.4	1.7	8.1	2.9
1977	9.2	11.5	– 3.4	– 2.9	– 1.5	1.6	1.9	1.2	11.7	2.8
1978	– 7.6	6.2	– 8.3	– 6.8	2.5	1.4	1.7	1.6	11.1	7.9
1979	4.8	– 1.3	3.4	4.5	2.6	3.3	3.4	3.2	5.0	5.9
1980	4.0	8.5	9.6	3.5	– 4.7	4.2	3.5	2.1	– 5.6	– 0.4
1971–80	3.7	4.1	2.0	0.6	0.5	1.9	1.9	1.6	3.6	3.5
1981	– 0.9	5.5	1.9	– 6.0	– 8.9	– 3.2	– 3.4	– 4.4	0.5	2.3
1982	– 7.4	2.3	5.3	– 0.9	5.9	– 2.8	– 2.8	– 1.6	– 7.4	– 0.2
1983	0.4	– 7.1	2.9	1.1	5.1	– 0.6	– 0.5	0.3	6.6	– 1.1
1984	0.1	– 17.4	– 1.7	7.1	9.3	– 0.3	– 0.7	1.0	15.8	4.3
1985	6.9	– 3.5	2.8	5.2	4.0	2.0	2.2	2.7	5.4	5.0
1986	2.4	10.9	1.0	0.3	2.1	4.7	4.6	4.3	1.4	4.8
1987	4.4	18.0	4.9	8.2	8.9	5.2	4.9	5.5	– 0.1	9.1
1988	6.8	14.8	11.0	6.6	14.8	8.1	8.0	8.8	3.6	11.5
1989	6.3	4.4	13.0	11.3	5.9	7.3	7.3	7.0	3.2	8.2
1990	6.6	7.6	– 4.6	1.3	– 2.3	5.3	5.3	3.8	– 0.3	8.5
1981–90	2.5	3.0	3.5	3.3	4.3	2.5	2.4	2.7	2.7	5.2
1991	6.3	3.5	– 18.6	– 8.9	– 8.7	1.3	1.3	– 0.5	– 5.2	3.3
1992	0.1	4.8	– 16.7	– 10.8	– 0.7	0.1	0.1	– 0.3	5.9	– 1.5
1993	– 2.0	– 6.0	– 16.6	– 17.2	0.8	– 6.7	– 6.6	– 5.9	6.8	– 2.0
1994	8.4	3.4	– 2.7	6.1	3.6	2.4	2.3	2.6	7.9	– 0.8
1995	1.2	4.8	10.6	9.4	2.9	3.0	3.0	3.2	5.8	1.7
1996	2.2	6.2	8.4	5.0	4.9	1.5	1.6	2.1	8.6	11.1
1997	1.0	10.6	11.9	– 2.2	7.5	2.3	2.4	3.1	9.5	– 0.8
1998	2.7	8.8	9.4	9.4	10.1	5.1	5.3	6.0	10.8	– 7.4
1999	3.2	5.4	4.6	8.1	6.1	5.4	5.4	5.5	9.3	– 1.2
2000	5.2	6.0	4.4	6.0	3.2	5.5	5.6	5.3	10.0	1.0
1991–2000	2.8	4.7	– 1.2	0.1	2.9	1.9	2.0	2.1	6.8	0.2
2001	4.0	5.6	5.3	7.5	3.8	4.9	5.1	4.9	6.4	3.0
2002	4.2	5.8	4.8	7.0	3.9	4.8	5.0	4.8	5.0	3.4

(1) PPS weighted; EU-15 excluding DK, EL, S, UK; 1961–91: including D_90.
(2) PPS weighted; EU-15 excluding DK, S, UK; 1961–91: including D_90.
(3) PPS weighted; 1961–91: including D_90.

Table 21

Net stockbuilding at current prices; total economy

(% of GDP at market prices)

	B	DK	D (1)	EL	E	F	IRL	I	L	NL
1960	– 0.1	4.4	3.0	– 6.5	– 0.5	3.0	2.0	2.1	2.4	3.3
1961	0.5	1.9	2.0	– 1.6	1.7	1.3	1.4	2.3	2.2	2.7
1962	0.0	2.9	1.6	– 2.7	3.6	2.2	1.6	1.7	5.6	1.5
1963	0.4	0.8	0.7	3.4	3.4	1.4	0.9	1.0	– 0.1	1.1
1964	1.5	1.7	1.5	5.3	2.7	2.1	1.2	0.5	– 1.2	3.0
1965	0.8	2.3	2.3	7.2	3.0	1.4	2.3	0.7	2.1	1.9
1966	1.0	0.8	1.1	3.4	2.9	1.8	0.8	0.8	1.7	1.3
1967	0.4	0.0	– 0.1	2.9	1.4	1.4	– 0.4	1.1	– 3.0	0.9
1968	0.9	0.6	2.1	2.0	0.8	1.1	1.1	0.0	– 1.9	0.6
1969	1.9	1.3	2.9	4.5	2.5	2.4	2.4	0.7	– 1.2	1.6
1970	1.6	1.0	2.1	5.2	0.8	2.5	1.7	2.6	2.7	1.6
1961–70	0.9	1.3	1.6	3.0	2.3	1.8	1.3	1.1	0.7	1.6
1971	1.4	0.6	0.6	5.4	0.9	1.5	0.3	0.8	1.3	0.4
1972	0.5	0.2	0.5	4.6	0.9	1.6	1.4	0.6	0.7	0.2
1973	1.3	1.3	1.3	10.1	0.8	2.0	1.6	2.0	– 0.2	1.0
1974	2.2	1.2	0.4	8.7	2.2	2.3	4.4	4.0	– 3.4	2.1
1975	– 0.5	0.0	– 0.6	7.2	2.1	– 0.7	0.0	– 1.1	– 4.8	– 0.2
1976	0.2	1.2	1.4	8.2	2.0	1.4	0.5	2.9	– 2.2	1.0
1977	0.4	1.0	0.6	1.1	1.1	1.5	3.1	1.2	– 4.7	0.6
1978	0.2	0.0	0.6	– 2.9	0.2	0.8	1.5	1.2	0.9	0.4
1979	0.8	0.9	1.7	– 5.4	0.8	1.3	2.3	1.7	– 2.3	0.4
1980	0.6	0.1	0.8	– 2.4	1.0	1.3	– 1.2	2.6	– 1.9	0.8
1971–80	0.7	0.7	0.7	3.4	1.2	1.3	1.4	1.6	– 1.7	0.7
1981	0.5	0.1	– 0.7	– 5.0	0.0	– 0.1	– 1.1	0.9	– 0.9	– 0.3
1982	0.7	0.5	– 1.0	2.0	0.6	0.5	1.4	0.7	– 0.1	– 0.5
1983	0.2	0.2	– 0.1	– 0.8	0.7	– 0.1	0.7	0.4	3.1	0.2
1984	1.2	1.5	0.3	5.1	1.0	0.1	1.4	1.5	4.7	0.2
1985	0.0	1.2	0.1	4.7	0.0	– 0.1	0.9	1.8	– 0.7	0.3
1986	– 0.1	1.1	0.2	3.0	0.5	0.2	0.6	1.1	– 1.1	0.8
1987	0.2	– 0.5	0.0	– 1.8	0.7	0.2	0.1	1.3	– 2.7	– 0.1
1988	0.2	0.2	0.5	0.6	1.0	0.6	– 0.2	1.3	– 2.7	0.1
1989	– 0.1	0.6	0.7	– 0.2	1.0	0.8	1.0	1.1	– 0.1	1.1
1990	– 0.7	0.4	0.5	– 0.3	0.9	0.8	2.3	0.8	– 1.1	1.2
1981–90	0.2	0.5	0.0	0.7	0.6	0.3	0.7	1.1	– 0.2	0.3
1991	– 0.4	0.0	0.6	0.9	0.8	0.5	2.1	0.7	– 0.3	0.9
1991	– 0.4	0.0	0.5	0.9	0.8	0.5	2.1	0.7	– 0.3	0.9
1992	– 0.4	0.2	– 0.2	– 0.3	0.8	– 0.1	– 0.6	0.3	– 0.5	0.5
1993	– 0.7	– 0.7	– 0.5	– 0.4	0.0	– 1.1	– 0.4	– 0.1	– 1.9	– 0.6
1994	– 0.4	0.3	0.1	0.1	0.2	– 0.1	– 0.4	0.5	0.9	0.4
1995	0.2	1.1	0.2	0.3	0.3	0.5	0.9	1.0	– 0.4	0.7
1996	– 0.2	0.4	– 0.1	0.3	0.3	– 0.2	0.8	0.3	– 0.1	0.2
1997	– 0.2	0.8	0.2	0.2	0.2	– 0.1	1.2	0.8	0.3	0.3
1998	0.0	1.1	0.5	0.3	0.3	0.4	1.5	1.2	0.3	0.4
1999	– 0.1	– 0.1	0.9	– 0.2	0.5	0.0	0.0	1.4	0.4	0.1
2000	0.1	0.0	1.0	0.0	0.6	0.1	0.2	1.8	0.5	0.1
1991–2000	– 0.2	0.3	0.2	0.1	0.4	0.0	0.5	0.8	– 0.1	0.3
2001	0.1	0.2	1.1	0.0	0.6	0.1	0.2	1.7	0.3	0.1
2002	0.1	0.2	1.1	0.0	0.6	0.0	0.2	1.9	0.2	0.2

(1) 1960–91: D_90.

(% of GDP at market prices)

	A	P	FIN	S	UK	EUR-11 (1)	EUR-12 (2)	EU-15 (3)	US	JP
1960	3.2	1.4	1.0	2.6	2.2	2.5	2.3	2.3	0.6	3.9
1961	2.2	3.9	1.2	1.6	1.0	1.8	1.8	1.6	0.6	5.0
1962	0.4	1.8	0.4	1.0	0.0	1.8	1.7	1.3	1.1	2.0
1963	– 0.2	2.0	– 0.8	0.2	0.5	1.1	1.1	0.9	0.9	2.2
1964	1.6	3.3	– 0.2	2.0	2.1	1.6	1.7	1.8	0.7	2.9
1965	0.7	4.4	2.0	2.5	1.3	1.7	1.8	1.7	1.3	2.1
1966	2.0	1.8	0.7	1.1	0.8	1.4	1.4	1.3	1.7	2.1
1967	1.0	0.6	– 0.2	0.2	0.7	0.7	0.8	0.7	1.2	3.4
1968	1.7	3.1	1.3	0.3	1.0	1.2	1.2	1.1	1.0	3.6
1969	2.0	1.8	1.1	1.3	1.2	2.1	2.2	1.9	0.9	3.1
1970	3.9	5.9	3.5	3.1	0.7	2.3	2.3	2.1	0.2	3.5
1961–70	1.5	2.9	0.9	1.3	0.9	1.6	1.6	1.5	1.0	3.0
1971	1.8	3.2	2.3	1.1	0.2	1.0	1.1	0.9	0.7	1.5
1972	0.4	3.6	– 0.6	– 0.1	0.0	0.8	0.9	0.7	0.7	1.4
1973	2.4	5.9	– 0.1	– 0.5	2.1	1.6	1.8	1.7	1.2	1.7
1974	2.7	5.2	4.7	2.4	1.3	2.0	2.1	2.0	0.9	2.5
1975	– 0.7	– 3.3	2.2	3.3	– 1.3	– 0.4	– 0.3	– 0.3	– 0.4	0.3
1976	1.2	1.8	– 1.2	2.3	0.7	1.5	1.6	1.6	0.9	0.7
1977	1.4	2.5	– 1.3	– 0.6	1.3	1.0	1.0	0.9	1.1	0.7
1978	0.0	2.6	– 1.9	– 1.8	1.1	0.6	0.6	0.5	1.1	0.5
1979	2.5	2.9	2.2	0.2	1.1	1.4	1.3	1.2	0.7	0.8
1980	1.7	4.2	3.4	1.1	– 1.1	1.3	1.3	0.9	– 0.2	0.7
1971–80	1.3	2.9	1.0	0.7	0.5	1.1	1.1	1.0	0.7	1.1
1981	– 0.7	3.7	0.9	– 0.7	– 1.1	0.0	– 0.1	– 0.3	1.0	0.6
1982	– 0.2	3.0	0.8	– 1.0	– 0.4	0.1	0.1	0.0	– 0.5	0.4
1983	– 0.6	– 0.9	0.0	– 1.4	0.5	0.1	0.1	0.1	– 0.2	0.1
1984	0.7	– 1.3	0.5	– 1.0	0.4	0.6	0.7	0.6	1.7	0.3
1985	0.4	– 1.2	– 0.1	– 0.1	0.2	0.4	0.4	0.4	0.5	0.7
1986	0.2	– 1.0	– 0.6	– 0.6	0.2	0.4	0.4	0.4	0.1	0.5
1987	– 0.1	0.7	– 0.2	– 0.5	0.3	0.4	0.3	0.3	0.6	0.2
1988	0.5	2.0	0.7	– 0.3	0.9	0.7	0.7	0.7	0.4	0.7
1989	0.9	1.2	1.3	0.0	0.5	0.9	0.8	0.8	0.5	0.7
1990	1.1	1.0	0.4	– 0.2	– 0.3	0.7	0.7	0.5	0.3	0.6
1981–90	0.2	0.7	0.4	– 0.6	0.1	0.4	0.4	0.3	0.4	0.5
1991	0.5	0.5	– 2.0	– 1.5	– 0.9	0.6	0.6	0.3	0.0	0.8
1991	0.5	0.5	– 2.0	– 1.5	– 0.9	0.5	0.5	0.2	0.0	0.8
1992	– 0.1	0.9	– 1.3	– 0.5	– 0.3	0.1	0.0	0.0	0.2	0.3
1993	– 0.3	– 0.1	– 0.7	– 0.6	0.1	– 0.5	– 0.5	– 0.5	0.3	0.1
1994	– 0.1	0.4	1.4	0.8	0.6	0.1	0.1	0.2	0.9	0.0
1995	1.0	1.2	1.2	1.1	0.6	0.5	0.5	0.5	0.4	0.1
1996	0.4	0.8	– 0.3	0.2	0.2	0.0	0.0	0.1	0.4	0.5
1997	0.7	0.6	0.4	0.6	0.5	0.3	0.3	0.3	0.8	0.5
1998	0.6	0.6	1.0	0.9	0.6	0.6	0.6	0.6	0.9	– 0.1
1999	0.3	0.7	0.5	0.3	– 0.2	0.6	0.6	0.4	0.5	0.0
2000	0.4	– 0.6	0.5	0.5	0.1	0.7	0.7	0.6	0.6	0.3
1991–2000	0.4	0.5	0.1	0.2	0.1	0.3	0.3	0.3	0.5	0.3
2001	0.4	– 0.6	0.4	0.6	0.0	0.7	0.7	0.6	0.5	0.2
2002	0.4	– 0.6	0.4	0.5	0.0	0.8	0.8	0.6	0.5	0.2

(1) EU-15 excluding DK, EL, S, UK; 1960–91: including D_90.
(2) EU-15 excluding DK, S, UK; 1960–91: including D_90.
(3) 1960–91: including D_90.

Table 22

National final uses, including stocks, at current prices

(% of GDP at market prices)

	B	DK	D [1]	EL	E	F	IRL	I	L	NL
1960	101.1	101.2	97.5	103.0	98.4	98.8	106.9	100.6	82.9	99.0
1961	101.2	101.5	97.8	102.9	100.9	99.0	106.6	100.3	88.9	100.8
1962	100.4	103.1	98.7	104.9	102.6	99.9	108.1	100.8	94.6	100.5
1963	101.3	99.6	98.5	104.8	104.2	100.5	108.7	102.6	95.1	101.7
1964	100.7	102.0	98.5	107.7	103.0	100.9	109.1	100.1	95.3	103.1
1965	100.4	101.5	99.7	108.1	105.6	99.9	110.5	97.7	94.5	101.6
1966	101.1	101.5	98.3	104.8	105.3	100.5	107.4	98.3	93.2	102.4
1967	99.9	101.9	96.4	104.7	103.8	100.5	104.5	99.1	87.7	101.9
1968	99.9	101.3	96.4	106.3	102.5	100.7	107.8	97.9	85.6	100.9
1969	99.3	102.1	97.2	106.5	102.2	101.4	110.5	98.7	81.4	101.1
1970	97.9	102.9	98.0	105.9	101.3	100.4	109.5	99.8	82.7	102.6
1961–70	100.2	101.7	97.9	105.7	103.1	100.4	108.3	99.5	89.9	101.7
1971	98.2	101.8	98.2	105.7	99.4	99.8	108.7	99.3	91.6	100.9
1972	96.9	99.3	98.0	105.7	100.1	99.9	106.8	99.2	89.4	98.0
1973	98.2	101.8	97.1	107.1	101.1	100.1	108.3	101.9	83.1	97.6
1974	99.9	102.8	95.6	105.3	105.1	101.9	116.2	104.1	75.0	98.0
1975	100.1	100.9	97.1	105.3	104.1	99.7	107.5	100.2	91.1	97.5
1976	100.1	104.5	97.7	105.1	104.8	101.7	109.4	101.2	89.6	97.4
1977	101.2	103.5	97.6	105.0	102.3	100.8	110.6	99.0	91.3	99.6
1978	101.3	102.0	97.5	104.2	99.5	99.6	111.4	97.8	93.8	100.7
1979	102.4	102.9	99.3	103.3	100.0	100.5	117.9	99.0	91.3	101.2
1980	103.4	101.1	100.5	103.8	102.6	102.4	115.0	102.9	95.9	101.2
1971–80	100.2	102.1	97.8	105.0	101.9	100.6	111.2	100.5	89.2	99.2
1981	102.5	99.3	99.2	101.9	102.4	102.4	115.7	102.2	97.9	96.9
1982	102.1	99.6	97.6	105.5	102.2	103.2	108.8	101.4	96.8	96.0
1983	99.7	98.1	98.0	106.4	101.2	101.4	104.2	99.5	95.0	96.5
1984	99.5	98.9	97.5	105.4	98.2	100.9	101.7	100.4	93.6	95.2
1985	99.0	99.8	96.5	106.4	98.3	100.9	99.5	100.5	90.2	95.8
1986	97.6	100.6	94.8	105.5	98.2	100.3	99.0	98.7	90.3	96.8
1987	98.0	98.2	95.0	104.3	100.1	101.0	95.7	99.5	94.0	98.0
1988	97.4	97.1	94.8	105.5	101.4	100.8	93.7	99.9	93.0	96.8
1989	97.6	96.9	94.6	107.4	103.6	100.9	94.2	100.2	91.4	96.8
1990	98.1	94.9	94.1	109.4	103.7	101.0	95.4	100.0	94.4	96.1
1981–90	99.1	98.3	96.2	105.8	100.9	101.3	100.8	100.2	93.7	96.5
1991	98.0	94.1	94.3	109.0	103.4	100.5	95.0	100.0	97.6	95.9
1991	98.0	94.1	100.2	109.0	103.4	100.5	95.0	100.0	97.6	95.9
1992	97.2	93.4	100.2	107.8	103.1	99.4	92.4	100.1	90.7	96.1
1993	96.4	93.2	99.8	107.7	100.8	98.5	89.4	96.8	88.2	94.4
1994	95.9	94.7	99.7	105.9	100.1	98.7	90.1	96.5	84.8	94.1
1995	95.9	95.9	99.4	107.3	100.2	98.6	88.5	95.9	86.8	94.1
1996	96.0	95.1	99.0	108.0	99.5	98.3	88.4	95.1	87.0	94.3
1997	95.5	96.5	98.6	107.5	99.0	97.0	87.3	95.9	84.0	94.1
1998	96.0	98.1	98.5	109.0	99.9	97.3	88.6	96.7	81.4	94.2
1999	96.2	95.8	99.0	108.4	101.3	97.5	86.3	98.0	83.9	95.1
2000	96.8	95.8	99.6	109.5	102.6	97.8	87.5	99.1	81.1	96.0
1991–2000	96.4	95.3	99.4	108.0	101.0	98.4	89.3	97.4	86.6	94.8
2001	96.7	95.2	99.7	109.7	102.8	97.9	87.6	99.3	80.4	96.2
2002	95.9	94.7	99.7	109.4	103.0	97.5	87.1	99.4	78.5	96.1

([1]) 1960–91: D_90.

(% of GDP at market prices)

	A	P	FIN	S	UK	EUR-11 (1)	EUR-12 (2)	EU-15 (3)	US	JP
1960	101.1	104.7	101.6	100.3	100.3	99.0	99.1	99.4	99.5	99.5
1961	100.1	109.7	99.8	99.2	100.1	99.3	99.4	99.6	99.5	101.6
1962	99.0	103.4	101.2	99.4	99.8	100.0	100.1	100.0	99.5	99.8
1963	99.4	103.8	99.5	99.5	99.6	100.6	100.7	100.4	99.5	100.8
1964	100.3	103.1	100.3	99.5	100.6	100.3	100.4	100.4	99.2	100.2
1965	100.9	103.4	103.5	100.6	99.4	100.2	100.3	100.2	99.5	98.6
1966	101.8	102.8	102.6	100.4	98.9	100.1	100.1	99.9	99.9	98.4
1967	101.1	101.1	100.5	99.8	100.3	99.4	99.5	99.7	99.9	99.8
1968	100.6	103.5	97.5	99.9	100.2	99.0	99.2	99.4	100.1	98.9
1969	99.1	102.9	96.7	100.1	98.2	99.5	99.6	99.5	100.1	98.4
1970	99.4	105.2	100.3	100.3	97.9	99.7	99.8	99.6	99.9	98.7
1961–70	100.2	103.9	100.2	99.9	99.5	99.8	99.9	99.9	99.7	99.5
1971	99.6	105.7	100.4	98.6	98.2	99.3	99.4	99.2	100.3	97.3
1972	99.8	103.5	98.5	98.2	98.6	99.0	99.1	99.0	100.7	97.7
1973	100.0	105.7	98.3	97.0	101.5	99.2	99.4	99.6	100.0	100.0
1974	100.7	113.7	102.3	100.5	104.9	100.2	100.3	101.0	100.2	100.7
1975	99.7	110.8	106.0	99.9	101.8	99.5	99.6	99.9	99.1	100.0
1976	101.9	111.7	102.1	101.4	101.2	100.4	100.5	100.7	100.1	99.2
1977	103.0	113.3	98.5	101.4	99.3	99.8	99.9	100.0	101.2	98.4
1978	100.3	110.7	96.3	98.7	98.7	99.0	99.1	99.1	101.1	98.3
1979	100.8	109.2	98.7	100.7	99.7	100.2	100.2	100.2	100.9	100.9
1980	102.3	112.9	101.1	101.6	97.8	102.1	102.1	101.4	100.5	100.9
1971–80	100.8	109.7	100.2	99.8	100.2	99.9	100.0	100.0	100.4	99.3
1981	101.7	117.5	98.6	99.9	97.2	101.3	101.3	100.5	100.5	99.2
1982	98.8	116.8	99.2	100.3	98.2	100.6	100.7	100.2	100.6	99.2
1983	99.1	111.1	99.5	97.6	99.2	99.6	99.7	99.6	101.4	98.2
1984	100.2	106.3	97.5	96.1	100.3	99.1	99.3	99.3	102.7	97.3
1985	100.2	102.5	99.2	98.0	99.1	98.9	99.0	99.0	102.7	96.6
1986	99.5	101.2	98.6	96.6	100.8	97.8	97.9	98.3	102.8	96.0
1987	100.0	104.5	99.6	97.9	101.2	98.5	98.5	98.9	103.0	96.9
1988	99.9	108.0	100.5	98.1	103.7	98.5	98.6	99.4	102.2	97.7
1989	99.4	105.7	102.0	99.2	104.1	98.8	99.0	99.7	101.5	98.6
1990	99.1	106.5	101.7	99.4	102.6	98.7	98.8	99.3	101.3	99.3
1981–90	99.8	108.0	99.6	98.3	100.6	99.2	99.3	99.4	101.9	97.9
1991	99.5	107.2	100.9	98.2	101.0	98.5	98.7	98.9	100.3	98.3
1991	99.5	107.2	100.9	98.2	101.0	100.3	100.4	100.3	100.3	98.3
1992	99.4	107.3	99.0	98.1	101.2	100.0	100.1	100.0	100.5	97.8
1993	99.7	106.9	95.1	96.1	101.0	98.6	98.7	98.8	100.9	97.7
1994	100.6	106.8	94.1	95.3	100.7	98.4	98.5	98.7	101.3	97.9
1995	100.8	106.1	92.1	93.1	100.4	98.2	98.3	98.4	101.2	98.5
1996	101.1	106.6	92.4	93.3	100.6	97.7	97.9	98.1	101.2	99.5
1997	101.5	107.5	91.8	92.9	99.9	97.4	97.5	97.8	101.1	98.8
1998	100.6	109.0	91.1	93.7	100.9	97.6	97.8	98.2	101.7	98.1
1999	100.5	110.3	91.9	94.5	101.7	98.2	98.4	98.8	102.7	98.4
2000	101.2	112.7	90.3	94.5	101.8	98.9	99.1	99.4	103.6	99.0
1991–2000	100.5	108.0	93.9	95.0	100.9	98.5	98.7	98.8	101.4	98.4
2001	101.0	113.3	89.4	94.5	101.8	99.0	99.2	99.4	103.7	99.2
2002	100.8	113.7	88.3	94.5	101.7	98.9	99.1	99.3	103.5	99.3

(1) EU-15 excluding DK, EL, S, UK; 1960–91: including D_90.
(2) EU-15 excluding DK, S, UK; 1960–91: including D_90.
(3) 1960–91: including D_90.

Table 23

National final uses, including stocks, at 1995 prices

(national currency; annual percentage change)

	B	DK	D (1)	EL	E	F	IRL	I	L	NL
1961	4.3	6.3	4.9	13.2	13.3	5.7	4.6	8.1	6.6	4.4
1962	4.5	7.7	5.7	2.0	10.6	7.3	4.9	6.7	4.9	4.0
1963	4.5	– 1.7	2.4	12.3	11.1	6.1	5.4	7.5	3.0	4.9
1964	6.7	12.1	6.7	11.5	4.9	7.5	5.3	0.7	8.1	9.5
1965	3.8	4.5	6.3	11.3	8.5	3.7	3.0	0.9	0.9	4.8
1966	4.0	3.2	1.7	4.4	7.9	5.7	– 0.2	6.2	– 0.7	3.5
1967	2.7	3.6	– 1.7	5.7	4.2	4.8	4.0	8.0	– 5.0	5.2
1968	3.9	3.0	5.2	8.4	5.8	4.7	10.0	5.3	2.5	6.7
1969	6.6	8.4	8.5	12.0	9.1	7.6	8.8	7.0	7.5	6.3
1970	5.1	3.4	7.4	8.3	3.3	4.3	0.7	6.9	9.3	6.9
1961–70	4.6	5.0	4.7	8.8	7.8	5.7	4.6	5.7	3.6	5.6
1971	3.3	0.8	3.9	7.4	3.1	4.4	3.9	1.4	6.4	2.5
1972	4.5	4.0	4.1	9.7	9.5	4.8	7.6	3.2	4.2	0.8
1973	8.5	5.4	3.7	10.0	8.7	6.3	9.1	6.9	5.9	4.5
1974	4.6	– 3.1	– 2.2	– 8.9	6.8	1.9	2.0	4.2	– 0.6	2.6
1975	– 2.0	– 1.7	0.4	5.4	0.4	– 2.0	– 3.2	– 4.2	0.8	– 0.3
1976	5.5	9.3	5.4	6.7	4.1	6.1	5.6	6.3	2.7	4.7
1977	2.2	0.2	2.7	3.7	0.5	1.8	7.4	1.5	– 2.6	4.7
1978	3.0	1.4	3.6	6.3	– 0.1	2.8	9.4	2.9	8.0	3.7
1979	3.6	2.6	5.3	2.1	0.9	3.8	6.9	6.2	– 0.6	1.5
1980	2.9	– 3.3	0.6	0.5	1.5	1.7	– 1.7	6.1	6.1	0.3
1971–80	3.6	1.5	2.7	4.2	3.5	3.1	4.6	3.4	3.0	2.5
1981	– 2.8	– 4.2	– 2.3	– 1.7	– 2.1	0.7	2.8	– 0.6	1.2	– 3.8
1982	– 0.5	3.3	– 2.2	1.2	1.5	2.9	– 2.4	0.6	1.1	– 1.1
1983	– 1.7	0.7	2.4	0.2	0.5	0.1	– 2.2	0.3	– 0.6	1.9
1984	2.5	3.9	1.9	0.0	– 1.0	0.8	0.7	3.3	2.5	2.2
1985	2.0	4.7	1.0	3.2	3.4	2.1	1.2	3.2	0.1	3.5
1986	2.6	6.5	3.3	0.6	5.4	3.7	2.1	3.1	8.7	3.5
1987	3.5	– 2.0	2.4	– 2.5	8.1	3.2	0.3	4.3	5.4	1.4
1988	4.8	0.2	3.6	6.3	7.0	4.6	1.3	4.1	6.8	1.9
1989	4.3	– 0.1	2.9	5.3	7.8	3.7	7.7	3.1	8.6	4.7
1990	2.9	– 0.7	5.2	2.9	4.8	2.9	5.5	2.7	3.1	3.5
1981–90	1.7	1.2	1.8	1.5	3.5	2.5	1.7	2.4	3.6	1.8
1991	1.7	– 0.1	4.7	3.8	2.9	0.5	0.2	2.1	8.7	1.9
1992	1.8	0.9	2.8	– 0.7	1.0	0.8	– 0.1	0.9	– 1.5	1.6
1993	– 1.5	– 0.3	– 1.1	– 0.8	– 4.2	– 1.6	1.0	– 5.1	9.8	– 1.0
1994	2.1	7.0	2.3	1.0	1.3	2.1	5.1	1.7	– 0.5	3.0
1995	1.9	4.2	1.7	4.4	3.2	1.6	6.4	2.0	3.2	2.6
1996	0.9	2.2	0.3	3.3	1.9	0.7	7.3	0.9	2.7	2.8
1997	2.6	4.4	0.6	3.6	3.4	0.7	9.3	2.5	5.5	3.9
1998	3.9	4.3	2.4	4.6	5.6	3.7	10.2	2.9	2.4	4.2
1999	2.1	– 0.4	2.4	3.0	5.5	2.7	6.0	2.5	11.3	4.2
2000	3.0	2.5	2.3	4.2	4.4	3.1	9.5	2.5	2.2	4.6
1991–2000	1.9	2.4	1.8	2.6	2.5	1.4	5.4	1.3	4.3	2.8
2001	2.7	1.4	2.6	4.4	3.5	3.0	7.3	2.8	4.8	4.1
2002	2.8	1.9	2.7	4.7	3.6	2.8	6.1	3.0	4.5	4.0

(1) 1961–91: including D_90.

(national currency; annual percentage change)

	A	P	FIN	S	UK	EUR-11 (1)	EUR-12 (2)	EU-15 (3)	US	JP
1961	4.7	9.7	8.0	4.7	2.6	6.5	6.6	5.7	2.5	12.8
1962	1.2	1.1	3.8	4.0	1.2	6.3	6.2	5.1	6.1	7.8
1963	4.6	6.6	1.2	5.6	4.1	5.5	5.6	5.1	4.0	9.4
1964	7.3	7.5	5.7	5.7	6.5	5.6	5.7	6.0	5.3	11.0
1965	3.7	8.2	9.5	4.8	1.6	4.6	4.7	4.1	6.5	5.0
1966	6.6	3.2	2.0	2.3	1.6	4.5	4.5	3.8	7.1	10.1
1967	2.1	8.3	0.5	2.9	4.0	3.3	3.4	3.5	3.1	12.0
1968	4.2	12.9	1.3	3.9	3.3	5.3	5.4	4.9	4.9	11.4
1969	3.9	2.6	9.6	5.1	0.1	7.6	7.7	6.2	2.9	11.6
1970	7.1	8.8	11.7	6.2	2.4	6.1	6.1	5.4	0.0	10.7
1961–70	4.5	6.8	5.2	4.5	2.7	5.5	5.6	5.0	4.2	10.1
1971	5.1	8.0	1.6	– 0.8	2.4	3.4	3.5	3.1	3.4	3.9
1972	6.8	6.8	4.1	2.3	4.5	4.6	4.7	4.6	5.6	8.9
1973	6.1	12.2	7.3	2.0	7.8	6.1	6.2	6.3	4.6	9.5
1974	2.9	5.6	8.1	4.2	– 2.2	2.1	1.8	1.1	– 1.4	– 2.2
1975	– 1.1	– 8.8	1.9	4.0	– 1.7	– 1.5	– 1.4	– 1.3	– 0.6	2.1
1976	6.5	7.8	– 2.6	3.1	2.0	5.5	5.5	4.9	6.0	3.3
1977	5.2	7.2	– 3.1	– 2.6	1.3	2.2	2.2	1.9	5.1	3.8
1978	– 2.4	0.7	– 0.7	– 1.8	3.8	2.6	2.6	2.7	5.1	5.9
1979	5.5	2.6	8.9	4.8	3.9	4.4	4.3	4.2	2.2	6.2
1980	2.7	6.1	5.2	1.5	– 2.9	2.4	2.4	1.4	– 1.6	0.7
1971–80	3.7	4.7	3.0	1.6	1.8	3.1	3.2	2.9	2.8	4.1
1981	– 2.1	3.4	– 0.5	– 2.1	– 1.7	– 1.1	– 1.1	– 1.3	2.2	2.0
1982	– 0.3	2.2	4.1	0.3	2.7	0.4	0.4	0.8	– 1.1	2.8
1983	3.5	– 5.7	2.9	– 1.2	4.8	0.8	0.8	1.3	5.2	1.7
1984	1.6	– 6.7	2.6	3.3	3.1	1.5	1.4	1.8	8.0	3.2
1985	1.9	0.9	4.5	3.8	3.0	2.3	2.3	2.5	4.0	3.8
1986	2.1	8.3	2.7	2.2	4.7	3.6	3.5	3.7	3.3	3.9
1987	2.6	9.9	5.7	4.4	4.9	3.8	3.7	3.8	2.8	5.1
1988	3.2	10.7	6.6	2.8	8.0	4.4	4.5	5.0	3.3	7.4
1989	3.0	3.3	7.0	3.6	2.8	4.0	4.0	3.7	2.7	5.6
1990	4.3	6.1	– 0.5	0.8	– 0.3	3.8	3.8	2.9	1.4	5.2
1981–90	2.0	3.1	3.5	1.8	3.2	2.3	2.3	2.4	3.2	4.1
1991	3.6	4.2	– 7.9	– 2.1	– 2.7	2.4	2.4	1.4	– 1.1	2.9
1992	1.4	5.0	– 5.7	– 1.8	0.8	1.5	1.5	1.3	3.1	0.4
1993	0.8	– 1.3	– 5.5	– 5.2	2.2	– 2.4	– 2.3	– 1.7	3.2	0.1
1994	3.6	3.0	3.2	3.1	3.4	2.1	2.1	2.4	4.5	1.0
1995	1.9	3.0	3.2	1.9	1.8	2.1	2.1	2.1	2.4	2.3
1996	1.9	3.0	4.1	0.7	3.0	1.1	1.1	1.4	3.7	5.7
1997	1.3	4.6	4.7	0.7	3.8	1.8	1.9	2.2	4.7	0.2
1998	2.5	6.1	4.9	3.8	4.6	3.5	3.5	3.7	5.6	– 3.1
1999	2.6	4.7	2.7	3.5	3.6	3.0	3.0	3.1	5.2	0.5
2000	3.1	3.7	3.2	3.6	3.5	3.1	3.1	3.2	5.9	1.4
1991–2000	2.3	3.6	0.6	0.8	2.4	1.8	1.8	1.9	3.7	1.1
2001	2.2	2.9	3.0	3.6	3.1	3.0	3.0	3.0	3.5	1.9
2002	2.3	3.0	2.5	3.1	3.2	3.0	3.0	3.0	2.9	2.2

(1) PPS weighted; EU-15 excluding DK, EL, S, UK; 1961–91: including D_90.
(2) PPS weighted; EU-15 excluding DK, S, UK; 1961–91: including D_90.
(3) PPS weighted; 1961–91: including D_90.

Table 24

Price deflator GDP at market prices

(national currency; annual percentage change)

	B	DK	D (1)	EL	E	F	IRL	I	L	NL
1961	1.2	4.3	4.7	1.1	1.8	2.7	2.5	2.8	– 3.7	2.4
1962	1.6	6.6	3.9	4.6	5.7	5.2	4.9	5.8	3.9	3.5
1963	3.0	5.8	3.1	1.1	8.5	6.6	2.7	8.5	3.1	4.7
1964	4.7	4.6	3.0	3.4	6.3	4.1	9.7	6.5	5.8	8.7
1965	5.2	7.4	3.7	4.1	9.2	3.0	4.5	4.2	2.8	6.1
1966	4.1	6.8	3.4	4.8	8.2	3.0	4.4	2.2	3.9	6.0
1967	3.2	6.3	1.6	2.2	8.5	3.2	3.2	2.8	0.4	4.2
1968	2.6	7.0	2.3	1.5	5.9	4.0	4.2	1.7	5.0	4.2
1969	4.0	7.0	4.2	3.2	5.1	6.9	9.1	4.1	5.3	6.4
1970	4.7	8.3	7.7	3.8	5.9	5.5	9.7	6.9	15.1	6.1
1961–70	3.4	6.4	3.8	3.0	6.5	4.4	5.5	4.5	4.1	5.2
1971	5.6	7.7	7.7	3.0	7.8	6.3	10.5	6.7	– 0.8	8.1
1972	6.4	9.2	5.3	5.0	8.5	7.0	13.4	6.1	5.8	9.3
1973	7.1	10.7	6.4	20.9	11.8	8.5	15.3	13.7	12.2	9.1
1974	12.6	13.1	7.1	22.5	16.0	11.8	6.1	20.6	17.0	9.0
1975	12.2	12.4	5.7	13.1	16.8	13.0	20.1	16.1	– 0.9	10.2
1976	7.6	9.0	3.6	16.4	16.5	11.1	21.0	18.3	12.2	8.8
1977	7.5	9.9	3.7	13.8	23.4	9.3	13.3	18.4	1.2	6.6
1978	4.4	9.5	4.3	13.8	20.6	10.1	10.7	13.8	5.1	5.3
1979	4.5	7.9	3.8	20.0	16.9	10.0	13.8	16.1	6.4	4.1
1980	4.1	8.6	5.0	19.0	13.4	11.1	14.8	20.9	7.9	5.5
1971–80	7.1	9.8	5.2	14.6	15.1	9.8	13.8	15.0	6.5	7.6
1981	4.9	11.8	4.2	21.3	12.6	11.0	17.5	19.1	7.2	5.4
1982	7.7	11.1	4.4	27.2	13.9	11.5	15.2	17.0	10.8	5.4
1983	5.6	8.4	3.2	20.5	11.8	9.0	10.8	15.1	6.8	2.1
1984	5.1	6.0	2.1	21.9	11.6	7.0	6.4	11.5	4.4	1.4
1985	4.6	4.9	2.1	19.0	7.7	5.4	5.3	8.9	3.0	1.8
1986	3.0	4.0	3.2	18.8	11.1	5.1	5.8	7.9	2.8	0.1
1987	1.4	5.1	1.9	15.2	5.8	2.9	2.2	6.2	0.9	– 0.7
1988	2.3	2.5	1.5	16.6	5.7	3.0	3.4	6.8	0.7	1.2
1989	4.9	5.2	2.4	14.5	7.1	3.1	5.1	6.5	3.5	1.2
1990	3.0	3.7	3.2	20.6	7.3	2.9	– 0.3	8.2	3.4	2.3
1981–90	4.3	6.2	2.8	19.5	9.4	6.1	7.0	10.6	4.3	2.0
1991	2.8	2.8	3.9	19.8	7.1	3.0	1.8	7.6	1.5	2.7
1992	3.6	2.9	5.0	14.8	6.9	2.0	2.8	4.5	4.3	2.3
1993	3.7	1.4	3.7	14.5	4.3	2.3	5.2	3.9	0.7	1.9
1994	1.8	1.7	2.5	11.2	4.0	1.7	1.7	3.5	5.3	2.3
1995	1.8	1.8	2.0	9.8	4.8	1.7	3.0	5.0	0.7	1.8
1996	1.2	2.5	1.0	7.4	3.5	1.4	2.3	5.3	1.7	1.2
1997	1.3	1.6	0.8	6.8	2.2	1.3	4.4	2.4	3.3	2.0
1998	1.6	2.1	1.1	5.2	2.3	0.9	5.8	2.7	1.5	2.0
1999	1.0	2.7	0.9	2.9	2.9	0.4	3.8	1.5	2.3	1.7
2000	0.5	2.9	– 0.2	2.3	3.3	0.8	4.4	1.8	1.7	2.3
1991–2000	1.9	2.2	2.1	9.3	4.1	1.5	3.5	3.8	2.3	2.0
2001	1.5	2.3	1.1	2.6	3.2	1.1	4.1	2.1	2.1	3.5
2002	2.0	2.3	1.1	2.9	2.4	1.7	3.7	2.2	3.3	3.7

(1) 1961–91: including D_90.

(national currency; annual percentage change)

	A	P	FIN	S	UK	EUR-11 (1)	EUR-12 (2)	EU-15 (3)	US	JP
1961	5.4	2.3	5.3	3.0	3.2	3.3	3.3	3.3	1.1	8.0
1962	3.8	– 0.2	4.0	4.1	3.5	4.6	4.6	4.4	1.4	4.5
1963	3.6	2.5	5.1	2.9	2.1	5.6	5.6	4.8	1.1	5.2
1964	3.3	1.1	7.2	4.4	3.6	4.8	4.8	4.5	1.5	5.8
1965	5.7	3.8	5.0	6.0	5.0	4.5	4.5	4.7	1.9	5.3
1966	3.1	5.5	4.7	6.6	4.4	3.8	3.8	4.1	2.9	5.3
1967	3.2	3.4	7.4	5.0	3.0	3.3	3.3	3.3	3.1	5.5
1968	2.8	1.4	12.1	2.4	4.1	3.2	3.2	3.4	4.3	5.8
1969	2.7	6.1	4.2	3.4	5.5	5.0	5.0	5.1	4.9	4.9
1970	4.7	3.4	3.8	5.2	7.4	6.4	6.4	6.6	5.3	6.9
1961–70	3.8	2.9	5.9	4.3	4.2	4.5	4.4	4.4	2.7	5.7
1971	6.2	5.1	7.6	7.1	9.3	7.1	7.0	7.4	5.0	5.4
1972	7.6	7.8	8.4	7.0	8.1	6.7	6.7	7.0	4.2	5.6
1973	8.0	9.4	14.1	7.0	7.2	9.5	9.7	9.2	5.6	12.7
1974	9.5	18.9	22.5	9.5	15.0	12.9	13.1	13.3	9.0	20.8
1975	6.5	16.2	13.3	14.5	27.1	11.7	11.8	14.5	9.4	7.2
1976	5.6	16.3	13.3	11.9	15.2	10.9	11.1	11.7	5.6	8.0
1977	5.7	26.5	9.7	10.5	13.8	11.2	11.3	11.7	6.4	6.7
1978	6.0	22.3	7.7	9.5	11.6	10.0	10.1	10.3	7.1	4.6
1979	3.5	19.4	8.9	7.9	14.5	9.8	10.0	10.7	8.4	2.8
1980	5.0	20.9	9.7	11.7	19.4	11.2	11.4	12.7	9.2	5.4
1971–80	6.3	16.1	11.4	9.6	14.0	10.1	10.2	10.8	7.0	7.8
1981	6.6	17.6	11.0	9.5	11.3	10.6	10.8	10.9	9.3	4.1
1982	5.3	20.7	9.0	8.3	7.4	10.6	11.0	10.3	6.2	1.8
1983	3.7	24.6	8.4	10.1	5.3	8.7	9.0	8.4	4.0	1.8
1984	4.6	24.7	8.5	7.6	4.6	7.0	7.4	6.9	3.7	2.6
1985	3.1	21.7	5.5	6.6	5.6	5.5	5.9	5.8	3.2	2.1
1986	2.7	20.5	4.3	6.9	3.1	5.7	6.0	5.5	2.2	1.7
1987	2.1	10.1	4.2	4.8	5.2	3.5	3.8	4.1	3.0	0.1
1988	1.6	11.2	8.1	6.5	6.0	3.8	4.1	4.5	3.4	0.7
1989	2.7	12.4	6.1	8.0	7.5	4.3	4.6	5.2	3.8	2.0
1990	3.4	12.8	5.4	8.8	7.7	4.8	5.2	5.6	3.9	2.3
1981–90	3.6	17.5	7.0	7.7	6.3	6.4	6.7	6.7	4.3	1.9
1991	3.7	12.2	1.8	7.6	6.7	4.8	5.1	5.4	3.6	2.7
1992	4.3	10.0	0.9	1.0	4.0	4.3	4.5	4.3	2.4	1.7
1993	2.8	6.7	2.3	2.6	2.7	3.4	3.7	3.5	2.4	0.6
1994	2.8	6.3	2.0	2.4	1.5	2.7	2.9	2.7	2.1	0.2
1995	2.3	5.1	4.1	3.5	2.5	3.0	3.1	3.0	2.2	– 0.6
1996	1.3	3.3	– 0.2	1.4	3.3	2.3	2.4	2.5	1.9	– 1.4
1997	1.2	3.1	2.1	1.2	2.9	1.6	1.7	1.9	2.0	0.3
1998	0.7	3.8	3.1	1.3	3.0	1.7	1.8	2.0	1.3	0.3
1999	0.9	3.5	0.7	0.5	2.5	1.3	1.3	1.5	1.5	– 0.9
2000	0.8	1.8	3.1	1.3	2.4	1.2	1.2	1.4	2.2	– 1.2
1991–2000	2.1	5.5	2.0	2.3	3.1	2.6	2.8	2.8	2.2	0.2
2001	1.2	2.5	2.4	1.9	2.5	1.8	1.8	1.9	2.5	1.2
2002	1.1	2.4	2.3	2.3	2.7	1.9	1.9	2.0	2.4	0.9

(1) PPS weighted; EU-15 excluding DK, EL, S, UK; 1961–91: including D_90.
(2) PPS weighted; EU-15 excluding DK, S, UK; 1961–91: including D_90.
(3) PPS weighted; 1961–91: including D_90.

Table 25

Price deflator private final consumption expenditure

(national currency; annual percentage change)

	B	DK	D (1)	EL	E	F	IRL	I	L	NL
1961	2.5	3.5	3.3	1.4	1.8	3.1	2.3	1.7	0.5	2.4
1962	1.0	6.2	2.9	2.0	5.3	4.6	4.1	5.3	0.8	2.6
1963	3.7	5.6	3.0	2.9	7.8	5.4	2.4	7.0	3.1	3.8
1964	4.2	4.0	2.2	1.5	6.7	3.2	7.0	4.9	3.0	6.8
1965	4.8	6.1	3.2	4.3	9.9	2.8	4.4	3.6	3.4	4.0
1966	4.1	6.5	3.5	3.3	7.0	3.1	3.9	2.9	3.4	5.4
1967	2.7	7.4	1.6	1.5	5.8	3.0	2.8	3.2	2.3	3.0
1968	2.8	7.1	1.6	0.4	5.1	4.8	4.8	1.5	2.5	2.6
1969	2.8	4.6	1.9	3.1	3.2	7.0	7.8	2.9	1.9	6.1
1970	2.6	6.6	3.5	3.4	6.1	5.0	12.4	5.0	4.3	4.4
1961–70	3.1	5.8	2.7	2.4	5.8	4.2	5.1	3.8	2.5	4.1
1971	5.3	8.3	5.1	2.9	7.7	6.0	9.4	5.5	4.7	7.7
1972	5.6	8.2	5.6	4.4	7.7	6.3	9.7	6.2	5.1	8.0
1973	5.9	11.7	6.5	16.1	11.3	7.4	11.6	14.2	4.9	9.4
1974	12.7	15.0	7.1	24.9	17.7	14.8	15.7	21.2	10.0	9.5
1975	12.5	9.9	6.0	12.8	15.5	11.8	18.0	16.2	10.2	10.0
1976	7.8	11.0	4.2	14.8	16.4	9.9	20.1	17.7	9.3	9.0
1977	7.2	10.0	3.3	12.8	23.7	9.4	14.2	16.7	5.7	6.1
1978	4.3	9.3	2.6	13.2	19.1	9.1	8.2	12.8	3.4	4.4
1979	3.9	10.2	4.2	16.2	16.5	10.5	15.1	15.5	4.9	4.9
1980	6.7	9.6	5.8	22.5	15.7	13.0	18.6	20.6	7.5	6.8
1971–80	7.1	10.3	5.0	13.9	15.0	9.8	14.0	14.6	6.5	7.6
1981	8.5	12.2	6.2	23.2	14.6	13.0	19.6	18.0	8.6	7.1
1982	8.1	9.9	5.1	21.1	14.6	11.6	14.9	17.0	10.6	5.5
1983	6.8	7.7	3.2	19.4	12.5	9.6	9.5	14.9	8.3	3.7
1984	5.3	7.2	2.5	19.3	11.9	7.8	7.3	11.6	6.5	2.9
1985	5.7	5.1	1.8	19.6	7.1	5.8	5.1	9.1	4.3	3.0
1986	– 0.1	2.8	– 0.6	22.4	9.4	2.6	3.7	6.4	0.5	0.2
1987	2.1	4.1	0.5	17.2	5.7	3.2	2.4	5.2	1.5	0.2
1988	1.0	2.4	1.3	15.1	5.0	2.8	4.0	5.9	2.8	0.7
1989	3.9	4.7	2.9	13.6	6.6	3.8	4.0	6.7	3.6	1.4
1990	2.8	2.9	2.7	19.9	6.5	3.0	2.1	6.4	3.8	2.0
1981–90	4.4	5.9	2.5	19.0	9.3	6.3	7.1	10.0	5.0	2.6
1991	2.6	2.8	3.7	19.7	6.4	3.5	2.7	7.0	2.8	3.1
1992	1.9	1.9	4.4	15.6	6.4	2.5	3.0	5.5	3.4	3.0
1993	2.7	2.0	3.9	14.2	5.6	2.4	2.2	5.5	4.1	2.2
1994	2.5	3.0	2.6	11.1	4.9	2.1	2.7	4.9	2.3	3.0
1995	1.7	1.9	1.9	8.9	4.7	2.0	2.8	6.0	2.1	1.1
1996	2.2	2.1	1.7	8.2	3.5	1.9	2.6	4.4	1.7	1.9
1997	1.6	2.0	2.0	5.5	2.4	1.4	2.6	2.2	1.7	2.0
1998	1.0	1.8	1.1	4.5	2.0	0.8	3.8	2.1	1.7	1.8
1999	1.2	2.6	0.3	2.4	2.5	0.8	3.3	2.2	1.4	1.9
2000	2.6	3.3	1.7	2.9	3.5	1.4	5.9	2.8	3.0	2.8
1991–2000	2.0	2.3	2.3	9.2	4.2	1.9	3.1	4.2	2.4	2.3
2001	1.9	2.6	1.6	2.8	3.0	1.5	4.0	2.4	2.6	4.0
2002	1.4	2.0	1.4	2.4	2.3	1.7	3.4	2.0	2.1	2.9

(1) 1961–91: including D_90.

(national currency; annual percentage change)

	A	P	FIN	S	UK	EUR-11 (1)	EUR-12 (2)	EU-15 (3)	US	JP
1961	4.0	0.6	2.8	2.3	2.9	2.6	2.6	2.7	1.1	6.4
1962	4.4	2.0	4.1	4.0	3.6	4.0	3.9	3.9	1.2	6.7
1963	2.6	1.1	5.0	3.4	1.6	4.9	4.9	4.2	1.1	7.3
1964	3.7	0.8	7.9	3.6	3.5	4.0	3.9	3.8	1.4	4.1
1965	4.5	4.8	4.3	5.4	4.9	4.1	4.1	4.4	1.5	6.8
1966	2.3	5.5	3.7	6.6	3.8	3.8	3.8	3.9	2.6	4.6
1967	3.9	1.5	6.7	5.4	2.7	3.0	2.9	3.0	2.5	3.9
1968	2.5	4.3	9.3	1.7	4.7	3.0	3.0	3.4	3.9	5.1
1969	3.3	4.9	2.1	3.4	5.5	3.8	3.8	4.1	4.5	4.2
1970	3.9	3.2	1.7	5.0	6.0	4.5	4.5	4.8	4.7	7.2
1961–70	3.5	2.8	4.7	4.1	3.9	3.8	3.8	3.8	2.4	5.6
1971	5.0	7.0	6.8	7.6	8.7	5.9	5.9	6.5	4.3	6.9
1972	6.5	6.3	8.4	6.4	6.5	6.4	6.3	6.4	3.5	5.9
1973	6.6	8.9	12.2	7.6	8.5	9.2	9.4	9.2	5.4	11.1
1974	10.0	23.5	19.6	10.3	17.1	14.3	14.6	14.9	10.3	21.0
1975	7.9	16.0	16.6	10.9	23.3	11.7	11.7	13.8	8.2	11.3
1976	6.5	18.1	14.0	11.0	15.8	11.0	11.1	11.9	5.5	9.8
1977	5.7	27.3	11.3	10.8	14.6	11.2	11.2	11.8	6.6	7.5
1978	4.0	21.3	8.2	11.6	9.4	9.0	9.1	9.2	7.1	4.6
1979	4.3	25.2	8.0	7.9	13.7	10.2	10.3	10.9	8.9	3.6
1980	6.1	21.6	11.1	12.4	16.1	12.5	12.8	13.3	10.8	7.5
1971–80	6.2	17.3	11.5	9.6	13.3	10.1	10.2	10.8	7.0	8.8
1981	7.3	20.2	11.7	12.1	10.9	12.1	12.4	12.1	8.8	4.6
1982	5.9	20.3	8.7	10.5	8.4	11.0	11.3	10.8	5.7	2.7
1983	3.9	25.8	8.0	10.9	5.1	9.2	9.5	8.7	4.3	2.1
1984	5.3	28.5	6.9	7.7	5.1	7.8	8.1	7.5	3.7	2.6
1985	3.3	19.4	5.5	7.0	5.2	5.7	6.1	5.9	3.5	2.3
1986	1.7	13.8	2.8	5.2	4.0	3.4	3.9	3.9	2.4	0.7
1987	0.7	9.9	3.1	5.6	4.2	3.1	3.5	3.7	3.8	0.5
1988	1.6	11.5	4.8	6.1	5.0	3.4	3.8	4.0	3.9	0.5
1989	2.7	13.1	5.3	7.0	6.2	4.7	4.9	5.2	4.4	2.1
1990	3.5	12.4	5.5	9.9	7.8	4.3	4.7	5.4	4.6	2.6
1981–90	3.6	17.3	6.2	8.2	6.2	6.4	6.8	6.7	4.5	2.0
1991	3.0	12.2	5.9	10.3	7.9	4.8	5.2	5.8	3.8	2.5
1992	3.9	9.7	4.1	2.2	4.7	4.4	4.7	4.6	3.1	1.9
1993	3.3	6.6	3.9	5.7	3.5	4.0	4.3	4.1	2.4	1.2
1994	3.3	5.6	0.9	2.8	2.2	3.3	3.6	3.3	2.0	0.7
1995	1.5	4.5	0.4	2.9	2.9	3.1	3.2	3.2	2.3	– 0.5
1996	1.9	3.2	1.4	1.4	3.2	2.6	2.7	2.8	2.1	0.1
1997	1.5	2.2	1.3	2.2	2.5	1.9	2.0	2.1	1.9	1.7
1998	0.5	2.6	1.9	1.0	2.4	1.4	1.5	1.7	1.1	0.2
1999	0.7	2.5	1.7	0.7	2.0	1.3	1.3	1.4	1.8	– 0.5
2000	2.4	2.8	2.9	1.0	1.7	2.3	2.3	2.2	2.5	– 0.1
1991–2000	2.2	5.1	2.4	3.0	3.3	2.9	3.1	3.1	2.3	0.7
2001	2.0	2.9	2.5	1.4	2.0	2.1	2.1	2.1	2.3	0.5
2002	1.8	2.3	2.2	1.8	2.1	1.8	1.9	1.9	2.3	1.2

(1) PPS weighted; EU-15 excluding DK, EL, S, UK; 1961–91: including D_90.
(2) PPS weighted; EU-15 excluding DK, S, UK; 1961–91: including D_90.
(3) PPS weighted; 1961–91: including D_90.

Table 26

Price deflator exports of goods and services

(national currency; annual percentage change)

	B	DK	D (1)	EL	E	F	IRL	I	L	NL
1961	0.6	– 1.2	– 0.9	– 1.6	2.0	0.5	– 0.1	– 0.8	– 3.0	– 1.7
1962	1.0	2.5	1.9	– 0.9	4.8	0.4	1.9	0.9	– 1.7	– 0.1
1963	2.1	2.8	1.0	7.3	6.3	3.0	2.1	3.3	0.0	2.6
1964	4.2	3.4	2.7	1.9	2.8	4.9	4.7	4.1	2.2	2.5
1965	1.4	2.2	2.7	– 1.0	1.1	0.4	1.9	0.0	1.4	2.3
1966	3.7	3.0	2.5	3.7	9.0	1.8	1.9	0.2	0.8	0.7
1967	0.5	1.2	0.2	– 0.6	14.2	– 0.2	0.6	1.1	0.4	0.0
1968	0.2	3.0	0.0	– 1.9	17.8	0.1	6.2	0.3	1.3	– 0.5
1969	4.6	6.7	4.0	1.8	6.1	4.6	6.1	2.7	6.5	2.2
1970	5.7	6.5	3.3	2.0	2.7	7.8	– 6.1	6.1	13.2	5.8
1961–70	2.4	3.0	1.7	1.0	6.6	2.3	1.9	1.8	2.0	1.3
1971	2.1	3.5	4.3	– 0.5	6.0	6.0	7.3	4.6	– 2.8	3.2
1972	1.7	6.9	2.1	4.8	6.1	1.5	11.5	6.0	0.7	1.8
1973	8.3	12.0	6.7	27.1	9.5	8.6	19.7	12.2	15.0	7.3
1974	24.5	20.5	15.8	35.9	22.4	24.7	23.0	35.3	26.5	26.0
1975	4.8	7.7	4.1	10.5	10.6	5.6	18.4	14.4	– 1.0	5.0
1976	6.5	6.9	3.5	9.3	16.4	10.0	23.0	20.1	8.6	6.6
1977	3.6	6.9	1.8	9.7	19.4	9.9	14.8	17.0	– 2.8	3.6
1978	1.1	6.2	1.6	7.0	15.8	7.1	6.6	8.3	2.7	– 0.9
1979	9.0	8.3	4.9	14.5	9.4	9.6	9.6	17.3	7.7	8.2
1980	9.3	13.6	6.3	36.4	18.1	11.1	10.8	22.6	7.5	11.5
1971–80	6.9	9.2	5.0	14.8	13.2	9.3	14.3	15.5	5.9	7.0
1981	9.2	13.1	5.7	22.7	17.8	13.3	16.4	21.5	9.6	13.8
1982	13.2	10.6	3.5	20.7	13.7	12.4	10.8	16.1	15.5	3.7
1983	7.3	5.4	1.9	20.5	16.9	9.2	9.1	8.2	5.9	– 0.2
1984	8.2	7.2	3.4	14.8	12.5	9.0	8.1	9.7	5.2	5.1
1985	2.8	3.7	2.8	16.1	6.4	3.9	3.1	8.6	3.9	1.4
1986	– 6.6	– 5.4	– 1.4	10.9	– 1.7	– 4.3	– 6.3	– 3.0	– 1.5	– 15.8
1987	– 3.4	– 1.3	– 1.1	8.8	2.5	– 0.9	0.5	1.0	– 3.2	– 5.1
1988	3.8	– 0.8	1.9	12.2	3.0	2.3	5.6	3.4	2.3	0.5
1989	7.2	6.8	2.7	11.6	4.5	4.1	7.3	6.6	5.9	4.5
1990	– 1.7	0.7	0.0	16.2	1.7	– 1.5	– 8.1	3.0	0.2	– 0.8
1981–90	3.8	3.9	1.9	15.4	7.5	4.6	4.4	7.3	4.3	0.4
1991	– 0.7	1.7	1.3	14.4	2.0	– 0.6	– 0.3	3.9	– 0.1	0.1
1992	– 1.1	2.5	1.0	9.7	3.1	– 1.7	– 2.0	0.9	1.6	– 2.2
1993	– 1.3	– 0.3	0.7	9.3	4.7	– 2.3	6.8	10.4	4.8	– 2.1
1994	1.2	0.6	1.0	9.1	4.5	– 0.1	0.2	3.3	6.0	0.5
1995	1.4	1.4	2.0	8.5	5.3	0.6	1.9	8.8	– 2.0	1.3
1996	2.6	1.7	0.1	5.6	1.5	1.7	– 0.3	1.0	0.6	0.5
1997	4.7	2.8	1.1	3.8	3.3	2.0	1.2	0.3	3.8	2.7
1998	– 0.3	– 0.9	0.0	4.5	0.5	– 1.1	2.8	1.0	0.4	– 1.2
1999	– 0.3	1.1	– 0.5	1.4	0.3	– 0.5	2.3	– 0.4	1.6	– 0.6
2000	5.8	6.3	3.2	6.1	5.7	1.5	5.7	5.2	3.7	6.3
1991–2000	1.2	1.7	1.0	7.2	3.1	– 0.1	1.8	3.4	2.0	0.5
2001	2.4	1.8	3.0	3.8	3.1	2.1	3.2	2.8	3.4	2.8
2002	2.0	1.6	1.8	2.6	2.0	2.0	2.4	1.7	3.1	1.9

(1) 1961–91: including D_90.

(national currency; annual percentage change)

	A	P	FIN	S	UK	EUR-11 (1)	EUR-12 (2)	EU-15 (3)	US	JP
1961	3.7	– 1.1	2.2	0.4	1.3	– 0.3	– 0.3	0.0	1.1	– 0.7
1962	0.4	– 0.9	– 0.4	– 1.6	0.8	1.0	1.0	0.9	0.0	– 1.6
1963	1.5	3.2	1.8	1.0	1.4	2.3	2.3	2.1	– 0.2	2.5
1964	2.7	3.9	6.0	1.3	2.3	3.4	3.4	3.1	0.8	1.6
1965	2.8	3.0	4.9	2.1	2.3	1.7	1.6	1.8	3.3	– 0.5
1966	1.8	– 1.8	– 0.9	1.7	3.0	2.0	2.0	2.2	3.0	– 0.1
1967	0.5	3.7	2.6	1.4	2.5	1.0	1.0	1.3	4.2	0.2
1968	1.6	2.3	19.9	0.7	8.0	1.4	1.4	2.6	2.0	0.1
1969	2.5	– 1.5	4.2	3.2	2.3	3.7	3.7	3.5	3.2	1.5
1970	5.5	5.4	9.0	9.2	8.4	5.2	5.2	5.9	4.3	2.8
1961–70	2.3	1.6	4.8	1.9	3.2	2.1	2.1	2.3	2.2	0.6
1971	3.5	2.9	5.4	4.2	4.9	4.3	4.3	4.4	3.3	2.8
1972	3.4	5.2	6.8	2.7	4.3	3.1	3.1	3.4	3.2	– 0.6
1973	7.4	9.4	13.2	10.9	12.0	8.8	9.0	9.7	13.8	9.7
1974	11.2	39.5	37.5	26.1	24.9	23.8	24.0	24.2	23.6	31.3
1975	4.9	1.0	16.0	13.2	20.9	7.0	7.0	9.7	10.4	5.0
1976	1.8	7.1	6.3	6.5	19.7	9.3	9.3	11.0	3.1	2.0
1977	4.1	35.5	8.2	6.2	15.5	8.3	8.3	9.6	4.0	– 3.7
1978	1.5	25.9	6.1	6.6	7.7	4.9	5.0	5.5	6.1	– 6.3
1979	4.3	27.6	12.8	13.8	11.5	9.8	9.9	10.3	12.1	8.1
1980	6.2	25.2	11.4	12.1	14.3	12.2	12.7	13.0	10.1	9.7
1971–80	4.8	17.2	12.0	10.0	13.4	9.0	9.1	9.9	8.8	5.4
1981	5.1	18.5	8.3	9.0	8.5	12.3	12.6	11.8	7.4	2.6
1982	3.5	19.8	5.8	11.2	6.9	9.3	9.5	9.2	0.4	2.8
1983	0.8	30.0	6.8	12.7	8.0	6.3	6.5	6.9	0.5	– 4.8
1984	4.0	30.2	8.4	7.1	7.7	7.5	7.7	7.6	1.0	0.0
1985	3.1	17.6	2.9	4.1	5.1	4.3	4.5	4.6	– 2.7	– 2.5
1986	– 2.5	4.5	– 3.7	– 1.9	– 8.2	– 4.5	– 4.2	– 4.8	– 1.6	– 12.8
1987	– 1.8	10.8	1.8	2.5	2.8	– 0.8	– 0.6	0.0	2.6	– 4.4
1988	2.5	11.7	4.9	5.6	0.3	2.7	2.9	2.5	5.3	– 2.3
1989	1.8	10.9	6.0	6.4	8.2	4.6	4.7	5.3	1.9	3.5
1990	0.8	5.9	0.4	1.5	4.4	0.1	0.3	0.9	0.7	1.4
1981–90	1.7	15.7	4.1	5.7	4.2	4.1	4.3	4.3	1.5	– 1.8
1991	0.4	2.1	– 0.4	1.7	1.6	1.0	1.1	1.2	1.4	– 3.3
1992	0.5	– 1.0	6.2	– 2.9	1.7	0.0	0.1	0.3	– 0.3	– 3.4
1993	0.7	5.2	6.5	9.5	8.8	1.9	2.0	3.1	0.0	– 7.9
1994	1.0	5.9	1.3	3.7	1.0	1.6	1.7	1.6	1.2	– 3.9
1995	0.9	5.2	5.0	7.0	3.4	3.2	3.2	3.3	2.4	– 3.0
1996	1.1	– 1.8	– 0.6	– 4.5	1.2	0.9	0.9	0.8	– 1.3	3.0
1997	0.8	1.8	– 1.1	– 0.2	– 4.1	1.8	1.8	0.9	– 1.5	1.6
1998	0.4	1.1	– 1.1	– 0.2	– 4.2	0.0	0.1	– 0.6	– 2.2	0.8
1999	– 0.2	0.5	– 4.8	– 0.9	– 1.4	– 0.3	– 0.3	– 0.4	– 0.4	– 9.0
2000	3.3	3.2	9.6	2.4	1.8	4.3	4.3	3.9	1.9	– 8.1
1991–2000	0.9	2.2	2.0	1.5	0.9	1.4	1.5	1.4	0.1	– 3.4
2001	2.5	2.6	2.8	1.8	2.7	2.7	2.7	2.7	2.2	0.9
2002	1.6	1.6	1.7	1.2	2.0	1.9	1.9	1.9	2.4	0.4

(1) PPS weighted; EU-15 excluding DK, EL, S, UK; 1961–91: including D_90.
(2) PPS weighted; EU-15 excluding DK, S, UK; 1961–91: including D_90.
(3) PPS weighted; 1961–91: including D_90.

Table 27

Price deflator imports of goods and services

(national currency; annual percentage change)

	B	DK	D (1)	EL	E	F	IRL	I	L	NL
1961	2.6	0.1	– 2.4	– 1.6	2.0	0.2	1.1	– 2.2	1.4	– 1.9
1962	0.8	– 0.1	– 0.2	– 0.7	2.0	2.3	0.5	0.4	0.8	– 0.9
1963	4.0	1.9	2.4	0.6	2.0	0.9	1.9	1.5	1.2	1.4
1964	3.2	1.3	1.8	3.4	2.4	0.8	1.3	3.4	2.1	2.4
1965	0.2	1.6	2.9	0.8	0.8	1.2	2.6	0.6	1.7	0.5
1966	3.2	1.6	1.8	1.4	0.2	2.9	0.2	1.9	1.4	0.7
1967	0.5	2.5	– 1.4	– 0.6	2.6	– 1.2	– 0.3	0.7	– 0.7	– 0.9
1968	0.6	5.0	0.7	0.5	10.7	– 1.2	7.9	0.7	0.0	– 2.9
1969	3.2	2.9	1.9	0.4	2.9	6.1	4.2	1.4	3.1	3.3
1970	5.1	5.6	– 6.5	3.9	4.5	10.2	0.7	3.7	6.8	6.6
1961–70	2.3	2.2	0.0	0.8	3.0	2.2	2.0	1.2	1.8	0.8
1971	3.3	6.1	1.0	3.0	5.5	5.2	5.4	5.2	5.1	3.8
1972	0.4	2.0	1.7	8.4	1.4	0.9	5.7	4.3	– 0.1	– 0.2
1973	7.6	16.8	8.0	20.4	10.4	6.7	13.9	27.2	9.0	7.3
1974	27.6	32.7	24.2	43.4	41.9	47.0	44.4	51.9	22.4	32.7
1975	6.0	4.9	2.1	18.5	7.0	2.7	20.5	11.1	10.2	4.6
1976	7.0	6.7	6.2	11.5	14.8	12.2	19.0	26.3	6.2	6.4
1977	3.0	8.2	1.7	5.3	22.0	12.9	16.8	15.2	3.8	3.3
1978	1.1	3.6	– 1.8	10.4	7.6	3.5	4.7	6.8	1.8	– 1.3
1979	8.9	13.8	8.6	18.6	7.2	11.2	13.7	19.0	7.9	10.9
1980	13.6	20.3	12.8	35.6	37.1	19.9	18.0	26.2	7.6	13.4
1971–80	7.6	11.2	6.2	16.9	14.8	11.6	15.7	18.6	7.2	7.7
1981	13.4	16.0	11.7	15.1	29.3	19.3	18.6	25.5	10.1	14.7
1982	13.8	9.3	2.8	23.9	12.7	13.2	7.5	11.6	13.8	1.7
1983	7.6	4.7	0.9	16.4	21.6	8.9	5.2	6.0	7.9	0.0
1984	8.1	7.8	5.1	24.1	11.7	10.2	9.4	9.5	7.4	5.7
1985	2.0	1.7	2.7	17.6	1.9	2.3	2.6	7.4	3.1	1.2
1986	– 10.3	– 11.2	– 11.5	7.6	– 14.6	– 12.8	– 10.1	– 14.2	– 2.4	– 16.7
1987	– 4.3	– 1.6	– 4.8	6.5	0.8	– 1.4	1.3	– 1.7	– 2.1	– 3.1
1988	2.3	– 1.4	1.8	9.8	1.1	1.4	6.4	4.8	4.5	– 0.4
1989	6.5	6.8	5.2	14.6	2.3	6.0	6.2	6.9	5.4	4.8
1990	– 1.4	– 0.6	– 0.7	13.4	– 1.2	– 1.8	– 3.7	– 1.8	2.4	– 1.3
1981–90	3.5	2.9	1.1	14.8	5.9	4.2	4.1	4.9	4.9	0.4
1991	– 0.7	2.8	2.2	12.1	– 0.3	– 0.2	2.4	0.5	1.1	0.4
1992	– 2.7	– 0.8	– 1.2	12.1	1.3	– 3.0	– 1.2	1.1	– 0.7	– 1.4
1993	– 2.8	– 0.5	– 1.0	7.7	6.5	– 3.3	4.5	14.8	1.6	– 2.3
1994	1.8	0.7	0.6	5.7	5.7	0.5	2.4	4.8	6.4	0.1
1995	2.3	1.2	0.8	6.8	4.7	0.4	3.8	11.1	0.8	0.4
1996	3.1	– 0.1	0.5	5.0	0.7	2.3	– 0.5	– 2.9	0.7	1.2
1997	5.3	3.8	3.0	2.7	3.4	1.5	0.7	1.4	2.1	2.2
1998	– 1.6	– 1.3	– 1.8	4.2	– 0.4	– 2.4	2.5	– 1.3	– 0.1	– 1.5
1999	0.7	0.1	– 1.3	1.2	0.4	0.3	2.7	1.3	1.2	0.3
2000	8.0	7.1	7.8	8.6	9.0	4.9	8.2	11.8	5.8	7.9
1991–2000	1.3	1.3	0.9	6.6	3.1	0.1	2.5	4.1	1.8	0.7
2001	2.8	2.4	3.6	4.4	3.4	2.6	3.9	3.5	4.2	2.9
2002	1.5	1.4	1.8	2.0	1.8	0.5	2.4	1.2	2.4	0.9

(1) 1961–91: including D_90.

(national currency; annual percentage change)

	A	P	FIN	S	UK	EUR-11 (1)	EUR-12 (2)	EU-15 (3)	US	JP
1961	2.2	1.0	0.8	0.5	0.0	– 0.8	– 0.8	– 0.6	0.2	1.2
1962	0.6	– 1.3	1.6	1.2	– 0.4	0.4	0.4	0.3	– 1.1	– 2.1
1963	0.9	1.6	1.1	1.6	3.2	1.9	1.9	2.1	1.7	1.7
1964	1.7	2.2	2.2	3.4	2.4	2.1	2.2	2.2	2.2	1.6
1965	1.9	2.8	1.4	1.8	1.3	1.5	1.5	1.5	1.4	– 0.7
1966	1.7	0.0	1.5	1.5	1.6	1.8	1.7	1.7	2.5	2.3
1967	1.5	– 2.4	5.5	1.4	1.2	– 0.3	– 0.3	0.2	0.2	– 0.1
1968	0.6	– 2.5	22.0	0.8	11.0	0.9	0.8	2.9	1.7	0.8
1969	4.9	0.9	2.8	2.7	2.4	3.0	3.0	2.9	2.5	2.9
1970	6.2	9.3	7.5	8.2	6.7	2.6	2.6	3.6	5.9	2.4
1961–70	2.2	1.1	4.5	2.3	2.9	1.3	1.3	1.7	1.7	1.0
1971	4.6	1.4	7.4	5.1	3.9	3.6	3.6	3.8	6.0	– 3.0
1972	2.0	3.4	8.1	3.0	2.7	1.8	1.9	2.1	7.1	– 4.6
1973	4.1	14.1	11.2	13.1	24.1	11.1	11.3	13.8	17.5	18.5
1974	17.7	43.8	41.5	37.5	41.9	36.8	36.9	37.8	43.0	64.1
1975	4.1	13.9	9.5	4.6	13.6	5.7	5.9	7.4	8.3	9.5
1976	2.9	11.2	4.7	7.3	21.1	11.8	11.8	13.1	3.0	5.3
1977	6.0	30.7	10.6	12.0	13.7	9.2	9.1	10.0	8.8	– 3.8
1978	0.6	22.1	11.2	10.4	3.2	2.7	2.9	3.1	7.1	– 15.7
1979	5.9	30.5	13.3	16.0	9.2	11.9	12.0	11.7	17.1	27.6
1980	9.5	31.3	19.5	14.2	9.9	18.7	19.1	17.5	24.5	37.5
1971–80	5.6	19.5	13.3	11.9	13.8	10.9	11.0	11.6	13.7	11.4
1981	9.3	25.6	11.0	11.2	7.8	17.7	17.6	16.0	5.4	2.1
1982	2.0	18.1	4.4	15.3	7.0	8.5	8.8	8.8	– 3.4	6.6
1983	– 0.4	29.9	7.1	13.5	7.4	6.2	6.4	6.8	– 3.8	– 5.4
1984	3.8	31.2	4.3	3.9	8.8	8.3	8.7	8.5	– 0.9	– 2.6
1985	3.9	13.0	3.3	4.5	4.0	3.4	3.7	3.8	– 3.2	– 2.3
1986	– 3.9	– 6.8	– 6.9	– 7.6	– 4.4	– 12.3	– 11.9	– 10.6	0.0	– 31.6
1987	– 2.6	9.5	– 0.2	3.5	2.4	– 2.3	– 2.1	– 1.1	5.9	– 7.2
1988	2.0	11.7	1.2	3.4	– 0.8	2.4	2.5	1.9	4.9	– 4.6
1989	3.5	10.4	5.2	5.8	6.5	5.6	5.8	5.9	2.5	6.7
1990	0.5	4.6	1.3	2.9	3.4	– 1.0	– 0.7	0.1	2.7	8.1
1981–90	1.8	14.2	3.0	5.5	4.1	3.4	3.6	3.8	1.0	– 3.7
1991	1.0	1.1	3.4	– 0.1	0.3	0.8	1.0	0.9	– 0.5	– 5.8
1992	0.0	– 4.2	7.7	– 2.2	0.0	– 1.1	– 0.8	– 0.7	0.1	– 5.0
1993	0.7	4.4	8.3	14.5	8.5	1.6	1.7	3.0	– 0.9	– 9.4
1994	0.8	4.0	– 0.5	4.0	3.1	1.9	2.0	2.2	0.9	– 5.3
1995	1.0	3.5	0.1	5.7	6.1	3.0	3.0	3.6	2.7	– 2.6
1996	2.1	1.7	0.4	– 4.2	0.2	0.6	0.7	0.5	– 1.8	9.8
1997	1.8	1.8	0.5	1.4	– 6.7	2.5	2.5	1.0	– 3.6	6.4
1998	– 0.1	– 0.8	– 3.0	– 0.3	– 6.3	– 1.4	– 1.3	– 2.0	– 5.4	– 1.9
1999	0.1	0.4	– 0.4	1.3	– 2.5	0.1	0.1	– 0.2	0.6	– 10.0
2000	5.6	7.0	9.9	3.5	1.4	8.0	8.0	6.9	3.8	– 0.4
1991–2000	1.3	1.8	2.5	2.3	0.3	1.6	1.7	1.5	– 0.4	– 2.6
2001	3.2	3.1	3.1	2.1	2.5	3.2	3.3	3.1	2.0	1.8
2002	2.0	1.5	1.4	1.1	1.5	1.4	1.4	1.4	2.3	0.3

(1) PPS weighted; EU-15 excluding DK, EL, S, UK; 1961–91: including D_90.
(2) PPS weighted; EU-15 excluding DK, S, UK; 1961–91: including D_90.
(3) PPS weighted; 1961–91: including D_90.

Table 28

Terms of trade; goods and services (national accounts)

(1991 = 100)

	B	DK	D (1)	EL	E	F	IRL	I	L	NL
1960	102.7	102.6	88.4	108.4	68.2	117.3	114.2	95.6	119.5	101.1
1961	100.7	101.3	89.7	108.4	68.2	117.6	112.8	97.0	114.2	101.4
1962	100.9	103.9	91.7	108.1	70.1	115.4	114.4	97.5	111.5	102.2
1963	99.1	104.8	90.4	115.4	73.0	117.7	114.6	99.1	110.1	103.4
1964	100.0	107.0	91.2	113.7	73.3	122.6	118.4	99.8	110.2	103.4
1965	101.2	107.6	91.0	111.7	73.5	121.6	117.6	99.2	109.8	105.3
1966	101.8	109.0	91.6	114.2	80.0	120.2	119.5	97.5	109.2	105.2
1967	101.7	107.7	93.2	114.1	89.0	121.4	120.6	97.9	110.4	106.1
1968	101.3	105.7	92.6	111.5	94.7	123.1	118.8	97.6	111.8	108.6
1969	102.8	109.6	94.5	113.1	97.7	121.3	120.9	98.8	115.5	107.4
1970	103.4	110.5	104.5	111.0	96.0	118.7	112.7	101.1	122.5	106.6
1971	102.1	107.9	108.0	107.3	96.5	119.5	114.7	100.6	113.3	106.0
1972	103.4	113.1	108.3	103.8	100.9	120.3	121.0	102.2	114.2	108.1
1973	104.2	108.5	107.0	109.6	100.1	122.5	127.2	90.1	120.5	108.1
1974	101.7	98.4	99.8	103.9	86.3	104.0	108.4	80.3	124.5	102.7
1975	100.5	101.1	101.8	96.8	89.3	106.8	106.4	82.7	111.8	103.1
1976	100.0	101.2	99.2	94.9	90.5	104.8	110.0	78.6	114.4	103.3
1977	100.5	100.0	99.3	98.9	88.5	102.0	108.1	79.9	107.1	103.6
1978	100.6	102.5	102.8	95.8	95.3	105.4	110.0	81.0	108.1	104.0
1979	100.7	97.6	99.3	92.4	97.3	103.8	106.1	79.8	107.9	101.4
1980	96.9	92.2	93.5	93.0	83.8	96.2	99.6	77.5	107.8	99.7
1981	93.4	89.8	88.5	99.1	76.3	91.4	97.7	75.0	107.3	99.0
1982	92.9	90.9	89.1	96.6	77.0	90.7	100.7	78.1	108.9	100.9
1983	92.7	91.5	90.0	99.9	74.0	91.0	104.4	79.7	106.9	100.7
1984	92.9	91.1	88.5	92.5	74.6	90.1	103.1	79.8	104.7	100.1
1985	93.6	92.9	88.6	91.2	77.9	91.4	103.7	80.7	105.6	100.3
1986	97.4	98.9	98.6	94.0	89.7	100.4	108.1	91.3	106.5	101.3
1987	98.3	99.2	102.5	96.0	91.2	100.9	107.2	93.8	105.3	99.2
1988	99.7	99.8	102.6	98.2	93.0	101.9	106.4	92.5	103.0	100.1
1989	100.4	99.8	100.2	95.6	95.0	100.0	107.6	92.3	103.5	99.8
1990	100.0	101.1	100.9	98.0	97.7	100.4	102.7	96.8	101.3	100.3
1991	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
1992	101.7	103.3	102.2	97.9	101.8	101.4	99.3	99.8	102.3	99.2
1993	103.3	103.5	104.0	99.3	100.1	102.4	101.4	95.9	105.6	99.4
1994	102.7	103.4	104.4	102.5	99.0	101.8	99.2	94.5	105.3	99.8
1995	101.7	103.5	105.6	104.1	99.5	101.9	97.4	92.5	102.3	100.7
1996	101.2	105.4	105.2	104.7	100.4	101.3	97.7	96.2	102.2	100.0
1997	100.6	104.4	103.3	105.8	100.3	101.8	98.1	95.1	103.9	100.4
1998	102.0	104.8	105.3	106.1	101.2	103.1	98.4	97.3	104.5	100.8
1999	101.0	105.9	106.1	106.2	101.1	102.3	98.0	95.8	105.0	99.9
2000	98.9	105.0	101.6	103.8	98.0	98.9	95.7	90.1	102.9	98.5
2001	98.5	104.5	101.1	103.1	97.7	98.4	95.2	89.5	102.1	98.4
2002	99.0	104.6	101.1	103.7	97.8	99.9	95.1	89.9	102.8	99.4

(1) 1960–91: D_90.

(1991 = 100)

	A	P	FIN	S	UK	US	JP
1960	108.8	101.4	101.3	118.4	98.3	138.1	145.1
1961	110.4	99.3	102.7	118.3	99.6	139.4	142.4
1962	110.1	99.7	100.5	115.0	100.7	141.0	143.2
1963	110.9	101.2	101.2	114.3	99.0	138.4	144.3
1964	111.9	102.9	105.0	111.9	98.9	136.4	144.4
1965	112.8	103.1	108.7	112.2	99.9	139.0	144.7
1966	113.0	101.2	106.1	112.3	101.3	139.7	141.2
1967	111.9	107.6	103.1	112.3	102.5	145.2	141.6
1968	113.0	112.8	101.3	112.3	99.8	145.6	140.8
1969	110.4	110.1	102.7	112.9	99.6	146.5	138.9
1970	109.6	106.1	104.1	113.9	101.2	144.3	139.5
1971	108.6	107.6	102.2	112.9	102.3	140.6	147.8
1972	110.0	109.5	101.0	112.7	103.8	135.5	154.0
1973	113.5	105.0	102.8	110.5	93.7	131.3	142.6
1974	107.2	101.8	99.9	101.3	82.5	113.4	114.1
1975	108.0	90.3	105.9	109.6	87.8	115.7	109.4
1976	106.9	87.0	107.5	108.7	86.8	115.9	106.0
1977	104.9	90.2	105.1	103.1	88.2	110.8	106.2
1978	105.8	93.0	100.3	99.5	92.0	109.7	118.0
1979	104.3	90.9	99.9	97.7	93.9	105.0	100.0
1980	101.1	86.7	93.1	95.8	97.7	92.9	79.8
1981	97.2	81.9	90.9	94.0	98.3	94.6	80.2
1982	98.6	83.0	92.1	90.6	98.2	98.4	77.3
1983	99.8	83.1	91.8	89.9	98.7	102.7	77.8
1984	99.9	82.5	95.4	92.7	97.7	104.6	79.8
1985	99.2	85.8	95.1	92.4	98.7	105.2	79.5
1986	100.6	96.2	98.3	98.1	94.8	103.6	101.4
1987	101.4	97.3	100.3	97.1	95.1	100.4	104.4
1988	101.9	97.2	103.9	99.1	96.2	100.8	107.0
1989	100.3	97.7	104.7	99.6	97.7	100.1	103.8
1990	100.6	99.0	103.8	98.2	98.7	98.2	97.4
1991	100.0	100.0	100.0	100.0	100.0	100.0	100.0
1992	100.5	103.3	98.6	99.3	101.7	99.6	101.7
1993	100.4	104.1	97.0	94.9	102.0	100.5	103.4
1994	100.6	105.9	98.8	94.6	99.9	100.7	104.8
1995	100.5	107.7	103.6	95.7	97.3	100.3	104.3
1996	99.5	104.0	102.6	95.4	98.3	100.8	97.9
1997	98.5	104.0	101.0	93.8	101.0	103.0	93.4
1998	98.9	105.9	103.0	93.9	103.2	106.4	95.9
1999	98.7	106.1	98.5	91.9	104.5	105.3	97.0
2000	96.5	102.4	98.2	90.8	104.9	103.4	89.5
2001	95.9	101.9	98.0	90.6	105.1	103.6	88.7
2002	95.5	102.0	98.2	90.6	105.6	103.7	88.8

Table 29

Nominal compensation per employee; total economy

(national currency; annual percentage change)

	B	DK	D (1)	EL	E	F	IRL	I	L	NL
1961	3.3	12.9	10.2	4.6	12.9	10.6	8.3	8.2	2.9	7.4
1962	7.4	11.1	9.1	6.6	15.2	11.6	8.5	13.4	4.8	6.8
1963	8.1	4.6	6.1	7.7	21.1	11.4	5.2	19.7	8.0	9.3
1964	9.9	10.7	8.2	13.3	13.7	9.2	13.7	11.6	13.3	16.5
1965	9.6	13.8	9.5	12.2	15.6	6.5	5.3	8.2	4.2	11.7
1966	8.8	10.2	7.6	12.6	18.1	6.0	8.5	8.0	5.0	11.1
1967	7.5	10.9	3.3	9.5	14.7	7.0	8.0	8.3	2.8	9.3
1968	6.4	10.0	6.7	9.8	8.8	11.9	10.6	7.6	5.9	8.6
1969	8.5	11.0	9.5	9.6	11.8	10.9	13.9	7.6	5.6	13.2
1970	9.3	11.0	16.0	8.8	9.4	10.4	16.8	15.3	15.1	12.6
1961–70	7.9	10.6	8.6	9.4	14.1	9.5	9.8	10.7	6.7	10.6
1971	12.2	11.6	11.4	8.0	13.6	11.3	14.8	13.4	7.8	13.9
1972	14.2	8.0	9.6	12.6	17.7	10.1	15.8	10.6	9.7	12.9
1973	13.5	13.1	11.9	17.2	18.3	12.4	18.8	17.7	11.4	15.6
1974	18.0	18.4	11.4	19.3	21.3	17.8	18.0	22.6	22.9	15.8
1975	16.5	13.9	7.0	20.3	22.5	18.7	28.9	20.8	12.4	13.6
1976	15.8	12.0	7.7	23.2	23.4	14.8	19.6	20.9	11.1	11.0
1977	9.1	10.1	6.6	22.0	26.8	12.2	14.9	20.8	9.9	8.5
1978	7.2	9.7	5.5	23.1	24.8	12.4	15.5	16.5	5.9	7.0
1979	5.8	10.1	5.8	22.1	19.0	12.8	18.9	19.9	6.7	5.6
1980	10.6	10.6	6.8	15.7	17.3	14.4	21.1	21.4	9.2	5.4
1971–80	12.2	11.7	8.3	18.3	20.4	13.6	18.6	18.4	10.6	10.9
1981	6.4	9.7	4.8	21.3	15.3	14.0	18.1	22.6	8.3	3.4
1982	7.0	12.2	4.2	27.5	13.7	14.3	14.2	16.2	6.9	5.9
1983	5.9	8.7	3.6	21.6	13.8	10.2	12.8	15.8	6.9	3.1
1984	6.9	6.2	3.4	20.8	10.0	7.4	10.7	11.7	7.1	0.3
1985	5.1	5.4	2.9	21.0	9.6	6.9	9.2	10.0	4.3	1.3
1986	3.9	5.0	3.6	12.0	9.1	4.4	5.1	7.5	5.7	2.1
1987	2.0	8.5	3.2	11.3	6.8	3.3	5.1	7.9	4.1	1.4
1988	2.2	5.6	3.0	20.1	7.4	4.4	7.0	8.2	3.4	0.9
1989	3.9	4.2	2.9	23.2	6.9	4.1	6.5	8.6	7.7	0.7
1990	7.6	4.0	4.7	17.9	9.5	5.1	4.2	10.4	5.5	3.2
1981–90	5.1	6.9	3.6	19.6	10.2	7.3	9.2	11.8	6.0	2.2
1991	7.5	3.9	5.9	15.4	9.5	4.1	4.3	8.8	6.4	4.5
1992	5.8	4.1	10.5	11.8	10.4	4.4	7.0	5.8	5.3	4.7
1993	3.7	2.3	4.1	9.8	6.8	3.0	6.4	4.6	5.0	3.3
1994	4.0	1.5	3.0	10.9	2.8	2.1	2.5	3.0	4.1	2.8
1995	2.4	3.8	3.6	12.9	3.0	2.6	2.0	4.2	2.2	1.9
1996	1.6	4.1	1.3	8.8	4.5	2.7	3.3	6.1	2.3	1.4
1997	2.9	3.5	0.8	13.6	2.1	2.5	5.7	4.1	3.1	2.2
1998	2.0	3.2	1.1	6.0	2.8	2.6	6.9	– 1.8	0.9	2.8
1999	2.3	4.0	1.1	4.8	2.8	1.8	5.6	1.9	3.1	3.0
2000	3.2	4.2	1.7	4.6	3.4	1.5	7.7	2.6	5.0	4.2
1991–2000	3.5	3.4	3.3	9.8	4.8	2.7	5.1	3.9	3.7	3.1
2001	3.0	3.3	1.9	5.0	3.7	2.5	8.1	2.9	4.0	4.3
2002	2.9	3.7	2.6	5.0	2.7	3.0	8.3	2.7	4.0	4.3

(1) 1961–91: including D_90.

(national currency; annual percentage change)

	A	P	FIN	S	UK	EUR-11 (1)	EUR-12 (2)	EU-15 (3)	US	JP
1961	9.3	5.8	7.9	8.1	6.5	9.6	9.5	8.7	3.2	13.2
1962	7.6	4.8	9.2	9.9	4.5	10.7	10.7	9.0	4.4	14.1
1963	7.9	8.1	10.8	9.4	4.9	11.7	11.7	9.8	4.0	13.2
1964	9.3	8.3	15.0	9.9	6.9	10.4	10.5	9.6	5.1	13.1
1965	9.1	11.0	9.6	8.6	6.7	9.2	9.2	8.7	3.7	11.9
1966	9.3	9.9	8.1	8.9	6.4	8.7	8.7	8.2	5.0	11.2
1967	9.5	13.7	9.7	9.2	6.2	7.3	7.3	7.2	4.3	12.1
1968	7.3	3.6	10.9	6.6	7.7	8.5	8.5	8.3	7.4	13.7
1969	8.3	10.0	7.4	6.9	7.1	9.9	9.9	9.2	7.3	15.8
1970	8.0	22.6	9.4	7.9	12.9	13.1	13.1	12.8	7.6	16.7
1961–70	8.6	9.7	9.8	8.5	7.0	9.9	9.9	9.1	5.2	13.5
1971	12.6	11.5	15.2	9.0	11.3	12.2	12.2	11.9	7.3	14.6
1972	11.0	15.8	14.6	8.5	13.0	11.3	11.4	11.5	7.3	14.2
1973	13.2	17.7	18.1	6.9	13.1	14.4	14.5	13.9	6.9	21.0
1974	13.9	35.1	24.0	12.9	18.7	17.4	17.4	17.6	8.2	25.7
1975	12.7	34.6	28.3	16.9	31.2	16.1	16.1	19.0	9.1	16.2
1976	9.2	24.5	16.3	17.9	14.8	14.9	15.0	15.0	8.3	11.1
1977	8.5	24.2	9.0	12.2	10.6	13.7	13.8	13.1	7.7	10.1
1978	9.0	18.8	6.1	10.9	13.3	12.0	12.1	12.3	7.7	7.5
1979	5.8	19.9	11.4	8.6	15.2	12.0	12.2	12.5	8.8	6.0
1980	6.6	25.7	13.1	10.9	19.8	13.1	13.2	14.2	10.2	6.5
1971–80	10.2	22.6	15.4	11.4	16.0	13.7	13.8	14.1	8.1	13.1
1981	8.1	21.0	13.9	9.2	14.1	12.1	12.2	12.5	9.5	6.4
1982	6.3	21.5	9.6	6.2	8.4	10.7	11.0	10.5	7.7	3.8
1983	4.7	21.8	10.0	7.9	8.7	9.3	9.5	9.3	5.4	2.2
1984	5.1	21.2	10.4	8.2	5.9	7.3	7.5	7.2	5.1	3.9
1985	5.3	22.5	10.3	7.5	7.6	6.6	6.8	6.9	4.6	2.9
1986	5.5	21.6	7.3	8.7	8.0	5.5	5.6	6.2	4.1	3.2
1987	4.0	14.4	7.7	7.0	7.4	4.6	4.7	5.4	4.2	3.3
1988	3.8	13.1	8.9	7.5	8.3	5.0	5.2	5.8	4.8	3.8
1989	4.5	15.2	10.2	11.3	9.3	5.0	5.3	6.2	3.2	4.8
1990	5.5	19.2	9.4	11.3	9.0	6.8	7.0	7.5	5.2	5.5
1981–90	5.3	19.1	9.7	8.5	8.7	7.3	7.4	7.7	5.4	4.0
1991	6.3	18.1	6.4	6.8	9.0	6.6	6.7	7.2	4.6	4.6
1992	5.8	16.3	2.2	3.9	5.6	7.6	7.7	7.2	5.3	1.3
1993	4.4	6.0	0.9	4.4	4.2	4.2	4.3	4.2	2.8	0.8
1994	3.5	5.6	3.1	4.8	3.4	2.9	3.0	3.1	2.4	1.8
1995	2.9	7.2	3.9	2.8	2.6	3.3	3.5	3.3	1.8	1.3
1996	1.1	4.9	2.7	6.8	1.8	2.9	3.0	2.8	2.5	1.1
1997	0.6	3.7	1.7	3.0	4.4	2.1	2.3	2.7	3.1	1.0
1998	2.8	3.7	4.1	3.3	5.1	1.5	1.5	2.2	4.4	– 0.6
1999	2.0	5.3	2.3	4.1	4.5	1.9	2.0	2.5	4.0	– 0.3
2000	2.1	5.4	4.1	4.0	4.1	2.4	2.5	2.8	4.7	0.9
1991–2000	3.1	7.5	3.1	4.4	4.5	3.5	3.6	3.8	3.6	1.2
2001	2.7	5.5	3.5	4.2	4.2	2.8	2.9	3.2	5.2	0.9
2002	2.0	4.9	3.4	4.2	4.4	3.0	3.0	3.3	4.9	1.1

(1) PPS weighted; EU-15 excluding DK, EL, S, UK; 1961–91: including D_90.
(2) PPS weighted; EU-15 excluding DK, S, UK; 1961–91: including D_90.
(3) PPS weighted; 1961–91: including D_90.

Table 30

Real compensation per employee; deflator GDP; total economy

(national currency; annual percentage change)

	B	DK	D (1)	EL	E	F	IRL	I	L	NL
1961	2.1	8.2	5.2	3.5	10.9	7.6	5.6	5.3	6.8	4.9
1962	5.7	4.2	5.0	1.9	9.0	6.1	3.4	7.2	0.9	3.2
1963	5.0	– 1.1	2.9	6.5	11.6	4.6	2.4	10.4	4.7	4.4
1964	5.0	5.8	5.0	9.6	6.9	4.9	3.7	4.8	7.1	7.2
1965	4.2	5.9	5.5	7.8	5.9	3.4	0.8	3.8	1.3	5.2
1966	4.5	3.1	4.0	7.4	9.1	3.0	3.9	5.6	1.0	4.8
1967	4.1	4.4	1.7	7.2	5.7	3.7	4.6	5.4	2.3	4.8
1968	3.6	2.8	4.3	8.2	2.7	7.6	6.1	5.7	0.8	4.2
1969	4.3	3.7	5.1	6.2	6.3	3.7	4.4	3.4	0.3	6.3
1970	4.4	2.4	7.7	4.8	3.2	4.6	6.5	7.9	0.0	6.1
1961–70	4.3	3.9	4.6	6.3	7.1	4.9	4.1	5.9	2.5	5.1
1971	6.2	3.7	3.4	4.9	5.3	4.6	3.8	6.2	8.7	5.4
1972	7.4	– 1.1	4.1	7.2	8.5	2.9	2.1	4.2	3.7	3.3
1973	6.0	2.2	5.2	– 3.1	5.8	3.6	3.1	3.5	– 0.7	5.9
1974	4.8	4.7	4.1	– 2.6	4.6	5.4	11.2	1.6	5.1	6.2
1975	3.9	1.3	1.3	6.4	4.9	5.1	7.3	4.0	13.3	3.1
1976	7.6	2.7	3.9	5.8	5.9	3.3	– 1.2	2.2	– 1.0	1.9
1977	1.5	0.2	2.8	7.2	2.7	2.7	1.4	2.0	8.6	1.8
1978	2.7	0.2	1.2	8.2	3.4	2.1	4.3	2.4	0.7	1.7
1979	1.2	2.0	1.9	1.7	1.8	2.5	4.5	3.3	0.3	1.4
1980	6.2	1.9	1.7	– 2.8	3.4	2.9	5.5	0.4	1.2	– 0.1
1971–80	4.7	1.8	2.9	3.2	4.6	3.5	4.2	3.0	3.9	3.0
1981	1.5	– 1.8	0.6	0.0	2.4	2.7	0.5	2.9	1.1	– 1.8
1982	– 0.7	1.0	– 0.2	0.2	– 0.2	2.5	– 0.9	– 0.8	– 3.5	0.5
1983	0.2	0.3	0.3	0.9	1.8	1.1	1.7	0.6	0.1	1.0
1984	1.7	0.1	1.3	– 0.8	– 1.5	0.4	4.1	0.2	2.6	– 1.1
1985	0.4	0.4	0.9	1.7	1.8	1.4	3.7	1.0	1.3	– 0.5
1986	0.8	1.0	0.4	– 5.7	– 1.7	– 0.6	– 0.6	– 0.4	2.9	1.9
1987	0.6	3.2	1.3	– 3.4	0.9	0.4	2.8	1.6	3.1	2.2
1988	– 0.1	3.0	1.5	2.9	1.7	1.4	3.5	1.4	2.7	– 0.3
1989	– 1.0	– 1.0	0.4	7.6	– 0.2	0.9	1.4	2.0	4.1	– 0.5
1990	4.5	0.4	1.5	– 2.2	2.0	2.1	4.6	2.0	2.0	0.9
1981–90	0.8	0.6	0.8	0.1	0.7	1.2	2.1	1.0	1.6	0.2
1991	4.6	1.1	1.9	– 3.7	2.3	1.1	2.5	1.1	4.8	1.7
1992	2.1	1.2	5.2	– 2.6	3.3	2.4	4.1	1.2	1.0	2.3
1993	0.0	0.9	0.4	– 4.0	2.4	0.7	1.1	0.6	4.3	1.4
1994	2.2	– 0.3	0.5	– 0.4	– 1.2	0.4	0.8	– 0.4	– 1.2	0.4
1995	0.6	2.0	1.6	2.8	– 1.8	0.9	– 1.0	– 0.8	1.5	0.0
1996	0.4	1.6	0.3	1.4	1.0	1.2	0.9	0.8	0.6	0.3
1997	1.5	1.8	0.0	6.3	– 0.1	1.2	1.2	1.7	– 0.2	0.2
1998	0.4	1.1	0.0	0.8	0.5	1.7	1.1	– 4.3	– 0.6	0.8
1999	1.3	1.2	0.2	1.8	– 0.1	1.4	1.8	0.4	0.8	1.3
2000	2.7	1.3	1.9	2.2	0.1	0.7	3.2	0.7	3.3	1.9
1991–2000	1.6	1.2	1.2	0.4	0.6	1.2	1.6	0.1	1.4	1.0
2001	1.4	0.9	0.8	2.3	0.4	1.4	3.9	0.8	1.9	0.7
2002	0.9	1.4	1.5	2.1	0.2	1.2	4.4	0.5	0.7	0.6

(1) 1961–91: including D_90.

(national currency; annual percentage change)

	A	P	FIN	S	UK	EUR-11 (1)	EUR-12 (2)	EU-15 (3)	US	JP
1961	3.8	3.4	2.4	5.0	3.2	6.1	6.1	5.3	2.1	4.9
1962	3.6	5.0	5.1	5.6	0.9	5.9	5.8	4.4	3.0	9.2
1963	4.2	5.5	5.4	6.3	2.7	5.8	5.8	4.8	2.9	7.6
1964	5.9	7.1	7.3	5.2	3.2	5.4	5.4	4.9	3.5	6.9
1965	3.2	6.9	4.3	2.5	1.6	4.5	4.6	3.8	1.7	6.3
1966	6.0	4.2	3.2	2.2	1.9	4.7	4.7	4.0	2.1	5.5
1967	6.1	10.0	2.2	4.0	3.1	3.8	3.9	3.7	1.2	6.2
1968	4.3	2.2	– 1.0	4.1	3.5	5.1	5.1	4.7	2.9	7.4
1969	5.4	3.7	3.1	3.3	1.5	4.7	4.7	4.0	2.3	10.4
1970	3.1	18.6	5.3	2.6	5.2	6.3	6.3	5.9	2.1	9.2
1961–70	4.6	6.6	3.7	4.1	2.7	5.2	5.2	4.5	2.4	7.3
1971	6.0	6.1	7.0	1.8	1.8	4.8	4.9	4.2	2.2	8.8
1972	3.1	7.4	5.7	1.4	4.5	4.3	4.4	4.3	3.0	8.1
1973	4.8	7.6	3.6	– 0.2	5.5	4.5	4.3	4.3	1.3	7.3
1974	4.0	13.6	1.3	3.2	3.3	4.0	3.8	3.7	– 0.8	4.0
1975	5.8	15.8	13.3	2.1	3.2	3.9	3.9	4.0	– 0.2	8.4
1976	3.4	7.1	2.7	5.3	– 0.4	3.6	3.5	2.9	2.5	2.9
1977	2.7	– 1.8	– 0.7	1.5	– 2.8	2.2	2.3	1.3	1.2	3.2
1978	2.8	– 2.9	– 1.5	1.2	1.6	1.8	1.9	1.8	0.5	2.7
1979	2.3	0.4	2.3	0.6	0.6	2.1	1.9	1.7	0.4	3.2
1980	1.5	4.0	3.0	– 0.7	0.3	1.7	1.6	1.4	0.9	1.0
1971–80	3.6	5.6	3.6	1.6	1.7	3.3	3.2	2.9	1.1	4.9
1981	1.4	2.9	2.7	– 0.3	2.5	1.4	1.2	1.5	0.2	2.2
1982	0.9	0.7	0.5	– 1.9	0.9	0.1	0.0	0.1	1.4	2.0
1983	1.1	– 2.2	1.4	– 2.0	3.2	0.5	0.4	0.8	1.4	0.4
1984	0.5	– 2.8	1.8	0.6	1.3	0.2	0.1	0.2	1.3	1.2
1985	2.2	0.6	4.6	0.8	1.8	1.0	0.9	1.0	1.4	0.8
1986	2.7	0.9	2.9	1.7	4.8	– 0.2	– 0.3	0.6	1.8	1.4
1987	1.9	3.9	3.3	2.1	2.1	1.1	0.9	1.2	1.1	3.2
1988	2.2	1.8	0.7	1.0	2.1	1.1	1.0	1.3	1.4	3.1
1989	1.7	2.5	3.9	3.1	1.7	0.7	0.7	1.0	– 0.6	2.7
1990	2.0	5.7	3.7	2.3	1.3	1.9	1.7	1.7	1.2	3.1
1981–90	1.6	1.4	2.5	0.7	2.2	0.8	0.7	0.9	1.1	2.0
1991	2.4	5.3	4.4	– 0.8	2.2	1.7	1.5	1.7	1.0	1.8
1992	1.4	5.7	1.3	2.9	1.5	3.2	3.1	2.8	2.8	– 0.4
1993	1.6	– 0.7	– 1.4	1.7	1.4	0.8	0.6	0.8	0.4	0.1
1994	0.6	– 0.7	1.1	2.4	1.9	0.2	0.1	0.4	0.4	1.6
1995	0.6	2.0	– 0.2	– 0.7	0.1	0.4	0.3	0.3	– 0.4	2.0
1996	– 0.2	1.5	2.9	5.3	– 1.4	0.6	0.5	0.3	0.6	2.6
1997	– 0.6	0.6	– 0.3	1.8	1.4	0.5	0.6	0.8	1.1	0.7
1998	2.1	– 0.1	1.0	2.0	2.0	– 0.3	– 0.3	0.2	3.1	– 0.9
1999	1.1	1.7	1.7	3.5	2.0	0.6	0.6	1.0	2.4	0.5
2000	1.3	3.6	0.9	2.7	1.7	1.3	1.3	1.4	2.5	2.1
1991–2000	1.0	1.9	1.1	2.1	1.3	0.9	0.8	1.0	1.4	1.0
2001	1.5	2.9	1.1	2.3	1.7	1.0	1.0	1.2	2.6	– 0.3
2002	0.9	2.5	1.1	1.8	1.6	1.1	1.1	1.2	2.4	0.1

(1) PPS weighted; EU-15 excluding DK, EL, S, UK; 1961–91: including D_90.
(2) PPS weighted; EU-15 excluding DK, S, UK; 1961–91: including D_90.
(3) PPS weighted; 1961–91: including D_90.

Table 31

Real compensation per employee; deflator private consumption; total economy

(national currency; annual percentage change)

	B	DK	D (1)	EL	E	F	IRL	I	L	NL
1961	0.8	9.0	6.7	3.2	10.9	7.3	5.9	6.4	2.4	4.9
1962	6.3	4.7	6.0	4.5	9.4	6.7	4.2	7.7	4.0	4.1
1963	4.3	– 0.9	3.0	4.6	12.4	5.7	2.7	11.8	4.7	5.3
1964	5.5	6.4	5.8	11.7	6.5	5.8	6.3	6.4	10.0	9.1
1965	4.6	7.3	6.0	7.5	5.2	3.6	0.9	4.4	0.8	7.4
1966	4.5	3.4	3.9	9.0	10.3	2.9	4.4	4.9	1.6	5.4
1967	4.7	3.2	1.7	7.9	8.4	4.0	5.1	5.0	0.5	6.1
1968	3.4	2.7	5.0	9.4	3.5	6.8	5.5	6.0	3.3	5.9
1969	5.5	6.1	7.5	6.3	8.4	3.7	5.7	4.5	3.7	6.7
1970	6.5	4.1	12.0	5.2	3.1	5.2	4.0	9.8	10.3	7.8
1961–70	4.6	4.6	5.7	6.9	7.8	5.1	4.4	6.7	4.1	6.3
1971	6.5	3.1	6.0	5.0	5.5	5.0	4.9	7.4	3.0	5.7
1972	8.2	– 0.2	3.8	7.9	9.4	3.5	5.6	4.2	4.4	4.5
1973	7.2	1.3	5.0	0.9	6.3	4.7	6.5	3.0	6.2	5.7
1974	4.7	3.0	4.0	– 4.5	3.0	2.6	1.9	1.1	11.7	5.8
1975	3.6	3.6	0.9	6.6	6.0	6.1	9.3	4.0	1.9	3.3
1976	7.4	0.9	3.3	7.4	6.0	4.4	– 0.4	2.7	1.6	1.8
1977	1.8	0.1	3.2	8.2	2.4	2.5	0.6	3.5	4.0	2.3
1978	2.8	0.4	2.8	8.7	4.8	3.0	6.7	3.2	2.4	2.5
1979	1.8	– 0.1	1.6	5.1	2.1	2.0	3.3	3.8	1.6	0.7
1980	3.7	0.9	0.9	– 5.5	1.3	1.2	2.1	0.7	1.6	– 1.3
1971–80	4.7	1.3	3.1	3.8	4.7	3.5	4.0	3.3	3.8	3.1
1981	– 1.9	– 2.3	– 1.3	– 1.5	0.7	0.8	– 1.3	3.8	– 0.2	– 3.4
1982	– 1.0	2.1	– 0.8	5.3	– 0.8	2.4	– 0.6	– 0.7	– 3.3	0.4
1983	– 0.9	1.0	0.4	1.8	1.1	0.6	3.0	0.7	– 1.2	– 0.6
1984	1.5	– 0.9	0.9	1.3	– 1.7	– 0.4	3.2	0.1	0.5	– 2.5
1985	– 0.6	0.2	1.1	1.1	2.3	1.0	3.8	0.9	0.0	– 1.6
1986	4.0	2.1	4.2	– 8.5	– 0.2	1.8	1.4	1.0	5.2	1.9
1987	– 0.1	4.2	2.7	– 5.1	1.1	0.1	2.6	2.5	2.5	1.2
1988	1.2	3.1	1.6	4.3	2.3	1.6	2.9	2.2	0.6	0.1
1989	0.0	– 0.6	0.0	8.4	0.3	0.3	2.4	1.8	4.0	– 0.7
1990	4.7	1.1	2.0	– 1.6	2.8	2.0	2.1	3.8	1.7	1.2
1981–90	0.7	1.0	1.1	0.5	0.8	1.0	1.9	1.6	1.0	– 0.4
1991	4.8	1.0	2.1	– 3.7	2.9	0.6	1.6	1.7	3.5	1.4
1992	3.8	2.2	5.8	– 3.3	3.7	1.8	3.9	0.3	1.8	1.6
1993	1.0	0.3	0.2	– 3.8	1.2	0.6	4.1	– 0.9	0.8	1.1
1994	1.5	– 1.5	0.4	– 0.2	– 2.0	0.0	– 0.2	– 1.8	1.7	– 0.3
1995	0.7	1.8	1.7	3.7	– 1.7	0.6	– 0.7	– 1.7	0.1	0.8
1996	– 0.6	2.0	– 0.4	0.6	1.0	0.8	0.7	1.7	0.6	– 0.4
1997	1.2	1.5	– 1.1	7.7	– 0.3	1.0	3.0	1.9	1.4	0.2
1998	1.0	1.4	0.0	1.5	0.8	1.8	3.0	– 3.8	– 0.8	1.0
1999	1.1	1.4	0.8	2.4	0.3	1.0	2.2	– 0.2	1.7	1.1
2000	0.6	0.9	0.0	1.7	0.0	0.2	1.7	– 0.2	2.0	1.4
1991–2000	1.5	1.1	0.9	0.6	0.6	0.8	1.9	– 0.3	1.3	0.8
2001	1.1	0.7	0.4	2.1	0.6	1.0	3.9	0.5	1.4	0.3
2002	1.5	1.7	1.2	2.5	0.4	1.3	4.7	0.7	1.8	1.4

(1) 1961–91: including D_90.

(national currency; annual percentage change)

	A	P	FIN	S	UK	EUR-11 (1)	EUR-12 (2)	EU-15 (3)	US	JP
1961	5.2	5.2	5.0	5.7	3.5	6.8	6.7	5.9	2.1	6.5
1962	3.1	2.8	5.0	5.7	0.9	6.4	6.5	4.9	3.2	7.0
1963	5.1	6.9	5.5	5.8	3.2	6.5	6.5	5.4	2.8	5.5
1964	5.4	7.5	6.6	6.1	3.3	6.2	6.3	5.6	3.6	8.7
1965	4.5	5.9	5.1	3.0	1.8	4.9	4.9	4.2	2.1	4.7
1966	6.9	4.2	4.3	2.2	2.5	4.7	4.7	4.1	2.4	6.3
1967	5.4	12.0	2.8	3.6	3.4	4.1	4.2	4.0	1.8	7.8
1968	4.7	– 0.7	1.5	4.8	2.9	5.3	5.3	4.8	3.4	8.2
1969	4.8	4.8	5.2	3.4	1.5	5.9	5.9	4.9	2.7	11.2
1970	4.0	18.8	7.6	2.8	6.6	8.2	8.2	7.6	2.7	8.8
1961–70	4.9	6.6	4.8	4.3	2.9	5.9	5.9	5.1	2.7	7.5
1971	7.2	4.2	7.9	1.3	2.4	5.9	5.9	5.1	2.9	7.2
1972	4.2	8.9	5.7	1.9	6.2	4.7	4.7	4.8	3.7	7.8
1973	6.2	8.1	5.3	– 0.7	4.3	4.8	4.6	4.3	1.4	8.9
1974	3.5	9.3	3.7	2.4	1.4	2.7	2.5	2.3	– 1.9	3.9
1975	4.4	16.0	10.1	5.4	6.4	3.9	3.9	4.6	0.9	4.3
1976	2.5	5.4	2.0	6.2	– 0.9	3.6	3.5	2.8	2.7	1.2
1977	2.7	– 2.4	– 2.1	1.3	– 3.5	2.3	2.4	1.2	1.0	2.5
1978	4.8	– 2.1	– 2.0	– 0.6	3.6	2.7	2.8	2.8	0.5	2.7
1979	1.5	– 4.2	3.2	0.6	1.3	1.7	1.7	1.5	– 0.1	2.4
1980	0.5	3.4	1.7	– 1.3	3.1	0.5	0.3	0.8	– 0.6	– 1.0
1971–80	3.7	4.5	3.5	1.6	2.4	3.3	3.2	3.0	1.0	4.0
1981	0.8	0.7	2.0	– 2.6	2.9	0.0	– 0.2	0.3	0.7	1.7
1982	0.3	1.0	0.8	– 3.9	0.0	– 0.3	– 0.3	– 0.3	1.9	1.1
1983	0.8	– 3.2	1.9	– 2.7	3.4	0.1	0.0	0.5	1.1	0.1
1984	– 0.1	– 5.6	3.3	0.4	0.8	– 0.4	– 0.5	– 0.3	1.3	1.3
1985	2.0	2.6	4.5	0.5	2.2	0.8	0.7	0.9	1.2	0.6
1986	3.8	6.8	4.4	3.4	3.9	2.1	1.7	2.1	1.6	2.5
1987	3.3	4.1	4.4	1.4	3.1	1.5	1.2	1.6	0.4	2.8
1988	2.2	1.4	3.9	1.4	3.1	1.5	1.4	1.7	0.9	3.4
1989	1.8	1.8	4.7	4.0	2.9	0.3	0.4	0.9	– 1.1	2.6
1990	1.9	6.0	3.7	1.3	1.2	2.4	2.1	2.0	0.5	2.8
1981–90	1.7	1.5	3.4	0.3	2.3	0.8	0.6	0.9	0.8	1.9
1991	3.2	5.2	0.5	– 3.2	1.0	1.7	1.4	1.3	0.8	2.0
1992	1.9	6.0	– 1.9	1.7	0.8	3.1	2.9	2.5	2.2	– 0.6
1993	1.0	– 0.6	– 2.9	– 1.2	0.7	0.2	0.0	0.1	0.4	– 0.4
1994	0.2	0.0	2.1	2.0	1.1	– 0.4	– 0.5	– 0.2	0.4	1.1
1995	1.4	2.6	3.5	– 0.1	– 0.3	0.3	0.2	0.1	– 0.5	1.8
1996	– 0.8	1.7	1.3	5.3	– 1.3	0.3	0.2	0.1	0.4	1.0
1997	– 0.9	1.5	0.4	0.8	1.8	0.2	0.3	0.5	1.2	– 0.7
1998	2.3	1.1	2.2	2.3	2.6	0.0	0.0	0.5	3.3	– 0.8
1999	1.2	2.8	0.6	3.3	2.5	0.6	0.6	1.1	2.2	0.2
2000	– 0.2	2.5	1.2	2.9	2.4	0.2	0.2	0.6	2.2	1.1
1991–2000	0.9	2.3	0.7	1.4	1.1	0.6	0.5	0.7	1.2	0.5
2001	0.6	2.5	1.0	2.7	2.2	0.7	0.7	1.0	2.8	0.4
2002	0.2	2.5	1.1	2.3	2.2	1.1	1.1	1.4	2.5	– 0.1

(1) PPS weighted; EU-15 excluding DK, EL, S, UK; 1961–91: including D_90.
(2) PPS weighted; EU-15 excluding DK, S, UK; 1961–91: including D_90.
(3) PPS weighted; 1961–91: including D_90.

Table 32

Adjusted wage share; total economy (1)

(% of GDP at factor cost)

	B	DK	D (2)	EL	E	F	IRL	I	L	NL
1960	69.0	68.2	70.6	101.4	74.4	74.1	79.2	77.2	56.3	63.4
1961	68.1	69.1	72.1	93.1	73.7	74.9	78.8	75.5	58.6	65.7
1962	69.3	69.7	72.5	94.1	73.9	75.0	79.2	75.1	58.2	66.6
1963	69.8	70.1	72.6	88.5	76.2	75.5	78.4	77.1	58.5	68.0
1964	68.9	69.4	71.4	87.3	77.3	75.4	79.2	78.1	58.7	68.5
1965	69.0	72.0	71.6	84.2	77.6	74.6	78.3	77.1	59.1	69.2
1966	70.5	73.1	72.2	84.5	79.6	73.6	81.4	75.5	59.2	71.4
1967	70.9	73.9	71.5	84.9	81.2	72.8	79.6	75.5	59.8	71.0
1968	70.0	74.4	70.0	85.3	78.5	74.0	78.3	74.4	57.6	70.6
1969	69.3	73.6	70.5	81.2	77.7	73.3	78.1	72.5	53.4	71.0
1970	68.9	74.5	72.1	77.7	77.4	73.1	80.2	74.4	53.9	72.3
1961–70	69.5	72.0	71.6	86.1	77.3	74.2	79.1	75.5	57.7	69.4
1971	70.9	75.8	72.7	75.2	77.9	73.2	80.4	77.2	59.5	73.9
1972	71.3	72.6	72.8	73.2	78.5	72.6	76.9	77.2	59.9	73.4
1973	71.4	71.8	73.6	65.5	79.0	72.1	76.5	76.4	55.8	73.7
1974	73.1	74.5	75.2	67.3	77.9	74.0	81.5	75.6	57.1	75.0
1975	75.5	75.4	75.0	68.4	79.6	77.1	79.9	78.4	71.3	76.9
1976	76.7	74.4	73.6	68.4	80.5	77.4	79.5	77.1	68.1	74.7
1977	77.1	74.3	73.7	72.3	79.8	76.9	73.0	77.6	72.7	75.0
1978	77.1	74.3	73.0	73.1	79.1	76.6	71.1	76.9	70.5	74.9
1979	76.9	74.9	72.7	73.0	79.4	77.0	74.0	75.7	69.3	75.4
1980	78.2	75.9	74.5	70.3	78.5	77.7	78.4	75.2	70.8	74.6
1971–80	74.8	74.4	73.7	70.7	79.0	75.5	77.1	76.7	65.5	74.8
1981	78.1	74.9	74.8	74.0	79.1	78.3	77.3	76.8	71.6	72.4
1982	76.7	73.0	74.3	74.9	76.9	78.4	75.7	76.3	68.7	71.7
1983	75.9	72.3	72.3	77.5	76.8	77.7	76.0	76.9	67.8	69.7
1984	74.8	71.3	71.3	75.4	73.0	76.6	74.1	75.2	66.4	67.0
1985	74.3	71.1	70.7	75.8	72.1	76.0	71.7	74.4	66.3	65.8
1986	73.9	71.8	70.0	72.3	70.9	73.6	71.8	72.9	64.5	67.0
1987	73.4	74.0	70.4	72.1	70.8	72.7	71.0	72.8	66.8	68.6
1988	71.3	74.5	69.3	71.2	70.3	71.3	70.0	72.5	64.1	67.8
1989	69.3	72.3	68.5	73.2	69.5	70.1	68.4	72.1	63.2	65.6
1990	71.1	70.8	67.7	73.9	70.6	70.4	67.6	73.5	65.9	65.3
1981–90	73.9	72.6	70.9	74.0	73.0	74.5	72.4	74.3	66.5	68.1
1991	72.9	70.2	67.8	68.4	71.2	70.3	67.8	74.2	67.8	65.7
1991	72.9	70.2	68.5	68.4	71.2	70.3	67.8	74.2	67.8	65.7
1992	73.1	69.4	69.6	67.6	72.4	70.1	69.5	74.2	67.4	66.9
1993	74.0	69.2	69.9	65.8	71.7	70.1	68.1	73.5	66.4	67.5
1994	73.5	66.9	68.7	65.4	69.3	69.3	67.9	71.1	64.5	65.7
1995	72.3	66.7	68.4	66.6	67.4	69.3	64.4	68.9	65.2	65.7
1996	72.4	66.9	67.9	66.2	67.3	69.7	62.1	68.6	65.3	65.8
1997	71.9	67.1	66.9	68.2	67.1	69.2	59.5	69.3	63.0	65.4
1998	71.3	68.1	66.2	69.1	67.4	69.0	58.6	68.3	62.2	65.5
1999	71.5	68.1	66.5	68.2	67.4	69.2	58.0	68.2	63.8	66.1
2000	71.7	67.5	66.9	67.8	67.2	68.5	56.9	67.5	64.5	66.5
1991–2000	72.4	68.0	68.0	67.3	68.9	69.5	63.3	70.4	65.0	66.1
2001	71.4	66.8	66.5	67.4	66.7	68.3	56.6	67.0	64.6	66.6
2002	70.6	66.2	66.3	66.6	66.2	68.3	56.6	66.3	63.7	66.3

(1) Ratio of compensation per employee to GDP at factor cost per person employed.
(2) 1960–91: D_90.

(% of GDP at factor cost)

	A	P	FIN	S	UK	EUR-11 (1)	EUR-12 (2)	EU-15 (3)	US	JP
1960	78.5	68.0	73.7	69.4	71.9	72.7	73.2	72.6	71.2	80.0
1961	78.3	67.6	71.5	69.7	73.3	73.1	73.4	73.2	70.8	76.0
1962	79.6	67.3	72.8	71.9	73.9	73.4	73.7	73.6	70.1	77.1
1963	79.1	67.1	73.6	72.6	72.5	74.2	74.4	73.9	69.8	76.8
1964	79.3	67.2	74.6	71.5	72.1	74.1	74.3	73.6	69.4	74.5
1965	79.2	67.0	75.3	71.7	72.5	73.8	74.0	73.6	68.3	75.9
1966	79.0	67.4	76.2	72.8	73.3	73.8	74.0	73.8	68.0	73.9
1967	79.7	68.7	75.9	72.6	73.0	73.6	73.8	73.6	69.0	71.9
1968	79.3	63.9	72.9	74.2	72.6	72.8	73.1	73.1	69.5	70.0
1969	78.5	64.0	69.1	73.8	73.4	72.2	72.4	72.7	70.9	69.4
1970	76.0	72.6	68.9	72.3	75.0	73.1	73.2	73.4	71.9	69.6
1961–70	78.8	67.3	73.1	72.3	73.2	73.4	73.6	73.4	69.8	73.5
1971	77.7	73.9	72.2	74.5	73.2	74.2	74.2	74.1	70.8	73.0
1972	76.6	73.4	71.6	73.5	73.0	74.0	74.0	73.8	70.6	73.1
1973	78.4	70.5	70.8	71.0	72.4	74.0	73.9	73.5	70.3	74.4
1974	78.3	78.0	68.7	71.1	75.1	75.1	74.9	74.8	71.3	77.5
1975	81.7	93.7	75.4	72.0	77.8	77.1	77.0	76.8	69.8	81.1
1976	80.6	94.0	76.9	75.1	75.2	76.5	76.3	76.1	69.4	81.0
1977	80.2	87.5	75.5	78.0	72.4	76.3	76.2	75.7	69.3	81.3
1978	82.4	79.9	72.4	76.8	71.9	75.7	75.6	75.2	69.0	80.0
1979	80.4	77.5	70.6	74.8	72.7	75.5	75.4	75.0	69.0	79.5
1980	80.5	77.9	71.3	74.0	74.8	76.1	76.0	75.8	70.0	78.6
1971–80	79.7	80.6	72.5	74.1	73.9	75.4	75.4	75.1	70.0	78.0
1981	81.6	79.7	72.7	74.2	75.3	76.6	76.6	76.3	69.3	78.6
1982	79.4	78.5	71.8	71.5	73.6	76.0	76.0	75.4	70.4	78.5
1983	77.3	76.8	71.1	69.8	72.0	75.0	75.1	74.4	68.9	78.0
1984	78.1	74.7	70.9	68.6	72.5	73.6	73.6	73.2	68.2	76.6
1985	78.0	73.4	72.2	69.0	71.9	73.0	73.0	72.7	68.2	74.6
1986	78.0	71.3	72.5	69.4	72.9	71.9	71.9	71.9	68.3	73.7
1987	78.3	71.3	72.5	69.8	72.6	71.8	71.8	71.9	68.7	73.9
1988	77.9	69.7	71.4	69.5	73.1	70.8	70.9	71.2	68.9	72.8
1989	77.2	68.9	71.1	70.7	74.5	69.9	70.0	70.7	67.8	72.3
1990	76.4	70.9	72.7	72.6	75.7	70.3	70.3	71.2	68.3	72.0
1981–90	78.2	73.5	71.9	70.5	73.4	72.9	72.9	72.9	68.7	75.1
1991	76.6	74.9	76.0	72.0	76.8	70.7	70.7	71.6	68.7	71.8
1991	76.6	74.9	76.0	72.0	76.8	70.8	70.8	71.7	68.7	71.8
1992	77.1	76.9	73.6	70.3	75.7	71.3	71.2	71.8	68.4	71.8
1993	77.5	74.7	68.6	68.5	74.0	71.0	71.0	71.3	68.2	71.9
1994	76.7	72.4	66.1	66.6	72.8	69.6	69.5	69.8	67.6	72.8
1995	75.5	71.2	64.3	64.7	72.3	68.8	68.7	69.0	67.2	73.4
1996	73.5	70.9	64.8	67.8	71.3	68.5	68.5	68.8	66.3	72.0
1997	73.1	70.3	63.4	68.1	71.5	68.0	68.0	68.6	65.7	72.1
1998	72.7	69.2	61.9	69.1	71.9	67.5	67.5	68.3	66.3	73.4
1999	72.7	70.0	61.9	72.1	73.0	67.7	67.7	68.7	66.3	73.0
2000	71.9	71.4	60.5	71.3	72.6	67.5	67.5	68.5	65.6	73.3
1991–2000	74.7	72.2	66.1	69.0	73.2	69.1	69.0	69.6	67.0	72.5
2001	71.4	72.6	59.4	71.1	72.2	67.1	67.1	68.2	65.7	71.9
2002	70.6	73.3	58.4	70.9	71.7	66.8	66.8	67.8	65.7	70.8

(1) EU-15 excluding DK, EL, S, UK; 1960–91: including D_90.
(2) EU-15 excluding DK, S, UK; 1960–91: including D_90.
(3) 1960–91: including D_90.

Table 33

Nominal unit labour costs; total economy (1)

(national currency; 1991 = 100)

	B	DK	D (2)	EL	E	F	IRL	I	NL
1960	21.7	11.2	30.8	4.0	5.2	14.2	9.1	5.6	22.6
1961	21.5	12.1	32.9	3.7	5.3	14.9	9.4	5.6	23.9
1962	22.2	12.9	34.4	3.9	5.6	15.6	9.9	5.9	25.0
1963	23.1	13.6	35.6	3.7	6.3	16.7	10.0	6.6	26.8
1964	23.9	14.1	36.1	3.8	6.8	17.3	11.0	7.1	29.3
1965	25.2	15.6	37.8	3.8	7.4	17.6	11.4	7.3	31.3
1966	26.6	16.8	39.4	4.0	8.2	17.9	12.2	7.4	34.2
1967	27.5	17.9	39.5	4.1	9.1	18.4	12.4	7.5	35.3
1968	28.0	19.1	40.0	4.1	9.4	19.7	12.7	7.6	36.4
1969	28.9	20.2	41.4	4.1	9.7	20.7	13.7	7.7	39.4
1970	30.2	22.1	46.3	4.0	10.2	21.9	15.4	8.5	42.4
1971	32.8	24.2	50.3	4.1	11.2	23.4	17.0	9.4	46.4
1972	35.5	25.3	53.0	4.2	12.2	24.8	18.6	10.1	50.4
1973	38.3	28.0	57.3	4.6	13.7	26.8	21.4	11.4	55.5
1974	44.1	33.3	62.9	5.8	15.8	30.9	24.5	13.6	61.9
1975	51.4	37.7	66.3	6.6	19.0	36.4	29.7	16.8	69.7
1976	56.0	40.4	67.4	7.7	22.4	40.4	34.7	19.3	73.8
1977	60.5	43.9	70.0	9.2	27.4	44.3	37.5	22.9	78.4
1978	63.2	47.7	72.3	10.6	33.1	48.4	41.4	25.9	82.7
1979	66.0	51.3	74.6	12.7	38.7	53.1	49.3	29.8	86.7
1980	69.8	56.8	80.1	14.8	43.5	59.8	58.5	35.6	90.9
1981	73.0	62.6	83.8	19.2	48.9	67.0	66.3	43.4	93.2
1982	76.8	68.6	87.1	24.5	54.2	74.6	74.1	50.5	97.3
1983	80.2	73.5	87.4	30.2	60.1	80.6	82.1	58.1	96.8
1984	83.6	76.5	88.1	35.7	63.6	84.9	85.6	63.4	94.2
1985	86.7	79.6	89.5	43.2	67.0	88.7	88.2	68.3	94.3
1986	89.0	82.2	91.9	48.3	71.8	90.6	93.1	72.2	95.6
1987	88.9	89.5	94.1	54.9	75.9	91.9	94.2	76.0	97.2
1988	88.4	92.6	94.2	64.3	80.1	92.5	96.7	80.0	97.1
1989	89.6	95.7	94.9	76.6	84.6	94.0	96.8	84.6	95.2
1990	94.7	97.9	96.8	91.5	92.5	97.1	97.7	92.5	96.6
1991	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
1992	103.7	102.6	106.4	112.6	108.0	102.1	104.5	104.3	103.7
1993	108.4	103.5	110.5	126.9	113.2	104.3	108.9	106.7	106.2
1994	109.1	101.0	111.0	140.5	113.2	104.0	108.8	106.5	105.4
1995	109.7	102.5	113.4	156.7	115.6	105.4	106.3	107.9	106.5
1996	110.5	104.8	113.6	166.0	119.4	106.8	105.4	113.6	107.5
1997	110.8	106.1	112.7	181.4	121.0	107.5	105.0	116.5	109.2
1998	111.7	109.0	112.7	193.0	123.7	108.0	108.9	114.0	111.1
1999	112.7	112.6	113.4	194.2	126.6	108.8	111.5	115.6	113.4
2000	113.3	115.4	113.4	197.4	129.7	109.0	114.1	116.8	116.3
2001	114.5	117.0	113.7	201.3	133.0	110.1	117.9	118.3	119.6
2002	115.7	118.9	114.6	205.0	135.1	112.0	122.3	119.7	123.2

(1) Ratio of compensation per employee to real GDP per person employed.
(2) 1960–91: D_90.

(national currency; 1991 = 100)

	A	P	FIN	S	UK	EU-10 (1)	EU-11 (2)	EU-14 (3)	US	JP
1960	25.8	3.0	9.4	11.7	8.8	16.9	16.7	14.6	25.3	24.0
1961	27.0	3.0	9.6	12.1	9.3	17.6	17.4	15.3	25.4	24.6
1962	28.5	3.0	10.1	12.8	9.7	18.4	18.2	16.0	25.5	26.2
1963	29.4	3.0	10.9	13.3	9.7	19.5	19.2	16.6	25.7	27.5
1964	30.2	3.1	11.9	13.7	10.0	20.3	20.1	17.2	25.9	28.3
1965	31.9	3.2	12.6	14.5	10.5	21.2	20.9	18.0	26.1	30.5
1966	32.7	3.3	13.3	15.6	11.0	22.0	21.7	18.8	26.8	31.4
1967	34.1	3.5	14.0	16.3	11.3	22.5	22.2	19.2	28.0	32.2
1968	34.6	3.3	15.0	17.0	11.6	23.1	22.8	19.8	29.4	33.3
1969	35.2	3.5	14.9	17.5	12.2	24.0	23.6	20.6	31.4	34.7
1970	35.6	4.1	15.5	18.1	13.4	26.1	25.7	22.4	33.4	37.1
1971	38.6	4.4	17.4	19.5	14.5	28.4	28.0	24.3	34.5	41.0
1972	40.6	4.7	18.7	20.7	15.8	30.2	29.8	26.0	36.0	43.5
1973	44.6	4.9	21.1	21.4	17.0	33.0	32.5	28.2	37.9	49.8
1974	49.3	6.6	25.5	23.9	20.6	37.5	37.0	32.4	41.9	63.1
1975	55.5	9.1	31.9	27.7	27.2	42.5	41.9	37.7	44.9	70.9
1976	58.2	10.6	36.9	32.4	30.1	45.8	45.2	41.0	47.3	76.4
1977	60.9	12.5	39.3	37.0	32.6	49.6	49.0	44.6	50.3	81.5
1978	66.9	14.2	40.3	40.5	36.1	53.1	52.4	48.2	53.9	84.0
1979	67.4	16.5	43.0	42.9	41.1	56.9	56.3	52.2	58.7	85.3
1980	70.9	19.7	47.6	47.3	50.3	62.8	62.1	58.8	64.9	89.0
1981	76.5	23.7	53.8	51.8	55.8	68.6	68.0	64.6	70.1	92.5
1982	78.6	27.7	57.8	54.3	58.4	74.1	73.6	69.5	75.8	94.0
1983	79.3	33.4	62.1	57.7	60.4	78.0	77.5	73.2	77.2	95.3
1984	83.0	40.6	66.7	60.5	63.8	80.8	80.4	76.3	79.3	95.6
1985	85.8	48.4	71.4	64.5	66.9	83.8	83.5	79.5	81.8	94.7
1986	88.8	54.9	74.5	68.9	69.3	86.7	86.4	82.4	83.8	95.5
1987	90.7	60.4	77.4	72.1	72.6	88.9	88.7	85.1	86.9	95.1
1988	91.6	65.0	81.2	76.9	77.3	90.1	90.0	87.2	90.0	94.1
1989	93.2	72.6	85.9	84.8	85.0	91.8	91.7	90.4	92.0	95.4
1990	95.8	84.3	93.4	94.0	93.2	95.6	95.6	95.2	96.2	97.3
1991	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
1992	104.9	111.6	98.1	100.8	102.8	104.7	104.7	104.2	102.0	101.3
1993	108.3	117.1	93.8	101.9	103.4	107.9	108.0	107.0	104.3	102.2
1994	109.5	119.7	92.0	101.8	103.2	107.9	108.1	107.0	105.3	103.5
1995	111.1	123.8	93.6	102.3	104.6	109.5	109.8	108.7	107.0	103.5
1996	109.5	127.3	93.7	107.5	106.6	111.0	111.3	110.5	107.8	100.0
1997	109.3	129.5	92.6	108.0	109.6	111.5	111.9	111.5	109.0	100.5
1998	109.7	133.2	93.3	109.7	113.6	111.8	112.2	112.4	111.4	101.8
1999	110.3	138.6	93.8	112.5	117.7	113.0	113.4	114.1	113.3	100.5
2000	109.8	144.0	94.9	114.7	120.0	113.8	114.2	115.2	114.5	99.8
2001	110.3	149.2	95.6	116.8	122.3	115.1	115.5	116.6	117.6	99.1
2002	110.1	153.7	96.1	119.1	124.8	116.6	117.1	118.2	120.6	98.3

(1) EU-15 excluding DK, EL, L, S, UK; export weighted.
(2) EU-15 excluding DK, L, S, UK; export weighted.
(3) EU-15 excluding L; export weighted.

Table 34

Real unit labour costs; total economy ([1])

(1991 = 100)

	B	DK	D ([2])	EL	E	F	IRL	I	NL
1960	94.6	100.1	101.8	149.1	105.8	103.3	113.5	103.4	97.7
1961	92.7	103.3	103.8	136.8	105.1	105.5	114.0	100.8	100.8
1962	94.3	103.4	104.5	137.5	105.7	105.1	114.9	100.7	102.1
1963	94.9	102.9	104.8	129.1	109.0	105.4	113.0	103.6	104.3
1964	93.7	101.6	103.3	127.6	110.3	104.9	113.4	105.2	105.0
1965	94.2	104.9	104.1	123.3	110.5	103.9	112.0	103.9	105.9
1966	95.6	105.8	105.0	123.3	113.0	102.5	115.0	101.9	108.9
1967	95.5	106.1	103.6	123.6	115.3	101.8	113.0	101.4	108.1
1968	94.8	105.8	102.6	123.2	112.1	104.7	111.1	100.4	106.9
1969	94.0	104.4	101.9	117.0	110.4	103.1	109.9	98.3	108.6
1970	93.8	105.6	105.8	112.4	110.0	103.5	112.6	100.9	110.1
1971	96.6	107.3	106.6	109.7	111.3	103.8	112.6	105.1	111.7
1972	98.4	102.9	106.8	107.2	112.0	102.9	108.2	105.8	110.9
1973	99.1	102.7	108.4	97.1	112.2	102.5	108.1	105.0	111.9
1974	101.3	108.3	111.2	101.2	111.9	105.7	116.9	103.9	114.5
1975	105.2	109.1	111.0	101.3	114.8	110.4	117.7	110.6	117.0
1976	106.7	107.1	108.9	101.5	116.4	110.2	113.8	107.8	113.9
1977	107.2	106.0	109.0	106.6	115.5	110.6	108.6	107.9	113.5
1978	107.2	105.1	108.0	107.9	115.7	109.7	108.4	107.1	113.6
1979	107.1	104.9	107.4	107.5	115.7	109.3	113.3	106.3	114.4
1980	108.8	106.8	109.8	105.2	114.5	110.8	117.2	105.2	113.7
1981	108.4	105.4	110.3	112.5	114.4	111.7	113.0	107.7	110.7
1982	106.0	104.0	109.8	112.8	111.4	111.6	109.6	107.0	109.7
1983	104.8	102.7	106.7	115.6	110.4	110.6	109.6	107.0	106.9
1984	103.8	100.8	105.3	112.1	104.7	108.9	107.3	104.7	102.5
1985	102.9	100.0	104.9	114.1	102.4	107.9	105.1	103.6	100.8
1986	102.6	99.3	104.4	107.4	98.8	104.9	104.9	101.4	102.1
1987	101.0	102.9	104.9	106.0	98.7	103.4	103.9	100.6	104.6
1988	98.2	103.9	103.4	106.4	98.6	101.1	103.1	99.1	103.3
1989	94.9	102.0	101.7	110.7	97.2	99.5	98.2	98.5	100.0
1990	97.4	100.6	100.6	109.6	99.1	99.9	99.5	99.5	99.2
1991	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
1992	100.0	99.8	101.3	98.1	101.0	100.1	101.7	99.8	101.4
1993	100.8	99.2	101.5	96.6	101.5	99.9	100.7	98.2	101.9
1994	99.6	95.2	99.5	96.1	97.7	98.0	99.0	94.8	98.8
1995	98.4	94.9	99.5	97.6	95.1	97.7	93.8	91.3	98.0
1996	98.0	94.7	98.7	96.3	94.9	97.6	90.9	91.4	97.8
1997	97.0	94.4	97.2	98.5	94.1	96.9	86.7	91.5	97.4
1998	96.2	94.9	96.1	99.7	94.1	96.6	85.1	87.2	97.2
1999	96.1	95.5	95.8	97.5	93.6	96.9	83.9	87.1	97.5
2000	96.2	95.1	96.1	96.9	92.8	96.3	82.3	86.4	97.8
2001	95.7	94.2	95.3	96.3	92.2	96.2	81.6	85.7	97.2
2002	94.9	93.6	95.0	95.3	91.5	96.2	81.6	84.9	96.6

([1]) Ratio of compensation per employee to nominal GDP per person employed.
([2]) 1960–91: D_90.

(1991 = 100)

	A	P	FIN	S	UK	EU-10 (1)	EU-11 (2)	EU-14 (3)	US	JP
1960	102.5	98.8	98.5	101.0	97.3	101.5	101.7	101.3	102.4	110.2
1961	101.9	97.8	95.5	101.3	99.3	102.4	102.5	102.5	101.8	104.7
1962	103.5	96.9	97.1	103.3	99.8	102.9	103.1	103.1	100.9	106.6
1963	103.0	96.8	99.4	104.3	98.1	103.8	103.9	103.1	100.3	106.4
1964	102.7	96.5	101.3	102.8	97.2	103.5	103.6	102.5	99.8	103.7
1965	102.4	96.1	101.6	102.5	97.3	103.5	103.5	102.5	98.5	105.9
1966	101.8	96.3	102.6	103.7	97.9	103.7	103.8	102.9	98.6	103.5
1967	102.9	97.5	100.8	103.2	97.3	103.0	103.1	102.2	99.7	100.9
1968	101.6	90.7	96.2	104.9	96.2	102.4	102.5	101.7	100.3	98.4
1969	100.6	90.4	91.9	104.4	95.8	101.3	101.4	100.8	102.0	97.8
1970	97.2	102.0	92.0	102.6	98.0	103.5	103.5	102.7	103.2	97.8
1971	99.2	104.3	95.9	103.3	96.9	105.1	105.1	103.6	101.5	102.7
1972	97.0	103.7	95.1	102.7	97.7	105.0	105.0	103.7	101.6	102.9
1973	98.5	99.9	94.1	98.9	97.8	105.5	105.4	103.8	101.3	104.6
1974	99.5	111.4	92.9	100.9	103.4	107.7	107.7	106.7	102.7	109.7
1975	105.2	133.3	102.6	102.4	107.4	110.9	110.8	109.8	100.6	115.1
1976	104.3	133.0	104.5	107.0	103.2	109.6	109.5	108.2	100.4	114.8
1977	103.4	124.1	101.5	110.5	98.1	109.4	109.3	107.4	100.4	114.8
1978	107.1	115.3	96.8	110.4	97.5	108.6	108.6	106.7	100.4	113.1
1979	104.3	112.0	94.8	108.2	96.9	108.1	108.1	106.1	100.9	111.8
1980	104.5	110.9	95.7	106.9	99.2	109.2	109.2	107.3	102.2	110.5
1981	105.9	113.4	97.4	106.8	99.0	109.7	109.7	107.8	100.9	110.4
1982	103.3	109.7	96.0	103.5	96.4	108.8	108.8	106.5	102.7	110.2
1983	100.5	106.2	95.2	99.9	94.7	107.0	107.1	104.6	100.7	109.8
1984	100.5	103.6	94.2	97.3	95.6	105.0	105.1	103.2	99.6	107.3
1985	100.8	101.4	95.6	97.3	94.9	104.2	104.3	102.4	99.6	104.1
1986	101.5	95.6	95.7	97.3	95.4	103.0	103.0	101.5	99.8	103.1
1987	101.6	95.6	95.3	97.1	95.0	102.9	102.9	101.4	100.5	102.6
1988	101.0	92.5	92.6	97.3	95.4	101.2	101.3	100.2	100.7	100.8
1989	100.0	91.8	92.2	99.3	97.7	99.5	99.6	99.4	99.1	100.2
1990	99.4	94.6	95.1	101.2	99.4	99.6	99.7	99.8	99.7	99.9
1991	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
1992	100.5	101.5	97.2	99.7	98.9	100.6	100.6	100.3	99.6	99.6
1993	101.0	99.8	90.9	98.3	96.8	100.3	100.3	99.7	99.4	99.8
1994	99.3	96.0	87.4	95.9	95.1	97.9	97.9	97.4	98.3	100.9
1995	98.4	94.4	85.3	93.1	94.1	96.8	96.8	96.3	97.8	101.6
1996	95.8	94.0	85.6	96.5	92.8	96.3	96.3	95.8	96.7	99.6
1997	94.4	92.8	83.0	95.7	92.8	95.2	95.3	95.0	95.8	99.9
1998	94.1	91.9	81.1	96.0	93.3	93.8	93.9	94.0	96.8	100.8
1999	93.8	92.4	81.0	98.0	94.4	93.7	93.8	94.1	96.9	100.3
2000	92.6	94.3	79.5	98.7	94.0	93.4	93.5	93.9	95.9	100.9
2001	91.9	95.3	78.1	98.7	93.5	92.8	92.9	93.3	96.1	98.9
2002	90.8	95.9	76.8	98.3	92.9	92.3	92.4	92.8	96.1	97.2

(1) EU-15 excluding DK, EL, L, S, UK; export weighted.
(2) EU-15 excluding DK, L, S, UK; export weighted.
(3) EU-15 excluding L; export weighted.

Table 35

Relative nominal unit labour cost in a common currency; total economy (1)
Performance relative to the rest of 22 industrial countries; double export weights

(USD; 1991 = 100)

	B	DK	D (2)	EL	E	F	IRL	I	NL
1960	109.4	70.1	87.3	180.1	61.0	123.8	97.8	76.7	80.1
1961	102.8	72.0	94.2	159.5	59.1	124.6	96.2	73.3	84.3
1962	101.9	73.8	95.3	161.3	60.4	125.5	98.1	74.5	85.4
1963	101.4	75.4	94.2	147.1	65.3	129.2	98.0	80.4	88.2
1964	100.8	75.6	91.8	146.1	68.0	129.2	105.0	84.5	93.8
1965	102.4	80.4	92.0	141.7	71.6	126.3	103.4	83.7	96.3
1966	103.6	82.9	92.1	142.9	76.2	122.8	105.9	80.4	100.8
1967	104.1	85.5	89.2	142.8	79.9	122.6	104.2	80.1	101.9
1968	104.0	85.3	89.0	142.8	71.7	131.1	99.1	79.6	104.2
1969	102.9	86.5	90.1	134.4	71.0	125.6	101.9	77.8	108.5
1970	98.8	87.2	102.8	122.1	69.0	112.5	105.2	78.7	106.3
1971	99.5	87.7	106.3	111.1	69.6	108.6	108.1	80.3	108.6
1972	104.8	86.7	108.5	99.9	73.0	110.6	108.3	80.2	112.5
1973	105.3	94.8	118.4	92.6	77.4	113.4	110.7	75.2	117.7
1974	108.0	98.9	118.9	103.6	80.0	106.4	106.0	71.0	120.9
1975	112.1	100.1	109.6	93.8	81.7	120.5	101.3	74.5	122.8
1976	116.7	101.4	108.0	96.3	82.4	119.5	100.3	66.6	125.0
1977	123.6	101.5	111.2	103.5	81.7	116.4	97.7	68.1	129.7
1978	124.3	103.4	112.6	101.4	83.8	117.1	100.2	67.7	131.3
1979	122.2	103.1	112.6	106.1	99.2	119.8	108.3	70.4	130.4
1980	116.0	94.1	109.2	96.3	92.8	122.0	108.7	73.6	123.7
1981	106.0	88.9	98.7	104.5	86.8	115.2	103.3	73.7	112.4
1982	94.5	87.6	100.1	114.4	85.0	110.0	107.7	75.0	115.4
1983	92.7	90.2	99.7	110.8	75.4	106.4	111.3	80.5	112.8
1984	91.9	87.9	95.3	108.9	75.4	103.7	107.6	80.6	104.5
1985	92.9	89.2	93.3	107.8	74.9	105.6	108.0	79.9	101.1
1986	98.6	95.8	103.5	92.6	77.7	110.3	117.2	86.1	107.3
1987	99.4	105.1	109.7	91.8	79.7	109.1	112.0	89.1	111.3
1988	95.5	103.4	105.6	97.5	84.6	104.3	109.2	88.4	108.1
1989	93.4	100.3	101.4	104.2	90.0	100.8	103.3	91.3	101.6
1990	99.2	104.3	103.0	108.2	97.4	104.5	104.2	98.5	101.9
1991	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
1992	101.9	101.8	106.4	100.2	101.4	101.4	104.2	97.3	101.9
1993	104.9	103.1	112.0	101.6	91.3	103.6	101.4	81.1	105.2
1994	107.4	100.4	112.3	104.7	85.4	103.6	100.7	77.1	104.4
1995	111.0	105.3	119.9	112.1	86.2	107.6	97.1	70.0	108.3
1996	108.3	105.4	115.4	114.8	88.5	107.8	97.4	80.0	105.8
1997	102.9	102.4	107.1	121.1	84.4	103.0	97.4	81.2	102.0
1998	102.8	104.6	106.1	120.3	85.2	103.2	94.8	78.3	102.8
1999	100.8	104.7	102.9	118.9	84.4	100.1	92.5	76.5	102.2
2000	97.2	101.8	97.0	112.5	82.8	95.0	89.0	73.4	100.9
2001	96.5	101.3	95.1	111.4	83.3	94.0	90.0	72.8	102.2
2002	96.0	101.4	94.3	111.9	83.3	94.2	91.9	72.6	103.9

(1) Ratio of compensation per employee to real GDP per person employed.
(2) 1960–91: D_90.

(USD; 1991 = 100)

	A	P	FIN	S	UK	EU-10 (1)	EU-11 (2)	EU-14 (3)	US	JP
1960	88.1	101.0	83.2	97.9	92.7	83.3	84.6	80.9	173.4	46.3
1961	87.9	98.1	81.1	96.5	94.9	86.2	87.3	84.6	168.9	46.4
1962	88.6	93.4	82.1	97.9	95.7	87.7	88.8	87.0	164.2	48.4
1963	87.2	92.3	85.7	98.0	92.7	91.0	92.0	88.8	159.4	49.8
1964	86.5	90.2	90.6	97.4	91.7	92.5	93.4	89.7	155.4	50.1
1965	87.6	89.6	91.4	98.4	93.0	92.7	93.6	91.3	149.3	52.6
1966	86.3	91.0	92.5	101.3	93.9	92.3	93.2	92.2	147.2	52.2
1967	88.0	92.6	88.1	103.1	91.6	90.6	91.5	89.8	148.5	51.9
1968	88.7	88.1	77.9	107.7	80.5	91.8	92.7	85.2	154.8	52.5
1969	86.9	89.4	74.3	106.4	81.0	90.5	91.2	83.9	158.2	51.9
1970	79.5	96.6	71.1	100.8	82.3	93.3	93.8	86.2	155.6	51.4
1971	80.8	96.1	72.8	99.4	82.5	95.8	96.1	88.2	145.8	54.7
1972	80.4	95.7	69.5	100.6	81.7	100.0	100.0	91.4	132.8	61.4
1973	86.8	96.5	72.9	95.3	72.4	109.1	109.0	93.7	119.2	69.8
1974	88.7	108.7	78.7	91.1	73.8	106.6	106.9	92.3	113.5	72.4
1975	90.9	126.5	84.9	95.4	79.6	110.3	110.3	100.0	105.3	71.2
1976	92.3	124.6	92.4	105.7	70.0	106.7	106.7	92.2	107.5	75.3
1977	95.6	106.6	86.3	107.6	67.3	109.9	110.2	93.9	106.4	82.8
1978	100.9	90.0	74.4	101.0	70.6	110.7	111.0	95.5	98.5	97.0
1979	97.5	81.7	74.1	99.9	79.4	114.5	115.0	105.5	97.5	84.4
1980	95.7	84.3	76.1	99.9	97.1	111.6	111.7	112.1	97.3	75.8
1981	92.7	89.6	80.6	98.1	100.2	95.8	95.9	94.5	106.6	81.8
1982	92.2	84.9	81.9	86.2	93.7	93.6	94.0	88.2	124.1	73.3
1983	91.7	77.6	80.3	78.6	86.9	91.7	91.9	81.9	131.4	80.3
1984	92.5	76.3	84.9	81.0	84.8	86.4	86.5	75.8	140.5	82.5
1985	93.0	77.9	88.1	82.8	85.9	85.5	85.6	75.7	147.3	81.0
1986	99.8	79.5	88.4	85.4	80.9	98.9	98.7	86.8	125.3	102.9
1987	102.9	78.6	89.6	85.2	81.4	105.4	105.2	94.1	112.7	107.9
1988	101.3	77.8	92.5	88.2	89.8	99.2	99.2	92.3	106.3	113.9
1989	99.4	81.1	97.1	94.5	93.0	95.1	95.1	90.4	108.3	106.7
1990	100.9	87.9	101.8	98.6	96.5	103.6	104.0	103.2	102.4	93.6
1991	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
1992	102.7	111.0	82.8	98.7	95.3	105.7	105.8	104.6	96.5	103.5
1993	106.2	106.1	67.3	79.8	85.8	102.0	102.1	92.6	99.7	122.8
1994	107.2	104.0	70.8	78.8	85.6	99.8	99.9	89.8	98.8	133.3
1995	111.0	107.3	78.9	77.9	82.2	105.4	105.9	94.5	98.7	138.0
1996	105.9	109.3	75.8	88.9	84.2	106.2	106.7	98.5	103.1	114.7
1997	101.8	107.3	71.7	84.7	99.5	95.8	96.4	93.5	109.2	107.5
1998	101.8	107.6	70.8	83.1	105.8	94.2	94.6	94.2	115.0	100.8
1999	100.0	108.9	68.5	82.4	107.7	89.2	89.5	88.7	114.1	114.2
2000	96.2	108.8	65.7	83.6	111.4	80.6	80.6	79.5	118.4	126.1
2001	95.2	110.9	64.9	83.3	110.0	79.1	79.0	77.1	122.7	125.2
2002	93.8	112.5	64.2	83.6	110.2	78.8	78.7	76.9	124.6	121.9

(1) EU-15 excluding DK, EL, L, S, UK; relative to 12 industrial countries.
(2) EU-15 excluding DK, L, S, UK; relative to 11 industrial countries.
(3) EU-15 excluding L relative to 8 industrial non-member countries.

Table 36

Exports of goods and services at current prices (national accounts)

(% of GDP at market prices)

	B	DK	D [1]	EL	E	F	IRL	I	L	NL
1960	39.1	31.3	19.0	12.3	8.4	13.9	29.4	12.8	99.1	49.8
1961	40.4	29.1	18.0	11.9	8.1	13.6	32.0	13.1	99.4	47.5
1962	42.0	27.7	17.4	10.4	8.3	12.3	29.8	13.0	91.3	46.8
1963	43.2	29.5	17.8	11.2	7.7	12.1	31.0	12.5	88.8	46.9
1964	44.0	28.9	18.1	9.6	8.8	12.2	30.8	13.2	90.0	45.5
1965	43.4	28.4	18.0	9.5	8.2	12.7	32.2	14.7	92.2	44.8
1966	45.1	27.7	19.2	11.7	8.9	12.7	34.4	15.1	88.3	43.6
1967	44.1	26.5	20.4	11.2	8.6	12.6	35.0	14.8	89.8	42.3
1968	46.4	26.8	21.4	9.9	10.6	12.7	35.9	15.6	92.0	42.8
1969	50.4	26.7	21.7	9.6	11.4	13.5	34.5	16.3	96.3	44.4
1970	52.4	27.2	21.2	9.8	12.5	15.1	34.1	16.2	101.6	47.0
1961–70	45.1	27.9	19.3	10.5	9.3	13.0	33.0	14.5	93.0	45.2
1971	51.0	26.9	20.8	10.1	13.4	15.7	33.4	16.7	100.8	47.4
1972	51.4	26.4	20.6	11.3	13.7	16.0	31.9	17.5	94.7	47.2
1973	56.0	27.8	21.8	14.5	13.7	16.8	35.1	17.1	102.1	49.5
1974	61.7	30.9	26.4	18.0	13.6	19.8	39.3	19.9	117.3	56.5
1975	53.5	29.3	24.7	17.9	12.7	18.2	39.4	20.2	105.7	52.1
1976	56.6	28.1	25.7	17.7	12.9	18.7	42.7	21.7	100.7	53.7
1977	55.4	28.1	25.5	17.6	13.6	19.6	45.7	23.0	99.3	50.3
1978	53.3	27.1	24.8	17.1	14.3	19.5	46.1	23.2	95.8	47.8
1979	58.2	28.8	25.1	19.1	14.1	20.1	45.9	23.9	103.9	52.2
1980	58.1	32.2	26.4	24.7	14.8	20.4	45.7	21.5	101.2	55.7
1971–80	55.5	28.6	24.2	16.8	13.7	18.5	40.5	20.5	102.2	51.2
1981	62.8	36.0	28.7	27.4	16.8	21.3	44.7	22.9	99.0	61.6
1982	67.6	35.7	29.9	22.1	17.4	20.8	44.3	22.5	101.7	60.8
1983	70.2	35.8	28.7	21.2	19.5	21.4	48.3	21.6	103.1	60.3
1984	75.0	36.3	30.6	21.5	21.7	23.0	54.9	22.3	115.6	65.0
1985	72.5	36.4	32.5	20.6	21.4	22.9	55.6	22.5	124.1	66.1
1986	66.4	31.9	30.2	22.6	18.7	20.3	50.6	19.9	114.1	55.1
1987	64.7	31.2	29.0	23.0	18.2	19.7	54.1	19.2	111.7	54.0
1988	68.8	33.2	29.6	20.6	17.8	20.4	57.7	18.8	114.8	57.0
1989	73.4	35.1	31.5	20.3	17.1	21.7	61.1	19.7	115.6	59.9
1990	71.3	35.8	32.1	18.7	16.1	21.2	57.0	19.7	113.3	58.8
1981–90	69.3	34.7	30.3	21.8	18.5	21.3	52.8	20.9	111.3	59.9
1991	69.7	37.2	33.6	18.0	16.1	21.5	57.9	18.5	112.0	58.6
1991	69.7	37.2	26.3	18.0	16.1	21.5	57.9	18.5	112.0	58.6
1992	67.8	36.5	24.5	18.8	16.6	21.5	60.8	19.1	109.5	56.5
1993	65.3	35.4	22.8	17.7	18.3	20.7	66.0	22.3	107.7	54.7
1994	68.3	35.5	23.6	18.1	21.0	21.5	70.8	23.9	108.5	55.5
1995	70.1	35.4	24.5	17.6	22.6	22.5	76.5	27.0	106.2	57.4
1996	71.1	35.8	25.3	17.5	23.9	23.1	77.7	25.8	106.1	57.9
1997	75.7	36.5	27.8	19.4	26.8	25.5	79.8	26.4	109.8	61.1
1998	75.7	35.3	28.9	19.9	27.3	26.1	86.8	26.5	113.7	61.1
1999	76.5	36.9	29.4	20.2	27.3	26.1	87.6	25.5	113.4	60.8
2000	84.9	39.4	33.2	21.6	29.4	28.6	91.9	28.1	120.4	65.7
1991–2000	72.5	36.4	26.6	18.9	23.0	23.7	75.6	24.3	110.7	58.9
2001	89.7	40.9	36.2	22.5	31.0	30.4	94.4	29.8	125.5	67.5
2002	93.4	42.1	38.4	23.1	32.4	31.9	95.9	31.1	129.0	68.4

[1] 1960–91: D_90.

(% of GDP at market prices)

	A	P	FIN	S	UK	EUR-11 (1)	EUR-12 (2)	EU-15 (3)	US	JP
1960	23.3	15.7	21.5	22.8	20.0	19.1	19.0	19.6	4.9	10.7
1961	23.0	14.7	20.3	22.2	19.8	18.6	18.4	19.1	4.9	9.3
1962	23.9	16.8	20.3	21.7	19.4	17.9	17.8	18.5	4.8	9.4
1963	24.1	17.1	19.4	21.7	19.3	17.8	17.7	18.4	4.8	9.0
1964	23.9	22.9	19.3	22.1	18.6	18.2	18.0	18.5	5.1	9.5
1965	24.2	24.0	19.3	21.7	18.5	18.5	18.4	18.7	5.0	10.5
1966	24.1	24.2	19.0	21.2	18.8	18.9	18.8	19.1	5.0	10.6
1967	24.1	24.4	18.8	20.9	18.4	19.1	18.9	19.1	5.0	9.6
1968	24.7	22.4	21.7	21.4	20.6	19.9	19.7	20.1	5.0	10.1
1969	27.3	21.9	23.1	22.6	21.5	20.8	20.6	21.0	5.1	10.5
1970	29.9	21.8	24.5	24.0	22.3	21.7	21.4	21.8	5.6	10.8
1961–70	24.9	21.0	20.6	22.0	19.7	19.1	19.0	19.4	5.0	9.9
1971	29.5	22.4	23.2	24.2	22.5	21.8	21.6	22.0	5.3	11.7
1972	29.4	24.4	24.4	24.1	21.1	22.1	21.9	22.0	5.4	10.6
1973	29.4	23.9	24.3	27.2	23.0	23.1	22.9	23.2	6.7	10.0
1974	31.8	24.0	26.3	32.0	27.3	26.9	26.7	27.1	8.4	13.6
1975	30.7	18.3	22.9	28.0	25.4	24.9	24.7	25.1	8.4	12.8
1976	31.4	15.6	24.4	27.5	28.0	26.0	25.9	26.3	8.2	13.6
1977	30.8	16.5	27.8	27.2	29.7	26.4	26.2	26.8	7.9	13.1
1978	31.9	18.0	29.4	28.1	28.2	26.0	25.9	26.3	8.2	11.1
1979	34.1	24.2	30.8	30.2	27.8	26.8	26.7	27.0	9.0	11.6
1980	35.5	24.5	32.2	29.6	27.1	27.2	27.1	27.3	10.1	13.7
1971–80	31.4	21.2	26.6	27.8	26.0	25.1	25.0	25.3	7.8	12.2
1981	36.8	23.2	32.9	30.1	26.6	28.9	28.9	28.7	9.8	14.7
1982	36.1	23.6	30.5	32.4	26.2	29.1	28.9	28.7	8.8	14.6
1983	35.4	28.0	30.2	35.8	26.4	29.1	28.9	28.9	7.9	13.9
1984	37.3	33.3	30.6	36.6	28.2	30.9	30.7	30.7	7.8	15.0
1985	39.1	33.4	29.2	35.5	28.7	31.4	31.2	31.1	7.3	14.5
1986	35.4	29.7	26.5	33.0	25.6	28.1	28.0	27.9	7.3	11.4
1987	34.5	31.2	25.5	32.7	25.4	27.3	27.2	27.2	7.8	10.4
1988	37.2	31.6	24.5	32.5	23.0	27.8	27.7	27.2	8.8	10.0
1989	39.4	33.5	23.6	32.2	23.7	29.1	28.9	28.4	9.4	10.6
1990	39.6	33.1	22.8	30.1	24.0	28.8	28.6	28.1	9.7	10.7
1981–90	37.1	30.1	27.6	33.1	25.8	29.0	28.9	28.7	8.4	12.6
1991	39.2	30.2	22.0	28.1	23.2	28.9	28.7	28.0	10.1	10.2
1991	39.2	30.2	22.0	28.1	23.2	26.8	26.6	26.4	10.1	10.2
1992	37.9	27.8	26.4	28.0	23.6	26.3	26.2	26.1	10.2	10.1
1993	36.5	26.7	32.5	32.9	25.4	26.5	26.4	26.6	10.0	9.3
1994	36.9	28.3	35.1	36.5	26.4	27.9	27.7	27.9	10.4	9.3
1995	38.1	30.1	37.0	40.5	28.3	29.6	29.4	29.7	11.2	9.4
1996	39.6	29.6	37.5	39.1	29.1	30.0	29.7	30.1	11.3	9.9
1997	42.7	30.6	39.1	42.7	28.5	32.4	32.1	31.9	11.7	11.1
1998	43.5	30.9	38.7	43.8	26.5	33.1	32.9	32.2	11.1	11.1
1999	45.1	29.9	37.4	43.8	25.8	33.3	33.0	32.2	10.7	10.4
2000	49.0	31.8	41.8	46.5	26.7	36.8	36.5	35.1	11.1	10.2
1991–2000	40.9	29.6	34.8	38.2	26.3	30.3	30.1	29.8	10.8	10.1
2001	52.3	33.2	43.7	48.4	27.8	39.2	38.9	37.2	11.7	10.7
2002	55.4	34.4	45.1	49.8	28.6	41.1	40.7	38.8	12.4	11.3

(1) EU-15 excluding DK, EL, S, UK; 1960–91: including D_90.
(2) EU-15 excluding DK, S, UK; 1960–91: including D_90.
(3) 1960–91: including D_90.

Table 37

Exports of goods and services at 1995 prices

(national currency; annual percentage change)

	B	DK	D (1)	EL	E	F	IRL	I	L	NL
1961	9.2	4.3	5.0	12.3	7.9	5.1	17.2	14.7	3.5	2.3
1962	10.1	4.9	2.7	– 7.2	12.8	1.8	– 1.0	10.3	– 1.6	6.2
1963	8.2	10.0	7.9	13.4	3.8	7.1	9.6	6.5	3.8	6.0
1964	9.4	8.5	8.3	– 5.4	25.5	6.7	8.2	10.8	13.3	11.3
1965	6.1	7.9	6.4	16.0	6.8	11.5	8.9	20.0	5.8	7.6
1966	7.7	3.9	10.1	32.0	15.5	6.6	10.6	11.2	– 0.2	5.2
1967	4.3	4.0	7.7	4.4	– 4.6	7.3	10.3	7.2	1.9	6.6
1968	12.2	9.3	12.7	– 2.1	18.4	9.4	9.0	13.9	10.7	12.8
1969	15.3	6.2	9.3	9.7	15.8	15.7	4.6	11.8	13.8	14.9
1970	9.2	5.6	6.9	13.3	18.0	16.1	18.8	5.8	9.0	12.2
1961–70	9.1	6.4	7.7	8.1	11.7	8.6	9.5	11.1	5.9	8.5
1971	4.5	5.6	4.4	14.5	14.2	9.2	4.1	6.9	3.9	10.3
1972	11.1	5.6	6.8	23.8	13.4	12.0	3.6	7.7	5.3	10.2
1973	14.1	7.8	10.6	31.9	10.0	10.8	10.9	5.8	13.9	12.0
1974	3.7	3.5	12.0	4.5	– 1.0	8.8	0.7	8.3	10.7	2.9
1975	– 8.3	– 1.8	– 6.3	8.2	– 0.4	– 1.7	7.6	1.2	– 15.7	– 3.0
1976	12.9	4.3	9.7	12.9	5.0	8.2	8.1	12.6	0.9	10.1
1977	2.1	3.9	3.9	6.0	12.1	7.4	14.0	10.4	4.2	– 1.4
1978	2.3	1.2	2.9	10.9	10.7	5.9	12.3	10.0	2.7	3.3
1979	7.0	8.9	4.3	21.1	5.6	6.7	6.5	7.7	9.7	7.4
1980	– 0.6	6.4	5.2	13.3	2.3	3.2	6.4	– 8.3	– 1.4	2.2
1971–80	4.7	4.5	5.2	14.4	7.1	7.0	7.3	6.1	3.1	5.3
1981	3.5	8.1	7.2	8.1	8.2	3.7	2.0	5.1	– 4.8	1.8
1982	2.7	2.5	3.9	– 16.1	5.0	– 0.6	5.5	– 0.8	– 0.3	– 0.8
1983	2.6	4.7	– 0.8	– 5.0	10.0	4.4	10.5	3.7	5.3	3.2
1984	6.5	3.9	8.2	10.1	11.7	7.1	16.6	7.7	18.0	7.5
1985	0.4	5.0	7.6	0.5	2.7	2.6	6.6	3.9	9.5	5.1
1986	2.8	0.4	– 0.6	18.2	1.9	– 0.4	3.1	0.8	3.3	1.8
1987	5.0	4.3	0.4	5.4	6.3	3.4	13.7	4.5	4.4	4.1
1988	9.6	11.2	5.5	– 3.1	5.1	8.7	8.9	5.1	11.7	9.0
1989	8.3	4.2	10.2	4.8	3.0	10.0	10.3	7.8	8.1	6.6
1990	4.6	6.2	11.0	– 4.1	3.2	4.8	8.7	7.5	3.4	5.3
1981–90	4.6	5.0	5.2	1.5	5.6	4.3	8.5	4.5	5.7	4.3
1991	3.1	6.1	12.6	3.7	7.9	5.9	5.7	– 1.4	6.7	4.7
1992	3.7	– 0.9	– 0.8	10.4	7.4	5.4	13.9	7.3	4.8	2.9
1993	– 0.4	– 1.5	– 5.5	– 3.3	8.5	0.0	9.7	9.0	2.8	1.4
1994	8.4	7.0	7.6	6.6	16.7	7.7	15.1	9.8	4.4	6.7
1995	5.7	2.9	5.7	0.5	10.0	7.7	20.0	12.6	4.4	6.5
1996	1.2	4.3	5.1	3.5	10.4	3.5	12.2	0.6	4.0	4.6
1997	6.7	4.1	11.3	18.2	15.3	11.8	17.4	6.5	10.5	8.8
1998	4.4	2.2	7.0	5.9	8.3	7.8	21.4	3.3	9.9	7.4
1999	5.2	7.9	5.1	6.5	6.6	3.7	12.4	– 0.4	7.9	5.6
2000	9.4	6.3	12.5	7.6	9.7	12.6	14.5	9.6	12.2	8.5
1991–2000	4.7	3.8	5.9	5.8	10.0	6.5	14.2	5.6	6.7	5.7
2001	8.2	6.8	9.8	7.6	8.9	8.5	12.0	8.7	9.6	7.8
2002	7.5	6.2	8.2	7.9	8.7	7.6	10.1	7.4	9.1	6.6

(1) 1961–91: including D_90.

(national currency; annual percentage change)

	A	P	FIN	S	UK	EUR-11 (1)	EUR-12 (2)	EU-15 (3)	US	JP
1961	5.6	1.9	5.1	5.2	3.2	6.5	6.6	5.7	1.6	5.3
1962	9.8	22.7	7.1	8.1	1.7	5.8	5.7	4.9	5.4	17.2
1963	7.1	7.2	2.2	7.3	4.9	6.9	7.0	6.6	7.5	7.0
1964	5.5	39.9	5.8	12.0	3.3	10.1	9.9	8.5	13.4	21.6
1965	7.1	13.5	5.6	5.6	4.3	9.5	9.6	8.3	2.0	23.8
1966	6.7	12.8	6.4	4.9	5.2	8.8	9.0	8.0	6.7	16.9
1967	5.8	8.3	5.9	5.5	0.6	6.4	6.4	5.2	2.2	6.8
1968	8.5	– 0.5	10.0	7.6	12.5	12.0	11.9	11.8	7.3	23.9
1969	17.6	8.7	16.7	11.5	9.8	12.7	12.7	11.9	5.4	20.8
1970	16.5	5.4	8.7	8.6	5.3	10.2	10.2	9.1	10.9	17.5
1961–70	9.0	11.5	7.3	7.6	5.0	8.9	8.9	8.0	6.2	15.9
1971	6.4	11.9	– 1.3	4.8	6.9	7.1	7.1	7.0	0.7	16.0
1972	10.1	20.2	14.5	5.9	1.1	9.6	9.8	8.0	8.2	4.1
1973	5.4	9.2	7.3	13.7	11.9	10.0	10.3	10.6	21.8	5.2
1974	10.7	– 13.3	– 0.6	5.3	7.3	7.0	7.0	6.9	9.6	23.1
1975	– 2.4	– 16.4	– 14.0	– 9.3	– 2.9	– 3.8	– 3.6	– 3.7	– 0.7	– 1.0
1976	11.1	– 0.8	13.4	4.3	9.1	9.8	9.9	9.4	5.9	16.6
1977	4.5	4.1	15.8	1.5	6.9	5.7	5.7	5.7	2.5	11.7
1978	7.7	9.1	9.8	7.8	1.8	5.8	5.9	5.1	10.5	– 0.3
1979	11.9	33.0	7.9	6.1	3.8	6.9	7.1	6.5	9.6	4.3
1980	5.2	2.2	8.5	– 0.6	– 0.3	1.1	1.4	1.1	10.7	17.0
1971–80	7.0	5.0	5.8	3.8	4.5	5.8	6.0	5.6	7.7	9.4
1981	5.1	– 4.4	6.8	2.1	– 0.7	4.8	4.9	3.9	1.1	12.5
1982	1.6	4.7	– 1.4	5.8	0.8	1.5	1.0	1.2	– 7.1	0.9
1983	3.6	13.6	3.0	9.8	1.8	3.1	2.9	3.0	– 2.4	4.8
1984	6.3	11.6	5.2	6.8	6.6	8.1	8.1	7.7	8.4	14.8
1985	7.1	6.7	0.7	1.4	6.0	4.6	4.5	4.6	2.7	5.4
1986	– 2.3	6.8	0.7	3.7	4.5	0.6	0.9	1.6	7.4	– 5.7
1987	3.1	11.2	2.9	4.3	5.9	3.5	3.5	3.9	11.2	– 0.5
1988	10.2	8.2	3.5	2.5	0.6	7.0	6.9	5.8	16.1	5.9
1989	11.3	13.0	1.6	3.1	4.8	8.6	8.6	7.8	11.8	9.1
1990	7.9	10.0	1.2	1.6	4.9	7.2	7.0	6.5	8.7	6.9
1981–90	5.3	8.0	2.4	4.1	3.5	4.9	4.8	4.6	5.6	5.3
1991	5.9	2.6	– 7.3	– 2.3	– 0.2	6.3	6.2	5.1	6.5	5.2
1992	1.7	4.9	10.3	2.3	4.1	3.6	3.7	3.6	6.2	4.9
1993	– 1.3	– 3.6	16.7	7.6	3.9	0.8	0.8	1.3	3.3	1.3
1994	5.6	8.7	13.1	14.1	9.2	8.8	8.8	9.0	8.9	4.6
1995	6.5	9.1	8.6	11.3	9.5	8.2	8.1	8.3	10.3	5.4
1996	6.2	7.1	5.8	3.5	7.5	4.3	4.3	4.7	8.2	6.3
1997	9.9	8.5	14.1	13.0	8.6	10.3	10.4	10.1	12.3	11.6
1998	5.5	7.6	8.9	7.3	2.6	6.9	6.9	6.2	2.3	– 2.5
1999	7.6	2.5	6.3	5.2	3.3	4.5	4.6	4.5	2.9	1.9
2000	9.6	8.0	10.0	9.4	7.5	10.9	10.8	10.3	9.1	7.8
1991–2000	5.7	5.5	8.5	7.0	5.6	6.4	6.4	6.3	6.9	4.6
2001	8.6	7.2	8.7	8.0	7.0	8.9	8.9	8.6	9.3	6.5
2002	8.2	7.1	7.8	7.3	6.6	7.9	7.9	7.6	9.4	8.3

(1) PPS weighted; EU-15 excluding DK, EL, S, UK; 1961–91: including D_90.
(2) PPS weighted; EU-15 excluding DK, S, UK; 1961–91: including D_90.
(3) PPS weighted; 1961–91: including D_90.

Table 38

Intra-EU-15 exports of goods at current prices
Foreign trade statistics

(% of GDP at market prices)

	B/L	DK	D (1)	EL	E	F	IRL	I	NL
1960	19.6	13.7	6.4	2.3	3.5	4.2	17.9	3.7	20.0
1961	20.1	12.3	6.6	2.1	3.1	4.6	19.7	4.0	19.8
1962	22.8	14.3	8.4	2.8	2.8	4.9	17.0	4.8	22.0
1963	25.0	15.4	9.1	2.6	2.4	4.9	18.0	4.5	22.7
1964	26.0	15.2	9.2	2.7	2.8	5.1	18.7	5.2	23.0
1965	27.3	14.7	9.2	2.5	2.2	5.4	17.7	6.0	22.7
1966	27.2	13.9	9.7	2.6	2.3	5.6	17.5	6.2	21.7
1967	26.1	12.9	10.2	3.1	2.2	5.3	18.9	5.9	21.2
1968	28.5	12.9	10.7	3.1	2.4	5.5	19.2	6.3	22.3
1969	33.1	12.9	11.4	3.0	2.6	6.3	18.1	6.7	24.0
1970	34.4	12.9	11.0	3.2	3.2	7.3	18.7	6.8	25.5
1971	32.5	12.5	10.7	3.0	3.5	7.6	19.8	7.2	26.3
1972	34.5	12.3	10.8	3.4	3.4	8.1	20.5	7.9	26.7
1973	37.0	13.6	11.7	4.6	3.7	8.6	23.3	7.9	28.2
1974	37.6	14.9	13.4	5.2	4.0	9.7	26.8	8.8	31.3
1975	33.9	14.4	12.1	5.0	3.5	8.3	28.4	8.6	28.9
1976	36.9	13.7	13.4	5.0	4.1	8.7	28.6	9.8	30.8
1977	35.1	12.9	13.1	4.4	4.2	9.0	32.1	10.1	28.1
1978	34.1	12.8	12.7	4.7	4.4	9.0	32.3	10.4	26.4
1979	38.0	14.0	13.7	4.2	4.7	9.7	32.8	11.1	29.9
1980	38.6	16.0	14.3	5.2	5.1	9.4	31.4	9.6	31.6
1981	39.4	16.3	14.9	4.3	5.0	9.2	28.6	9.0	34.6
1982	42.7	16.2	15.9	4.5	5.4	9.0	28.9	9.5	35.1
1983	44.4	16.4	15.3	5.6	6.2	9.4	31.2	9.1	35.6
1984	45.2	15.8	16.3	6.7	7.4	10.1	35.8	9.1	38.2
1985	45.0	15.9	17.2	6.3	7.5	10.3	35.9	9.6	39.1
1986	43.3	14.4	14.3	7.7	7.0	9.7	34.1	9.3	33.8
1987	42.8	14.4	16.5	8.1	7.3	10.0	37.2	9.3	32.1
1988	42.3	15.2	17.3	5.6	7.6	10.6	39.7	9.4	31.7
1989	46.7	16.3	18.6	7.6	7.7	11.3	42.3	9.8	33.6
1990	44.6	16.8	16.9	6.5	7.7	11.3	39.1	9.6	33.4
1991	43.4	17.2	14.3	6.4	8.0	11.4	39.2	9.2	33.1
1992	40.3	17.2	13.4	6.8	7.8	11.2	40.6	8.9	30.9
1993	40.1	15.6	11.4	5.5	8.4	10.0	41.2	9.7	28.2
1994	41.6	15.4	11.8	5.3	10.2	10.9	45.4	10.6	29.3
1995	41.1	15.7	12.4	5.7	11.1	11.6	47.7	12.0	30.5
1996	42.4	15.4	12.6	5.3	11.9	11.6	43.5	11.4	30.7
1997	47.2	17.6	13.4	4.8	13.2	12.6	45.3	11.2	38.0
1998	50.3	16.9	13.9	4.7	13.2	13.1	50.3	11.4	29.3
1999	50.2	16.2	14.5	4.7	13.2	13.0	48.2	11.0	29.0
2000	52.4	17.3	15.5	4.7	14.2	14.4	47.2	11.4	31.4
2001	54.3	18.1	16.4	4.7	14.8	15.3	46.3	11.6	32.3
2002	55.5	18.6	17.4	4.7	15.6	16.1	45.5	11.7	32.7

(1) 1960–90: including D_90.

(% of GDP at market prices)

	A	P	FIN	S	UK	EU-15 (1)
1960	:	4.3	:	:	3.3	:
1961	:	4.1	:	:	3.7	:
1962	:	4.9	:	10.5	4.6	:
1963	9.7	5.1	10.4	10.6	4.8	7.7
1964	9.5	6.2	11.0	11.1	4.7	8.0
1965	9.5	6.4	10.4	10.9	4.7	8.2
1966	9.1	6.3	10.4	10.7	4.8	8.2
1967	8.7	6.6	9.9	9.9	4.5	8.1
1968	9.0	6.4	11.7	10.4	5.1	8.7
1969	10.3	6.9	12.5	11.1	5.6	9.5
1970	10.7	6.8	13.1	11.8	6.1	10.0
1971	10.1	6.9	12.4	12.0	6.2	10.1
1972	10.2	7.6	13.1	12.0	6.1	10.4
1973	10.4	8.3	12.5	13.9	7.0	11.3
1974	10.9	8.7	14.0	15.8	8.5	12.7
1975	9.9	7.0	10.7	12.9	7.8	11.4
1976	10.9	6.4	11.7	13.1	9.2	12.6
1977	10.9	6.6	12.8	12.4	10.2	12.6
1978	11.6	7.5	13.3	12.9	10.0	12.4
1979	12.7	9.5	15.3	14.3	10.8	13.3
1980	13.0	10.3	15.5	13.9	10.6	13.3
1981	13.1	9.2	13.7	13.5	9.7	13.1
1982	13.0	10.3	12.3	14.4	9.8	13.5
1983	12.8	12.9	12.6	16.3	10.3	13.7
1984	13.7	15.6	13.3	16.5	11.5	14.5
1985	14.8	16.1	12.4	16.1	11.9	14.9
1986	14.7	15.5	12.2	15.5	10.1	13.5
1987	14.9	16.6	12.9	15.5	10.3	14.1
1988	16.0	17.0	11.8	15.9	9.5	14.1
1989	16.7	18.3	11.7	16.0	10.0	14.9
1990	17.5	18.6	11.7	15.0	10.7	14.5
1991	16.4	16.5	12.0	13.8	10.8	13.8
1992	15.8	15.4	14.4	13.6	10.7	13.4
1993	14.2	14.4	15.9	15.3	9.7	12.6
1994	14.6	15.9	16.8	16.4	11.0	13.6
1995	15.6	17.4	17.3	18.9	12.3	14.6
1996	16.0	16.3	16.8	18.0	12.4	14.6
1997	17.2	17.9	17.2	18.8	11.6	15.5
1998	18.5	17.8	18.1	19.7	10.8	15.4
1999	18.9	17.0	18.0	19.7	10.6	15.4
2000	20.8	17.5	20.0	21.1	10.9	16.4
2001	22.4	18.4	20.9	22.1	11.1	17.1
2002	23.7	19.3	21.7	22.8	11.5	17.8

(1) 1960–90: including D_90.

Table 39

Extra-EU-15 exports of goods at current prices
Foreign trade statistics

(% of GDP at market prices)

	B/L	DK	D (1)	EL	E	F	IRL	I	NL
1960	12.7	10.3	9.5	3.0	2.5	6.8	4.2	5.5	12.7
1961	11.6	9.9	8.9	3.1	2.2	6.1	4.5	5.5	12.0
1962	9.8	6.8	6.3	2.6	1.9	4.8	3.9	4.6	9.1
1963	9.0	7.4	6.2	3.1	1.6	4.5	4.2	4.4	8.3
1964	9.0	7.1	6.2	2.7	1.8	4.4	3.3	4.4	7.9
1965	9.5	7.0	6.4	2.5	1.7	4.4	3.1	4.7	7.7
1966	9.5	6.9	6.8	2.9	2.2	4.3	3.8	4.8	7.8
1967	9.2	6.8	7.4	3.1	2.2	4.2	4.0	5.0	7.9
1968	9.8	6.9	8.0	2.3	2.7	4.3	4.6	5.4	7.7
1969	9.4	7.1	7.8	2.5	2.8	4.2	4.7	5.5	7.6
1970	9.6	7.2	7.5	2.4	2.9	4.7	4.7	5.5	7.8
1971	9.3	7.2	7.4	2.2	3.1	4.7	6.1	5.5	7.4
1972	9.3	6.9	7.1	2.6	3.3	4.7	5.3	5.6	7.5
1973	10.3	7.0	7.8	3.0	3.2	5.0	6.1	5.5	7.6
1974	12.2	8.1	9.9	4.0	3.5	6.2	7.5	7.5	9.5
1975	10.7	7.9	9.4	4.2	3.4	6.4	6.2	7.7	8.9
1976	10.0	7.2	9.5	4.4	3.6	6.4	7.6	7.7	9.0
1977	10.9	7.8	9.8	4.4	3.9	6.8	8.4	8.5	8.8
1978	10.9	7.2	9.5	4.1	4.1	6.4	7.8	8.4	8.3
1979	11.1	7.1	9.0	4.0	4.2	6.6	7.6	8.3	8.4
1980	12.0	7.9	9.3	5.3	4.3	6.8	8.7	7.6	9.5
1981	13.8	10.2	10.9	5.1	5.5	7.7	10.2	9.4	11.2
1982	14.5	9.6	11.0	4.6	5.4	7.4	9.8	8.7	10.5
1983	15.5	10.4	10.6	4.7	5.9	7.5	11.4	8.3	10.8
1984	16.9	11.6	11.5	5.0	6.6	8.1	13.5	8.6	11.7
1985	16.5	11.4	12.2	4.8	6.5	8.0	14.0	8.8	11.6
1986	13.6	9.8	9.5	4.0	4.3	6.3	11.3	6.8	9.3
1987	12.5	9.0	10.0	3.4	3.8	5.9	11.3	6.0	8.8
1988	12.2	9.8	9.7	2.7	3.6	5.9	11.8	5.8	11.2
1989	14.1	9.7	10.2	3.5	3.5	6.3	12.4	6.3	11.6
1990	12.2	9.2	9.5	3.1	3.1	6.0	11.1	5.7	11.0
1991	12.0	9.3	8.3	3.1	2.9	6.0	11.4	5.4	11.0
1992	11.3	9.8	7.8	3.1	2.8	6.0	12.0	5.5	10.7
1993	13.0	11.2	8.0	3.9	3.8	6.1	16.7	7.3	12.0
1994	13.7	12.0	8.5	4.0	4.3	6.3	17.3	7.9	12.1
1995	16.1	11.4	8.9	3.7	4.2	6.7	18.3	9.1	12.2
1996	16.4	11.3	9.3	4.3	4.8	6.6	18.9	9.1	12.4
1997	19.0	10.5	10.8	4.4	5.7	7.5	21.7	9.3	10.9
1998	16.0	10.6	11.3	4.1	5.4	7.6	24.0	8.9	13.2
1999	16.9	12.1	11.2	3.8	5.2	7.6	26.9	8.4	13.0
2000	21.7	12.5	13.7	4.6	5.9	8.5	31.8	10.3	14.5
2001	23.9	12.9	15.4	5.1	6.5	9.1	34.9	11.7	15.2
2002	25.7	13.3	16.3	5.3	6.8	9.6	36.9	12.6	15.4

(1) 1960–90: including D_90.

(% of GDP at market prices)

	A	P	FIN	S	UK	EU-15 (1)
1960	:	6.9	:	:	11.1	:
1961	:	6.3	:	:	10.5	:
1962	:	6.1	:	6.5	8.7	:
1963	6.2	6.4	6.3	6.6	8.6	6.1
1964	6.4	6.9	5.7	6.6	8.1	5.9
1965	6.7	6.7	6.3	6.5	8.5	6.1
1966	6.6	6.6	6.0	6.5	8.5	6.2
1967	7.1	6.5	6.6	6.8	8.1	6.2
1968	7.2	6.4	6.9	6.8	9.1	6.6
1969	7.7	6.2	7.3	7.2	9.4	6.6
1970	8.3	6.2	7.5	7.7	9.6	6.8
1971	8.0	5.8	6.6	7.6	9.8	6.8
1972	7.8	5.2	7.2	7.5	9.1	6.6
1973	7.8	5.5	6.9	8.5	9.8	6.9
1974	9.9	5.7	8.5	10.6	11.3	8.5
1975	9.2	4.0	8.3	10.0	10.9	8.2
1976	9.3	3.5	8.6	9.5	11.3	8.3
1977	8.5	3.9	10.6	9.7	12.4	8.8
1978	8.4	3.9	10.9	9.9	12.2	8.5
1979	8.8	4.5	10.3	10.1	10.8	8.3
1980	8.8	5.4	11.4	9.7	10.7	8.5
1981	9.8	5.3	13.5	10.5	10.3	9.6
1982	9.6	4.9	13.1	11.1	10.2	9.4
1983	9.1	5.9	12.5	12.2	9.7	9.3
1984	10.0	7.4	12.7	12.8	10.3	10.0
1985	10.4	7.3	12.2	12.9	10.1	10.1
1986	8.7	5.1	10.7	11.5	9.0	8.2
1987	7.6	4.6	9.5	11.0	8.8	7.9
1988	8.0	4.7	8.5	10.6	7.9	7.7
1989	8.4	5.1	8.4	10.0	8.2	8.0
1990	8.3	4.5	7.7	9.1	8.0	7.5
1991	7.7	3.7	6.6	8.4	7.1	7.0
1992	7.4	3.7	7.6	8.2	7.1	6.8
1993	7.4	3.6	11.4	10.6	8.2	7.8
1994	7.9	3.9	12.8	13.2	8.5	8.3
1995	8.9	4.1	0.8	13.3	9.0	8.6
1996	9.0	4.2	15.0	13.7	9.5	9.1
1997	10.3	4.3	16.2	15.5	9.6	9.8
1998	10.3	4.0	15.3	15.0	8.3	9.7
1999	10.9	3.9	14.2	14.9	7.9	9.6
2000	12.3	4.9	16.2	16.0	8.7	11.2
2001	13.5	5.2	17.1	16.7	9.4	12.3
2002	14.8	5.3	17.8	17.3	9.7	13.0

(1) 1960–90: including D_90.

Table 40

Imports of goods and services at current prices (national accounts)

(% of GDP at market prices)

	B	DK	D [1]	EL	E	F	IRL	I	L	NL
1960	40.0	32.5	16.5	15.8	7.1	12.4	35.1	13.3	81.7	48.8
1961	41.5	30.6	15.8	15.4	8.9	12.3	37.5	13.3	89.0	48.2
1962	42.3	30.8	16.1	16.1	10.6	11.9	36.7	13.7	87.8	47.3
1963	44.4	29.1	16.3	16.6	11.3	12.2	38.4	14.8	85.9	48.5
1964	44.6	30.9	16.5	18.1	11.6	12.8	38.6	13.1	87.3	48.5
1965	43.7	29.8	17.8	18.5	13.4	12.3	41.3	12.5	88.6	46.3
1966	46.2	29.1	17.5	17.0	13.8	12.9	40.7	13.4	83.3	45.8
1967	44.0	28.4	16.8	16.5	12.1	12.8	38.5	14.0	78.3	44.0
1968	46.2	28.1	17.7	17.0	12.8	13.1	42.6	13.7	78.1	43.6
1969	49.6	28.8	18.9	16.9	13.3	14.6	43.6	15.0	77.3	45.4
1970	50.2	30.0	19.1	16.5	13.6	15.3	42.4	16.1	83.9	49.6
1961–70	45.3	29.6	17.3	16.9	12.1	13.0	40.0	14.0	83.9	46.7
1971	49.1	28.6	19.0	16.5	12.8	15.4	40.9	16.0	93.5	48.2
1972	48.2	25.8	18.6	17.6	13.7	15.7	37.6	16.7	85.0	44.8
1973	54.1	29.6	18.9	21.9	14.6	16.7	42.2	19.0	84.9	46.6
1974	61.5	33.7	22.0	23.2	18.3	21.7	53.9	24.0	90.2	54.2
1975	53.5	30.1	21.8	23.1	16.6	17.9	45.9	20.4	97.6	49.2
1976	56.6	32.6	23.4	22.8	17.3	20.3	51.1	22.9	91.2	50.7
1977	56.5	31.6	23.1	22.6	15.8	20.4	55.2	22.1	91.7	49.7
1978	54.6	29.2	22.3	21.3	13.7	19.1	56.4	21.1	91.2	48.3
1979	60.6	31.7	24.4	22.3	14.0	20.6	62.2	23.0	96.2	53.3
1980	61.5	33.3	26.9	27.7	17.3	22.8	59.3	24.4	98.9	56.8
1971–80	55.6	30.6	22.0	21.9	15.4	19.1	50.5	20.9	92.0	50.2
1981	65.3	35.3	27.9	28.2	19.0	23.8	58.9	25.1	99.2	58.5
1982	69.7	35.4	27.5	27.1	19.4	24.0	52.1	23.9	100.4	56.8
1983	69.9	33.9	26.7	27.2	20.6	22.8	51.9	21.2	99.8	56.9
1984	74.4	35.2	28.2	26.5	19.9	23.9	56.2	22.8	110.1	60.3
1985	71.5	36.1	29.0	26.7	19.8	23.9	54.8	23.0	114.6	61.9
1986	64.0	32.5	25.0	27.5	16.9	20.6	49.4	18.5	104.8	51.9
1987	62.7	29.5	23.9	26.7	18.3	20.7	49.7	18.7	106.8	52.0
1988	66.2	30.3	24.3	25.7	19.1	21.2	51.4	18.7	108.7	53.7
1989	71.0	32.0	26.1	27.4	20.4	22.6	55.5	19.9	107.5	56.7
1990	69.4	30.8	26.3	28.0	19.5	22.2	52.4	19.7	108.9	54.8
1981–90	68.4	33.1	26.5	27.1	19.3	22.6	53.2	21.1	106.1	56.4
1991	67.7	31.3	27.8	27.0	19.4	22.0	52.9	18.6	111.4	54.6
1991	67.7	31.3	26.5	27.0	19.4	22.0	52.9	18.6	111.4	54.6
1992	65.1	29.9	24.8	26.5	19.5	21.0	53.2	19.1	100.7	52.6
1993	61.7	28.6	22.6	25.4	19.1	19.2	55.4	19.0	96.1	49.1
1994	64.2	30.1	23.3	24.0	21.1	20.1	60.9	20.4	92.9	49.6
1995	66.1	31.3	23.8	24.9	22.8	21.1	65.0	23.0	93.0	51.5
1996	67.0	30.8	24.3	25.5	23.4	21.4	66.1	20.9	93.0	52.2
1997	71.2	33.0	26.5	27.0	25.8	22.5	67.2	22.4	93.8	55.2
1998	71.7	33.4	27.3	28.9	27.3	23.5	75.4	23.1	95.1	55.3
1999	72.8	32.7	28.5	28.6	28.7	23.6	73.8	23.5	97.3	55.9
2000	81.7	35.2	32.8	31.1	32.0	26.9	79.3	27.2	101.5	61.6
1991–2000	68.9	31.6	26.0	26.9	23.9	22.1	64.9	21.7	97.5	53.7
2001	86.4	36.1	35.9	32.2	33.7	28.8	82.0	29.1	105.9	63.8
2002	89.3	36.8	38.1	32.5	35.4	29.8	82.9	30.5	107.5	64.5

([1]) 1960–91: D_90.

(% of GDP at market prices)

	A	P	FIN	S	UK	EUR-11 (1)	EUR-12 (2)	EU-15 (3)	US	JP
1960	24.3	20.5	22.4	23.3	21.5	18.0	17.9	19.2	4.4	10.3
1961	23.0	24.0	21.5	21.5	20.1	17.8	17.8	18.7	4.2	10.9
1962	22.8	20.3	21.6	21.2	19.6	17.8	17.7	18.5	4.3	9.3
1963	23.4	21.0	19.5	21.3	19.7	18.2	18.2	18.8	4.3	9.8
1964	24.1	25.9	21.3	21.7	20.4	18.4	18.4	19.2	4.3	9.7
1965	25.0	27.2	21.2	22.3	19.4	18.5	18.5	19.1	4.4	9.1
1966	25.7	26.9	20.8	21.7	19.0	18.9	18.8	19.2	4.8	9.0
1967	25.1	25.5	19.9	20.8	19.5	18.3	18.3	18.8	4.9	9.4
1968	25.2	25.8	20.4	21.4	21.5	18.9	18.8	19.6	5.2	9.0
1969	26.4	24.7	22.4	22.8	21.1	20.2	20.2	20.6	5.2	8.9
1970	29.2	26.7	26.0	24.3	21.5	21.3	21.2	21.6	5.4	9.5
1961–70	25.0	24.8	21.5	21.9	20.2	18.8	18.8	19.4	4.7	9.5
1971	29.1	27.8	25.3	22.9	21.1	21.1	21.0	21.2	5.6	9.0
1972	29.1	27.6	24.4	22.4	21.3	21.0	20.9	21.1	6.1	8.3
1973	29.3	29.2	25.2	24.3	25.5	22.3	22.3	23.0	6.7	10.0
1974	32.4	36.5	30.1	32.5	32.3	27.1	27.0	28.1	8.6	14.3
1975	30.3	28.3	29.0	28.0	27.2	24.3	24.3	25.0	7.6	12.8
1976	33.2	26.7	26.5	28.9	29.2	26.3	26.3	26.9	8.4	12.8
1977	33.8	28.9	26.3	28.7	29.1	26.1	26.1	26.7	9.1	11.5
1978	32.2	28.1	25.7	26.8	27.0	25.0	24.9	25.3	9.3	9.4
1979	34.9	32.8	29.5	31.0	27.4	27.0	26.9	27.2	9.9	12.5
1980	37.8	36.4	33.3	31.3	24.9	29.2	29.2	28.7	10.6	14.6
1971–80	32.2	30.2	27.5	27.7	26.5	24.9	24.9	25.3	8.2	11.5
1981	38.5	39.1	31.5	30.1	23.8	30.2	30.1	29.2	10.2	13.9
1982	34.9	38.9	29.7	32.7	24.4	29.6	29.6	29.0	9.4	13.8
1983	34.5	38.1	29.7	33.4	25.6	28.7	28.6	28.4	9.4	12.2
1984	37.5	39.1	28.1	32.6	28.6	30.0	30.0	29.9	10.4	12.3
1985	39.3	35.8	28.3	33.5	27.8	30.3	30.2	30.1	10.0	11.1
1986	34.9	31.1	25.1	29.6	26.4	25.9	25.9	26.3	10.3	7.4
1987	34.5	35.8	25.1	30.5	26.6	25.7	25.7	26.1	10.8	7.2
1988	37.0	39.4	24.9	30.6	26.6	26.3	26.3	26.6	10.9	7.8
1989	38.8	39.1	25.6	31.4	27.8	27.9	27.9	28.1	10.8	9.2
1990	38.7	39.6	24.4	29.5	26.6	27.4	27.4	27.5	10.9	10.0
1981–90	36.8	37.6	27.2	31.4	26.4	28.2	28.2	28.1	10.3	10.5
1991	38.8	37.4	22.9	26.3	24.1	27.4	27.4	27.0	10.5	8.5
1991	38.8	37.4	22.9	26.3	24.1	27.0	27.0	26.7	10.5	8.5
1992	37.4	35.2	25.4	26.1	24.8	26.3	26.3	26.1	10.6	7.8
1993	36.2	33.6	27.6	29.1	26.4	25.0	25.1	25.4	10.9	7.0
1994	37.5	35.1	29.2	31.8	27.1	26.3	26.2	26.6	11.6	7.2
1995	38.9	36.2	29.1	33.6	28.7	27.7	27.7	28.1	12.3	7.9
1996	40.7	36.2	30.0	32.4	29.7	27.7	27.6	28.1	12.4	9.4
1997	44.3	38.1	30.9	35.6	28.4	29.7	29.7	29.7	12.8	9.9
1998	44.1	39.9	29.8	37.5	27.4	30.7	30.7	30.4	12.8	9.1
1999	45.6	40.2	29.3	38.2	27.5	31.5	31.5	31.0	13.5	8.7
2000	50.2	44.5	32.0	41.0	28.5	35.8	35.7	34.5	14.7	9.4
1991–2000	41.4	37.6	28.6	33.2	27.3	28.8	28.7	28.7	12.2	8.5
2001	53.3	46.5	33.0	42.9	29.6	38.3	38.2	36.7	15.4	10.0
2002	56.2	48.1	33.4	44.3	30.3	40.0	39.9	38.2	15.9	10.6

(1) EU-15 excluding DK, EL, S, UK; 1960–91: including D_90.
(2) EU-15 excluding DK, S, UK; 1960–91: including D_90.
(3) 1960–91: including D_90.

Table 41

Imports of goods and services at 1995 prices

(national currency; annual percentage change)

	B	DK	D (1)	EL	E	F	IRL	I	L	NL
1961	7.2	4.4	7.7	12.8	40.1	6.9	13.7	13.7	7.3	6.4
1962	8.2	13.4	11.1	10.6	34.4	6.7	5.4	14.9	3.2	6.5
1963	8.6	– 1.1	4.9	16.5	23.5	14.1	10.6	22.5	3.1	9.8
1964	8.9	19.6	9.3	19.2	13.0	15.1	12.9	– 6.1	13.6	14.9
1965	6.6	6.9	14.2	16.8	32.9	2.2	11.0	2.0	4.5	6.1
1966	9.9	5.4	2.7	1.3	19.4	10.6	3.5	14.0	– 2.5	7.0
1967	1.6	4.5	– 1.3	5.4	– 3.3	8.3	3.7	13.5	– 4.8	6.3
1968	11.7	4.9	13.2	11.2	8.1	12.9	15.7	5.9	9.1	13.0
1969	15.5	13.1	17.0	14.1	16.0	19.5	13.4	19.3	11.2	14.1
1970	7.0	9.3	22.7	6.4	7.5	6.3	8.6	16.0	19.0	15.0
1961–70	8.5	7.9	9.9	11.3	18.5	10.2	9.8	11.3	6.1	9.9
1971	3.6	– 0.7	9.0	7.6	0.7	6.3	4.7	2.7	8.0	5.6
1972	9.6	1.5	5.8	13.9	24.3	13.2	5.1	9.5	2.7	5.0
1973	18.6	12.8	4.9	35.1	16.7	14.2	19.0	8.5	11.3	11.1
1974	4.4	– 3.8	0.4	– 15.4	8.0	1.9	– 2.3	4.7	5.9	– 0.6
1975	– 9.1	– 4.8	1.3	1.3	– 0.9	– 9.7	– 10.2	– 12.9	– 9.0	– 4.1
1976	12.4	17.6	10.5	9.9	9.8	17.4	14.7	12.2	1.2	10.3
1977	4.8	– 0.4	3.4	10.2	– 5.5	0.1	13.3	1.7	– 0.4	3.3
1978	2.7	– 0.7	5.5	4.0	– 1.0	3.0	15.7	5.8	7.0	6.3
1979	9.0	6.2	9.2	9.4	11.4	10.0	13.9	12.1	6.4	5.9
1980	– 2.8	– 5.6	3.6	10.0	3.3	4.6	– 4.5	5.2	3.9	0.3
1971–80	5.0	2.0	5.3	8.0	6.3	5.8	6.5	4.7	3.5	4.2
1981	– 1.9	– 0.2	– 3.1	5.7	– 4.2	– 1.9	1.7	– 1.8	– 2.9	– 5.9
1982	1.3	4.7	– 1.1	– 2.6	4.8	2.0	– 3.1	0.2	– 0.3	– 0.5
1983	– 1.2	1.0	1.4	2.7	– 0.3	– 3.4	4.7	– 2.4	1.2	3.9
1984	6.4	5.7	5.2	– 2.2	– 1.8	3.5	9.9	12.4	13.9	5.1
1985	0.4	9.7	4.5	4.3	7.9	4.2	3.2	5.3	7.0	6.3
1986	4.5	9.5	2.7	14.4	14.4	6.5	6.3	4.0	3.8	3.5
1987	6.7	– 3.1	4.2	2.5	20.1	7.7	6.2	12.2	7.5	4.2
1988	10.4	8.3	5.1	6.7	14.4	8.8	4.9	5.9	8.2	7.6
1989	9.6	4.1	8.3	10.7	17.3	8.0	13.5	8.9	6.6	6.8
1990	4.8	1.2	10.3	8.7	7.8	5.5	5.1	11.5	4.5	4.2
1981–90	4.0	4.0	3.7	5.0	7.7	4.0	5.1	5.5	4.9	3.4
1991	2.8	3.0	13.1	6.0	9.0	3.1	2.4	2.3	9.0	4.1
1992	4.1	– 0.4	1.5	1.3	6.9	1.8	8.2	7.4	– 0.8	2.1
1993	– 0.4	– 2.7	– 5.5	0.2	– 5.2	– 3.7	7.5	– 10.9	2.8	– 2.0
1994	7.2	12.3	7.4	1.3	11.3	8.2	15.5	8.1	– 0.1	6.7
1995	5.0	7.3	5.6	9.2	11.0	8.0	16.4	9.7	3.8	7.7
1996	0.8	3.5	3.1	7.0	8.0	1.6	12.5	– 0.3	4.0	4.4
1997	5.7	8.0	8.4	13.9	13.3	6.9	16.8	10.2	9.3	9.5
1998	6.5	7.3	8.6	11.3	13.4	11.0	25.8	9.1	8.3	8.0
1999	4.5	2.2	8.1	3.9	11.9	3.6	8.7	3.4	11.2	6.3
2000	8.6	6.2	10.0	6.7	10.2	13.1	14.5	8.4	8.0	9.2
1991–2000	4.5	4.6	5.9	6.0	8.9	5.2	12.7	4.5	5.5	5.6
2001	7.8	4.8	9.7	6.5	8.8	8.6	11.9	8.8	8.8	8.3
2002	7.3	5.4	8.3	6.6	9.1	7.9	9.7	8.5	8.5	7.5

(1) 1961–91: including D_90.

(national currency; annual percentage change)

	A	P	FIN	S	UK	EUR-11 (1)	EUR-12 (2)	EU-15 (3)	US	JP
1961	2.8	24.9	8.1	0.2	– 0.7	9.5	9.6	6.6	– 0.6	26.4
1962	4.7	– 8.7	5.6	5.7	2.1	10.0	10.0	8.2	11.4	– 1.2
1963	9.6	10.4	– 2.8	7.1	4.2	11.4	11.5	9.4	2.7	19.6
1964	10.9	30.8	20.6	9.7	10.7	9.4	9.5	10.1	5.3	13.6
1965	10.6	14.3	8.3	11.3	1.0	9.2	9.4	7.6	10.6	5.6
1966	10.4	8.1	3.5	4.3	2.5	8.3	8.2	6.8	14.9	12.2
1967	2.3	8.9	– 0.3	2.5	7.0	4.0	4.1	4.6	7.3	22.7
1968	7.2	14.6	– 3.9	8.3	7.5	10.9	10.9	10.0	14.9	12.1
1969	9.0	4.3	22.3	12.9	3.4	16.5	16.4	13.5	5.7	13.7
1970	17.0	9.9	20.3	10.4	4.8	14.5	14.4	12.3	4.3	22.6
1961–70	8.3	11.3	7.8	7.2	4.2	10.3	10.4	8.9	7.5	14.5
1971	6.3	14.6	– 0.6	– 3.3	5.4	5.7	5.8	5.2	5.3	7.0
1972	12.1	12.1	4.2	4.0	9.9	9.4	9.5	9.2	11.2	10.5
1973	9.6	12.7	13.0	6.9	11.2	10.8	11.3	11.2	4.6	24.3
1974	6.9	4.6	6.7	9.9	1.0	2.7	2.3	2.1	– 2.3	4.2
1975	– 4.6	– 24.2	0.6	– 3.5	– 6.6	– 6.4	– 6.3	– 6.2	– 11.1	– 10.3
1976	17.4	5.2	– 0.9	9.0	5.2	12.0	11.9	10.7	19.6	6.7
1977	6.2	10.8	– 1.3	– 3.8	1.9	2.2	2.4	2.1	10.9	4.1
1978	0.1	0.2	– 3.2	– 5.5	3.7	4.2	4.2	3.7	8.7	6.9
1979	11.7	12.6	17.8	11.6	9.6	10.0	10.0	9.9	1.6	12.9
1980	6.2	6.9	9.0	0.4	– 3.5	3.2	3.4	1.9	– 6.6	– 7.8
1971–80	7.0	4.9	4.3	2.4	3.6	5.3	5.3	4.8	3.8	5.4
1981	– 0.8	2.3	– 3.5	– 5.4	– 2.8	– 2.6	– 2.4	– 2.5	2.6	0.4
1982	– 4.7	3.9	1.6	3.0	4.9	0.4	0.3	1.1	– 1.3	– 2.5
1983	5.7	– 6.1	3.9	0.8	6.6	– 0.3	– 0.2	0.8	12.6	– 3.0
1984	10.0	– 4.4	1.9	5.3	9.9	5.6	5.4	6.1	24.4	10.5
1985	6.2	1.4	6.2	6.9	2.5	4.6	4.6	4.5	6.4	– 1.4
1986	– 2.9	16.9	1.5	4.5	6.9	4.9	5.1	5.4	8.4	1.9
1987	5.4	23.1	9.2	7.7	7.9	8.1	8.0	7.7	6.1	9.5
1988	10.4	18.0	10.9	5.3	12.8	8.2	8.1	8.9	3.8	20.9
1989	8.4	6.1	9.0	7.4	7.4	9.0	9.1	8.6	4.0	18.6
1990	7.3	14.0	– 0.8	0.7	0.5	7.8	7.8	6.3	3.8	7.9
1981–90	4.4	7.1	3.9	3.6	5.6	4.5	4.5	4.6	6.9	6.0
1991	6.5	7.3	– 13.5	– 4.9	– 5.0	6.1	6.1	4.0	– 0.5	– 3.1
1992	1.8	10.7	0.6	1.1	6.8	3.5	3.5	3.8	6.6	– 0.7
1993	– 0.7	– 3.3	1.3	– 2.5	3.2	– 4.4	– 4.3	– 3.2	9.1	– 0.3
1994	8.3	9.0	12.8	12.2	5.4	8.2	8.0	7.8	12.0	8.9
1995	7.0	7.8	7.8	7.2	5.5	7.6	7.7	7.3	8.2	14.2
1996	5.8	4.9	6.4	3.0	9.1	3.1	3.2	4.1	8.6	11.9
1997	9.7	10.6	11.3	11.8	9.2	9.1	9.2	9.3	13.7	0.5
1998	3.7	13.8	8.3	10.4	8.8	9.7	9.7	9.5	11.9	– 7.6
1999	7.1	7.0	3.2	5.0	7.6	6.4	6.4	6.4	10.7	5.3
2000	8.8	8.4	7.5	9.2	8.1	10.0	10.0	9.6	13.3	8.2
1991–2000	5.7	7.5	4.3	5.1	5.8	5.9	5.9	5.8	9.3	3.5
2001	7.1	6.7	6.8	8.3	6.9	8.8	8.8	8.4	8.4	7.4
2002	7.5	6.9	5.9	7.7	6.6	8.1	8.1	7.8	6.8	9.7

(1) PPS weighted; EU-15 excluding DK, EL, S, UK; 1961–91: including D_90.
(2) PPS weighted; EU-15 excluding DK, S, UK; 1961–91: including D_90.
(3) PPS weighted; 1961–91: including D_90.

Table 42

Intra-EU-15 imports of goods at current prices
Foreign trade statistics

(% of GDP at market prices)

	B/L	DK	D [1]	EL	E	F	IRL	I	NL
1960	19.2	15.9	5.6	8.4	2.1	3.5	20.9	4.4	19.9
1961	20.3	15.0	5.5	8.3	2.8	3.8	23.2	4.5	21.9
1962	22.1	18.6	6.8	9.9	4.4	4.4	24.0	5.6	23.3
1963	23.6	17.2	6.8	9.4	5.1	4.8	25.3	6.3	24.3
1964	24.6	18.5	7.2	9.3	5.5	5.2	25.3	5.3	24.7
1965	24.6	17.8	8.2	9.9	6.4	5.0	25.2	4.7	23.7
1966	26.2	17.3	7.9	9.7	6.6	5.6	23.7	5.2	23.3
1967	24.4	16.5	7.5	9.1	5.6	5.6	22.6	5.6	21.9
1968	26.2	16.5	8.4	9.6	5.3	6.2	25.9	5.5	22.2
1969	29.2	17.6	9.4	9.1	5.6	7.4	27.5	6.4	23.7
1970	29.8	18.6	9.3	9.8	5.3	7.6	27.8	7.1	25.4
1971	31.9	17.0	9.5	9.4	5.1	7.7	26.5	7.0	23.4
1972	32.1	15.3	9.5	9.5	5.6	8.1	25.6	7.7	22.5
1973	34.5	17.8	9.5	10.0	6.0	8.6	29.7	9.1	23.0
1974	36.6	19.2	10.0	9.6	6.5	9.8	36.8	10.3	24.9
1975	33.5	17.5	10.2	10.7	5.5	8.4	30.3	8.6	22.5
1976	35.9	19.4	11.1	10.7	5.5	9.7	33.7	10.0	23.2
1977	35.1	18.3	11.0	10.7	5.1	9.7	35.7	9.5	22.8
1978	35.1	17.4	10.9	9.9	4.5	9.5	37.3	9.6	22.8
1979	37.4	18.7	11.9	9.9	4.8	10.0	42.1	10.5	24.8
1980	37.5	19.0	12.6	9.6	5.1	10.3	39.6	10.9	24.9
1981	38.4	19.0	13.2	10.5	5.2	10.3	39.6	10.1	25.0
1982	42.1	19.3	13.2	10.8	5.7	11.0	34.5	10.0	25.3
1983	44.8	18.7	13.4	11.6	6.2	11.0	32.6	9.2	25.4
1984	47.1	19.4	14.0	12.0	6.3	11.6	34.2	9.9	27.5
1985	46.9	19.8	14.6	12.6	6.8	11.8	33.3	10.7	29.9
1986	42.9	18.3	12.8	14.3	7.9	10.9	29.2	9.9	27.4
1987	41.9	16.5	12.4	14.8	9.2	11.2	28.2	10.0	27.4
1988	42.9	16.0	12.5	12.4	10.1	11.5	29.5	10.2	28.0
1989	44.7	16.2	13.4	15.7	10.9	12.3	31.5	10.7	29.0
1990	44.3	15.9	13.6	15.9	10.7	12.0	30.3	10.1	28.5
1991	43.4	16.0	13.0	15.2	10.6	11.5	29.6	9.7	28.1
1992	40.1	15.4	12.0	15.6	10.5	11.1	28.9	9.6	27.0
1993	37.2	14.1	9.8	14.8	9.9	9.7	25.4	8.8	21.6
1994	37.9	14.7	10.1	14.5	11.7	10.5	27.2	9.9	23.0
1995	39.2	15.9	10.7	15.4	12.6	11.2	27.3	11.2	23.4
1996	41.4	15.2	10.8	15.2	13.4	11.2	27.7	10.3	23.0
1997	43.1	18.5	11.6	14.6	14.6	11.6	27.6	10.8	25.3
1998	43.9	18.5	11.7	15.8	15.5	12.3	27.6	11.1	21.7
1999	43.9	18.1	12.2	15.8	16.7	12.7	26.9	11.1	21.2
2000	45.7	19.3	13.1	16.3	17.6	14.5	26.9	11.8	22.5
2001	46.8	19.8	13.8	16.4	18.5	15.6	26.5	11.9	23.4
2002	47.6	20.2	14.6	16.3	19.5	16.2	26.0	12.0	23.8

[1] 1960–90: including D_90.

(% of GDP at market prices)

	A	P	FIN	S	UK	EU-15 (1)
1960	:	9.6	:	:	4.0	:
1961	:	11.7	:	:	3.9	:
1962	:	10.0	:	11.6	4.8	:
1963	13.6	9.7	10.5	11.5	4.8	7.9
1964	14.0	10.4	11.4	11.7	5.2	8.2
1965	14.6	11.6	11.9	12.1	5.2	8.3
1966	14.9	12.1	11.3	11.6	5.3	8.5
1967	14.1	11.2	10.8	10.9	5.7	8.3
1968	13.9	11.1	10.8	11.1	6.5	8.9
1969	14.4	11.6	12.4	12.1	6.2	9.7
1970	16.1	12.6	14.6	12.9	6.2	10.1
1971	16.3	12.5	14.2	11.9	6.5	10.1
1972	16.8	12.3	13.8	11.6	7.1	10.4
1973	17.1	12.9	13.6	12.7	9.1	11.3
1974	17.2	15.3	15.5	16.5	11.6	12.7
1975	15.9	10.7	14.8	14.7	10.3	11.6
1976	18.3	12.1	12.8	14.1	11.2	12.6
1977	19.4	13.4	11.8	14.0	11.7	12.6
1978	18.0	13.5	11.7	13.0	11.8	12.4
1979	19.1	13.8	13.3	15.4	12.6	13.3
1980	19.9	15.2	14.3	15.2	10.6	13.2
1981	18.8	16.7	12.7	14.1	10.0	13.0
1982	18.1	17.5	12.4	15.5	10.7	13.4
1983	18.2	16.0	12.2	16.5	11.6	13.6
1984	18.9	15.9	12.1	16.4	12.9	14.4
1985	19.8	15.2	12.4	17.3	12.9	14.8
1986	19.3	16.7	12.4	15.4	13.0	13.9
1987	19.1	20.7	13.0	15.9	13.1	14.0
1988	20.0	24.9	11.4	15.6	13.2	14.1
1989	21.2	24.8	12.6	15.6	13.7	14.8
1990	21.8	25.7	11.9	14.4	13.0	14.5
1991	20.9	24.5	10.4	12.7	11.5	13.8
1992	19.9	24.1	11.5	12.2	11.8	13.4
1993	18.1	21.0	11.9	13.9	11.4	12.1
1994	18.9	21.9	12.7	15.5	11.9	12.9
1995	20.2	23.1	13.2	17.8	12.8	13.8
1996	20.6	22.9	14.2	17.0	12.9	13.8
1997	21.6	24.8	14.5	18.1	12.2	14.4
1998	22.3	25.7	14.5	18.5	11.6	14.5
1999	22.7	25.1	13.7	18.7	11.4	14.7
2000	24.4	26.5	15.3	20.2	11.6	15.7
2001	25.5	27.8	16.2	21.2	12.2	16.4
2002	26.6	28.7	16.3	21.9	12.7	17.0

(1) 1960–90: including D_90.

Table 43

Extra-EU-15 imports of goods at current prices
Foreign trade statistics

(% of GDP at market prices)

	B/L	DK	D (1)	EL	E	F	IRL	I	NL
1960	14.7	13.3	8.5	10.2	3.9	6.5	11.8	7.5	16.8
1961	13.8	12.3	7.9	8.2	5.2	6.1	12.0	7.4	15.9
1962	12.3	9.0	6.8	5.6	5.5	5.5	10.0	6.6	13.0
1963	12.3	8.6	6.8	6.3	5.4	5.4	10.1	7.0	13.0
1964	12.6	9.3	6.7	6.0	5.2	5.5	10.0	6.3	12.9
1965	12.1	8.9	7.0	7.0	5.9	5.1	10.3	6.3	11.9
1966	12.4	8.6	6.9	6.7	6.0	5.1	10.1	6.6	11.8
1967	11.7	8.5	6.5	5.7	5.4	4.8	9.8	6.5	11.3
1968	12.9	8.2	6.7	6.3	6.0	4.6	10.0	6.3	11.2
1969	13.0	8.1	7.0	6.7	6.3	4.8	10.0	6.6	11.2
1970	13.3	8.3	6.8	7.4	6.7	5.3	9.1	6.8	12.5
1971	11.4	8.1	6.5	7.1	6.0	5.1	10.6	6.4	12.7
1972	10.5	7.1	5.9	6.5	6.3	5.1	8.7	6.4	11.5
1973	11.8	8.2	6.3	8.2	6.7	5.5	8.9	7.6	12.4
1974	15.5	10.3	8.0	10.2	9.8	8.6	13.0	11.6	15.7
1975	13.2	9.1	7.6	11.0	8.9	6.9	10.7	9.2	14.7
1976	14.4	9.5	8.7	11.8	9.8	7.8	12.1	10.4	16.0
1977	14.3	9.3	8.5	11.2	8.8	7.8	13.8	9.9	15.6
1978	13.4	8.0	7.9	10.0	7.6	6.9	12.8	9.0	13.9
1979	15.3	8.4	8.9	10.4	7.5	7.8	13.4	10.0	15.7
1980	18.8	9.2	10.3	11.9	10.2	9.4	13.1	10.8	18.0
1981	21.1	10.5	10.8	8.9	11.4	10.0	13.1	12.2	19.1
1982	21.1	9.8	10.5	10.5	11.1	9.5	12.1	11.4	17.7
1983	17.7	9.1	9.9	10.7	11.6	8.5	12.9	10.1	18.1
1984	19.3	9.9	10.8	11.2	11.0	8.7	15.2	10.4	19.5
1985	17.6	10.0	10.8	12.2	10.6	8.3	15.0	10.5	18.5
1986	13.8	8.5	8.6	8.9	6.8	6.4	12.4	7.0	13.0
1987	13.4	7.5	8.1	8.2	6.8	6.3	13.1	6.5	12.8
1988	13.2	7.8	8.5	6.3	6.7	6.6	13.2	6.3	13.4
1989	15.1	8.5	9.4	8.0	7.1	7.1	14.6	6.8	14.7
1990	13.4	7.7	9.1	7.6	6.3	7.1	13.4	6.2	14.0
1991	13.4	7.9	8.9	8.6	6.2	7.3	13.8	6.0	13.5
1992	12.1	7.4	8.1	7.9	6.0	6.6	12.9	5.7	13.0
1993	11.7	7.9	7.7	8.7	6.0	6.1	18.0	6.0	13.9
1994	12.6	8.6	8.1	6.9	6.6	6.3	19.7	6.5	14.1
1995	13.0	8.1	8.2	6.6	6.8	6.4	21.4	7.3	14.7
1996	13.8	8.4	8.4	7.7	6.8	6.5	21.3	6.6	16.1
1997	17.9	7.1	9.5	7.6	7.6	7.4	21.5	7.0	17.7
1998	18.0	7.7	10.2	7.8	7.4	7.4	23.7	7.0	18.1
1999	18.6	7.5	10.4	7.8	7.7	7.6	22.6	7.3	18.7
2000	24.3	7.9	13.4	8.2	9.6	9.1	26.9	9.8	22.3
2001	27.2	8.0	15.1	8.2	10.1	9.6	28.7	11.5	23.2
2002	28.7	8.2	16.0	8.1	10.6	9.8	29.7	12.7	23.3

(1) 1960–90: including D_90.

(% of GDP at market prices)

	A	P	FIN	S	UK	EU-15 (1)
1960	:	9.0	:	:	13.8	:
1961	:	9.1	:	:	12.4	:
1962	:	7.5	:	6.5	11.0	:
1963	6.6	8.4	7.1	6.7	11.0	7.8
1964	6.5	9.3	8.0	6.8	11.4	7.8
1965	6.6	9.4	7.3	7.0	11.0	7.7
1966	6.7	9.1	7.5	6.8	10.4	7.6
1967	6.1	8.4	7.4	6.4	10.4	7.3
1968	6.4	8.6	7.3	6.8	11.7	7.5
1969	6.6	8.2	7.8	6.8	11.5	7.7
1970	7.4	9.2	9.0	7.2	11.4	7.9
1971	7.6	9.5	8.5	6.7	10.6	7.5
1972	7.3	9.8	8.2	6.4	10.2	7.1
1973	7.5	9.8	8.3	6.8	12.3	7.9
1974	9.0	13.6	12.5	9.6	16.0	10.8
1975	8.0	11.4	11.6	9.0	12.5	9.3
1976	9.0	11.4	10.9	9.3	13.7	10.2
1977	8.8	12.4	11.4	9.3	13.4	10.0
1978	8.2	11.2	10.5	8.4	12.5	9.2
1979	9.0	13.4	12.8	9.9	11.9	9.9
1980	10.5	16.2	15.4	10.5	11.3	11.2
1981	11.6	17.9	14.9	10.1	9.9	11.6
1982	10.1	17.6	13.4	10.7	9.8	11.2
1983	9.4	17.8	13.6	10.6	10.2	10.6
1984	10.7	19.4	11.8	10.0	11.6	11.2
1985	10.9	16.3	11.7	9.9	10.9	10.9
1986	8.6	10.3	9.1	8.1	9.6	8.4
1987	8.0	10.4	9.3	8.4	9.3	8.1
1988	8.3	10.5	8.3	8.7	9.5	8.2
1989	8.9	10.1	8.7	9.2	10.0	8.9
1990	8.9	9.9	7.9	8.4	9.7	8.4
1991	8.9	8.2	7.3	7.4	8.9	8.2
1992	8.4	7.4	8.0	7.2	8.9	7.7
1993	8.0	7.2	9.0	8.3	9.1	7.8
1994	8.7	7.9	10.5	9.4	9.7	8.3
1995	8.0	7.9	0.8	7.9	10.5	8.4
1996	8.5	7.4	10.0	7.4	11.2	8.7
1997	9.3	7.7	10.7	8.5	10.9	9.5
1998	9.4	7.6	10.5	8.6	10.5	9.7
1999	10.0	8.9	10.6	8.6	10.6	9.9
2000	12.3	11.4	11.8	9.5	11.5	12.1
2001	13.7	11.9	12.0	10.0	11.9	13.2
2002	15.0	12.4	12.4	10.4	12.1	13.8

(1) 1960–90: including D_90.

Table 44

Balance on current transactions with the rest of the world (national accounts)

(% of GDP at market prices)

	B	DK	D [1]	EL	E	F	IRL	I	L	NL
1960	0.2	– 1.1	1.6	– 0.4	3.8	1.5	– 0.1	0.8	12.5	3.0
1961	0.2	– 1.7	1.0	– 0.1	1.9	1.1	0.2	1.2	6.5	1.4
1962	0.9	– 3.2	– 0.1	– 1.3	– 0.1	1.0	– 1.8	0.6	0.6	1.0
1963	– 0.2	0.1	0.2	– 1.2	– 1.5	0.3	– 2.8	– 1.4	0.2	0.7
1964	0.5	– 2.2	0.2	– 4.0	– 1.3	– 0.3	– 3.5	1.1	– 0.1	– 1.1
1965	1.0	– 1.8	– 1.3	– 4.6	– 3.8	1.2	– 4.4	3.6	0.7	0.1
1966	0.2	– 1.9	0.2	– 1.4	– 3.8	0.5	– 1.6	3.2	1.7	– 1.0
1967	1.3	– 2.4	2.2	– 1.6	– 2.5	0.6	1.4	2.2	7.4	– 0.3
1968	1.4	– 1.7	2.3	– 2.9	– 1.1	0.3	– 1.3	3.3	9.7	0.3
1969	1.7	– 2.8	1.4	– 3.2	– 0.9	– 0.4	– 4.8	2.7	14.0	0.4
1970	2.8	– 3.9	0.6	– 2.3	0.2	0.8	– 4.0	0.8	15.5	– 1.3
1961–70	1.0	– 2.1	0.7	– 2.3	– 1.3	0.5	– 2.3	1.7	5.6	0.0
1971	2.3	– 2.4	0.4	– 0.9	2.2	0.9	– 3.8	1.4	6.6	0.0
1972	3.6	– 0.4	0.6	– 0.7	1.5	1.0	– 2.2	1.5	10.6	3.0
1973	2.1	– 1.7	1.5	– 2.1	0.9	0.6	– 3.5	– 1.7	16.5	3.8
1974	0.5	– 3.1	2.7	– 0.5	– 3.5	– 1.3	– 9.9	– 4.4	26.5	3.3
1975	– 0.1	– 1.6	1.2	– 0.5	– 2.9	0.8	– 1.5	– 0.3	17.0	2.8
1976	0.2	– 4.9	0.8	– 0.5	– 3.9	– 0.9	– 5.3	– 1.3	21.6	3.1
1977	– 1.2	– 3.8	0.8	– 0.4	– 1.7	– 0.1	– 5.4	1.0	21.7	0.9
1978	– 1.3	– 2.2	1.4	– 0.2	1.0	– 0.5	– 6.8	2.1	19.7	– 0.7
1979	– 3.0	– 4.6	– 0.5	0.8	0.5	– 1.4	– 13.3	1.6	21.7	– 1.1
1980	– 4.1	– 3.6	– 1.7	0.6	– 2.4	– 2.8	– 11.7	– 2.4	19.0	– 1.2
1971–80	– 0.1	– 2.8	0.7	– 0.4	– 0.8	– 0.4	– 6.3	– 0.2	18.1	1.4
1981	– 3.6	– 2.8	– 0.6	1.7	– 2.7	– 3.0	– 14.6	– 2.4	21.3	2.2
1982	– 3.6	– 4.2	0.8	– 1.8	– 2.6	– 4.1	– 10.5	– 1.8	34.4	3.2
1983	– 1.2	– 2.6	0.9	– 2.8	– 1.8	– 2.5	– 6.8	0.2	39.5	3.1
1984	– 0.9	– 3.4	1.4	– 2.5	1.2	– 2.1	– 5.8	– 0.7	39.1	4.1
1985	– 0.4	– 4.5	2.4	– 4.5	1.4	– 2.0	– 3.8	– 1.0	37.2	4.1
1986	1.4	– 5.4	4.3	– 3.6	1.6	– 1.2	– 3.3	0.4	33.6	2.9
1987	1.0	– 2.9	4.1	– 0.8	0.1	– 1.6	– 0.2	– 0.3	26.9	1.9
1988	1.3	– 1.4	4.3	– 1.8	– 1.1	– 1.8	0.6	– 0.8	25.6	2.7
1989	0.4	– 1.6	4.8	– 4.3	– 3.2	– 1.8	– 1.1	– 1.4	26.6	3.3
1990	0.6	0.4	3.5	– 4.7	– 3.7	– 1.9	– 1.8	– 1.6	27.6	3.7
1981–90	– 0.5	– 2.8	2.6	– 2.5	– 1.1	– 2.2	– 4.7	– 0.9	31.2	3.1
1991	1.0	0.9	0.7	– 3.8	– 3.6	– 1.5	– 0.4	– 2.1	25.2	3.3
1991	1.0	0.9	– 1.0	– 3.8	– 3.6	– 1.5	– 0.4	– 2.1	25.2	3.3
1992	2.0	2.1	– 0.7	– 2.0	– 3.6	– 0.4	0.4	– 2.5	26.1	3.0
1993	4.2	2.8	– 0.5	– 2.6	– 1.0	0.7	3.7	0.8	20.1	4.7
1994	5.2	1.5	– 1.2	– 0.5	– 1.3	0.2	2.9	1.2	18.2	5.2
1995	4.5	0.7	– 0.8	– 0.9	0.0	0.3	2.8	2.2	:	6.4
1996	4.6	1.5	– 0.3	– 2.4	0.2	0.9	3.3	3.2	:	5.4
1997	4.5	0.2	– 0.1	– 2.3	0.5	2.5	3.1	2.8	:	6.2
1998	3.8	– 1.4	– 0.2	– 3.9	– 0.6	2.3	0.9	1.8	:	4.1
1999	3.4	1.0	– 0.8	– 3.2	– 2.3	2.3	0.6	0.9	:	5.6
2000	3.5	0.8	– 0.8	– 4.1	– 3.6	1.6	– 1.2	– 0.5	:	4.7
1991–2000	3.7	1.0	– 0.7	– 2.6	– 1.6	0.9	1.6	0.8	:	4.9
2001	3.8	1.4	– 1.0	– 4.4	– 3.9	1.7	– 1.8	– 0.7	:	4.4
2002	4.5	2.1	– 1.1	– 4.2	– 4.2	2.2	– 1.8	– 0.6	:	4.6

([1]) 1960–91: D_90.

(% of GDP at market prices)

	A	P	FIN	S	UK	EU-10 (1)	EU-11 (2)	EU-14 (3)	US	JP
1960	– 1.1	– 4.0	– 0.9	– 0.6	– 0.7	1.3	1.3	0.7	0.6	0.5
1961	– 0.2	– 10.0	– 1.2	0.5	0.5	0.9	0.8	0.7	0.8	– 1.6
1962	1.7	– 3.4	– 1.5	0.4	0.9	0.4	0.4	0.4	0.7	0.0
1963	0.7	– 3.3	– 0.4	0.3	0.7	– 0.2	– 0.2	0.0	0.8	– 1.0
1964	0.1	0.0	– 2.4	0.4	– 0.8	0.0	– 0.1	– 0.2	1.1	– 0.5
1965	– 0.5	– 0.4	– 2.3	– 0.8	0.1	0.3	0.2	0.1	0.9	1.1
1966	– 1.2	0.8	– 2.2	– 0.7	0.6	0.4	0.4	0.3	0.5	1.3
1967	– 0.7	3.7	– 1.7	– 0.1	– 0.5	1.1	1.0	0.6	0.4	0.0
1968	– 0.4	1.5	0.7	– 0.4	– 0.3	1.4	1.3	0.9	0.2	0.8
1969	1.2	3.6	0.0	– 0.7	1.2	0.9	0.8	0.7	0.2	1.3
1970	0.6	1.9	– 2.2	– 0.8	1.8	0.6	0.5	0.6	0.4	1.0
1961–70	0.1	– 0.6	– 1.3	– 0.2	0.4	0.6	0.5	0.4	0.6	0.2
1971	0.5	2.5	– 2.8	1.0	2.2	0.8	0.8	1.0	0.1	2.5
1972	0.1	5.5	– 0.9	1.3	0.5	1.2	1.2	1.0	– 0.3	2.2
1973	– 0.3	3.0	– 1.9	2.8	– 1.2	0.8	0.7	0.5	0.6	0.0
1974	– 1.0	– 6.2	– 4.9	– 1.0	– 3.8	– 0.4	– 0.4	– 1.0	0.5	– 1.0
1975	– 0.1	– 5.5	– 7.4	– 0.5	– 1.5	0.3	0.2	– 0.1	1.3	– 0.1
1976	– 2.2	– 8.0	– 3.7	– 2.1	– 0.6	– 0.5	– 0.5	– 0.7	0.5	0.7
1977	– 3.5	– 9.4	– 0.4	– 2.6	0.1	0.0	0.0	– 0.2	– 0.4	1.5
1978	– 0.7	– 5.7	1.8	0.0	0.9	0.5	0.5	0.5	– 0.5	1.7
1979	– 1.0	– 1.7	– 0.4	– 2.2	0.0	– 0.6	– 0.6	– 0.6	0.1	– 0.9
1980	– 2.6	– 5.9	– 2.8	– 3.4	1.4	– 2.4	– 2.3	– 1.8	0.4	– 1.0
1971–80	– 1.1	– 3.1	– 2.3	– 0.7	– 0.2	0.0	0.0	– 0.1	0.2	0.6
1981	– 2.0	– 12.2	– 0.8	– 2.5	2.6	– 2.0	– 1.9	– 1.2	0.2	0.5
1982	1.0	– 13.5	– 1.7	– 3.4	1.5	– 1.6	– 1.6	– 1.2	0.0	0.7
1983	0.3	– 8.3	– 2.1	– 1.1	1.1	– 0.5	– 0.6	– 0.3	– 0.9	1.8
1984	– 0.3	– 3.4	0.1	0.3	0.4	0.0	– 0.1	– 0.1	– 2.2	2.8
1985	– 0.2	0.4	– 1.3	– 1.7	0.6	0.3	0.2	0.1	– 2.7	3.6
1986	0.2	2.1	– 0.9	0.2	– 0.6	1.4	1.3	0.8	– 3.2	4.3
1987	– 0.2	0.3	– 1.9	– 0.6	– 1.3	0.9	0.9	0.4	– 3.2	3.6
1988	– 0.2	– 3.3	– 2.5	– 1.1	– 3.7	0.7	0.6	– 0.2	– 2.2	2.8
1989	0.2	– 0.7	– 5.0	– 2.7	– 4.6	0.4	0.3	– 0.6	– 1.6	2.0
1990	0.8	– 1.7	– 5.1	– 3.6	– 3.5	0.0	– 0.1	– 0.7	– 1.2	1.3
1981–90	0.0	– 4.0	– 2.1	– 1.6	– 0.8	– 0.1	– 0.1	– 0.3	– 1.7	2.3
1991	0.0	– 2.8	– 5.4	– 2.1	– 1.4	– 0.9	– 0.9	– 1.0	0.3	2.3
1991	0.0	– 2.8	– 5.4	– 2.1	– 1.4	– 1.4	– 1.4	– 1.4	0.3	2.3
1992	– 0.1	– 2.8	– 4.7	– 3.1	– 1.7	– 1.1	– 1.1	– 1.2	– 0.6	3.0
1993	– 0.4	– 2.6	– 1.3	– 1.4	– 1.7	0.4	0.4	0.1	– 1.1	3.1
1994	– 0.9	– 4.4	1.1	1.2	– 0.2	0.2	0.2	0.2	– 1.5	2.8
1995	– 2.4	– 3.0	4.1	3.3	– 0.5	0.7	0.6	0.6	– 1.3	2.2
1996	– 2.2	– 4.0	4.0	3.0	– 0.1	1.1	1.1	1.0	– 1.4	1.4
1997	– 2.6	– 5.7	5.6	3.6	0.8	1.6	1.5	1.4	– 1.5	2.2
1998	– 2.0	– 7.0	5.6	3.4	0.0	1.0	0.9	0.8	– 2.3	3.2
1999	– 2.6	– 8.5	5.2	2.4	– 1.2	0.5	0.5	0.2	– 3.4	2.5
2000	– 3.4	– 10.9	6.4	2.9	– 1.5	– 0.1	– 0.2	– 0.3	– 4.2	2.0
1991–2000	– 1.7	– 5.2	2.1	1.3	– 0.8	0.3	0.3	0.1	– 1.7	2.5
2001	– 3.1	– 11.5	7.4	2.9	– 1.7	– 0.2	– 0.3	– 0.4	– 4.3	2.0
2002	– 2.9	– 11.9	8.5	3.3	– 1.5	– 0.1	– 0.1	– 0.2	– 4.2	1.9

(1) EU-15 excluding DK, EL, L, S, UK; 1960–91: including D_90.
(2) EU-15 excluding DK, L, S, UK; 1960–91: including D_90.
(3) EU-15 excluding L; 1960–91: including D_90.

Table 45

Gross national saving

(% of GDP at market prices)

	B	DK	D (1)	EL	E	F	IRL	I	L	NL
1960	19.4	24.9	28.9	13.7	22.7	24.4	16.3	25.5	35.8	30.3
1961	21.3	23.4	28.2	18.7	24.0	24.3	17.9	26.7	32.9	28.9
1962	22.2	22.9	27.3	18.3	24.3	24.4	17.7	26.0	32.1	27.0
1963	20.8	22.9	26.4	21.7	23.0	23.8	17.7	23.7	30.3	25.5
1964	24.3	24.0	28.3	22.5	25.0	24.9	18.2	23.8	32.4	27.4
1965	24.1	24.6	27.2	24.7	24.1	26.8	19.4	23.6	30.8	27.1
1966	24.0	22.9	26.8	25.0	24.2	26.9	19.0	22.8	30.0	26.5
1967	24.6	21.8	25.2	23.3	24.1	26.8	21.0	22.8	28.3	26.8
1968	23.7	22.3	26.8	24.1	25.3	25.9	20.7	23.6	29.9	27.7
1969	24.8	23.0	27.6	27.6	27.5	26.5	20.9	24.4	35.0	27.5
1970	27.1	21.8	28.1	28.2	27.0	27.6	20.4	28.1	41.3	27.0
1961–70	23.7	23.0	27.2	23.4	24.8	25.8	19.3	24.5	32.3	27.1
1971	25.7	22.4	27.1	31.0	26.8	27.1	20.2	26.2	36.3	26.7
1972	25.4	24.4	26.5	34.4	27.3	27.3	22.9	25.3	39.1	27.6
1973	24.7	24.4	26.7	38.8	28.0	27.8	23.4	25.2	43.5	28.5
1974	25.3	22.1	24.7	31.9	26.6	26.8	19.2	25.6	47.7	28.0
1975	21.7	20.5	21.0	30.2	25.6	24.3	21.7	23.6	39.9	24.2
1976	22.3	20.2	22.4	31.8	23.0	24.5	20.0	25.5	44.3	24.1
1977	20.6	20.4	21.7	28.0	23.2	24.4	22.4	25.9	42.1	23.0
1978	20.3	20.7	22.6	27.4	23.9	23.3	22.1	26.3	44.6	21.5
1979	18.3	18.4	22.8	28.0	22.8	23.0	19.5	26.3	43.8	20.7
1980	20.2	16.6	21.7	26.5	20.8	22.4	15.9	24.7	44.2	18.1
1971–80	22.5	21.0	23.7	30.8	24.8	25.1	20.7	25.5	42.5	24.2
1981	17.3	14.1	20.3	22.6	19.2	20.0	13.5	22.6	45.8	18.7
1982	16.3	13.8	20.2	23.6	19.6	18.8	17.1	22.8	59.3	18.7
1983	16.7	15.5	21.2	21.6	19.7	18.6	16.8	23.1	63.8	19.2
1984	17.6	17.1	21.7	22.9	20.9	18.3	16.8	23.1	63.8	20.7
1985	17.4	17.4	22.0	22.1	20.6	18.1	15.3	22.6	52.6	21.3
1986	19.0	18.3	23.8	22.1	21.6	19.4	14.9	22.4	52.1	21.4
1987	19.5	18.6	23.5	18.9	21.6	19.6	16.3	21.9	46.7	19.7
1988	21.8	19.2	24.3	20.3	22.6	20.8	16.3	21.8	47.2	21.2
1989	22.3	19.5	25.7	18.0	21.9	21.6	17.1	21.0	49.7	23.0
1990	22.9	20.7	24.9	18.0	21.7	21.5	18.0	20.7	50.6	22.9
1981–90	19.1	17.4	22.8	21.0	20.9	19.7	16.2	22.2	53.2	20.7
1991	22.1	20.0	22.7	19.6	21.0	20.9	17.7	19.6	50.8	21.8
1991	22.1	20.0	23.3	19.6	21.0	20.9	17.7	19.6	50.8	21.8
1992	22.9	20.3	23.1	18.9	19.0	20.5	15.6	18.3	48.3	20.7
1993	24.0	19.2	22.0	17.3	18.9	19.0	17.7	19.2	41.9	20.4
1994	24.7	19.1	22.0	18.2	18.7	19.2	18.0	19.7	39.5	21.5
1995	24.9	20.4	21.9	18.0	22.3	19.5	20.4	21.6	:	27.4
1996	24.5	20.4	21.3	17.4	22.1	19.2	22.0	21.9	:	26.7
1997	24.9	20.4	21.5	17.8	22.6	20.4	23.8	21.7	:	27.9
1998	24.7	19.9	21.6	18.0	22.6	21.1	24.8	21.4	:	25.9
1999	24.5	20.6	21.4	19.1	22.3	21.3	23.9	21.2	:	27.9
2000	25.0	21.6	21.7	19.6	22.6	22.4	23.3	21.1	:	27.7
1991–2000	24.2	20.2	22.0	18.4	21.2	20.4	20.7	20.6	:	24.8
2001	25.7	22.2	21.7	20.6	23.1	22.8	23.3	21.5	:	27.5
2002	26.7	23.0	21.8	22.0	23.5	23.5	23.7	22.3	:	27.9

(1) 1960–91: D_90.

(% of GDP at market prices)

	A	P	FIN	S	UK	EU-10 (1)	EU-11 (2)	EU-14 (3)	US	JP
1960	27.1	15.0	27.1	24.1	18.5	26.0	25.8	24.1	19.0	33.4
1961	28.2	11.5	28.6	24.7	18.5	26.1	25.9	24.3	18.5	35.2
1962	27.9	15.4	25.9	24.5	17.7	25.6	25.5	23.8	19.4	34.3
1963	26.6	16.7	24.4	24.7	18.3	24.5	24.4	23.2	19.8	32.7
1964	28.1	20.6	23.6	26.9	20.1	25.8	25.7	24.6	20.4	34.1
1965	27.5	21.3	23.7	26.3	20.7	25.9	25.9	24.8	21.2	33.0
1966	28.6	21.6	23.5	25.2	20.5	25.6	25.6	24.6	20.9	33.7
1967	26.9	24.4	23.2	24.9	19.6	25.1	25.1	24.0	19.7	35.3
1968	27.0	21.5	25.6	23.8	20.2	25.6	25.6	24.5	19.5	37.6
1969	28.3	22.5	26.8	23.8	22.0	26.4	26.5	25.5	19.7	38.9
1970	30.3	25.5	28.0	24.8	22.1	27.8	27.8	26.6	18.5	40.0
1961–70	27.9	20.1	25.3	25.0	20.0	25.8	25.8	24.6	19.8	35.5
1971	30.2	24.5	27.9	24.0	21.2	26.9	26.9	25.8	19.2	38.3
1972	30.8	29.6	27.2	23.4	20.0	26.7	26.9	25.6	19.6	37.8
1973	30.6	29.3	28.7	24.1	21.2	27.0	27.3	26.2	21.3	38.1
1974	30.2	18.7	30.4	22.9	18.0	26.0	26.1	24.8	20.4	36.4
1975	25.9	10.8	27.3	23.8	16.7	23.1	23.2	22.3	18.8	32.7
1976	25.0	12.8	25.5	21.4	18.1	23.6	23.7	22.8	19.6	32.5
1977	24.7	19.7	24.4	17.9	19.1	23.3	23.4	22.5	20.2	32.4
1978	25.9	24.8	24.6	17.6	19.6	23.4	23.5	22.7	21.5	32.6
1979	26.4	27.8	26.4	17.8	19.0	23.2	23.3	22.4	22.1	31.6
1980	26.0	26.9	27.0	17.8	17.4	22.2	22.3	21.3	20.6	31.2
1971–80	27.6	22.5	27.0	21.1	19.0	24.5	24.7	23.6	20.3	34.4
1981	24.7	22.4	26.1	15.6	16.9	20.5	20.6	19.6	21.3	31.6
1982	23.8	20.6	24.7	14.2	16.7	20.2	20.3	19.3	18.6	30.6
1983	22.1	20.0	24.2	16.1	17.2	20.6	20.6	19.8	17.8	29.9
1984	23.1	18.8	25.4	17.9	17.9	20.9	21.0	20.3	19.1	30.9
1985	23.1	21.0	24.4	17.5	17.7	20.8	20.9	20.2	17.6	31.8
1986	23.2	25.4	23.8	18.1	16.7	21.8	21.8	20.9	16.6	32.0
1987	23.4	27.8	23.7	18.2	17.7	21.7	21.6	20.9	16.1	32.2
1988	23.4	27.3	26.1	18.8	17.7	22.5	22.5	21.5	16.5	33.1
1989	23.9	28.2	26.1	19.2	17.6	23.0	22.9	21.9	17.1	33.3
1990	25.0	26.9	24.5	17.7	16.7	22.7	22.6	21.5	16.5	33.6
1981–90	23.6	23.8	24.9	17.3	17.3	21.5	21.5	20.6	17.7	31.9
1991	25.1	24.0	16.8	15.8	15.6	21.3	21.3	20.2	16.6	34.4
1991	25.1	24.0	16.8	15.8	15.6	21.5	21.5	20.4	16.6	34.4
1992	23.8	23.0	14.0	13.4	14.5	20.8	20.8	19.7	16.0	33.8
1993	22.6	20.6	14.9	13.4	14.2	20.4	20.3	19.3	16.1	32.8
1994	22.9	19.4	18.4	17.1	16.2	20.7	20.6	19.9	16.8	31.4
1995	21.8	20.1	21.6	19.9	16.4	21.7	21.7	20.9	17.0	30.7
1996	21.5	19.1	20.7	18.9	16.8	21.4	21.4	20.6	17.3	31.4
1997	22.0	18.8	24.1	19.1	18.0	21.9	21.9	21.1	18.2	31.3
1998	22.0	18.3	25.1	20.1	18.0	22.0	21.9	21.2	18.3	30.0
1999	21.4	17.1	25.2	19.3	16.3	22.0	21.9	20.9	17.4	28.6
2000	21.1	15.1	26.4	20.2	16.4	22.3	22.3	21.1	17.7	28.3
1991–2000	22.4	19.6	20.7	17.7	16.2	21.5	21.4	20.5	17.1	31.3
2001	21.6	15.2	27.6	20.9	16.4	22.6	22.6	21.4	18.2	29.1
2002	22.0	15.5	28.8	21.9	16.9	23.1	23.0	21.9	18.6	29.3

(1) EU-15 excluding DK, EL, L, S, UK; 1960–91: including D_90.
(2) EU-15 excluding DK, L, S, UK; 1960–91: including D_90.
(3) EU-15 excluding L; 1960–91: including D_90.

Table 46a

Gross saving; private sector
EU Member States: former definition

(% of GDP at market prices)

	B	DK	D [1]	EL	E	F	IRL	I	L	NL
1960	21.2	19.3	21.6	10.3	:	20.5	16.2	23.1	30.1	25.6
1961	20.6	20.3	20.1	14.4	:	20.1	18.1	24.1	25.8	23.8
1962	21.1	19.1	19.7	13.9	:	21.2	17.8	23.6	27.1	23.1
1963	20.4	17.9	19.7	17.6	:	20.4	17.3	21.8	26.2	22.5
1964	22.1	19.0	21.2	18.7	:	20.4	17.9	21.5	27.9	24.4
1965	22.6	19.3	21.9	21.9	:	22.3	19.1	24.1	26.2	23.7
1966	21.7	17.0	21.4	21.7	:	22.4	17.6	23.4	26.2	23.0
1967	22.1	17.3	21.6	21.0	:	22.8	19.6	21.8	26.6	23.6
1968	22.0	17.0	22.5	20.7	:	22.6	19.4	23.1	28.5	23.6
1969	22.8	17.2	21.1	23.4	:	22.0	19.7	24.3	31.7	23.1
1970	24.5	12.1	21.8	24.4	23.1	22.6	18.8	27.9	34.7	22.8
1961–70	22.0	17.6	21.1	19.8	:	21.7	18.5	23.6	28.1	23.4
1971	23.3	13.2	21.1	27.6	23.7	22.6	18.3	28.1	29.5	22.3
1972	24.2	15.9	21.3	30.5	23.8	22.7	21.4	28.9	32.4	23.1
1973	23.5	15.2	20.1	35.2	23.9	23.5	22.4	28.6	35.1	23.1
1974	23.4	14.5	20.3	30.1	23.4	22.6	20.3	28.9	38.0	23.9
1975	21.8	17.3	21.1	29.7	22.2	22.3	27.1	30.5	32.5	21.8
1976	23.1	16.0	20.4	30.0	20.3	20.6	22.5	30.5	36.4	21.8
1977	21.5	16.9	18.9	27.4	20.2	21.6	24.4	30.2	33.6	20.1
1978	21.8	16.9	20.1	27.3	22.6	22.0	25.7	31.8	34.6	19.9
1979	20.5	15.9	20.2	27.2	21.7	20.3	24.2	31.5	36.8	19.2
1980	23.9	15.9	19.2	26.5	20.2	18.7	20.9	29.2	37.1	16.8
1971–80	22.7	15.8	20.3	29.2	22.2	21.7	22.7	29.8	34.6	21.2
1981	24.8	16.7	19.2	28.5	19.1	18.3	19.6	29.5	41.1	18.5
1982	22.6	19.0	19.1	27.4	20.1	17.9	24.1	29.8	53.4	19.9
1983	24.1	19.3	19.8	25.3	19.7	18.2	22.7	29.9	54.9	20.3
1984	23.6	18.4	19.7	27.1	21.6	17.8	21.7	30.2	54.9	21.2
1985	23.2	16.5	19.4	29.4	20.4	17.6	21.6	29.5	41.6	20.5
1986	25.5	12.8	21.4	27.8	21.9	18.8	21.2	29.1	43.5	21.7
1987	24.4	14.1	21.8	24.9	20.7	18.1	21.5	28.1	39.1	20.6
1988	25.9	16.0	23.0	27.9	20.8	18.9	18.8	27.5	:	21.6
1989	26.5	17.6	22.1	28.1	19.7	19.2	17.2	26.0	:	24.0
1990	26.5	20.5	23.6	27.4	20.0	19.1	18.8	26.4	:	24.5
1981–90	24.7	17.1	20.9	27.4	20.4	18.4	20.7	28.6	:	21.3
1991	26.5	21.0	21.6	26.0	19.8	19.5	18.9	25.3	:	21.5
1991	26.5	21.0	22.0	26.0	19.8	19.5	18.9	25.3	:	21.5
1992	27.9	20.6	21.6	25.9	18.3	20.9	16.8	25.4	:	21.6
1993	29.1	20.2	21.4	25.2	20.5	21.2	18.8	24.6	:	20.8
1994	27.7	19.9	21.0	25.3	20.2	21.3	17.4	25.1	:	22.5
1995	27.0	20.8	21.9	25.1	24.6	20.9	20.6	25.4	:	28.4

[1] 1960–91: D_90.

(% of GDP at market prices)

	A	P	FIN	S	UK	EU-10 (1)	EU-11 (2)	EU-12 (3)	EU-14 (4)	US	JP
1960	20.8	11.7	18.7	:	20.3	:	:	21.0	:	16.2	27.2
1961	20.2	9.5	21.1	:	16.4	:	:	19.8	:	17.0	28.2
1962	20.3	12.9	18.3	:	14.5	:	:	19.4	:	17.5	27.4
1963	20.4	14.1	18.9	:	16.6	:	:	19.5	:	17.1	26.4
1964	21.0	17.8	17.3	:	17.4	:	:	20.2	:	18.2	27.9
1965	20.0	17.8	17.0	:	17.2	:	:	21.2	:	18.5	27.3
1966	20.7	17.8	16.9	:	16.3	:	:	20.7	:	18.6	28.4
1967	20.6	21.0	15.7	:	15.5	:	:	20.5	:	18.9	29.3
1968	21.3	17.9	18.1	:	15.0	:	:	20.9	:	17.6	31.5
1969	22.4	18.1	19.4	:	14.5	:	:	20.7	:	16.4	32.4
1970	23.3	20.5	20.0	14.4	14.2	23.4	23.4	21.5	21.3	17.7	33.0
1961–70	21.0	16.7	18.3	:	15.8	:	:	20.4	:	17.8	29.2
1971	22.6	19.9	19.6	13.3	14.9	23.0	23.1	21.4	21.2	19.2	31.0
1972	22.1	25.9	19.3	13.6	16.9	23.4	23.6	22.2	21.9	18.4	31.3
1973	21.6	25.2	19.1	15.5	18.6	23.1	23.3	22.3	22.1	19.3	30.9
1974	21.9	17.2	22.1	16.6	16.3	22.9	23.0	21.8	21.7	18.9	29.7
1975	21.1	11.3	17.8	17.1	16.1	22.9	23.0	21.9	21.7	21.1	29.1
1976	22.2	14.2	14.4	13.0	18.2	22.0	22.2	21.6	21.1	20.4	30.1
1977	20.8	19.9	14.6	11.5	18.5	21.6	21.7	21.3	20.8	20.1	29.6
1978	22.5	26.7	17.3	13.1	20.4	22.7	22.8	22.3	22.0	20.2	30.7
1979	22.9	28.9	19.7	15.2	19.2	22.3	22.4	21.7	21.5	20.6	28.7
1980	21.8	30.4	19.7	17.1	17.9	21.2	21.3	20.6	20.5	20.6	28.0
1971–80	22.0	22.0	18.4	14.6	17.7	22.5	22.6	21.7	21.4	19.9	29.9
1981	20.4	29.3	17.8	15.9	17.3	21.1	21.3	20.6	20.3	21.2	28.0
1982	21.5	23.2	18.0	16.0	17.1	21.2	21.3	20.5	20.4	21.2	27.2
1983	20.2	21.8	19.1	16.1	17.9	21.6	21.7	21.1	20.8	21.2	26.9
1984	20.1	25.1	18.9	17.1	19.0	21.8	21.9	21.3	21.2	21.6	27.0
1985	20.0	27.0	17.8	17.6	18.2	21.4	21.5	20.9	20.7	20.2	26.9
1986	21.2	27.1	16.8	16.1	17.3	22.5	22.6	21.5	21.4	19.3	27.3
1987	22.4	29.9	18.7	13.0	17.7	22.2	22.2	21.4	21.0	17.9	25.9
1988	21.4	27.3	17.6	13.0	15.9	22.6	22.7	21.5	21.1	17.8	25.7
1989	22.0	27.2	16.7	11.4	14.9	22.2	22.3	21.1	20.6	17.9	25.0
1990	22.8	28.3	15.4	11.4	14.3	22.7	22.8	21.6	21.1	18.2	24.7
1981–90	21.2	26.6	17.7	14.8	17.0	21.9	22.0	21.1	20.9	19.7	26.4
1991	23.4	26.5	14.3	14.4	15.1	21.8	21.9	20.9	20.6	18.9	25.1
1991	23.4	26.5	14.3	14.4	15.1	22.0	22.0	21.1	20.7	18.9	25.1
1992	21.1	22.2	16.0	16.7	17.8	22.0	22.0	21.7	21.3	19.3	25.6
1993	21.8	22.7	19.8	20.2	19.2	22.1	22.1	21.8	21.6	18.6	26.5
1994	22.8	22.2	21.3	23.7	20.4	22.1	22.2	22.0	21.9	18.0	25.9
1995	22.2	22.4	23.9	24.4	19.5	23.1	23.1	22.4	22.6	17.6	26.6

(1) EU-15 excluding DK, EL, L, S, UK; 1960–91: including D_90.
(2) EU-15 excluding DK, L, S, UK; 1960–91: including D_90.
(3) EU-15 excluding E, L, S; 1960–91: including D_90.
(4) EU-15 excluding L; 1960–91: including D_90.

Table 46b

Gross saving; private sector
EU Member States: ESA 95

(% of GDP at market prices)

	B	DK	D	EL	E	F	IRL	I	L	NL
1970	24.1	:	:	:	:	:	:	:	:	:
1971	23.2	12.9	:	:	:	:	:	:	:	:
1972	24.5	15.6	:	:	:	:	:	:	:	:
1973	23.6	15.9	:	:	:	:	:	:	:	:
1974	23.5	14.5	:	:	:	:	:	:	:	:
1975	22.1	18.1	:	:	:	:	:	:	:	:
1976	23.2	16.3	:	:	:	:	:	:	:	:
1977	21.4	16.6	:	:	:	:	:	:	:	:
1978	22.0	17.0	:	:	:	20.8	:	:	:	:
1979	20.8	15.9	:	:	:	19.0	:	:	:	:
1980	24.3	15.9	:	:	:	18.3	:	:	:	:
1975–80	22.3	16.6	:	:	:	:	:	:	:	:
1981	25.2	16.8	:	:	:	18.1	:	:	:	:
1982	23.4	18.9	:	:	:	17.2	:	:	:	:
1983	24.3	19.2	:	:	:	17.4	:	:	:	:
1984	24.2	18.7	:	:	:	17.1	:	:	:	:
1985	23.7	16.9	:	:	:	17.2	:	:	:	:
1986	25.5	13.6	:	:	:	18.7	:	:	:	:
1987	24.2	14.6	:	:	:	17.8	:	:	:	:
1988	25.7	16.0	:	:	:	19.1	:	:	:	:
1989	27.5	17.6	:	:	:	19.2	:	:	:	:
1990	27.5	20.5	:	:	:	19.1	19.1	:	40.2	:
1981–90	25.1	17.3	:	:	:	18.1	:	:	:	:
1991	27.2	21.0	21.9	:	:	19.3	19.1	:	43.0	:
1992	28.4	20.6	21.5	:	:	20.3	17.0	:	39.0	:
1993	28.5	20.3	21.1	:	:	20.8	18.9	:	30.6	:
1994	27.1	19.7	20.9	:	:	20.4	17.6	:	29.4	:
1995	26.9	20.9	22.0	24.8	24.1	20.6	20.5	25.4	:	28.5
1996	26.0	19.5	21.9	22.7	20.8	19.5	20.3	25.6	:	26.1
1997	24.4	18.2	21.6	19.3	22.2	20.4	21.2	21.9	:	26.6
1998	23.2	17.0	21.0	18.0	21.4	20.0	20.7	21.2	:	24.1
1999	22.6	16.3	20.1	17.1	19.5	19.5	18.2	19.7	:	24.3
2000	22.7	17.4	20.0	16.6	18.9	20.2	17.2	19.0	:	23.9
1991–2000	25.7	19.1	21.2	:	:	20.1	19.1	:	:	:
2001	22.8	17.7	20.6	17.1	18.9	20.4	16.9	19.3	:	24.2
2002	23.5	18.2	20.4	17.9	19.1	20.3	17.2	20.0	:	23.8

(% of GDP at market prices)

	A	P	FIN	S	UK	EU-10 (1)	EU-11 (2)	EU-14 (3)	US	JP
1970	:	:	:	:	13.3	:	:	:	17.7	33.0
1971	:	:	:	:	14.1	:	:	:	19.2	31.0
1972	:	:	:	:	16.1	:	:	:	18.4	31.3
1973	:	:	:	:	17.7	:	:	:	19.3	30.9
1974	:	:	:	:	15.2	:	:	:	18.9	29.7
1975	:	:	17.0	:	15.1	:	:	:	21.1	29.1
1976	:	:	13.1	:	17.3	:	:	:	20.4	30.1
1977	:	:	13.6	:	17.9	:	:	:	20.1	29.6
1978	:	:	16.6	:	19.8	:	:	:	20.2	30.7
1979	:	:	19.1	:	18.5	:	:	:	20.6	28.7
1980	:	:	19.2	:	17.2	:	:	:	20.6	28.0
1975–80	:	:	16.4	:	17.6	:	:	:	20.5	29.4
1981	:	:	17.2	:	16.7	:	:	:	21.2	28.0
1982	:	:	17.2	:	16.4	:	:	:	21.2	27.2
1983	:	:	18.4	:	17.3	:	:	:	21.2	26.9
1984	:	:	18.2	:	18.5	:	:	:	21.6	27.0
1985	:	:	17.2	:	17.6	:	:	:	20.2	26.9
1986	:	:	16.1	:	16.6	:	:	:	19.3	27.3
1987	:	:	18.1	:	17.2	:	:	:	17.9	25.9
1988	21.8	:	16.5	:	15.0	:	:	:	17.8	25.7
1989	22.2	:	15.9	:	14.0	:	:	:	17.9	25.0
1990	22.5	:	15.2	:	13.8	:	:	:	18.2	24.7
1981–90	:	:	17.0	:	16.3	:	:	:	19.7	26.4
1991	23.1	:	13.6	:	14.9	:	:	:	18.9	25.1
1992	20.9	:	15.6	:	17.7	:	:	:	19.3	25.6
1993	21.6	:	18.9	19.9	19.1	:	:	:	18.6	26.5
1994	22.7	:	20.5	24.0	20.1	:	:	:	18.0	25.9
1995	22.1	21.4	22.1	24.0	19.2	23.0	23.0	22.5	17.6	26.6
1996	20.6	19.4	20.3	19.4	19.0	22.2	22.2	21.6	17.1	27.4
1997	20.0	17.8	22.5	18.0	18.4	21.7	21.7	21.0	16.6	27.7
1998	20.2	16.4	21.0	16.4	16.0	21.0	21.0	19.9	15.5	27.6
1999	19.9	14.8	20.6	14.7	13.5	20.1	20.0	18.7	13.8	30.3
2000	19.4	13.1	19.3	14.1	13.0	19.9	19.8	18.4	12.7	30.9
1991–2000	21.0	:	19.4	:	17.1	:	:	:	16.8	27.4
2001	19.1	12.6	20.4	14.7	13.0	20.2	20.2	18.7	12.7	32.0
2002	19.3	12.7	21.3	15.2	13.3	20.3	20.3	18.8	12.9	33.0

(1) EU-15 excluding DK, EL, L, S, UK.
(2) EU-15 excluding DK, L, S, UK.
(3) EU-15 excluding L.

Table 47a

Gross saving; general government
EU Member States: former definition

(% of GDP at market prices)

	B	DK	D (1)	EL	E	F	IRL	I	L	NL
1960	– 1.8	5.6	7.3	3.4	:	3.9	0.1	2.4	5.7	4.7
1961	0.7	3.1	8.0	4.2	:	4.2	– 0.2	2.6	7.1	5.0
1962	1.1	3.8	7.5	4.4	:	3.3	– 0.2	2.4	5.0	3.8
1963	0.5	5.1	6.7	4.1	:	3.4	0.4	1.8	4.1	3.0
1964	2.3	5.0	7.1	3.9	:	4.4	0.3	2.3	4.5	2.9
1965	1.5	5.3	5.3	2.7	:	4.5	0.3	– 0.5	4.6	3.3
1966	2.4	5.9	5.3	3.3	:	4.6	1.4	– 0.6	3.8	3.5
1967	2.4	4.5	3.7	2.3	:	4.0	1.4	0.9	1.8	3.3
1968	1.7	5.3	4.2	3.3	:	3.2	1.4	0.5	1.4	4.1
1969	2.0	5.8	6.5	4.1	:	4.4	1.2	0.1	3.3	4.4
1970	2.6	9.7	6.3	3.9	3.9	5.0	1.7	0.2	6.6	4.2
1961–70	1.7	5.3	6.1	3.6	:	4.1	0.8	1.0	4.2	3.8
1971	2.4	9.1	6.1	3.4	3.1	4.5	1.9	– 1.9	6.8	4.4
1972	1.2	8.5	5.2	3.9	3.5	4.6	1.4	– 3.6	6.6	4.5
1973	1.2	9.2	6.6	3.6	4.1	4.3	0.9	– 3.4	8.5	5.4
1974	1.9	7.6	4.5	1.7	3.3	4.2	– 1.2	– 3.2	9.7	4.1
1975	– 0.1	3.2	– 0.1	0.6	3.4	2.0	– 5.4	– 6.9	7.5	2.4
1976	– 0.8	4.2	1.9	1.8	2.7	4.0	– 2.6	– 5.0	7.9	2.3
1977	– 0.9	3.5	2.8	0.7	3.0	2.8	– 2.0	– 4.3	8.4	2.9
1978	– 1.5	3.7	2.5	0.2	1.3	1.3	– 3.6	– 5.5	10.1	1.6
1979	– 2.2	2.6	2.6	0.7	1.1	2.7	– 4.7	– 5.2	7.0	1.4
1980	– 3.7	0.7	2.4	– 0.1	0.5	3.7	– 4.9	– 4.6	7.0	1.3
1971–80	– 0.2	5.3	3.5	1.6	2.6	3.4	– 2.0	– 4.4	7.9	3.0
1981	– 7.5	– 2.6	1.1	– 5.9	0.1	1.7	– 6.1	– 7.0	4.8	0.3
1982	– 6.3	– 5.2	1.1	– 3.7	– 0.5	0.9	– 7.0	– 7.1	5.9	– 1.2
1983	– 7.4	– 3.9	1.4	– 3.8	0.0	0.3	– 5.9	– 6.8	8.9	– 1.0
1984	– 6.0	– 1.4	2.0	– 4.3	– 0.7	0.6	– 4.9	– 7.1	8.9	– 0.5
1985	– 5.8	0.8	2.6	– 7.4	0.3	0.5	– 6.2	– 6.9	11.0	0.9
1986	– 6.5	5.5	2.4	– 5.7	– 0.3	0.6	– 6.3	– 6.8	8.6	– 0.3
1987	– 5.0	4.5	1.7	– 5.9	0.9	1.4	– 5.2	– 6.2	7.5	– 0.9
1988	– 4.1	3.2	1.3	– 7.6	1.8	1.9	– 2.5	– 5.7	:	– 0.4
1989	– 4.3	1.9	3.6	– 10.1	2.2	2.4	– 0.1	– 5.1	:	– 1.0
1990	– 3.6	0.2	1.3	– 9.4	1.7	2.4	– 0.8	– 5.7	:	– 1.5
1981–90	– 5.6	0.3	1.8	– 6.4	0.6	1.3	– 4.5	– 6.4	:	– 0.6
1991	– 4.4	– 1.0	1.1	– 6.4	1.2	1.4	– 1.2	– 5.7	:	0.3
1991	– 4.4	– 1.0	1.2	– 6.4	1.2	1.4	– 1.2	– 5.7	:	0.3
1992	– 5.0	– 0.4	1.4	– 7.0	0.7	– 0.4	– 1.2	– 7.1	:	– 0.9
1993	– 5.1	– 1.0	0.5	– 7.9	– 1.6	– 2.2	– 1.0	– 5.4	:	– 0.3
1994	– 3.0	– 0.7	1.0	– 7.1	– 1.5	– 2.1	0.6	– 5.4	:	– 1.0
1995	– 2.0	– 0.5	0.0	– 7.1	– 2.3	– 1.4	– 0.2	– 3.8	:	– 1.1

(1) 1960–91: D_90.

(% of GDP at market prices)

	A	P	FIN	S	UK	EU-10 (1)	EU-11 (2)	EU-12 (3)	EU-14 (4)	US	JP
1960	6.3	3.2	8.4	:	– 1.8	:	:	3.1	:	2.8	6.2
1961	7.9	2.0	7.6	:	2.1	:	:	4.4	:	1.5	7.0
1962	7.6	2.5	7.6	:	3.2	:	:	4.3	:	1.8	6.9
1963	6.1	2.6	5.5	:	1.7	:	:	3.6	:	2.7	6.4
1964	7.1	2.9	6.3	:	2.7	:	:	4.3	:	2.2	6.1
1965	7.6	3.5	6.7	:	3.4	:	:	3.6	:	2.7	5.7
1966	7.9	3.7	6.6	:	4.1	:	:	3.9	:	2.3	5.3
1967	6.3	3.4	7.5	:	4.1	:	:	3.5	:	0.7	6.0
1968	5.7	3.5	7.4	:	5.2	:	:	3.6	:	1.9	6.1
1969	5.9	4.4	7.4	:	7.5	:	:	4.8	:	3.3	6.4
1970	7.0	5.0	8.0	10.4	8.0	4.4	4.4	5.2	5.3	0.8	7.0
1961–70	6.9	3.4	7.1	:	4.2	:	:	4.1	:	2.0	6.3
1971	7.5	4.5	8.3	10.7	6.3	3.8	3.8	4.4	4.6	0.0	7.2
1972	8.6	3.7	7.9	9.8	3.1	3.3	3.3	3.4	3.7	1.1	6.5
1973	8.9	4.1	9.7	8.6	2.6	4.0	4.0	3.9	4.1	2.0	7.2
1974	8.3	1.5	8.3	6.3	1.7	3.0	3.0	2.9	3.1	1.5	6.7
1975	4.8	– 0.5	9.5	6.6	0.6	0.2	0.2	0.1	0.6	– 2.3	3.6
1976	2.9	– 1.4	11.1	8.3	– 0.1	1.5	1.5	1.3	1.7	– 0.8	2.5
1977	3.9	– 0.2	9.8	6.3	0.6	1.7	1.6	1.5	1.8	0.1	2.8
1978	3.5	– 1.9	7.3	4.5	– 0.8	0.7	0.7	0.5	0.7	1.2	1.9
1979	3.4	– 1.2	6.7	2.6	– 0.2	1.0	1.0	0.8	0.9	1.5	2.9
1980	4.2	– 3.5	7.4	0.7	– 0.5	1.1	1.0	0.8	0.8	0.0	3.2
1971–80	5.6	0.5	8.6	6.5	1.3	2.0	2.0	2.0	2.2	0.4	4.4
1981	4.3	– 6.9	8.3	– 0.4	– 0.5	– 0.6	– 0.7	– 0.8	– 0.7	0.1	3.7
1982	2.2	– 2.6	6.7	– 1.7	– 0.4	– 1.0	– 1.0	– 1.0	– 1.0	– 2.6	3.4
1983	1.9	– 1.8	5.1	– 0.1	– 0.7	– 1.1	– 1.1	– 1.2	– 1.1	– 3.4	3.0
1984	3.1	– 6.3	6.5	0.9	– 1.1	– 0.9	– 0.9	– 1.0	– 0.9	– 2.5	3.9
1985	3.1	– 6.0	6.5	– 0.1	– 0.5	– 0.5	– 0.6	– 0.6	– 0.6	– 2.6	4.9
1986	2.0	– 1.8	7.0	2.1	– 0.6	– 0.6	– 0.7	– 0.6	– 0.5	– 2.7	4.7
1987	1.0	– 2.1	4.9	5.2	0.0	– 0.5	– 0.6	– 0.5	– 0.2	– 1.8	6.3
1988	1.9	0.0	8.5	5.7	1.9	– 0.1	– 0.2	0.1	0.4	– 1.3	7.4
1989	1.9	1.0	9.4	7.8	2.7	0.8	0.7	0.9	1.3	– 0.8	8.4
1990	2.2	– 1.4	9.1	6.3	2.4	– 0.1	– 0.2	0.1	0.4	– 1.7	8.9
1981–90	2.4	– 2.8	7.2	2.6	0.3	– 0.4	– 0.5	– 0.5	– 0.3	– 1.9	5.5
1991	1.8	– 2.5	2.6	1.4	0.5	– 0.5	– 0.6	– 0.6	– 0.4	– 2.3	9.4
1991	1.8	– 2.5	2.6	1.4	0.5	– 0.4	– 0.5	– 0.5	– 0.3	– 2.3	9.4
1992	2.7	0.8	– 2.1	– 3.3	– 3.3	– 1.1	– 1.2	– 1.7	– 1.6	– 3.3	8.2
1993	0.8	– 2.0	– 5.0	– 6.9	– 5.0	– 1.7	– 1.8	– 2.3	– 2.4	– 2.5	6.2
1994	0.0	– 2.8	– 2.9	– 6.6	– 4.2	– 1.4	– 1.5	– 1.9	– 2.0	– 1.2	5.5
1995	– 0.4	– 2.3	– 2.2	– 4.5	– 3.1	– 1.4	– 1.5	– 1.6	– 1.7	– 0.7	4.2

(1) EU-15 excluding DK, EL, L, S, UK; 1960–91: including D_90.
(2) EU-15 excluding DK, L, S, UK; 1960–91: including D_90.
(3) EU-15 excluding E, L, S; 1960–91: including D_90.
(4) EU-15 excluding L; 1960–91: including D_90.

Table 47b

Gross saving; general government
EU Member States: ESA 95

(% of GDP at market prices)

	B	DK	D	EL	E	F	IRL	I	L	NL
1970	3.0	:	:	:	:	:	:	:	:	:
1971	2.5	9.4	:	:	:	:	:	:	:	:
1972	0.9	8.8	:	:	:	:	:	:	:	:
1973	1.1	8.5	:	:	:	:	:	:	:	:
1974	1.8	7.6	:	:	:	:	:	:	:	:
1975	– 0.4	2.5	:	:	:	:	:	:	:	:
1976	– 0.9	3.9	:	:	:	:	:	:	:	:
1977	– 0.8	3.8	:	:	:	:	:	:	:	:
1978	– 1.6	3.6	:	:	:	2.5	:	:	:	:
1979	– 2.5	2.5	:	:	:	4.0	:	:	:	:
1980	– 4.1	0.7	:	:	:	4.1	:	:	:	:
1975–80	– 1.7	2.8	:	:	:	:	:	:	:	:
1981	– 7.8	– 2.7	:	:	:	1.9	:	:	:	:
1982	– 7.0	– 5.1	:	:	:	1.6	:	:	:	:
1983	– 7.6	– 3.7	:	:	:	1.2	:	:	:	:
1984	– 6.6	– 1.7	:	:	:	1.2	:	:	:	:
1985	– 6.3	0.5	:	:	:	0.9	:	:	:	:
1986	– 6.5	4.7	:	:	:	0.7	:	:	:	:
1987	– 4.7	4.0	:	:	:	1.7	:	:	:	:
1988	– 4.0	3.2	:	:	:	1.7	:	:	:	:
1989	– 5.3	1.9	:	:	:	2.3	:	:	:	:
1990	– 4.6	0.2	:	:	:	2.5	– 1.1	:	10.4	:
1981–90	– 6.0	0.1	:	:	:	1.6	:	:	:	:
1991	– 5.1	– 1.0	1.4	:	:	1.7	– 1.4	:	7.8	:
1992	– 5.5	– 0.4	1.6	:	:	0.2	– 1.4	:	9.4	:
1993	– 4.5	– 1.0	0.8	:	:	– 1.9	– 1.2	:	11.4	:
1994	– 2.4	– 0.6	1.1	:	:	– 1.2	0.5	:	10.1	:
1995	– 2.0	– 0.5	– 0.1	– 6.8	– 1.8	– 1.1	– 0.1	– 3.8	8.0	– 1.1
1996	– 1.5	0.9	– 0.5	– 5.2	1.2	– 0.3	1.7	– 3.7	8.4	0.6
1997	0.5	2.3	– 0.1	– 1.5	0.4	– 0.1	2.6	– 0.2	8.6	1.3
1998	1.5	2.9	0.6	0.0	1.2	1.0	4.1	0.3	9.2	1.8
1999	1.9	4.3	1.3	2.0	2.9	1.9	5.8	1.5	9.4	3.5
2000	2.4	4.2	1.7	3.0	3.7	2.2	6.1	2.1	10.1	3.8
1991–2000	– 1.5	1.1	0.8	:	:	0.2	1.7	:	9.2	:
2001	2.9	4.5	1.1	3.5	4.2	2.5	6.4	2.2	9.9	3.2
2002	3.2	4.8	1.4	4.1	4.4	3.2	6.5	2.3	9.3	4.1

(% of GDP at market prices)

	A	P	FIN	S	UK	EUR-11 (1)	EUR-12 (2)	EU-15	US	JP
1970	:	:	:	:	8.9	:	:	:	0.8	7.0
1971	:	:	:	:	7.1	:	:	:	0.0	7.2
1972	:	:	:	:	4.0	:	:	:	1.1	6.5
1973	:	:	:	:	3.5	:	:	:	2.0	7.2
1974	:	:	:	:	2.8	:	:	:	1.5	6.7
1975	:	:	10.3	:	1.6	:	:	:	– 2.3	3.6
1976	:	:	12.4	:	0.7	:	:	:	– 0.8	2.5
1977	:	:	10.9	:	1.2	:	:	:	0.1	2.8
1978	:	:	8.0	:	– 0.2	:	:	:	1.2	1.9
1979	:	:	7.3	:	0.5	:	:	:	1.5	2.9
1980	:	:	7.9	:	0.2	:	:	:	0.0	3.2
1975–80	:	:	9.4	:	0.7	:	:	:	0.0	2.8
1981	:	:	9.0	:	0.2	:	:	:	0.1	3.7
1982	:	:	7.5	:	0.3	:	:	:	– 2.6	3.4
1983	:	:	5.8	:	0.0	:	:	:	– 3.4	3.0
1984	:	:	7.1	:	– 0.6	:	:	:	– 2.5	3.9
1985	:	:	7.2	:	0.1	:	:	:	– 2.6	4.9
1986	:	:	7.7	:	0.1	:	:	:	– 2.7	4.7
1987	:	:	5.6	:	0.5	:	:	:	– 1.8	6.3
1988	1.6	:	9.5	:	2.7	:	:	:	– 1.3	7.4
1989	1.7	:	10.3	:	3.6	:	:	:	– 0.8	8.4
1990	2.4	:	9.4	:	2.9	:	:	:	– 1.7	8.9
1981–90	:	:	7.9	:	1.0	:	:	:	– 1.9	5.5
1991	2.0	:	3.3	:	0.7	:	:	:	– 2.3	9.4
1992	2.9	:	– 1.7	:	– 3.2	:	:	:	– 3.3	8.2
1993	0.9	:	– 4.1	– 6.5	– 4.8	:	:	:	– 2.5	6.2
1994	0.1	:	– 2.0	– 6.9	– 3.9	:	:	:	– 1.2	5.5
1995	– 0.2	– 1.3	– 0.5	– 4.1	– 2.9	– 1.2	– 1.3	– 1.6	– 0.7	4.2
1996	0.9	– 0.2	0.4	– 0.5	– 2.2	– 0.7	– 0.8	– 1.0	0.2	3.9
1997	2.0	1.0	1.6	1.1	– 0.3	0.2	0.2	0.2	1.5	3.6
1998	1.8	1.9	4.1	3.7	2.0	1.0	1.0	1.3	2.8	2.3
1999	1.5	2.3	4.7	4.6	2.8	1.9	1.9	2.2	3.7	– 1.7
2000	1.7	2.0	7.1	6.1	3.4	2.4	2.4	2.8	5.0	– 2.6
1991–2000	1.4	:	1.3	:	– 0.9	:	:	:	0.3	3.9
2001	2.5	2.6	7.2	6.2	3.4	2.4	2.4	2.8	5.5	– 2.8
2002	2.7	2.8	7.6	6.7	3.6	2.8	2.8	3.1	5.8	– 3.7

(1) EU-15 excluding DK, EL, S, UK.
(2) EU-15 excluding DK, S, UK.

Table 48

Money supply (M2/M3)

(end year; annual percentage change)

	B/L	DK	D (1)	EL	E	F	IRL	I	NL
1960	4.3	8.0	11.1	20.2	:	16.7	5.5	19.6	7.0
1961	9.9	9.8	12.9	17.0	:	17.2	7.4	14.9	5.4
1962	7.4	8.5	10.4	21.5	:	18.7	9.6	17.0	6.7
1963	10.3	12.5	9.9	21.4	:	14.1	5.9	13.5	9.8
1964	7.6	11.1	9.4	16.1	:	9.8	9.4	12.8	10.4
1965	9.6	9.7	10.6	12.9	:	10.9	6.7	15.2	6.2
1966	8.2	12.8	8.3	18.2	:	10.6	10.6	13.0	5.9
1967	7.1	9.9	12.0	16.1	:	13.1	12.7	13.7	10.9
1968	8.6	14.5	11.8	17.8	:	11.6	16.9	13.1	14.8
1969	7.0	10.2	9.4	16.2	:	6.1	11.2	12.5	10.2
1970	10.0	3.3	9.1	19.3	15.8	15.3	14.0	15.9	11.0
1961–70	8.6	10.2	10.4	17.6	:	12.7	10.4	14.1	9.1
1971	12.9	8.5	13.5	22.4	24.0	18.0	12.9	17.2	9.0
1972	17.0	15.0	14.4	23.6	23.8	18.8	14.2	19.0	11.9
1973	15.4	12.6	10.1	14.5	24.8	14.7	26.1	23.1	21.9
1974	14.0	8.9	8.5	20.9	19.9	15.6	20.6	15.7	20.1
1975	15.1	25.1	8.6	26.5	18.9	18.1	18.9	23.7	5.7
1976	14.3	10.9	8.4	26.8	19.0	12.3	14.5	20.8	22.7
1977	10.3	9.8	11.2	22.7	18.9	14.2	17.1	21.7	3.6
1978	10.2	8.3	11.0	26.0	19.5	12.4	29.0	22.6	4.2
1979	8.2	9.7	6.0	18.4	18.5	14.0	18.7	20.8	6.9
1980	6.5	8.8	6.2	24.7	16.9	9.6	17.7	12.7	4.4
1971–80	12.4	11.8	9.8	22.6	20.4	14.8	19.0	19.7	11.0
1981	6.0	10.0	5.0	36.4	16.9	11.1	17.4	10.0	5.3
1982	5.5	11.4	7.1	28.5	17.0	11.6	13.0	18.1	7.6
1983	9.0	25.4	5.3	22.0	15.4	11.7	5.6	12.3	5.1
1984	6.0	17.8	4.7	30.8	15.0	9.9	10.1	12.1	5.8
1985	7.7	15.8	7.6	29.1	13.2	7.2	5.3	11.1	9.0
1986	12.8	10.8	6.6	20.6	13.5	6.4	– 1.0	10.7	7.0
1987	10.2	4.4	5.9	24.3	14.9	11.2	10.9	7.2	3.1
1988	7.8	3.4	6.9	23.5	13.4	8.1	6.3	7.6	10.3
1989	13.5	6.2	5.5	24.7	14.9	9.9	5.0	9.9	12.0
1990	5.7	7.1	4.2	15.7	11.8	9.0	15.5	8.1	7.7
1981–90	8.4	11.2	5.9	25.6	14.6	9.6	8.8	10.7	7.3
1991	3.6	6.4	6.3	12.9	11.3	2.0	3.1	9.1	5.3
1992	7.8	– 1.5	7.6	15.4	5.1	5.1	11.7	4.7	6.2
1993	14.2	11.4	10.9	16.8	10.1	– 2.9	16.3	8.1	7.8
1994	– 4.8	– 5.2	1.6	9.2	7.1	1.8	10.2	0.9	0.3
1995	0.0	3.9	3.6	16.1	9.2	4.6	12.4	– 2.0	4.3
1996	6.9	7.3	8.7	13.8	7.4	– 3.3	15.9	4.0	6.0
1997	6.1	5.2	3.6	20.3	4.3	2.0	22.1	9.0	5.6
1998	9.8	2.9	7.3	15.5	1.1	2.7	17.3	6.5	11.7
1999	:	4.1	:	12.7	:	:	:	:	:

(1) 1960–90: including D_90.

Definitions:
B: M3H;
DK: M2;
D: M3, until 1990 D_90, from 1991 onwards D;
EL: M3;
E: ALP;
F: M3;
IRL: M3;
I: M2;
NL: M3;
A: M3;
P: L-;
FIN: until 1984 M1, from 1985 onwards M3;
S: M3;
UK: M4;
EUR: chain weighted arithmetic mean; weights: GDP at current market prices and PPS;
US: M2;
JP: M2 plus certificates of deposit.

(end year; annual percentage change)

	A	P	FIN	S	UK	EUR-11 (1)	EUR-12 (2)	EU-15 (3)	US	JP
1960	:	:	:	:	:	:	:	:	4.9	20.1
1961	10.8	:	14.8	:	:	14.1	14.2	:	7.4	20.2
1962	13.0	:	6.5	9.7	:	14.0	14.1	:	8.1	20.3
1963	10.5	:	8.8	8.6	:	12.3	12.5	:	8.4	24.0
1964	12.3	:	11.1	7.5	7.6	10.9	11.1	:	8.0	18.7
1965	12.0	:	10.4	5.3	9.4	11.9	11.9	:	8.1	18.0
1966	9.6	:	11.8	8.5	6.5	10.5	10.7	:	4.5	16.3
1967	9.2	11.7	8.5	12.7	12.8	12.7	12.8	:	9.2	15.5
1968	8.9	14.1	12.1	11.3	8.5	12.7	12.8	:	8.0	14.8
1969	11.2	17.8	12.6	4.8	5.1	9.9	10.1	:	4.1	18.5
1970	12.4	12.4	13.5	5.5	12.0	13.0	13.2	12.6	6.6	16.9
1961–70	11.0	:	11.0	:	:	12.2	12.3	:	7.2	18.3
1971	15.3	21.0	13.8	9.9	16.2	16.2	16.4	16.0	13.5	24.3
1972	16.5	23.4	17.1	11.8	23.2	17.6	17.7	18.5	13.0	24.7
1973	10.8	28.9	15.6	12.8	21.8	16.9	16.9	17.6	6.9	16.8
1974	9.6	12.1	17.5	8.9	10.8	14.2	14.3	13.5	5.5	11.5
1975	11.7	13.1	22.1	12.7	11.7	15.6	15.9	15.3	12.6	16.5
1976	14.4	16.4	8.9	5.1	11.3	14.6	14.9	13.9	13.7	15.4
1977	11.4	21.8	11.9	9.4	14.8	14.7	14.9	14.6	10.6	13.4
1978	13.6	26.0	15.3	18.0	15.0	14.9	15.1	15.1	8.0	14.0
1979	6.3	31.1	17.2	16.4	14.4	13.3	13.4	13.6	7.8	10.8
1980	9.1	28.4	11.2	10.8	17.1	10.2	10.5	11.6	8.9	9.5
1971–80	11.9	22.2	15.1	11.6	15.6	14.8	15.0	15.0	10.1	15.7
1981	10.3	24.0	14.9	13.6	20.4	9.6	10.3	12.0	10.1	11.0
1982	14.6	24.1	12.9	7.7	12.0	12.3	12.7	12.4	8.8	7.9
1983	7.2	17.0	12.2	7.0	13.2	9.9	10.2	10.9	11.8	7.3
1984	7.5	24.8	15.7	7.2	13.5	9.5	10.0	10.6	8.7	7.8
1985	6.6	28.5	16.7	– 0.7	13.0	9.5	9.9	10.2	8.0	8.7
1986	10.2	26.3	8.6	10.7	15.6	8.9	9.2	10.3	9.5	9.2
1987	7.4	19.7	21.2	4.2	16.3	9.1	9.4	10.3	3.6	10.8
1988	4.1	17.8	24.6	5.2	17.6	8.8	9.1	10.4	5.8	10.2
1989	6.7	10.6	6.1	10.0	19.1	9.4	9.7	11.2	5.5	12.0
1990	7.6	10.9	6.8	11.3	11.8	7.6	7.8	8.6	3.8	11.7
1981–90	8.2	20.4	14.0	7.6	15.2	9.5	9.8	10.7	7.6	9.7
1991	8.0	18.1	6.8	4.0	5.9	7.5	:	6.7	3.1	3.6
1992	4.2	13.6	– 0.1	3.2	3.6	7.1	:	3.1	1.6	– 0.4
1993	4.0	6.2	3.8	4.0	4.6	6.4	:	6.9	2.2	1.4
1994	5.3	9.4	1.9	0.3	4.7	2.3	:	1.9	– 1.6	2.9
1995	5.7	8.0	0.4	2.7	9.9	5.6	:	5.2	4.1	3.2
1996	1.8	8.8	– 1.3	11.4	9.5	3.9	:	7.8	4.6	3.1
1997	1.2	6.2	8.8	1.3	12.1	4.0	:	7.4	5.7	3.5
1998	6.4	7.8	2.4	2.1	8.2	4.7	:	3.9	8.8	4.4
1999	:	:	:	9.9	4.0	6.1	:	9.3	5.8	2.6

(1) EU-15 excluding DK, EL, S, UK; 1960–90: including D_90.
(2) EU-15 excluding DK, S, UK; 1960–90: including D_90.
(3) 1960–90: including D_90.

Table 49

Nominal short-term interest rates

(%)

	B	DK	D (1)	EL	E	F	IRL	I	NL
1960	:	:	5.1	:	:	4.1	:	3.5	2.1
1961	4.6	6.3	3.6	:	:	3.7	:	3.5	1.1
1962	3.4	6.5	3.4	:	:	3.6	:	3.5	1.9
1963	3.6	6.1	4.0	:	:	4.0	:	3.5	2.0
1964	4.9	6.2	4.1	:	:	4.7	:	3.5	3.5
1965	5.0	6.5	5.1	:	:	4.2	:	3.5	4.0
1966	5.6	6.5	6.6	:	:	4.8	:	3.5	4.9
1967	5.5	6.6	4.3	:	:	4.8	:	3.5	4.7
1968	4.5	6.6	3.8	:	:	6.2	:	3.5	4.6
1969	7.3	8.2	5.8	:	:	9.3	:	3.7	5.7
1970	8.1	9.0	9.4	:	:	8.6	:	5.3	6.2
1961–70	5.2	6.8	5.0	:	:	5.4	:	3.7	3.8
1971	5.4	7.6	7.1	:	:	6.0	6.6	5.7	4.5
1972	4.2	7.3	5.7	:	:	5.3	7.1	5.2	2.7
1973	6.6	7.6	12.2	:	:	9.3	12.2	7.0	7.5
1974	10.6	10.0	9.8	:	:	13.0	14.6	14.9	10.4
1975	7.0	8.0	4.9	:	:	7.6	10.9	10.4	5.4
1976	10.1	8.9	4.3	:	:	8.7	11.7	16.0	7.4
1977	7.3	14.5	4.3	:	15.5	9.1	8.4	14.0	4.8
1978	7.3	15.4	3.7	:	17.6	7.8	9.9	11.5	7.0
1979	10.9	12.5	6.9	:	15.5	9.7	16.0	12.0	9.6
1980	14.2	16.8	9.5	16.4	16.5	12.0	16.2	16.9	10.6
1971–80	8.4	10.9	6.9	:	:	8.8	11.4	11.3	7.0
1981	15.6	14.9	12.4	16.8	16.2	15.3	16.7	19.3	11.8
1982	14.1	16.4	8.8	18.9	16.3	14.6	17.5	19.9	8.2
1983	10.5	12.0	5.8	16.6	20.0	12.5	14.0	18.3	5.7
1984	11.5	11.5	6.0	15.7	14.9	11.7	13.2	17.3	6.1
1985	9.6	10.0	5.4	17.0	12.2	10.0	12.0	15.0	6.3
1986	8.1	9.1	4.6	19.8	11.7	7.7	12.4	12.8	5.7
1987	7.1	9.9	4.0	14.9	15.8	8.3	11.1	11.4	5.4
1988	6.7	8.3	4.3	15.9	11.6	7.9	8.1	11.3	4.8
1989	8.7	9.6	7.1	18.7	15.0	9.4	9.8	12.7	7.4
1990	9.8	10.9	8.4	19.9	15.2	10.3	11.4	12.3	8.7
1981–90	10.2	11.3	6.7	17.4	14.9	10.8	12.6	15.0	7.0
1991	9.4	9.7	9.2	22.7	13.2	9.6	10.4	12.2	9.3
1992	9.4	11.0	9.5	23.5	13.3	10.4	12.4	14.0	9.4
1993	8.2	10.4	7.2	23.5	11.7	8.6	9.3	10.2	6.9
1994	5.7	6.2	5.3	24.6	8.0	5.9	5.9	8.5	5.2
1995	4.7	6.1	4.5	16.3	9.4	6.6	6.3	10.3	4.4
1996	3.2	3.9	3.3	13.8	7.5	3.9	5.4	8.7	3.0
1997	3.4	3.7	3.3	12.8	5.4	3.5	6.0	6.8	3.3
1998	3.5	4.1	3.5	14.0	4.3	3.6	5.5	4.9	3.4
1999	3.0	3.3	3.0	10.4	3.0	3.0	3.0	3.0	3.0
2000	4.4	5.1	4.4	8.4	4.4	4.4	4.4	4.4	4.4
1991–2000	5.5	6.4	5.3	17.0	8.0	5.9	6.8	8.3	5.2

(1) 1960–90: including D_90.

Definitions:

B: 1961–84, 4-month certificates of 'Fonds des Rentes'; from 1985, 3-month Treasury certificates.
DK: 1961–76, discount rate; 1977–88, call money; from 1989, 3-month interbank rates.
D: 3-month interbank rates.
EL 1960–April 1980, credit for working capital to industry; May 1980–87, interbank sight deposits; from 1988, 1-month interbank rates; since December 1994, 3-month Athibor.
E: 3-month interbank rates.
F: 1960–68, call money; 1969–81, 1-month sale and repurchase agreements on private-sector paper; from 1982, 3-month sale and repurchase agreements on private-sector paper (Pibor).
IRL: 1961–70, 3-month interbank deposits in London; from 1971, 3-month interbank rates in Dublin.
I: 1960–70, 12-month Treasury bills; 1971–84, interbank sight deposits; from 1985, 3-month interbank rates.
NL 1960–September 1972, 3-month Treasury bills; from October 1972, 3-month interbank rates.
A: 1960–79, day-to-day money; 1980–94 onwards, 3-month interbank rates; from 1995, 3-month Vibor.
P: 1966–July 1985, 6-month deposits; August 1985–92, 3-month Treasury bills; from January 1993, 3-month interbank rates.
FIN: 3-month Helibor.
S: 1982–86, 3-month Treasury discount notes, from 1987 onwards, 3-month Stibor.
UK: 1961–September 1964, 3-month Treasury bills; from October 1964, 3-month interbank rates.
EU-15: Weighted geometric mean; weights: gross domestic product at current market prices and PPS.
US: 3-month money market.
JP: Bonds traded with 3-month repurchase agreements; from January 1989, rates of 3-month Certificate of Deposit.

(%)

	A	P	FIN	S	UK	EU-7 (1)	EUR-11 (2)	EUR-12 (3)	EU-15 (4)	US	JP
1960	:	:	:	:	:	:	:	:	:	:	:
1961	:	:	:	:	5.2	4.0	:	:	:	2.4	:
1962	:	:	:	:	4.1	3.6	:	:	:	2.8	:
1963	:	:	:	:	3.7	3.7	:	:	:	3.2	:
1964	:	:	:	:	5.0	4.4	:	:	:	3.6	:
1965	:	:	:	:	6.8	5.0	:	:	:	4.0	:
1966	:	3.0	:	:	7.0	5.6	:	:	:	4.9	:
1967	4.8	3.1	:	:	6.3	4.8	:	:	:	4.3	:
1968	4.1	3.4	:	:	7.9	5.3	:	:	:	5.4	:
1969	4.5	3.4	:	:	9.2	7.0	:	:	:	6.7	:
1970	5.6	4.0	10.6	:	8.1	7.9	:	:	:	6.3	:
1961–70	:	:	:	:	6.3	5.1	:	:	:	4.3	:
1971	4.4	4.3	8.1	:	6.2	6.2	:	:	:	4.3	6.5
1972	5.2	4.4	7.8	:	6.8	5.6	:	:	:	4.2	5.2
1973	6.9	4.4	9.3	:	11.8	9.9	:	:	:	7.2	8.3
1974	7.3	5.3	10.4	:	13.4	12.3	:	:	:	7.9	14.7
1975	5.5	6.8	11.7	:	10.6	7.9	:	:	:	5.8	10.1
1976	4.7	8.4	12.4	:	11.6	9.5	:	:	:	5.0	7.3
1977	7.5	11.1	11.8	:	8.0	8.3	9.1	9.1	:	5.3	6.4
1978	6.4	15.5	8.6	:	9.4	7.9	8.5	8.5	:	7.4	5.1
1979	5.6	16.1	8.5	:	13.9	10.4	10.1	10.1	:	10.1	5.9
1980	10.3	16.3	13.8	:	16.8	13.4	13.0	13.0	:	11.6	10.7
1971–80	6.4	9.3	10.2	:	10.8	9.1	:	:	:	6.9	8.0
1981	11.4	16.0	12.7	:	14.1	14.9	15.1	15.1	:	14.0	7.4
1982	8.8	16.8	13.7	13.3	12.2	13.3	13.8	13.9	13.7	10.6	6.9
1983	5.4	20.9	14.2	11.4	10.1	11.0	12.2	12.3	11.9	8.7	6.5
1984	6.6	22.5	15.8	11.9	10.0	10.7	11.4	11.5	11.3	9.5	6.3
1985	6.2	21.0	12.8	14.2	12.2	10.1	10.0	10.1	10.6	7.5	6.5
1986	5.3	15.6	11.7	9.8	10.9	8.5	8.5	8.7	9.1	6.0	5.0
1987	4.4	13.9	10.0	9.7	9.7	7.9	8.4	8.6	8.8	5.9	3.9
1988	4.6	13.0	10.0	10.2	10.3	8.0	7.9	8.1	8.5	6.9	4.0
1989	7.5	15.1	12.6	11.6	13.9	10.3	10.1	10.3	10.9	8.4	5.4
1990	8.5	16.9	14.0	13.8	14.8	11.0	10.8	11.0	11.7	7.8	7.8
1981–90	6.9	17.2	12.7	:	11.8	10.6	10.8	11.0	:	8.5	6.0
1991	9.1	17.7	13.1	11.8	11.5	10.3	10.6	10.8	11.0	5.5	7.4
1992	9.3	16.2	13.3	13.5	9.6	10.6	11.2	11.5	11.2	3.5	4.4
1993	7.2	13.3	7.8	8.8	5.9	7.9	8.8	9.1	8.6	3.1	3.0
1994	5.0	11.1	5.3	7.6	5.5	6.1	6.5	6.9	6.7	4.7	2.3
1995	4.5	9.8	5.8	8.9	6.7	6.5	6.8	7.0	7.0	6.0	1.2
1996	3.3	7.4	3.6	5.9	6.0	5.0	5.0	5.2	5.4	5.5	0.6
1997	3.5	5.7	3.2	4.5	6.8	4.7	4.4	4.5	4.9	5.7	0.6
1998	3.6	4.3	3.6	4.3	7.3	4.6	3.9	4.1	4.7	5.5	0.8
1999	3.0	3.0	3.0	3.3	5.5	3.5	3.0	3.1	3.5	5.4	0.3
2000	4.4	4.4	4.4	4.1	6.2	4.7	4.4	4.4	4.7	6.5	0.3
1991–2000	5.3	9.3	6.3	7.3	7.1	6.4	6.4	6.7	6.8	5.1	2.1

(1) B, DK, D, F, I, NL, UK; 1960–90: including D_90.
(2) EU-15 excluding DK, EL, S, UK; 1960–90: including D_90.
(3) EU-15 excluding DK, S, UK; 1960–90: including D_90.
(4) 1960–90: including D_90.

Table 50

Nominal long-term interest rates

(%)

	B	DK	D ([1])	EL	E	F	IRL	I	L	NL
1960	:	:	6.3	:	:	5.7	:	5.3	:	4.2
1961	5.9	6.6	5.9	:	:	5.5	:	5.2	:	3.9
1962	5.2	6.6	5.9	:	:	5.4	:	5.8	:	4.2
1963	5.0	6.5	6.1	:	:	5.3	:	6.1	:	4.2
1964	5.6	7.1	6.2	:	:	5.5	:	7.4	:	4.9
1965	6.4	8.6	7.1	:	:	6.2	:	6.9	:	5.2
1966	6.7	8.7	8.1	:	:	6.6	:	6.5	:	6.2
1967	6.7	9.1	7.0	:	:	6.7	:	6.6	:	6.0
1968	6.6	8.7	6.5	:	:	7.0	:	6.7	:	6.2
1969	7.3	9.7	6.8	:	:	7.9	:	6.9	:	7.0
1970	7.8	11.1	8.3	:	:	8.6	:	9.0	:	7.8
1961–70	6.3	8.3	6.8	:	:	6.5	:	6.7	:	5.6
1971	7.3	11.0	8.0	:	:	8.4	9.2	8.3	:	7.1
1972	7.0	11.0	7.9	:	:	8.0	9.1	7.5	:	6.7
1973	7.5	12.6	9.3	9.3	:	9.0	10.7	7.4	6.8	7.3
1974	8.8	15.9	10.4	10.5	:	11.0	14.6	9.9	7.3	10.7
1975	8.5	12.7	8.5	9.4	:	10.3	14.0	11.5	6.7	9.2
1976	9.1	14.9	7.8	10.2	:	10.5	14.6	13.1	7.2	9.2
1977	8.8	16.2	6.2	9.5	:	11.0	12.9	14.6	7.0	8.5
1978	8.5	16.8	5.7	10.0	:	10.6	12.8	13.7	6.6	8.1
1979	9.7	16.7	7.4	11.2	13.3	10.9	15.1	14.1	6.8	9.2
1980	12.2	18.7	8.5	17.1	16.0	13.1	15.4	16.1	7.4	10.7
1971–80	8.7	14.6	8.0	:	:	10.3	12.8	11.6	:	8.7
1981	13.8	19.3	10.4	17.7	15.8	15.9	17.3	20.6	8.7	12.2
1982	13.5	20.5	9.0	15.4	16.0	15.7	17.0	20.9	10.4	10.5
1983	11.8	14.4	7.9	18.2	16.9	13.6	13.9	18.0	9.8	8.8
1984	12.0	14.0	7.8	18.5	16.5	12.5	14.6	15.0	10.3	8.6
1985	10.6	11.6	6.9	15.8	13.4	10.9	12.7	14.3	9.5	7.3
1986	7.9	10.6	5.9	15.8	11.4	8.4	11.1	11.7	8.7	6.4
1987	7.8	11.9	5.8	17.4	12.8	9.4	11.3	11.3	8.0	6.4
1988	7.9	10.6	6.1	16.6	11.7	9.0	9.4	12.1	7.1	6.3
1989	8.7	10.2	7.0	:	13.7	8.8	8.9	12.9	7.7	7.2
1990	10.1	11.0	8.9	:	14.7	9.9	10.1	13.4	8.6	9.0
1981–90	10.4	13.4	7.6	:	14.3	11.4	12.6	15.0	8.9	8.3
1991	9.3	10.1	8.6	:	12.4	9.0	9.2	13.0	8.2	8.7
1992	8.6	10.1	8.0	:	12.2	8.6	9.1	13.7	7.9	8.1
1993	7.2	7.2	6.4	:	10.1	6.7	7.8	11.1	6.8	6.3
1994	7.8	7.9	6.9	:	10.1	7.3	8.1	10.4	7.2	6.9
1995	7.5	8.3	6.8	:	11.3	7.5	8.3	11.9	7.2	6.9
1996	6.5	7.2	6.2	:	8.7	6.3	7.3	9.2	6.3	6.2
1997	5.8	6.2	5.7	:	6.4	5.6	6.3	6.7	5.6	5.6
1998	4.7	4.9	4.6	8.5	4.8	4.6	4.8	4.8	4.7	4.6
1999	4.8	4.9	4.5	6.5	4.7	4.6	4.6	4.8	4.7	4.6
2000	5.6	5.7	5.3	6.6	5.6	5.5	5.5	5.6	5.5	5.4
1991–2000	6.8	7.3	6.3	:	8.6	6.6	7.1	9.1	6.4	6.3

([1]) 1960–90: including D_90.

Definitions:

B: Central government bonds over 5 years, secondary market; from 1993, central government benchmark bond of 10 years.
DK: State and mortgage bonds; from 1993, central government benchmark bond of 10 years.
D: Public-sector bonds outstanding (over 3 years); from 1993, central government benchmark bond of 10 years.
EL: Central government bonds, based on 12-months Tresury bonds.
E: 1979–87, State bonds of 2 to 4 years; 1988–92, central government bonds at more than two years; from 1993, central government benchmark bond of 10 years.
F: 1960–79, public-sector bonds; 1980–92, central government bonds of 7 to 10 years; from 1993, central government benchmark bond of 10 years.
IRL: 1960–70, central government bonds, 20 years in London; 1971–94, central government bonds with 15 years to maturity, in Dublin; from 1995, central government benchmark bond of 10 years.
I: 1960–84, Crediop bonds; 1985–91, rate of specialized industrial credit institutions (gross rate); 1992, public-sector bonds outstanding; from 1993, central government benchmark bond of 10 years.
L: 1973–93, Central government bonds of 5 to 7 years, secondary market; from 1994, central government OLUX bonds of 10 years, secondary market.
NL: 1960–73, 3.25 % State bond 1948; 1974–84, private loans to public enterprises; 1985–92, yield of 5 central government bonds with the longest maturity; from 1993, central government benchmark bond of 10 years.
A: Government bonds of more than 1 year, secondary market; from 1995, central government benchmark bond of 10 years.
P: Weighted average of public and private bonds over 5 years; from 1993, central government benchmark bond of 10 years.
FIN: 1960–79, non-central government taxable bonds, 1980–94, government bonds of 5 to 7 years, secondary market; from 1995, central government benchmark bond of 10 years.
S: Central government bonds of 9 to 11 years; from 1995, central government benchmark bond of 10 years.
UK: Central government bonds 20 years; from 1993, central government benchmark bond of 10 years.
EU-15: Weighted geometric mean; weights: gross domestic product at current market prices and PPS.
US: 1960–88, federal government bonds over 10 years; 1989–92, federal government bonds over 30 years; from 1993, central government benchmark bond of 10 years.
JP: 1961–78, State bonds; 1979–June 1987, over the counter sales of State bonds; 1987–April 1989: benchmark: bond No 111 (1998); 1989–August 1992: benchmark: bond No 119 (1999); from September 1992: benchmark bond No 145 (maturity in 2002).

(%)

	A	P	FIN	S	UK	EU-9 (1)	EUR-11 (2)	EUR-12 (3)	EU-15 (4)	US	JP
1960	:	:	:	5.2	5.4	:	:	:	:	:	:
1961	:	:	6.6	5.3	6.3	5.7	:	:	:	3.9	:
1962	:	:	7.1	5.0	5.9	5.7	:	:	:	3.9	:
1963	:	:	8.0	4.9	5.4	5.6	:	:	:	4.0	:
1964	:	:	8.4	5.6	6.0	6.2	:	:	:	4.1	:
1965	6.5	:	8.6	6.2	6.6	6.7	:	:	:	4.2	:
1966	6.9	:	8.4	6.6	6.9	7.1	:	:	:	4.7	:
1967	7.2	:	8.2	6.1	6.8	6.8	:	:	:	4.9	:
1968	7.7	:	8.2	6.3	7.6	6.9	:	:	:	5.3	:
1969	7.5	:	7.9	7.0	9.1	7.6	:	:	:	6.2	:
1970	7.8	:	7.8	7.4	9.3	8.7	:	:	:	6.6	:
1961–70	:	:	7.9	6.0	7.0	6.7	:	:	:	4.8	:
1971	7.7	:	8.1	7.2	8.9	8.3	:	:	:	5.7	:
1972	7.4	:	8.0	7.3	9.0	8.0	:	:	:	5.6	6.9
1973	8.3	:	8.3	7.4	10.8	9.0	:	:	:	6.3	7.0
1974	9.7	:	8.8	7.8	15.0	11.3	:	:	:	7.0	8.1
1975	9.6	:	9.6	8.8	14.5	10.8	:	:	:	7.0	8.4
1976	8.8	:	10.2	9.3	14.6	11.0	:	:	:	6.8	8.2
1977	8.7	:	10.8	9.7	12.5	10.6	:	:	:	7.1	7.4
1978	8.2	:	9.8	10.1	12.6	10.2	:	:	:	7.9	6.3
1979	8.0	:	9.5	10.5	13.0	11.0	10.6	10.6	11.1	8.7	8.3
1980	9.3	:	11.6	11.7	13.9	12.6	12.4	12.6	12.9	10.8	8.9
1971–80	8.6	:	9.5	9.0	12.5	10.3	:	:	:	7.3	:
1981	10.6	:	12.4	13.5	14.8	14.8	14.8	14.9	14.9	12.9	8.4
1982	9.9	:	12.4	13.0	12.7	14.0	14.3	14.3	14.1	12.2	8.3
1983	8.2	:	13.1	12.3	10.8	12.1	12.8	12.9	12.6	10.8	7.8
1984	8.0	:	14.0	12.3	10.7	11.3	11.8	11.9	11.8	12.0	7.3
1985	7.8	27.7	12.7	13.0	10.6	10.4	10.8	11.0	11.0	10.8	6.5
1986	7.3	19.5	11.7	10.3	9.8	8.8	8.9	9.0	9.2	8.1	5.2
1987	7.0	16.8	11.2	11.7	9.5	8.9	9.1	9.3	9.4	8.7	4.7
1988	6.7	15.5	10.6	11.4	9.3	8.9	9.1	9.3	9.4	9.0	4.7
1989	7.1	16.9	12.1	11.2	9.6	9.4	9.8	9.8	9.8	8.5	5.2
1990	8.7	16.8	13.2	14.2	11.1	10.7	11.0	11.0	11.1	8.6	7.5
1981–90	8.1	:	12.3	12.3	10.9	10.9	11.2	11.3	11.3	10.2	6.6
1991	8.6	18.3	11.7	11.8	9.9	10.0	10.3	10.3	10.3	8.1	6.7
1992	8.3	15.4	12.0	10.0	9.1	9.6	10.0	10.0	9.8	7.7	5.3
1993	6.6	9.5	8.2	8.6	7.3	7.6	7.9	7.9	7.8	5.8	4.0
1994	6.7	10.4	8.4	9.5	8.1	8.0	8.1	8.1	8.2	7.1	4.2
1995	7.2	11.5	8.8	10.2	8.2	8.3	8.6	8.6	8.6	6.6	3.3
1996	6.3	8.6	7.1	8.1	7.8	7.2	7.2	7.2	7.3	6.4	3.0
1997	5.7	6.4	6.0	6.7	7.0	6.1	6.0	6.0	6.2	6.3	2.2
1998	4.7	5.0	4.8	5.0	5.5	4.8	4.7	4.8	4.9	5.3	1.3
1999	4.7	4.8	4.7	5.0	5.0	4.7	4.6	4.7	4.7	5.6	1.8
2000	5.6	5.6	5.5	5.4	5.3	5.4	5.5	5.5	5.5	6.1	1.8
1991–2000	6.4	9.5	7.7	8.0	7.3	7.2	7.3	7.3	7.3	6.5	3.4

(1) B, DK, D, F, I, NL, FIN, S, UK; 1960–90: including D_90.
(2) EU-15 excluding DK, EL, S, UK; 1960–90: including D_90.
(3) EU-15 excluding DK, S, UK; 1960–90: including D_90.
(4) 1960–90: including D_90.

Table 51

Gross official reserves

(end year; Mrd ECU)

	B	DK	D (1)	EL	E	F	IRL	I	L	NL
1960	:	0.27	6.67	0.23	0.51	2.17	0.31	3.10	:	1.78
1961	:	0.26	6.68	0.25	0.83	3.14	0.32	3.55	:	1.83
1962	:	0.24	6.49	0.27	0.97	3.78	0.33	3.79	:	1.81
1963	:	0.44	7.13	0.27	1.07	4.58	0.38	3.38	:	1.96
1964	:	0.60	7.36	0.26	1.41	5.35	0.42	3.57	:	2.19
1965	:	0.55	6.94	0.23	1.33	5.93	0.38	4.48	:	2.26
1966	:	0.56	7.53	0.26	1.18	6.32	0.46	4.60	:	2.30
1967	:	0.52	7.92	0.28	1.07	6.80	0.43	5.30	:	2.55
1968	:	0.46	10.55	0.34	1.27	4.83	0.55	5.76	:	2.72
1969	:	0.44	7.01	0.31	1.26	3.78	0.68	4.96	:	2.49
1970	:	0.48	13.54	0.31	1.81	5.07	0.68	5.41	:	3.28
1971	:	0.66	17.47	0.48	3.03	7.98	0.90	6.59	:	3.71
1972	:	0.82	24.44	1.02	4.90	11.54	1.03	7.53	:	5.66
1973	:	1.23	35.07	1.09	6.58	13.21	0.89	10.34	:	8.77
1974	9.07	0.95	39.32	1.16	6.81	18.63	1.06	14.99	:	11.78
1975	8.57	0.91	36.70	1.27	6.45	19.43	1.35	11.14	:	10.75
1976	8.12	0.96	40.61	1.22	5.87	17.03	1.66	12.76	:	11.07
1977	8.95	1.56	44.29	1.36	6.83	18.49	1.98	17.79	:	12.05
1978	9.87	2.60	54.76	1.57	9.74	23.52	2.02	21.75	:	12.71
1979	15.96	2.59	57.59	1.47	12.28	29.44	1.62	26.69	:	14.52
1980	21.36	3.28	76.57	2.49	15.26	57.10	2.25	45.94	:	27.50
1981	17.08	3.01	79.81	2.19	15.84	52.52	2.59	45.48	:	26.26
1982	20.20	2.94	82.14	2.31	13.27	46.30	2.84	39.02	:	26.52
1983	21.46	5.17	98.20	2.95	15.92	63.69	3.33	56.31	:	33.24
1984	21.30	4.99	100.90	3.21	23.51	66.18	3.03	59.67	0.23	32.89
1985	18.05	6.78	88.94	2.63	19.62	62.53	3.45	44.24	0.20	29.55
1986	17.66	4.79	84.32	2.64	17.97	59.71	3.16	43.35	0.19	26.52
1987	19.87	8.30	96.13	3.38	28.31	57.53	3.83	49.45	0.19	29.44
1988	19.74	9.80	85.10	4.36	36.71	50.82	4.41	53.44	0.19	29.27
1989	19.12	5.89	82.27	3.86	39.99	47.42	3.46	61.17	0.18	28.34
1990	17.45	8.31	77.74	3.56	42.62	50.75	3.88	66.08	0.16	25.40
1991	17.06	5.96	72.08	4.77	53.21	44.91	4.38	53.88	0.15	24.86
1992	18.29	9.28	101.32	4.90	41.88	44.85	2.94	41.18	0.16	30.21
1993	19.00	9.81	102.92	8.19	42.26	48.96	5.44	48.03	0.17	40.37
1994	19.08	7.99	92.55	12.85	38.66	46.85	5.08	47.00	0.16	38.91
1995	18.35	8.97	92.69	12.27	30.84	44.52	6.57	46.18	0.15	35.89
1996	18.04	11.87	94.43	14.99	50.84	45.51	6.66	56.32	0.15	31.61
1997	18.69	18.85	95.28	12.36	66.05	49.53	6.01	68.00	0.14	29.63
1998	18.01	13.58	92.79	15.86	52.18	63.23	8.16	46.18	0.15	26.70
1999	13.23	22.80	92.16	19.23	37.70	66.91	5.37	44.53	0.10	18.94

(1) 1960–91: D_90.
B/L: until 1983, Belgium and Luxembourg.

Source: IMF: International financial statistics, Bank for international settlements (BIS), Eurostat and Commission departments. Gold is valued at market-related prices.

(end year; Mrd ECU)

	A	P	FIN	S	UK	B/L	EU-10 (1)	EU-11 (2)	EUR-12 (3)	EU-12 (4)	EU-15 (5)
1960	:	0.61	:	:	3.55	1.44	16.80	:	:	20.62	:
1961	:	0.52	:	:	3.10	1.69	18.79	:	:	22.15	:
1962	:	0.63	:	:	3.09	1.64	19.71	:	:	23.03	:
1963	:	0.68	:	:	2.94	1.84	21.29	:	:	24.66	:
1964	:	0.81	:	:	2.16	2.08	23.45	:	:	26.21	:
1965	:	0.88	:	:	2.81	2.18	24.62	:	:	27.97	:
1966	:	1.01	:	:	2.91	2.21	25.86	:	:	29.33	:
1967	:	1.20	:	:	2.62	2.52	28.06	:	:	31.20	:
1968	:	1.49	:	:	2.64	2.42	29.93	:	:	33.03	:
1969	:	1.42	:	:	2.48	2.35	24.25	:	:	27.17	:
1970	:	1.53	:	:	2.85	2.87	34.49	:	:	37.82	:
1971	:	1.89	:	:	8.10	3.37	45.42	:	:	54.18	:
1972	:	2.75	:	:	5.64	4.56	63.45	:	:	69.90	:
1973	:	4.04	:	:	6.73	6.82	86.80	:	:	94.76	:
1974	5.11	5.07	0.60	2.04	7.95	9.10	107.91	112.46	:	116.81	124.56
1975	5.59	3.68	0.47	3.13	6.49	8.58	99.35	104.14	:	106.74	115.94
1976	5.64	3.46	0.51	2.69	5.50	8.12	101.78	106.71	:	108.24	117.07
1977	5.56	3.55	0.56	3.59	19.42	8.95	115.29	120.04	:	136.27	145.97
1978	7.12	4.27	1.04	3.98	15.41	9.89	140.21	146.81	:	158.23	170.37
1979	10.35	5.32	1.42	4.60	17.39	10.41	159.34	169.64	:	179.33	195.70
1980	13.53	10.03	1.87	5.34	23.69	20.54	257.66	270.57	:	284.62	305.37
1981	12.60	9.40	1.83	5.54	22.13	18.28	252.38	264.63	:	277.53	297.51
1982	15.45	8.57	2.17	6.50	19.71	16.24	237.20	252.51	:	259.85	283.97
1983	15.20	10.21	2.08	7.67	23.17	20.94	304.79	319.12	:	333.13	358.08
1984	15.18	9.95	4.44	8.06	22.51	21.53	320.87	337.27	340.48	348.37	376.05
1985	13.15	9.74	4.93	8.76	21.02	18.24	278.94	294.39	297.02	306.74	333.58
1986	13.48	8.69	2.37	8.34	23.44	17.85	264.20	277.41	280.05	292.42	316.61
1987	13.63	10.27	5.65	8.53	37.64	20.06	298.41	314.31	317.69	344.35	372.16
1988	13.68	10.07	6.12	9.37	45.32	19.92	294.09	309.53	313.89	349.21	378.37
1989	14.10	13.66	4.94	10.02	39.09	19.30	299.46	314.65	318.50	344.45	373.51
1990	12.64	15.18	7.64	14.91	34.06	17.61	302.82	319.53	323.10	345.19	380.38
1991	12.99	19.57	6.20	15.27	36.22	17.20	294.87	309.28	314.06	337.05	371.51
1992	15.71	20.52	4.86	20.35	35.38	18.45	306.23	321.90	326.80	350.89	391.81
1993	19.61	19.82	5.55	19.20	39.42	19.17	335.15	352.12	360.31	384.38	428.74
1994	19.39	17.29	9.29	20.80	39.09	19.24	318.43	334.26	347.11	365.50	414.98
1995	17.78	16.79	8.11	19.71	37.40	18.50	304.24	317.86	330.13	350.60	396.21
1996	21.42	17.26	5.99	16.66	37.28	18.19	335.80	348.21	363.20	384.94	429.01
1997	19.94	18.41	8.04	11.04	34.11	18.83	364.09	379.71	392.08	417.05	456.08
1998	21.60	18.52	8.80	13.25	33.28	18.16	341.79	356.33	372.19	388.64	432.29
1999	18.74	14.30	8.61	16.64	35.49	13.33	312.47	320.59	339.82	370.76	414.75

(1) EU-15 excluding DK, A, FIN, S, UK; 1960–91: including D_90.
(2) EU-15 excluding DK, EL, S, UK; 1960–91: including D_90.
(3) EU-15 excluding DK, S, UK; 1960–91: including D_90.
(4) EU-15 excluding A, FIN, S; 1960–91: including D_90.
(5) 1960–91: including D_90.

Table 52

Exchange rates [1]

(annual average, national currency units per ECU/EUR [1])

	BEF	DKK	DEM	GRD 100	ESP 100	FRF	IEP	ITL 1 000	LUF	NLG
1960	52.81	7.295	4.436	0.317	0.634	5.215	0.3 772	0.660	52.81	4.014
1961	53.37	7.372	4.307	0.320	0.640	5.270	0.3 812	0.667	53.37	3.899
1962	53.49	7.389	4.279	0.321	0.641	5.282	0.3 821	0.669	53.49	3.873
1963	53.49	7.389	4.279	0.321	0.641	5.282	0.3 821	0.669	53.49	3.873
1964	53.49	7.389	4.279	0.321	0.641	5.282	0.3 821	0.669	53.49	3.873
1965	53.49	7.389	4.279	0.321	0.641	5.282	0.3 821	0.669	53.49	3.873
1966	53.49	7.389	4.279	0.321	0.641	5.282	0.3 821	0.669	53.49	3.873
1967	53.24	7.423	4.259	0.319	0.651	5.257	0.3 877	0.666	53.24	3.855
1968	51.44	7.717	4.116	0.309	0.720	5.080	0.4 287	0.643	51.44	3.725
1969	51.11	7.666	4.026	0.307	0.716	5.290	0.4 259	0.639	51.11	3.700
1970	51.11	7.667	3.741	0.307	0.714	5.678	0.4 259	0.639	51.11	3.700
1971	50.87	7.753	3.646	0.314	0.726	5.772	0.4 286	0.647	50.87	3.658
1972	49.36	7.789	3.577	0.337	0.720	5.657	0.4 489	0.654	49.36	3.600
1973	47.80	7.416	3.276	0.370	0.718	5.468	0.5 023	0.716	47.80	3.429
1974	45.91	7.193	3.087	0.358	0.688	5.674	0.5 135	0.792	45.91	3.171
1975	45.57	7.123	3.049	0.400	0.703	5.319	0.5 598	0.810	45.57	3.135
1976	43.17	6.762	2.815	0.409	0.747	5.345	0.6 219	0.930	43.17	2.955
1977	40.88	6.856	2.648	0.422	0.868	5.606	0.6 537	1.007	40.88	2.800
1978	40.06	7.019	2.556	0.468	0.974	5.740	0.6 639	1.080	40.06	2.754
1979	40.17	7.208	2.511	0.508	0.920	5.830	0.6 694	1.138	40.17	2.749
1980	40.60	7.827	2.524	0.594	0.997	5.869	0.6 760	1.189	40.60	2.760
1981	41.29	7.923	2.514	0.616	1.027	6.040	0.6 910	1.263	41.29	2.775
1982	44.71	8.157	2.376	0.653	1.076	6.431	0.6 896	1.324	44.71	2.614
1983	45.44	8.132	2.271	0.781	1.275	6.771	0.7 150	1.350	45.44	2.537
1984	45.44	8.146	2.238	0.884	1.266	6.872	0.7 259	1.381	45.44	2.523
1985	44.91	8.019	2.226	1.057	1.291	6.795	0.7 152	1.448	44.91	2.511
1986	43.80	7.936	2.128	1.374	1.375	6.800	0.7 335	1.462	43.80	2.401
1987	43.04	7.885	2.072	1.563	1.422	6.929	0.7 754	1.495	43.04	2.334
1988	43.43	7.952	2.074	1.676	1.376	7.036	0.7 757	1.537	43.43	2.335
1989	43.38	8.049	2.070	1.788	1.304	7.024	0.7 768	1.510	43.38	2.335
1990	42.43	7.857	2.052	2.014	1.294	6.914	0.7 678	1.522	42.43	2.312
1991	42.22	7.909	2.051	2.252	1.285	6.973	0.7 678	1.533	42.22	2.311
1992	41.59	7.809	2.020	2.470	1.325	6.848	0.7 607	1.596	41.59	2.275
1993	40.47	7.594	1.936	2.686	1.491	6.634	0.8 000	1.841	40.47	2.175
1994	39.66	7.543	1.925	2.880	1.589	6.583	0.7 936	1.915	39.66	2.158
1995	38.55	7.328	1.874	3.030	1.630	6.525	0.8 155	2.130	38.55	2.099
1996	39.30	7.359	1.910	3.055	1.607	6.493	0.7 934	1.959	39.30	2.140
1997	40.53	7.484	1.964	3.094	1.659	6.613	0.7 475	1.929	40.53	2.211
1998	40.62	7.499	1.969	3.307	1.672	6.601	0.7 862	1.944	40.62	2.220
1999	—	7.436	—	3.258	—	—	—	—	—	—
2000	—	7.455	—	3.363	—	—	—	—	—	—

[1] As from 1999 euro conversion rates for BEF, DEM, ESP, FRF, IEP, ITL, LUF, NLG, ATS, PTE, FIM.

(annual average, national currency units per ECU/EUR [1])

	ATS	PTE 100	FIM	SEK	GBP	USD	YEN 100
1960	27.46	0.304	3.380	5.464	0.3 772	1.056	3.802
1961	27.75	0.307	3.416	5.522	0.3 812	1.067	3.842
1962	27.82	0.308	3.423	5.534	0.3 821	1.070	3.851
1963	27.82	0.308	3.423	5.534	0.3 821	1.070	3.851
1964	27.82	0.308	3.423	5.534	0.3 821	1.070	3.851
1965	27.82	0.308	3.423	5.534	0.3 821	1.070	3.851
1966	27.82	0.308	3.423	5.534	0.3 821	1.070	3.851
1967	27.69	0.306	3.674	5.509	0.3 877	1.065	3.833
1968	26.75	0.296	4.321	5.323	0.4 287	1.029	3.704
1969	26.58	0.294	4.293	5.288	0.4 259	1.022	3.680
1970	26.58	0.294	4.293	5.288	0.4 259	1.022	3.680
1971	26.18	0.296	4.384	5.371	0.4 286	1.048	3.638
1972	25.93	0.305	4.651	5.342	0.4 489	1.122	3.397
1973	24.12	0.303	4.707	5.379	0.5 023	1.232	3.332
1974	22.47	0.299	4.536	5.337	0.5 135	1.202	3.397
1975	21.55	0.314	4.564	5.141	0.5 600	1.241	3.607
1976	20.03	0.336	4.311	4.867	0.6 216	1.118	3.312
1977	18.84	0.436	4.593	5.119	0.6 537	1.141	3.058
1978	18.46	0.559	5.239	5.749	0.6 639	1.274	2.671
1979	18.31	0.670	5.322	5.872	0.6 463	1.370	3.005
1980	17.97	0.696	5.172	5.881	0.5 985	1.392	3.150
1981	17.72	0.685	4.793	5.635	0.5 531	1.116	2.454
1982	16.70	0.780	4.707	6.143	0.5 605	0.980	2.435
1983	15.97	0.987	4.948	6.821	0.5 870	0.890	2.114
1984	15.73	1.157	4.724	6.511	0.5 906	0.789	1.871
1985	15.64	1.303	4.694	6.521	0.5 890	0.763	1.806
1986	14.96	1.471	4.980	6.996	0.6 715	0.984	1.650
1987	14.57	1.626	5.065	7.310	0.7 046	1.154	1.666
1988	14.59	1.701	4.944	7.242	0.6 644	1.182	1.515
1989	14.57	1.734	4.723	7.099	0.6 733	1.102	1.519
1990	14.44	1.811	4.855	7.521	0.7 139	1.273	1.837
1991	14.43	1.786	5.002	7.479	0.7 010	1.239	1.665
1992	14.22	1.747	5.807	7.533	0.7 377	1.298	1.642
1993	13.62	1.884	6.696	9.122	0.7 800	1.171	1.301
1994	13.54	1.969	6.191	9.163	0.7 759	1.190	1.213
1995	13.18	1.961	5.709	9.332	0.8 288	1.308	1.230
1996	13.43	1.958	5.828	8.515	0.8 138	1.270	1.381
1997	13.82	1.986	5.881	8.651	0.6 923	1.134	1.371
1998	13.85	2.017	5.983	8.916	0.6 764	1.121	1.464
1999	—	—	—	8.808	0.6 587	1.066	1.213
2000	—	—	—	8.397	0.6 128	0.932	0.997

([1]) As from 1999 euro conversion rates for BEF, DEM, ESP, FRF, IEP, ITL, LUF, NLG, ATS, PTE, FIM.

Table 53

Irrevocably fixed conversion rates between the euro and the currencies of the Member States

1 EUR	=	40.3399	Belgian francs
	=	1.95583	German marks
	=	166.386	Spanish pesetas
	=	6.55957	French francs
	=	0.787564	Irish pounds
	=	1 936.27	Italian lire
	=	40.3399	Luxembourg francs
	=	2.20371	Dutch guilders
	=	13.7603	Austrian schillings
	=	200.482	Portuguese escudos
	=	5.94573	Finnish marks

Table 54

Nominal effective exchange rates
Performance relative to the rest of 22 industrial countries; double export weights

(1991 = 100)

	B	DK	D [1]	EL	E	F	IRL	I	NL
1960	85.4	98.5	39.7	764.8	174.9	137.0	145.2	248.7	61.6
1961	84.3	97.7	41.3	756.8	173.5	135.7	145.0	246.0	63.5
1962	84.1	97.6	41.6	755.6	173.4	135.5	145.1	245.7	64.0
1963	84.1	97.6	41.6	755.7	173.4	135.6	145.1	245.7	64.0
1964	84.1	97.6	41.6	755.7	173.4	135.6	145.1	245.7	64.0
1965	84.1	97.6	41.6	755.7	173.4	135.6	145.1	245.7	64.0
1966	84.1	97.6	41.6	755.7	173.4	135.6	145.1	245.7	64.0
1967	84.3	97.4	41.8	758.4	169.2	136.0	144.6	246.5	64.2
1968	85.5	94.1	42.7	772.5	152.4	139.3	138.6	251.4	65.6
1969	86.1	94.1	43.6	773.8	152.9	132.0	138.8	252.6	65.7
1970	85.7	93.2	47.5	763.5	152.3	121.0	138.6	250.8	64.8
1971	85.5	92.5	48.8	747.6	151.1	118.6	138.6	247.5	65.2
1972	88.5	93.2	50.4	696.7	154.2	121.6	137.3	245.6	66.3
1973	89.5	99.3	55.5	641.5	157.8	125.7	131.4	220.9	68.2
1974	90.7	99.9	58.6	642.0	162.4	117.3	128.7	199.1	71.7
1975	91.9	103.5	59.5	582.9	158.8	128.6	123.2	190.9	73.5
1976	94.3	106.8	63.2	551.6	146.6	123.9	113.7	158.5	75.8
1977	99.6	106.8	68.4	535.8	128.4	119.1	110.7	146.5	79.8
1978	102.7	107.6	72.5	486.5	117.1	117.5	111.4	137.8	81.7
1979	103.9	106.7	76.0	457.5	128.1	118.1	111.0	133.1	82.8
1980	103.2	98.1	76.4	395.6	119.2	118.6	107.5	128.2	82.9
1981	98.3	91.7	72.8	361.9	109.4	109.5	98.9	114.0	79.9
1982	89.6	88.4	77.2	333.7	105.2	101.2	98.9	107.3	84.4
1983	87.8	88.8	81.1	273.1	89.4	94.9	96.0	104.3	86.6
1984	86.3	86.2	80.3	235.5	88.2	91.1	92.7	99.1	85.6
1985	87.1	87.4	80.8	199.9	86.9	92.5	94.0	94.5	85.9
1986	93.1	94.5	90.7	158.7	87.3	98.2	100.1	99.7	93.1
1987	97.0	98.9	97.4	143.0	88.1	99.5	98.1	101.1	98.0
1988	95.9	97.0	96.9	133.1	91.4	97.5	96.5	97.8	97.7
1989	95.1	94.7	95.9	123.2	95.4	96.2	95.6	98.4	96.8
1990	100.1	101.5	100.9	112.6	99.8	102.0	101.2	101.7	100.6
1991	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
1992	102.1	102.6	103.3	92.5	97.8	103.6	103.2	97.0	102.4
1993	103.1	105.3	107.0	85.4	86.2	106.4	98.3	81.2	106.0
1994	105.0	105.4	107.2	79.7	81.0	107.2	97.9	77.8	106.4
1995	109.8	110.6	113.8	77.7	81.7	111.7	98.2	71.0	111.1
1996	107.5	109.7	110.9	76.2	82.5	111.9	100.6	77.8	108.8
1997	102.9	106.1	105.1	74.2	78.5	107.5	102.4	77.6	104.1
1998	103.2	107.2	105.8	69.8	78.4	108.5	97.6	77.7	104.2
1999	101.7	105.4	103.5	69.5	77.2	106.3	94.6	75.9	102.8
2000	98.4	101.0	98.7	65.2	74.7	101.8	89.8	72.7	99.7
2001	98.0	100.4	98.1	64.1	74.4	101.2	89.3	72.2	99.4
2002	98.1	100.3	98.1	64.1	74.4	101.2	89.3	72.2	99.4

[1] 1960–91: D_90.

(1991 = 100)

	A	P	FIN	S	UK	EU-10 (1)	EU-11 (2)	EU-14 (3)	US	JP
1960	58.1	520.8	138.0	126.8	180.6	75.9	80.9	118.4	84.6	34.7
1961	57.4	517.7	136.7	125.7	180.0	77.4	82.5	120.1	84.7	34.6
1962	57.2	517.7	136.6	125.6	180.4	77.9	83.0	120.8	85.4	34.7
1963	57.2	517.8	136.6	125.6	180.5	77.9	83.0	120.9	85.6	34.7
1964	57.2	517.8	136.6	125.6	180.5	77.9	83.0	120.9	85.6	34.7
1965	57.2	517.8	136.6	125.6	180.5	77.9	83.0	120.9	85.6	34.7
1966	57.2	517.8	136.6	125.6	180.5	77.9	83.0	120.9	85.6	34.7
1967	57.4	520.4	127.2	126.5	178.6	77.9	83.0	120.3	85.8	34.8
1968	58.6	543.5	108.5	131.8	157.9	79.9	85.2	115.5	87.8	35.4
1969	58.5	545.9	108.6	132.0	158.3	79.6	84.8	115.1	87.9	35.5
1970	57.5	545.0	107.8	131.0	157.6	80.8	86.1	116.1	86.9	35.3
1971	58.4	543.9	106.3	129.8	157.2	81.5	86.8	116.6	84.9	35.8
1972	58.9	539.8	100.8	131.7	151.7	85.0	90.4	119.5	79.3	40.2
1973	63.1	557.9	100.9	131.6	136.5	91.6	97.3	122.7	73.9	42.8
1974	66.6	548.4	103.5	130.6	131.5	91.6	97.4	120.4	75.2	39.9
1975	69.1	535.3	103.6	136.1	121.3	96.3	102.0	123.4	75.0	39.1
1976	72.0	494.6	106.7	139.5	104.4	93.6	99.0	111.3	79.7	41.2
1977	76.7	388.5	101.5	134.5	100.5	95.9	101.3	110.8	80.8	45.8
1978	78.8	310.8	91.5	123.1	101.8	96.9	102.1	110.0	74.3	55.8
1979	80.7	263.3	91.6	123.3	108.1	101.0	106.3	118.6	72.6	52.0
1980	83.2	253.9	94.6	123.9	119.1	99.8	104.4	121.1	72.6	49.9
1981	81.4	245.7	96.8	122.0	120.6	85.7	89.1	100.0	81.3	56.6
1982	84.8	214.6	98.2	110.3	116.5	83.3	86.5	93.5	96.4	54.4
1983	87.3	170.1	93.4	98.9	109.2	80.7	83.0	84.9	106.7	60.9
1984	86.8	142.7	95.3	100.9	104.3	76.2	78.0	77.3	116.6	64.7
1985	87.5	127.0	96.0	100.7	104.4	75.8	77.1	76.3	124.6	66.8
1986	94.1	118.2	96.0	101.1	98.5	88.2	89.3	87.6	110.6	87.5
1987	98.2	110.1	97.3	100.9	97.7	95.9	96.8	95.7	103.2	96.0
1988	98.0	104.3	98.9	101.2	103.8	93.3	94.0	94.8	100.0	106.5
1989	97.3	100.9	102.2	101.6	100.2	92.5	93.0	91.9	104.6	101.8
1990	100.5	99.3	103.9	100.2	99.1	102.8	103.3	103.8	100.3	91.9
1991	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
1992	102.3	103.5	87.3	101.2	96.1	103.6	103.4	102.5	98.5	105.3
1993	105.3	96.7	75.8	82.3	88.3	98.6	98.0	89.8	102.2	126.8
1994	105.4	92.9	81.6	81.4	88.7	97.2	96.3	87.9	101.2	136.8
1995	109.5	94.1	90.7	81.4	85.2	103.0	102.0	92.5	102.3	144.2
1996	107.3	94.6	88.3	89.4	86.6	103.4	102.4	94.9	108.0	125.8
1997	104.0	92.1	85.3	85.7	100.3	94.6	93.4	90.3	116.6	118.7
1998	104.4	91.1	84.8	84.3	104.2	95.2	93.9	92.4	123.7	112.0
1999	103.2	90.0	83.0	82.9	103.7	91.0	89.6	86.7	123.1	130.8
2000	100.5	87.5	79.4	83.2	106.1	82.7	81.2	77.6	128.0	147.1
2001	100.1	87.2	79.0	82.6	104.4	81.7	80.1	75.6	131.0	150.3
2002	100.1	87.2	79.0	82.5	104.2	81.7	80.1	75.6	131.4	150.6

(1) EU-15 excluding DK, EL, L, S, UK; relative to 12 industrial countries.
(2) EU-15 excluding DK, L, S, UK; relative to 11 industrial countries.
(3) EU-15 excluding L relative to eight industrial non-member countries.

Table 55a

Taxes linked to imports and production
EU Member States: former definition

	B	DK	D (1)	EL	E	F	IRL	I	L	NL
1970	13.1	17.9	13.2	12.1	7.5	14.6	17.2	10.4	8.4	10.6
1971	12.9	16.9	13.2	11.8	7.2	14.4	17.1	10.3	9.3	10.8
1972	12.2	16.8	13.4	11.4	7.3	14.5	16.4	9.7	10.0	11.1
1973	12.0	16.3	13.2	10.8	7.6	14.4	15.9	9.3	10.0	10.8
1974	11.8	15.4	12.7	10.4	6.6	13.9	18.4	9.1	9.2	10.2
1975	11.5	15.0	12.7	11.6	6.4	14.1	15.6	8.1	11.2	10.3
1976	12.2	15.7	12.7	11.5	6.3	14.6	17.5	8.8	11.0	10.8
1977	12.4	16.6	12.8	12.2	6.4	13.9	16.3	9.4	11.5	12.0
1978	12.5	17.6	13.1	12.1	5.9	14.2	15.1	9.2	12.0	12.0
1979	12.6	18.4	13.2	11.8	6.0	14.8	14.2	8.7	11.5	12.0
1980	12.2	18.0	13.1	10.4	6.4	14.9	15.3	9.3	12.3	11.6
1981	12.2	17.8	12.9	10.6	7.0	14.8	15.9	8.9	12.4	11.1
1982	12.5	17.0	12.7	11.7	7.4	15.1	16.5	9.2	13.0	11.3
1983	12.6	17.2	12.8	12.5	8.1	15.1	17.2	9.8	14.8	11.4
1984	12.2	17.5	12.9	12.5	8.5	15.4	17.3	9.9	14.5	11.7
1985	12.0	17.8	12.6	12.5	9.1	15.6	16.7	9.5	14.7	11.7
1986	11.7	19.1	12.3	14.1	10.3	15.3	16.8	9.9	14.2	12.1
1987	12.2	18.9	12.3	14.6	10.4	15.4	16.6	10.3	14.3	12.8
1988	12.0	18.6	12.3	13.5	10.5	15.3	16.6	10.8	14.6	12.7
1989	12.0	17.7	12.5	12.2	10.4	14.9	16.4	11.1	14.7	12.0
1990	12.2	17.0	12.5	13.9	10.2	14.9	15.5	11.3	15.1	11.8
1991	12.1	16.7	12.7	14.6	10.3	14.5	15.2	11.8	15.3	11.9
1991	12.1	16.7	12.2	14.6	10.3	14.5	15.2	11.8	15.3	11.9
1992	12.0	16.6	12.4	15.3	10.8	14.3	15.2	11.8	15.5	12.2
1993	12.4	16.9	12.7	14.7	10.1	14.3	14.4	12.7	16.1	12.4
1994	12.7	17.3	13.1	14.3	10.6	14.7	15.3	12.3	16.1	12.3
1995	12.2	17.2	12.7	14.2	10.3	14.9	14.6	12.4	16.0	12.3

(1) 1970–91: D_90.

(% of GDP at market prices)

	A	P	FIN	S	UK	EU-10 (1)	EU-11 (2)	EU-14 (3)	US	JP
1970	15.7	10.2	12.8	12.1	16.2	12.5	12.5	13.2	8.4	7.1
1971	16.0	9.6	13.2	14.2	15.1	12.5	12.4	13.0	8.5	7.1
1972	16.5	9.3	13.2	13.6	14.3	12.5	12.4	12.9	8.3	7.0
1973	17.2	9.1	12.7	13.8	13.6	12.3	12.3	12.6	8.1	7.0
1974	16.6	9.2	12.0	12.7	13.6	11.8	11.8	12.1	7.9	6.9
1975	16.3	9.5	12.1	13.2	13.3	11.7	11.7	12.0	7.9	6.6
1976	15.8	11.1	12.1	13.8	13.0	12.0	12.0	12.3	7.6	6.5
1977	16.3	11.3	13.1	14.6	13.6	12.1	12.1	12.5	7.5	6.9
1978	15.8	10.6	13.4	13.3	13.6	12.2	12.2	12.5	7.0	6.8
1979	15.7	10.4	13.2	12.8	15.0	12.2	12.2	12.8	6.6	7.3
1980	15.7	12.3	13.1	13.0	15.8	12.3	12.3	13.0	6.7	7.4
1981	15.8	12.7	13.4	13.7	16.8	12.2	12.2	13.1	7.0	7.5
1982	15.6	13.3	13.3	13.6	16.8	12.3	12.3	13.2	6.9	7.5
1983	15.6	14.2	13.3	14.7	16.4	12.5	12.5	13.3	7.0	7.3
1984	16.3	13.6	14.0	15.2	16.3	12.7	12.7	13.4	6.9	7.6
1985	16.2	13.8	14.1	15.9	15.9	12.6	12.6	13.4	6.8	7.8
1986	16.0	14.5	14.5	16.2	16.5	12.6	12.6	13.4	6.8	7.5
1987	16.1	13.9	14.6	16.7	16.4	12.8	12.8	13.6	6.9	8.1
1988	16.0	14.0	15.0	15.8	16.3	12.8	12.8	13.6	6.9	8.3
1989	15.9	13.1	15.2	15.7	15.7	12.7	12.7	13.4	6.8	8.0
1990	15.6	13.1	14.9	16.6	15.6	12.7	12.7	13.4	6.9	8.2
1991	15.4	13.0	15.0	17.1	16.0	12.8	12.8	13.5	7.2	7.6
1991	15.4	13.0	15.0	17.1	16.0	12.6	12.6	13.4	7.2	7.6
1992	15.6	13.8	14.7	15.7	15.7	12.7	12.7	13.3	7.2	7.9
1993	15.7	13.0	14.5	15.1	15.4	12.9	13.0	13.4	7.2	7.8
1994	15.7	13.4	14.2	14.3	15.5	13.2	13.2	13.6	7.2	7.9
1995	15.5	13.6	13.6	13.8	15.8	13.0	13.1	13.5	7.2	8.1

(1) EU-15 excluding DK, EL, L, S, UK; 1970–91: including D_90.
(2) EU-15 excluding DK, L, S, UK; 1970–91: including D_90.
(3) EU-15 excluding L; 1970–91: including D_90.

Table 55b

Taxes linked to imports and production
EU Member States: ESA 95

	B	DK	D	EL	E	F	IRL	I	L	NL
1970	14.0	:	:	:	:	:	:	:	:	:
1971	13.6	17.6	:	:	:	:	:	:	:	:
1972	12.5	18.0	:	:	:	:	:	:	:	:
1973	12.3	15.8	:	:	:	:	:	:	:	:
1974	12.2	14.9	:	:	:	:	:	:	:	:
1975	11.9	14.6	:	:	:	:	:	:	:	:
1976	12.4	15.2	:	:	:	:	:	:	:	:
1977	12.7	16.2	:	:	:	:	:	:	:	:
1978	12.7	17.3	:	:	:	14.4	:	:	:	:
1979	12.6	18.0	:	:	:	15.1	:	:	:	:
1980	11.7	17.7	:	:	:	15.0	:	:	:	:
1981	11.9	17.4	:	:	:	15.1	:	:	:	:
1982	11.9	16.6	:	:	:	15.3	:	:	:	:
1983	12.2	16.8	:	:	:	15.3	:	:	:	:
1984	11.9	17.1	:	:	:	15.7	:	:	:	:
1985	11.8	17.3	:	:	:	15.8	:	:	:	:
1986	11.4	18.6	:	:	:	15.4	:	:	:	:
1987	11.7	18.4	:	:	:	15.5	:	:	:	:
1988	11.7	18.3	:	:	:	15.3	:	:	:	:
1989	11.6	17.4	:	:	:	14.9	:	:	:	:
1990	11.8	16.7	:	:	:	14.8	14.4	:	11.9	:
1991	11.7	16.4	11.1	:	:	14.6	14.0	:	12.3	:
1992	11.7	16.3	11.1	:	:	14.4	14.0	:	12.2	:
1993	12.2	16.6	11.5	:	:	14.7	13.1	:	13.4	:
1994	12.5	17.0	11.8	:	:	15.2	14.0	:	13.2	:
1995	12.2	16.9	11.4	13.5	10.2	15.4	13.5	12.1	12.4	10.7
1996	12.7	17.3	11.4	14.0	10.2	16.1	13.7	11.8	12.6	11.2
1997	12.9	17.6	11.4	14.3	10.5	16.0	13.5	12.5	12.8	11.4
1998	12.9	18.1	11.6	14.4	11.1	16.0	13.2	15.4	13.4	11.6
1999	13.3	17.8	12.2	15.2	11.7	16.0	13.1	15.3	14.2	12.2
2000	13.5	17.3	12.4	15.3	12.1	15.6	13.1	15.2	14.5	12.3
2001	13.5	17.0	12.5	15.2	12.1	15.3	13.0	15.2	15.2	13.0
2002	13.5	16.7	12.6	15.1	12.1	15.2	12.9	15.1	15.3	13.0

(% of GDP at market prices)

	A	P	FIN	S	UK	EUR-11 (1)	EUR-12 (2)	EU-15	US	JP
1970	:	:	:	:	14.4	:	:	:	8.4	7.1
1971	:	:	:	:	13.2	:	:	:	8.5	7.1
1972	:	:	:	:	12.4	:	:	:	8.3	7.0
1973	:	:	:	:	11.5	:	:	:	8.1	7.0
1974	:	:	:	:	11.6	:	:	:	7.9	6.9
1975	:	:	12.2	:	11.1	:	:	:	7.9	6.6
1976	:	:	12.3	:	10.8	:	:	:	7.6	6.5
1977	:	:	13.3	:	11.3	:	:	:	7.5	6.9
1978	:	:	13.6	:	11.2	:	:	:	7.0	6.8
1979	:	:	13.4	:	12.3	:	:	:	6.6	7.3
1980	:	:	13.3	:	13.2	:	:	:	6.7	7.4
1981	:	:	13.6	:	13.9	:	:	:	7.0	7.5
1982	:	:	13.5	:	13.5	:	:	:	6.9	7.5
1983	:	:	13.5	:	13.3	:	:	:	7.0	7.3
1984	:	:	14.2	:	13.3	:	:	:	6.9	7.6
1985	:	:	14.4	:	12.9	:	:	:	6.8	7.8
1986	:	:	14.8	:	13.2	:	:	:	6.8	7.5
1987	:	:	14.9	:	13.0	:	:	:	6.9	8.1
1988	15.9	:	16.1	:	13.2	:	:	:	6.9	8.3
1989	15.8	:	15.9	:	12.5	:	:	:	6.8	8.0
1990	15.5	:	15.2	:	12.2	:	:	:	6.9	8.2
1991	15.3	:	15.3	:	13.3	:	:	:	7.2	7.6
1992	15.5	:	15.0	:	12.9	:	:	:	7.2	7.9
1993	15.6	:	14.7	15.1	12.8	:	:	:	7.2	7.8
1994	15.5	:	14.6	14.4	13.1	:	:	:	7.2	7.9
1995	14.2	14.2	13.7	13.7	13.2	12.5	12.5	12.7	7.2	8.1
1996	14.5	14.3	13.5	14.3	13.3	12.6	12.7	12.9	7.0	8.2
1997	15.0	14.2	14.3	14.8	13.6	12.8	12.9	13.1	6.9	8.1
1998	15.0	14.6	14.0	15.5	13.5	13.5	13.5	13.7	6.8	8.8
1999	15.0	15.1	14.0	17.0	14.0	13.8	13.8	14.0	6.8	8.8
2000	15.0	15.2	13.6	15.1	14.0	13.8	13.8	14.0	6.8	8.8
2001	15.0	15.5	13.4	14.8	13.9	13.8	13.8	13.9	6.7	8.8
2002	15.0	15.8	13.2	14.7	13.8	13.8	13.8	13.9	6.7	9.1

(1) EU-15 excluding DK, EL, S, UK.
(2) EU-15 excluding DK, S, UK.

Table 56a

Current taxes on income and wealth
EU Member States: former definition

	B	DK	D [1]	EL	E	F	IRL	I	L	NL
1970	11.3	21.9	10.8	3.0	3.3	6.9	7.8	5.1	10.4	12.4
1971	11.9	23.5	11.3	3.4	3.5	6.4	8.6	5.3	11.4	13.2
1972	12.6	22.9	11.1	3.3	3.5	6.5	8.2	5.9	10.9	13.7
1973	13.5	23.8	12.6	3.0	3.7	6.7	8.3	5.6	11.7	13.9
1974	14.5	26.7	13.0	4.2	3.8	7.1	9.0	5.4	13.2	14.2
1975	16.4	24.3	12.1	3.2	4.2	6.9	9.1	6.0	14.5	14.8
1976	16.0	23.9	12.8	4.3	4.5	7.8	10.2	6.9	14.6	14.5
1977	17.2	23.2	13.8	3.5	4.7	7.8	10.0	7.7	17.2	14.7
1978	18.3	23.7	13.0	3.7	5.3	7.4	9.8	8.8	18.2	14.8
1979	18.8	24.0	12.6	3.9	5.8	7.5	10.2	8.6	16.0	14.9
1980	18.0	25.0	12.8	4.5	6.7	8.1	11.5	9.6	15.5	15.1
1981	17.8	24.9	12.3	3.8	6.9	8.4	11.8	11.0	15.6	14.5
1982	19.4	24.5	12.2	4.8	6.5	8.6	12.1	11.9	15.6	14.3
1983	18.7	25.7	12.0	4.5	7.4	8.7	12.6	12.4	17.2	13.2
1984	19.2	26.6	12.2	4.9	7.8	9.1	13.4	12.6	16.4	12.4
1985	19.2	27.7	12.6	4.6	8.1	8.9	13.1	13.0	17.3	12.2
1986	18.8	28.5	12.3	5.0	7.9	9.1	13.9	12.8	15.8	12.9
1987	18.5	29.0	12.4	5.0	9.8	9.2	14.3	13.3	15.7	13.6
1988	17.7	30.3	12.2	5.3	10.0	8.8	15.1	13.3	:	13.8
1989	16.4	30.0	12.7	4.5	11.5	8.8	12.6	14.3	:	13.4
1990	16.7	28.3	11.2	5.4	11.5	8.7	13.1	14.3	:	14.9
1991	16.3	28.5	11.9	5.5	11.5	9.2	13.7	14.4	:	16.2
1991	16.3	28.5	11.3	5.5	11.5	9.2	13.7	14.4	:	16.2
1992	16.2	29.0	11.6	5.4	11.9	8.8	14.1	14.6	:	15.3
1993	16.3	30.1	11.2	5.7	11.4	9.0	14.8	16.0	:	16.1
1994	17.5	30.6	10.8	6.8	11.0	9.2	15.2	14.8	:	13.4
1995	17.9	30.3	11.1	7.2	11.0	9.4	13.5	14.5	:	12.5

[1] 1970–91: D_90.

(% of GDP at market prices)

	A	P	FIN	S	UK	EU-10 (1)	EU-11 (2)	EU-14 (3)	US	JP
1970	10.5	5.2	12.8	19.4	14.4	8.3	8.2	10.0	13.4	8.1
1971	10.6	4.8	13.6	19.2	14.0	8.5	8.4	10.1	12.5	8.7
1972	11.0	4.5	13.7	19.1	12.6	8.6	8.5	9.9	13.5	8.6
1973	10.9	4.5	14.4	17.6	12.5	9.3	9.2	10.3	13.3	9.5
1974	11.7	4.6	14.7	19.7	15.2	9.6	9.5	11.1	13.7	11.0
1975	11.1	4.5	16.1	20.3	15.9	9.4	9.3	11.0	12.3	9.5
1976	11.0	4.8	18.5	21.6	15.2	10.2	10.1	11.6	13.1	9.0
1977	11.2	5.2	17.2	21.7	14.1	10.7	10.6	11.8	13.5	9.2
1978	12.5	5.3	15.0	21.8	13.5	10.7	10.5	11.7	13.8	9.1
1979	12.3	5.8	14.1	21.6	12.8	10.5	10.4	11.4	14.0	9.9
1980	12.4	5.7	14.2	20.7	13.4	10.9	10.7	11.8	13.8	10.8
1981	13.1	6.6	15.6	20.2	14.3	11.0	10.9	12.1	13.7	11.3
1982	12.6	7.0	15.3	20.7	14.5	11.2	11.0	12.2	12.9	11.3
1983	12.4	7.9	15.5	20.9	14.3	11.3	11.2	12.3	12.3	11.6
1984	13.1	7.7	15.9	20.5	14.4	11.5	11.4	12.5	12.1	11.7
1985	13.9	7.8	16.5	20.2	14.5	11.7	11.6	12.7	12.3	12.0
1986	13.9	5.9	17.5	21.0	13.6	11.7	11.6	12.6	12.3	12.1
1987	13.4	5.4	15.6	23.0	13.3	11.9	11.8	12.8	13.1	12.8
1988	13.5	6.6	16.7	23.4	13.2	11.8	11.7	12.8	12.7	12.9
1989	12.6	7.9	16.5	24.4	13.6	12.2	12.1	13.1	13.0	13.5
1990	11.6	8.0	17.7	22.6	13.8	11.9	11.8	12.8	12.7	13.6
1991	12.1	8.8	17.6	19.2	12.9	12.3	12.2	12.8	12.2	13.6
1991	12.1	8.8	17.6	19.2	12.9	12.1	12.0	12.7	12.2	13.6
1992	12.7	9.9	16.9	19.8	12.1	12.1	12.0	12.6	12.0	12.6
1993	12.8	9.0	15.2	20.1	11.5	12.2	12.1	12.6	12.3	11.5
1994	11.3	8.8	16.8	20.3	11.9	11.7	11.6	12.3	12.6	10.5
1995	11.9	9.0	16.7	20.8	12.7	11.7	11.7	12.4	13.0	10.0

(1) EU-15 excluding DK, EL, L, S, UK; 1970–91: including D_90.
(2) EU-15 excluding DK, L, S, UK; 1970–91: including D_90.
(3) EU-15 excluding L; 1970–91: including D_90.

Table 56b

Current taxes on income and wealth
EU Member States: ESA 95

	B	DK	D	EL	E	F	IRL	I	L	NL
1970	10.5	:	:	:	:	:	:	:	:	:
1971	11.1	23.8	:	:	:	:	:	:	:	:
1972	11.8	23.0	:	:	:	:	:	:	:	:
1973	12.9	24.1	:	:	:	:	:	:	:	:
1974	13.7	27.2	:	:	:	:	:	:	:	:
1975	15.6	23.8	:	:	:	:	:	:	:	:
1976	15.2	24.1	:	:	:	:	:	:	:	:
1977	16.5	23.5	:	:	:	:	:	:	:	:
1978	17.5	23.7	:	:	:	6.8	:	:	:	:
1979	17.8	24.0	:	:	:	7.1	:	:	:	:
1980	17.1	25.0	:	:	:	7.6	:	:	:	:
1981	17.0	24.9	:	:	:	7.8	:	:	:	:
1982	18.0	24.5	:	:	:	8.0	:	:	:	:
1983	18.0	25.7	:	:	:	8.1	:	:	:	:
1984	18.5	26.7	:	:	:	8.4	:	:	:	:
1985	18.1	27.8	:	:	:	8.3	:	:	:	:
1986	17.8	28.6	:	:	:	8.3	:	:	:	:
1987	17.5	29.0	:	:	:	8.3	:	:	:	:
1988	16.9	30.3	:	:	:	7.9	:	:	:	:
1989	15.4	30.0	:	:	:	8.0	:	:	:	:
1990	15.7	28.3	:	:	:	8.2	13.2	:	16.7	:
1991	15.3	28.5	11.3	:	:	8.5	13.9	:	15.6	:
1992	14.7	29.0	11.7	:	:	8.3	14.2	:	16.4	:
1993	15.9	30.1	11.5	:	:	8.2	14.9	:	19.4	:
1994	16.3	30.8	11.0	:	:	8.5	15.3	:	18.2	:
1995	16.7	30.4	11.1	7.4	10.1	8.5	13.6	14.8	17.5	12.4
1996	16.7	30.6	11.5	7.1	10.3	8.9	14.1	15.4	18.4	12.9
1997	17.1	30.5	11.2	7.8	10.5	9.5	14.0	16.2	17.4	12.4
1998	17.6	29.7	11.5	9.5	10.2	11.7	13.9	14.5	17.0	12.1
1999	17.2	30.2	12.0	10.5	10.3	12.2	13.8	15.2	16.4	12.2
2000	17.2	29.5	12.2	10.8	10.2	12.2	13.3	15.2	16.2	11.9
2001	17.2	29.4	11.2	10.6	10.3	12.0	12.9	14.7	15.0	11.5
2002	17.1	29.4	11.4	10.5	10.4	11.9	12.4	14.5	13.8	11.3

(% of GDP at market prices)

	A	P	FIN	S	UK	EUR-11 (1)	EUR-12 (2)	EU-15	US	JP
1970	:	:	:	:	16.8	:	:	:	13.4	8.1
1971	:	:	:	:	16.3	:	:	:	12.5	8.7
1972	:	:	:	:	14.9	:	:	:	13.5	8.6
1973	:	:	:	:	14.8	:	:	:	13.3	9.5
1974	:	:	:	:	17.6	:	:	:	13.7	11.0
1975	:	:	16.2	:	18.2	:	:	:	12.3	9.5
1976	:	:	19.0	:	17.3	:	:	:	13.1	9.0
1977	:	:	17.6	:	16.2	:	:	:	13.5	9.2
1978	:	:	15.3	:	15.5	:	:	:	13.8	9.1
1979	:	:	14.2	:	14.9	:	:	:	14.0	9.9
1980	:	:	14.3	:	15.8	:	:	:	13.8	10.8
1981	:	:	15.8	:	16.8	:	:	:	13.7	11.3
1982	:	:	15.6	:	17.3	:	:	:	12.9	11.3
1983	:	:	15.6	:	16.9	:	:	:	12.3	11.6
1984	:	:	16.0	:	16.9	:	:	:	12.1	11.7
1985	:	:	16.6	:	17.1	:	:	:	12.3	12.0
1986	:	:	17.6	:	16.4	:	:	:	12.3	12.1
1987	:	:	15.7	:	16.0	:	:	:	13.1	12.8
1988	11.9	:	17.1	:	16.1	:	:	:	12.7	12.9
1989	11.0	:	16.8	:	16.5	:	:	:	13.0	13.5
1990	11.6	:	17.5	:	16.7	:	:	:	12.7	13.6
1991	12.2	:	17.7	:	15.7	:	:	:	12.2	13.6
1992	12.7	:	16.7	:	14.9	:	:	:	12.0	12.6
1993	12.8	:	15.8	19.9	13.9	:	:	:	12.3	11.5
1994	11.3	:	17.2	19.7	14.2	:	:	:	12.6	10.5
1995	12.0	9.3	17.4	20.2	15.0	11.5	11.4	12.5	13.0	10.0
1996	13.1	9.8	18.9	21.6	14.8	12.0	11.9	13.0	13.6	9.9
1997	13.5	10.1	18.4	21.8	15.0	12.2	12.1	13.2	14.1	9.9
1998	13.7	9.9	18.8	22.6	16.5	12.5	12.4	13.7	14.6	8.9
1999	13.4	10.4	18.5	22.4	16.3	12.9	12.8	14.0	14.8	7.2
2000	13.1	10.7	19.1	21.3	16.5	12.9	12.9	14.1	15.1	7.3
2001	13.9	11.0	18.3	20.6	16.4	12.5	12.4	13.7	15.3	7.3
2002	14.1	11.2	18.1	20.4	16.4	12.4	12.4	13.7	15.5	7.2

(1) EU-15 excluding DK, EL, S, UK.
(2) EU-15 excluding DK, S, UK.

Table 57a

Social contributions received;
EU Member States: former definition

	B	DK	D (1)	EL	E	F	IRL	I	L	NL
1970	12.3	2.4	12.6	7.7	7.4	13.8	2.3	11.1	8.5	13.1
1971	12.7	2.4	13.1	7.7	8.1	14.0	2.4	11.6	9.2	13.8
1972	13.1	2.5	13.7	7.7	8.5	14.2	2.4	11.7	9.2	14.0
1973	13.4	1.7	14.6	7.0	8.6	14.2	2.6	11.7	8.9	15.2
1974	13.6	1.5	15.2	7.5	8.7	14.7	3.4	11.6	9.3	16.1
1975	14.9	1.5	16.3	7.7	9.8	16.2	4.0	12.6	12.2	16.5
1976	14.7	1.5	16.8	8.1	10.5	16.7	4.2	12.5	12.8	16.2
1977	15.0	1.5	16.8	8.7	11.3	17.3	4.1	12.3	13.6	16.2
1978	14.8	1.5	16.6	8.9	12.0	17.4	3.9	12.3	13.1	16.5
1979	14.9	1.6	16.6	8.9	12.5	18.2	4.1	12.7	12.8	17.1
1980	14.9	1.8	16.9	9.3	12.6	19.1	4.4	12.9	13.2	17.4
1981	15.3	2.0	17.5	9.5	12.8	19.2	4.5	12.9	13.5	17.9
1982	15.4	2.3	17.9	10.6	12.7	19.7	5.0	13.7	13.0	18.8
1983	16.0	2.8	17.4	11.1	13.0	20.2	5.2	14.0	12.5	20.9
1984	16.6	2.8	17.4	11.4	12.3	20.6	5.2	13.6	12.4	19.9
1985	17.1	2.8	17.6	11.6	12.6	20.8	5.1	13.5	12.2	19.6
1986	17.3	2.5	17.5	11.2	12.4	20.5	5.1	13.9	11.9	18.8
1987	17.6	2.9	17.6	11.4	12.4	20.6	5.0	13.8	12.3	19.7
1988	17.1	2.2	17.5	10.8	12.2	20.4	5.1	13.7	:	19.7
1989	16.6	2.2	17.2	11.2	12.5	20.5	4.9	14.0	:	18.1
1990	16.8	2.3	16.9	11.5	12.8	20.6	5.0	14.3	:	16.3
1991	17.4	2.3	17.0	11.1	13.1	20.7	5.2	14.6	:	17.3
1991	17.4	2.3	17.5	11.1	13.1	20.7	5.2	14.6	:	17.3
1992	17.7	2.4	17.8	11.0	14.0	20.9	5.3	14.9	:	17.8
1993	18.2	2.5	18.4	11.9	14.3	21.1	5.3	15.4	:	17.8
1994	17.7	2.8	18.9	12.1	14.0	20.7	5.1	14.8	:	18.2
1995	17.4	2.6	19.1	12.4	13.1	21.0	4.7	14.6	:	18.2

(1) 1970–91: D_90.

(% of GDP at market prices)

	A	P	FIN	S	UK	EU-10 (1)	EU-11 (2)	EU-14 (3)	US	JP
1970	10.5	5.1	5.5	8.6	5.2	11.9	11.9	10.4	4.5	4.3
1971	10.8	5.5	6.0	9.1	4.9	12.4	12.3	10.8	4.6	4.6
1972	10.6	6.0	5.9	9.6	5.2	12.7	12.6	11.1	4.8	4.7
1973	10.9	6.1	6.3	9.1	5.3	13.1	13.0	11.5	5.5	4.6
1974	11.2	6.2	6.5	9.2	6.0	13.5	13.4	11.9	5.7	5.1
1975	12.1	8.6	10.5	9.7	6.5	14.7	14.5	12.9	5.5	6.4
1976	12.3	8.5	11.4	12.1	6.7	15.0	14.9	13.4	5.6	6.4
1977	12.6	8.5	11.8	13.6	6.5	15.2	15.1	13.6	5.6	6.8
1978	14.0	8.1	10.8	14.4	6.0	15.3	15.2	13.6	5.8	6.8
1979	14.0	7.8	10.6	14.3	5.8	15.6	15.5	13.8	6.0	7.2
1980	14.3	8.0	10.9	14.7	6.0	16.0	15.8	14.0	6.0	7.3
1981	14.5	8.5	11.1	15.1	6.3	16.2	16.1	14.1	6.3	7.8
1982	14.3	9.1	10.6	14.6	6.5	16.6	16.5	14.5	6.5	8.0
1983	14.0	9.2	10.2	14.3	6.9	16.8	16.7	14.7	6.5	8.1
1984	14.2	9.2	10.5	13.8	6.9	16.7	16.6	14.6	6.6	8.1
1985	14.6	8.7	11.4	13.5	6.8	16.8	16.7	14.7	6.7	8.2
1986	14.6	9.9	11.4	13.7	6.9	16.7	16.7	14.8	6.9	8.3
1987	14.7	10.1	11.4	13.3	6.6	16.8	16.7	14.8	6.9	8.5
1988	14.6	9.7	11.3	13.6	6.6	16.6	16.5	14.5	7.1	8.4
1989	14.5	9.6	11.4	14.6	6.5	16.4	16.4	14.5	7.1	8.3
1990	15.4	10.1	12.9	15.0	6.2	16.4	16.4	14.5	7.1	9.1
1991	15.5	10.6	13.6	14.9	6.2	16.6	16.5	14.7	7.3	9.0
1991	15.5	10.6	13.6	14.9	6.2	16.8	16.7	14.8	7.3	9.0
1992	16.1	11.1	14.6	14.3	6.1	17.2	17.1	15.2	7.3	9.2
1993	16.8	11.8	15.0	13.9	6.1	17.8	17.7	15.7	7.3	9.4
1994	17.2	11.5	15.8	13.8	6.2	17.8	17.7	15.7	7.3	9.5
1995	17.3	11.6	14.8	14.2	6.2	17.8	17.7	15.8	7.3	10.3

(1) EU-15 excluding DK, EL, L, S, UK; 1970–91: including D_90.
(2) EU-15 excluding DK, L, S, UK; 1970–91: including D_90.
(3) EU-15 excluding L; 1970–91: including D_90.

Table 57b

Social contributions received;
EU Member States: ESA 95

	B	DK	D	EL	E	F	IRL	I	L	NL
1970	11.2	:	:	:	:	:	:	:	:	:
1971	11.7	2.4	:	:	:	:	:	:	:	:
1972	11.9	2.5	:	:	:	:	:	:	:	:
1973	12.3	1.6	:	:	:	:	:	:	:	:
1974	12.6	1.5	:	:	:	:	:	:	:	:
1975	13.7	1.5	:	:	:	:	:	:	:	:
1976	13.7	1.5	:	:	:	:	:	:	:	:
1977	13.9	1.5	:	:	:	:	:	:	:	:
1978	13.8	1.5	:	:	:	17.8	:	:	:	:
1979	13.9	1.6	:	:	:	18.8	:	:	:	:
1980	14.0	1.8	:	:	:	19.3	:	:	:	:
1981	14.4	2.0	:	:	:	19.3	:	:	:	:
1982	14.6	2.3	:	:	:	20.0	:	:	:	:
1983	15.2	2.8	:	:	:	20.4	:	:	:	:
1984	15.8	2.8	:	:	:	20.8	:	:	:	:
1985	16.4	2.8	:	:	:	20.8	:	:	:	:
1986	16.7	2.0	:	:	:	20.3	:	:	:	:
1987	17.0	2.9	:	:	:	20.5	:	:	:	:
1988	16.4	2.2	:	:	:	20.3	:	:	:	:
1989	16.0	2.2	:	:	:	20.4	:	:	:	:
1990	16.1	2.3	:	:	:	20.5	7.1	:	12.6	:
1991	16.8	2.3	17.2	:	:	20.4	7.4	:	12.9	:
1992	16.9	2.4	17.6	:	:	20.7	7.5	:	13.1	:
1993	17.4	2.5	18.2	:	:	20.8	7.6	:	13.0	:
1994	17.2	2.8	18.6	:	:	20.6	7.3	:	12.4	:
1995	16.8	2.6	18.8	12.6	13.0	20.5	6.8	14.8	12.4	17.2
1996	16.8	2.6	19.4	12.9	13.2	20.7	6.3	15.0	12.3	16.6
1997	16.7	2.6	19.6	13.3	13.1	20.3	6.0	15.4	11.8	16.6
1998	16.5	2.6	19.2	13.5	13.1	18.2	5.7	12.9	11.6	16.5
1999	16.5	3.2	18.9	13.7	13.1	18.4	5.8	12.7	11.9	17.1
2000	16.3	3.3	18.6	13.9	13.1	18.4	5.4	12.7	12.1	17.0
2001	16.2	3.3	18.2	14.0	13.1	18.4	5.1	12.5	12.1	15.0
2002	16.0	3.3	17.8	14.0	13.1	18.4	4.9	12.4	11.9	14.8

(% of GDP at market prices)

	A	P	FIN	S	UK	EUR-11 (1)	EUR-12 (2)	EU-15	US	JP
1970	:	:	:	:	6.3	:	:	:	4.5	4.3
1971	:	:	:	:	6.1	:	:	:	4.6	4.6
1972	:	:	:	:	6.4	:	:	:	4.8	4.7
1973	:	:	:	:	6.6	:	:	:	5.5	4.6
1974	:	:	:	:	7.4	:	:	:	5.7	5.1
1975	:	:	10.6	:	8.0	:	:	:	5.5	6.4
1976	:	:	11.4	:	8.3	:	:	:	5.6	6.4
1977	:	:	11.9	:	8.0	:	:	:	5.6	6.8
1978	:	:	10.8	:	7.5	:	:	:	5.8	6.8
1979	:	:	10.6	:	7.2	:	:	:	6.0	7.2
1980	:	:	10.9	:	7.6	:	:	:	6.0	7.3
1981	:	:	11.1	:	8.0	:	:	:	6.3	7.8
1982	:	:	10.6	:	8.2	:	:	:	6.5	8.0
1983	:	:	10.3	:	8.5	:	:	:	6.5	8.1
1984	:	:	10.5	:	8.5	:	:	:	6.6	8.1
1985	:	:	11.4	:	8.3	:	:	:	6.7	8.2
1986	:	:	11.4	:	8.4	:	:	:	6.9	8.3
1987	:	:	11.4	:	8.1	:	:	:	6.9	8.5
1988	15.8	:	11.4	:	8.0	:	:	:	7.1	8.4
1989	15.7	:	11.5	:	7.8	:	:	:	7.1	8.3
1990	15.5	:	12.9	:	7.5	:	:	:	7.1	9.1
1991	15.6	:	13.7	:	7.7	:	:	:	7.3	9.0
1992	16.3	:	14.6	:	7.6	:	:	:	7.3	9.2
1993	16.9	:	15.1	15.0	7.6	:	:	:	7.3	9.4
1994	17.3	:	15.8	15.0	7.6	:	:	:	7.3	9.5
1995	17.4	10.9	14.9	14.2	7.6	17.5	17.4	15.7	7.3	10.3
1996	17.5	11.0	14.3	15.2	7.5	17.7	17.6	15.9	7.2	10.2
1997	17.3	11.2	13.4	15.0	7.5	17.6	17.5	15.6	7.1	10.5
1998	17.2	11.4	13.0	15.1	7.6	16.5	16.5	14.7	7.1	11.0
1999	17.1	11.6	12.9	14.2	7.5	16.5	16.4	14.6	7.2	11.2
2000	16.9	12.1	12.5	16.0	7.5	16.3	16.2	14.4	7.1	11.5
2001	16.6	12.3	12.3	16.0	7.3	15.9	15.9	14.1	7.1	11.4
2002	16.3	12.4	12.1	15.9	7.2	15.7	15.7	13.9	7.0	12.0

(1) EU-15 excluding DK, EL, S, UK.
(2) EU-15 excluding DK, S, UK.

Table 58

Actual social contributions received;
EU Member States: ESA 95

	B	DK	D	EL	E	F	IRL	I	L	NL
1970	9.9	:	:	:	:	:	:	:	:	:
1971	10.4	1.6	:	:	:	:	:	:	:	:
1972	10.6	1.7	:	:	:	:	:	:	:	:
1973	10.9	0.8	:	:	:	:	:	:	:	:
1974	11.2	0.6	:	:	:	:	:	:	:	:
1975	12.1	0.6	:	:	:	:	:	:	:	:
1976	12.2	0.6	:	:	:	:	:	:	:	:
1977	12.4	0.6	:	:	:	:	:	:	:	:
1978	12.2	0.6	:	:	:	16.0	:	:	:	:
1979	12.2	0.7	:	:	:	17.1	:	:	:	:
1980	12.3	0.8	:	:	:	17.6	:	:	:	:
1981	12.6	1.0	:	:	:	17.6	:	:	:	:
1982	12.8	1.2	:	:	:	18.2	:	:	:	:
1983	13.3	1.8	:	:	:	18.6	:	:	:	:
1984	14.0	1.8	:	:	:	19.0	:	:	:	:
1985	14.5	1.9	:	:	:	19.0	:	:	:	:
1986	14.8	1.5	:	:	:	18.5	:	:	:	:
1987	15.2	1.9	:	:	:	18.7	:	:	:	:
1988	14.6	1.4	:	:	:	18.6	:	:	:	:
1989	14.2	1.4	:	:	:	18.8	:	:	:	:
1990	14.4	1.5	:	:	:	18.9	5.3	:	11.2	:
1991	14.9	1.5	16.2	:	:	18.8	5.4	:	11.4	:
1992	15.1	1.5	16.6	:	:	19.0	5.6	:	11.7	:
1993	15.4	1.6	17.2	:	:	19.1	5.6	:	11.7	:
1994	15.2	1.6	17.5	:	:	18.8	5.4	:	11.2	:
1995	14.8	1.6	17.7	10.5	12.0	18.7	5.0	13.0	11.2	16.0
1996	14.7	1.6	18.3	10.8	12.2	18.9	4.6	14.6	11.1	15.5
1997	14.6	1.6	18.5	11.2	12.2	18.4	4.4	15.0	10.7	15.5
1998	14.5	1.6	18.1	11.4	12.2	16.4	4.2	12.5	10.6	15.4
1999	14.5	2.1	17.9	11.7	12.3	16.6	4.4	12.4	10.9	16.0
2000	14.3	2.3	17.6	11.8	12.3	16.6	4.1	12.3	11.1	15.9
2001	14.2	2.3	17.2	11.9	12.3	16.5	4.0	12.1	11.1	13.9
2002	14.0	2.4	16.8	11.9	12.3	16.5	3.8	12.0	11.0	13.8

(% of GDP at market prices)

	A	P	FIN	S	UK	EUR-11 (1)	EUR-12 (2)	EU-15	US	JP
1970	:	:	:	:	5.7	:	:	:	:	4.3
1971	:	:	:	:	5.5	:	:	:	:	4.6
1972	:	:	:	:	5.8	:	:	:	:	4.7
1973	:	:	:	:	5.9	:	:	:	:	4.6
1974	:	:	:	:	6.7	:	:	:	:	5.1
1975	:	:	9.1	:	7.3	:	:	:	:	6.4
1976	:	:	9.8	:	7.5	:	:	:	:	6.4
1977	:	:	10.2	:	7.2	:	:	:	:	6.8
1978	:	:	9.3	:	6.7	:	:	:	:	6.8
1979	:	:	9.1	:	6.5	:	:	:	:	7.2
1980	:	:	9.3	:	6.8	:	:	:	:	7.3
1981	:	:	9.5	:	7.0	:	:	:	:	7.8
1982	:	:	9.0	:	7.3	:	:	:	:	8.0
1983	:	:	8.6	:	7.6	:	:	:	:	8.1
1984	:	:	8.8	:	7.6	:	:	:	:	8.1
1985	:	:	9.7	:	7.5	:	:	:	:	8.2
1986	:	:	9.7	:	7.6	:	:	:	:	8.3
1987	:	:	9.6	:	7.3	:	:	:	:	8.5
1988	13.6	:	10.6	:	7.3	:	:	:	:	8.4
1989	13.5	:	10.7	:	7.1	:	:	:	:	8.3
1990	13.3	:	12.1	:	6.8	:	:	:	:	9.1
1991	13.4	:	13.4	:	6.8	:	:	:	:	9.0
1992	14.1	:	14.4	:	6.7	:	:	:	:	9.2
1993	14.6	:	14.9	13.2	6.8	:	:	:	:	9.4
1994	15.0	:	15.6	13.1	6.8	:	:	:	:	9.5
1995	15.2	10.0	14.6	13.6	6.8	16.1	16.0	14.4	:	10.3
1996	15.3	10.2	14.0	14.6	6.8	16.5	16.4	14.7	:	10.2
1997	15.3	10.5	13.2	14.5	6.9	16.4	16.3	14.5	:	10.5
1998	15.2	10.7	12.9	14.6	6.9	15.4	15.3	13.6	:	11.0
1999	15.1	10.8	12.9	13.5	6.9	15.3	15.2	13.5	:	:
2000	14.9	11.3	12.5	15.2	6.8	15.2	15.1	13.3	:	:
2001	14.8	11.5	12.2	15.2	6.7	14.8	14.8	13.1	:	:
2002	14.6	11.6	12.0	15.1	6.6	14.6	14.6	12.9	:	:

(1) EU-15 excluding DK, EL, S, UK.
(2) EU-15 excluding DK, S, UK.

Table 59a

Other current revenue;
EU Member States: former definition

	B	DK	D (1)	EL	E	F	IRL	I	L	NL
1970	2.1	2.5	2.2	1.7	3.2	2.6	3.1	2.3	4.0	2.9
1971	1.9	2.5	2.1	1.4	2.8	2.7	3.0	2.6	4.1	2.8
1972	1.6	2.8	2.0	1.5	2.7	2.6	3.1	2.5	4.0	2.9
1973	1.6	2.8	2.1	1.5	2.6	2.6	2.7	2.4	3.9	2.9
1974	1.7	2.8	2.1	2.3	3.0	2.8	2.9	2.4	3.7	3.4
1975	2.1	3.4	2.0	2.0	3.1	3.1	2.8	2.3	4.8	4.2
1976	2.0	3.7	2.0	1.8	3.1	3.2	2.8	2.1	5.8	4.9
1977	2.1	3.8	2.0	1.6	3.3	3.0	3.2	2.2	5.2	5.3
1978	2.0	4.1	2.1	1.3	3.1	2.9	3.3	2.4	5.2	5.2
1979	2.1	4.3	2.2	1.6	3.3	3.0	3.1	2.5	5.5	5.7
1980	2.6	5.1	2.3	1.9	3.4	3.2	3.2	2.4	6.2	6.3
1981	2.8	5.2	2.6	1.6	3.6	3.8	3.1	2.5	6.4	7.5
1982	3.0	5.2	3.2	1.4	3.8	3.7	3.6	2.2	6.1	7.6
1983	2.5	5.6	3.2	1.4	3.7	3.7	3.9	2.6	5.5	7.5
1984	2.4	6.1	3.2	1.6	3.2	3.6	3.6	2.5	5.1	8.1
1985	2.3	6.0	3.2	1.7	4.1	3.8	3.8	2.9	5.6	8.7
1986	2.0	6.1	3.1	1.3	4.0	3.9	3.1	3.4	4.9	6.9
1987	1.8	5.7	2.7	1.5	3.7	3.8	3.1	2.8	5.5	5.4
1988	1.7	7.1	2.3	1.4	3.7	3.9	2.9	2.7	:	4.7
1989	1.7	7.5	2.7	1.6	3.3	3.6	2.2	2.8	:	4.7
1990	1.8	7.5	2.7	1.7	3.6	4.0	2.2	2.9	:	4.9
1991	1.9	7.2	2.6	2.2	4.1	3.9	2.5	3.0	:	5.2
1991	1.9	7.2	2.6	2.2	4.1	3.9	2.5	3.0	:	5.2
1992	1.8	8.0	3.1	2.5	4.0	4.1	2.5	3.3	:	4.8
1993	1.8	8.4	3.0	3.1	5.0	4.1	2.4	3.6	:	4.6
1994	1.5	7.5	3.0	3.8	4.2	3.7	2.1	3.6	:	4.0
1995	1.5	6.8	2.7	4.2	3.6	3.8	1.8	3.7	:	3.7

(1) 1970–91: D_90.

(% of GDP at market prices)

	A	P	FIN	S	UK	EU-10 (1)	EU-11 (2)	EU-14 (3)	US	JP
1970	2.0	2.3	:	5.9	4.1	:	:	:	2.6	1.5
1971	2.1	2.2	:	6.3	4.2	:	:	:	2.7	1.6
1972	1.9	2.3	2.4	6.5	4.0	2.3	2.3	2.8	2.7	1.7
1973	1.8	2.3	2.3	6.5	4.0	2.4	2.4	2.8	2.7	1.7
1974	1.9	2.1	2.4	6.5	4.6	2.5	2.5	2.9	2.9	1.8
1975	2.2	1.9	3.2	6.6	4.4	2.6	2.6	3.0	2.8	2.0
1976	2.3	2.6	3.5	6.6	4.5	2.7	2.7	3.1	2.7	2.0
1977	2.2	1.8	3.7	7.0	4.3	2.7	2.7	3.1	2.6	2.1
1978	2.4	2.1	3.9	7.0	4.1	2.7	2.7	3.1	2.8	2.2
1979	2.4	2.6	3.8	7.0	4.2	2.8	2.8	3.2	3.0	2.4
1980	2.8	2.0	3.8	7.2	4.5	3.0	3.0	3.4	3.3	2.7
1981	3.1	2.3	3.9	7.8	4.6	3.4	3.3	3.7	3.6	3.0
1982	3.0	2.7	4.4	8.5	4.5	3.5	3.4	3.8	3.9	3.1
1983	2.8	3.3	4.7	9.0	4.1	3.5	3.5	3.8	3.9	3.2
1984	2.8	3.3	4.9	8.9	3.9	3.4	3.4	3.8	4.0	3.4
1985	2.9	2.7	5.1	9.3	4.1	3.7	3.7	4.0	4.2	3.5
1986	2.8	2.7	5.1	8.8	3.4	3.6	3.6	3.8	4.2	3.7
1987	3.0	3.0	5.0	8.4	3.2	3.3	3.3	3.5	4.1	3.8
1988	2.9	3.0	5.1	8.0	2.9	3.1	3.1	3.3	4.0	3.8
1989	2.9	2.7	5.5	8.4	2.9	3.2	3.1	3.4	4.0	3.8
1990	4.4	2.9	5.9	8.4	2.7	3.3	3.3	3.5	3.9	3.9
1991	4.4	3.1	6.8	8.2	2.5	3.4	3.4	3.5	4.1	4.1
1991	4.4	3.1	6.8	8.2	2.5	3.4	3.4	3.5	4.1	4.1
1992	4.8	3.6	7.6	9.0	2.3	3.6	3.6	3.7	4.0	3.9
1993	4.6	3.1	8.0	9.2	2.2	3.7	3.7	3.7	3.8	3.8
1994	4.4	2.6	6.7	8.5	2.2	3.5	3.5	3.5	3.8	4.7
1995	4.5	2.8	7.0	8.1	2.2	3.3	3.3	3.4	3.9	4.2

(1) EU-15 excluding DK, EL, L, S, UK; 1970–91: including D_90.
(2) EU-15 excluding DK, L, S, UK; 1970–91: including D_90.
(3) EU-15 excluding L; 1970–91: including D_90.

Table 59b

Other current revenue;
EU Member States: ESA 95

	B	DK	D	EL	E	F	IRL	I	L	NL
1970	4.4	:	:	:	:	:	:	:	:	:
1971	4.1	4.0	:	:	:	:	:	:	:	:
1972	3.8	4.0	:	:	:	:	:	:	:	:
1973	3.7	3.5	:	:	:	:	:	:	:	:
1974	3.6	4.4	:	:	:	:	:	:	:	:
1975	4.0	4.8	:	:	:	:	:	:	:	:
1976	3.8	5.1	:	:	:	:	:	:	:	:
1977	4.0	5.3	:	:	:	:	:	:	:	:
1978	3.9	5.6	:	:	:	3.4	:	:	:	:
1979	4.1	5.9	:	:	:	3.3	:	:	:	:
1980	4.5	6.6	:	:	:	3.5	:	:	:	:
1981	4.9	6.9	:	:	:	3.7	:	:	:	:
1982	5.1	7.1	:	:	:	3.9	:	:	:	:
1983	4.7	7.3	:	:	:	4.0	:	:	:	:
1984	4.4	7.7	:	:	:	3.9	:	:	:	:
1985	4.3	7.4	:	:	:	4.1	:	:	:	:
1986	3.9	7.4	:	:	:	4.1	:	:	:	:
1987	3.6	6.8	:	:	:	4.0	:	:	:	:
1988	3.4	7.3	:	:	:	3.8	:	:	:	:
1989	3.4	7.5	:	:	:	3.8	:	:	:	:
1990	3.5	7.6	:	:	:	3.9	3.3	:	7.8	:
1991	3.6	7.4	3.4	:	:	4.2	4.1	:	7.3	:
1992	3.4	8.1	3.9	:	:	4.1	3.9	:	7.2	:
1993	3.4	8.5	3.8	:	:	4.2	3.8	:	5.9	:
1994	3.2	7.5	3.8	:	:	3.9	3.4	:	5.6	:
1995	3.1	6.8	3.5	2.9	4.1	3.7	2.8	3.1	5.5	6.0
1996	3.2	7.1	3.4	2.9	4.2	4.0	2.9	3.2	5.4	5.8
1997	3.0	6.7	3.2	3.4	4.0	3.9	2.7	3.3	5.3	5.5
1998	2.9	6.6	3.2	2.7	3.7	3.7	2.5	3.2	5.2	5.0
1999	2.8	6.0	3.1	2.7	3.6	3.6	2.4	3.2	4.8	4.7
2000	2.8	5.7	3.0	2.8	3.3	3.6	2.2	3.2	4.6	4.7
2001	2.8	5.5	2.9	2.7	3.5	3.5	2.0	3.2	4.4	4.6
2002	2.8	5.3	2.8	2.6	3.5	3.5	1.9	3.1	4.2	4.5

(% of GDP at market prices)

	A	P	FIN	S	UK	EUR-11 (1)	EUR-12 (2)	EU-15	US	JP
1970	:	:	:	:	5.7	:	:	:	2.6	1.5
1971	:	:	:	:	5.8	:	:	:	2.7	1.7
1972	:	:	:	:	5.6	:	:	:	2.7	1.7
1973	:	:	:	:	5.7	:	:	:	2.7	1.8
1974	:	:	:	:	6.4	:	:	:	2.9	1.8
1975	:	:	3.8	:	6.1	:	:	:	2.8	2.0
1976	:	:	4.0	:	6.3	:	:	:	2.7	2.1
1977	:	:	4.3	:	6.1	:	:	:	2.6	2.2
1978	:	:	4.4	:	5.8	:	:	:	2.8	2.3
1979	:	:	4.3	:	5.8	:	:	:	3.0	2.4
1980	:	:	4.3	:	6.1	:	:	:	3.3	2.7
1981	:	:	4.5	:	6.4	:	:	:	3.6	3.0
1982	:	:	4.9	:	6.4	:	:	:	3.9	3.2
1983	:	:	5.2	:	5.8	:	:	:	3.9	3.3
1984	:	:	5.3	:	5.6	:	:	:	4.0	3.4
1985	:	:	5.5	:	5.6	:	:	:	4.2	3.5
1986	:	:	5.5	:	5.4	:	:	:	4.2	3.7
1987	:	:	5.4	:	4.1	:	:	:	4.1	3.8
1988	5.6	:	5.3	:	3.9	:	:	:	4.0	3.9
1989	5.7	:	5.6	:	4.0	:	:	:	4.0	3.8
1990	5.8	:	6.2	:	3.9	:	:	:	3.9	3.9
1991	5.7	:	7.3	:	4.1	:	:	:	4.1	4.2
1992	6.1	:	8.2	:	3.3	:	:	:	4.0	4.0
1993	5.9	:	8.7	7.9	3.2	:	:	:	3.8	3.9
1994	5.7	:	6.7	7.2	3.0	:	:	:	3.8	4.7
1995	5.8	3.9	7.3	8.4	2.9	3.8	3.8	3.9	3.9	4.2
1996	5.2	4.1	6.7	8.0	3.0	3.8	3.8	3.9	3.9	4.0
1997	3.7	3.7	6.3	7.4	2.7	3.6	3.6	3.7	3.9	3.8
1998	3.4	3.8	6.0	7.2	2.6	3.5	3.5	3.5	3.8	3.7
1999	3.3	3.7	5.8	6.6	2.6	3.4	3.4	3.4	3.8	3.7
2000	3.3	4.4	6.0	6.3	2.5	3.4	3.4	3.4	4.7	4.0
2001	3.1	4.3	5.7	5.9	2.5	3.3	3.3	3.3	4.6	4.1
2002	3.0	4.3	5.4	5.6	2.4	3.3	3.2	3.2	4.6	4.6

(1) EU-15 excluding DK, EL, S, UK.
(2) EU-15 excluding DK, S, UK.

Table 60a

Total current revenue;
EU Member States: former definition

	B	DK	D (1)	EL	E	F	IRL	I	L	NL
1970	38.7	44.7	38.7	24.5	21.4	37.9	30.3	29.0	31.3	39.0
1971	39.5	45.3	39.8	24.3	21.6	37.5	31.2	29.8	34.1	40.6
1972	39.5	44.9	40.1	23.9	22.0	37.8	30.1	29.8	34.1	41.7
1973	40.5	44.5	42.5	22.3	22.5	37.9	29.5	29.0	34.5	42.8
1974	41.6	46.4	43.1	24.4	22.0	38.6	33.7	28.5	35.4	43.7
1975	44.9	44.2	43.1	24.4	23.6	40.2	31.5	29.1	42.8	45.8
1976	45.0	44.7	44.3	25.7	24.4	42.3	34.8	30.3	44.1	46.4
1977	46.6	45.2	45.3	26.0	25.6	42.0	33.6	31.5	47.5	48.3
1978	47.5	46.9	44.8	26.0	26.2	41.9	32.1	32.8	48.5	48.5
1979	48.4	48.3	44.6	26.3	27.5	43.5	31.6	32.5	45.8	49.7
1980	47.7	49.9	45.1	26.2	29.0	45.3	34.5	34.2	47.2	50.4
1981	48.2	49.9	45.3	25.6	30.3	46.2	35.4	35.3	47.9	51.0
1982	50.3	49.0	46.0	28.5	30.3	47.1	37.2	37.0	47.7	52.0
1983	49.8	51.3	45.4	29.6	32.2	47.7	38.9	38.8	50.0	52.9
1984	50.4	53.0	45.6	30.3	31.9	48.7	39.4	38.6	48.3	52.0
1985	50.6	54.4	46.0	30.3	34.0	49.1	38.7	38.9	49.9	52.2
1986	49.8	56.1	45.2	31.6	34.6	48.8	38.8	40.1	46.8	50.7
1987	50.1	56.4	45.0	32.4	36.3	49.1	39.0	40.2	47.8	51.4
1988	48.6	58.2	44.2	31.0	36.3	48.3	39.7	40.5	:	51.0
1989	46.8	57.3	45.1	29.6	37.8	47.8	36.1	42.1	:	48.1
1990	47.4	55.1	43.3	32.5	38.2	48.2	35.9	42.8	:	47.9
1991	47.7	54.7	44.3	33.4	38.9	48.2	36.6	43.8	:	50.6
1991	47.7	54.7	43.5	33.4	38.9	48.2	36.6	43.8	:	50.6
1992	47.7	56.0	44.9	34.2	40.7	48.0	37.0	44.5	:	50.1
1993	48.6	57.9	45.3	35.4	40.8	48.4	36.9	47.7	:	50.8
1994	49.4	58.1	45.9	36.9	39.7	48.3	37.6	45.5	:	48.0
1995	49.0	56.9	45.6	38.0	38.0	49.0	34.7	45.3	:	46.6

(1) 1970–91: D_90.

(% of GDP at market prices)

	A	P	FIN	S	UK	EU-10 (1)	EU-11 (2)	EU-14 (3)	US	JP
1970	38.7	22.8	33.9	45.9	40.0	35.2	35.0	36.5	29.0	21.0
1971	39.5	22.0	35.5	48.7	38.2	35.8	35.6	36.8	28.3	22.1
1972	40.1	22.0	35.2	48.7	36.2	36.1	35.9	36.7	29.3	22.0
1973	40.8	21.9	35.8	47.0	35.5	37.1	36.8	37.2	29.5	22.8
1974	41.4	22.1	35.6	48.1	39.4	37.4	37.1	38.1	30.2	24.8
1975	41.8	24.6	41.9	49.7	40.0	38.4	38.1	39.0	28.4	24.4
1976	41.3	27.1	45.4	54.2	39.5	39.9	39.6	40.4	29.0	24.0
1977	42.3	26.8	45.8	57.0	38.6	40.7	40.4	41.0	29.2	25.1
1978	44.7	26.1	43.1	56.6	37.2	40.9	40.6	40.9	29.4	25.0
1979	44.3	26.6	41.6	55.6	37.8	41.1	40.8	41.1	29.6	26.8
1980	45.3	28.1	42.0	55.6	39.8	42.1	41.8	42.2	29.9	28.1
1981	46.5	30.0	44.0	56.9	41.9	42.7	42.4	43.0	30.7	29.6
1982	45.5	32.0	43.6	57.3	42.4	43.5	43.2	43.7	30.2	30.0
1983	44.9	34.6	43.7	59.0	41.6	44.1	43.8	44.1	29.6	30.3
1984	46.5	33.8	45.2	58.5	41.5	44.3	44.0	44.3	29.6	30.8
1985	47.6	33.0	47.0	59.0	41.4	44.8	44.6	44.8	30.0	31.4
1986	47.3	33.1	48.5	59.7	40.3	44.7	44.4	44.6	30.3	31.6
1987	47.1	32.4	46.7	61.4	39.5	44.8	44.6	44.7	30.9	33.1
1988	47.0	33.2	48.2	60.9	38.9	44.3	44.1	44.2	30.7	33.4
1989	45.9	33.3	48.7	63.1	38.7	44.6	44.3	44.4	30.9	33.6
1990	46.9	34.1	51.4	62.7	38.3	44.4	44.2	44.2	30.7	34.7
1991	47.4	35.4	53.1	59.5	37.5	45.1	44.9	44.5	30.7	34.3
1991	47.4	35.4	53.1	59.5	37.5	44.8	44.6	44.3	30.7	34.3
1992	49.1	38.3	53.7	58.8	36.2	45.6	45.4	44.8	30.4	33.7
1993	49.8	36.8	52.7	58.2	35.2	46.5	46.4	45.4	30.6	32.6
1994	48.5	36.2	53.5	57.0	35.8	46.1	45.9	45.1	30.9	32.6
1995	49.2	37.0	52.0	56.9	36.9	45.9	45.7	45.1	31.3	32.6

(1) EU-15 excluding DK, EL, L, S, UK; 1970–91: including D_90.
(2) EU-15 excluding DK, L, S, UK; 1970–91: including D_90.
(3) EU-15 excluding L; 1970–91: including D_90.

Table 60b

Total current revenue;
EU Member States: ESA 95

	B	DK	D	EL	E	F	IRL	I	L	NL
1970	40.0	:	:	:	:	:	:	:	:	:
1971	40.4	47.9	:	:	:	:	:	:	:	:
1972	40.0	47.5	:	:	:	:	:	:	:	:
1973	41.2	45.0	:	:	:	:	:	:	:	:
1974	42.0	48.0	:	:	:	:	:	:	:	:
1975	45.2	44.7	:	:	:	:	:	:	:	:
1976	45.1	45.9	:	:	:	:	:	:	:	:
1977	47.1	46.5	:	:	:	:	:	:	:	:
1978	47.9	48.2	:	:	:	42.4	:	:	:	:
1979	48.4	49.5	:	:	:	44.4	:	:	:	:
1980	47.3	51.2	:	:	:	45.4	:	:	:	:
1981	48.2	51.2	:	:	:	45.9	:	:	:	:
1982	49.6	50.5	:	:	:	47.2	:	:	:	:
1983	50.1	52.6	:	:	:	47.8	:	:	:	:
1984	50.7	54.3	:	:	:	48.8	:	:	:	:
1985	50.6	55.3	:	:	:	49.0	:	:	:	:
1986	49.8	56.6	:	:	:	48.1	:	:	:	:
1987	49.9	57.2	:	:	:	48.3	:	:	:	:
1988	48.4	58.1	:	:	:	47.3	:	:	:	:
1989	46.4	57.0	:	:	:	47.2	:	:	:	:
1990	47.1	55.0	:	:	:	47.5	38.0	:	49.0	:
1991	47.4	54.6	43.0	:	:	47.6	39.3	:	48.0	:
1992	46.8	55.8	44.3	:	:	47.5	39.7	:	48.9	:
1993	48.9	57.8	44.9	:	:	48.0	39.4	:	51.8	:
1994	49.2	58.1	45.3	:	:	48.2	40.0	:	49.4	:
1995	48.9	56.8	44.8	36.4	37.4	48.1	36.7	44.8	47.9	46.3
1996	49.4	57.7	45.7	36.9	37.8	49.7	37.0	45.5	48.6	46.5
1997	49.7	57.4	45.4	38.8	38.1	49.7	36.1	47.3	47.2	45.9
1998	50.0	57.0	45.5	40.1	38.2	49.6	35.3	46.0	47.3	45.2
1999	49.9	57.2	46.1	42.1	38.6	50.4	35.1	46.5	47.3	46.2
2000	49.8	55.8	46.3	42.8	38.8	49.8	33.9	46.3	47.4	45.9
2001	49.7	55.3	44.9	42.6	39.0	49.3	33.0	45.6	46.7	44.1
2002	49.4	54.7	44.7	42.1	39.0	49.0	32.1	45.0	45.3	43.6

(% of GDP at market prices)

	A	P	FIN	S	UK	EUR-11 (1)	EUR-12 (2)	EU-15	US	JP
1970	:	:	:	:	43.1	:	:	:	29.0	21.1
1971	:	:	:	:	41.4	:	:	:	28.3	22.1
1972	:	:	:	:	39.4	:	:	:	29.3	22.0
1973	:	:	:	:	38.6	:	:	:	29.5	22.9
1974	:	:	:	:	42.9	:	:	:	30.2	24.9
1975	:	:	42.8	:	43.5	:	:	:	28.4	24.5
1976	:	:	46.8	:	42.8	:	:	:	29.0	24.0
1977	:	:	47.1	:	41.6	:	:	:	29.2	25.1
1978	:	:	44.2	:	39.9	:	:	:	29.4	25.0
1979	:	:	42.5	:	40.3	:	:	:	29.6	26.9
1980	:	:	42.8	:	42.6	:	:	:	29.9	28.1
1981	:	:	44.9	:	45.1	:	:	:	30.7	29.6
1982	:	:	44.6	:	45.5	:	:	:	30.2	30.0
1983	:	:	44.6	:	44.6	:	:	:	29.6	30.3
1984	:	:	46.0	:	44.3	:	:	:	29.6	30.9
1985	:	:	47.9	:	44.0	:	:	:	30.0	31.5
1986	:	:	49.3	:	43.3	:	:	:	30.3	31.6
1987	:	:	47.5	:	41.2	:	:	:	30.9	33.2
1988	49.3	:	49.8	:	41.2	:	:	:	30.7	33.5
1989	48.2	:	49.7	:	40.8	:	:	:	30.9	33.7
1990	48.4	:	51.9	:	40.4	:	:	:	30.7	34.8
1991	48.8	:	54.0	:	40.7	:	:	:	30.7	34.4
1992	50.6	:	54.5	:	38.8	:	:	:	30.4	33.8
1993	51.2	:	54.3	57.9	37.5	:	:	:	30.6	32.6
1994	49.8	:	54.4	56.3	37.9	:	:	:	30.9	32.7
1995	49.5	38.3	53.2	56.5	38.6	45.3	45.1	44.9	31.3	32.7
1996	50.3	39.2	53.5	59.1	38.6	46.1	46.0	45.6	31.7	32.3
1997	49.5	39.2	52.3	58.9	38.9	46.3	46.2	45.6	32.0	32.3
1998	49.3	39.7	51.8	60.4	40.2	46.0	45.9	45.6	32.3	32.4
1999	48.8	40.8	51.3	60.2	40.4	46.5	46.4	46.0	32.5	31.0
2000	48.3	42.4	51.3	58.6	40.5	46.4	46.3	45.8	33.7	31.6
2001	48.5	43.2	49.7	57.3	40.2	45.5	45.5	45.1	33.8	31.6
2002	48.3	43.6	48.8	56.6	39.9	45.2	45.1	44.7	33.8	32.9

(1) EU-15 excluding DK, EL, S, UK.
(2) EU-15 excluding DK, S, UK.

Table 61a

Total final consumption expenditure;
EU Member States: former definition

	B	DK	D (1)	EL	E	F	IRL	I	L	NL
1970	13.2	19.3	15.8	11.0	7.9	14.3	12.8	13.2	9.0	14.6
1971	13.9	20.6	16.9	10.9	8.1	14.5	13.4	14.8	10.0	15.1
1972	14.3	20.6	17.1	10.4	8.1	14.4	13.4	15.4	10.1	15.0
1973	14.3	20.6	17.8	9.6	7.9	14.4	13.6	14.6	9.7	14.7
1974	14.5	22.6	19.3	11.9	8.3	14.9	15.7	14.0	9.8	15.3
1975	16.1	23.8	20.5	12.9	8.8	16.1	17.0	14.3	12.8	16.4
1976	16.1	23.4	19.8	12.6	9.4	16.4	16.5	13.6	12.6	16.3
1977	16.4	23.3	19.7	13.3	9.6	16.7	15.6	14.0	13.6	16.2
1978	17.0	23.8	19.7	13.1	10.0	17.1	15.6	14.4	13.4	16.5
1979	17.2	24.3	19.7	13.4	10.4	17.1	16.5	14.7	13.7	16.9
1980	17.3	25.9	20.2	13.4	12.2	17.7	18.1	14.9	14.3	16.7
1981	18.0	26.8	20.7	14.7	12.6	18.4	18.2	16.2	14.9	16.6
1982	17.6	27.2	20.6	14.4	12.7	18.9	18.1	16.3	14.1	16.6
1983	17.1	26.4	20.2	14.9	13.1	19.1	17.6	16.6	13.5	16.4
1984	16.6	25.0	20.0	15.3	12.9	19.2	17.0	16.5	13.2	15.6
1985	16.7	24.5	20.1	16.1	14.1	19.1	16.9	16.6	13.5	15.1
1986	16.6	23.2	19.9	15.2	14.0	18.7	17.1	16.4	13.3	14.9
1987	16.0	24.4	20.0	15.4	14.4	18.5	16.1	16.8	14.3	15.3
1988	15.0	26.3	19.7	14.1	14.1	18.1	14.8	17.0	12.3	14.8
1989	14.2	25.9	18.8	15.0	14.5	17.6	13.8	16.7	11.8	14.3
1990	13.9	25.6	18.3	15.1	14.9	17.7	14.2	17.4	12.7	14.0
1991	14.3	25.7	17.6	14.2	15.5	17.9	15.1	17.4	12.6	13.9
1991	14.3	25.7	18.9	14.2	15.5	17.9	15.1	17.4	12.6	13.9
1992	14.1	25.8	19.5	13.7	16.4	18.5	15.4	17.5	12.4	14.1
1993	14.6	26.8	19.6	14.3	16.8	19.4	15.3	17.5	12.3	14.2
1994	14.6	25.9	19.4	13.8	16.2	19.2	15.2	17.0	11.8	13.8
1995	14.5	25.7	19.5	15.3	16.0	19.0	14.2	15.9	12.5	13.8

(1) 1970–91: D_90.

(% of GDP at market prices)

	A	P	FIN	S	UK	EU-10 (1)	EU-11 (2)	EU-14 (3)	US	JP
1970	14.1	12.3	14.1	20.5	18.0	14.0	14.0	15.0	18.3	7.4
1971	14.2	12.0	14.7	21.5	18.4	14.9	14.8	15.8	17.8	8.0
1972	14.0	11.9	14.9	21.7	18.8	15.0	14.9	15.9	17.6	8.2
1973	14.5	11.3	14.6	21.7	18.6	15.1	15.0	15.9	16.7	8.3
1974	15.1	12.4	14.8	22.2	20.5	15.7	15.6	16.7	17.2	9.1
1975	16.5	13.6	16.6	22.8	22.4	16.6	16.5	17.8	17.7	10.0
1976	16.9	12.9	17.5	23.8	22.2	16.5	16.4	17.6	17.0	9.9
1977	16.6	12.7	18.0	26.3	20.7	16.6	16.5	17.6	16.7	9.8
1978	17.5	12.7	17.8	26.7	20.3	16.9	16.8	17.8	16.1	9.7
1979	17.2	12.7	17.4	27.0	20.1	16.9	16.9	17.9	15.9	9.7
1980	17.3	13.4	17.6	28.3	21.7	17.4	17.3	18.6	16.4	9.8
1981	17.7	14.0	18.2	28.6	22.3	18.0	17.9	19.3	16.4	9.9
1982	18.1	13.8	18.4	28.5	22.3	18.1	18.0	19.3	17.3	9.9
1983	18.0	14.0	18.9	27.9	22.2	18.1	18.0	19.2	17.2	9.9
1984	18.0	14.0	18.9	27.1	22.0	17.9	17.9	19.0	16.8	9.8
1985	18.3	14.1	19.8	26.9	21.2	18.0	18.0	19.0	17.1	9.6
1986	18.5	13.7	20.2	26.5	21.2	17.8	17.8	18.7	17.3	9.7
1987	18.4	13.6	20.4	25.8	20.8	17.9	17.9	18.7	17.3	9.4
1988	18.1	14.2	19.6	25.2	20.0	17.6	17.6	18.4	16.8	9.1
1989	17.7	14.7	19.4	25.3	19.8	17.1	17.1	18.0	16.4	9.1
1990	18.3	15.1	20.8	26.4	20.3	17.2	17.2	18.1	16.5	9.0
1991	18.6	16.8	23.8	26.3	21.2	17.3	17.2	18.3	16.7	9.0
1991	18.6	16.8	23.8	26.3	21.2	17.7	17.6	18.6	16.7	9.0
1992	19.0	16.8	24.3	27.0	21.7	18.1	18.0	19.0	16.3	9.2
1993	19.9	17.4	22.8	27.1	21.6	18.4	18.4	19.2	15.7	9.4
1994	20.0	17.1	21.8	26.1	21.3	18.1	18.1	18.9	15.1	9.5
1995	19.8	17.2	21.2	24.8	21.0	17.9	17.9	18.7	14.8	9.8

(1) EU-15 excluding DK, EL, L, S, UK; 1970–91: including D_90.
(2) EU-15 excluding DK, L, S, UK; 1970–91: including D_90.
(3) EU-15 excluding L; 1970–91: including D_90.

Table 61b

Total final consumption expenditure;
EU Member States: ESA 95

	B	DK	D	EL	E	F	IRL	I	L	NL
1970	16.9	:	:	:	:	:	:	:	:	:
1971	17.9	22.2	:	:	:	:	:	:	:	:
1972	18.4	22.0	:	:	:	:	:	:	:	:
1973	18.7	22.0	:	:	:	:	:	:	:	:
1974	19.1	24.1	:	:	:	:	:	:	:	:
1975	21.3	25.3	:	:	:	:	:	:	:	:
1976	21.5	24.7	:	:	:	:	:	:	:	:
1977	22.0	24.6	:	:	:	:	:	:	:	:
1978	22.8	25.2	:	:	:	20.7	:	:	:	:
1979	23.1	25.7	:	:	:	20.8	:	:	:	:
1980	23.0	27.3	:	:	:	21.5	:	:	:	:
1981	24.3	28.4	:	:	:	22.4	:	:	:	:
1982	24.0	28.7	:	:	:	23.1	:	:	:	:
1983	23.6	27.9	:	:	:	23.3	:	:	:	:
1984	23.6	26.6	:	:	:	23.7	:	:	:	:
1985	23.0	25.9	:	:	:	23.7	:	:	:	:
1986	22.8	24.6	:	:	:	23.4	:	:	:	:
1987	22.7	25.8	:	:	:	23.1	:	:	:	:
1988	21.3	26.3	:	:	:	22.7	:	:	:	:
1989	20.5	25.9	:	:	:	22.3	:	:	:	:
1990	20.3	25.6	:	:	:	22.3	16.4	:	17.8	:
1991	21.0	25.7	19.2	:	:	22.5	17.4	:	18.0	:
1992	21.0	25.8	19.8	:	:	23.1	17.8	:	18.1	:
1993	21.5	26.8	19.9	:	:	24.5	17.6	:	18.1	:
1994	21.4	25.9	19.7	:	:	24.1	17.4	:	17.3	:
1995	21.5	25.8	19.8	15.3	18.1	23.9	16.4	17.9	18.2	24.0
1996	21.8	25.9	19.9	14.5	17.9	24.2	15.8	18.1	18.8	23.1
1997	21.3	25.6	19.5	15.2	17.6	24.2	15.2	18.2	17.8	22.9
1998	21.2	25.8	19.1	15.3	17.5	23.5	14.5	18.0	17.2	22.8
1999	21.4	25.7	19.0	15.0	17.3	23.7	14.0	18.1	17.5	22.8
2000	21.2	25.3	18.9	15.1	16.9	23.4	13.4	17.9	17.3	22.9
2001	21.0	25.2	18.7	14.9	16.6	23.0	12.9	17.6	17.3	22.7
2002	20.7	25.1	18.6	14.6	16.5	22.5	12.5	17.3	17.0	22.4

(% of GDP at market prices)

	A	P	FIN	S	UK	EUR-11 (1)	EUR-12 (2)	EU-15	US	JP
1970	:	:	:	:	18.0	:	:	:	18.3	7.4
1971	:	:	:	:	18.4	:	:	:	17.8	8.0
1972	:	:	:	:	18.7	:	:	:	17.6	8.2
1973	:	:	:	:	18.6	:	:	:	16.7	8.3
1974	:	:	:	:	20.5	:	:	:	17.2	9.1
1975	:	:	17.8	:	22.4	:	:	:	17.7	10.0
1976	:	:	18.8	:	22.1	:	:	:	17.0	9.9
1977	:	:	19.3	:	20.7	:	:	:	16.7	9.8
1978	:	:	19.0	:	20.4	:	:	:	16.1	9.7
1979	:	:	18.5	:	20.1	:	:	:	15.9	9.7
1980	:	:	18.7	:	21.6	:	:	:	16.4	9.8
1981	:	:	19.2	:	22.2	:	:	:	16.4	9.9
1982	:	:	19.3	:	22.1	:	:	:	17.3	9.9
1983	:	:	19.8	:	22.0	:	:	:	17.2	9.9
1984	:	:	19.7	:	21.7	:	:	:	16.8	9.8
1985	:	:	20.6	:	20.9	:	:	:	17.1	9.6
1986	:	:	21.0	:	21.0	:	:	:	17.3	9.7
1987	:	:	21.3	:	20.5	:	:	:	17.3	9.4
1988	19.5	:	20.4	:	19.7	:	:	:	16.8	9.1
1989	19.2	:	20.2	:	19.5	:	:	:	16.4	9.1
1990	18.9	:	21.6	:	19.9	:	:	:	16.5	9.0
1991	19.1	:	24.8	:	20.8	:	:	:	16.7	9.0
1992	19.5	:	25.4	:	21.2	:	:	:	16.3	9.2
1993	20.4	:	24.3	28.4	20.6	:	:	:	15.7	9.4
1994	20.5	:	23.4	27.4	20.1	:	:	:	15.1	9.5
1995	20.4	18.6	22.8	26.3	19.8	20.6	20.5	20.7	14.8	9.8
1996	20.3	18.9	23.2	27.1	19.4	20.6	20.5	20.7	14.5	9.7
1997	19.7	19.2	22.4	26.7	18.4	20.4	20.3	20.3	14.1	9.7
1998	19.6	19.2	21.6	26.7	18.2	20.0	20.0	20.0	13.8	10.2
1999	19.8	20.0	21.5	27.0	18.3	20.1	20.0	20.0	13.7	10.3
2000	19.4	20.8	20.6	26.3	18.3	19.8	19.8	19.8	14.1	10.0
2001	18.8	20.6	20.0	26.0	18.5	19.5	19.5	19.6	14.1	9.9
2002	18.3	20.4	19.6	25.7	18.6	19.3	19.2	19.4	14.1	9.6

(1) EU-15 excluding DK, EL, S, UK.
(2) EU-15 excluding DK, S, UK.

Table 62a

Compensation of employees;
EU Member States: former definition

	B	DK	D (1)	EL	E	F	IRL	I	L	NL
1970	9.8	13.4	8.8	8.1	6.3	10.5	10.0	9.6	6.1	10.5
1971	10.2	13.9	9.4	8.1	6.4	10.7	10.3	10.8	6.9	10.9
1972	10.7	14.0	9.6	7.6	6.2	10.8	10.4	11.2	7.0	11.2
1973	10.9	14.3	10.1	7.0	6.3	10.7	10.6	10.8	6.8	11.2
1974	11.1	15.6	10.9	8.2	6.5	11.2	10.5	10.1	7.1	11.6
1975	12.3	16.7	11.4	8.3	6.9	12.1	11.3	10.2	8.9	12.3
1976	12.3	16.6	11.0	8.2	7.5	12.4	10.9	9.8	8.9	12.2
1977	12.5	16.7	11.0	8.7	7.8	12.8	10.1	10.1	9.7	12.3
1978	12.9	16.9	10.9	8.9	8.0	13.1	10.1	10.4	9.5	12.4
1979	13.1	17.3	10.8	9.2	8.3	13.1	10.8	10.5	9.6	12.5
1980	13.4	18.0	11.0	9.3	9.4	13.4	11.8	11.1	10.0	12.3
1981	14.0	18.9	11.3	9.9	9.8	13.9	12.1	12.1	10.5	12.1
1982	13.8	19.5	11.2	10.4	9.7	14.2	12.1	12.0	9.9	12.0
1983	13.3	19.0	11.0	10.6	10.1	14.3	11.9	12.0	9.9	11.7
1984	13.0	18.0	10.7	10.8	9.9	14.4	11.7	11.9	9.6	11.0
1985	13.0	17.4	10.6	11.4	10.1	14.4	11.5	11.8	9.6	10.6
1986	12.9	16.7	10.6	10.8	9.9	14.2	11.6	11.7	9.4	10.4
1987	12.3	17.4	10.6	11.0	9.9	13.9	11.3	11.9	10.1	10.5
1988	11.6	18.2	10.3	11.1	10.0	13.4	10.5	12.1	:	10.1
1989	11.3	18.0	10.0	12.1	10.2	13.1	9.8	11.9	:	9.5
1990	11.2	17.7	9.7	12.5	10.6	13.0	9.8	12.6	:	9.3
1991	11.5	17.7	9.6	11.5	11.0	13.1	10.5	12.6	:	9.2
1991	11.5	17.7	10.1	11.5	11.0	13.1	10.5	12.6	:	9.2
1992	11.5	17.8	10.4	10.9	11.7	13.4	10.6	12.5	:	9.4
1993	12.0	18.1	10.6	10.9	11.8	14.0	10.8	12.4	:	9.6
1994	12.1	17.5	10.3	10.6	11.3	14.0	10.4	11.9	:	9.2
1995	12.1	17.3	10.2	11.3	11.2	14.1	9.6	11.3	:	9.2

(1) 1970–91: D_90.

(% of GDP at market prices)

	A	P	FIN	S	UK	EU-10 (1)	EU-11 (2)	EU-14 (3)	US	JP
1970	9.8	7.3	10.0	13.9	10.5	9.4	9.4	9.8	11.5	5.9
1971	9.8	7.1	10.3	14.7	11.1	9.9	9.9	10.4	11.7	6.3
1972	9.6	7.6	10.2	15.1	11.6	10.1	10.0	10.6	11.6	6.5
1973	9.9	7.3	10.0	14.8	11.4	10.1	10.1	10.5	11.3	6.7
1974	10.1	7.4	10.0	15.1	12.6	10.5	10.4	11.0	11.4	7.5
1975	11.0	9.3	11.5	15.7	14.0	11.1	11.0	11.8	11.6	8.4
1976	11.3	9.7	12.4	16.5	13.5	11.1	11.0	11.7	11.4	8.3
1977	11.0	9.8	12.5	18.4	12.6	11.3	11.2	11.8	11.1	8.2
1978	11.8	9.8	12.4	19.2	12.1	11.4	11.4	11.9	10.7	8.0
1979	11.6	9.7	12.2	19.4	11.8	11.4	11.4	11.9	10.4	8.0
1980	11.6	10.3	12.0	20.0	12.8	11.8	11.7	12.3	10.6	7.9
1981	11.9	10.4	12.5	20.0	13.3	12.2	12.1	12.8	10.4	7.9
1982	12.1	10.3	12.8	19.9	12.9	12.2	12.2	12.7	10.9	7.9
1983	12.1	10.4	13.2	19.2	12.9	12.2	12.2	12.7	10.7	7.8
1984	12.2	10.3	13.3	18.6	12.7	12.0	12.0	12.5	10.5	7.7
1985	12.3	10.3	13.9	18.2	12.2	12.0	12.0	12.4	10.6	7.5
1986	12.5	10.2	14.1	18.1	12.2	11.9	11.8	12.2	10.6	7.6
1987	12.6	10.3	14.2	17.5	12.1	11.8	11.8	12.2	10.6	7.5
1988	12.3	10.8	13.7	17.1	11.8	11.6	11.6	12.0	10.4	7.2
1989	12.0	11.5	13.6	17.3	11.5	11.3	11.4	11.7	10.3	7.1
1990	11.6	11.9	14.4	18.1	11.5	11.4	11.5	11.8	10.5	7.0
1991	11.8	12.9	16.8	18.3	11.7	11.5	11.5	11.9	10.8	6.9
1991	11.8	12.9	16.8	18.3	11.7	11.6	11.6	12.0	10.8	6.9
1992	12.0	13.9	17.3	18.7	11.8	11.8	11.8	12.1	10.6	7.0
1993	12.4	14.2	16.2	18.5	10.7	12.0	11.9	12.1	10.5	7.2
1994	12.4	13.6	15.2	17.6	9.1	11.7	11.7	11.6	10.2	7.2
1995	12.4	13.7	14.8	16.7	8.5	11.6	11.5	11.4	9.9	7.4

(1) EU-15 excluding DK, EL, L, S, UK; 1970–91: including D_90.
(2) EU-15 excluding DK, L, S, UK; 1970–91: including D_90.
(3) EU-15 excluding L; 1970–91: including D_90.

Table 62b

Compensation of employees;
EU Member States: ESA 95

	B	DK	D	EL	E	F	IRL	I	L	NL
1970	9.7	:	:	:	:	:	:	:	:	:
1971	10.1	14.5	:	:	:	:	:	:	:	:
1972	10.6	14.5	:	:	:	:	:	:	:	:
1973	10.8	14.8	:	:	:	:	:	:	:	:
1974	11.0	16.0	:	:	:	:	:	:	:	:
1975	12.2	17.2	:	:	:	:	:	:	:	:
1976	12.2	17.1	:	:	:	:	:	:	:	:
1977	12.5	16.7	:	:	:	:	:	:	:	:
1978	12.9	17.0	:	:	:	12.6	:	:	:	:
1979	13.2	17.3	:	:	:	12.6	:	:	:	:
1980	13.3	18.0	:	:	:	12.9	:	:	:	:
1981	13.9	19.0	:	:	:	13.3	:	:	:	:
1982	13.7	19.5	:	:	:	13.7	:	:	:	:
1983	13.2	19.0	:	:	:	13.8	:	:	:	:
1984	13.3	18.0	:	:	:	13.8	:	:	:	:
1985	12.7	17.4	:	:	:	13.8	:	:	:	:
1986	12.6	16.7	:	:	:	13.7	:	:	:	:
1987	12.1	17.4	:	:	:	13.3	:	:	:	:
1988	11.4	18.2	:	:	:	12.8	:	:	:	:
1989	11.1	18.0	:	:	:	12.5	:	:	:	:
1990	11.2	17.7	:	:	:	12.5	10.4	:	10.2	:
1991	11.4	17.7	9.0	:	:	12.7	11.0	:	10.1	:
1992	11.5	17.8	9.2	:	:	13.0	11.2	:	10.1	:
1993	11.9	18.1	9.3	:	:	13.5	11.4	:	10.0	:
1994	12.0	17.5	9.0	:	:	13.5	11.0	:	9.6	:
1995	12.0	17.3	9.0	11.3	11.3	13.7	10.2	11.2	9.6	10.8
1996	11.9	17.3	8.9	10.7	11.3	13.9	9.7	11.5	9.6	10.4
1997	11.8	17.2	8.7	11.6	10.9	13.8	9.2	11.6	9.3	10.2
1998	11.7	17.4	8.4	11.7	10.7	13.7	8.8	10.7	9.1	10.2
1999	11.6	17.3	8.3	11.5	10.5	13.7	8.2	10.7	8.7	10.2
2000	11.5	17.1	8.2	11.8	10.3	13.6	7.8	10.5	8.7	10.0
2001	11.4	17.1	7.9	11.6	10.1	13.5	7.4	10.4	8.6	9.8
2002	11.3	17.0	7.7	11.4	9.9	13.3	7.1	10.2	8.5	9.6

(% of GDP at market prices)

	A	P	FIN	S	UK	EUR-11 (1)	EUR-12 (2)	EU-15	US	JP
1970	:	:	:	:	11.5	:	:	:	11.5	5.9
1971	:	:	:	:	12.1	:	:	:	11.7	6.3
1972	:	:	:	:	12.6	:	:	:	11.6	6.5
1973	:	:	:	:	12.4	:	:	:	11.3	6.7
1974	:	:	:	:	13.6	:	:	:	11.4	7.5
1975	:	:	12.6	:	15.0	:	:	:	11.6	8.4
1976	:	:	13.5	:	14.4	:	:	:	11.4	8.3
1977	:	:	13.6	:	13.4	:	:	:	11.1	8.2
1978	:	:	13.4	:	12.9	:	:	:	10.7	8.0
1979	:	:	13.1	:	12.5	:	:	:	10.4	8.0
1980	:	:	13.0	:	13.4	:	:	:	10.6	7.9
1981	:	:	13.4	:	13.9	:	:	:	10.4	7.9
1982	:	:	13.8	:	13.8	:	:	:	10.9	7.9
1983	:	:	14.2	:	13.7	:	:	:	10.7	7.8
1984	:	:	14.1	:	13.3	:	:	:	10.5	7.7
1985	:	:	14.7	:	12.8	:	:	:	10.6	7.5
1986	:	:	14.9	:	12.8	:	:	:	10.6	7.6
1987	:	:	15.0	:	12.7	:	:	:	10.6	7.5
1988	12.2	:	14.6	:	12.3	:	:	:	10.4	7.2
1989	12.0	:	14.3	:	11.9	:	:	:	10.3	7.1
1990	11.8	:	15.1	:	12.0	:	:	:	10.5	7.0
1991	12.0	:	17.6	:	12.2	:	:	:	10.8	6.9
1992	12.2	:	18.0	:	12.3	:	:	:	10.6	7.0
1993	12.7	:	16.8	19.1	11.1	:	:	:	10.5	7.2
1994	12.7	:	15.9	18.2	9.4	:	:	:	10.2	7.2
1995	12.6	13.7	15.4	17.3	8.8	11.1	11.1	11.1	9.9	7.4
1996	12.3	13.6	15.6	17.8	8.3	11.2	11.2	11.1	9.7	7.3
1997	11.5	13.9	14.6	17.5	7.8	11.0	11.1	10.8	9.5	7.3
1998	11.3	14.2	13.9	16.9	7.4	10.8	10.8	10.5	9.3	7.6
1999	11.4	14.5	13.6	16.7	7.4	10.7	10.7	10.5	9.1	:
2000	11.1	15.2	13.0	16.6	7.5	10.5	10.5	10.3	9.0	:
2001	10.7	15.4	12.6	16.5	7.6	10.3	10.4	10.2	8.9	:
2002	10.3	15.5	12.3	16.4	7.6	10.1	10.2	10.0	8.8	:

(1) EU-15 excluding DK, EL, S, UK.
(2) EU-15 excluding DK, S, UK.

Table 63

Collective consumption expenditure
EU Member States: ESA 95

	B	DK	D	EL	E	F	IRL	I	L	NL
1970	7.4	:	:	:	:	:	:	:	:	:
1971	7.8	7.3	:	:	:	:	:	:	:	:
1972	7.9	7.2	:	:	:	:	:	:	:	:
1973	8.0	7.0	:	:	:	:	:	:	:	:
1974	7.9	7.8	:	:	:	:	:	:	:	:
1975	8.6	7.8	:	:	:	:	:	:	:	:
1976	8.5	7.3	:	:	:	:	:	:	:	:
1977	8.7	7.5	:	:	:	:	:	:	:	:
1978	9.2	7.9	:	:	:	9.0	:	:	:	:
1979	9.4	8.1	:	:	:	9.1	:	:	:	:
1980	9.4	8.8	:	:	:	9.4	:	:	:	:
1981	9.8	9.0	:	:	:	9.8	:	:	:	:
1982	9.6	8.8	:	:	:	10.0	:	:	:	:
1983	9.3	8.5	:	:	:	10.2	:	:	:	:
1984	9.2	8.3	:	:	:	10.3	:	:	:	:
1985	9.0	8.0	:	:	:	10.3	:	:	:	:
1986	9.0	7.7	:	:	:	10.2	:	:	:	:
1987	8.7	8.3	:	:	:	10.1	:	:	:	:
1988	8.0	8.3	:	:	:	10.0	:	:	:	:
1989	7.7	8.3	:	:	:	9.5	:	:	:	:
1990	7.5	8.2	:	:	:	9.4	6.6	:	8.6	:
1991	7.8	8.5	8.7	:	:	9.6	7.0	:	8.4	:
1992	7.5	8.6	8.7	:	:	9.8	7.0	:	8.4	:
1993	7.8	9.3	8.8	:	:	10.4	6.6	:	8.2	:
1994	7.9	9.0	8.5	:	:	10.0	6.4	:	7.9	:
1995	7.8	8.4	8.4	9.4	8.0	9.8	6.1	7.3	8.6	11.6
1996	7.7	8.5	8.4	8.5	7.8	9.9	5.8	7.3	8.7	11.3
1997	7.6	8.2	8.1	8.9	7.7	10.0	5.5	7.2	8.4	11.0
1998	7.6	8.2	8.0	9.1	8.1	9.5	5.2	7.1	7.9	10.8
1999	7.7	8.1	7.9	8.9	8.0	9.5	5.0	7.2	7.8	10.8
2000	7.6	8.0	7.8	8.9	7.9	9.3	4.8	7.1	7.7	10.8
2001	7.6	7.9	7.6	8.8	7.9	9.2	4.7	7.1	7.7	10.6
2002	7.4	7.9	7.6	8.6	7.8	9.0	4.5	7.0	7.5	10.5

(% of GDP at market prices)

	A	P	FIN	S	UK	EUR-11 (1)	EUR-12 (2)	EU-15	US	JP
1970	:	:	:	:	9.0	:	:	:	:	:
1971	:	:	:	:	9.1	:	:	:	:	:
1972	:	:	:	:	9.3	:	:	:	:	:
1973	:	:	:	:	9.2	:	:	:	:	:
1974	:	:	:	:	9.3	:	:	:	:	:
1975	:	:	7.2	:	10.1	:	:	:	:	:
1976	:	:	7.3	:	10.1	:	:	:	:	:
1977	:	:	7.5	:	9.6	:	:	:	:	:
1978	:	:	7.3	:	9.8	:	:	:	:	:
1979	:	:	7.0	:	9.7	:	:	:	:	:
1980	:	:	7.2	:	10.4	:	:	:	:	:
1981	:	:	7.3	:	10.7	:	:	:	:	:
1982	:	:	7.4	:	10.7	:	:	:	:	:
1983	:	:	7.6	:	10.5	:	:	:	:	:
1984	:	:	7.3	:	10.6	:	:	:	:	:
1985	:	:	7.5	:	10.3	:	:	:	:	:
1986	:	:	7.4	:	10.0	:	:	:	:	:
1987	:	:	7.5	:	9.5	:	:	:	:	:
1988	7.9	:	7.2	:	8.9	:	:	:	:	:
1989	7.8	:	6.9	:	8.8	:	:	:	:	:
1990	7.5	:	7.4	:	9.2	:	:	:	:	:
1991	7.6	:	8.8	:	9.4	:	:	:	:	:
1992	7.6	:	9.2	:	9.2	:	:	:	:	:
1993	7.8	:	9.0	:	8.8	:	:	:	:	:
1994	7.8	:	8.8	:	8.7	:	:	:	:	:
1995	8.2	8.0	8.3	:	8.2	8.6	8.6	:	:	:
1996	8.2	7.6	8.4	:	8.1	8.6	8.6	:	:	:
1997	8.0	7.8	8.4	:	7.4	8.4	8.5	:	:	:
1998	8.0	7.9	8.1	4.6	7.4	8.3	8.3	8.0	:	:
1999	8.0	8.2	8.1	4.3	7.5	8.3	8.3	8.0	:	:
2000	7.8	8.5	7.7	4.2	7.3	8.2	8.2	7.9	:	:
2001	7.5	8.4	7.5	4.1	7.4	8.0	8.0	7.8	:	:
2002	7.2	8.4	7.4	4.1	7.5	7.9	7.9	7.7	:	:

(1) EU-15 excluding DK, EL, S, UK.
(2) EU-15 excluding DK, S, UK.

Table 64

Social benefits in kind
EU Member States: ESA 95

	B	DK	D	EL	E	F	IRL	I	L	NL
1970	9.5	:	:	:	:	:	:	:	:	:
1971	10.1	14.8	:	:	:	:	:	:	:	:
1972	10.5	14.8	:	:	:	:	:	:	:	:
1973	10.6	15.1	:	:	:	:	:	:	:	:
1974	11.2	16.3	:	:	:	:	:	:	:	:
1975	12.7	17.5	:	:	:	:	:	:	:	:
1976	13.1	17.5	:	:	:	:	:	:	:	:
1977	13.3	17.0	:	:	:	:	:	:	:	:
1978	13.6	17.3	:	:	:	11.6	:	:	:	:
1979	13.7	17.6	:	:	:	11.8	:	:	:	:
1980	13.6	18.5	:	:	:	12.1	:	:	:	:
1981	14.5	19.4	:	:	:	12.6	:	:	:	:
1982	14.4	19.9	:	:	:	13.1	:	:	:	:
1983	14.3	19.4	:	:	:	13.1	:	:	:	:
1984	14.3	18.2	:	:	:	13.5	:	:	:	:
1985	14.0	17.9	:	:	:	13.4	:	:	:	:
1986	13.8	17.0	:	:	:	13.2	:	:	:	:
1987	14.0	17.5	:	:	:	13.0	:	:	:	:
1988	13.2	18.0	:	:	:	12.8	:	:	:	:
1989	12.8	17.7	:	:	:	12.8	:	:	:	:
1990	12.8	17.4	:	:	:	12.9	9.8	:	9.2	:
1991	13.2	17.3	10.5	:	:	13.0	10.4	:	9.6	:
1992	13.5	17.2	11.0	:	:	13.2	10.8	:	9.7	:
1993	13.7	17.5	11.0	:	:	14.1	10.9	:	9.8	:
1994	13.6	16.9	11.2	:	:	14.1	11.0	:	9.3	:
1995	13.7	17.4	11.4	5.9	10.1	14.1	10.4	10.6	9.6	12.5
1996	14.1	17.4	11.6	6.0	10.1	14.2	10.0	10.8	10.1	11.9
1997	13.7	17.4	11.3	6.3	9.9	14.2	9.6	11.0	9.4	11.9
1998	13.6	17.6	11.1	6.2	9.4	14.1	9.3	10.9	9.3	11.9
1999	13.7	17.7	11.1	6.1	9.3	14.1	8.9	10.9	9.7	12.0
2000	13.6	17.4	11.2	6.2	8.9	14.0	8.5	10.8	9.6	12.1
2001	13.4	17.3	11.0	6.1	8.8	13.8	8.2	10.6	9.6	12.1
2002	13.2	17.2	11.0	6.0	8.7	13.5	8.0	10.3	9.5	11.9

(% of GDP at market prices)

	A	P	FIN	S	UK	EUR-11 (1)	EUR-12 (2)	EU-15	US	JP
1970	:	:	:	:	9.1	:	:	:	:	:
1971	:	:	:	:	9.3	:	:	:	:	:
1972	:	:	:	:	9.4	:	:	:	:	:
1973	:	:	:	:	9.4	:	:	:	:	:
1974	:	:	:	:	11.2	:	:	:	:	:
1975	:	:	10.6	:	12.3	:	:	:	:	:
1976	:	:	11.5	:	12.0	:	:	:	:	:
1977	:	:	11.8	:	11.2	:	:	:	:	:
1978	:	:	11.7	:	10.6	:	:	:	:	:
1979	:	:	11.4	:	10.3	:	:	:	:	:
1980	:	:	11.5	:	11.2	:	:	:	:	:
1981	:	:	11.8	:	11.6	:	:	:	:	:
1982	:	:	11.9	:	11.5	:	:	:	:	:
1983	:	:	12.2	:	11.5	:	:	:	:	:
1984	:	:	12.4	:	11.1	:	:	:	:	:
1985	:	:	13.1	:	10.6	:	:	:	:	:
1986	:	:	13.6	:	11.0	:	:	:	:	:
1987	:	:	13.8	:	11.0	:	:	:	:	:
1988	11.6	:	13.3	:	10.8	:	:	:	:	:
1989	11.4	:	13.3	:	10.6	:	:	:	:	:
1990	11.3	:	14.2	:	10.7	:	:	:	:	:
1991	11.5	:	16.1	:	11.4	:	:	:	:	:
1992	12.0	:	16.2	:	12.0	:	:	:	:	:
1993	12.6	:	15.3	:	11.7	:	:	:	:	:
1994	12.7	:	14.6	:	11.4	:	:	:	:	:
1995	12.2	10.6	14.5	:	11.5	12.0	11.9	:	:	:
1996	12.1	11.3	14.8	:	11.3	12.1	12.0	:	:	:
1997	11.7	11.3	14.1	:	11.0	11.9	11.8	:	:	:
1998	11.6	11.4	13.5	22.1	10.8	11.8	11.7	11.9	:	:
1999	11.9	11.8	13.4	22.7	10.8	11.8	11.7	12.0	:	:
2000	11.6	12.3	12.8	22.1	10.9	11.7	11.6	11.9	:	:
2001	11.4	12.2	12.5	21.8	11.1	11.5	11.4	11.8	:	:
2002	11.1	12.1	12.3	21.6	11.1	11.3	11.2	11.6	:	:

(1) EU-15 excluding DK, EL, S, UK.
(2) EU-15 excluding DK, S, UK.

Table 65a

Social transfers other than in kind;
EU Member States: former definition

	B	DK	D (1)	EL	E	F	IRL	I	L	NL
1970	16.4	11.1	13.0	8.6	7.1	14.3	7.9	11.5	12.9	15.9
1971	16.6	11.0	13.3	8.7	7.9	14.3	8.2	12.2	14.4	17.0
1972	17.2	11.1	13.8	8.1	8.0	14.5	8.1	13.1	14.7	18.1
1973	17.8	10.8	13.9	7.2	8.1	14.6	8.7	12.7	13.7	18.5
1974	18.4	11.7	15.1	7.9	8.1	15.0	10.4	12.4	13.1	19.7
1975	21.4	13.4	18.1	8.1	8.9	16.8	11.7	14.1	18.9	21.9
1976	21.9	13.2	17.8	8.1	9.5	16.7	11.7	13.9	19.6	22.3
1977	22.7	13.8	17.8	8.8	9.9	17.1	10.9	13.6	20.8	23.1
1978	23.2	14.6	17.4	9.4	11.4	17.9	10.5	14.5	21.0	23.9
1979	23.7	15.1	17.1	9.0	12.4	18.0	10.5	13.7	20.7	24.7
1980	23.6	16.3	17.2	9.3	12.2	18.6	11.6	14.4	21.4	25.3
1981	25.5	17.3	17.9	10.8	13.5	19.7	12.5	15.9	22.6	26.4
1982	25.4	17.5	18.3	12.6	13.3	20.7	14.3	16.4	21.9	27.8
1983	26.0	17.2	17.7	12.9	13.7	20.9	14.9	17.5	21.1	28.3
1984	25.5	16.6	17.1	13.3	13.7	21.2	14.8	17.0	20.6	27.2
1985	24.9	15.9	16.8	14.1	13.7	21.7	15.1	17.3	20.5	26.3
1986	24.6	15.1	16.6	14.2	13.4	21.6	15.6	17.4	20.0	25.9
1987	24.6	15.8	16.8	14.6	13.2	21.2	16.1	17.5	20.7	26.3
1988	23.6	17.1	16.7	14.7	13.3	21.0	15.4	17.5	:	26.0
1989	23.1	18.0	16.4	15.1	13.3	20.7	13.6	17.8	:	25.1
1990	23.1	18.0	15.8	15.0	13.8	20.9	13.4	18.3	:	26.1
1991	24.0	18.7	15.4	14.9	14.6	21.4	14.1	18.4	:	26.3
1991	24.0	18.7	16.6	14.9	14.6	21.4	14.1	18.4	:	26.3
1992	24.3	19.2	17.3	14.8	15.4	22.0	14.6	19.5	:	26.7
1993	24.7	20.3	18.4	15.1	16.2	23.1	14.5	19.7	:	26.9
1994	24.3	21.7	18.6	15.2	15.8	22.9	14.4	19.7	:	25.8
1995	24.3	20.8	19.0	15.5	15.1	23.0	13.7	19.1	:	25.1

(1) 1970–91: D_90.

(% of GDP at market prices)

	A	P	FIN	S	UK	EU-10 (1)	EU-11 (2)	EU-14 (3)	US	JP
1970	14.8	3.6	7.9	11.0	8.0	12.8	12.7	11.8	7.0	4.8
1971	14.9	3.7	8.6	12.1	7.9	13.2	13.1	12.1	7.6	5.1
1972	14.8	4.9	8.8	12.7	8.6	13.6	13.5	12.7	7.7	5.4
1973	14.7	5.3	8.3	12.3	8.2	13.7	13.6	12.7	7.9	5.4
1974	14.9	5.9	8.6	14.4	8.9	14.2	14.1	13.4	8.7	6.5
1975	16.2	8.9	11.2	14.3	9.2	16.4	16.3	15.1	10.1	8.1
1976	17.0	11.5	12.2	15.2	9.7	16.5	16.4	15.4	9.8	8.9
1977	17.1	9.8	13.4	16.8	9.8	16.7	16.6	15.7	9.4	9.3
1978	18.5	9.0	13.6	17.5	10.2	17.2	17.1	16.1	8.9	9.8
1979	18.4	8.6	12.8	17.6	10.2	17.1	16.9	16.0	8.9	10.2
1980	18.3	9.4	12.5	17.4	10.6	17.3	17.2	16.1	9.8	10.5
1981	18.7	10.5	12.8	18.0	11.9	18.3	18.1	17.1	9.9	11.0
1982	19.1	10.5	13.7	18.0	12.7	18.8	18.7	17.7	10.6	11.4
1983	19.1	10.4	14.5	18.2	12.7	19.1	18.9	17.9	10.5	11.7
1984	19.3	10.5	14.5	17.4	12.8	18.7	18.6	17.6	9.7	11.4
1985	19.7	10.5	15.3	18.1	12.8	18.8	18.7	17.6	9.7	11.3
1986	19.9	10.6	15.9	18.3	13.0	18.6	18.5	17.6	9.7	11.6
1987	20.5	11.4	16.1	18.6	12.1	18.6	18.6	17.6	9.5	12.0
1988	20.0	11.1	14.4	19.3	11.2	18.4	18.3	17.2	9.4	11.8
1989	19.5	11.0	14.1	19.2	10.5	18.1	18.0	16.9	9.5	11.4
1990	19.4	11.4	15.5	19.2	10.6	18.2	18.1	17.1	10.0	11.8
1991	19.6	12.6	19.3	20.6	11.9	18.4	18.3	17.4	10.9	11.3
1991	19.6	12.6	19.3	20.6	11.9	18.7	18.6	17.7	10.9	11.3
1992	19.9	13.5	23.2	22.7	13.2	19.4	19.4	18.6	11.6	11.8
1993	21.4	15.0	24.7	24.4	13.8	20.3	20.3	19.5	11.8	12.5
1994	21.7	14.8	24.5	24.1	13.7	20.3	20.2	19.4	11.6	13.1
1995	21.6	15.1	22.9	22.5	13.5	20.2	20.1	19.3	11.7	14.0

(1) EU-15 excluding DK, EL, L, S, UK; 1970–91: including D_90.
(2) EU-15 excluding DK, L, S, UK; 1970–91: including D_90.
(3) EU-15 excluding L; 1970–91: including D_90.

Table 65b

Social transfers other than in kind;
EU Member States: ESA 95

	B	DK	D	EL	E	F	IRL	I	L	NL
1970	11.7	:	:	:	:	:	:	:	:	:
1971	11.9	11.0	:	:	:	:	:	:	:	:
1972	12.3	11.0	:	:	:	:	:	:	:	:
1973	12.8	10.5	:	:	:	:	:	:	:	:
1974	13.3	11.9	:	:	:	:	:	:	:	:
1975	15.6	13.2	:	:	:	:	:	:	:	:
1976	15.9	13.1	:	:	:	:	:	:	:	:
1977	16.5	13.7	:	:	:	:	:	:	:	:
1978	16.8	14.5	:	:	:	14.9	:	:	:	:
1979	17.2	14.9	:	:	:	15.1	:	:	:	:
1980	17.3	16.0	:	:	:	15.5	:	:	:	:
1981	18.6	17.2	:	:	:	16.4	:	:	:	:
1982	18.8	17.4	:	:	:	17.1	:	:	:	:
1983	19.5	16.9	:	:	:	17.3	:	:	:	:
1984	18.8	16.6	:	:	:	17.5	:	:	:	:
1985	18.3	15.8	:	:	:	17.7	:	:	:	:
1986	18.0	15.1	:	:	:	17.5	:	:	:	:
1987	17.6	15.8	:	:	:	17.2	:	:	:	:
1988	16.9	17.0	:	:	:	17.0	:	:	:	:
1989	16.3	17.8	:	:	:	16.7	:	:	:	:
1990	16.2	17.9	:	:	:	16.9	11.9	:	15.1	:
1991	16.6	18.4	15.7	:	:	17.3	12.6	:	15.9	:
1992	16.7	18.9	16.3	:	:	17.7	13.0	:	15.8	:
1993	17.1	19.8	17.4	:	:	18.5	12.9	:	16.3	:
1994	16.8	21.2	17.7	:	:	18.4	12.7	:	16.1	:
1995	16.6	20.4	18.1	15.1	13.9	18.5	11.8	16.7	16.5	15.3
1996	16.6	19.8	19.3	15.4	13.8	18.7	11.6	16.9	16.4	14.8
1997	16.3	18.9	19.3	15.6	13.3	18.8	10.9	17.3	15.7	13.9
1998	16.0	18.2	18.9	15.6	12.8	18.4	10.3	17.0	15.4	13.0
1999	15.7	17.7	18.9	15.8	12.4	18.4	10.2	17.4	15.1	12.5
2000	15.6	17.2	18.7	16.0	12.3	18.1	10.0	17.2	14.8	12.0
2001	15.5	16.9	18.5	16.0	12.3	17.8	9.6	17.0	14.5	11.6
2002	15.5	16.6	18.3	16.0	12.2	17.4	9.4	16.9	14.1	11.1

(% of GDP at market prices)

	A	P	FIN	S	UK	EUR-11 (1)	EUR-12 (2)	EU-15	US	JP
1970	:	:	:	:	8.9	:	:	:	7.0	4.8
1971	:	:	:	:	8.8	:	:	:	7.6	5.1
1972	:	:	:	:	9.4	:	:	:	7.7	5.4
1973	:	:	:	:	9.0	:	:	:	7.9	5.4
1974	:	:	:	:	9.8	:	:	:	8.7	6.5
1975	:	:	9.4	:	10.2	:	:	:	10.1	8.1
1976	:	:	10.4	:	10.7	:	:	:	9.8	8.9
1977	:	:	11.7	:	10.9	:	:	:	9.4	9.3
1978	:	:	12.1	:	11.2	:	:	:	8.9	9.8
1979	:	:	11.3	:	11.3	:	:	:	8.9	10.2
1980	:	:	11.0	:	11.9	:	:	:	9.8	10.5
1981	:	:	11.2	:	13.3	:	:	:	9.9	11.0
1982	:	:	12.2	:	14.2	:	:	:	10.6	11.4
1983	:	:	13.0	:	14.1	:	:	:	10.5	11.7
1984	:	:	13.2	:	14.1	:	:	:	9.7	11.4
1985	:	:	13.9	:	14.1	:	:	:	9.7	11.3
1986	:	:	14.4	:	14.2	:	:	:	9.7	11.6
1987	:	:	14.5	:	13.3	:	:	:	9.5	12.0
1988	18.5	:	13.8	:	12.3	:	:	:	9.4	11.3
1989	17.9	:	13.5	:	11.7	:	:	:	9.5	10.9
1990	17.8	:	14.9	:	11.9	:	:	:	10.0	11.4
1991	17.7	:	18.6	:	14.0	:	:	:	10.9	10.8
1992	18.1	:	22.5	:	15.6	:	:	:	11.6	11.3
1993	19.4	:	24.0	24.4	16.0	:	:	:	11.8	11.9
1994	19.6	:	23.8	24.0	15.7	:	:	:	11.6	12.5
1995	19.5	11.7	22.2	21.3	15.4	17.3	17.3	17.2	11.7	13.4
1996	19.5	11.8	21.5	20.3	14.9	17.7	17.7	17.4	11.6	13.5
1997	18.9	11.7	19.9	19.7	14.4	17.6	17.6	17.2	11.3	13.7
1998	18.6	11.7	18.3	19.5	13.7	17.2	17.1	16.7	10.9	14.6
1999	18.6	11.8	17.8	19.1	13.5	17.1	17.1	16.5	10.7	17.4
2000	18.6	12.5	16.5	18.4	13.2	16.9	16.8	16.2	10.4	18.0
2001	18.7	12.8	15.8	17.9	13.0	16.6	16.6	16.0	10.3	17.8
2002	18.9	13.3	15.2	17.4	12.7	16.4	16.4	15.7	10.3	19.1

(1) EU-15 excluding DK, EL, S, UK.
(2) EU-15 excluding DK, S, UK.

Table 66a

Interest;
EU Member States: former definition

	B	DK	D (1)	EL	E	F	IRL	I	L	NL
1970	3.2	1.3	1.0	0.8	0.6	1.1	3.6	1.7	1.0	2.7
1971	3.1	1.3	1.0	0.9	0.5	1.0	3.5	1.9	1.0	2.7
1972	3.1	1.3	1.0	0.8	0.5	0.8	3.3	2.1	1.0	2.6
1973	3.1	1.2	1.1	0.8	0.6	0.7	3.3	2.3	0.8	2.6
1974	3.3	1.2	1.2	1.1	0.5	0.8	3.6	2.8	0.7	2.8
1975	3.4	1.2	1.4	1.2	0.5	1.2	4.1	3.6	0.7	2.9
1976	3.6	1.3	1.6	1.3	0.4	1.1	4.8	4.0	0.7	2.9
1977	4.0	1.8	1.7	1.2	0.5	1.2	4.9	4.4	0.8	3.0
1978	4.4	2.1	1.7	1.4	0.5	1.3	5.3	5.2	0.8	3.2
1979	5.0	3.4	1.7	1.8	0.6	1.4	5.7	5.1	0.7	3.3
1980	5.9	3.8	1.9	2.0	0.7	1.4	6.0	5.4	1.1	3.7
1981	7.6	5.1	2.3	2.6	0.8	1.9	6.8	6.2	1.2	4.4
1982	9.0	5.8	2.8	2.8	0.9	2.0	8.2	7.1	1.4	5.1
1983	9.1	7.8	3.0	3.6	1.2	2.5	8.5	7.5	1.4	5.5
1984	9.6	9.3	3.0	4.3	1.9	2.6	8.6	8.0	1.5	5.9
1985	10.3	9.6	3.0	4.9	1.9	2.8	9.3	8.0	1.0	6.1
1986	10.9	8.6	3.0	5.2	3.7	2.8	8.8	8.5	0.9	6.1
1987	10.4	8.0	2.9	6.5	4.2	2.7	8.8	7.9	1.0	6.1
1988	9.9	7.6	2.9	7.4	3.3	2.6	8.2	7.9	:	6.1
1989	10.1	7.2	2.7	7.5	3.9	2.7	7.4	8.7	:	5.8
1990	10.4	7.3	2.6	10.0	3.9	2.9	7.4	9.4	0.4	5.7
1991	10.0	7.3	2.8	9.3	3.7	2.9	7.2	10.1	0.4	5.9
1991	10.0	7.3	2.6	9.3	3.7	2.9	7.2	10.1	0.4	5.9
1992	10.6	6.6	3.2	11.5	4.2	3.2	6.7	11.4	0.3	6.0
1993	10.7	7.3	3.2	12.6	5.0	3.3	6.3	12.0	0.3	6.0
1994	10.0	6.7	3.3	13.9	4.7	3.5	5.6	10.9	0.3	5.6
1995	8.8	6.4	3.7	12.7	5.3	3.7	5.0	11.3	0.3	5.7

(1) 1970–91: D_90.

(% of GDP at market prices)

	A	P	FIN	S	UK	EU-10 (1)	EU-11 (2)	EU-14 (3)	US	JP
1970	1.0	0.5	1.0	1.8	3.9	1.3	1.3	1.8	2.3	0.6
1971	1.0	0.5	0.9	1.9	3.6	1.3	1.3	1.7	2.2	0.6
1972	1.0	0.6	0.8	1.8	3.5	1.3	1.3	1.7	2.1	0.8
1973	0.9	0.4	0.7	1.8	3.6	1.4	1.3	1.7	2.3	0.8
1974	1.0	0.4	0.6	2.0	4.2	1.5	1.5	1.9	2.4	0.9
1975	1.3	0.7	0.7	2.1	3.9	1.8	1.8	2.1	2.5	1.2
1976	1.6	0.9	0.7	2.0	4.2	1.9	1.9	2.2	2.6	1.5
1977	1.8	1.4	0.8	2.4	4.3	2.1	2.1	2.4	2.5	1.9
1978	2.1	2.3	0.8	2.5	4.2	2.3	2.3	2.5	2.6	2.2
1979	2.2	2.4	0.9	2.9	4.4	2.4	2.4	2.7	2.9	2.6
1980	2.4	2.6	1.0	3.9	4.7	2.6	2.6	3.0	3.2	3.1
1981	2.7	4.6	1.1	5.1	5.0	3.2	3.2	3.6	3.8	3.5
1982	3.0	5.0	1.3	6.6	5.0	3.7	3.6	4.0	4.3	3.8
1983	2.9	6.0	1.5	6.9	4.7	4.1	4.0	4.3	4.5	4.2
1984	3.3	6.7	1.7	7.3	4.9	4.3	4.3	4.6	4.8	4.4
1985	3.4	7.5	1.8	8.1	5.0	4.5	4.5	4.8	5.1	4.4
1986	3.5	7.6	1.7	7.1	4.5	4.7	4.7	4.9	5.1	4.4
1987	3.8	7.5	1.7	6.2	4.3	4.6	4.6	4.7	5.0	4.4
1988	3.9	6.8	1.6	5.4	3.9	4.4	4.5	4.5	5.0	4.2
1989	3.9	6.0	1.5	5.2	3.7	4.6	4.7	4.6	5.1	4.0
1990	4.0	7.8	1.4	4.8	3.1	4.8	4.9	4.7	5.2	3.9
1991	4.1	7.6	1.9	5.0	2.7	5.0	5.1	4.8	5.3	3.7
1991	4.1	7.6	1.9	5.0	2.7	4.9	5.0	4.7	5.3	3.7
1992	4.2	7.0	2.6	5.2	2.7	5.4	5.5	5.2	5.1	3.7
1993	4.2	6.1	4.5	6.0	2.8	5.5	5.6	5.3	4.8	3.7
1994	4.0	6.1	5.0	6.6	3.2	5.3	5.4	5.2	4.7	3.7
1995	4.3	6.2	5.2	6.8	3.4	5.5	5.6	5.4	4.9	3.8

(1) EU-15 excluding DK, EL, L, S, UK; 1970–91: including D_90.
(2) EU-15 excluding DK, L, S, UK; 1970–91: including D_90.
(3) EU-15 excluding L; 1970–91: including D_90.

Table 66b

Interest;
EU Member States: ESA 95

	B	DK	D	EL	E	F	IRL	I	L	NL
1970	3.6	:	:	:	:	:	:	:	:	:
1971	3.7	1.3	:	:	:	:	:	:	:	:
1972	3.7	1.3	:	:	:	:	:	:	:	:
1973	3.8	1.2	:	:	:	:	:	:	:	:
1974	3.9	1.2	:	:	:	:	:	:	:	:
1975	4.2	1.2	:	:	:	:	:	:	:	:
1976	4.2	1.3	:	:	:	:	:	:	:	:
1977	4.8	1.8	:	:	:	:	:	:	:	:
1978	5.1	2.1	:	:	:	1.3	:	:	:	:
1979	5.8	3.4	:	:	:	1.4	:	:	:	:
1980	6.6	3.8	:	:	:	1.4	:	:	:	:
1981	8.4	5.1	:	:	:	1.9	:	:	:	:
1982	9.5	5.8	:	:	:	2.0	:	:	:	:
1983	10.0	7.8	:	:	:	2.5	:	:	:	:
1984	10.1	9.3	:	:	:	2.6	:	:	:	:
1985	11.1	9.6	:	:	:	2.8	:	:	:	:
1986	11.4	8.5	:	:	:	2.8	:	:	:	:
1987	10.7	8.0	:	:	:	2.7	:	:	:	:
1988	10.3	7.6	:	:	:	2.6	:	:	:	:
1989	11.3	7.2	:	:	:	2.7	:	:	:	:
1990	11.9	7.3	:	:	:	2.9	7.9	:	0.4	:
1991	11.3	7.3	2.8	:	:	3.0	7.6	:	0.3	:
1992	11.2	6.6	3.3	:	:	3.2	7.1	:	0.3	:
1993	11.2	7.3	3.4	:	:	3.5	6.7	:	0.3	:
1994	9.7	6.7	3.3	:	:	3.6	6.1	:	0.4	:
1995	9.3	6.4	3.7	11.1	5.2	3.8	5.4	11.5	0.3	5.9
1996	8.9	6.1	3.7	10.5	5.3	3.9	4.6	11.5	0.3	5.6
1997	8.0	5.7	3.6	8.2	4.8	3.7	4.2	9.4	0.3	5.2
1998	7.7	5.3	3.6	7.8	4.3	3.6	3.4	8.1	0.4	4.8
1999	7.2	4.7	3.5	7.6	3.6	3.4	2.5	6.8	0.3	4.4
2000	7.0	4.4	3.4	7.3	3.4	3.3	2.1	6.4	0.3	3.9
2001	6.6	4.0	3.3	6.7	3.3	3.2	1.8	6.2	0.3	3.4
2002	6.3	3.7	3.2	6.1	3.2	3.1	1.6	6.0	0.3	3.0

(% of GDP at market prices)

	A	P	FIN	S	UK	EUR-11 (1)	EUR-12 (2)	EU-15	US	JP
1970	:	:	:	:	4.8	:	:	:	2.3	0.6
1971	:	:	:	:	4.6	:	:	:	2.2	0.6
1972	:	:	:	:	4.5	:	:	:	2.1	0.8
1973	:	:	:	:	4.6	:	:	:	2.3	0.8
1974	:	:	:	:	5.3	:	:	:	2.4	0.9
1975	:	:	0.6	:	5.0	:	:	:	2.5	1.2
1976	:	:	0.6	:	5.4	:	:	:	2.6	1.5
1977	:	:	0.8	:	5.4	:	:	:	2.5	1.9
1978	:	:	0.8	:	5.3	:	:	:	2.6	2.2
1979	:	:	0.9	:	5.4	:	:	:	2.9	2.6
1980	:	:	1.0	:	5.7	:	:	:	3.2	3.1
1981	:	:	1.1	:	6.0	:	:	:	3.8	3.5
1982	:	:	1.2	:	6.0	:	:	:	4.3	3.8
1983	:	:	1.5	:	5.7	:	:	:	4.5	4.2
1984	:	:	1.6	:	6.0	:	:	:	4.8	4.4
1985	:	:	1.8	:	6.0	:	:	:	5.1	4.4
1986	:	:	1.7	:	5.7	:	:	:	5.1	4.4
1987	:	:	1.6	:	4.7	:	:	:	5.0	4.4
1988	3.9	:	1.6	:	4.2	:	:	:	5.0	4.2
1989	3.9	:	1.4	:	4.1	:	:	:	5.1	4.0
1990	4.0	:	1.4	:	3.8	:	:	:	5.2	3.9
1991	4.2	:	1.9	:	3.2	:	:	:	5.3	3.7
1992	4.3	:	2.6	:	3.1	:	:	:	5.1	3.7
1993	4.3	:	4.5	6.1	3.1	:	:	:	4.8	3.7
1994	4.1	:	4.2	6.6	3.4	:	:	:	4.7	3.7
1995	4.3	6.2	4.0	7.1	3.7	5.5	5.6	5.4	4.9	3.8
1996	4.2	5.3	4.3	7.1	3.7	5.6	5.7	5.5	4.7	3.7
1997	3.9	4.2	4.3	6.8	3.7	5.1	5.1	5.0	4.5	3.7
1998	3.8	3.5	3.7	6.2	3.6	4.7	4.8	4.6	4.3	3.7
1999	3.6	3.2	3.5	5.5	3.0	4.3	4.3	4.1	3.9	4.1
2000	3.5	3.2	3.2	4.2	2.6	4.1	4.1	3.9	3.6	5.1
2001	3.4	3.3	2.9	3.6	2.4	3.9	3.9	3.6	3.3	5.7
2002	3.3	3.4	2.7	3.4	2.1	3.8	3.8	3.5	3.1	6.8

(1) EU-15 excluding DK, EL, S, UK.
(2) EU-15 excluding DK, S, UK.

Table 67a

Subsidies;
EU Member States: former definition

	B	DK	D [1]	EL	E	F	IRL	I	L	NL
1970	2.7	2.8	2.0	0.8	0.8	2.0	4.3	1.7	1.1	1.6
1971	2.6	2.7	1.9	1.2	1.0	1.9	4.1	2.0	1.2	1.2
1972	2.9	2.8	2.1	1.2	1.0	1.9	3.8	2.1	1.4	1.4
1973	3.3	3.0	2.2	1.7	0.9	2.1	2.9	1.9	1.7	1.7
1974	2.9	3.4	2.1	2.5	0.9	2.0	4.8	1.7	1.7	1.7
1975	3.1	2.7	2.2	2.4	1.1	2.3	6.2	3.2	2.7	1.7
1976	3.6	2.9	2.2	2.6	1.2	2.4	5.9	2.9	3.2	2.3
1977	3.9	3.1	2.3	2.7	1.4	2.5	7.8	3.1	3.9	2.8
1978	3.9	3.2	2.6	2.7	1.8	2.4	8.6	3.1	4.2	2.9
1979	4.2	3.1	2.5	2.1	1.6	2.5	8.1	3.3	3.8	3.0
1980	3.6	3.1	2.3	2.2	2.0	2.5	7.2	3.5	2.9	2.9
1981	3.7	2.9	2.1	3.9	1.9	2.8	6.1	3.4	3.7	2.7
1982	3.6	3.1	2.1	4.3	2.4	2.7	5.8	3.7	3.7	3.0
1983	4.0	3.2	2.1	4.3	2.4	2.8	6.3	3.6	4.0	3.2
1984	3.8	3.2	2.3	3.9	2.6	3.0	6.9	3.8	3.1	3.4
1985	3.7	2.9	2.3	5.2	2.3	3.0	7.4	3.4	3.0	3.4
1986	3.6	2.9	2.3	5.9	2.0	3.1	7.2	3.6	2.9	3.5
1987	3.2	3.1	2.5	5.4	2.1	3.1	6.2	3.2	3.0	4.2
1988	3.1	3.3	2.5	4.3	2.6	2.5	6.8	2.9	3.0	4.0
1989	2.5	3.3	2.3	4.1	2.4	2.2	4.4	2.9	2.7	3.3
1990	2.8	3.3	2.2	4.0	2.4	2.1	5.6	2.5	3.0	2.9
1991	2.9	3.2	1.9	3.5	2.5	2.2	5.5	2.6	3.1	3.1
1991	2.9	3.2	2.4	3.5	2.5	2.2	5.5	2.6	3.1	3.1
1992	2.6	3.8	2.1	3.6	2.5	2.2	4.7	2.3	2.9	3.1
1993	2.6	3.9	2.1	3.9	3.1	2.4	4.9	2.7	2.8	2.9
1994	2.4	3.7	2.1	3.6	2.9	2.3	4.4	2.4	2.8	2.5
1995	2.4	3.6	2.1	3.3	3.0	2.3	4.1	1.9	2.0	1.8

([1]) 1970–91: D_90.

(% of GDP at market prices)

	A	P	FIN	S	UK	EU-10 (1)	EU-11 (2)	EU-14 (3)	US	JP
1970	1.7	1.3	2.7	1.6	1.7	1.9	1.8	1.8	0.5	1.1
1971	1.7	1.2	2.7	1.8	1.6	1.9	1.9	1.8	0.4	1.1
1972	1.6	1.0	2.6	1.8	1.8	2.0	2.0	1.9	0.5	1.2
1973	1.6	0.9	2.2	1.8	2.0	2.0	2.0	2.0	0.4	1.0
1974	2.0	1.9	3.0	2.3	3.7	2.0	2.0	2.3	0.2	1.6
1975	2.8	1.7	3.7	2.9	3.6	2.4	2.4	2.6	0.3	1.5
1976	2.8	3.1	3.7	3.8	2.9	2.4	2.4	2.6	0.3	1.3
1977	2.8	3.3	3.6	3.9	2.3	2.6	2.6	2.6	0.3	1.3
1978	3.0	4.0	3.3	4.0	2.2	2.7	2.7	2.7	0.4	1.3
1979	2.8	4.0	3.4	4.1	2.4	2.8	2.7	2.7	0.3	1.3
1980	2.9	6.1	3.2	4.2	2.5	2.8	2.7	2.8	0.4	1.5
1981	2.9	7.8	3.3	4.5	2.5	2.8	2.8	2.8	0.4	1.5
1982	2.9	5.2	3.1	4.8	2.1	2.8	2.8	2.8	0.4	1.4
1983	2.8	5.9	3.2	5.0	2.1	2.9	2.9	2.8	0.6	1.4
1984	2.7	8.7	3.2	4.8	2.3	3.1	3.1	3.0	0.5	1.3
1985	2.8	6.9	3.1	4.9	2.0	3.0	3.0	2.9	0.5	1.1
1986	3.1	3.1	3.1	4.8	1.7	3.0	3.0	2.9	0.6	1.1
1987	3.1	2.3	3.0	4.6	1.5	2.9	3.0	2.8	0.7	1.0
1988	2.8	1.8	2.5	4.3	1.3	2.7	2.8	2.6	0.6	0.9
1989	2.6	1.4	2.8	4.4	1.1	2.5	2.5	2.4	0.5	0.8
1990	2.8	1.5	2.8	4.6	1.1	2.4	2.4	2.3	0.5	1.1
1991	3.1	1.3	3.4	4.9	1.0	2.4	2.4	2.3	0.5	0.8
1991	3.1	1.3	3.4	4.9	1.0	2.5	2.5	2.4	0.5	0.8
1992	3.0	1.2	3.5	5.3	1.1	2.3	2.4	2.3	0.5	0.7
1993	3.1	1.3	3.3	5.7	1.1	2.5	2.5	2.4	0.6	0.7
1994	2.5	1.2	3.0	5.1	1.1	2.3	2.4	2.3	0.5	0.7
1995	2.9	1.1	3.2	4.9	1.1	2.2	2.3	2.2	0.5	0.8

(1) EU-15 excluding DK, EL, L, S, UK; 1970–91: including D_90.
(2) EU-15 excluding DK, L, S, UK; 1970–91: including D_90.
(3) EU-15 excluding L; 1970–91: including D_90.

Table 67b

Subsidies;
EU Member States: ESA 95

	B	DK	D	EL	E	F	IRL	I	L	NL
1970	2.3	:	:	:	:	:	:	:	:	:
1971	2.2	3.3	:	:	:	:	:	:	:	:
1972	2.4	3.7	:	:	:	:	:	:	:	:
1973	2.5	1.8	:	:	:	:	:	:	:	:
1974	2.3	2.2	:	:	:	:	:	:	:	:
1975	2.6	1.5	:	:	:	:	:	:	:	:
1976	2.7	1.6	:	:	:	:	:	:	:	:
1977	2.9	1.3	:	:	:	:	:	:	:	:
1978	3.0	1.3	:	:	:	2.2	:	:	:	:
1979	3.0	1.4	:	:	:	2.2	:	:	:	:
1980	2.8	1.6	:	:	:	2.1	:	:	:	:
1981	2.9	1.7	:	:	:	2.3	:	:	:	:
1982	2.6	1.9	:	:	:	2.4	:	:	:	:
1983	2.8	1.9	:	:	:	2.4	:	:	:	:
1984	2.9	1.8	:	:	:	2.7	:	:	:	:
1985	2.4	1.6	:	:	:	2.6	:	:	:	:
1986	2.3	1.4	:	:	:	2.6	:	:	:	:
1987	2.0	1.4	:	:	:	2.5	:	:	:	:
1988	2.1	2.1	:	:	:	2.1	:	:	:	:
1989	1.7	2.2	:	:	:	2.0	:	:	:	:
1990	1.7	2.2	:	:	:	1.8	1.1	:	2.6	:
1991	1.7	2.1	2.2	:	:	1.7	1.1	:	2.8	:
1992	1.6	2.7	1.9	:	:	1.7	1.2	:	2.8	:
1993	1.6	2.6	1.9	:	:	1.7	1.3	:	2.5	:
1994	1.5	2.6	2.1	:	:	1.6	1.1	:	2.6	:
1995	1.5	2.5	2.1	0.4	1.1	1.5	1.0	1.5	1.8	1.1
1996	1.6	2.6	2.0	0.5	1.0	1.5	1.0	1.5	2.0	1.2
1997	1.4	2.5	1.8	0.2	0.9	1.5	1.0	1.2	1.8	1.5
1998	1.5	2.3	1.8	0.1	1.1	1.4	0.8	1.3	1.8	1.5
1999	1.5	2.4	1.7	0.2	1.2	1.3	0.7	1.3	1.5	1.6
2000	1.5	2.2	1.7	0.2	1.2	1.3	0.7	1.3	1.4	1.5
2001	1.5	2.1	1.6	0.2	1.2	1.2	0.6	1.3	1.2	1.4
2002	1.6	2.0	1.6	0.2	1.2	1.2	0.6	1.2	1.1	1.3

(% of GDP at market prices)

	A	P	FIN	S	UK	EUR-11 (1)	EUR-12 (2)	EU-15	US	JP
1970	:	:	:	:	1.7	:	:	:	0.5	1.1
1971	:	:	:	:	1.6	:	:	:	0.4	1.1
1972	:	:	:	:	1.8	:	:	:	0.5	1.2
1973	:	:	:	:	1.9	:	:	:	0.4	1.0
1974	:	:	:	:	3.6	:	:	:	0.2	1.6
1975	:	:	3.4	:	3.3	:	:	:	0.3	1.5
1976	:	:	3.4	:	2.7	:	:	:	0.3	1.3
1977	:	:	3.4	:	2.2	:	:	:	0.3	1.3
1978	:	:	3.2	:	2.1	:	:	:	0.4	1.3
1979	:	:	3.4	:	2.2	:	:	:	0.3	1.3
1980	:	:	3.2	:	2.3	:	:	:	0.4	1.5
1981	:	:	3.2	:	2.3	:	:	:	0.4	1.5
1982	:	:	3.1	:	1.8	:	:	:	0.4	1.4
1983	:	:	3.2	:	1.7	:	:	:	0.6	1.4
1984	:	:	3.1	:	1.9	:	:	:	0.5	1.3
1985	:	:	3.1	:	1.7	:	:	:	0.5	1.1
1986	:	:	3.1	:	1.3	:	:	:	0.6	1.1
1987	:	:	3.0	:	1.2	:	:	:	0.7	1.0
1988	3.3	:	2.9	:	1.0	:	:	:	0.6	0.9
1989	3.2	:	2.8	:	0.9	:	:	:	0.5	0.8
1990	3.1	:	2.9	:	0.9	:	:	:	0.5	1.1
1991	3.3	:	3.4	:	0.8	:	:	:	0.5	0.8
1992	3.3	:	3.5	:	0.8	:	:	:	0.5	0.7
1993	3.4	:	3.3	4.7	0.8	:	:	:	0.6	0.7
1994	2.9	:	3.2	4.3	0.8	:	:	:	0.5	0.7
1995	2.9	1.4	2.8	3.8	0.7	1.7	1.7	1.6	0.5	0.8
1996	2.6	1.5	2.1	3.3	0.8	1.7	1.6	1.6	0.4	0.7
1997	2.6	1.1	1.9	2.7	0.6	1.5	1.5	1.4	0.4	0.7
1998	2.8	1.1	1.7	2.2	0.5	1.5	1.5	1.4	0.4	0.6
1999	2.6	1.0	1.6	2.0	0.6	1.5	1.5	1.4	0.5	0.8
2000	2.5	1.2	1.6	1.6	0.6	1.5	1.5	1.3	0.4	0.9
2001	2.5	1.0	1.5	1.5	0.6	1.4	1.4	1.3	0.4	0.9
2002	2.4	1.0	1.4	1.3	0.6	1.4	1.3	1.2	0.4	0.9

(1) EU-15 excluding DK, EL, S, UK.
(2) EU-15 excluding DK, S, UK.

Table 68

Other current expenditure;
EU Member States: ESA 95

	B	DK	D	EL	E	F	IRL	I	L	NL
1970	2.5	:	:	:	:	:	:	:	:	:
1971	2.2	0.7	:	:	:	:	:	:	:	:
1972	2.2	0.8	:	:	:	:	:	:	:	:
1973	2.2	0.9	:	:	:	:	:	:	:	:
1974	1.7	1.0	:	:	:	:	:	:	:	:
1975	1.9	1.1	:	:	:	:	:	:	:	:
1976	1.7	1.2	:	:	:	:	:	:	:	:
1977	1.8	1.4	:	:	:	:	:	:	:	:
1978	1.9	1.4	:	:	:	0.8	:	:	:	:
1979	1.7	1.7	:	:	:	0.8	:	:	:	:
1980	1.7	1.7	:	:	:	0.8	:	:	:	:
1981	1.8	1.7	:	:	:	0.9	:	:	:	:
1982	1.7	1.8	:	:	:	1.0	:	:	:	:
1983	1.8	1.8	:	:	:	1.1	:	:	:	:
1984	1.8	1.9	:	:	:	1.0	:	:	:	:
1985	2.0	1.9	:	:	:	1.2	:	:	:	:
1986	1.7	2.1	:	:	:	1.0	:	:	:	:
1987	1.7	2.1	:	:	:	1.1	:	:	:	:
1988	1.8	2.0	:	:	:	1.2	:	:	:	:
1989	1.8	2.0	:	:	:	1.2	:	:	:	:
1990	1.7	1.8	:	:	:	1.2	1.8	:	2.8	:
1991	1.9	2.1	1.8	:	:	1.4	2.0	:	3.2	:
1992	1.9	2.1	1.4	:	:	1.6	2.0	:	2.6	:
1993	2.0	2.3	1.5	:	:	1.7	2.2	:	3.2	:
1994	2.1	2.3	1.4	:	:	1.6	2.3	:	2.9	:
1995	2.0	2.2	1.2	1.3	0.9	1.6	2.1	1.1	3.1	1.1
1996	2.1	2.4	1.3	1.2	1.0	1.7	2.4	1.3	2.7	1.2
1997	2.2	2.4	1.4	1.1	1.1	1.6	2.2	1.3	2.9	1.2
1998	2.2	2.6	1.4	1.2	1.2	1.7	2.2	1.3	3.3	1.4
1999	2.2	2.5	1.6	1.6	1.3	1.7	2.0	1.3	3.5	1.4
2000	2.2	2.5	1.8	1.2	1.4	1.6	1.8	1.3	3.5	1.7
2001	2.2	2.5	1.8	1.3	1.4	1.6	1.6	1.3	3.5	1.8
2002	2.2	2.5	1.7	1.2	1.5	1.6	1.6	1.4	3.5	1.8

(% of GDP at market prices)

	A	P	FIN	S	UK	EUR-11 (1)	EUR-12 (2)	EU-15	US	JP
1970	:	:	:	:	0.8	:	:	:	0.2	0.1
1971	:	:	:	:	0.9	:	:	:	0.2	0.1
1972	:	:	:	:	1.0	:	:	:	0.2	0.1
1973	:	:	:	:	0.9	:	:	:	0.2	0.0
1974	:	:	:	:	1.0	:	:	:	0.2	0.1
1975	:	:	1.3	:	1.1	:	:	:	0.2	0.1
1976	:	:	1.3	:	1.1	:	:	:	0.2	0.1
1977	:	:	1.2	:	1.0	:	:	:	0.2	0.1
1978	:	:	1.1	:	1.2	:	:	:	0.2	0.1
1979	:	:	1.1	:	0.8	:	:	:	0.2	0.1
1980	:	:	1.1	:	1.0	:	:	:	0.2	0.1
1981	:	:	1.2	:	1.0	:	:	:	0.2	0.1
1982	:	:	1.3	:	1.1	:	:	:	0.2	0.1
1983	:	:	1.3	:	1.1	:	:	:	0.2	0.1
1984	:	:	1.3	:	1.1	:	:	:	0.2	0.1
1985	:	:	1.3	:	1.2	:	:	:	0.3	0.1
1986	:	:	1.4	:	1.1	:	:	:	0.3	0.1
1987	:	:	1.5	:	1.1	:	:	:	0.2	0.1
1988	2.5	:	1.5	:	1.2	:	:	:	0.2	0.5
1989	2.4	:	1.6	:	1.2	:	:	:	0.2	0.5
1990	2.3	:	1.7	:	1.1	:	:	:	0.2	0.6
1991	2.5	:	2.0	:	1.2	:	:	:	– 0.5	0.6
1992	2.5	:	2.1	:	1.2	:	:	:	0.3	0.6
1993	2.7	:	2.3	0.9	1.8	:	:	:	0.3	0.7
1994	2.7	:	1.9	0.9	1.9	:	:	:	0.2	0.7
1995	2.5	1.6	1.9	2.1	1.9	1.4	1.4	1.5	0.1	0.8
1996	2.8	1.9	2.1	1.8	2.0	1.5	1.5	1.6	0.2	0.8
1997	2.6	2.0	2.3	1.8	2.0	1.5	1.5	1.6	0.1	0.8
1998	2.8	2.3	2.2	2.1	2.2	1.5	1.5	1.7	0.1	0.9
1999	2.7	2.5	2.3	2.0	2.2	1.6	1.6	1.8	0.1	0.1
2000	2.6	2.7	2.2	2.1	2.4	1.7	1.7	1.9	0.1	0.1
2001	2.6	2.8	2.2	2.1	2.3	1.7	1.7	1.8	0.1	0.1
2002	2.7	2.8	2.2	2.1	2.2	1.7	1.7	1.8	0.1	0.1

(1) EU-15 excluding DK, EL, S, UK.
(2) EU-15 excluding DK, S, UK.

Table 69a

Total current expenditure;
EU Member States: former definition

	B	DK	D (1)	EL	E	F	IRL	I	L	NL
1970	36.2	35.0	32.4	20.8	17.5	32.9	28.7	28.8	24.7	34.8
1971	37.0	36.2	33.7	21.0	18.5	33.0	29.3	31.7	27.3	36.1
1972	38.3	36.4	34.9	20.0	18.5	33.2	28.6	33.4	27.5	37.2
1973	39.3	35.3	35.9	18.7	18.4	33.6	28.6	32.4	26.0	37.4
1974	39.7	38.7	38.6	22.8	18.8	34.4	34.8	31.7	25.7	39.7
1975	45.0	41.0	43.1	23.9	20.2	38.2	36.9	35.9	35.3	43.4
1976	45.8	40.5	42.4	24.0	21.7	38.3	37.3	35.3	36.2	44.1
1977	47.6	41.7	42.5	25.4	22.6	39.2	35.6	35.8	39.1	45.4
1978	49.0	43.2	42.2	25.9	24.9	40.6	35.7	38.3	38.4	47.0
1979	50.6	45.7	42.1	25.6	26.4	40.8	36.3	37.6	38.8	48.2
1980	51.4	49.2	42.7	26.2	28.5	41.7	39.4	38.7	40.2	49.1
1981	55.7	52.5	44.2	31.5	30.2	44.5	41.5	42.3	43.1	50.8
1982	56.6	54.2	44.9	32.3	30.8	46.2	44.2	44.1	41.8	53.2
1983	57.2	55.1	44.0	33.3	32.1	47.4	44.8	45.6	41.1	53.9
1984	56.4	54.4	43.6	34.6	32.6	48.1	44.4	45.7	39.5	52.6
1985	56.3	53.5	43.4	37.7	33.7	48.6	45.0	45.9	38.9	51.4
1986	56.3	50.6	42.8	37.4	34.8	48.2	45.1	46.8	38.2	51.0
1987	55.1	51.9	43.3	38.4	35.4	47.6	44.2	46.4	40.3	52.3
1988	52.7	55.1	42.9	38.7	34.5	46.4	42.2	46.2	:	51.3
1989	51.0	55.4	41.6	39.8	35.6	45.4	36.2	47.2	:	49.1
1990	51.1	54.9	42.0	41.9	36.5	45.7	36.7	48.5	:	49.5
1991	52.1	55.7	43.2	39.8	37.7	46.7	37.8	49.5	:	50.3
1991	52.1	55.7	42.3	39.8	37.7	46.7	37.8	49.5	:	50.3
1992	52.7	56.3	43.4	41.2	40.0	48.4	38.2	51.6	:	51.0
1993	53.7	58.9	44.8	43.4	42.5	50.7	38.0	53.1	:	51.2
1994	52.4	58.8	44.9	44.0	41.2	50.4	37.0	51.0	:	49.0
1995	51.0	57.4	45.6	45.1	40.3	50.4	34.8	49.1	:	47.7

(1) 1970–91: D_90.

(% of GDP at market prices)

	A	P	FIN	S	UK	EU-10 (1)	EU-11 (2)	EU-14 (3)	US	JP
1970	31.6	17.8	25.9	35.6	32.0	30.8	30.6	31.1	28.2	14.0
1971	32.0	17.5	27.2	38.0	31.9	32.0	31.8	32.2	28.3	14.8
1972	31.5	18.3	27.3	38.9	33.1	32.8	32.6	33.0	28.2	15.5
1973	31.9	17.9	26.1	38.4	32.9	33.1	32.9	33.1	27.5	15.6
1974	33.1	20.6	27.3	41.8	37.7	34.3	34.1	35.0	28.7	18.1
1975	36.9	25.1	32.4	43.1	39.5	38.2	38.0	38.5	30.7	20.8
1976	38.4	28.5	34.3	45.8	39.6	38.4	38.1	38.7	29.8	21.5
1977	38.4	27.0	36.0	50.7	38.0	39.1	38.8	39.3	29.1	22.3
1978	41.3	28.0	35.9	52.1	38.0	40.2	39.9	40.2	28.1	23.0
1979	40.8	27.7	34.9	53.0	38.0	40.2	39.9	40.2	28.1	23.9
1980	41.1	31.6	34.6	54.9	40.3	41.0	40.8	41.4	29.9	24.9
1981	42.2	36.9	35.7	57.2	42.4	43.3	43.1	43.7	30.6	25.9
1982	43.3	34.6	36.9	59.1	42.8	44.5	44.3	44.8	32.8	26.5
1983	43.0	36.4	38.6	59.0	42.3	45.2	44.9	45.2	33.0	27.3
1984	43.5	40.0	38.7	57.6	42.6	45.2	45.0	45.3	32.1	26.9
1985	44.5	39.1	40.5	59.0	41.9	45.3	45.2	45.4	32.6	26.5
1986	45.3	34.8	41.4	57.7	40.9	45.3	45.2	45.1	33.0	26.8
1987	46.1	34.4	41.7	56.2	39.4	45.3	45.2	44.9	32.8	26.8
1988	45.0	33.2	39.7	55.2	37.1	44.4	44.3	43.8	32.0	26.0
1989	44.0	32.3	39.3	55.3	36.0	43.7	43.7	43.1	31.7	25.3
1990	44.8	35.5	42.2	56.3	35.9	44.4	44.4	43.8	32.3	25.8
1991	45.6	38.0	50.5	58.1	37.0	45.6	45.5	44.9	32.9	25.0
1991	45.6	38.0	50.5	58.1	37.0	45.3	45.2	44.6	32.9	25.0
1992	46.4	37.5	55.8	62.0	39.5	46.7	46.6	46.3	33.7	25.5
1993	49.0	38.9	57.7	65.1	40.2	48.3	48.2	47.8	33.1	26.3
1994	48.5	39.0	56.4	63.6	40.0	47.5	47.5	47.1	32.1	27.1
1995	49.6	39.3	54.3	61.4	40.0	47.2	47.2	46.9	32.0	28.4

(1) EU-15 excluding DK, EL, L, S, UK; 1970–91: including D_90.
(2) EU-15 excluding DK, L, S, UK; 1970–91: including D_90.
(3) EU-15 excluding L; 1970–91: including D_90.

Table 69b

Total current expenditure;
EU Member States: ESA 95

	B	DK	D	EL	E	F	IRL	I	L	NL
1970	36.9	:	:	:	:	:	:	:	:	:
1971	37.9	38.4	:	:	:	:	:	:	:	:
1972	39.0	38.7	:	:	:	:	:	:	:	:
1973	40.0	36.5	:	:	:	:	:	:	:	:
1974	40.2	40.4	:	:	:	:	:	:	:	:
1975	45.6	42.3	:	:	:	:	:	:	:	:
1976	46.0	42.0	:	:	:	:	:	:	:	:
1977	48.0	42.7	:	:	:	:	:	:	:	:
1978	49.6	44.5	:	:	:	39.9	:	:	:	:
1979	50.9	47.0	:	:	:	40.4	:	:	:	:
1980	51.5	50.4	:	:	:	41.4	:	:	:	:
1981	56.0	54.0	:	:	:	44.0	:	:	:	:
1982	56.7	55.6	:	:	:	45.6	:	:	:	:
1983	57.7	56.3	:	:	:	46.6	:	:	:	:
1984	57.2	56.0	:	:	:	47.6	:	:	:	:
1985	56.9	54.9	:	:	:	48.0	:	:	:	:
1986	56.3	51.8	:	:	:	47.4	:	:	:	:
1987	54.6	53.1	:	:	:	46.6	:	:	:	:
1988	52.4	54.9	:	:	:	45.6	:	:	:	:
1989	51.6	55.1	:	:	:	44.8	:	:	:	:
1990	51.7	54.7	:	:	:	45.0	39.1	:	38.7	:
1991	52.5	55.6	41.6	:	:	46.0	40.7	:	40.2	:
1992	52.3	56.2	42.7	:	:	47.3	41.1	:	39.6	:
1993	53.4	58.8	44.1	:	:	49.8	40.6	:	40.4	:
1994	51.5	58.7	44.2	:	:	49.3	39.5	:	39.3	:
1995	50.9	57.3	44.9	43.3	39.2	49.2	36.8	48.6	39.8	47.4
1996	50.9	56.8	46.2	42.2	39.0	50.0	35.3	49.2	40.2	45.9
1997	49.2	55.1	45.5	40.3	37.6	49.8	33.5	47.4	38.6	44.7
1998	48.5	54.2	44.8	40.1	37.0	48.6	31.2	45.7	38.1	43.4
1999	48.0	52.9	44.8	40.1	35.8	48.5	29.3	45.0	38.0	42.7
2000	47.5	51.6	44.6	39.8	35.1	47.6	27.9	44.2	37.3	42.1
2001	46.9	50.8	43.8	39.1	34.8	46.8	26.6	43.4	36.9	40.9
2002	46.2	49.9	43.3	38.0	34.6	45.8	25.6	42.7	36.0	39.5

(% of GDP at market prices)

	A	P	FIN	S	UK	EUR-11 (1)	EUR-12 (2)	EU-15	US	JP
1970	:	:	:	:	34.2	:	:	:	28.2	14.0
1971	:	:	:	:	34.2	:	:	:	28.3	14.9
1972	:	:	:	:	35.4	:	:	:	28.2	15.5
1973	:	:	:	:	35.1	:	:	:	27.5	15.7
1974	:	:	:	:	40.1	:	:	:	28.7	18.2
1975	:	:	32.5	:	41.9	:	:	:	30.7	20.9
1976	:	:	34.4	:	42.1	:	:	:	29.8	21.6
1977	:	:	36.2	:	40.3	:	:	:	29.1	22.4
1978	:	:	36.2	:	40.2	:	:	:	28.1	23.1
1979	:	:	35.2	:	39.8	:	:	:	28.1	23.9
1980	:	:	34.9	:	42.4	:	:	:	29.9	25.0
1981	:	:	35.9	:	44.9	:	:	:	30.6	25.9
1982	:	:	37.1	:	45.2	:	:	:	32.8	26.6
1983	:	:	38.8	:	44.6	:	:	:	33.0	27.3
1984	:	:	38.9	:	44.9	:	:	:	32.1	27.0
1985	:	:	40.7	:	43.9	:	:	:	32.6	26.6
1986	:	:	41.6	:	43.2	:	:	:	33.0	26.9
1987	:	:	41.9	:	40.7	:	:	:	32.8	26.8
1988	47.7	:	40.3	:	38.5	:	:	:	32.0	26.0
1989	46.6	:	39.4	:	37.3	:	:	:	31.7	25.3
1990	46.0	:	42.5	:	37.5	:	:	:	32.3	25.9
1991	46.9	:	50.7	:	40.0	:	:	:	32.9	25.0
1992	47.6	:	56.1	:	42.0	:	:	:	33.7	25.5
1993	50.2	:	58.4	64.4	42.3	:	:	:	33.1	26.4
1994	49.7	:	56.4	63.2	41.9	:	:	:	32.1	27.1
1995	49.7	39.6	53.7	60.6	41.5	46.5	46.4	46.4	32.0	28.5
1996	49.4	39.4	53.0	59.6	40.8	47.1	47.0	46.8	31.5	28.3
1997	47.6	38.2	50.7	57.8	39.2	46.1	46.0	45.4	30.5	28.7
1998	47.5	37.8	47.6	56.7	38.2	45.0	44.9	44.3	29.5	30.0
1999	47.3	38.6	46.6	55.6	37.6	44.6	44.5	43.8	28.9	32.7
2000	46.6	40.4	44.2	52.5	37.1	43.9	43.9	43.1	28.7	34.2
2001	46.0	40.6	42.5	51.1	36.7	43.1	43.0	42.3	28.3	34.5
2002	45.6	40.9	41.2	49.9	36.2	42.4	42.3	41.6	28.0	36.6

(1) EU-15 excluding DK, EL, S, UK.
(2) EU-15 excluding DK, S, UK.

Table 70a

Gross saving;
EU Member States: former definition

	B	DK	D (1)	EL	E	F	IRL	I	L	NL
1970	2.6	9.7	6.3	3.9	3.9	5.0	1.7	0.2	6.6	4.2
1971	2.4	9.1	6.1	3.4	3.1	4.5	1.9	– 1.9	6.8	4.4
1972	1.2	8.5	5.2	3.9	3.5	4.6	1.4	– 3.6	6.6	4.5
1973	1.2	9.2	6.6	3.6	4.1	4.3	0.9	– 3.4	8.5	5.4
1974	1.9	7.6	4.5	1.7	3.3	4.2	– 1.2	– 3.2	9.7	4.1
1975	– 0.1	3.2	– 0.1	0.6	3.4	2.0	– 5.4	– 6.9	7.5	2.4
1976	– 0.8	4.2	1.9	1.8	2.7	4.0	– 2.6	– 5.0	7.9	2.3
1977	– 0.9	3.5	2.8	0.7	3.0	2.8	– 2.0	– 4.3	8.4	2.9
1978	– 1.5	3.7	2.5	0.2	1.3	1.3	– 3.6	– 5.5	10.1	1.6
1979	– 2.2	2.6	2.6	0.7	1.1	2.7	– 4.7	– 5.2	7.0	1.4
1980	– 3.7	0.7	2.4	– 0.1	0.5	3.7	– 4.9	– 4.6	7.0	1.3
1981	– 7.5	– 2.6	1.1	– 5.9	0.1	1.7	– 6.1	– 7.0	4.8	0.3
1982	– 6.3	– 5.2	1.1	– 3.7	– 0.5	0.9	– 7.0	– 7.1	5.9	– 1.2
1983	– 7.4	– 3.9	1.4	– 3.8	0.0	0.3	– 5.9	– 6.8	8.9	– 1.0
1984	– 6.0	– 1.4	2.0	– 4.3	– 0.7	0.6	– 4.9	– 7.1	8.9	– 0.5
1985	– 5.8	0.8	2.6	– 7.4	0.3	0.5	– 6.2	– 6.9	11.0	0.9
1986	– 6.5	5.5	2.4	– 5.7	– 0.3	0.6	– 6.3	– 6.8	8.6	– 0.3
1987	– 5.0	4.5	1.7	– 5.9	0.9	1.4	– 5.2	– 6.2	7.5	– 0.9
1988	– 4.1	3.2	1.3	– 7.6	1.8	1.9	– 2.5	– 5.7	:	– 0.4
1989	– 4.3	1.9	3.6	– 10.1	2.2	2.4	– 0.1	– 5.1	:	– 1.0
1990	– 3.6	0.2	1.3	– 9.4	1.7	2.4	– 0.8	– 5.7	:	– 1.5
1991	– 4.4	– 1.0	1.1	– 6.4	1.2	1.4	– 1.2	– 5.7	:	0.3
1991	– 4.4	– 1.0	1.2	– 6.4	1.2	1.4	– 1.2	– 5.7	:	0.3
1992	– 5.0	– 0.4	1.4	– 7.0	0.7	– 0.4	– 1.2	– 7.1	:	– 0.9
1993	– 5.1	– 1.0	0.5	– 7.9	– 1.6	– 2.2	– 1.0	– 5.4	:	– 0.3
1994	– 3.0	– 0.7	1.0	– 7.1	– 1.5	– 2.1	0.6	– 5.4	:	– 1.0
1995	– 2.0	– 0.5	0.0	– 7.1	– 2.3	– 1.4	– 0.2	– 3.8	:	– 1.1

(1) 1970–91: D_90.

(% of GDP at market prices)

	A	P	FIN	S	UK	EU-10 (1)	EU-11 (2)	EU-14 (3)	US	JP
1970	7.0	5.0	8.0	10.4	8.0	4.4	4.4	5.3	0.8	7.0
1971	7.5	4.5	8.3	10.7	6.3	3.8	3.8	4.6	0.0	7.2
1972	8.6	3.7	7.9	9.8	3.1	3.3	3.3	3.7	1.1	6.5
1973	8.9	4.1	9.7	8.6	2.6	4.0	4.0	4.1	2.0	7.2
1974	8.3	1.5	8.3	6.3	1.7	3.0	3.0	3.1	1.5	6.7
1975	4.8	– 0.5	9.5	6.6	0.6	0.2	0.2	0.6	– 2.3	3.6
1976	2.9	– 1.4	11.1	8.3	– 0.1	1.5	1.5	1.7	– 0.8	2.5
1977	3.9	– 0.2	9.8	6.3	0.6	1.7	1.6	1.8	0.1	2.8
1978	3.5	– 1.9	7.3	4.5	– 0.8	0.7	0.7	0.7	1.2	1.9
1979	3.4	– 1.2	6.7	2.6	– 0.2	1.0	1.0	0.9	1.5	2.9
1980	4.2	– 3.5	7.4	0.7	– 0.5	1.1	1.0	0.8	0.0	3.2
1981	4.3	– 6.9	8.3	– 0.4	– 0.5	– 0.6	– 0.7	– 0.7	0.1	3.7
1982	2.2	– 2.6	6.7	– 1.7	– 0.4	– 1.0	– 1.0	– 1.0	– 2.6	3.4
1983	1.9	– 1.8	5.1	– 0.1	– 0.7	– 1.1	– 1.1	– 1.1	– 3.4	3.0
1984	3.1	– 6.3	6.5	0.9	– 1.1	– 0.9	– 0.9	– 0.9	– 2.5	3.9
1985	3.1	– 6.0	6.5	– 0.1	– 0.5	– 0.5	– 0.6	– 0.6	– 2.6	4.9
1986	2.0	– 1.8	7.0	2.1	– 0.6	– 0.6	– 0.7	– 0.5	– 2.7	4.7
1987	1.0	– 2.1	4.9	5.2	0.0	– 0.5	– 0.6	– 0.2	– 1.8	6.3
1988	1.9	0.0	8.5	5.7	1.9	– 0.1	– 0.2	0.4	– 1.3	7.4
1989	1.9	1.0	9.4	7.8	2.7	0.8	0.7	1.3	– 0.8	8.4
1990	2.2	– 1.4	9.1	6.3	2.4	– 0.1	– 0.2	0.4	– 1.7	8.9
1991	1.8	– 2.5	2.6	1.4	0.5	– 0.5	– 0.6	– 0.4	– 2.3	9.4
1991	1.8	– 2.5	2.6	1.4	0.5	– 0.4	– 0.5	– 0.3	– 2.3	9.4
1992	2.7	0.8	– 2.1	– 3.3	– 3.3	– 1.1	– 1.2	– 1.6	– 3.3	8.2
1993	0.8	– 2.0	– 5.0	– 6.9	– 5.0	– 1.7	– 1.8	– 2.4	– 2.5	6.2
1994	0.0	– 2.8	– 2.9	– 6.6	– 4.2	– 1.4	– 1.5	– 2.0	– 1.2	5.5
1995	– 0.4	– 2.3	– 2.2	– 4.5	– 3.1	– 1.4	– 1.5	– 1.7	– 0.7	4.2

(1) EU-15 excluding DK, EL, L, S, UK; 1970–91: including D_90.
(2) EU-15 excluding DK, L, S, UK; 1970–91: including D_90.
(3) EU-15 excluding L; 1970–91: including D_90.

Table 70b

Gross saving;
EU Member States: ESA 95

	B	DK	D	EL	E	F	IRL	I	L	NL
1970	3.0	:	:	:	:	:	:	:	:	:
1971	2.5	9.4	:	:	:	:	:	:	:	:
1972	0.9	8.8	:	:	:	:	:	:	:	:
1973	1.1	8.5	:	:	:	:	:	:	:	:
1974	1.8	7.6	:	:	:	:	:	:	:	:
1975	– 0.4	2.5	:	:	:	:	:	:	:	:
1976	– 0.9	3.9	:	:	:	:	:	:	:	:
1977	– 0.8	3.8	:	:	:	:	:	:	:	:
1978	– 1.6	3.6	:	:	:	2.5	:	:	:	:
1979	– 2.5	2.5	:	:	:	4.0	:	:	:	:
1980	– 4.1	0.7	:	:	:	4.1	:	:	:	:
1981	– 7.8	– 2.7	:	:	:	1.9	:	:	:	:
1982	– 7.0	– 5.1	:	:	:	1.6	:	:	:	:
1983	– 7.6	– 3.7	:	:	:	1.2	:	:	:	:
1984	– 6.6	– 1.7	:	:	:	1.2	:	:	:	:
1985	– 6.3	0.5	:	:	:	0.9	:	:	:	:
1986	– 6.5	4.7	:	:	:	0.7	:	:	:	:
1987	– 4.7	4.0	:	:	:	1.7	:	:	:	:
1988	– 4.0	3.2	:	:	:	1.7	:	:	:	:
1989	– 5.3	1.9	:	:	:	2.3	:	:	:	:
1990	– 4.6	0.2	:	:	:	2.5	– 1.1	:	10.4	:
1991	– 5.1	– 1.0	1.4	:	:	1.7	– 1.4	:	7.8	:
1992	– 5.5	– 0.4	1.6	:	:	0.2	– 1.4	:	9.4	:
1993	– 4.5	– 1.0	0.8	:	:	– 1.9	– 1.2	:	11.4	:
1994	– 2.4	– 0.6	1.1	:	:	– 1.2	0.5	:	10.1	:
1995	– 2.0	– 0.5	– 0.1	– 6.8	– 1.8	– 1.1	– 0.1	– 3.8	8.0	– 1.1
1996	– 1.5	0.9	– 0.5	– 5.2	1.2	– 0.3	1.7	– 3.7	8.4	0.6
1997	0.5	2.3	– 0.1	– 1.5	0.4	– 0.1	2.6	– 0.2	8.6	1.3
1998	1.5	2.9	0.6	0.0	1.2	1.0	4.1	0.3	9.2	1.8
1999	1.9	4.3	1.3	2.0	2.9	1.9	5.8	1.5	9.4	3.5
2000	2.4	4.2	1.7	3.0	3.7	2.2	6.1	2.1	10.1	3.8
2001	2.9	4.5	1.1	3.5	4.2	2.5	6.4	2.2	9.9	3.2
2002	3.2	4.8	1.4	4.1	4.4	3.2	6.5	2.3	9.3	4.1

(% of GDP at market prices)

	A	P	FIN	S	UK	EUR-11 (1)	EUR-12 (2)	EU-15	US	JP
1970	:	:	:	:	8.9	:	:	:	0.8	7.0
1971	:	:	:	:	7.1	:	:	:	0.0	7.2
1972	:	:	:	:	4.0	:	:	:	1.1	6.5
1973	:	:	:	:	3.5	:	:	:	2.0	7.2
1974	:	:	:	:	2.8	:	:	:	1.5	6.7
1975	:	:	10.3	:	1.6	:	:	:	– 2.3	3.6
1976	:	:	12.4	:	0.7	:	:	:	– 0.8	2.5
1977	:	:	10.9	:	1.2	:	:	:	0.1	2.8
1978	:	:	8.0	:	– 0.2	:	:	:	1.2	1.9
1979	:	:	7.3	:	0.5	:	:	:	1.5	2.9
1980	:	:	7.9	:	0.2	:	:	:	0.0	3.2
1981	:	:	9.0	:	0.2	:	:	:	0.1	3.7
1982	:	:	7.5	:	0.3	:	:	:	– 2.6	3.4
1983	:	:	5.8	:	0.0	:	:	:	– 3.4	3.0
1984	:	:	7.1	:	– 0.6	:	:	:	– 2.5	3.9
1985	:	:	7.2	:	0.1	:	:	:	– 2.6	4.9
1986	:	:	7.7	:	0.1	:	:	:	– 2.7	4.7
1987	:	:	5.6	:	0.5	:	:	:	– 1.8	6.3
1988	1.6	:	9.5	:	2.7	:	:	:	– 1.3	7.4
1989	1.7	:	10.3	:	3.6	:	:	:	– 0.8	8.4
1990	2.4	:	9.4	:	2.9	:	:	:	– 1.7	8.9
1991	2.0	:	3.3	:	0.7	:	:	:	– 2.3	9.4
1992	2.9	:	– 1.7	:	– 3.2	:	:	:	– 3.3	8.2
1993	0.9	:	– 4.1	– 6.5	– 4.8	:	:	:	– 2.5	6.2
1994	0.1	:	– 2.0	– 6.9	– 3.9	:	:	:	– 1.2	5.5
1995	– 0.2	– 1.3	– 0.5	– 4.1	– 2.9	– 1.2	– 1.3	– 1.6	– 0.7	4.2
1996	0.9	– 0.2	0.4	– 0.5	– 2.2	– 0.7	– 0.8	– 1.0	0.2	3.9
1997	2.0	1.0	1.6	1.1	– 0.3	0.2	0.2	0.2	1.5	3.6
1998	1.8	1.9	4.1	3.7	2.0	1.0	1.0	1.3	2.8	2.3
1999	1.5	2.3	4.7	4.6	2.8	1.9	1.9	2.2	3.7	– 1.7
2000	1.7	2.0	7.1	6.1	3.4	2.4	2.4	2.8	5.0	– 2.6
2001	2.5	2.6	7.2	6.2	3.4	2.4	2.4	2.8	5.5	– 2.8
2002	2.7	2.8	7.6	6.7	3.6	2.8	2.8	3.1	5.8	– 3.7

(1) EU-15 excluding DK, EL, S, UK.
(2) EU-15 excluding DK, S, UK.

Table 71

Capital transfers received;
EU Member States: ESA 95

	B	DK	D	EL	E	F	IRL	I	L	NL
1970	0.4	:	:	:	:	:	:	:	:	:
1971	0.4	0.3	:	:	:	:	:	:	:	:
1972	0.3	0.3	:	:	:	:	:	:	:	:
1973	0.3	0.4	:	:	:	:	:	:	:	:
1974	0.3	0.4	:	:	:	:	:	:	:	:
1975	0.3	0.5	:	:	:	:	:	:	:	:
1976	0.3	0.5	:	:	:	:	:	:	:	:
1977	0.4	0.6	:	:	:	:	:	:	:	:
1978	0.4	0.6	:	:	:	– 0.1	:	:	:	:
1979	0.4	0.6	:	:	:	– 0.2	:	:	:	:
1980	0.4	0.6	:	:	:	– 0.1	:	:	:	:
1981	0.4	0.6	:	:	:	0.0	:	:	:	:
1982	0.3	0.3	:	:	:	– 0.3	:	:	:	:
1983	0.3	0.3	:	:	:	– 0.1	:	:	:	:
1984	0.3	0.3	:	:	:	– 0.3	:	:	:	:
1985	0.3	0.5	:	:	:	0.0	:	:	:	:
1986	0.3	0.3	:	:	:	0.1	:	:	:	:
1987	0.3	0.4	:	:	:	0.3	:	:	:	:
1988	0.3	0.4	:	:	:	0.2	:	:	:	:
1989	0.3	0.3	:	:	:	0.2	:	:	:	:
1990	0.3	0.6	:	:	:	0.0	1.5	:	0.2	:
1991	0.3	0.4	0.3	:	:	0.4	1.7	:	0.2	:
1992	0.3	0.4	0.3	:	:	0.2	1.6	:	0.2	:
1993	0.4	0.5	0.4	:	:	0.2	1.8	:	0.3	:
1994	0.4	0.4	0.4	:	:	0.2	1.4	:	0.2	:
1995	0.4	0.5	0.5	0.0	1.4	0.4	1.8	0.9	0.2	0.3
1996	0.4	0.4	0.4	0.0	1.4	0.3	1.7	0.4	0.2	0.6
1997	0.6	0.5	0.4	0.0	1.3	0.8	1.7	1.0	0.3	0.4
1998	0.5	0.5	0.5	0.0	1.4	0.3	1.6	0.7	0.2	0.4
1999	0.6	0.5	0.4	0.0	1.4	0.4	1.8	0.5	0.5	0.5
2000	0.5	0.5	0.4	0.0	1.3	1.4	1.7	0.5	0.4	0.4
2001	0.5	0.5	0.4	0.0	1.3	1.4	1.7	0.7	0.4	0.4
2002	0.5	0.4	0.4	0.0	1.3	1.4	1.6	0.5	0.4	0.4

(% of GDP at market prices)

	A	P	FIN	S	UK	EUR-11 (1)	EUR-12 (2)	EU-15	US	JP
1970	:	:	:	:	1.1	:	:	:	0.4	– 0.3
1971	:	:	:	:	1.0	:	:	:	0.5	– 0.3
1972	:	:	:	:	1.1	:	:	:	0.5	– 0.2
1973	:	:	:	:	0.9	:	:	:	0.5	– 0.3
1974	:	:	:	:	0.7	:	:	:	0.4	– 0.4
1975	:	:	0.1	:	0.5	:	:	:	0.4	– 0.4
1976	:	:	0.1	:	0.4	:	:	:	0.4	– 0.3
1977	:	:	0.1	:	0.4	:	:	:	0.5	– 0.3
1978	:	:	0.1	:	0.4	:	:	:	0.3	– 0.4
1979	:	:	0.1	:	0.4	:	:	:	0.3	– 0.5
1980	:	:	0.1	:	0.4	:	:	:	0.3	– 0.5
1981	:	:	0.1	:	0.5	:	:	:	0.3	– 0.4
1982	:	:	0.1	:	0.4	:	:	:	0.3	– 0.3
1983	:	:	0.1	:	0.3	:	:	:	0.2	– 0.2
1984	:	:	0.1	:	0.5	:	:	:	0.2	0.0
1985	:	:	0.3	:	0.5	:	:	:	0.2	– 0.1
1986	:	:	0.1	:	0.6	:	:	:	0.2	0.0
1987	:	:	0.1	:	0.3	:	:	:	0.2	0.1
1988	0.1	:	0.1	:	0.3	:	:	:	0.2	0.1
1989	0.1	:	0.1	:	0.3	:	:	:	0.2	0.1
1990	0.1	:	0.2	:	0.3	:	:	:	0.1	0.1
1991	0.1	:	0.2	:	0.3	:	:	:	0.2	– 0.3
1992	0.1	:	0.2	:	0.3	:	:	:	0.3	0.1
1993	0.1	:	0.3	0.2	0.2	:	:	:	0.3	0.0
1994	0.1	:	0.2	0.1	0.3	:	:	:	0.3	– 0.1
1995	0.2	1.9	0.2	0.2	0.3	0.6	0.6	0.6	0.3	– 0.2
1996	0.1	2.1	0.2	0.2	0.3	0.5	0.5	0.5	0.3	– 0.5
1997	0.3	2.4	0.3	0.1	0.3	0.7	0.7	0.6	0.3	– 0.3
1998	0.2	1.9	0.3	0.2	0.3	0.6	0.6	0.5	0.4	– 5.9
1999	0.2	2.2	0.4	0.2	0.3	0.6	0.6	0.5	0.4	:
2000	0.2	2.6	0.3	0.2	0.3	0.8	0.8	0.7	:	:
2001	0.2	2.7	0.3	0.1	0.2	0.8	0.8	0.7	:	:
2002	0.2	2.7	0.3	0.1	0.2	0.8	0.8	0.6	:	:

(1) EU-15 excluding DK, EL, S, UK.
(2) EU-15 excluding DK, S, UK.

Table 72a

Total revenue;
EU Member States: former definition

	B	DK	D (1)	EL	E	F	IRL	I	L	NL
1970	38.7	44.7	38.7	24.5	21.4	37.9	30.3	29.0	31.3	39.0
1971	39.5	45.3	39.8	24.3	21.6	37.5	31.2	29.8	34.1	40.6
1972	39.5	44.9	40.1	23.9	22.0	37.8	30.1	29.8	34.1	41.7
1973	40.5	44.5	42.5	22.3	22.5	37.9	29.5	29.0	34.5	42.8
1974	41.6	46.4	43.1	24.4	22.0	38.6	33.7	28.5	35.4	43.7
1975	44.9	44.2	43.1	24.4	23.6	40.2	31.5	29.1	42.8	45.8
1976	45.0	44.7	44.3	25.7	24.4	42.3	34.8	30.3	44.1	46.4
1977	46.6	45.2	45.3	26.0	25.6	42.0	33.6	31.5	47.5	48.3
1978	47.5	46.9	44.8	26.0	26.2	41.9	32.1	32.8	48.5	48.5
1979	48.4	48.3	44.6	26.3	27.5	43.5	31.6	32.5	45.8	49.7
1980	47.7	49.9	45.1	26.2	29.0	45.3	34.5	34.2	47.2	50.4
1981	48.2	49.9	45.3	25.6	30.3	46.2	35.4	35.3	47.9	51.0
1982	50.3	49.0	46.0	28.5	30.3	47.1	37.2	37.0	47.7	52.0
1983	49.8	51.3	45.4	29.6	32.2	47.7	38.9	38.8	50.0	52.9
1984	50.4	53.0	45.6	30.3	31.9	48.7	39.4	38.6	48.3	52.0
1985	50.6	54.4	46.0	30.3	34.0	49.1	38.7	38.9	49.9	52.2
1986	49.8	56.1	45.2	31.6	34.6	48.8	38.8	40.1	46.8	50.7
1987	50.1	56.4	45.0	32.4	36.3	49.1	39.0	40.2	47.8	51.4
1988	48.6	58.2	44.2	31.0	36.3	48.3	39.7	40.5	:	51.0
1989	46.8	57.3	45.1	29.6	37.8	47.8	36.1	42.1	:	48.1
1990	47.4	55.1	43.3	32.5	38.2	48.2	35.9	42.8	:	47.9
1991	47.7	54.7	44.3	33.4	38.9	48.2	36.6	43.8	:	50.6
1991	47.7	54.7	43.5	33.4	38.9	48.2	36.6	43.8	:	50.6
1992	47.7	56.0	44.9	34.2	40.7	48.0	37.0	44.5	:	50.1
1993	48.6	57.9	45.3	35.4	40.8	48.4	36.9	47.7	:	50.8
1994	49.4	58.1	45.9	36.9	39.7	48.3	37.6	45.5	:	48.0
1995	49.0	56.9	45.6	38.0	38.0	49.0	34.7	45.3	:	46.6

(1) 1970–91: D_90.

(% of GDP at market prices)

	A	P	FIN	S	UK	EU-10 (1)	EU-11 (2)	EU-14 (3)	US	JP
1970	38.7	22.8	33.9	45.9	40.0	35.2	35.0	36.5	29.0	21.0
1971	39.5	22.0	35.5	48.7	38.2	35.8	35.6	36.8	28.3	22.1
1972	40.1	22.0	35.2	48.7	36.2	36.1	35.9	36.7	29.3	22.0
1973	40.8	21.9	35.8	47.0	35.5	37.1	36.8	37.2	29.5	22.8
1974	41.4	22.1	35.6	48.1	39.4	37.4	37.1	38.1	30.2	24.8
1975	41.8	24.6	41.9	49.7	40.0	38.4	38.1	39.0	28.4	24.4
1976	41.3	27.1	45.4	54.2	39.5	39.9	39.6	40.4	29.0	24.0
1977	42.3	26.8	45.8	57.0	38.6	40.7	40.4	41.0	29.2	25.1
1978	44.7	26.1	43.1	56.6	37.2	40.9	40.6	40.9	29.4	25.0
1979	44.3	26.6	41.6	55.6	37.8	41.1	40.8	41.1	29.6	26.8
1980	45.3	28.1	42.0	55.6	39.8	42.1	41.8	42.2	29.9	28.1
1981	46.5	30.0	44.0	56.9	41.9	42.7	42.4	43.0	30.7	29.6
1982	45.5	32.0	43.6	57.3	42.4	43.5	43.2	43.7	30.2	30.0
1983	44.9	34.6	43.7	59.0	41.6	44.1	43.8	44.1	29.6	30.3
1984	46.5	33.8	45.2	58.5	41.5	44.3	44.0	44.3	29.6	30.8
1985	47.6	33.0	47.0	59.0	41.4	44.8	44.6	44.8	30.0	31.4
1986	47.3	33.1	48.5	59.7	40.3	44.7	44.4	44.6	30.3	31.6
1987	47.1	32.4	46.7	61.4	39.5	44.8	44.6	44.7	30.9	33.1
1988	47.0	33.2	48.2	60.9	38.9	44.3	44.1	44.2	30.7	33.4
1989	45.9	33.3	48.7	63.1	38.7	44.6	44.3	44.4	30.9	33.6
1990	46.9	34.1	51.4	62.7	38.3	44.4	44.2	44.2	30.7	34.7
1991	47.4	35.4	53.1	59.5	37.5	45.1	44.9	44.5	30.7	34.3
1991	47.4	35.4	53.1	59.5	37.5	44.8	44.6	44.3	30.7	34.3
1992	49.1	38.3	53.7	58.8	36.2	45.6	45.4	44.8	30.4	33.7
1993	49.8	36.8	52.7	58.2	35.2	46.5	46.4	45.4	30.6	32.6
1994	48.5	36.2	53.5	57.0	35.8	46.1	45.9	45.1	30.9	32.6
1995	49.2	37.0	52.0	56.9	36.9	45.9	45.7	45.1	31.3	32.6

(1) EU-15 excluding DK, EL, L, S, UK; 1970–91: including D_90.
(2) EU-15 excluding DK, L, S, UK; 1970–91: including D_90.
(3) EU-15 excluding L; 1970–91: including D_90.

Table 72b

Total revenue;
EU Member States: ESA 95

	B	DK	D	EL	E	F	IRL	I	L	NL
1970	39.8	:	:	:	:	:	:	:	:	:
1971	40.2	47.8	:	:	:	:	:	:	:	:
1972	39.8	47.6	:	:	:	:	:	:	:	:
1973	40.8	45.1	:	:	:	:	:	:	:	:
1974	41.6	48.1	:	:	:	:	:	:	:	:
1975	44.7	44.9	:	:	:	:	:	:	:	:
1976	44.7	46.0	:	:	:	:	:	:	:	:
1977	46.7	46.9	:	:	:	:	:	:	:	:
1978	47.5	48.5	:	:	:	43.4	:	:	:	:
1979	48.0	49.8	:	:	:	45.2	:	:	:	:
1980	46.9	51.3	:	:	:	46.5	:	:	:	:
1981	47.5	51.4	:	:	:	47.1	:	:	:	:
1982	48.9	50.4	:	:	:	48.1	:	:	:	:
1983	49.3	52.6	:	:	:	49.0	:	:	:	:
1984	49.9	54.4	:	:	:	49.9	:	:	:	:
1985	49.7	55.4	:	:	:	50.4	:	:	:	:
1986	49.0	56.6	:	:	:	49.5	:	:	:	:
1987	49.1	57.5	:	:	:	49.9	:	:	:	:
1988	47.7	58.7	:	:	:	48.9	:	:	:	:
1989	45.7	57.6	:	:	:	48.6	:	:	:	:
1990	46.6	56.0	:	:	:	48.6	40.4	:	48.5	:
1991	46.9	55.4	44.1	:	:	49.1	42.0	:	47.5	:
1992	46.4	56.8	45.5	:	:	48.8	42.3	:	48.4	:
1993	48.6	58.9	46.1	:	:	49.3	42.3	:	51.3	:
1994	48.8	59.1	46.5	:	:	49.4	42.3	:	48.8	:
1995	48.6	58.0	46.1	37.7	38.4	49.7	39.4	45.8	47.4	47.3
1996	49.3	58.8	46.8	38.1	38.8	51.4	39.5	46.1	48.0	47.8
1997	49.7	58.6	46.5	40.0	39.1	51.9	38.5	48.5	46.7	47.1
1998	50.0	58.3	46.6	41.4	39.2	51.3	37.7	46.9	46.9	46.4
1999	50.0	58.8	47.2	43.4	39.6	52.1	37.6	47.3	47.1	47.5
2000	49.8	57.3	47.2	44.0	39.7	51.5	36.4	47.1	47.2	47.1
2001	49.7	57.2	46.1	43.9	39.9	50.9	35.5	46.6	46.5	45.3
2002	49.5	56.1	45.8	43.6	39.9	50.7	34.6	45.8	45.0	44.7

(% of GDP at market prices)

	A	P	FIN	S	UK	EUR-11 (1)	EUR-12 (2)	EU-15	US	JP
1970	:	:	:	:	:	:	:	:	29.4	20.7
1971	:	:	:	:	:	:	:	:	28.8	21.8
1972	:	:	:	:	:	:	:	:	29.9	21.7
1973	:	:	:	:	:	:	:	:	30.0	22.6
1974	:	:	:	:	:	:	:	:	30.6	24.5
1975	:	:	45.2	:	:	:	:	:	28.8	24.1
1976	:	:	49.3	:	:	:	:	:	29.4	23.7
1977	:	:	49.6	:	:	:	:	:	29.6	24.9
1978	:	:	46.8	:	:	:	:	:	29.7	24.6
1979	:	:	45.1	:	:	:	:	:	29.9	26.4
1980	:	:	45.4	:	:	:	:	:	30.2	27.7
1981	:	:	47.6	:	:	:	:	:	31.0	29.2
1982	:	:	47.4	:	:	:	:	:	30.5	29.7
1983	:	:	47.5	:	:	:	:	:	29.9	30.1
1984	:	:	48.8	:	:	:	:	:	29.8	30.8
1985	:	:	50.9	:	:	:	:	:	30.3	31.3
1986	:	:	52.2	:	:	:	:	:	30.5	31.5
1987	:	:	50.4	:	42.9	:	:	:	31.1	33.2
1988	51.3	:	52.7	:	42.8	:	:	:	30.9	33.6
1989	50.2	:	52.4	:	42.3	:	:	:	31.1	33.7
1990	50.4	:	54.6	:	41.8	:	:	:	30.8	34.8
1991	50.9	:	57.3	:	42.1	:	:	:	30.8	34.1
1992	52.7	:	58.2	:	40.3	:	:	:	30.7	33.8
1993	53.5	:	57.7	:	38.9	:	:	:	30.9	32.6
1994	52.3	:	57.8	:	39.4	:	:	:	31.2	32.6
1995	52.1	40.3	56.2	60.0	40.1	46.6	46.5	46.3	31.6	32.4
1996	52.8	41.4	56.8	62.3	39.8	47.4	47.2	46.9	32.0	31.8
1997	52.1	41.8	55.3	61.8	40.0	47.7	47.6	47.0	32.3	32.0
1998	51.9	41.9	54.5	63.5	41.2	47.3	47.2	46.9	32.7	26.4
1999	51.5	43.2	53.8	63.6	41.2	47.8	47.7	47.3	32.9	31.0
2000	50.6	45.2	53.9	61.9	41.3	47.6	47.5	47.0	33.7	31.6
2001	49.6	46.1	51.9	60.5	41.0	46.8	46.7	46.3	33.8	31.6
2002	48.5	46.6	50.6	59.7	40.7	46.3	46.3	45.9	33.8	32.9

(1) EU-15 excluding DK, EL, S, UK.
(2) EU-15 excluding DK, S, UK.

Table 73a

Gross fixed capital formation;
EU Member States: former definition

	B	DK	D (1)	EL	E	F	IRL	I	L	NL
1970	4.7	4.8	4.6	2.7	2.6	3.9	3.9	2.9	3.1	4.4
1971	5.2	4.5	4.5	2.8	3.0	3.7	4.0	2.8	4.0	4.6
1972	5.0	4.1	4.1	3.3	2.6	3.8	4.0	2.9	4.3	4.1
1973	4.4	3.6	3.8	3.0	2.5	3.4	4.3	2.6	4.8	3.6
1974	4.1	4.0	4.1	2.5	2.4	3.5	5.5	2.8	4.6	3.5
1975	4.3	3.8	3.9	2.9	2.6	3.9	5.2	3.2	5.6	3.7
1976	4.3	3.6	3.5	2.9	2.3	3.8	4.3	3.1	5.3	3.6
1977	4.3	3.5	3.3	2.7	2.6	3.2	4.2	3.0	5.1	2.9
1978	4.0	3.4	3.3	2.6	2.0	3.0	4.3	2.8	5.1	2.9
1979	4.2	3.6	3.5	2.6	1.7	3.1	4.8	2.7	5.5	2.9
1980	4.4	3.3	3.6	2.1	1.8	3.3	5.4	3.2	6.4	3.2
1981	4.3	2.9	3.2	2.5	2.2	3.2	5.2	3.7	6.0	3.1
1982	3.9	2.7	2.9	2.3	2.9	3.3	4.8	3.7	5.8	2.8
1983	3.4	2.2	2.5	3.0	2.7	3.2	4.3	3.7	5.1	2.4
1984	2.9	1.9	2.4	3.5	2.9	3.0	3.7	3.6	4.2	2.5
1985	2.5	2.1	2.4	3.6	3.5	3.2	3.7	3.7	3.9	2.2
1986	2.3	1.6	2.5	3.4	3.5	3.2	3.3	3.5	3.6	2.0
1987	2.0	1.7	2.4	2.6	3.3	3.0	2.5	3.5	4.1	2.0
1988	2.1	1.8	2.3	2.9	3.7	3.3	1.7	3.4	:	2.0
1989	1.4	1.7	2.4	2.9	4.2	3.3	1.7	3.3	:	1.9
1990	1.3	1.6	2.3	2.8	4.8	3.5	2.0	3.3	4.5	1.9
1991	1.3	1.5	2.3	3.1	4.7	3.5	2.1	3.2	4.7	2.1
1991	1.3	1.5	2.6	3.1	4.7	3.5	2.1	3.2	4.7	2.1
1992	1.4	1.9	2.8	3.5	4.0	3.5	2.0	3.0	5.1	2.0
1993	1.6	1.8	2.7	3.3	4.1	3.1	2.2	2.6	5.1	2.0
1994	1.6	1.8	2.5	3.1	3.9	3.1	2.3	2.3	4.2	2.0
1995	1.4	1.8	2.3	3.3	3.7	3.2	2.4	2.2	4.4	1.9

(1) 1970–91: D_90.

(% of GDP at market prices)

	A	P	FIN	S	UK	EU-10 (1)	EU-11 (2)	EU-14 (3)	US	JP
1970	4.9	2.3	3.6	6.3	4.8	3.9	3.9	4.2	3.3	5.1
1971	5.2	2.3	3.8	5.8	4.5	3.9	3.9	4.1	3.3	5.8
1972	5.4	2.2	4.2	5.6	4.3	3.8	3.8	3.9	3.0	6.3
1973	5.1	2.1	4.0	4.8	5.0	3.5	3.5	3.7	2.7	6.4
1974	5.3	2.0	3.7	4.6	5.3	3.6	3.5	3.8	2.9	6.0
1975	5.4	2.5	4.6	4.1	4.7	3.7	3.7	3.9	3.4	6.0
1976	4.8	2.8	4.0	3.9	4.3	3.5	3.5	3.6	2.9	5.8
1977	4.7	2.9	4.2	4.3	3.3	3.2	3.2	3.3	2.7	6.3
1978	4.7	3.2	4.0	4.3	2.8	3.1	3.1	3.1	2.8	7.0
1979	4.5	3.7	3.8	4.1	2.6	3.1	3.1	3.1	2.7	7.2
1980	4.3	4.2	3.8	4.1	2.5	3.3	3.3	3.2	2.9	7.1
1981	4.2	5.3	3.7	3.9	1.8	3.3	3.3	3.1	2.6	7.1
1982	3.8	4.4	3.9	3.7	1.7	3.3	3.3	3.0	2.6	6.8
1983	3.7	3.9	4.0	3.5	2.0	3.1	3.1	2.9	2.5	6.4
1984	3.6	3.5	3.6	3.2	2.2	2.9	3.0	2.8	2.4	5.9
1985	3.6	3.3	3.6	3.0	2.1	3.0	3.0	2.9	2.7	5.6
1986	3.7	3.0	3.6	2.6	1.9	3.0	3.0	2.8	2.8	5.6
1987	3.4	3.2	3.8	2.5	1.7	2.9	2.9	2.7	2.8	5.9
1988	3.2	3.4	3.8	2.3	1.3	2.9	2.9	2.6	2.6	6.1
1989	3.3	3.2	3.1	2.4	1.8	3.0	3.0	2.7	2.7	5.9
1990	3.1	3.2	3.7	2.3	2.3	3.0	3.0	2.9	2.9	6.1
1991	3.2	3.3	3.8	2.2	2.1	3.0	3.0	2.8	2.9	6.2
1991	3.2	3.3	3.8	2.2	2.1	3.1	3.1	2.9	2.9	6.2
1992	3.2	3.7	3.5	2.6	2.0	3.0	3.0	2.9	2.9	6.9
1993	3.2	3.9	2.8	1.0	1.8	2.9	2.9	2.6	2.8	7.8
1994	3.3	3.5	2.9	2.9	1.8	2.7	2.7	2.6	2.7	7.7
1995	2.8	3.6	2.7	2.8	1.7	2.6	2.6	2.5	2.7	7.6

(1) EU-15 excluding DK, EL, L, S, UK; 1970–91: including D_90.
(2) EU-15 excluding DK, L, S, UK; 1970–91: including D_90.
(3) EU-15 excluding L; 1970–91: including D_90.

Table 73b

Gross fixed capital formation;
EU Member States: ESA 95

	B	DK	D	EL	E	F	IRL	I	L	NL
1970	4.3	:	:	:	:	:	:	:	:	:
1971	5.0	4.3	:	:	:	:	:	:	:	:
1972	5.0	3.9	:	:	:	:	:	:	:	:
1973	4.3	3.4	:	:	:	:	:	:	:	:
1974	3.9	3.4	:	:	:	:	:	:	:	:
1975	4.5	3.5	:	:	:	:	:	:	:	:
1976	4.5	3.3	:	:	:	:	:	:	:	:
1977	4.4	3.3	:	:	:	:	:	:	:	:
1978	4.3	3.4	:	:	:	3.1	:	:	:	:
1979	4.4	3.5	:	:	:	3.1	:	:	:	:
1980	4.7	3.1	:	:	:	3.2	:	:	:	:
1981	4.7	2.8	:	:	:	3.3	:	:	:	:
1982	4.4	2.4	:	:	:	3.4	:	:	:	:
1983	3.9	2.0	:	:	:	3.1	:	:	:	:
1984	3.2	1.9	:	:	:	3.1	:	:	:	:
1985	3.0	2.1	:	:	:	3.2	:	:	:	:
1986	2.7	1.8	:	:	:	3.2	:	:	:	:
1987	2.4	2.2	:	:	:	3.2	:	:	:	:
1988	2.4	2.1	:	:	:	3.5	:	:	:	:
1989	1.8	1.9	:	:	:	3.5	:	:	:	:
1990	1.7	1.6	:	:	:	3.5	2.1	:	4.7	:
1991	1.7	1.5	2.7	:	:	3.6	2.2	:	5.1	:
1992	1.8	1.9	2.9	:	:	3.7	2.1	:	5.2	:
1993	2.0	1.8	2.8	:	:	3.5	2.3	:	5.4	:
1994	2.0	1.8	2.7	:	:	3.4	2.3	:	4.3	:
1995	1.8	1.8	2.3	3.2	3.7	3.3	2.3	2.1	4.6	3.0
1996	1.6	2.0	2.1	3.2	3.1	3.2	2.4	2.2	4.7	3.1
1997	1.6	1.9	1.9	3.4	3.1	3.0	2.5	2.2	4.3	2.9
1998	1.5	1.7	1.8	3.6	3.3	2.9	2.7	2.4	4.6	3.0
1999	1.8	1.6	1.8	4.1	3.3	2.9	2.6	2.6	4.5	3.0
2000	1.8	1.7	1.8	4.2	3.3	3.0	2.6	2.6	4.7	3.2
2001	1.7	1.8	1.8	4.2	3.4	3.0	2.6	2.8	5.2	3.1
2002	1.7	1.8	1.8	4.3	3.5	3.0	2.6	2.7	5.2	3.1

(% of GDP at market prices)

	A	P	FIN	S	UK	EUR-11 (1)	EUR-12 (2)	EU-15	US	JP
1970	:	:	:	:	4.8	:	:	:	3.3	4.5
1971	:	:	:	:	4.5	:	:	:	3.2	5.0
1972	:	:	:	:	4.3	:	:	:	3.0	5.5
1973	:	:	:	:	5.0	:	:	:	2.9	5.7
1974	:	:	:	:	5.3	:	:	:	3.2	5.2
1975	:	:	4.1	:	4.8	:	:	:	3.2	5.3
1976	:	:	3.8	:	4.4	:	:	:	3.0	5.2
1977	:	:	3.9	:	3.3	:	:	:	2.7	5.5
1978	:	:	3.8	:	2.9	:	:	:	2.7	6.1
1979	:	:	3.6	:	2.8	:	:	:	2.8	6.3
1980	:	:	3.7	:	2.6	:	:	:	2.9	6.1
1981	:	:	3.7	:	2.1	:	:	:	2.7	6.1
1982	:	:	3.8	:	1.9	:	:	:	2.6	5.8
1983	:	:	3.8	:	2.2	:	:	:	2.5	5.5
1984	:	:	3.5	:	2.4	:	:	:	2.5	5.0
1985	:	:	3.6	:	2.3	:	:	:	2.6	4.7
1986	:	:	3.5	:	2.4	:	:	:	2.7	4.8
1987	:	:	3.8	:	2.2	:	:	:	2.7	5.0
1988	3.1	:	3.8	:	1.8	:	:	:	2.6	5.0
1989	3.1	:	3.3	:	2.3	:	:	:	2.7	5.0
1990	3.0	:	3.7	:	2.6	:	:	:	2.8	5.0
1991	3.1	:	3.9	:	2.4	:	:	:	2.8	5.1
1992	3.1	:	3.6	:	2.3	:	:	:	2.8	5.6
1993	3.3	:	2.9	3.3	2.1	:	:	:	2.7	6.5
1994	3.3	:	3.0	3.5	2.1	:	:	:	2.6	6.5
1995	3.0	3.7	2.8	3.4	2.0	2.7	2.7	2.6	2.7	6.4
1996	2.8	4.1	2.9	3.0	1.5	2.6	2.6	2.4	2.7	6.6
1997	2.0	4.4	3.2	2.6	1.2	2.4	2.4	2.2	2.8	5.7
1998	1.9	4.0	2.9	2.7	1.2	2.4	2.5	2.2	2.8	5.8
1999	1.8	4.1	2.8	2.8	1.1	2.5	2.5	2.3	2.9	:
2000	1.8	4.3	2.9	2.6	1.2	2.5	2.6	2.3	:	:
2001	1.7	4.4	2.8	2.6	1.4	2.6	2.6	2.4	:	:
2002	1.7	4.5	2.7	2.6	1.5	2.6	2.6	2.4	:	:

(1) EU-15 excluding DK, EL, S, UK.
(2) EU-15 excluding DK, S, UK.

Table 74

Other capital expenditure, including capital transfers ([1]);
EU Member States: ESA 95

	B	DK	D	EL	E	F	IRL	I	L	NL
1970	1.5	:	:	:	:	:	:	:	:	:
1971	1.3	0.4	:	:	:	:	:	:	:	:
1972	1.2	0.1	:	:	:	:	:	:	:	:
1973	1.3	0.5	:	:	:	:	:	:	:	:
1974	1.2	0.8	:	:	:	:	:	:	:	:
1975	1.1	0.7	:	:	:	:	:	:	:	:
1976	1.1	0.9	:	:	:	:	:	:	:	:
1977	1.1	0.7	:	:	:	:	:	:	:	:
1978	1.2	0.4	:	:	:	0.6	:	:	:	:
1979	2.2	0.3	:	:	:	0.8	:	:	:	:
1980	1.1	0.5	:	:	:	0.8	:	:	:	:
1981	3.6	1.0	:	:	:	0.9	:	:	:	:
1982	1.5	1.2	:	:	:	0.8	:	:	:	:
1983	3.7	1.0	:	:	:	0.7	:	:	:	:
1984	1.5	0.4	:	:	:	0.7	:	:	:	:
1985	1.3	0.4	:	:	:	0.7	:	:	:	:
1986	1.2	– 0.1	:	:	:	0.8	:	:	:	:
1987	1.2	– 0.2	:	:	:	0.8	:	:	:	:
1988	1.2	0.0	:	:	:	0.9	:	:	:	:
1989	0.8	0.1	:	:	:	0.9	:	:	:	:
1990	0.8	0.3	:	:	:	1.1	1.0	:	1.4	:
1991	0.9	0.3	1.9	:	:	0.8	1.0	:	1.6	:
1992	1.0	0.4	1.6	:	:	0.9	1.0	:	1.8	:
1993	1.3	0.4	1.5	:	:	0.8	1.1	:	1.5	:
1994	1.1	0.4	1.3	:	:	1.2	1.5	:	1.6	:
1995	1.0	0.5	1.6	0.2	2.5	1.5	1.6	2.5	1.4	0.4
1996	1.1	0.3	1.2	– 0.6	2.0	0.9	1.2	1.6	1.3	– 0.1
1997	1.5	0.4	1.2	– 0.2	1.9	0.8	1.1	1.3	1.2	– 0.2
1998	1.3	0.5	1.3	– 0.5	1.8	1.1	1.0	1.4	1.1	– 0.1
1999	1.4	0.4	1.3	– 0.3	2.0	1.1	3.1	1.4	0.9	0.0
2000	1.1	0.4	– 1.1	– 0.4	2.0	2.1	1.0	0.0	0.9	– 0.7
2001	0.9	– 0.1	1.2	– 0.4	2.0	0.9	1.0	1.2	0.9	– 0.1
2002	1.1	0.3	1.2	– 0.5	2.0	2.1	0.9	1.1	0.9	– 0.2

([1]) Including one-off proceeds (treated as negative expenditure) relative to the allocation of mobile phone licences (UMTS) as follows:
in 2000: D: DEM 99.4 bn, E: ESP 80 bn, I: ITL 26 721 bn, NL: NLG 5.9 bn, P: PTE 80 bn, UK: GBP 22.5 bn, A: ATS 10 bn;
in 2001: B: BEF 24 bn, DK: DKK 6.7 bn, F: FRF 105 bn.

(% of GDP at market prices)

	A	P	FIN	S	UK	EUR-11 (1)	EUR-12 (2)	EU-15	US	JP
1970	:	:	:	:	2.6	:	:	:	:	:
1971	:	:	:	:	2.1	:	:	:	:	:
1972	:	:	:	:	2.4	:	:	:	:	:
1973	:	:	:	:	2.7	:	:	:	:	:
1974	:	:	:	:	1.8	:	:	:	:	:
1975	:	:	1.4	:	1.7	:	:	:	:	:
1976	:	:	1.0	:	1.5	:	:	:	:	:
1977	:	:	0.9	:	1.6	:	:	:	:	:
1978	:	:	0.6	:	1.5	:	:	:	:	:
1979	:	:	0.6	:	1.2	:	:	:	:	:
1980	:	:	0.7	:	1.3	:	:	:	:	:
1981	:	:	0.6	:	2.5	:	:	:	:	:
1982	:	:	0.8	:	1.6	:	:	:	:	:
1983	:	:	0.7	:	1.4	:	:	:	:	:
1984	:	:	0.5	:	1.4	:	:	:	:	:
1985	:	:	0.5	:	1.2	:	:	:	:	:
1986	:	:	0.6	:	0.8	:	:	:	:	:
1987	:	:	0.5	:	0.5	:	:	:	:	:
1988	2.0	:	0.8	:	0.6	:	:	:	:	:
1989	1.8	:	0.4	:	0.7	:	:	:	:	:
1990	1.9	:	0.5	:	2.1	:	:	:	:	:
1991	2.0	:	0.7	:	1.4	:	:	:	:	:
1992	1.9	:	0.6	:	1.2	:	:	:	:	:
1993	2.0	:	0.6	2.3	1.3	:	:	:	:	:
1994	1.9	:	0.9	0.6	1.0	:	:	:	:	:
1995	2.0	1.4	0.6	0.6	1.2	1.7	1.7	1.6	:	:
1996	2.0	1.7	0.9	0.0	0.9	1.2	1.2	1.1	:	:
1997	2.0	1.6	0.3	0.6	0.7	1.1	1.1	1.0	:	:
1998	2.4	2.1	0.3	– 0.7	0.6	1.3	1.2	1.1	:	:
1999	2.0	2.3	0.3	0.1	0.6	1.3	1.3	1.1	:	:
2000	1.5	1.8	0.3	0.1	– 2.0	0.4	0.4	– 0.1	:	:
2001	1.9	2.3	0.3	0.1	0.3	1.1	1.1	0.9	:	:
2002	1.8	2.4	0.3	0.1	0.3	1.4	1.3	1.1	:	:

(1) EU-15 excluding DK, EL, S, UK.
(2) EU-15 excluding DK, S, UK.

Table 75a

Total expenditure;
EU Member States: former definition

	B	DK	D (1)	EL	E	F	IRL	I	L	NL
1970	40.9	40.7	38.5	23.9	20.7	37.1	34.2	32.6	28.5	40.1
1971	42.6	41.6	39.9	24.3	22.2	36.9	35.0	35.0	31.9	41.5
1972	43.9	41.2	40.7	23.9	21.8	37.2	33.8	36.8	32.2	42.1
1973	44.3	39.5	41.3	22.4	21.4	37.3	33.7	35.5	31.2	42.1
1974	44.4	43.3	44.3	25.8	21.9	38.3	41.2	34.9	30.9	44.0
1975	49.8	45.5	48.6	27.4	23.5	42.6	42.9	40.4	41.8	48.5
1976	50.7	44.9	47.7	27.4	24.7	43.0	42.6	39.0	42.3	48.9
1977	52.4	45.8	47.7	28.6	26.2	42.8	40.6	39.4	44.7	49.1
1978	53.7	47.3	47.2	28.9	27.9	43.9	41.0	42.1	44.2	50.7
1979	55.3	49.9	47.2	28.7	29.1	44.3	42.1	41.5	45.2	52.6
1980	56.2	53.1	48.0	28.8	31.6	45.4	46.1	42.8	47.7	54.4
1981	60.7	56.6	48.9	34.5	34.0	48.1	47.6	46.8	50.9	56.2
1982	61.0	57.8	49.3	35.3	35.7	49.8	49.8	48.3	48.7	58.3
1983	61.2	58.2	48.0	37.1	36.7	50.8	49.6	49.4	48.1	58.4
1984	59.8	57.0	47.6	38.6	37.1	51.4	48.4	50.2	45.2	57.3
1985	59.5	56.3	47.2	41.9	40.1	52.0	49.0	51.5	43.7	55.7
1986	59.1	52.8	46.5	41.0	40.1	51.5	48.9	51.7	42.5	55.6
1987	57.7	54.1	46.9	41.5	39.9	50.9	47.0	51.1	45.1	57.1
1988	55.3	56.8	46.4	42.4	39.6	49.9	43.9	51.2	:	55.4
1989	52.8	57.0	45.0	43.9	41.3	49.0	37.8	51.9	:	52.7
1990	52.8	56.1	45.3	48.4	42.3	49.7	38.0	53.8	:	52.8
1991	53.9	57.1	47.7	44.7	43.2	50.1	38.9	53.8	:	53.4
1991	53.9	57.1	46.8	44.7	43.2	50.1	38.9	53.8	:	53.4
1992	54.6	58.2	47.6	46.8	44.6	51.8	39.4	54.0	:	53.8
1993	55.8	60.7	48.8	49.0	47.6	54.1	39.2	57.1	:	53.9
1994	54.2	60.7	48.4	46.8	45.8	54.0	39.2	54.6	:	51.6
1995	52.9	59.2	49.0	48.5	45.0	53.8	36.8	52.9	:	50.4

(1) 1970–91: D_90.

(% of GDP at market prices)

	A	P	FIN	S	UK	EU-10 (1)	EU-11 (2)	EU-14 (3)	US	JP
1970	37.5	19.9	29.7	41.7	37.0	35.6	35.3	36.0	31.0	19.4
1971	38.1	19.9	31.1	43.7	36.9	36.8	36.5	37.0	31.0	20.9
1972	38.1	21.0	31.5	44.5	37.4	37.5	37.2	37.7	30.7	22.1
1973	39.6	20.2	30.2	43.1	38.2	37.5	37.2	37.6	29.7	22.3
1974	40.2	23.1	31.1	46.3	43.2	38.8	38.6	39.6	31.1	24.5
1975	44.1	28.6	37.4	47.1	44.6	43.0	42.8	43.3	33.7	27.2
1976	44.9	32.5	38.5	49.8	44.4	43.0	42.7	43.3	32.4	27.7
1977	44.5	30.8	40.3	55.4	41.8	43.3	43.0	43.5	31.3	28.9
1978	47.4	32.1	40.0	57.0	41.6	44.3	44.0	44.3	30.6	30.5
1979	46.6	32.2	39.0	58.4	41.1	44.4	44.1	44.3	30.5	31.6
1980	46.9	36.6	38.6	59.5	43.2	45.5	45.2	45.6	32.5	32.5
1981	48.2	42.5	39.6	61.9	44.5	47.7	47.5	47.7	32.9	33.4
1982	48.8	40.5	41.1	64.1	44.9	48.8	48.6	48.7	35.1	33.6
1983	48.7	41.4	42.8	63.8	45.0	49.1	48.9	49.0	35.3	33.9
1984	49.0	44.1	42.5	61.3	45.4	49.2	49.0	49.0	34.3	32.9
1985	50.0	43.3	44.2	62.7	44.2	49.6	49.5	49.3	35.1	32.2
1986	50.9	38.8	45.1	61.0	42.8	49.3	49.2	48.8	35.6	32.5
1987	51.3	37.8	45.7	57.3	41.1	49.2	49.1	48.3	35.3	32.7
1988	50.0	36.6	44.2	57.5	38.3	48.4	48.3	47.2	34.3	31.9
1989	48.6	35.6	42.5	57.9	37.8	47.6	47.6	46.6	34.2	31.1
1990	49.3	39.0	46.1	58.6	39.2	48.5	48.5	47.7	35.0	31.9
1991	50.4	41.3	54.5	60.6	39.8	49.7	49.6	48.7	35.7	31.4
1991	50.4	41.3	54.5	60.6	39.8	49.3	49.3	48.5	35.7	31.4
1992	51.1	41.2	59.5	66.3	42.3	50.2	50.2	49.8	36.3	32.3
1993	54.0	42.8	60.6	70.1	43.0	52.1	52.0	51.4	35.7	34.2
1994	53.4	42.1	59.5	66.9	42.5	51.1	51.0	50.5	34.5	34.9
1995	54.2	42.6	57.1	64.4	42.4	50.7	50.7	50.1	34.4	36.2

(1) EU-15 excluding DK, EL, L, S, UK; 1970–91: including D_90.
(2) EU-15 excluding DK, L, S, UK; 1970–91: including D_90.
(3) EU-15 excluding L; 1970–91: including D_90.

Table 75b

Total expenditure ([1]);
EU Member States: ESA 95

	B	DK	D	EL	E	F	IRL	I	L	NL
1970	42.3	:	:	:	:	:	:	:	:	:
1971	43.6	42.8	:	:	:	:	:	:	:	:
1972	44.7	42.5	:	:	:	:	:	:	:	:
1973	44.9	40.1	:	:	:	:	:	:	:	:
1974	44.7	44.3	:	:	:	:	:	:	:	:
1975	50.4	46.1	:	:	:	:	:	:	:	:
1976	50.8	45.8	:	:	:	:	:	:	:	:
1977	52.7	46.5	:	:	:	:	:	:	:	:
1978	54.2	48.0	:	:	:	44.7	:	:	:	:
1979	56.6	50.5	:	:	:	45.3	:	:	:	:
1980	56.4	53.6	:	:	:	46.5	:	:	:	:
1981	63.3	57.3	:	:	:	49.3	:	:	:	:
1982	61.4	58.8	:	:	:	51.0	:	:	:	:
1983	64.1	59.0	:	:	:	51.7	:	:	:	:
1984	60.8	58.0	:	:	:	52.7	:	:	:	:
1985	60.0	56.8	:	:	:	53.4	:	:	:	:
1986	59.1	53.3	:	:	:	52.7	:	:	:	:
1987	57.1	55.0	:	:	:	51.9	:	:	:	:
1988	55.0	57.2	:	:	:	51.3	:	:	:	:
1989	53.3	57.3	:	:	:	50.4	:	:	:	:
1990	53.3	57.0	:	:	:	50.7	43.2	:	43.9	:
1991	54.3	57.8	47.1	:	:	51.6	44.8	:	46.2	:
1992	54.3	59.0	48.1	:	:	52.9	45.2	:	45.8	:
1993	55.9	61.7	49.3	:	:	55.2	45.1	:	46.4	:
1994	53.9	61.6	49.0	:	:	54.9	44.3	:	44.4	:
1995	53.0	60.3	49.6	47.8	45.0	55.2	41.6	53.4	45.1	51.4
1996	53.0	59.8	50.3	45.9	43.7	55.5	39.7	53.2	45.4	49.6
1997	51.6	58.1	49.2	44.7	42.2	55.0	37.8	51.2	43.3	48.2
1998	50.9	57.1	48.6	44.6	41.8	54.0	35.6	49.7	43.1	47.1
1999	50.7	56.0	48.6	45.2	40.7	53.9	35.8	49.2	42.7	46.5
2000	49.8	54.7	45.8	44.8	40.0	53.0	32.3	47.2	42.3	45.4
2001	49.0	53.9	47.5	44.2	39.8	51.0	31.0	47.7	42.3	44.6
2002	48.6	53.0	46.9	43.2	39.7	51.2	30.1	46.9	41.4	43.1

([1]) Including one-off proceeds (treated as negative expenditure) relative to the allocation of mobile phone licences (UMTS) as follows: in 2000: D: DEM 99.4 bn, E: ESP 80 bn, I: ITL 26 721 bn, NL: NLG 5.9 bn, P: PTE 80 bn, UK: GBP 22.5 bn, A: ATS 10 bn; in 2001: B: BEF 24 bn, DK: DKK 6.7 bn, F: FRF 105 bn.

(% of GDP at market prices)

	A	P	FIN	S	UK	EUR-11 (1)	EUR-12 (2)	EU-15	US	JP
1970	:	:	:	:	:	:	:	:	31.5	19.1
1971	:	:	:	:	:	:	:	:	31.5	20.6
1972	:	:	:	:	:	:	:	:	31.2	21.9
1973	:	:	:	:	:	:	:	:	30.2	22.1
1974	:	:	:	:	:	:	:	:	31.5	24.1
1975	:	:	40.3	:	:	:	:	:	34.1	26.9
1976	:	:	41.7	:	:	:	:	:	32.8	27.4
1977	:	:	43.3	:	:	:	:	:	31.8	28.7
1978	:	:	43.1	:	:	:	:	:	30.9	30.1
1979	:	:	41.9	:	:	:	:	:	30.8	31.1
1980	:	:	41.9	:	:	:	:	:	32.8	32.1
1981	:	:	42.8	:	:	:	:	:	33.2	33.0
1982	:	:	44.5	:	:	:	:	:	35.4	33.3
1983	:	:	46.1	:	:	:	:	:	35.5	33.7
1984	:	:	45.6	:	:	:	:	:	34.6	32.9
1985	:	:	47.6	:	:	:	:	:	35.4	32.1
1986	:	:	48.5	:	:	:	:	:	35.8	32.5
1987	:	:	49.0	:	44.3	:	:	:	35.5	32.8
1988	54.8	:	47.6	:	41.8	:	:	:	34.6	32.1
1989	53.3	:	45.7	:	41.3	:	:	:	34.4	31.2
1990	52.8	:	49.3	:	43.3	:	:	:	35.2	32.0
1991	53.9	:	58.5	:	44.9	:	:	:	35.9	31.2
1992	54.7	:	63.8	:	46.8	:	:	:	36.6	32.4
1993	57.7	:	65.1	:	46.9	:	:	:	35.9	34.2
1994	57.3	:	63.4	:	46.2	:	:	:	34.8	34.9
1995	57.2	44.8	59.9	67.9	45.8	51.6	51.5	51.4	34.7	36.1
1996	56.6	45.4	59.9	65.6	44.2	51.6	51.5	51.1	34.2	36.1
1997	53.8	44.5	56.8	63.8	42.0	50.3	50.2	49.5	33.3	35.3
1998	54.2	44.2	53.3	61.7	40.7	49.4	49.3	48.4	32.4	36.8
1999	53.6	45.2	51.9	61.8	39.9	49.1	49.0	48.0	31.9	39.9
2000	52.0	46.7	49.6	58.3	36.8	47.3	47.2	45.8	31.7	40.5
2001	50.4	47.5	47.6	56.8	39.0	47.2	47.2	46.1	31.4	39.5
2002	49.0	48.0	45.7	55.6	38.7	46.7	46.6	45.6	31.2	40.7

(1) EU-15 excluding DK, EL, S, UK.
(2) EU-15 excluding DK, S, UK.

Table 76a

Net lending (+) or net borrowing (–);
EU Member States: former definition

	B	DK	D [1] [2]	EL	E	F	IRL	I	L	NL [3]
1970	– 2.2	3.9	0.2	0.7	0.6	0.9	– 3.9	– 3.3	2.8	– 1.1
1971	– 3.2	3.8	– 0.2	0.1	– 0.5	0.6	– 3.8	– 4.8	2.2	– 1.0
1972	– 4.5	3.8	– 0.5	0.0	0.2	0.6	– 3.8	– 7.0	2.0	– 0.4
1973	– 3.7	5.1	1.2	– 0.1	1.1	0.6	– 4.2	– 6.5	3.3	0.7
1974	– 2.8	3.0	– 1.3	– 1.3	0.2	0.3	– 7.5	– 6.4	4.5	– 0.2
1975	– 5.0	– 1.3	– 5.6	– 2.9	0.0	– 2.3	– 11.5	– 10.5	1.0	– 2.7
1976	– 5.7	– 0.2	– 3.4	– 1.6	– 0.3	– 0.7	– 7.8	– 8.0	1.8	– 2.5
1977	– 5.8	– 0.6	– 2.4	– 2.5	– 0.6	– 0.8	– 6.9	– 7.1	2.8	– 0.8
1978	– 6.1	– 0.3	– 2.4	– 2.9	– 1.7	– 2.0	– 8.9	– 8.6	4.3	– 2.2
1979	– 6.9	– 1.6	– 2.6	– 2.4	– 1.6	– 0.8	– 10.4	– 8.3	0.6	– 2.9
1980	– 8.6	– 3.2	– 2.9	– 2.6	– 2.5	0.0	– 11.6	– 8.6	– 0.4	– 4.1
1981	– 12.6	– 6.7	– 3.7	– 9.0	– 3.7	– 1.9	– 12.2	– 11.5	– 3.1	– 5.1
1982	– 10.7	– 8.8	– 3.3	– 6.8	– 5.3	– 2.7	– 12.6	– 11.3	– 1.0	– 6.3
1983	– 11.4	– 6.9	– 2.6	– 7.5	– 4.5	– 3.1	– 10.7	– 10.6	1.9	– 5.5
1984	– 9.4	– 4.0	– 1.9	– 8.3	– 5.2	– 2.7	– 8.9	– 11.6	3.2	– 5.3
1985	– 8.9	– 2.0	– 1.2	– 11.6	– 6.1	– 2.8	– 10.2	– 12.5	6.2	– 3.5
1986	– 9.3	3.3	– 1.3	– 9.4	– 5.5	– 2.7	– 10.1	– 11.6	4.3	– 4.9
1987	– 7.6	2.3	– 1.9	– 9.1	– 3.7	– 1.9	– 8.1	– 11.0	2.7	– 5.7
1988	– 6.7	1.5	– 2.2	– 11.4	– 3.3	– 1.6	– 4.2	– 10.7	:	– 4.4
1989	– 6.1	0.3	0.1	– 14.2	– 3.5	– 1.2	– 1.7	– 9.8	:	– 4.6
1990	– 5.4	– 1.0	– 2.1	– 15.9	– 4.1	– 1.5	– 2.2	– 11.0	4.7	– 4.9
1991	– 6.2	– 2.4	– 3.4	– 11.4	– 4.3	– 2.0	– 2.3	– 10.0	1.8	– 2.8
1991	– 6.2	– 2.4	– 3.2	– 11.4	– 4.3	– 2.0	– 2.3	– 10.0	1.8	– 2.8
1992	– 6.9	– 2.2	– 2.8	– 12.6	– 4.0	– 3.9	– 2.4	– 9.5	0.7	– 3.8
1993	– 7.2	– 2.8	– 3.5	– 13.6	– 6.7	– 5.6	– 2.3	– 9.4	1.6	– 3.1
1994	– 4.8	– 2.6	– 2.6	– 9.9	– 6.1	– 5.6	– 1.6	– 9.1	2.6	– 3.6
1995	– 3.9	– 2.2	– 3.4	– 10.5	– 7.0	– 4.8	– 2.1	– 7.6	1.8	– 3.8

(1) 1970–91: D_90.
(2) Not including unification-related debt and asset assumptions by the federal government in 1995 (Treuhand, eastern housing companies and Deutsche Kreditbank) equal to DEM 227.5 bn.
(3) Not including for 1995 a net amount of NLG 32.84 bn of exceptional expenditure related to the reform of the financing of the social housing societies.

(% of GDP at market prices)

	A	P	FIN	S	UK	EU-10 (1)	EU-11 (2)	EU-14 (3)	US	JP
1970	1.1	2.9	4.2	4.2	3.0	– 0.3	– 0.3	0.5	– 2.0	1.6
1971	1.4	2.2	4.3	5.0	1.3	– 0.9	– 0.9	– 0.2	– 2.8	1.1
1972	1.9	1.0	3.7	4.2	– 1.3	– 1.3	– 1.3	– 1.0	– 1.3	– 0.1
1973	1.2	1.7	5.6	3.9	– 2.7	– 0.4	– 0.4	– 0.4	– 0.2	0.5
1974	1.2	– 1.0	4.5	1.9	– 3.8	– 1.4	– 1.4	– 1.5	– 1.0	0.4
1975	– 2.4	– 4.0	4.5	2.6	– 4.5	– 4.5	– 4.5	– 4.1	– 5.2	– 2.8
1976	– 3.6	– 5.4	7.0	4.3	– 4.9	– 3.0	– 3.0	– 2.8	– 3.3	– 3.7
1977	– 2.2	– 4.0	5.4	1.6	– 3.2	– 2.5	– 2.5	– 2.4	– 2.2	– 3.8
1978	– 2.6	– 6.1	3.1	– 0.4	– 4.4	– 3.4	– 3.3	– 3.3	– 1.3	– 5.5
1979	– 2.3	– 5.6	2.6	– 2.8	– 3.3	– 3.2	– 3.1	– 3.1	– 0.9	– 4.7
1980	– 1.6	– 8.5	3.3	– 3.9	– 3.4	– 3.4	– 3.4	– 3.4	– 2.6	– 4.4
1981	– 1.7	– 12.5	4.4	– 5.1	– 2.6	– 5.0	– 5.1	– 4.7	– 2.2	– 3.8
1982	– 3.3	– 8.4	2.5	– 6.7	– 2.5	– 5.3	– 5.3	– 5.0	– 4.9	– 3.6
1983	– 3.8	– 6.8	0.9	– 4.8	– 3.3	– 5.0	– 5.1	– 4.8	– 5.6	– 3.6
1984	– 2.5	– 10.3	2.7	– 2.8	– 3.9	– 4.9	– 4.9	– 4.7	– 4.8	– 2.1
1985	– 2.4	– 10.2	2.8	– 3.7	– 2.9	– 4.8	– 4.9	– 4.5	– 5.1	– 0.8
1986	– 3.6	– 5.7	3.3	– 1.2	– 2.5	– 4.7	– 4.8	– 4.1	– 5.3	– 0.9
1987	– 4.2	– 5.4	1.0	4.1	– 1.6	– 4.4	– 4.5	– 3.6	– 4.4	0.5
1988	– 3.0	– 3.4	4.0	3.4	0.7	– 4.1	– 4.2	– 3.0	– 3.7	1.5
1989	– 2.7	– 2.3	6.2	5.2	1.0	– 3.1	– 3.3	– 2.2	– 3.3	2.5
1990	– 2.4	– 4.9	5.3	4.0	– 0.9	– 4.2	– 4.4	– 3.5	– 4.4	2.9
1991	– 3.0	– 5.9	– 1.5	– 1.1	– 2.3	– 4.6	– 4.7	– 4.2	– 5.0	2.9
1991	– 3.0	– 5.9	– 1.5	– 1.1	– 2.3	– 4.5	– 4.6	– 4.1	– 5.0	2.9
1992	– 1.9	– 2.9	– 5.7	– 7.5	– 6.1	– 4.7	– 4.8	– 5.0	– 5.9	1.5
1993	– 4.2	– 5.9	– 7.9	– 11.9	– 7.8	– 5.5	– 5.6	– 6.0	– 5.0	– 1.6
1994	– 4.9	– 5.9	– 6.0	– 9.9	– 6.7	– 5.0	– 5.1	– 5.4	– 3.7	– 2.3
1995	– 5.0	– 5.6	– 5.0	– 7.5	– 5.4	– 4.8	– 4.9	– 5.0	– 3.1	– 3.6

(1) EU-15 excluding DK, EL, L, S, UK; 1970–91: including D_90.
(2) EU-15 excluding DK, L, S, UK; 1970–91: including D_90.
(3) EU-15 excluding L; 1970–91: including D_90.

Table 76b

Net lending (+) or net borrowing (–); ([1])
EU Member States: ESA 95

	B	DK	D ([2])	EL	E	F	IRL	I	L	NL ([3])
1970	– 2.4	:	:	:	:	:	:	:	:	:
1971	– 3.4	5.0	:	:	:	:	:	:	:	:
1972	– 5.0	5.1	:	:	:	:	:	:	:	:
1973	– 4.1	5.0	:	:	:	:	:	:	:	:
1974	– 3.1	3.8	:	:	:	:	:	:	:	:
1975	– 5.6	– 1.3	:	:	:	:	:	:	:	:
1976	– 6.2	0.2	:	:	:	:	:	:	:	:
1977	– 6.0	0.4	:	:	:	:	:	:	:	:
1978	– 6.7	0.4	:	:	:	– 1.3	:	:	:	:
1979	– 8.6	– 0.7	:	:	:	– 0.1	:	:	:	:
1980	– 9.5	– 2.4	:	:	:	0.0	:	:	:	:
1981	– 15.8	– 5.9	:	:	:	– 2.2	:	:	:	:
1982	– 12.6	– 8.4	:	:	:	– 2.9	:	:	:	:
1983	– 14.8	– 6.4	:	:	:	– 2.8	:	:	:	:
1984	– 10.9	– 3.7	:	:	:	– 2.8	:	:	:	:
1985	– 10.3	– 1.4	:	:	:	– 3.0	:	:	:	:
1986	– 10.1	3.3	:	:	:	– 3.2	:	:	:	:
1987	– 7.9	2.5	:	:	:	– 2.0	:	:	:	:
1988	– 7.3	1.5	:	:	:	– 2.5	:	:	:	:
1989	– 7.6	0.3	:	:	:	– 1.8	:	:	:	:
1990	– 6.7	– 1.0	:	:	:	– 2.1	– 2.8	:	4.6	:
1991	– 7.4	– 2.4	– 3.0	:	:	– 2.4	– 2.9	:	1.3	:
1992	– 8.0	– 2.2	– 2.5	:	:	– 4.2	– 3.0	:	2.5	:
1993	– 7.3	– 2.9	– 3.1	:	:	– 6.0	– 2.7	:	4.8	:
1994	– 5.0	– 2.4	– 2.4	:	:	– 5.5	– 2.0	:	4.4	:
1995	– 4.3	– 2.3	– 3.5	– 10.2	– 6.6	– 5.5	– 2.2	– 7.6	2.3	– 4.2
1996	– 3.8	– 1.0	– 3.4	– 7.8	– 4.9	– 4.1	– 0.2	– 7.1	2.6	– 1.8
1997	– 1.9	0.5	– 2.7	– 4.7	– 3.2	– 3.0	0.7	– 2.7	3.4	– 1.1
1998	– 0.9	1.2	– 2.1	– 3.1	– 2.6	– 2.7	2.1	– 2.8	3.7	– 0.7
1999	– 0.7	2.8	– 1.4	– 1.8	– 1.1	– 1.8	1.9	– 1.9	4.4	1.0
2000	0.0	2.6	1.4	– 0.8	– 0.3	– 1.4	4.2	– 0.1	4.9	1.8
2001	0.7	3.3	– 1.5	– 0.3	0.1	0.0	4.5	– 1.1	4.2	0.6
2002	0.8	3.1	– 1.2	0.3	0.2	– 0.5	4.6	– 1.0	3.6	1.6

([1]) Including one-off proceeds relative to the allocation of mobile phone licences (UMTS) as follows:
in 2000: D: DEM 99.4 bn, E: ESP 80 bn, I: ITL 26 721 bn, NL: NLG 5.9 bn, P: PTE 80 bn, UK: GBP 22.5 bn; A: ATS 10 bn;
in 2001: B: BEF 24 bn, DK: DKK 6.7 bn, F: FRF 105 bn.

([2]) Not including unification-related debt and asset assumptions by the federal government in 1995 (Treuhand, eastern housing companies and Deutsche Kreditbank) equal to DEM 227.5 bn.

([3]) Not including for 1995 a net amount of NLG 32.84 bn of exceptional expenditure related to the reform of the financing of the social housing societies.

(% of GDP at market prices)

	A	P	FIN	S	UK	EUR-11 (1)	EUR-12 (2)	EU-15	US	JP
1970	:	:	:	:	2.6	:	:	:	– 2.0	1.6
1971	:	:	:	:	1.5	:	:	:	– 2.8	1.1
1972	:	:	:	:	– 1.7	:	:	:	– 1.3	– 0.1
1973	:	:	:	:	– 3.3	:	:	:	– 0.2	0.5
1974	:	:	:	:	– 3.6	:	:	:	– 1.0	0.4
1975	:	:	4.9	:	– 4.5	:	:	:	– 5.2	– 2.8
1976	:	:	7.6	:	– 4.7	:	:	:	– 3.3	– 3.7
1977	:	:	6.2	:	– 3.3	:	:	:	– 2.2	– 3.8
1978	:	:	3.7	:	– 4.3	:	:	:	– 1.3	– 5.5
1979	:	:	3.2	:	– 3.1	:	:	:	– 0.9	– 4.7
1980	:	:	3.5	:	– 3.3	:	:	:	– 2.6	– 4.4
1981	:	:	4.8	:	– 3.9	:	:	:	– 2.2	– 3.8
1982	:	:	3.0	:	– 2.8	:	:	:	– 4.9	– 3.6
1983	:	:	1.4	:	– 3.3	:	:	:	– 5.6	– 3.6
1984	:	:	3.2	:	– 4.0	:	:	:	– 4.8	– 2.1
1985	:	:	3.3	:	– 2.9	:	:	:	– 5.1	– 0.8
1986	:	:	3.8	:	– 2.6	:	:	:	– 5.3	– 0.9
1987	:	:	1.4	:	– 1.9	:	:	:	– 4.4	0.5
1988	– 3.5	:	5.1	:	0.6	:	:	:	– 3.7	1.5
1989	– 3.1	:	6.7	:	0.9	:	:	:	– 3.3	2.5
1990	– 2.4	:	5.3	:	– 1.5	:	:	:	– 4.4	2.9
1991	– 3.0	:	– 1.1	:	– 2.8	:	:	:	– 5.0	2.9
1992	– 2.0	:	– 5.6	:	– 6.5	:	:	:	– 5.9	1.5
1993	– 4.2	:	– 7.3	– 11.9	– 8.0	:	:	:	– 5.0	– 1.6
1994	– 5.0	:	– 5.7	– 10.8	– 6.8	:	:	:	– 3.7	– 2.3
1995	– 5.1	– 4.6	– 3.7	– 7.9	– 5.8	– 5.0	– 5.0	– 5.2	– 3.1	– 3.6
1996	– 3.8	– 4.0	– 3.2	– 3.4	– 4.4	– 4.2	– 4.3	– 4.2	– 2.2	– 4.2
1997	– 1.7	– 2.6	– 1.5	– 2.0	– 2.0	– 2.6	– 2.6	– 2.4	– 1.0	– 3.3
1998	– 2.3	– 2.3	1.3	1.9	0.4	– 2.1	– 2.2	– 1.5	0.3	– 10.4
1999	– 2.1	– 2.0	1.9	1.9	1.3	– 1.3	– 1.3	– 0.7	1.0	– 8.9
2000	– 1.3	– 1.5	4.2	3.5	4.5	0.3	0.3	1.2	2.0	– 8.9
2001	– 0.8	– 1.4	4.4	3.6	2.0	– 0.5	– 0.5	0.2	2.4	– 7.9
2002	– 0.5	– 1.4	4.9	4.1	2.0	– 0.3	– 0.3	0.3	2.6	– 7.8

(1) EU-15 excluding DK, EL, S, UK.
(2) EU-15 excluding DK, S, UK.

Table 77a

Net lending (+) or net borrowing (–) excluding interest;
EU Member States: former definition

	B	DK	D (1) (2)	EL	E	F	IRL	I	L	NL (3)
1970	1.0	5.2	1.2	1.5	1.2	1.9	– 0.3	– 1.6	3.7	1.6
1971	– 0.1	5.1	0.8	1.0	0.0	1.5	– 0.4	– 2.9	3.2	1.8
1972	– 1.4	5.1	0.5	0.8	0.8	1.4	– 0.5	– 4.9	2.9	2.2
1973	– 0.6	6.3	2.3	0.8	1.7	1.3	– 0.9	– 4.1	4.1	3.3
1974	0.5	4.2	– 0.1	– 0.3	0.6	1.1	– 3.9	– 3.6	5.2	2.6
1975	– 1.6	– 0.1	– 4.2	– 1.7	0.5	– 1.2	– 7.4	– 6.9	1.7	0.2
1976	– 2.1	1.1	– 1.9	– 0.3	0.1	0.3	– 3.1	– 4.0	2.4	0.4
1977	– 1.8	1.2	– 0.7	– 1.3	– 0.1	0.3	– 2.0	– 2.7	3.6	2.2
1978	– 1.8	1.8	– 0.8	– 1.5	– 1.1	– 0.7	– 3.5	– 3.4	5.1	1.0
1979	– 1.9	1.8	– 0.8	– 0.6	– 1.0	0.6	– 4.8	– 3.2	1.3	0.5
1980	– 2.7	0.7	– 1.0	– 0.6	– 1.8	1.4	– 5.6	– 3.2	0.7	– 0.3
1981	– 4.9	– 1.6	– 1.4	– 6.4	– 3.0	0.1	– 5.5	– 5.3	– 1.8	– 0.7
1982	– 1.7	– 3.0	– 0.5	– 4.0	– 4.4	– 0.7	– 4.4	– 4.2	0.4	– 1.3
1983	– 2.3	0.8	0.4	– 3.9	– 3.3	– 0.6	– 2.3	– 3.2	3.4	0.0
1984	0.1	5.3	1.1	– 4.0	– 3.3	– 0.1	– 0.4	– 3.6	4.7	0.6
1985	1.4	7.6	1.9	– 6.7	– 4.2	0.0	– 0.9	– 4.5	7.1	2.6
1986	1.6	11.9	1.7	– 4.1	– 1.8	0.1	– 1.3	– 3.1	5.2	1.3
1987	2.8	10.4	1.0	– 2.5	0.5	0.9	0.7	– 3.0	3.7	0.4
1988	3.2	9.1	0.7	– 4.0	0.0	1.0	4.0	– 2.8	:	1.7
1989	4.0	7.5	2.8	– 6.8	0.4	1.5	5.7	– 1.1	:	1.2
1990	5.0	6.3	0.6	– 5.9	– 0.3	1.4	5.3	– 1.6	5.2	0.8
1991	3.8	4.9	– 0.6	– 2.1	– 0.6	0.9	5.0	0.1	2.2	3.1
1991	3.8	4.9	– 0.6	– 2.1	– 0.6	0.9	5.0	0.1	2.2	3.1
1992	3.7	4.4	0.4	– 1.1	0.3	– 0.7	4.3	1.9	1.1	2.3
1993	3.5	4.5	– 0.2	– 1.0	– 1.7	– 2.3	4.0	2.6	1.9	2.9
1994	5.2	4.1	0.7	4.0	– 1.4	– 2.2	4.0	1.8	3.0	2.0
1995	4.9	4.2	0.3	2.3	– 1.7	– 1.1	2.9	3.6	2.0	1.9

(1) 1970–91: D_90.
(2) Not including unification-related debt and asset assumptions by the federal government in 1995 (Treuhand, eastern housing companies and Deutsche Kreditbank) equal to DEM 227.5 bn.
(3) Not including for 1995 a net amount of NLG 32.84 bn of exceptional expenditure related to the reform of the financing of the social housing societies.

(% of GDP at market prices)

	A	P	FIN	S	UK	EU-10 (1)	EU-11 (2)	EU-14 (3)	US	JP
1970	2.2	3.4	5.2	6.0	6.9	1.0	1.0	2.3	0.2	2.2
1971	2.4	2.7	5.3	6.9	5.0	0.4	0.4	1.6	– 0.6	1.8
1972	2.9	1.6	4.6	6.1	2.3	0.0	0.0	0.7	0.8	0.6
1973	2.2	2.1	6.3	5.7	0.9	0.9	0.9	1.3	2.0	1.4
1974	2.2	– 0.6	5.1	3.8	0.4	0.1	0.1	0.3	1.4	1.3
1975	– 1.1	– 3.4	5.1	4.7	– 0.6	– 2.8	– 2.7	– 2.1	– 2.8	– 1.6
1976	– 2.0	– 4.5	7.6	6.3	– 0.7	– 1.1	– 1.1	– 0.7	– 0.8	– 2.2
1977	– 0.5	– 2.6	6.2	4.0	1.1	– 0.4	– 0.4	0.0	0.4	– 1.9
1978	– 0.5	– 3.8	4.0	2.1	– 0.2	– 1.1	– 1.1	– 0.8	1.4	– 3.3
1979	– 0.1	– 3.2	3.6	0.1	1.1	– 0.8	– 0.8	– 0.4	2.0	– 2.1
1980	0.8	– 5.8	4.3	0.1	1.3	– 0.8	– 0.8	– 0.4	0.6	– 1.3
1981	1.0	– 7.9	5.5	0.0	2.4	– 1.8	– 1.9	– 1.1	1.5	– 0.3
1982	– 0.3	– 3.4	3.7	– 0.1	2.6	– 1.6	– 1.7	– 0.9	– 0.6	0.2
1983	– 0.9	– 0.8	2.5	2.1	1.3	– 1.0	– 1.0	– 0.5	– 1.2	0.6
1984	0.8	– 3.6	4.4	4.5	1.0	– 0.5	– 0.6	– 0.1	0.1	2.3
1985	1.0	– 2.7	4.7	4.4	2.1	– 0.4	– 0.5	0.3	0.0	3.6
1986	0.0	1.9	5.0	5.9	2.1	0.0	0.0	0.7	– 0.2	3.5
1987	– 0.3	2.1	2.7	10.3	2.7	0.2	0.1	1.1	0.7	4.8
1988	0.9	3.3	5.6	8.8	4.6	0.3	0.3	1.4	1.3	5.6
1989	1.1	3.7	7.6	10.4	4.7	1.5	1.4	2.4	1.8	6.5
1990	1.6	2.9	6.7	8.9	2.2	0.7	0.5	1.2	0.8	6.7
1991	1.2	1.8	0.4	3.9	0.4	0.4	0.4	0.6	0.3	6.6
1991	1.2	1.8	0.4	3.9	0.4	0.4	0.3	0.6	0.3	6.6
1992	2.2	4.1	– 3.1	– 2.3	– 3.4	0.8	0.7	0.1	– 0.9	5.2
1993	0.1	0.1	– 3.3	– 5.9	– 4.9	0.0	0.0	– 0.8	– 0.2	2.1
1994	– 0.9	0.2	– 1.0	– 3.4	– 3.6	0.3	0.3	– 0.2	1.0	1.4
1995	– 0.7	0.6	0.1	– 0.7	– 2.0	0.6	0.7	0.3	1.8	0.1

(1) EU-15 excluding DK, EL, L, S, UK; 1970–91: including D_90.
(2) EU-15 excluding DK, L, S, UK; 1970–91: including D_90.
(3) EU-15 excluding L; 1970–91: including D_90.

Table 77b

Net lending (+) or net borrowing (–) excluding interest ([1]);
EU Member States: ESA 95

	B	DK	D ([2])	EL	E	F	IRL	I	L	NL ([3])
1970	1.2	:	:	:	:	:	:	:	:	:
1971	0.4	6.4	:	:	:	:	:	:	:	:
1972	– 1.3	6.3	:	:	:	:	:	:	:	:
1973	– 0.3	6.3	:	:	:	:	:	:	:	:
1974	0.8	5.0	:	:	:	:	:	:	:	:
1975	– 1.5	– 0.1	:	:	:	:	:	:	:	:
1976	– 2.0	1.5	:	:	:	:	:	:	:	:
1977	– 1.2	2.2	:	:	:	:	:	:	:	:
1978	– 1.6	2.5	:	:	:	0.0	:	:	:	:
1979	– 2.8	2.7	:	:	:	1.2	:	:	:	:
1980	– 2.9	1.5	:	:	:	1.4	:	:	:	:
1981	– 7.4	– 0.9	:	:	:	– 0.3	:	:	:	:
1982	– 3.0	– 2.6	:	:	:	– 0.9	:	:	:	:
1983	– 4.9	1.4	:	:	:	– 0.3	:	:	:	:
1984	– 0.8	5.6	:	:	:	– 0.2	:	:	:	:
1985	0.9	8.1	:	:	:	– 0.2	:	:	:	:
1986	1.3	11.8	:	:	:	– 0.3	:	:	:	:
1987	2.7	10.5	:	:	:	0.8	:	:	:	:
1988	3.0	9.1	:	:	:	0.1	:	:	:	:
1989	3.7	7.5	:	:	:	0.9	:	:	:	:
1990	5.1	6.3	:	:	:	0.8	5.1	:	4.9	:
1991	4.0	4.9	– 0.1	:	:	0.6	4.8	:	1.7	:
1992	3.2	4.4	0.7	:	:	– 0.9	4.2	:	2.8	:
1993	3.8	4.4	0.2	:	:	– 2.5	3.9	:	5.2	:
1994	4.6	4.2	0.9	:	:	– 2.0	4.1	:	4.8	:
1995	5.0	4.1	0.2	1.0	– 1.4	– 1.8	3.2	3.9	2.6	1.7
1996	5.1	5.1	0.3	2.8	0.4	– 0.1	4.4	4.4	2.9	3.8
1997	6.1	6.2	0.9	3.6	1.6	0.7	4.9	6.7	3.8	4.1
1998	6.7	6.5	1.5	4.7	1.7	0.9	5.5	5.3	4.1	4.2
1999	6.5	7.5	2.1	5.8	2.5	1.6	4.4	4.9	4.7	5.4
2000	7.0	7.0	4.9	6.5	3.1	1.8	6.2	6.4	5.2	5.7
2001	7.4	7.3	1.8	6.5	3.4	3.2	6.2	5.1	4.5	4.0
2002	7.1	6.8	2.0	6.5	3.5	2.6	6.1	5.0	3.9	4.6

([1]) Including one-off proceeds relative to the allocation of mobile phone licences (UMTS) as follows:
in 2000: D: DEM 99.4 bn, E: ESP 80 bn, I: ITL 26 721 bn, NL: NLG 5.9 bn, P: PTE 80 bn, UK: GBP 22.5 bn, A: ATS 10 bn;
in 2001: B: BEF 24 bn, DK: DKK 6.7 bn, F: FRF 105 bn.

([2]) Not including unification-related debt and asset assumptions by the federal government in 1995 (Treuhand, eastern housing companies and Deutsche Kreditbank) equal to DEM 227.5 bn.

([3]) Not including for 1995 a net amount of NLG 32.84 bn of exceptional expenditure related to the reform of the financing of the social housing societies.

(% of GDP at market prices)

	A	P	FIN	S	UK	EUR-11 (1)	EUR-12 (2)	EU-15	US	JP
1970	:	:	:	:	7.3	:	:	:	0.2	2.2
1971	:	:	:	:	6.0	:	:	:	– 0.6	1.8
1972	:	:	:	:	2.8	:	:	:	0.8	0.6
1973	:	:	:	:	1.3	:	:	:	2.1	1.4
1974	:	:	:	:	1.7	:	:	:	1.4	1.3
1975	:	:	5.5	:	0.6	:	:	:	– 2.8	– 1.6
1976	:	:	8.3	:	0.7	:	:	:	– 0.8	– 2.2
1977	:	:	7.0	:	2.2	:	:	:	0.4	– 1.9
1978	:	:	4.5	:	1.0	:	:	:	1.4	– 3.3
1979	:	:	4.1	:	2.3	:	:	:	2.0	– 2.1
1980	:	:	4.5	:	2.4	:	:	:	0.6	– 1.3
1981	:	:	5.9	:	2.2	:	:	:	1.5	– 0.3
1982	:	:	4.2	:	3.2	:	:	:	– 0.6	0.2
1983	:	:	2.9	:	2.4	:	:	:	– 1.2	0.6
1984	:	:	4.8	:	2.0	:	:	:	0.1	2.3
1985	:	:	5.1	:	3.1	:	:	:	0.0	3.6
1986	:	:	5.4	:	3.1	:	:	:	– 0.2	3.5
1987	:	:	3.1	:	2.8	:	:	:	0.7	4.8
1988	0.5	:	6.7	:	4.8	:	:	:	1.3	5.6
1989	0.8	:	8.1	:	5.0	:	:	:	1.8	6.5
1990	1.6	:	6.7	:	2.2	:	:	:	0.8	6.7
1991	1.2	:	0.8	:	0.4	:	:	:	0.3	6.6
1992	2.3	:	– 3.1	:	– 3.4	:	:	:	– 0.9	5.2
1993	0.1	:	– 2.8	– 5.8	– 4.9	:	:	:	– 0.2	2.1
1994	– 0.9	:	– 1.5	– 4.2	– 3.4	:	:	:	1.0	1.4
1995	– 0.8	1.7	0.3	– 0.8	– 2.1	0.5	0.5	0.2	1.8	0.1
1996	0.4	1.4	1.1	3.7	– 0.7	1.4	1.4	1.3	2.5	– 0.5
1997	2.1	1.6	2.7	4.8	1.7	2.5	2.5	2.5	3.5	0.3
1998	1.5	1.2	5.0	8.0	4.0	2.6	2.6	3.1	4.6	– 6.6
1999	1.4	1.2	5.4	7.3	4.3	3.0	3.0	3.5	4.9	– 4.8
2000	2.1	1.7	7.4	7.7	7.1	4.4	4.4	5.1	5.6	– 3.7
2001	2.6	1.9	7.3	7.3	4.4	3.4	3.5	3.8	5.7	– 2.1
2002	2.8	2.0	7.6	7.5	4.1	3.4	3.5	3.8	5.7	– 0.9

(1) EU-15 excluding DK, EL, S, UK.
(2) EU-15 excluding DK, S, UK.

Table 78

General government consolidated gross debt ([1])

	B	DK	D ([2])	EL	E	F	IRL	I	L	NL
1970	65.2	:	18.6	21.9	15.1	:	51.5	37.9	18.7	:
1971	64.3	12.0	18.6	22.4	15.8	:	49.3	42.8	18.8	:
1972	64.0	10.6	18.8	23.4	14.4	:	46.3	49.2	16.7	:
1973	61.8	8.3	18.3	19.3	12.7	:	43.3	51.2	13.6	:
1974	57.7	5.8	19.4	25.8	12.2	:	54.2	51.4	11.1	:
1975	59.4	6.5	24.8	22.4	12.4	:	61.1	57.4	12.1	40.8
1976	60.0	10.5	26.3	21.8	12.2	:	66.2	56.3	11.0	40.5
1977	63.5	14.1	27.3	22.0	13.3	20.8	62.9	56.2	11.1	39.9
1978	67.2	23.6	28.7	28.5	13.4	21.9	64.9	61.3	10.2	41.3
1979	70.2	29.4	29.7	27.9	15.1	21.9	70.7	60.6	9.5	43.2
1980	78.5	36.4	31.7	27.7	17.0	20.4	72.3	58.0	9.2	46.0
1981	91.8	48.1	35.4	33.0	20.8	22.6	78.0	60.1	9.6	49.9
1982	102.4	60.0	38.7	37.3	25.7	26.3	87.7	65.1	9.5	55.3
1983	113.3	69.0	40.2	42.9	31.0	27.7	98.0	70.0	10.1	61.4
1984	117.5	72.7	41.0	51.2	37.0	30.0	102.3	75.3	10.0	65.5
1985	122.2	69.8	41.7	59.8	42.4	31.8	105.3	82.0	9.5	70.0
1986	127.4	61.9	41.6	62.2	43.7	32.3	117.1	86.3	9.2	72.0
1987	131.9	57.9	42.6	69.9	44.0	34.5	118.2	90.5	8.1	74.5
1988	131.9	60.0	43.1	76.4	40.4	34.5	113.8	92.6	6.5	77.5
1989	128.2	57.8	41.8	80.4	41.8	35.2	103.9	95.4	5.3	77.5
1990	128.6	57.7	43.5	89.0	43.7	36.3	97.5	97.3	4.5	77.1
1991	130.4	62.3	44.4	91.1	44.4	36.7	97.3	100.6	4.0	77.2
1991	130.4	62.3	40.4	91.1	44.4	36.7	97.3	100.6	4.0	77.2
1992	131.8	66.3	43.1	97.5	46.8	40.6	94.7	107.7	4.8	78.0
1993	138.8	78.0	47.2	110.2	58.6	46.1	98.8	118.2	5.8	79.1
1994	136.9	73.5	49.4	107.9	61.1	49.6	92.6	123.9	5.3	75.5
1995	133.8	69.3	57.1	108.7	64.0	54.0	84.4	123.3	5.6	77.0
1996	130.5	65.1	59.8	111.3	68.1	57.1	74.3	122.1	6.2	75.2
1997	125.2	61.4	60.9	108.3	66.7	59.3	65.1	119.8	6.0	70.0
1998	119.7	55.8	60.7	105.5	64.6	59.7	55.0	116.2	6.4	66.6
1999	115.9	52.6	61.1	104.6	63.3	58.9	50.1	115.1	6.0	62.9
2000	111.2	48.5	60.0	103.9	61.0	58.3	41.6	110.7	5.5	56.9
2001	105.3	44.6	57.8	99.8	58.1	56.9	33.3	105.8	5.3	52.7
2002	99.2	40.9	56.6	96.4	55.6	55.7	26.3	102.3	5.1	47.5

([1]) ESA 95 as from 1996.
([2]) 1970–91: D_90.

Definitions:
General government gross debt is defined by Article 1 (5) of Council Regulation (EC) No 3605/93 (Article 1(5)), as amended by Council Regulation (EC) No 475/2000. According to the said regulation:

'Government debt means the total gross debt at nominal value outstanding at the end of the year of the sector of 'general government' (S.13), with the exception of those liabilities the corresponding financial assets of which are held by the sector of 'general government' (S.13).
Government debt is constituted by the liabilities of general government in the following categories: currency and deposits (AF.2); securities other than shares, excluding financial derivatives (AF.33) and loans (AF.4), as defined in ESA 95.
The nominal value of a liability outstanding at the end of the year is the face value.
The nominal value of an index-linked liability corresponds to its face value adjusted by the index-related change in the value of the principal accrued to the end of the year.
Liabilities denominated in a foreign currency, or exchanged from one foreign currency through contractual agreements to one or more other foreign currencies shall be converted into the other foreign currencies at the rate agreed upon in those contracts and shall be converted into the national currency on the basis of the representative market exchange rate prevailing on the last working day of each year.
Liabilities denominated in the national currency and exchanged through contractual agreements to a foreign currency shall be converted into the foreign currency at the rate agreed upon in those contracts and shall be converted into the national currency on the basis of the representative market exchange rate prevailing on the last working day of each year.
Liabilities denominated in a foreign currency and exchanged through contractual agreements to the national currency shall be converted into the national currency at the rate agreed upon in those contracts'.

(% of GDP at market prices)

	A	P	FIN	S	UK	EUR-11 (1)	EUR-12 (2)	EU-15 (3)
1970	18.8	:	11.8	27.0	81.3	:	:	:
1971	17.7	:	10.6	27.3	77.4	:	:	:
1972	16.9	:	9.7	27.2	72.0	:	:	:
1973	16.9	16.8	7.9	26.6	67.0	:	:	:
1974	17.1	16.4	6.3	26.9	67.2	:	:	:
1975	23.2	24.3	6.7	26.1	63.3	:	:	:
1976	26.6	29.9	6.3	24.4	62.6	:	:	:
1977	28.9	31.5	8.0	26.5	61.4	31.6	31.4	34.6
1978	32.6	34.5	11.4	30.6	58.9	33.6	33.5	36.5
1979	34.6	39.0	11.5	35.0	55.4	34.3	34.2	37.1
1980	36.1	35.3	11.6	39.6	55.0	35.2	35.1	38.4
1981	37.9	44.9	11.9	47.6	55.2	38.6	38.5	41.9
1982	40.3	48.2	14.3	56.8	54.1	42.9	42.7	45.5
1983	44.6	53.8	15.9	60.6	54.3	46.6	46.5	48.7
1984	47.2	59.3	15.7	62.1	56.3	49.5	49.6	51.6
1985	49.2	67.4	16.4	61.6	54.3	52.6	52.8	53.7
1986	53.7	66.0	17.1	61.3	52.7	54.3	54.4	54.6
1987	57.6	63.6	18.3	54.3	50.2	56.6	56.8	55.8
1988	58.8	63.1	17.1	48.8	43.6	57.0	57.3	54.9
1989	58.0	61.4	14.8	43.9	37.9	57.3	57.6	54.1
1990	57.3	63.4	14.5	42.1	35.2	58.6	59.0	54.9
1991	57.4	65.3	22.9	51.2	35.1	60.2	60.7	56.6
1991	57.4	65.3	22.9	51.2	35.1	58.5	59.0	55.3
1992	57.3	58.1	41.0	64.8	41.2	61.8	62.4	59.6
1993	61.9	61.3	57.3	75.1	47.8	66.8	67.5	65.3
1994	64.7	61.9	58.8	77.7	49.8	69.2	69.8	67.3
1995	68.5	63.9	57.1	76.6	52.1	72.3	72.9	70.2
1996	69.2	62.6	57.1	76.0	52.7	74.8	75.4	72.2
1997	64.7	59.3	54.1	75.0	51.1	74.6	75.3	71.1
1998	64.0	55.6	48.7	72.4	48.0	73.0	73.6	69.0
1999	64.6	55.4	46.6	65.7	45.7	72.1	72.7	67.5
2000	64.4	55.7	42.5	58.6	38.8	69.8	70.4	63.9
2001	62.8	56.2	39.3	52.7	34.8	66.9	67.5	60.7
2002	61.0	56.1	36.4	47.1	30.9	64.5	65.2	57.9

(1) EU-15 excluding DK, EL, S, UK; 1970–91: including D_90.
(2) EU-15 excluding DK, S, UK; 1970–91: including D_90.
(3) 1970–91: including D_90.

Table 79a

Budgetary expenditure of the European Communities

(Mio UA/EUA/ECU (1))

	ECSC operational budget	European Development Fund	Euratom (2)	EC general budget							Total
				EAGGF (3)	Social Fund	Regional Fund	Industry energy, research	Administration (4)	Other	Total EC	
1958	21.7	—	7.9	—	—	—	—	8.6	0.0	8.6	35.5
1959	30.7	51.2	39.1	—	—	—	—	20.3	4.9	25.2	146.2
1960	23.5	63.2	20.0	—	—	—	—	23.4	4.9	28.3	135.0
1961	26.5	172.0	72.5	—	8.6	—	—	27.9	2.9	39.4	305.0
1962	13.6	162.3	88.6	—	11.3	—	—	34.2	46.8	92.3	356.8
1963	21.9	55.5	106.4	—	4.6	—	—	37.2	42.3	84.1	267.9
1964	18.7	35.0	124.4	—	7.2	—	—	43.0	42.9	93.1	271.1
1965	37.3	248.8	120.0	102.7	42.9	—	—	48.1	7.4	201.1	607.2
1966	28.1	157.8	129.2	310.3	26.2	—	—	55.4	10.4	402.3	717.3
1967	10.4	105.8	158.5	562.0	35.6	—	—	60.4	17.1	675.1	949.8
1968	21.2	121.0	73.4	2 250.4	43.0	—	—	91.8	23.5	2 408.7	2 624.2
1969	40.7	104.8	59.2	3 818.0	50.5	—	—	105.6	77.1	4 051.2	4 255.9
1970	56.2	10.5	63.4	5 228.3	64.0	—	—	114.7	41.4	5 448.4	5 578.5
1971	37.4	236.1	—	1 883.6	56.5	—	65.0	132.1	152.2	2 289.3	2 562.8
1972	43.7	212.7	—	2 477.6	97.5	—	75.1	177.2	247.1	3 074.5	3 330.9
1973	86.9	210.0	—	3 768.8	269.2	—	69.1	239.4	294.4	4 641.0	4 937.9
1974	92.0	157.0	—	3 651.3	292.1	—	82.8	336.7	675.2	5 038.2	5 287.2
1975	127.4	71.0	—	4 586.6	360.2	150.0	99.0	375.0	642.8	6 213.6	6 412.0
1976	94.0	320.0	—	6 033.3	176.7	300.0	113.3	419.7	909.5	7 952.6	8 366.6
1977	93.0	244.7	—	6 463.5	325.2	372.5	163.3	497.0	883.4	8 704.9	9 042.6
1978	159.1	394.5	—	9 602.2	284.8	254.9	227.2	676.7	1 302.4	12 348.2	12 901.8
1979	173.9	480.0	—	10 735.5	595.7	671.5	288.0	863.9	1 447.9	14 602.5	15 256.4
1980	175.7	508.5	—	11 596.1	502.0	751.8	212.8	938.8	2 056.1	16 057.5 (7)	16 741.7
1981	261.0	658.0	—	11 446.0	547.0	2 264.0	217.6	1 035.4	3 024.6	18 546.0 (8)	19 465.0
1982	243.0	750.0	—	12 792.0	910.0	2 766.0 (5)	346.0	1 103.3	3 509.7	21 427.0 (9)	22 420.0
1983	300.0	752.0	—	16 331.3	801.0	2 265.5	1 216.2	1 161.6	2 989.9	24 765.5 (10)	25 817.5
1984	408.0	703.0	—	18 985.8	1 116.4	1 283.3	1 346.4	1 236.6	2 150.8	26 119.3 (11)	27 230.3
1985	453.0	698.0	—	20 546.4	1 413.0	1 624.3	706.9	1 332.6	2 599.8	28 223.0 (12)	29 374.0
1986	439.0	846.7	—	23 067.7	2 533.0	2 373.0	760.1	1 603.2	4 526.2	34 863.2	36 148.9
1987	399.3	837.9	—	23 939.4	2 542.2	2 562.3	964.8	1 740.0	3 720.5	35 469.2	36 706.4
1988	567.0	1 196.3	—	27 531.9	2 298.8	3 092.8	1 203.7	1 947.0	6 186.8	42 261.0	44 024.3
1989	404.0	1 297.0	—	25 868.8	2 676.1	3 920.0	1 353.0	2 063.0	9 978.9 (6)	45 859.8	47 560.8
1990	488.0	1 256.5	—	27 233.8	3 212.0	4 554.1	1 738.7	2 298.1	7 567.9	46 604.6	48 349.1
1991	495.0	1 191.0	—	33 443.2	3 869.3	5 179.9	1 918.8	2 519.2	9 655.6	56 586.0	58 272.0
1992	535.3	1 942.0	—	38 461.6	4 817.2	7 578.7	2 423.7	2 927.4	6 619.0	62 827.6	65 304.9
1993	551.8	1 353.6	—	37 135.3	5 097.2	8 172.4	2 833.8	3 296.4	9 704.6	66 239.7	68 145.1
1994	383.0	1 781.0	—	40 750.8	6 239.9	8 648.9	3 194.3	3 617.6	7 562.0	70 013.5	72 177.5
1995	268.0	1 850.0	—	40 246.8	6 497.5	10 530.5	3 294.5	3 691.2	7 694.7	71 955.2	74 673.2

(1) UA until 1977, EUA/ECU from 1978 onwards.
(2) Incorporated in the EC budget from 1971.
(3) This column includes, for the years to 1970, substantial amounts carried forward to following years.
(4) Commission, Council, Parliament, Court of Justice and Court of Auditors.
(5) Including surplus of ECU 82.4 million carried forward to 1981.
(6) Including ECU 1 173 million carried forward to 1982.
(7) Including ECU 1 819 million UK special measures.
(8) Including ECU 2 211 million carried forward to 1983.
(9) Including ECU 1 707 million carried forward to 1984.
(10) There was a small deficit in 1984 in respect of EC budget due largely to late payment of advances by some Member States.
(11) There was a cash deficit in 1985 of ECU 25 million due to late payment of advances by some Member States.
(12) Includes a surplus of ECU 5 080 million carried forward to 1990.

Sources: 1958–89: Management accounts; 1990–93: Court of Auditors, Report; 1994: General budget of the European Community; 95–2000: General budget of the European Union.

Table 79b

Budgetary expenditure of the European Communities

(Mio ECU/EUR ([1]))

	EAGGF Guarantee	Structural Funds	Community initiatives	Cohesion Fund	Other structural	Total structural	Internal policies	External policies	Administration	Other	Total budget
1994	37 465.0	17 555.7	1 860.2	1 679.0	433.9	21 528.8	3 733.8	3 348.3	3 617.6	320.0	70 013.5
1995	38 422.5	18 688.3	2 068.0	1 749.7	1 221.6	23 727.6	4 256.0	4 162.8	4 008.3	1 950.0	76 527.2
1996	41 328.0	21 099.2	2 204.6	1 919.3	782.5	26 005.6	4 780.3	4 718.2	4 128.6	927.7	81 888.4
1997	41 305.0	21 544.0	2 349.3	2 326.0	413.6	26 632.9	4 870.6	4 796.5	4 283.5	477.1	82 365.6
1998	40 937.0	23 084.4	2 558.8	2 648.8	302.7	28 594.7	4 678.5	4 528.5	4 353.4	437.0	83 529.2
1999	40 940.0	24 204.9	3 042.0	2 877.0	534.6	30 658.5	4 812.7	4 298.2	4 502.3	346.0	85 557.7
2000	41 493.9	25 539.1	2 950.8	2 800.0	667.1	31 957.0	5 518.6	5 510.6	4 703.7	203.1	89 386.9

([1]) 1994–98: ECU.

Table 80a

Budgetary receipts of the European Communities

(Mio UA/EUA/ECU ([1]))

	ECSC levies and other	European Development Fund contributions	Euratom contributions (research only)	EC budget						Total
					Own resources					
				Miscellaneous and contributions under special keys	Miscellaneous	Agricultural levies	Import duties	GNP contributions or VAT ([2]) ([3])	Total EC	
1958	44.0	116.0	7.9	0.02	—	—	—	5.9	5.9	173.8
1959	49.6	116.0	39.1	0.1	—	—	—	25.1	25.2	229.9
1960	53.3	116.0	20.0	0.2	—	—	—	28.1	28.3	217.6
1961	53.1	116.0	72.5	2.8	—	—	—	31.2	34.0	275.6
1962	45.3	116.0	88.6	2.1	—	—	—	90.2	92.3	342.2
1963	47.1	—	106.4	6.7	—	—	—	77.4	84.1	237.5
1964	61.3	—	124.4	2.9	—	—	—	90.1	93.1	278.7
1965	66.1	—	98.8	3.5	—	—	—	197.6	201.1	366.0
1966	71.2	—	116.5	3.9	—	—	—	398.3	402.2	590.0
1967	40.3	40.0	158.5	4.2	—	—	—	670.9	675.1	913.9
1968	85.4	90.0	82.0	—	—	—	—	—	2 408.6	2 666.0
1969	106.8	110.0	62.7	78.6	—	—	—	3 972.6	4 051.2	4 330.7
1970	100.0	130.0	67.7	121.1	—	—	—	5 327.3	5 448.4	5 746.1
1971	57.9	170.0	—	—	69.5	713.8	582.2	923.8	2 289.3	2 517.2
1972	61.1	170.0	—	—	80.9	799.6	957.4	1 236.6	3 074.5	3 305.6
1973	120.3	150.0	—	—	511.0	478.0	1 564.7	2 087.3	4 641.0	4 911.3
1974	124.6	150.0	—	—	65.3	323.6	2 684.4	1 964.8	5 038.2	5 312.8
1975	189.5	220.1	—	—	320.5	590.0	3 151.0	2 152.0	6 213.6	6 623.1
1976	129.6	311.0	—	—	282.8	1 163.7	4 064.6	2 482.1	7 993.1 ([7])	8 433.7
1977	123.0	410.0	—	—	504.7	1 778.5	3 927.2	2 494.5	8 704.9	9 237.9
1978	164.9	147.5	—	—	344.4	2 283.3	4 390.9	5 329.7	12 348.2	12 660.6
1979	168.4	480.0	—	—	230.3	2 143.4	5 189.1	7 039.8	14 602.5	15 251.0
1980	226.2	555.0	—	—	1 055.9 ([4])	2 002.3	5 905.8	7 093.5	16 057.5 ([8])	16 838.7
1981	264.0	658.0	—	—	1 219.0	1 747.0	6 392.0	9 188.0	18 546.0 ([9])	19 468.0
1982	243.0	750.0	—	—	187.0	2 228.0	6 815.0	12 197.0	21 427.0	22 420.0
1983	300.0	700.0	—	—	1 565.0	2 295.0	6 988.7	13 916.8	24 765.5 ([10])	25 765.5
1984	408.0	703.0	—	—	1 060.7 ([5])	2 436.3	7 960.8	14 594.6	26 052.4 ([11])	27 163.4
1985	453.0	698.0	—	—	2 491.0 ([6])	2 179.0	8 310.0	15 218.0	28 198.0	29 349.0
1986	439.0	846.7	—	—	396.5	2 287.0	8 172.9	22 810.8	33 667.2	34 952.9
1987	399.3	837.9	—	—	74.8	3 097.9	8 936.5	23 674.1	35 783.3	37 020.5
1988	567.0	1 196.3	—	—	1 377.0	2 606.0	9 310.0	28 968.0	42 261.0	44 024.3
1989	404.0	1 297.0	—	—	4 018.4	2 397.9	10 312.9	29 170.6	45 899.8	47 600.8
1990	488.0	1 256.5	—	—	5 191.5	1 875.7	10 285.1	29 252.4	46 604.7	48 349.2
1991	495.0	1 191.0	—	—	3 749.2	2 486.8	11 476.0	38 874.5	56 586.5	58 272.5
1992	535.3	1 942.1	—	—	385.9	2 328.6	11 599.9	48 513.2	62 827.6	65 605.0
1993	551.8	1 353.6	—	—	1 266.2	2 930.0	11 055.6	50 987.9	66 239.7	68 145.1
1994	393.0	1 781.0	—	—	516.1	2 038.9	12 619.3	54 839.2	70 013.5	72 187.5
1995	268.0	1 563.7	—	—	515.9	1 901.5	12 340.9	57 196.9	71 955.2	73 873.2

([1]) UA until 1977, EUA/ECU from 1978 onwards.
([2]) GNP until 1978, VAT from 1979 until 1987; GNP from 1988 onwards.
([3]) This column includes for the years to 1970 surplus revenue from previous years carried forward to following years.
([4]) As a result of the calculations to establish the relative shares of the Member States in the 1976 budget, an excess of revenue over expenditure occurred amounting to UA 40.5 million. This was carried forward to 1977.
([5]) Including surplus brought forward from 1979 and balance of 1979 VAT and financial contributions.
([6]) Including surplus of ECU 82.4 million carried forward to 1981.
([7]) Including surplus of ECU 661 million.
([8]) Includes surplus of ECU 307 million.
([9]) Includes ECU 593 million of repayable advances by Member States.
([10]) There was a small deficit in 1984 in respect of EC budget due largely to late payment of advances by some Member States.
([11]) Includes non-repayable advances by Member States of 1981, ECU 6 million.

Note: From 1988 onwards, agricultural levies, sugar levies and customs duties are net of 10% collection costs previously included as an expenditure item.

Sources: 1958–89: Management accounts; 1990–93: Court of Auditors, Report; 1994: General budget of the European Community; 1995–2000: General budget of the European Union.

Table 80b

Budgetary receipts of the European Communities

(Mio UA/EUA/ECU ([1]))

	ECSC levies and other	European Development Fund contributions	Euratom contributions (research only)	EC budget						Total
					Own resources					
				Miscellaneous and contributions under special keys	Miscellaneous	Agricultural levies	Import duties	GNP contributions or VAT ([2]) ([3])	Total EC	
1996	—	1 317.4	—	—	568.2	1 963.3	12 852.9	66 504.0	81 888.4	—
1997	—	1 212.7	—	—	612.0	2 015.4	12 203.2	67 534.9	82 365.5	—
1998	—	1 830.0	—	—	668.1	2 718.1	11 144.3	70 046.7	84 577.2	—
1999	—	—	—	—	2 108.5	1 921.0	11 893.9	69 634.3	85 557.7	—
2000	—	—	—	—	674.1	2 038.4	11 070.0	75 604.4	89 386.9	—

([1]) 1996–98: ECU.

Table 81

Borrowing operations of the European Communities and of the European Investment Bank

(Mio UA/EUA/ECU (1))

	ECSC	EIB	Euratom	EEC (2)	EEC-NCI (3)	Total
1958	50	—	—	—	—	50
1959	—	—	—	—	—	—
1960	35	—	—	—	—	35
1961	23	21	—	—	—	44
1962	70	32	—	—	—	102
1963	33	35	5 (6)	—	—	73
1964	128	67	8 (6)	—	—	203
1965	54	65	11 (6)	—	—	130
1966	103	139	14 (6)	—	—	256
1967	58	195	3 (6)	—	—	256
1968	108	213	—	—	—	321
1969	52	146	—	—	—	198
1970	60	169	—	—	—	229
1971	102	413	1 (6)	—	—	516
1972	230	462	—	—	—	692
1973	263	608	—	—	—	871
1974	528	826	—	—	—	1 354
1975	731	814	—	—	—	1 545
1976	956	732	—	1 249	—	2 937
1977	729	1 030	99	571	—	2 429
1978	981	1 863	72	—	—	2 916
1979	837	2 437	153	—	178	3 605
1980	1 004	2 384	181	—	305	3 874
1981	325	2 243	373	—	339	3 280
1982	712	3 146	363	—	773	4 994
1983	750	3 508	369	4 247	1 617	10 491
1984	822	4 339 (5)	214	—	967	6 342
1985	1 265	5 699 (5)	344	—	860	8 168
1986	1 517	6 786	488	862	541	10 194
1987	1 487	5 593	853	860	611	9 404
1988	880 (4)	7 666	93	—	945 (4)	9 584
1989	913	9 034	—	—	522	10 469
1990	1 086	10 996	—	350	76	12 508
1991	1 446	13 672	—	1 695	49	16 862
1992	1 474	12 974	—	1 209	—	15 657
1993	908	14 224	—	4 969	—	20 101
1994	644	14 148	49	245	70	15 156
1995	386	12 395	—	410	66	13 257
1996	298	17 553	—	155	—	18 006
1997	474	23 026	—	195	—	23 695
1998	0	30 098	—	403	—	30 501
1999	0	28 355	—	108	—	28 463

See the chapter 'notes on tables' at the beginning of the document.

(1) ECSC: 1958–74 UA, 1975–89 EUA/ECU. EIB: 1961–73 UA, 1974–89 EUA/ECU. Euratom: 1963–73 UA, 1974–89 EUA/ECU.
(2) EEC balance of payments financing; from 1990 onwards including financial assistance to non-member countries.
(3) NCI: New Community Instrument for investment.
(4) Drawings under credit lines opened with Eximbank (USA).
(5) Including short-term borrowing.
(6) Including the Community loan 'Jean Monnet' of ECU 500 million which has been divided equally under the headings ECSC and NCI.
(7) From 1989 onwards, including short term (new EIB approach).

Note: The conversion rates used were those on 31 December of each year. As the majority of borrowings are denominated in national currencies, the difference between two year-ends reflects, on the one hand, changes in the valuation of the existing stock and, on the other hand, the net volume of borrowings during the year. Figures give original amount of borrowings, plus or minus repayments of the principal, cancellations, annulments and exchange rate adjustments.

Source: *European Economy:* Report on the borrowing and lending activities of the Community.

Table 82

Net outstanding borrowing of the European Communities and of the European Investment Bank

(Mio UA/EUA/ECU (1))

	ECSC	EIB	Euratom	EEC (2)	EEC-NCI (3)	Total
1958	212	—	—	—	—	212
1959	209	—	—	—	—	209
1960	236	—	—	—	—	236
1961	248	21	—	—	—	269
1962	304	54	—	—	—	358
1963	322	88	—	—	—	410
1964	436	154	—	—	—	590
1965	475	217	—	—	—	692
1966	560	355	—	—	—	915
1967	601	548	—	—	—	1 149
1968	686	737	—	—	—	1 423
1969	719	883	—	—	—	1 602
1970	741	1 020	—	—	—	1 761
1971	802	1 423	—	—	—	2 225
1972	963	1 784	—	—	—	2 747
1973	1 157	2 287	—	—	—	3 444
1974	1 615	3 124	—	—	—	4 739
1975	2 391	3 926	—	—	—	6 317
1976	3 478	4 732	—	1 161	—	9 371
1977	3 955	5 421	99	1 500	—	10 975
1978	4 416	6 715	172	1 361	—	12 664
1979	4 675	8 541	323	965	178	14 682
1980	5 406	10 604	502	1 016	491	18 019
1981	5 884	13 482	902	1 062	894	22 224
1982	6 178	16 570	1 272	591	1 747	23 358
1983	6 539	20 749	1 680	4 610	3 269	36 847
1984	7 119	25 007	1 892	4 932	4 432	43 382
1985	7 034	26 736	2 013	3 236	4 960	43 979
1986	6 761	30 271	2 168	1 890	5 202	46 292
1987	6 689	31 957	2 500	2 997	5 229	49 372
1988	6 825	36 928	2 164	2 459	5 514	53 890
1989 (7)	6 738	42 330	1 945	2 075	5 122	58 210
1990	6 673	48 459	1 687	2 045	4 542	63 406
1991	7 139	58 893	1 563	3 516	3 817	74 928
1992	7 327	67 784	1 338	4 026	3 326	83 801
1993	7 331	78 661	1 018	5 204	2 202	94 416
1994	6 548	83 673	779	7 697	1 570	100 267
1995	5 966	87 079	720	8 032	1 113	102 910
1996	4 677	96 649	572	6 666	748	109 312
1997	3 637	110 394	118	5 853	218	120 220
1998	2 806	123 767	28	4 166	168	130 935
1999	2 432	148 086	12	4 074	130	154 734

See the chapter 'notes on tables' at the beginning of the document.

(1) ECSC: 1958–74 UA, 1975–89 EUA/ECU. EIB: 1961–73 UA, 1974–89 EUA/ECU. Euratom: 1963–73 UA, 1974–89 EUA/ECU.
(2) EEC balance of payments financing; from 1990 onwards including financial assistance to non-member countries.
(3) NCI: New Community Instrument for investment.
(4) Drawings under credit lines opened with Eximbank (USA).
(5) Including short-term borrowing.
(6) Including the Community loan 'Jean Monnet' of ECU 500 million which has been divided equally under the headings ECSC and NCI.
(7) From 1989 onwards, including short term (new EIB approach).

Note: The conversion rates used were those on 31 December of each year. As the majority of borrowings are denominated in national currencies, the difference between two year-ends reflects, on the one hand, changes in the valuation of the existing stock and, on the other hand, the net volume of borrowings during the year. Figures give original amount of borrowings, plus or minus repayments of the principal, cancellations, annulments and exchange rate adjustments.

Source: *European Economy:* Report on the borrowing and lending activities of the Community.

Table 83

Main economic indicators 1961–2002
EU-15

(annual percentage change, unless otherwise stated)

	1961–73	1974–85	1986–90	1991–95	1993
1. Growth of GDP and its components (real) (1)					
1.1. Private consumption	4.9	2.1	3.7	1.4	– 0.4
1.2. Government consumption	3.9	2.7	2.1	1.5	1.1
1.3. Gross fixed capital formation	5.7	0.1	5.9	– 0.3	– 6.0
1.4. of which equipment	:	2.1	7.2	– 0.7	– 10.7
1.5. of which construction	:	– 1.3	4.8	0.0	– 3.1
1.6. Exports of goods and services	8.1	4.3	5.1	5.4	1.3
1.7. Imports of goods and services	8.8	2.7	7.4	3.9	– 3.2
1.8. GDP	4.8	2.0	3.3	1.5	– 0.4
2. Demand components: contribution to changes in GDP (%) (2)					
2.1. Consumption	3.6	1.7	2.6	1.1	0.0
2.2. Investment	1.3	0.0	1.2	0.0	– 1.2
2.3. Stockbuilding	0.0	– 0.1	0.1	0.0	– 0.5
2.4. Domestic demand	4.9	1.7	3.8	1.1	– 1.7
2.5. Exports	:	0.4	0.1	0.7	1.3
2.6. Final demand	:	2.1	3.9	1.8	– 0.4
2.7. Imports	:	0.0	– 0.6	– 0.3	0.0
2.8. Net exports	– 0.1	0.4	– 0.5	0.4	1.3
3. Gross savings and investment in % of GDP at current prices (2)					
3.1. Private-sector savings	:	21.1	21.0	21.6	21.6
3.2. Net savings of households	:	:	6.4	7.4	7.6
3.3. General government savings	:	0.4	0.3	– 1.6	– 2.4
3.4. National savings	24.9	21.5	21.3	20.0	19.3
3.5. Gross capital formation	25.4	22.7	21.8	20.6	19.5
3.6. Current account	0.5	– 0.6	0.0	– 0.3	0.1
4. Determinants of investment					
4.1. Capacity utilisation (survey) (2) (3)	:	79.3	83.1	80.7	77.7
4.2. Trend GDP gap (2)	0.2	– 0.3	0.7	0.3	– 1.2
4.3. Potential GDP gap (2)	:	– 1.4	0.9	– 1.6	– 3.3
4.4. Profitability index (1961–73 = 100) (1)	100.0	73.3	90.9	97.4	92.4
5. Growth potential					
5.1. Growth of net capital stock (real) (1)	4.6	2.8	2.5	2.1	1.8
5.2. Net capital/output ratio (real) (2)	3.0	3.1	3.1	3.2	3.2
5.3. Growth of capital intensity (1)	4.2	2.8	1.1	2.7	3.7
5.4. Labour productivity growth (1)	4.4	2.0	1.9	2.0	1.4
5.5. Total factor productivity growth (1)	3.0	1.1	1.5	1.1	0.0
6. Employment and unemployment					
6.1. Employment (1)	0.3	0.1	1.5	– 0.4	– 1.9
6.2. Activity rate (2)	65.9	65.4	65.8	67.3	67.0
6.3. Employment rate (2) (benchmark)	64.4	61.2	59.9	60.6	59.9
6.4. Employment rate (2) (full-time equivalent)	:	:	57.1	56.4	55.8
6.5. Unemployment rate (2) (Eurostat definition)	2.3	6.4	8.9	9.9	10.7
7. Prices and wages (1)					
7.1. Nominal wages per head	9.9	12.5	6.2	5.0	4.2
7.2. Real wages per head (4)	5.0	1.4	1.7	0.8	0.1
7.3. Nominal unit labour costs	5.2	10.2	4.2	2.9	2.7
7.4. Real unit labour costs	0.0	– 0.3	– 0.7	– 0.8	– 0.7
7.5. GDP deflator	5.2	10.6	5.0	3.8	3.5
7.6. Private consumption deflator	4.6	10.9	4.4	4.2	4.1
8. General government budget, % of GDP (2)					
8.1. Expenditure (5)	:	45.7	47.7	50.1	51.4
8.2. Current revenues (5)	:	42.0	44.4	45.0	45.4
8.3. Net borrowing (–) or lending (+) (5)	:	– 3.7	– 3.3	– 5.1	– 6.0
8.4. Net borrowing cyclically adjusted (5)	:	– 3.5	– 3.7	– 5.2	– 5.4
8.5. Debt (end of period) (6)	:	53.8	55.0	72.3	65.4
9. Monetary conditions					
9.1. Long-term interest rate (2)	7.1	11.9	9.8	8.9	7.8
9.2. Short-term interest rate (2)	5.6	11.2	9.8	8.9	8.6
9.3. Yield curve (9.1–9.2) (2)	1.3	0.7	0.0	0.1	– 0.8
9.4. Real long-term interest rate (2) (7)	1.8	1.2	4.6	5.0	4.2
9.5. Nominal effective exchange rate (1)	0.3	– 3.9	6.3	– 2.3	– 12.4
9.6. Real effective exchange rate (1) (1991 = 100; ULC in total economy)	88.6	92.3	93.4	96.3	92.6

(1) 1961–91: including D_90.
(2) 1961–90: including D_90.
(3) Manufacturing industry.
(4) Private consumption deflator.
(5) Break in 1995 (ESA 95 data), 1991–95 average according to the former definition.
(6) Break in 1996 (ESA 95 data).
(7) GDP deflator.

(annual percentage change, unless otherwise stated)

1994	1995	1996	1997	1998	1999	2000	2001	2002
1.7	1.8	2.0	2.1	3.2	3.0	2.8	2.8	2.7
1.0	0.6	1.6	0.6	1.2	1.8	1.5	1.8	1.8
2.7	3.2	2.1	3.1	6.1	5.5	5.3	4.9	4.8
4.5	7.4	5.1	6.3	11.0	7.1	6.6	6.3	5.9
1.6	0.2	– 0.5	0.3	2.1	3.7	3.9	3.4	3.6
9.0	8.3	4.7	10.1	6.2	4.5	10.2	8.6	7.6
7.8	7.3	4.1	9.3	9.5	6.4	9.6	8.4	7.8
2.8	2.4	1.7	2.5	2.7	2.5	3.4	3.1	3.0
1.2	1.2	1.5	1.4	2.1	2.1	1.9	2.0	1.9
0.5	0.6	0.4	0.6	1.2	1.1	1.1	1.0	1.0
0.7	0.3	– 0.5	0.2	0.4	– 0.2	0.1	0.0	0.0
2.4	2.1	1.4	2.2	3.7	3.0	3.2	3.0	3.0
0.8	0.6	0.9	1.4	0.7	0.5	2.2	1.8	1.4
3.2	2.7	2.3	3.5	4.3	3.6	5.3	4.8	4.4
– 0.5	– 0.3	– 0.7	– 1.0	– 1.6	– 1.1	– 1.9	– 1.6	– 1.4
0.4	0.3	0.2	0.4	– 0.9	– 0.6	0.3	0.1	0.0
21.9	22.5	21.6	21.0	19.9	18.7	18.4	18.7	18.8
6.9	7.2	6.9	:	:	:	:	:	:
– 2.0	– 1.6	– 1.0	0.2	1.3	2.2	2.8	2.8	3.1
19.9	20.9	20.6	21.1	21.2	20.9	21.1	21.4	21.9
20.0	20.3	19.7	19.7	20.4	20.6	21.3	21.6	22.0
0.2	0.6	1.0	1.4	0.8	0.2	– 0.3	– 0.4	– 0.2
79.8	82.8	81.0	81.8	83.3	81.6	84.7	:	:
– 0.6	– 0.5	– 1.2	– 1.1	– 0.8	– 0.9	– 0.1	0.3	0.6
– 2.0	– 1.8	– 2.2	– 1.8	– 1.3	– 1.0	– 0.1	0.4	0.6
100.9	104.5	108.1	113.0	117.4	118.1	119.4	121.8	124.0
1.9	1.9	1.9	1.9	2.1	2.3	2.5	2.6	2.8
3.2	3.2	3.2	3.2	3.2	3.2	3.1	3.1	3.1
2.0	1.2	1.3	1.0	0.6	0.7	0.8	1.3	1.5
2.9	1.6	0.9	1.5	1.2	0.9	1.8	1.8	1.8
2.1	1.1	0.4	1.1	1.0	0.6	1.4	1.3	1.2
0.0	0.8	0.7	0.9	1.4	1.6	1.8	1.4	1.3
67.1	67.1	67.5	67.7	68.1	68.4	69.0	69.4	69.8
59.7	60.0	60.2	60.6	61.3	62.2	63.2	64.0	64.7
55.5	55.6	55.4	55.6	56.1	56.7	:	:	:
11.1	10.7	10.8	10.6	9.9	9.2	8.4	7.8	7.3
3.1	3.3	2.9	2.7	2.2	2.5	2.8	3.2	3.3
– 0.2	0.1	0.1	0.5	0.5	1.1	0.6	1.0	1.4
0.1	1.6	1.8	1.0	1.0	1.6	1.1	1.3	1.5
– 2.5	– 1.4	– 0.7	– 0.8	– 1.0	0.1	– 0.4	– 0.6	– 0.5
2.7	3.0	2.5	1.9	2.0	1.5	1.4	1.9	2.0
3.3	3.2	2.8	2.1	1.7	1.4	2.2	2.1	1.9
50.5	51.4	51.1	49.5	48.4	48.0	45.8	46.1	45.6
45.1	46.3	46.9	47.0	46.9	47.3	47.0	46.3	45.9
– 5.4	– 5.2	– 4.2	– 2.4	– 1.5	– 0.7	1.2	0.2	0.3
– 5.1	– 4.9	– 3.7	– 2.0	– 1.2	– 0.3	0.0	– 0.2	0.0
67.5	70.4	72.3	71.2	69.1	67.7	64.1	60.9	58.0
8.2	8.6	7.3	6.2	4.9	4.7	5.5	:	:
6.7	7.0	5.4	4.9	4.7	3.5	4.7	:	:
1.5	1.6	2.0	1.3	0.3	1.2	0.7	:	:
5.4	5.4	4.7	4.2	2.9	3.2	4.0	:	:
– 2.0	5.2	2.6	– 4.8	2.3	– 6.2	– 10.5	– 2.5	– 0.1
89.8	94.5	98.5	93.5	94.2	88.7	79.5	77.1	76.9

Table 84

Main economic indicators 1961–2002
EUR-12 (1)

(annual percentage change, unless otherwise stated)

	1961–73	1974–85	1986–90	1991–95	1993
1. Growth of GDP and its components (real) (2)					
1.1. Private consumption	5.5	2.3	3.5	1.4	– 1.1
1.2. Government consumption	4.3	3.0	2.5	1.6	1.5
1.3. Gross fixed capital formation	5.9	– 0.1	6.0	– 0.1	– 6.7
1.4. of which equipment	:	2.1	7.9	– 1.1	– 12.5
1.5. of which construction	:	– 1.4	4.4	0.5	– 3.3
1.6. Exports of goods and services	8.9	4.5	5.3	5.5	0.8
1.7. Imports of goods and services	10.0	2.9	7.6	4.1	– 4.4
1.8. GDP	5.2	2.1	3.3	1.5	– 0.9
2. Demand components: contribution to changes in GDP (%) (3)					
2.1. Consumption	3.9	1.9	2.5	1.2	– 0.3
2.2. Investment	1.4	0.0	1.2	0.0	– 1.5
2.3. Stockbuilding	0.1	– 0.1	0.1	0.0	– 0.6
2.4. Domestic demand	5.4	1.8	3.8	1.1	– 2.4
2.8. Net exports	– 0.2	0.4	– 0.5	0.4	1.5
3. Gross savings and investment in % of GDP at current prices (3)					
3.1. Private-sector savings	:	22.0	22.5	22.3	22.1
3.2. Net savings of households	:	:	7.7	7.9	8.1
3.3. General government savings	:	0.4	– 0.2	– 1.3	– 1.8
3.4. National savings	26.1	22.4	22.3	21.0	20.3
3.5. Gross capital formation	26.8	23.5	22.1	21.5	20.3
3.6. Current account	0.6	– 0.6	0.6	– 0.3	0.4
4. Determinants of investment					
4.1. Capacity utilisation (survey) (3) (4)	:	79.3	82.8	80.8	77.7
4.2. Trend GDP gap (3)	0.2	– 0.2	0.2	0.7	– 0.7
4.3. Potential GDP gap (3)	:	:	:	:	:
4.4. Profitability index (1961–73 = 100) (2)	100.0	70.2	89.7	95.8	90.1
5. Growth potential					
5.1. Growth of net capital stock (real) (2)	5.0	3.0	2.5	2.3	2.1
5.2. Net capital/output ratio (real) (3)	3.0	3.2	3.2	3.2	3.3
5.3. Growth of capital intensity (2)	4.7	3.0	1.2	2.7	4.0
5.4. Labour productivity growth (2)	4.8	2.1	2.0	1.9	1.0
5.5. Total factor productivity growth (2)	3.2	1.1	1.6	0.9	– 0.5
6. Employment and unemployment					
6.1. Employment (2)	0.3	0.1	1.4	– 0.3	– 2.0
6.2. Activity rate (3)	64.2	63.1	63.2	65.3	64.9
6.3. Employment rate (3) (benchmark)	62.7	59.0	57.3	58.7	58.0
6.4. Employment rate (3) (full-time equivalent)	:	:	:	:	:
6.5. Unemployment rate (3) (Eurostat definition)	2.4	6.5	9.3	10.1	10.8
7. Prices and wages (2)					
7.1. Nominal wages per head	10.5	12.2	5.6	5.0	4.3
7.2. Real wages per head (5)	5.7	1.4	1.3	0.8	0.0
7.3. Nominal unit labour costs	5.3	9.8	3.5	3.1	3.2
7.4. Real unit labour costs	0.1	– 0.4	– 1.2	– 0.8	– 0.4
7.5. GDP deflator	5.2	10.2	4.7	3.9	3.7
7.6. Private consumption deflator	4.5	10.7	4.2	4.2	4.3
8. General government budget, % of GDP (3)					
8.1. Expenditure (6)	:	45.3	48.5	50.7	52.0
8.2. Current revenues (6)	:	41.4	44.3	45.7	46.4
8.3. Net borrowing (–) or lending (+) (6)	:	– 3.9	– 4.2	– 5.0	– 5.6
8.4. Net borrowing cyclically adjusted (6)	:	– 3.8	– 4.3	– 5.4	– 5.3
8.5. Debt (end of period) (7)	:	52.9	59.1	73.1	67.7
9. Monetary conditions					
9.1. Long-term interest rate (3)	6.9	11.6	9.7	9.0	7.9
9.2. Short-term interest rate (3)	5.2	11.0	9.3	9.0	9.1
9.3. Yield curve (9.1–9.2) (3)	1.7	0.6	0.4	0.0	– 1.2
9.4. Real long-term interest rate (3) (8)	1.6	1.5	4.7	4.9	4.1
9.5. Nominal effective exchange rate (2)	1.4	– 1.9	6.0	– 0.2	– 5.2
9.6. Real effective exchange rate (2) (1991 = 100; ULC in total economy)	94.0	102.1	100.4	102.8	102.1

(1) EU-15 excluding DK, S and UK.
(2) 1961–91: including D_90.
(3) 1961–90: including D_90.
(4) Manufacturing industry 2000: 3 quarters 2000.
(5) Private consumption deflator.
(6) Break in 1995 (ESA 95 data), 1991–95 average according to the former definition.
(7) Break in 1996 (ESA 95 data).
(8) GDP deflator.

(annual percentage change, unless otherwise stated)

1994	1995	1996	1997	1998	1999	2000	2001	2002
1.4	1.8	1.6	1.7	3.0	2.8	2.6	2.8	2.7
0.9	0.5	1.5	1.1	1.2	1.5	1.4	1.4	1.5
2.4	3.0	1.6	2.4	5.3	5.4	5.6	5.1	5.0
2.8	7.0	4.3	5.4	9.6	6.8	7.7	7.0	6.5
2.0	0.4	– 0.8	– 0.1	1.8	3.8	3.6	3.2	3.3
8.8	8.1	4.3	10.4	6.9	4.5	10.8	8.9	7.8
8.1	7.7	3.2	9.2	9.7	6.3	10.0	8.8	8.1
2.4	2.3	1.5	2.3	2.8	2.5	3.5	3.2	3.0
1.0	1.1	1.3	1.2	2.0	1.9	1.8	1.9	1.8
0.5	0.6	0.3	0.5	1.1	1.1	1.2	1.1	1.1
0.6	0.3	– 0.5	0.2	0.4	0.0	0.1	0.0	0.1
2.1	2.1	1.1	1.8	3.5	3.0	3.1	3.0	3.0
0.3	0.2	0.4	0.5	– 0.7	– 0.5	0.4	0.2	0.0
22.2	23.0	22.2	21.7	21.0	20.0	19.8	20.2	20.3
7.4	7.6	7.3	:	:	:	:	:	:
– 1.5	– 1.3	– 0.8	0.2	1.0	1.9	2.4	2.4	2.8
20.6	21.7	21.4	21.9	21.9	21.9	22.3	22.6	23.0
20.8	21.0	20.3	20.3	21.0	21.5	22.2	22.6	23.0
0.2	0.6	1.1	1.5	0.9	0.5	– 0.2	– 0.3	– 0.1
78.5	82.5	80.6	81.0	82.9	81.8	83.8	:	:
– 0.5	– 0.5	– 1.3	– 1.3	– 1.0	– 1.0	– 0.2	0.3	0.5
:	:	:	:	:	:	:	:	:
97.8	100.9	104.4	108.8	113.9	115.3	116.4	119.0	121.4
2.1	2.1	2.0	2.0	2.1	2.3	2.5	2.6	2.8
3.3	3.3	3.3	3.3	3.3	3.3	3.2	3.2	3.2
2.4	1.5	1.7	1.3	0.5	0.6	0.7	1.2	1.4
2.7	1.6	1.1	1.5	1.1	0.8	1.6	1.7	1.6
1.8	1.1	0.5	1.1	0.9	0.6	1.4	1.2	1.1
– 0.1	0.6	0.6	0.7	1.5	1.7	2.0	1.6	1.4
65.2	65.2	65.7	66.0	66.5	66.8	67.4	68.0	68.4
57.7	58.0	58.2	58.5	59.3	60.1	61.3	62.2	63.1
:	:	:	:	:	:	:	:	:
11.5	11.2	11.5	11.4	10.8	10.0	9.1	8.5	7.9
3.0	3.5	3.0	2.3	1.5	2.0	2.5	2.9	3.0
– 0.5	0.2	0.2	0.3	0.0	0.6	0.2	0.7	1.1
0.3	1.7	1.7	0.7	0.4	1.1	0.8	1.2	1.3
– 2.6	– 1.4	– 0.7	– 1.0	– 1.4	– 0.2	– 0.4	– 0.7	– 0.6
2.9	3.1	2.4	1.7	1.8	1.3	1.2	1.8	1.9
3.6	3.2	2.7	2.0	1.5	1.3	2.3	2.1	1.9
51.0	51.5	51.5	50.2	49.3	49.0	47.2	47.2	46.6
45.9	46.5	47.2	47.6	47.2	47.7	47.5	46.7	46.3
– 5.1	– 5.0	– 4.3	– 2.6	– 2.2	– 1.3	0.3	– 0.5	– 0.3
– 4.9	– 4.8	– 3.7	– 2.0	– 1.7	– 0.8	– 0.7	– 0.8	– 0.6
70.0	73.1	75.6	75.4	73.8	72.9	70.6	67.7	65.4
8.2	8.6	7.2	6.0	4.8	4.7	5.5	:	:
6.9	7.0	5.2	4.5	4.1	3.1	4.4	:	:
1.3	1.7	2.0	1.4	0.6	1.5	1.0	:	:
5.1	5.4	4.7	4.2	2.9	3.3	4.2	:	:
– 1.7	5.9	0.3	– 8.7	0.5	– 4.6	– 9.4	– 1.3	0.0
99.9	105.9	106.7	96.4	94.6	89.5	80.6	79.0	78.7

Table 85

Main economic indicators 1961–2002
EUR-11 (1)

(annual percentage change, unless otherwise stated)

	1961–73	1974–85	1986–90	1991–95	1993
1. Growth of GDP and its components (real) (2)					
1.1. Private consumption	5.5	2.2	3.5	1.4	– 1.1
1.2. Government consumption	4.2	2.9	2.5	1.7	1.5
1.3. Gross fixed capital formation	5.8	0.0	6.1	– 0.1	– 6.8
1.4. of which equipment	:	2.1	7.9	– 1.2	– 12.7
1.5. of which construction	:	– 1.3	4.5	0.6	– 3.2
1.6. Exports of goods and services	8.9	4.5	5.3	5.5	0.8
1.7. Imports of goods and services	10.0	2.9	7.6	4.1	– 4.5
1.8. GDP	5.2	2.2	3.4	1.5	– 0.8
2. Demand components: contribution to changes in GDP (%) (3)					
2.1. Consumption	3.9	1.8	2.5	1.1	– 0.3
2.2. Investment	1.4	0.0	1.2	0.0	– 1.5
2.3. Stockbuilding	0.0	– 0.1	0.1	0.0	– 0.6
2.4. Domestic demand	5.3	1.8	3.9	1.1	– 2.4
2.8. Net exports	– 0.1	0.4	– 0.5	0.4	1.6
3. Gross savings and investment in % of GDP at current prices (3)					
3.1. Private-sector savings	:	21.9	22.4	22.2	22.1
3.2. Net savings of households	:	:	7.7	7.9	8.1
3.3. General government savings	:	0.4	– 0.1	– 1.2	– 1.7
3.4. National savings	26.1	22.3	22.3	21.0	20.4
3.5. Gross capital formation	26.8	23.4	22.0	21.6	20.3
3.6. Current account	0.6	– 0.6	0.7	– 0.2	0.4
4. Determinants of investment					
4.1. Capacity utilisation (survey) (3) (4)	:	79.3	82.9	80.8	77.3
4.2. Trend GDP gap (3)	0.2	– 0.2	0.3	0.8	– 0.7
4.3. Potential GDP gap (3)	:	– 1.7	0.3	– 2.0	– 4.0
4.4. Profitability index (1961–73 = 100) (2)	100.0	70.2	90.6	96.1	90.4
5. Growth potential					
5.1. Growth of net capital stock (real) (2)	4.9	3.0	2.5	2.3	2.0
5.2. Net capital/output ratio (real) (3)	3.0	3.2	3.2	3.2	3.3
5.3. Growth of capital intensity (2)	4.6	3.0	1.2	2.7	4.0
5.4. Labour productivity growth (2)	4.7	2.2	2.0	1.9	1.1
5.5. Total factor productivity growth (2)	3.2	1.1	1.6	0.9	– 0.4
6. Employment and unemployment					
6.1. Employment (2)	0.3	0.0	1.4	– 0.3	– 2.1
6.2. Activity rate (3)	64.4	63.3	63.4	65.5	65.2
6.3. Employment rate (3) (benchmark)	62.9	59.2	57.4	58.9	58.1
6.4. Employment rate (3) (full-time equivalent)	:	:	:	:	:
6.5. Unemployment rate (3) (Eurostat definition)	2.4	6.6	9.3	10.2	10.8
7. Prices and wages (2)					
7.1. Nominal wages per head	10.5	12.1	5.4	4.9	4.2
7.2. Real wages per head (5)	5.7	1.5	1.5	1.0	0.2
7.3. Nominal unit labour costs	5.5	9.7	3.3	3.0	3.1
7.4. Real unit labour costs	0.2	– 0.3	– 1.1	– 0.7	– 0.4
7.5. GDP deflator	5.2	10.0	4.4	3.6	3.4
7.6. Private consumption deflator	4.6	10.5	3.8	3.9	4.0
8. General government budget, % of GDP (3)					
8.1. Expenditure (6)	:	45.6	48.6	50.8	52.1
8.2. Current revenues (6)	:	41.7	44.5	45.8	46.5
8.3. Net borrowing (–) or lending (+) (6)	:	– 3.9	– 4.1	– 4.9	– 5.5
8.4. Net borrowing cyclically adjusted (6)	:	– 3.7	– 4.2	– 5.3	– 5.2
8.5. Debt (end of period) (7)	:	52.7	58.7	72.5	67.0
9. Monetary conditions					
9.1. Long-term interest rate (3)	6.9	11.6	9.6	9.0	7.9
9.2. Short-term interest rate (3)	5.2	11.0	9.1	8.8	8.8
9.3. Yield curve (9.1–9.2) (3)	1.7	0.6	0.5	0.2	– 0.9
9.4. Real long-term interest rate (3) (8)	1.6	1.5	4.9	5.2	4.3
9.5. Nominal effective exchange rate (2)	1.5	– 1.6	6.3	0.0	– 4.8
9.6. Real effective exchange rate (2) (1991 = 100; ULC in total economy)	93.3	101.9	100.5	102.6	102.0

(1) EU-15 excluding DK, GR, S and UK.
(2) 1961–91: including D_90.
(3) 1961–90: including D_90.
(4) Manufacturing industry.
(5) Private consumption deflator.
(6) Break in 1995 (ESA 95 data), 1991–95 average according to the former definition.
(7) Break in 1996 (ESA 95 data).
(8) GDP deflator.

(annual percentage change, unless otherwise stated)

1994	1995	1996	1997	1998	1999	2000	2001	2002
1.4	1.8	1.6	1.7	3.0	2.8	2.6	2.8	2.7
1.0	0.4	1.6	1.0	1.2	1.6	1.5	1.4	1.5
2.5	3.0	1.5	2.3	5.1	5.3	5.5	4.9	4.8
2.9	6.9	3.9	5.3	9.3	7.0	7.6	6.9	6.4
2.2	0.4	– 0.8	– 0.3	1.7	3.7	3.5	3.0	3.0
8.9	8.2	4.3	10.3	6.9	4.5	10.9	8.9	7.8
8.2	7.7	3.1	9.1	9.7	6.4	10.1	8.8	8.1
2.4	2.3	1.5	2.3	2.8	2.5	3.5	3.1	3.0
1.0	1.1	1.2	1.2	2.0	1.9	1.8	1.9	1.8
0.5	0.6	0.3	0.5	1.1	1.1	1.2	1.1	1.1
0.6	0.3	– 0.5	0.2	0.4	0.0	0.1	0.0	0.1
2.1	2.0	1.0	1.8	3.4	3.0	3.0	2.9	2.9
0.3	0.2	0.4	0.5	– 0.7	– 0.5	0.4	0.2	0.0
22.1	23.0	22.2	21.7	21.0	20.1	19.9	20.2	20.3
7.4	7.6	7.3	:	:	:	:	:	:
– 1.4	– 1.2	– 0.7	0.2	1.0	1.9	2.4	2.4	2.8
20.7	21.7	21.4	21.9	22.0	22.0	22.3	22.6	23.1
20.9	21.1	20.3	20.4	21.0	21.4	22.2	22.6	22.9
0.2	0.7	1.1	1.6	1.0	0.5	– 0.1	– 0.2	– 0.1
79.1	82.6	80.6	81.3	83.2	81.8	84.0	:	:
– 0.5	– 0.5	– 1.3	– 1.3	– 1.0	– 1.0	– 0.2	0.3	0.5
– 2.6	– 2.3	– 2.9	– 2.7	– 2.1	– 1.8	– 0.8	– 0.3	0.0
98.1	101.2	104.5	108.8	114.1	115.2	116.3	118.9	121.1
2.1	2.1	2.0	2.0	2.1	2.3	2.5	2.6	2.8
3.3	3.3	3.3	3.3	3.2	3.2	3.2	3.2	3.2
2.5	1.5	1.7	1.2	0.5	0.5	0.6	1.2	1.4
2.8	1.7	1.1	1.5	1.2	0.7	1.6	1.6	1.6
1.8	1.1	0.4	1.0	1.0	0.5	1.4	1.2	1.1
– 0.2	0.6	0.6	0.8	1.5	1.7	2.1	1.6	1.4
65.4	65.4	65.9	66.2	66.6	66.9	67.6	68.1	68.6
57.9	58.1	58.3	58.6	59.4	60.3	61.5	62.4	63.3
:	54.0	53.8	53.9	54.6	55.6	:	:	:
11.6	11.3	11.5	11.5	10.8	9.9	9.0	8.4	7.8
2.9	3.3	2.9	2.1	1.5	1.9	2.4	2.8	3.0
– 0.4	0.3	0.3	0.2	0.0	0.6	0.1	0.7	1.1
0.1	1.6	1.7	0.6	0.3	1.1	0.8	1.2	1.3
– 2.6	– 1.4	– 0.6	– 1.0	– 1.4	– 0.1	– 0.4	– 0.7	– 0.5
2.7	3.0	2.3	1.6	1.7	1.3	1.2	1.8	1.9
3.3	3.1	2.6	1.9	1.4	1.3	2.3	2.1	1.8
51.1	51.6	51.6	50.3	49.4	49.1	47.3	47.2	46.7
46.1	46.6	47.4	47.7	47.3	47.8	47.6	46.8	46.3
– 5.0	– 5.0	– 4.2	– 2.6	– 2.1	– 1.3	0.3	– 0.5	– 0.3
– 4.8	– 4.8	– 3.6	– 2.0	– 1.7	– 0.8	– 0.7	– 0.8	– 0.6
69.3	72.5	75.0	74.8	73.2	72.3	70.0	67.1	64.7
8.2	8.6	7.2	6.0	4.7	4.6	5.5	:	:
6.5	6.8	5.0	4.4	3.9	3.0	4.4	:	:
1.7	1.9	2.2	1.6	0.8	1.7	1.1	:	:
5.3	5.5	4.8	4.3	2.9	3.3	4.2	:	:
– 1.4	5.9	0.4	– 8.5	0.7	– 4.5	– 9.1	– 1.2	0.0
99.8	105.4	106.2	95.8	94.2	89.2	80.6	79.1	78.8

Table 86

Main economic indicators 1961–2002
Belgium

(annual percentage change, unless otherwise stated)

	1961–73	1974–85	1986–90	1991–95	1993
1. Growth of GDP and its components (real)					
1.1. Private consumption	4.3	2.0	3.1	1.4	– 1.0
1.2. Government consumption	5.5	2.5	0.8	1.5	– 0.1
1.3. Gross fixed capital formation	5.1	– 0.2	9.2	– 0.2	– 3.1
1.4. of which equipment	:	2.3	10.3	– 2.1	– 5.8
1.5. of which construction	:	– 2.5	8.1	0.7	– 0.5
1.6. Exports of goods and services	9.3	2.8	6.0	4.1	– 0.4
1.7. Imports of goods and services	8.9	2.0	7.2	3.7	– 0.4
1.8. GDP	4.9	2.0	3.1	1.5	– 1.5
2. Demand components: contribution to changes in GDP (%)					
2.1. Consumption	3.5	1.7	1.9	1.1	– 0.6
2.2. Investment	1.1	0.0	1.7	0.0	– 0.6
2.3. Stockbuilding	0.2	– 0.1	– 0.1	0.1	– 0.2
2.4. Domestic demand	4.8	1.6	3.5	1.2	– 1.5
2.5. Exports	4.1	1.5	3.4	2.7	– 0.3
2.6. Final demand	8.9	3.2	6.9	3.8	– 1.7
2.7. Imports	– 3.9	– 1.2	– 3.8	– 2.3	0.2
2.8. Net exports	0.2	0.3	– 0.4	0.3	– 0.1
3. Gross savings and investment in % of GDP at current prices					
3.1. Private-sector savings	22.4	23.2	26.1	27.6	28.5
3.2. Net savings of households	:	11.0	9.2	12.3	13.8
3.3. General government savings	1.7	– 3.7	– 5.0	– 3.9	– 4.5
3.4. National savings	24.1	19.5	21.1	23.7	24.0
3.5. Gross capital formation	25.4	22.4	20.1	20.3	19.8
3.6. Current account	1.4	– 1.6	0.9	3.4	4.2
4. Determinants of investment					
4.1. Capacity utilisation (survey) (1)	:	75.6	78.7	78.0	74.8
4.2. Trend GDP gap	0.0	0.1	0.3	0.2	– 1.7
4.3. Potential GDP gap	:	– 1.7	0.6	– 1.5	– 4.7
4.4. Profitability index (1961–73 = 100)	100.0	69.7	89.3	86.3	82.6
5. Growth potential					
5.1. Growth of net capital stock (real)	3.9	3.0	2.3	2.4	2.3
5.2. Net capital/output ratio (real)	2.8	2.9	2.9	3.0	3.1
5.3. Growth of capital intensity	3.4	3.3	1.3	2.6	3.1
5.4. Labour productivity growth	4.4	2.2	2.1	1.7	– 0.8
5.5. Total factor productivity growth	3.2	1.1	1.6	0.8	– 1.8
6. Employment and unemployment					
6.1. Employment	0.5	– 0.3	1.2	– 0.1	– 0.7
6.2. Activity rate	59.9	60.6	59.4	60.7	60.7
6.3. Employment rate (benchmark)	58.7	56.0	54.3	55.5	55.2
6.4. Employment rate (full-time equivalent)	:	:	55.5	54.8	54.3
6.5. Unemployment rate (Eurostat definition)	1.9	7.7	8.7	8.5	8.8
7. Prices and wages					
7.1. Nominal wages per head	9.1	9.4	3.9	4.7	3.7
7.2. Real wages per head (2)	5.2	1.9	1.9	2.3	1.0
7.3. Nominal unit labour costs	4.5	7.0	1.8	3.0	4.5
7.4. Real unit labour costs	0.4	0.3	– 1.1	0.2	0.8
7.5. GDP deflator	4.1	6.7	2.9	2.7	3.7
7.6. Private consumption deflator	3.7	7.4	1.9	2.3	2.7
7.7. Terms of trade	0.1	– 0.9	1.3	0.3	1.5
8. General government budget, % of GDP					
8.1. Expenditure (3)	38.6	56.3	55.6	54.3	55.9
8.2. Current revenues (3)	36.0	47.1	47.6	47.9	48.6
8.3. Net borrowing (–) or lending (+) (3)	– 2.6	– 9.2	– 7.9	– 6.4	– 7.3
8.4. Net borrowing cyclically adjusted (3)	– 2.5	– 9.1	– 8.1	– 6.5	– 6.3
8.5. Debt (end of period) (4)	61.8	122.2	128.6	133.8	138.8
9. Monetary conditions					
9.1. Long-term interest rate	6.5	10.6	8.5	8.1	7.2
9.2. Short-term interest rate	5.3	10.7	8.1	7.5	8.2
9.3. Yield curve (9.1–9.2)	1.3	– 0.1	0.4	0.6	– 1.0
9.4. Real long-term interest rate (5)	2.3	3.7	5.4	5.2	3.4
9.5. Nominal effective exchange rate	0.4	– 0.2	2.8	1.9	1.0
9.6. Real effective exchange rate (1991 = 100; ULC in total economy)	102.5	108.4	97.2	105.0	104.9

(1) Manufacturing industry.
(2) Private consumption deflator.
(3) From 1974 (ESA 95 data), 1961–73 average according to the former definition.
(4) Break in 1996 (ESA 95 data).
(5) GDP deflator.

(annual percentage change, unless otherwise stated)

1994	1995	1996	1997	1998	1999	2000	2001	2002
2.0	1.0	0.7	2.1	3.3	1.9	2.5	2.4	2.4
1.4	1.2	2.4	0.1	1.4	3.4	1.1	1.5	1.5
– 0.1	4.9	0.8	6.7	4.6	4.8	4.6	4.5	4.5
– 3.4	9.2	4.2	6.9	3.3	5.4	5.0	5.4	5.6
3.0	– 6.1	– 2.9	5.9	4.2	5.4	4.0	3.2	3.0
8.4	5.7	1.2	6.7	4.4	5.2	9.4	8.2	7.5
7.2	5.0	0.8	5.7	6.5	4.5	8.6	7.8	7.3
3.0	2.6	1.2	3.4	2.4	2.7	3.9	3.3	3.2
1.4	0.8	0.9	1.1	2.1	1.7	1.6	1.6	1.6
0.0	1.0	0.2	1.3	1.0	1.0	1.0	1.0	1.0
0.6	0.1	– 0.2	0.0	0.6	– 0.7	0.3	0.0	0.0
2.0	1.9	0.9	2.5	3.7	2.1	2.9	2.6	2.6
5.4	3.9	0.8	4.7	3.2	3.8	7.1	6.5	6.2
7.5	5.8	1.7	7.2	6.8	5.9	10.0	9.1	8.8
– 4.5	– 3.2	– 0.5	– 3.7	– 4.4	– 3.1	– 6.1	– 5.8	– 5.6
0.9	0.7	0.3	0.9	– 1.2	0.7	1.0	0.7	0.6
27.1	26.9	26.0	24.4	23.2	22.6	22.7	22.8	23.5
11.9	11.1	9.8	9.0	8.5	8.5	8.4	8.4	8.5
– 2.4	– 2.0	– 1.5	0.5	1.5	1.9	2.4	2.9	3.2
24.7	24.9	24.5	24.9	24.7	24.5	25.0	25.7	26.7
19.6	20.4	19.9	20.4	20.9	21.2	21.6	21.9	22.2
5.2	4.5	4.6	4.5	3.8	3.4	3.5	3.8	4.5
77.6	80.8	79.5	81.4	82.7	80.9	84.5	:	:
– 0.9	– 0.6	– 1.7	– 0.8	– 1.0	– 1.0	0.0	0.4	0.7
– 0.9	– 1.2	– 2.5	– 1.2	– 0.7	– 0.4	0.0	0.8	1.0
86.3	90.5	88.4	92.1	94.6	94.5	94.1	95.8	99.3
2.2	2.2	2.0	2.1	2.2	2.3	2.5	2.6	2.8
3.0	3.0	3.0	3.0	3.0	3.0	2.9	2.9	2.9
2.6	1.6	1.6	1.4	1.0	1.0	1.2	1.2	1.4
3.4	1.9	0.8	2.6	1.2	1.4	2.6	1.9	1.8
2.4	1.3	0.2	2.1	0.9	1.1	2.2	1.5	1.3
– 0.3	0.8	0.6	0.7	1.2	1.3	1.3	1.4	1.4
61.2	61.6	61.9	62.0	62.8	63.4	63.7	64.1	64.5
55.0	55.4	55.8	56.1	56.8	57.5	58.2	59.0	59.8
54.0	53.9	54.1	54.3	54.7	54.5	:	:	:
10.0	9.9	9.7	9.4	9.5	9.1	8.6	8.0	7.4
4.0	2.4	1.6	2.9	2.0	2.3	3.2	3.0	2.9
1.5	0.7	– 0.6	1.2	1.0	1.1	0.6	1.1	1.5
0.7	0.5	0.8	0.2	0.8	0.9	0.6	1.1	1.1
– 1.2	– 1.2	– 0.4	– 1.1	– 0.8	– 0.1	0.1	– 0.5	– 0.9
1.8	1.8	1.2	1.3	1.6	1.0	0.5	1.5	2.0
2.5	1.7	2.2	1.6	1.0	1.2	2.6	1.9	1.4
– 0.6	– 0.9	– 0.5	– 0.6	1.3	– 1.0	– 2.0	– 0.4	0.5
53.9	53.0	53.0	51.6	50.9	50.7	49.8	49.0	48.6
48.8	48.6	49.3	49.7	50.0	50.0	49.8	49.7	49.5
– 5.0	– 4.3	– 3.8	– 1.9	– 0.9	– 0.7	0.0	0.7	0.8
– 4.5	– 4.0	– 2.7	– 1.4	– 0.3	0.0	0.0	0.2	0.4
136.9	133.8	130.5	125.2	119.7	115.9	111.2	105.3	99.2
7.8	7.5	6.5	5.8	4.7	4.8	5.6	:	:
5.7	4.7	3.2	3.4	3.5	3.0	4.4	:	:
2.1	2.8	3.3	2.3	1.2	1.8	1.3	:	:
5.8	5.6	5.2	4.4	3.1	3.7	5.1	:	:
1.8	4.6	– 2.0	– 4.3	0.3	– 1.4	– 3.2	– 0.4	0.0
107.4	111.0	108.3	102.9	102.8	100.8	97.2	96.5	96.0

Table 87

Main economic indicators 1961–2002
Denmark

(annual percentage change, unless otherwise stated)

	1961–73	1974–85	1986–90	1991–95	1993
1. Growth of GDP and its components (real)					
1.1. Private consumption	3.8	1.2	0.8	2.3	0.5
1.2. Government consumption	5.8	2.9	0.3	2.1	4.1
1.3. Gross fixed capital formation	6.5	– 1.1	1.7	1.9	– 3.8
1.4. of which equipment	:	2.5	1.8	2.7	– 10.2
1.5. of which construction	:	– 3.1	0.6	– 0.6	– 0.7
1.6. Exports of goods and services	6.4	4.2	5.2	2.7	– 1.5
1.7. Imports of goods and services	7.1	2.3	3.9	3.8	– 2.7
1.8. GDP	4.3	1.6	1.3	2.0	0.0
2. Demand components: contribution to changes in GDP (%)					
2.1. Consumption	3.5	1.4	0.5	1.7	1.3
2.2. Investment	1.5	– 0.3	0.3	0.3	– 0.7
2.3. Stockbuilding	– 0.1	0.0	– 0.1	0.1	– 0.9
2.4. Domestic demand	4.9	1.1	0.8	2.2	– 0.3
2.5. Exports	1.6	1.0	1.6	0.9	– 0.5
2.6. Final demand	6.5	2.1	2.3	3.1	– 0.8
2.7. Imports	– 2.1	– 0.5	– 1.0	– 1.1	0.8
2.8. Net exports	– 0.6	0.6	0.5	– 0.2	0.3
3. Gross savings and investment in % of GDP at current prices					
3.1. Private-sector savings	17.0	17.1	16.5	20.5	20.3
3.2. Net savings of households	:	:	:	:	:
3.3. General government savings	6.2	1.0	2.8	– 0.7	– 1.0
3.4. National savings	23.1	18.1	19.3	19.8	19.2
3.5. Gross capital formation	26.6	21.6	21.4	18.2	16.4
3.6. Current account	– 2.0	– 3.5	– 2.2	1.6	2.8
4. Determinants of investment					
4.1. Capacity utilisation (survey) (1)	:	:	64.8	80.2	77.1
4.2. Trend GDP gap	0.5	– 0.6	1.4	– 1.5	– 3.8
4.3. Potential GDP gap	:	– 0.8	– 3.8	– 1.3	– 2.3
4.4. Profitability index (1961–73 = 100)	100.0	78.1	86.8	99.6	92.4
5. Growth potential					
5.1. Growth of net capital stock (real)	4.4	1.9	1.8	0.8	0.4
5.2. Net capital/output ratio (real)	2.9	3.2	3.1	3.1	3.2
5.3. Growth of capital intensity	3.2	1.6	1.6	1.0	1.9
5.4. Labour productivity growth	3.2	1.3	1.2	2.2	1.5
5.5. Total factor productivity growth	1.9	0.7	0.5	1.8	0.8
6. Employment and unemployment					
6.1. Employment	1.3	0.5	0.9	– 0.6	– 2.3
6.2. Activity rate	72.1	77.1	81.9	80.5	81.2
6.3. Employment rate (benchmark)	71.4	72.2	76.7	73.4	72.9
6.4. Employment rate (full-time equivalent)	:	:	66.8	64.9	63.2
6.5. Unemployment rate (Eurostat definition)	1.0	6.4	6.4	8.6	10.2
7. Prices and wages					
7.1. Nominal wages per head	10.7	10.5	5.4	3.1	2.3
7.2. Real wages per head (2)	3.8	0.7	2.0	0.8	0.3
7.3. Nominal unit labour costs	7.3	9.1	4.2	0.9	0.8
7.4. Real unit labour costs	0.2	– 0.2	0.1	– 1.2	– 0.5
7.5. GDP deflator	7.0	9.4	4.1	2.1	1.4
7.6. Private consumption deflator	6.6	9.7	3.4	2.3	2.0
7.7. Terms of trade	0.4	– 1.3	1.7	0.5	0.2
8. General government budget, % of GDP					
8.1. Expenditure (3)	34.5	52.1	56.0	60.1	61.7
8.2. Current revenues (3)	38.2	50.0	57.3	57.6	58.9
8.3. Net borrowing (–) or lending (+) (3)	2.1	– 2.1	1.3	– 2.4	– 2.9
8.4. Net borrowing cyclically adjusted (3)	:	– 1.7	0.2	– 1.3	0.2
8.5. Debt (end of period) (4)	8.3	69.8	57.7	69.3	78.0
9. Monetary conditions					
9.1. Long-term interest rate	9.0	16.0	10.8	8.7	7.2
9.2. Short-term interest rate	7.0	12.6	9.6	8.7	10.4
9.3. Yield curve (9.1–9.2)	2.0	3.4	1.3	0.0	– 3.2
9.4. Real long-term interest rate (5)	1.8	6.1	6.5	6.5	5.7
9.5. Nominal effective exchange rate	0.1	– 1.1	3.0	1.7	2.6
9.6. Real effective exchange rate (1991 = 100; ULC in total economy)	82.6	95.5	101.8	102.1	103.1

(1) Manufacturing industry.
(2) Private consumption deflator.
(3) From 1974 (ESA 95 data), 1961–73 average according to the former definition.
(4) Break in 1996 (ESA 95 data).
(5) GDP deflator.

(annual percentage change, unless otherwise stated)

1994	1995	1996	1997	1998	1999	2000	2001	2002
6.5	1.2	2.5	3.7	3.5	0.6	0.5	1.3	1.7
3.0	2.1	3.4	1.3	3.0	1.4	1.1	1.4	1.4
7.7	12.0	3.5	7.9	6.9	0.3	7.9	1.3	3.3
15.0	12.5	– 3.2	12.6	7.1	3.9	6.7	3.7	3.6
0.6	8.3	10.0	4.5	4.3	– 5.5	10.3	– 2.1	2.4
7.0	2.9	4.3	4.1	2.2	7.9	6.3	6.8	6.2
12.3	7.3	3.5	8.0	7.3	2.2	6.2	4.8	5.4
5.5	2.8	2.5	3.1	2.5	1.7	2.6	2.3	2.4
4.1	1.2	2.1	2.2	2.5	0.7	0.5	1.0	1.2
1.3	2.1	0.7	1.5	1.4	0.1	1.6	0.3	0.7
1.1	0.8	– 0.7	0.5	0.3	– 1.2	0.3	0.1	0.0
6.5	3.9	2.1	4.2	4.2	– 0.4	2.4	1.3	1.9
2.4	1.0	1.5	1.5	0.8	2.9	2.4	2.7	2.6
8.9	5.0	3.6	5.7	5.0	2.4	4.8	4.0	4.4
– 3.5	– 2.2	– 1.1	– 2.5	– 2.4	– 0.8	– 2.2	– 1.7	– 2.0
– 1.0	– 1.2	0.4	– 1.1	– 1.6	2.1	0.2	0.9	0.6
19.7	20.9	19.5	18.2	17.0	16.3	17.4	17.7	18.2
:	:	:	18.7	16.9	16.7	18.2	18.5	19.0
– 0.6	– 0.5	0.9	2.3	2.9	4.3	4.2	4.5	4.8
19.1	20.4	20.4	20.4	19.9	20.6	21.6	22.2	23.0
17.6	19.7	18.9	20.2	21.2	19.6	20.8	20.7	20.9
1.5	0.7	1.5	0.2	– 1.4	1.0	0.8	1.4	2.1
81.5	82.9	81.2	83.2	85.5	82.2	83.3	:	:
– 0.6	– 0.1	0.2	0.9	1.0	0.2	0.4	0.3	0.2
– 0.7	0.3	1.6	2.7	3.0	2.0	1.0	0.0	0.0
111.4	115.6	119.6	121.1	123.2	125.3	127.5	130.0	131.8
0.7	1.2	1.2	1.5	2.0	2.0	2.4	2.4	2.4
3.1	3.0	3.0	2.9	2.9	2.9	2.9	2.9	2.9
– 0.7	0.7	0.6	0.5	0.0	1.0	1.5	2.0	2.0
4.0	2.3	1.9	2.1	0.5	0.6	1.7	1.9	2.0
4.3	2.0	1.6	1.9	0.6	0.2	1.1	1.1	1.2
– 1.7	2.3	1.1	2.2	0.4	0.8	0.9	0.4	0.4
78.0	78.6	78.7	79.2	79.1	79.6	79.9	79.9	80.1
71.5	72.8	73.2	74.7	74.9	75.4	76.0	76.3	76.5
65.7	65.6	65.6	65.8	66.9	68.7	:	:	:
8.2	7.2	6.8	5.6	5.2	5.2	4.8	4.6	4.5
1.5	3.8	4.1	3.5	3.2	4.0	4.2	3.3	3.7
– 1.5	1.8	2.0	1.5	1.4	1.4	0.9	0.7	1.7
– 2.4	1.5	2.2	1.3	2.7	3.3	2.4	1.4	1.6
– 4.1	– 0.3	– 0.3	– 0.3	0.6	0.6	– 0.4	– 0.9	– 0.6
1.7	1.8	2.5	1.6	2.1	2.7	2.9	2.3	2.3
3.0	1.9	2.1	2.0	1.8	2.6	3.3	2.6	2.0
– 0.1	0.2	1.8	– 1.0	0.4	1.0	– 0.8	– 0.5	0.2
61.6	60.3	59.8	58.1	57.1	56.0	54.7	53.9	53.0
59.1	58.0	58.8	58.6	58.3	58.8	57.3	57.2	56.1
– 2.4	– 2.3	– 1.0	0.5	1.2	2.8	2.6	3.3	3.1
– 2.0	– 2.2	– 1.1	– 0.2	0.4	2.6	2.3	2.6	2.9
73.5	69.3	65.1	61.4	55.8	52.6	48.5	44.6	40.9
7.9	8.3	7.2	6.2	4.9	4.9	5.7	:	:
6.2	6.1	3.9	3.7	4.1	3.3	5.1	:	:
1.7	2.2	3.3	2.6	0.8	1.6	0.5	:	:
6.1	6.4	4.6	4.5	2.8	2.1	2.7	:	:
0.1	4.9	– 0.8	– 3.2	1.0	– 1.6	– 4.2	– 0.6	– 0.1
100.4	105.3	105.4	102.4	104.6	104.7	101.8	101.3	101.4

Table 88

Main economic indicators 1961–2002
Germany

(annual percentage change, unless otherwise stated)

	1961–73	1974–85	1986–90	1991–95	1993
1. Growth of GDP and its components (real) (1)					
1.1. Private consumption	4.9	1.9	3.6	2.3	0.1
1.2. Government consumption	4.5	2.2	1.4	1.9	0.1
1.3. Gross fixed capital formation	3.9	– 0.3	4.8	1.8	– 4.5
1.4. of which equipment	4.9	1.6	7.2	– 2.4	– 15.1
1.5. of which construction	3.4	– 1.4	3.1	4.0	1.8
1.6. Exports of goods and services	7.6	4.7	5.2	3.7	– 5.5
1.7. Imports of goods and services	9.1	3.3	6.1	4.2	– 5.5
1.8. GDP	4.3	1.7	3.4	2.0	– 1.1
2. Demand components: contribution to changes in GDP (%) (2)					
2.1. Consumption	3.4	1.5	2.2	1.7	0.1
2.2. Investment	1.0	– 0.1	1.0	0.4	– 1.0
2.3. Stockbuilding	0.0	– 0.1	0.1	0.0	– 0.1
2.4. Domestic demand	4.4	1.3	3.3	2.0	– 1.1
2.5. Exports	1.2	1.1	1.5	1.1	– 1.3
2.6. Final demand	5.6	2.5	4.8	3.1	– 2.4
2.7. Imports	– 1.3	– 0.7	– 1.5	– 1.1	1.3
2.8. Net exports	0.0	0.4	0.1	0.0	0.0
3. Gross savings and investment in % of GDP at current prices (2)					
3.1. Private-sector savings	21.0	19.8	22.4	21.5	21.1
3.2. Net savings of households	:	8.3	8.1	7.8	7.9
3.3. General government savings	6.0	2.1	2.0	1.0	0.8
3.4. National savings	27.1	21.9	24.4	22.4	22.0
3.5. Gross capital formation	26.4	21.0	20.2	23.3	22.5
3.6. Current account	0.7	0.8	4.2	– 0.9	– 0.5
4. Determinants of investment					
4.1. Capacity utilisation (survey) (2) (3)	:	80.4	86.0	83.6	79.1
4.2. Trend GDP gap (2)	0.3	– 0.4	– 0.8	2.1	0.7
4.3. Potential GDP gap (2)	:	– 1.6	1.4	– 1.1	– 3.9
4.4. Profitability index (1961–73 = 100) (1)	100.0	73.7	81.1	86.9	81.8
5. Growth potential					
5.1. Growth of net capital stock (real) (1)	5.1	2.6	2.1	2.5	2.3
5.2. Net capital/output ratio (real) (2)	3.2	3.5	3.6	3.4	3.5
5.3. Growth of capital intensity (1)	4.8	2.8	0.6	2.6	3.7
5.4. Labour productivity growth (1)	4.0	1.9	1.9	2.1	0.3
5.5. Total factor productivity growth (1)	2.3	0.9	1.7	1.1	– 1.2
6. Employment and unemployment					
6.1. Employment (1)	0.2	– 0.2	1.4	– 0.1	– 1.2
6.2. Activity rate (2)	68.6	66.3	66.6	72.3	71.9
6.3. Employment rate (2) (benchmark)	68.1	63.5	62.6	67.1	66.4
6.4. Employment rate (2) (full-time equivalent)	:	:	61.8	61.8	60.9
6.5. Unemployment rate (2) (Eurostat definition)	0.7	4.2	5.9	7.4	7.9
7. Prices and wages (1)					
7.1. Nominal wages per head	9.1	5.8	3.5	5.4	4.1
7.2. Real wages per head (4)	5.5	1.4	2.1	2.0	0.2
7.3. Nominal unit labour costs	4.9	3.8	1.6	3.2	3.8
7.4. Real unit labour costs	0.5	– 0.3	– 0.8	– 0.2	0.2
7.5. GDP deflator	4.4	4.1	2.4	3.4	3.7
7.6. Private consumption deflator	3.4	4.3	1.4	3.3	3.9
7.7. Terms of trade	1.5	– 1.6	2.6	0.9	1.7
8. General government budget, % of GDP (2)					
8.1. Expenditure (5)	37.9	47.6	46.0	48.6	49.3
8.2. Current revenues (5)	38.2	44.9	44.5	45.7	46.1
8.3. Net borrowing (–) or lending (+) (5)	0.4	– 2.8	– 1.5	– 2.9	– 3.1
8.4. Net borrowing cyclically adjusted (5)	0.2	– 2.6	– 1.0	– 3.9	– 3.5
8.5. Debt (end of period) (6)	18.3	41.7	43.5	57.1	47.2
9. Monetary conditions					
9.1. Long-term interest rate (2)	7.2	8.0	6.8	7.3	6.4
9.2. Short-term interest rate (2)	5.8	6.8	5.7	7.1	7.2
9.3. Yield curve (9.1–9.2) (2)	1.4	1.2	1.1	0.2	– 0.8
9.4. Real long-term interest rate (2) (7)	2.7	3.8	4.2	3.8	2.6
9.5. Nominal effective exchange rate (1)	2.6	3.2	4.6	2.4	3.6
9.6. Real effective exchange rate (1) (1991 = 100; ULC in total economy)	97.2	105.8	104.6	110.1	112.0

(1) 1961–91: including D_90.
(2) 1961–90: including D_90.
(3) Manufacturing industry.
(4) Private consumption deflator.
(5) Break in 1991 (ESA 95 data).
(6) Break in 1996 (ESA 95 data).
(7) GDP deflator.

(annual percentage change, unless otherwise stated)

1994	1995	1996	1997	1998	1999	2000	2001	2002
1.0	2.0	1.0	0.7	2.0	2.6	1.7	2.6	2.4
2.4	1.5	1.8	– 0.9	0.5	– 0.1	1.6	1.2	1.6
4.0	– 0.7	– 0.8	0.6	3.0	3.3	3.4	3.5	3.6
– 1.9	1.1	1.7	3.7	9.2	6.7	9.3	7.2	6.3
6.9	– 1.8	– 2.8	– 1.5	– 1.0	0.5	– 1.1	0.3	1.0
7.6	5.7	5.1	11.3	7.0	5.1	12.5	9.8	8.2
7.4	5.6	3.1	8.4	8.6	8.1	10.0	9.7	8.3
2.3	1.7	0.8	1.4	2.1	1.6	3.1	2.8	2.8
1.1	1.5	0.9	0.2	1.2	1.4	1.3	1.7	1.7
0.9	– 0.2	– 0.2	0.1	0.7	0.7	0.8	0.8	0.8
0.3	0.3	– 0.5	0.2	0.4	0.2	0.3	0.1	0.2
2.3	1.7	0.3	0.6	2.3	2.3	2.3	2.6	2.6
1.7	1.3	1.2	2.9	2.0	1.5	3.8	3.2	2.9
4.0	3.0	1.5	3.4	4.3	3.8	6.1	5.8	5.5
– 1.6	– 1.3	– 0.7	– 2.0	– 2.2	– 2.2	– 3.0	– 3.1	– 2.8
0.1	0.1	0.5	0.8	– 0.3	– 0.8	0.8	0.2	0.1
20.9	22.0	21.9	21.6	21.0	20.1	20.0	20.6	20.4
7.4	7.2	7.4	7.1	6.8	6.6	6.6	6.9	6.6
1.1	– 0.1	– 0.5	– 0.1	0.6	1.3	1.7	1.1	1.4
22.0	21.9	21.3	21.5	21.6	21.4	21.7	21.7	21.8
23.2	22.7	21.6	21.6	21.8	22.2	22.5	22.7	22.8
– 1.2	– 0.8	– 0.3	– 0.1	– 0.2	– 0.8	– 0.8	– 1.0	– 1.1
81.1	84.6	82.2	83.2	85.5	84.0	86.3	:	:
0.9	0.5	– 0.7	– 1.3	– 1.2	– 1.7	– 0.7	– 0.2	0.3
– 0.8	– 1.9	– 2.6	– 1.9	– 1.0	– 1.4	– 0.7	– 0.1	– 0.1
87.7	87.8	89.7	93.6	97.9	99.9	99.6	103.3	105.5
2.4	2.2	2.0	1.9	1.9	2.0	2.1	2.2	2.3
3.5	3.5	3.6	3.6	3.6	3.6	3.5	3.5	3.5
2.6	2.0	2.3	2.1	1.0	0.9	0.6	1.1	1.4
2.5	1.5	1.1	1.6	1.1	0.5	1.7	1.7	1.9
1.5	0.7	0.2	0.8	0.7	0.1	1.4	1.2	1.3
0.0	0.3	– 0.3	– 0.2	0.9	1.1	1.5	1.1	0.9
72.2	72.1	72.3	72.8	73.1	73.2	74.1	74.7	75.0
66.3	66.4	66.1	65.8	66.5	67.0	68.0	68.9	69.6
60.5	60.3	59.3	58.5	58.0	58.0	:	:	:
8.5	8.2	8.9	9.9	9.4	8.8	8.3	7.8	7.1
3.0	3.6	1.3	0.8	1.1	1.1	1.7	1.9	2.6
0.4	1.7	– 0.4	– 1.1	0.0	0.8	0.0	0.4	1.2
0.5	2.1	0.2	– 0.8	0.0	0.6	0.0	0.2	0.8
– 2.0	0.1	– 0.8	– 1.6	– 1.1	– 0.3	0.3	– 0.8	– 0.3
2.5	2.0	1.0	0.8	1.1	0.9	– 0.2	1.1	1.1
2.6	1.9	1.7	2.0	1.1	0.3	1.7	1.6	1.4
0.4	1.2	– 0.4	– 1.8	1.9	0.8	– 4.2	– 0.6	0.0
49.0	49.6	50.3	49.2	48.6	48.6	45.8	47.5	46.9
46.5	46.1	46.8	46.5	46.6	47.2	47.2	46.1	45.8
– 2.4	– 3.5	– 3.4	– 2.7	– 2.1	– 1.4	1.4	– 1.5	– 1.2
– 2.8	– 3.7	– 3.1	– 2.1	– 1.4	– 0.5	– 0.7	– 1.4	– 1.3
49.4	57.1	59.8	60.9	60.7	61.1	60.0	57.8	56.6
6.9	6.8	6.2	5.7	4.6	4.5	5.3	:	:
5.3	4.5	3.3	3.3	3.5	3.0	4.4	:	:
1.5	2.3	2.9	2.4	1.1	1.5	0.9	:	:
4.3	4.7	5.1	4.8	3.4	3.6	5.5	:	:
0.2	6.1	– 2.5	– 5.2	0.6	– 2.1	– 4.6	– 0.7	0.0
112.3	119.9	115.4	107.1	106.1	102.9	97.0	95.1	94.3

Table 89

Main economic indicators 1961–2002
Greece

(annual percentage change, unless otherwise stated)

	1961–73	1974–85	1986–90	1991–95	1993
1. Growth of GDP and its components (real)					
1.1. Private consumption	6.8	3.4	3.1	1.8	– 0.8
1.2. Government consumption	6.2	5.0	– 0.1	0.5	2.6
1.3. Gross fixed capital formation	9.6	– 2.2	2.3	– 0.2	– 3.5
1.4. of which equipment	12.8	0.7	5.4	4.6	0.6
1.5. of which construction	8.9	– 3.3	0.8	– 2.8	– 6.0
1.6. Exports of goods and services	11.4	5.8	3.9	3.5	– 3.3
1.7. Imports of goods and services	12.9	2.9	8.5	3.6	0.2
1.8. GDP	8.5	1.7	1.2	1.2	– 1.6
2. Demand components: contribution to changes in GDP (%)					
2.1. Consumption	5.1	2.8	2.2	1.4	– 0.3
2.2. Investment	3.0	– 0.6	0.5	0.0	– 0.8
2.3. Stockbuilding	1.4	– 0.5	0.0	0.3	0.2
2.4. Domestic demand	9.5	1.6	2.7	1.7	– 0.9
2.5. Exports	0.8	0.7	0.7	0.7	– 0.6
2.6. Final demand	10.4	2.3	3.4	2.4	– 1.5
2.7. Imports	– 1.8	– 0.5	– 2.1	– 1.1	– 0.1
2.8. Net exports	– 1.0	0.2	– 1.4	– 0.5	– 0.7
3. Gross savings and investment in % of GDP at current prices					
3.1. Private-sector savings	22.4	28.0	27.2	25.5	25.2
3.2. Net savings of households	:	:	:	:	:
3.3. General government savings	3.6	– 1.6	– 7.8	– 7.1	– 7.9
3.4. National savings	26.0	26.4	19.4	18.4	17.3
3.5. Gross capital formation	28.4	27.6	22.8	20.6	20.1
3.6. Current account	– 2.0	– 0.9	– 3.0	– 2.0	– 2.6
4. Determinants of investment					
4.1. Capacity utilisation (survey) (1)	:	:	76.4	76.5	76.0
4.2. Trend GDP gap	0.6	– 0.1	– 0.6	– 0.3	– 1.8
4.3. Potential GDP gap	:	– 3.7	– 1.6	– 2.6	– 5.1
4.4. Profitability index (1961–73 = 100)	100.0	81.7	61.8	82.2	82.1
5. Growth potential					
5.1. Growth of net capital stock (real)	8.0	4.7	2.7	2.5	2.4
5.2. Net capital/output ratio (real)	2.8	3.5	4.2	4.5	4.5
5.3. Growth of capital intensity	8.5	3.7	2.0	1.9	1.5
5.4. Labour productivity growth	9.0	0.7	0.5	0.7	– 2.5
5.5. Total factor productivity growth	6.1	– 0.5	– 0.1	0.1	– 3.0
6. Employment and unemployment					
6.1. Employment	– 0.5	1.0	0.7	0.6	0.9
6.2. Activity rate	60.1	57.3	58.7	58.3	58.2
6.3. Employment rate (benchmark)	57.4	55.1	54.8	53.4	53.2
6.4. Employment rate (full-time equivalent)	:	:	53.3	52.4	52.1
6.5. Unemployment rate (Eurostat definition)	4.4	3.8	6.6	8.3	8.6
7. Prices and wages					
7.1. Nominal wages per head	10.1	21.5	16.8	12.1	9.8
7.2. Real wages per head (2)	6.4	2.7	– 0.7	– 1.5	– 3.8
7.3. Nominal unit labour costs	1.0	20.6	16.2	11.4	12.7
7.4. Real unit labour costs	– 3.2	1.3	– 0.8	– 2.3	– 1.5
7.5. GDP deflator	4.4	19.0	17.1	14.0	14.5
7.6. Private consumption deflator	3.6	18.2	17.6	13.8	14.2
7.7. Terms of trade	0.1	– 1.5	1.4	1.2	1.4
8. General government budget, % of GDP					
8.1. Expenditure (3)	23.0	31.9	43.4	47.2	49.0
8.2. Current revenues (3)	23.4	26.9	31.4	35.6	35.4
8.3. Net borrowing (–) or lending (+) (3)	0.5	– 4.9	– 12.0	– 11.6	– 13.6
8.4. Net borrowing cyclically adjusted (3)	0.4	– 4.9	– 11.8	– 11.5	– 13.0
8.5. Debt (end of period) (4)	19.3	59.8	89.0	108.7	110.2
9. Monetary conditions					
9.1. Long-term interest rate	:	13.6	:	:	:
9.2. Short-term interest rate	:	:	17.8	22.1	23.5
9.3. Yield curve (9.1–9.2)	:	:	:	:	:
9.4. Real long-term interest rate (5)	:	– 4.5	:	:	:
9.5. Nominal effective exchange rate	– 1.3	– 9.3	– 10.8	– 7.2	– 7.7
9.6. Real effective exchange rate (1991 = 100; ULC in total economy)	134.2	104.0	98.9	103.7	101.6

(1) Manufacturing industry 2000.
(2) Private consumption deflator.
(3) Break in 1995 (ESA 95 data), 1991–95 average according to the former definition.
(4) Break in 1996 (ESA 95 data).
(5) GDP deflator.

(annual percentage change, unless otherwise stated)

1994	1995	1996	1997	1998	1999	2000	2001	2002
2.0	2.7	2.4	2.8	3.1	2.9	2.9	3.1	3.2
– 1.1	5.6	0.9	3.0	1.7	– 0.1	0.8	0.6	0.6
– 2.8	4.2	8.4	7.8	11.8	7.3	8.6	10.6	10.9
– 0.3	8.5	23.1	8.2	24.4	1.9	9.0	10.1	10.1
– 4.3	1.7	1.8	7.4	6.6	9.0	9.0	11.5	12.0
6.6	0.5	3.5	18.2	5.9	6.5	7.6	7.6	7.9
1.3	9.2	7.0	13.9	11.3	3.9	6.7	6.5	6.6
2.0	2.1	2.4	3.5	3.1	3.4	4.1	4.5	4.8
1.4	2.8	1.9	2.5	2.5	2.1	2.3	2.3	2.4
– 0.6	0.9	1.6	1.5	2.4	1.6	2.0	2.6	2.8
0.4	1.2	0.0	– 0.1	0.2	– 0.6	0.3	0.0	– 0.1
1.1	4.9	3.5	3.9	5.0	3.3	4.6	4.9	5.1
1.3	0.1	0.6	3.2	1.2	1.4	1.6	1.7	1.8
2.4	5.0	4.1	7.1	6.3	4.6	6.2	6.6	6.9
– 0.4	– 2.9	– 1.7	– 3.6	– 3.3	– 1.2	– 2.1	– 2.1	– 2.1
0.9	– 2.8	– 1.1	– 0.4	– 2.0	0.2	– 0.4	– 0.4	– 0.3
25.3	24.8	22.7	19.3	18.0	17.1	16.6	17.1	17.9
:	:	:	9.8	8.3	7.8	7.6	8.1	8.5
– 7.1	– 6.8	– 5.2	– 1.5	0.0	2.0	3.0	3.5	4.1
18.2	18.0	17.4	17.8	18.0	19.1	19.6	20.6	22.0
18.9	18.9	19.8	20.2	21.9	22.3	23.7	25.0	26.3
– 0.5	– 0.9	– 2.4	– 2.3	– 3.9	– 3.2	– 4.1	– 4.4	– 4.2
74.5	76.6	75.6	74.4	75.8	75.7	78.4	:	:
– 1.7	– 1.7	– 1.8	– 1.1	– 1.0	– 0.9	– 0.2	0.6	1.7
– 3.4	– 1.5	– 0.9	– 0.1	0.0	0.1	0.7	1.3	1.8
85.5	84.5	87.6	86.4	84.7	89.0	89.8	92.0	95.0
2.1	2.1	2.4	2.6	3.0	3.2	3.5	3.9	4.3
4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.4	4.4
0.3	1.2	2.8	2.9	– 0.4	4.0	2.3	2.4	2.7
0.1	1.2	2.8	3.9	– 0.3	4.1	2.9	3.0	3.1
0.0	0.8	1.8	2.9	– 0.2	2.8	2.1	2.2	2.2
1.9	0.9	1.3	– 0.5	2.9	– 0.7	1.2	1.5	1.6
59.1	59.6	60.4	60.1	62.5	62.7	62.8	63.0	63.3
53.9	54.1	54.6	54.2	55.7	55.4	55.8	56.3	56.9
52.6	53.0	52.6	52.4	53.1	53.7	:	:	:
8.9	9.2	9.6	9.8	10.9	11.7	11.2	10.6	10.1
10.9	12.9	8.8	13.6	6.0	4.8	4.6	5.0	5.0
– 0.2	3.7	0.6	7.7	1.5	2.4	1.7	2.1	2.5
10.7	11.5	5.9	9.3	6.4	0.6	1.6	2.0	1.8
– 0.5	1.6	– 1.4	2.3	1.2	– 2.2	– 0.6	– 0.6	– 1.0
11.2	9.8	7.4	6.8	5.2	2.9	2.3	2.6	2.9
11.1	8.9	8.2	5.5	4.5	2.4	2.9	2.8	2.4
3.2	1.6	0.5	1.0	0.3	0.1	– 2.3	– 0.6	0.6
46.8	47.8	45.9	44.7	44.6	45.2	44.8	44.2	43.2
36.9	37.7	38.1	40.0	41.4	43.4	44.0	43.9	43.6
– 9.9	– 10.2	– 7.8	– 4.7	– 3.1	– 1.8	– 0.8	– 0.3	0.3
– 9.3	– 9.5	– 7.1	– 4.2	– 2.7	– 1.4	– 0.7	– 0.6	– 0.4
107.9	108.7	111.3	108.3	105.5	104.6	103.9	99.8	96.4
:	:	:	:	8.5	6.5	6.6	:	:
24.6	16.3	13.8	12.8	14.0	10.4	8.4	:	:
:	:	:	:	– 5.5	– 3.9	– 1.8	:	:
:	:	:	:	3.2	3.5	4.1	:	:
– 6.7	– 2.5	– 1.8	– 2.6	– 5.9	– 0.5	– 6.1	– 1.7	0.0
104.7	112.1	114.8	121.1	120.3	118.9	112.5	111.4	111.9

Table 90

Main economic indicators 1961–2002
Spain

(annual percentage change, unless otherwise stated)

	1961–73	1974–85	1986–90	1991–95	1993
1. Growth of GDP and its components (real)					
1.1. Private consumption	7.2	1.6	4.7	1.1	– 2.2
1.2. Government consumption	4.5	5.0	6.6	2.7	2.4
1.3. Gross fixed capital formation	10.5	– 0.9	11.6	– 0.7	– 10.5
1.4. of which equipment	:	– 0.5	13.0	– 2.4	– 20.2
1.5. of which construction	:	– 1.5	11.3	0.2	– 6.5
1.6. Exports of goods and services	11.9	5.9	3.9	10.0	8.5
1.7. Imports of goods and services	17.3	2.5	14.7	6.4	– 5.2
1.8. GDP	7.2	1.9	4.5	1.3	– 1.2
2. Demand components: contribution to changes in GDP (%)					
2.1. Consumption	5.4	1.6	3.9	1.1	– 1.0
2.2. Investment	2.2	– 0.2	2.4	– 0.2	– 2.5
2.3. Stockbuilding	0.2	– 0.1	0.2	– 0.1	– 1.0
2.4. Domestic demand	7.8	1.4	6.6	0.8	– 4.5
2.5. Exports	1.2	0.9	0.8	2.3	1.9
2.6. Final demand	9.1	2.3	7.4	3.2	– 2.7
2.7. Imports	– 1.8	– 0.4	– 2.9	– 1.8	1.5
2.8. Net exports	– 0.6	0.5	– 2.1	0.5	3.4
3. Gross savings and investment in % of GDP at current prices					
3.1. Private-sector savings	:	21.0	20.6	20.7	20.5
3.2. Net savings of households	:	:	3.7	4.9	6.0
3.3. General government savings	:	1.2	1.3	– 0.7	– 1.6
3.4. National savings	25.4	22.2	21.9	20.0	18.9
3.5. Gross capital formation	28.0	24.9	24.4	22.9	21.0
3.6. Current account	– 0.7	– 1.4	– 1.3	– 1.9	– 1.0
4. Determinants of investment					
4.1. Capacity utilisation (survey) (1)	:	:	59.7	76.0	72.8
4.2. Trend GDP gap	0.2	– 0.2	1.3	0.1	– 1.7
4.3. Potential GDP gap	:	– 1.2	– 1.8	– 4.0	– 5.9
4.4. Profitability index (1961–73 = 100)	100.0	81.5	139.0	138.1	125.0
5. Growth potential					
5.1. Growth of net capital stock (real)	5.0	3.7	3.7	3.4	2.7
5.2. Net capital/output ratio (real)	2.4	2.7	2.7	2.9	3.0
5.3. Growth of capital intensity	4.3	5.2	0.4	3.8	5.8
5.4. Labour productivity growth	6.5	3.4	1.2	1.8	1.8
5.5. Total factor productivity growth	5.1	1.7	1.1	0.6	0.0
6. Employment and unemployment					
6.1. Employment	0.7	– 1.4	3.3	– 0.5	– 2.9
6.2. Activity rate	60.8	58.1	58.3	59.0	58.9
6.3. Employment rate (benchmark)	64.4	55.6	50.9	51.6	50.7
6.4. Employment rate (full-time equivalent)	:	:	:	:	:
6.5. Unemployment rate (Eurostat definition)	2.6	11.3	18.9	20.9	22.7
7. Prices and wages					
7.1. Nominal wages per head	14.6	18.0	8.0	6.4	6.8
7.2. Real wages per head (2)	7.6	2.3	1.2	0.8	1.2
7.3. Nominal unit labour costs	7.6	14.2	6.7	4.6	4.9
7.4. Real unit labour costs	0.5	– 0.8	– 0.7	– 0.8	0.5
7.5. GDP deflator	7.2	15.0	7.4	5.4	4.3
7.6. Private consumption deflator	6.5	15.4	6.6	5.6	5.6
7.7. Terms of trade	3.0	– 2.1	4.6	0.4	– 1.7
8. General government budget, % of GDP					
8.1. Expenditure (3)	:	30.9	40.7	45.3	47.6
8.2. Current revenues (3)	:	28.6	36.6	39.6	40.8
8.3. Net borrowing (–) or lending (+) (3)	:	– 2.6	– 4.0	– 5.6	– 6.7
8.4. Net borrowing cyclically adjusted (3)	:	– 2.4	– 4.5	– 5.6	– 6.0
8.5. Debt (end of period) (4)	12.7	42.4	43.7	64.0	58.6
9. Monetary conditions					
9.1. Long-term interest rate	:	:	12.9	11.2	10.1
9.2. Short-term interest rate	:	:	13.9	11.1	11.7
9.3. Yield curve (9.1–9.2)	:	:	– 1.0	0.1	– 1.6
9.4. Real long-term interest rate (5)	:	:	5.1	5.5	5.5
9.5. Nominal effective exchange rate	– 0.8	– 4.9	2.8	– 3.9	– 11.8
9.6. Real effective exchange rate (1991 = 100; ULC in total economy)	70.2	83.3	85.9	92.9	91.3

(1) Manufacturing industry 2000.
(2) Private consumption deflator.
(3) Break in 1995 (ESA 95 data), 1991–95 average according to the former definition.
(4) Break in 1996 (ESA 95 data).
(5) GDP deflator.

(annual percentage change, unless otherwise stated)

1994	1995	1996	1997	1998	1999	2000	2001	2002
0.9	1.6	2.2	3.1	4.5	4.7	4.1	3.2	2.9
– 0.3	1.8	1.3	2.9	3.7	2.9	1.3	2.2	2.6
2.5	8.2	2.1	5.0	9.7	8.9	6.7	5.4	5.9
6.9	12.4	8.1	10.3	13.4	8.1	4.3	4.3	4.6
1.9	6.6	– 1.9	2.7	8.1	9.0	8.2	6.1	6.7
16.7	10.0	10.4	15.3	8.3	6.6	9.7	8.9	8.7
11.3	11.0	8.0	13.3	13.4	11.9	10.2	8.8	9.1
2.3	2.7	2.4	3.9	4.3	4.0	4.1	3.5	3.3
0.5	1.3	1.5	2.4	3.3	3.3	2.7	2.3	2.2
0.5	1.8	0.5	1.1	2.2	2.1	1.6	1.4	1.5
0.3	0.2	– 0.1	– 0.1	0.1	0.2	0.2	0.0	0.0
1.4	3.3	1.9	3.4	5.6	5.5	4.5	3.6	3.7
4.0	2.8	2.3	3.7	2.3	1.9	2.8	2.7	2.8
5.4	6.0	4.3	7.1	7.8	7.4	7.3	6.3	6.4
– 3.1	– 3.3	– 1.8	– 3.2	– 3.5	– 3.4	– 3.1	– 2.9	– 3.1
0.9	– 0.6	0.5	0.5	– 1.3	– 1.5	– 0.4	– 0.2	– 0.3
20.2	24.1	20.8	22.2	21.4	19.5	18.9	18.9	19.1
4.2	5.3	5.0	:	8.2	7.6	6.9	6.8	6.9
– 1.5	– 1.8	1.2	0.4	1.2	2.9	3.7	4.2	4.4
18.7	22.3	22.1	22.6	22.6	22.3	22.6	23.1	23.5
21.2	22.3	21.9	22.2	23.2	24.6	26.3	27.0	27.7
– 1.3	0.0	0.2	0.5	– 0.6	– 2.3	– 3.6	– 3.9	– 4.2
74.5	78.4	77.1	78.3	80.3	79.7	80.8	:	:
– 2.0	– 2.1	– 2.5	– 1.7	– 0.6	0.1	0.8	0.8	0.6
– 3.2	– 2.2	– 2.3	– 2.2	– 1.3	– 0.3	0.0	0.1	0.2
139.6	150.3	152.5	156.0	157.2	160.6	155.6	153.7	153.3
2.7	3.1	3.0	3.1	3.4	4.0	4.2	4.3	4.5
3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0
3.2	1.2	1.7	– 0.1	– 0.3	0.4	1.1	1.9	2.2
2.8	0.9	1.2	0.7	0.5	0.4	1.0	1.1	1.0
1.7	0.5	0.7	0.7	0.6	0.3	0.7	0.5	0.3
– 0.5	1.8	1.2	2.8	3.7	3.5	3.1	2.4	2.3
59.0	59.1	60.3	60.8	61.1	61.2	62.6	63.3	64.0
50.2	50.9	51.3	52.7	54.5	56.4	58.1	59.4	60.7
:	48.8	49.2	50.7	52.5	54.4	56.1	57.3	58.6
24.1	22.9	22.2	20.8	18.8	15.9	14.2	12.9	12.0
2.8	3.0	4.5	2.1	2.8	2.8	3.4	3.7	2.7
– 2.0	– 1.7	1.0	– 0.3	0.8	0.3	0.0	0.6	0.4
0.0	2.1	3.3	1.4	2.2	2.3	2.4	2.6	1.6
– 3.8	– 2.6	– 0.2	– 0.8	0.0	– 0.5	– 0.9	– 0.6	– 0.8
4.0	4.8	3.5	2.2	2.3	2.9	3.3	3.2	2.4
4.9	4.7	3.5	2.4	2.0	2.5	3.5	3.0	2.3
– 1.1	0.6	0.8	– 0.1	0.9	– 0.1	– 3.0	– 0.3	0.1
45.8	45.0	43.7	42.2	41.8	40.7	40.0	39.8	39.7
39.7	38.4	38.8	39.1	39.2	39.6	39.7	39.9	39.9
– 6.1	– 6.6	– 4.9	– 3.2	– 2.6	– 1.1	– 0.3	0.1	0.2
– 5.3	– 5.8	– 4.0	– 2.5	– 2.3	– 1.1	– 0.7	– 0.2	0.0
61.1	64.0	68.1	66.7	64.6	63.3	61.0	58.1	55.6
10.1	11.3	8.7	6.4	4.8	4.7	5.6	:	:
8.0	9.4	7.5	5.4	4.3	3.0	4.4	:	:
2.1	1.9	1.2	1.0	0.6	1.8	1.2	:	:
5.9	6.2	5.0	4.1	2.5	1.8	2.2	:	:
– 6.1	0.9	0.9	– 4.8	– 0.1	– 1.6	– 3.2	– 0.4	0.0
85.4	86.2	88.5	84.4	85.2	84.4	82.8	83.3	83.3

Table 91

Main economic indicators 1961–2002
France

(annual percentage change, unless otherwise stated)

	1961–73	1974–85	1986–90	1991–95	1993
1. Growth of GDP and its components (real)					
1.1. Private consumption	5.3	2.2	3.0	0.7	– 0.4
1.2. Government consumption	4.0	3.2	2.4	2.3	4.6
1.3. Gross fixed capital formation	7.7	0.5	6.4	– 1.2	– 6.4
1.4. of which equipment	:	2.9	9.0	– 0.1	– 5.7
1.5. of which construction	:	– 1.1	4.1	– 2.1	– 7.6
1.6. Exports of goods and services	9.1	4.6	5.2	5.3	0.0
1.7. Imports of goods and services	10.4	2.4	7.3	3.4	– 3.7
1.8. GDP	5.4	2.2	3.3	1.1	– 0.9
2. Demand components: contribution to changes in GDP (%)					
2.1. Consumption	3.8	1.9	2.3	0.9	0.8
2.2. Investment	1.7	0.1	1.2	– 0.2	– 1.3
2.3. Stockbuilding	0.1	– 0.1	0.1	0.0	– 1.1
2.4. Domestic demand	5.6	1.9	3.6	0.7	– 1.6
2.5. Exports	1.3	0.8	0.9	1.1	0.0
2.6. Final demand	6.9	2.7	4.5	1.7	– 1.6
2.7. Imports	– 1.5	– 0.4	– 1.2	– 0.7	0.7
2.8. Net exports	– 0.2	0.4	– 0.4	0.4	0.7
3. Gross savings and investment in % of GDP at current prices					
3.1. Private-sector savings	22.0	19.8	18.8	20.3	20.8
3.2. Net savings of households	:	9.3	4.6	6.5	6.8
3.3. General government savings	4.2	2.0	1.8	– 0.5	– 1.9
3.4. National savings	26.2	21.9	20.6	19.8	19.0
3.5. Gross capital formation	26.5	23.7	22.2	20.0	18.2
3.6. Current account	0.6	– 1.7	– 1.6	– 0.1	0.7
4. Determinants of investment					
4.1. Capacity utilisation (survey) (1)	:	82.8	85.9	83.4	79.7
4.2. Trend GDP gap	0.2	– 0.2	0.6	0.3	– 0.9
4.3. Potential GDP gap	:	– 1.6	0.3	– 1.9	– 2.9
4.4. Profitability index (1961–73 = 100)	100.0	74.8	95.8	102.2	99.1
5. Growth potential					
5.1. Growth of net capital stock (real)	4.7	3.2	2.8	2.3	2.0
5.2. Net capital/output ratio (real)	2.8	3.0	3.0	3.2	3.2
5.3. Growth of capital intensity	4.0	3.2	1.9	2.7	3.8
5.4. Labour productivity growth	4.7	2.2	2.4	1.5	0.8
5.5. Total factor productivity growth	3.2	1.0	1.7	0.5	– 0.5
6. Employment and unemployment					
6.1. Employment	0.7	0.1	0.9	– 0.2	– 1.2
6.2. Activity rate	67.7	67.7	66.3	66.7	66.6
6.3. Employment rate (benchmark)	66.8	63.9	60.5	60.1	59.6
6.4. Employment rate (full-time equivalent)	:	:	58.6	57.7	57.2
6.5. Unemployment rate (Eurostat definition)	2.0	6.4	9.8	11.1	11.7
7. Prices and wages					
7.1. Nominal wages per head	9.9	12.9	4.3	3.2	3.0
7.2. Real wages per head (2)	5.0	2.2	1.2	0.7	0.6
7.3. Nominal unit labour costs	5.0	10.5	1.8	1.7	2.2
7.4. Real unit labour costs	– 0.1	0.4	– 1.5	– 0.5	– 0.2
7.5. GDP deflator	5.1	10.0	3.4	2.1	2.3
7.6. Private consumption deflator	4.7	10.5	3.1	2.5	2.4
7.7. Terms of trade	0.3	– 2.4	1.9	0.3	1.0
8. General government budget, % of GDP					
8.1. Expenditure (3)	36.7	46.0	51.4	54.0	55.2
8.2. Current revenues (3)	37.2	44.4	49.1	49.2	49.3
8.3. Net borrowing (–) or lending (+) (3)	0.4	– 1.6	– 2.3	– 4.7	– 6.0
8.4. Net borrowing cyclically adjusted (3)	:	– 1.5	– 2.5	– 4.8	– 5.6
8.5. Debt (end of period) (4)	:	31.8	36.3	54.0	46.1
9. Monetary conditions					
9.1. Long-term interest rate	6.9	12.2	9.1	7.8	6.7
9.2. Short-term interest rate	5.7	11.0	8.7	8.2	8.6
9.3. Yield curve (9.1–9.2)	1.2	1.2	0.4	– 0.4	– 1.9
9.4. Real long-term interest rate (5)	1.8	2.0	5.5	5.6	4.3
9.5. Nominal effective exchange rate	– 0.7	– 2.5	2.0	1.8	2.7
9.6. Real effective exchange rate (1991 = 100; ULC in total economy)	121.7	113.5	105.8	103.3	103.6

(1) Manufacturing industry.
(2) Private consumption deflator.
(3) Break in 1978 (ESA 95 data), 1986–90 average according to the former definition.
(4) Break in 1996 (ESA 95 data).
(5) GDP deflator.

(annual percentage change, unless otherwise stated)

1994	1995	1996	1997	1998	1999	2000	2001	2002
1.2	1.2	1.3	0.2	3.3	2.1	2.6	2.8	2.8
0.7	– 0.1	2.3	2.1	0.1	2.6	1.3	1.3	1.3
1.5	2.0	0.0	– 0.1	6.3	7.1	6.2	5.4	4.6
4.8	6.0	2.4	2.8	11.6	8.4	6.8	7.3	6.1
– 0.6	– 0.2	– 3.0	– 3.4	1.7	6.5	5.7	3.5	2.8
7.7	7.7	3.5	11.8	7.8	3.7	12.6	8.5	7.6
8.2	8.0	1.6	6.9	11.0	3.6	13.1	8.6	7.9
2.1	1.7	1.1	1.9	3.1	2.9	3.3	3.1	2.8
0.8	0.7	1.3	0.6	1.8	1.7	1.7	1.8	1.8
0.3	0.4	0.0	0.0	1.2	1.3	1.2	1.1	0.9
0.9	0.6	– 0.6	0.1	0.6	– 0.5	0.1	0.0	0.0
2.1	1.6	0.7	0.6	3.6	2.6	3.0	2.9	2.7
1.5	1.6	0.8	2.7	2.0	1.0	3.3	2.5	2.3
3.6	3.3	1.4	3.4	5.5	3.8	6.4	5.4	5.0
– 1.5	– 1.6	– 0.3	– 1.5	– 2.5	– 0.9	– 3.2	– 2.3	– 2.2
0.0	0.0	0.4	1.3	– 0.5	0.1	0.2	0.2	0.1
20.4	20.6	19.5	20.4	20.0	19.5	20.2	20.4	20.3
6.4	7.1	6.4	7.2	7.0	7.0	7.0	7.2	7.0
– 1.2	– 1.1	– 0.3	– 0.1	1.0	1.9	2.2	2.5	3.2
19.2	19.5	19.2	20.4	21.1	21.3	22.4	22.8	23.5
19.0	19.2	18.3	17.8	18.8	19.0	19.7	20.1	20.3
0.2	0.3	0.9	2.5	2.3	2.3	1.6	1.7	2.2
83.0	85.5	83.6	83.5	85.0	85.3	89.1	:	:
– 0.7	– 0.9	– 1.8	– 2.0	– 1.2	– 0.8	0.0	0.4	0.5
– 3.2	– 3.7	– 4.3	– 4.0	– 1.8	– 0.6	1.3	1.8	2.4
105.2	107.9	108.1	110.7	114.1	114.8	117.8	118.9	120.0
2.0	1.9	1.8	1.7	1.8	2.1	2.3	2.5	2.7
3.2	3.2	3.2	3.2	3.2	3.2	3.1	3.1	3.1
2.3	1.4	2.0	1.6	0.8	0.3	0.4	0.9	1.1
2.4	1.2	1.3	1.8	2.1	1.1	1.3	1.5	1.2
1.6	0.7	0.6	1.2	1.7	1.0	1.2	1.1	0.8
0.0	0.8	0.3	0.3	1.2	1.8	1.9	1.6	1.6
66.8	66.6	67.1	67.0	67.2	67.7	67.8	68.0	68.2
59.4	59.7	59.6	59.6	60.1	60.9	61.9	62.7	63.5
56.8	56.9	56.6	56.4	56.8	57.6	58.5	59.3	60.0
12.3	11.7	12.4	12.3	11.8	11.3	9.9	9.0	8.2
2.1	2.6	2.7	2.5	2.6	1.8	1.5	2.5	3.0
0.0	0.6	0.8	1.0	1.8	1.0	0.2	1.0	1.3
– 0.3	1.4	1.3	0.6	0.6	0.6	0.2	1.0	1.7
– 2.0	– 0.3	– 0.1	– 0.7	– 0.4	0.3	– 0.6	– 0.1	0.0
1.7	1.7	1.4	1.3	0.9	0.4	0.8	1.1	1.7
2.1	2.0	1.9	1.4	0.8	0.8	1.4	1.5	1.7
– 0.6	0.2	– 0.6	0.5	1.3	– 0.8	– 3.3	– 0.5	1.5
54.9	55.2	55.5	55.0	54.0	53.9	53.0	51.0	51.2
49.4	49.7	51.4	51.9	51.3	52.1	51.5	50.9	50.7
– 5.5	– 5.5	– 4.1	– 3.0	– 2.7	– 1.8	– 1.4	0.0	– 0.5
– 5.2	– 5.1	– 3.3	– 2.2	– 2.2	– 1.5	– 1.4	– 1.3	– 0.7
49.6	54.0	57.1	59.3	59.7	58.9	58.3	56.9	55.7
7.3	7.5	6.3	5.6	4.6	4.6	5.5	:	:
5.9	6.6	3.9	3.5	3.6	3.0	4.4	:	:
1.4	1.0	2.4	2.1	1.1	1.6	1.1	:	:
5.5	5.8	4.8	4.2	3.7	4.2	4.6	:	:
0.8	4.2	0.2	– 4.0	1.0	– 2.0	– 4.3	– 0.6	0.0
103.6	107.6	107.8	103.0	103.2	100.1	95.0	94.0	94.2

Table 92

Main economic indicators 1961–2002
Ireland

(annual percentage change, unless otherwise stated)

	1961–73	1974–85	1986–90	1991–95	1993
1. Growth of GDP and its components (real)					
1.1. Private consumption	3.8	2.2	3.4	3.2	2.9
1.2. Government consumption	5.2	3.7	– 0.7	2.7	0.1
1.3. Gross fixed capital formation	9.9	0.7	4.5	2.3	– 5.1
1.4. of which equipment	:	1.6	6.0	1.8	6.1
1.5. of which construction	:	0.6	3.3	3.2	– 9.3
1.6. Exports of goods and services	8.7	8.0	8.9	12.8	9.7
1.7. Imports of goods and services	9.7	4.4	7.1	9.9	7.5
1.8. GDP	4.4	3.8	4.6	4.7	2.7
2. Demand components: contribution to changes in GDP (%)					
2.1. Consumption	3.7	2.3	2.0	2.3	1.7
2.2. Investment	1.9	0.2	0.8	0.4	– 0.9
2.3. Stockbuilding	0.1	0.0	0.4	– 0.2	0.2
2.4. Domestic demand	5.7	2.5	3.2	2.3	0.9
2.5. Exports	2.5	3.0	4.8	8.0	5.8
2.6. Final demand	8.2	5.7	8.2	10.3	6.7
2.7. Imports	– 3.8	– 1.9	– 3.6	– 5.6	– 4.0
2.8. Net exports	– 1.3	1.1	1.2	2.4	1.8
3. Gross savings and investment in % of GDP at current prices					
3.1. Private-sector savings	19.0	22.9	19.5	18.6	18.9
3.2. Net savings of households	:	:	:	:	:
3.3. General government savings	0.9	– 4.5	– 3.0	– 0.7	– 1.2
3.4. National savings	19.9	18.4	16.5	17.9	17.7
3.5. Gross capital formation	21.5	25.4	17.8	17.0	15.1
3.6. Current account	– 2.5	– 7.9	– 1.2	1.9	3.7
4. Determinants of investment					
4.1. Capacity utilisation (survey) (1)	:	:	73.5	76.2	73.6
4.2. Trend GDP gap	– 0.3	1.0	– 0.5	– 2.7	– 4.5
4.3. Potential GDP gap	:	– 3.5	– 1.7	– 2.3	– 2.7
4.4. Profitability index (1961–73 = 100)	100.0	81.4	108.5	118.6	112.6
5. Growth potential					
5.1. Growth of net capital stock (real)	4.9	4.8	2.5	2.2	1.8
5.2. Net capital/output ratio (real)	3.1	3.4	3.5	3.1	3.2
5.3. Growth of capital intensity	4.8	4.7	1.4	0.3	1.2
5.4. Labour productivity growth	4.3	3.7	3.5	2.7	2.1
5.5. Total factor productivity growth	2.5	2.0	2.9	2.6	1.6
6. Employment and unemployment					
6.1. Employment	0.1	0.1	1.1	1.9	0.6
6.2. Activity rate	69.1	64.7	62.5	63.0	62.7
6.3. Employment rate (benchmark)	65.4	58.0	53.0	54.0	53.0
6.4. Employment rate (full-time equivalent)	:	:	:	:	:
6.5. Unemployment rate (Eurostat definition)	5.6	10.6	15.5	14.5	15.6
7. Prices and wages					
7.1. Nominal wages per head	11.3	16.7	5.6	4.4	6.4
7.2. Real wages per head (2)	4.7	2.6	2.3	1.7	4.1
7.3. Nominal unit labour costs	6.8	12.5	2.1	1.7	4.2
7.4. Real unit labour costs	– 0.4	– 0.2	– 1.1	– 1.2	– 0.9
7.5. GDP deflator	7.2	12.8	3.2	2.9	5.2
7.6. Private consumption deflator	6.3	13.8	3.2	2.7	2.2
7.7. Terms of trade	0.8	– 1.7	– 0.2	– 1.0	2.2
8. General government budget, % of GDP					
8.1. Expenditure (3)	30.5	45.1	43.2	44.2	45.1
8.2. Current revenues (3)	26.5	35.2	37.9	41.7	42.3
8.3. Net borrowing (–) or lending (+) (3)	– 3.5	– 9.9	– 5.3	– 2.5	– 2.7
8.4. Net borrowing cyclically adjusted (3)	:	– 10.3	– 5.0	– 1.5	– 0.9
8.5. Debt (end of period) (4)	43.3	105.3	97.5	84.4	98.8
9. Monetary conditions					
9.1. Long-term interest rate	:	14.6	10.2	8.5	7.8
9.2. Short-term interest rate	:	13.4	10.5	8.8	9.3
9.3. Yield curve (9.1–9.2)	:	1.1	– 0.4	– 0.4	– 1.5
9.4. Real long-term interest rate (5)	:	1.6	6.8	5.4	2.5
9.5. Nominal effective exchange rate	– 0.8	– 2.8	1.5	– 0.6	– 4.7
9.6. Real effective exchange rate (1991 = 100; ULC in total economy)	103.4	105.0	109.2	100.7	101.4

(1) Manufacturing industry.
(2) Private consumption deflator.
(3) Break in 1978 (ESA 95 data), 1986–90 average according to the former definition.
(4) Break in 1996 (ESA 95 data).
(5) GDP deflator.

(annual percentage change, unless otherwise stated)

1994	1995	1996	1997	1998	1999	2000	2001	2002
4.4	4.1	6.4	7.5	7.8	7.8	10.1	8.0	6.5
4.1	3.8	3.2	5.6	5.3	5.2	4.1	4.1	3.9
11.8	13.3	16.5	17.8	14.7	12.5	9.4	7.8	6.5
10.9	15.3	12.0	15.6	24.9	18.1	10.5	8.7	7.5
13.4	12.6	18.5	17.6	9.9	10.5	8.5	7.0	5.8
15.1	20.0	12.2	17.4	21.4	12.4	14.5	12.0	10.1
15.5	16.4	12.5	16.8	25.8	8.7	14.5	11.9	9.7
5.8	9.7	7.7	10.7	8.6	9.8	10.5	8.2	7.1
3.3	3.0	4.0	4.9	4.9	4.8	5.7	4.6	3.8
1.9	2.2	2.8	3.3	2.9	2.6	2.0	1.6	1.4
0.0	1.4	0.1	0.5	0.5	– 1.8	0.5	0.0	0.0
4.7	5.8	6.5	8.2	8.9	5.3	8.2	6.2	5.2
9.7	14.0	9.4	13.9	18.1	11.7	14.1	12.1	10.5
14.5	19.8	15.8	22.1	27.0	17.0	22.4	18.3	15.7
– 8.7	– 10.1	– 8.1	– 11.4	– 18.5	– 7.2	– 11.9	– 10.2	– 8.6
1.0	3.9	1.2	2.5	– 0.3	4.5	2.2	1.9	1.9
17.6	20.5	20.3	21.2	20.7	18.2	17.2	16.9	17.2
:	:	:	6.7	6.8	6.0	4.7	4.7	4.9
0.5	– 0.1	1.7	2.6	4.1	5.8	6.1	6.4	6.5
18.0	20.4	22.0	23.8	24.8	23.9	23.3	23.3	23.7
16.1	18.1	19.6	21.5	23.4	23.3	24.6	25.3	25.6
2.9	2.8	3.3	3.1	0.9	0.6	– 1.2	– 1.8	– 1.8
74.9	79.9	77.6	75.9	76.6	75.9	81.5	:	:
– 5.1	– 2.7	– 2.5	0.1	0.5	1.8	3.7	3.5	2.3
– 4.8	– 2.8	– 3.3	– 2.2	– 1.2	– 0.1	1.0	1.5	2.0
118.5	140.1	152.6	172.8	178.8	181.6	185.1	184.8	182.7
2.1	2.6	3.2	4.1	4.7	5.2	5.6	5.8	5.9
3.1	2.9	2.8	2.6	2.5	2.4	2.3	2.3	2.2
– 1.0	– 2.4	– 0.2	– 0.2	– 0.7	– 1.1	0.6	2.4	3.2
2.6	4.5	4.1	6.1	3.0	3.2	5.2	4.7	4.4
2.9	5.4	4.2	6.2	3.2	3.6	5.0	3.8	3.2
3.1	5.1	3.8	5.6	5.0	6.4	5.0	3.3	2.6
62.9	63.5	64.4	65.4	65.8	67.3	68.3	69.1	69.7
54.0	55.9	57.0	59.0	60.7	63.4	65.4	66.6	67.4
:	52.5	53.3	54.6	56.3	58.9	60.7	61.8	62.6
14.3	12.3	11.7	9.9	7.6	5.7	4.2	3.6	3.3
2.5	2.0	3.3	5.7	6.9	5.6	7.7	8.1	8.3
– 0.2	– 0.7	0.7	3.0	3.0	2.2	1.7	3.9	4.7
– 0.1	– 2.3	– 0.8	– 0.5	3.8	2.3	2.4	3.3	3.7
– 1.8	– 5.2	– 3.1	– 4.7	– 1.9	– 1.4	– 1.9	– 0.8	0.0
1.7	3.0	2.3	4.4	5.8	3.8	4.4	4.1	3.7
2.7	2.8	2.6	2.6	3.8	3.3	5.9	4.0	3.4
– 2.2	– 1.8	0.2	0.5	0.3	– 0.4	– 2.3	– 0.6	0.0
44.3	41.6	39.7	37.8	35.6	35.8	32.3	31.0	30.1
42.3	39.4	39.5	38.5	37.7	37.6	36.4	35.5	34.6
– 2.0	– 2.2	– 0.2	0.7	2.1	1.9	4.2	4.5	4.6
0.1	– 1.1	0.8	0.7	1.9	1.2	2.9	3.3	3.8
92.6	84.4	74.3	65.1	55.0	50.1	41.6	33.3	26.3
8.1	8.3	7.3	6.3	4.8	4.6	5.5	:	:
5.9	6.3	5.4	6.0	5.5	3.0	4.4	:	:
2.2	2.0	1.9	0.3	– 0.7	1.7	1.1	:	:
6.3	5.1	4.8	1.8	– 0.9	0.8	1.0	:	:
– 0.4	0.3	2.5	1.8	– 4.6	– 3.1	– 5.1	– 0.6	0.0
100.7	97.1	97.4	97.4	94.8	92.5	89.0	90.0	91.9

Table 93

Main economic indicators 1961–2002
Italy

(annual percentage change, unless otherwise stated)

	1961–73	1974–85	1986–90	1991–95	1993
1. Growth of GDP and its components (real)					
1.1. Private consumption	6.0	3.1	3.5	0.9	– 3.7
1.2. Government consumption	4.0	2.6	2.8	– 0.2	– 0.2
1.3. Gross fixed capital formation	4.5	0.3	4.3	– 1.2	– 10.9
1.4. of which equipment	:	2.8	6.3	– 0.1	– 17.4
1.5. of which construction	:	– 1.3	2.4	– 2.4	– 6.7
1.6. Exports of goods and services	10.1	5.0	5.1	7.4	9.0
1.7. Imports of goods and services	10.2	3.3	8.5	3.0	– 10.9
1.8. GDP	5.3	2.7	2.9	1.3	– 0.9
2. Demand components: contribution to changes in GDP (%)					
2.1. Consumption	4.2	2.3	2.6	0.5	– 2.3
2.2. Investment	1.0	0.0	0.8	– 0.2	– 2.2
2.3. Stockbuilding	0.0	0.1	– 0.1	0.0	– 0.7
2.4. Domestic demand	5.2	2.4	3.4	0.3	– 5.2
2.5. Exports	1.4	0.8	0.9	1.7	1.9
2.6. Final demand	6.6	3.2	4.4	1.9	– 3.3
2.7. Imports	– 1.3	– 0.5	– 1.5	– 0.7	2.5
2.8. Net exports	0.1	0.3	– 0.6	1.0	4.3
3. Gross savings and investment in % of GDP at current prices					
3.1. Private-sector savings	24.7	30.1	27.4	25.1	24.6
3.2. Net savings of households	:	:	12.6	11.3	10.7
3.3. General government savings	0.1	– 5.8	– 5.9	– 5.5	– 5.4
3.4. National savings	24.8	24.3	21.5	19.7	19.2
3.5. Gross capital formation	27.1	25.7	22.3	19.7	18.4
3.6. Current account	1.4	– 0.8	– 0.7	– 0.1	0.8
4. Determinants of investment					
4.1. Capacity utilisation (survey) (1)	:	:	77.8	76.3	74.4
4.2. Trend GDP gap	0.3	– 0.3	0.9	– 0.1	– 1.7
4.3. Potential GDP gap	:	– 2.2	0.4	– 2.6	– 4.5
4.4. Profitability index (1961–73 = 100)	100.0	60.8	89.5	100.2	92.4
5. Growth potential					
5.1. Growth of net capital stock (real)	5.1	3.1	2.4	1.8	1.4
5.2. Net capital/output ratio (real)	3.0	3.0	3.0	3.1	3.2
5.3. Growth of capital intensity	5.4	2.1	1.7	2.6	4.5
5.4. Labour productivity growth	5.5	1.8	2.1	2.1	2.2
5.5. Total factor productivity growth	3.7	1.1	1.6	1.2	0.7
6. Employment and unemployment					
6.1. Employment	– 0.2	0.9	0.9	– 0.6	– 2.5
6.2. Activity rate	61.3	60.6	61.1	60.0	59.3
6.3. Employment rate (benchmark)	56.1	56.8	57.3	57.5	57.2
6.4. Employment rate (full-time equivalent)	:	59.4	59.8	58.8	58.2
6.5. Unemployment rate (Eurostat definition)	5.0	7.0	9.5	10.1	10.2
7. Prices and wages					
7.1. Nominal wages per head	11.4	18.2	8.5	5.3	4.6
7.2. Real wages per head (2)	6.3	2.0	2.2	– 0.5	– 0.9
7.3. Nominal unit labour costs	5.6	16.1	6.2	3.1	2.3
7.4. Real unit labour costs	0.1	– 0.1	– 0.8	– 1.7	– 1.5
7.5. GDP deflator	5.5	16.3	7.1	4.9	3.9
7.6. Private consumption deflator	4.9	15.9	6.1	5.8	5.5
7.7. Terms of trade	– 0.5	– 0.9	3.7	– 0.9	– 3.9
8. General government budget, % of GDP					
8.1. Expenditure (3)	32.3	43.9	52.0	54.5	57.1
8.2. Current revenues (3)	28.9	33.9	41.1	45.4	47.7
8.3. Net borrowing (–) or lending (+) (3)	– 3.1	– 9.6	– 10.8	– 9.1	– 9.4
8.4. Net borrowing cyclically adjusted (3)	:	– 9.5	– 11.2	– 9.1	– 8.6
8.5. Debt (end of period) (4)	51.2	82.0	97.3	123.3	118.2
9. Monetary conditions					
9.1. Long-term interest rate	7.0	15.1	12.3	12.0	11.1
9.2. Short-term interest rate	4.2	15.5	12.1	11.0	10.2
9.3. Yield curve (9.1–9.2)	2.7	– 0.3	0.2	1.0	0.9
9.4. Real long-term interest rate (5)	1.4	– 0.9	4.8	6.8	6.9
9.5. Nominal effective exchange rate	– 0.9	– 6.8	1.5	– 6.9	– 16.3
9.6. Real effective exchange rate (1991 = 100; ULC in total economy)	79.1	73.5	90.7	85.1	81.1

(1) Manufacturing industry 2000.
(2) Private consumption deflator.
(3) Break in 1995 (ESA 95 data), 1991–95 average according to the former definition.
(4) Break in 1996 (ESA 95 data).
(5) GDP deflator.

(annual percentage change, unless otherwise stated)

1994	1995	1996	1997	1998	1999	2000	2001	2002
1.5	1.7	1.2	3.0	2.3	1.7	2.1	2.4	2.5
– 0.9	– 2.2	1.0	0.8	0.7	0.6	0.9	1.0	0.8
0.1	6.0	3.6	1.2	4.1	4.4	7.1	6.2	5.8
7.9	12.4	3.7	4.6	8.2	6.3	8.5	7.9	7.8
– 6.3	0.9	3.6	– 2.3	– 0.1	1.8	5.0	3.6	2.7
9.8	12.6	0.6	6.5	3.3	– 0.4	9.6	8.7	7.4
8.1	9.7	– 0.3	10.2	9.1	3.4	8.4	8.8	8.5
2.2	2.9	1.1	1.8	1.5	1.4	2.9	2.8	2.7
0.8	0.6	0.9	1.9	1.5	1.1	1.4	1.6	1.6
0.0	1.1	0.7	0.2	0.8	0.8	1.4	1.3	1.2
0.8	0.2	– 0.7	0.3	0.6	0.4	– 0.3	– 0.1	0.1
1.6	1.9	0.8	2.4	2.8	2.4	2.5	2.7	2.9
2.3	3.1	0.2	1.7	0.9	– 0.1	2.7	2.6	2.3
3.9	5.0	1.0	4.1	3.8	2.3	5.2	5.3	5.3
– 1.7	– 2.1	0.1	– 2.3	– 2.2	– 0.9	– 2.2	– 2.5	– 2.6
0.6	1.0	0.2	– 0.6	– 1.3	– 1.0	0.5	0.1	– 0.2
25.1	25.4	25.6	21.9	21.2	19.7	19.0	19.3	20.0
10.4	10.4	9.5	:	0.0	0.0	0.0	0.0	0.0
– 5.4	– 3.8	– 3.7	– 0.2	0.3	1.5	2.1	2.2	2.3
19.7	21.6	21.9	21.7	21.4	21.2	21.1	21.5	22.3
18.5	19.3	18.7	18.9	19.7	20.3	21.6	22.2	22.9
1.2	2.2	3.2	2.8	1.8	0.9	– 0.5	– 0.7	– 0.6
75.2	78.1	76.5	76.4	78.5	76.0	79.8	:	:
– 1.2	0.0	– 0.6	– 0.6	– 0.9	– 1.5	– 0.7	– 0.1	0.4
– 4.3	– 2.8	– 3.6	– 3.3	– 3.4	– 3.8	– 3.0	– 2.4	– 2.2
104.8	119.3	122.6	123.2	138.5	137.8	141.0	143.7	147.6
1.3	1.5	1.6	1.6	1.7	1.8	2.1	2.4	2.6
3.1	3.1	3.1	3.1	3.1	3.1	3.1	3.1	3.1
2.3	1.5	1.3	1.3	0.6	0.8	0.7	1.2	1.4
3.2	2.9	0.8	1.5	0.4	0.5	1.5	1.6	1.5
2.5	2.4	0.4	1.1	0.2	0.2	1.3	1.2	1.1
– 1.5	– 0.1	0.6	0.4	1.0	1.2	1.4	1.2	1.2
58.9	59.1	59.4	59.5	59.9	60.3	60.8	61.4	62.1
56.2	56.2	56.6	56.8	57.4	58.2	59.1	60.0	60.9
57.5	57.6	57.8	57.9	58.6	59.2	60.2	61.1	62.0
11.1	11.6	11.7	11.7	11.8	11.3	10.5	10.0	9.6
3.0	4.2	6.1	4.1	– 1.8	1.9	2.6	2.9	2.7
– 1.8	– 1.7	1.7	1.9	– 3.8	– 0.2	– 0.2	0.5	0.7
– 0.2	1.2	5.3	2.6	– 2.2	1.4	1.0	1.3	1.1
– 3.5	– 3.6	0.0	0.2	– 4.7	0.0	– 0.8	– 0.8	– 1.0
3.5	5.0	5.3	2.4	2.7	1.5	1.8	2.1	2.2
4.9	6.0	4.4	2.2	2.1	2.2	2.8	2.4	2.0
– 1.5	– 2.1	4.0	– 1.1	2.3	– 1.6	– 5.9	– 0.7	0.5
54.6	53.4	53.2	51.2	49.7	49.2	47.2	47.7	46.9
45.5	45.8	46.1	48.5	46.9	47.3	47.1	46.6	45.8
– 9.1	– 7.6	– 7.1	– 2.7	– 2.8	– 1.9	– 0.1	– 1.1	– 1.0
– 8.6	– 7.6	– 6.8	– 2.4	– 2.4	– 1.2	– 0.9	– 1.1	– 1.2
123.9	123.3	122.1	119.8	116.2	115.1	110.7	105.8	102.3
10.4	11.9	9.2	6.7	4.8	4.8	5.6	:	:
8.5	10.3	8.7	6.8	4.9	3.0	4.4	:	:
2.0	1.6	0.5	0.0	– 0.1	1.8	1.3	:	:
6.7	6.5	3.7	4.2	2.1	3.2	3.7	:	:
– 4.2	– 8.7	9.4	– 0.2	0.1	– 2.3	– 4.2	– 0.6	0.0
77.1	70.0	80.0	81.2	78.3	76.5	73.4	72.8	72.6

Table 94

Main economic indicators 1961–2002
Luxembourg

(annual percentage change, unless otherwise stated)

	1961–73	1974–85	1986–90	1991–95	1993
1. Growth of GDP and its components (real)					
1.1. Private consumption	4.6	2.6	5.1	2.3	1.7
1.2. Government consumption	3.4	2.4	3.9	2.7	3.7
1.3. Gross fixed capital formation	4.9	– 2.7	14.3	6.3	28.4
1.6. Exports of goods and services	6.3	2.9	6.1	4.6	2.8
1.7. Imports of goods and services	6.4	2.7	6.1	2.9	2.8
1.8. GDP	4.0	1.8	6.4	5.4	8.7
2. Demand components: contribution to changes in GDP (%)					
2.1. Consumption	2.9	1.9	3.8	1.7	1.5
2.2. Investment	1.5	– 0.7	3.0	1.7	7.4
2.3. Stockbuilding	– 0.4	0.3	– 0.3	0.3	0.5
2.4. Domestic demand	4.0	1.5	6.5	3.8	9.3
2.5. Exports	5.2	2.9	6.0	4.4	2.7
2.6. Final demand	9.2	4.4	12.4	8.2	11.4
2.7. Imports	– 5.1	– 2.6	– 5.9	– 2.7	– 2.6
2.8. Net exports	0.1	0.3	0.1	1.7	0.1
3. Gross savings and investment in % of GDP at current prices					
3.1. Private-sector savings	29.1	41.2	:	:	30.6
3.2. Net savings of households	:	:	:	:	:
3.3. General government savings	4.9	8.1	:	9.3	11.4
3.4. National savings	34.0	49.3	49.3	:	41.9
3.5. Gross capital formation	19.2	16.4	19.8	21.3	20.4
3.6. Current account	6.9	26.6	28.1	:	20.1
4. Determinants of investment					
4.1. Capacity utilisation (survey) (1)	:	:	83.1	81.2	80.1
4.2. Trend GDP gap	0.1	– 0.6	0.6	1.5	3.3
4.3. Potential GDP gap	:	– 1.8	– 3.4	– 3.9	– 2.9
4.4. Profitability index (1961–73 = 100)	100.0	79.5	126.4	159.3	173.7
5. Growth potential					
5.1. Growth of net capital stock (real)	1.4	1.6	3.4	4.7	5.8
5.2. Net capital/output ratio (real)	2.7	2.2	1.9	1.8	1.8
5.3. Growth of capital intensity	0.3	1.2	0.2	2.0	3.9
5.4. Labour productivity growth	3.0	1.3	3.2	2.7	6.8
5.5. Total factor productivity growth	2.8	0.8	3.1	1.9	5.1
6. Employment and unemployment					
6.1. Employment	1.1	0.5	3.2	2.7	1.8
6.2. Activity rate	59.8	62.2	61.7	62.2	62.0
6.3. Employment rate (benchmark)	63.1	64.3	67.4	75.4	75.1
6.4. Employment rate (full-time equivalent)	:	:	57.4	58.0	58.7
6.5. Unemployment rate (Eurostat definition)	0.0	1.7	2.1	2.5	2.6
7. Prices and wages					
7.1. Nominal wages per head	7.4	9.2	5.3	4.6	5.0
7.2. Real wages per head (2)	4.2	1.7	2.8	1.6	0.8
7.3. Nominal unit labour costs	4.3	7.8	2.1	1.8	– 1.7
7.4. Real unit labour costs	– 0.2	1.1	– 0.2	– 0.6	– 2.4
7.5. GDP deflator	4.4	6.7	2.2	2.5	0.7
7.6. Private consumption deflator	3.0	7.4	2.4	3.0	4.1
7.7. Terms of trade	0.1	– 1.1	– 0.8	0.2	3.2
8. General government budget, % of GDP					
8.1. Expenditure (3)	29.1	44.4	:	45.6	46.4
8.2. Current revenues (3)	31.1	46.3	:	48.7	51.3
8.3. Net borrowing (–) or lending (+) (3)	1.8	1.8	:	3.1	4.8
8.4. Net borrowing cyclically adjusted (3)	:	2.3	:	2.2	2.8
8.5. Debt (end of period) (4)	13.6	9.5	4.5	5.6	5.8
9. Monetary conditions					
9.1. Long-term interest rate	:	8.1	8.0	7.5	6.8
9.4. Real long-term interest rate (5)	:	1.5	5.6	4.9	6.1

(1) Manufacturing industry.
(2) Private consumption deflator.
(3) Break in 1990 (ESA 95 data), 1986–90 average according to the former definition.
(4) Break in 1996 (ESA 95 data).
(5) GDP deflator.

(annual percentage change, unless otherwise stated)

1994	1995	1996	1997	1998	1999	2000	2001	2002
2.4	2.4	4.4	3.8	2.3	4.1	3.6	5.0	5.0
2.0	2.2	4.4	2.1	2.8	12.8	4.0	3.8	3.6
– 14.9	3.5	– 3.5	10.5	1.5	26.6	– 1.7	5.7	4.8
4.4	4.4	4.0	10.5	9.9	7.9	12.2	9.6	9.1
– 0.1	3.8	4.0	9.3	8.3	11.2	8.0	8.8	8.5
4.2	3.8	2.9	7.3	5.0	7.5	7.8	6.5	6.0
1.6	1.5	2.9	2.2	1.5	4.0	2.3	2.8	2.7
– 4.6	0.9	– 0.8	2.1	0.3	5.4	– 0.4	1.2	1.0
2.5	0.5	0.2	0.4	0.0	0.1	0.0	– 0.1	– 0.1
– 0.5	2.9	2.4	4.8	2.0	9.4	1.9	3.9	3.6
4.1	4.1	4.2	11.3	10.9	9.2	14.1	11.6	11.3
4.1	7.0	6.6	16.0	13.0	18.6	16.0	15.6	15.0
0.1	– 3.2	– 3.7	– 8.8	– 7.9	– 11.1	– 8.2	– 9.1	– 8.9
4.2	0.8	0.5	2.5	3.0	– 1.9	5.9	2.5	2.4
29.4	:	:	:	:	:	:	:	:
:	:	:	:	:	:	:	:	:
10.1	8.0	8.4	8.6	9.2	9.4	10.1	9.9	9.3
39.5	:	:	:	:	:	:	:	:
20.0	21.3	20.2	20.4	19.5	22.8	21.3	21.0	20.4
18.2	:	:	:	:	:	:	:	:
81.3	82.9	79.0	82.4	88.0	84.9	88.3	:	:
1.8	– 0.1	– 2.8	– 1.4	– 2.2	– 0.7	1.0	1.6	1.8
– 4.7	– 4.7	– 4.9	– 3.3	– 3.4	– 2.8	– 1.9	– 1.1	– 0.8
180.6	172.1	170.5	206.5	218.7	234.1	229.7	231.2	241.3
3.8	4.1	3.2	4.2	3.9	6.9	5.7	5.7	5.6
1.8	1.8	1.8	1.7	1.7	1.7	1.7	1.7	1.6
1.3	1.5	0.5	1.0	– 0.4	1.8	0.2	1.2	1.4
1.6	1.3	0.2	4.0	0.6	2.4	2.2	1.9	1.9
1.1	0.6	0.0	3.5	0.8	1.6	2.1	1.4	1.3
2.5	2.5	2.7	3.1	4.4	5.0	5.5	4.5	4.1
62.3	61.9	62.0	62.1	62.5	63.2	67.1	70.3	73.2
76.3	77.5	78.7	80.4	83.0	86.3	90.1	93.2	96.1
57.5	56.0	57.1	57.1	57.4	59.2	:	:	:
3.2	2.9	3.0	2.7	2.7	2.3	1.9	1.6	1.4
4.1	2.2	2.3	3.1	0.9	3.1	5.0	4.0	4.0
1.7	0.1	0.6	1.4	– 0.8	1.7	2.0	1.4	1.8
2.4	0.9	2.1	– 0.9	0.3	0.7	2.8	2.0	2.1
– 2.8	0.2	0.4	– 4.1	– 1.2	– 1.6	1.1	0.0	– 1.2
5.3	0.7	1.7	3.3	1.5	2.3	1.7	2.1	3.3
2.3	2.1	1.7	1.7	1.7	1.4	3.0	2.6	2.1
– 0.3	– 2.8	– 0.1	1.6	0.6	0.5	– 2.0	– 0.8	0.7
44.4	45.1	45.4	43.3	43.1	42.7	42.3	42.3	41.4
48.8	47.4	48.0	46.7	46.9	47.1	47.2	46.5	45.0
4.4	2.3	2.6	3.4	3.7	4.4	4.9	4.2	3.6
3.3	2.3	4.4	4.3	5.1	4.8	4.3	3.3	2.5
5.3	5.6	6.2	6.0	6.4	6.0	5.5	5.3	5.1
7.2	7.2	6.3	5.6	4.7	4.7	5.5	:	:
1.7	6.5	4.5	2.2	3.2	2.4	3.8	:	:

Table 95

Main economic indicators 1961–2002
Netherlands

(annual percentage change, unless otherwise stated)

	1961–73	1974–85	1986–90	1991–95	1993
1. Growth of GDP and its components (real)					
1.1. Private consumption	5.6	1.8	2.9	1.9	0.5
1.2. Government consumption	2.9	2.8	2.2	2.0	2.2
1.3. Gross fixed capital formation	5.4	0.0	3.7	0.9	– 3.0
1.4. of which equipment	:	2.8	3.6	1.3	– 2.9
1.5. of which construction	:	– 1.6	3.7	0.3	– 3.5
1.6. Exports of goods and services	9.0	3.1	5.3	4.4	1.4
1.7. Imports of goods and services	9.2	2.4	5.2	3.7	– 2.0
1.8. GDP	4.9	1.9	3.1	2.1	0.8
2. Demand components: contribution to changes in GDP (%)					
2.1. Consumption	3.7	1.6	2.0	1.5	0.8
2.2. Investment	1.3	0.0	0.8	0.2	– 0.6
2.3. Stockbuilding	0.0	0.0	0.1	– 0.2	– 1.2
2.4. Domestic demand	5.0	1.6	2.9	1.5	– 1.0
2.5. Exports	3.3	1.4	2.6	2.4	0.8
2.6. Final demand	8.3	3.0	5.5	3.9	– 0.2
2.7. Imports	– 3.5	– 1.0	– 2.4	– 1.8	1.0
2.8. Net exports	– 0.2	0.3	0.2	0.6	1.8
3. Gross savings and investment in % of GDP at current prices					
3.1. Private-sector savings	23.2	20.3	22.5	23.0	20.8
3.2. Net savings of households	:	:	9.0	8.0	7.8
3.3. General government savings	4.0	1.2	– 0.8	– 0.6	– 0.3
3.4. National savings	27.2	21.5	21.7	22.4	20.4
3.5. Gross capital formation	29.3	22.8	23.6	21.6	20.3
3.6. Current account	0.5	2.0	2.9	4.5	4.7
4. Determinants of investment					
4.1. Capacity utilisation (survey) (1)	:	80.1	84.9	83.2	81.0
4.2. Trend GDP gap	– 0.1	0.0	0.1	0.1	– 0.9
4.3. Potential GDP gap	:	– 2.3	– 2.4	– 2.3	– 2.8
4.4. Profitability index (1961–73 = 100)	100.0	78.1	93.0	101.9	94.7
5. Growth potential					
5.1. Growth of net capital stock (real)	5.3	2.5	2.2	1.7	1.5
5.2. Net capital/output ratio (real)	3.1	3.3	3.3	3.2	3.2
5.3. Growth of capital intensity	4.4	2.6	0.2	1.0	1.6
5.4. Labour productivity growth	4.0	2.0	1.2	1.4	0.9
5.5. Total factor productivity growth	2.3	1.1	1.1	1.0	0.3
6. Employment and unemployment					
6.1. Employment	1.5	0.4	2.3	1.1	0.0
6.2. Activity rate	69.5	68.6	68.2	71.3	71.2
6.3. Employment rate (benchmark)	68.9	64.0	63.6	67.0	66.8
6.4. Employment rate (full-time equivalent)	62.4	54.3	51.8	53.5	53.4
6.5. Unemployment rate (Eurostat definition)	1.1	7.1	7.4	6.4	6.5
7. Prices and wages					
7.1. Nominal wages per head	11.4	6.6	1.7	3.4	3.3
7.2. Real wages per head (2)	6.1	0.6	0.8	0.9	1.1
7.3. Nominal unit labour costs	7.2	4.5	0.5	2.0	2.5
7.4. Real unit labour costs	1.1	– 0.9	– 0.3	– 0.3	0.5
7.5. GDP deflator	6.0	5.4	0.8	2.2	1.9
7.6. Private consumption deflator	5.1	6.0	0.9	2.5	2.2
7.7. Terms of trade	0.5	– 0.6	0.0	0.1	0.2
8. General government budget, % of GDP					
8.1. Expenditure (3)	37.1	52.9	54.7	52.6	53.9
8.2. Current revenues (3)	36.7	49.7	49.8	49.2	50.8
8.3. Net borrowing (–) or lending (+) (3)	– 0.7	– 3.4	– 4.9	– 3.4	– 3.1
8.4. Net borrowing cyclically adjusted (3)	:	– 3.4	– 4.9	– 3.5	– 2.5
8.5. Debt (end of period) (4)	:	70.0	77.1	77.0	79.1
9. Monetary conditions					
9.1. Long-term interest rate	5.9	9.4	7.1	7.4	6.3
9.2. Short-term interest rate	4.1	7.7	6.4	7.0	6.9
9.3. Yield curve (9.1–9.2)	1.8	1.7	0.7	0.4	– 0.5
9.4. Real long-term interest rate (5)	– 0.1	3.8	6.2	5.1	4.3
9.5. Nominal effective exchange rate	0.8	1.9	3.2	2.0	3.4
9.6. Real effective exchange rate (1991 = 100; ULC in total economy)	100.7	119.2	106.0	104.0	105.2

(1) Manufacturing industry 2000.
(2) Private consumption deflator.
(3) Break in 1995 (ESA 95 data), 1991–95 average according to the former definition.
(4) Break in 1996 (ESA 95 data).
(5) GDP deflator.

(annual percentage change, unless otherwise stated)

1994	1995	1996	1997	1998	1999	2000	2001	2002
2.3	2.1	4.0	3.0	4.4	4.4	4.3	4.3	4.2
1.1	0.7	– 0.4	3.2	3.4	2.5	3.2	2.5	2.1
2.4	4.6	6.3	6.6	4.1	6.5	6.8	5.4	5.0
0.5	10.4	9.4	9.4	4.5	5.8	6.4	6.6	6.4
2.2	1.0	2.2	2.3	3.2	6.3	6.9	4.2	3.8
6.7	6.5	4.6	8.8	7.4	5.6	8.5	7.8	6.6
6.7	7.7	4.4	9.5	8.0	6.3	9.2	8.3	7.5
3.2	2.3	3.0	3.8	4.1	3.9	4.3	4.0	3.5
1.4	1.2	1.9	2.2	2.9	2.8	2.8	2.7	2.5
0.5	0.9	1.3	1.4	0.9	1.4	1.5	1.2	1.2
0.9	0.0	– 0.5	0.1	0.1	– 0.2	0.0	0.0	0.1
2.8	2.4	2.7	3.7	4.0	3.9	4.3	3.9	3.8
3.6	3.6	2.6	5.1	4.5	3.5	5.4	5.2	4.5
6.4	6.0	5.3	8.8	8.5	7.5	9.7	9.1	8.3
– 3.2	– 3.8	– 2.2	– 5.0	– 4.4	– 3.6	– 5.4	– 5.1	– 4.8
0.4	– 0.2	0.4	0.2	0.1	– 0.1	0.0	0.1	– 0.3
22.5	28.5	26.1	26.6	24.1	24.3	23.9	24.2	23.8
7.6	7.8	8.1	6.0	5.6	4.3	3.6	4.4	3.9
– 1.0	– 1.1	0.6	1.3	1.8	3.5	3.8	3.2	4.1
21.5	27.4	26.7	27.9	25.9	27.9	27.7	27.5	27.9
20.9	21.0	21.3	21.7	21.9	22.3	23.0	23.1	23.3
5.2	6.4	5.4	6.2	4.1	5.6	4.7	4.4	4.6
82.4	84.4	83.9	84.4	85.3	84.0	84.6	:	:
– 0.6	– 1.4	– 1.5	– 1.0	– 0.4	– 0.1	0.6	1.0	0.9
– 2.3	– 2.5	– 2.4	– 2.1	– 2.0	– 0.6	1.0	2.0	2.5
106.9	110.7	111.8	116.3	118.4	118.2	119.5	124.9	129.3
1.5	1.7	1.9	2.2	2.2	2.5	2.8	3.0	3.1
3.2	3.2	3.1	3.1	3.0	3.0	2.9	2.9	2.9
1.9	0.2	– 0.6	– 1.0	– 0.8	– 0.4	0.1	0.4	0.8
3.6	0.8	0.5	0.7	1.0	0.9	1.6	1.4	1.2
2.9	0.7	0.7	1.0	1.3	1.1	1.5	1.3	0.9
0.5	1.4	2.3	3.2	3.0	2.8	2.7	2.6	2.3
71.8	72.4	73.3	74.6	75.6	76.8	77.9	79.1	80.3
66.9	67.6	68.9	70.9	72.7	74.3	76.0	77.5	78.9
53.0	53.6	54.8	56.3	57.8	59.1	60.4	61.6	62.7
7.1	6.9	6.3	5.2	4.0	3.3	2.6	2.3	2.1
2.8	1.9	1.4	2.2	2.8	3.0	4.2	4.3	4.3
– 0.3	0.8	– 0.4	0.2	1.0	1.1	1.4	0.3	1.4
– 0.8	1.0	1.0	1.6	1.8	2.1	2.6	2.8	3.0
– 3.1	– 0.8	– 0.2	– 0.4	– 0.2	0.4	0.3	– 0.7	– 0.6
2.3	1.8	1.2	2.0	2.0	1.7	2.3	3.5	3.7
3.0	1.1	1.9	2.0	1.8	1.9	2.8	4.0	2.9
0.4	0.9	– 0.7	0.4	0.4	– 0.9	– 1.4	– 0.1	1.1
51.6	51.4	49.6	48.2	47.1	46.5	45.4	44.6	43.1
48.0	47.3	47.8	47.1	46.4	47.5	47.1	45.3	44.7
– 3.6	– 4.2	– 1.8	– 1.1	– 0.7	1.0	1.8	0.6	1.6
– 3.2	– 3.2	– 0.8	– 0.4	– 0.4	1.0	0.7	– 0.1	1.0
75.5	77.0	75.2	70.0	66.6	62.9	56.9	52.7	47.5
6.9	6.9	6.2	5.6	4.6	4.6	5.4	:	:
5.2	4.4	3.0	3.3	3.4	3.0	4.4	:	:
1.7	2.5	3.2	2.3	1.2	1.7	1.1	:	:
4.5	5.0	5.0	3.5	2.6	2.9	3.1	:	:
0.4	4.4	– 2.1	– 4.4	0.1	– 1.3	– 3.0	– 0.3	0.0
104.4	108.3	105.8	102.0	102.8	102.2	100.9	102.2	103.9

Table 96

Main economic indicators 1961–2002
Austria

(annual percentage change, unless otherwise stated)

	1961–73	1974–85	1986–90	1991–95	1993
1. Growth of GDP and its components (real)					
1.1. Private consumption	4.6	2.4	3.2	2.2	0.7
1.2. Government consumption	3.2	2.7	1.2	1.9	2.7
1.3. Gross fixed capital formation	6.5	0.9	5.3	2.7	– 2.0
1.4. of which equipment	5.5	2.4	6.1	1.4	– 7.2
1.5. of which construction	7.2	– 0.1	4.9	3.7	1.7
1.6. Exports of goods and services	8.6	6.0	5.9	3.6	– 1.3
1.7. Imports of goods and services	8.6	4.8	5.6	4.5	– 0.7
1.8. GDP	4.9	2.3	3.2	1.9	0.5
2. Demand components: contribution to changes in GDP (%)					
2.1. Consumption	3.1	1.9	2.0	1.6	0.9
2.2. Investment	1.7	0.2	1.2	0.7	– 0.5
2.3. Stockbuilding	0.0	– 0.1	0.2	– 0.2	– 0.4
2.4. Domestic demand	4.9	2.0	3.0	2.3	0.8
2.5. Exports	2.3	1.9	2.5	1.7	– 0.6
2.6. Final demand	7.2	3.9	5.5	4.0	0.2
2.7. Imports	– 2.3	– 1.6	– 2.3	– 2.1	0.3
2.8. Net exports	0.0	0.3	0.2	– 0.4	– 0.3
3. Gross savings and investment in % of GDP at current prices					
3.1. Private-sector savings	21.3	21.3	22.0	22.1	21.6
3.2. Net savings of households	:	:	7.0	6.3	5.5
3.3. General government savings	7.3	3.8	1.8	1.2	0.9
3.4. National savings	28.5	25.1	23.8	23.2	22.6
3.5. Gross capital formation	26.9	24.6	23.5	24.1	23.0
3.6. Current account	0.1	– 1.0	0.2	– 0.7	– 0.4
4. Determinants of investment					
4.1. Capacity utilisation (survey) (1)	:	:	:	:	:
4.2. Trend GDP gap	– 0.1	0.2	– 0.6	1.0	0.2
4.3. Potential GDP gap	:	0.7	0.1	– 0.3	– 0.8
4.4. Profitability index (1961–73 = 100)	100.0	91.3	94.7	96.0	90.3
5. Growth potential					
5.1. Growth of net capital stock (real)	4.0	3.5	2.9	3.1	2.8
5.2. Net capital/output ratio (real)	2.8	2.9	3.1	3.2	3.2
5.3. Growth of capital intensity	4.0	3.4	2.1	2.7	3.3
5.4. Labour productivity growth	4.9	2.2	2.4	1.5	1.0
5.5. Total factor productivity growth	3.6	1.1	1.8	0.7	0.0
6. Employment and unemployment					
6.1. Employment	– 0.2	0.6	1.1	1.8	0.8
6.2. Activity rate	66.9	64.9	67.0	70.0	69.1
6.3. Employment rate (benchmark)	65.7	63.3	64.7	67.4	66.3
6.4. Employment rate (full-time equivalent)	:	:	64.0	63.7	63.0
6.5. Unemployment rate (Eurostat definition)	1.7	2.5	3.4	3.7	4.0
7. Prices and wages					
7.1. Nominal wages per head	9.4	7.9	4.7	4.6	4.4
7.2. Real wages per head (2)	5.1	2.0	2.6	1.5	1.0
7.3. Nominal unit labour costs	4.3	5.6	2.2	3.0	3.3
7.4. Real unit labour costs	– 0.3	0.2	– 0.3	– 0.2	0.5
7.5. GDP deflator	4.6	5.4	2.5	3.2	2.8
7.6. Private consumption deflator	4.1	5.8	2.0	3.0	3.3
7.7. Terms of trade	0.3	– 1.1	0.3	0.0	– 0.1
8. General government budget, % of GDP					
8.1. Expenditure (3)	37.2	46.6	50.0	56.2	57.7
8.2. Current revenues (3)	38.0	44.3	46.8	52.3	53.5
8.3. Net borrowing (–) or lending (+) (3)	0.8	– 2.3	– 3.2	– 3.8	– 4.2
8.4. Net borrowing cyclically adjusted (3)	0.8	– 2.3	– 3.0	– 4.1	– 4.3
8.5. Debt (end of period) (4)	16.9	49.2	57.3	68.5	61.9
9. Monetary conditions					
9.1. Long-term interest rate	:	8.9	7.4	7.5	6.6
9.2. Short-term interest rate	:	7.1	6.1	7.0	7.2
9.3. Yield curve (9.1–9.2)	:	1.8	1.3	0.4	– 0.6
9.4. Real long-term interest rate (5)	:	3.3	4.7	4.1	3.8
9.5. Nominal effective exchange rate	0.6	2.8	2.8	1.7	2.9
9.6. Real effective exchange rate (1991 = 100; ULC in total economy)	85.8	93.6	100.9	105.4	106.2

(1) Manufacturing industry.
(2) Private consumption deflator.
(3) Break in 1988 (ESA 95 data), 1986–90 average according to the former definition.
(4) Break in 1996 (ESA 95 data).
(5) GDP deflator.

(annual percentage change, unless otherwise stated)

1994	1995	1996	1997	1998	1999	2000	2001	2002
1.8	2.9	3.2	1.4	2.9	2.3	3.1	2.2	2.4
2.5	0.0	1.2	– 1.4	2.8	3.2	0.5	– 0.2	– 0.4
8.4	1.2	2.2	1.0	2.7	3.2	5.2	4.0	4.2
11.0	1.2	4.7	5.3	4.5	4.8	7.7	5.6	5.2
7.0	0.7	0.3	– 2.0	0.9	2.2	2.5	1.7	2.1
5.6	6.5	6.2	9.9	5.5	7.6	9.6	8.6	8.2
8.3	7.0	5.8	9.7	3.7	7.1	8.8	7.1	7.5
2.4	1.7	2.0	1.3	3.3	2.8	3.5	2.9	2.8
1.5	1.6	2.0	0.5	2.2	1.9	1.9	1.2	1.3
2.0	0.3	0.5	0.2	0.6	0.7	1.2	0.9	1.0
0.4	0.0	– 0.6	0.3	0.0	– 0.3	0.0	0.0	0.0
3.6	2.0	1.9	1.3	2.5	2.6	3.0	2.1	2.3
2.6	3.1	2.4	3.9	2.4	3.4	4.4	4.2	4.2
6.1	5.0	4.3	5.2	4.9	5.9	7.5	6.3	6.5
– 3.8	– 3.3	– 2.3	– 3.9	– 1.6	– 3.1	– 4.0	– 3.4	– 3.7
– 1.2	– 0.3	0.1	0.0	0.8	0.2	0.4	0.7	0.5
22.7	22.1	20.6	20.0	20.2	19.9	19.4	19.1	19.3
5.9	5.5	4.5	:	:	:	:	:	:
0.1	– 0.2	0.9	2.0	1.8	1.5	1.7	2.5	2.7
22.9	21.8	21.5	22.0	22.0	21.4	21.1	21.6	22.0
24.3	24.3	23.7	24.2	24.2	24.0	24.5	24.7	25.0
– 0.9	– 2.4	– 2.2	– 2.6	– 2.0	– 2.6	– 3.4	– 3.1	– 2.9
:	:	80.2	82.0	83.7	81.9	85.1	:	:
0.3	– 0.4	– 0.7	– 1.7	– 1.0	– 0.8	0.0	0.2	0.2
– 0.6	– 0.8	– 0.7	– 1.0	– 0.3	– 1.4	– 0.9	– 0.5	– 0.8
96.2	96.5	105.0	106.6	107.5	108.1	113.0	115.4	119.4
3.1	2.9	2.9	2.8	2.8	2.8	3.0	3.1	3.2
3.2	3.3	3.3	3.3	3.3	3.3	3.3	3.3	3.3
3.0	2.7	3.5	2.3	2.0	1.4	2.1	2.4	2.6
2.3	1.5	2.6	0.8	2.5	1.4	2.6	2.2	2.2
1.4	0.6	1.5	0.1	1.8	1.0	1.9	1.5	1.4
4.5	– 0.2	– 1.3	0.1	0.1	1.4	0.9	0.7	0.6
71.8	71.6	70.8	70.8	70.8	70.2	70.3	70.6	70.8
69.1	68.8	67.8	67.7	67.7	67.5	68.0	68.4	68.8
63.1	63.6	62.4	62.7	62.9	63.0	:	:	:
3.8	3.9	4.3	4.4	4.5	3.8	3.3	3.0	2.7
3.5	2.9	1.1	0.6	2.8	2.0	2.1	2.7	2.0
0.2	1.4	– 0.8	– 0.9	2.3	1.2	– 0.2	0.6	0.2
1.1	1.4	– 1.4	– 0.2	0.4	0.5	– 0.5	0.5	– 0.2
– 1.7	– 0.9	– 2.7	– 1.4	– 0.4	– 0.3	– 1.2	– 0.7	– 1.2
2.8	2.3	1.3	1.2	0.7	0.9	0.8	1.2	1.1
3.3	1.5	1.9	1.5	0.5	0.7	2.4	2.0	1.8
0.3	– 0.1	– 1.0	– 1.0	0.4	– 0.2	– 2.2	– 0.6	– 0.4
57.3	57.2	56.6	53.8	54.2	53.6	52.0	50.4	49.0
52.3	52.1	52.8	52.1	51.9	51.5	50.6	49.6	48.5
– 5.0	– 5.1	– 3.8	– 1.7	– 2.3	– 2.1	– 1.3	– 0.8	– 0.5
– 5.0	– 5.0	– 3.6	– 1.2	– 2.0	– 1.9	– 1.7	– 0.9	– 0.6
64.7	68.5	69.2	64.7	64.0	64.6	64.4	62.8	61.0
6.7	7.2	6.3	5.7	4.7	4.7	5.6	:	:
5.0	4.5	3.3	3.5	3.6	3.0	4.4	:	:
1.7	2.6	3.0	2.2	1.1	1.7	1.2	:	:
3.7	4.7	4.9	4.4	3.9	3.8	4.8	:	:
0.1	3.9	– 2.0	– 3.1	0.4	– 1.2	– 2.6	– 0.4	0.0
107.2	111.0	105.9	101.8	101.8	100.0	96.2	95.2	93.8

Table 97

Main economic indicators 1961–2002
Portugal

(annual percentage change, unless otherwise stated)

	1961–73	1974–85	1986–90	1991–95	1993
1. Growth of GDP and its components (real)					
1.1. Private consumption	6.0	1.4	5.2	2.6	1.5
1.2. Government consumption	9.1	6.7	6.3	3.3	0.9
1.3. Gross fixed capital formation	7.9	– 1.3	11.0	2.0	– 6.0
1.4. of which equipment	:	:	13.5	1.9	– 12.1
1.5. of which construction	:	:	8.8	3.9	0.4
1.6. Exports of goods and services	12.0	3.4	9.8	4.2	– 3.6
1.7. Imports of goods and services	11.7	0.6	15.5	6.2	– 3.3
1.8. GDP	6.9	2.2	5.5	1.8	– 1.1
2. Demand components: contribution to changes in GDP (%)					
2.1. Consumption	5.4	1.9	4.4	2.2	1.1
2.2. Investment	1.7	– 0.3	2.7	0.6	– 1.7
2.3. Stockbuilding	0.9	– 0.2	0.9	0.2	– 0.8
2.4. Domestic demand	8.0	1.4	7.9	3.0	– 1.4
2.5. Exports	2.4	1.1	3.1	1.5	– 1.3
2.6. Final demand	10.5	2.6	11.0	4.6	– 2.7
2.7. Imports	– 3.5	– 0.3	– 5.5	– 2.8	1.6
2.8. Net exports	– 1.1	0.8	– 2.4	– 1.3	0.3
3. Gross savings and investment in % of GDP at current prices					
3.1. Private-sector savings	18.3	22.9	28.0	23.2	22.7
3.2. Net savings of households	:	:	14.0	10.0	10.1
3.3. General government savings	3.5	– 2.6	– 0.8	– 1.8	– 2.0
3.4. National savings	21.9	20.3	27.1	21.4	20.6
3.5. Gross capital formation	24.3	27.4	26.4	23.5	22.0
3.6. Current account	0.4	– 6.6	– 0.6	– 3.1	– 2.6
4. Determinants of investment					
4.1. Capacity utilisation (survey) (1)	:	:	:	77.5	73.9
4.2. Trend GDP gap	0.2	– 0.5	0.4	0.3	– 1.2
4.3. Potential GDP gap	:	– 3.4	– 0.6	– 0.5	– 1.5
4.4. Profitability index (1961–73 = 100)	100.0	44.7	95.0	93.2	89.0
5. Growth potential					
5.1. Growth of net capital stock (real)	3.8	4.8	3.8	3.0	2.6
5.2. Net capital/output ratio (real)	2.4	2.4	2.6	2.7	2.7
5.3. Growth of capital intensity	3.4	5.3	2.7	3.6	4.8
5.4. Labour productivity growth	6.6	2.6	4.4	2.3	1.0
5.5. Total factor productivity growth	5.4	0.9	3.5	1.1	– 0.6
6. Employment and unemployment					
6.1. Employment	0.0	0.7	1.8	– 0.4	– 1.8
6.2. Activity rate	69.8	69.2	69.6	70.8	70.1
6.3. Employment rate (benchmark)	68.0	64.3	65.2	66.8	66.1
6.4. Employment rate (full-time equivalent)	:	:	62.5	63.9	64.2
6.5. Unemployment rate (Eurostat definition)	2.5	7.0	6.4	5.7	5.7
7. Prices and wages					
7.1. Nominal wages per head	10.9	24.1	16.7	10.5	6.0
7.2. Real wages per head (2)	6.7	1.6	4.0	2.6	– 0.6
7.3. Nominal unit labour costs	4.0	20.9	11.7	8.0	5.0
7.4. Real unit labour costs	0.1	0.1	– 1.4	0.0	– 1.6
7.5. GDP deflator	3.9	20.8	13.3	8.0	6.7
7.6. Private consumption deflator	3.9	22.2	12.2	7.7	6.6
7.7. Terms of trade	0.3	– 1.7	2.9	1.7	0.8
8. General government budget, % of GDP					
8.1. Expenditure (3)	18.7	35.6	37.6	42.0	42.8
8.2. Current revenues (3)	19.9	28.7	33.2	36.8	36.8
8.3. Net borrowing (–) or lending (+) (3)	1.2	– 6.9	– 4.4	– 5.2	– 5.9
8.4. Net borrowing cyclically adjusted (3)	1.2	– 6.7	– 4.5	– 5.3	– 5.6
8.5. Debt (end of period) (4)	16.8	67.4	63.4	63.9	61.3
9. Monetary conditions					
9.1. Long-term interest rate	:	:	17.1	13.0	9.5
9.2. Short-term interest rate	:	14.7	14.9	13.6	13.3
9.3. Yield curve (9.1–9.2)	:	:	2.2	– 0.6	– 3.7
9.4. Real long-term interest rate (5)	:	:	3.3	4.6	2.7
9.5. Nominal effective exchange rate	0.5	– 11.6	– 4.8	– 1.1	– 6.6
9.6. Real effective exchange rate (1991 = 100; ULC in total economy)	93.0	94.1	81.0	105.7	106.1

(1) Manufacturing industry 2000.
(2) Private consumption deflator.
(3) Break in 1995 (ESA 95 data), 1991–95 average according to the former definition.
(4) Break in 1996 (ESA 95 data).
(5) GDP deflator.

(annual percentage change, unless otherwise stated)

1994	1995	1996	1997	1998	1999	2000	2001	2002
2.2	1.6	3.9	3.3	6.0	4.6	3.0	2.4	2.4
2.1	2.2	– 0.3	2.6	3.0	3.8	2.7	1.0	1.0
3.4	4.8	6.2	10.6	8.8	5.4	6.0	5.6	5.8
5.7	9.0	7.7	10.0	14.1	6.8	8.0	6.5	6.8
1.7	9.0	5.9	11.0	5.1	4.2	3.7	4.5	4.5
8.7	9.1	7.1	8.5	7.6	2.5	8.0	7.2	7.1
9.0	7.8	4.9	10.6	13.8	7.0	8.4	6.7	6.9
2.2	2.9	3.6	3.7	3.6	3.0	3.0	2.7	2.7
1.8	1.4	2.4	2.6	4.4	3.7	2.5	1.8	1.8
0.9	1.3	1.4	2.4	2.1	1.4	1.6	1.5	1.6
0.6	0.6	– 0.6	– 0.1	0.0	0.1	0.0	0.0	0.0
3.4	3.3	3.2	4.9	6.5	5.2	4.1	3.3	3.4
3.0	3.3	2.1	2.7	2.5	0.9	2.7	2.5	2.6
6.3	6.6	5.4	7.6	9.0	6.0	6.7	5.8	6.0
– 4.1	– 3.8	– 1.8	– 3.9	– 5.4	– 3.0	– 3.7	– 3.2	– 3.4
– 1.1	– 0.5	0.4	– 1.2	– 2.9	– 2.1	– 1.1	– 0.6	– 0.8
22.2	21.4	19.4	17.8	16.4	14.8	13.1	12.6	12.7
7.7	7.8	9.7	5.4	0.7	– 0.4	– 0.4	– 0.6	– 0.6
– 2.8	– 1.3	– 0.2	1.0	1.9	2.3	2.0	2.6	2.8
19.4	20.1	19.1	18.8	18.3	17.1	15.1	15.2	15.5
22.6	23.1	23.1	24.5	25.3	25.6	26.5	27.2	27.9
– 4.4	– 3.0	– 4.0	– 5.7	– 7.0	– 8.5	– 10.9	– 11.5	– 11.9
77.3	79.7	78.8	80.9	81.4	80.8	80.9	:	:
– 1.8	– 1.9	– 1.2	– 0.4	0.3	0.4	0.5	0.3	0.2
– 1.2	– 0.8	– 0.8	– 0.7	– 0.4	– 0.6	– 0.4	– 1.0	– 1.2
98.9	103.6	106.6	110.2	114.6	113.5	105.3	100.1	96.6
2.6	2.6	2.8	3.5	3.8	3.9	4.1	4.3	4.4
2.7	2.7	2.7	2.7	2.7	2.7	2.7	2.8	2.8
3.7	3.3	1.3	1.7	1.1	2.1	2.6	3.4	3.6
3.3	3.6	2.0	2.0	0.9	1.2	1.5	1.8	1.8
2.1	2.5	1.6	1.4	0.5	0.5	0.6	0.7	0.6
– 0.2	– 0.5	0.7	2.0	1.1	1.8	1.5	0.8	0.8
70.5	70.1	70.4	71.2	70.7	71.2	71.6	72.2	72.7
65.6	65.0	65.2	66.3	66.9	67.8	68.7	69.1	69.6
62.1	61.8	62.3	62.7	63.5	64.6	:	:	:
6.9	7.3	7.3	6.8	5.2	4.5	4.0	4.2	4.3
5.6	7.2	4.9	3.7	3.7	5.3	5.4	5.5	4.9
0.0	2.6	1.7	1.5	1.1	2.8	2.5	2.5	2.5
2.2	3.5	2.8	1.7	2.8	4.1	3.9	3.6	3.0
– 3.9	– 1.6	– 0.4	– 1.3	– 1.0	0.6	2.1	1.1	0.6
6.3	5.1	3.3	3.1	3.8	3.5	1.8	2.5	2.4
5.6	4.5	3.2	2.2	2.6	2.5	2.8	2.9	2.3
1.8	1.6	– 3.4	0.0	1.9	0.1	– 3.5	– 0.4	0.1
42.1	44.8	45.4	44.5	44.2	45.2	46.7	47.5	48.0
36.2	40.3	41.4	41.8	41.9	43.2	45.2	46.1	46.6
– 5.9	– 4.6	– 4.0	– 2.6	– 2.3	– 2.0	– 1.5	– 1.4	– 1.4
– 5.2	– 4.0	– 3.6	– 2.5	– 2.4	– 2.1	– 2.1	– 1.6	– 1.5
61.9	63.9	62.6	59.3	55.6	55.4	55.7	56.2	56.1
10.4	11.5	8.6	6.4	5.0	4.8	5.6	:	:
11.1	9.8	7.4	5.7	4.3	3.0	4.4	:	:
– 0.7	1.7	1.2	0.6	0.7	1.8	1.3	:	:
3.9	6.0	5.1	3.2	1.1	1.2	3.8	:	:
– 4.0	1.3	0.5	– 2.6	– 1.1	– 1.2	– 2.8	– 0.3	0.0
104.0	107.3	109.3	107.3	107.6	108.9	108.8	110.9	112.5

Table 98

Main economic indicators 1961–2002
Finland

(annual percentage change, unless otherwise stated)

	1961–73	1974–85	1986–90	1991–95	1993
1. Growth of GDP and its components (real)					
1.1. Private consumption	5.2	2.6	3.6	– 0.9	– 3.1
1.2. Government consumption	5.4	3.9	3.2	– 0.5	– 4.2
1.3. Gross fixed capital formation	4.8	1.0	4.9	– 9.5	– 16.6
1.4. of which equipment	4.7	1.6	6.4	– 9.3	– 17.6
1.5. of which construction	5.1	0.4	3.7	– 11.1	– 18.3
1.6. Exports of goods and services	7.1	4.3	2.0	8.0	16.7
1.7. Imports of goods and services	7.2	3.1	5.9	1.4	1.3
1.8. GDP	5.0	2.7	3.3	– 0.7	– 1.1
2. Demand components: contribution to changes in GDP (%)					
2.1. Consumption	3.7	2.2	2.6	– 0.6	– 2.7
2.2. Investment	1.5	0.3	1.2	– 2.1	– 3.2
2.3. Stockbuilding	0.0	0.1	0.1	0.2	0.4
2.4. Domestic demand	5.1	2.5	4.3	– 2.6	– 5.4
2.5. Exports	1.3	1.1	0.5	2.5	4.6
2.6. Final demand	6.3	3.5	4.8	– 0.1	– 0.8
2.7. Imports	– 1.3	– 0.7	– 1.4	– 0.5	– 0.3
2.8. Net exports	0.0	0.4	– 0.9	2.0	4.3
3. Gross savings and investment in % of GDP at current prices					
3.1. Private-sector savings	18.5	18.1	16.3	18.1	18.9
3.2. Net savings of households	:	3.2	0.5	2.5	3.1
3.3. General government savings	7.4	7.8	8.5	– 1.0	– 4.1
3.4. National savings	25.9	25.9	24.8	17.1	14.9
3.5. Gross capital formation	28.0	28.3	27.4	18.2	15.7
3.6. Current account	– 1.4	– 2.0	– 3.1	– 1.2	– 1.3
4. Determinants of investment					
4.1. Capacity utilisation (survey) (1)	:	:	:	:	82.3
4.2. Trend GDP gap	0.2	– 0.4	4.8	– 4.7	– 7.6
4.3. Potential GDP gap	:	– 0.1	1.8	– 7.7	– 11.3
4.4. Profitability index (1961–73 = 100)	100.0	72.3	77.6	71.7	70.6
5. Growth potential					
5.1. Growth of net capital stock (real)	5.1	3.4	3.0	– 0.2	– 1.0
5.2. Net capital/output ratio (real)	3.1	3.3	3.2	3.5	3.6
5.3. Growth of capital intensity	4.6	3.0	2.7	3.7	5.6
5.4. Labour productivity growth	4.5	2.4	3.0	3.2	5.4
5.5. Total factor productivity growth	2.7	1.3	2.0	1.9	3.3
6. Employment and unemployment					
6.1. Employment	0.2	1.0	0.2	– 3.5	– 6.1
6.2. Activity rate	73.6	75.6	76.9	73.2	72.6
6.3. Employment rate (benchmark)	72.0	72.0	73.8	63.4	60.7
6.4. Employment rate (full-time equivalent)	:	:	72.0	61.2	58.7
6.5. Unemployment rate (Eurostat definition)	2.5	4.8	4.1	13.3	16.3
7. Prices and wages					
7.1. Nominal wages per head	11.2	13.4	8.7	3.3	0.9
7.2. Real wages per head (2)	5.2	2.4	4.2	0.2	– 2.9
7.3. Nominal unit labour costs	6.4	10.7	5.5	0.0	– 4.3
7.4. Real unit labour costs	– 0.4	0.1	– 0.1	– 2.1	– 6.5
7.5. GDP deflator	6.8	10.5	5.6	2.2	2.3
7.6. Private consumption deflator	5.7	10.7	4.3	3.0	3.9
7.7. Terms of trade	0.1	– 0.7	1.8	0.0	– 1.7
8. General government budget, % of GDP					
8.1. Expenditure (3)	29.7	39.6	48.0	62.1	65.1
8.2. Current revenues (3)	32.7	43.2	52.4	57.4	57.7
8.3. Net borrowing (–) or lending (+) (3)	2.9	3.7	4.5	– 4.7	– 7.3
8.4. Net borrowing cyclically adjusted (3)	2.8	4.0	1.5	– 1.3	– 1.8
8.5. Debt (end of period) (4)	7.9	16.4	14.5	57.1	57.3
9. Monetary conditions					
9.1. Long-term interest rate	8.0	11.2	11.7	9.8	8.2
9.2. Short-term interest rate	:	12.2	11.6	9.0	7.8
9.3. Yield curve (9.1–9.2)	:	– 1.0	0.1	0.8	0.5
9.4. Real long-term interest rate (5)	1.1	0.7	5.8	7.4	5.8
9.5. Nominal effective exchange rate	– 2.4	– 0.4	1.6	– 2.7	– 13.1
9.6. Real effective exchange rate (1991 = 100; ULC in total economy)	80.8	81.9	93.9	80.0	67.3

(1) Manufacturing industry 2000.
(2) Private consumption deflator.
(3) Break in 1975 (ESA 95 data), 1974–85 average according to the former definition.
(4) Break in 1996 (ESA 95 data).
(5) GDP deflator.

(annual percentage change, unless otherwise stated)

1994	1995	1996	1997	1998	1999	2000	2001	2002
2.6	4.4	4.2	3.5	4.9	3.6	3.7	3.0	2.1
0.3	2.0	2.5	4.1	1.7	2.0	0.7	1.0	1.0
– 2.7	10.6	8.4	11.9	9.4	4.6	4.4	5.3	4.8
1.5	24.4	10.8	12.2	8.3	4.1	2.8	5.7	5.5
– 6.4	2.7	9.0	12.6	11.2	4.5	5.7	5.1	4.3
13.1	8.6	5.8	14.1	8.9	6.3	10.0	8.7	7.8
12.8	7.8	6.4	11.3	8.3	3.2	7.5	6.8	5.9
4.0	3.8	4.0	6.3	5.5	4.0	4.8	4.3	3.8
1.4	2.7	2.7	2.7	2.9	2.2	2.0	1.7	1.2
– 0.4	1.6	1.4	2.0	1.7	0.9	0.8	1.0	0.9
2.4	– 0.3	– 1.5	0.7	0.7	– 0.5	0.1	– 0.1	0.0
3.0	2.9	3.7	4.3	4.4	2.4	2.9	2.6	2.1
4.3	3.1	2.1	5.3	3.6	2.6	4.3	3.9	3.7
7.3	6.0	5.9	9.7	8.1	5.0	7.2	6.5	5.8
– 3.3	– 2.2	– 1.9	– 3.4	– 2.6	– 1.0	– 2.4	– 2.2	– 2.0
1.0	0.9	0.3	2.0	1.0	1.6	1.9	1.7	1.7
20.5	22.1	20.3	22.5	21.0	20.6	19.3	20.4	21.3
0.2	2.0	0.7	5.2	4.4	4.4	3.9	3.9	3.8
– 2.0	– 0.5	0.4	1.6	4.1	4.7	7.1	7.2	7.6
18.4	21.6	20.7	24.1	25.1	25.2	26.4	27.6	28.8
16.9	17.5	16.8	18.4	19.7	19.6	19.6	19.7	19.9
1.1	4.1	4.0	5.6	5.6	5.2	6.4	7.4	8.5
86.8	87.7	83.2	87.2	88.9	86.1	86.6	:	:
– 5.8	– 4.5	– 3.5	– 0.7	1.0	1.1	1.8	1.9	1.5
– 7.3	– 2.3	– 3.2	– 2.7	– 2.6	– 0.9	0.2	1.0	1.5
85.1	99.9	105.1	122.7	136.7	138.5	150.9	161.1	169.9
– 1.0	– 0.5	– 0.2	0.4	0.9	1.1	1.3	1.6	1.8
3.5	3.3	3.2	3.0	2.9	2.8	2.7	2.6	2.6
0.1	– 2.1	– 1.6	– 2.8	– 1.2	– 1.1	– 0.6	0.1	0.8
5.2	2.2	2.6	2.9	3.3	1.8	2.8	2.8	2.8
5.1	3.0	3.2	4.0	3.8	2.2	3.1	2.8	2.5
– 0.7	2.2	1.4	2.0	2.4	2.2	1.9	1.4	1.0
72.1	72.5	72.6	72.3	72.6	72.9	73.5	73.9	74.2
60.1	61.3	62.0	63.1	64.3	65.3	66.3	67.0	67.5
58.0	58.8	59.1	61.2	62.0	63.6	:	:	:
16.6	15.4	14.6	12.7	11.4	10.2	9.8	9.3	9.1
3.1	3.9	2.7	1.7	4.1	2.3	4.1	3.5	3.4
2.1	3.5	1.3	0.4	2.2	0.6	1.2	1.0	1.1
– 2.0	1.7	0.1	– 1.1	0.8	0.5	1.2	0.7	0.5
– 3.9	– 2.3	0.4	– 3.1	– 2.3	– 0.1	– 1.9	– 1.7	– 1.7
2.0	4.1	– 0.2	2.1	3.1	0.7	3.1	2.4	2.3
0.9	0.4	1.4	1.3	1.9	1.7	2.9	2.5	2.2
1.8	4.9	– 1.0	– 1.6	2.0	– 4.4	– 0.3	– 0.2	0.3
63.4	59.9	59.9	56.8	53.3	51.9	49.6	47.6	45.7
57.8	56.2	56.8	55.3	54.5	53.8	53.9	51.9	50.6
– 5.7	– 3.7	– 3.2	– 1.5	1.3	1.9	4.2	4.4	4.9
– 1.4	– 0.5	– 0.7	– 1.0	0.6	1.2	3.0	3.1	3.9
58.8	57.1	57.1	54.1	48.7	46.6	42.5	39.3	36.4
8.4	8.8	7.1	6.0	4.8	4.7	5.5	:	:
5.3	5.8	3.6	3.2	3.6	3.0	4.4	:	:
3.0	3.0	3.4	2.7	1.2	1.8	1.1	:	:
6.2	4.4	7.3	3.8	1.6	4.1	2.3	:	:
7.7	11.1	– 2.7	– 3.4	– 0.5	– 2.1	– 4.3	– 0.5	0.0
70.8	78.9	75.8	71.7	70.8	68.5	65.7	64.9	64.2

Table 99

Main economic indicators 1961–2002
Sweden

(annual percentage change, unless otherwise stated)

	1961–73	1974–85	1986–90	1991–95	1993
1. Growth of GDP and its components (real)					
1.1. Private consumption	3.4	1.1	2.4	– 0.3	– 3.1
1.2. Government consumption	4.9	2.7	1.5	0.3	0.2
1.3. Gross fixed capital formation	4.4	0.5	5.5	– 4.8	– 17.2
1.4. of which equipment	:	3.2	6.9	– 0.6	– 14.0
1.5. of which construction	:	– 1.1	3.9	– 8.3	– 19.0
1.6. Exports of goods and services	7.7	3.3	3.0	6.4	7.6
1.7. Imports of goods and services	6.0	2.2	5.1	2.4	– 2.5
1.8. GDP	4.1	1.8	2.3	0.6	– 2.2
2. Demand components: contribution to changes in GDP (%)					
2.1. Consumption	3.1	1.3	1.7	– 0.1	– 1.6
2.2. Investment	0.9	0.1	1.0	– 0.9	– 3.0
2.3. Stockbuilding	– 0.1	0.1	0.0	0.2	– 0.5
2.4. Domestic demand	3.9	1.4	2.7	– 0.8	– 5.1
2.5. Exports	1.3	0.8	0.8	2.3	2.2
2.6. Final demand	5.3	2.3	3.6	1.5	– 2.9
2.7. Imports	– 1.2	– 0.5	– 1.3	– 0.9	0.7
2.8. Net exports	0.2	0.3	– 0.4	1.4	2.9
3. Gross savings and investment in % of GDP at current prices					
3.1. Private-sector savings	:	15.5	13.0	19.9	19.9
3.2. Net savings of households	:	:	– 1.0	3.8	4.8
3.3. General government savings	:	2.8	5.4	– 4.0	– 6.5
3.4. National savings	24.7	18.4	18.4	15.9	13.4
3.5. Gross capital formation	27.1	22.2	22.2	17.1	14.7
3.6. Current account	0.2	– 1.7	– 1.6	– 0.4	– 1.4
4. Determinants of investment					
4.1. Capacity utilisation (survey) (1)	:	:	:	:	:
4.2. Trend GDP gap	0.2	– 0.4	2.5	– 1.6	– 4.8
4.3. Potential GDP gap	:	– 1.2	– 2.0	– 1.7	– 2.7
4.4. Profitability index (1961–73 = 100)	100.0	86.2	100.9	107.2	95.4
5. Growth potential					
5.1. Growth of net capital stock (real)	3.9	2.2	2.2	0.6	– 0.2
5.2. Net capital/output ratio (real)	2.9	3.1	3.0	3.2	3.3
5.3. Growth of capital intensity	3.3	1.4	1.1	2.9	5.4
5.4. Labour productivity growth	3.5	1.0	1.2	2.8	3.2
5.5. Total factor productivity growth	2.3	0.5	0.8	1.7	1.2
6. Employment and unemployment					
6.1. Employment	0.6	0.9	0.8	– 2.2	– 5.5
6.2. Activity rate	73.9	80.2	82.3	79.2	78.5
6.3. Employment rate (benchmark)	72.5	78.2	80.6	73.5	71.3
6.4. Employment rate (full-time equivalent)	:	:	71.7	65.6	63.7
6.5. Unemployment rate (Eurostat definition)	1.9	2.4	2.0	7.2	9.1
7. Prices and wages					
7.1. Nominal wages per head	8.4	10.7	9.2	4.5	4.4
7.2. Real wages per head (2)	3.5	0.4	2.3	– 0.2	– 1.2
7.3. Nominal unit labour costs	4.7	9.6	7.8	1.7	1.2
7.4. Real unit labour costs	– 0.2	– 0.1	0.8	– 1.6	– 1.4
7.5. GDP deflator	4.9	9.8	7.0	3.4	2.6
7.6. Private consumption deflator	4.8	10.3	6.7	4.7	5.7
7.7. Terms of trade	– 0.5	– 1.5	1.2	– 0.5	– 4.4
8. General government budget, % of GDP					
8.1. Expenditure (3)	:	57.3	58.5	65.7	:
8.2. Current revenues (3)	:	55.5	61.6	58.1	:
8.3. Net borrowing (–) or lending (+) (3)	:	– 1.7	3.1	– 7.6	– 11.9
8.4. Net borrowing cyclically adjusted (3)	:	– 1.3	1.4	– 6.5	– 8.6
8.5. Debt (end of period) (4)	26.6	61.6	42.1	76.6	75.1
9. Monetary conditions					
9.1. Long-term interest rate	6.3	11.0	11.7	10.0	8.6
9.2. Short-term interest rate	:	:	11.0	10.1	8.8
9.3. Yield curve (9.1–9.2)	:	:	0.7	– 0.1	– 0.2
9.4. Real long-term interest rate (5)	1.4	1.1	4.4	6.4	5.8
9.5. Nominal effective exchange rate	0.3	– 2.2	– 0.1	– 4.1	– 18.6
9.6. Real effective exchange rate (1991 = 100; ULC in total economy)	100.2	93.9	90.4	87.0	79.8

(1) Manufacturing industry.
(2) Private consumption deflator.
(3) Break in 1993 (ESA 95 data), 1991–95 average according to the former definition.
(4) Break in 1996 (ESA 95 data).
(5) GDP deflator.

(annual percentage change, unless otherwise stated)

1994	1995	1996	1997	1998	1999	2000	2001	2002
1.8	0.6	1.4	1.7	2.4	4.1	4.9	3.5	3.1
– 0.9	– 0.6	0.9	– 1.0	2.2	1.8	– 0.8	0.8	0.8
6.1	9.4	5.0	– 2.2	9.4	8.1	6.0	7.5	7.0
25.2	21.8	9.3	4.4	15.1	10.8	6.6	7.6	7.1
– 8.0	– 0.6	1.7	– 13.6	4.6	3.5	4.9	7.3	7.1
14.1	11.3	3.5	13.0	7.3	5.2	9.4	8.0	7.3
12.2	7.2	3.0	11.8	10.4	5.0	9.2	8.3	7.7
4.1	3.7	1.1	2.0	3.0	3.8	4.0	3.7	3.2
0.7	0.1	0.9	0.6	1.8	2.5	2.2	2.0	1.8
0.9	1.4	0.8	– 0.4	1.4	1.3	1.0	1.3	1.2
1.4	0.3	– 1.0	0.5	0.3	– 0.5	0.2	0.1	0.0
3.0	1.8	0.7	0.6	3.5	3.3	3.4	3.4	2.9
4.8	4.3	1.4	5.4	3.4	2.5	4.1	3.7	3.5
7.8	6.0	2.1	6.0	6.8	5.8	7.5	7.1	6.4
– 3.7	– 2.3	– 1.0	– 4.1	– 3.9	– 2.0	– 3.5	– 3.3	– 3.2
1.2	1.9	0.4	1.3	– 0.5	0.5	0.6	0.4	0.3
24.0	24.0	19.4	18.0	16.4	14.7	14.1	14.7	15.2
4.6	3.5	2.5	0.4	2.3	1.9	1.8	1.8	1.7
– 6.9	– 4.1	– 0.5	1.1	3.7	4.6	6.1	6.2	6.7
17.1	19.9	18.9	19.1	20.1	19.3	20.2	20.9	21.9
15.9	16.6	15.9	15.5	16.7	16.9	17.3	18.0	18.5
1.2	3.3	3.0	3.6	3.4	2.4	2.9	2.9	3.3
:	:	85.0	85.8	85.0	85.8	88.5	:	:
– 2.4	– 0.6	– 1.6	– 1.9	– 1.5	– 0.5	0.5	1.2	1.2
– 0.4	– 0.5	– 1.8	– 1.2	– 0.7	0.0	0.5	0.3	0.2
115.2	134.2	127.9	134.2	135.2	130.2	134.4	139.4	143.8
0.2	0.6	0.7	0.4	0.7	0.9	1.2	1.6	2.0
3.2	3.1	3.1	3.0	2.9	2.9	2.8	2.7	2.7
0.9	– 0.7	1.3	1.0	– 0.5	– 1.4	– 0.8	0.2	1.0
4.9	2.3	1.6	2.6	1.7	1.4	2.0	2.3	2.2
4.6	2.6	1.2	2.2	1.9	1.9	2.3	2.2	1.8
– 0.9	1.5	– 0.6	– 1.0	1.5	2.3	2.0	1.4	1.0
77.6	77.9	77.9	77.2	76.8	77.3	77.9	77.9	78.1
70.2	70.9	70.3	69.5	70.3	71.7	72.8	73.5	73.9
62.7	63.2	61.4	61.2	62.0	63.1	:	:	:
9.4	8.8	9.6	9.9	8.3	7.2	6.5	5.7	5.4
4.8	2.8	6.8	3.0	3.3	4.1	4.0	4.2	4.2
2.0	– 0.1	5.3	0.8	2.3	3.3	2.9	2.7	2.3
– 0.1	0.5	5.1	0.4	1.6	2.6	1.9	1.8	2.0
– 2.4	– 2.9	3.6	– 0.8	0.3	2.1	0.7	0.0	– 0.3
2.4	3.5	1.4	1.2	1.3	0.5	1.3	1.9	2.3
2.8	2.9	1.4	2.2	1.0	0.7	1.0	1.4	1.8
– 0.4	1.2	– 0.4	– 1.6	0.1	– 2.2	– 1.1	– 0.3	0.1
:	67.9	65.6	63.8	61.7	61.8	58.3	56.8	55.6
:	60.0	62.3	61.8	63.5	63.6	61.9	60.5	59.7
– 10.8	– 7.9	– 3.4	– 2.0	1.9	1.9	3.5	3.6	4.1
– 9.2	– 7.5	– 2.2	– 0.7	2.9	2.2	3.2	2.9	3.3
77.7	76.6	76.0	75.0	72.4	65.7	58.6	52.7	47.1
9.5	10.2	8.1	6.7	5.0	5.0	5.4	:	:
7.6	8.9	5.9	4.5	4.3	3.3	4.1	:	:
1.9	1.4	2.2	2.2	0.7	1.6	1.3	:	:
7.0	6.5	6.5	5.4	3.7	4.4	4.1	:	:
– 1.1	0.0	9.7	– 4.1	– 1.6	– 1.7	0.4	– 0.8	0.0
78.8	77.9	88.9	84.7	83.1	82.4	83.6	83.3	83.6

Table 100

Main economic indicators 1961–2002
United Kingdom

(annual percentage change, unless otherwise stated)

	1961–73	1974–85	1986–90	1991–95	1993
1. Growth of GDP and its components (real)					
1.1. Private consumption	3.0	1.6	4.7	1.2	2.9
1.2. Government consumption	2.5	1.4	1.0	1.1	– 0.8
1.3. Gross fixed capital formation	4.6	0.9	5.7	– 0.5	0.8
1.4. of which equipment	:	1.9	4.9	1.1	0.9
1.5. of which construction	:	– 0.7	8.1	– 1.8	0.9
1.6. Exports of goods and services	5.4	3.3	4.1	5.3	3.9
1.7. Imports of goods and services	5.3	2.6	7.0	3.1	3.2
1.8. GDP	3.2	1.4	3.3	1.6	2.3
2. Demand components: contribution to changes in GDP (%)					
2.1. Consumption	2.2	1.3	3.1	1.0	1.7
2.2. Investment	0.8	0.1	1.0	– 0.1	0.1
2.3. Stockbuilding	0.1	– 0.1	– 0.1	0.2	0.3
2.4. Domestic demand	3.3	1.3	4.1	1.1	2.2
2.5. Exports	0.8	0.7	0.9	1.4	1.0
2.6. Final demand	4.1	2.0	5.0	2.5	3.2
2.7. Imports	– 0.9	– 0.5	– 1.7	– 0.9	– 0.9
2.8. Net exports	0.0	0.1	– 0.7	0.5	0.1
3. Gross savings and investment in % of GDP at current prices					
3.1. Private-sector savings	16.0	17.3	15.4	18.2	19.1
3.2. Net savings of households	:	4.5	1.6	4.9	5.4
3.3. General government savings	4.1	0.6	1.9	– 2.8	– 4.8
3.4. National savings	20.2	17.9	17.3	15.4	14.2
3.5. Gross capital formation	18.9	18.5	20.2	16.5	15.9
3.6. Current account	0.4	0.2	– 2.8	– 1.1	– 1.7
4. Determinants of investment					
4.1. Capacity utilisation (survey) (1)	:	79.1	84.6	81.0	80.0
4.2. Trend GDP gap	0.2	– 0.8	2.9	– 1.6	– 2.9
4.3. Potential GDP gap	:	– 0.1	5.8	0.9	0.8
4.4. Profitability index (1961–73 = 100)	100.0	78.2	96.5	107.9	108.4
5. Growth potential					
5.1. Growth of net capital stock (real)	2.8	1.6	2.3	1.4	1.0
5.2. Net capital/output ratio (real)	3.0	3.0	2.8	2.8	2.9
5.3. Growth of capital intensity	2.5	1.7	0.5	2.3	2.3
5.4. Labour productivity growth	2.9	1.5	1.5	2.5	3.6
5.5. Total factor productivity growth	2.0	0.9	1.3	1.7	2.8
6. Employment and unemployment					
6.1. Employment	0.3	– 0.1	1.9	– 0.7	– 1.1
6.2. Activity rate	71.5	73.1	75.0	75.2	75.0
6.3. Employment rate (benchmark)	70.2	68.1	68.2	68.0	67.1
6.4. Employment rate (full-time equivalent)	:	:	60.4	58.7	57.4
6.5. Unemployment rate (Eurostat definition)	1.9	6.9	9.0	9.5	10.5
7. Prices and wages					
7.1. Nominal wages per head	8.2	13.8	8.4	4.9	4.2
7.2. Real wages per head (2)	3.2	1.7	2.8	0.7	0.7
7.3. Nominal unit labour costs	5.1	12.1	6.9	2.3	0.6
7.4. Real unit labour costs	0.0	– 0.3	0.9	– 1.1	– 2.1
7.5. GDP deflator	5.1	12.4	5.9	3.5	2.7
7.6. Private consumption deflator	4.8	11.9	5.4	4.2	3.5
7.7. Terms of trade	– 0.4	0.4	0.0	– 0.3	0.3
8. General government budget, % of GDP					
8.1. Expenditure (3)	35.8	:	:	46.2	46.9
8.2. Current revenues (3)	35.4	:	:	40.2	38.9
8.3. Net borrowing (–) or lending (+) (3)	– 0.3	– 3.6	– 0.9	– 6.0	– 8.0
8.4. Net borrowing cyclically adjusted (3)	– 0.3	– 3.2	– 2.3	– 5.2	– 6.6
8.5. Debt (end of period) (4)	67.0	54.3	35.2	52.1	47.8
9. Monetary conditions					
9.1. Long-term interest rate	7.6	13.0	9.9	8.5	7.3
9.2. Short-term interest rate	6.8	11.9	11.9	7.9	5.9
9.3. Yield curve (9.1–9.2)	0.8	1.1	– 2.0	0.7	1.4
9.4. Real long-term interest rate (5)	2.3	0.6	3.8	4.9	4.5
9.5. Nominal effective exchange rate	– 2.1	– 2.2	– 1.0	– 3.0	– 8.2
9.6. Real effective exchange rate (1991 = 100; ULC in total economy)	87.2	82.4	88.4	89.8	85.8

(1) Manufacturing industry.
(2) Private consumption deflator.
(3) From 1974 (ESA 95 data), 1961–73 average according to the former definition.
(4) Break in 1996 (ESA 95 data).
(5) GDP deflator.

(annual percentage change, unless otherwise stated)

1994	1995	1996	1997	1998	1999	2000	2001	2002
2.9	1.7	3.6	3.9	4.0	4.3	3.4	2.9	2.8
1.4	1.6	1.7	– 1.4	1.1	3.3	2.2	4.0	4.0
3.6	2.9	4.9	7.5	10.1	6.1	3.2	3.8	3.9
9.7	7.2	9.7	10.5	17.2	8.0	1.8	3.0	3.0
0.1	– 2.1	– 0.5	4.4	3.5	4.3	4.9	4.9	5.3
9.2	9.5	7.5	8.6	2.6	3.3	7.5	7.0	6.6
5.4	5.5	9.1	9.2	8.8	7.6	8.1	6.9	6.6
4.4	2.8	2.6	3.5	2.6	2.2	3.1	3.0	3.0
2.2	1.4	2.6	2.2	2.8	3.4	2.7	2.7	2.6
0.6	0.5	0.8	1.3	1.7	1.1	0.6	0.7	0.8
0.7	– 0.1	– 0.4	0.3	0.1	– 0.7	0.4	– 0.1	0.0
3.5	1.8	3.0	3.8	4.7	3.8	3.6	3.3	3.4
2.4	2.5	2.1	2.6	0.8	1.0	2.4	2.3	2.2
5.9	4.3	5.2	6.3	5.5	4.8	6.0	5.6	5.6
– 1.5	– 1.5	– 2.6	– 2.8	– 2.8	– 2.6	– 2.9	– 2.6	– 2.6
0.9	1.0	– 0.5	– 0.3	– 2.0	– 1.6	– 0.6	– 0.3	– 0.3
20.1	19.2	19.0	18.4	16.0	13.5	13.0	13.0	13.3
4.5	5.4	5.6	6.5	4.0	3.6	2.7	2.8	3.1
– 3.9	– 2.9	– 2.2	– 0.3	2.0	2.8	3.4	3.4	3.6
16.2	16.4	16.8	18.0	18.0	16.3	16.4	16.4	16.9
16.4	16.9	16.8	17.2	18.0	17.6	18.0	18.2	18.5
– 0.2	– 0.5	– 0.1	0.8	0.0	– 1.2	– 1.5	– 1.7	– 1.5
82.8	84.4	82.5	83.8	83.7	79.4	81.3	:	:
– 0.9	– 0.6	– 0.6	0.3	0.3	– 0.2	0.2	0.5	0.8
1.1	0.6	0.3	0.1	0.7	0.3	0.9	1.2	1.4
119.0	122.7	129.5	137.0	140.2	138.0	139.4	140.4	141.4
1.2	1.5	1.8	1.9	2.4	2.6	2.6	2.7	2.8
2.8	2.7	2.7	2.7	2.7	2.7	2.7	2.7	2.7
0.5	0.0	– 0.8	– 0.1	1.2	1.3	1.7	2.0	2.1
3.6	1.2	– 0.1	1.4	1.5	0.9	2.2	2.3	2.3
3.4	1.2	0.2	1.5	1.0	0.4	1.6	1.6	1.6
0.8	1.2	1.0	1.9	1.0	1.3	0.9	0.7	0.7
74.6	74.5	74.4	74.5	74.3	74.8	74.8	74.8	74.8
67.4	67.9	68.3	69.2	69.6	70.2	70.6	70.8	71.0
58.1	58.8	59.2	60.1	60.6	60.8	:	:	:
9.6	8.7	8.2	7.0	6.3	6.1	5.6	5.3	5.1
3.4	2.6	1.8	4.4	5.1	4.5	4.1	4.2	4.4
1.1	– 0.3	– 1.3	1.8	2.6	2.5	2.4	2.2	2.2
– 0.2	1.4	1.9	2.9	3.6	3.6	1.9	1.9	2.0
– 1.7	– 1.1	– 1.3	0.0	0.6	1.1	– 0.4	– 0.5	– 0.7
1.5	2.5	3.3	2.9	3.0	2.5	2.4	2.5	2.7
2.2	2.9	3.2	2.5	2.4	2.0	1.7	2.0	2.1
– 2.0	– 2.5	1.0	2.7	2.2	1.2	0.4	0.1	0.5
46.2	45.8	44.2	42.0	40.7	39.9	36.8	39.0	38.7
39.4	40.1	39.8	40.0	41.2	41.2	41.3	41.0	40.7
– 6.8	– 5.8	– 4.4	– 2.0	0.4	1.3	4.5	2.0	2.0
– 6.3	– 5.5	– 4.1	– 2.2	0.3	1.4	2.0	1.8	1.6
49.8	52.1	52.7	51.1	48.0	45.7	38.8	34.8	30.9
8.1	8.2	7.8	7.0	5.5	5.0	5.3	:	:
5.5	6.7	6.0	6.8	7.3	5.5	6.2	:	:
2.5	1.5	1.8	0.2	– 1.8	– 0.5	– 0.9	:	:
6.4	5.5	4.4	4.0	2.4	2.4	2.8	:	:
0.5	– 4.0	1.6	15.8	3.9	– 0.5	2.4	– 1.6	– 0.2
85.6	82.2	84.2	99.5	105.8	107.7	111.4	110.0	110.2

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