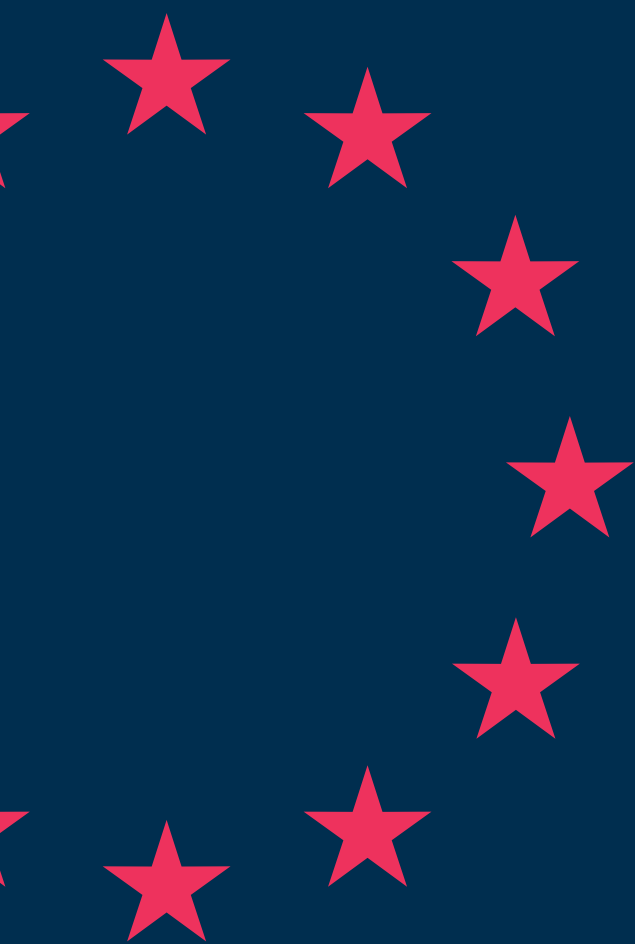


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AND FINANCIAL AFFAIRS



**The EU economy:
2003 review**

European Economy appears six times a year. It contains important reports and communications from the Commission to the Council and the Parliament on the economic situation and developments ranging from the *Broad economic policy guidelines* and its implementation report to the *Economic forecasts*, the *EU economic review* and the *Public finance report*. As a complement, *Special reports* focus on problems concerning economic policy.

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European Commission

EUROPEAN ECONOMY

Directorate-General for Economic and Financial Affairs

2003

Number 6

The EU economy: 2003 review

Abbreviations and symbols used

Member States

BE	Belgium
DK	Denmark
DE	Germany
EL	Greece
ES	Spain
FR	France
IE	Ireland
IT	Italy
LU	Luxembourg
NL	The Netherlands
AT	Austria
PT	Portugal
FI	Finland
SE	Sweden
UK	United Kingdom

EU	European Union
EU-15	European Union, 15 Member States
Euro area	Member States currently participating in monetary union

Acceding countries

CY	Cyprus
CZ	Czech Republic
EE	Estonia
HU	Hungary
LV	Latvia
LT	Lithuania
MT	Malta
PL	Poland
SK	Slovakia
SO	Slovenia

AC-10	The 10 acceding countries in May 2004 (CY, CZ, EE, HU, LV, LT, MT, PL, SK, SO)
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Other candidate countries

BG	Bulgaria
RO	Romania
TR	Turkey

Currencies

ECU	European currency unit
EUR	euro
ATS	Austrian schilling
BEF	Belgian franc
DEM	German mark
DKK	Danish crown (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 crown (krona)
CAD	Canadian dollar
CHF	Swiss franc
JPY	Japanese yen
RUB	Russian rouble
USD	United States dollar
CYP	Cyprus pound
CZK	Czech koruna
EEK	Estonian kroon
HUF	Hungarian forint
LTL	Lithuanian litas
LVL	Latvian lats
MTL	Maltese lira
PLN	Polish zloty
SIT	Slovenian tolar
SKK	Slovak koruna
BGN	(new) Bulgarian lev
ROL	Romanian leu
TRL	Turkish lira

Other abbreviations

bn, billion	1 000 million
CPI	consumer price index
EC	European Commission
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
PEP	pre-accession economic programmes
PPS	purchasing power standard
SCP	stability and convergence programmes
qoq	quarter-on-quarter percentage change
SMEs	small and medium-sized enterprises
VAT	value added tax
yoy	year-on-year percentage change
:	not available
—	none

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Summary and main conclusions ⁽¹⁾

⁽¹⁾ Communication from the Commission to the Council and the European Parliament 'The EU economy: 2003 review', COM(2003) 729, adopted on 26 November 2003.

1. Introduction

Lesson from 2003: more vigour needed to pursue the economic reforms agreed in the Lisbon strategy and the broad economic policy guidelines.

The economic performance of the EU economy in 2003 has underlined the need to pursue the Lisbon strategy with more vigour. The recovery that started in 2002 proved short-lived and did not initiate the dynamics necessary to bring economic activity back to potential. Although economic growth failed to rebound, employment withstood the slowdown better than in the early 1990s, suggesting a stronger resilience in the labour market after reforms implemented in the second half of the 1990s. However, employment growth stalled in 2003 and the rate of unemployment rose slightly. Moreover, public finances deteriorated. Investment has been a major drag on economic activity and was held back by the required adjustment in corporate balance sheets and depressed profit margins. At the same time, the euro appreciation weighed on exports, while the sluggish decline in inflation did not stimulate private consumption. These developments have urged policy-makers to intensify efforts to design and implement structural reforms in line with the Lisbon targets, the broad economic policy guidelines and the employment guidelines.

Reason for the EU's disappointing economic record can be found mainly in domestic conditions.

The reasons for the subdued economic record are mainly to be found in domestic conditions. A series of global economic shocks have initiated the slowdown from 2000 onwards and 2003 was not free from further disturbances at the global scale. Oil prices were high and volatile, the global conflicts added to economic uncertainty and world trade did not rebound to former strength. Growth nevertheless picked up in some economic regions, most prominently in the USA and Japan. Among the possible domestic reasons for the European Union's tepid economic performance, structural rigidities figure prominently. Despite progress in recent years, activity rates and labour force utilisation are still too low. Key macroeconomic price variables such as real unit labour costs and consumer price inflation adjusted sluggishly to weak growth and deteriorating labour market conditions.

'The EU economy: 2003 review' provides analytical support to key issues of the EU economic policy agenda.

The 2003 edition of the EU economy review analyses four specific topics that have been chosen for this year in the context of current economic policy challenges. Two chapters elaborate on key determinants of economic growth. The review starts with a chapter on recent macroeconomic and policy developments in the euro area and provides an in-depth discussion of possible reasons behind slow growth in the euro area. Chapter 2 deals with the drivers of productivity growth and analyses this from both an economy-wide and a sectoral perspective. It tries to identify the reason behind the gap between accelerating labour productivity growth in the USA and decelerating labour productivity growth in the EU. Despite widespread attention in policy circles devoted to education and human capital in the recent past, little is known about the contribution of education to economic growth. Chapter 3 provides a detailed analysis of education and growth. The experience from the early years of economic and monetary union (EMU) as regards wage flexibility and wage interdependencies are analysed in Chapter 4. Finally, Chapter 5 deals with important aspects of the process of international capital flows.

2. Macroeconomic developments in the euro area

The euro area is to record economic growth below potential for three years in a row, being off course from 2001 to 2003.

Despite signs of a pickup in economic activity in the second half of 2003, the euro area is set to record economic growth significantly below potential for the third year in a row. Sluggish economic activity can be associated with two main factors at work in 2003. Firstly, global economic uncertainty persisted throughout the spring of 2003. The Iraq conflict dominated headlines, stock markets nosedived and the euro continued to appreciate rapidly, especially against the US dollar. These events hit an economy that was already coping with the aftermath of past major shocks. Secondly, there is some evidence that adjustment to these past economic disturbances has been more anaemic than analysts and forecasters had assumed. Market forces that usually initiate recovery seem to have worked less efficiently or strongly, implying that the economy, which recovered in early 2002, was not resilient to further adverse events.

Prolonged period of slow growth rather than a sharp fall in growth.

In a broader perspective, 2001–03 can best be described as a period of sustained growth slowdown rather than mild recession. A comparison of the last three major downturns in the region that now forms the euro area shows that they all started from a similar level of a positive output gap between 2 and 2½ %. The current change in the output gap is broadly comparable to that observed in the early 1980s and early 1990s. In international comparison, the deterioration of the euro-area output gap has not been particularly large. Moreover, the cross-country perspective points to a consistent relationship between the size of the output gap in 2000 and its subsequent deterioration. Those countries that witnessed the strongest deterioration in the output gap in 2002–03 were also those where actual gross domestic product (GDP) was higher than potential in 2000, and vice versa. This suggests that the recent slowdown should not be analysed in isolation but with reference to the events during the previous boom period.

Market adjustment was sluggish, suggesting an economy not resilient to shocks.

The fact that the slowdown has persisted for three years suggests that supply-side dynamics have been important and the growth weakness cannot be attributed solely to demand shocks. Against the background of both receding inflation and a considerable weakening of labour productivity growth at the early stage of the slowdown, steady nominal wage growth contributed to a marked increase in nominal unit labour costs. Both employment and private consumption growth decelerated broadly in line with the weakening of overall economic activity. Compared with historical experience, the fact that employment growth remained slightly positive despite a considerable weakening of economic activity is indicative of improved labour market resilience, and reflects a different path in job creation and destruction than in previous slowdowns as a result of labour market deregulation measures implemented in several Member States. Finally, exchange rate movements had a pro- rather than a countercyclical effect. During the previous period of strong growth in 1999–2000, the weakening euro increased price/cost competitiveness, while the strengthening euro did not support export demand when economic growth slowed in 2002–03. Interest rates declined in accordance with the slowdown in economic activity. Nominal interest rates have not been so low for some 50 years and the real long-term interest rates have not been as low as they are now since the late 1970s. Nevertheless, investment activity remained particularly weak, reflecting the importance of macroeconomic factors such as weak demand prospects, a worsening of profit margins and a low degree of capacity utilisation, and also the increase of risk aversion and high debt in the corporate sector despite the ongoing correction of corporate balance sheets.

Corporate adjustment to slow growth yielded depressed profit margins and a pronounced weakness of investment.

The perception of risk seems to have fundamentally changed due to economic (slow-down in growth), financial (bursting of the stock market bubble) and political factors (terrorism). All these factors raised corporate capital costs. In a nutshell, the typical euro-area company adjusted to the erosion of revenues by trimming down capital costs whereas the US company reduced both capital and labour costs. The effect was a profound weakening of the growth of labour productivity in the euro area, which translated into depressed profit margins. Investment was cut considerably on both sides of the Atlantic. The main difference was that, whilst almost all the adjustment in investment in the USA took place in the years 2001 and 2002, in the euro area weak investment performance lasted until 2003.

Forces of recovery are well intact.

Optimism as regards the outlook for the euro-area economy was and still is based on significant structural improvements in the euro area that imply a clear break with past patterns. Four positive factors stand out: (i) a stability-oriented macroeconomic policy framework; (ii) a growing resolve to tackle structural reforms; (iii) continuously moderate wage growth; and (iv) technological advances providing scope for improvements in labour productivity growth.

Monetary policy has been accommodative.

Monetary policy had to act against the background of only slowly receding rates of headline and core inflation. While most of the increase in headline inflation in 2001 was related to one-off effects (oil price hikes and food price hikes linked to bad weather and bovine spongiform encephalopathy (BSE)), there was a substantial risk of second-round effects. Despite this, the European Central Bank (ECB) cut interest rates from May 2001 onwards by a cumulative 275 basis points. A positive lesson from the recent experience is that the monetary policy stance has been accompanied by continuously low and stable inflation expectations. Forward interest rates suggest that financial market participants seem to consider that neither the strong growth in monetary aggregates nor the currently low level of money market rates represents a threat to price stability in the short to medium term.

Budgetary policy: easing did not stimulate economic activity.

In terms of both actual budgetary developments and as regards the implementation of the EU framework for fiscal surveillance, the past few years have been a difficult period. The play of automatic stabilisers in the context of the slowdown implied a considerable worsening of government finances. But the increase in the nominal deficit for the euro area as a whole also reflects discretionary loosening by some Member States. Available evidence suggests that the impact of the tax cuts, which have been enacted in several EU Member States (Germany, France, Italy, the Netherlands and Austria) since 2001, did not yield the hoped-for increase in private consumption and investment. The less energetic pursuit of budgetary consolidation may, also in view of the growing awareness of the need to reform pension systems, have dented private consumption through negative confidence effects. Moreover, worsening public finances may have prevented any further lowering of interest rates.

Budgetary consolidation needs to resume to tackle on time the looming budgetary implications of ageing ...

The deterioration of public finances witnessed since 2000, particularly in some Member States, has cast doubts on the commitment of several euro-area countries to achieve sound public finances over the coming years. This unfortunate development has been clearly marked by a breach of the EU's fiscal rules by some Member States. In responding to this, it is important that fiscal authorities do not settle for short-term solutions that undermine the EU fiscal framework and the need to pay adequate attention to sustainability issues. Indeed, the increased focus on the quality of public finances has highlighted that about half of the Member States face a serious problem

of sustainability. Achieving sound public finances is an important prong in the strategy to tackle on time the looming budgetary implications of ageing. Member States should demonstrate a clear willingness to pursue the medium-term strategy that in some cases has already delivered periods of high and sustained growth.

... supplemented by further progress in encouraging labour market participation and economic growth.

Moreover, encouraging labour market participation and economic growth will be key to alleviating the problem of ageing populations. For example, enhanced efforts to help parents combine work and family life, which Member States are committed to undertake, may contribute to raising employment rates. In order to bolster and speed up implementation of the Lisbon strategy, the European initiative for growth seeks to mobilise investment in areas that will reinforce structural reforms, stimulate growth and create jobs. It targets public and private investment in networks and knowledge.

3. Drivers of productivity growth: an economy-wide and industry-level perspective

A new growth pattern has emerged in the USA and a small number of the EU's Member States since the mid-1990s.

A new growth pattern has emerged in the USA and a small number of the EU's Member States since the mid-1990s. For the first time since World War II, the EU is now on a lower trend productivity growth path than the USA. Over the 1996–2002 period, the EU proved incapable of reversing the long-run decline in its productivity growth performance whereas the USA enjoyed a notable recovery in its secular trend.

Deterioration in EU productivity growth is due to inadequate investment and innovation.

The 1 percentage point decline in EU labour productivity growth experienced over the 1990s emanates from two factors. Half of the decline can be attributed to a reduction in the contribution from capital deepening. Within this category, whilst investment in information and communication technologies (ICT) contributed positively (but not as much as in the USA), the rest of investment performed poorly. The remaining half emanates from deterioration in total factor productivity (TFP). This should probably be seen as the greatest source of concern for policy-makers. Improvements in TFP are generally attributed to more efficient resource utilisation emanating from enhanced market efficiency, from technological progress resulting from investments in human capital, R & D and information technology, or from the natural catching-up process of the less developed EU countries through increased business investment in general.

Economic growth in the EU in the 1990s is characterised by more labour input and less productivity.

In terms of GDP growth, the EU and the USA experienced significant breaks in the 1990s not only in terms of labour productivity but also with regard to labour input. The EU, in fact, achieved a sharp increase in its contribution from labour which, as mentioned above, was accompanied by equally sharp reductions in the contribution from productivity. The opposite pattern emerged in the USA. These divergent labour input and labour productivity trends are clearly linked. Up to one quarter of the 1 percentage point slowdown in EU productivity growth can be attributed to the higher employment content of growth. No policy trade-off should, however, be implied since boosting employment rates through bringing low-skilled workers into employment only leads to a temporary reduction in measured productivity growth, with no effect on the long-run productivity growth of the existing workforce.

Several Member States have outperformed the USA in terms of labour productivity growth.

A much more nuanced picture emerges at the individual EU Member State level. As regards labour productivity growth, seven EU Member States (Belgium, Greece, Ireland, Austria, Portugal, Finland and Sweden) performed well above the EU productivity average and even above that of the USA. Three of the seven, namely Ireland, Finland and Sweden, were also capable of combining both strong productivity and high labour utilisation rates. The aggregate EU productivity gap therefore reflects the particularly poor performances of a number of the larger Member States, most notably Italy.

The industry-level analysis shows that superior US performance is concentrated in four ICT-producing and ICT-using industries.

The industry-level analysis shows that the superior performance of the USA in ICT-producing manufacturing and intensive ICT-using service industries is the principal source of the diverging productivity trends in favour of the USA. Whilst productivity in ICT-producing manufacturing industries has been growing at a significantly faster rate than in the associated ICT-using service industries, the latter account for by far the greatest proportion of the US upsurge in productivity. Labour productivity growth seems to be dominated by just 5, of a total of 56, industries. All these are among the ICT-producing and intensive ICT-using areas of the respective economies. The USA outperforms the EU in four of these five, namely in one ICT-producing manufacturing industry (i.e. semiconductors and other electronic equipment) and in three intensive ICT-using service industries (i.e. wholesale trade, retail trade, and financial services). On a more encouraging note, the EU is dominant in one ICT-producing service industry, namely telecommunications.

But with ICT also contributing positively to EU productivity growth, the slowdown has occurred in the non-ICT part of the economy.

The industry analysis also reaffirms that ICT is only part of the story behind the rising US and declining EU labour productivity trends. Just like in the USA, ICT also contributes to both capital deepening and TFP in the EU (although the extent of the gains in the USA is larger). The origin of the deterioration in EU productivity over the 1990s stems therefore from developments in the non-ICT, more traditional, group of industries, including services. Indeed, data reveal that both capital intensity and overall efficiency patterns in these sectors appear to be deteriorating. Accounting still for nearly 70 % of total EU output, these developments are particularly worrisome. In addition, these are the parts of an enlarged EU economy which are facing the greatest competitive challenges from globalisation.

Productivity growth differentials appear to be related to some fundamental structural differences at the individual country level.

The key policy question addressed is whether the EU countries that experienced high productivity growth and the USA shared certain common characteristics that could explain their superior performance. More specifically, what were the channels via which the more fundamental factors driving growth (i.e. institutions, trade, market size, education, and labour supply/demographics) affected investment and TFP in these countries, and how did these last two factors interact to generate labour productivity growth? A model-based analysis shows that EU–US productivity differentials are indeed related to some fundamental structural differences at the individual country level, with five areas being identified as being quantitatively important and relevant in an EU context, namely the level of regulation, the structure of financial markets, the degree of product market integration, the size of knowledge investment, and the ageing of the labour force.

'Lisbon strategy' simulation highlights the difficulties for the EU in becoming the most competitive, knowledge-based economy in the world.

A 'Lisbon strategy' simulation, whilst explicitly concentrating on regulatory reform and the knowledge-based economy, implicitly highlights the importance of the above five factors in determining the EU's long-run productivity growth rate and therewith for its ambitions to outperform the USA in terms of potential growth ⁽¹⁾. In terms of boosting investment via regulatory reform, the Lisbon strategy simulation showed that even a relatively rapid policy of deregulation towards equivalent US levels would not lead to sufficiently large productivity gains over the next seven years to close the present 10 % efficiency gap with the USA. Such a policy approach would appear to yield static efficiency gains rather than the dynamic efficiency benefits needed to achieve an outward shift of the 'technology frontier'. This suggests that deregulation alone, whilst crucial for investment, would be insufficient to meet the strategic Lisbon goal. It must therefore be accompanied by concerted efforts aimed at boosting the production of knowledge.

Productivity gains from R & D and human capital investments ...

Regarding knowledge production, long-run productivity gains seem to stem above all from investments in both education and R & D. Regarding education, investment that fosters higher educational attainment can be expected to yield productivity gains as explained in Section 4. Regarding R & D, the focus should be on creating the framework conditions that would promote an increase in total investment in R & D. These conditions include a higher degree of product market integration (e.g. through completion of the internal market) and an investment environment which ensures the development of a more active risk capital market. The reforms in this direction would undoubtedly improve the EU's economic fortunes, but even if taken by themselves they would still not allow the EU to overtake the USA in productivity terms over the timescale laid out by the Lisbon agenda.

... will be partially offset by the parallel efforts to boost employment growth and by the effects of the EU's ageing labour force.

Apart from the time it takes for the reforms to yield visible effects, two further obstacles need to be overcome to reach the productivity target put forward in Lisbon: firstly, the temporary efficiency trade-off faced in attaining the parallel employment target of 70 % and, secondly, the continuous drag on productivity induced by Europe's ageing labour force.

The productivity analysis supports the conclusions of the 2003 spring report.

Realising the difficulties of measuring progress in structural reforms, the European Commission and the Council of the European Union devised a set of structural indicators which have become one of the main tools for assessing progress in achieving the Lisbon objectives. This year, the spring report presented a simple, but very informative, exercise counting the frequency with which each Member State was amongst the three best- or three worst-performing Member States in the EU on each indicator. Certain countries appeared again and again amongst the top three Member States, most notably Denmark, Sweden and Finland. It is important to note that these are precisely the same countries that had already undertaken deep and successful reforms well before the launch of the Lisbon strategy. On the other hand, the largest Member States, such as Germany, France and Italy, came out as clear laggards with respect to struc-

⁽¹⁾ The Lisbon simulation captures two supply-side initiatives linked to the Lisbon strategy, namely (i) a reduction in the level of regulation in the EU to the US level, and (ii) higher spending on third-level education, software and R & D. It suggests that the effect of implementing such a large package of reforms would be to significantly boost EU potential growth rates, on average by ½ to ¾ of a percentage point annually over a 5- to 10-year horizon.

tural reforms. The strong productivity growth performances of a small number of Member States vindicate the policy framework established by the Lisbon strategy. To bear fruit, however, the strategy has to be backed up by commitment and the timely and thorough implementation of the different reform measures.

Reversing declining labour productivity trends depends ultimately on the policy choices made by governments in the five areas highlighted in the analysis.

Finally, whether recent EU productivity trends are likely to be permanent or transitory will depend on the policy choices governments make. The analysis confirms the importance to the EU's long-run productivity performance of forceful implementation of a comprehensive reform strategy. It should aim at reducing the regulatory burden, further integrating markets, promoting human capital investment and enhancing the innovation potential of the economy. The implementation of such a wide-ranging reform agenda would create a more flexible, dynamic and investment-friendly business environment. Together with better functioning markets and more risk-oriented financing mechanisms, this will set the conditions for a significant increase in the EU's underlying labour productivity growth rate.

4. Education, training and growth

Investment in education is a powerful influence on economic growth ...

Rising educational attainment has been a major influence on economic growth. Attainment can be defined as the successful completion of a given level of education, such as lower-secondary school or an undergraduate degree. Given the difficulties in comparing education systems in different countries, the number of years of study required to obtain a given qualification is usually used as a proxy. Several recent studies, based on improved attainment data, suggest that an extra year of average attainment in the population aged 25–64 could raise productivity by as much as 4 to 6 %. In the EU, average attainment has grown by about 0.8 years per decade since 1960. This means that education might have accounted for as much as 0.3 to 0.5 percentage points of annual GDP growth. Further possible benefits might result if education indirectly promotes technical progress in the longer term. Whether this continues to be the case in the future depends on many unknowns, not least the nature of technical change and the consequent demand for skills. Nevertheless, educational attainment in the EU as a whole is set to continue increasing in the medium term at a similar pace to that of recent decades. Thus, a similar contribution to growth might be expected, though this will vary considerably among Member States.

... and yields long-term benefits.

The full productivity benefits of investment in young people's education accrue over the whole professional life. Three quarters or more of the increase in average attainment over the next decade will result from investments already made, in some cases many years ago, as older workers retire and are replaced by younger and better-educated cohorts. In comparison, investments made today will have a relatively small impact on average attainment over the next decade. Nevertheless, for the benefits of education to be reaped throughout the working life of an individual, knowledge and skills must be maintained and updated. Indeed, education should be interpreted in the broadest sense of lifelong learning, from pre-school and basic education to adult education and training in the workplace. The impact of education on growth is expected to be highest in countries where enrolment in secondary and tertiary education has risen most rapidly over the past 30 to 40 years, and lowest in countries where enrolment was already high and has grown less rapidly. There is some evidence of high returns to education particularly in the case of people who would otherwise enter the labour market with low levels of attainment. Since initial education leads to further

training opportunities, inequalities in attainment tend to widen over time. Those with few qualifications are faced with a higher risk of unemployment and the need for later and more costly attempts to improve employability.

The quality of education is as important as the number of years spent in education ...

The economic evidence suggests that the quality of educational outcomes — measured by scores in internationally comparable tests — may be at least as important as the number of years spent in school or college. In fact, when quality is taken into account, the estimated growth impact of the number of years of schooling tends to fall. A key question, then, is how quality can be improved. It is self-evident that adequate resources are necessary for a high-quality education system. On the other hand, the link between expenditure and outcomes across countries is weak at best, which suggests that resources are being used with varying efficiency. Improving teachers' incentives to deliver high-quality outcomes may be more of a priority than increasing spending in some countries. Where increased resources are available, decisions on how these are spent — for example, on books, computer equipment, smaller class sizes, higher salaries for staff, etc. — may have important implications for quality.

... and greater efficiency would encourage investment in education.

Greater efficiency in the use of resources would increase the rate of return to investment in education. At tertiary level, for example, high dropout rates and studies that often last well beyond the standard duration are equivalent to years spent outside the labour market without tangible benefits in the form of higher attainment. At primary and lower-secondary levels, demographic developments mean that the number of pupils is falling. This should, in principle, free resources. But, in practice, expenditure per student has tended to grow faster than GDP in recent years. If this continues, the additional cost in a decade could comfortably exceed the cost of an ambitious programme to increase enrolment in pre-school, upper-secondary, tertiary and adult education. Reforms in other areas, such as labour markets, tax and benefit systems and retirement incentives, would also increase the returns to education, thus encouraging investment.

Additional public resources should be focused where social returns are highest compared to private returns.

The available evidence suggests that the social returns to an additional year of schooling (i.e. the benefits to the whole economy) are broadly comparable to the private returns (i.e. the benefits to the individuals concerned). But both private and social returns are likely to vary considerably between, and indeed within, specific areas of education and training. There may be a case for targeted increases in public investment where the social returns appear high enough, and where they exceed the perceived private returns (otherwise government would merely subsidise investments that might anyway be made, leaving other more deserving projects unfunded, or unnecessarily raising the tax burden). A good case might be made for broadening access to pre-school education or for increasing upper-secondary participation, especially since these investments have long-lasting benefits and may help to even out inequalities in access to education that tend to widen over time. Where private returns are high and apparent, policy-makers should question whether increased public funding is needed to meet their objectives. Potential external benefits in terms of longer-term technical progress might justify certain public investments, including aspects of tertiary education.

Adult education and training may offer the greatest scope for raising average attainment in the longer term, but policies to encourage it must be efficient.

Since upper-secondary and tertiary participation cannot grow unboundedly, adult education and training is likely to offer the greatest scope for increasing educational attainment in the long term. Of course, the duration of the benefits is shorter than for children and young adults. Nevertheless, theory suggests, with some empirical support, that there are significant failures in the market for training, leading to underprovision. In addition, lifelong learning could play a crucial role in maintaining and renewing human capital acquired earlier in life, something which is not taken fully into account in the basic 'returns to education' framework. Lifelong learning could also help older workers to remain longer in the labour market, thus extending the benefits of earlier investments in human capital. If policies could be designed to address market failures in an efficient way, the returns could be higher than those for traditional schooling. Experience suggests, however, that tax incentives, subsidies and co-financing schemes to encourage training will need to be designed and evaluated much more carefully than in the past. This would help to maximise incentives to undertake genuinely additional training, and to minimise deadweight losses, substitution effects and other inefficiencies that may otherwise quickly consume the potential benefits of such programmes.

Wages play a key role in macroeconomic adjustment in EMU.

5. Wage flexibility and wage interdependencies in EMU

Over recent years, a near consensus view has emerged on the roots of high and persistent unemployment in many Member States, including all the major economies of the euro area and, more generally, on the low employment rates. Broadly speaking, this view regards the poor labour market performance of the countries concerned as the result of the interaction of a series of adverse macroeconomic shocks with unfavourable labour market institutions, and also product market regulations that have significantly limited the capacity to adjust to changes in economic conditions. Obviously, wages as the price of labour have a key role to play in determining the overall balance of supply and demand in the labour market. Furthermore, the formation of economic and monetary union is often taken to put further demands on the flexibility of wages to compensate for lack of (national) instruments to deal with economic disturbances. If wages are too rigid, the necessary adjustment will come slowly and with considerable economic and social costs.

The downturn has exposed both the strength and the limits of wage setting mechanisms in the euro area.

Both common macroeconomic shocks and country-specific developments have put the flexibility of wage setting mechanisms in the euro area to a stress test in recent years. It was expected that nominal wage growth would remain consistent with price stability and productivity gains, thereby allowing companies to increase job-creating investment. Regarding actual developments, on the positive side, overall wage discipline has been preserved and risks that the inflation overshoot would lead to extended second-round wage effects have been averted. On the negative side, with nominal wage growth rather invariant to the cyclical situation, the slowdown in labour productivity growth translated into significant increases in nominal unit labour costs in 2001 and 2002. Hence, wage flexibility appears so far to have provided little, if any, support to the expected cyclical recovery.

Wage moderation should be pursued if EMU is to continue to deliver strong job growth.

After a prolonged period of wage moderation, the fall of the share of wages in GDP came to halt at the turn of the decade and remained broadly stable throughout the downturn. There are indications that the wage share will decrease again when the economy gathers momentum in 2004. Moderate real wage increases, consistent with productivity gains and the need for restoring profitability where necessary, help to increase employment and to lower structural unemployment over the medium term, without necessarily compromising domestic demand in the economy. This assertion is backed up by both standard economic theory and by the factual experience of many euro-area countries, in particular in the second half of the 1990s. Hence, in the light of still high structural unemployment, further wage moderation is necessary in the euro area. However, it should also be noted that aggregate real wage moderation is a fairly poor substitute for wage differentiation when it comes to helping to price the low-skilled back into jobs. It needs therefore to be accompanied by specific measures targeted at raising employment among low-skilled workers.

Conventional wisdom holds that wage formation mechanisms in Europe are characterised by a high degree of rigidity and slow adjustment to shocks but the evidence is still inconclusive.

Conventional wisdom holds that wage formation mechanisms in Europe are characterised by a high degree of rigidity and slow adjustment to shocks. A number of institutional features in the euro-area labour market could account for a lack of nominal as well as real wage flexibility. Factors typically mentioned in this context include union power, coordination/centralisation of bargaining, bargaining coverage, the impact of collective bargaining on contract length, the use of wage rules in collective bargaining, including wage indexation, and, last but not least, various insider–outsider mechanisms in the labour market affecting the sensitivity of wages with respect to unemployment. However, in line with findings from other studies, formal econometric analysis of Phillips-curve-type wage equations suggests that wage inflation persistence in the euro area is not higher than in the USA. The finding of broadly similar degrees of nominal inertia across euro-area Member States, and in the euro area and the USA, makes it difficult to identify institutional labour market characteristics as the major determinants of nominal rigidities. Thus, while institutional and structural factors are a key to an understanding of what determines the level of equilibrium unemployment over the medium term, institutional labour market characteristics appear to be of less importance for the degree of nominal inertia in the economy.

EMU is affecting the wage bargaining system in several ways with potentially important implications for the adjustment to shocks in the euro area.

While it is still too early to draw final conclusions on potential channels through which EMU could impact on the incentives faced by its economic agents and on its wage bargaining systems, the picture is nevertheless becoming progressively clearer. Research has already identified a strong positive impact of the euro on product market integration via increased trade and foreign direct investment. This should lead to enhanced competition on product markets. The impact of EMU is somewhat less clear-cut in the case of wage interdependencies. The convergence of wages and unit labour costs has not waited for the single market, let alone EMU, to be completed. The available sectoral evidence suggests that convergence was, in fact, stronger in the 1980s than in the 1990s. The emergence of higher goods market integration and of stronger interdependencies in wage setting across countries — be it due to EMU or other factors — can affect the way in which shocks are absorbed and transmitted in EMU. Model simulations show that this partly depends on the nature of the shocks. Increased wage interdependency does not lead to major differences in the absorption of supply shocks but entails a more protracted adjustment to demand shocks. In the case of demand shocks, the wage and price response slows down if wage setting is interdependent, with simulations showing that it takes approximately one more year for the output adjustment process to work out than in the case without wage interdependencies.

6. Determinants of international capital flows

The creation of the internal market and the launch of EMU have fostered international capital flows.

The strong increase in international capital flows (portfolio flows and direct investments) over the past 10 years is the combined result of legal and economic forces. As regards the EU, the full liberalisation of capital movements within the Community was finally accomplished on 1 July 1990, while capital movements between Member States and third countries were fully liberalised on 1 January 1994. The rapid expansion of domestic financial markets and surging international trade have been two of the main driving economic forces. In addition, the adoption of the euro and the resulting elimination of foreign exchange risk within the euro area have accelerated financial integration within the EU.

Increased international capital flows have strong implications for the global economy.

Enhanced financial integration has strong implications for the functioning of the global economy. International capital flows may serve both as a source of growth and as a transmitter of macroeconomic shocks. By smoothing consumption, capital flows play an important role in the adjustment to disturbances. Sudden shifts in the flow of foreign finance can, however, also create major domestic problems, as demonstrated by financial crises in several emerging economies in the past decade. Many emerging economies liberalised their capital flows in the 1990s, while maintaining weak financial institutions and pursuing macroeconomic and financial policies that turned out to be inconsistent with exchange rate stability. The outcome has been large financial imbalances driven by capital inflows and eventually financial crises and distress.

The need to finance high investment ratios without adequate national savings continues to lead to external deficits financed by FDI inflows in acceding countries.

Current account deficits are a common feature in the acceding countries. In several cases, they amount to more than 5 % of GDP, having increased over recent years in connection with rising foreign direct investment (FDI). Thus, the current account deficit in most cases is a reflection of large FDI inflows and not the main reason for the worsening of the external accounts. With the notable exception of Hungary, the external deficits are largely covered by non-debt-creating FDI inflows. In some acceding countries, privatisations are still under way. In others, second-round investment in the form of inter-company loans provides an important source of current account financing. On the whole, the acceding countries are likely to run considerable current account deficits for some time to come in order to compensate for their lack of domestic savings. Thus, foreign investments will continue to be a major motor of growth.

Adoption of EU acquis should contribute to financial stability in the acceding countries.

In the area of financial sector development and supervision, in particular, there are striking differences between acceding countries and many other emerging markets. Here, the acceding countries have gradually implemented the EU *acquis* for regulation and supervision and have opened their markets to large-scale foreign ownership. This experience suggests that the acceding countries — by pursuing adequate policies — can avoid the negative experiences in other regions, thereby setting the preconditions for strong real convergence in a setting of financial stability.

Improving corporate governance systems should help the EU to attract capital flows.

Countries with good corporate governance systems are likely to attract international capital flows on better terms than countries with weak systems that invite fraudulent behaviour. With rising competition for capital inflows, these issues are likely to become important determinants of capital flows in the coming years. The EU has already taken a number of steps to improve corporate governance in Europe, including the financial services action plan (FSAP) and the market abuse directive. Work is also under way to strengthen accountancy standards, auditor independence and shareholders' rights. This will make the EU more attractive for growth-enhancing capital flows.

Chapter 1

Macroeconomic developments
in the euro area

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1. Introduction

Despite signs of a pickup in economic activity in the second half of 2003, the euro area is set to record economic growth below potential for three years in a row. After solid growth in the first two years of EMU, economic activity in the euro area faltered in 2001. With the economy seemingly recovering in early 2002, the slowdown was initially perceived to be a brief event. However, expectations were defied: the recovery did not unfold in the course of 2002 and growth dipped again. Real GDP growth virtually stalled in the first half of 2003.

In terms of annual figures, real GDP is expected to have grown by barely $\frac{1}{2}$ % in 2003, down from about $1\frac{1}{2}$ % in 2001 and 1 % in 2002. The unemployment rate increased to 8.9 %, up by $\frac{1}{2}$ a percentage point compared with the year before and almost 1 percentage point above the level in 2001. Over the same period, consumer price inflation hardly decreased and remained above 2 % in 2003.

Sluggish economic activity can be associated with two main factors at work in 2003. Firstly, global economic

uncertainty persisted throughout the spring of 2003. The Iraq conflict dominated headlines, stock markets nosedived and the euro exchange rate continued to appreciate rapidly, especially against the US dollar. These events hit an economy that was already coping with the aftermath of past major shocks, affecting the supply as well as the demand side of the economy. Secondly, there is some evidence that adjustment to past economic disturbances has been more anaemic than analysts and forecasters had expected.

The fact that the slowdown has persisted for three years suggests that supply-side factors have played an important role, the growth weakness not being solely attributable to demand factors. Market forces that usually initiate recovery seem to have worked less efficiently or strongly in the euro area than in other economies. Against this background, this chapter reviews patterns of economic adjustment in the euro area between 2001 and 2003. The intention is to identify the factors which acted as a drag on growth and economic resilience.

2. Macroeconomic developments in the euro area, 2001–03

2.1. Comparing the deterioration in output gaps: a cross-country perspective

As analysed in past editions of the review, the euro area was hit by supply-side as well as by demand-side disturbances. They included an increase in risk premiums on financial markets and a high level of corporate debt as the result of strong investment in equipment during the previous boom on the supply side, and the decline in world trade and the oil price hikes on the demand side. However, the slump in stock prices, the overcapacity in the ICT sector, the deterioration in external demand and higher energy prices affected all industrial countries ⁽¹⁾. But other economic entities, for example, the USA, Australia and Canada, were more successful in overcoming the global downturn. Consequently, factors specific to the euro area are key to understanding why economic activity remained weak in the euro area.

The period 2001–03 can best be described as a period of sustained growth slowdown rather than mild recession. That is, the defining feature has been the duration of the period of low growth rather than the severity of the short-fall in growth. A comparison of the last three major downturns in the region that now forms the euro area shows that they all started from a similar positive level of the output gap, i.e. between 2 and 2½ %. The output gap declined by 3 percentage points of potential GDP to an estimated –1.2 % in 2003. The magnitude of the change is broadly comparable to that observed in the early 1980s and early 1990s when the deterioration in growth had been sharper, but, in the latter case, recovery also took root earlier.

The weakening in economic activity has spread to almost all the advanced industrial economies ⁽²⁾. Graph 2 plots output gaps in four major economic areas, yielding a striking similarity of the change over time between the different areas ⁽³⁾. Among the smaller advanced economic areas, which are not shown in the graph, it was only in New Zealand where the output gap did not decline from 2000 to 2001. The experience in Canada was also slightly different as the country's pronounced weakening in 2001 had already turned into a gradual recovery in 2002.

From an international perspective, the deterioration in the euro-area output gap has not been particularly large. Moreover, it looks as if the magnitude of the output gap's deterioration between 2000 and 2003 was strongly related to the size of the output gap in 2000 for three of the four major economic areas. It was abrupt from a high level in the USA and gentle from a low level in the case of the UK. The euro area is in an interim position and only Japan, which had hardly seen a positive output gap in 2000, seems to be an exception. Graph 3 relates the size of the output gap in 2000 to its change over 2000–03 for 22 advanced industrial economies ⁽⁴⁾, clearly supporting the notion that the strength of the previous boom had a large impact on the subsequent weakening. Those countries that witnessed the strongest deterioration in the output gap between 2000 and 2003 were also those where actual GDP was higher than potential in 2000, and vice versa. Except for Ireland, the size of the output gap in 2000 alone accounts for 55 % of the variation in its sub-

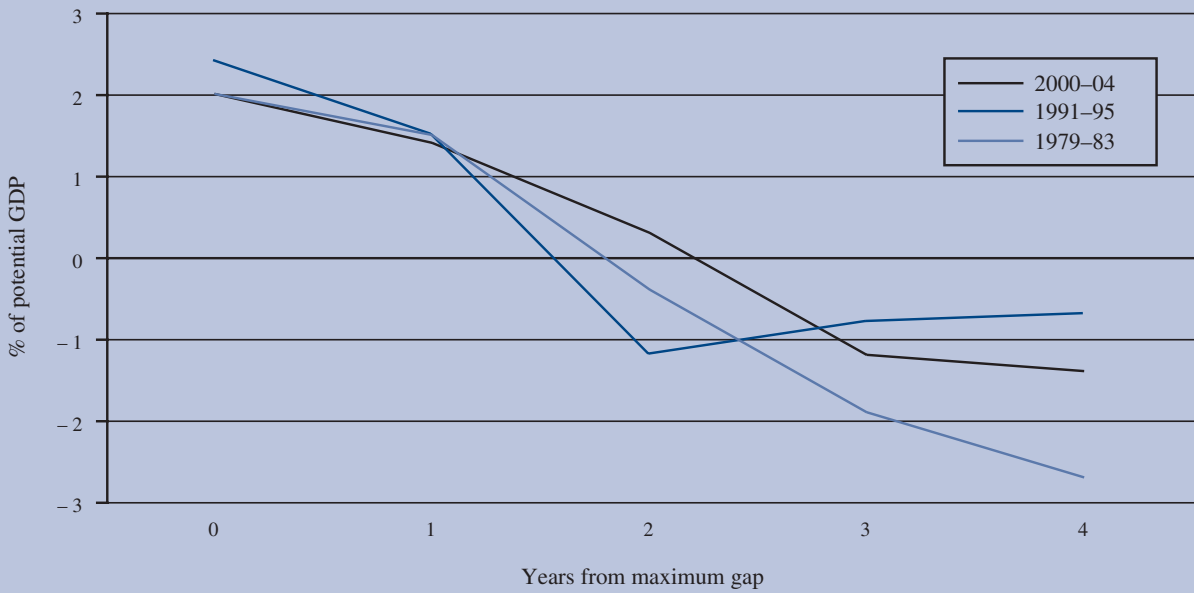
⁽¹⁾ These shocks were analysed in detail in the chapters on the euro-area macro-economic developments in the EU economy reviews of 2001 and 2002.

⁽²⁾ The output gap is the preferred methodology for two reasons. It allows the slowdown in growth to be cumulated over several years and it abstracts from differences in rates of potential growth across countries.

⁽³⁾ Because of the larger coverage of countries, the comparison is made on the basis of the Organisation for Economic Cooperation and Development (OECD) calculations rather than on Commission estimates. While the level of euro-area output gap is lower with the OECD method compared with the Commission's method, the difference is quite stable over time, yielding a comparable variation over time.

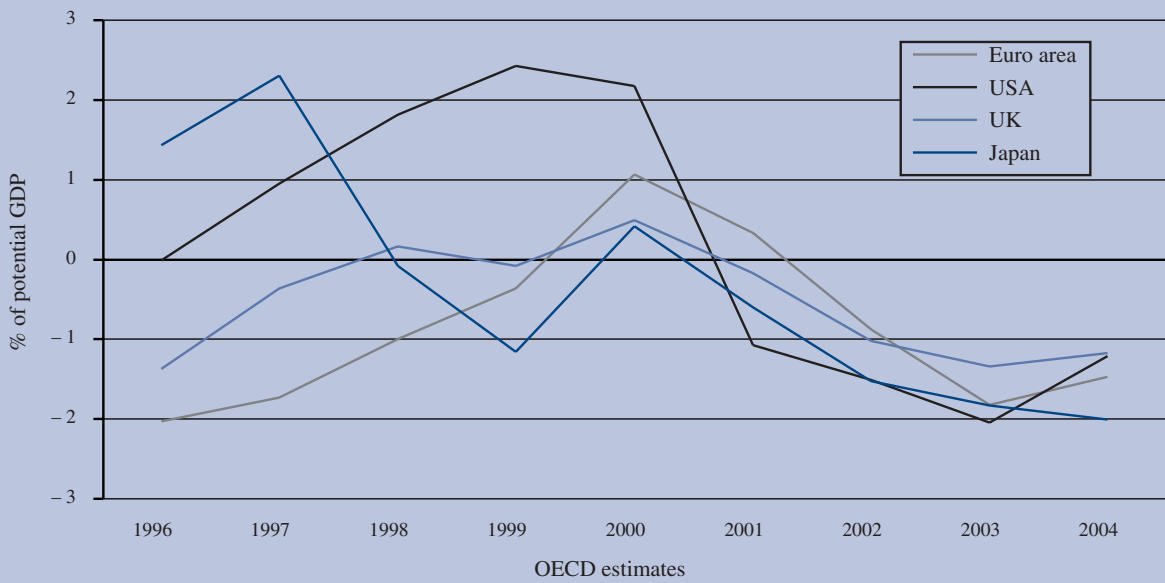
⁽⁴⁾ Including the euro-area Member States.

Graph 1: Output gap during economic downturns, euro area



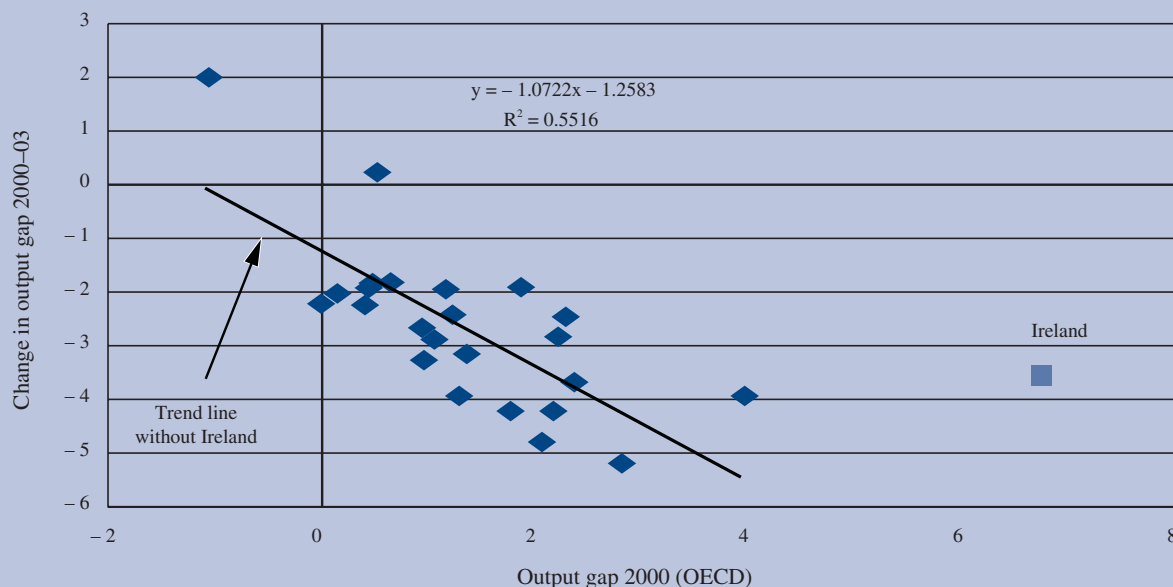
Source: Commission services.

Graph 2: Output gaps in major economies



NB: Output gaps for 2003 and 2004 are OECD forecasts.
Source: OECD.

Graph 3: Initial position and severity of slowdown in 22 advanced industrial economies



NB: Output gaps for 2003 are OECD forecasts.
Source: OECD.

sequent change up to 2003. This suggests that any explanation of the current growth weakness would be incomplete without reference to the events during the previous boom period.

While the strength of the cyclical upswing and global shocks may explain the magnitude of the recent economic weakening, there is so far no evidence that the depth of the current trough helps to predict the strength of the subsequent recovery. Graph 4 shows on the horizontal axis all minimums of the output gap for the 15 EU Member States during 1965–97, which is on average three troughs per country. The change in the output gap in the first two years after the trough is plotted on the vertical axis, yielding no systematic variation between both variables.

2.2. Weakening of all major demand components and employment

Economic activity started to weaken in the second half of 2000 when oil prices hiked and private consumption growth decelerated. While this could still be assessed as a normalisation from a previously high rate of economic

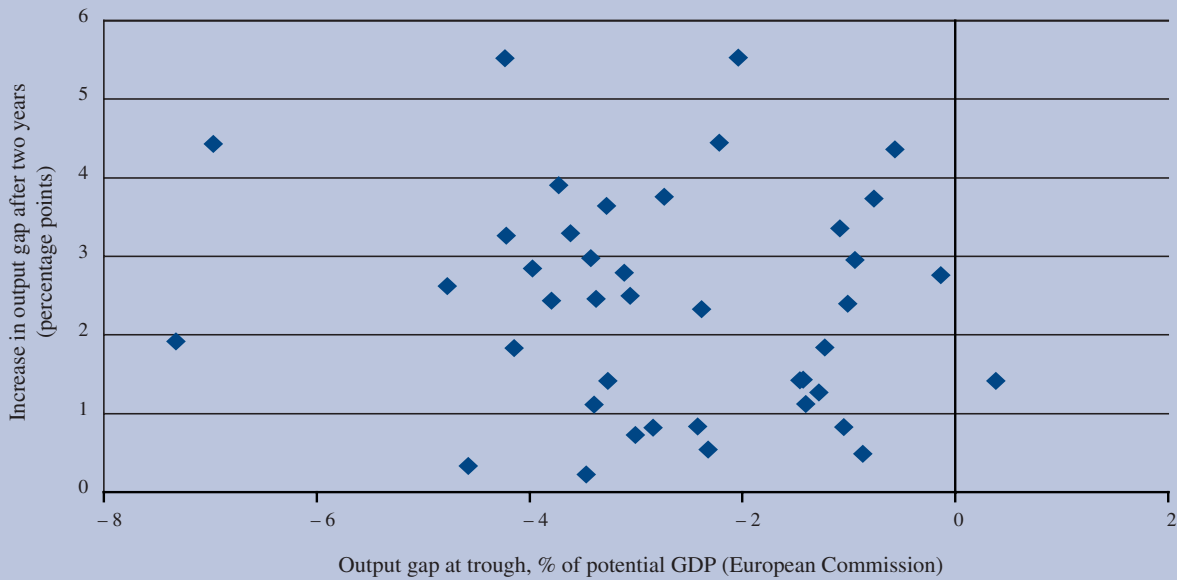
growth, economic activity began to rapidly lose pace from spring 2001 onwards. From then on, investment posted a substantial negative contribution to GDP growth (see Graph 5) and the other demand components weakened considerably. On a more positive note, employment was more resilient than expected throughout the slowdown. This section describes the development of the major demand components and employment in 2001–03 and reviews the main contributing factors. A more detailed account of some key factors is given in Sections 3 to 6.

Investment was a major drag on economic growth

In the course of the slowdown, investment shrank substantially, declining from the second quarter of 2001 until the second quarter of 2003 by –0.6 % on average per quarter. Its contribution to growth was negative in each quarter except one ⁽¹⁾. The investment share in GDP has declined since the end of 2000 by 2.5 percent-

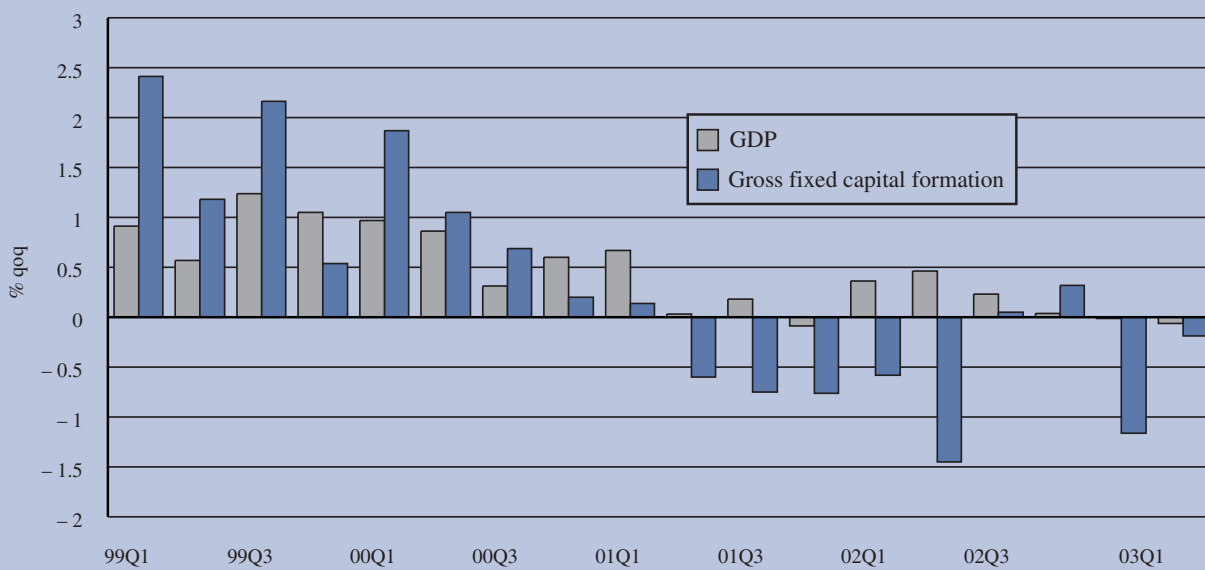
⁽¹⁾ Quarterly investment growth contributed positively to growth in the final quarter of 2002 due to special developments in Italy (expiry of tax incentives) and Germany (a technical correction of very weak investment in the first half of 2002 and reconstruction after the floods in the summer).

Graph 4: Severity of cyclical downturn and subsequent recovery, 15 EU Member States, 1965–97



Source: Commission services.

Graph 5: GDP and investment, euro area



Source: Commission services.

age points in nominal terms and this despite a considerable fall in interest rates ⁽¹⁾.

Short-term interest rates fell from their peak in November 2000 to September 2003 by almost 3 percentage points or by just over 2 percentage points if the 2000 average is compared with the 2003 average. Yields on 10-year government bonds declined by 1.2 percentage points on average between 2000 and 2003, independently of whether nominal or real rates are looked at ⁽²⁾. While the absolute size of the interest rate reduction appears modest at first sight, the resulting level of interest rates is very low by historical standards. Nominal interest rates have never been so low for some 50 years and the last time real long-term interest rates were not as low as they are now was in the late 1970s.

However, yields on government bonds and money market interest rates are not always a good proxy for firms' capital costs. Declining stock market prices and a rising spread between the yields of corporate bonds and government bonds suggest that the wedge between benchmark interest rates and firms' capital costs, which usually reflects risk and liquidity premiums, has not remained constant during the slowdown. Since this issue is dealt with in detail in Section 4.3, it suffices here to say that interest on bank loans to enterprises broadly followed the trends in benchmark markets ⁽³⁾. Bank lending rates declined by 1.5 % between autumn 2000 and summer 2003, implying, however, that the spread to benchmark rates increased by about 1 percentage point (see Section 4).

From a macroeconomic perspective, it is somewhat surprising that investment growth has been so weak in the euro area. If there had been any overinvestment in the previous boom, the investment share could be expected to return to its pre-boom level. However, the investment share in the

⁽¹⁾ The investment share is the preferred measure compared to investment growth, because it at least partially controls for the impact of GDP growth on investment. However, using the investment share instead of investment growth does not completely control for the impact of income effects because it itself is also procyclical.

⁽²⁾ German Government bonds are used as a benchmark. Real rates in the graph are deflated with the contemporaneous change in the harmonised index of consumer prices (HICP).

⁽³⁾ The closest match is between short-term lending rates (up to one year) and the three-month money market rate as well as between the long-term lending rate (over one year maturity) and the five-year government bond rate. Therefore, these are considered here as benchmark rates.

Graph 6: Nominal interest rates, euro area



Source: Commission services.

first half of 2003 is at the same level as at the beginning of 1997 in real terms, i.e. before buoyant economic growth set in, and lower than in each quarter in the 1990s in nominal terms. Moreover, the increase in the investment share during the previous boom was moderate in comparison with the US experience.

A slightly different twist emerges when investment is decomposed into its main components, namely equipment and construction. It emerges that a sizeable increase in equipment investment in the second half of the 1990s has been masked by a drop in investment in construction. As regards investment in equipment, its share in GDP increased between 1996 and 2000 by a substantial 2.7 percentage points, i.e. double the increase of the overall investment share ⁽¹⁾. In summer 2003, the investment share was at the same level as in late 1998, suggesting that most of the normalisation had already taken place.

The decline in investment in equipment, despite falling interest rates, points to an important role of other forces ⁽²⁾. Among them are: (i) macroeconomic factors such as weak demand prospects, a worsening of profit margins and a low degree of capacity utilisation; (ii) the increase of risk aversion following the terrorist attack of 11 September 2001, corporate fraudulence and global uncertainty; and (iii) the ongoing correction of corporations' balance sheets, where high debt ratios had built up during the long boom period 1996–2000. The pronounced fall in stock prices, the weakening of credit growth and the virtual absence of issuance activity on equity and corporate bond markets support the notion that all factors have been at play and reinforced one another. The impact of corporate balance-sheet adjustment, which is widely held responsible for subdued investment in the euro area, is analysed in detail in Section 4.

There is not yet a comprehensive and convincing explanation for the decline in the share of investment in construction from 11.5 % of GDP in 1995 to 10 % in the second quarter of 2003. Country data suggest that the trend decline in construction is almost exclusively due to developments in Germany, where the effects of the post-unifi-

cation construction boom still appear to matter. In the euro area without Germany, the construction investment share has remained broadly constant at slightly below 10 % since the mid-1990s. Against the background of falling interest rates, in both nominal and real terms, and given the historical sensitivity to interest rates, a practically constant investment ratio suggests that structural factors have held back activity. A number of factors appear to have been at work. Among them are: (i) ageing, which makes investment in housing less profitable in the long run; (ii) fiscal consolidation, as most of public investment is in construction; or (iii) regulations on land use.

Private consumption supported growth less than could be expected

Despite posting the largest positive contributions to real GDP growth on average during the slowdown, private consumption underperformed. Private consumption growth in the euro area was just 1.2 % on average in 2001–03, which is about ½ a percentage point below the expansion of households' real gross disposable income over the same time. This means that the households' saving ratio increased during the slowdown from 14.5 % in 2000 to 15.3 % in 2003 in the eight Member States for which data are available.

This increase in the saving ratio is at odds with economic theory. The life-cycle hypothesis predicts that consumers would reduce savings in a downturn in order to smooth their consumption over time. Among the reasons that may explain why consumption has not been more resilient in the euro area, the following factors feature prominently: the stickiness of inflation, a worsening of unemployment prospects and the growing awareness of the sustainability of public finances.

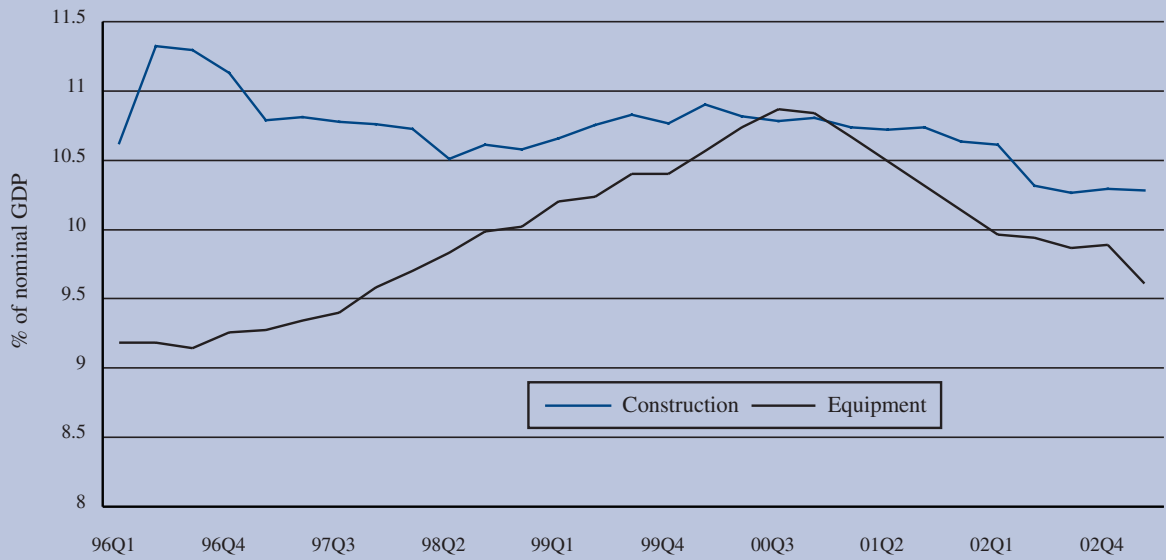
Sticky inflation: Adjustment of prices on product and service markets is usually considered endogenous to the development of disposable income, consumer confidence and labour costs. Nevertheless, the extent to which the rate of inflation responds to a weakening of demand can have sizeable repercussions on private purchasing power. Euro-area headline inflation peaked in early 2001 and came down sluggishly by about 1 percentage point until 2003, only occasionally falling below 2 %. Core inflation ⁽³⁾ peaked in January 2002 almost a year after the slowdown set in at 2.7 % and it took one and a half years before it decelerated to 2 %.

⁽¹⁾ Despite a broadening of the coverage of investment in the national accounts, which included expenditure on software and other intangibles to be treated as investment, investment from the perspective of the individual firms is likely to be an even broader concept. For example, spending in company restructuring and education is usually not considered investment in the national accounting systems, but seems to play a crucial role when firms aim to embrace technical progress in ICT. See 'The EU economy: 2001 review', Chapter 6.

⁽²⁾ For an analysis of the impact of equity prices, see 'The EU economy: 2002 review'.

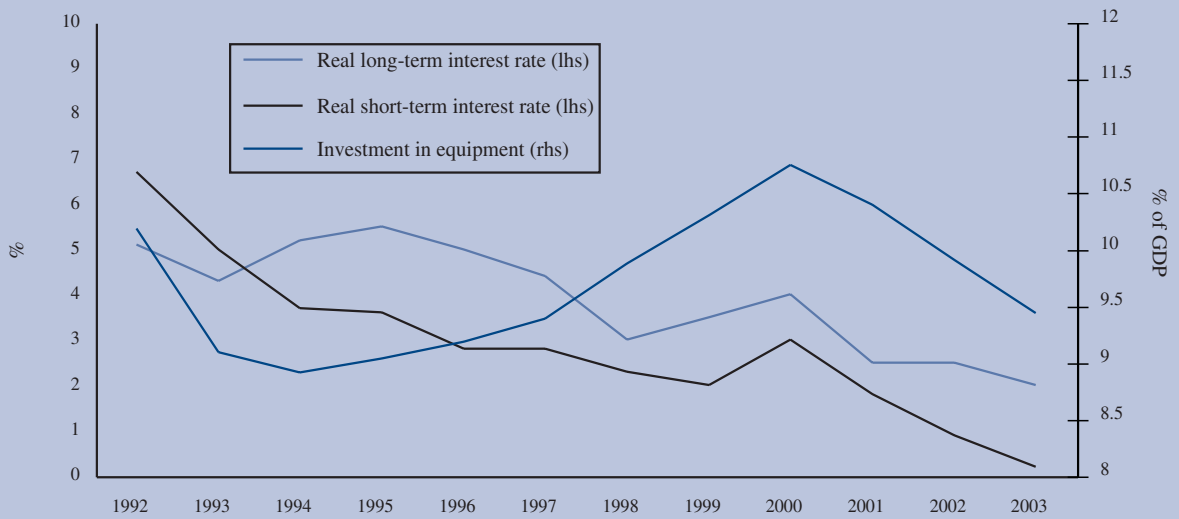
⁽³⁾ Here defined as HICP excluding energy and unprocessed food.

Graph 7: Investment share by category, euro area



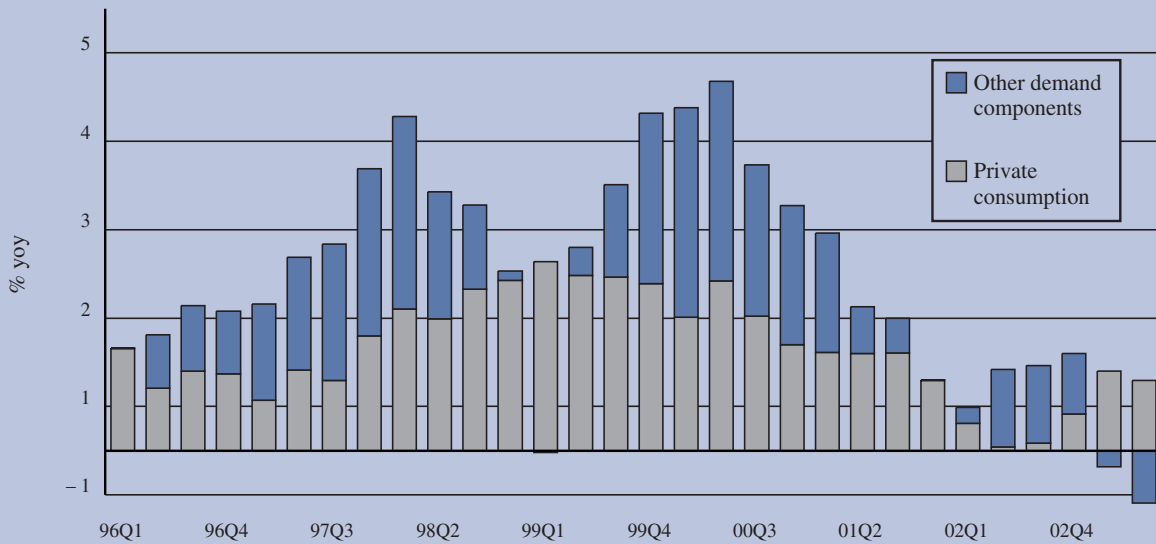
Source: Commission services.

Graph 8: Investment and interest rates, euro area



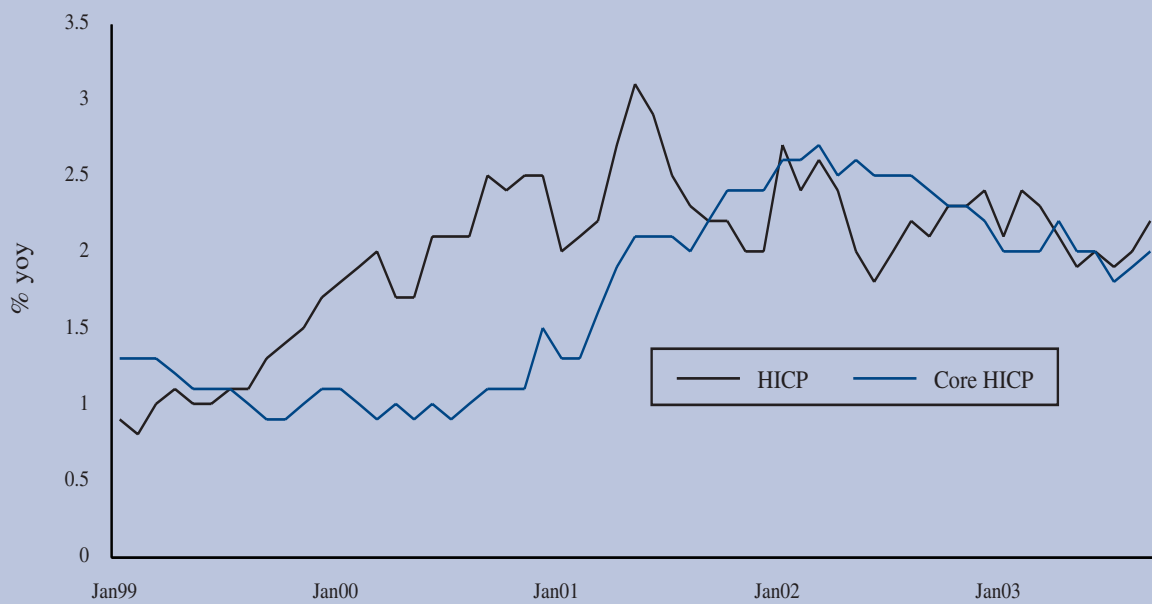
Source: Commission services.

Graph 9: Contribution of private consumption to GDP growth, euro area



NB: Other demand components are public consumption, gross capital formation and net exports.
Source: Commission services.

Graph 10: Inflation development, euro area



Source: Commission services.

With less persistent inflation, private consumption growth would likely have been higher. In particular in 2002, when the euro notes and coins were introduced, private consumption was depressed by households' perception of a much higher increase in prices than actually occurred. Consumers' responses in surveys indicated an assessment of price development that was out of line with both past experience and actual developments ⁽¹⁾.

Worsening unemployment prospects: Whereas labour market rigidities probably lead to a smoothing of disposable income across the cycle, they may also affect consumption negatively via household expectations. In particular, in so far as rigidities are frequently associated with hysteresis effects, households may assess a spell of unemployment as more damaging for short- to medium-term revenue prospects when labour markets are more rigid. Against this background, a striking feature of the household surveys of the European Commission is that the link between worries concerning unemployment and other measures of household sentiment varies considerably depending on the countries considered. Graph 11 displays the correlation since the beginning of the cyclical downswing between households' expectations regarding unemployment over the next 12 months and an average of the three other components of household sentiment ⁽²⁾. Overall, the correlation tends to be lower in Member States where employment protection legislation (EPL) is less strict or where long-term unemployment is low. It also tends to be lower in most countries where labour market reforms have recently brought large decreases in structural unemployment (Ireland, Spain and Finland). All Member States cumulating signs of less efficient labour markets with high unemployment, limited progress in the non-accelerating inflation rate of unemployment (NAIRU) in recent years and a high EPL index post a high correlation between the two variables (Belgium, Germany and France). In those countries, cyclical developments in employment seem to have a more pervasive bearing on overall consumer confidence and, presumably, on private spending than in countries enjoying more efficient labour markets. While the evidence is of an illustrative nature, it suggests that contagion effects from unemployment worries to overall consumer senti-

ment are not more pronounced in economies characterised by a high degree of labour market flexibility.

Sustainability of public finances: A further factor affecting private saving behaviour is public finances. While economic theory suggests that private consumption could move in the one or the other direction when fiscal policy is loosening, i.e. depending on whether Keynesian multiplier or Ricardian wealth effects dominate, there is some reason to believe that the less energetic pursuit of budgetary consolidation may have dented private consumption ⁽³⁾. For example, there is a close relationship between the behaviour of the euro-area households' saving ratio and the budgetary deficit since the mid-1990s (see Graph 12). Moreover, quarterly growth in public and private consumption has tended to move in opposite directions since the beginning of 2001, suggesting a certain degree of substitution in their relationship (see Graph 24 in the budgetary policy section).

Low stimulus from external demand

External demand for euro-area goods and services has gradually weakened in the course of the slowdown. Real export growth fell from an annual rate of more than 12 % at the peak of the cycle in 2000 via 3 % in 2001 to a virtual standstill in 2003 ⁽⁴⁾. The development of net exports over cycles shows that their contribution to growth has been weaker than in past cycles (see Graph 13), in particular at the later stage of the slowdown. The same observation also holds if developments in export growth are compared across the slowdowns experienced in the 1990s. Quarterly export growth has been stronger in 1995/96 and 1998/99 than in the current juncture.

At the early stage of the slowdown, it was expected that growth in the euro area would receive a welcome stimulus from the recovery of external demand. These expectations were, however, disappointed and the ongoing appreciation of the euro's external value raised concerns that external demand may remain a missing driving force of the recovery.

Exchange rate movements can have an important role in kick-starting the growth process in small open economies. Although the euro area is not a small economic entity, it is relatively open and in many Member States the cyclical

⁽¹⁾ This issue was addressed in 'The EU economy: 2002 review'.

⁽²⁾ Namely the 'financial position over the next 12 months', the 'general economic situation over the next 12 months' and 'savings over the next 12 months'. Together with the unemployment expectations, these three indicators form the overall indicator of consumer confidence presented in the European Commission surveys.

⁽³⁾ For case studies on fiscal consolidations and their effect on consumer confidence, see European Commission (2003a).

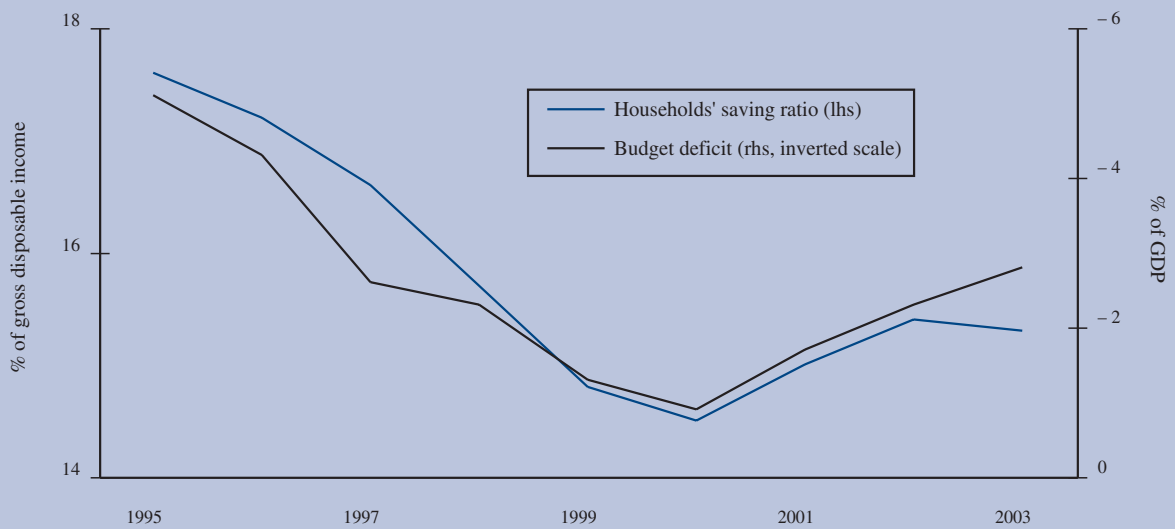
⁽⁴⁾ National accounts data on exports include intra-area trade.

Graph 11: Correlation between unemployment expectations and other components of consumer confidence ⁽¹⁾



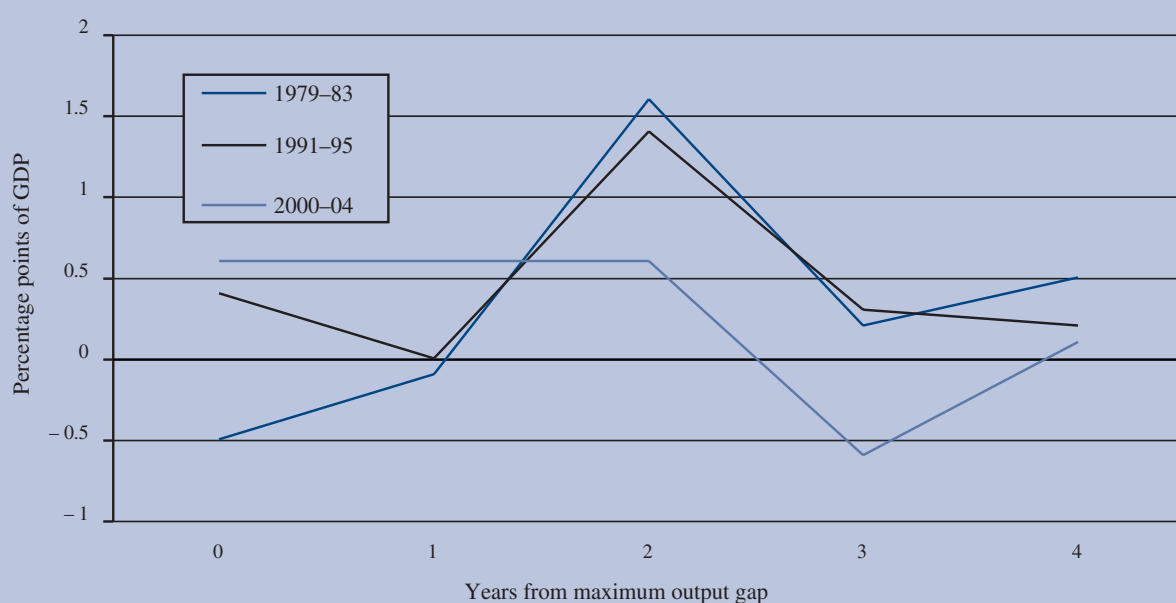
⁽¹⁾ Correlation between unemployment expectations and an index of the other components of consumer sentiment. Period covered is mid-2000 to April 2003.
Source: Commission services.

Graph 12: Household saving and fiscal deficit, euro area



NB: Euro-area saving ratio derived from eight Member States (BE, DE, ES, FR, IT, NL, AT, FI); deficit excluding UMETS receipts in 2000 and 2001.
Source: Commission services.

Graph 13: Contribution of net exports to GDP growth, euro area



Source: Commission services.

upturn was in the past generally export driven. However, since the introduction of the euro in 1999, exchange rate developments have been largely procyclical. The euro exchange rate devalued against the US dollar when growth was high in 1999 and 2000, remained on a low level in 2001 and started to appreciate in 2002 when the slowdown became entrenched. From February 2002, which is the month from when the euro exchange rate was on a clear appreciating trend, to September 2003, the external value increased against the US dollar by about 30%. If bilateral exchange rates are weighted with the countries' share in foreign trade, the euro appreciation set in earlier and was smaller. Depending on the deflator used, the real exchange rate appreciated between 18% (export prices) and 24% (consumer prices, unit labour costs) from its trough in October 2000 to September 2003. That is, the loss in price competitiveness was smaller than suggested by the appreciation against the US dollar.

A real exchange rate appreciation reduces price competitiveness and tends to reduce exports. However, this effect is often dominated by the behaviour of a second determinant of foreign trade, namely the growth in world income. Indeed, the pattern of euro-area exports primarily reflects

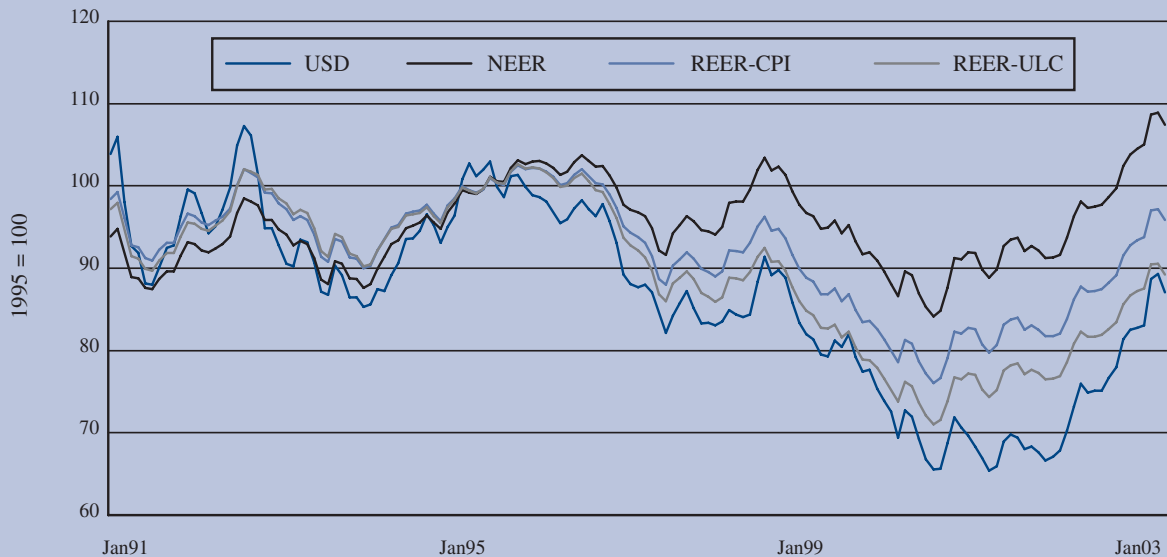
the deceleration in world import growth, which plummeted in 2001 and has recovered only moderately since then.

Moreover, an appreciation has two effects on import demand that tend to cushion its impact on net exports. First, declining exports lead to lower income, which reduces demand for imports. Second, an appreciation reduces import prices, which makes international inputs cheaper and exerts a favourable disinflationary impact on the whole economy. That is, domestic demand would compensate for lower external demand⁽¹⁾.

Overall, analysing the total effect of the euro appreciation requires a look beyond the pure trade effect. Since a more detailed analysis of the trade and price channel is undertaken in Section 6, it is enough to point out at this juncture that the recent appreciation of the euro on foreign exchange markets has already left its trace in declining import prices but has not yet become visible in consumer prices.

⁽¹⁾ If the exchange rate appreciation is driven by a change in the relative risk premiums, rising capital inflows from abroad rise, impacting favourably on domestic capital costs and thus on investment and thereby on economic growth. Due to balance-of-payments mechanics, the trade balance would decline.

Graph 14: Euro exchange rate developments



NB: USD: US dollar, NEER: nominal effective exchange rate, REER: real effective exchange rate, CPI: consumer price index, ULC: unit labour costs (total economy).

Source: Commission services.

Resilient employment

Employment growth weakened and the rate of unemployment increased in the euro area in the course of the slowdown. Compared with the experience of massive job losses during past downturns and most recently during the recession of the early 1990s, the performance during the present slowdown is remarkable. Employment growth decelerated strongly in the early phase of the slowdown but stabilised somewhat in 2001 at positive rates before dipping to zero in late 2002 and becoming slightly negative in 2003. The rate of unemployment reached a trough at the beginning of 2001 at 8 % and gradually moved up to 8.8 % in September 2003.

Labour market variables typically respond with a lag to changes in economic activity. Therefore, it remains to be seen whether the labour market adjustment in the euro area has already fully run its course. A number of factors could explain the observed resilience of employment in the euro area.

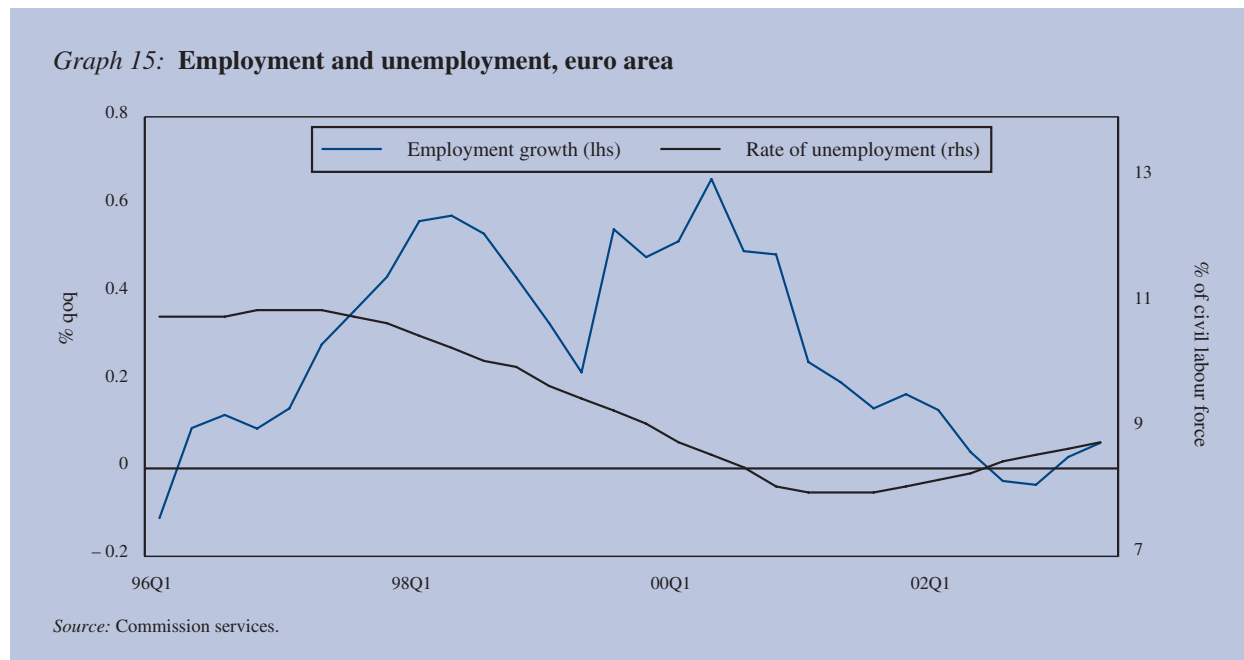
- Enterprises expected the growth slowdown to be a temporary phenomenon and hoarded labour to be prepared for the next upswing. As this expectation did not materialise, one would, however, have

expected to see more massive job shedding in the most recent past.

- Employment protection laws may have prevented larger quantity adjustments on the labour market. This could explain the relatively moderate change in employment and unemployment but not the fact that employment growth remained positive during most of the slowdown.
- The NAIRU might have continued to decline, countering the effect of the cyclical weakening on unemployment. Similarly, a further expansion of labour supply may have countered the impact of the decline in labour demand on employment. In this case, one would, however, expect to see wage growth coming down ⁽¹⁾.
- There could have been increased substitution of capital with labour, i.e. a relative rise in the share of labour-intensive industries. An example would be the increasing share of services at the expense of industries, where production is typically thought to

⁽¹⁾ This assumes that wages were determined in a pure market regime.

Graph 15: Employment and unemployment, euro area



be more capital intensive ⁽¹⁾. Graph 16 reveals that job creation took place predominantly in the euro-area's service economy.

Wage growth hardly responded to the slowdown in economic growth. In the euro area, nominal wage growth has remained on a plateau of about 3 % per annum since 1999 (see Graph 17). In real terms, a slight deceleration is visible from 1.1 % in 1999 to 0.5 % on average in 2001–03. Such a downward adjustment is hardly detectable in real unit labour costs ⁽²⁾, indicating that real wage growth was equal to or even higher than growth in apparent labour productivity during the slowdown ⁽³⁾.

The puzzling correspondence of stable wage growth with resilient employment has had both a positive and an adverse impact on economic recovery. On the one hand, it contributed to the stability of growth in private consumption since higher employment left wage-earners with higher disposable income. This might help to explain why consumption growth was the most resilient

demand component, even if households increased their saving ratio. On the other hand, constant real unit labour costs at a time when overall demand weakened had a negative effect on cash flow and the profitability of firms and thus a negative impact on investment.

2.3. The macroeconomic policy mix: responding to the slowdown

This section reviews the policy mix in the euro area, describing first the major policy responses taken during the slowdown and subsequently reviewing the conduct of monetary and budgetary policy in more detail.

Adjustment of macroeconomic policy variables

Concerning the adjustment of policy variables in the euro area, the area-wide budgetary deficit increased by almost 2 % of GDP from 0.9 % of GDP ⁽⁴⁾ in 2000 to 2.8 % in 2003. Most of this widening was due to the working of automatic stabilisers. This is witnessed by the more moderate increase in the cyclically adjusted deficit by 0.4 % of GDP over the same time.

To assess the discretionary fiscal impulse, the change of the cyclically adjusted primary balance (CAPB) is a fre-

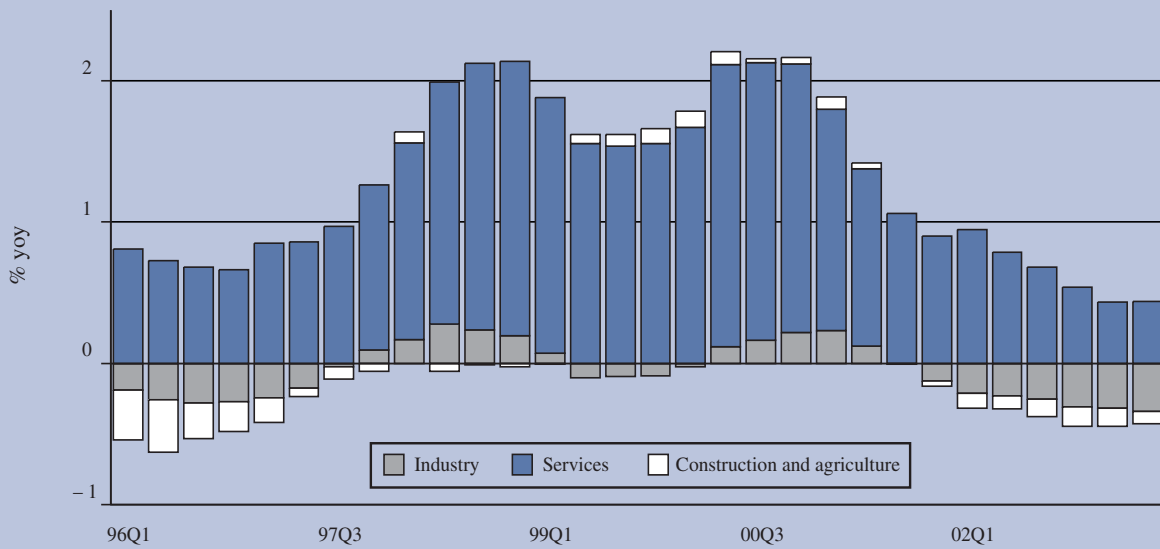
⁽¹⁾ It should not be taken for granted that industry is more capital intensive than services because production in some service sectors, for instance financial intermediation, is quite capital intensive and has been heavily influenced in the recent past by investment in information and communication technology.

⁽²⁾ Real unit labour costs are deflated with the GDP deflator.

⁽³⁾ A more detailed account of wage flexibility in the euro area can be found in Chapter 4.

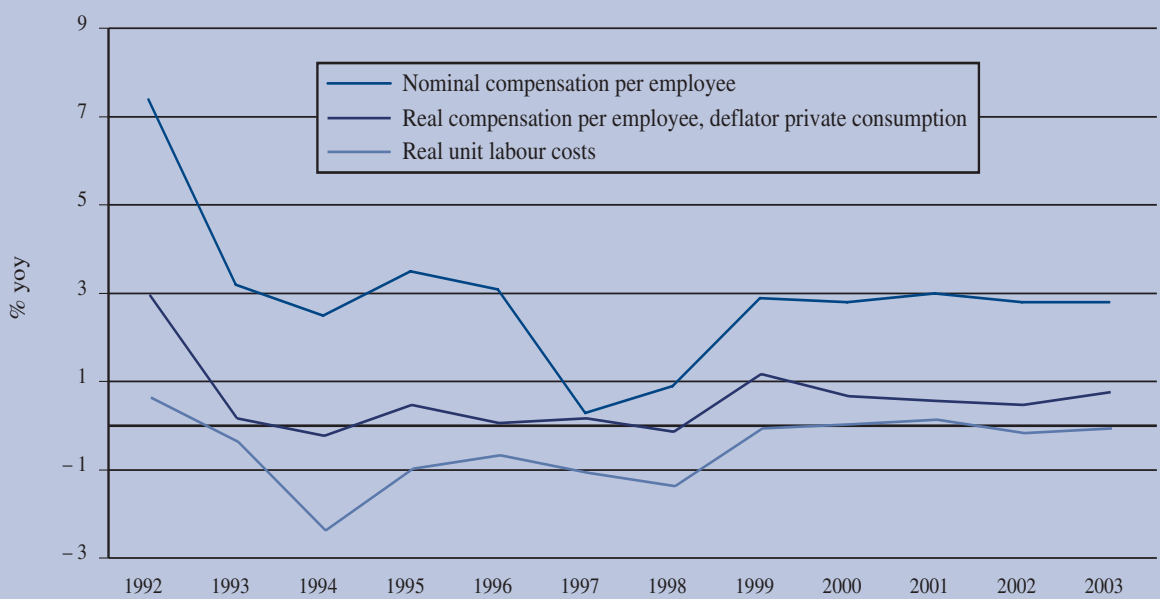
⁽⁴⁾ Excluding the one-off proceeds from UMTS licences.

Graph 16: Sectoral contribution to employment growth, euro area



Source: Commission services.

Graph 17: Wage developments, euro area



Source: Commission services.

quently used benchmark. It differs from the cyclically adjusted deficit by also neutralising the effect of changes in interest rates on public spending. Although changes in the CAPB of less than 0.5 % of GDP are typically assessed as broadly neutral, and therefore not likely to have a significant impact on the economy, the fiscal stance in the euro area can be considered somewhat expansionary since 2000 (see Graph 18) ⁽¹⁾.

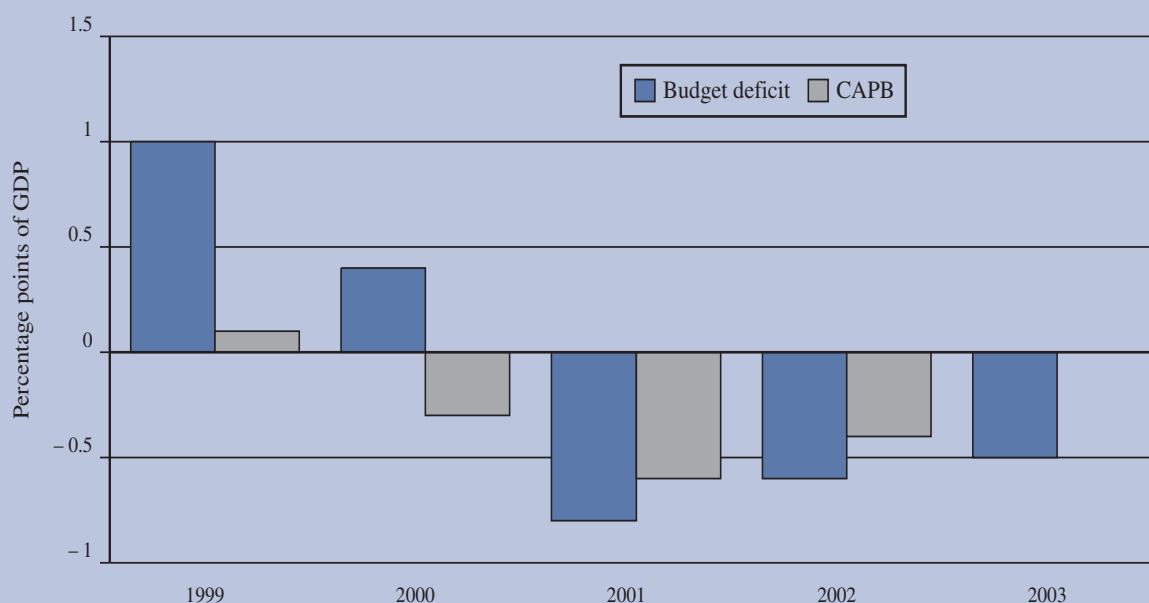
The ECB cut interest rates from May 2001 onwards by a cumulative 275 basis points ⁽²⁾. When assessed against a Taylor rule, which may be considered a representation of an autopilot central bank that responds equally to the deviation of inflation from the target and the output gap, it would seem that short-term interest rates have been accommodative to economic activity during the slow-down, in particular since the second half of 2001. Note that the Taylor rule already encompasses some cyclical

stabilisation because the benchmark declines when the output gap deteriorates and vice versa. Therefore, deviations from the Taylor rule express additional leeway used by the central bank. Whereas empirical estimates of Taylor rules generally provide an accurate *ex post* description of central bank policy, the Taylor rule in Graph 19 yields an interesting further insight. The ECB rate seems to lead the Taylor corridor, which is consistent with the notion that monetary policy should be based on future rather than on current economic developments.

It is difficult to determine the point in time from when on monetary policy can be considered to have been accommodative. An assessment based on the Taylor rule is not free from difficulties because the point in time when the short-term interest rate declined below the Taylor rate is strongly dependent on how the Taylor rate is computed. In addition to the well-known problem concerning the level of the real interest rate, the use of the relevant inflation rate has a crucial impact. Based on a measure of core or median inflation, the monetary stance turned accommodative in autumn 2001. Based on headline inflation, which was much higher due to soaring energy prices in 2000, monetary policy could

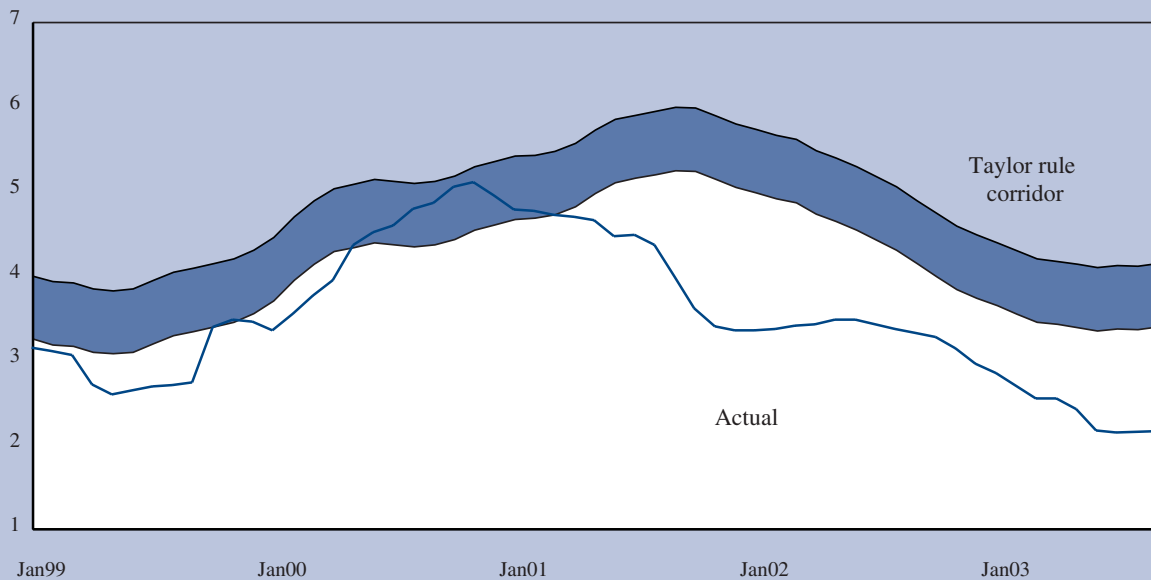
⁽¹⁾ For a discussion of this indicator's limitations, see Larch and Salto (2003).
⁽²⁾ The actual easing of the monetary stance seems to have started earlier because the short-term interest rate had already peaked six months earlier. Between November 2000 and the first cut in official interest rates in May 2001, the three-month money market interest rate had already fallen by a significant 50 basis points.

Graph 18: Change in public budget, euro area



NB: Deficit excluding UMTS proceeds. Cyclically adjusted primary balance (CAPB) based on potential growth.
 Source: Commission services.

Graph 19: Short-term interest rate: actual and implied by the Taylor rule, euro area



NB: Taylor rule based on median inflation, monthly figures.
Source: Commission services.

even be considered to have already started easing in 1999, i.e. before the cycle peaked. However, even by this measure, the easing has become more substantial since the end of 2001.

In order to display the joint stance of monetary and budgetary policy, Graph 20 relates the annual change in the cyclically adjusted budgetary balance to the deviation of the short-term interest rate from the Taylor rule. Deviating from conventional Taylor rate calculations, the calculation underlying Graph 20 uses the HICP realised a year later instead of the contemporaneous rate of inflation. This appears a good alternative to the use of actual rates of inflation, in particular in view of (i) the notion that the ECB bases its policy on expected rather than actual inflation and (ii) the observation that short-term rates in the euro area lead the Taylor corridor ⁽¹⁾.

According to this measure, both monetary policy and budgetary policy were accommodative in 2000–02, before budgetary policy turned neutral in 2003. Note that

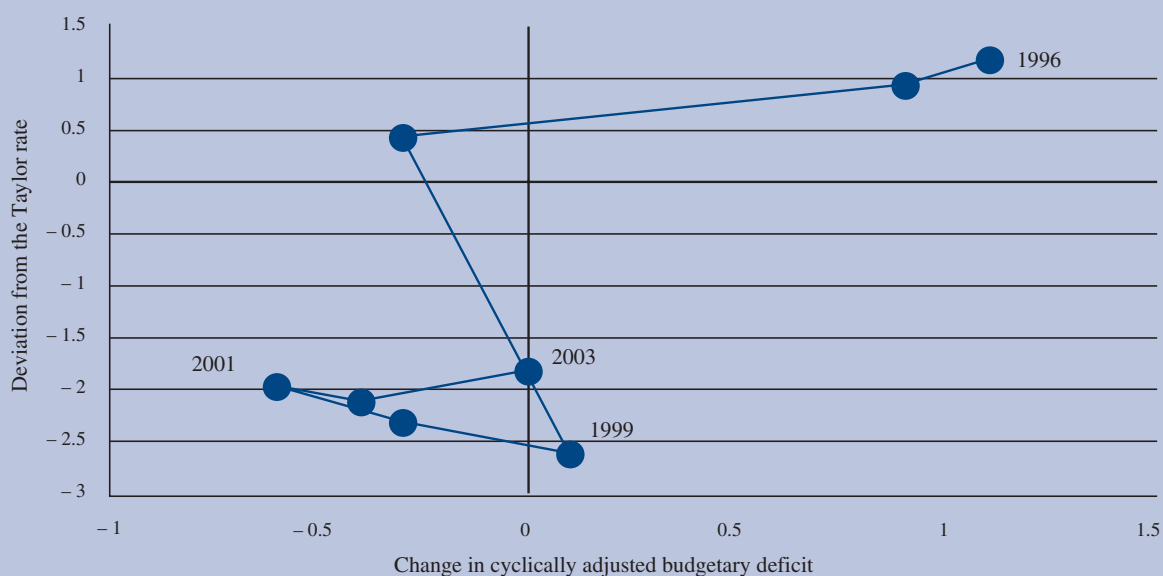
⁽¹⁾ The drawback is the implicit assumption that both the central bank and money market participants are able to correctly anticipate future inflation.

budgetary policy stimulated the economy when activity was still buoyant in 2000, implying the availability of lesser margins to support the economy when the slow-down continued into 2003 ⁽²⁾. When the change of the two indicators is looked at instead of their level, it appears as if fiscal policy eased from 1999 to 2001 while the degree of easing was reduced in 2002 and 2003. Monetary policy, according to this measure, became slightly less accommodative from 1999 to 2003.

These two indicators, while frequently used in policy discussions, do not reflect the complexity of all the intervening forces that eventually determine the effect of macroeconomic policies on economic activity. The following subsections provide a more detailed account of

⁽²⁾ The graph could also be used to analyse the relationship between monetary and fiscal policy. However, the period since 1999 is too short to draw conclusions. When looking over the period 1996–2003, assuming that policies were to some extent determined on a European level before the start of EMU, it appears as if there was no systematic relationship between monetary and fiscal policy. Of the eight observations, five are in the areas that indicate that both monetary and fiscal policy have had the same stance (restrictive in the upper-right and accommodative in the lower-left areas) and two are in the area that indicates an opposite stance. The 2003 observation does not fit into this classification because fiscal policy was neutral.

Graph 20: Policy mix, euro area



NB: A positive number indicates restrictive policy. The Taylor rate was derived with a real interest rate of 3 %, an inflation target of 1.75 %, the HICP one year later to proxy inflation expectations and a weight of the inflation gap and the output gap of 0.5, respectively.
Source: Commission services.

the factors affecting the impact of monetary and budgetary policy.

Monetary policy has been accommodative

Monetary policy had to act against the background of only slowly receding rates of headline and core inflation. While most of the increase in headline inflation in 2001 was related to one-off effects (oil price hikes and food price hikes linked to bad weather and BSE), there was a substantial risk of second-round effects, complicating the assessment of risks to price stability. Despite this, the ECB started cutting interest rates in May 2001 when headline inflation peaked and conducted six further cuts (overall four times by 50 basis points and three times by 25 basis points) despite a sluggish deceleration in the rate of inflation.

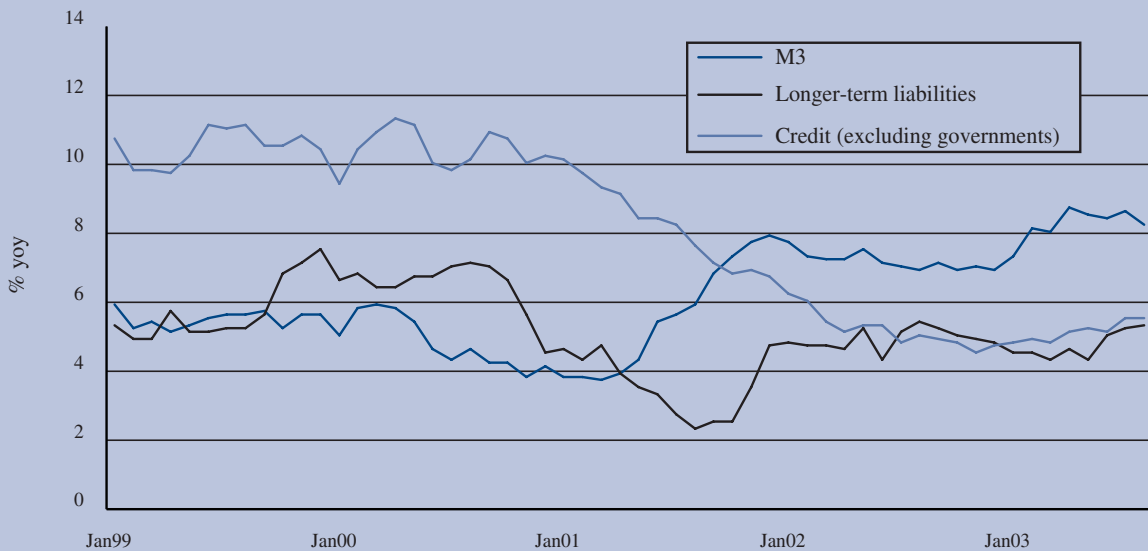
A further relevant feature for monetary policy in the slowdown was that the spread of risk aversion significantly affected monetary indicators. Flight to quality was a common driver of portfolio reallocation, with government bonds benefiting from an increased desire for safe-haven securities and the incentive to hold shares considerably undermined by bad economic news and

corporate scandals. The results were falling stock quotations and soaring government bond prices. Returns on government bonds declined sharply to historical lows. For example, 10-year euro-area government bond yields were just 3.5 % in summer 2003 and US 10-year government bonds even approached 3 % in summer 2003, when a discussion on deflationary threats arose in the USA.

In addition, the reading of monetary aggregates was affected by rising risk premiums as agents considerably increased their holdings of liquid assets in bank accounts. In consequence, the share of M3 that is motivated by saving purposes has increased relative to that used for transactions. Graph 21 shows that an upward shift in M3 growth started in spring 2001. At the same time, both credit growth, which is the main counterpart of monetary growth, and growth in longer-term liabilities that do not belong to M3 decelerated sharply. M3 growth stabilised at a high level in late 2001 when these two components also stabilised.

Two factors attenuated the impact of the ECB's interest rate cuts on economic activity. First, the increase in risk premiums prevented capital costs for enterprises from

Graph 21: Growth in monetary aggregates and main counterparts, euro area



Source: ECB.

declining by a comparable amount. This issue is dealt with in Section 4.3. Second, the euro's appreciation on foreign exchange markets had a tightening effect on monetary conditions.

Monetary condition indices that use a relative weight of the exchange rate and the interest rate component of 1:6 suggest that, on average, monetary conditions were looser in 2001–03 than during the boom years 1999 and 2000. In 2001, the effect of lower real short-term interest rates more than offset the impact of the euro appreciation. In spring 2002, the exchange rate appreciation caused a tightening of monetary conditions, bringing the monetary conditions index (MCI) back to the level recorded in spring 2001. Since mid-2002, the decline in the real interest rate component has broadly neutralised the effect of the real exchange rate appreciation on the monetary conditions index.

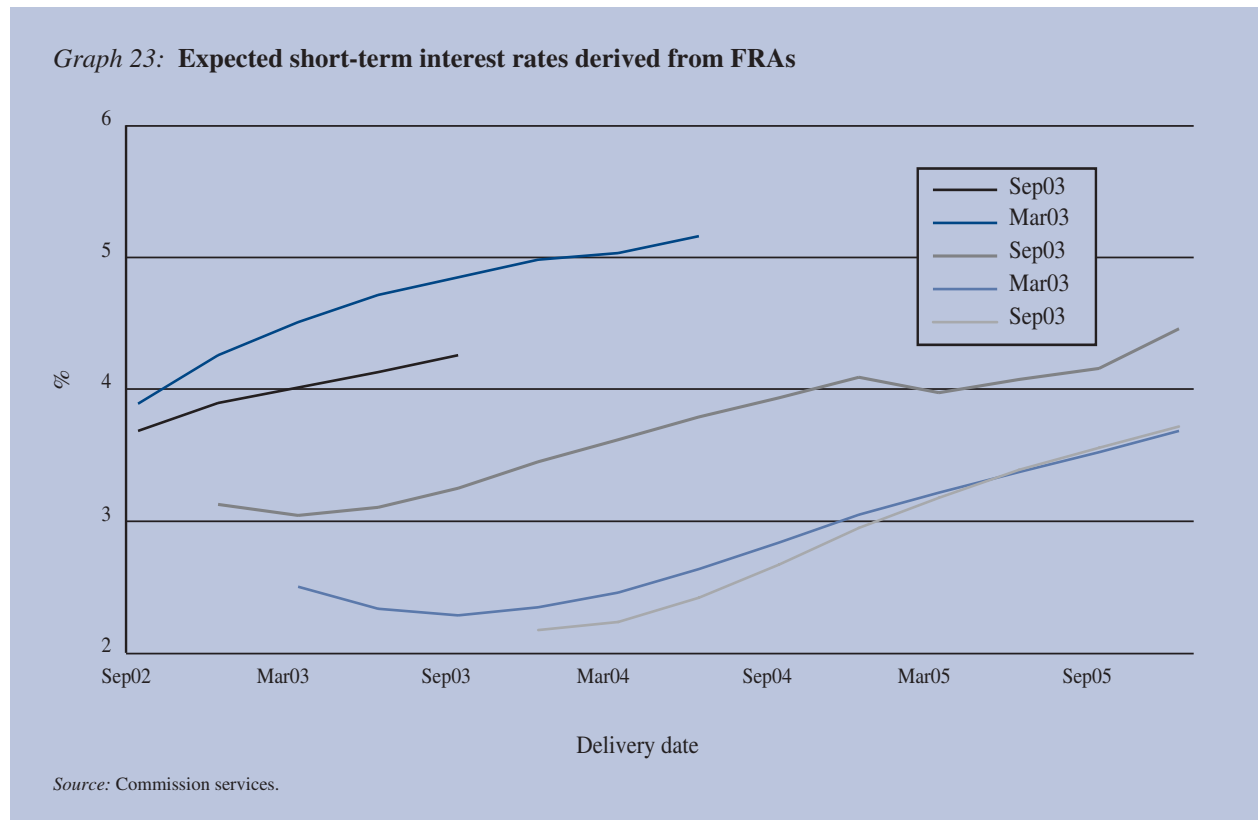
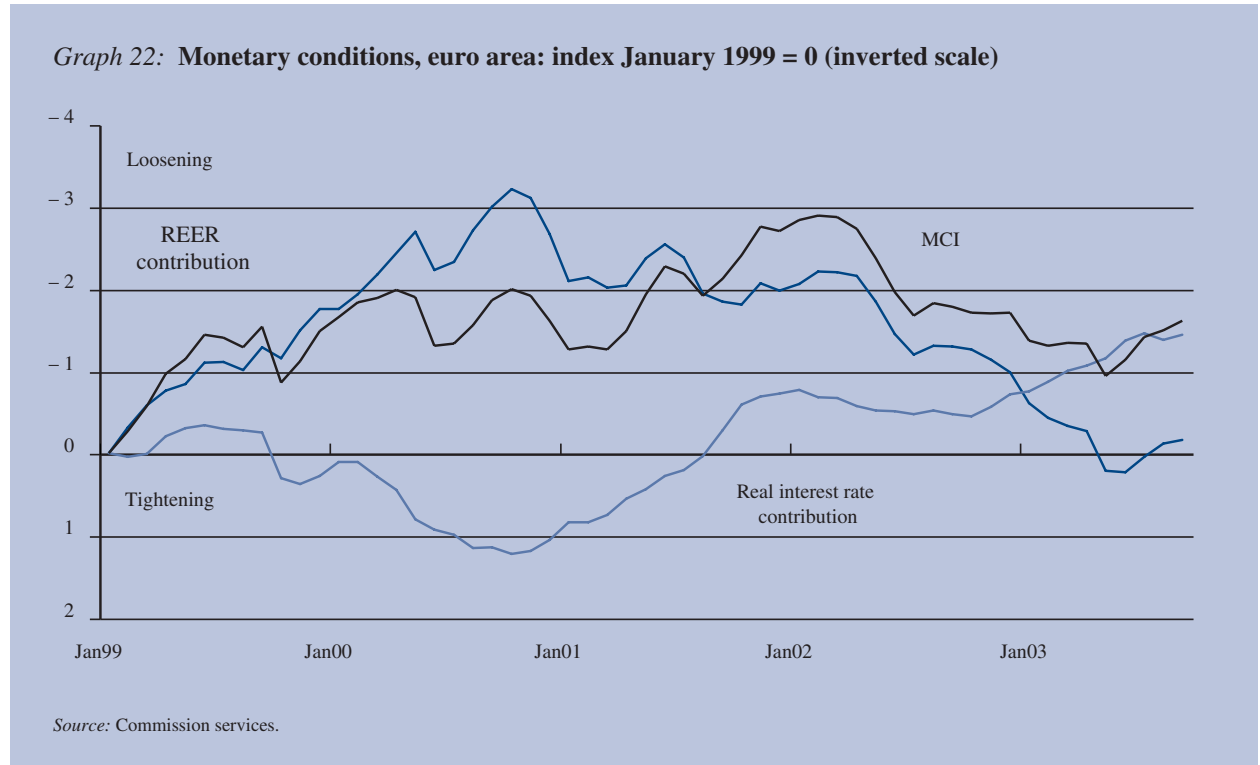
The prices quoted for forward rate agreements (FRAs) provide information on how interest rate expectations changed between 2001 and 2003. At the early stage of the slowdown, market participants expected short-term interest rates to climb strongly (see Graph 23). In spring 2002, it was forecast that the short-term interest rate could return to a level close to 5%. This expectation, however, was revised over the summer of 2002, when markets expected that a lower level of interest rates

would prevail into the autumn of 2003. Eventually, actual short-term interest rates were almost 100 basis points lower in autumn 2003 than expected by market participants a year earlier. Overall, the quotations of forward rate agreements in 2001–02 suggest that market participants assume the ECB will not increase interest rates faster now than before the monetary easing in order to undo the rate cuts undertaken during the slowdown. This can be derived from the slope of the lines in Graph 23, which expresses the expected increase in short-term interest rates and which was about the same in autumn 2003 and winter 2001–02.

A positive lesson from the recent experience is that the monetary policy stance has been accompanied by continuously low and stable inflation expectations. Forward interest rates suggest that financial market participants seem to consider that neither the strong growth in monetary aggregates nor the currently low level of money market rates represents a threat to price stability in the short to medium term.

Budgetary policy easing did not stimulate economic activity

In terms of both actual budgetary developments and as regards the implementation of the EU framework for fiscal surveillance, the past few years have been a difficult



period. The play of automatic stabilisers in the context of the slowdown implied a considerable worsening of government finances. But the increase in the nominal deficit for the euro area as a whole also reflects discretionary loosening by some Member States.

Whereas budgetary policy in the euro area has been slightly expansionary over the last few years, its impact on the economy has been rather muted, if not adverse, for the following reasons.

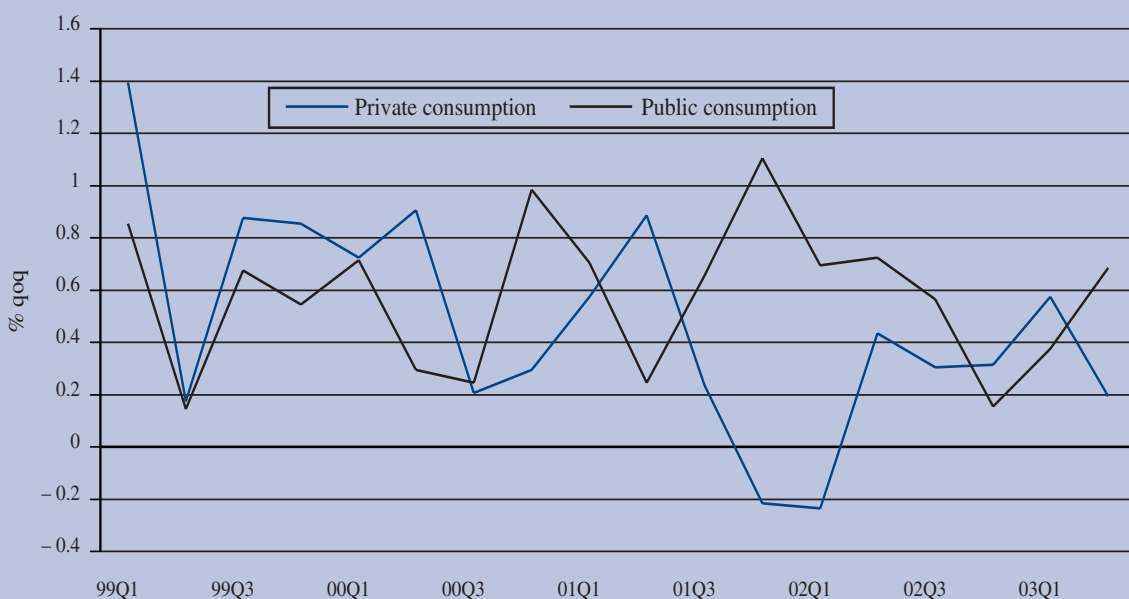
- While public spending should have a direct effect on activity and via the multiplier effect also on private consumption, it seems that in recent years the latter has reacted rather negatively to sustained increases in public spending. For instance, there is a strong comovement of the households' saving ratio with the budgetary deficit, suggesting that the increase in aggregate demand due to larger public deficits was attenuated by less spending from private households (see Graph 12). Similar evidence can be derived from the correlation between private and public consumption growth. Whereas quarterly growth in private and public consumption in the euro area is not systematically related over longer time periods,

Graph 24 illustrates the surprisingly clear inverse relationship in the current slowdown ⁽¹⁾.

- Tax reforms have been adopted in several EU Member States (in Germany, France, Italy, the Netherlands and Austria), and are now gradually introduced over several years. The basic aim of such reforms was to simplify the systems, while at the same time widening the tax base and reducing marginal rates. They also included a substantial amount of tax relief. The evidence so far available on the impact of such reforms is that they have not produced the increase in private consumption that was hoped for. The increase in savings can probably be explained by the fact that such reforms were not considered credible, as the strategies to finance them were not well defined or were simply unrealistic, and therefore could not be per-

⁽¹⁾ Whereas the coefficient of correlation between quarterly private and public consumption growth is not significantly different from zero over the 1990s, suggesting independence between both aggregates, the coefficient for the period since 2001 is -0.65 . In terms of annual growth, the coefficient of correlation between private and public consumption growth in the euro area is $+0.58\%$ over the period 1970–2000, which implies a weak positive relationship. The coefficient for the recession 1992–93 is $+0.25$.

Graph 24: Private and public consumption growth, euro area



Source: Commission services.

ceived as permanent, a condition necessary to induce consumers to believe that their permanent income would be improved by such reforms.

- The economic literature has identified a quite substantial effect of fiscal deficits on long-term interest rates ⁽¹⁾. In Europe, the increase in recent years in both actual and cyclically adjusted deficits may have prevented a further lowering of interest rates. However, the effect is difficult to interpret at the current juncture, when other factors such as the short-term interest rates set by the European Central Bank, movements in the US capital market rates, the flight to quality and changes in risk premiums have put downward pressure on long-term interest rates. Nevertheless, the three large Member States that have budgetary difficulties, and of which the two larger ones are

formally under scrutiny because their budgetary deficit has exceeded the 3 % of GDP limit, have seen a deterioration in their bond market rates compared with those countries where budgetary balances are on a healthier footing (see Graph 25) ⁽²⁾.

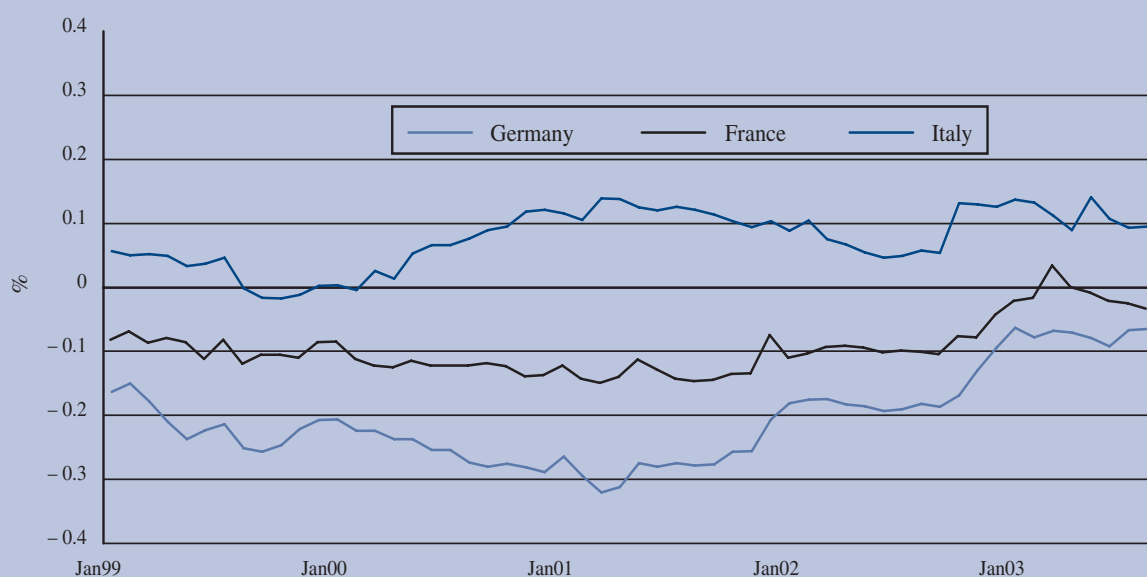
- The increased focus in recent years in Europe on the quality of public finances has highlighted that about half of the Member States may face a serious problem of fiscal sustainability due to the ageing of the population and the current design of pension systems ⁽³⁾. Such prospects over the long term, together with growing awareness of the need to reform the pension systems and the lack of determination in correcting unbalanced budgets, may be taking their toll on consumers' confidence.

⁽¹⁾ US studies suggest that a 1 % of GDP deterioration in the fiscal position increases the long-term real interest rate by 25 basis points. For an overview of the empirical literature, see Brooks (2003).

⁽²⁾ For an analysis of how changes in issuance techniques might have influenced bond market spreads, see 'The EU economy: 2002 review', Chapter 4.

⁽³⁾ For an overview of the impact of ageing populations on public finances, see Economic Policy Committee (2003).

Graph 25: Spread of bond market interest rates over the average of six euro-area Member States



NB: The six Member States are BE, ES, IE, NL, AT and FI. Their average is weighted with their average public debt 1999–2002 in euro.
Source: Commission services.

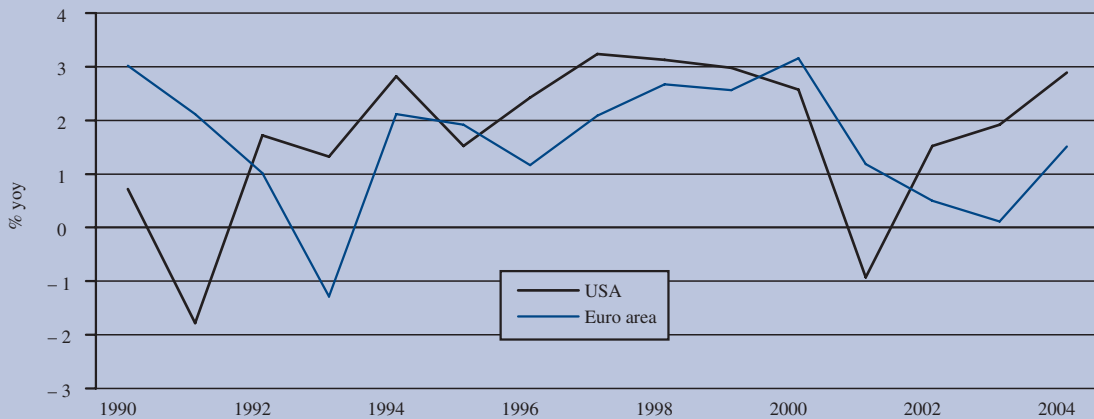
Box 1: Economic performance and policies in the euro area and the USA

There is a widespread perception that the US economic performance is much stronger than that of the euro area and that this is partly the result of differing macroeconomic policies conducted in the two areas. This picture needs to be qualified in several respects.

Comparisons of growth performance should focus on growth in GDP per capita rather than on overall GDP growth rates. It is often pointed out that GDP grows much faster in the USA than in the euro area. Indeed, over the last decade GDP growth has been higher in the USA than in the euro area for every single year, except 2001. On average, over this period GDP grew 1.2 % faster. This quicker growth stems in large part from the much more rapid growth in the US population (about 1 % per annum) compared with the euro area (only ¼ % per annum). The

difference in labour force growth is expected to increase over the coming years as the effects of ageing in the euro area come to be felt more clearly. It is therefore unrealistic to expect the euro-area economy to match headline US growth rates in the years ahead. Any meaningful growth comparison should therefore take the differential impact of demographic developments into account by concentrating on growth in GDP per capita. Indeed, the differential in GDP growth since 1990 disappears when viewed in per capita terms. The growth performance and the rise in living standards in both economic areas were broadly comparable. Of course, given that the GDP per capita level in the EU stands at only 71 % of the USA, catching up in Europe should be feasible. This is the objective of the Lisbon agenda that concentrates on raising employment rates and accelerating productivity growth.

No difference in real GDP per capita growth



Source: Commission services.

GDP and employment average annual growth rates 1990–2003

	USA	Euro area
Real GDP	2.8	2.0
Real GDP per capita	1.6	1.6
Population	1.2	0.4
Working-age population (15–64)	1.0	0.3

(Continued on the next page)

Box 1 (continued)

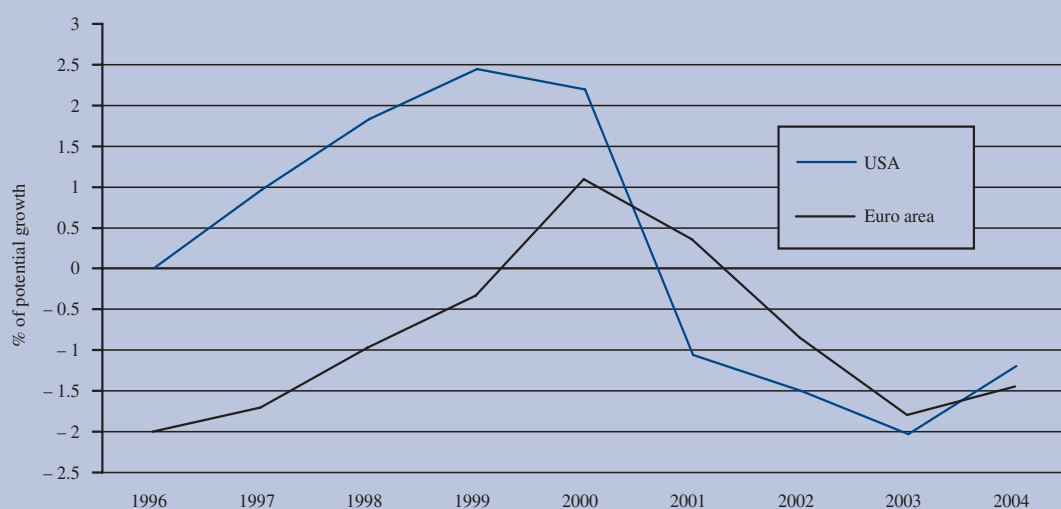
Comparisons of policy adjustments should take differences between the euro area and the USA duly into account. Over these last few years, US authorities have implemented a considerable easing of both monetary and fiscal policies. The US Central Bank has cut interest rates by a cumulative 550 basis points since the beginning of 2001, while the US federal budget balance deteriorated by 6.5 percentage points from a surplus of 1.5 % of GDP in 2000 to an estimated deficit of 5 % in 2003. In comparison, the cut in ECB interest rates by a cumulative 275 basis points and the widening of the aggregate euro-area budget balance by 3 percentage points from 0.2 % of GDP in 2000 to an estimated deficit of 2.8 % of GDP in 2003 seems to be much less important. A meaningful comparison should, however, take due account of the differences between the two areas.

A first difference resides in the relative deterioration of the output gaps in the USA and the euro area. The deterioration in the US output gap has been much larger and sharper than in the euro area. The more considerable easing in policies seems to be partially explained by this background. Indeed, against the background of the important policy easing imparted in the USA, it is all the more striking that the USA has nevertheless seen a bigger deterioration in the output gap than the euro area. This may reflect that the US economy has been far more affected by the impact of the common shocks hitting both the US and the euro-area economies.

A second difference resides in the room for manoeuvre for monetary and fiscal policy. The rapid fall in consumer price inflation from 2.5 % in 2000 to 1.2 % in 2002 created considerable leeway for the US Central Bank to cut interest rates. In contrast, the room for monetary policy action in the euro area has been constrained by the persisting inflationary pressures that caused inflation to come down only slowly. However, it is noteworthy that real long-term interest rates — which are a more important determinant of corporate investment in the euro area than in the USA — have been lower in the euro area than in the USA since the end of 2001.

On the fiscal policy side, account should be taken of the fact that budget balances in the euro area were generally much less sound than in the USA at the onset of the slowdown, thereby limiting the scope for easing without compromising long-run sustainability. On the latter point, it should be noted that the euro area has much more of an ageing problem than the USA and that because of this it should steer a more prudent budgetary course. Again on the fiscal front, it should be noted that in terms of fiscal stabilisation important differences exist between the euro area and the USA, which explains why the latter has greater recourse to more visible and discretionary fiscal policy action. Reflecting the bigger size of governments and the progressiveness of the tax system, automatic stabilisers are roughly twice as important in the euro area and

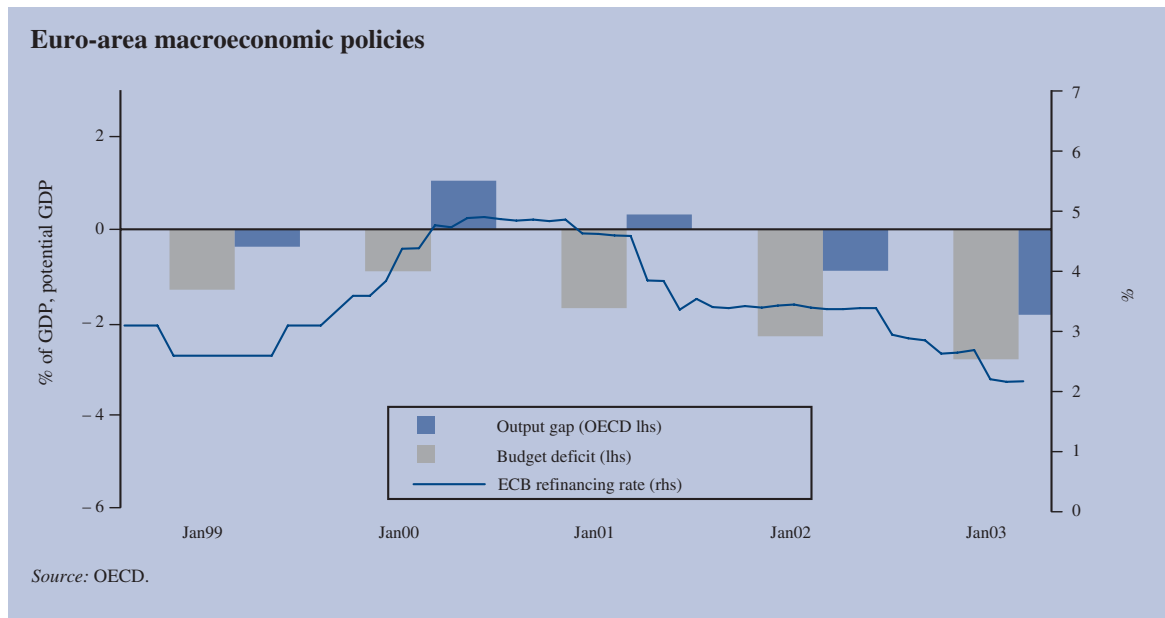
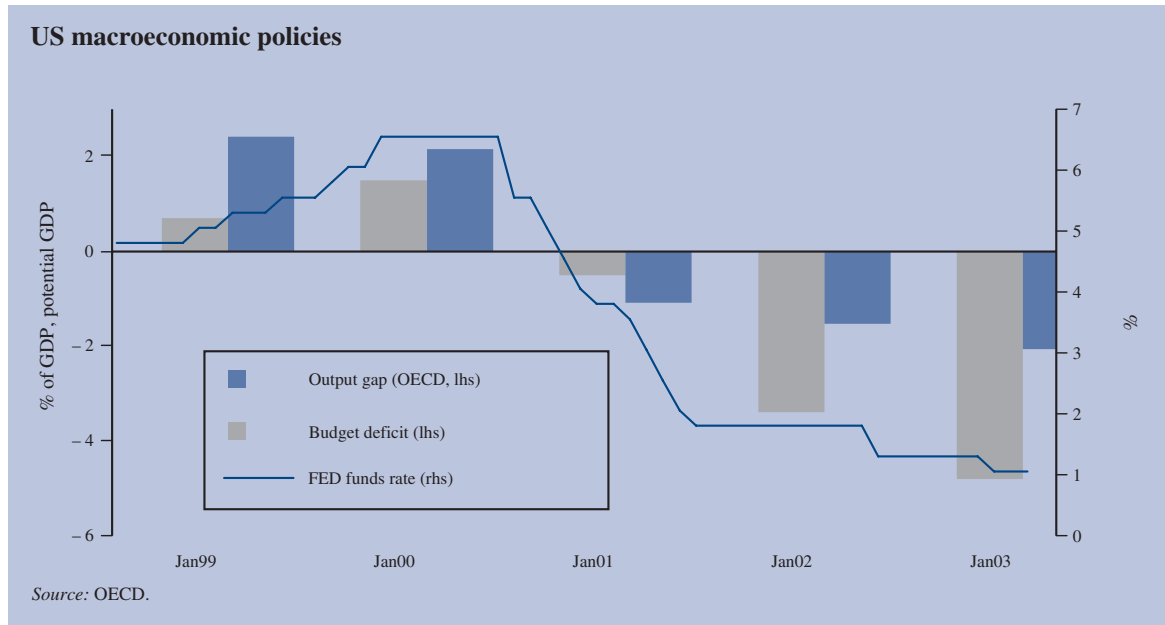
More pronounced fall in the US output gap



Source: OECD.

(Continued on the next page)

Box 1 (continued)



therefore lessen the need for discretionary policy action compared with the USA. In addition to the play of automatic stabilisers which do not require any policy decision and therefore are not very visible, some euro-area Member States have also cut taxes. However, as consumers

responded by increasing saving rates rather than by increasing spending, this failed to stimulate the economy. It corroborates the finding reported in the Commission's 2003 public finance report that the credibility of discretionary policy action is important in the euro area.

(Continued on the next page)

Box 1 (continued)

Fourth, the conduct of macroeconomic policies seems to be driven to a greater extent by short-term policy considerations in the USA than in the euro area. The accumulation of government and household debt, showing up in a widening US current account deficit, can be expected to lead to a correction at some point in the future at the expense of domestic demand. The macroeconomic policy framework in the euro area is, short-term pressures notwithstanding, oriented to a greater extent by the need to preserve medium-term sustainability. This framework has already entailed important benefits for the euro-area economy. It does not appear advisable to risk squandering the hard-won credibility in going for a dash for growth in the short run.

Relatively low potential growth and productivity increases in the euro area compared with the USA limit the scope for macroeconomic policy action, and under-

line the need for pressing ahead with structural reform. Estimates of potential growth suggest a clear lead for the USA over the euro area in the order of 1 % per annum. Again, the stronger population growth in the USA plays to its advantage. But apart from this factor, higher potential growth in the USA seems to derive from a better utilisation of human resources and a much higher and accelerating growth in labour productivity. If anything, the comparatively low potential growth in the euro area limits the scope for macroeconomic policy action as attempts to raise growth will quickly run into bottlenecks. A durable increase in growth potential will require forceful pursuit of structural reforms. These should help to unlock the euro area's hidden labour reserve and create the conditions for higher labour productivity growth (see Chapter 2 of this volume for a discussion on the drivers of productivity growth).

3. Resilience in employment due to the service economy?

The euro-area labour market withstood the slowdown in economic growth relatively well. During the 1990s, the service sector was the mainstay of job creation and employment growth exceeded 0.5 % quarter on quarter (qoq) in each quarter between 1997 and 2000, helping to weather the Asian crisis in 1998–99 ⁽¹⁾. Job creation in services gradually decelerated during the recent slowdown, but from a high rate. This section sheds some light on the role of the service sector during the current slowdown, asking whether developments specific to this sector have aggravated or cushioned the slowdown and to what extent.

3.1. The economic significance of the service sector

The service sector accounts for about 70 % of euro-area GDP and employment. However, surprisingly little is known about the significance of service activity for overall economic developments. Both data limitations and heterogeneity of the service sector itself complicate empirical analysis (see Box 2).

A rising share of services in economic activity is generally considered to have the following effects:

- business cycles are expected to become less pronounced because activity in services is less volatile than that in industry ⁽²⁾;
- economic growth is likely to be lower over the medium to long term because productivity growth is

generally perceived to be lower in services than in industry ⁽³⁾;

- inflation is thought to be higher if wage growth in services is similar to that in industry and sectoral productivity is lower. In this case, higher unit labour costs in services would translate into rising service prices relative to industrial prices ⁽⁴⁾.

The theoretical conjectures about growth and volatility in the service economy find partial support in Table 1. In the period for which quarterly data are available, cyclical volatility is markedly lower in the service than in the industry sector, supporting the notion that the rise of the service sector may dampen cyclical variation. Labour productivity growth was on average weaker in services than in industry. This did not translate into lower growth in value added because employment growth was much more vigorous in services. Relatively lower growth in labour productivity is consistent, however, with higher sectoral inflation given that real wage growth was about the same in both sectors.

The different frequency of the service cycle compared with the industrial cycle raises some interesting questions. First, it appears as if activity in the service economy is to some extent decoupled from that in industry, activity in both sectors seemingly being driven by different factors. Second, the duration of divergence suggests an important impact of supply-side factors on economic activity in the service economy rather than just the working of demand forces.

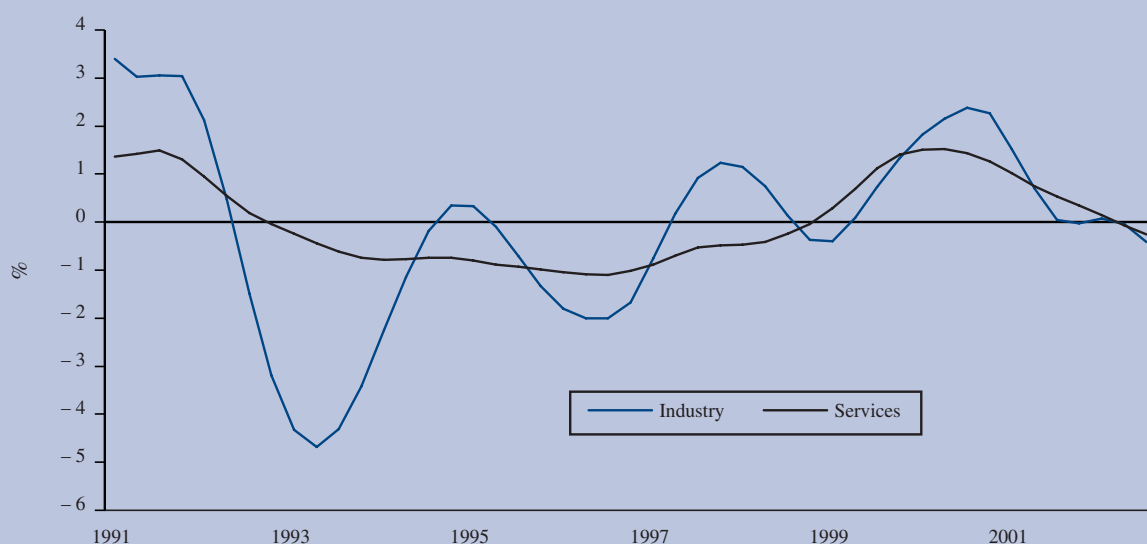
⁽¹⁾ For an analysis of the service sector in a medium-term perspective, see European Commission (2002a) and Chapter 2 of this volume.

⁽²⁾ See Dalsgaard et al. (2002).

⁽³⁾ Baumol (1967) was the first to conduct an analysis of this issue. For a critical review, see Oulton (2001).

⁽⁴⁾ This is the Harrod–Balassa–Samuelson effect.

Graph 26: Sectoral output gaps, euro area



Source: Commission services.

3.2. Demand for services: buoyant in the boom and severely weakening in the slowdown

Different trends in industrial and service activity are only possible if demand from industry for services is not a major part of overall demand for services. The decomposition of demand can be analysed by means of input-output tables. Without such a tool for the euro area hitherto, Table 2 displays the relationships derived from the French input-output table for 2000. It is evident that the service sector itself is a heavy user of inputs generated by the service sector. On the other side of the spectrum, other services, which constitute public services, health and education, are almost exclusively designated for final use in consumption ⁽¹⁾. Demand from industry and other parts of the economy for services as intermediate goods makes up only a sixth of total resources ⁽²⁾. Exports constitute only a small part of demand, consistent with the high number of non-tradables and the still relatively low degree of openness in the service sector.

⁽¹⁾ For the classification of services, see Box 2.

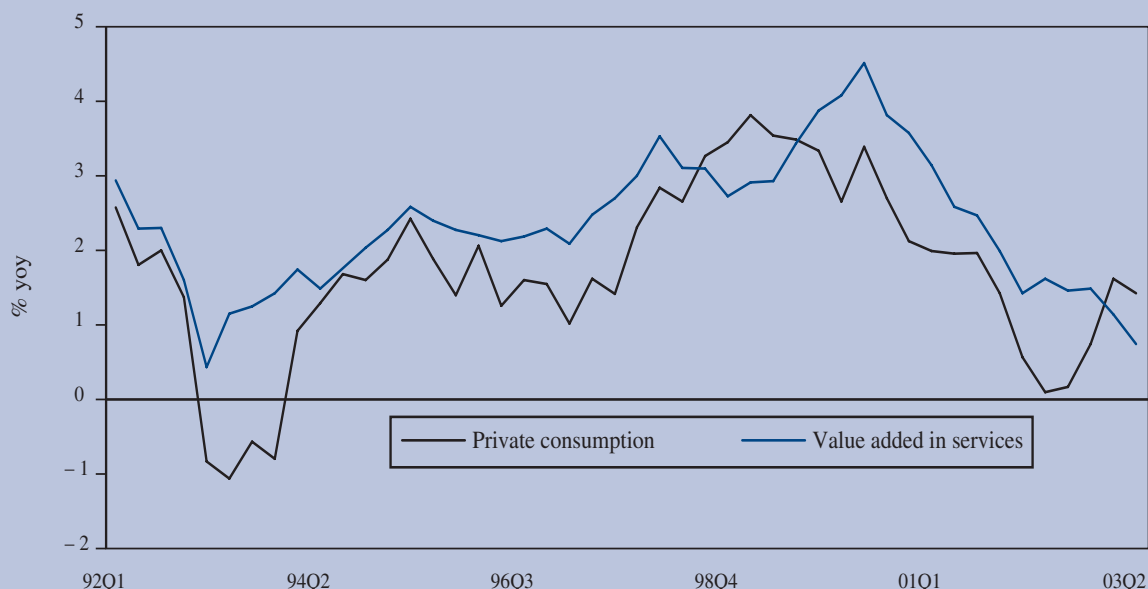
⁽²⁾ The share of demand for broadly defined financial intermediation services is, however, a quarter and that of narrowly defined financial intermediation services more than a half.

Consumer demand for services deteriorated markedly in the current slowdown. Comparing the behaviour of demand for services over the business cycle suffers from the non-availability of detailed data over a long time-span. The data available so far reveal that strong private consumer demand in the late 1990s was spread to many goods and services. Particularly strong was demand for communications, recreation and restaurants, which are also the sectors where demand has declined strongly in the current downturn.

Specific factors have weighed on household demand for some services in the past two years. As the pace of deregulation in transport and telecommunications has become slower, price cuts in these sectors have moderated relative to the late 1990s, providing a more muted stimulus to demand. Consumption of transport services and package holidays also grew strongly in 1999 and — particularly against the background of worries related to terrorism — is reported to be weak in the recent past.

Turning to demand from the corporate sector, value added growth has been particularly weak in the current downturn in financial intermediation, which also includes business services. Demand for these services benefited in the mid-1990s *inter alia* from corporations' preparation for EMU, deregulation (airlines, telecommu-

Graph 27: Service activity and consumption, euro area



Source: Commission services.

Table 1

Some stylised facts on activity in the service sector, year-on-year % change average (1992Q1–2003Q2)

	Value added	Employment	Productivity ⁽¹⁾	Prices ⁽²⁾	Real wages ⁽³⁾	Volatility ⁽⁴⁾
Services	2.3	1.5	0.8	2.1	0.4	0.9
Industry	1.3	- 1.4	2.6	0.9	1.1	2.8

⁽¹⁾ Value added in constant prices per person employed.

⁽²⁾ Value added deflators of both sectors.

⁽³⁾ Compensation per person employed, not adjusted for hours, deflated with consumer prices.

⁽⁴⁾ Standard deviation of annual growth in real value added.

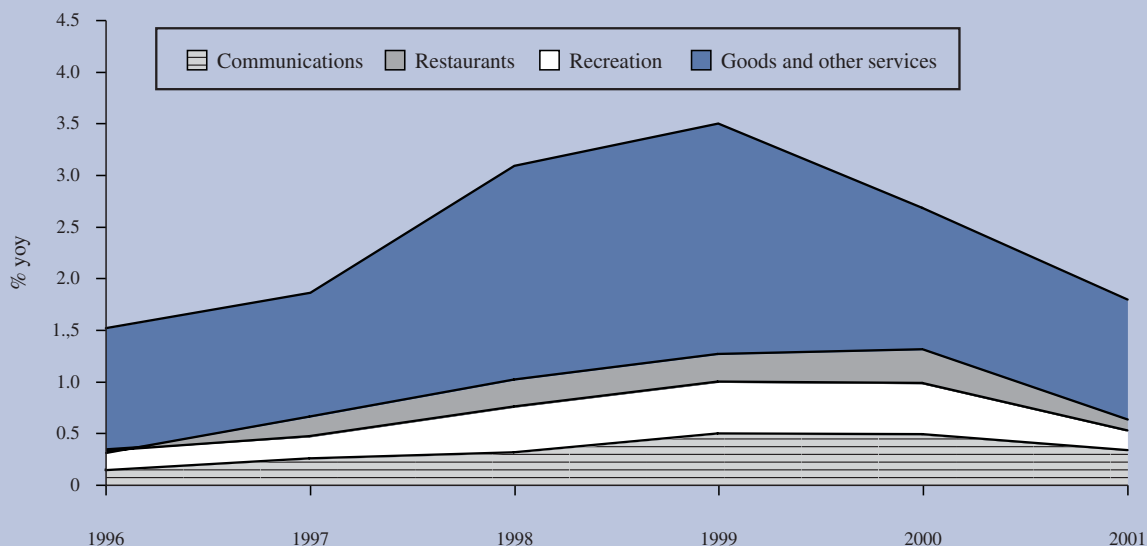
Table 2

Composition of demand for services, France, 2000 ⁽¹⁾

	Provision as/to					
	Intermediate goods		Final demand			
	Services	Other sectors	Investment and stocks	Exports	Private consumption	Public consumption
Services	26	15	4	3	29	24
- Trade	39	6	0	8	47	0
- Financial intermediation	34	26	7	3	27	3
- Other services	4	1	0	1	22	72

⁽¹⁾ Percentage of total resources in market prices. Differences in sums are due to rounding.

Graph 28: Demand for selected services: contribution to consumption growth, euro area



Source: Commission services.

nications) and technical progress in the ICT sector, but is now hit by companies' efforts to cut operating costs and restore profit margins.

3.3. Supply of services: employment growth driven by structural factors

The sustained difference in the cyclical development of industry and services documented above suggests that the remarkable strength of the service economy in the late 1990s could be related to supply-side forces ⁽¹⁾. The main difference between economic activity in industry and services is in employment trends. Whereas employment growth in industry stagnated over the 1990s, job creation was vibrant in the service sector. Given the similarity of the cyclical component ⁽²⁾ of employment between both sectors shown in Graph 29, the difference in employment performance is almost exclusively due to the trend in employment.

The favourable impulse to employment in the mid-1990s might stem from various factors. Firstly, the impact of

wage moderation is studied below. Secondly, outsourcing from industry into services has had an impetus. But given that more jobs were created in services than lost in industry, it provides a partial explanation at best. Thirdly, the rising participation of women in the workforce has been a factor. Many women work in services and the spread of half-time jobs has probably encouraged many of them to take up a job. Equally, relaxation in contract type or the flow of educated people into the labour market may have contributed.

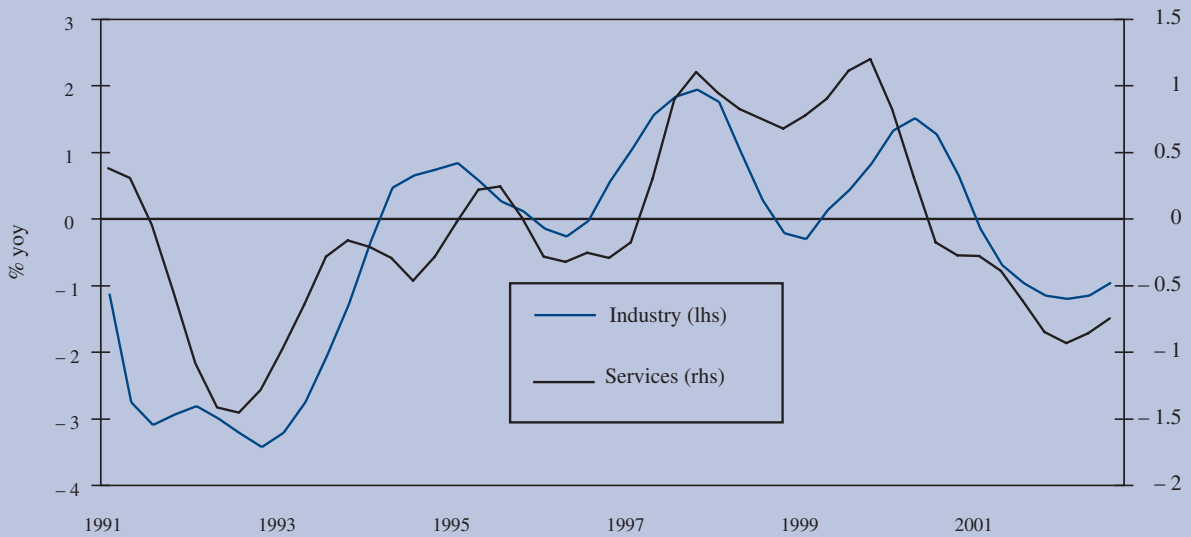
Apart from more employment-friendly conditions on labour markets, a favourable entrepreneurial climate in the mid-1990s might have encouraged the opening-up of new businesses and stimulated service employment. Whereas some caution is warranted as regards the statistical classification of self-employed or employee, tentative evidence can be drawn from the observation that job creation in services was particularly strong shortly after growth in self-employment had accelerated ⁽³⁾. Taking the data at face value, self-employment in financial services increased considerably between 1996 and 1998. In

⁽¹⁾ For a detailed analysis of the changes in the labour market structure in the 1990s, see European Commission (2002b, 2003b).

⁽²⁾ The cyclical component is defined here as the change in the output gap.

⁽³⁾ The observed lag between the growth in self-employment and total employment could be a technical factor, as firms need time to get established and expand the workforce.

Graph 29: Employment growth, cyclical component, euro area



Source: Commission services.

Graph 30: Composition of employment in financial services, euro area



Source: Commission services.

trade services, self-employment growth was weaker in absolute figures, but also relatively strong when compared with the historical trend.

The reasons for the relative increase in self-employment could be associated with microeconomic conditions (new technologies, product market reforms), macroeconomic stability (low interest rates, price stability, budgetary consolidation) or psychological factors (booming stock markets, envisaged start of EMU). Changes in self-employment seem to follow cyclical patterns, with numbers declining in the early 1990 recession as well as during the Asian crisis. The reduction in self-employment in trade services is particularly strong at the current juncture, in terms of both magnitude and duration.

Despite higher and more volatile productivity growth in industries than in services in absolute terms, the change in apparent labour productivity growth in both services and industry is quite similar over time. This holds for both trend growth and trend-corrected productivity data, measured in output per person employed. Trend productivity growth almost halved in both sectors during the 1990s. Trend-corrected productivity data presented in Graph 32 show that the cyclical pattern of productivity growth in industry and services differed only in the early 1990s.

Since about 1994, they have moved in tandem, albeit with a different amplitude as volatility in industry exceeds that in services by a factor of five. This suggests that the reasons for differences in activity are unlikely to be linked to the main determinants of productivity growth, for instance capital deepening and technical progress.

3.4. Wage developments in services: strongly linked to industrial wages

One would expect buoyant employment growth in services to be first of all a consequence of wage moderation. However, Graph 33 reveals that actual wage growth in services tends to follow that in manufacturing quite closely. Moreover, this appears to be more or less independent of whether hourly labour costs or compensation per employee is looked at⁽¹⁾. Hourly labour costs in trade-related service sectors, in particular, tend to develop in line with those in manufacturing whereas those in financial intermediation (broadly defined) do so to a lesser degree.

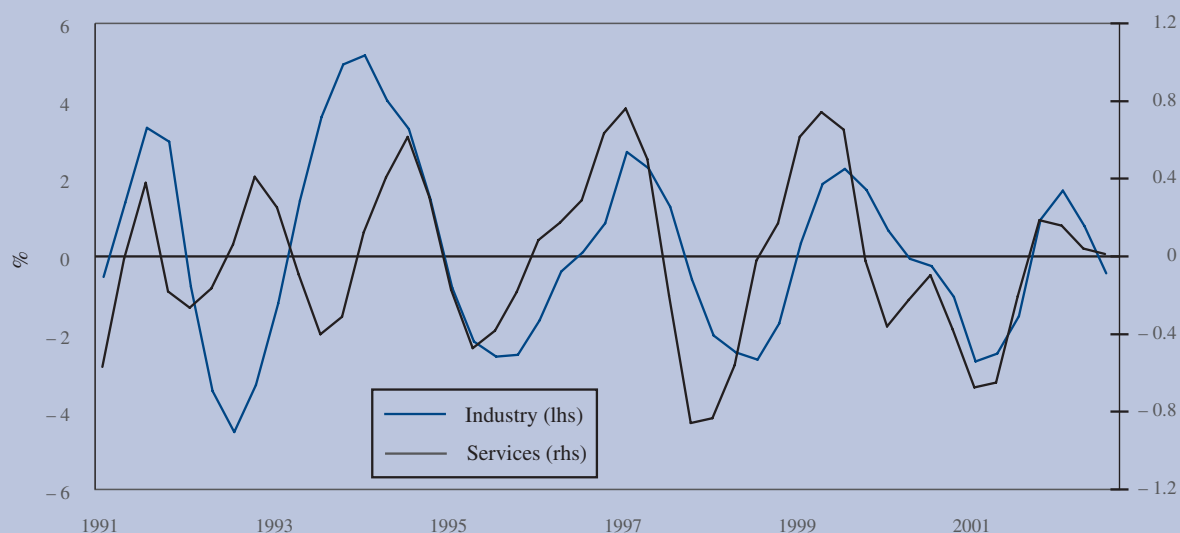
⁽¹⁾ Nominal compensation, which stems from the national accounting system, has the advantage that the series goes back to 1991, whereas Eurostat's labour cost index starts only in 1995.

Graph 31: Composition of employment in trade services, euro area



Source: Commission services.

Graph 32: Labour productivity growth, cyclical component



Source: Commission services.

Box 2: Measurement problems in services

Statistical coverage of the service sector has increased considerably over the past few years, but data availability for business-cycle analysis is still insufficient. Currently, a breakdown into three broad service sectors is available in the national accounts (see table). A major problem is the sector's heterogeneity, encompassing output produced with a lot of capital and high-skilled labour as well as output generated by low-skilled labour and without much capital. For instance, trade services in the NACE classifi-

cation (general industrial classification of economic activities within the European Community) encompass not only retail and wholesale trade, restaurants and hotels, which generate output mainly for consumption, but also include the subsectors of transport and communication, which produce mainly intermediate output used in other business. Financial services include the real estate sector, whose output is mainly geared to final usage rather than for input into other sectors.

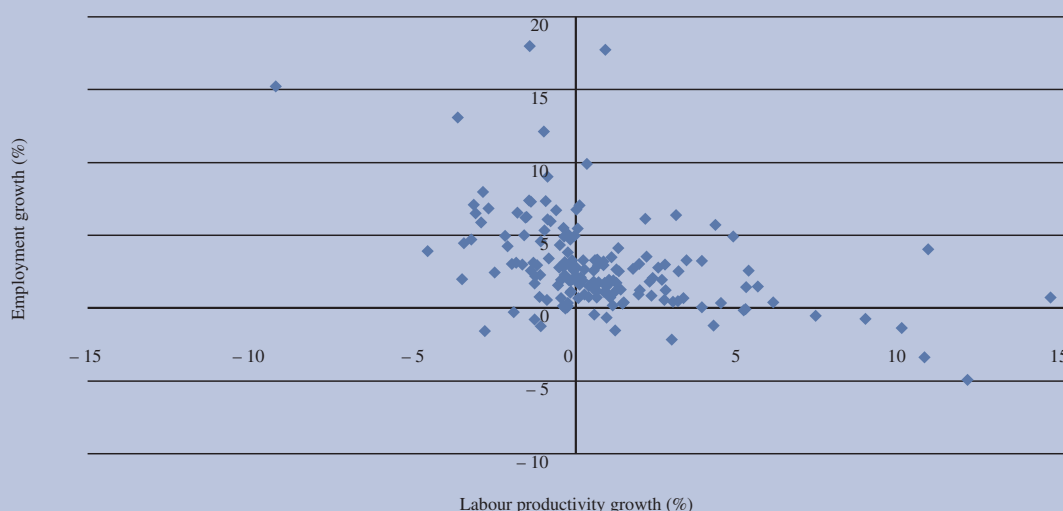
Statistical coverage of the euro-area sector in quarterly national accounts

Sector	Consists of	Share in GDP	Share in employment
Trade	NACE G-I: Wholesale and retail trade, hotels and restaurants, transport, storage, communication	22	25
Financial intermediation	NACE J-K: Financial intermediation, real estate, business activities	27	14
Other services	NACE L-P: Public administration, education, health, etc.	21	30

(Continued on the next page)

Box 2 (continued)

Employment and productivity in service sectors, eight euro-area countries, average 1996–2000



Source: OECD STAN.

Measurement problems seem to be particularly pronounced in the financial intermediation sector, which creates 27 % of euro-area gross value added and employs 14 % of labour. A recent OECD working paper documents that labour productivity growth in the broadly defined financial intermediation sector was on average negative over the 1995–2001 period in 10 of the 16 industrial countries for which data are available ⁽¹⁾. For the euro area as a whole, national account data show that labour productivity growth (gross value added per person employed) in the sector ‘financial intermediation, real estate’ was –0.5 % on average over the 1992–2002 period. At the same time, nominal wages in this sector increased by 5.9 % and employment by 2.5 %, yielding a rather puzzling constellation of macroeconomic variables.

Moreover, measurement of output is often complicated as a lot of activity takes place in the public sector where decomposition into labour costs and profits is cumbersome or in small private firms where hours worked are often not available. Data on value added are subject to serious difficulties in distinguishing output into intermediate goods and final usage. Moreover, it is almost impossible to cater for quality improvements in services, which has a potentially large impact on deflators. For these reasons, productivity comparisons have to be treated with caution.

For instance, due to relatively high labour intensity in production, numbers of hours worked are crucial ingredients of productivity calculations but are not generally available. It is, however, a well-known fact that mismeasurement is an issue

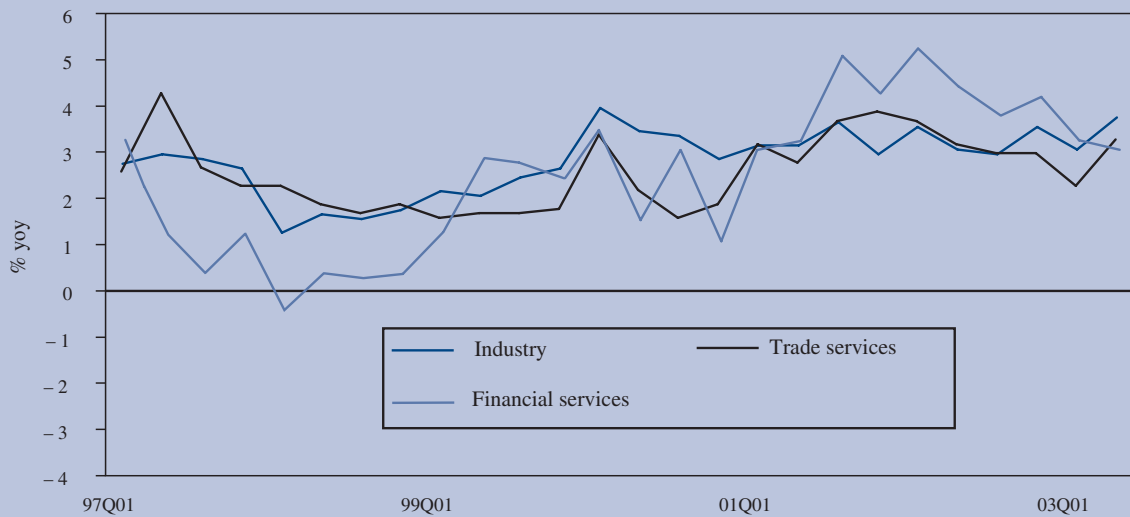
in the service sector, as evidenced by the wide variation of productivity developments across countries as well as by negative productivity growth in some service sectors that feature at the same time high employment growth. The latter is demonstrated by the graph, which displays employment and productivity growth in disaggregated service sectors in eight euro-area countries in the late 1990s.

In addition to the statistical problems mentioned above, the financial intermediation sector seems to be particularly exposed to the following three issues. First, the sector includes quite heterogeneous services, ranging from banking and insurance services to real estate, renting and business services. On the other hand, communication services are not included. Second, the output of financial services is hard to measure. For example, banks charge not only fees but also profit from the difference between borrowing and lending rates (the so-called ‘financial intermediation services indirectly measured (FISIM)’ component, which is not recorded in the EU national accounts as final consumption). Third, disentangling intermediate inputs from final usage is complicated. A large share of financial intermediation services is used as inputs by other services and only a relatively small fraction is used in private consumption ⁽²⁾.

⁽¹⁾ Negative rates are mainly due to developments in real estate, renting and business services rather than in narrowly defined financial intermediation. See Wölfl (2003).

⁽²⁾ For a US study of how ICT affects productivity in the financial sector on the basis of input–output analysis, see Klein et al. (2003).

Graph 33: Sectoral hourly labour costs



Source: Commission services.

The combination of strong co-movement of wage costs in services and industry with lower productivity in the former generates higher average unit labour costs in the service sector compared with those in industry. Indeed, Graph 34, for which unit labour costs were derived from Eurostat's quarterly national accounts, reflects that wage growth outpaced productivity growth in services during the period under consideration. Since 1999, wage developments in the service sector have exerted limited but constant upward pressure on prices. This holds, in particular, for financial services, but less so for trade-related services. On average, the increase in nominal unit labour costs in services outpaced that in industry by 1.1 % throughout the 1990s. This is compatible with the observed difference in sectoral inflation.

Real units labour costs in services had been supportive to employment growth since the mid-1990s but became less so during the boom of the late 1990s. On average, developments of real unit labour costs were similar in services and industry. This makes it difficult to explain why employment growth was so buoyant in services. Wage trends likewise seem to provide little help in explaining why employment growth in services was resilient during the Asian crisis.

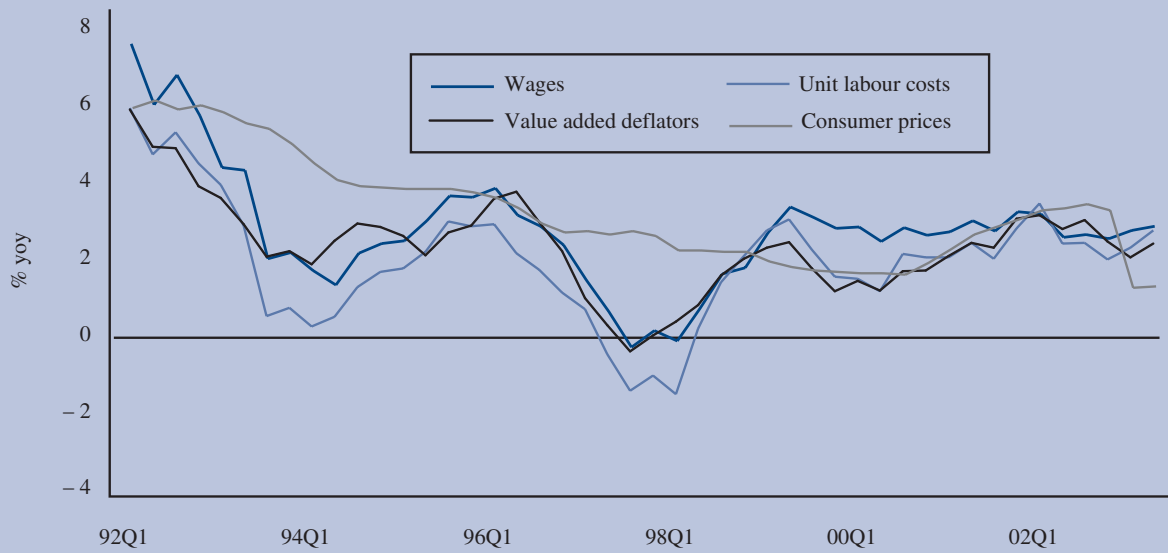
To some extent, high growth in real unit labour costs in the financial intermediation sector is responsible

for the lack of fit with the employment performance. Real unit labour costs in trade-related services remained moderate during the Asian crisis and subsequent periods. While conclusions on the basis of a few observations only should be treated with caution, it can be stated that the moderate growth in real unit labour costs in trade-related services during the Asian crisis is consistent with continuously strong employment growth in this sector.

3.5. Conclusions: past buoyancy in services due to favourable supply-side developments

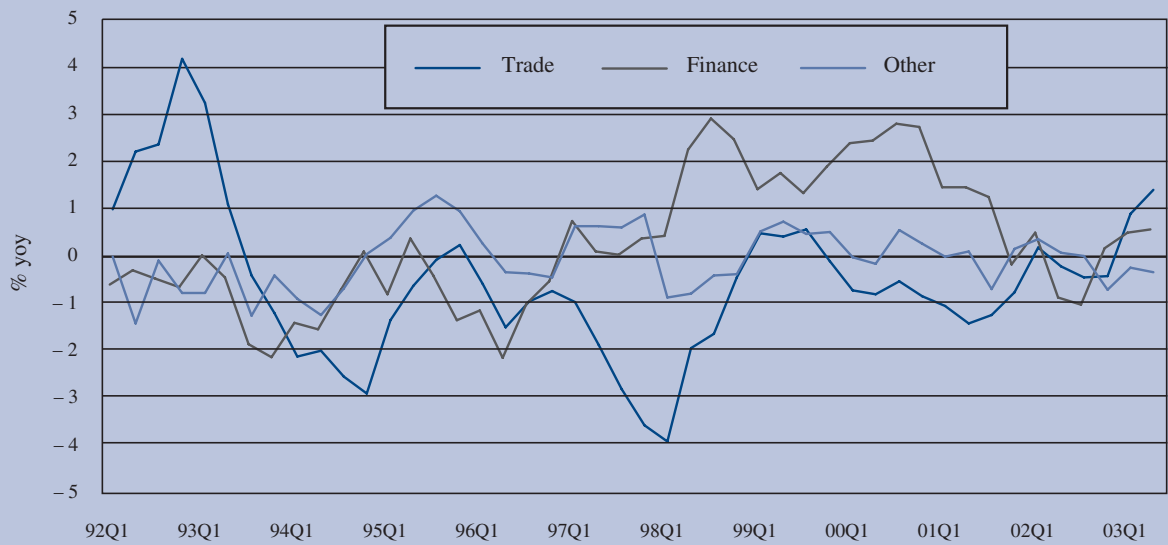
Activity in the service sector had been particularly buoyant in the late 1990s and the tentative evidence available suggests that it was mainly related to supply-side factors. Remarkably, the late 1990s witnessed strong employment growth in services and at the same time accelerating growth in real unit labour costs. This is consistent with the view that wage moderation had no strong impact on the favourable development in sectoral employment. An alternative hypothesis would be that, for instance, deregulation in product and labour markets in the mid-1990s has allowed enterprises to create profitable jobs in services despite rising real unit labour costs.

Graph 34: Nominal unit labour costs



Source: Commission services.

Graph 35: Real unit labour costs in service sectors



Source: Commission services.

It is also likely that the service sector benefited more from the take-up of ICT than industry, without, however, the impact of new technologies being already visible in productivity data. This would require acknowledging that national accounts do not yet give an accurate picture of true productivity developments in ‘hard-to-measure sectors’ and, in particular, in the financial intermediation sector. Taking account of the increase in equity and housing prices in the late 1990s, it may well be that economic agents expected to benefit more from financial services and that they were accordingly prepared to pay more than what macroeconomic performance data suggest financial services were worth ⁽¹⁾.

Both demand for and employment in services weakened considerably in the current slowdown. Sectoral employment growth decelerated but has remained positive throughout the slowdown, suggesting that the favourable structural effects that had driven job creation in services in the last half of the 1990s are still intact.

⁽¹⁾ Interestingly, there is a strong co-movement of growth in real unit labour costs in financial intermediation and stock market prices for the period 1996–2002, with a coefficient of correlation with the German stock market index of 0.8. It could be the reflection of performance-related pay in the financial sector or of increasing competition among firms for employees that drove up wages in the course of the stock market bubble and vice versa afterwards.

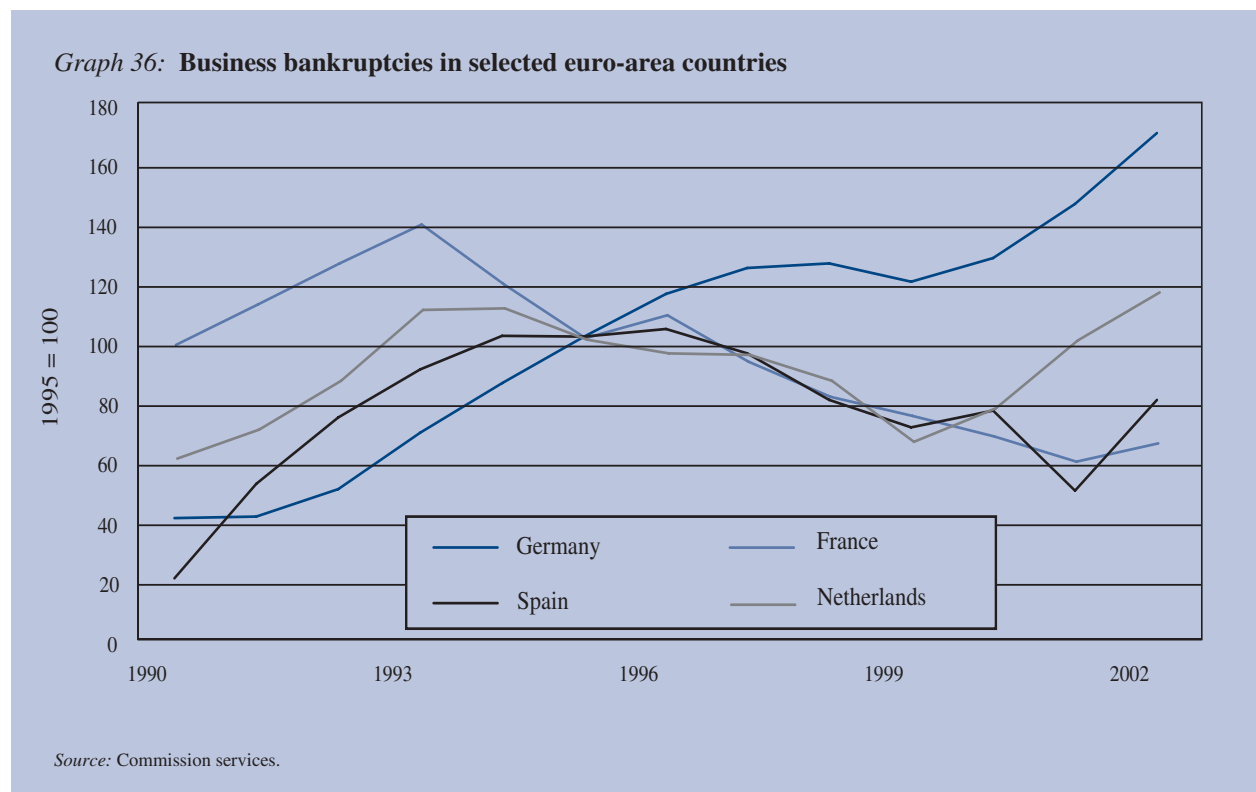
4. How have corporations adjusted to the slowdown?

The growth slowdown of 2001–03 has put immense pressure on enterprises to adjust. A number of enterprises, in particular small and medium-sized enterprises (SMEs), had to give in to this pressure, as evidenced by the increase in the number of bankruptcies in some euro-area Member States, in particular in Germany. Reflecting differences in corporate structure and insolvency legislation, the picture is not uniform across Member States. The number of business bankruptcies even declined in France.

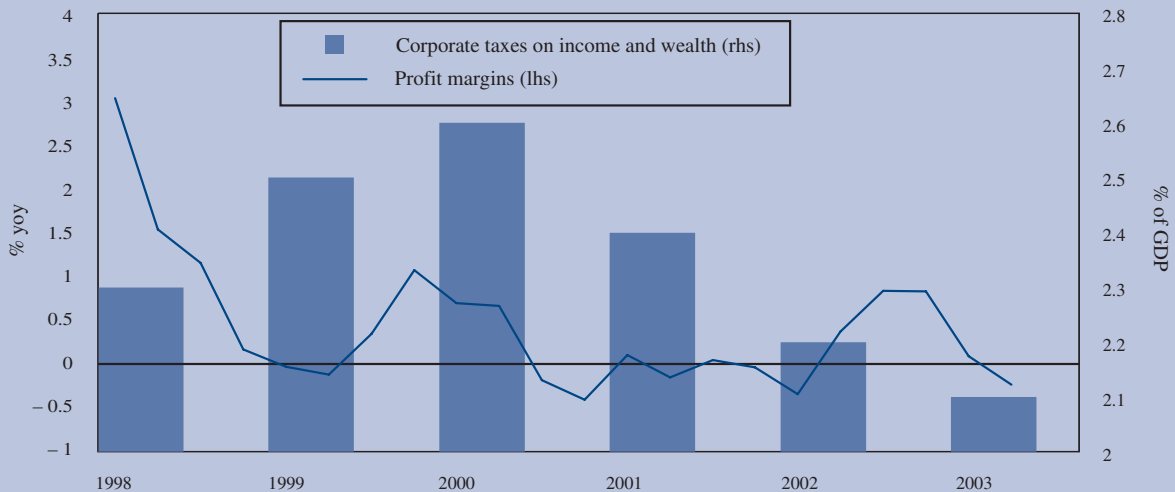
Graph 37 plots two proxies of corporate profitability. While being imperfect measures, they both confirm the

deteriorating corporate profitability in the slowdown. First, growth in unit labour costs outpaced the increase in the GDP deflator throughout most of 2001–02 ⁽¹⁾. This suggests that an important cost component outpaced revenues and depressed profit margins at a critical juncture. Second, taxes paid by corporations on income and wealth declined from 2.6 % in 2000 to 2.1 % of GDP in 2003, reflecting both the cyclical impact and changes in the tax system.

⁽¹⁾ This is equivalent to the inverse of real unit labour costs.



Graph 37: Corporations' profits, euro area



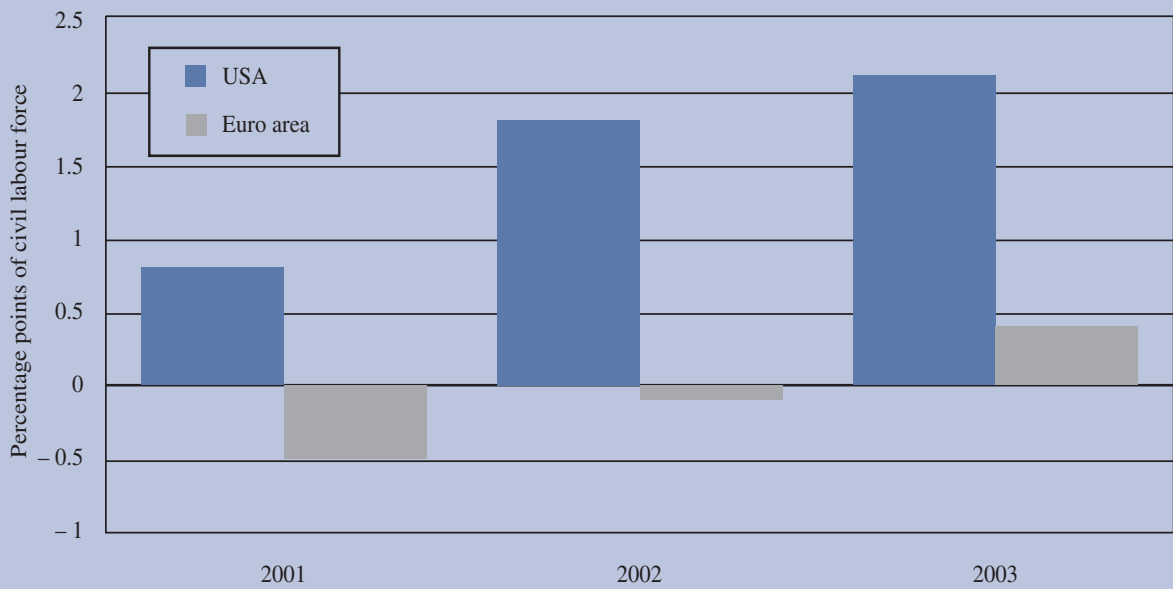
NB: Profit margins are calculated as GDP price deflator minus unit labour costs.
Source: Commission services.

This section compares differences in corporate adjustment in the USA and the euro area and their implications for recovery. In both economic entities, initial conditions at the peak of the business cycle were broadly similar. During the boom period of the late 1990s, a large number of new firms had entered the market, in particular in services and ICT. Job creation had been strong and firms had taken on significantly more financial debt, implying some pressure on profit margins by labour and capital costs in the event of a downturn.

In a nutshell, the typical euro-area company adjusted to the erosion of revenues by trimming down capital costs whereas the US company reduced both capital and labour costs. The consequences were a relatively sharper deterioration in labour market conditions in the USA, as witnessed by a 2 percentage point increase in the rate of unemployment between 2000 and 2003. Investment was cut considerably on both sides of the Atlantic, the main difference being that almost all the adjustment in investment in the USA took place in the years 2000 and 2001. The euro area, in contrast, experienced a weak investment performance that lasted well into 2003. On a more positive note, unemployment started to increase only at a rather late stage of the slowdown.

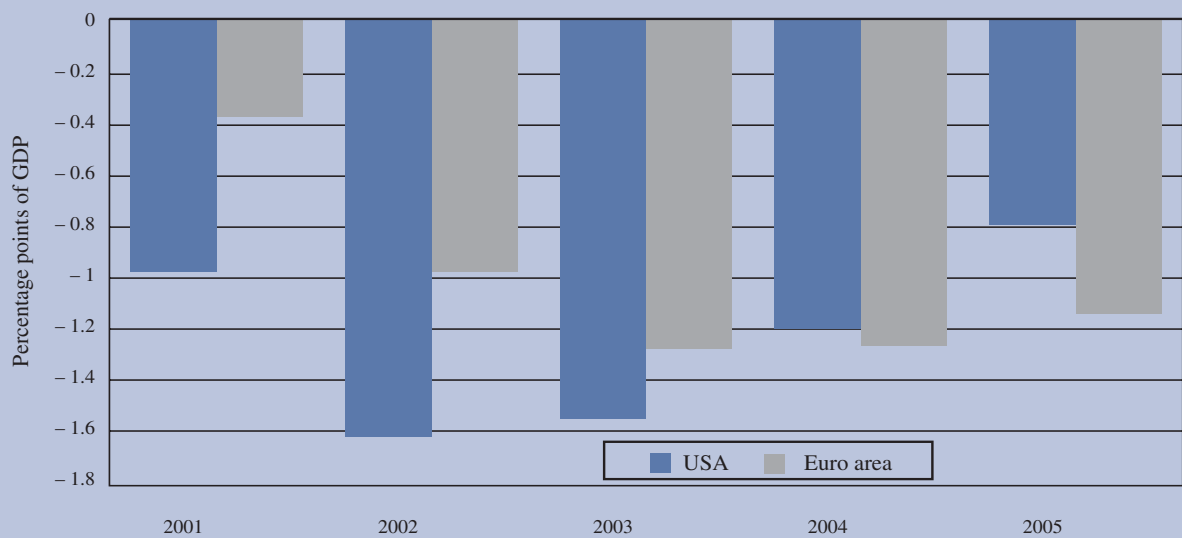
Comparing the change in the rate of unemployment or in the investment share, as in Graphs 38 and 39, illustrates the main differences between the USA and the euro area. However, the comparison of crude numbers should not be taken at face value because this would assume that both labour market overheating and overinvestment during the boom of 1996–2000, if they had existed, were of a similar magnitude in both economic entities. Evidence of potential imbalances is much weaker for the euro area than for the USA, which was the reason why a faster recovery in the euro area was expected. For instance, it is generally considered that the trough of the unemployment rate in the USA of 4.0 % in the year 2000 was particularly low in absolute terms as well as when assessed against NAIRU estimates. The euro-area rate of unemployment reached a minimum of 8.0 % in summer 2001, i.e. double the rate of the USA. Equally, the increase in the overall investment share was more pronounced in the USA during the 1990s. It increased by 1.9 percentage points of GDP between 1996 and 2000 and by as much as 4.0 percentage points if the period from 1991 to 2000 is taken as a reference. In the euro area, the share of investment in GDP grew by just 1.3 percentage points between 1996 and 2000, and was even lower in 2000 than in 1991/92. Finally, although numbers are not strictly comparable, analysts assess capacity utilisation to be much lower in the USA than in the euro area.

Graph 38: Cumulative change in the rate of unemployment since 2000



Source: Commission services.

Graph 39: Cumulative change in investment in equipment since 2000



Source: Commission services.

4.1. Adjustment via labour markets

Employment has traditionally been less cyclical than GDP in industrial economies. This reflects the existence of hiring and firing costs linked to employment protection and also to imperfect information in the job-search process or the need to acquire company-specific knowledge. The early perception that the slowdown was only short-lived may initially have contributed to the slow adjustment in the euro area. It seemed to have lost importance relative to structural factors when the expected recovery failed to materialise in 2002.

The consequence of the lagged and modest employment response by euro-area enterprises was a profound weakening in the growth of labour productivity. Since wage growth remained steady, decelerating labour productivity growth translated into rising unit labour costs and — as a mirror image — depressed profit margins. Real unit labour costs (ULCs), however, decelerated from 2002 onwards when labour productivity growth recovered from the trough recorded in early 2002.

Both quantity and price adjustment were different in the USA. Employment shrank in the first phase of the cycle and unemployment increased. Real unit labour costs decelerated, first driven by falling real wage growth and

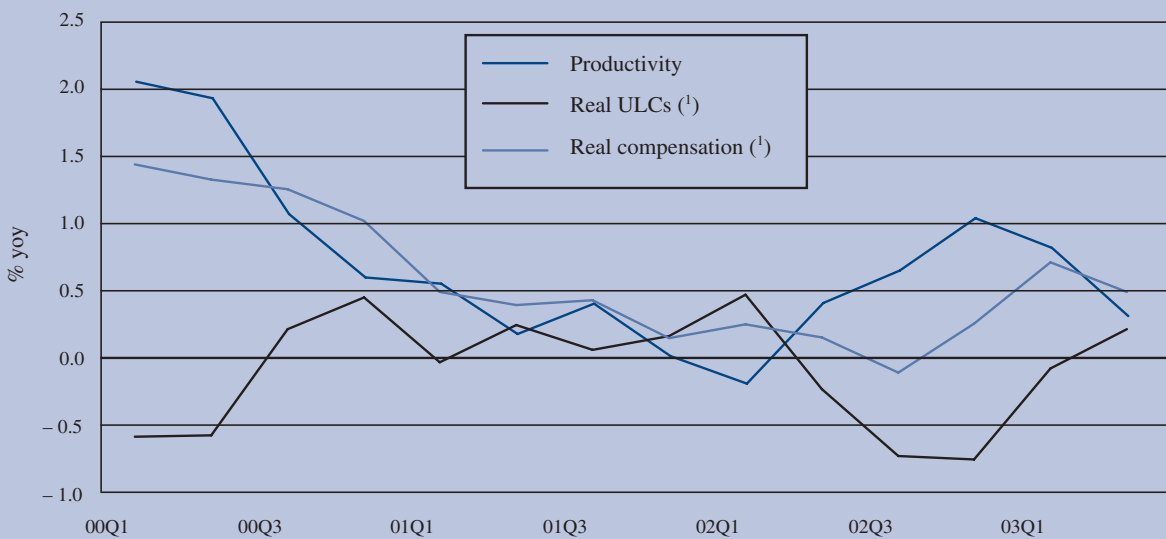
subsequently — when real wage growth recuperated — by a pickup in labour productivity growth ⁽¹⁾. From 2002 onwards, productivity growth in the US business sector has exceeded the rates registered during the boom of the late 1990s. This is an atypical pattern; its continuation will crucially determine the chances of the US economy to remain on a sustained growth path.

To some extent, the marked difference in labour productivity growth between both areas is due to the lagged effect of buoyant investment in ICT in the 1990s in the USA. A further factor is the relatively quick recovery of investment in equipment and software in the course of the slowdown ⁽²⁾. Observers have increasingly found evidence that whereas US productivity growth in the late 1990s was strongly driven by both capital deepening and technical progress in the ICT-producing sector, recent improve-

⁽¹⁾ Productivity growth in the USA was even more marked than shown in Graph 41, when the US data on hourly output in the business sector are applied. This business sector productivity is the standard measure used by the US Bureau of Labour Statistics. Output and labour input are corrected for the activity of the public sector, non-profit institutions and private households.

⁽²⁾ Investment in equipment and software contributed to US economic growth in five of six quarters from the beginning of 2002.

Graph 40: Labour productivity, real unit labour costs and real wages, euro area



⁽¹⁾ GDP deflator.
Source: Commission services.

ments are related to ICT usage especially in services ⁽¹⁾. Similar evidence of lagged benefits from past ICT investment has not yet been detected in the euro area.

A second factor explaining the difference in productivity performance is related to adjustment in the quantity of employment. Labour cutbacks in the USA inflated productivity figures because typically the least productive labour is set free first. The opposite effect can be observed for the euro area. Labour hoarding may have caused an underestimation of the underlying productivity trend in the euro area. In order to assess this effect, one needs to know whether this labour hoarding in the euro area was voluntary or the effect of labour market rigidities. Without explicit statistics on hiring and firing costs, Graph 42 displays the OECD indicator of employment protection legislation (EPL), comprising a number of detailed measures of the strictness of EPL in areas such as procedural requirements, notice and sev-

erance pay and prevailing standards of ‘unfair’ dismissal ⁽²⁾. With the exception of Ireland and, to a lesser degree, Portugal, the average EPL measure displays relatively little dispersion across Member States in the euro area. Lower levels of employment protection can be found in other EU Member States (Denmark and the United Kingdom) or in the USA.

To check the likely negative impact of EPL on the cyclical adjustment of employment, Table 3 compares the average productivity performance in the downturn for the four countries in Graph 42 enjoying the lowest level of EPL and for the euro area as a whole. The two groups of countries have gone through a cyclical slowdown of similar magnitude as witnessed by a similar decline in the output gap. However, in the group with a low EPL, the deceleration of productivity relative to trend has remained quite limited ⁽³⁾.

⁽¹⁾ See Triplett and Bosworth (2002) and Chapter 2 of this volume.

⁽²⁾ See Nicoletti et al. (2000).

⁽³⁾ For a more detailed discussion of the variables used and labour market adjustment in general, see *Quarterly report on the euro area 2003 — II*.

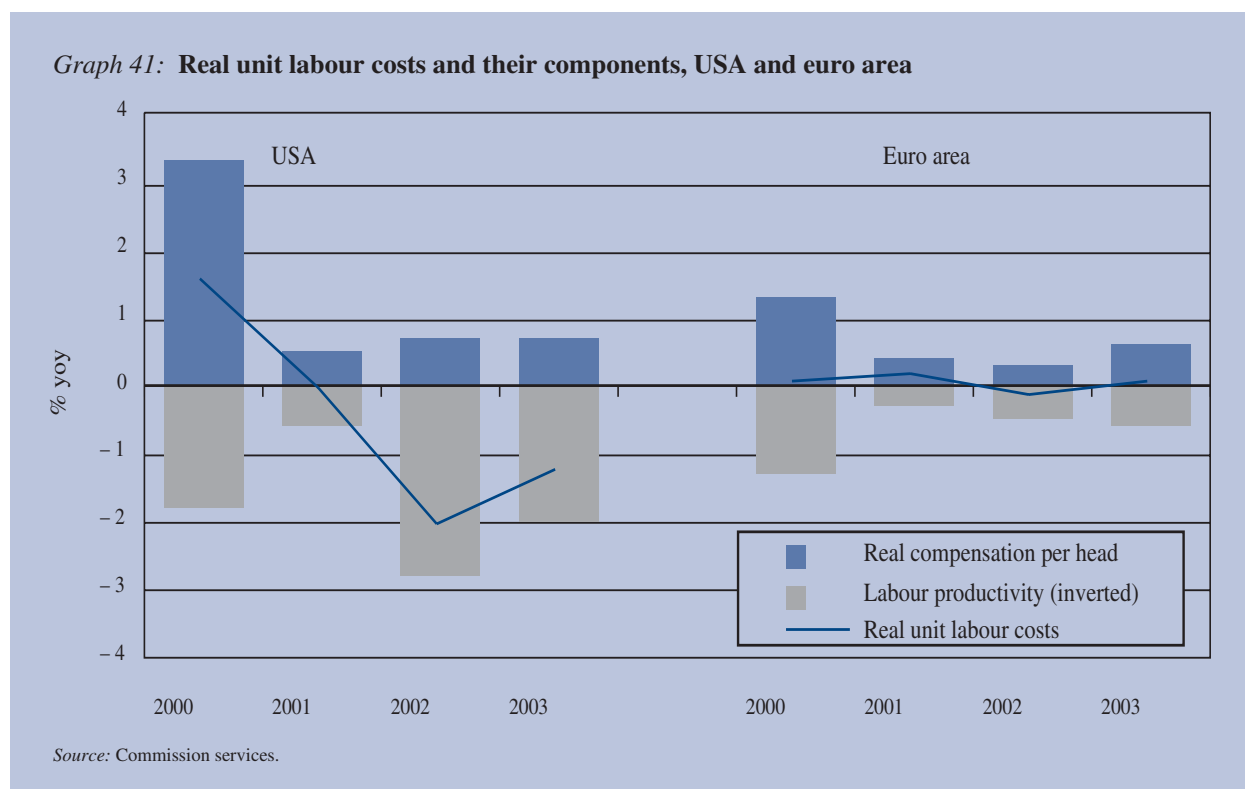


Table 3

EPL and productivity in the current downturn

	Low EPL countries ⁽¹⁾	Euro area
Productivity performance ⁽²⁾	– 0.1	– 1.2
Loss in output gap ⁽³⁾	– 1.9	– 1.7
EPL	0.8	3.0

⁽¹⁾ Denmark, Ireland, the UK and the USA.

⁽²⁾ Difference between average growth in real GDP per head over 2001–02 and trend growth in real GDP per head. The latter is calculated as the average growth over 1993–2002.

⁽³⁾ Difference in output gap between 2000 and 2002.

Sources: Commission services and OECD.

4.2. Balance-sheet adjustment in euro-area corporations and its impact on investment

The weak investment performance of the euro area is probably more than a reflex to previously strong investment in equipment. A second factor is the need to adjust to an unsustainable trend in corporations' financing behaviour during the economic boom ⁽¹⁾. At that time, a number of factors stimulated rising activity on financial markets. For example, (i) technological advances in ICT promised extraordinary high returns, (ii) a wave of merger and acquisitions took place, motivated by the strategy of companies to adapt to a global level playing field, and (iii) an immense increase in stock prices of, in particular, high-tech firms that seemed to confirm perceptions of an upward shift in potential output growth.

While rates of overall economic growth and especially labour productivity growth were more modest in the euro area than in the USA, euro-area corporations participated in the global investment upsurge. Investment in equipment increased by a sizeable proportion, foreign direct investment and portfolio capital outflows from the euro area being particularly buoyant. During the boom of 1996–2000, internal funds did not keep pace with capital spending in the euro area. The financing gap of the non-financial corporate sector widened to about 3.5 % in 2000 ⁽²⁾. As regards stock variables, liabilities in the non-financial corporate sector increased from 150 % of

GDP in 1995 to 250 % in 2000 (see Graph 43) ⁽³⁾. It is not only investment in physical capital that increased during the boom period. Vivid merger and acquisition activity inflated corporations' asset and liability positions alike ⁽⁴⁾. The sector's holding of financial assets almost doubled in absolute figures between 1995 and 2000. Net financial assets increased from – 67 % of GDP in 1995 to – 112 % in 1999. Until 2002, the ratio improved to – 76 % of GDP.

The slowdown in economic growth put the sustainability of these positions into question. Many companies have undergone credit rating downgrades, which directly increased their financing costs. Moreover, weaker demand deteriorated cash flows and lower stock market prices caused a decline in the value of collateral. Overall, the perception of risk seems to have fundamentally changed due to economic (slowdown in growth), financial (bursting of the stock market bubble) and political factors (terrorism). All these factors raised firms' capital costs, which increased much more than indicated by the yields of benchmark government bonds.

Economic theory does not provide a benchmark for an optimal level of debt. While it was long believed that financing decisions did not matter at all for investment, there is now consensus that information asymmetries, moral hazards and transaction costs are sensitive issues that crucially determine firms' debt and their financing of

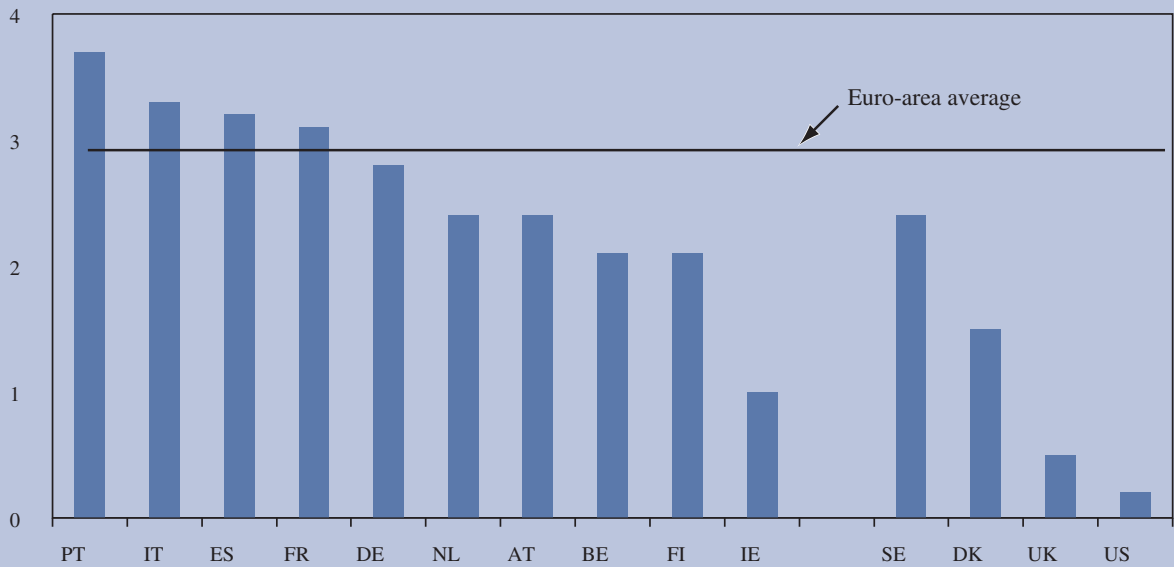
⁽¹⁾ See Jäger (2003) and BIS (2003). For an empirical analysis of the effects of balance sheets on investment in manufacturing in Germany, Spain, France and Italy, see Vermeulen (2002).

⁽²⁾ Data quoted from National Bank of Belgium (2003).

⁽³⁾ Financial assets and liabilities are non-consolidated data. All the data on financial stocks stem from Eurostat's financial accounts. The euro-area aggregate consists of data from nine Member States, with Greece, Ireland and Luxembourg missing.

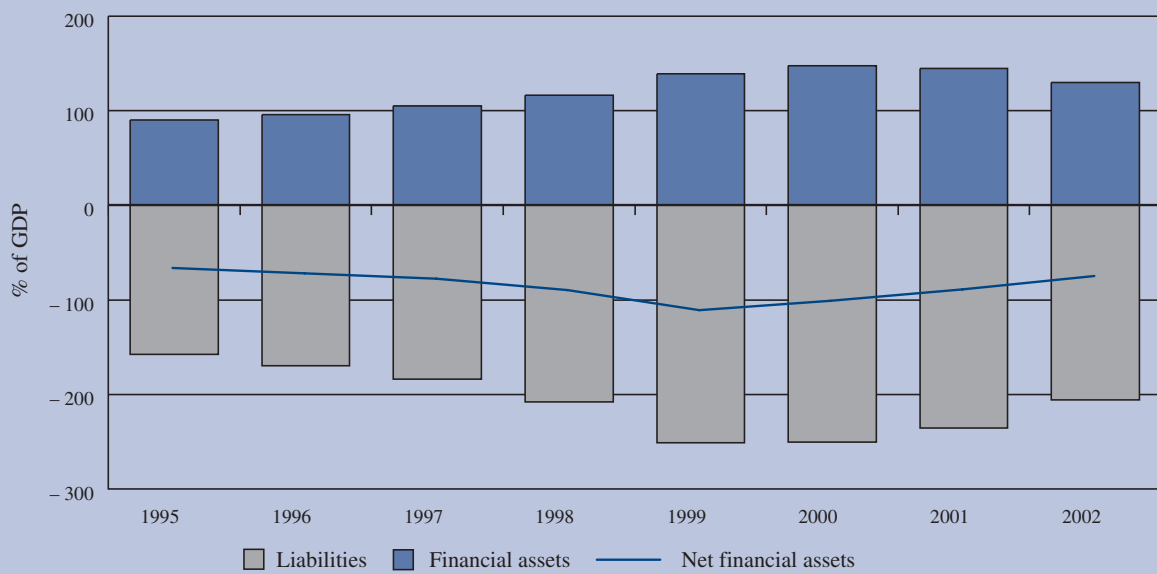
⁽⁴⁾ A further one-time factor was the auctioning of UMTS licences, which had a sizeable impact on the financing positions of telecommunication enterprises.

Graph 42: Employment protection legislation



Source: Commission services.

Graph 43: Financial assets and liabilities of non-financial corporations, euro area



Source: Commission services.

capital expenditure ⁽¹⁾. They are particularly relevant for small and medium-sized enterprises. While empirical work has found that cash flow and other financing variables have a significant effect on investment, an assessment of whether the debt ratios reached in 2003 represent an equilibrium value or not is still difficult. Thus, it is uncertain whether the balance-sheet adjustment since 2000 had fully run its course by 2003.

Comparing the eight euro-area Member States, for which detailed data are available to date, reveals a clear pattern between the change in corporate investment and corporations' net borrowing. This suggests that the increase in debt in 1996–2000 had been related to strong investment activity, just as the deleveraging in 2000–03 has been linked to weak investment (see Graph 44).

Data on the current condition of corporate balance sheets are limited, but evidence suggests that companies are exploiting improvements in financing conditions (see Graph 45). There are, for instance, signs of a tentative pickup in the growth of debt financing in the euro area.

⁽¹⁾ The initial position is the famous Modigliani–Miller theorem. For a review of the current literature, see Hubbard (1998).

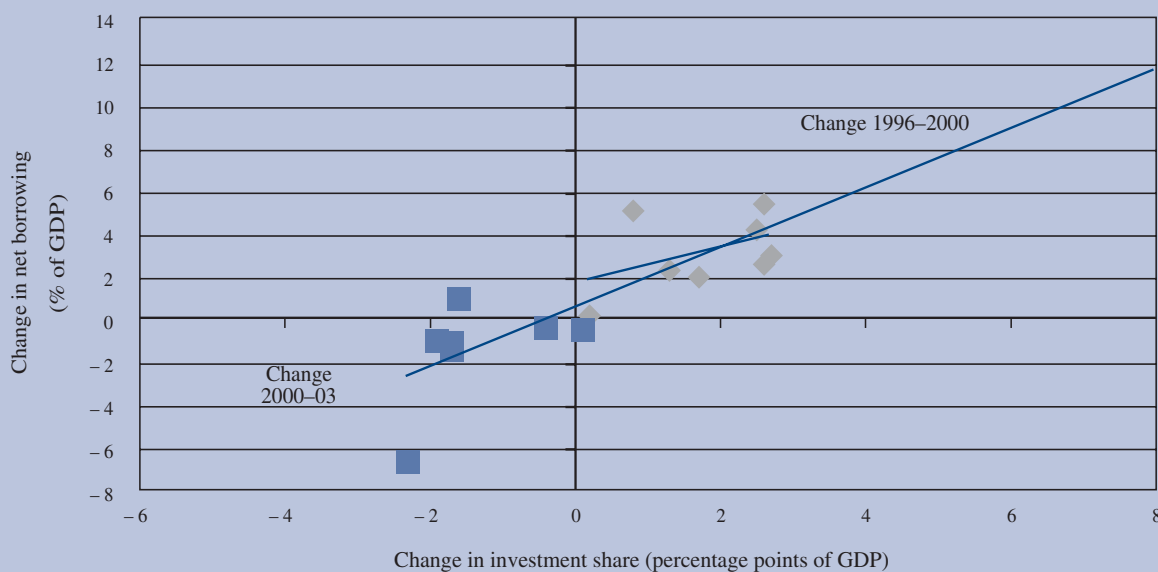
Loans to euro-area non-financial corporations increased slightly, confirming the mild turnaround recorded in the final quarter of 2002, and issuance of corporate debt securities accelerated in 2003. There was also some recovery in secondary issuance of equity, although initial public offering activity remained weak.

Sectoral national accounts data suggest that the increase of corporations' net borrowing in 1996–2002 had not been fully corrected by 2003. The extent, however, varied among Member States (see Graph 46 where countries are shown clockwise in order of the magnitude of the correction since 2000). Whereas the decline in corporations' net lending/GDP ratio in 2000–03 had been even larger than the previous increase in Germany, there are still wide gaps in Finland, Spain and Italy.

4.3. Risk considerations shaped credit supply

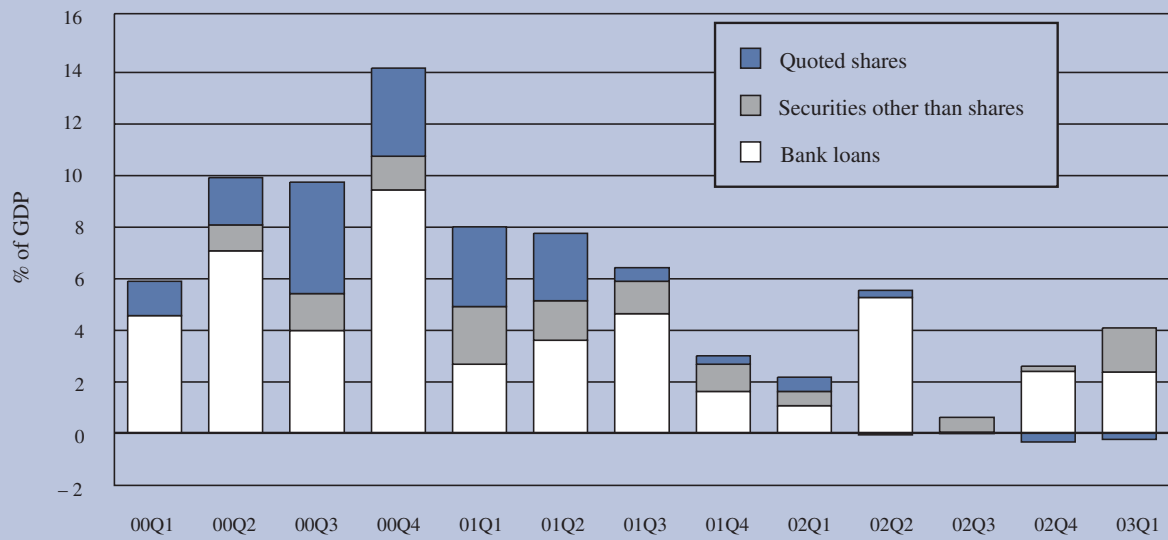
Weak investment in combination with a low level of interest rates in the current slowdown represents a break with the relationship observed during the 1990s (see Graph 8). It is puzzling why the build-up of financial

Graph 44: Investment and net borrowing of corporations, eight euro-area Member States



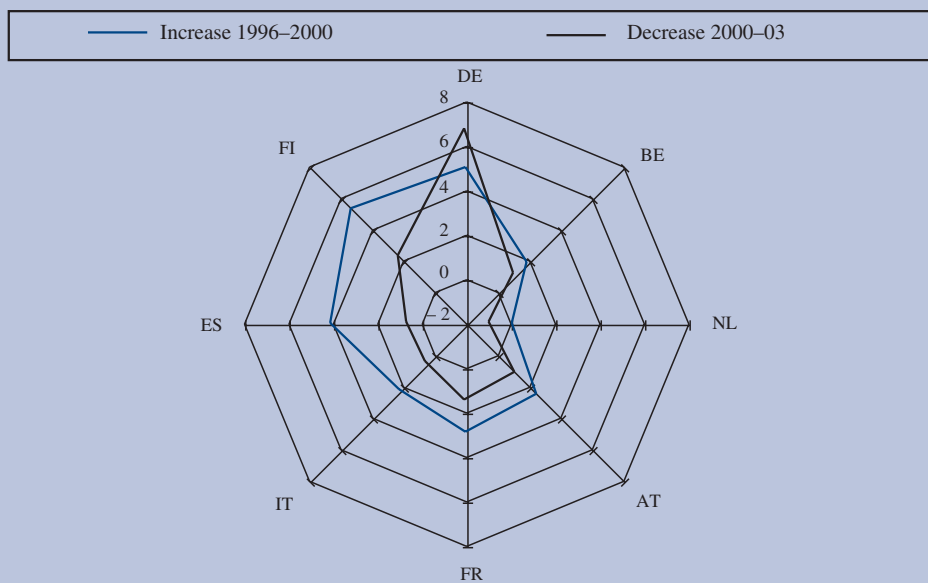
Source: Commission services.

Graph 45: Financing of non-financial corporations: transactions in main instruments, euro area



Source: Commission services.

Graph 46: Change in corporations' net borrowing



Source: Commission services.

debt during the boom period in the second half of the 1990s had left no clearer trace in interest rates at that time. This section looks at the supply side of the credit market in order to identify the possible factors behind this apparent oddity.

One reason is probably to be found in the cyclical behaviour of bank lending and, in particular, the different importance of risk considerations in an upswing and a downturn. Bank credit is the dominant form of external financing for most enterprises and as banks in some euro-area Member States have developed long-term relationships with their corporate clientele, conditions on credit markets represent more than a snapshot of supply and demand conditions at a particular point in time. The effect is that credit availability tends to depend on a number of non-price factors related to the risk characteristics of the borrower, for instance the value of collateral, firm size and branch of activity ⁽¹⁾. Since early 2003, the ECB has been conducting a survey among banks in order to assess this kind of lending conditions. The ECB's first

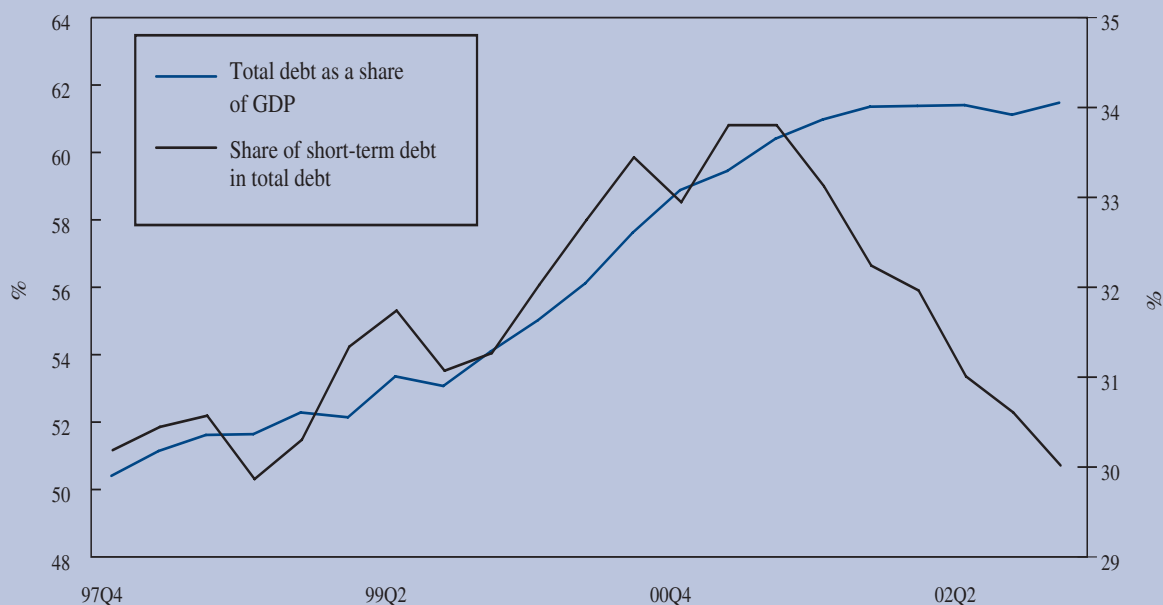
three surveys reveal a trend towards a continuous tightening of credit standards, with the number of respondents, which indicated a tightening, encouragingly declining in the course of 2003.

There is some evidence that risk considerations were not particularly prominent in the previous boom. Bank lending to the corporate sector reached double-digit growth rates and short-term lending, in particular, was vibrant. Until 2000, retail loan interest rates slid downwards both in absolute terms and when expressed relative to comparable market rates. At the same time, corporations accumulated debt.

Some structural developments in the financial sector may have contributed to the willingness of financial institutions to take greater risks in the late 1990s. On the one hand, financial institutions were faced with pressure on the margins in traditional branches of activity. On the other hand, they had the scope to intensify activity in new business areas. Declining levels of interest rates in combination with increased competition among financial institutions and a trend towards disintermediation among large enterprises put pressure on interest margins. Banks, for instance, responded by shifting into new

⁽¹⁾ Economic theory has shown that the credit supply curve may be backward bending when the borrower needs to address lenders' moral hazard and asymmetric information. See Stiglitz and Weiss (1981).

Graph 47: Non-financial corporate sector debt, euro area (share in %)



Source: Commission services.

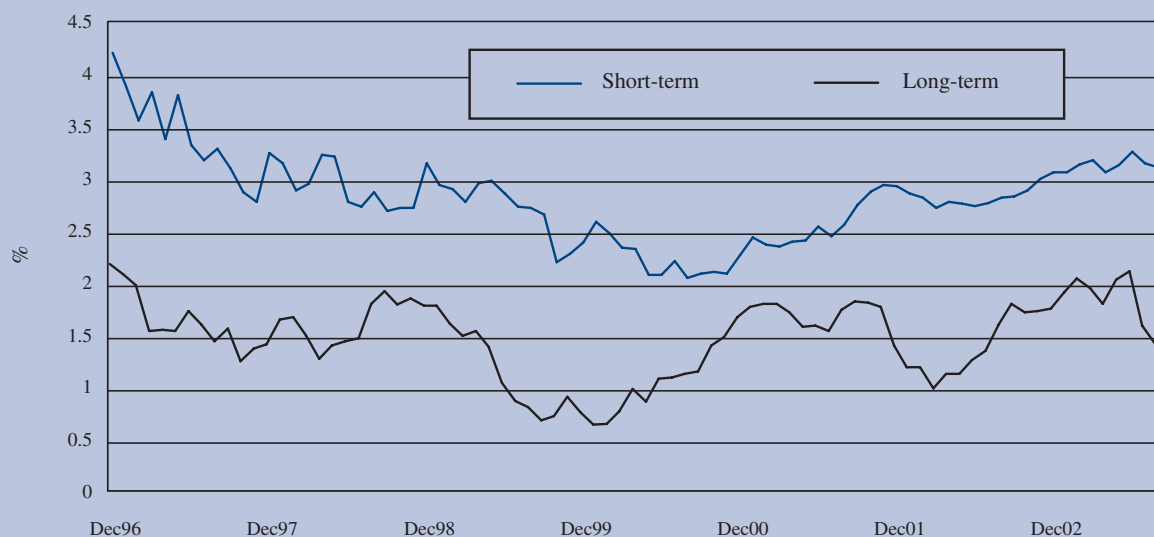
branches of activity, as evidenced by the expansion of fees and commission as a source of bank profits relative to traditional interest income. Moreover, financial services are a heavy user of ICT and the technical advances in this area caused a decisive reduction in information, processing and transaction costs. Monetary and financial integration widened the level playing field, encouraging financial institutions to broaden the geographical coverage of activity. Further structural factors may have directly encouraged institutions to become less risk averse. For instance, the development of markets for credit derivatives, which allow for a more efficient allocation of risks within the financial system, and strong profit prospects may have encouraged risk taking. Improved regulation and the absence of any failure among major financial institutions may have also contributed to a less risk-averse attitude among financial institutions.

Banks apparently reassessed the risk of their credit exposure during the downturn. The need to scale down profit expectations has certainly played a role, as well as deteriorating balance sheets of loan-takers and banks. The consequence of their shift towards a more risk-averse lending policy seems to have made it difficult for enterprises to obtain short-term credits, in

particular, even if they were prepared to pay higher interest rates. At the aggregate level, this is witnessed by a divergence in market conditions for long- and short-term credit, where the latter constitutes about a third of the total market for bank credit to non-financial corporations. Growth in medium- to long-term credit volumes (more than one year) decelerated slightly, i.e. from an average of 9 % in 1999–2000 to 7.8 % between 2001 and the first half of 2003. Over the same period, growth decelerated from an average 10 % to less than 2 % in the market segment of credits of up to one year. It has even shrunk in each quarter from 2002 onwards. As regards price terms, interest on bank loans broadly followed the interest trend in government bond markets, declining by 1.5 percentage points between autumn 2000 and summer 2003. The spread of both long-term loan rates with five-year government bonds and short-term loans to three-month money market rates widened by about 1 percentage point.

Graph 49 combines the information of Graphs 47 and 48 on credit volumes and interest rate spreads. It shows that the observations from 1999 to 2003 are consistent with a slight upward-sloping supply curve of long-term credit. The increase in the demand for loans relative to GDP

Graph 48: Bank lending rates to non-financial corporations, spread over market rates, euro area



Source: Commission services.

caused the interest rate spread to increase by 1.3 percentage points between summer 1999 and summer 2003 ⁽¹⁾. Conversely, the curve for short-term credit displays an almost constant spread until 2001 despite rising volumes. Afterwards higher spreads coincided with lower credit volumes, suggesting that banks relied prominently on non-price factors when allocating credit.

The explanation for the divergence is probably related to the fact that short-term credits are often used to bridge sudden shortfalls in cash flows. Therefore, corporations asking for short-term credit may have been considered more risky than those asking for long-term credit, which is supposedly dedicated to long-term investment ⁽²⁾.

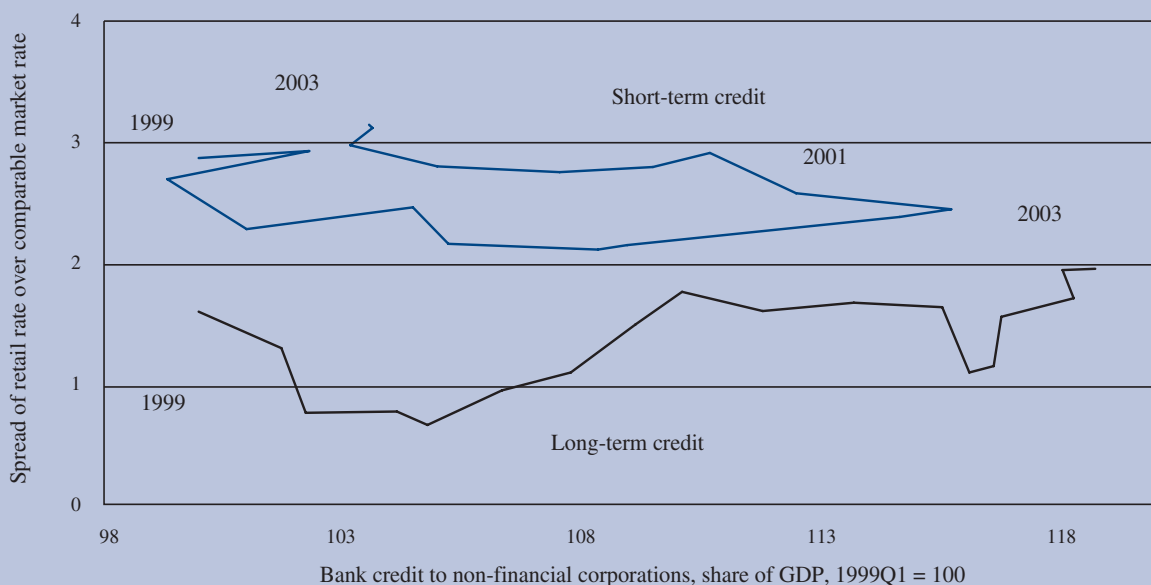
An increase in the differentiation of risk considerations among companies is also witnessed by the behaviour of spreads on corporate bonds over government bonds. The interest of high-quality corporate bonds only temporarily swelled in 2000. The timing of this hiccup suggests that it was more likely related to the burst of the stock market bubble than to the weakening of the economic outlook. Since early 2001, spreads of AAA bonds have fallen whereas spreads have widened considerably for lower-rated borrowers. This implies that the cost of bond financing has not fallen in line with the yields on benchmark government bonds, and has even risen for low-grade borrowers. It is only in 2003 that a sharp narrowing of the spread has taken place.

It is very likely that the increase in risk differentiation is directly related to the difficult economic and financial situation, which has raised concerns about the health of the banking sector. Several signs of stress have been registered. First, corporate insolvencies in the non-financial corporate sector had a negative impact on banks' balance sheets. Loan loss provisions increased substantially in 2001. Second, the profitability of banks has fallen due to the increased loan loss provisions, reduced activity in financial markets and lower valuations of security hold-

⁽¹⁾ Note that the increase in demand for long-term loans does not reflect an improvement in the incentive to conduct long-term investment projects but is due to the deterioration of conditions on issuance markets for shares and corporate bonds (see Graph 46). Also, the low level of long-term interest rates may have encouraged companies to redirect their lending from short- to long-term credits.

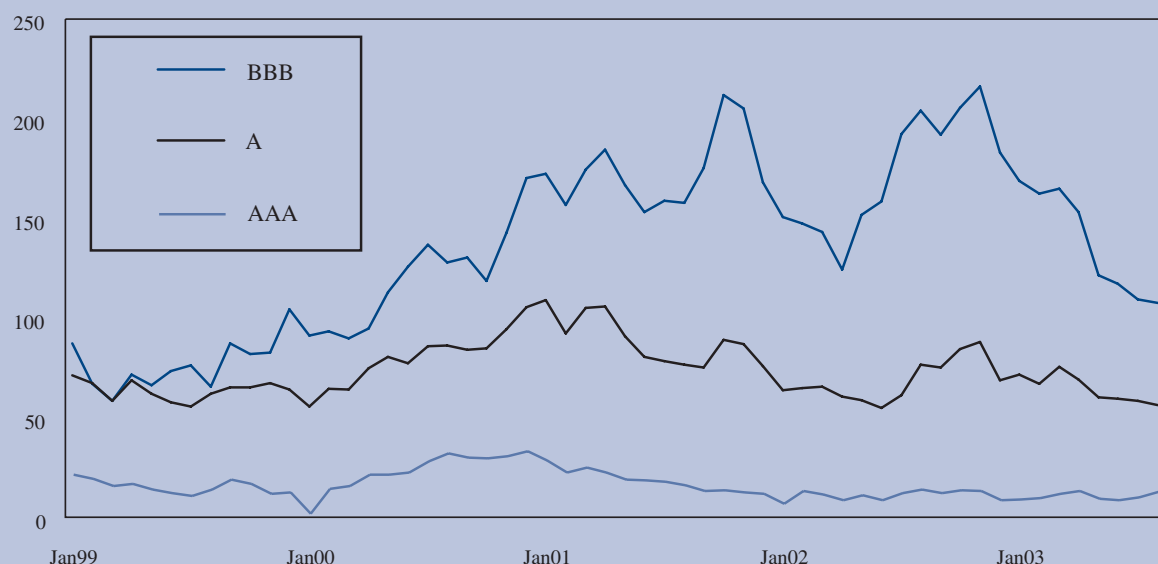
⁽²⁾ The notion that banks perceive short-term credit to be more risky than long-term credit is also supported by the fact that ECB statistics display short-term retail lending rates to have been consistently higher than long-term lending rates since the beginning of the series in 1996. This does not, however, imply that the same borrower would obtain a cheaper credit if he or she opts for a long-term maturity, except in the case of pronounced expectations that short-term interest rates will decline in the future.

Graph 49: Price–volume combinations on the market for bank credit, euro area



Source: Commission services.

Graph 50: Corporate bonds, euro area — Spreads over government bonds (basis point)



Source: Commission services.

Table 4

Key indicators for euro-area banks

	1998	1999	2000	2001	2002
Credit quality					
Loan loss reserve/gross loans	2.82	2.77	2.59	2.58	2.68
Loan loss reserve/impaired loans	72.43	74.16	77.41	88.82	74.63
Loan loss reserve/gross loans	3.90	3.73	3.35	2.91	3.60
Solvency					
Equity/total assets	4.03	4.06	4.28	4.17	4.32
Profitability					
Return on average assets (ROAA)	0.44	0.52	0.73	0.43	0.27
Return on average equity (ROAE)	11.17	12.96	17.42	10.29	6.38

Source: Bankscope — based on the 140 largest banks.

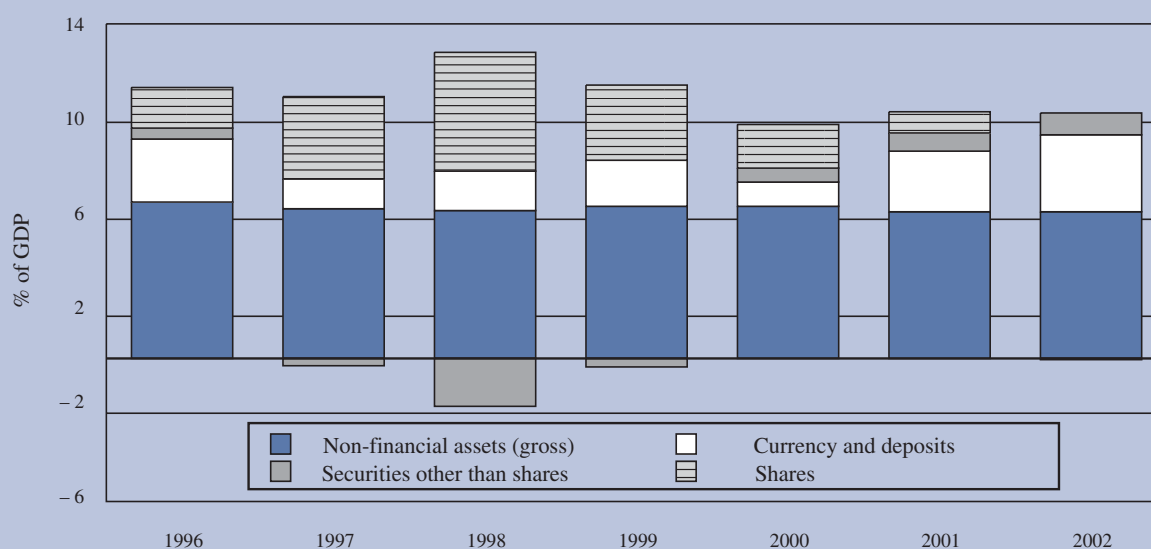
ings. Third, the creditworthiness of some banks has fallen. Credit rating agencies have lowered or put under review the ratings of several major banks.

A shift towards more risk aversion is also detectable in households' saving behaviour. It was believed that the bursting of the stock price bubble would have a strong effect on households' preparedness to take risks. Indeed, some evidence suggests that this has been the case. For

example, the households' savings ratio increased by about 1 percentage point of GDP, despite a lowering of interest rates. Second, a larger proportion of financial wealth was accumulated in risk-free assets, in particular in currency and deposits (see Graph 51). In 2002, the households sector did not acquire shares and other equity.

Households' acquisition of non-financial assets, which mainly constitutes housing, hardly declined in

Graph 51: Households' net acquisition of selected assets, euro area



Source: Commission services.

gross terms. Households continued to accumulate debt in the course of the economic downturn, mostly to finance house purchases. Traditionally, purchasing property is seen to be less risky than the holding of financial wealth, although strong price increases for property seem to challenge this view. Mortgage lending growth has generally been strongest in those Member States where house prices have increased most — such as Greece, Spain, Ireland and the Netherlands (see Table 5). In terms of financing, mortgage lending growth remained above a robust 7 % annual rate in the years 2001–03. Retail activity, and more specifically the buoyancy of household lending, has supported bank profitability, cushioning the impact of rising loan loss provisions and falling commission income.

The economic effect of a shift in risk attitudes is similar to an interest rate change. Less risk taking on the part of households and financial intermediaries implies higher capital costs for investment. It can go hand in hand with declining interest rates because savers' and probably also financial intermediaries' appetite for low-risk government bonds will keep bond yields low. If the allocation of credit were fully driven by prices, a spread between market rates and lending rates would emerge. Such a spread materialised in the euro area in 2002–03 in the market for long- to medium-

term loans but not for short-term loans, where allocation apparently relied strongly on non-price mechanisms.

The risk of not obtaining short-term credit at a time when demand weakens and in consequence revenues deteriorate is a particular threat for enterprises. If they were close to bankruptcy, banks would face moral hazard problems, which might explain the moderate increase in retail rate spreads. Whether reliance on non-price factors is welfare distorting depends in this case on the efficiency of the non-price factors in discriminating between profitable and non-profitable enterprises and investment. While this issue is perhaps impossible to assess at the macroeconomic level, the extent of the deterioration in investment together with the slump in productivity growth suggest that banks have been particularly demanding when allocating short-term loans in the past few years.

4.4. Conclusions: strong adjustment pressure on corporations and financial intermediaries

This section documented that the growth slowdown exerted considerable pressure on enterprises to adjust and its implication on employment and investment. The build-up of corporate debt in the long cyclical upswing of the 1990s was an additional burden on the corporate

Table 5

Nominal property prices, euro area (annual change in %)

	Residential property		Household debt	
	1995–02	2002	1995–02	2002
BE	5.2	6.5	5.1	1.5
DE	0.0	1.0	4.4	2.5
ES	9.8	17.4	13.2	6.2
FR	4.8	6.7	6.2	6.2
IE	14.5	14.2	:	:
IT	3.7	10.0	8.1	6.3
NL	11.2	4.5	12.7	7.0
FI	8.2	8.7	4.3	4.7

Source: BIS.

sector. While the balance-sheet constraints in the private sector have eased in the course of the slowdown, it is difficult to say whether deleveraging has been fully achieved. Moreover, activity in the financial sector was not insulated from the adjustment pressure. Despite some concerns about the health of financial institutions, the euro-area financial sector weathered the slowdown relatively well, without any major institutions failing. Nevertheless, there was a weakening in credit availability, in particular for short-term credit.

It is still premature for a final assessment of the corporate adjustment in the euro area vis-à-vis that in the USA.

The growth performance of the USA during the slowdown has been superior and forecasters also attach a more favourable economic outlook to the USA than to the euro area. However, the slowdown did not contribute to reducing the US external balance. Relatively steady investment in combination with a deteriorating labour market and consequently the prospect of less private savings mean that the US recovery is not taking place on sound foundations. The consequence of the pronounced investment weakness in the euro area, on the other hand, augurs badly for accomplishing high labour productivity growth in the near future and high potential GDP growth over the medium term.

5. How sticky is inflation?

From a rate of barely 1 % in early 1999, HICP inflation accelerated to just over 3 % in May 2001. It slowly receded afterwards, fluctuating around 2 % in summer 2003. While most of the increase was related to one-off effects due to rising energy and food prices as well as the euro depreciation, there was a substantial risk of second-round effects, complicating the assessment of risks to price stability. The persistence of inflation above the 2 % ceiling, despite a slowing of the economy, presented a challenge to the ECB and may have contributed to the weakening in private consumption.

5.1. The cyclical responsiveness of inflation

In the short to medium term, several factors determine the level of inflation in an economy, including external price shocks, administratively set prices, domestic demand, and external demand. This section looks into how inflation is related to real GDP growth. All other things being equal, standard macroeconomic theory indicates that when real GDP growth falls below potential there are downward pressures on inflation in the economy. The recent slowdown provides an occasion to observe how fast this mechanism comes into play in the euro area.

Against the background of volatile prices for energy and unprocessed food in 2000–03, headline inflation can give a misleading picture of the underlying price trend and its relationship with the business cycle. As can be seen in Graph 52, core HICP inflation, which excludes energy and unprocessed food, stabilised four quarters after real GDP growth fell for the first time below the potential rate in 2001Q2, and started slowing four quarters later.

Individual Member State data reveal differences in how quickly inflation responded to below potential growth in GDP. The average lag of four quarters is observed in

Belgium, Germany and Austria. The Netherlands exhibited a large rise in inflation in the first three quarters following the drop in GDP growth below its potential, and started a more gradual decline after five quarters. In Spain and France, inflation started to fall six quarters after GDP growth dropped below average, for Portugal it took eight quarters, while in Italy evidence of a correlation between inflation and GDP growth is mixed in the current downturn.

Graph 52 suggests that the output gap tends to impact on inflation with a lag of four to five quarters in a cyclical downturn, both for the euro area as a whole and for most Member States. This is a useful observation for analysing the effect of differences in cyclical positions on inflation dispersion in the euro area. Indeed, Graph 53 and the simple regression depicted in it show that a country's inflation rate is positively linked to the cyclical position of the economy, implying that cyclical differences do help to explain inflation dispersion in the euro area ⁽¹⁾. As expected, however, differences in cyclical positions explain only part of the whole magnitude of differences in inflation ⁽²⁾.

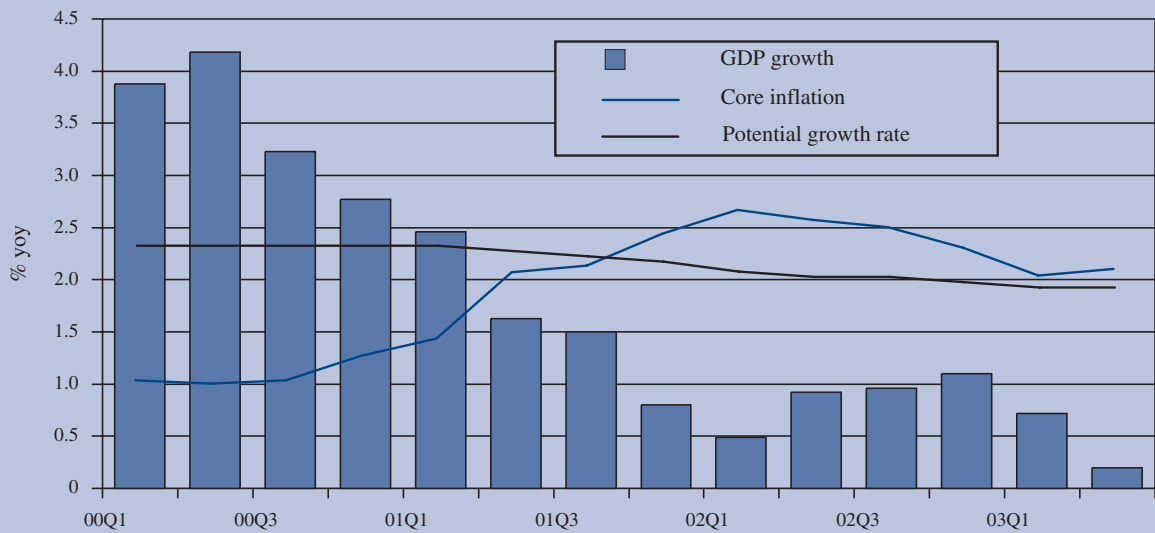
Both findings have important implications for economic adjustment in the euro area. First, the one-year lag with which inflation responds to the output gap suggests that inflation is persistent, i.e. the effect of economic shocks peters out over a long period. Second, the differences in the cyclical response among Member States mean that common shocks to the euro area may cause some divergence in economic performance ⁽³⁾.

⁽¹⁾ The picture does not change systematically if core inflation is used instead of headline inflation because over the medium term both inflation measures should converge. Indeed, the accuracy is slightly better with HICP than with core inflation.

⁽²⁾ For an in-depth analysis of inflation differences, see European Central Bank (2003).

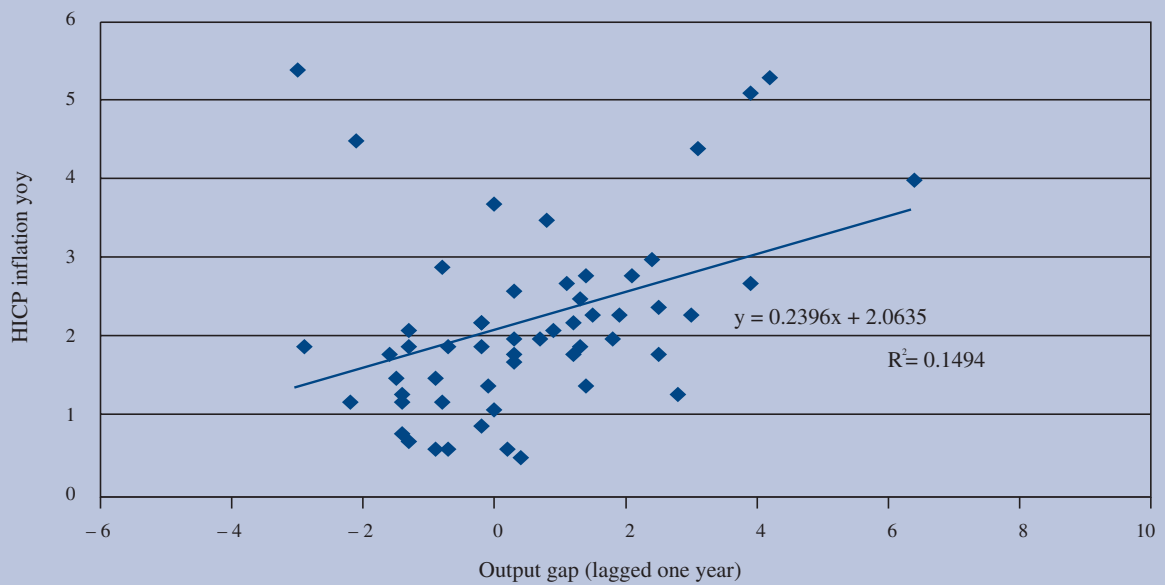
⁽³⁾ Both issues are supported by the results of simulations with wage equations in Chapter 4.

Graph 52: GDP growth and inflation, euro area



Source: Commission services.

Graph 53: HICP inflation and output gap in the euro-area Member States, 1996–2002



Source: Commission services.

5.2. A primer on inflation persistence

Inflation persistence can be understood as the time it takes after a given shock for inflation to return to the level prior to the shock. While intuitively easy to grasp, the concept of persistence is not easily measured in practice. There is a variety of possible approaches to measuring it, but in general there is no agreement as to which one is the more satisfactory overall ⁽¹⁾.

Perhaps one of the most direct ways to gauge the degree of inflation persistence is to look at the correlation of inflation in a given quarter with inflation in earlier quarters. Using data for the euro area, Graph 54 provides some evidence that there might have been a change in the degree of inflation persistence over the 1990s. Indeed, the autocorrelations of headline inflation for the period 1996–2003 are noticeably lower than those observed for the early 1990s. The same result can be obtained if a comparison is made of the autocorrelations of the 1996–2003 period with those for the

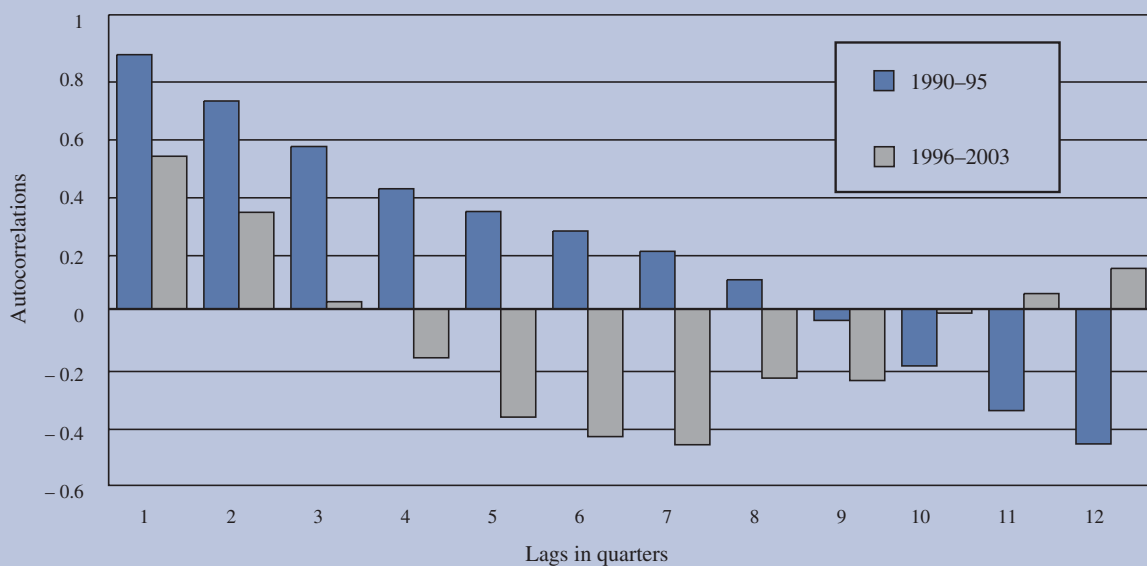
entire 1990–2003 period. There are many potential reasons for such a finding. In particular, the new policy regime put in place in the run-up to EMU and thereafter could have altered inflation expectations markedly, producing a reduction in the level of inflation persistence ⁽²⁾.

The dynamics of inflation persistence can be further investigated with the same univariate approach by looking at the evidence for the main components of HICP inflation. Unfortunately, HICP data only exist for a relatively short time period and therefore comparisons with the early 1990s are excluded. Nonetheless, examining the data for the period 1996–2003 provides some useful insights. For example, the degree of persistence for core HICP inflation is somewhat lower than for headline inflation for short lags (Graph 55). This is probably due to the fact that the more volatile items are not included in core inflation. The volatile components of the HICP display strong persistence in the short term, i.e. the first two quarters. Thereafter, shocks to these components appear, however, to fade out quicker.

⁽¹⁾ The literature is divided on what is the best way of measuring inflation persistence and the results tend to be quite sensitive to different methods, specifications and time periods. For example, Batini (2002), using model-free methods, argues that inflation persistence in the euro area has changed little over the last 30 years.

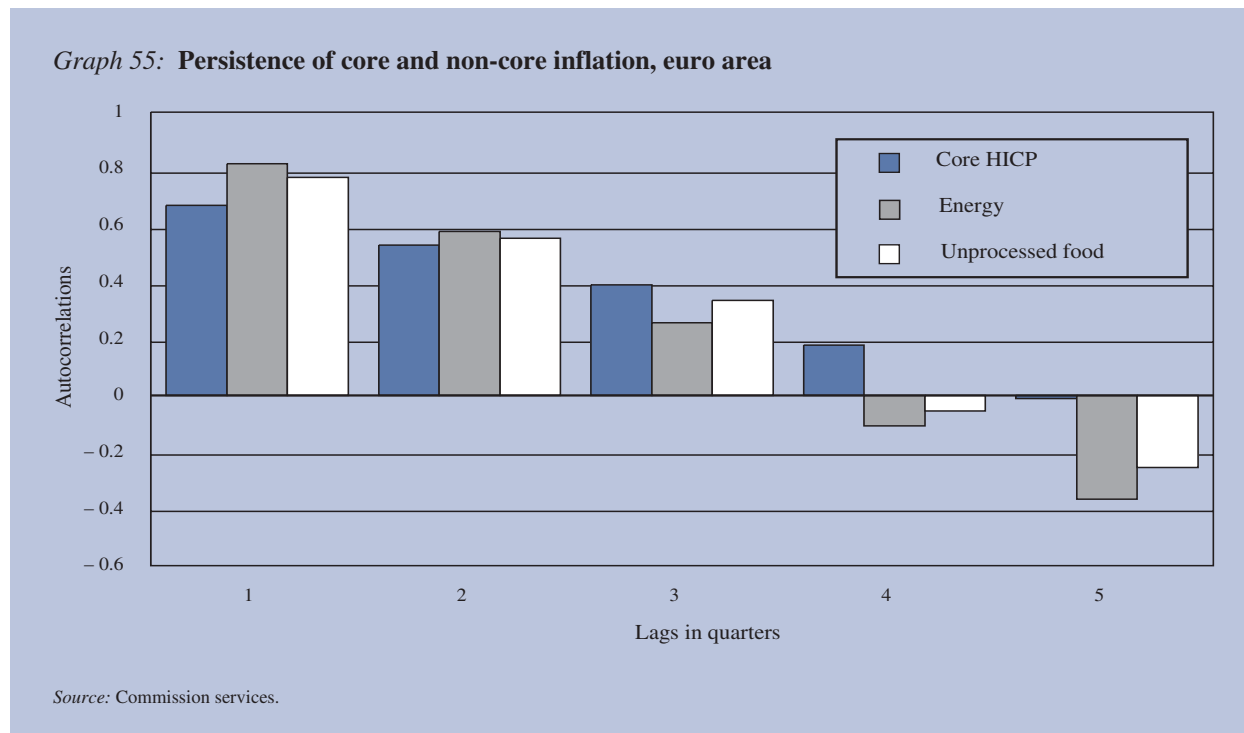
⁽²⁾ The same type of evidence is reported in IMF (2003).

Graph 54: Consumer price inflation persistence, euro area



Source: Commission services.

Graph 55: Persistence of core and non-core inflation, euro area



Moreover, doing the same exercise for the two main core inflation components shows that, as could be expected, the degree of inflation persistence is higher in the service sector than in the non-energy industrial goods sector. The correlation of inflation in a given quarter with the immediate previous quarter is higher for service inflation and the correlation with earlier quarters also declines more markedly for services inflation. The coefficient of correlation goes down to zero after three quarters for inflation in non-energy industrial goods, whereas this happens only after four quarters for inflation in the service sector. This evidence would indicate that much of the persistence of core inflation (and hence headline inflation) stems from persistence in the service sector. This could, in turn, be related to differences in the degree of competition between sectors, to the higher importance of wage costs for services relative to industrial goods and to the fact that the service sector is more insulated from external shocks.

5.3. Service inflation revisited (1)

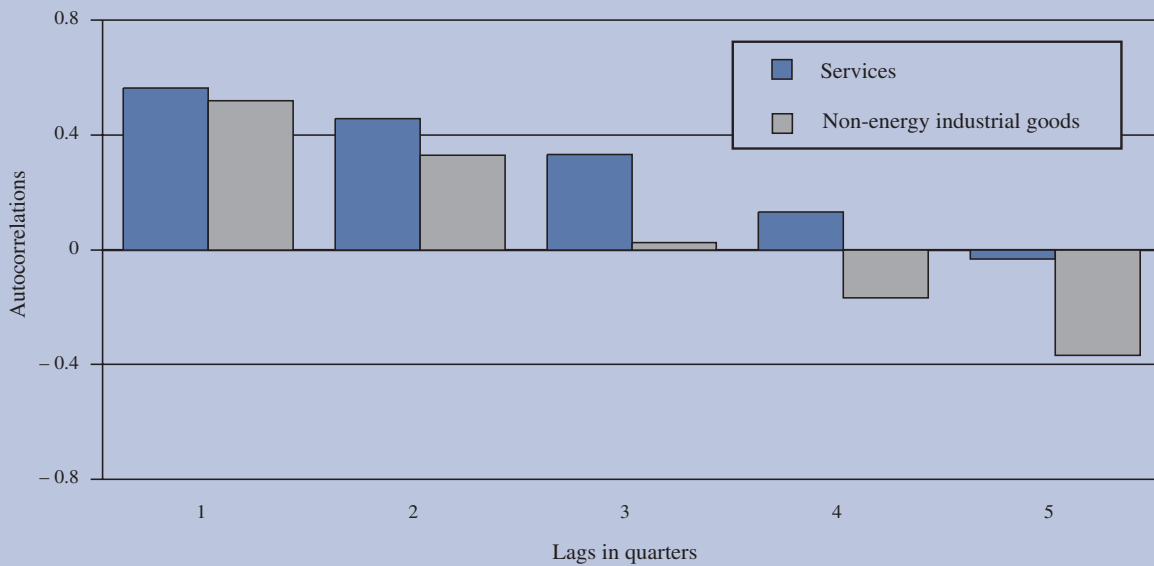
In 2002, service inflation accelerated to a rate of 3 % despite a slowdown in economic growth. At the same

time, inflation in consumer goods decelerated in conformity with the cyclical weakening. Graph 57 shows that service inflation hardly responded to cyclical conditions over the 1990s and started to accelerate in 2001, when economic growth had already weakened. Comparing service prices for various indicators, the graph shows that sectoral wage growth, unit labour costs and value added deflators move closely over time whereas service consumer inflation does less so. This suggests that sectoral cost developments have only little explanatory power for sectoral price developments.

However, price developments were less distinct in the recent slowdown in the manufacturing and the service sectors than headline inflation suggests. This is because the wedge between service inflation and overall inflation was strongly determined by developments in energy prices. Evidence can be drawn from the trends in service prices and prices of non-energy goods, which both experienced a very similar development over time, i.e. decelerating inflation until 2000, subsequently accelerating until spring 2002 and decelerating once more since then (see Graph 58). The spread between service and non-energy industrial prices shows some co-movement with the rate of

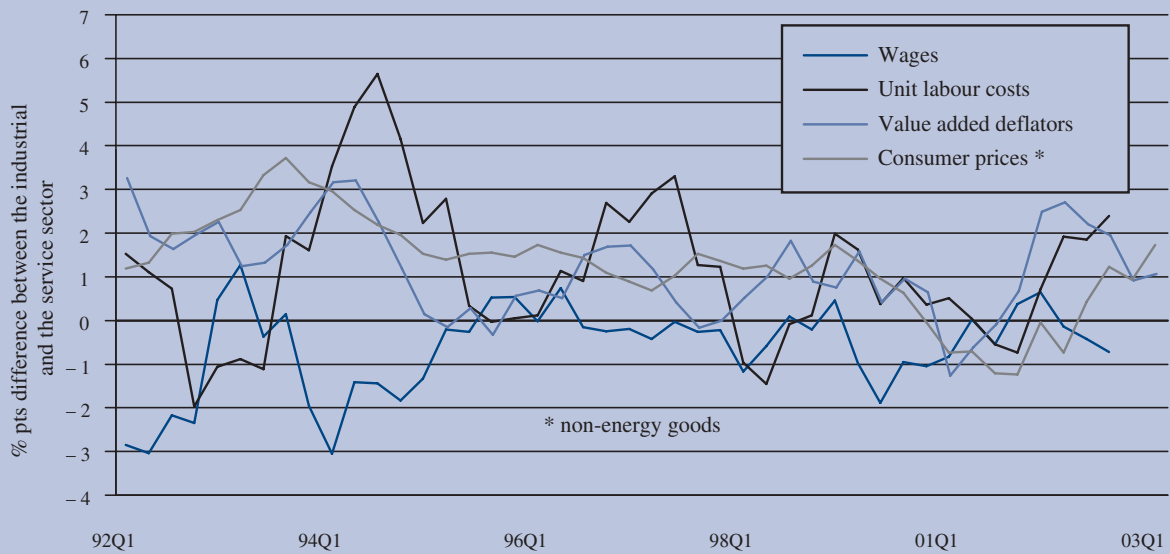
(1) The determinants of service inflation were already briefly analysed in 'The EU economy: 2002 review'.

Graph 56: Persistence of core inflation components, euro area



Source: Commission services.

Graph 57: Service inflation, euro area



Source: Commission services.

headline inflation. It is high when the overall rate of inflation is high ⁽¹⁾. Moreover, it displays a higher degree of autocorrelation than both components, suggesting that there is a strong link between prices in both sectors ⁽²⁾.

Inflation dynamics in the service sector is also similar to those in industry when value added deflators are looked at ⁽³⁾. Inflation, measured by value added deflators, differed by 1.2 percentage points on average between the service and industrial sectors, which is the same as the difference obtained from consumer price statistics ⁽⁴⁾.

When correcting for higher average inflation in the service sector compared with the industrial sector and for differences in volatility, it becomes evident that, firstly, value added inflation in both sectors coincided in the first half of the 1990s but that, secondly, synchronicity turned into a small lag of service inflation relative to industrial inflation in the second half of the decade. Industrial and service prices moved in tandem, most visibly when inflation in industrial prices accelerated in 1998 and later in 2001 but also during the subsequent deceleration. However, service inflation followed the trend in industrial prices with a lag of some quarters. This observation fits into the picture of a stable long-term relationship between industrial and service prices where the latter slowly adjust to the former.

Cost developments are very dissimilar across the different service subsectors. Comparing the value added deflator in different service sectors with the deflator for the total economy reveals that prices in the financial intermediation and other services sector increased relative to the rest of the economy throughout most of the 1990s ⁽⁵⁾. Output from trade-related services and industry has become relatively cheaper.

As regards behaviour over time, inflation in trade services was very similar to that in industry. Prices in the (broadly defined) financial intermediation sector posted a different evolution. Inflation was higher than in other sectors in the early 1990s and converged to the economy's mean until 1998. Since 1998, it has developed out of tune with price developments in industry and trade-related services. The acceleration of inflation in financial services continued, whereas it decelerated in industry, first, in mid-1998 and then again, more pronouncedly, in 2001. This implies that the lag in service inflation that emerged in the late 1990s is attributable to a special trend in prices in the financial intermediation sector. This observation is consistent with the relatively strong growth in unit labour costs in the financial intermediation sector discussed above (Section 3.4).

5.4. Conclusions: service inflation the culprit at last?

Economic theory conjectures that wage developments in services are closely connected to those in industry and differentials in productivity growth then translate into on average higher service inflation. Although this theory is considered to hold generally over the long term, the empirical picture of the euro area over the last 10 years provides some support for it. On average since the early 1990s, the difference between costs and prices of the service sector and the industrial sector has remained fairly constant at about 1¼ percentage points for unit labour costs, value added deflators and consumer prices.

Although productivity differences explain the average spread between service and industrial inflation relatively well, they have only little explanatory power for price developments in the service sector in the short term. Instead, service prices are strongly related to consumer price developments in non-energy goods. This finding suggests that consumer prices in the service sector only weakly respond to sector-specific supply and demand conditions. Instead, suppliers follow some kind of price-imitation strategy between sectors.

⁽¹⁾ Energy prices seem to be an important further determinant of this spread. This is reasonable because energy is a more important input in industry compared with services and accordingly energy prices should affect industrial prices faster than service prices.

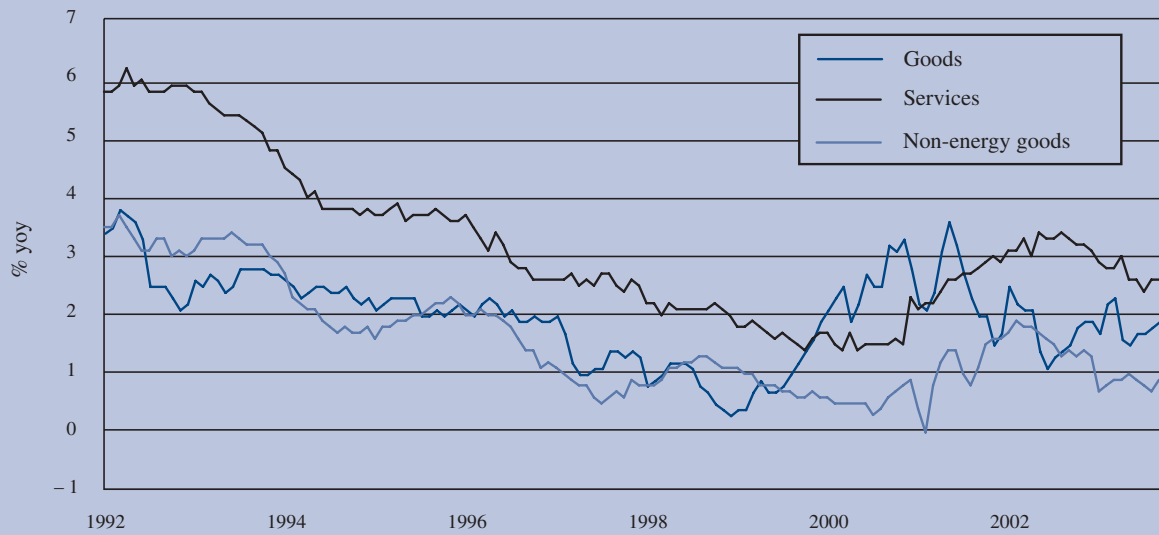
⁽²⁾ See also Section 3 on the service economy.

⁽³⁾ Gross value added (GVA) is GDP less net indirect taxes plus subsidies on products plus 'financial intermediation services indirectly measured'. As these items are small compared with GDP, the difference between GVA deflators and the GDP deflator is negligible for growth rates. One of the reasons for looking at value added deflators is that they provide a sectoral breakdown that is similar to that available for the labour cost indicators used above, hence facilitating the consistency of the analysis of wage and price developments at the sectoral level. A second reason is data availability, as a detailed HICP sectoral breakdown for the whole period under consideration does not yet exist.

⁽⁴⁾ The difference between service inflation and goods inflation in the HICP was also 1.2 percentage points over the same period. See also Section 3.4.

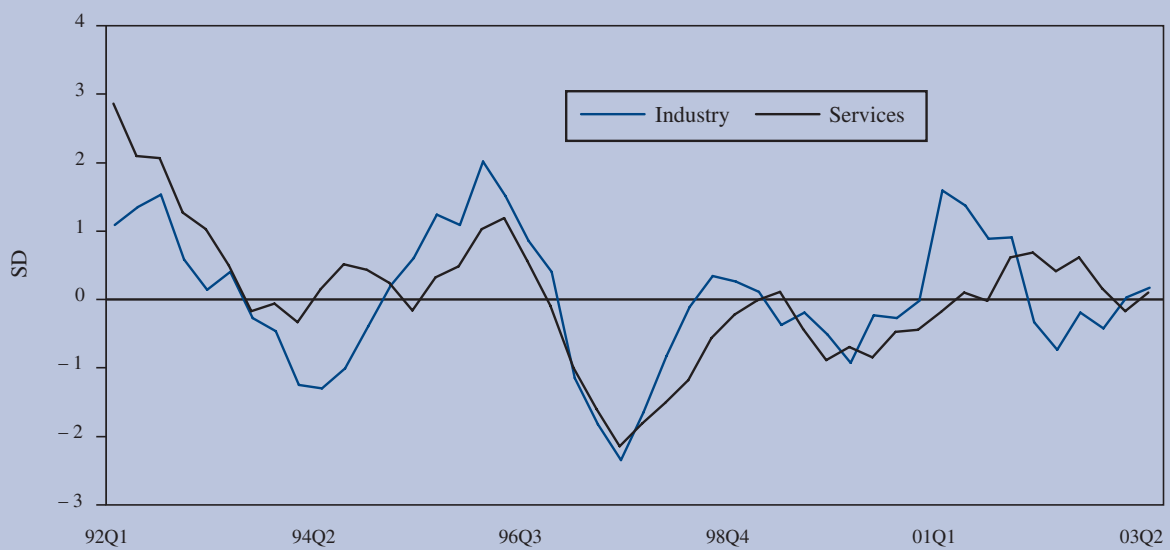
⁽⁵⁾ In conformity with the classification used by Eurostat, trade services in this note include retail and wholesale trade, communication, transport, hotels and restaurants. Financial services include financial intermediation, real estate and business services. The category 'other services' comprises mainly public services, health and education.

Graph 58: Sectoral inflation: demand perspective consumer prices, euro area



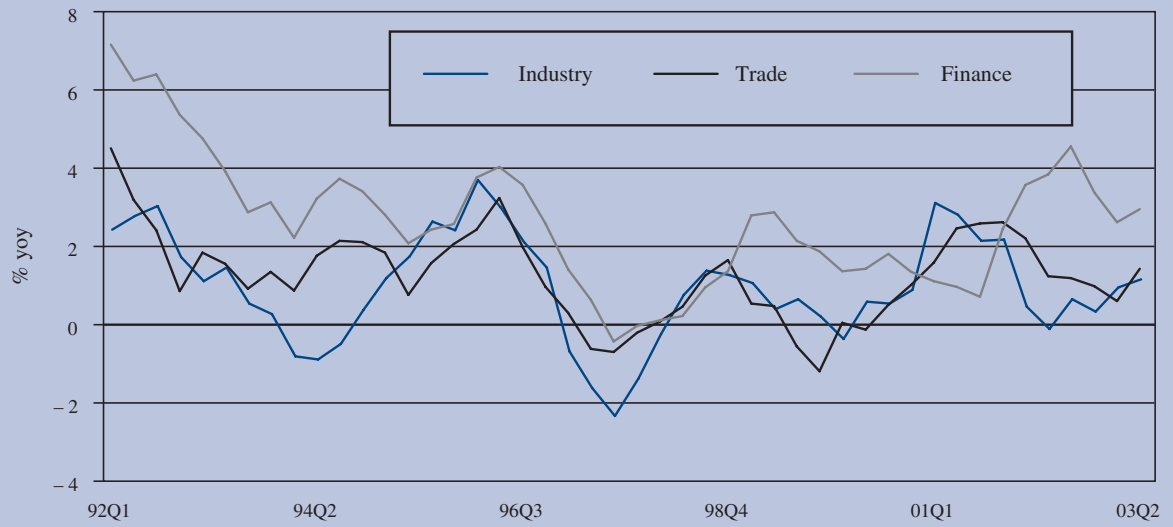
Source: Commission services.

Graph 59: Normalised sectoral cost inflation, euro area



Source: Commission services.

Graph 60: Sectoral cost inflation: service sectors, euro area



Source: Commission services.

6. How sensitive is the euro area to external developments?

Due to the introduction of the euro, which eliminated nominal exchange rate volatility within the euro area, and the establishment of a stability-oriented macroeconomic framework, the euro area was expected to be more resilient to external economic shocks than in the past. At the same time, however, global economic interdependency increased. Technological progress in the ICT sector reduced transaction costs and an increasing number of countries opened their markets. Trade in goods and services accelerated in the last decade as did the magnitude of international capital flows.

The net effect was that the euro area did not become more insulated. After reviewing how some of the main factors shaping international interdependencies have developed, this section examines the extent to which the deterioration in world trade and world growth since 2000 affected the euro area.

6.1. Factors shaping cross-border linkages

Trade linkages have traditionally been considered to be important in transmitting economic disturbances across borders. Other channels run through capital market integration, and through production as well as through confidence and information linkages.

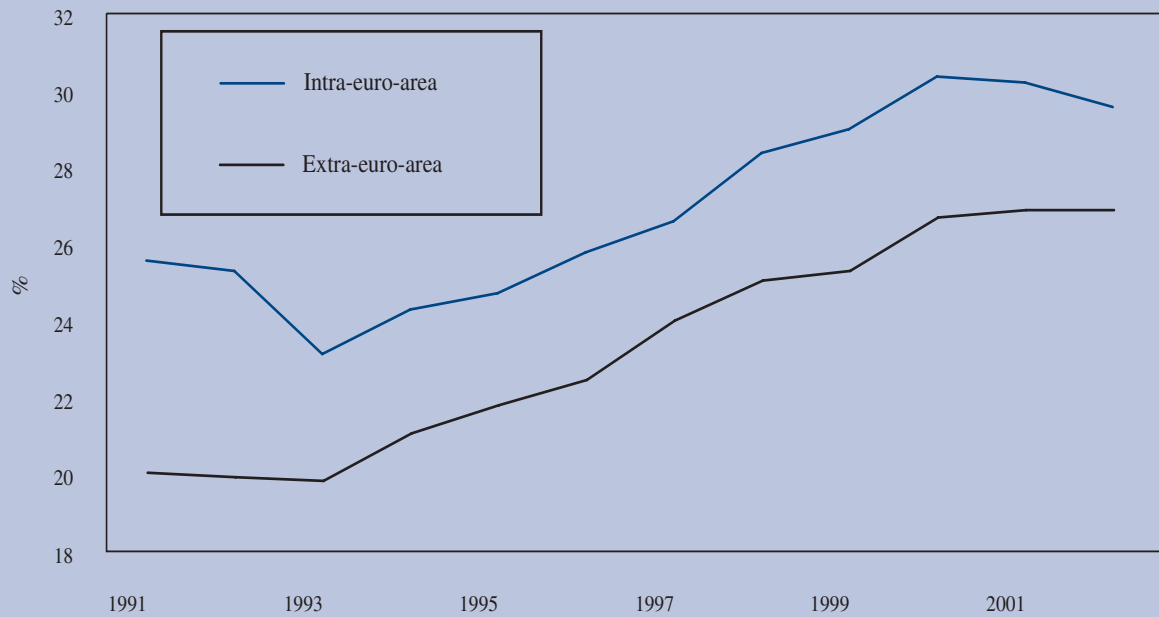
- (i) Closer economic integration intensified intra-euro-area trade flows, i.e. from a share of 23 % of GDP in 1993 to about 30 % at the end of the decade. At the same time, extra-euro-area trade increased by a similar magnitude from 20 % to 27 % (see Graph 61).
- (ii) Foreign direct investment (FDI) flows have equally intensified within the euro area and with other

countries. Capital outflows to the USA were particularly buoyant but the acceding countries also benefited from a remarkable increase in foreign investment inflows ⁽¹⁾ (see Graph 62).

- (iii) The consequence of the observed trend in FDI is an increase in foreign ownership, which should go hand in hand with a trend increase in the international interdependency of production, especially if FDI is undertaken by multinational enterprises. Graph 63 provides some tentative support for the hypothesis that the cross-border correlation of production in manufacturing tends to increase over time.
- (iv) Security prices and economic sentiment are closely linked across borders, implying that they exert a comparable impact on domestic economic activity in different economies. Owing to information and communication technology, financial asset prices respond almost instantaneously to global news on all major markets. Economic sentiment among industrial producers and consumers is strongly correlated between the USA and the euro area, reflecting both cyclical synchronisation and the similarity of perceptions related to economic and financial developments.

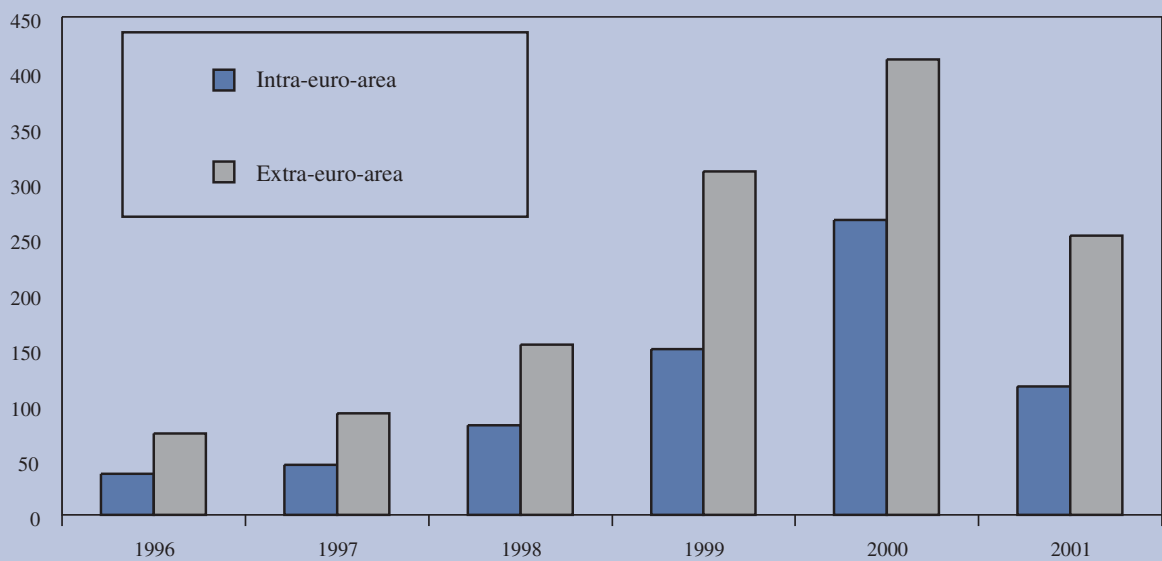
⁽¹⁾ In the late 1990s, a lot of euro-area investment was reportedly channelled to the USA. About a third of the extra-euro-area FDI outflow was invested in the USA. Although reliable data on bilateral portfolio investment flows are not available, there is reason to believe that euro-area investors heavily invested in US dollar assets in the late 1990s. US statistics reveal that about 20 % of US securities held by foreigners were held by euro-area residents in 2000. According to Warnock and Cleaver (2002), this figure is very likely an underestimation because some of the 27 % share registered for the UK may be indirectly held by euro-area residents.

Graph 61: Real trade in goods, euro area ⁽¹⁾ (as a share of GDP)



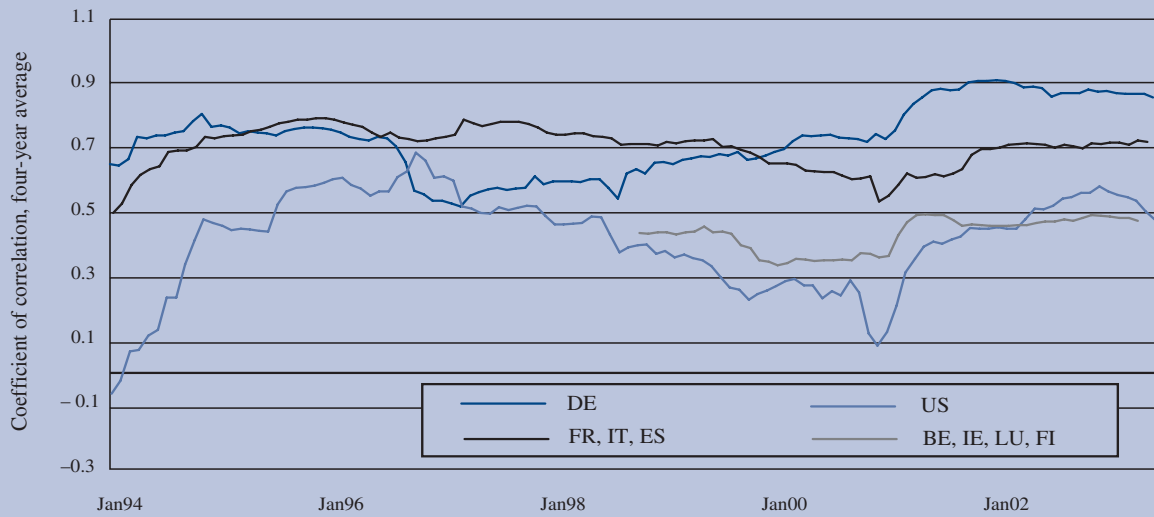
⁽¹⁾ Trade is measured as the sum of imports and exports.
Source: Commission services.

Graph 62: Outward foreign direct investment, euro area, level in billion EUR



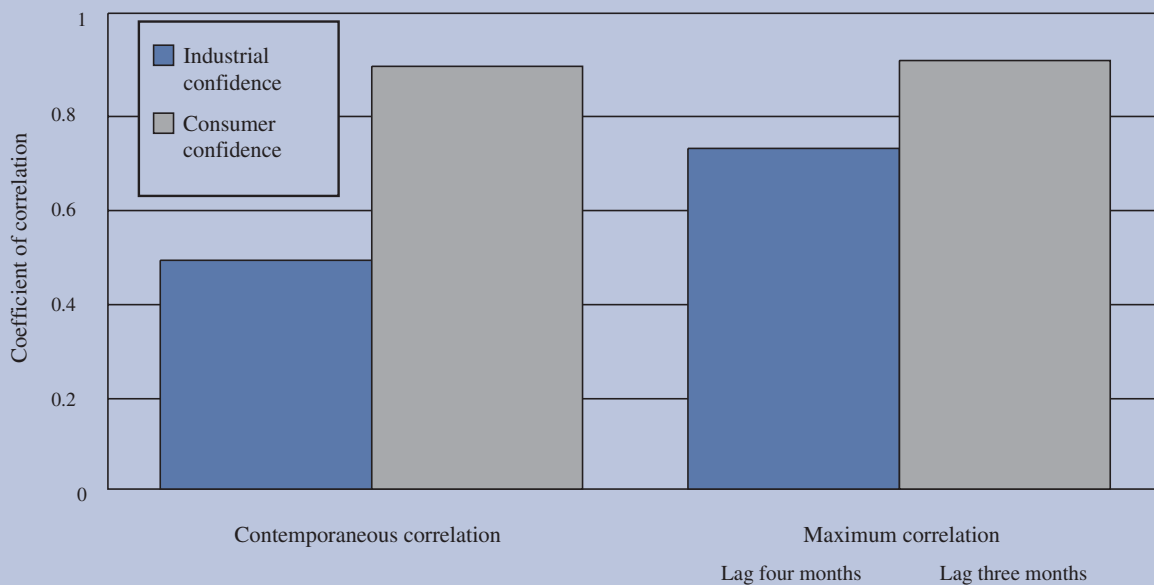
Source: Commission services.

Graph 63: Correlation of quarterly manufacturing production growth with euro-area aggregate



Source: Commission services.

Graph 64: Correlation of economic sentiment in surveys between the USA and euro area, January 1999 to July 2003



Source: Commission services.

6.2. The world trade shock revisited

The year 2000 marks both the zenith of and the abrupt end to a period of spectacular growth in world trade. Annual trade growth peaked at more than 12 % in real terms, after having grown by about 8 % on average in 1996–2000. The favourable growth environment was probably not the dominant factor behind this development, as evidenced by the fact that import growth clearly outpaced output growth over the last decade. Whereas global import volumes grew on average at only double the size of real output in the second half of the 1980s, this so-called income elasticity of trade increased to a factor of three in the first half of the 1990s and moved on to a factor of more than four in the period 1996–2000.

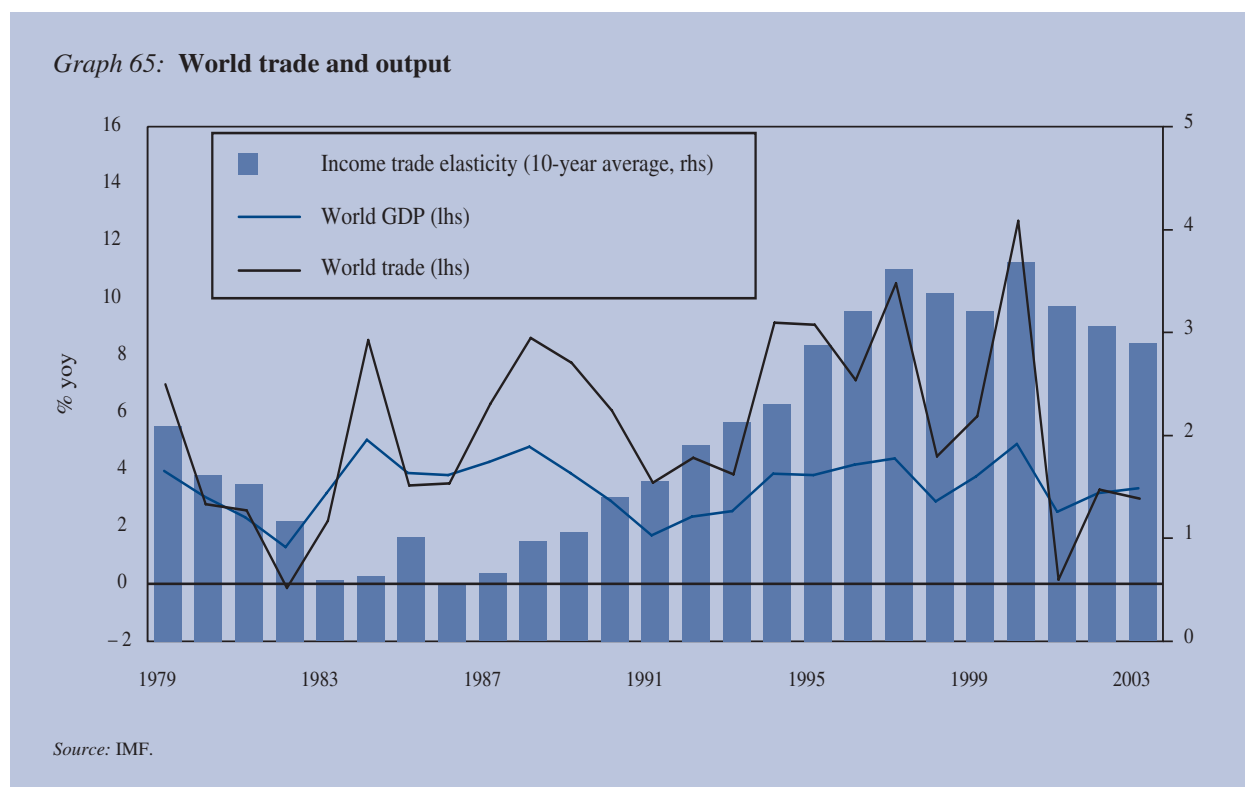
Compared with the experience of the 1990s, the growth in world trade since 2000 can be described as modest. The previously strong rates seem to be attributable to a one-off shift in the level of the trade to GDP ratio, driven *inter alia* by (i) the increased number of countries that have opened their economies to trade and foreign investment, and (ii) progress in the technical and

political sphere which reduced information and transaction costs. While the adjustment to the new level yielded transitorily high rates of growth, this factor seems to have lost momentum since 2000. Moreover, two factors are likely to have significantly contributed to the bleaker development in international trade. Sluggish global output growth may have dented trade. Furthermore, international terrorism increased risk premiums in international transactions.

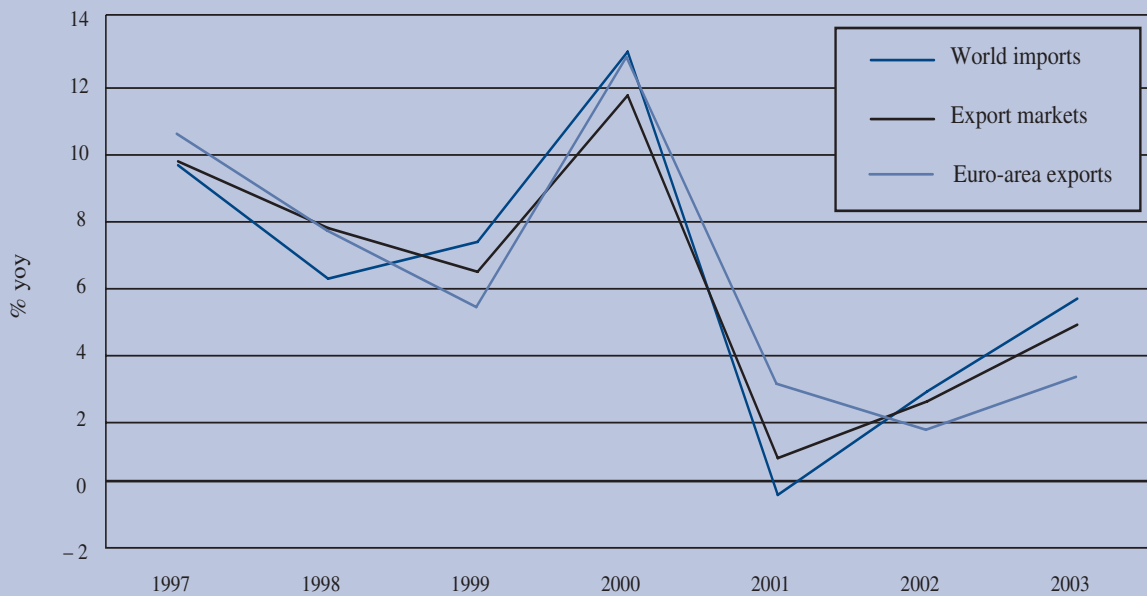
As regards the impact of the global trade shock on the euro area, export performance has weakened in line with the development of demand in the euro-area's export markets (see Graph 66) ⁽¹⁾. Thus, euro-area exports did not deviate from their historical track. Market shares on average remained constant in 2001–03, having widened in 2001 against the background of the euro depreciation, but closed in 2002–03 when the euro appreciated.

⁽¹⁾ Whereas the annual perspective gives the impression that trade is almost invariant to changes in exchange rates, the picture is less clear-cut if high-frequency data are looked at.

Graph 65: World trade and output



Graph 66: Export performance, euro area



Source: Commission services.

6.3. No support from procyclical exchange rate variation

The synchronised slowdown of economic growth in most parts of the world limited the role for flexible exchange rates to smooth adjustment. The exchange rate is one of the key macroeconomic prices that could bring relief in a slowdown and may provide a welcome impulse to recovery. This notion of a currency appreciating in an upturn and depreciating in a downturn is not, however, supported by historical evidence ⁽¹⁾.

The most recent experience of the euro exchange rate is another example of exchange rate movements that are not necessarily conducive to stabilising the cyclical situation. In 1999–2000, the euro depreciated when growth was strong, further stimulating international price competitiveness and adding to the inflationary shock of climbing oil prices. Moreover, the perceived weakness of the euro prompted many investors to channel capital to the USA, where returns appeared higher. In 2002–03, by contrast, the appreciation of the euro undermined the

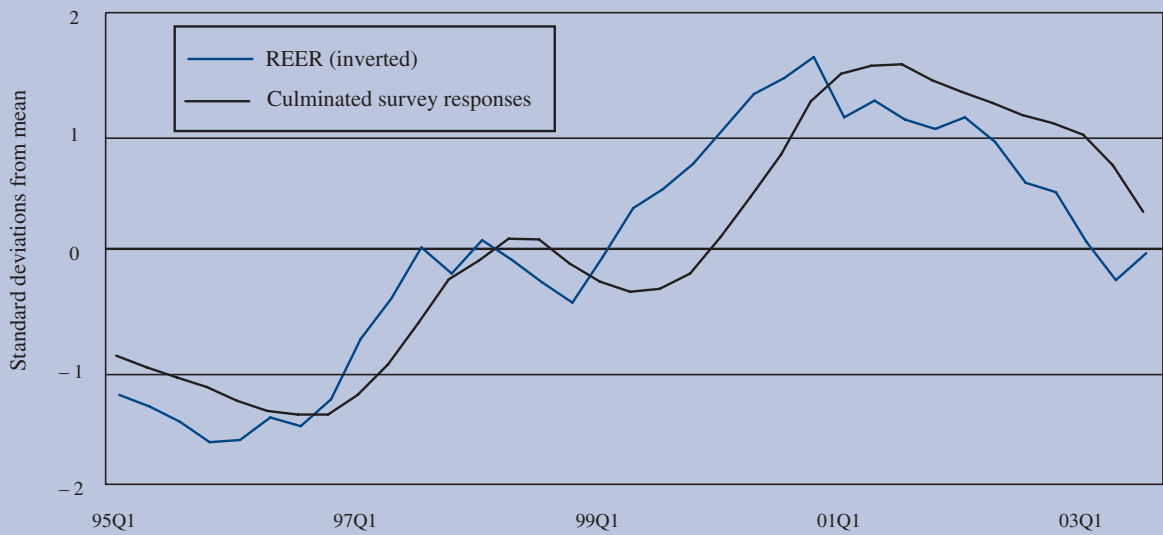
price competitiveness of exports. Indeed, Graph 67 displays a strong co-movement between the actual development of the euro's real exchange rate (inverted, deflated with total economy unit labour costs) and industrialists' assessment of competitiveness as indicated in the Commission's business survey ⁽²⁾. Industrialists pay more attention to variations in exchange rates than Graph 67 would suggest, which shows that world import demand is the dominant determinant of export growth and only a relatively minor role can be allocated to exchange rate variations.

As shown in Box 3, the pass-through to domestic prices was slow, implying that the strengthening of the currency provided only partial relief to domestic demand. Price stickiness seems to have prevented a stronger increase in purchasing power and thereby a larger offsetting of falling external demand by domestic demand.

⁽¹⁾ For a comprehensive review of the issue, see IMF (1998, Chapter 3).

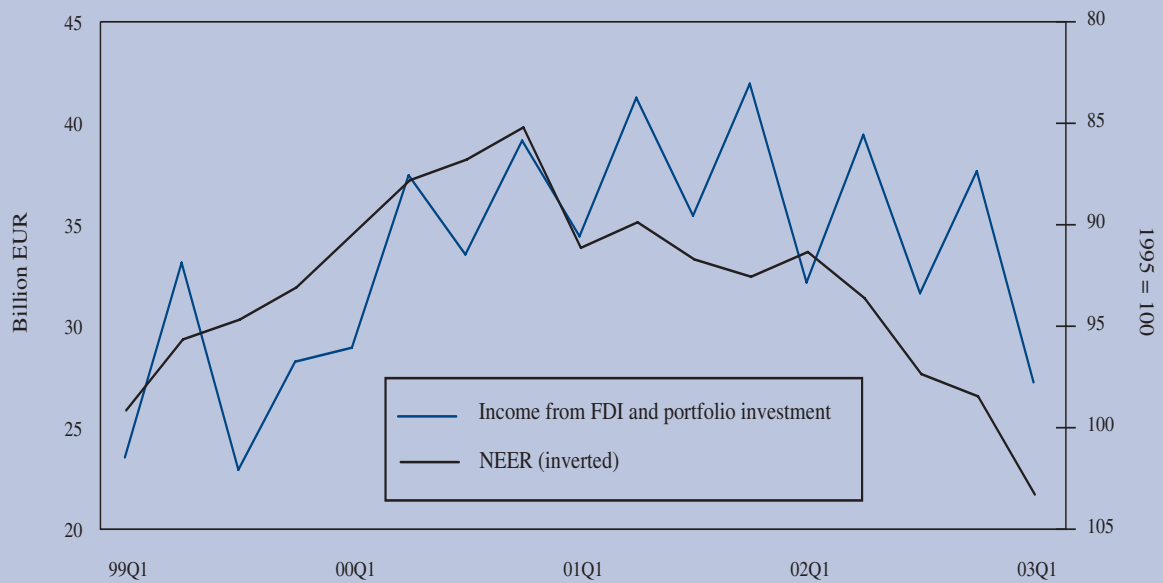
⁽²⁾ As the Commission survey asks for the assessment of the change in the competitive position, the balances were culminated over time in order to compare them with the level of the real exchange rate. Both variables in the graph are normalised (the difference from the mean being divided by the standard deviation in 1995–2003).

Graph 67: Assessment of price competitiveness, euro area



Source: Commission services.

Graph 68: Capital income from abroad and exchange rate, euro area



Source: Commission services.

The exchange rate exerted a further procyclical impulse through its impact on the value of capital invested abroad. For example, euro-area investors that bought US assets when the US dollar was still expensive face exchange rate losses when they sell their assets when the euro is strong. A 20 percentage point appreciation of the euro against the US dollar implies that the yield of a bond if held over 10 years declines by about 2 percentage points, i.e. interest of 6 % in US dollars, which was noted for 10-year government bonds in 2000, translates into a 4 % return in euro. Although the sum of capital income flows from FDI and portfolio investment amounted to barely 2 % of GDP in 2002, such a shortfall in revenues is already visible in the balance-of-payments income account (see Graph 68). More important than the effect on

investors' wealth or cash flow is probably their impact on the value of international securities as collateral.

6.4. Conclusions: export performance not invariant to the world cycle

The deceleration of world trade had a marked impact on the euro-area's export performance, with the euro appreciation having contributed to slight losses in market shares. Usually, one would expect the exchange rate appreciation to stimulate domestic demand because import prices decline and terms of trade become more favourable. As the pass-through of exchange rates to consumer prices has been slow, evidence is weak that domestic demand in the euro area has already been much influenced by this positive effect.

Box 3: The exchange rate pass-through to inflation in the euro area

As much as the depreciation observed during the first two years of the euro raised fears about the potential inflationary impact, the recent appreciation of the euro exchange rate is raising interest about the potential to reduce inflationary pressures in the euro area.

In principle, the way exchange rate changes are transmitted to domestic prices, i.e. the exchange rate pass-through (ERPT), can be understood as follows. Exchange rate fluctuations condition the extent to which external price developments affect the prices of imported goods, expressed in euro. In turn, changes in import prices can affect domestic consumer prices through direct and indirect channels. The direct effects come through the pricing of both homogeneous products (e.g. energy, coffee) and from less homogeneous imported goods that nonetheless enter the consumer basket nearly directly. The indirect effects stem from the degree to which import prices impact on costs of intermediate goods in the production process and from the price reaction of domestically produced substitutes or complements to imports. Indirect effects are also induced via the impact on net exports, and thereby on aggregate demand. There may also be second-round effects arising from the response of wage setting as well as of fiscal and monetary policy to the impact on inflation. Accordingly, abstracting from the indirect effects via net exports and the second-round effects, the

pass-through of exchange rate changes to consumer prices may be considered in two stages: (i) the pass-through from exchange rate changes to import prices; and (ii) the pass-through from import prices to final consumption prices, possibly via producer and wholesale prices.

The following table provides an overview of five recent studies that have looked at the evidence for the euro area or a subset of its Member States. Despite differences *inter alia* in model specification, the price measures used and the sample period, these studies do provide evidence in favour of two common conclusions. Firstly, the pass-through in the euro area is generally found to be partial, and to diminish through the chain of distribution. Secondly, the time lag of pass-through increases as the exchange rate shock is propagated through the distribution chain to final consumer prices. For import prices, it is typically found that between 20 and 50 % of the total effect takes place on impact and the remainder within three to eight quarters. For producer and consumer prices, there is generally little effect on impact. Most of the effect occurs with a considerable lag, with consumer prices showing a more delayed response than producer prices. These studies suggest a pass-through to consumer prices of between 2 and 16 % after with most of the effect occurring with a lag of one and a half to two years.

(Continued on the next page)

Box 3 (continued)

**Empirical studies on the degree of pass-through of an exchange rate shock, euro area
(as % of the initial shock)**

Pass-through on:	Import prices	Producer prices	Consumer prices
McCarthy (2000) ⁽¹⁾ (1976Q1–1998Q4)	50 % on impact, total 60 % after eight quarters	3 % on impact, total 20 % after eight quarters	0 % on impact, total 8 % after eight quarters
Hüfner and Schröder (2002) ⁽²⁾ (1982M1–2001M1)	n.a.	n.a.	4 % after one year, total 8 % after three years
IMF (2003) (1990/1–2002/12)	3 % after one month, total of 117 % after 18 months	0 % after one month, total of 17 % after 18 months	0 % after one month, total of 2 % after 18 months ⁽³⁾
Hahn (2003) (1970Q2–2002Q2)	20 % after one quarter, total of 50 % after three quarters	10 % after one quarter, total of 30 % after three years	2.5 % after one quarter, total of 16 % after three years
Anderton (2003) (1989Q1–2001Q4)	25–40 % in the same quarter as the shock, total 50–70 % after 15 months	n.a.	n.a.

⁽¹⁾ Approximate values as derived from graphic representations of the effects reported in the paper for Belgium, Germany, France and the Netherlands and averaging using HICP weights. In addition, the study covers Japan, Sweden, Switzerland, the UK and the USA.

⁽²⁾ Euro-area estimates are only made for the effects on consumer prices, based on a constructed aggregate using estimates for Germany, Spain, France, Italy and the Netherlands. The relative speed of adjustment for import and producer prices is also assessed, but using a non-comparable average of the five countries.

⁽³⁾ If the core inflation measure used — HICP excluding energy and unprocessed foods — is replaced by headline inflation the degree of pass-through rises to nearly 10 %.

The impact of recent developments in the euro exchange rate on import prices, producer prices and consumer prices is clouded by the simultaneously large fluctuations in oil prices. Nevertheless, an analysis of the co-movements since 1999 between the nominal effective exchange rate (NEER) of the euro and inflation in non-oil extra-euro-area import prices, producer prices and consumer prices is broadly in line with the results of academic research. It indicates that the exchange rate pass-through for the euro area as a whole is rapid and large to import prices, while distinctly more muted and lagged to producer and consumer prices.

To get an idea of the actual delays involved in the response of inflation at the level of import prices, one can look at the correlation between changes in the NEER of the euro and inflation in unit values for imports of consumer goods ⁽⁴⁾. This is the component of total unit import values that can be expected to capture best the impact of changes in the exchange rate that may be later passed through to final consumer goods. The correlation is highest without any lags in unit values for imported consumer goods, indicating a swift response of imports inflation to the changes in the NEER.

Reflecting this observation, almost immediately after the NEER began appreciating at the end of 2000, annual rates of change in unit values for consumer goods also began decelerating (see first graph). Thereafter, in line with the observed developments of the exchange rate, inflation in unit values for consumer goods registered a prolonged period of downward movement, declining by some 18 percentage points to May

2003. Over the preceding period in which the euro depreciated, inflation in import unit values for consumer goods increased by 13 percentage points. Comparing these figures with the corresponding changes in the NEER hints at a pass-through in this sector of around 72 %, indicating partial but near complete pass-through at the level of import prices.

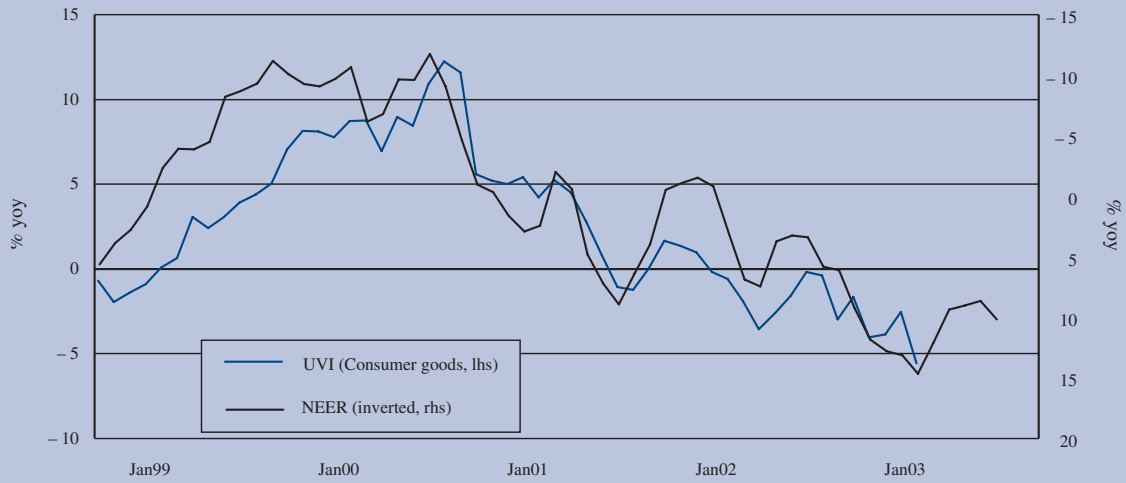
The correlation of changes in the NEER with inflation in producer prices for consumer goods, taken as the relevant measure that excludes the effects of oil price changes, is highest at lags of three to four quarters. Accordingly, inflation in consumer goods at the producer stage peaked in April–May 2001 seven months after the NEER had stopped depreciating. From January 1999 to the peak month (April 2001), inflation in this component increased by 3.8 percentage points and from the peak month to August 2003 it declined by 2.1 percentage points. Comparing these figures with the corresponding changes in the NEER suggests an approximated pass-through of 16 %, i.e. a considerably more subdued reaction of producer prices than import prices to given exchange rate changes.

⁽⁴⁾ The available proxies are unit value indices from foreign trade statistics. Although unit values are commonly used in empirical studies of the pass-through, they have well-known drawbacks. Unit values are calculated as the value of the products divided by their quantity, which is proxied by the weight of the products in terms of tonnage. For some products where the decline in weight does not match a decline in quantity (e.g. computers), unit values would yield a distorted picture of price developments. Unit values also do not correct for changes in quality and tend to under-represent new commodities, leaving large scope for measurement bias.

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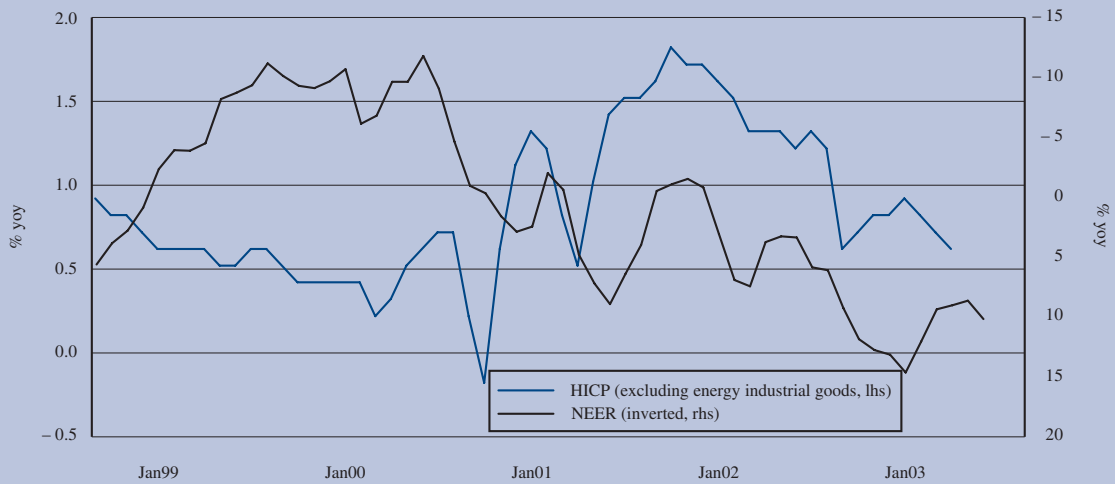
Box 3 (continued)

Unit values for imports (UVI) and NEER, euro area



Source: Commission services.

HICP non-energy industrial goods and NEER, euro area



Source: Commission services.

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Box 3 (continued)

Consumer prices have reacted with a longer time lag than producer prices to the appreciation of the euro. The correlation of changes in the NEER with inflation in non-energy industrial goods, which is the component of overall HICP inflation that can be expected to reflect first and foremost the impact of fluctuations in the exchange rate, is highest at lags of 16 to 18 months. Given this lag reaction, taking the difference in inflation between July 2000, instead of January 1999, and the month when the series peaked, gives an increase in inflation of 1.6 percentage points (see second graph). From its peak in February 2002 to August 2003, inflation in this component declined by 1.2 percentage points. These figures, together with the corresponding changes in the NEER, yield a rough approximation of the observed pass-through of 7 %.

Several reasons have been put forward in the economic literature to explain why the pass-through to consumer prices is lower than to import prices. At the point of sale to the consumer, prices of imported goods have to cover the costs of domestic distribution and retailing, and they contain a significant component of domestic wages, profits and taxes.

This means that changes in import prices are only one of several components of total costs that determine the final consumer price. The extent to which changes in cost are reflected in final prices may depend also on differences in market structure across industries and on strategic considerations of firms. In particular, empirical studies tend to find considerable scope for 'pricing-to-market' for heterogeneous goods, i.e. the practice of foreign firms to align their pricing strategy to domestic conditions in order to preserve market share. The higher the degree of pricing-to-market, the more muted and delayed would be the pass-through of exchange rate changes to consumer prices.

Overall, the economic literature finds that the degree of exchange rate pass-through typically depends on a number of interrelated microeconomic and macroeconomic factors. The most important are the state of overall demand (cyclical conditions), whether the exchange rate change is perceived to be temporary or permanent, whether the country (destination/origin) is large or small, the industry-specific market structure, and product characteristics as well as the macroeconomic policy set-up, in particular the degree of credibility of monetary policy.

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Chapter 2

Drivers of productivity growth

An economy-wide and industry-level
perspective

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1. Introduction

The 1990s witnessed some important shifts in the underlying growth performances of the EU and US economies, with a significant gap opening up in terms of GDP, and more importantly GDP per capita, growth rates. From a situation over the period 1980–95 when EU and US living standards were growing at roughly an equivalent rate, the second half of the 1990s saw the emergence of a significant growth gap in favour of the USA. These EU–US differences are mirrored at the EU Member State level, with simple measures of dispersion indicating that individual country divergences relative to the average EU performance grew by close to 50 % in the 1990s compared with the 1980s. These extra- and intra-EU divergences in economic fortunes have been the subject of intense research efforts in recent years ⁽¹⁾, with policy-makers keen to decipher the reasons for their own respective out-turns and to further refine the ‘magic formula’ for boosting their long-run growth performances ⁽²⁾.

The present study will contribute to this ongoing debate regarding the sources of growth in general, with specific attention being devoted to productivity determinants given their importance in shaping medium- to long-run changes in living standards. Any analysis of growth, however, must be seen as an ongoing process, with economies in a constant process of ‘creative destruction’ and with the emerging structural patterns difficult to disentangle from cyclical influences and policy adjustment lags. Consequently, while the main sources of growth over long periods of time are easily established, less success is possible in explaining more recent breaks in trends and in assessing whether or not these breaks are durable ⁽³⁾.

⁽¹⁾ See, amongst others, Scarpetta et al. (2000), Bassanini and Ernst (2002), Colecchia and Schreyer (2002) and OECD (2003).

⁽²⁾ See, for example, Temple (1999) and Ahn and Hemmings (2000) for surveys of the literature on economic growth.

⁽³⁾ As a general point, readers should bear in mind that international comparisons of growth performances are particularly problematic at present due to a range of differences in the measurement techniques used in the national accounts of the respective countries. These differences include, for example, the use or non-use of new methodologies for constructing price deflators for the output of fast-growing, high-tech industries or for measuring the output of a number of the service sectors. Some of these measurement issues have been overcome in the industry data sets used in Section 3 of this chapter.

While conscious of such uncertainties, the present study examines the empirical evidence to ascertain whether some tentative conclusions can be drawn regarding recent trends and future prospects in terms of productivity. The study is particularly interested in establishing whether a genuine break occurred in the 1990s in the post-World War II pattern of EU convergence to US living standards, with the previous rapid progress of the 1960s and 1970s, and the stabilisation of the 1980s, now giving way to a further pulling ahead by the USA over the second half of the 1990s. A number of key questions are addressed: firstly, whether this break in the convergence pattern is likely to be permanent or transitory; secondly, in terms of explaining recent EU and US trends in investment and technical progress, what was the role played by information and communication technologies (ICT) ⁽⁴⁾ and by increases in the employment content of growth; and, finally, whether any policy lessons need to be learnt by EU, and especially continental EU, Member States, from the growth pattern which has emerged in the USA and a small number of individual EU countries. In terms of content, following the present introduction, Sections 2 and 3 present the broad stylised facts concerning growth and productivity trends at the economy-wide and industry levels for the USA and the 15 EU Member States.

Section 2, drawing on official data sources and using mainly a growth accounting approach, concludes that the EU is now, for the first time in decades, on a trend productivity growth path which is lower than that of the USA. This recent EU performance reflects a deterioration in terms of both investment and innovation and marks a serious downgrading relative to the situation in the early 1990s when annual EU labour productivity growth was averaging nearly 2½ %, compared with 1 % for the USA. Since then, EU labour productivity growth

⁽⁴⁾ See, for example, Gordon (2000), Oliner and Sichel (2000), Council of Economic Advisers (2000), Pilat and Lee (2001), Baily and Lawrence (2001) and Daveri (2002).

has declined by 1 percentage point to 1½ %, compared with an acceleration in the USA to 1¾ %.

Section 3, exploiting two new, internationally comparable, industry data sets based on the OECD's STAN database, goes on to pinpoint the small number of industries which have been driving the EU–US productivity differentials over recent decades and, in particular, over the second half of the 1990s ⁽¹⁾. In terms of individual countries, it also highlights the negative contributions from a number of the larger Member States, most notably Italy, in driving the overall deterioration in the EU's performance. An interesting feature of this data set is that, for all countries, it uses US hedonic deflators for deflating the relevant ICT industries and classifies computer software as investment expenditure (and not as a business expense which is the convention in a large number of EU countries). It therefore provides a more accurate estimate of the contribution of ICT to the growth performances of the respective countries. In this way, it is possible to assess whether the decline in EU labour productivity growth could be due, as some commentators have suggested ⁽²⁾, to mismeasurement of the growth impact of ICT ⁽³⁾. Unfortunately, despite pointing to a positive contribution to growth from ICT in the EU, the industry-level analysis still confirms the conclusion from the economy-wide analysis in Section 2, namely that the EU as a whole experienced a significant decline in its trend productivity growth rate over the second half of the 1990s. The positive contribution of ICT to EU productivity growth over this period in time, both in terms of capital deepening and TFP growth, was firstly on a lower scale than that experienced in the USA and, secondly, all the EU gains on the ICT side were more than offset by a sharp deterioration in the performance of the non-ICT part of the EU economy, which it must be stressed still accounts for around 70 % of EU output. In contrast, the non-ICT part of the US economy, whilst not showing the spectacular gains experienced on the ICT side, nevertheless steadily improved its productivity performance over the second half of the 1990s.

Section 4 of the paper draws some policy lessons from the aggregate and industry analyses. In particular, it addresses two key questions: firstly, why the EU as a whole has not gained as much as the USA in terms of ICT, and, secondly, why the non-ICT part of the US economy has been doing significantly better than the equivalent part of the EU economy in terms of both investment and innovation trends. The section attempts to answer these questions by assessing the relative merits of the major hypotheses for explaining productivity growth over time ⁽⁴⁾ — i.e. the role played by the regulatory environment (product, labour and financial markets) ⁽⁵⁾; by the degree of openness of economies ⁽⁶⁾; by the efficiency of knowledge production (R & D and education) ⁽⁷⁾; by the determinants of physical investment levels ⁽⁸⁾; and, finally, by demographics ⁽⁹⁾. An analytical framework is presented which combines standard growth regressions with recent developments in endogenous growth theory. An assessment is made using this framework of issues such as whether the second half of the 1990s was exceptional in terms of ICT technologies (with regard to both industry specialisation and the speed of diffusion) and whether the slowdown in EU productivity growth over this period simply reflected the temporary negative effects of a higher employment content of growth. In terms of future scenarios, a 'Lisbon strategy' simulation examines the impact on EU growth of implementing those policy reforms which have been established by the regression analysis (covering a total of 21 OECD countries) as being vital for sustaining labour productivity growth in the long run. In terms of policy conclusions, this section stresses that international labour productivity differentials to a large extent reflect differences in the basic determinants affecting physical capital formation (especially the regulatory environment and the structure of financial markets) and the creation of knowledge (where R & D expenditures are closely linked with educational attainment levels, the openness of economies and market size considerations).

⁽¹⁾ The data used in Section 3 draw heavily on a study prepared for the Enterprise DG by O'Mahony and van Ark (2003).

⁽²⁾ For example, Jorgenson (2003) asserts that ICT has made a much larger contribution to growth in the non-US G7 countries than that suggested by official statistics. In his recent paper, 'Information technology and the G7 economies', he compares the growth performances of the G7 economies, on the basis of an internationally comparable data set (similar to that used in Section 3) which focuses on the impact of investment in IT equipment and software. See also the *The Economist* article 'Computing the gains', of 25 October 2003, which summarises the Jorgenson paper.

⁽³⁾ Regarding price measurement issues for ICT goods, see Colecchia and Schreyer (2002) and Pilat and Lee (2001).

⁽⁴⁾ See Barro (1990), Barro and Sala-i-Martin (1995) and Mendoza et al. (1997).

⁽⁵⁾ See Soskice (1997), Nickell et al. (1997), Eichengreen and Iversen (1999), Nickell and Layard (1999), Nicoletti et al. (2001), Scarpetta and Tresselt (2002), Scarpetta et al. (2002) and IMF (2003).

⁽⁶⁾ See Sachs and Warner (1995), Alesina et al. (1997), Frankel and Romer (1999) and Ben-David and Kimhi (2000).

⁽⁷⁾ See Lucas (1988), Romer (1990), Grossman and Helpman (1991), Coe and Helpman (1995) and Aghion and Howitt (1998).

⁽⁸⁾ See Arrow (1962), Romer (1986), De Long and Summers (1991), Mankiw et al. (1992) and Levine (1997).

⁽⁹⁾ See European Commission (2002) and Jones (2002).

2. Growth accounting analysis at the aggregate economy level

The main objective of this section is to present the basic stylised facts concerning growth patterns in the EU and the USA over the last 40 years. In order to get a more complete understanding of the underlying factors driving the aggregate performance and to set the stage for the industry analysis in Section 3, the results of some basic growth accounting analyses are described ⁽¹⁾. At the outset, it is important to distinguish between the different measures of growth performance which are used. In addition to actual GDP, this section makes reference to two basic indicators of the relative performance of the different economies, namely GDP per capita (which simply adjusts for changes in population and represents the widest possible measure of a country's living standards) and GDP per hour worked (which adjusts the GDP per capita measure for changes in employment and hours worked and constitutes the primary indicator used in this study to compare the underlying productivity performance of the various countries).

GDP and GDP per capita trends, 1960–2002

In terms of GDP and GDP per capita, Table 1 and Graph 1⁽²⁾ provide an overview of the EU and US performances over the last four decades. At the outset, the EU enjoyed a period of strong convergence towards US standards of living, with an average annual growth rate of GDP per capita of 3¼ % in the 1960s and 1970s, which was ¾ of a percentage point higher than that of the USA. This performance formed part of a continuous post-World War II process of EU

income convergence, with GDP per capita levels rising from less than 50 % of the US level in the 1950s to over 70 % by the early 1980s. Over the subsequent period to 1995, the convergence process in effect stalled, with GDP per capita growth rates in the EU only managing to grow at rates similar to those of the USA, with both areas growing by about 2 to 2¼ %, on an annual average basis, in the 1980s and by 1 to 1¼ % in the first half of the 1990s. While a stalling of the process was an obvious concern to EU policy-makers over this period, especially given the relatively low level at which the convergence process had halted, a more worrying trend emerged over the second half of the 1990s, with US living standards clearly moving onto a higher growth path relative to that of the EU, with the result that the convergence process went into reverse. This trend break which, on the basis of standard statistical techniques, can be traced to the year 1995, witnessed the USA growing at nearly ½ a percentage point higher, in GDP per capita terms, compared with the EU over the period 1996–2000, with Graph 1 also indicating that this trend break has largely persisted over the period 2000–02.

Standard growth accounting analysis

Theories about what exactly determines economic growth at a high and sustainable rate have been discussed at length since the 1950s and are not exempt from controversy. However, in recent years, the neoclassical growth model, initially proposed by Solow (1956), has been increasingly used in growth accounting analyses which decompose real GDP growth into its main determinants. The objective is to try to measure the proportion of the overall growth rate of GDP which can be attributed to the accumulation of factors of production (i.e. to the growth of employment and fixed capital) and the part which can be attributed to independent technical progress or total factor productivity (i.e. the so-called

⁽¹⁾ See, in particular, Barro (1991), Sala-i-Martin (1997), Temple (1999), Durlauf and Quah (1999) and Levine and Renelt (1992).

⁽²⁾ Given the problem of deciphering underlying patterns in the data series, the present chapter makes recourse to trend series which have been calculated using a Hodrick Prescott (HP) statistical filter. These trend series are mainly used in the graphs, with the actual data series (normally period averages) being given in the tables.

Table 1

Economic and demographics trends, 1981–2000
(annual average % changes for the USA and EU-15)

	EU-15	USA
1961–80		
GDP	3.9	3.7
Population	0.6	1.2
GDP per capita	3.3	2.5
1981–90		
GDP	2.4	3.2
Population	0.3	1.0
GDP per capita	2.1	2.2
1991–95		
GDP	1.6	2.4
Population	0.4	1.3
GDP per capita	1.2	1.1
1996–2000		
GDP	2.7	4.1
Population	0.3	1.3
GDP per capita	2.4	2.8

Source: Commission services.

Solow growth residual). Indeed, such a framework captures the essential characteristics of the USA, EU and individual EU Member States' performances and is useful in pinpointing the broad sources of the recent changes in growth. In fact, as Graph 2 and Tables 2 and 3 show, the engines of growth changed significantly in the course of the 1990s, with marked differences not only between the EU and the USA but also within the EU itself.

Decomposition of EU and US growth performances into the contributions from labour and labour productivity

While the post-1995 experience is the time period of most intense interest to policy-makers, for a more complete understanding, Table 2 and Graph 2 show data from the mid-1960s in order to put the most recent years into their proper historical context. What is striking from the data presented is the fact that the long-established US and EU trends for both labour utilisation and labour productivity altered dramatically over the second half of the 1990s.

Labour utilisation

The second half of the 1990s witnessed a reversal of the US trend of a strong contribution to growth from labour which has been a feature of the US performance since the 1960s. From a situation as recently as the mid-1990s when

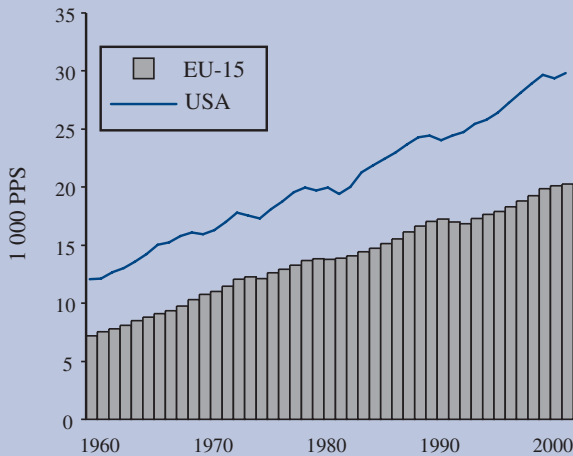
over 60 % of the US overall trend growth rate was emanating from labour, in 2002 only one third was attributable to this factor of production. This however must be seen in the context of the recent period of 'jobless growth' in the USA and with the fact that the US employment rate is at around 72 % compared with 64 % in the EU. For the EU, the turnaround in its performance has been significant, with its origins around the start of the 1990s but with the trend accelerating strongly over the second half of the decade. In terms of trend growth, the EU is now in a situation where labour is contributing almost as much as in the USA which compares with the situation in the mid-1990s when labour's contribution to growth in the EU was only one tenth of that of the USA ⁽¹⁾.

Labour productivity

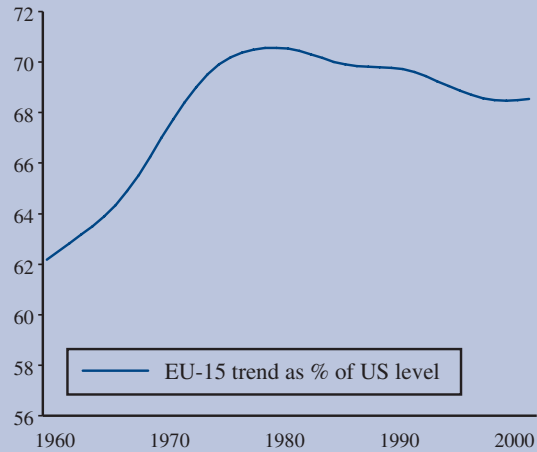
Unfortunately, for the EU, the strong recovery which took place in terms of the utilisation of the factor of production labour was accompanied by a correspondingly negative trend which emerged for labour productivity. In

⁽¹⁾ Factor input proportions in the EU have altered in a labour-friendly way over recent years. This pattern reflects the effects of the real wage moderation which took place over the period as well as the support provided by some structural labour market reform efforts. Employment growth has also been accompanied by a marked decline in capital/labour substitution, which is suggestive that EU employment creation has been occurring in the relatively less capital-intensive service industries (see Section 3).

Graph 1: GDP per capita: EU + USA, 1960–2002



Source: Commission services.



In addition, for the first time in decades, the EU has now a rate of productivity growth which is lower than that of the USA. Whilst there has been a reversal in the extent of the employment content of US growth, nevertheless the USA is still in the relatively unique position internationally of being able to combine both a high employment rate and a strong productivity performance. In terms of employment creation, the USA has since the early 1970s consistently outperformed the EU, with the present employment rate 8 percentage points higher in the USA. Indeed, until recently, the EU was able to maintain its relatively high standards of living compared with the USA due to its superior productivity performance. If this productivity route to prosperity is now in doubt, the EU is facing a difficult future since the present recovery in labour utilisation rates is, by definition, a temporary phenomenon. Furthermore, looking towards the medium term, it is only a matter of a few years before the negative effects of ageing populations will really start to impact on the potential growth rates of a large number of EU Member States.

Further breakdown of labour utilisation and labour productivity

An inverse relationship between the contributions to growth from labour utilisation and labour productivity was very evident for the EU, and to a lesser extent the USA, over the second half of the 1990s. This suggests that a further breakdown of both growth components is needed in order to decipher the underlying determinants.

Labour utilisation decomposition into hours worked and employment

The breakdown of the individual roles played by hours worked and employment in determining the overall labour input trend is shown in Graph 3.

- For the EU, the marked upward trend in the overall contribution from labour is driven by employment growth rather than by an increase in hours worked. While the fall in average hours worked is now substantially less than in previous decades, nevertheless the average time spent at work continues to fall in the EU.
- The situation in the USA is very different to that in the EU, with the average hours worked per worker starting to rise in the late 1980s and with this trend persisting until 2002. At the same time, the US employment creation performance is on a downward trend, driven by the jobless growth pattern of recent years, with the EU now in the historically unusual position of having an employment growth rate which compares favourably with that of the USA.

Labour productivity decomposition into capital deepening and total factor productivity (TFP)

- *Capital deepening:* The growth process in industrialised countries is characterised by a process of continuous capital deepening, which is crucial for productivity and, consequently, income growth. In terms of capital-

Table 2

Decomposition of US and EU-15 average GDP growth rates

	1966–70	1971–80	1981–90	1991–95	1996–2000	1996–2002
USA						
GDP	3.4	3.2	3.1	2.4	4.0	3.2
Labour	1.6	1.6	1.7	1.3	2.4	1.5
(Hours worked)	(– 0.8)	(– 0.5)	(– 0.1)	(0.2)	(0.4)	(0.2)
(Employment)	(2.4)	(2.1)	(1.8)	(1.1)	(2.0)	(1.3)
Labour productivity (hourly)	1.8	1.6	1.4	1.0	1.6	1.7
(TFP)	(1.2)	(1.1)	(1.1)	(0.8)	(1.2)	(1.1)
(Capital deepening)	(0.6)	(0.5)	(0.3)	(0.2)	(0.4)	(0.6)
EU-15						
GDP	5.0	3.2	2.4	1.7	2.6	2.2
Labour	– 0.7	– 0.6	0.1	– 0.7	1.1	0.9
(Hours worked)	(– 0.9)	(– 0.9)	(– 0.6)	(– 0.5)	(– 0.3)	(– 0.3)
(Employment)	(0.2)	(0.3)	(0.7)	(– 0.2)	(1.4)	(1.2)
Labour productivity (hourly)	5.6	3.8	2.2	2.4	1.6	1.4
(TFP)	(3.8)	(2.4)	(1.5)	(1.4)	(1.2)	(0.9)
(Capital deepening)	(1.8)	(1.4)	(0.7)	(1.0)	(0.4)	(0.5)

Source: All data are from AMECO/Eurostat, except for the hours worked series which are from the Groningen Growth and Development Centre (GGDC).

deepening trends for the EU, following a long period stretching over three decades when the growth rate of the capital/labour ratio in the EU was at significantly higher levels than in the USA, a growing gap emerged over the second half of the 1990s in favour of the USA (Graph 4) ⁽¹⁾. While it can be questioned whether the US trend is a sustainable one given the ‘bubble-like’ features evident over this period, what is more puzzling is the poor EU performance, with meagre/falling rates of investment despite rising profitability and declining costs of capital. The significant fall in EU capital deepening reflects not only a halt to unfavourable capital-for-labour substitution trends but also other, hopefully temporary, phenomena such as the negative effects emanating from the collapse in equity markets. While

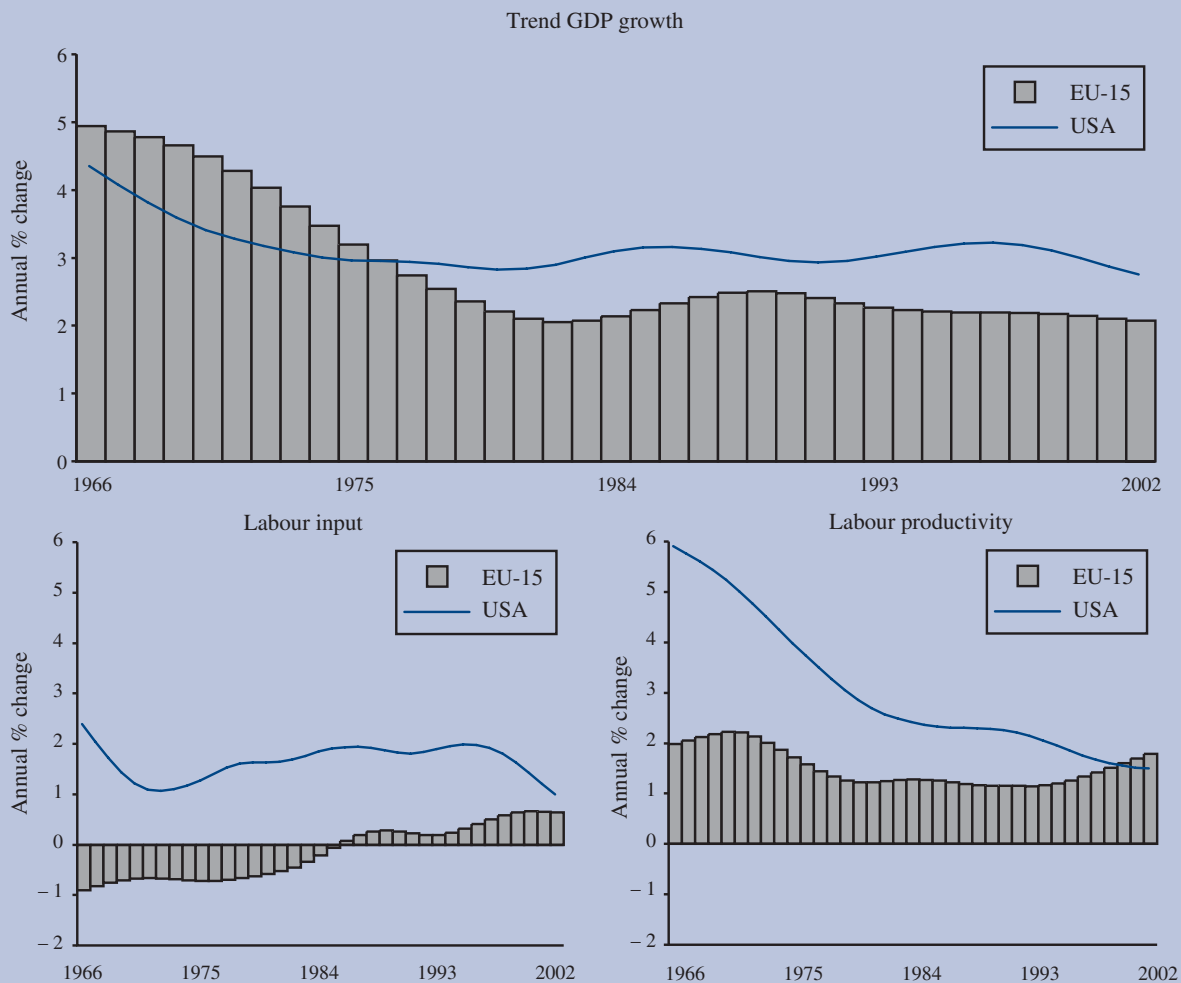
this latter, generally more sanguine, view of recent investment patterns will hopefully turn out to be the reality, other more worrying structural factors may also be at play, such as locational investment considerations ⁽²⁾ and adverse demographic trends ⁽³⁾.

⁽¹⁾ The smaller capital-deepening component in EU labour productivity growth over the period 1996–2002 partly reflects the reversal of the unfavourable capital-for-labour substitution of earlier periods. In addition, a slowdown in the rate of capital substitution at a macroeconomic level does not of course automatically imply that firms are switching to more labour-intensive forms of production. In fact, in the case of the EU, the slower increase in capital/labour substitution to a large extent reflects an increase in employment in those industries which are more employment intensive, such as certain service industries. These employment increases in the generally non-capital-intensive, more traditional, service industries can also explain a proportion of the apparent fall in EU labour productivity over the same period since these service industries have in the past been characterised by comparatively low productivity growth rates. However, while such employment patterns may be temporarily negative for productivity growth, they are nevertheless positive for GDP per capita.

⁽²⁾ Various factors influence the investment to GDP ratio, with current and expected profitability and capital costs being the major driving forces. These factors are themselves determined by demand conditions, the availability of (skilled) workers, tax levels, expected rates of innovation, etc. With improved international communications and reductions in transport costs, international locational choices for investors have increased and investment is undertaken in those regions which offer the most favourable (expected) ratio between capital productivity and capital cost. The US investment boom in the 1990s offers a good example of how investment opportunities in one country can attract substantial foreign direct investment. Falling ICT investment prices and high rates of innovation, as expressed by accelerating productivity and TFP growth rates, created an exceptionally positive investment climate in the USA in the 1990s which, in turn, led to a strong increase in US investment. These international investment trends were unfortunately not without repercussions for domestic EU investment rates (see Section 3).

⁽³⁾ Demographic trends in the EU are also likely to affect the investment rate negatively. With an increasing dependency ratio, it is likely that domestic investment as a share of GDP declines, or remains constant in a situation of falling interest rates. There are several reasons for this to occur. First, a declining population requires less net investment in order to keep the capital/labour ratio constant. Second, a declining domestic labour force reduces the return prospects from domestic investment as well as the risk associated with overinvestment. In a world with free capital mobility, this effect is likely to be even stronger since firms can avoid pressure on domestic returns by investing abroad. It is also interesting to note that the falling trend in the investment rate is likely to be accompanied by a secular decline in interest rates, with falling borrowing costs in this case reflecting the lower returns from capital investment (due to expected decreases in labour supply and domestic demand reductions) rather than acting as a stimulus to undertake additional investment.

Graph 2: Trend GDP growth and its labour and labour productivity components, 1966–2002



Sources: Commission services and GGDC.

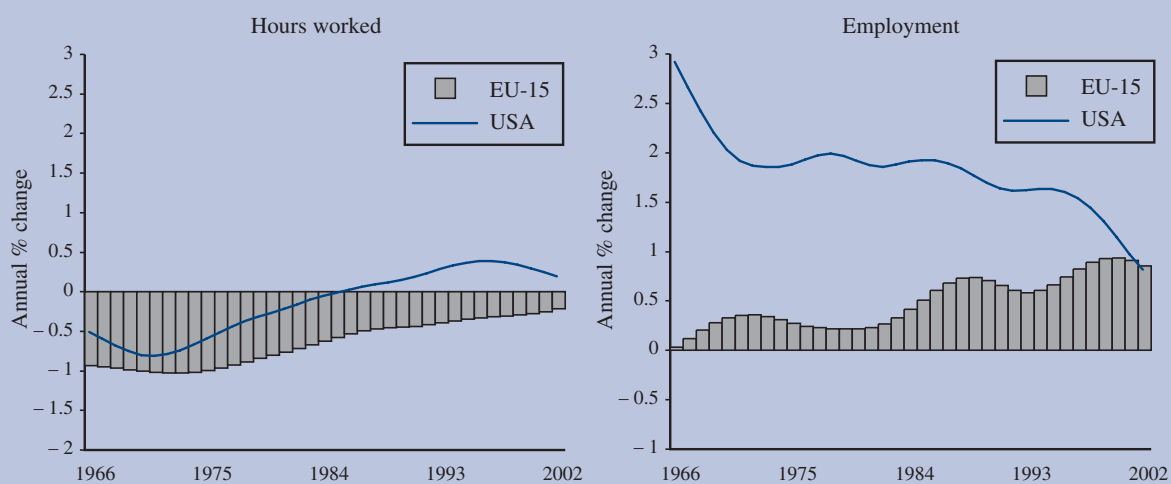
- *TFP*: Finally, and from an EU perspective potentially the most worrying aspect of the analysis so far, is the evolution of the TFP trend. For the first time in a generation, the USA has a trend rate of TFP growth which is higher than that of the EU (Graph 4). This significant turning point results from a combination of a sharp downturn in the EU trend and an acceleration for the USA. Given the crucial importance of the evolution of TFP to long-run growth perspectives, this recent reversal in TFP fortunes for the EU bodes ominously for its future prosperity.

Intra-EU differences in overall growth performances

Table 3 shows the large differences in overall GDP growth performances amongst the EU's 15 Member States.

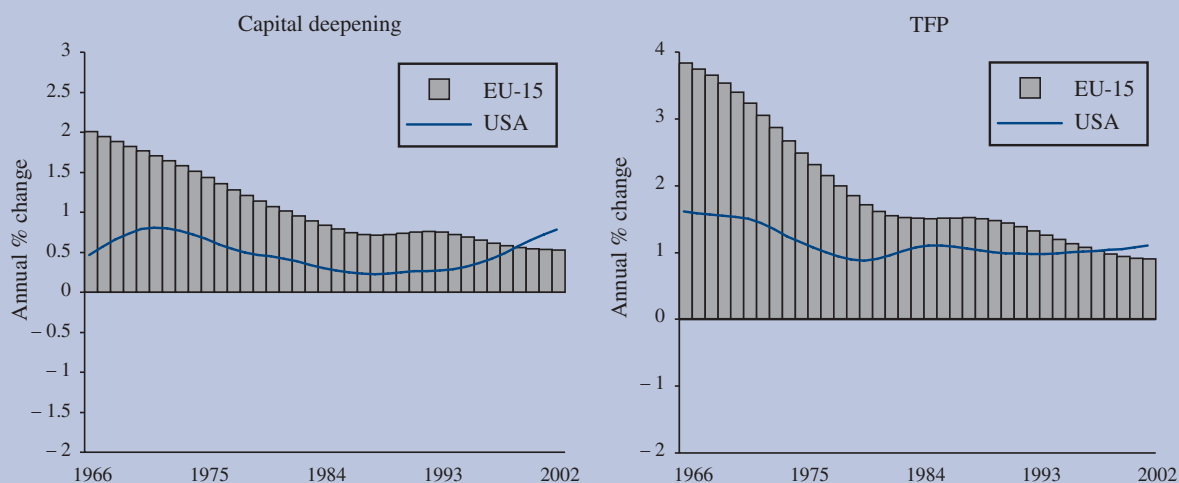
- There are three broad groups of countries which can be delineated in terms of their overall growth performance since the early 1990s. The first group, comprising two of the largest Member States, namely Germany and Italy, stand out for their persistently poor out-turns relative to the EU average throughout the 1990s. They collectively represented around 40 % of total EU-15

Graph 3: Breakdown of trend labour input into hours worked and employment



Sources: Commission services and GGDC.

Graph 4: Breakdown of trend labour productivity into capital deepening and TFP



Sources: Commission services and GGDC.

output, and thus their performance constituted a significant drag on the aggregate EU position. A second group, made up of Belgium, Denmark, France, Austria and the UK, grew close to the EU average. The final group of mainly small countries (Greece, Spain, Ireland, the Netherlands, Portugal, Finland and Sweden)

managed to grow at a significantly faster pace than the EU as a whole, especially over the second half of the 1990s. For example, for the period 1996–2002, this last group of EU countries grew on average by 3½%, compared with 3¼% for the USA and 2¼% for EU-15 as a whole.

Table 3

Decomposition of average GDP growth rates

		1981–90	1991–95	1996–2000	1996–2002
Belgium	GDP	2.0	1.6	2.7	2.1
	Labour input in hours	-0.5	-0.1	0.1	0.5
	Labour productivity per hour	2.5	1.7	2.6	1.6
Denmark	GDP	1.6	2.0	2.7	2.3
	Labour input in hours	-0.3	0.1	1.2	0.8
	Labour productivity per hour	1.8	1.9	1.4	1.6
Germany	GDP	2.3	1.6	1.8	1.4
	Labour input in hours	0.4	0.9	0.0	-0.2
	Labour productivity per hour	1.9	0.7	1.8	1.6
Greece	GDP	0.7	1.2	3.4	3.5
	Labour input in hours	0.6	0.7	0.6	0.4
	Labour productivity per hour	0.1	0.6	2.8	3.1
Spain	GDP	2.9	1.5	3.8	3.3
	Labour input in hours	0.1	-0.4	2.9	2.6
	Labour productivity per hour	2.8	1.9	0.8	0.8
France	GDP	2.4	1.1	2.6	2.4
	Labour input in hours	-0.6	-0.4	1.2	0.9
	Labour productivity per hour	3.0	1.5	1.4	1.5
Ireland	GDP	3.5	4.6	9.3	8.3
	Labour input in hours	-0.7	1.0	3.9	3.2
	Labour productivity per hour	4.2	3.6	5.4	5.1
Italy	GDP	2.2	1.3	1.9	1.7
	Labour input in hours	0.3	-1.0	0.9	1.0
	Labour productivity per hour	2.0	2.3	1.0	0.7
Netherlands	GDP	2.2	2.1	3.6	2.8
	Labour input in hours	0.0	0.6	2.4	1.8
	Labour productivity per hour	2.2	1.5	1.2	1.0
Austria	GDP	2.4	2.0	2.7	2.2
	Labour input in hours	-0.2	-1.3	0.1	0.1
	Labour productivity per hour	2.6	3.4	2.7	2.1
Portugal	GDP	3.2	1.7	3.8	3.0
	Labour input in hours	-0.1	-1.2	0.7	0.7
	Labour productivity per hour	3.3	2.9	3.1	2.3
Finland	GDP	3.1	-0.6	4.7	3.7
	Labour input in hours	0.0	-3.6	1.7	1.1
	Labour productivity per hour	3.0	3.0	3.1	2.6
Sweden	GDP	2.2	1.3	3.2	2.7
	Labour input in hours	1.0	-1.3	0.9	0.6
	Labour productivity per hour	1.1	2.5	2.3	2.1
United Kingdom	GDP	2.6	1.7	2.9	2.6
	Labour input in hours	0.4	-1.4	1.2	1.0
	Labour productivity per hour	2.3	3.1	1.7	1.6

Sources: AMECO, GGDC, OECD, and Economic and Financial Affairs DG calculations.

- For Greece, Spain, Ireland and Portugal, the trends for the 1990s are in part influenced by an element of catching-up. Each of these four countries had standards of living in the early 1990s which were significantly below that of the EU as a whole, with Greece and Portugal at around 70 % of the EU average and with Spain and Ireland at close to 80 %.
- While a large number of the EU countries shared in the general EU upturn in the contribution to growth from labour, there were notably poor performances from countries such as Belgium, Germany, Greece and Austria. With regard to the contribution from labour productivity, the differences across countries were quite marked. From a contribution to average

growth of only 0.8 and 1.0 % in Italy and Spain respectively, at the other end of the spectrum, labour productivity added nearly 5½ percentage points to the aggregate Irish performance. Despite the wide variation in performances, a large number of the smaller EU countries, namely Belgium, Greece, Ireland, Austria, Portugal, Finland and Sweden had labour productivity performances which were higher than both the EU and US averages.

- Finally, if one excludes the catching-up countries which were coming from relatively low starting positions in the early 1990s, the most striking labour productivity performances came from Belgium, Austria, Finland and Sweden. However, amongst these, it is important to distinguish those countries which were unable to combine high rates of both labour utilisation and labour productivity (namely Belgium and Austria) and those which could (namely Finland and to a lesser extent Sweden). In addition, with regard to Greece, Ireland and Portugal, whilst Ireland performed spectacularly well in relation to both employment and productivity growth rates, Greece and Portugal were only average in terms of their labour utilisation rates.

Main points to be retained from Section 2

EU-15 as a whole and the USA experienced significant breaks in the 1990s in terms of employment (measured in hours worked) and productivity. The EU experienced sharp increases in the contribution of labour to growth and equally sharp reductions in the contribution from productivity, with the latter reflecting the dual impact of lower capital deepening and TFP growth. The opposite pattern emerged in the USA.

- In terms of labour input (i.e. employment x hours worked), following decades of negative contributions to growth, the 1990s, and especially the second half, saw the EU display a strong recovery in its contribution from labour. At the same time, the opposite

trend was emerging in the USA, although adequate account needs to be taken of the effect on these employment patterns of the downturn in US growth rates since 2000. Bearing in mind this latter, the EU now has a labour contribution to growth which is very similar to that of the USA.

- In terms of productivity, again as with labour utilisation rates, the reversal of past trends in the 1990s in both the EU and the USA is remarkable. For example, for the first time in the post-World War II period, the EU is now on a trend productivity growth path which is lower than that of the USA. Since the mid-1990s, the EU has been incapable of arresting the long-run decline in its productivity performance, whereas the USA has enjoyed a notable recovery in its secular trend, with productivity per hour growth rates in the USA starting to recover to the rates of growth last experienced in the 1960s. Thus, the EU is facing a future of increasing divergence, as opposed to convergence, with respect to US living standards.
- At the individual EU Member State level, a much more nuanced picture emerges. In terms of labour productivity, seven of the EU's smaller Member States had performances which were not only well above the EU average but were also higher than that of the USA. However, only three of the seven, namely Ireland, Finland and Sweden, were capable of combining both strong productivity growth and high labour utilisation rates.

Given the large divergences at both the EU/USA and the intra-EU levels, it is important to dig a little deeper to try to ascertain whether these divergences in labour productivity performances can be explained by firstly looking at differences in the industrial structure of economies (Section 3) or, secondly, at a deeper level, by an analysis of the underlying determinants of productivity growth (Section 4).

3. Industry-level analysis

The purpose of the present section is to look beneath the economy-wide trends to assess the broad structural changes which have occurred at the industry level in the EU and US economies over the period since 1980 ⁽¹⁾. This analysis is needed to pinpoint the specific industries which are driving the EU–US productivity differentials. In particular, the following key issues are addressed.

- Firstly, do divergences in labour productivity growth trends between the EU and the USA emanate from either structural employment shifts in the respective economies from low- to high-productivity industries or do they simply reflect higher productivity growth rates in specific industries (Section 3.1)?
- Secondly, are differences emanating from specific industries in the manufacturing or service sectors or are the EU–US productivity differentials more pervasive? In this regard, a key related question is whether the US economy is benefiting to a greater extent than the EU from the productivity gains associated with innovation in general and specifically from the adoption of ICT (Sections 3.2 and 3.3).

Industry data sets

To address these issues, this section draws on two separate, internationally comparable, Enterprise DG/GGDC ⁽²⁾ industry data sets which cover the period 1979–2001 and provide different levels of detail regarding the industrial structures of the EU and US economies.

- The industry labour productivity database, which is used for the shift–share analysis in Section 3.1 and for the wider analysis in Section 3.2, includes a detailed breakdown of the total output of the USA and all the EU’s Member States at the greatest level

of disaggregation which is presently possible, i.e. a 56-industry decomposition. This data set, which is an expanded version of the OECD’s structural analysis (STAN) database, contains a large number of variables for the 56 industries, including numbers employed and hours worked (which can both be combined to give overall labour utilisation rates) and, most importantly for the present study, labour productivity per hour figures.

- The industry growth accounting database, which is described in Section 3.3, permits a growth accounting analysis at the industry level similar to that given in Section 2 for the total economy. Due to space restrictions, Section 3.3 avoids any decomposition of labour utilisation rates at the industry level into employment and hours worked and instead focuses solely on a decomposition of the hourly labour productivity trends described in Section 3.2 into the contributions from capital deepening and TFP. In addition, since the capital stock series at the industry level is further disaggregated into six different asset types, three of which are ICT-related assets, it is possible to calculate the contribution of the ICT and non-ICT parts of the EU and US economies to overall labour productivity growth. Due to data constraints, however, this second database is only available for the USA and 4 of the 15 EU Member States (i.e. France, Germany, the Netherlands and the UK). It also only disaggregates total output into 26 industries compared with the 56 industries in the industry labour productivity database.

Both these data sets have a number of important advantages compared with that used for the economy-wide analysis in Section 2. Firstly, using shift–share analysis and other techniques, these data sets can be used to give a highly disaggregated picture of industry trends. Secondly, they overcome one of the main criticisms levelled at carrying out international comparisons of productivity performances on the basis of offi-

⁽¹⁾ Annex 2 gives a short technical description of the basic methodologies applied in this section as well as providing information on other issues such as the handling of the data series used for the analysis.

⁽²⁾ GGDC (Groningen Growth and Development Centre).

cial national accounts data, namely that, outside the USA and Canada, most other statistical offices underestimate the role played by ICT in recent output and productivity growth trends. Two issues, in particular, which may lead to an underestimation of the role played by ICT are, firstly, the fact that software is often excluded from investment expenditure in the national accounts (i.e. it is classified as a business expense in most EU countries and therefore excluded from final output) and, secondly, the well-documented problem of hedonic deflators. As stressed in the introduction, both these concerns have been addressed in the construction of the GGDC data sets, with US ICT industry deflators being applied to the equivalent industries in all countries and with ICT investment spending being defined in all countries as including software spending (software is, in fact, one of three ICT-related assets, the others being computing and communications equipment) ⁽¹⁾.

3.1. Shift–share analysis

Aggregate productivity is calculated as a weighted average of underlying industry productivity, with the weights being determined by each industry's share in overall employment ⁽²⁾. Consequently, the change in an economy's productivity growth rate over a specific period of time is determined not only by the productivity growth rate of the individual industries but also by changes in the industry composition of employment. Aggregate changes in productivity are due to either the former, within-industry, effect or they reflect the latter phenomenon of structural shifts in resources between contracting/expanding industries. Shift–share analysis (see Annex 2 for a technical overview of this approach) is the most commonly used algebraic method for carrying out such a decomposition, with aggregate productivity growth capable of being broken down into the sum of the following three effects:

- *Intra-industry productivity growth effect: This is equal to the sum of productivity growth in the individ-*

ual industries in the absence of structural change (i.e. on the assumption that there are no changes in the employment shares of specific industries). This 'growth' effect is the natural starting point for interpreting the shift–share decomposition since it provides the hourly labour productivity growth rate in a situation where the structure of the economy remains fixed. For example, if the intra-industry productivity growth effect is smaller than aggregate productivity growth, then the expectation would be that industries with higher productivity growth have increased their share in total employment.

- *'Structural' change effect: This is equal to the contribution to overall productivity growth of a shift of employment resources from low- to high-productivity industries (i.e. the shift effect). When the structural change effect is both positive and increasing over time, this is indicative of a healthy process of restructuring occurring in an economy. Boosting overall growth in this manner is also suggestive that a favourable upskilling process is occurring in terms of employment.*
- *Interaction effect: This is a residual term which captures the dynamic component of structural change ⁽³⁾. It attempts to measure correlations in an economy between productivity and employment changes, with positive/negative efficiency gains interacting with the expansion/contraction ⁽⁴⁾ of specific industries. The interaction term is positive when the first two effects (i.e. the intra-industry plus the 'structural' effects) are complementary (i.e. productivity growth is positive in expanding industries and negative in contracting industries). The interaction effect is, in turn, negative when the first two effects are substitutes (i.e. productivity growth is positive in contracting industries — a good example being the agriculture sector — and negative in expanding industries).*

⁽¹⁾ This ICT investment breakdown applies only to the industry growth accounting database.

⁽²⁾ The value added of all the different industries is aggregated using Törnqvist indices (based on average nominal value added shares) and, in combination with the employment levels (adjusted for hours worked), the hourly labour productivity estimates are calculated accordingly. For calculating the contribution of an individual industry to aggregate labour productivity growth, the share of the specific industry in total value added (in nominal terms) is used as weights (see Annex 2 for additional details).

⁽³⁾ The sum of the structural change and interaction effects is sometimes used as a measure of the overall reallocation process in an economy. Nevertheless, this study takes the view that some additional insights can be derived from examining the shift and interaction effects separately. For example, some countries might be able to increase their employment share in fast-growing productivity industries whilst in other countries fast productivity growth could be the result of low-productivity firms exiting the market.

⁽⁴⁾ Expanding or contracting in terms of employment or, in the case of the present analysis, employment as measured in terms of hours worked.

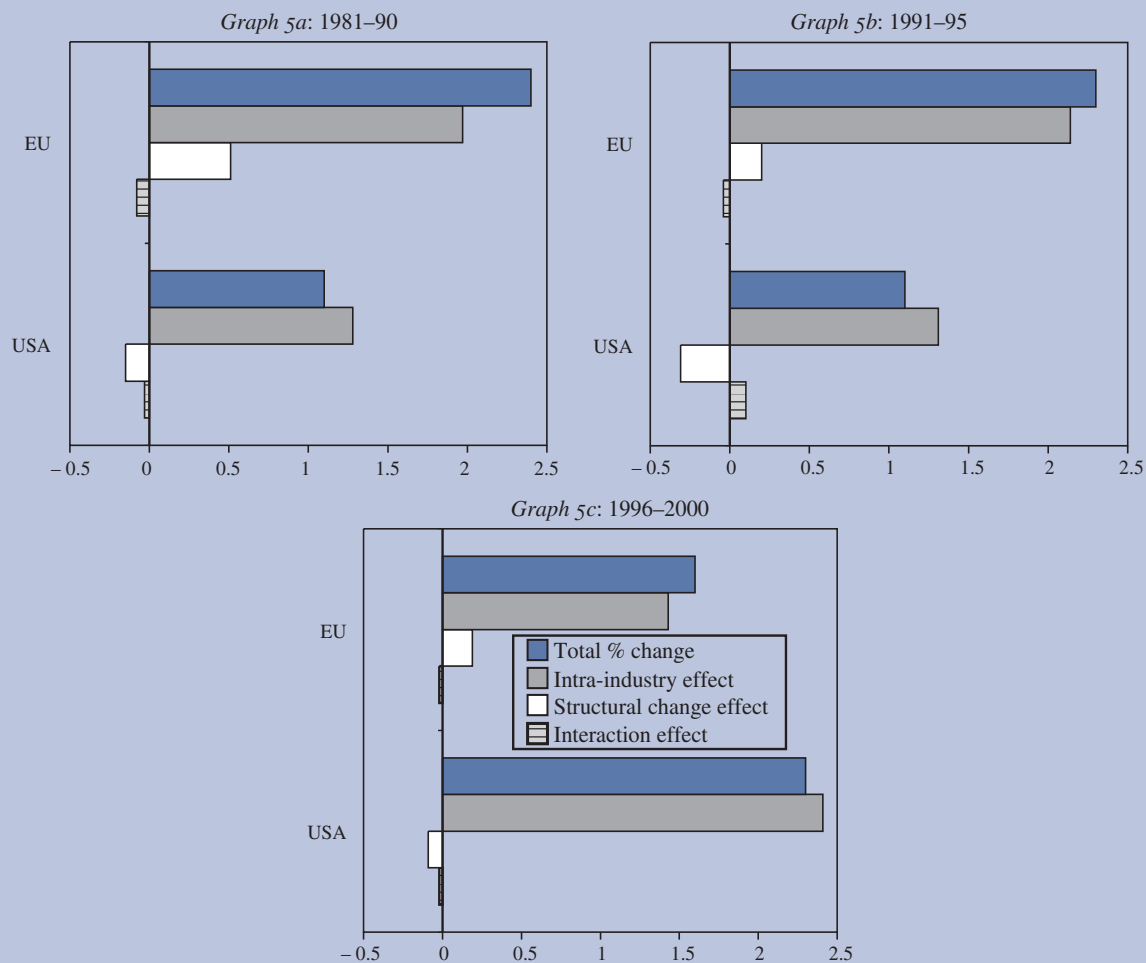
Based on this decomposition, one can ask why the EU and the US economies differ in terms of their labour productivity growth rates, with a combination of three explanations being possible: firstly, differences in the average productivity growth rates of individual industries; secondly, differences in the reallocation of employment resources between industries; and, finally, the initial starting conditions in both countries may not be uniform (i.e. a level effect which encapsulates the potential for catching up).

The main points to be retained from the analysis are as follows (see Graphs 5a to 5c).

- Firstly, for all three periods, the intra-industry growth effect dominates the outcome, accounting for between 80 and 95 % of aggregate productivity growth in the case of the EU and from 100 to 120 % of the change in the USA ⁽¹⁾

⁽¹⁾ Results from a similar analysis by the OECD (OECD, 2003) for the non-farm business sector (i.e. the manufacturing plus private service sectors) confirms the importance of the intra-industry effect. For the service sector, while the net shift effect made an important contribution for a period of time in certain countries, due to the increased size of business services, this effect faded out in the 1980s. For the manufacturing sector, employment shifts across industries did not play a significant role in productivity trends (see also van Ark (1996) and 'Employment in Europe' (2003).

Graph 5: Shift–share analysis for the EU and USA: decomposition of hourly labour productivity growth rates, 1981–2000



Sources: Commission services and GGDC.

- Secondly, the shift effect has been positive over the last two decades for the EU compared with a consistent negative pattern for the USA. Thus, the EU is still gaining from a shift of employment from low-productivity industries such as agriculture to higher-productivity jobs in manufacturing or services. For the USA, however, this process would appear to be completed with negative contributions from the shift term suggesting that workers are on average moving into lower-productivity service industries. In overall terms, over the period 1980–2000, the EU was able to use changes in the industry composition of employment as a mechanism for closing the productivity gap with the USA. However, the contribution from this ‘catching-up’ mechanism has been declining over time, more than halving, in fact, between the 1980s and the 1990s, falling from a contribution of $\frac{1}{2}$ a percentage point over the 1980–90 period to less than a $\frac{1}{4}$ of a percentage point in the 1990s. In addition, the positive structural change effect was also offset by a small negative ‘interaction’ effect on productivity. The EU is therefore becoming increasingly like the services-dominated US economy where employment shifts from manufacturing to service industries are often associated with declines in productivity growth. In these circumstances, the only option for the EU, as has been the case for the USA over the last few decades, is to generate productivity gains at the intra-industry level.
- Finally, the shift–share analysis for the USA suggests a surge of ‘pure’ productivity gains from within the industries themselves, more than compensating for the negative effect from the reallocation of employment resources between industries. The extent of the surge is suggestive of the emergence of a new technological regime which is permeating a wide range of US industries and positively influencing their productivity performance. This new regime could, in part at least, be driven by the efficiencies being reaped from the use of ICT products and services and the wider changes associated with the diffusion and creation of ICT-specific knowledge. Sections 3.2 and 3.3 focus on isolating the wide-ranging contribution of ICT to aggregate productivity growth in terms of both the production and use of ICT.

3.2. Analysis of labour productivity trends at the industry level

The shift–share analysis has established that most of the growth in labour productivity over the second half

of the 1990s occurred within the industries themselves rather than being due to a reallocation of resources between industries. Consequently, EU–US productivity growth differentials are overwhelmingly due to differences in the size of the productivity gains in individual EU and US industries. Using the industry labour productivity database, this section firstly isolates the broad groups of industries (i.e. manufacturing and private services) which are driving the productivity differentials (Subsection 3.2.1) and, secondly assesses the specific role of ICT-producing and intensive ICT-using industries in determining overall productivity trends (Subsection 3.2.2).

3.2.1. Overview of labour productivity trends

Table 4 gives a quick overview of the industrial structure of the EU and US economies on the basis of an aggregation of the 56 industries into the standard four categories of primary production, manufacturing, private services and government services. In terms of productivity levels, Table 4 underlines the extent of the deterioration experienced by the EU over the second half of the 1990s, with the USA pulling ahead in virtually all areas of the economy. This compares with a situation in the early 1990s when the EU was making steady progress in all four categories in converging towards US productivity levels.

In terms of labour productivity growth rates, an aggregation of the 56 industries displays trends similar to those established in Section 2 on the basis of the economy-wide data, namely a sharp deterioration in EU labour productivity growth over the two halves of the 1990s and an acceleration for the USA. Consequently, while the use of hedonic deflators and equivalent definitions of what constitutes ICT investment expenditure did help, to a small extent, in reducing the pace of decline in EU labour productivity growth rates over the 1990s, these adjustments were insufficient to change the overall pattern. Graph 6 confirms the US dominance in productivity terms over the period 1996–2000, with the USA doing better in terms of manufacturing and private service industries and with the EU only ahead in the ‘rest of the economy’ category (which includes primary industries and public services). When one looks in more detail at the trends for the manufacturing and private service industries (see Graph 7), one sees the extent of the transformation in relative performances, with the USA powering ahead over the 1990s as a whole in both areas, com-

Table 4

Overview of the sectoral composition + productivity levels of the EU and US economies, 1981–2000

	Share of total output (nominal)		Share of total employment (adjusted for hours worked)		EU productivity level (USA = 100)
	EU	USA	EU	USA	EU
Primary industries					
1981–90	0.05	0.05	0.10	0.04	47.8 ⁽¹⁾
1991–95	0.04	0.03	0.07	0.04	63.8 ⁽²⁾
1996–2000	0.03	0.03	0.06	0.03	58.1 ⁽³⁾
Manufacturing					
1981–90	0.24	0.20	0.24	0.19	78.9
1991–95	0.21	0.18	0.21	0.17	81.4
1996–2000	0.20	0.17	0.19	0.15	73.5
Private services					
1981–90	0.50	0.52	0.42	0.49	82.9
1991–95	0.53	0.54	0.45	0.50	98.4
1996–2000	0.55	0.57	0.47	0.53	91.9
Public services					
1981–90	0.21	0.23	0.24	0.28	72.4
1991–95	0.22	0.25	0.27	0.29	83.8
1996–2000	0.22	0.23	0.28	0.29	89.3
Total economy					
1996–2000	1	1	1	1	86.4

⁽¹⁾1980. ⁽²⁾1995. ⁽³⁾2000.

Sources: European Commission, Enterprise DG/GGDC, and Economic and Financial Affairs DG calculations.

pared with persistent downward trends for the EU in both industry categories ⁽¹⁾.

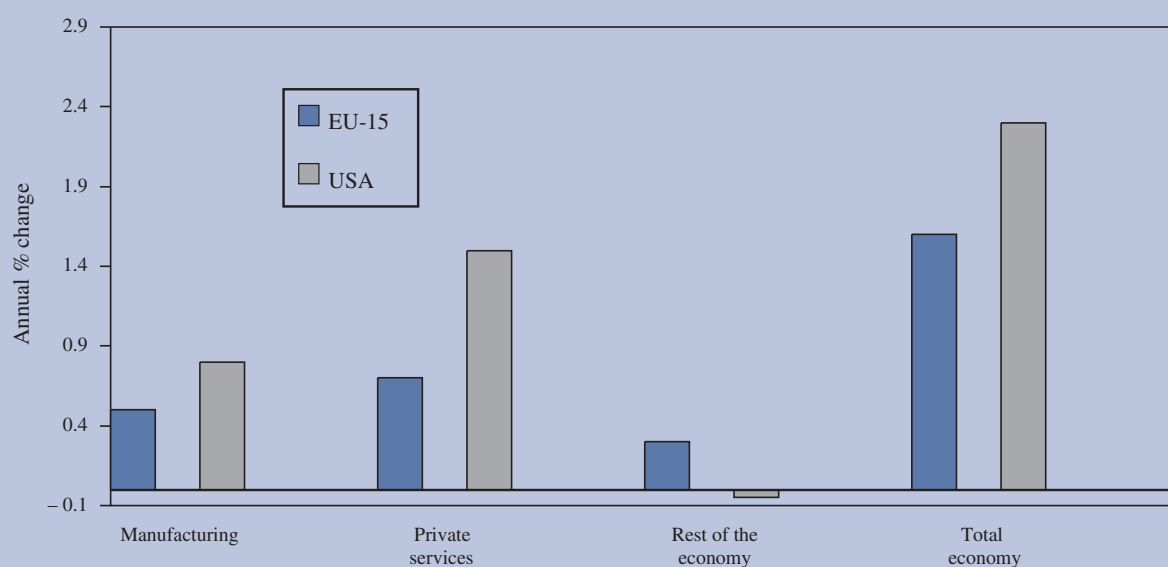
⁽¹⁾ Graph 7 also shows that average trend productivity growth in the manufacturing sector has always been higher than that of services in both the EU and the USA. While this is still the case, the recent surge in productivity growth in US service industries is suggestive that the latter industries could challenge manufacturing in the not too distant future. For a further discussion on these issues, see Bernard and Jones (1996a and b) and Triplett and Bosworth (2002). If this were to occur it would have enormous implications for the overall growth performance of the US economy since the private service sector is over three times larger than that of manufacturing in terms of both output and employment shares. In addition, at least until the mid-1990s, the manufacturing sector accounted for between 60 to 75 % of total US productivity growth despite representing only 15 to 20 % of total employment. Finally, Graph 7 shows that the EU experienced a marked downward trend in productivity growth in both its manufacturing and service industries over both decades. The USA, in contrast, is characterised, in manufacturing, by a declining trend only until the end of the 1980s followed by a strong recovery in the 1990s. For services, the USA has been on a steady upward trend since the early 1980s and has now a marked advantage over the EU in such industries, with US private service productivity growing from a pace of less than 1 percentage point, on an annual average basis, in the early 1980s to well over 2 % in the second half of the 1990s.

3.2.2. Specific role of ICT-producing and ICT-using industries in determining overall labour productivity trends

While Subsection 3.2.1 has displayed the broad overall trends for labour productivity at the industry level, it is necessary to dig a little deeper to see the important role which ICTs are playing in the substantial transformation of industrial structures in the EU and US economies. Building on the four-way breakdown of industries given earlier in Table 4, and in order to isolate the increasing role being played by ICT in the respective economies, these four categories are further subdivided in Table 5 on the basis of the ICT content of the different industries. The complete breakdown of the ICT intensity of all 56 industries into ICT-producing, intensive ICT-using and less intensive ICT-using industries is provided in Table 6 ⁽²⁾. This three-way ICT

⁽²⁾ This three-way categorisation of the 56 industries is based on the University of Groningen's Growth and Development Centre's ICT intensity breakdown for these industries — see also OECD (2000a) and Sutton (2000).

Graph 6: Contribution to total economy labour productivity growth from manufacturing, private services and the rest of the economy



Sources: Commission services and GGDC.

Table 5

Overview of ICT-related industries, 1996–2000

	Share of total output (nominal)		Share of total employment (adjusted for hours worked)		EU productivity level (USA = 100) ⁽¹⁾
	EU	USA	EU	USA	EU
1. Primary industries (less ICT-intensive)	0.03	0.03	0.06	0.03	58.1
2. Total manufacturing	0.20	0.17	0.19	0.15	73.5
(ICT-producing)	(0.01)	(0.02)	(0.01)	(0.02)	(46.3)
(Intensive ICT-using)	(0.06)	(0.05)	(0.07)	(0.05)	(95.8)
(Less-intensive ICT-using)	(0.12)	(0.10)	(0.12)	(0.08)	(82.7)
3. Total private services	0.55	0.57	0.47	0.53	91.9
(ICT-producing)	(0.04)	(0.04)	(0.03)	(0.03)	(116.1)
(Intensive ICT-using)	(0.21)	(0.26)	(0.20)	(0.25)	(79.7)
(Less-intensive ICT-using)	(0.30)	(0.27)	(0.24)	(0.25)	(101.5)
4. Public services (less-intensive ICT-using)	0.22	0.23	0.28	0.29	89.3
Total economy	1	1	1	1	86.4

⁽¹⁾ 2000.

Sources: European Commission, Enterprise DG/GGDC, and Economic and Financial Affairs DG calculations.

Table 6

ICT breakdown of all industries (ISIC Rev. 3) ⁽¹⁾

2. Non-farm business sector						
1. Primary production (less-intensive ICT-using industries)	2A : Manufacturing			2B : Services		3. Government services (less-intensive ICT-using industries)
	ICT-producing manufacturing	Intensive ICT-using manufacturing	Rest of manufacturing (less-intensive ICT-using industries)	ICT-producing services	Intensive ICT-using services	
Agriculture (01)	Office and computing equipment (30)	Clothing (18)	Food, drink and tobacco (15–16)	Post and telecommunications (64)	Wholesale trade (51)	Public Administration and defence (75)
Forestry (02)	Insulated wire and cables (313)	Printing and publishing (22)	Textiles (17)	Computer and related services (72)	Retail trade (52)	Hotels and restaurants (55)
Fishing (05)	Semiconductors and other electronic components (321)	Machinery and equipment (29)	Leather and footwear (19)	Financial intermediation (65)	Inland transport (60)	Health and social work (85)
Mining (10–14)	Communication and broadcasting equipment (322)	Other electrical machinery (31 excluding 313)	Wood products (20)	Insurance and pension funding (66)	Water transport (61)	Other community, social and personal services (90–93)
	Radio and TV receivers (323)	Other instruments (33 excluding 331)	Pulp and paper products (21)	Activities auxiliary to financial intermediation (67)	Air transport (62)	Private households with employed persons (95)
	Scientific instruments (331)	Building and repairing of ships and boats (351)	Oil refining and nuclear fuel (23)	Renting of machinery and equipment (71)	Auxiliary transport activities (63)	
	Aircraft and spacecraft (353)	Chemicals (24)	Rubber and plastics (25)	Research and development (73)	Real estate activities (70)	
	Railroad and transport equipment (352 + 359)	Rubber and plastics (25)	Non-metallic mineral products (26)	Professional business services (741–743)	Other business services (749)	
	Miscellaneous manufacturing (36–37)	Miscellaneous manufacturing (36–37)	Basic metals (27)	Electricity, gas and water supply (40–41)	Construction (45)	
		Fabricated metal products (28)	Motor vehicles (34)			

⁽¹⁾ ISIC Rev. 3 codes are in parentheses.

Source: GGDC.

breakdown can also be used as a rough proxy for high-, medium- and low-productivity industries in the EU and USA as a whole.

Are the ICT-producing manufacturing or the intensive ICT-using service industries driving the EU–US productivity differentials?

Table 7 gives an overview of the total economy, broken down into the same three categories which were used for Graph 6, namely manufacturing, private services (both of which when combined form the non-farm business sector) and the rest of the economy. These three groups of industries are in turn broken down into ICT-producing, intensive ICT-using and less-intensive ICT-using industries. This latter three-way breakdown is not, however, applied to the rest of the economy grouping since the nine industries which are included in this category (i.e. primary industries and government services) are all classified as less intensive ICT-using industries.

In order to assess the relative importance of the different groups of industries to overall productivity growth, Table 7 gives firstly the productivity growth rates of each group, and secondly (using their respective nominal shares in total economy output as weights) their contri-

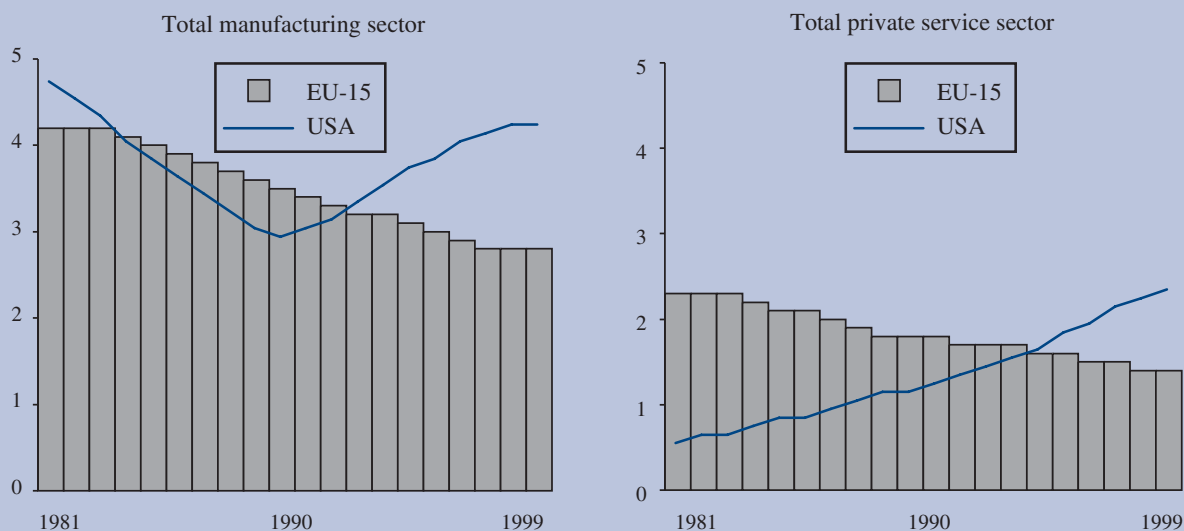
bution to economy-wide labour productivity growth. As can be seen from the table (which confirms the story given in Graphs 6 and 7), the non-farm business sector is where the divergences in EU–US productivity growth rates are emanating from. In fact, in terms of overall contributions to productivity growth, the non-farm business sector can explain virtually all the change in aggregate productivity trends over the two halves of the 1990s for both the EU and the USA ⁽¹⁾.

The key results from Table 7 are as follows.

- Firstly, at an overall level, despite having productivity growth rates which were often three to four times higher than those of services, the manufacturing sector, due to its smaller share in overall GDP, had a contribution to aggregate productivity growth in both the EU and the USA which was often only about the same as that of services. In addition, over the most recent 1996–2000 period, it is services which were by far the biggest contributor to total labour productivity growth, especially in the USA.

⁽¹⁾ This, in fact, is what one would have expected since the non-farm business sector accounts for roughly 75 % of total output in the EU and the USA.

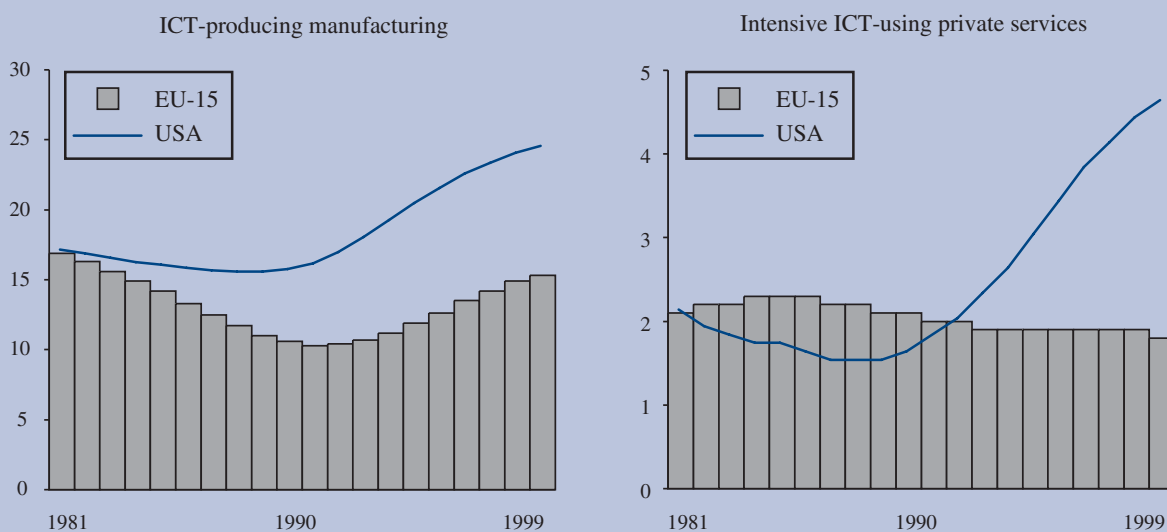
Graph 7: Trend labour productivity growth rates for the manufacturing and private service sectors: the EU versus the USA, 1981–2000 (annual % change)



Sources: Commission services and GGDC.

- Secondly, looking at the ICT-based breakdown for manufacturing, the highest productivity growth rates were achieved in the ICT-producing industries, reaching over 25 % in the USA and 17 % in the EU, on an annual average basis, over the second half of the 1990s (Graph 8). While these industries only account for between 1 and 2 % of EU and US GDP respectively, by virtue of their exceptionally high growth rates, they contributed 13 % (EU) and 30 % (USA) to overall productivity growth over the 1996–2000 period. For the intensive ICT-using and non-ICT-using (i.e. less-intensive ICT-using) manufacturing industries, which combined represent by far the largest share of the overall manufacturing sector, the EU has consistently outperformed the USA over the last two decades.
- In addition, despite having productivity growth rates which were much lower than those of the ICT-producing industries, nevertheless given their higher share in EU GDP, these industries have made, until recently, a higher contribution to overall productivity growth in the EU. For the USA, the ICT-producing industries consistently outperformed the rest of US manufacturing over the period as a whole.
- Thirdly, in terms of private service industries, which account for 55 and 57 % of overall EU and US output respectively, the EU consistently outperformed the USA in terms of ICT-producing services (i.e. mainly telecommunications), and, indeed, until the mid-1990s did so in all areas of services. However, over the second half of the 1990s, the USA pulled significantly ahead in ICT-using private service industries (see Graph 8). In terms of contributions to total productivity growth, since ICT-using service industries are substantially larger in terms of GDP than the ICT-producing service sector, they are crucial in determining the growth rate for services as a whole, especially in the USA. As Table 7 shows, ICT-using services contributed well over half of all US productivity growth in the second half of the 1990s. For the non-ICT (i.e. the less-intensive ICT-using) service industries, which collectively form the largest share of total services, the EU had been consistently outperforming the USA until the most recent period.

Graph 8: Trend labour productivity per hour in ICT-producing manufacturing and intensive ICT-using private services (annual % change)



NB: Scales are different for the ICT-producing manufacturing and ICT-using services graphs.
 Sources: Commission services and GGDC.

Table 7

Breakdown of total economy into three categories — two ICT categories (ICT-producing + intensive ICT-using) and one non-ICT (other industries)

	Average % change in labour productivity per hour			Contribution to total change in labour productivity per hour (%) ⁽¹⁾		
	1981–90	1991–95	1996–2000	1981–90	1991–95	1996–2000
Total economy (1 + 2 + 3)						
EU	2.4	2.3	1.6	2.4	2.3	1.6
USA	1.1	1.1	2.3	1.1	1.1	2.3
1 + 2. Total non-farm business sector (2)						
EU	2.7	2.5	1.7	2.0	1.8	1.3
USA	1.6	1.7	3.1	1.1	1.2	2.3
1. Manufacturing sector						
EU	3.9	3.7	2.6	1.0	0.9	0.5
USA	3.6	3.6	4.6	0.8	0.7	0.8
1(a). ICT-producing manufacturing industries						
EU	13.9	9.6	17.1	0.2	0.2	0.2
USA	16.2	16.4	26.0	0.4	0.4	0.7
1(b). Intensive ICT-using manufacturing industries						
EU	2.8	2.6	2.0	0.2	0.2	0.1
USA	0.8	- 0.6	1.4	0.1	0.0	0.1
1(c). Rest of manufacturing (less-intensive ICT-using)						
EU	3.2	3.6	1.6	0.5	0.5	0.2
USA	2.4	2.6	0.6	0.3	0.3	0.1
2. Private service sector						
EU	2.0	1.9	1.4	1.0	1.0	0.7
USA	0.8	1.0	2.7	0.4	0.5	1.5
2(a). ICT-producing service industries						
EU	4.1	4.8	6.8	0.1	0.2	0.2
USA	2.1	2.4	0.8	0.1	0.1	0.0
2(b). Intensive ICT-using service industries						
EU	2.2	1.8	2.1	0.4	0.4	0.4
USA	1.6	1.6	5.3	0.3	0.4	1.3
2(c). Rest of services (less-intensive ICT-using)						
EU	1.7	1.7	0.2	0.5	0.5	0.1
USA	- 0.2	0.2	0.3	0.0	0.1	0.1
3. Rest of the economy (primary industries + public services) (less-intensive ICT-using)						
EU	1.6	2.0	1.1	0.4	0.5	0.3
USA	0.2	- 0.3	- 0.1	0.0	- 0.1	0.0

⁽¹⁾ In terms of contributions to the change in labour productivity, the aggregate figures given in the table include the sum of the intra-industry, shift and interaction effects. However, since it is not possible to allocate the structural shift and interaction effects to specific manufacturing and service industries, the sum of the labour productivity contributions from these industries may not therefore equal the total change in labour productivity per hour at the aggregate industry level. The size of the residuals are, however, very small (in all cases not more than 0.1) since the intra-industry effect accounts for the bulk of the overall change in hourly labour productivity in both the USA and the EU as a whole. As shown in Table 9b, however, this conclusion does not apply to all the individual EU Member States where these residuals (i.e. the combined effect of the shift and interaction terms) are somewhat larger and consequently Table 9b includes a correction for these effects.

⁽²⁾ Total economy excluding agriculture and government services.

Sources: Commission services and GGDC.

- Finally, as Table 8 shows, within the ICT-producing and ICT-using categories, the five most important individual industries, in terms of contributions to economy-wide productivity growth, are semiconductors and other electronic equipment; telecommunications; wholesale trade; retail trade; and financial services. In four of these five industries (telecommu-

nications is the exception), the EU has to radically improve its performance over the coming years in order to match the US position, with the five specific industries shown in Table 8 contributing 80 % of the US total productivity growth rate over the 1996–2000 period compared with only 40 % in the case of the EU.

Table 8

The five most important industries from a labour productivity perspective, 1996–2000 ⁽¹⁾

	Labour productivity growth rate		Share of total output		Contribution to total labour productivity growth	
	EU	USA	EU	USA	EU	USA
ICT-producing manufacturing industries						
1. Semiconductors and other electronic equipment						
1981–90	22.6	23.3	0.2	0.4	0.04	0.09
1991–95	35.6	38.2	0.1	0.6	0.05	0.22
1996–2000	57.3	52.9	0.2	0.9	0.10	0.46
ICT-producing service industries						
2. Post and telecommunications services						
1981–90	5.0	1.0	2.1	2.8	0.10	0.03
1991–95	6.3	2.4	2.2	2.3	0.14	0.05
1996–2000	10.0	5.9	2.4	2.4	0.24	0.14
ICT-using service industries						
3. Wholesale trade						
1981–90	2.2	2.8	4.7	6.3	0.10	0.17
1991–95	3.3	2.9	4.9	5.5	0.16	0.16
1996–2000	2.0	8.3	5.0	5.6	0.10	0.47
4. Retail trade						
1981–90	2.0	3.1	4.7	6.9	0.10	0.21
1991–95	1.7	2.0	4.8	6.5	0.08	0.13
1996–2000	1.6	6.6	4.7	6.5	0.07	0.43
5. Financial services ⁽²⁾						
1981–90	2.2	– 0.7	4.7	4.7	0.11	– 0.03
1991–95	0.8	1.7	5.5	5.9	0.05	0.10
1996–2000	2.9	5.0	5.4	7.1	0.16	0.35
Total of the above five industries ⁽³⁾						
1981–90	2.9	2.3	16.3	21.1	0.45 (19)	0.47 (43)
1991–95	2.7	3.2	17.5	20.8	0.48 (21)	0.66 (60)
1996–2000	3.7	8.3	17.6	22.4	0.67 (42)	1.85 (80)

⁽¹⁾ These were the five most important industries if one takes the average of the EU and US economies (note that the sixth most important industry was office machinery). There is a different ranking, of course, if one looks at the top five industries for the EU and the USA separately in terms of contributions to labour productivity growth. For the EU, the five most important industries were telecommunications; financial services; electricity, gas and water supply; office machinery; and wholesale trade. Compared with the list shown in Table 8, it is interesting that the EU is producing strong productivity gains in recently liberalised industries such as utilities. For the USA, the top five were semiconductors and other electronic equipment; wholesale trade; retail trade; financial services; and telecommunications.

⁽²⁾ Financial services include financial intermediation, insurance and pension funding and auxiliary financial services.

⁽³⁾ Share of total labour productivity growth is given in brackets.

Sources: European Commission, Enterprise DG/GGDC, and Economic and Financial Affairs DG calculations.

In overall terms, therefore, the story which has emerged from Table 7 and Graph 8 is one in which the USA has pulled ahead of the EU over recent years in terms of productivity growth rates. This is essentially due to the US superior performance in a wide range of ICT-producing and ICT-using industries. This conclusion applies to both the manufacturing and service sectors as a whole. In manufacturing, while EU productivity growth rates in ICT-producing industries are not dramatically different from those in the USA, unfortunately the size of the EU ICT-producing sector is much smaller than the equivalent sector in the USA, and the contribution to overall productivity growth is correspondingly smaller. With regard to services, which are the main source of the US productivity advantage over the EU, the USA appears to have benefited enormously from substantial investments in the intensive ICT-using service industries such as wholesale and retail trade and financial services. Finally, regarding the non-ICT part of the respective economies, the slowdown in the EU's productivity growth rate in both the 'rest of manufacturing' and the 'rest of services' categories is marked over the most recent period. These industries collectively still account for over 40 % of EU GDP. The USA has also experienced a slowdown in productivity growth in these, relatively less high-tech, manufacturing industries, whilst showing a marginal improvement in the 'rest of services' category.

How do the individual Member States perform?

As with the aggregate analysis in Section 2, it is important to differentiate between the overall EU performance and that of the individual Member States. As Table 9a shows, the deterioration in the EU's trend productivity growth rate is largely due to the performance of a number of the larger Member States, most notably Italy.

As with the analysis at the overall EU level, labour productivity trends in the individual Member States are determined largely by the non-farm business sector. Table 9b shows how the EU Member States were performing over the second half of the 1990s, in terms of this crucial sector. Again, there is an extremely wide range of experiences, from zero productivity growth in the business sector in the case of Spain to over 8 % in the case of Ireland. Four EU countries, namely Greece, Ireland, Austria and Portugal, achieved business sector productivity growth rates which matched or even exceeded that of the USA over the second half of the 1990s. Within the total business sector of these countries, Austria and Portugal managed to achieve a reasonable balance

between manufacturing and service industries. In Greece and Ireland, on the other hand, business sector productivity growth emanated predominantly from either manufacturing (Ireland) or private services (Greece).

Table 9a

Contributions to total EU-15 labour productivity growth, 1981–2000

	1981–90	1991–95	1996–2000
BE	0.09	0.07	0.07
DK	0.04	0.04	0.03
DE	0.54	0.59	0.56
EL	0.02	0.01	0.04
ES	0.21	0.13	0.03
FR	0.57	0.27	0.25
IE	0.03	0.03	0.06
IT	0.28	0.38	0.09
LU	0.01	0.00	0.00
NL	0.12	0.06	0.06
AT	0.06	0.09	0.08
PT	0.03	0.02	0.04
FI	0.04	0.06	0.03
SE	0.06	0.07	0.06
UK	0.32	0.45	0.29
EU-15	2.40	2.30	1.60

Sources: Commission services and GGDC.

3.3. What proportion of economy-wide labour productivity growth can be attributed to the effect of ICT (ICT investments and technical progress in ICT-producing industries)

Section 3.2 described the contribution of ICT-producing and ICT-using industries to overall labour productivity growth. Although this analysis suggests that the production and use of ICT technologies are playing an important role, it is not possible to infer how much of the productivity increases are directly linked to ICT investments in the economy and to innovation in ICT-producing industries. The present section, using the industry growth accounting database, provides a quantification of the overall contribution of ICT to labour productivity trends via the investment and TFP transmission channels. This is done by calculating firstly the contribution to capital deepening from investment in ICT and secondly by measuring the contribution to TFP growth

Table 9b

Hourly labour productivity growth in the business sector, 1996–2000
(contributions from manufacturing + private services)

	Total business sector ⁽¹⁾	Contribution from manufacturing				Contribution from private services				Residual term (shift + interaction effects) ⁽²⁾
		Total	ICT-producing	ICT-using	Rest	Total	ICT-producing	ICT-using	Rest	
BE	2.8 (2.2)	1.1	(0.1)	(0.3)	(0.8)	1.6	(0.4)	(0.2)	(1.1)	0.1
DK	1.9 (1.4)	0.7	(0.0)	(0.1)	(0.5)	1.0	(0.3)	(1.0)	(- 0.4)	0.2
DE	2.3 (2.0)	0.6	(0.2)	(0.2)	(0.1)	1.6	(0.6)	(0.6)	(0.5)	0.1
EL	3.1 (2.6)	0.4	(0.0)	(0.2)	(0.2)	2.4	(0.3)	(0.9)	(1.2)	0.3
ES	0.0 (0.5)	0.2	(0.1)	(0.1)	(0.0)	- 0.2	(0.1)	(0.1)	(- 0.5)	0.0
FR	1.3 (1.4)	0.8	(0.2)	(0.2)	(0.4)	0.5	(0.3)	(0.3)	(- 0.1)	0.0
IE	8.4 (7.6)	7.3	(3.4)	(1.4)	(2.4)	1.8	(0.2)	(0.7)	(0.8)	- 0.7
IT	0.6 (0.7)	0.3	(0.1)	(0.1)	(0.1)	0.1	(0.2)	(0.4)	(- 0.6)	0.2
LU	1.6 (1.5)	0.4	(0.0)	(- 0.1)	(0.5)	1.0	(0.2)	(0.8)	(-0.1)	0.2
NL	1.7 (1.3)	0.5	(0.0)	(0.2)	(0.4)	1.2	(0.2)	(0.8)	(0.1)	0.0
AT	3.1 (2.7)	1.3	(0.2)	(0.3)	(0.8)	1.8	(0.1)	(0.8)	(0.9)	0.0
PT	3.3 (3.0)	1.6	(0.1)	(0.3)	(1.1)	1.5	(0.3)	(0.6)	(0.7)	0.2
FI	2.1 (2.2)	1.5	(0.4)	(0.2)	(0.5)	0.7	(0.3)	(0.7)	(- 0.1)	- 0.1
SE	1.7 (2.1)	0.5	(- 0.2)	(0.1)	(0.6)	1.2	(0.2)	(0.8)	(0.1)	0.0
UK	2.6 (2.2)	0.8	(0.5)	(0.1)	(0.2)	1.9	(0.3)	(1.2)	(0.4)	- 0.1
EU-15	1.7 (1.6)	0.7	(0.3)	(0.2)	(0.3)	1.0	(0.3)	(0.6)	(0.1)	0.0
US	3.1 (2.3)	1.2	(0.9)	(0.1)	(0.1)	2.0	(0.0)	(1.8)	(0.1)	- 0.1

⁽¹⁾ Hourly labour productivity growth rates in the total economy are given in brackets.

⁽²⁾ This residual term only applies to the totals for the manufacturing and service sectors and not the three subcategories of each of the two groups (see note at the bottom of Table 7 for additional information).

Sources: European Commission, Enterprise DG/GGDC, and Economic and Financial Affairs DG calculations.

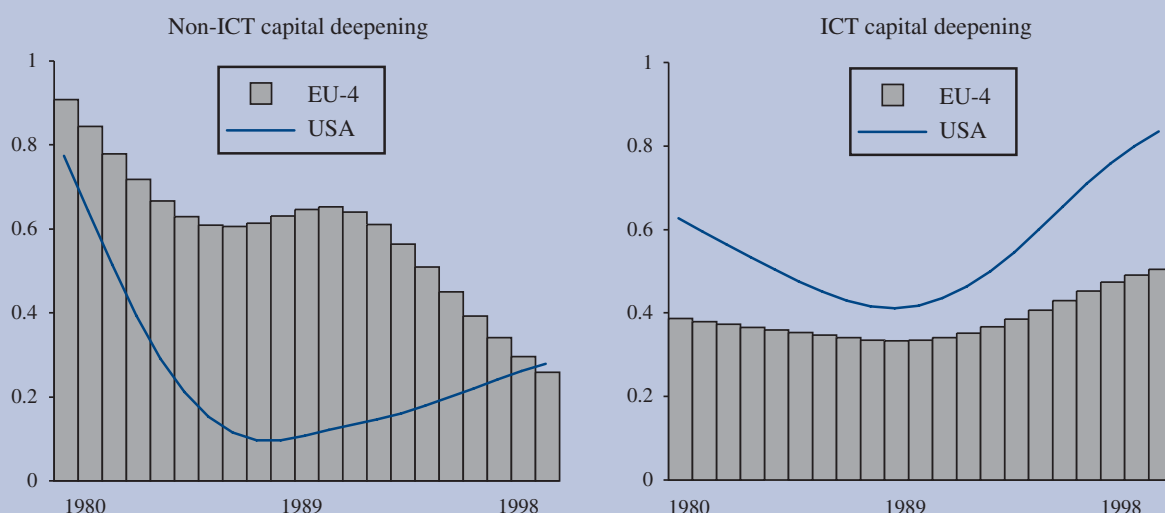
from technical progress in ICT-producing industries in both the manufacturing and service sectors (see Annex 2 for details).

As explained at the beginning of Section 3, due to significant data constraints in terms of capital stock data for the respective industries, the EU average used for this exercise is made up of only four countries. These countries do, however, provide a reasonably representative picture for the EU as a whole since they include France, Germany, the Netherlands and the UK which collectively account for nearly two thirds of EU GDP.

In order to reflect the respective contributions from the ICT and non-ICT parts of the economy to overall investment and TFP trends, Graphs 9 and 10 give a breakdown of labour productivity into the contributions from capital deepening and TFP. This decomposition shows the following.

- Firstly, that whilst investment in ICT equipment contributed positively to labour productivity growth in EU-4 over the second half of the 1990s, the contribution was substantially less than that in the USA, and if anything the gap appears to be widening in favour of the USA.
- Secondly, that non-ICT capital deepening fell significantly in the EU over the 1996–2000 period, with only part of the relatively poor investment performance due to the higher labour content of growth (with perhaps, as mentioned in Section 2, other factors such as locational investment considerations or adverse demographic trends playing a role). Over the same period, the USA experienced a small acceleration in its trend rate of non-ICT capital spending.
- Thirdly, in terms of TFP, the contribution of technical progress in ICT-producing industries such as semiconductors and telecommunications equipment

Graph 9: Breakdown of trend capital deepening into ICT and non-ICT components



Sources: Commission services and GGDC.

has been consistently higher in the USA since the early 1990s but the divergence with the EU is not as high compared with ICT investment spending due to the good performance of the EU in the telecommunications industry.

- Finally, the contribution to TFP from the non-ICT-producing industries has shown a slight downward trend since the late 1980s in the EU, with the USA sharing this trend until around the mid-1990s but with a clear upward pattern emerging over the last years of the 1990s ⁽¹⁾. This upward pattern may be suggestive of some positive growth spillovers from ICT investment, including both embodiment effects associated with a more modern capital stock and possible tangential gains in areas such as network externalities ⁽²⁾.

⁽¹⁾ Research by Baily and Lawrence (2001) and Oliner and Sichel (2002) would support this empirical finding.

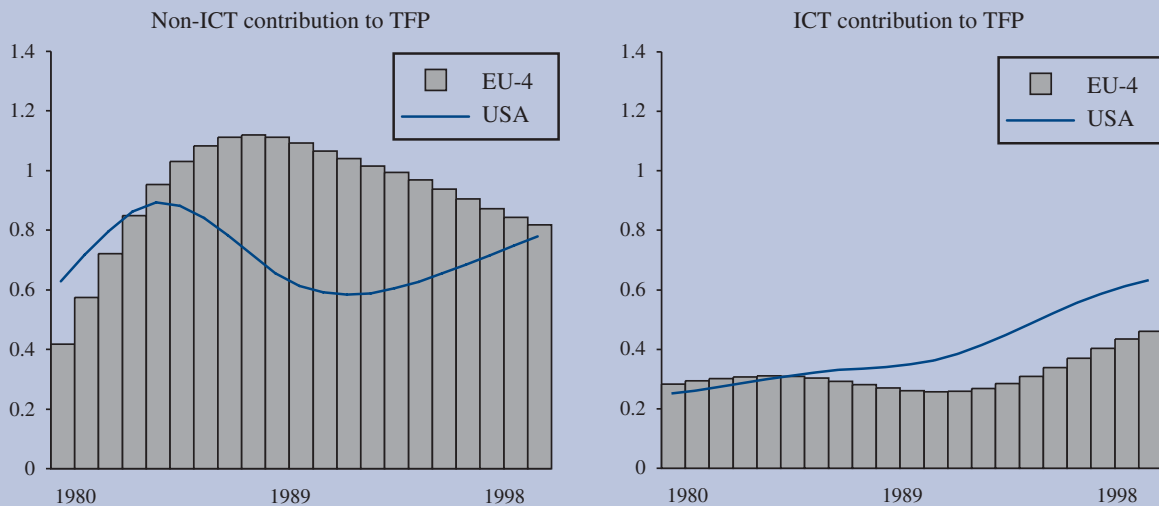
⁽²⁾ In trying to assess spillover effects in ICT-using industries, researchers are confronted with two major difficulties: firstly, measurement problems in a number of the intensive ICT-using industries, such as financial services, and, secondly, identifying the long-run impact of innovative, ICT-based businesses and markets, many of which are now only in the start-up phase of their operations. For a discussion of these issues, see Coppel (2000), Fixler and Zieschang (1999), Gullickson and Harper (1999) and Moulton et al. (1999).

In overall terms, from the ICT investment and TFP channels described above, it would appear that ICT was contributing roughly 60 % of US labour productivity growth at the end of the 1990s compared with around 40 % in the case of EU-4.

Main conclusions to be retained from Section 3

- Firstly, the industry analysis confirms the broad conclusion from the aggregate analysis in Section 2, namely that the USA achieved a significant turnaround in its labour productivity performance over the second half of the 1990s whereas the EU's long-run trend of declining productivity growth, if anything, accelerated over the same period.
- Secondly, the superior performance of the USA in ICT-producing manufacturing and ICT-using service industries is the source of the diverging productivity trends. While the ICT-producing manufacturing industries have been growing at a substantially faster pace than the associated ICT-using service industries, nevertheless it is the latter grouping which accounts for the largest part of the US upsurge in productivity. This higher contribution to growth from ICT-using service industries simply reflects their higher share in overall value added.

Graph 10: Breakdown of trend TFP into ICT and non-ICT components



Sources: Commission services and GGDC.

- The individual EU Member States show a high degree of dispersion in their respective performances, with four EU countries (Greece, Ireland, Austria and Portugal) all achieving labour productivity growth rates which matched or even exceeded those of the USA over the period 1996–2000.
- Finally, Section 3.3 concluded that the overall contribution to labour productivity growth from ICT investments and from technical progress in the pro-

duction of ICT goods and services accounted for about 60 % of US labour productivity growth over the second half of the 1990s, compared with 40 % in the EU. If one was to apply these ratios to the aggregate labour productivity growth rates given in Section 2, this would translate over the second half of the 1990s into an ICT contribution to labour productivity growth of around 1 percentage point in the USA and $\frac{2}{3}$ of a percentage point in the case of the EU.

4. Macro determinants of growth — An analytical framework

Following on from the aggregate and industry analyses in Sections 2 and 3, the present section builds on the insights gained so far in terms of explaining the relative growth performances of the EU and US economies over the 1980s and the 1990s. While the highly industry-specific nature of the growth rate differentials in recent years cannot be disputed, it is nevertheless important to place these stylised facts into a more policy-relevant context by examining the factors which have shaped the wider economic environment in both the EU and the USA over recent decades.

4.1. The basic productivity determinants

The achievement of a better understanding of the key determinants of productivity growth has been high on the research agenda of international organisations and the academic community for some decades ⁽¹⁾. The present research represents an attempt to combine a detailed knowledge of these growth determinants (based on reviews of the literature and regression analysis) with the central policy concerns of European governments. It identifies five areas which are both quantitatively important for productivity and relevant in a European context, i.e. the level of regulation, the structure of financial markets, the degree of product market integration, the size of knowledge investment, and the ageing of the labour force.

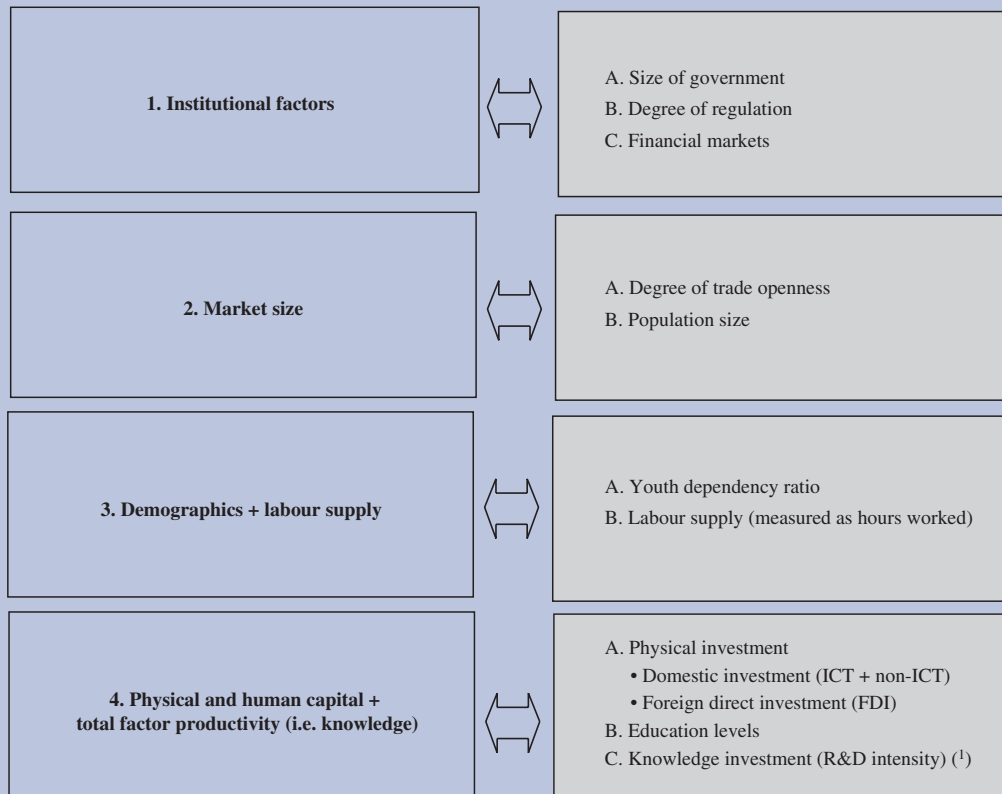
- *Level of regulation:* In recent studies, both the OECD (2003) and the IMF (2003) have stressed that levels of regulation are potentially crucial driving forces for efficiency gains. Given the EU's relatively weak performance on a range of different measures of regulation, the IMF study concluded that deregulating the EU economy to US levels could increase output by

nearly 7 % and productivity by 3 % in the longer term (see Bayoumi et al., 2003). The OECD study pointed to deleterious effects in terms of physical investment rates and to a particularly negative impact from regulation in a panel of OECD service industries.

- *Structure of financial markets:* In academic discussions a lot of attention has been given to the link between financial markets and growth (see, for example, Levine, 1997). Special emphasis is devoted to the question of the relative effectiveness of bank-based or equity-based financial systems. Could stock markets, for example, have special advantages in the commercial assessment of innovations or as vehicles for fostering international portfolio and direct investment? The question of financial market efficiency is also a central concern for the EU authorities, with the financial services action plan (FSAP) summarising a large set of policy initiatives aimed at improving the functioning of the EU's financial architecture.
- *Product market integration:* Related to the creation of the single market and EMU, the relationship between trade integration and productivity growth becomes relevant. Here, again, recent studies (see, for example, Frankel and Rose, 2000, and Alesina and Wacziarg, 1998) suggest significant gains from further integration. In this context, the initial benefits from increased trade openness amongst euro-area Member States are already beginning to emerge in the post-EMU environment.
- *Knowledge investment:* With the striking impact of ICT, there has been considerable interest in analysing the effects of investments in knowledge and human capital formation. With Europe lagging behind not only in terms of ICT penetration rates but also with regard to other indicators of knowledge production (such as R & D invest-

⁽¹⁾ See, for example, Bassanini et al. (2001).

Figure 1: Basic growth determinants



⁽¹⁾ Knowledge investment is defined in much wider terms in the analysis to include spending on higher education and software as well as R & D spending.

ments and the share of high-tech industries), the creation of knowledge capital has emerged as a central policy concern. Both the Lisbon process and the more recent EU growth initiative are concrete examples of ongoing policy programmes aimed at boosting the pace of innovation.

- *Ageing of the labour force:* An unavoidable consequence of declining birth rates is an ageing of the labour force. While so far there has been little research carried out on the possible consequences of ageing for productivity, nevertheless there is a widespread suspicion that an older labour force will be less adept at creating and adopting new technologies. Given the magnitude of the demographic transition in Europe, it seems appropriate to explore the possible consequences for productivity of this ‘greying’ phenomenon.

In order to integrate all these diverse aspects into a unifying framework, growth regressions are used to draw lessons from the growth experiences of OECD Member States over the last two and a half decades. In a more forward-looking perspective, estimated multipliers are employed to provide some tentative projections concerning the possible impact of specific policy measures. On the analytical side, an attempt is made to integrate recent developments in endogenous growth theory into the specification. This burgeoning growth literature combined with the distinctive nature of recent growth patterns has underlined the importance of knowledge production for productivity growth. In broad terms, growth theory isolates two productivity-enhancing channels, namely capital deepening and technical progress which is deemed proportional to knowledge. By looking at how these basic growth elements affect knowledge and physical capital formation enables one to establish a more nuanced under-

standing of the channels through which they affect productivity. A detailed technical description of the model used as well as a discussion of the theoretical linkages are provided in Annex 1, which also contains the regression results.

It must be mentioned at the outset that we are far from a complete understanding of the determinants of productivity. The growth experience since the mid-1990s is a reflection of continuous structural changes. Any empirical study which draws on past data must be aware of these shifts. Special emphasis will therefore be devoted to the issue of understanding recent trends. In interpreting these trends, two main questions arise: firstly, how do the basic growth determinants affect physical investment and knowledge production, and, secondly, what is the relative importance of physical and knowledge capital formation for productivity growth?

How do the basic growth determinants affect investment and knowledge production?

When analysing investment one has to take into account the fact that its structure is changing in at least two important dimensions.

Firstly, the growth in the importance of more knowledge-intensive forms of investment: The share of ICT investment in total investment grew steadily over the 1990s, with the ICT share of non-residential gross fixed capital formation in the USA presently approaching one third. ICT investment itself has not only a larger knowledge share in terms of software and R & D spending but is also complementary to skilled labour. In addition, overall R & D spending (whilst still comparatively small in terms of overall GDP) is playing a more prominent role in many of the more advanced economies.

Secondly, the observed increase in the international mobility of capital: Technology, allied to globalisation and capital market liberalisation, has generated a huge increase in the volume of capital movements in general and FDI flows in particular. The growing importance of multinationals in determining worldwide investment trends is reflected in the fact that the stock of FDI asset grew from around 5 % of world GDP in the mid-1980s to over 15 % at the end of the 1990s. In order to capture these structural shifts, it is important not only to look at aggregate investment but also at specific investment categories such as ICT, FDI and R & D.

Determinants of physical investment

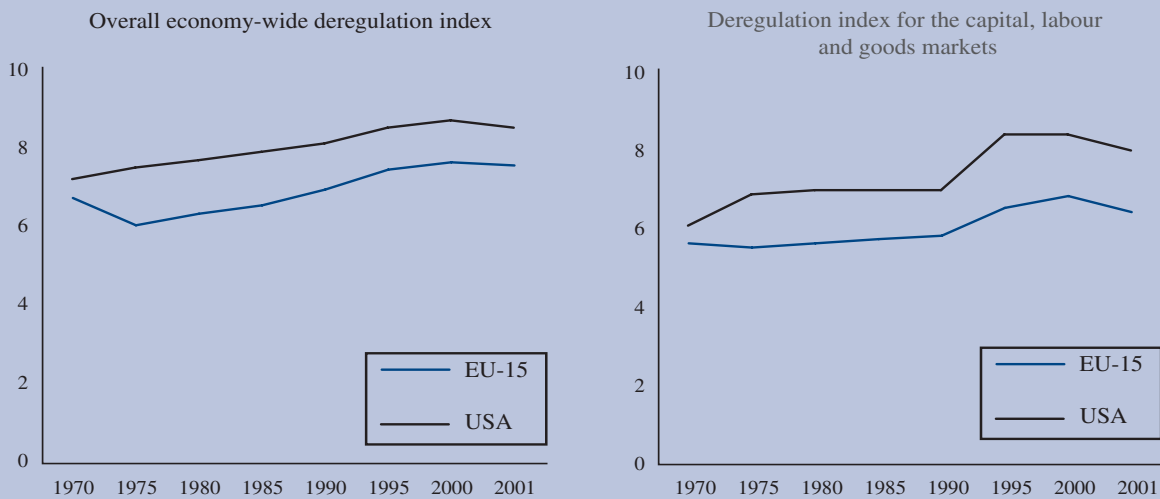
Amongst all the various growth determinants assessed in the regression analysis in Annex 1, regulation appears to be the most important driver of investment rates. The degree of regulation plays an especially important role for foreign direct investment but it is also a crucial driver for new forms of investment such as ICT. These results are consistent with a recent empirical study by Alesina et al. (2003), which uses OECD regulatory indices for service industries. As discussed in Annex 1, these results are in accordance with theoretical priors. There is also some evidence that equity-based financial systems are more favourable to physical investment. Again, FDI flows are positively correlated with a more equity-based structure for financial markets. Finally, education appears to be an important factor for foreign direct investment. These results suggest that in an environment characterised by increasing international capital mobility, levels of regulation, financial market conditions and human capital endowments are important determinants for the attractiveness of a country as an investment location.

Determinants of R & D investment

The determinants of knowledge investment are different to those of physical investment. Firstly, R & D is less affected by the regulatory environment. What seems to be more important for R & D is market size as measured by openness and population size. The lack of importance of regulation for R & D could be due to the fact that entry barriers are less important for R & D activities which are typically concentrated amongst incumbent firms.

Also, theoretically the link between regulation and research intensity is less clear-cut. Given the sunk cost nature of R & D activities, the prospects of more secure rents provided by product market regulations (for example, in the form of higher protection against violation of property rights from new inventions) may act as an incentive for R & D. The sunk cost nature of R & D also makes it plausible that market size matters in that firms located in more open and/or larger economies will typically engage more strongly in R & D activities. Investments in R & D are usually more risky than physical investments and therefore the attitude of all financial institutions towards the financing of such investments is important. More market-based financing mechanisms, including equity markets and venture capital funds, tend to favour riskier investments. This is borne out in the empirical analysis where it is found

Graph 11: Fraser Institute deregulation indices



Source: Fraser Institute.

that stock market turnover indices move more closely with R & D investment compared with bank credit measures. Whether this can be unambiguously interpreted in a causal sense is an open question. An alternative interpretation could be that stock markets simply value the returns from R & D investments more highly. This argument would be supported by the fact that R & D expenditures can equally well be explained by only concentrating on fundamentals such as market size, education and government involvement. In this case, the role of education as a fundamental determining factor of R & D becomes more evident.

Knowledge production: the effect of R & D, education, market size and demographic influences

In addition to analysing the specific determinants of R & D investment (see Table A1), Annex 1 also assesses the role of R & D as one element in the overall knowledge production process in economies (Table A2). In this context, the empirical growth literature emphasises that knowledge and the creation of knowledge via the investment activities of firms, households and the government in both R & D and education are crucial for enhancing the level of technology (i.e. TFP). As shown

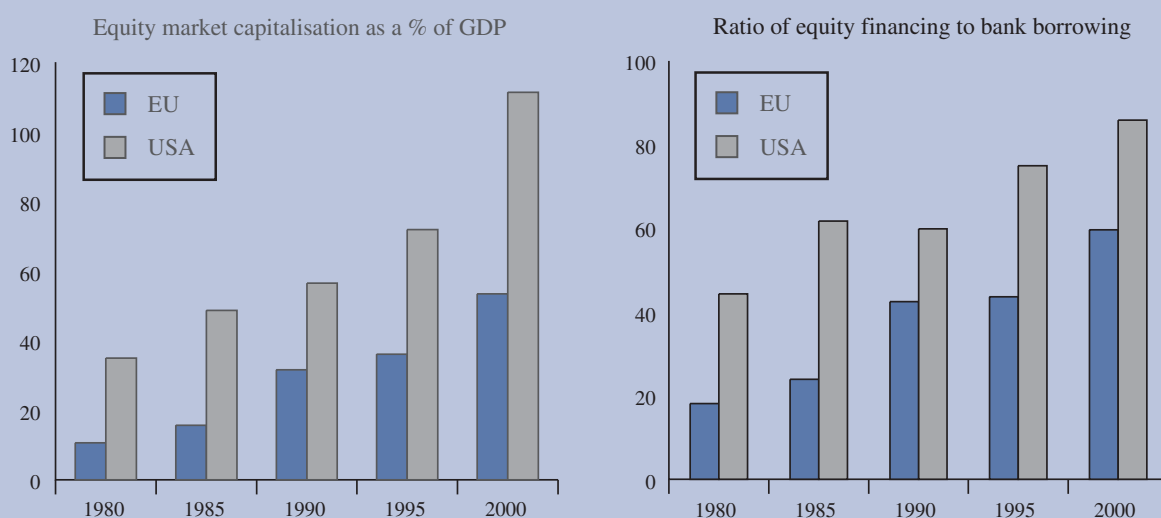
in Table A2, both R & D and education are significant drivers of total factor productivity.

As in the case of R & D, only a limited role is found for deregulation in boosting the growth of knowledge ⁽¹⁾. The Economic and Financial Affairs DG's results broadly occupy a mid-point between a 2003 joint CEPR and IFS study which reports a negative association between regulation and TFP and an OECD (Nicoletti and Scarpetta, 2003) study which finds a more positive effect of deregulation on TFP.

Trade openness/market size also appears to be especially important. However, it is interesting that this particular determinant only affects TFP growth via its impact on the level of R & D investment. This is suggestive that country size/scale effects bestow no particular efficiency gains in terms of other aspects of productivity growth.

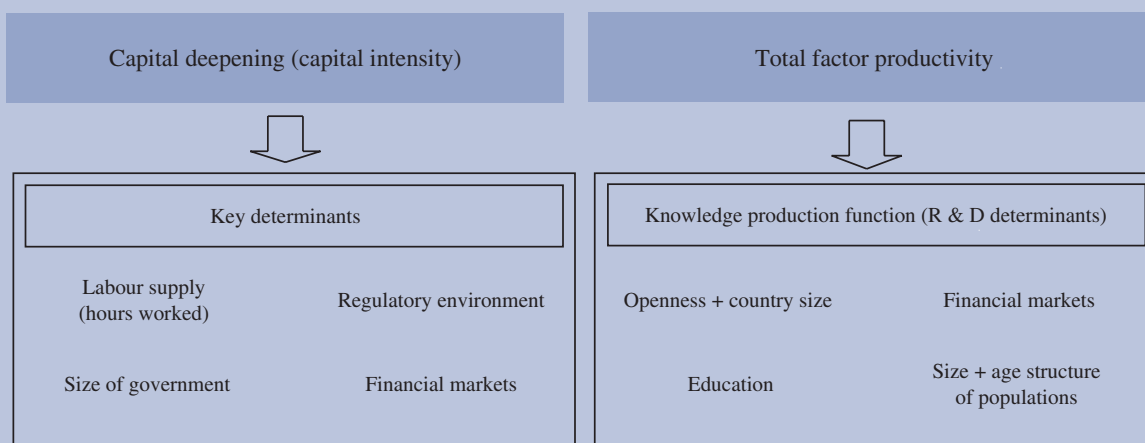
⁽¹⁾ The fact that regulation is neither significant for R & D nor for TFP points in the direction that the link between regulation and moving the technology frontier is rather weak. Any gains from deregulation in terms of technological catching-up or from privatisations should therefore be interpreted more in terms of static efficiency gains and not with the dynamic gains needed for outward shifts in the technology frontier.

Graph 12: Financial market indicators



Source: World Bank (2002).

Figure 2: Labour productivity determinants ⁽¹⁾
(What are the key drivers of investment and total factor productivity?)



⁽¹⁾ This figure gives an overview of the Economic and Financial Affairs DG's productivity model in terms of the key determinants of capital intensity and TFP. The model specifies productivity growth as being generated by four distinct activities, namely the investment of firms in both physical and knowledge capital, investment of households in human capital and changes in labour supply. As discussed in the text and Annex 1, the separate analysis of investment showed clearly that the variables used in the aggregate productivity regression affected different types of investment in very different ways. In addition, the separation into gross fixed capital formation and R & D also indicated both a physical investment and a TFP channel to labour productivity. Both components are manifestly closely linked, and interact with each other in influencing labour productivity, with knowledge investment simply being an input into the overall investment process in an economy. In overall terms, consistent with the neoclassical growth framework, the Economic and Financial Affairs DG's model predicts that the level of labour productivity is influenced positively via knowledge production and the investment rate, and with a negative effect from growth in the labour input (as measured by hours worked). A fourth factor, to be considered, would be the potential for catching up.

Another important feature revealed by these regression results is the impact of an ageing labour force on TFP. Since the mid-1970s, the youth dependency ratio has declined in all OECD countries. This has led to a reduction in the inflow of young workers into the labour force and has increased their mean age. Little is known so far of the impact this might have on the creation and adoption of new ideas and technologies. The results reported in Table A2 suggest, however, that this process could have been one of the main contributors to the slowdown in productivity growth.

What is the relative importance of physical investment and knowledge capital formation for productivity growth?

The previous subsection has described how the basic determinants affect physical capital formation and the creation of knowledge. The present subsection looks at the relative contribution of these two factors to labour productivity growth when they are combined with two other factors, namely the growth in the employment rate and the potential for catching up. The neoclassical growth model makes fairly precise quantitative predictions concerning these four factors, with Annex 1 showing that the estimated labour productivity growth contributions from the Economic and Financial Affairs DG's model are very close to those predicted by the neoclassical model. The main results are as follows.

1. Physical investments and the impact of regulation

- *Physical investments:* A permanent 1 percentage point increase in gross fixed capital formation results in a 1.8 % long-run effect on the level of labour productivity. This is equivalent to an annual average effect of 0.05 on the growth rate of labour productivity in the long run (i.e. over 30 years).
- *Regulation:* The implied change of moving to US levels of regulation, as measured by the Fraser index, would suggest a long-run labour productivity effect of about 5 % (i.e. 0.15 on the long-run growth rate of productivity).

2. Knowledge investments (TFP effects)

- *R & D:* A permanent increase in the share of R & D in GDP of 1 percentage point would increase the long-run level of TFP by nearly 18 % (i.e. 0.6 on the long-run growth rate of productivity).
- *Education:* A permanent increase of one year in the average education levels of the labour force would lead to a long-run level effect on TFP of close to

13 % (i.e. 0.45 on the long-run growth rate of productivity).

- *Ageing:* A permanent 10 percentage points decline in the youth dependency ratio would reduce the long-run level of TFP by 6.8 % (i.e. 0.25 on the long-run growth rate of productivity).
- *Openness and market size:* A permanent 10 percentage points increase in intra-euro-area trade would result in a long-run gain in TFP of 3 % (i.e. 0.1 on the long-run growth rate of productivity).

3. Hours worked:

A permanent 1 percentage point increase in hours worked lowers the long-run rate of productivity growth by about 0.25 percentage points.

4. Catching up:

In terms of the speed of convergence, the results confirm the established literature result of a long-run, annual, catching-up effect of roughly 2 %.

4.2. Practical applications of the Economic and Financial Affairs DG's analytical framework

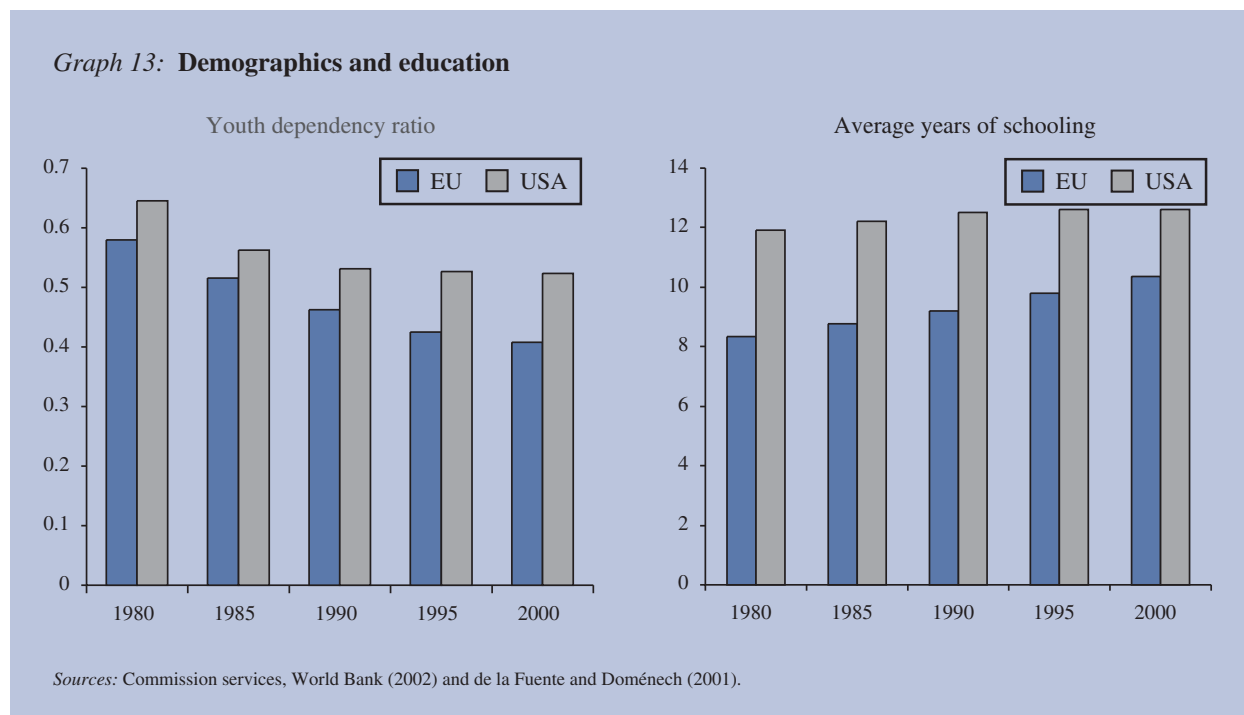
The present section provides a number of examples of how this framework can be used to further our understanding of past (Subsection 4.2.1) and future (Subsection 4.2.2) labour productivity developments.

4.2.1. Historical analyses: Were the late 1990s exceptional in terms of ICT and labour market trends?

Here, we assess two questions which have emerged in the previous sections. Firstly, how large a role did ICT play in explaining the growth rate differentials which were experienced and, secondly, to what extent was the slowdown in productivity growth in Europe simply a reflection of the higher employment content of growth?

Role of ICT in the 1990s

Since the mid-1990s, changed patterns and rankings of countries in terms of productivity/TFP growth have been increasingly observed. Relative productivity growth seems strongly related to the degree to which countries have been producing, or investing in, ICT. Given that the knowledge production function does not explicitly cap-



ture these ICT effects, how can we reconcile this with the observed developments? There are four possibilities.

Hypothesis 1: The knowledge-generating factors as identified by the knowledge production function, namely R & D and human capital investment, can explain the international TFP growth patterns since the mid-1990s.

Hypothesis 2: There is a large industry-specific element which plays a role. Countries with high-ICT industry shares have benefited from the positive productivity shocks taking place in these industries. Alternatively, those countries which are high-ICT users have benefited from technological spillovers.

Hypothesis 3: It is true that the ICT revolution was industry specific, but it was not confined to a specific country. With high capital mobility, those countries which offered attractive investment locations in terms of flexible labour and goods markets and/or young labour forces which were open to the adoption of new technologies benefited most from the ICT boom.

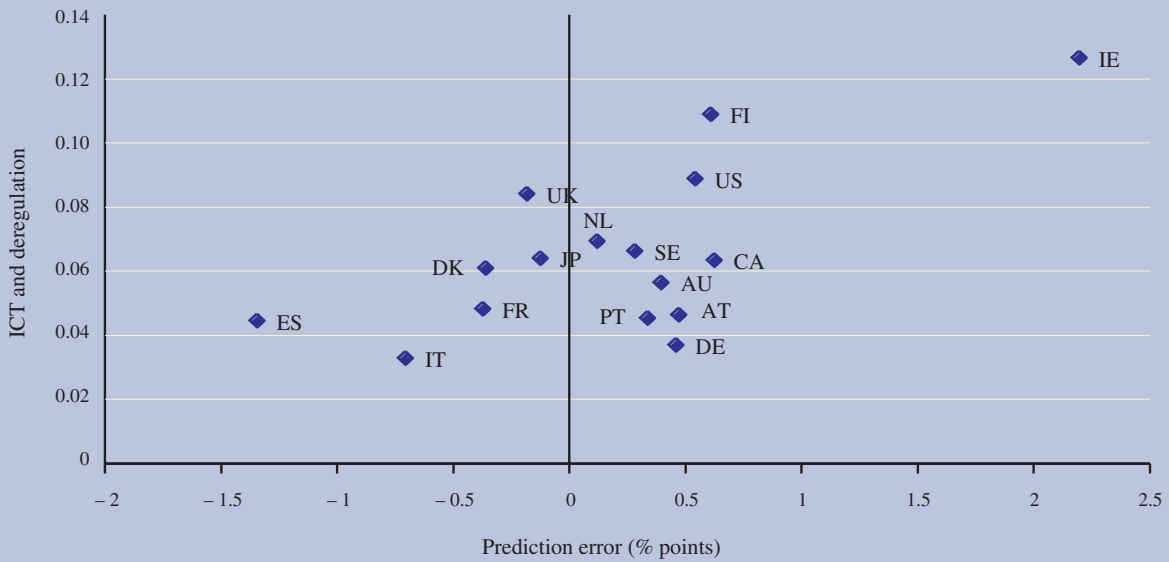
Hypothesis 4: Both industry specialisation (hypothesis 2) as well as flexibility in the adoption of new technologies (hypothesis 3) have interacted positively.

Assessing the four hypotheses (see Table A3)

The empirical analysis conducted in Annex 1 is based on explaining the prediction errors for the late 1990s of the knowledge production function (i.e. did the model under- or overpredict TFP per hour growth rates over the period and what can explain these prediction errors?). It turns out that hypothesis 4 offers the best explanation for the cross-country variation of prediction errors. As can be seen clearly from Graphs 14 and 15, there is a strong relationship between the ICT production share of a country (which is the best measure of its degree of industry specialisation), when interacted with either the regulatory burden or the age of the labour force, and the size of the deviation of actual TFP growth from the predicted growth rate⁽¹⁾. This supports the interpretation whereby countries, some of which are in the EU, which have low regulatory burdens and a comparatively young labour force (creating favourable conditions in terms of technology adoption) have been better able to exploit the technological developments occurring in the mid-1990s compared with other countries and have consequently gained in terms of higher TFP

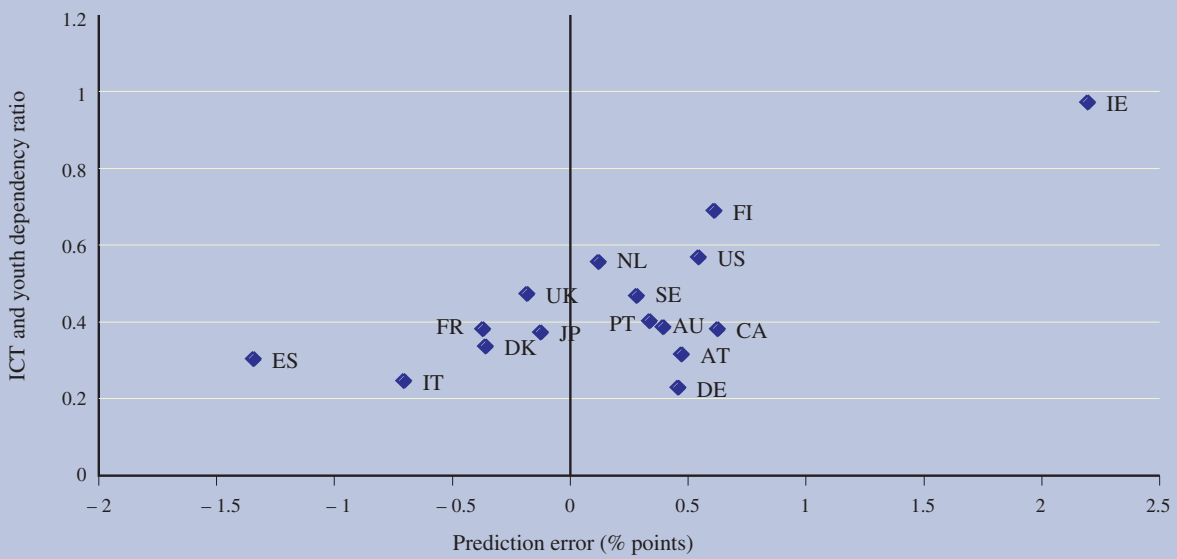
⁽¹⁾ The predicted growth rate of TFP would be the rate expected on the basis of the R & D and educational inputs in the corresponding country.

Graph 14: TFP prediction error correlated with ICT production share and deregulation



Source: Commission services.

Graph 15: TFP prediction error correlated with ICT production share and youth dependency ratio



Source: Commission services.

growth. In relative terms, with a strong correlation between the ICT production share and TFP growth, the analysis also indicates that industry specialisation (hypothesis 2) is probably more important than the degree of regulation and the age of the labour force (hypothesis 3) in explaining the TFP prediction errors. Finally, the clear patterns emerging for these prediction errors also leads one to reject hypothesis 1.

Link between hours worked and productivity developments

In explaining growth patterns over the second half of the 1990s, an assessment of the short- and long-run effects on labour productivity of a significant boost to employment (as measured in hours worked) is important to assess the extent to which the present downturn in EU labour productivity is a permanent or a short-run phenomenon. Since the mid-1990s, the EU has been experiencing a trend change in labour input. While in the 1970s, 1980s and early 1990s, the growth rate of the labour input was negative on average, a positive labour input growth was observed over the period 1996–2002 of 0.9 % on an annual average basis. According to the estimates presented in Table A5, this increase in employment growth (when compared to a hypothetical zero baseline growth) has had the effect of slowing down EU labour productivity growth by about a ¼ of a percentage point per annum over the period in question.

4.2.2. Future scenarios: boosting EU labour productivity via two specific reform initiatives linked with the Lisbon strategy

This subsection focuses on the effects of policy actions in both the TFP and capital accumulation areas aimed at boosting future EU labour productivity growth. The simulation presented here focuses, for illustrative purposes, on measures aimed at achieving the specific Lisbon target of making Europe the most competitive, knowledge-based economy in the world by 2010. Realising this ambition will require the implementation of far-reaching structural reforms in a large number of the Member States. Two supply-side initiatives have received a lot of media attention, namely deregulation and boosting the knowledge-based economy. In both cases, for simplicity, the USA is used as the benchmark.

- *Regulatory reform:* Due to significant negative effects from the regulatory framework on investment, policy-makers should consider putting a greater

emphasis on regulatory changes in their reform agendas. Graph 11 provided, on the basis of Fraser Institute indices ⁽¹⁾, a quick overview at the EU level of the existing differences with the USA. The graph presented both an economy-wide deregulation index as well as one relating specifically to the capital, labour and goods markets. It is assumed that EU–US differences in terms of the overall economy-wide index will be eliminated between now and 2010. As shown in Annex 1, even a relatively rapid deregulation towards US levels would not lead to sufficient productivity gains over the next seven years to close the present efficiency gap of roughly 10 % with the USA. Even our more favourable results (when compared with the IMF World Economic Outlook 2002) would only give a boost to the level of labour productivity of less than 0.2 annually until 2010 under the condition that reforms are implemented quickly (see Table A6). A major reason why this would not be sufficient is — according to this analysis — the limited dynamic efficiency gains of deregulation. This suggests that deregulation must be accompanied by measures which increase knowledge production.

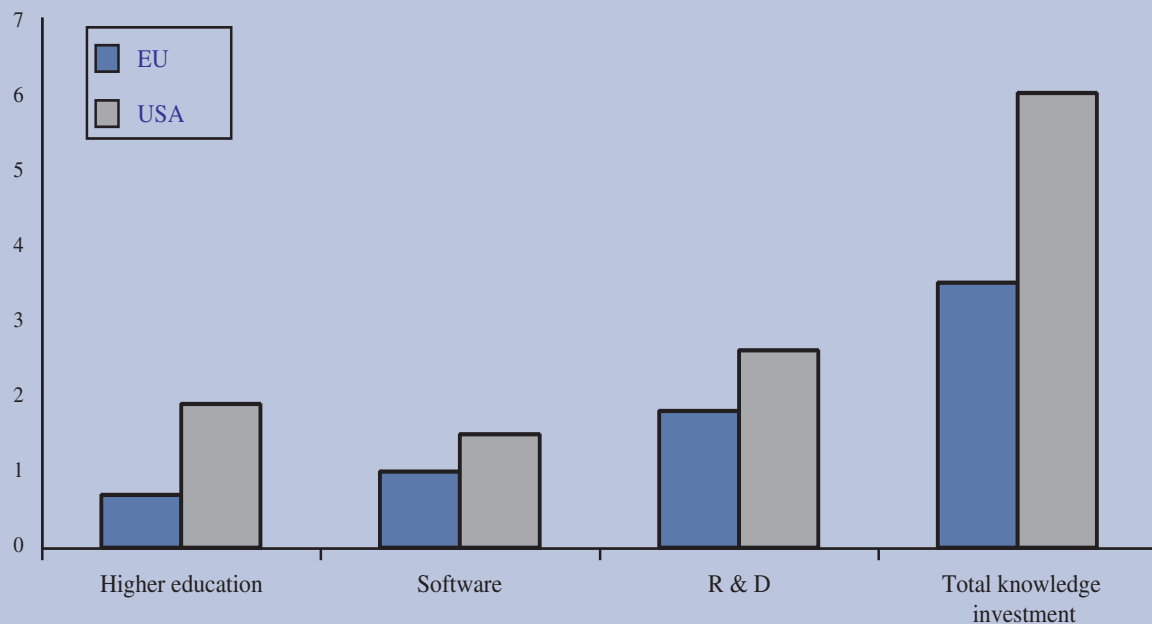
- *Knowledge production:* The second element of this illustrative ‘Lisbon’ package is action to boost TFP growth. On the TFP side, action is needed to boost investment in the knowledge-based economy, in terms of higher spending on third-level education, software and R & D ⁽²⁾. With respect to R & D, the focus should not be on boosting public R & D spending directly, but on creating the conditions which will promote an endogenous increase in research spending ⁽³⁾. The empirical analysis has identified three main channels through which this could be achieved, namely higher

⁽¹⁾ The OECD has compiled various regulatory indicators, for example measuring legal barriers to entry or administrative burdens for start-ups. Unfortunately, these indicators are normally only available for a single year (1998) and therefore they cannot be used to explain changes in economic performance since the mid-1970s. The Fraser Institute index has the advantage of having a time dimension. It is, however, possible to compare the Fraser and OECD indicators by correlating them with each other at least for the year in which both are available. In fact, both indicators (see CEPR–IFS, 2003, p. 64) are highly negatively correlated, which should be expected since the Fraser index measures the degree of deregulation whilst the OECD indicators measure regulation. The maximum correlation is found for the OECD ‘administrative burdens on start-ups’ indicator (– 0.57), which suggests that the Fraser index is indeed a reasonable measure for entry barriers.

⁽²⁾ See OECD (2001) and Guellac and Van Pottelsberghe (2001). For a discussion on recent trends in R & D intensity, see OECD (2000b).

⁽³⁾ The wide variation across industries in the expected returns from R & D activities suggests that direct forms of support to specific industries should be avoided in favour of a more market-based, tax credit approach, except in instances where potentially large social benefits can be credibly predicted.

Graph 16: Investing in the knowledge-based economy: the EU versus the USA, 1998 (% of GDP)



Source: OECD.

product market integration, education and more efficient financial markets. Market size seems to be a crucial determinant for R & D, since the development of new products typically involves large sunk costs. Since research activities are human capital-intensive, education is an essential requirement for any R & D activity. Finally, more equity-based financial structures seem to have promoted the 'riskier' forms of investment, such as R & D, more strongly than bank-based systems.

Key results of the 'Lisbon strategy' simulation

The effect of introducing such a large package of supply-side reforms over the coming years would be to significantly boost EU potential growth rates, on average by

between ½ and ¾ of a percentage point over a 5- to 10-year horizon. However, even if one assumes a no-policy change scenario in the USA, there is no question of the EU overtaking the USA over the timescale laid out by the Lisbon agenda. Apart from the time it will take from the implementation of reforms to the appearance of visible effects, there are two further obstacles to reaching the productivity target: firstly, the need to integrate the predominantly low-skilled part of the EU's potential labour force to reach the Lisbon employment target of 70 %, and, secondly, the continuous drag on productivity induced by Europe's ageing labour force. This 'Lisbon' simulation highlights the extent of the challenge facing EU governments in their efforts to boost the supply-side potential of their respective economies.

5. Summary and concluding remarks

Summary

This chapter has examined the evidence at both the aggregate and industry levels to assess the hypothesis that a new growth pattern has emerged in the USA and a small number of the EU's Member States since the mid-1990s. More specifically, the objectives of the study were twofold:

- firstly, to establish the stylised facts concerning growth and labour productivity, using a growth accounting approach at the aggregate and industry levels;
- secondly, to exploit a new framework for productivity analysis to derive policy lessons from the post-1995 growth experience which, in the context of the Lisbon policy strategy, can be harnessed to boost growth and convergence in the EU as a whole over the medium to long term.

Stylised facts

EU employment and productivity growth patterns have diverged sharply over recent years. Compared with the first half of the 1990s, the period 1996–2002 witnessed a significant increase in the contribution of labour to EU GDP growth but unfortunately these gains were largely offset by a reduction in the contribution from labour productivity. By comparison, over the same time frame, the USA enjoyed a combination of strong employment increases allied to an acceleration in labour productivity.

Even allowing for the fact that employment and labour productivity trends in the EU may be negatively correlated ⁽¹⁾, the reversal of past productivity patterns in the 1990s relative to the USA has nevertheless been striking. For the first time in the post-World War II period, the EU is now on a trend productivity growth path which is lower than that of the USA. Since the mid-1990s, the EU has proved incapable of arresting the long-run decline in its productivity performance whereas the USA has

enjoyed a notable recovery in its secular trend. Productivity per hour growth rates in the USA have, in fact, started to recover to the rates of growth last experienced in the 1960s. While accepting that the present productivity per hour level differences between the EU and the USA are still only of the order of around 10 % ⁽²⁾, on the basis of an extrapolation of present trends and policies, and mindful of the ongoing imperative to boost employment rates, the EU as a whole looks destined to experience a significant widening in its productivity gap relative to the USA over the coming years ⁽³⁾.

What explains the deterioration in the EU's labour productivity trend relative to the USA at the total economy level?

The most important point to underline in terms of aggregate productivity trends is that although a number of the EU countries performed well over the second half of the 1990s, the EU as a whole has a productivity problem relative to the USA. While the sources of the deterioration in EU labour productivity are difficult to disentangle, from a purely growth accounting perspective the 1 percentage point decline

⁽¹⁾ The Economic and Financial Affairs DG estimates that roughly a quarter of the slowdown in EU labour productivity growth over the second half of the 1990s can be attributed to the higher employment content of growth. However, no policy trade-off should be implied from this negative correlation, with action on both the employment and productivity fronts capable of being taken on a simultaneous basis. Labour market reforms aimed at boosting employment rates only lead to a temporary reduction in measured productivity growth, with no negative implications for the long-run productivity growth of the existing workforce. In addition, a higher employment rate implies an unambiguous increase in GDP per capita.

⁽²⁾ This 10 % figure underestimates the differential since the EU has still a long way to go to reach US employment rates, which will involve the integration of a significant proportion of low-skilled workers which will have negative implications for measured labour productivity, at least over the short to medium term.

⁽³⁾ At the individual EU Member State level, a much more nuanced picture emerges in terms of the EU's performance relative to the USA. In terms of labour productivity, over the period 1996–2000, it turns out that seven of the EU's smaller Member States had performances which were not only well above the EU average but were also significantly higher than that of the USA. Three of the seven, namely Ireland, Finland and to a lesser extent Sweden, were also capable of combining strong productivity growth with high labour utilisation rates.

in labour productivity experienced over the period 1996–2002 compared with the first half of the 1990s appears to emanate from the following factors:

- Firstly, roughly 50 % of the decline can be attributed to a reduction in the contribution from capital deepening. Within this category, whilst investment in ICT was contributing positively (but not as positively as in the USA), the rest of investment performed poorly. The smaller non-ICT capital-deepening component in EU labour productivity growth appears to be due firstly to a reversal of the unfavourable capital/labour substitution of earlier periods and secondly to a more worrying downward trend in non-ICT investment rates generally (which may be linked to locational investment considerations or to adverse demographic trends). In terms of the capital/labour substitution factor, this can be seen as the flip side of the more employment-intensive growth pattern experienced over the period. As noted earlier, a move towards full employment may entail a temporary reduction in measured productivity growth, but this should not be regarded as a trade-off in any sense.
- Secondly, the remaining 50 % of the decline in labour productivity growth emanates from a deterioration in terms of total factor productivity. This probably should be seen as the greatest source of concern for policy-makers since changes in total factor productivity are generally attributed to a more efficient resource utilisation emanating from enhanced market efficiency, from technological progress resulting from investments in human capital, R & D and information technology, or from the natural catching-up process of the less developed EU countries through increased business investment in general. Again, as with the capital-deepening channel, there has been a positive contribution to EU TFP growth from ICT (but again less than in the USA although the differential is not as great as with ICT investment). Consequently, the non-ICT contribution to TFP has fallen more than TFP as a whole.

What have we learned from the industry analysis?

The industry decomposition added some significant new details in terms of our understanding of the sources of the EU–US labour productivity differentials. It focused, in particular, on trying to decompose the overall change in productivity into the effects which can be associated

with the ICT and non-ICT parts of the economy ⁽¹⁾. It also showed at the individual EU country level that it was the deterioration in the productivity performance of a number of the larger Member States, most notably Italy, over the second half of the 1990s, which was responsible for the deterioration in the overall EU performance.

ICT part of EU and US economies (ICT-producing and ICT-using industries)

As with the aggregate analysis, the industry breakdown showed that ICT has indeed been a significant driver of labour productivity trends in both the USA and the EU. Accurately measuring the overall contribution from ICT is difficult, however, since it is only possible to directly measure the effect of two of the transmission channels from ICT to productivity growth, namely the effect emanating from a sharp increase in ICT investment as a share of total investment ⁽²⁾ and the contribution from technical progress in ICT-producing industries to overall TFP growth. The effect of the third transmission channel (i.e. positive growth spillovers from ICT investments, including both embodiment and network externalities) cannot be directly measured and, consequently, is the subject of much controversy. On the basis of an assessment of the first two channels, it would appear that around 60 % of US labour productivity growth at the end of the 1990s can be attributed to ICT with a contribution of roughly 40 % in the case of the EU.

Non-ICT part of the EU and US economies

The industry analysis reaffirmed the earlier conclusion that ICT is only part of the story behind the rising US and declining EU labour productivity trends. Given that ICT has been contributing to both capital deepening and TFP in the EU, the deterioration in EU productivity over the two halves of the 1990s therefore occurred in the non-ICT, more traditional, industries. Since these industries accounted for around 70 % of total EU output in the year 2000, it is a source of deep concern that both their capital intensity and overall efficiency patterns appear to be deteriorating. In addition, these are the parts of an enlarged EU economy which are facing the greatest

⁽¹⁾ This decomposition into ICT and non-ICT industries was based on the GGDC's ICT intensity breakdown of all industries. In total, 25 of the 56 industries are classified as either ICT-producing or heavy ICT-using industries, with 31 in the non-ICT part of the respective economies. In terms of shares of value added, in the year 2000, ICT-intensive industries represented 37 % of US value added compared with 32 % for the EU.

⁽²⁾ For example, in the year 2000, ICT investment represented 30 % of all non-residential gross fixed capital formation in the USA.

competitive challenges from globalisation. By contrast, for the USA, the non-ICT industries showed an improving trend for both capital deepening and TFP (but not as dramatic as for the ICT-related industries), with some commentators suggesting that part of the improvement in non-ICT TFP growth may be due to positive spillover effects from ICT investments in other industries.

The most important industries from a labour productivity perspective

In the ICT and non-ICT parts of the US and EU economies, there are a total of 56 different industries but, from a labour productivity growth perspective, just five of these industries dominate the overall patterns, with all these industries being in the ICT-producing and ICT-using areas of the respective economies ⁽¹⁾. Of these five industries, the USA outperforms the EU in four, namely in one ICT-producing manufacturing industry (i.e. semiconductors and other electronic equipment) and in three ICT-using service industries (i.e. wholesale trade, retail trade, and financial services). On a more encouraging note, the EU is dominant in one ICT-producing service industry, namely telecommunications. It is interesting to point out that whilst productivity in ICT-producing manufacturing industries has been growing at a significantly faster pace than the associated ICT-using service industries, it is the latter group of service industries which accounts for by far the greatest proportion of the US upsurge in productivity ⁽²⁾. Some caution may therefore need to be exercised given the well-documented measurement issues in a number of these service industries.

What role could policies play in future productivity patterns? A 'Lisbon strategy' scenario

Having established the stylised facts from the aggregate and industry analyses, the logical next step was to place these results into a more policy-relevant context. This is particularly important given the diverse experiences of the EU's individual Member States, with many of them outperforming the USA in terms of labour productivity over the period discussed. The key policy question addressed was whether all the EU countries that experienced high productivity growth and the USA shared certain common characteristics which could explain their

superior performance. More specifically, what were the channels via which the more fundamental factors driving growth (i.e. institutions, trade, market size, education and labour supply/demographics) affected investment and total factor productivity (TFP) in these countries and how did these last two factors interact to generate labour productivity growth?

The productivity model which is developed looks at these issues and specifies productivity growth as being generated by four distinct activities, namely the investment of firms in both physical and knowledge capital, the investment of households in human capital formation, and changes in labour supply ⁽³⁾. Using this model, the analysis shows that EU-US productivity differentials can, in fact, be related to some fundamental structural differences at the individual country level, with five areas identified as being quantitatively important and relevant in an EU context, namely the level of regulation, the structure of financial markets, the degree of product market integration, the size of knowledge investment, and the ageing of the labour force.

The 'Lisbon strategy' simulation in Section 4, whilst explicitly concentrating on regulatory reform and the knowledge-based economy, implicitly was an attempt to highlight the importance of all these five factors in determining the EU's long-run growth performance and for its ambitions to outperform the USA in terms of potential growth rates (thereby establishing itself as the most competitive, knowledge-based economy in the world).

- In terms of boosting investment via regulatory reform, the 'Lisbon strategy' simulation showed that even a relatively rapid deregulation towards equivalent US levels would not lead to sufficiently large productivity gains over the next seven years to close the present 10 % efficiency gap with the USA. Whilst moving to US levels of regulation would lead to a 0.15 % increase in the long run (i.e. over 30 years) rate of productivity growth, the Economic and Financial Affairs DG's analysis stresses that any gains from deregulation in terms of technological catching-up or from privatisations of State monopolies should be interpreted more in terms of static efficiency gains and not of the dynamic efficiency gains

⁽¹⁾ If one examines the performance of all 56 industries, the extent of the deterioration in the EU's performance over the two halves of the 1990s is striking, with 44 of the 56 industries showing a downward trend in their productivity performances over the second half of the decade.

⁽²⁾ This apparent contradiction is explained by the higher share of ICT-using service industries in overall value added.

⁽³⁾ The neoclassical growth model makes fairly precise quantitative predictions concerning these four factors, with the estimated labour productivity growth contributions from the Economic and Financial Affairs DG's model being very close to those predicted by the neoclassical model.

needed to achieve an outward shift of the ‘technology frontier’. This suggests that deregulation, whilst crucial for investment, on its own would be insufficient to meet the EU’s ‘Lisbon’ ambitions and must therefore be accompanied by concerted efforts aimed at boosting the production of knowledge.

- In terms of the second element of the ‘Lisbon’ package, namely action to boost TFP growth (i.e. the knowledge-based economy), the recent empirical growth literature emphasises knowledge and the creation of knowledge via the investment activities of firms, households and the government in both R & D and education as being essential for enhancing the level of technology in an economy. The chapter points to long-run productivity gains from investments in both education and R & D ⁽¹⁾. With respect to R & D, the chapter stresses that the focus should not be on boosting R & D spending directly, but on creating the framework conditions which would promote an endogenous increase in research spending. The empirical analysis in this chapter identified two main channels through which this could be achieved, namely higher product market integration (e.g. completion of the single market programme) and an investment environment which ensures the development of a more active risk capital market. However, disentangling the different transmission channels and even the direction of causality is extremely difficult. For example, while, on the one hand, a certain degree of imperfect competition may be necessary to cover the costs of knowledge-intensive forms of investment such as R & D, on the other hand, there is increasing evidence against the view that firms enjoying significant market power plough back excess profits into higher rates of R & D and innovation. Rather, it appears that a lack of competition tends to provide little incentive for firms to pursue technological innovations, slows down their diffusion and impedes a wider variety and higher quality of goods and services being delivered to consumers.

Consequently, in assessing the combined effect of introducing the overall package of supply-side reforms

described in the ‘Lisbon’ simulation (i.e. deregulation, product market integration, human capital development and an investment climate conducive to the channelling of financial resources to R & D and other high-risk investment domains), it is important to underline the uncertainties involved. However, on the assumption that the quantitative relationships established in the regression analysis hold, this package of supply-side reforms would boost EU potential growth rates by roughly ½ to ¾ of a percentage point annually over a 5- to 10-year horizon. While this would undoubtedly represent a significant turnaround in the EU’s present economic fortunes, given the extent of the present gap in performance, this package of reforms would still not be sufficient for the EU to overtake the USA in productivity terms over the timescale laid out for the Lisbon agenda. Apart from the time which will need to elapse between the implementation of reforms and the appearance of visible effects, there are two further obstacles to be overcome in reaching the Lisbon-imposed productivity target: firstly, the temporary trade-off faced in attaining the parallel employment target of 70 %, and, secondly, the continuous drag on productivity induced by Europe’s ageing labour force.

Concluding remarks

At present, EU GDP per capita is at around 70 % of the US level, with roughly one third of the gap due to productivity differentials and two thirds due to a lower labour input (i.e. lower employment rate and hours worked compared with the USA). Consequently, improving the EU’s productivity performance and raising employment are both fundamental to an increase in the long-term growth potential of the EU economy. This study has concentrated on the first aspect of this dual-policy path by isolating the key drivers explaining the productivity differences between the EU and the USA and by suggesting a range of policy initiatives aimed at closing the EU’s productivity gap over the coming years.

The optimistic view of recent EU productivity trends is that part of the explanation for the poor performance could be adjustment lags, with perhaps the basis for future growth already firmly established due to the labour, capital and product market reforms which have already been introduced. Under this view, the EU may now simply be in a transition phase whereby some of the negative effects of those reforms (e.g. a temporary decrease in productivity due to labour market changes) are visible, whilst the gains to be reaped in the future are not. The more pessimistic view (which is the one largely

⁽¹⁾ For example, a permanent increase of one year in the average education levels of the labour force would lead to a 0.45 percentage point gain on the EU’s long-run rate of productivity growth. R & D is even more potent, with a permanent increase in the share of R & D in GDP of 1 percentage point leading to a 0.6 percentage point increase in the long-run rate of productivity growth.

supported by the analysis in this chapter) is that a large number of Member States have as yet failed to recognise the extent of the reforms which need to be introduced given the challenges posed by an acceleration in the pace of technological progress, by globalisation (most recently in terms of the growing tradability of large parts of the service economy) and finally from the steady 'greying' of EU populations.

Whilst based on a different set of indicators to those used for the present analysis, this chapter's more pessimistic viewpoint would appear to be borne out by the 2003 spring report. Realising the difficulties of measuring progress in structural reform, the Commission and the Council devised a set of structural indicators which have become one of the main tools for assessing progress in achieving the Lisbon objectives. This year the spring report presented a simple but very informative exercise counting the frequency with which each Member State was amongst the three best- or three worst-performing Member States in the EU on each indicator. The results document that certain countries appeared again and again amongst the top three Member States, most notably Denmark, Sweden and Finland. It is important to note that these are precisely the same countries that had already undertaken deep and successful reforms well before the launch of the Lisbon strategy. On the other hand, the major euro-area Member States, such as Germany, France

and Italy, came out as clear laggards with respect to structural reforms. Consequently, as underlined by the analysis in this chapter, the strong productivity growth performances of a small number of EU Member States demonstrate that there is nothing inherently wrong with the policy framework established by the Lisbon reform strategy. Timely and thorough implementation of the different reform measures would therefore appear to be the real Achilles heel of this process.

To conclude, the issue of whether recent EU productivity trends are likely to be permanent or transitory was raised at the start of this study. While it is still premature to speculate as to the likely answer to this question, what can be said is that the outcome will depend on the policy choices which governments make in the policy domains outlined earlier. The present chapter confirms the importance to the EU's long-run productivity performance of a comprehensive reform strategy aimed at reducing the regulatory burden, further integrating markets, promoting human capital investment and enhancing the innovation potential of the economy. Implementation of such a wide-ranging reform agenda would create a more flexible, dynamic and investment-friendly business environment which, together with better functioning markets and more risk-oriented financing mechanisms, will ultimately be reflected in a significant increase in EU-15's underlying labour productivity growth rate.

6. References

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Annex 1: Analytical framework

In the framework for the empirical analysis presented in this annex an attempt is made to combine standard growth regressions (see, for example, Mankiw et al., 1992) with some new developments in endogenous growth theory. Standard growth regressions treat technical progress as exogenous and they therefore miss a large part of productivity. The endogenous growth literature makes an attempt to explain technical progress as the result of human capital formation both undertaken at the household (see, for example, Lucas, 1992) and the firm level (see, for example, Romer, 1990) in the form of education and training (for households) and in the form of R & D spending (in the case of firms). This literature regards the level of technology as being (at least partly) created by a knowledge production function (see Jones, 2002).

1. The model: Output is produced via a conventional neoclassical production function. For reasons of analytical convenience and in order to be in conformity with most of the literature, we assume a Cobb–Douglas technology

$$Y = K^\alpha (L^*A)^{1-\alpha} \quad (1a)$$

Output is produced with capital (K) and labour (L) input which is measured in hours. Technical progress is labour augmenting. The level of technology is given by the variable A . The level of technology must be regarded as a summary indicator of both the knowledge accumulated in the economy and the level of efficiency in which factor inputs are used in the production process. Knowledge production is described below. With this formulation, hourly labour productivity can be decomposed into a capital intensity effect and a technology component by reformulating equation (1a) as

$$Y/L = (K/L)^\alpha A^{1-\alpha} \quad (1b)$$

Labour productivity is increased either by capital deepening (K/L) or by the accumulation of knowledge (A),

with α and $1 - \alpha$ being their corresponding elasticities. Both physical and human capital represent stocks which can be increased by corresponding investment activities. Physical capital (we express both physical and human capital in per hour terms) evolves according to the following capital accumulation equation

$$\dot{K}_L = I/L - (\delta + n)K_L \text{ where } K_L \equiv K/L \quad (2)$$

where δ is the depreciation rate and n is the growth rate of hours worked. Crucial for physical capital is investment. In the case of knowledge capital, we follow the literature and specify a knowledge production function:

$$\dot{A} = B \left(\frac{RD}{Y} \right)^\gamma (EDU^x Ydeprat^w) A^\phi \quad (3)$$

Knowledge is increased by the investment activities of households and firms. It is a positive function of the research intensity of firms as expressed by the R & D to GDP ratio (RD/Y) and the level of educational attainment (EDU) of the labour force. We correct the average level of education for the time elapsed since the knowledge was created by correcting for the age structure of the labour force. A simple index for this is the youth dependency ratio ($Ydeprat$). Under the assumption that human capital depreciates over time, one would expect a younger labour force to have a higher capacity to create and absorb new ideas and technical developments.

The variable B captures other factors that could potentially affect efficiency. With an eye towards the variables of interest in this study, namely regulation, structure of financial markets and market size, one can argue that all of them have a potential effect on efficiency. For example, more deregulated markets which are open to foreign competition improve average efficiency by forcing low-productivity firms to exit. However, it is unclear whether reducing monopoly rents will also increase a firm's incentives to innovate simply because potential rents from the innovation will be lower. Increased competition via more openness may be more successful since

increased market size could compensate for higher competition. Market size (i.e. scale effects) can have additional efficiency effects if there are increasing returns to production.

Likewise, the structure of financial markets can affect efficiency. It has been argued recently in the literature (e.g. Levine, 1997) that equity-based systems may be more efficient in terms of risk sharing, information acquisition and providing management incentives. However, in contrast to this view, Shleifer and Vishny (1986) regard stock markets as having detrimental effects on corporate governance.

For empirical testing, we formulate the following simple specification for the efficiency term in the knowledge production function

$$B = REG^{\lambda} OPEN^{\phi} POP^{\theta} FIN^{\kappa} \quad (4)$$

where efficiency becomes a function of measures of regulation (*REG*), market size proxied by openness (*OPEN*), population size (*POP*) and a set of financial market indicators (*FIN*). A more precise definition of these variables will be given in the following section.

Finally, the question arises as to whether an increase in the level of investment in human capital will permanently increase the growth rate of knowledge ($\phi = 1$) or whether the marginal product of knowledge capital is declining ($\phi < 1$). Jones (1995) argues forcefully that the stylised facts of declining TFP growth rates and rising human capital investments over the last decades are clearly more consistent with the second view.

As shown by equations (2) and (3), both physical and knowledge capital are driven by physical and R & D investment activities correspondingly. Thus, eventually, the factors influencing investment in both forms of capital will determine the growth rate of labour productivity. Since we are interested in how regulation, the structure of financial markets and market size as well as the qualification levels of the labour force influence investment rates, we postulate the following equations:

$$I = iy(REG, OPEN, POP, FIN)Y \quad (5a)$$

and

$$RD = rdy(REG, OPEN, POP, FIN)Y \quad (5b)$$

Economic theory provides various justifications for these variables as possible predictors of investment rates.

Regulation: The level of regulation affects investment in various ways. First, to the extent to which regulation prevents entry, it lowers competition which, in turn, enables firms to earn higher marginal returns which lowers investment. Regulation can also affect the investment costs of existing firms and increases capital costs which, in turn, requires higher returns and leads to lower investment rates. Blanchard and Giavazzi (2002) provide a theoretical framework for a discussion of these effects.

Financial markets: Another potentially important aspect affecting investment rates is access to finance. Allen and Gale (2000) see a special advantage of stock markets in the assessment of innovations. This suggests that stock markets should be favourable to new forms of investment (or investment undertaken by new firms) as well as R & D investment. Wachtel (2001) regards stock markets as a vehicle for fostering international portfolio and direct investment. Other authors have a more critical attitude towards stock markets, for example Levine and Zervos (1998) see improved liquidity as having negative effects on savings rates and therefore on investment.

Market size (population, openness): By endogenising knowledge capital, scale effects become more important. This should not have direct effects on the aggregate investment to GDP ratio but it is likely to have effects on the allocation of investment to different types. The endogenous growth literature (see Romer, 1990) especially stresses the sunk costs associated with R & D. Therefore, bigger markets associated with larger national economies and more open borders should be positively correlated with R & D activities. Size effects have played a prominent role in the recent growth literature, since the size/growth link is stressed in the first generation of endogenous growth models (see Jones, 2001). There is, of course, a large amount of literature which deals with the effect of openness on productivity growth, but only recently Alesina et al. (2000) have tried to look systematically into the effects of openness and country size on productivity.

Education: Since education affects the efficiency of labour, it affects output and investment in the same direction and with the same intensity. Therefore, it does

not affect the investment rate as such. However, the composition of investment may be affected in the sense that more knowledge-intensive forms of investment (ICT, software, R & D) may be complementary to the human capital endowment in the respective economy. Education may also play a role in attracting foreign direct investment.

After having established investment equations, one can determine the dynamic adjustment of labour productivity to changes in fundamental economic determinants via the impact of physical and knowledge investment on their respective capital stocks. The long-run level of productivity is given by

$$\ln\left(\frac{Y}{L}\right)^* = \ln(A^*(..)) + \frac{\alpha}{1-\alpha}(iy(..)-(n+\delta+\pi)) \quad (6)$$

where $A^*(..)$ and $iy(..)$ are functions which are defined by equations (6) and (3). Since it takes time for (permanent) changes in investment to increase the stock of physical capital and knowledge, the dynamic adjustment of labour productivity to new investment levels is characterised by a process of convergence. Given the technological assumptions, with declining marginal products of physical and human capital, countries with low levels of human and physical capital endowments should grow faster. A summary measure of both forms of capital is, of course, labour productivity itself. The labour productivity growth regressions can be written as follows:

$$\dot{y}_l = \lambda(y_l^* - y_l) \quad \text{where } y_l \equiv \ln\left(\frac{Y}{L}\right) \quad (7)$$

2. Empirical analysis and results: The model specifies productivity growth as generated by four distinct activities, namely the investment of firms in both physical and knowledge capital, investment of households in human capital and changes in labour supply. The neoclassical model also weighs the contributions of these individual factors by the output elasticities of physical capital, labour and TFP. However, in this section, we want to go beyond pure growth accounting and ask how productivity growth at the aggregate level may be linked to the fundamental factors presented in Section 4 of the main text, namely institutions, market size, demographic trends and education. The framework presented above allows for the direct estimation of these effects. It also allows us to distinguish between an investment and a TFP channel. The empirical analysis is based on a panel of 21 OECD countries over the period 1975–2000⁽¹⁾. Growth regressions have become a standard analytical

tool for structural economic analysis. Nevertheless, it is important to point out some caveats, namely omitted variables and endogeneity. Firstly, the empirical analysis probably leaves out some important factors. In order to reduce the likelihood that the variables used in the regression could be interpreted as proxies for unobservables, all regressions are run with country fixed effects. Not all variables used in the regressions can be regarded as strictly exogenous. Some of the indicators used in these regressions could be endogenous. In particular, this holds for the financial market indicators. We try to minimise this problem by using beginning-of-period values instead of period averages⁽²⁾.

As discussed in Section 4 of the main text, the economic determinants most relevant for this study are the degree of regulation, financial markets, market size and the human capital endowment of the labour force. Empirical proxies for these variables must be selected. It is difficult to obtain internationally comparable figures of regulation. In this study, we use the Fraser index which has the advantage of being available over the whole sample period⁽³⁾. In addition, we use the share of government consumption and the degree of openness as possible indicators for government involvement and regulation. Unlike with a direct regulation index, the results which are obtained with the two latter indicators are more difficult to interpret. Government consumption could also be negative for other reasons. For example, it could represent crowding-out effects, but there could also be a bias due to the way in which a government's contribution to GDP is measured. Similarly, a positive effect of openness could indicate both higher competition but also market size effects.

The structure of financing is captured in the regressions below by two indicators, the 'volume of bank credit as a share of GDP' and an 'index of stock market capitalisation'. In order to reduce possible problems of endogeneity with these two indicators, we again use beginning-of-period values instead of period averages.

(1) Data series for the different variables used in the analysis were available, starting in the mid-1970s, for all of the EU countries, with the exception of Greece and Luxembourg. Outside the EU, comparable series were assembled for Australia, Canada, Iceland, Japan, New Zealand, Norway, Switzerland and the USA. Since we are interested in medium-term trends, the analysis removes business-cycle effects by using five-year averages.

(2) GMM panel data estimators have been suggested (see Caselli et al., 1996) for dealing with the endogeneity problem. However, with persistent time series, instruments can be weak and results can be severely biased in relatively small samples (see Bond et al., 2001).

(3) The OECD regulation indices are usually only available for the 1990s.

For modelling the effects of market size, we follow Alesina et al. (2000) and use three variables, namely openness, population size and the product between the two. The last variables capture possible non-linearities, for example that the degree of openness may be less important for large as opposed to small economies.

As a human capital indicator of the household sector, we use the average years of schooling of the adult population. The data are from de la Fuente and Doménech (2001). In order to allow depreciation of human capital, we use the youth dependency ratio as an additional regressor.

Following the framework outlined above, we first present results on investment rates (equations (5a) and (5b)). In a second step, we estimate the parameters of the knowledge production function (equations (3) and (4)) and finally we estimate the contributions of physical and knowledge capital to labour productivity growth (equations (6) and (7)).

2.1. Investment: This section analyses how the investment of firms is affected by the basic growth determi-

nants. We are especially interested in the economic determinants of physical investment versus R & D. However, one should keep in mind that within fixed capital formation important changes have taken place, with investment in ICT becoming a more important investment category. In order to understand the structural changes within aggregate investment, it is therefore useful to also look at individual investment categories such as ICT. Important shifts are also occurring along another dimension. With increasing international capital mobility, foreign direct investment is becoming much more important. In a forward-looking analysis, it therefore seems essential to explore the specific determinants of these ICT and FDI investment categories.

Key results from the regression analysis: The most important result is that for all physical investment categories we find that regulation has a negative effect on investment rates. In contrast to this, R & D expenditures are not affected by regulation. The first result is in conformity with the theoretical priors. There are various possible explanations for the latter result. Firstly, entry barriers may be less of a problem since R & D is probably highly concentrated amongst large incumbent firms. Secondly, certain forms of protection may actu-

Table A.1

Investment regressions

	Gross fixed capital formation	Foreign direct investment	ICT investment	R & D expenditure	
	(1)	(2)	(3)	(4)	(5)
1. Government expenditure	– (!)	– (!)	– (!)	1.18**	0.95**
2. Degree of regulation	0.29**	3.32**	0.86**	– 0.20	– 0.04
3. Bank credit	– 0.01	– 0.68**	0.16	– 0.07	–
4. Stock market capitalisation	0.03*	0.48**	0.13**	0.15**	–
5. Openness	– 3.35**	1.93	1.09	3.21*	6.87**
6. Openness x size	0.79**	0.16	– 0.44	– 0.71	– 1.86**
7. Population size	0.97*	0.49	1.99**	1.78**	1.72**
8. Education	– 0.05**	0.53**	0.002	0.02	0.13**
9. Growth of working-age population	– 0.04	0.13	– 0.001	0.06	– 0.02
Number of countries/observations	21/89	21/85	21/61	21/89	21/100
R**2	0.77	0.79	0.81	0.93	0.92

(!) Government consumption is excluded from regressions (1) to (3). Collinearity between government consumption and deregulation tends to make both regressors insignificant when used simultaneously. Only results with deregulation are reported here since this indicator slightly outperforms government consumption in the regressions.

NB: Panel regression with country fixed effects.
 ***/**/* indicates significance at the 1/5/10 % levels.
 Source: Commission services.

ally be beneficial for R & D activities which yield risky returns. So far, there is little empirical work on the relationship between investment and regulation. A more recent empirical study by Alesina et al. (2003), which uses OECD regulatory indices, tends to support the results on physical investment rates and also finds a significantly negative impact of regulation in a panel of OECD service industries. The regression results also indicate that more stock-market-based financial systems tend to be more favourable to both physical and knowledge investment. It appears that equity markets are an important determinant of foreign direct investment. Given the rising importance of international capital mobility, these results suggest that the structure of financial markets may play a more important role in the future than they have in the past. Kappler and Westerbeide (2003) found similar results for a panel of OECD countries with different control variables. However, a certain degree of ambiguity remains concerning the importance of the structure of financial markets. A comparison of columns (4) and (5) shows that adding indicators of financial structure does not really improve the fit of the regression. In the absence of financial market indicators, the level of education, which is an intuitively plausible explanatory variable, becomes significant. These two regression results taken together could also be interpreted as indicating that stock markets simply place a high value on the human capital endowment of firms. A causal interpretation running from the structure of financial markets to R & D expenditure would not be correct. This leads directly to a discussion of the role of education for different types of investment. Education is negatively correlated with aggregate physical investment rates but tends to be positively correlated with human capital investment. This should not be interpreted as suggesting that education is bad for physical investment. Rather this correlation captures structural changes from low-skilled heavy industry production structures, with high levels of physical investment, to high-skilled low-capital-intensity service sector production structures, with low levels of physical investment. Also, in the case of FDI, education is significant and positive. Internationally mobile capital seems to seek low-regulation and high-education environments.

2.2. Knowledge production: This section looks at the quantitative importance of knowledge investment measures (i.e. education and R & D investments) for TFP growth. The results are presented in two steps (see Table A.2). Column (1) gives the standard specification

of the knowledge production function, while columns (2) and (3) present slightly augmented versions where we ask whether institutional features affect the efficiency of knowledge accumulation⁽¹⁾. As can be seen from column (1), all three variables have the correct sign and, except for education, they are significant.

Adding additional regulatory indicators improves the fit of the regression. Trade openness, corrected for country size, appears to be especially important, whilst the regulatory indicator is not significant. It is interesting to observe that market size does not have an impact on TFP growth beyond its effect on R & D investment.

This suggests that there are no particular efficiency gains in production due to country size, i.e. increasing returns in production is not present in this data set. Market size effects are largely confined to R & D investment itself (see Table A.1).

Another interesting result is the strong negative effect of government consumption on TFP. However, one must be careful when interpreting this result. The way government production is measured in the national accounts could be a possible explanation for this result. Countries with a higher government share could have systematically underreported GDP, since the capital services of the government sector are not reported. Whatever interpretation is the correct one, government consumption appears to be an important control variable. This can be directly seen by looking at the consequences for the impact of education on TFP, which now becomes significant. Since there is a positive correlation between education and government expenditure, the exclusion of government consumption biases the effect of education downwards. Adding financial market measures to the regression in column (4) does not improve the fit but instead makes all the explanatory variables insignificant. This suggests that financial market measures are highly correlated with the remaining explanatory variables.

The correlation is especially high with R & D expenditure and regulation. Unfortunately, our analysis does not allow us to shed light on the direction of causality. Theoretically, it could go in both directions. More market-based financial systems could both exert pressure to increase efficiency and provide easier funding for R & D

⁽¹⁾ All regressions have country and time fixed effects. The latter are meant to make the regressions more robust against common time trends in both the explanatory variables and TFP.

Table A.2

TFP/knowledge production function ⁽¹⁾

	TFP	TFP	TFP	TFP
	(1)	(2)	(3)	(4)
1. Youth dependency ratio	0.076**	0.073**	0.048*	0.062
2. R&D expenditure	0.025**	0.022**	0.033**	0.009
3. Education	0.005	0.007	0.009*	0.01
4. Deregulation		0.04	0.03	0.03
5. Government consumption			-0.06**	
6. Openness		0.40**	0.25*	0.24
7. Openness x size		-0.13**	-0.09*	-0.07
8. Population		0.05	0.05	0.03
9. Bank credit				-0.004
10. Stock market capitalisation				0.003
11. TFP (-1)	-0.01	-0.04*	-0.07**	-0.056*
Number of countries/observations	21/97	21/97	21/97	21/88
R**2	0.31	0.40	0.45	0.34

(¹) Panel regression with country fixed effects.
 NB: ***/**/* indicates significance at the 1/5/10 % levels.

Source: Commission services.

investments. But, equally well, the correlation could simply reflect the fact that stock markets place a high value on regulatory reforms and R & D investments.

A specific feature of these results is the insignificance of direct measures of regulation as an explanatory factor for TFP growth. The results on regulation and TFP reported here lie somewhere in the middle between a recent joint CEPR-IFS (2003) study which reports a negative association between deregulation and TFP and an OECD (Nicoletti and Scarpetta, 2003) study which finds a positive effect of deregulation on TFP. However, the results presented by the OECD are not clear-cut and are open to some interpretation. The study finds that productivity gains are mostly associated with privatisations and not with levels of regulation in general. The study also finds that deregulation mostly facilitates technological catching-up but that there is little evidence that it leads to outward shifts in the technological frontier. Whether productivity gains from privatisations can be interpreted as true dynamic efficiency gains is also questionable in the light of the CEPR-IFS study which also finds productiv-

ity gains from privatisations (in network industries, for example) but these are associated with reductions in employment. Thus, the effect of privatisations could be temporary productivity improvements related to a reduction of economic slack in previously publicly owned companies. The fact that regulation is neither significant for R & D nor for TFP points in the direction that the link between regulation and moving the technological frontier is rather weak and an interpretation in terms of static efficiency gains is probably more appropriate.

Is the second half of the 1990s a special period for TFP growth? The second half of the 1990s differs from previous periods in various respects. First, some countries, in particular the USA, managed an acceleration in the rate of technical progress and, secondly, technological convergence of the EU relative to the USA came to a halt. It is by now well understood that technological developments related to the production and use of ICT are likely to be a major contributing factor. In this subsection, an attempt is made to relate the estimates from the knowledge production function to the technological

developments in the late 1990s⁽¹⁾. In a very stylised manner, one can formulate the following hypotheses.

Hypothesis 1: The knowledge-generating factors as identified by the knowledge production function, namely R & D and human capital can explain the international growth patterns since the mid-1990s. If this hypothesis is correct, then we would expect to see no systematic variation of the regression residuals with variables relating to hypotheses 2 to 4.

Hypothesis 2: There is a large industry-specific element which plays a role. Countries with high-ICT industry shares have benefited from the positive productivity shocks taking place in these industries. Alternatively, those countries which are high-ICT users have benefited from technological spillovers. If this hypothesis is correct, then one would expect the ICT production share or, in the case of spillovers, the ICT investment share to be significant.

Hypothesis 3: It is true that the ICT revolution was industry specific, but it was not confined to a specific country. With high capital mobility, those countries which offered attractive investment locations in terms of flexible labour and goods markets benefited most from the ICT boom. Alternatively, it is sometimes argued that an ageing labour force would be less willing to adopt new technologies. If this is correct, then both measures of deregulation and the youthfulness of the labour force should be positively correlated with the residual.

Hypothesis 4: Both industry specialisation (hypothesis 2) as well as flexibility in adopting new technologies (hypothesis 3) have interacted positively. In this case, one would expect ICT production shares and measures of deregulation and youthfulness of the labour force to interact positively.

Table A.3, which summarises our analysis of the TFP residuals for 19 OECD countries over the period 1996–2000 is intended to shed some light on the relative importance of these four hypotheses. The most significant relationships are found for the interactions of ICT production with either demographic or regulatory indicators. This suggests that both industry specialisation as

well as favourable conditions in terms of technology adoption were important factors for TFP growth in the late 1990s. Industry specialisation does seem to play the dominant role as expressed by the high correlation between the ICT share and TFP growth⁽²⁾. There is little evidence of spillover effects from investment in technology which goes beyond the pure investment effect. Implicitly these results reject hypothesis 1. Notice, however, that the results are sensitive to outliers. Ireland and Spain constitute positive and negative outliers in the second half of the 1990s. Removing the two countries makes the result less significant. However, it does not change the ranking of the individual hypotheses.

2.3. Combining the effect of physical and knowledge capital formation on productivity growth:

The previous two sets of regressions have shown how the basic productivity growth determinants affect physical capital formation and the creation of knowledge. This section looks at the relative contribution of these two factors to productivity growth when they are combined with two other factors, namely the growth of hours worked and the potential for catching up. As indicated above, the neoclassical growth model makes fairly precise quantitative predictions concerning these four factors conditional on the choice of the output elasticity of capital and labour, which have been set to 0.35 and 0.65 respectively. This follows the standard practice of using the wage share for calibrating the output elasticity of labour (α) in the production function. A comparison of column (1) in Table A.4 — which gives the theoretically predicted coefficients — and column (2) — which gives the estimated coefficients — shows that the estimated growth contributions of these four factors seem to be close to the predicted contributions of the neoclassical model. These results are robust to instrumenting investment in order to control for possible endogeneity (see column (3)). The last column tests whether the individual growth determinants have an independent effect on labour productivity

⁽¹⁾ We use the knowledge production function without controls (except for country dummies) for country-specific efficiency changes (column (1) in Table A2) in order to assess how much the knowledge inputs can account for changes in TFP growth in the late 1990s.

⁽²⁾ Countries with high ICT production shares combined with relatively low levels of regulation (on the basis of the Fraser Institute measure), such as Ireland, Finland and the USA, have outperformed countries like Spain and Italy with low ICT shares and above-average levels of regulation. There is, however, another group of European countries consisting of Germany, Austria and Portugal which showed TFP growth rates above the rates predicted by their knowledge investment efforts despite below-average performances in terms of the combined effect of ICT production shares and regulation. This could possibly be explained by their relatively timid efforts to increase the employment content of growth via labour market reforms. While the contribution of employment to growth increased in the EU as a whole between the first and the second half of the 1990s, it declined in Germany and Portugal, with Austria having a zero employment contribution to growth over the 1996–2000 period.

growth not adequately captured by our theoretical framework. As can be seen when looking at column (4), no significant effect of the individual growth determinants can be detected if one accounts for the impact of these factors on either TFP or physical capital formation.

3. What do these results imply quantitatively?: The estimates reported in the tables above can be translated

and interpreted in terms of short-, medium- and long-run multipliers and therefore can give an indication of the magnitude of the effect of certain policies or exogenous shocks. Table A5 gives the estimated productivity growth contributions of investment in knowledge, physical investment and labour input growth. The most striking result is the large difference in the R & D multiplier relative to the physical investment multiplier. This is a

Table A.3

Explaining the residuals of the knowledge production function, 1996–2000

	Coefficient	R**2	Coefficient	R**2	Coefficient	R**2
1. ICT production	0.26***	0.40	0.13	0.11	0.09	0.09
2. ICT investment	-0.10	0.00	0.18	0.02	0.12	0.02
3. Deregulation	0.40*	0.15	0.25	0.01	0.15	0.07
4. Age of labour force	0.08**	0.27	0.04	0.07	0.02	0.03
5. ICT and regulation	3.02***	0.44	1.67	0.16	1.09	0.12
6. ICT and age of labour force	0.46***	0.53	0.29*	0.18	0.19	0.15

NB: ***/**/* significant at the 1/5/10 % levels.

Source: Commission services.

Table A.4

Productivity growth regressions (with controls for TFP)

	1 ⁽¹⁾	(2)	(3)	(4)
1. Initial income level	-0.036	-0.045**	-0.042**	-0.037**
2. Hours' growth	-0.019	-0.017**	-0.016**	-0.017**
3. TFP growth (implied long-run) ⁽²⁾	0.036	0.044**	0.041**	0.036**
4a. Investment rate	0.019	0.017**		0.006
4b. Investment rate (predicted) ⁽³⁾			0.017**	
5. Education				-0.001
6. Youth dependency ratio				0.001
7. Degree of regulation:				
7a. Government size				0.006
7b. Regulation index				0.019
8. Stock market capitalisation				0.001
9. Bank credit				-0.003
10. Openness				0.006
11. Openness* population				-0.001
12. Population				0.000
Number of countries/observations		21 / 91	21/88	21 / 88
R**2		0.63	0.58	0.67

⁽¹⁾ Coefficients as implied by the neoclassical growth model with an output elasticity of labour equal to 0.65.

⁽²⁾ Coefficients estimated from Table A.2, column (3), are used to calculate A*.

⁽³⁾ Predicted investment rate from Table A.1, column (1).

NB: ***/**/* indicates significance at the 1/5/10 % levels.

Source: Commission services.

fairly common result which can be found in many other studies (see, for example Grilliches, 1994, Coe and Helpman, 1995, and Jones, 1995). The results found in the literature suggest that the social rate of return of one unit of money spent on R & D is in the range between 25 and 100 %. This implies that a permanent increase in the share of R & D in GDP of 1 % would increase the growth rate of GDP in the range between 0.25 % and up to 1 %. The results reported in the table suggest that over a period of 25 years the average growth effect of an increase in the R & D share from currently about 2 % in the EU to 3 % could increase growth by 0.6 %. However, extreme caution should be exercised when interpreting these results. One has to ask why the share of R & D spending is so low (only about 10 % of physical investment spending) when returns are so high. First of all, the average return compensates for substantial risks associated with R & D investment. Therefore, these figures say very little about the return that can be expected from concrete knowledge investment projects. A somewhat easier question to pose is the following: how can we explain why certain countries have a high R & D share and other countries have a low share? A look at Table A.2 suggests that R & D activities require certain framework conditions. By looking at the cross-country variation of R & D spending across OECD countries, one can identify clearly the following determinants, namely the level of education of the labour force and market size (proxied by openness and country size). Another possibly important variable is the structure of financial markets. If one takes these determinants into account, it is not that surprising that countries like Finland, Germany, Japan, Sweden, Switzerland and the USA manage to consistently have R & D shares above 2.25 %. These factors also provide a good explanation as to why countries such as Italy,

New Zealand, Portugal and Spain have R & D shares of only 1 % or less. This suggests that any successful strategy to increase R & D spending in the second group of countries must be accompanied by measures to increase human capital endowments and by further efforts to better integrate their economies into the world market.

A permanent increase in the growth rate of hours worked, whilst keeping the investment rate as well as TFP constant, has negative effects on labour productivity. Roughly speaking, an increase in the growth rate of hours by 1 % lowers productivity growth by about 3 percentage points in the first 10 years. The results also give a possible explanation for the trend decline in TFP and labour productivity in OECD countries.

With the fall in the birthrate in the 1970s, all OECD countries have experienced a decline in the youth dependency ratio and an increase in the average age of the labour force. If it is the case that human capital depreciates, then one would expect the ageing of the labour force to have an effect on productivity. As our regression results suggest, this is indeed the case. Table A5 gives the results of a decline in the youth dependency ratio which is of the order of magnitude of the decline which actually occurred in OECD countries from the mid-1970s to the mid-1980s. These figures are fairly large and would imply a decline in the growth rate of labour productivity of –0.3 % per annum in the last 15 years. When interpreting these figures, one must keep in mind that there is an offsetting effect on productivity growth induced by a decline in hours worked.

These results also give some indication of the effects of specific policy measures.

Table A.5

Medium- and long-run effects of knowledge, physical investment and labour force growth on productivity (level effects)

	5 years	10 years	Long-run
1. Knowledge (increase in TFP by 1 %)	0.2	0.4	1.0
2. R & D expenditure share (increase by 1 percentage point)	5.3	9.1	17.7
3. Physical investment (increase of investment to GDP ratio by 1 percentage point)	0.4	0.7	1.8
4. Hours worked (permanent increase by 1 percentage point)	– 1.5	– 2.6	– 7.1
5. Youth dependency ratio (decline by 10 percentage points)	– 2.0	– 3.5	– 6.8

Source: Commission services.

Education: The results reported here confirm the positive effects of education spending on productivity growth which are reported in the separate study on education and growth which is included in the present review. Compared with the figures quoted there, the long-run effects are somewhat higher.

Openness: One interesting foreign trade development is the increased openness of countries belonging to EMU. The estimates suggest that the increase in the total trade of EMU Member States between the first and the second half of the 1990s may have increased productivity growth by about 0.04 percentage points per year.

Regulation: The results on deregulation that we obtained from the growth regressions are comparable to previous results obtained by the International Monetary Fund (IMF) (see Bayoumi et al., 2003, and IMF, 2002). The implied change of moving to US levels of regulation as measured by the Fraser index used in the regression would suggest an increase in long-run labour productivity of about 5 %. The IMF study implies a long-run labour productivity effect of about 3 %. Both in the IMF study and in the Economic and Financial Affairs DG's regressions, the positive effect is generated via an increase in the investment rate.

Table A.6

Effect of some policy measures on productivity (level effects)

	5 years	10 years	Long-run
1. Years of education (increase by one year)	0.5	1.4	12.8
2. Increased openness (equivalent to the increase in euro-area trade between 1991–95 and 1996–2000)	0.2	0.5	0.9
3. Moving to US levels of regulation	0.9	1.6	4.6

Source: Commission services.

Annex 2: Industry analysis: data and methodological points

Industry labour productivity database: This database has been assembled by a team led by B. van Ark at the Groningen Growth and Development Centre (GGDC) for the Enterprise DG. It consists of an industry data set that covers the period 1979–2001 for the 15 EU Member States and for the USA. Disaggregation into 56 industries is provided on the basis of the ISIC Rev. 3 classification. The primary variables included are nominal value added, industry deflators, employment and hours worked per employee ⁽¹⁾. Constant value added and hourly productivity series are then derived (see Table A2.2 for a complete list of the hourly labour productivity growth rates of all 56 industries over the last two decades).

Three methodological points need to be underlined:

- Firstly, the discussions on the emergence of a new productivity pattern linked to ICT industries ('new economy' era) have been associated with the statistical problem of correctly estimating price indices when the quality of the product is increasing rapidly (the typical case being for computer prices and other IT products). Hedonic deflators — based on the pricing of essential characteristics of the product — can help to overcome this and are applied by the US and a few European statistical offices. Following van Ark's approach, the Economic and Financial Affairs DG has uniformly applied US deflators (instead of national ones) to sensitive industries (industries 30 to 33 included in ISIC Rev. 3). These are derived using a double deflation procedure (both input and output).
- Secondly, the current best practice for GDP calculations is to use chained indices like the Fisher or

⁽¹⁾ Information on compensation is also included but is not used in the present study.

Törnqvist indices ⁽²⁾. These indices avoid the usual problem associated with fixed-based indices (i.e. composition drift), and this is even more important when price indices vary a lot. It is, for example, a known property that the combination of the use of a Laspeyres price index and strongly declining prices (as in the IT industry) would overestimate the (value added and) productivity gains. In this study, and again following van Ark's approach, we have used Törnqvist aggregation procedures throughout. That is, the deflator of a group of industries is calculated as the geometric mean of the component industry deflators, using average nominal value added shares ⁽³⁾. Or, in terms of changes in deflators (P), we have:

$$\Delta \ln P_t = \sum_i \frac{1}{2} \left(\frac{Y_{it}}{Y_t} + \frac{Y_{it-1}}{Y_{t-1}} \right) \Delta \ln P_{it}$$

For these two main reasons, the aggregate measures used in this study will often not correspond to official series of value added or labour productivity (see Table A2.1 for a comparison) ⁽⁴⁾.

- Finally, the EU-15 total is aggregated on the basis of euro exchange rates applied to nominal values, whilst all international comparisons are made following the conversion of the constant price series into PPS, using (fixed) 1995 conversion rates. All exchange rates are taken from Economic and Financial Affairs DG's AMECO database.

⁽²⁾ Laspeyres indices are still, however, often used to calculate aggregate value added in volume.

⁽³⁾ This formula also corresponds to the first-order approximation of a Fisher index.

⁽⁴⁾ An additional explanation for the difference can be found in the series of 'hours worked per employee'. The series in the industry labour productivity database do not always match those at the aggregate level that were used for the analysis in Section 2 of the main text (source for the series at the aggregate level: GGDC and the Conference Board, total economy database, July 2003 — <http://www.ggdc.net>).

Shift-share analysis of labour productivity growth (Section 3.1 of the main text): Relating the productivity growth of the overall economy to the productivity growth of the constituent industries implies taking into account the simultaneous changes to the allocation and volume of the production factor (i.e. labour in the case of labour productivity). In the decomposition, the most important part is, of course, dependent on the productivity growth at the industry level that we can aggregate using the (fixed) beginning-of-period labour volumes. Another effect then involves displacements of resources amongst industries of varying productivity levels, which would result in overall productivity changes, even in the context of unchanged productivity at the industry level⁽¹⁾. Finally, the interaction effect would then account for labour reallocation effects amongst industries with varying productivity growth rates (typically negative, when an increase in productivity is associated with a decrease in labour use).

Formally we note, for the individual industries and for the overall economy, that (hourly) labour productivity is output (Y) divided by labour input (L):

$$LPH_{it} = Y_{it}/L_{it}$$

$$LPH_t = Y_t/L_t = \sum_i Y_{it}/\sum_i L_{it}$$

The second identity is only correct when we can use simple summation to aggregate output, that is when output is expressed in nominal terms (or with the use of a fixed-based index). In this case as well, labour productivity can be written as a weighted sum of the intra-industry productivity values:

$$LPH_t = \sum_i LPH_{it} \frac{L_{it}}{L_t}$$

This gives, in difference terms:

$$\begin{aligned} \Delta LPH &= \sum_i \Delta(LPH_i) \frac{L_{it-1}}{L_{t-1}} + \\ &\quad \sum_i LPH_{it-1} \Delta\left(\frac{L_i}{L}\right) + \\ &\quad \sum_i \Delta(LPH_i) \Delta\left(\frac{L_i}{L}\right) \end{aligned}$$

⁽¹⁾ An historical example is the surge in overall productivity accompanying the labour force movement from the low-productivity agriculture sector to the higher-productivity manufacturing sector, i.e. the ‘Denison effect’.

Dividing by LPH_{t-1} to get the growth (percentage change) and rearranging the terms we get:

$$\begin{aligned} \frac{\Delta LPH}{LPH_{t-1}} &= \sum_i \frac{\Delta LPH_i}{LPH_{it-1}} \frac{Y_{it-1}}{Y_{t-1}} + \\ &\quad \sum_i \frac{LPH_{it-1}}{LPH_{t-1}} \left(\frac{L_{it}}{L_t} - \frac{L_{it-1}}{L_{t-1}} \right) + \\ &\quad \sum_i \frac{1}{LPH_{t-1}} (\Delta LPH_i) \Delta\left(\frac{L_i}{L}\right) \end{aligned}$$

- The first component is the intra-industry effect, i.e. the sum of industry productivity growth rates, weighted by the initial (nominal) output shares.
- The second component is the shift effect, i.e. the sum of changes in input shares, weighted by the relative productivity level (i.e. the ratio of industry productivity to average productivity). This effect could also be written and decomposed as the sum of industry labour input growth rates, weighted by initial output shares, minus total labour input growth.
- The sign of the residual (interaction) component is usually negative (in the economy there is a majority of industries where the productivity change and the labour input change have opposite signs). It may, however, be positive when beneficial restructuring of the economy occurs (in this case, most of the industries enjoying productivity growth are at the same time attracting more resources).

The decomposition described above would strictly hold only in the case of (discrete) percentage changes. The logarithmic approximation (used throughout the study) entails an error of magnitude often comparable to the interaction effect. We have, however, defined the intra-industry effect and the shift effect analogously to the discrete case. A corresponding decomposition for the continuous time assumption can be found in Nordhaus (2002), who has also shown that when ‘old-fashioned’ price index methods are used (i.e. not the Törnqvist method, as explained above), one should add to the decomposition an additional term accounting for the drift in prices.

Specific industry contribution to total labour productivity per hour (LPH) growth (Section 3.2 of the main text): To calculate the contribution of specific industries to overall LPH growth, we take advantage of the fact that the intra-industry effect is the dominant effect, and that,

for the period and countries under consideration, the shift (and interaction) effects are minimal.

The figures in the tables should therefore be understood in the following way.

- The contribution to labour productivity per hour (LPH) growth from any group or subgroup of industries is calculated using a method compatible with the Törnqvist price index.
- The contribution to LPH growth from any group or subgroup of industries includes, therefore, the possible reallocation effects amongst industries belonging to that group or subgroup.
- The contribution from individual industries can clearly not include any reallocation effects. They are simply the product of that industry's productivity growth rate and of the (nominal) value added share of that industry at the beginning of the period.
- As a result, the contribution to LPH growth from a group or subgroup of industries would only equal the sum of the contributions of the component industries if there were no changes in the volume of labour input. Conversely, any differences, apart from rounding and approximation, suggest a shift effect.

ICT contribution to labour productivity growth (capital deepening and TFP) (Section 3.3 of the main text): This subsection relies on a different data set, the industry growth accounting database, which has also been assembled by the GGDC for the Enterprise DG. Disaggregated data on capital, allowing for a complete growth decomposition into labour, capital and TFP contributions are only available for five countries (Germany, France, the Netherlands, the UK and the USA) and for a 26-sector decomposition of total output. The timespan of the data is unchanged (1979–2001). In addition, information on ICT-related investment (software, computing and communications equipment) and on labour quality is also available at the industry level in this data set.

Based on this information set, a comprehensive measure of the ICT contribution to overall productivity growth can be tentatively derived that would encompass both the TFP growth linked to ICT production and the diffu-

sion of ICT to the rest of the economy through investment in ICT capital. The accounting equation for productivity growth becomes ⁽¹⁾

$$g(Y/L) = (1 - \alpha)(1 - \eta)[g(K_{nonICT}) - g(L)] + (1 - \alpha)\eta[g(K_{ICT}) - g(L)] + g(TFP_{ICT\ ind})\frac{Y_{ICT\ ind}}{Y_{tot}} + g(TFP_{other\ ind})\frac{T_{tot} - Y_{ICT\ ind}}{Y_{tot}}$$

with $g(Y/L)$, $g(L)$, $g(K_{nonICT})$ and $g(K_{ICT})$ denoting the growth of, respectively, output, hourly labour input, non-ICT capital and ICT capital. α is the wage share and η the share of capital expenditures devoted to ICT investment.

The second term is the part of capital deepening coming from investment in ICT capital (defined as software, computing and communications equipment).

The third term in the equation measures the contribution to technical progress stemming from ICT industries. For this database, 'electrical and electronic equipment; instruments' and 'communications' are the two ICT-producing industries (of a total of 26 industries). Their contribution is weighted on the basis of nominal value added taken from the industry labour productivity database, using matching industries with codes 30 to 33 and 64 (ISIC Rev. 3 classification).

Summing up these components, we can obtain a ratio showing the importance of ICT (both the productivity gains linked to ICT production and to the diffusion of ICT investment throughout the economy) to overall, economy-wide productivity growth. Since the absolute figures that can be derived for labour productivity growth on the basis of this limited data set are different to those obtained from the official national accounts data used in Section 2 of the main text, we have applied the ratio of ICT's contribution to labour productivity growth at the industry level to the official productivity figures given in Section 2 of the main text.

⁽¹⁾ (Using standard conventions and assumptions and a modified production function to include ICT capital: $Y = L^\alpha (K_{ICT}^\eta K_{nonICT}^{1-\eta})^{1-\alpha} A$.)

Table A2.1

**US + EU hourly labour productivity:
a comparison of the aggregates from the economy-wide and industry data sets**

	USA		EU	
	National accounts	Industry aggregate – total economy	National accounts	Industry aggregate – total economy
1981–90	1.4	1.1	2.2	2.4
1991–95	1.0	1.1	2.4	2.3
1996–2000	1.6	2.3	1.6	1.6

Sources: Commission services and GGDC.

Table A2.2

Hourly labour productivity growth rates, USA and EU-15, 1981–2000 (average annual % change)

	1981–90		1991–95		1996–2000	
	USA	EU	USA	EU	USA	EU
Agriculture	4.6	4.9	2.2	5.2	10.4	4.2
Forestry	8.2	4.1	– 9.7	3.2	4.6	2.9
Fishing	– 1.2	2.0	– 11.3	1.4	12.8	0.3
Mining and quarrying	4.4	3.4	5.1	13.0	0.4	3.4
Food, drink and tobacco	0.6	2.7	3.6	2.6	– 6	0.4
Textiles	3.4	2.9	2.1	3.1	2.6	2.2
Clothing	3.1	2.7	4.6	2.3	4.3	2.4
Leather and footwear	3.4	4.5	0.2	3.1	3.3	0.9
Wood and wood products	2.3	– 3.0	– 0.9	2.6	2.9	2.6
Pulp, paper and paper products	1.9	3.9	– 0.1	3.4	1.7	3.2
Printing and publishing	– 1.1	2.6	– 2.9	2.1	0.7	2.2
Mineral oil refining, coke and nuclear fuel	9.4	– 4.8	5.5	5.2	4.5	– 1.1
Chemicals	4.8	5.4	3	6.4	2.4	4.2
Rubber and plastics	3.9	2.8	4.3	2.7	4.7	1.5
Non-metallic mineral products	2.3	3.5	2.3	3.1	1.2	1.7
Basic metals	0.3	4.6	3.6	6.1	2.1	1.9
Fabricated metal products	2.0	2.4	2.9	2.5	1.0	1.1
Mechanical engineering	– 0.3	2.1	0.3	2.8	– 0.1	1.3
Office machinery	27.5	26.3	28.5	28.0	53.4	48.1
Insulated wire	4.5	5.9	2.4	7.4	5.5	– 1.4
Other electrical machinery	0.7	3.0	1.1	1.3	– 1.3	2.1
Electronic valves and tubes	23.3	22.6	38.2	35.6	52.9	57.3
Telecommunications equipment	19.7	20.3	4.8	5.1	0.6	1.4
Radio and television receivers	9.4	11.8	– 5.3	– 0.8	– 5.7	– 5
Scientific instruments	2.4	2.5	– 4.7	– 3.1	– 4.9	– 7
Other instruments	4.7	6.0	2.3	6.8	7.1	5.4
Motor vehicles	0.8	4.4	3.8	3.3	1.2	1
Building and repairing of ships and boats	4.3	5.4	– 4.4	1.8	2.6	1.2
Aircraft and spacecraft	1.2	4.9	– 1.1	3.4	1.5	1.6
Railroad and other transport equipment	4.7	3.6	– 2.4	4.6	3.2	3
Furniture and miscellaneous manufacturing	3.1	1.8	1.1	1.3	3.6	1.8

Table A2.2

Hourly labour productivity growth rates, USA and EU-15, 1981–2000 (average annual % change) (continued)

	1981–90		1991–95		1996–2000	
Electricity, gas and water supply	1.3	3.3	1.8	3.7	2.3	6
Construction	-0.4	1.8	0.4	1.0	-0.1	0.2
Sales and repair of motor vehicles (1)	-0.1	1.7	-2.4	2.2	-1.8	0.8
Wholesale trade and commission trade (2)	2.8	2.2	2.9	3.3	8.3	2.0
Retail trade (2) and repairs (3)	3.1	2.0	2	1.7	6.6	1.6
Hotels and catering	-0.8	-0.7	-1	-0.6	0.2	-0.8
Inland transport	1.5	2.7	1	3.1	1.2	2.3
Water transport	0.4	3.8	0.7	5.7	2.9	2.4
Air transport	1.2	3.7	2	9.0	4.6	5.0
Supporting transport activities	-0.9	3.4	-0.8	3.6	4.6	1.6
Communications	1.0	5.0	2.4	6.3	5.9	1.0
Financial intermediation	0.1	2.4	1	1.0	3.9	4.8
Insurance and pension funding	-5.1	2.7	2.5	1.1	1.1	-0.7
Auxiliary financial services	1.1	1.1	3.1	0.4	9.9	0.2
Real estate activities	0.2	-0.8	1.6	-0.1	1.2	-0.5
Renting of machinery and equipment	-1.5	2.2	8.2	2.9	4.3	2.3
Computer and related activities	5.8	0.7	2.4	1.1	-5.8	2.4
Research and development	3.3	3.5	0.0	-0.4	1.3	-0.9
Legal, technical and advertising	-1.2	0.3	-0.9	0.4	-0.3	0.8
Other business activities	0.3	-0.3	-0.7	0.8	-0.1	-1.2
Public administration	0.7	1.0	0.2	1.3	0.9	1.0
Education	-0.2	0.1	0.3	1.0	-2.4	0.4
Health and social work	-1.7	0.3	-1.8	1.2	-0.3	0.8
Other services	0.2	0.3	0.6	0.7	-2.1	0.3
Private households with employed persons	2.5	-4.6	2.3	-0.5	0.7	-0.1
Total economy	1.3	2.3	1.1	2.3	2.3	1.7

	1991–95		1996–2000	
	USA	EU	USA	EU
Number of industries experiencing a productivity deceleration	27 (48 %)	23 (41 %)	21 (38 %)	44 (79 %)
Number of industries experiencing a productivity acceleration	29 (52 %)	33 (59 %)	35 (63 %)	12 (21 %)

Sources: Commission services and GGDC.

Chapter 3

Education, training and growth

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1. Introduction

At the Lisbon Summit in March 2000, EU leaders made education a central part of their strategy for the Union to become the world's most competitive and dynamic knowledge-based economy by 2010. In particular, they set the objective of a 'substantial annual increase in per capita investment in human resources', as well as more specific targets such as a halving of the number of early school-leavers not in further education or training. Education ministers have since agreed further benchmarks, for instance on participation in lifelong learning ⁽¹⁾.

The previous chapter in this review looked at drivers of productivity growth and highlighted the importance of investment in knowledge-related factors, in particular R & D and education. This chapter looks in more detail at education. Although there has always been awareness of the important role of education in growth, the formal study of this role has been inhibited in the past by the lack of empirical data and perhaps also by the lack of coherent theories of endogenous growth. Improvements in both these areas in recent years have led to a better, though still by no means complete, understanding of the contribution of education to economic growth.

The chapter begins by reviewing the recent economic literature to see how much of an impact on growth could be expected from the additional investments called for by Lisbon. It then looks at the available evidence on specific

areas of education and training to see where investments might be targeted for higher returns. Finally, the chapter takes a first look at the quantitative impact of increased investment on average educational attainment in the labour force and at the implications for expenditure on education.

The chapter focuses mainly on the benefits of education in terms of higher earnings and national income. There is evidence in the literature that education leads to a whole range of other benefits, including greater citizenship, lower crime, reduced welfare dependence, increased social inclusion and better health ⁽²⁾.

To the extent that improvements in these areas have a positive impact on growth, they are already partly covered by the macroeconomic analysis described in Section 2.2. Moreover, factors such as reduced welfare dependence are conditional on a positive impact of education on aggregate employment which, as we shall see, cannot be taken for granted. Thus, these additional benefits should not be exaggerated. Nevertheless, it seems quite clear that education leads to substantial improvements in private and especially social welfare over and above its impact on wages and national income. It is important to take these benefits into account in public decision-making, even though they may be more difficult to measure in monetary terms.

⁽¹⁾ See 'European benchmarks in education and training: follow-up to the Lisbon European Council', communication from the Commission (COM(2002) 629).

⁽²⁾ See, for instance, Venniker (2000).

2. The contribution of education to economic growth — A brief review of the recent literature

There are several excellent recent surveys of the economic returns to education and its contribution to economic growth ⁽¹⁾. This section is therefore confined to a brief review of the main findings, with a focus on key European results.

We first discuss the private returns to education, or the individual rewards that a person who invests in an extra year of education may expect. Section 2.2 then discusses the macroeconomic returns, or the benefits of an extra year of average attainment for the economy as a whole.

2.1. Private returns

The private rate of return to investment in education reflects the trade-off that individuals are supposed to make between the costs of investing and the benefits they expect to receive. The main cost to consider is employment income forgone while studying (opportunity cost), although direct costs, such as tuition fees, maintenance and repayment of loans, are also relevant. The main benefits are increased earnings, a higher probability of employment and any income received during studies such as grants and income-conditional loans as well as any income from part-time employment.

Graph 1 shows estimated returns to schooling in 15 countries ⁽²⁾. These range from around 5 % in the Nordic countries to upwards of 10 % in the UK and Ireland.

The EU average of around 8 % implies that the average EU employee (earning EUR 33 750 in 2003) who chooses to invest an extra year in full-time education could expect a pay-off of EUR 2 700 per year in extra wages thereafter. An individual who would otherwise have earned the average wage but instead invests in a four-year degree course could expect increased earnings of close to EUR 500 000 over a 40-year working life ⁽³⁾.

The raw estimates of private returns need to be adjusted for several factors: the fact that working life is finite; the direct costs of education (such as tuition fees); any direct benefits (such as financial grants); income taxes; the possibility of employment during studies; and a higher probability of employment after studies. De la Fuente (2003) estimates that private returns are, if anything, even higher once these factors are taken into account. He estimates a private return of 9.67 % for the EU as a whole.

The interpretation of these figures is not quite as straightforward as the foregoing discussion suggests. The fact that people with higher levels of education tend to earn more does not necessarily mean that education has a causal effect on earnings. Some of the complications are discussed in Box 1. Suffice it to say here that there is nevertheless widespread agreement in the literature that private returns to schooling are indeed broadly of this magnitude.

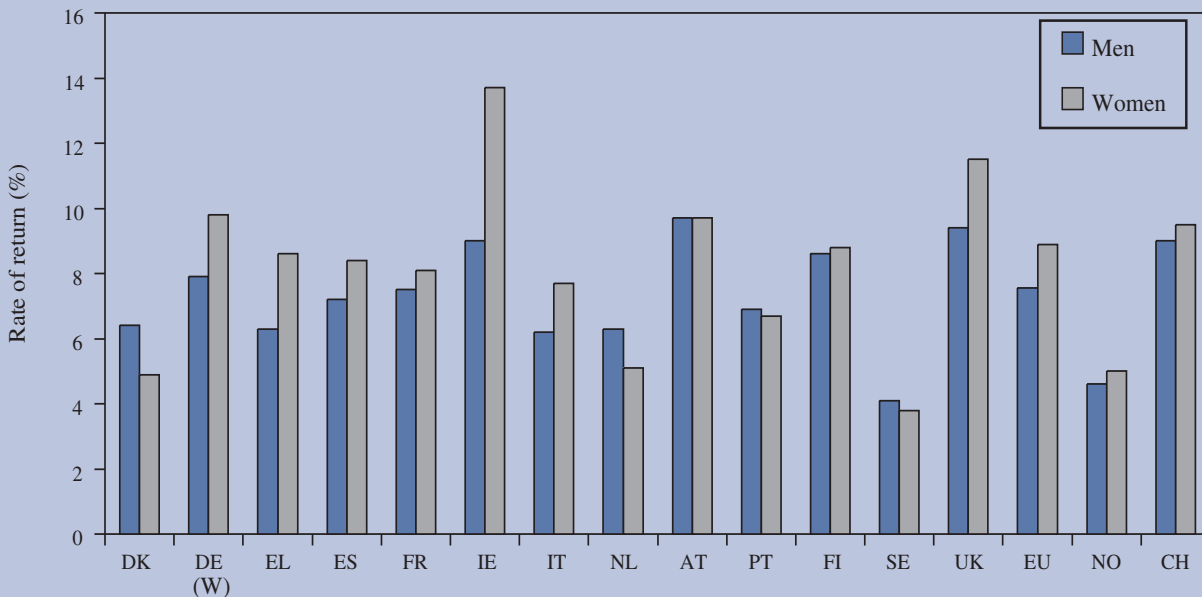
Of course, the attractiveness of an investment depends on risk as well as expected return. Risk is harder to quantify since, while it is easy to show that people with similar levels of education may have quite different sal-

⁽¹⁾ See, among others, Card (1999), de la Fuente and Ciccone (2002), Harmon et al. (2003), Krueger and Lindahl (2001), Psacharopoulos and Patrinos (2002), Sianesi and Van Reenen (2003), Temple (2002) and Topel (1999).

⁽²⁾ Returns are estimated using a common specification and national survey data supplied as part of a European Commission-funded research project on public funding and private returns to education (PURE). See Harmon et al. (2001, 2003) for more details.

⁽³⁾ An 8 % annual return compounded over four years gives a total return of 36 % which, multiplied by the average wage and by 40 working years, gives EUR 486 000 (without reinvestment).

Graph 1: Private returns to schooling, ca. 1995



Source: Harmon et al. (2001).

aries, it would be difficult to distinguish variance in the returns to education from other sources of variance in earnings. Therefore, it is difficult to make a precise comparison with other private investments, but returns of close to 10 % certainly appear favourable at first sight compared, for example, with equities.

In a world of perfect markets, individuals would be able to borrow to finance investment in education and eliminate any risk through insurance. In practice, for several reasons, these markets are missing. The fact that estimated private returns appear high may indicate that some individuals are deterred from making worthwhile investments in human capital, which suggests a possible case for policies to ease credit constraints and reduce the risk faced by individuals.

In most countries, the estimated returns to education for women exceed those for men. The reasons for this are not fully understood, though the difference — more than 1 percentage point at the EU level — might partly reflect relative underinvestment in female human capital, at least among older women. In other words, the availability of high returns suggests that worthwhile opportunities for investment in women's education have not been fully exploited, perhaps partly owing to factors such as the role of women in the family and gender discrimination, particularly in older generations.

Underemployment of well-educated women may also mean that those who do remain longer in employment tend to be relatively successful, which would imply higher estimated returns ⁽¹⁾.

2.2. Macroeconomic returns

A conceptually similar trade-off to that individuals are supposed to make when deciding on whether to invest in education operates at the macroeconomic level. Increased investment in human capital results at first in a smaller labour input, as people stay longer at school rather than working, and therefore reduced production and consumption. The stock of human capital then increases, which raises future productive potential. The economy is rewarded for sacrificing current consumption, and perhaps some investment in physical capital, in the form of higher output, consumption and welfare in future years.

A key question for policy-makers is then whether the macroeconomic reward is higher than the private returns.

⁽¹⁾ Since returns are estimated only for people in employment. Further research is required to confirm the reasons for apparent gender differences in returns to education, as well as to disaggregate estimated returns by age group in order to determine whether significant differences remain for younger generations.

Box 1: The private rate of return to investment in education

The key to calculating the private returns to investment in education is an estimate of the relationship between educational attainment and earnings. This is usually obtained from econometric studies of the determinants of individual wages, with years of schooling (or a better measure of attainment, if available) included as an exogenous variable. The estimated rates of return in Graph 1 correspond to r in the following equation:

$$\log w_i = rS_i + g(x_i)\beta + u_i$$

where w_i is earnings (usually gross), S_i is years of schooling, x_i is age or years of labour market experience with functional form $g(\cdot)$ (often quadratic), β is a parameter and u_i is a disturbance term. The subscripts i refer to individuals, the estimation usually being carried out using large social survey or census data sets. A vector of other variables thought to influence earnings (such as intelligence quotient (IQ), race, etc.) might also be included, though the figures

reported come from a parsimonious specification including only years of schooling and potential experience (age minus age on leaving education).

The two main potential problems with this approach are ability bias and measurement error. Firstly, if people with higher ability tend to reach higher educational levels, it may be ability rather than education that actually causes higher earnings. Secondly, survey evidence is prone to a degree of measurement error, which will tend to lead to an underestimation of the impact of education. Since these effects work in opposite directions, ordinary least-squares (OLS) estimates of the equation above may be reasonably accurate. According to Card (1999), the best available evidence suggests that any upward bias of OLS estimates of private returns is indeed small. This is based on studies of large numbers of identical twins, where ability bias is arguably less of an issue and where self-reported attainment can be corroborated by asking twins to report their siblings' attainment as well as their own.

If so, this would indicate the presence of external benefits, which might be grounds for encouraging investment.

Until recently, it would have been difficult to find broad agreement among economists on the scale of the macroeconomic returns to investment in education. Many have argued that the social returns should in theory be a good deal higher than the private returns, owing to external benefits⁽¹⁾. For example, it seems quite plausible to argue that a higher level of education might well enhance the productivity of one's colleagues as well as oneself.

Others, however, have pointed out that education does not necessarily have a causal impact on productivity just because it has a causal impact on earnings. In particular, if education serves mainly as a signal of ability rather than something that actually enhances productivity, then the macroeconomic returns could be lower than the private returns. On the other hand, in some countries, the estimated private returns may be understated because

wages do not reflect productivity (perhaps because of wage compression or equalisation across regions with widely varying productivity), which could partly explain the relatively low estimates for some countries (Graph 1). In this case, macroeconomic returns might well be higher than private returns.

The main empirical approach to estimating macroeconomic returns to investment in education has been cross-country regressions to explain economic growth. Temple (2002, p. 72 et seq.) provides an excellent survey of this literature. To summarise very briefly, some papers, particularly those that used the initial stock of human capital as an explanatory variable, found a very large — implausibly so — positive impact on growth. Then a number of high-profile papers in the mid-1990s found that the change in educational attainment over time had — equally implausibly, for many — little or no impact on growth.

A further difficulty in the case of human capital was the poor quality of the available data on educational attainment and enrolment. Even if one accepted that the stock of human capital could be proxied by average years of schooling in the adult population, it was difficult to obtain series that were consistent over time and comparable among countries. This situation has markedly improved in

⁽¹⁾ The terms 'macroeconomic' and 'social' returns are often used interchangeably in the literature. This is not strictly correct, since education may lead to social welfare benefits that are not reflected in higher GDP, as noted in the introduction.

the past few years thanks to the work of several researchers, notably de la Fuente and Doménech (2001, 2002), Cohen and Soto (2001) and Barro and Lee (2001).

Improved data quality has led to clearer results. Recently, something of a consensus has been established around the proposition that an increase in average years of schooling does indeed have a sizeable impact on productivity growth, implying a social rate of return broadly comparable to the private returns discussed in the previous section.

Much uncertainty remains, however. The data improvements in question consist in essence of subjective judgments about the reliability of different sources, interpolation for missing years and so forth. The data may still contain a significant amount of noise. In some cases, the results are further adjusted for likely remaining measurement error⁽¹⁾. Finally, it is worth remembering that ‘years of schooling’ do not cover important parts of formal education (such as pre-school and most of adult education), let alone the uncharted but nonetheless important areas of informal learning (see Section 3.6).

Moreover, it would be an exaggeration to speak of a complete consensus. Some authors continue to stress methodological problems, the wide variance in published results and the large margin of error surrounding many estimates of the macroeconomic returns (see, for instance, Pritchett, 2003).

For this chapter, we use the results of a study undertaken for the European Commission (de la Fuente, 2003), which is itself partly based on the results of several recent studies (including the three papers cited above as well as Basanini and Scarpetta, 2001, and Jones, 1996). The benchmark estimates are reported in Table 1. Like the figures on private returns, these must be adjusted for several factors in order to arrive at the true social return: direct and opportunity costs of education, possible additional benefits in terms of employment (see Section 2.4), and welfare benefits that do not show up in the form of higher GDP.

A number of studies, some recent, have produced significantly higher estimates of the impact of education on productivity. Some suggest that an extra year of school-

ing might lead to a permanent increase in the rate of GDP growth of 1 percentage point or more — in other words, a large endogenous growth effect.

There are several problems with estimates that go much beyond the benchmarks presented. Firstly, a large permanent impact on GDP growth is basically inconsistent with the data — while attainment has increased greatly in recent decades, GDP growth potential has remained fairly constant or even declined (Jones, 2002). Secondly, there remains a strong suspicion of reverse causation or bias due to omitted variables. Thirdly, many of the studies use large data sets including developing countries, where the potential for using education to catch up with the world technological frontier is relatively high.

Nevertheless, the results presented are still consistent with the notion that education influences innovation, invention and the diffusion of new ideas, and therefore has a longer-run impact on GDP growth as well as a more immediate direct effect on the level of GDP. The impact of education on technical progress should be picked up by the growth regressions described. As described in Box 2, the baseline α_H parameter in Table 1 is taken as a maximum for the direct effect. Studies that find a higher value for α_H are then interpreted as evidence of an additional, longer-run rate effect.

The benchmark ‘rate effect’ in Table 1 was chosen so that education accounts for no more than a reasonable share of cross-country differences in total factor productivity. While some might argue for a higher rate effect, it must be remembered that several alternative explanations of TFP differences — such as transport and communications infrastructure, investments in information and communication technologies, research and development spending, and workplace organisation — are frequently put forward. Doubtless, education contributes to technical progress through some of these channels, but it cannot on its own account for all of it⁽²⁾.

It may then be asked which particular aspects of human capital are likely to promote technical progress the most. Would it be more important, for instance, to raise general skill levels so that all can apply new techniques, or should policy-makers focus on specific skills in order to stimulate

⁽¹⁾ See de la Fuente (2003, p. 51). Several different data sets are taken and a measure of their signal to noise ratio obtained by looking at the covariances between them. The same growth equation is estimated using each data set and a relation between the estimated signal to noise ratio and the estimated coefficients is observed. This is then used in effect to extrapolate to the hypothetical case of zero measurement error.

⁽²⁾ Chapter 2 looks in more detail at the broader determinants of productivity growth and, as far as education is concerned, arrives at results of a similar magnitude to those presented in Table 1.

Table 1

Benchmark estimates of the social returns to education

Parameter	Value	Source and interpretation	Implied productivity impact of an extra year's schooling in the EU
α_H 'minimum'	0.394	Elasticity of output per worker with respect to average years of schooling. Raw coefficient from de la Fuente and Doménech (2002).	4.1 %
α_H 'baseline'	0.587	Same, but adjusted for likely remaining measurement error (see footnote 1, p. 171).	6.2 %
γ 'rate effect'	0.2 %	Impact on growth of total factor productivity (imputed from studies that find $d_s > 0.587$).	+ 3.1 % in the long term

Source: de la Fuente (2003).

Box 2: The macroeconomic rate of return to investment in education

The key to measuring the macroeconomic or social returns to education is an estimate of the response of output to changes in the stock of human capital. This is usually obtained by estimating a production function using cross-country data. A common choice is the neoclassical production function in Cobb–Douglas form augmented to include human capital:

$$Y = AK^{\alpha_K}L^{\alpha_L}H^{\alpha_H},$$

where Y is output, A is total factor productivity (TFP), K is the stock of physical capital, L is employment, H is average years of schooling or some other proxy of the stock of human capital, and the α_s are the relevant output elasticities. The choice of the functional form is not neutral: in this case, it implies a constant response of output to a given percentage change in years of schooling. This means that the estimated absolute impact of an additional year of schooling varies inversely with years of schooling — a point that should be kept in mind when making cross-country comparisons.

This specification also leaves open the question of whether education might affect the rate of technical progress, independently of its direct effect on productivity. An alternative specification based on Lucas (1988) allows explicitly for human capital externalities and thus endogenous growth:

$$Y_j = AK_j^{\alpha_K}H_j^{\alpha_H}H_a g,$$

where the subscripts j refer to firms, H_a is the average level of human capital across all firms and g represents

the externality effect. As long as g is greater than zero, the average level of human capital in the economy has an impact on a firm's output over and above the direct impact of the firm's own employees' education. Empirical testing of this type of model would require firm-level data.

Another possibility is to keep the first specification but to add a second equation that captures the impact of education on aggregate TFP, or on TFP relative to the world frontier, in addition to its direct impact on output. De la Fuente and Ciccone (2002, appendix, p. 87 et seq.) discuss such an approach, but note that results are mixed in studies where this is attempted. In practice, most empirical studies estimate a single equation that is expected to capture both the direct effect and any longer-term 'rate' effect. The problem is then how to distinguish between the two, and also how to decide whether very large measured effects are genuine or might result from reverse causality or omitted variable bias.

De la Fuente (2003) adopts a pragmatic approach. He sets a maximum direct effect of $\alpha_s = 0.587$ (the result of de la Fuente and Doménech, and towards the maximum value of α_s consistent with constant returns to 'broad' capital, i.e. $\alpha_s + \alpha_k = 1$). He then assumes that studies finding a larger α_s must be picking up either external benefits of education that would show up in TFP growth, or reverse causation. Results implying that education explains more than the total of TFP differences among countries are rejected as implausible. De la Fuente selects the benchmark of 0.20 % for the rate effect since this implies that education explains about one third of differences in TFP.

the generation of new techniques? We return to this issue briefly in the context of tertiary education in Section 3.5.

To sum up, while the selected benchmarks are still optimistic according to some observers, and come within a wide margin of error, they are at least plausible. Taken at face value, they suggest that an extra year of schooling in the adult working-age population might increase productivity by between 4 and 9 % in the medium to long term.

Aside from the data issues mentioned above, there are several strong caveats. Perhaps the most important are, firstly, the calculations above are made on the basis of a representative individual of average attainment, whereas returns are likely in practice to differ among different individuals. Secondly, the returns to investment in education may diminish as average years of schooling increase. Thirdly, the calculations above are retrospective; returns may be higher or lower in the future. Some of these points are elaborated on in the following sections.

2.3. The importance of quality

There is some evidence to suggest that the quality of schooling may be just as important as quantity. Quality in this context usually refers to levels of achievement in internationally comparable tests of mathematics, science and reading skills ⁽¹⁾. More generally, the quality of schooling systems might be defined with respect to any institutional feature that enhances the academic, economic and social capabilities of students.

Unfortunately, the available estimates of the impact of quality are less precise than estimates of the effect of years of schooling reviewed in the previous section. Both Hanushek and Kimko (2000) and Barro (2001), for instance, find strong evidence of a causal link between labour force quality (measured by test scores) and growth. Indeed, the impact appears to be larger than the impact of years of schooling, which itself declines and becomes less significant when quality variables are included in the regressions. The problem is that the estimated impact of quality seems implausibly large: an improvement of one standard deviation in science and maths skills seems to translate into a permanent increase of real annual GDP growth of 1 percentage point. Hanushek and Kimko

put this down to omitted variables, but state that they are unable to specify the precise cause or magnitude of the overestimation.

From this brief review, we conclude that estimates of the growth impact of quality are still too tentative to yield consensus benchmark estimates. Nevertheless, the evidence clearly suggests that quality might be at least as important as the quantity of schooling. A 1 standard deviation improvement in student performance could have as much impact on growth as a standard deviation in average attainment (about 1.5 years among EU Member States). Moreover, since the scope for increasing the quantity of schooling may not be unbounded, quality takes on added importance as potentially the key margin for future expansion.

2.4. Employment effects

The analysis of returns to education described in Sections 2.1 and 2.2 implicitly assumes that, when people invest in human capital, they will realise the benefits by being employed subsequently. In addition, it is usually assumed that people receive no work income while they are in full-time education.

Allowing for employment effects could make a significant difference to estimated returns. Firstly, if an individual is not in employment, then the return on investment in human capital (at least in terms of GDP) will be zero. Even the potential value of the investment is liable to decline with time spent outside the labour market. Secondly, however, if education increases the probability of employment (including the probability of remaining in employment), then this could significantly increase returns. Thirdly, if people are able to work and study at the same time, the opportunity cost of education may be reduced, which also increases the rate of return.

Data from the labour force survey (LFS) (Table 2) show that the level of education is strongly correlated with an individual's probability of employment. The level of education is classified according to the international standard classification of education (ISCED) adopted by the United Nations Educational, Scientific and Cultural Organisation (Unesco) and last revised in 1997. In 2002, the overall employment rate in EU-15 was 64.6 %, but ranged from 49.4 % for those with only lower-secondary

⁽¹⁾ Such as the 'Third international mathematics and science study' (TIMSS) or the OECD programme for international student assessment (PISA).

attainment or below (ISCED ⁽¹⁾ 0–2) to 70.5 % for those with upper-secondary level (3–4) and 82.8 % for those with tertiary education (5–6) ⁽²⁾.

Table 2

Employment by age and education (ISCED level), EU-15, 2002

	0–2	3–4	5–6	Total
15–19	19.6	42.3	n.a.	23.5
20–24	58.0	55.0	61.7	56.6
25–29	63.3	74.9	82.4	74.1
30–34	65.5	80.7	88.1	78.5
35–39	66.8	82.6	89.1	79.4
40–44	67.8	83.5	90.9	80.0
45–49	66.0	82.8	91.3	78.5
50–54	58.9	77.3	87.6	71.6
55–59	43.0	60.6	74.8	54.8
60–64	20.7	25.8	42.7	24.3
Total	49.4	70.5	82.8	64.2

Source: Commission services, LFS.

Causality is likely to run both ways. Individuals who are more likely to be employed have higher expected returns to education and thus may be more inclined to invest ⁽³⁾. But an increase in an individual's level of education is also likely to raise the probability of employment. In terms of labour supply, low productivity and therefore low wages make employment less attractive compared with other options. Moreover, there is evidence to suggest that the structure of labour demand has shifted in recent decades in favour of intermediate and higher-level skills ⁽⁴⁾.

Even if an increase in the level of education raises an individual's probability of employment, it does not necessarily follow that an increase in average attainment will lead to higher aggregate employment. If increased education leads to an increase in productivity that is evenly distrib-

uted across the population, then wages should increase in proportion, leaving labour demand unchanged. Moreover, if an increase in the average skill level leads firms to upgrade their production methods and technology, the relative demand for skills may be little changed. To the extent that the value of alternatives to employment (such as home production or social security benefits) increases with average wages, the impact on labour supply will also be limited. Thus, in a simple labour demand and supply framework, an increase in the average level of education may have little impact on the employment rate.

On the other hand, increases in the education and training of particular groups could influence aggregate employment. Increased attainment among the low-skilled relative to the higher-skilled would serve to counteract the impact of skill-biased technical change. Large increases in tertiary participation without a proportionate rise in the qualifications of the low-skilled might have the opposite effect.

In the past, education, in combination with broader social and cultural developments, almost certainly played a substantial role in raising female labour force participation. Clearly, since young women are now at least as well educated as young men, this cannot be expected to continue (except in so far as pre-school education for children facilitates mothers' participation). But lifelong learning could conceivably play a similar role in the future in the case of older workers (again, in combination with cultural factors as well as necessary reforms in other areas).

Thus, there are reasons to be optimistic that education may have a positive employment impact in the long run, although this cannot be taken for granted. In the short to medium term, increased upper-secondary and tertiary enrolment is clearly liable to have a negative effect on labour force participation. Although full-time education is not incompatible with part-time employment, many students choose not to work or are unable to find a job. Thus, EU leaders should not necessarily expect increased investment in education to help much in attaining the employment rate targets set for 2010 ⁽⁵⁾.

⁽¹⁾ The international standard classification of education adopted by Unesco, revised in 1997.

⁽²⁾ See also Barceinas Paredes et al. (2001) for a useful discussion and some estimates of the impact of education on unemployment probabilities in Spain.

⁽³⁾ This is akin to the 'ability bias' discussed in Box 1, but with the important difference that there is unlikely to be an offsetting measurement error, since there is relatively little scope for error in measuring whether or not someone is employed.

⁽⁴⁾ See, for instance, Gregg and Manning (1997) and Acemoglu and Pischke (1999).

⁽⁵⁾ From a purely technical point of view, measures to encourage student employment could help, even if the typical part-time student job makes a relatively minor contribution to output. Only one hour of paid work per week is required to qualify as 'employed' in the labour force survey.

3. The Lisbon objective — How and where to increase investment in order to maximise the impact on growth?

3.1. Introduction

Given the objective of ‘a substantial increase in investment in human resources’, the question for policy-makers is where, how and by whom these extra investments should be made. A comprehensive answer to this would require information on the relative returns of different stages (e.g. pre-primary, tertiary) and types (e.g. academic, vocational) of education, ideally differentiated according to characteristics of participants (e.g. low-skilled, younger, older). However, as Sianesi and Van Reenen (2003, p. 181) point out, ‘the available literature is still only tentatively and marginally able to provide reliable findings that could shed some light on such relevant issues’.

Nevertheless, this section aims to gather the available evidence as to where the returns to investment might be relatively promising, and also where resources for increased investment might be available. This information may then be combined with the results of Section 4 in order to study the possible growth impact of meeting the Lisbon objectives.

Although somewhat more detailed than the previous section, the review of the evidence presented here remains at a rather general level. Partly for reasons of space and partly for the lack of economic evidence, many more detailed, but nonetheless important, issues are not addressed. For example, the choice between different types of upper-secondary education — from traditional academic qualifications to more vocational courses or modern apprenticeships — may have a key bearing on the economic effects of increasing enrolment. Nonetheless, a comparison of likely returns in the main broad areas of education and training should still be of interest to economic policy-makers.

3.2. Pre-school education

The available evidence, albeit mainly from the USA, suggests that pre-school education is potentially an area of relatively high returns. Evaluations of model programmes (such as the Perry pre-school programme, which is relatively expensive and with relatively few participants) have found substantial long-term benefits, in the form of higher test scores, graduation rates and earnings as well as lower crime and welfare dependence.

The evidence is less conclusive in the case of large publicly funded programmes, such as ‘Head start’. Early benefits in terms of test scores seem to fade away, according to some studies. However, Garces et al. (2002) argue that this may be due to the lack of well-designed evaluations, and produce some evidence of long-term benefits. Short- and medium-term benefits in the form of childcare, reduced needs for (costly) special education and reduced grade repetition offset 40 to 60 % of the costs. Thus, if long-term benefits are even a fraction of those of the model programmes, ‘Head start’ clearly pays for itself ⁽¹⁾.

All these US programmes target children from disadvantaged backgrounds, who might otherwise be relatively ill-prepared for school. There is some evidence that the benefits in terms of cognitive and social skills are greatest for children whose mothers had the least education.

The evidence from outside the USA is scarcer. Nevertheless, Boocock (1995) surveys studies from 15 countries, including Germany, France, Ireland, Sweden and the

⁽¹⁾ See Currie (2001).

UK. These tend to broadly confirm the US findings that pre-school programmes can have strong positive effects on children's school readiness and subsequent academic performance, and that children from disadvantaged backgrounds are likely, if anything, to benefit more.

It seems reasonable, therefore, to consider a year of pre-school as at least comparable to a year of compulsory or further education in terms of its economic impact. Alternatively, to the extent that it improves educational outcomes, pre-school attendance might be regarded as a factor contributing to the quality of school education ⁽¹⁾.

There may also be positive effects on female employment, in so far as the availability of good-quality child-care facilitates mothers' employment.

Pre-school education appears to be a good candidate for public support, at least as far as children from disadvantaged backgrounds are concerned, given the likely market failures in the form of liquidity constraints and imperfect information on future benefits.

3.3. Primary and lower-secondary education

Within the framework described, one would expect the social returns to investment in basic education to be relatively high, since the direct costs are low compared with higher levels of education, while the opportunity cost ought to be low for those below working age. Since the case for free and compulsory basic education appears to be almost universally accepted, we do not dwell on the balance between private and social returns here.

However, the scope for increasing investment in terms of persons is, of course, negligible, since participation in primary and lower-secondary education is already virtually universal in the EU.

Indeed, the number of school-age children is actually declining at present. This raises an important efficiency issue. In principle, falling student numbers might be expected to free resources which could be used for investment in other areas of education. In practice, the more likely outcome may be an increase in expenditure

per student, at least in the short to medium term (see Box 3). If this is so, an important issue for education policy-makers is how to ensure that increased spending per student leads to genuine quality improvements. Alternatively, in systems where lower- and upper-secondary education are integrated, the fall in the number of lower-secondary pupils may make it possible to increase upper-secondary participation at limited financial cost.

The key margin for future expansion in basic education appears to be quality. The types of policies that might lead to quality improvements — and thus potentially large economic benefits — are discussed in Section 4.4.

3.4. Upper-secondary education

Upper-secondary participation is also very high, but there remains significant scope for further expansion. EU leaders set a specific target at Lisbon to halve the share of 18–24-year-olds with at most lower-secondary education and not in further education or training.

Socially, this group is clearly of high significance. In evaluating the economic returns to investment, the question of heterogeneity arises. If, in fact, it is educational outcomes (in terms of skills and capabilities) that are important for growth, rather than simply the number of years spent in school, then expanding enrolment to take in those with lower abilities may be subject to diminishing returns ⁽²⁾.

On the other hand, some of the microeconomic evidence suggests that this may not be a practical concern. Quasi-experimental evidence (based on exogenous changes in schooling due, for example, to a change in the legal school-leaving age) suggests that the returns to staying longer at school may be higher for those from disadvantaged backgrounds ⁽³⁾. This is not necessarily inconsistent with the previous point. It may be, for instance, that some able young people are discouraged from staying on at school for reasons to do with their background. In any case, the available evidence does not confirm that extending upper-secondary participation would yield below-average returns.

A significant reduction in the share of early school-leavers would serve to improve the credentials of the lowest-skilled relative to the rest of the labour force. As argued in Section 2.4, this might be expected to have a

⁽¹⁾ Although children from countries with traditionally high pre-school enrolment do not necessarily perform well in comparable tests, whereas some of the best-performing countries in the PISA study have relatively low pre-school enrolment (see Graphs 3 and 5).

⁽²⁾ See Sianesi and Van Reenen (2003, p. 194).

⁽³⁾ See Card (1999) for a survey.

favourable long-term impact on employment and unemployment, as well as productivity.

3.5. Tertiary education

Tertiary education is probably where the greatest margin for increasing investment in education in terms of persons is to be found, at least in the near future. The individual contemplating whether or not to continue studying at tertiary level is quite close to the average agent to whom the calculations on returns to schooling apply. Apparently, therefore, we would expect marginal returns to be quite close to the benchmark results presented in Section 2, although some of the literature suggests that returns to tertiary education may be higher ⁽¹⁾.

However, these calculations are retrospective. They do not necessarily apply to future increases in average attainment. Krueger and Lindahl (2001) estimate returns to schooling (across a broad range of countries) with a quadratic specification and find not only that returns are diminishing, but that they are actually negative beyond about 7.5 years. This can be safely ruled out if one accepts the results of studies confined to OECD countries, where average attainment is well above 7.5 years. Moreover, as the knowledge-based economy continues to develop, the returns to education might increase.

Nevertheless, the possibility of diminishing returns remains a genuine concern. Firstly, there is the theoretical possibility that participation might reach the point where it becomes imperative to have a tertiary degree as a signal of ability, even if that degree does little to enhance productivity. Concerns about ‘overeducation’ are probably overdone at present since, even if some graduates are in non-graduate jobs, all the evidence suggests that the growth in demand for graduates has, if anything, outpaced the growth in supply. Blöndal et al. (2002), for example, show that the average wage premium for those with tertiary education has tended to rise since the early 1980s. However, there is no guarantee that this state of affairs will continue.

Furthermore, if signalling does not lead to excessive participation, it might still affect the type of course chosen, particularly where longer, academic programmes command a higher status than other tertiary courses.

Secondly, if a rapid increase in tertiary participation is encouraged by governments, complementary inputs —

in particular, physical capital and technical progress — may not be able to keep pace. Hence, the returns to human capital might fall.

The balance between private and social returns is an important issue in tertiary education. As we saw in Section 2.2, the overall evidence suggests that private and social returns may be broadly comparable. The argument turns partly on the extent to which education may be of special significance for technical progress. A greater supply of especially high-level skills, it might be argued, is likely to facilitate innovation and its diffusion. More specifically, certain subjects and skills may need to be promoted, either to increase the supply of researchers or to fill supposed skill shortages.

Some of these arguments assume, at least implicitly, that policy-makers can speed up the reaction of the supply of skills to changes in demand, or that they have superior or advance knowledge of changing demand. This might be partly true. Romer (2000) has suggested that the US system is biased towards the liberal arts and that reforms and improved information on the prospects of natural science and engineering graduates would be conducive to growth. Since governments spend a lot of money subsidising private sector research and development, it could be argued that they have some responsibility to tackle informational imperfections that might inhibit the supply of commercial researchers. Nevertheless, there is no clear evidence of systematic and durable misallocation of human resources on the supply side.

As discussed in Section 2.2, there is evidence that education influences long-term technical progress, but the size of this effect is very imprecisely estimated. Gemmell (1997) concludes that the limited evidence ‘is suggestive of a small externality effect, at best, associated with higher education but a greater weight of evidence is required before firm conclusions can be stated’. Furthermore, we are far from understanding the nature of this effect. The argument that policy should seek to promote natural sciences and engineering, for example, is mainly a theoretical one. It could also be argued that having well-educated people across all occupations, most of whom are in services and have little to do with natural sciences and engineering, is the important thing ⁽²⁾.

⁽¹⁾ See Gemmell (1996).

⁽²⁾ Moreover, the education system in the EU is already highly focused on science and technology. Around 26 % of graduates in the EU graduate in mathematics, science or technology, compared with only 17 % in the USA. However, the USA has a significantly higher share of people actually working as researchers in the labour force (8.7 per 1 000 people compared with 5.4 in the EU). See European Commission (2003a).

In any event, the relatively high participation rate in tertiary education in the USA compared with the EU is one possible explanatory factor behind relatively high productivity growth in the USA in recent years. Even if education does only affect the level of GDP, rather than its long-term growth rate, the expansion of tertiary education may still offer an important means of catching up with the USA in terms of GDP per capita.

On the basis of the available evidence, it is not unreasonable to continue justifying subsidies to tertiary education on the grounds of presumed external benefits. It might also be argued that public resources are better focused on specific areas where a clear, albeit theoretical, link with technical progress can be made. On the whole, in the absence of clear evidence, policy in this area must be partly a question of judgment. A prime example of a specific investment that seems likely to foster progress is the establishment, as part of EU research funding initiatives, of exchange programmes and multinational networks of researchers, designed to promote cooperation and greater diffusion of ideas ⁽¹⁾.

What does seem relatively clear is that there are high apparent private returns to tertiary education, which might be sufficient to secure a further increase in participation without additional public funds. This is a relevant point given de facto constraints on public resources, which mean that, in order to maximise overall investment in education, public investment would have to be focused on areas where private funds are unlikely to be forthcoming.

The present system of tertiary education funding in most EU countries — free or low-cost access repaid in part by progressive taxation — is one reason why private investment is limited compared, say, with the USA (see Table 5). Moreover, the system is regressive, benefiting those from affluent backgrounds at the expense of the less well-off, who are much less likely to attend university even if access is free. The available evidence suggests that family background and environmental factors, not funding constraints, are the key influences on college attendance (OECD, 2001). Alternative funding schemes may be superior in terms of equity as well as efficiency ⁽²⁾.

⁽¹⁾ See also European Commission (2003b).

⁽²⁾ See, for instance, García-Peñalosa and Wälde (2000), who show that a free access system financed by a graduate tax tends to outperform financing by an income-contingent loan scheme in achieving efficiency and equity targets, while both these schemes fare much better than systems of free access financed from general taxation.

3.6. Adult education and workplace training

The finiteness of working life means that the private rate of return to schooling is slightly lower than the figures reported in Section 2.1 ⁽³⁾. Returning to the example given in Section 2.1, with a salary of EUR 33 750 and an annual pay-off of EUR 2 700, the actual rate of return is 7.6 % with a working life of 40 years, rather than 8 % with an infinite time horizon. In the context of adult education, this detail becomes significant. For example, the rate of return on a similar investment with a lifetime of 20 years is only 5 %. In the framework outlined, late investment clearly implies lower returns.

However, this framework is not fully adequate for the purpose of evaluating investments in lifelong learning. Firstly, it takes no account of depreciation; yet, while some skills may last a lifetime, especially if regularly practised, some are soon forgotten while others become obsolete. Secondly, some skills (management training, for example) build on other skills and experience, or recent technological developments, and can therefore only be acquired later in life. Thirdly, continuous learning or retraining may play a crucial role in maintaining human capital already acquired. For these reasons, it cannot simply be concluded that the older people get, the less economic sense it makes to invest in their education and training, although there is likely to be an element of truth in this.

One argument in favour of adult education and training is that the opportunity cost may be relatively low, since participation does not necessarily imply giving up full-time employment. Clearly, this is only true up to a point. To the extent that training substitutes for working hours, there is still likely to be a significant opportunity cost in terms of output. If training substitutes for leisure, there may be a cost in terms of welfare, even if this does not show up in GDP, although that may be partly offset in some cases by the consumption benefits of education.

In the case of workplace training, the evidence on private returns is mixed ⁽⁴⁾, as well as references in OECD (2003a). Many studies have found that participation in

⁽³⁾ In the finite case, the private rate of return can be represented as r in the following equation:

$$I = \sum_{t=1}^H \frac{w}{(1+r)^t} \quad \text{where } I \text{ is the initial investment (direct plus opportunity cost), } H \text{ is the remaining years of working life and } w \text{ is the annual increment in salary due to the investment.}$$

⁽⁴⁾ See, for instance, Dearden et al. (2000) and Pischke (2001).

training has a positive effect on earnings, though the estimated rate of return is often smaller than in the case of schooling. On the other hand, some studies in both the USA and Europe have found very high returns to participation in short-duration courses, but much lower returns to longer courses (although Pischke, 2001, shows that this may be because individuals with high earnings growth have a higher propensity to participate in short courses). Several pieces of evidence suggest that firms benefit as well as (and perhaps even more than) employees, even where the training provided is of a general nature ⁽¹⁾. For instance, the estimated direct impact of training on firm productivity tends to be higher than the impact on wages, while trained employees seem to receive a higher premium for their skills at subsequent employers than at the present one.

The existence of high returns does not necessarily mean that encouraging an increase in training will yield similarly high returns. In the absence of market failures, employers would presumably invest in training up to the point where the benefits equalled the cost of capital, so that a further increase in training would yield only a normal return. In competitive labour markets, employees themselves would have an incentive to invest in skills that are of use to many firms, though inability to finance training may be an obstacle.

However, in imperfectly competitive labour markets, training provision is likely to be suboptimal (Acemoglu and Pischke, 1999). In practice, wages do not fully reflect productivity, partly on account of various labour market institutions that tend to reduce wage dispersion. Workers' incentives to invest even in general skills are reduced, since they will not receive the full productivity benefits in the form of higher wages. Employers, on the other hand, have an incentive to hire relatively skilled workers and even to offer some general training, since they are able to pay wages below the marginal product. But, unless training is fully contractible, the firm and worker will not take into account the benefits to each other. Nor will the firm take into account the possible benefits to other firms if trained workers leave. These externalities are likely to result in underprovision.

Various co-financing mechanisms designed to top up employers' and/or individuals' training resources with public funds could help. Tax incentives or subsidies can reduce the marginal cost of training and help to ease credit constraints faced by individuals. However, there is also scope for policy failure. It is difficult to ensure that firms or individuals use subsidies for genuine training that is truly additional and of good quality. Regulation and monitoring of standards (by government and/or social partners) can help to improve information. While this might work well in some cases ⁽²⁾, the regulation of eligible types of training clearly entails costs in terms of administration and loss of flexibility, and is unlikely to fully overcome the additionality problem.

Unfortunately, the history of training incentives is scattered with examples of large deadweight losses which mean that the returns on public investment, if any, have been considerably less than hoped for. OECD (2003a) provides a useful overview of some of these initiatives, including the mistakes made and lessons learned. Examples include lump-sum subsidies that have no impact on training incentives, subsidies for particular groups of workers that lead mainly to substitution of training for other groups, a lack of accreditation leading to low-quality training or even fraudulent use of funds, and the potentially high costs of administering applications for training grants.

Finally, the evidence strongly suggests that 'learning begets learning' (Heckman, 2000). Those who leave school or college relatively well-qualified also tend to receive more education and training later in life. As far as work-related training is concerned, OECD (2003a) provides some evidence that this may be in large part due to lower demand from the lower-skilled, rather than a reluctance to supply on the part of employers. Still, factors such as low literacy appear to lead to reduced supply of training.

These findings have two important implications for the analysis of returns to education. Firstly, since schooling and subsequent education and training are correlated, the measured impact of the former may partly pick up the effects of the latter. In other words, part of the apparent beneficial effect of schooling on growth may be due to

⁽¹⁾ Some research suggests extremely high returns: Ballot (2003), for instance, finds that, where training accompanies innovation, estimated rates of return on 'training capital' may amount to several hundred per cent.

⁽²⁾ The German apprenticeship scheme is a commonly cited example, albeit in initial rather than continuing vocational training. Still, some criticise its lack of flexibility while others argue that the particular set of institutional circumstances necessary for it to function would be difficult to replicate in other countries. Wolf (2002) has a useful brief discussion.

adult education and training, not to mention informal learning and on-the-job training ⁽¹⁾. Secondly, the fact that initial training inequalities are likely to diverge suggests that perhaps the greatest contribution the public sector can make in this area is to ensure high-quality initial education for all, enabling new skills to be assim-

lated and thereby stimulating both the demand for and supply of lifelong learning.

We conclude that, despite the fact that adult education and training occurs later in working life, it is reasonable to regard the returns as broadly comparable in magnitude to those from traditional schooling, and possibly higher in some cases. However, this does not necessarily mean that policies to increase adult education and training would yield similar returns. Any such conclusion would be strongly conditional on a radical improvement in policy design and evaluation.

⁽¹⁾ Adult education and training is only included in the attainment figures used to estimate returns to schooling if it leads to an increase in the individual's attainment according to the ISCED classification.

4. Policy simulations

4.1. Data snapshot

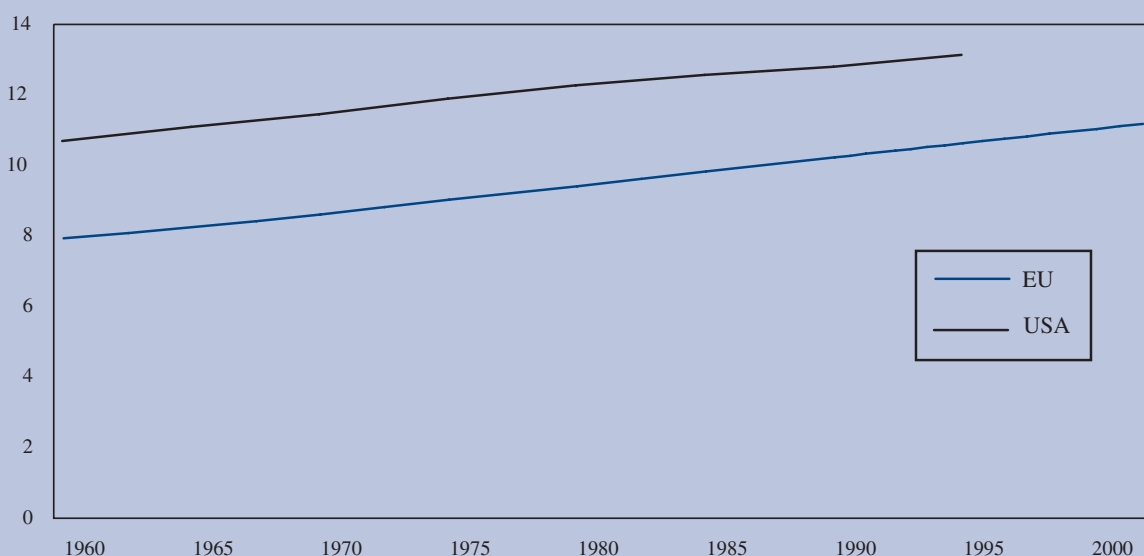
With some idea of the possible impact of an extra year of education on growth, we now turn to the more technical question of how much average attainment is likely to grow by in the coming years.

Graph 2 shows average years of schooling in the population aged 25–64 over the past four decades. This is the variable used in the growth regressions described in Section 2. Over the past 30 to 40 years, average years of schooling have tended to grow linearly at the rate of about 0.8 per decade in the EU as a whole (compared with 0.7 in the USA, with a slight slowdown apparent since about 1980).

Graph 3 illustrates the pattern of enrolment in the EU by graphing age against cumulative enrolment. Initially, the graph is a line with an almost 45° slope, reflecting the fact that between the ages of 5 and 15, enrolment is virtually universal. Thus, by the age of 15, cumulative enrolment is almost 11 years. From the age of 16 onwards, the slope begins to fall off. Thus, the main scope for increasing years of conventional schooling — in the meaning of the studies discussed in Section 2 — lies in upper-secondary and tertiary education.

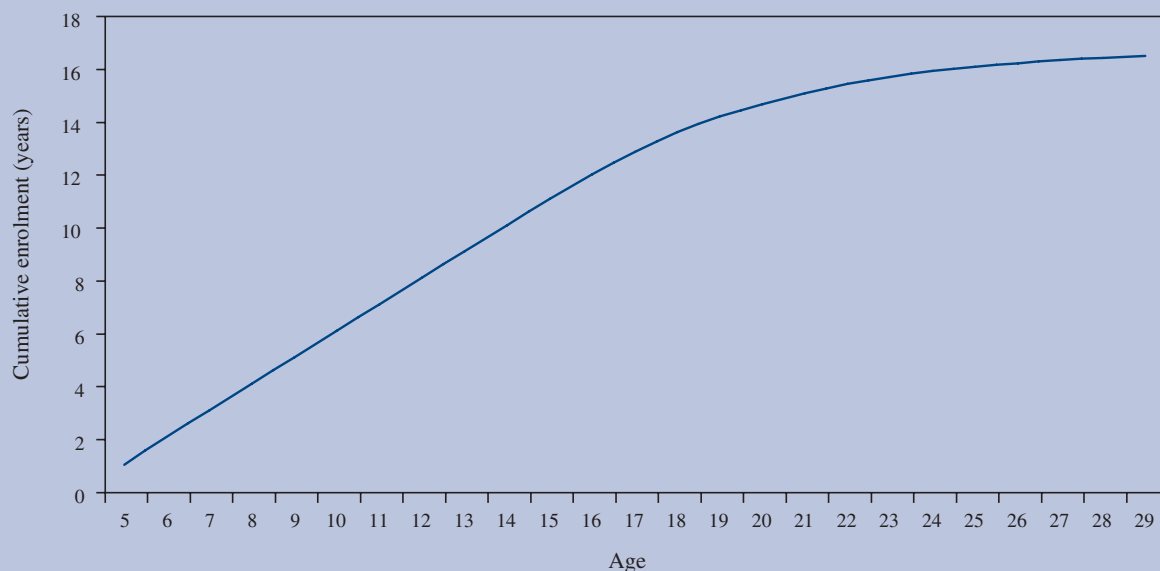
After 29 (not shown), the curve almost flattens out. Average enrolment rises only another 0.7 years between the ages of 30 and 65, to reach an estimated total expected enrolment (or school life expectancy) of 17.1 years.

Graph 2: Average years of schooling in the EU and USA, 1960–2002



Note and source: See Table A.1. The figure for EU 1995 is estimated.

Graph 3: Cumulative enrolment in the EU, ages 5–29, 2001



NB: Cumulative enrolment is the sum of the net enrolment rates, i.e. the number aged x who are enrolled divided by the population aged x.
 Source: Commission services.

Even in upper-secondary and tertiary education, there may be limits to increased participation. The EU Education Council recently set a benchmark stating that, by 2010, 85 % of 22-year-olds should have completed upper-secondary education. In some countries, education is already compulsory up to the age of 18. In tertiary education, the position of the USA suggests some scope for further increases in participation in most EU countries. Beyond this, it is unclear whether tertiary participation will become saturated, or whether it can continue to grow. According to the Unesco figures (Table 4), tertiary enrolment as a share of the population aged 20–29 declined in the USA in the late 1990s, though that may have been partly a cyclical effect.

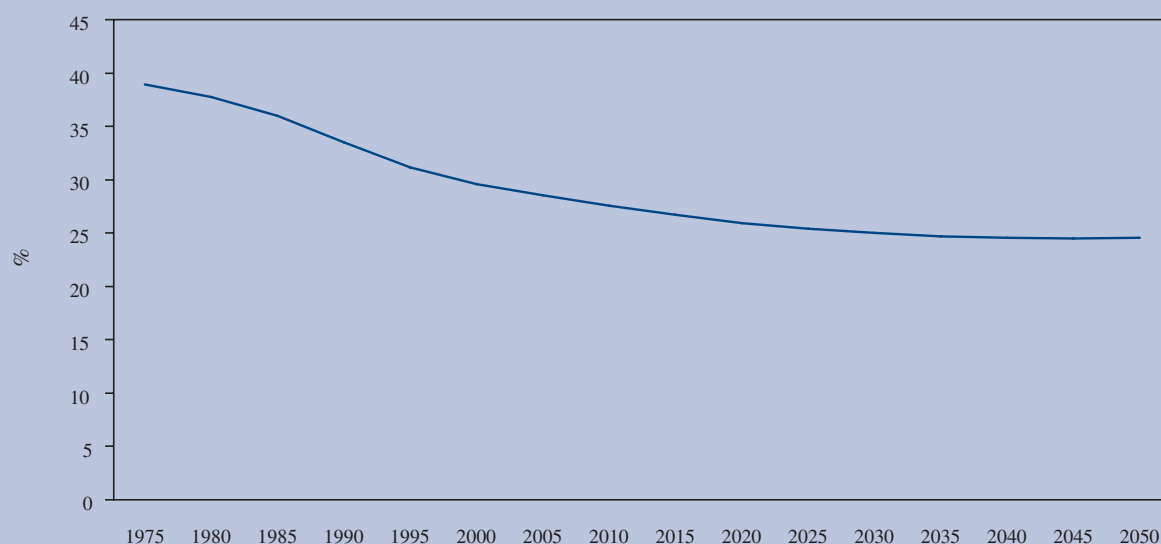
Graph 4 shows the decline in the share of the population aged under 25 over the last few decades and projected into the future. This, together with the likely saturation of secondary and perhaps tertiary participation, means that the increase in average attainment due to higher attainment of the youngest age groups is likely to decline. Thus, it cannot be taken for granted that average years of schooling will continue to follow the steady trend depicted in Graph 2 indefinitely.

Graph 5 shows that there remains some scope for increasing participation in pre-school education in some

countries. Early child education and care are not counted in the measures of years of schooling used in the growth regressions described in Section 2.2. Nevertheless, since the available evidence suggests that early child education and care may be associated with even higher returns than traditional schooling, it is important to take them into account. The Barcelona Summit in 2002 set a target to provide childcare by 2010 to at least 90 % of children between 3 years old and the mandatory school age and at least 33 % of children under 3 years of age. While the latter target seems ambitious from the graph, it should be noted that the majority of care for the under-3s (according to national figures) does not show up in the ISCED enrolment data, which may be partly because the facilities in question do not count as educational. For this reason, we focus here on facilities for 3–5-year-olds.

In the long term, perhaps the greatest scope for a continuing increase in attainment lies in adult education. Graph 6 shows the latest figures on the share of the population aged 25–64 having participated in an education or training action during the four weeks prior to the labour force survey. The EU average has remained broadly constant over the past few years at 8.4 % (compared with an estimated 8.5 % in 2000), despite the recently agreed EU benchmark of 12.5 % for 2010. Most

Graph 4: Share of population aged under 25, 1975–2050



NB: 1999 baseline population projections for 2005 onwards.
Source: Commission services.

Table 3

Net enrolment rates in secondary education

	1970	1975	1980	1985	1990	1995	2000
EU average	n.a.	n.a.	78.7	78.4	82.7	91.0	91.0
BE	n.a.	n.a.	83.5	88.6	87.7	88	n.a.
DK	n.a.	n.a.	88	83.3	86.8	87.7	89.5
DE	n.a.	n.a.	n.a.	n.a.	n.a.	89	87.7
EL	51.9	63.7	76.8	80.7	82.7	86.2	87.4
ES	39.9	63	74.2	n.a.	n.a.	n.a.	93.7
FR	66.4	76.1	78.7	81.7	83.8	94.4	92.4
IE	63.4	75.3	77.5	81.4	79.4	86.5	n.a.
IT	n.a.	66.6	n.a.	68.4	n.a.	n.a.	90.5
LU	44.5	55.6	67.1	66.2	n.a.	66.9	78.3
NL	68.8	80.3	81.1	88.6	83.6	90.7	89.9
AT	68.7	70.4	n.a.	n.a.	n.a.	89	88.5
PT	30.3	29	n.a.	n.a.	n.a.	n.a.	85.2
FI	70.6	n.a.	n.a.	n.a.	93	92.6	94.6
SE	n.a.	n.a.	81.6	n.a.	85.3	98.4	96.1
UK	67.1	77.3	79.2	80	79.1	91.5	93.7

NB: The net enrolment rate is the number of students enrolled divided by the official age group for secondary education. 1980 figures for Belgium, Greece, Luxembourg and Sweden are 1981; 1985 figures for Italy are 1984; 1990 figures for France are estimates; 2000 figures for Denmark, Germany and Sweden are 1999; EU average weighted by population aged 11-18.

Sources: Unesco education database and Commission services.

Table 4

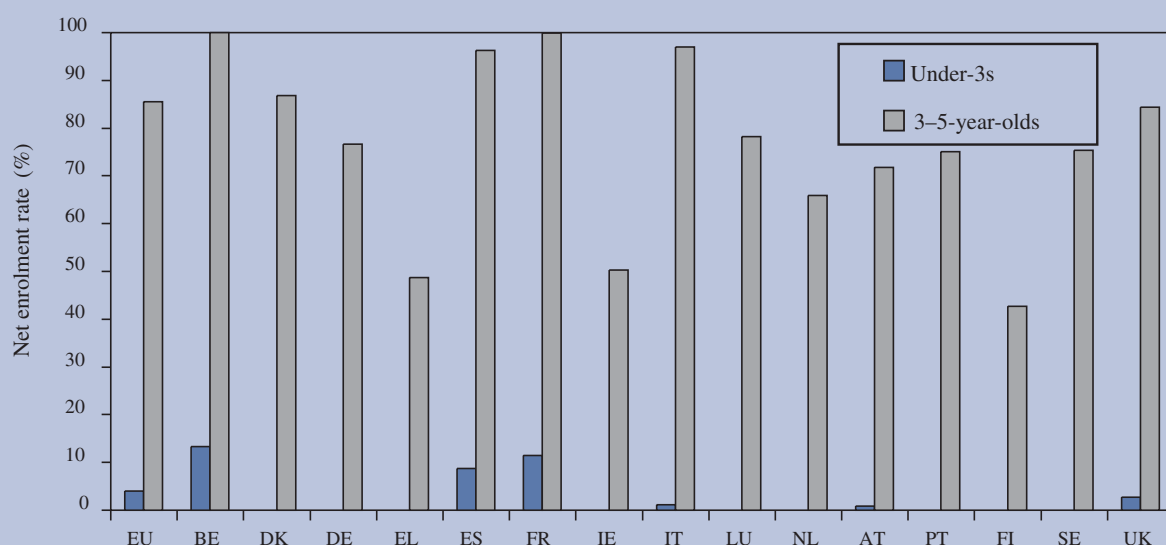
Enrolment in tertiary education as a share of population aged 20–29

	1970	1975	1980	1985	1990	1995	2000
EU average	0.08	0.11	0.12	0.14	0.17	0.21	0.26
BE	0.10	0.11	0.13	0.16	0.18	0.25	n.a.
DK	0.10	0.14	0.14	0.15	0.18	0.22	0.27
DE	n.a.	n.a.	n.a.	n.a.	0.15	0.18	n.a.
EL	0.07	0.09	0.09	0.13	0.19	0.21	n.a.
ES	0.05	0.11	0.13	0.16	0.19	0.24	0.28
FR	0.11	0.12	0.13	0.15	0.20	0.25	0.26
IE	0.08	0.10	0.11	0.13	0.18	0.24	0.26
IT	0.09	0.12	0.14	0.14	0.16	0.20	0.22
LU	0.01	0.01	0.01	0.01	0.02	0.04	0.04
NL	0.11	0.12	0.15	0.16	0.19	0.20	0.24
AT	0.06	0.09	0.12	0.14	0.15	0.19	0.25
PT	0.04	0.06	0.06	0.07	0.12	0.20	0.24
FI	0.08	0.13	0.16	0.17	0.23	0.33	0.44
SE	0.11	0.13	0.15	0.15	0.16	0.22	0.32
UK	0.07	0.09	0.10	0.12	0.13	0.21	0.27
US	0.30	0.32	0.30	0.30	0.34	0.39	0.37

NB: Figures for Belgium 1975 and Luxembourg 1990 are estimated; the figure for the UK population aged 20–29 in 1970 is from 1972. Enrolment rates for Luxembourg are low because, until recently, there was no university in the country.

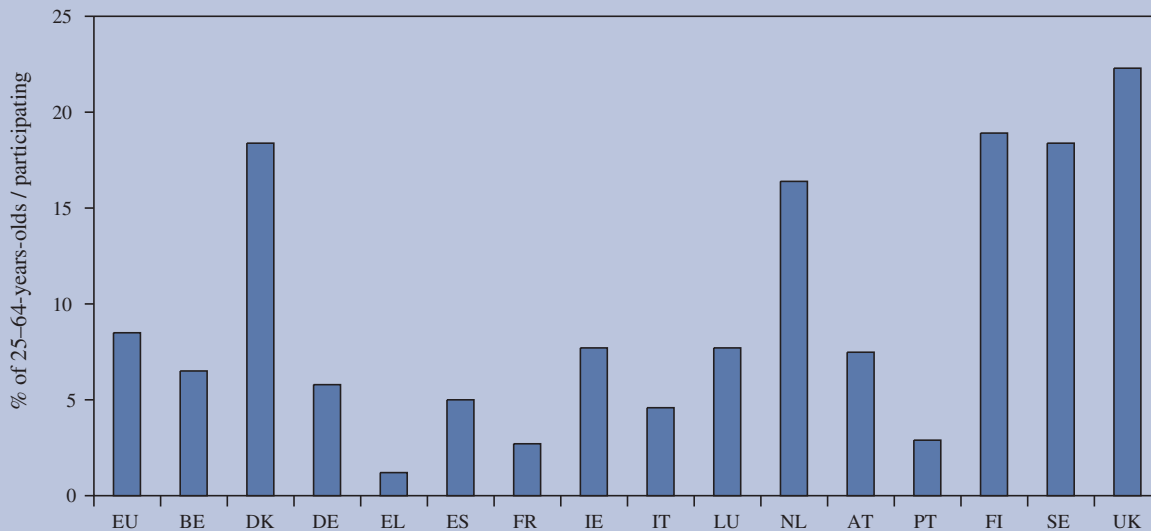
Sources: Unesco education database, Commission services and OECD.

Graph 5: Enrolment of under-5s in education



Source: Commission services.

Graph 6: Participation in lifelong learning, 2002



NB: The graph shows the percentage participating in education and training in the four weeks prior to the survey.
Source: Commission services, LFS.

participants in adult education have other substantial commitments and so are only able to devote a limited amount of time to education and training. This means that a relatively large increase in participation is necessary to have a sizeable impact on average attainment measured in years.

Table 5 shows the latest available data on the amount of resources invested in education and training and Graph 7 illustrates the recent evolution of public expenditure on education. As a share of GDP, this has fallen slightly over the past few years, to just under 5 % for the EU as a whole, although education accounts for a growing share of total public spending. The declining share of the under-25s in the population might have led one to expect a larger fall were it not for the apparent upward pressure on expenditure per student.

Indeed, the data on expenditure per student suggest a significant increase between 1999 and 2000 (5 % in tertiary education and over 7 % in primary and secondary education — see Annex, Table A2). The Eurostat figures are only available for a couple of recent years, but Gundlach et al. (1999), using Unesco data, show that this is merely the continuation of a longer trend.

4.2. Policy scenarios

In order to look at the impact of different policy scenarios on average years of schooling in the population, it is useful to have an idea of the age profile of attainment. Fortunately, data on educational attainment by individual ISCED category and by age group are now available (though only for a few recent years under the ISCED 97 classification). These tell us what proportion of a given age group has reached each level of attainment — primary, lower-secondary, upper-secondary and so forth. This has been combined with de la Fuente and Ciccone's (2002) figures on the number of (full-time) years of attainment corresponding to each level of attainment in the different countries. The results are given in Table 6.

Average attainment is highest in the 25–34 age group and, as would be expected, declines thereafter with age. The profile is broadly consistent with the finding that average years of schooling have tended to increase by 0.8 per decade. For the EU as a whole, the difference between the 55–64 and 25–34 cohorts is 2.2 years, slightly below 0.8 per decade. But by the time the 25–34 age group reach the age of 55–64, the gap will have increased slightly, since some will reach a higher level of (ISCED) attainment through adult education.

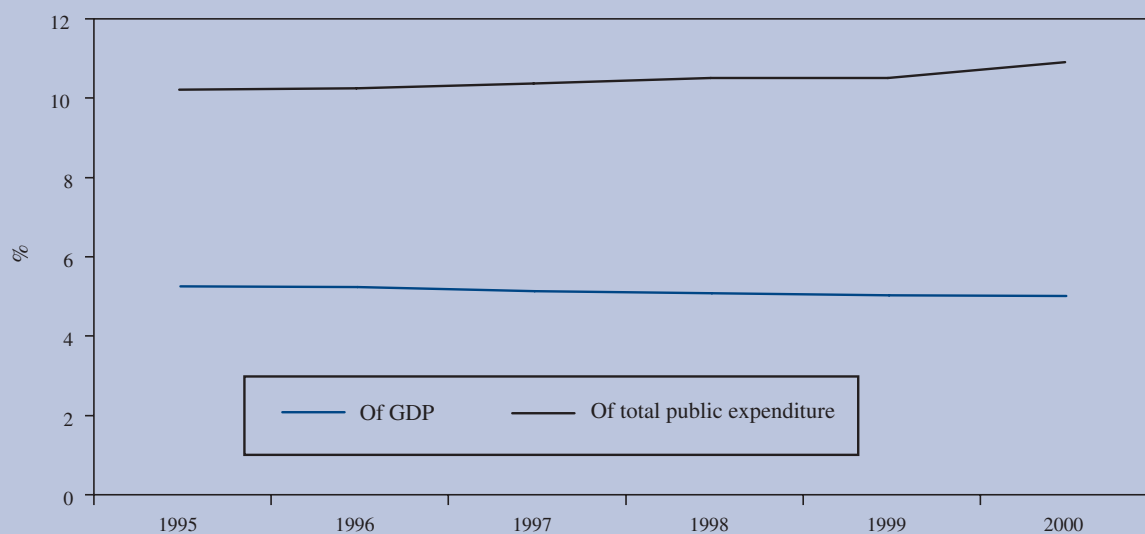
Table 5

**Investment in education: latest figures
(in% of GDP)**

	Public (2000)	Private (1999)	Enterprise CVT course (1999)
BE	5.2	0.3	0.4
DK	8.4	0.3	1.6
DE	4.5	1.2	0.5
EL	3.8	0.3	0.1
ES	4.4	0.9	0.4
FR	5.8	0.4	0.5
IE	4.4	0.4	0.4
IT	4.6	0.4	0.3
LU	n.a.	n.a.	0.6
NL	4.8	0.4	0.9
AT	5.7	0.2	0.4
PT	5.7	0.1	0.3
FI	6.0	0.1	0.6
SE	7.4	0.2	0.8
UK	4.4	0.7	1.3
EU-15	4.9	0.4	0.6
US	4.9	1.6	n.a.

Notes and sources: Total public expenditure as a share of GDP, Eurostat; private expenditure on educational institutions (net of public subsidies attributable for educational institutions), OECD education database; enterprise expenditure on continuing vocational training courses, Eurostat, based on CVTS 2. The last figures are likely to be underestimates since only expenditures by firms with 10 or more employees in NACE Sectors C to K and O are included, whereas the denominator is total GDP. In addition, it is important to note that other important categories of workplace training (notably initial vocational training) are not included.

Graph 7: Public spending on education, EU-15



Source: Commission services.

Average attainment among 15–24-year-olds is relatively low, of course, because many in this group are still studying. In 10 years, their attainment will have risen to the level of current 25–34-year-olds or above.

Gender differences in attainment are notable. In the oldest groups, especially the 55–64 age group, male attainment comfortably exceeds that of females (except in Ireland, Finland and Sweden). In the youngest groups, however, women now have slightly more years of schooling on average than men. This, of course, reflects the substantial growth in female enrolment over time.

Country differences are also striking. Average attainment ranges from just over 7 years in Portugal to 13 years in Germany. Here, a word of caution is in order, since education systems in different countries are not fully comparable. The figures do take into account differences in the duration of different types of tertiary and upper-secondary programmes in the same country. However, they cannot take into account the fact that attainment is obviously higher in some countries in part because courses last

longer, and it is debatable whether the quality of outcomes increases in proportion to the length of studies.

The age profile of attainment between the ages of 25 and 64 ranges from being almost flat in the case of Germany to a steep incline in Spain. Average attainment of 25–34-year-olds in Spain is four years higher than that of 55–64-year-olds, which reflects the tremendous increase in enrolment in recent decades.

We now turn to estimating the likely increase in average attainment over the next 10 years and beyond. In what follows, we focus simply on the EU average, aggregated by country and by gender, for several reasons (not to mention limited space). Firstly, the margin of error surrounding the estimates, as well as the source data, might make cross-country comparisons misleading. Secondly, the data on macroeconomic returns to education come from cross-country regressions. This means that estimates of returns for different countries (or different genders) depend on the functional form of the regression model. In the case of the model on which the figures presented in Section 2.2 are based, estimated returns are lower in countries with relatively high average attainment (see Box 2). Since it is an

Table 6

Average years of schooling by age group, 2002

	15-24		25-34		35-44		45-54		55-64		25-64	
	F	M	F	M	F	M	F	M	F	M	F	M
BE	10.7	10.3	12.4	11.9	11.4	11.5	10.6	10.8	9.4	10.0	11.0	11.1
DK	10.3	10.3	12.8	12.6	12.6	12.5	12.4	12.6	11.9	12.3	12.4	12.5
DE	10.0	9.8	12.9	13.1	12.9	13.2	12.8	13.3	12.2	13.1	12.7	13.2
EL	10.7	10.3	12.0	11.5	10.7	11.1	9.2	10.0	7.9	8.7	10.0	10.4
ES	10.2	9.6	11.1	10.6	9.7	9.7	7.9	8.5	6.4	7.3	9.1	9.3
FR	10.7	10.5	12.0	11.8	11.1	11.2	9.8	10.3	8.5	9.2	10.5	10.8
IE	10.6	10.2	11.9	11.6	11.1	10.9	10.1	9.9	9.0	8.8	10.8	10.5
IT	10.1	9.8	11.2	10.9	10.4	10.4	8.9	9.6	6.9	8.0	9.5	9.9
LU	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
NL	10.5	10.1	12.5	12.3	12.0	12.3	11.3	12.0	10.6	11.5	11.7	12.1
AT	11.2	11.0	12.6	12.8	12.4	12.9	11.9	12.6	11.4	12.3	12.1	12.7
PT	8.8	8.0	9.0	8.2	7.6	7.3	6.7	6.9	4.5	6.1	7.1	7.2
FI	10.3	10.0	12.7	12.1	12.4	12.0	11.4	11.0	9.9	9.9	11.6	11.3
SE	10.8	10.7	12.4	12.3	12.2	11.9	11.9	11.5	10.9	10.6	11.9	11.6
UK	11.8	11.7	12.3	12.4	12.1	12.3	11.7	12.1	11.2	11.6	11.9	12.1
EU-15	10.6	10.3	12.0	11.9	11.5	11.6	10.5	11.0	9.3	10.2	10.9	11.3
EU-15 (both sexes)	10.5		11.9		11.5		10.8		9.8		11.1	

Sources: Commission services, LFS; de la Fuente and Ciccone (2002) for cumulative years of schooling by educational level.

open question whether returns are, in fact, diminishing, we would not wish to impose such a restriction. Finally, this study is motivated by the Lisbon strategy, the goals of which refer to the performance of the EU as a whole.

Nevertheless, two important points follow from Table 6 and from the data presented in Section 4.1. Firstly, the potential contribution of increased attainment to growth varies a great deal between countries where older workers are already relatively well educated and those where the replacement of older workers by better-educated younger cohorts will substantially increase average attainment. Secondly, the scope for raising future attainment through current investment also varies significantly among countries, as the difference in enrolment rates in the different areas of education and training shows.

Even without additional investment, average years of schooling are destined to rise as younger, more educated cohorts replace those who retire. We begin, therefore, by estimating the increase in attainment holding enrolment rates constant. It is then relatively straightforward to study the additional impact of different policy scenarios by increasing the enrolment and/or attainment rates of different age groups, according to the policy target or benchmark in question.

In principle, the change in average years of schooling over the next 10 years can be estimated by moving the 55–64 age group into retirement, shifting the younger age groups up by a decade, and estimating any increase in their attainment over that decade.

Clearly, demographic changes also have an impact as the size of the youngest cohorts declines relative to the workforce as a whole. Average years of schooling for the population aged 25–64 are thus calculated using Eurostat's baseline population projections for 2010 and 2050.

Given data on expenditure per student in the different areas of education and training, the possible implications for expenditure can also be estimated. This exercise simply assumes constant spending per student as a share of GDP, and is intended to be illustrative. In practice, with declining or rising student numbers, expenditure per student might well rise or fall (see Box 3).

The benchmarks, calculations and underlying assumptions are described in more detail in the annex. Table 7 presents the main results.

It is important to note that these scenarios are merely estimates of the change in full-time equivalent years of attainment. In the table, a year of attainment is implicitly

Table 7

Policy scenarios: implications for average years of schooling in the population aged 25–64 and for education expenditure

Scenario	Description	Increase in years of schooling in 25–64 population		Change in annual expenditure after first decade
		First decade	Long-run	% of GDP
Constant enrolment	Enrolment rates by age remain constant	c. 0.65	c. 2.2	– 0.30
Halve number of early school-leavers	+ 10 % of 18–24-year-olds achieve upper-secondary attainment	+ 0.04	+ 0.34	0.12
Rapid increase in tertiary participation	Equivalent of + 9 % of 20–29-year-olds enrolled in tertiary studies	+ 0.10	+ 0.69	0.41
More lifelong learning	+ 4 % of 25–64-year-olds participating (at any given time)	+ 0.05	+ 0.22	0.24
More pre-school education	+ 4.4 % of 3–5-year-olds participating	+ 0	+ 0.11	0.03

NB: Here, pre-school education and adult training are included in average years of schooling; this is not the case in Tables 6 and A1 and Graph 2. Expenditure projections assume that expenditure per student grows at the same rate as GDP.

Source: See Annex.

viewed as equivalent across the different areas of education and training. But, as the discussion in Section 3 suggests, this is not necessarily the case as far as the impact on economic growth is concerned.

The results in Table 7 confirm what is intuitively obvious: that most of the increase in average attainment over the next 10 years will result from investments already made, in some cases many years ago, as older and (on average) less educated members of the workforce are replaced by younger cohorts. This will be the case even if the benchmarks for raising participation in upper-secondary education and lifelong learning are met, and tertiary enrolment continues to increase rapidly. On the other hand, it will take 50 years or more for the efforts to increase investment in education today to bear full fruit.

The long-term nature of the investment means that the rapid increase in enrolment in recent decades will be felt for several decades to come. Eventually, the growth in average attainment seems likely to slow down, owing to demographic change, the saturation of secondary and perhaps even tertiary education and the limited time most adults have available for training. Over the next decade or two, however, the results suggest that the increase in attainment will not be far below the trend of 0.8 per decade observed recently.

With constant enrolment, and if expenditure per student grew at the same rate as GDP, total expenditure on education would be expected to fall significantly as a share of GDP. While spending may be unlikely to fall by this much in practice, this does suggest that resources may be available to fund significant quality improvements or, for example, an increase in upper-secondary participation, even before increased expenditure is considered.

In view of the discussion in Section 3, some tentative conclusions on the relative returns to investments in different areas of education and training may be drawn.

- Pre-school education appears in many ways to be the best long-term investment, especially given its low opportunity cost and potentially high returns. The short-term pay-off is limited, for obvious reasons.
- Raising upper-secondary participation also appears to be a good long-term investment, coming relatively early in the life cycle and with relatively low cost per student compared with tertiary education.

- The growth in tertiary enrolment is clearly likely to make the largest additional contribution to increasing attainment in the near future. The cost of maintaining growth at a similar rate to that of previous decades is, however, significant.
- Lifelong learning can also make a significant contribution, and it offers the largest short-term pay-off relative to its long-run impact. But it also appears to be the most expensive option in terms of direct costs, mainly because the investment comes relatively late in the life cycle.

4.3. The possible impact on employment

Compared to the vast economic literature on education and growth, it is striking that there is almost no solid evidence on the impact of education on aggregate employment ⁽¹⁾.

This is partly because full employment is implicitly assumed in most of the growth literature. However, the dependent variable in the growth regressions described in Section 2.2 is frequently GDP per person rather than GDP per employed person. In this case, the growth regressions should in principle pick up employment as well as productivity effects. Bassanini and Scarpetta (2001), for instance, using GDP per working-age person, arrive at similar results to the benchmark estimates in Table 1, which are based on GDP per employed person.

The paucity of empirical work on education and aggregate employment may also be partly due to the fact that theoretical priors, as discussed in Section 2.4, suggest a limited impact. Nevertheless, with employment far from full in many countries, and with human capital a key strand of employment policy, this issue would seem to be an important one for future research.

In the mean time, the best that can be done is to provide some indicative figures on the possible magnitude of the effects discussed.

Röger and Wijkander (2000) found that skill-biased technical progress could explain as much as 3.5 to 5 per-

⁽¹⁾ Stenberg and Wikström (2004) is one of the few papers that squarely addresses the issue. These authors find that a rise in the share of individuals with a college degree has a short-run positive impact on the aggregate employment rate of Swedish males (though they do not take into account the initial negative effect of increased tertiary enrolment on participation). De la Fuente (2003) arrives at a tentative estimate of an aggregate employment impact, but this is based on scaled-down estimates of the correlation between attainment and employment probability at the individual level.

Box 3: Expenditure projections

The expenditure projections in Table 7 are made on the basis of constant expenditure per student. Whether this is a reasonable assumption in the short to medium term, particularly in view of changing student numbers, may be open to question.

Salary costs make up the bulk (around 70 %) of public expenditure on education. The natural assumption is that these should be indexed to overall productivity in the long run, assuming that the quality of teaching staff relative to the rest of the workforce is to be maintained. There might be some scope for productivity improvements in non-staff inputs. Even here, however, in order to maintain a constant quality of education, schools must move with the productive capacity of the rest of the economy — for example, they will need to invest in up-to-date ICT facilities. Therefore, a reasonable approximation is to index total education spending to productivity in the wider economy. This implies that, in the absence of demographic shifts or changes in enrolment rates, and with a constant employment rate, spending on education as a share of GDP would remain constant.

At the primary and lower-secondary levels, there are reasons to think that expenditure per student is likely to rise in the face of a significant fall in student numbers, at least in the short term. Firstly, some of the costs associated with infrastructure and equipment may be fixed and, to a certain extent, indivisible. For example, class sizes might

have to fall significantly before the closure of a school and the reallocation of pupils to other schools would be justified. Secondly, staff representatives are likely to be able to mount effective political opposition to reduced expenditure (particularly since this implies a fall in the number of staff), and so there may be ‘windfall gains’. These might take the form, for instance, of smaller class sizes or reduced workload — which may or may not lead to increased quality.

In tertiary and adult education, where participation seems set to continue expanding, there may be economies of scale, meaning that the marginal cost of enrolling an additional student is less than average expenditure per student. However, quality is likely to suffer eventually if enrolment is expanded substantially without sufficient additional finance.

Another method of projecting education expenditure is to assume that growth in expenditure per student initially follows recent trends and gradually converges (over a period of say 20 years) towards the rate of productivity growth. This approach suggests a significant increase in spending despite declining numbers at primary and lower-secondary level (Montanino et al., forthcoming; Economic Policy Committee, 2003). Indeed, the cost of allowing spending per student to rise in this way could match the cost of increasing enrolment along the lines of the benchmarks presented in Table 7 (i.e. a total of 0.8 % of GDP per year).

centage points of unemployment in Germany, France and Italy. A similar-sized effect in terms of reduced labour force participation is easily imaginable, given the extent of early retirement in recent years. Thus the benefits of re-equilibrating the skills distribution would appear potentially significant.

However, calculations by Heckman (2000) suggest that investments of nearly 30 % of GDP might be required to fully reverse the increase in inequality due to skill bias in the USA by means of training — even assuming a 10 % rate of return on investment. These are rough estimates that may not easily translate to the European case, but they serve to illustrate the point that, even if all investment in human capital were targeted, it would take a huge effort and/or a long time to offset the effects of skill bias. In practice, most investment is not targeted in this manner and some clearly works in the opposite direction.

Nevertheless, examples of targeted investments with likely positive employment effects may be highlighted, though it is extremely difficult to quantify these effects. The most obvious case is perhaps the target of reducing the share of early school-leavers by 10 %. This would increase both the wage and employment prospects of the individuals in question, though there may be some substitution for existing employees with upper-secondary qualifications. It would also reduce the supply of low-skilled workers, thus potentially raising wages for this group and potentially lifting some out of unemployment traps. However, since tertiary participation also seems set to continue increasing, the relative skill level of those with at most upper-secondary qualifications is set to decline over time.

In the longer term, the limited scope for increased secondary and tertiary participation, together with a greater focus on lifelong learning, is likely to mean that

the distribution of attainment by age will even out. In other words, the downward slope in attainment from the 25–34 age group onwards that is apparent in Table 6 is likely to flatten out over time. Indeed, as noted earlier, this is already the case for some countries, such as Denmark and Germany. It might be argued that this will help to counter skill-biased technical change, since older workers ought to be more adaptable, relative to the rest of the workforce, than they are at present.

Of course, it is not inevitable that technical change will continue to be skill biased — it might become skill neutral, or even biased towards the low-skilled, as seems to have been the case in the early 20th century (Acemoglu, 2002). On the other hand, since governments are actively encouraging skill-biased change in some respects (by subsidising R & D and promoting dynamic knowledge-based economies, for instance), they may have a responsibility to ensure that the requisite high-level skills are available. In that case, efforts to improve lower-level skills may be a necessary complement.

Increased upper-secondary and tertiary participation is likely to have a negative impact on employment in the short term. Table 8 shows employment rates in and out of education for 15–24 and 20–29-year-olds (the age groups most relevant for the benchmarks on upper-secondary and tertiary education). Assuming that these average rates remain unchanged and hold for the individuals in question, then meeting the benchmark for reducing early school leaving implies that around 4.2 % of the 15–24-year-old population will have an average employment rate of 25 % instead of 64 %. This translates into a fall of 0.3 percentage points in the overall employment rate. Similarly, raising the participation of 20–29-year-olds in tertiary education by 9 percentage points implies a fall of 0.6 percentage points in the 15–64 employment rate (see the annex for details). These, of course, are first-order effects and might be partly offset by reduced youth unemployment.

Finally, the improved availability of affordable, good-quality childcare and education is likely to have a positive impact on female participation. Duncan et al. (2001), for example, show that the quality-adjusted price of childcare strongly influences the demand for childcare and, through that, the employment choices of mothers with pre-school children. For the EU as a whole, this is of most relevance in the case of care (as opposed to education) for 1–2-year-olds. But in those countries where enrolment of 3–5-year-olds in pre-

school education is low, progress towards the Barcelona target could facilitate an increase in female labour force participation (see Graph 5).

4.4. Reforms

The importance of the quality of the school system was highlighted in Section 2.3. This raises the question of how educational outcomes can be improved.

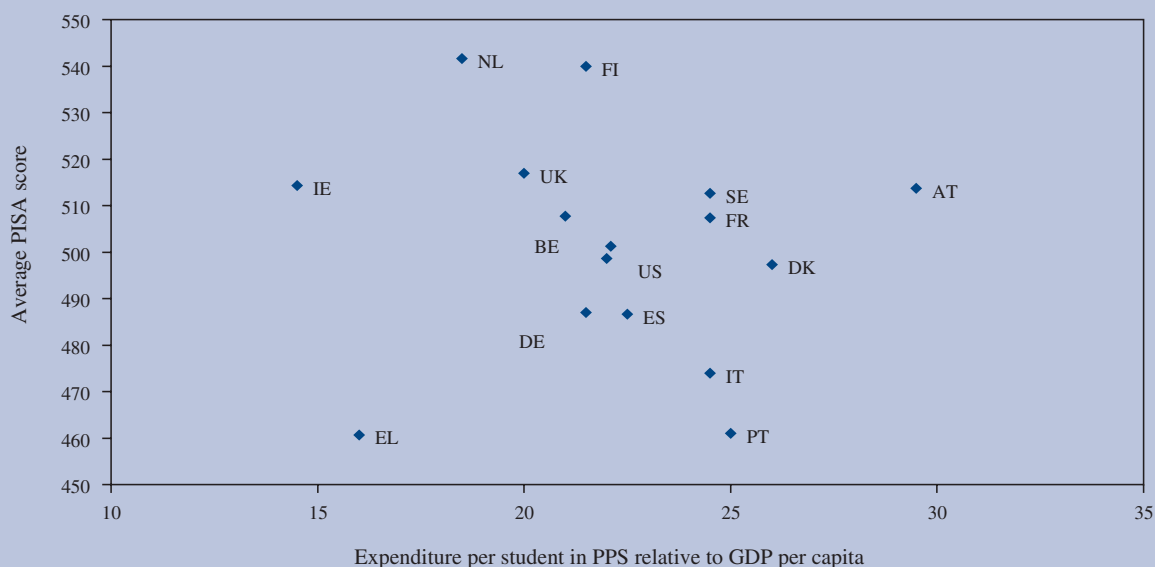
Several authors have found that the relationship between students' educational performance and resource factors such as expenditure per student and class size are, in the words of Wößmann (2003, p. 156), 'dubious and weak at best'. This does not mean that money makes no difference — adequate resources are self-evidently a necessary condition for a high-quality education system. The apparently weak relationship between resources and outcomes does, however, suggest that resources are used with varying efficiency. For instance, the allocation between teachers' salaries and non-teacher inputs such as books and equipment may be far from optimal in some countries (Pritchett and Filmer, 1999).

By way of illustration, Graph 8 plots 15-year-olds' test results from the OECD's PISA study against public expenditure per student as a share of GDP per capita. Of course, this requires careful interpretation and should not be read in a simplistic fashion as an indicator of efficiency. For example, some observers question how accurately the PISA results reflect performance, arguing that children in some countries may be more used to tests and thus perform relatively well. In addition, it would be preferable (were the data available) to look at cumulative expenditure over the past decade, rather than from only the past two years. It should also be noted that expenditure appears relatively low in some countries, notably Ireland, where GDP growth has been particularly rapid in recent years and it may take some time for expenditure on education to catch up.

Nevertheless, the striking lack of any clear correlation between expenditure and performance suggests that resources may be being used with variable efficiency. At least, it suggests that efficiency issues deserve a prominent place on policy-makers' agendas.

Countries to the upper-left of the mean manage above-average attainment with below-average public spending on education (as a share of GDP per capita). Others, such as Austria and Sweden, also have well-above-average

Graph 8: Expenditure versus outcomes



NB: The PISA score is the average of the scores for reading, mathematics and science literacy in 2000. Expenditure per student is at primary and secondary levels (averaged) for 1999 in purchasing power standards (PPS).
Source: OECD.

achievement, but this costs them significantly more. Italy and Portugal also spend more than the average but have relatively low attainment. This might signal efficiency issues, though it might also be partly due to reforms undertaken in recent years that have led to increased investment but will take time to be fully reflected in improved performance. In Greece, there might be a stronger case for increased investment, though, of course, the efficiency with which additional resources are employed will largely determine whether Greece moves towards the upper-left or the lower-right quadrants of the graph.

Not everyone agrees that variables such as class size make no difference. Krueger (2003), for example, uses high-quality US experimental evidence to argue that an exogenous reduction in class size from 22 to 15 students yields a normal economic return of around 6 %.

But what also clearly matters is the incentives that determine how efficiently available resources are spent⁽¹⁾. Wößman (2003) identifies a number of institutional features of schooling systems that are found to be positively related to student performance. Among the most important

are centralised control of performance standards (in particular, examinations) combined with school autonomy in process and personnel decisions, with power and incentives for individual teachers to determine appropriate methods but a relatively low-level influence on these issues from teaching unions. The US literature has highlighted the role of competition and choice — between different public institutions (e.g. by means of voucher schemes) or between private and public schools — in promoting an increased focus on improving student performance (see, for instance, Hoxby, 2003).

The appropriate balance between centralised control, accountability and autonomy is also an issue in tertiary education. Here again, there may be substantial scope for improvements. Table 9 provides a crude indicator of the public cost per graduate. This should also be interpreted with care. The costs reported are for all students, not only those graduating, while private expenditure is not included, and some of the public expenditure in some countries is in the form of student loans which will be repaid. Nevertheless, factors such as high dropout rates and the long duration of tertiary studies in some countries undoubtedly explain a large share of the striking differences between Member States. Reforms to curtail excessive duration and to reduce high dropout rates

⁽¹⁾ See European Commission (2003c).

Table 8

Youth employment rates (in %) in and out of education, 2001

	Age group	In education	Out of education
BE	15–24	9.3	58.7
	20–29	45.1	79.3
DK	15–24	54.9	78.8
	20–29	63.9	87.2
DE	15–24	38.6	65.0
	20–29	49.8	77.0
EL	15–24	4.2	55.6
	20–29	12.6	67.7
ES	15–24	11.3	69.0
	20–29	28.4	75.1
FR	15–24	14.2	51.7
	20–29	38.0	75.5
IE	15–24	15.9	83.1
	20–29	16.8	86.5
IT	15–24	4.8	51.7
	20–29	14.9	64.3
LU	15–24	11.5	81.3
	20–29	32.9	84.6
NL	15–24	55.0	84.0
	20–29	60.4	87.3
AT	15–24	24.4	67.5
	20–29	21.8	84.4
PT	15–24	11.7	78.3
	20–29	37.9	85.3
FI	15–24	25.9	55.1
	20–29	50.9	73.1
SE	15–24	24.3	73.2
	20–29	36.0	87.1
UK	15–24	47.9	71.8
	20–29	62.3	79.8
EU average	15–24	24.9	63.8
	20–29	39.1	76.0
US	15–24	48.0	71.3
	20–29	67.3	80.3

NB: Employment includes work study programmes; figures for the Netherlands and the USA for 2000.

Sources: OECD, (2002, Table C5.1); Eurostat and OECD for population weights.

could significantly improve the ratio between attainment and enrolment.

Reforms outside the school system could also have a significant impact on the returns to investment in human capital.

The Barcelona Summit set the objective of raising the effective retirement age by five years, from about 60 at present. Clearly, these extra years come at the end of working life, and so are heavily discounted as far as young people are concerned. Developing the example given in Section 3.6, the impact of extending working life from 40 to 45 years would be to raise the rate of return to schooling from 7.6 % to 7.7 %. If the increase

Table 9

Estimated public cost per tertiary graduate

	EUR PPS	% of GDP per capita
EU	40 750	186
BE	48 028	205
DK	86 602	335
DE	71 108	305
EL	n.a.	n.a.
ES	24 471	136
FR	26 233	119
IE	25 684	103
IT	51 422	228
LU	n.a.	n.a.
NL	62 530	253
AT	107 405	434
PT	25 709	167
FI	65 743	294
SE	96 399	415
UK	20 286	92

NB: Public spending on tertiary education in PPS (average of 1999 and 2000) divided by the number of tertiary graduates in 2001 (2000 for Denmark, France, Italy and Finland).

Source: Commission services.

came about through reduced early retirement — for example, extending working life from 35 to 40 years — then the effect would be slightly larger, with returns increasing from 7.3 % to 7.6 %.

The impact on returns to adult education and training, particularly for older workers, could be much larger. Extending the lifespan of an investment from 20 to 25 years, for instance, raises returns from 5.0 % to 6.2 %, using the same example. Similarly, under an alternative view whereby human capital depreciates more rapidly and needs to be maintained, raising the effective retirement age would significantly boost incentives to invest in adult education and training.

Labour market reforms could have a substantial impact on incentives to invest in education. Wage bargaining institutions, minimum wages, search and matching frictions and firing costs may all lead to compression of the wage distribution (Acemoglu and Pischke, 1999). A closer link between wages and productivity would directly raise the private returns to investment in education, though, of course, the reaction of labour demand and the implications for firms' incentives to provide training must also be taken into account. Greater opportunities for holiday work or part-time work while studying — for which there is ample scope in many countries (see Table 8) — could significantly reduce the opportunity costs particularly of tertiary education.

The differences in estimated private rates of return to education (Graph 1) suggest that labour market institutions may have a significant impact. However, they can-

not explain all the cross-country variations. Part of the reason why returns in Denmark and Sweden are relatively low may simply be that investment is relatively high (Table 5), thus driving down average returns. It could also be argued that investment in education leads to greater equality of opportunity, resulting in lower wage inequality. This could result in lower estimated private returns to education compared with other countries, but not necessarily lower social returns.

Labour taxation is a significant influence on private returns to education since it determines how much of any increment in gross wages due to education finds its way into disposable income. Out-of-work benefits also may reduce training incentives in the same way as they reduce employment incentives⁽¹⁾. De la Fuente (2003), using OECD data on tax and benefit replacement rates at the average production worker wage, estimates that the negative impact of taxes and benefits on private returns to education is more than outweighed by the positive impact of public educational subsidies. A more detailed analysis would be necessary to take full account of the details and pro-

⁽¹⁾ In-work benefits, designed to boost the incomes of low-paid workers without operating directly on wages, may also discourage training.

gressiveness of the tax and benefit system in different countries. Nevertheless, to give a broad indication of scale based on de la Fuente's calculations, a reduction in the marginal tax rate of 1 percentage point (from an EU average of just over 41 %) would raise the private rate of return to schooling for an average production worker by about 0.14 percentage points.

Finally, there are indications that gender balance in human capital investment and utilisation could be improved. The fact that private returns to investment in education tend to be higher for women than for men may indicate the presence of surplus returns. This is most probable in the case of older groups, since many women in the past did not have the same educational opportunities as men or, even if they had acquired a good education, dropped out of the labour force. Efforts to combat discrimination and perhaps to target lifelong learning initiatives at women who might wish to return to work could pay dividends. Younger women are nowadays better educated on average than their male counterparts. A policy of gender balance here might involve, for example, ensuring that efforts to reduce the number of early school-leavers not in further training are adequately geared towards the needs of young men.

5. Conclusions

The aims of this chapter were threefold: firstly, to review the economic evidence on the impact of education on growth; secondly, to see what insights are to be gained about particular areas of education and training that might deliver relatively high returns; and, thirdly, to look at the likely impact on attainment, and hence growth, of meeting various benchmarks for increased investment in education — in the broadest sense of lifelong learning ⁽¹⁾.

The best available evidence suggests that education has had a substantial impact on growth in recent decades. These estimates still come with a wide margin of error and several strong caveats. Nevertheless, a one-year increase in the average attainment of the population aged 25–64 is plausibly associated with a 4 to 6 % increase in productivity, and perhaps a further 3 % in the long run.

Whether this continues to be the case in the future depends on many unknowns, such as the nature of technical progress, the extent of any diminishing returns to continued growth in enrolment and whether increased investment is channelled into more or less productive areas of the education and training system. It also depends crucially on the quality of education and training systems. Indeed, the literature suggests, perhaps not surprisingly, that the quality of educational outcomes may matter at least as much as the number of years spent at school or college.

The economic literature does not allow firm conclusions about the returns to different areas of education and training to be drawn, mainly because the data that would be needed to address these questions are unavailable. Nevertheless, evidence in some areas as well as insights from the general returns framework allow some tentative conclusions to be put forward.

- Pre-school education looks to be a sound long-term investment, with potentially large economic and social benefits, relatively low costs (both direct and opportunity), likely benefits in terms of employment for mothers, and, of course, a long period of amortisation.
- A high-quality basic education for all would also seem to be a priority, particularly in view of the finding that success early on begets further opportunities for productive learning later in life, while a lack of education leads to poor prospects for employment and further training. The key margin for expansion in primary and lower-secondary education is quality. Raising upper-secondary participation — already compulsory and approaching universality in some countries — would also appear to be a sound investment.
- Tertiary education appears to be an area of high private and social returns. While concerns about overeducation are periodically raised, the evidence does not suggest that this is a practical concern at present, although the possibility of diminishing returns to a further rapid increase in enrolment cannot be ruled out. Aspects of tertiary education may be of particular importance for technical progress, though the evidence does not provide precise estimates of the benefits.
- Adult education and training might seem at first sight to be an area of relatively low returns, on account of the shorter duration of the benefits. However, the opportunity cost may be lower than for tertiary education, and, if the need to maintain and renew depreciating human capital is taken into account, the returns may be larger than they first appear. The evidence suggests that returns to work-related training — when the benefits to both firms and employees are taken into account — are at least comparable to the returns to schooling.

⁽¹⁾ See European Commission (2001).

As to the likely impact of growth, it is probable that education will continue to make a substantial contribution over the next decade. Average attainment is set to increase at a rate not far below the recent trend of 0.8 years per decade. If the estimates of macroeconomic returns to schooling are accurate and continue to apply, that would imply a contribution of a little under 0.3 to 0.5 percentage points of GDP per annum on average in the EU as a whole.

However, around three quarters of the increase in average attainment will be due to investments already made, as younger and better-educated cohorts replace those who retire. Average attainment is a stock that responds slowly to changes in the flow of enrolment. Thus, investments made in the next decade will have relatively little influence on growth in the near future. Indeed, it will take 50 years or more for them to bear full fruit, although increased tertiary enrolment and lifelong learning, in particular, may also have a significant shorter-run impact.

In the long run, it may seem unlikely that average attainment can continue to increase at the same pace, given the fall in the share of young people in the population, the saturation of upper-secondary and perhaps tertiary education, and the relatively limited scope for increasing adult education and training as long as most participants are working full time. Nevertheless, the effects of the rapid increase in participation in recent decades will continue to be felt for many years.

These gains will be very unevenly distributed among Member States, with the greatest benefits going to countries where enrolment has expanded most rapidly in recent decades. Nevertheless, there remain large disparities in average attainment between Member States, so further investments may still be required in countries that are rapidly catching up. Average attainment is set to increase by much less in countries where enrolment was already high in the 1960s and 1970s, and has grown less rapidly in subsequent years, which suggests that the contribution of education to growth in the coming years will be relatively low. Here again, however, it must be stressed that the number of years of attainment is by no means an ideal proxy for the stock of human capital. For example, a country that improved the quality and efficiency of its education system might see stable attainment in years, but increased attainment in persons and improved educational outcomes.

Finally, a number of general reflections are in order.

Firstly, while most of the literature focuses on the productivity impact of education, there are also reasons to be optimistic that increased education will have a positive impact on aggregate employment in the longer term. This would be more likely if investments were targeted at the low-skilled and if the increased focus on lifelong learning helps older workers to remain longer in the labour market. In the short term, a further increase in upper-secondary and tertiary participation is expected to have a negative impact on employment, since those in full-time education are less likely to participate in the labour market.

Secondly, the social returns to education, although they are not measured with great precision, appear to be broadly comparable to the private returns. This does not suggest a compelling case based on market failure for a generalised increase in public investment in education. Rather, it makes sense to focus additional public funds on particular areas where significant market failures — and, moreover, ones that policy is able to address — appear more likely. In areas where both private and social returns appear high, but there is no clear evidence that the latter exceed the former, private investment is likely to be forthcoming. It does not seem to make sense to concentrate finite public resources in these areas, given the objective of increasing overall investment. However, the fact that estimated private returns appear high in relation to other investments suggests the existence of significant credit constraints and/or uninsurable risks associated with investments in human capital. Policy may need to ease these constraints in order to enable private investment.

Thirdly, if policy-makers are interested in maximising the impact of education on growth, then the focus should not only be on increasing investment. Raising the quality of educational outcomes, especially at basic and secondary level, must be a high priority, and the evidence suggests that incentives, rather than expenditure, are the key influence here. In addition, there is probably ample scope for improving the efficiency with which existing resources are used in some areas. Reforms leading to improvements in quality and efficiency would directly raise both private and social rates of return, thus encouraging further productive investment.

Fourthly, reforms in other areas should also be on the agenda. Private returns to investment in education would

be higher in better-functioning labour markets. Raising the effective retirement age is perhaps one of the best ways to promote lifelong learning. Tax and benefit systems are an important influence on training incentives, and should be designed accordingly. Measures to reduce gender imbalances in access to education and training and to lower obstacles that may prevent able and qualified older women from making the most of their human capital would be desirable. The great advantage of reforms in these areas is that they would be immediately effective for the whole stock of human capital, not just current enrolment. They would thus have a relatively large impact in the short to medium term, which should be of interest from the perspective of the Lisbon strategy.

Fifthly, there is room for improvement in the design and evaluation of education policies in Europe. It is striking, for example, that almost all the evaluation literature on pre-school education is from the USA even though provision is much more extensive in several EU countries. Moreover, the scope for policy failure, as well as market failure, needs to be acknowledged. High-profile failures, for example in the area of tax breaks and subsidies for adult education and training, risk discrediting all such schemes. Yet, with rigorous design and evaluation, it may be possible to find ways of addressing the market failures in this area in an efficient way.

Sixthly, there is great potential for international cooperation and exchange of experience in the field of education and training. On the one hand, EU-funded exchange programmes have proved to be profitable experiences for many individual students and researchers. On the other hand, growing cooperation among education policy-makers in the EU promises progress on the mutual recognition of qualifications as well as exchange of best practice in a range of areas, from ICTs in the classroom to making better use of resources.

Finally, although the framework of returns to education offers useful insights, the chapter has highlighted a few shortcomings. It would be unrealistic to expect economic analysis to provide a precise guide to returns in every area of education, but some more results by type and level of training would be desirable. This is, of course, conditional on having adequate data, which is more likely in an evaluation-friendly environment (see above). It would also be useful to have an idea of the riskiness of investments. It is striking that there is very little solid evidence on the impact of education on aggregate employment. Also, the returns framework appears in need of some refinement in order to deal adequately with lifelong learning. It will be for economists to judge whether greater knowledge in these areas would justify the necessary investments.

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Annex

Simulation details

This annex provides some more details on the estimates of how average attainment is affected by demographics and enrolment patterns and on the implications for expenditure and employment.

Table A1 shows de la Fuente and Doménech's (2001) estimates of average years of schooling in the adult population from 1960 to 1995 for EU countries and the USA, together with our estimates for EU countries for 2002.

A.1. Constant enrolment

We begin by estimating what would happen to attainment over the next decade if enrolment rates were frozen at current levels.

Graph 3 in the main text shows cumulative net enrolment, or the sum of net enrolment rates — i.e. the number of people of a given age enrolled divided by the total number of people of that age. The sum of net enrolment rates from ages 5 to 65 gives school life expectancy, as reported by Eurostat, the OECD and Unesco. (In practice, net enrolment rates for the latter years are estimated, since data on the enrolment of over-40s are not available.)

As noted in Section 4.2, the data on enrolment (from the registers of schools and other institutions) are not fully comparable with the attainment data (from the labour force survey). Years enrolled are significantly higher than years of attainment because of factors such as part-time studies, repeated years and dropouts. These may well vary between countries, age groups and types of

Table A1

Average years of schooling, 1960–2002

	1960	1965	1970	1975	1980	1985	1990	1995	2002
BE	7.7	8.1	8.5	8.9	9.4	9.7	10.1	10.5	11.1
DK	10.8	10.9	11.1	11.3	11.5	11.7	11.7	11.9	12.5
DE	9.9	10.4	11.0	11.5	12.0	12.6	12.9	13.1	13.0
EL	5.6	5.9	6.2	6.6	7.1	7.5	7.9	8.7	10.2
ES	5.0	5.1	5.2	5.5	5.9	6.5	7.1	n.a.	9.2
FR	8.1	8.6	9.0	9.6	9.9	10.2	10.5	n.a.	10.6
IE	7.4	7.5	7.8	8.2	8.5	8.9	9.4	10.1	10.6
IT	5.4	5.8	6.2	6.6	7.0	7.5	8.0	8.6	9.7
LU	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	0.0
NL	8.1	8.5	8.9	9.4	9.9	10.4	11.0	11.4	11.9
AT	9.0	9.2	9.3	9.8	10.3	10.9	11.3	11.7	12.4
PT	4.4	4.6	4.9	5.3	5.7	6.1	6.4	n.a.	7.2
FI	7.7	8.2	8.7	9.3	9.9	10.5	11.0	11.4	11.4
SE	8.0	8.3	8.6	9.1	9.6	10.1	10.6	11.1	11.7
UK	8.6	8.8	9.1	9.4	9.8	10.2	10.5	n.a.	12.0
EU-15	7.8	8.2	8.5	8.9	9.3	9.7	10.2	n.a.	11.1
US	10.6	11.0	11.3	11.8	12.2	12.4	12.7	13.0	n.a.

NB: Figures for Germany before 1990 exclude the former GDR; EU average (excluding Luxembourg) weighted by population aged 25–64.
Sources: De la Fuente and Doménech (2001) for 1990–95, Table in the main text for 2002; Commission services for population data.

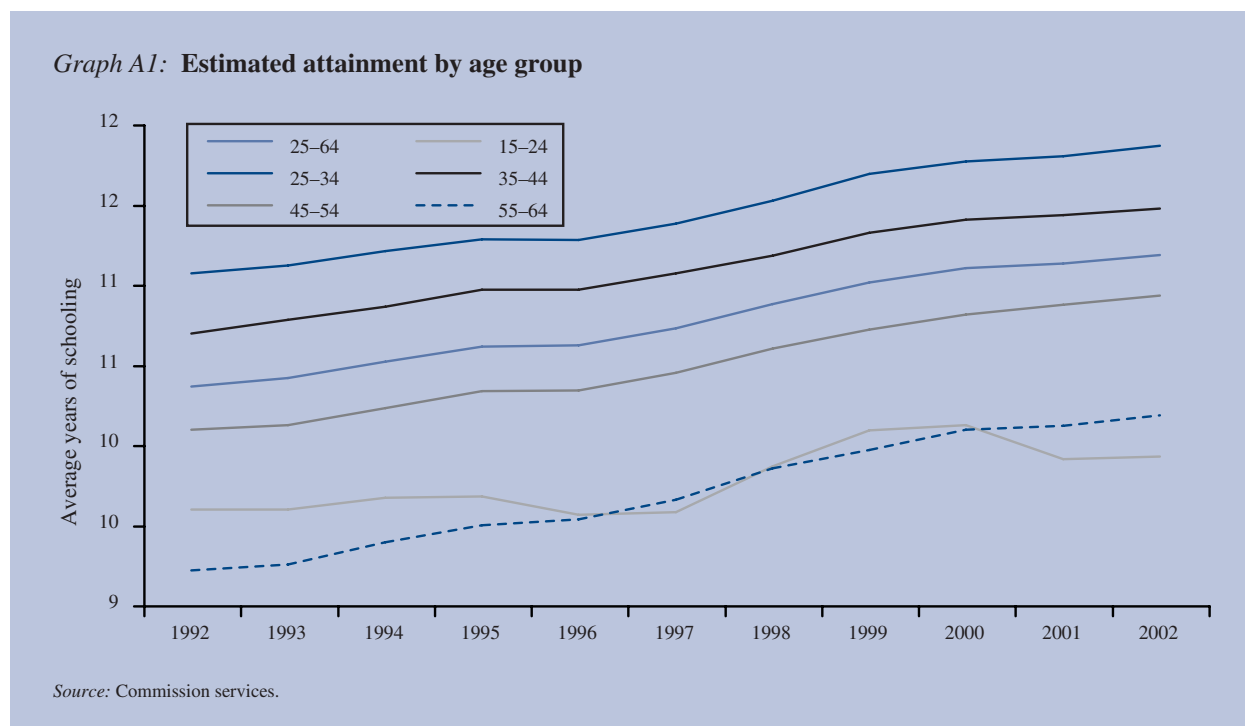
education, and comparable data are not available. Using the enrolment data to predict how much attainment would increase over the next decade leads to a large overestimation. One could assume that the error is constant and estimate this by predicting current attainment using enrolment data from 10 years ago, but unfortunately the enrolment data do not go back far enough.

The LFS data giving a detailed breakdown of attainment by ISCED categories are only available for a few recent years. However, using the broader categories of low, medium and high education, it is possible to estimate attainment by age group for 1992–2002 (for most countries). It turns out that for 2002 the results are very similar to those obtained using the more detailed data. The pattern of increasing attainment is illustrated in Graph A1. (Attainment rises less among 15–24-year-olds than among the other age groups, perhaps in part because of the relatively limited scope for increasing secondary participation.)

We use this data to estimate lower and upper bounds for the increase in years of schooling over the next decade with constant enrolment. In essence, each age group is shifted up by 10 years (the 55–64-year-olds into retirement), and then some allowance must be made for increased attainment due to current enrolment.

The lower-bound estimate assumes that 15–24-year-olds (currently with 9.9 years of attainment), reach the same level in 2012 as current 25–34-year-olds (11.9 years). Applying this to the population projections for 2010 gives an increase in average years of schooling in the population aged 25–64 of 0.47 years. This is clearly a lower bound since it misses current enrolment in the 15–24 age group that has not yet resulted in attainment.

For an upper-bound estimate, we use the actual increase in attainment of the 15–24 cohort between 1992 and 2002. This, of course, includes not only existing enrolment that has not yet led to attainment, but also any increase in enrolment rates over the decade. The average attainment of 15–24-year-olds in 1992 grew from an estimated 9.6 years to 11.9 years by the time they reached the ages of 25–34 in 2002. If we had applied the method of the previous paragraph, this would have captured only 65 % of the actual increase, since the attainment of 25–34-year-olds in 1992 was only 11.1 years. For an upper bound, we will apply the same factor of error to the 2002 figures. Thus, we take the difference between 25–34 and 15–24 attainment in 2002 (two years), divide this by 65 %, and add the result to 15–24 attainment (9.9). This gives an upper-bound estimate for attainment of 25–34-year-olds in 2012 of



13.0 years. Applying that to the population figures gives an increase in average years of schooling of 0.71 years.

These estimates need to be adjusted upwards by the expected increase in attainment among today's 25–54-year-olds due to current enrolment. This was done by looking at the enrolment profile, which suggests that school life expectancy for a 5-year-old is 17.1 years (Eurostat estimate); 15.8 of these expected years occur before the age of 25. Since attainment at this age probably lags behind enrolment (we suppose by about two years on average, given tertiary course duration of around four years), we take the figure for expected years before age 23, which is 15.4 years. Assuming that the profile of attainment is similar to that of enrolment, attainment before age 25 can be estimated to account for 90 % (15.4/17.1) of total attainment. (This may, in fact, be an underestimate to the extent that enrolment later in life is less likely to result in a higher ISCED qualification.)

Putting all this together gives a range of estimates for the increase in average years of schooling of 0.52 to 0.79 over the next decade, from which we select our rough baseline estimate of 0.65.

The baseline for total expected lifetime attainment of 15–24-year-olds is then 13.8 years. In the long run, with constant enrolment, the age profile of attainment changes markedly. Since attainment continues to increase throughout working life, albeit slowly after the age of 25, it is the 55–64-year-olds who end up with the highest level. Using the results from the previous paragraphs, and the shape of the enrolment profile, we derived the following attainment profile: 15–24, 9.9 years; 25–34, 12.5 years; 35–44, 13.4 years; 45–54, 13.6 years; 55–64 13.7 years. Applying this to the population projections for 2050 provides us with a rough estimate of average attainment in the long run with constant enrolment: 13.3 years, an increase of 2.2 years. Part of this effect is demographic: whereas today the 15–24 and 55–64 age groups are about the same size, the older group will significantly outnumber the younger one by 2050.

A.2. Early school-leavers

The Lisbon Summit set a specific target to halve the number of 18–24-year-olds with only lower-secondary education who are not in further education or training. In 2000, around 19.7 % of 18–24-year-olds were in this position. The target could be met by increasing participation in upper-secondary education and/or by increasing the par-

ticipation of over-18s with only basic education in post-secondary education and training. For simplicity, we assume that hitting the Lisbon target will mean that an extra 10 % of 18–24-year-olds will have achieved upper-secondary attainment by 2010 or shortly thereafter. Since enrolment does not necessarily lead to attainment, it is possible that some who participate may still end up with only basic qualifications. Thus, the benchmark is slightly more ambitious than the Lisbon target.

The difference between upper- and lower-secondary attainment is 3.4 years on average in the EU (de la Fuente and Doménech, 2001). Hitting the target implies that, eventually (in 50 years, to be precise), 10 % of the population aged 25–64 will have an extra 3.4 years of attainment. Thus, the long-run impact on average attainment will be 0.34 years.

During the first decade, the impact is much smaller for two reasons. Firstly, in 2010, only one age group in the adult population (25–34-year-olds) has been affected. Secondly, we assume that progress towards the benchmark is gradual and linear, so that the increase in total attainment during the first decade is only about half of what it would be if the target were hit immediately. Applying this to the 2010 population projections implies increased attainment of a total of 8.1 million years. Dividing by the population aged 25–64 (in 2010) gives an increase in average schooling of 0.039 years.

A.3. Tertiary education

If (gross) tertiary enrolment in the EU grows by about the same amount between 2000 and 2010 as it did during 1990–2000, it will reach 37 % of 20–29-year-olds by 2010, which happens also to be the US rate for 2000 (see Table 4). We therefore take this as our scenario for a continued rapid increase in tertiary participation. An increase of 9 % of 20–29-year-olds (or a smaller equivalent share of a larger age group) implies an increase in school life expectancy of 0.9 years. The long-run increase in average years of enrolment in the population aged 25–64 is slightly below this (0.85, using Eurostat's population projections for 2050), since some in the 25–29 age group have yet to complete their studies.

As we have seen, it cannot simply be assumed that enrolment equates with attainment, particularly at the tertiary level. We correct for this using the quotient of our baseline estimate of expected lifetime attainment of current 15–24-year-olds (13.8) and total school life expectancy

(17.1), or 81 %. Thus, we take the expected increase in attainment to be 81 % of 0.85, or 0.69 years. This may still be an overestimate to the extent that the scope for dropouts, repeated years and part-time studies is higher in tertiary education than at other levels. As before, we will also assume an average lag of two years between enrolment and attainment.

Over the first decade, assuming gradual progress towards the target as before, and using the 2010 population projections, the total impact is estimated at around 26 million years. Adjusting for the gap between enrolment and attainment as before and dividing by the population aged 25–64 (2010) implies an increase in average years of schooling of 0.10.

Graph A2 illustrates the increase in attainment in the long run and in the first decade. The impact during the first decade is slightly larger than in the case of early school-leavers because some of it is immediate, in the sense that the 25–29 age group are already in the workforce.

It should be stressed here that we merely follow the convention of the literature in defining the ‘adult’ population as those aged 25–64. In reality, of course, many peo-

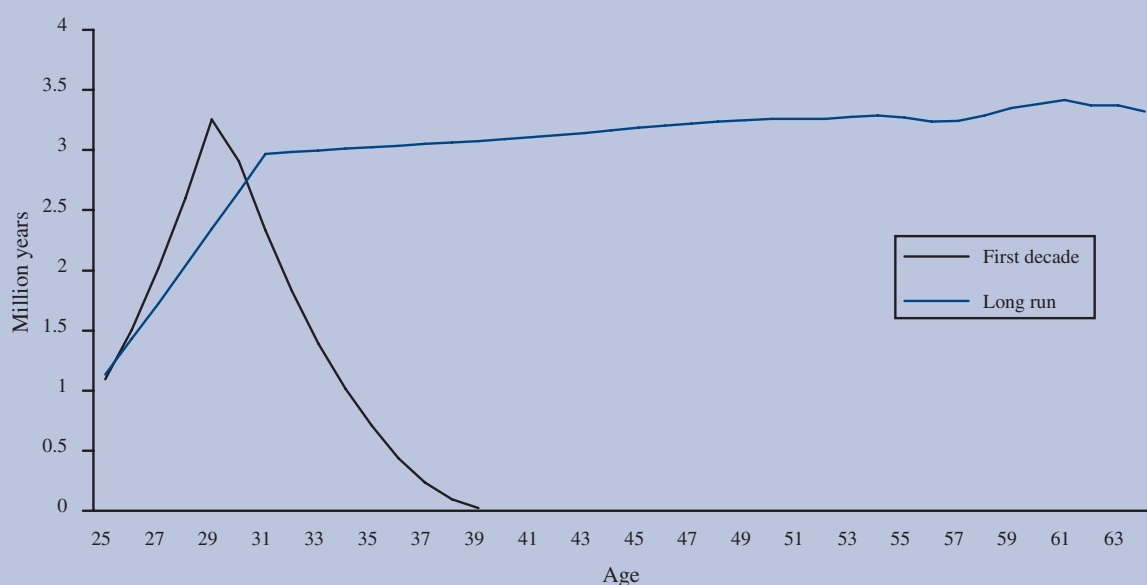
ple aged 15–24 have completed their studies and are productive members of the workforce.

A.4. Lifelong learning

In May 2003, the Education Council adopted a benchmark stating that 12.5 % of 25–64-year-olds should participate in lifelong learning by 2010 (up from an estimated 8.5 % in 2000). The benchmark relates to labour force survey data on training undertaken in the four weeks prior to the survey. Since the duration of many continuing training activities is relatively short, the proportion of adults participating in some form of training within a 12-month period is much higher — between 13 and 56 % in the EU-15 Member States according to OECD (2002), based on 1994–98 data from the international adult literacy survey (IALS).

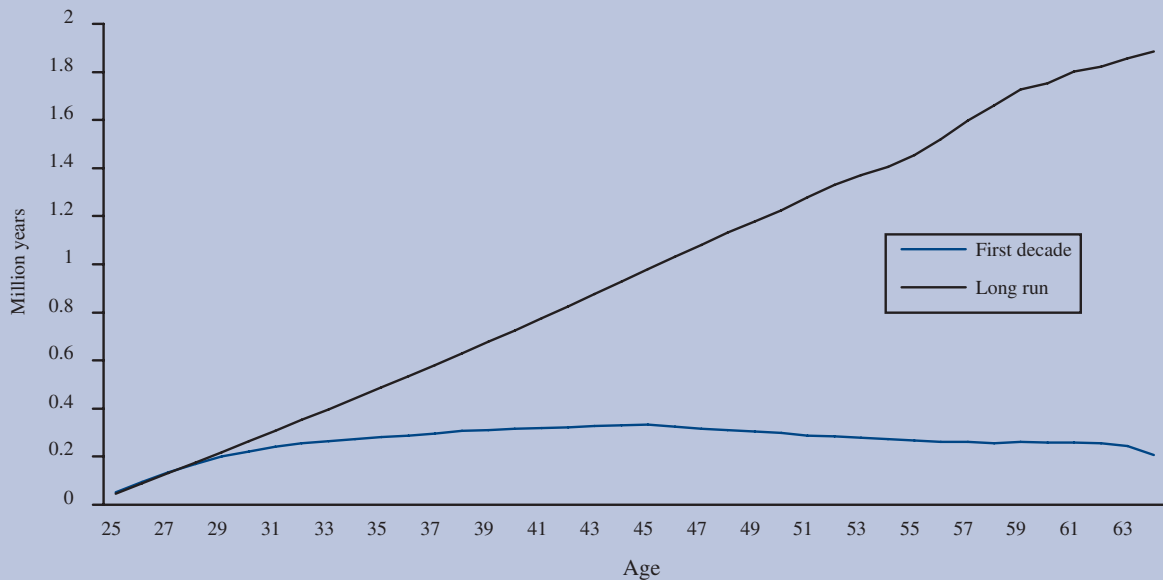
IALS figures suggest that the mean number of annual hours per participant in 20 mainly OECD countries is around 143. This implies an average of 48.2 hours per capita in the population aged 25–65 (Tuijnman and Boudard, 2001). We assume that an increase in the share of people participating in training during the previous four weeks will lead to a proportionate increase in the number of annual hours per capita. Hitting the target of 12.5 %

Graph A2: Extra years of schooling due to increased tertiary participation, by age



Source: Commission services.

Graph A3: Extra years of schooling due to increased lifelong learning, by age



Source: Commission services.

would then imply an increase in average annual training per capita of 22.7 hours. Given an average working week of 37 hours (full-time and part-time) and a working year of 48 weeks, this implies a full-time equivalent increase in enrolment of 0.013 years.

In the long run, the average worker will have been enrolled in lifelong learning for an extra 0.013 years for every year that he or she has been in the adult population. Assuming that increased attainment is uniformly distributed in the 25–64 age group, the average 64-year-old will acquire an additional half a year of enrolment. The cumulative total on the basis of the 2050 population projections is 47.3 million extra years, which divided by the population aged 25–64 (2050) gives an increase in average enrolment of 0.27 years. In the absence of information on enrolment and attainment in the wide variety of activities covered under adult education, we will make the same correction for the gap between enrolment and attainment as before, and assume that training acquired, with or without formal qualifications, has the same value as secondary and tertiary attainment. This implies a long-run increase in average years of schooling of 0.22.

During the first 10 years, and assuming as before that the target is reached gradually, meeting the benchmark

of 12.5 % participation will mean an extra 12.7 million years of enrolment by 2010, which implies 0.05 additional years of attainment. Graph A3 shows the pattern of increased attainment in the long run and after 10 years.

A.5. Early childcare and education

Graph 5 in Section 4.1 of the main text shows that 85.6 % of 3–5-year-olds are currently enrolled in early childcare and education. We assume that hitting the Barcelona target would mean raising this to 90 %, and that a year of pre-school education can be compared to a year of traditional schooling. This implies an effective increase in school life expectancy of 0.132. Applying the same attainment/enrolment correction as before gives the equivalent of 0.11 additional years of schooling in the long run (72 years in this case). Needless to say, the impact over the next 10 years is zero.

A.6. Expenditure

Table A2 provides the available Eurostat figures on expenditure per student by level of education. For a first estimate of the potential expenditure implications of the scenarios discussed above, we will assume con-

Table A2

Expenditure per student in public educational institutions, PPS

	Pre-primary		Primary		Secondary		Tertiary	
	1999	1999	2000	1999	2000	1999	2000	
EU	4 244	3 859	4 157	5 267	5 639	7 937	8 334	
BE	2 848	4 212	4 635	6 487	6 846	8 773	9 897	
DK	3 948	6 435	5 897	7 084	6 944	9 405	11 922	
DE	4 632	3 477	3 827	4 302	4 690	9 698	10 183	
EL	2 197	1 997	2 496	2 756	3 436	3 913	3 168	
ES	2 617	3 828	4 031	5 235	5 527	5 374	6 227	
FR	3 660	3 946	4 253	7 148	7 621	7 139	7 618	
IE	3 177	2 735	3 145	3 924	4 268	9 553	10 402	
IT	4 816	4 898	5 496	5 979	6 517	6 962	7 422	
LU	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	
NL	3 611	3 827	3 979	5 284	5 436	11 310	10 981	
AT	4 767	6 059	6 111	7 872	8 452	10 078	10 003	
PT	2 031	3 469	3 589	4 853	5 093	6 461	6 353	
FI	3 617	3 794	3 970	5 646	5 555	8 930	7 879	
SE	3 186	5 268	5 842	5 388	6 719	12 799	13 651	
UK	5 848	3 364	3 577	4 618	5 600	8 433	8 737	

NB: EU average for pre-primary weighted by enrolment of 3–5-year-olds.
Sources: OECD for pre-primary; Commission services.

stant expenditure per student. Whether this is likely to be the case in practice is discussed in Box 3 in the main text.

In order to estimate total expenditure, we multiply enrolment by expenditure per student, assuming the following age ranges for the different levels of education: 3–5 years pre-primary; 6–11 years primary; 12–18 years secondary; and 19–29 years tertiary. This produces a result of EUR 432 billion, or 5.1 % of GDP, for the year 2000. Applying the same procedure to Eurostat's baseline population projections for 2010 yields EUR 409 billion, or 4.8 % of 2000 GDP. Thus, abstracting from price and productivity developments, and holding enrolment constant, spending on education as a share of GDP falls, not surprisingly given the fall in the school-age population.

We now estimate the implied increase in annual expenditure by 2010 (or so) under the different scenarios.

Our benchmark for early school-leavers first needs to be converted into an equivalent increase in the enrolment

rate. Recalling that the average duration of upper-secondary attainment is 3.4 years, we adjust as before to give 4.2 years of enrolment. Then, noting that the 18–24 range comprises seven years, we calculate that in order to increase attainment in persons by 10 %, enrolment in the 18–24 age group would have to increase by 10 % of 4.2/7, or 0.06. In practice, of course, much of this increased enrolment will come before the age of 18, but the impact on total expenditure will be the same, as we shall use the figure for expenditure per student at secondary level. This results in additional expenditure of EUR 10.1 billion (0.12 % of GDP) compared with the constant enrolment scenario.

As the benchmark for tertiary participation is in terms of the enrolment rate, we simply add 0.09 to the net enrolment rates of 20–29-year-olds. This implies increased expenditure of EUR 35 billion, or 0.41 % of GDP.

As discussed above, the selected benchmark for lifelong learning implies an increase in average annual enrolment of 0.012 years, which we add to the net enrolment rates of the population aged 25–64. We assume, in the absence

of better information, that adult education costs the same per hour as tertiary education. This implies increased annual expenditure of EUR 20.9 billion from 2010, or 0.24 % of GDP.

For pre-school education, we raise the net enrolment rates of 3–5-year-olds by 4.4 %. This costs EUR 2.2 billion, or 0.03 % of GDP.

A.7. Employment

Finally, we calculate the first-order short-term impact of increased upper-secondary and tertiary enrolment on employment.

To estimate the impact of reducing the share of early school-leavers, we convert the attainment benchmark into an equivalent increase in enrolment in the 15–24 age

group, as before (Section A.6). By 2010, 10 % more will have an extra 3.4 years of attainment, which on average will require an extra 4.2 years of enrolment. Spreading this over the 15–24 range implies increased enrolment of 4.2 %. We assume that, in the absence of increased employment opportunities for students, an additional 4.2 % of 15–24-year-olds will have the in-education employment rate of 24.9 % instead of the out-of-education rate of 63.8 % (see Table 8 in the main text). Applying this to Eurostat’s baseline population projections for 2010 implies a reduction in the total (15–64) employment rate of 0.3 percentage points, other things being equal.

The benchmark for tertiary participation implies that 9 % of 20–29-year-olds would have an average employment rate of 39.1 % instead of 76.0 %. This implies a reduction in the total employment rate of 0.6 percentage points.

Chapter 4

Wage flexibility and wage interdependencies in EMU

Some lessons from the early years

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1. Introduction

Over recent years, a near consensus view has emerged on the roots of the high and persistent unemployment in many EU Member States, including all the major economies of the euro area, and the overall jobs deficit more widely. Broadly speaking, this view regards the poor labour market performance of the countries concerned to be the result of the interaction of a series of adverse macroeconomic shocks with unfavourable labour market institutions, and also product market regulations that have significantly limited the capacity to adjust to changes in economic conditions. Consequently, the institutional design and structural characteristics of European labour markets have assumed centre stage in many economic policy debates, with wage setting mechanisms typically figuring prominently in the analysis.

Obviously, wages as the price of labour have a key role to play in determining the overall balance of supply and demand in the labour market. Furthermore, the formation of economic and monetary union (EMU) is often taken to put further demands on the flexibility of wages to compensate for the lack of (national) instruments to deal with economic disturbances. If wages are too rigid, the necessary adjustment will come slowly and with considerable economic and social costs; moreover, asymmetries and differences in labour market performance across European countries may increase, and this may, in turn, lead to stronger pressure for monetary policy to be concerned with output stability alongside price stability. However, labour market structures and institutions are likely to change as a response to the integration process. It is therefore necessary to evaluate the mechanisms through which labour markets, and, in particular, wage setting mechanisms, could be affected by integration.

Recent years have seen some improvement in overall labour market performance, as indicated by rising employment rates, a trend increase in participation and a fall in structural unemployment. It has proven hard to explain these developments without taking recourse to relatively widespread wage moderation observed in the

past couple of years, *inter alia*, based on the re-emergence of informal income policies in a number of countries. However, from a more sceptical perspective, over the current protracted period of sluggish economic activity, wage flexibility appears to have provided little, if any, support for cyclical recovery; thus, present wage rigidities may have seriously hampered the smooth adjustment to the macroeconomic shocks that have hit the euro area in recent years.

These observations are also in line with predictions that the formation of EMU and its associated impact on wage bargaining behaviour could affect both the level of (un-) employment and the flexibility by which wages adjust to shocks. It has been widely held that, in general, EMU should provide improved framework conditions for employment-compatible wage bargaining; indeed, with all the elements of the Marshall–Hicks rule of labour demand likely to operate, the link between wage and employment trends becomes more evident and stringent. However, it has also been argued that inherent in the integration process are forces which tend to make wages less flexible, which implies that more protracted output adjustment may follow, even though the equilibrium level of employment may increase and structural unemployment may be lower. Stronger wage inter-dependencies and also nominal convergence may thus be beneficial for both the level of employment and the objective of price stability, but it may come at the cost of greater volatility in output and employment, i.e. nominal convergence but real divergence.

Against this background, this chapter takes a fresh look at wage flexibility in EMU and attempts to draw a few lessons from the experience of the early years. The chapter is organised as follows. Section 2 starts with a short refresher discussion of the role of wage flexibility as an adjustment mechanism to shocks; it then proceeds with a brief description of the stylised facts regarding nominal and real wage developments in the euro area over the recent business cycle; finally, it presents an empirical

assessment of wage inertia based on new econometric estimates of a Phillips-curve-type wage equation across euro-area countries and offers an interpretation of the main findings with respect to nominal and real wage flexibility. Section 3 explores some specific aspects of wage setting interdependencies in EMU and cross-country transmission mechanisms. The first part of the section is devoted to an investigation of shock absorption and shock transmission under two different bargaining regimes, where (i) wages respond in a traditional way to

purely national conditions, or (ii) when wage setting interdependencies are present, i.e. domestic wage setting takes developments abroad into account. Moreover, we also look into the transmission mechanisms of a wage shock under different degrees of goods market integration. The analytical tool employed in this part is simulation analysis of a stylised two-country model. The second part of this section then investigates the issue of wage pattern bargaining and wage convergence from a detailed sectoral perspective. Finally, Section 4 concludes.

2. Wages and the adjustment to shocks

2.1. Some background considerations

Wages are key in equilibrating demand and supply on the labour market. Wage setting mechanisms strongly contribute to determining the level of equilibrium unemployment in an economy. They are decisive for an efficient allocation of labour resources across economic activities; and, obviously, a flexible wage formation process is required to help absorb macroeconomic shocks and cyclical disturbances in a smooth way. The focus of the analysis here is on this latter issue. Clearly, other forms of labour market flexibility could partially act as a substitute for wage adjustment. But given that adjustment of the quantity of labour is socially and economically costly and, moreover, often infeasible for short-term adjustment, the adjustment of wages and prices is, in most cases, the preferred solution. Flexible labour markets facilitate the task of macroeconomic policies, which must otherwise bear the main burden of adjustment to economic disturbances. Indeed, with perfectly flexible markets, macroeconomic stabilisation policy would actually be irrelevant ⁽¹⁾.

With monetary union, the importance of labour market flexibility has gained an additional dimension ⁽²⁾. Monetary policy is conducted in view of economic conditions of the euro area as a whole and the nominal exchange rate is uniform across the euro area. Thus, nominal exchange rate and national monetary policy are no longer available policy instruments to facilitate the adjustment to asymmetric or country-specific shocks.

This implies that other adjustment mechanisms have a larger burden to bear when it comes to country-specific economic disturbances. Among those, fiscal policy, efficient capital markets, product market and labour market flexibility clearly play an outstanding role. The first two can serve, in principle, to stabilise income, thereby pre-

venting or reducing the need for quantitative adjustments. Flexibility of prices in goods and service markets as well as of wages in labour markets means that quantities can easily adjust to economic shocks. If they were inflexible, in response to a negative shock production would be lower and the rate of unemployment higher over a more protracted period of time.

Inflexibility of wages may be more costly in EMU than before in terms of employment. For example, a higher degree of competition, which stems from higher price transparency, increases the responsiveness of employment to wages. In the case of adverse shocks, rigid wages would lead to higher unemployment. Some economists also argue that country-specific shocks would translate into higher macroeconomic volatility, given the absence of monetary policy or nominal devaluation as policy tools at the national level ⁽³⁾. Moreover, with room for manoeuvre, in some cases constrained by fiscal objectives, labour market flexibility is key to smooth adjustment to shocks.

Indeed, country-specific shocks or divergent cyclical developments usually trigger some realignment of relative competitiveness through changes in real effective exchange rates. As nominal exchange rates between euro-area countries no longer exist, intra-euro-area real exchange rate adjustment can only come via differing unit labour cost developments across countries, in particular changes in relative wages, since productivity may be hard to influence in the short to medium term. Thus, flexible labour and product markets bring about a swift realignment of real effective exchange rates and correction of economic divergences.

Basically, wage flexibility can be seen as the speed with which wages adjust to economic shocks. Implicitly, this assumes the existence of a benchmark. The economic disturbance enforces a change in the wage rate and flexibility measures the pace with which actual wages converge to the

⁽¹⁾ Allsopp and Vines (1998).

⁽²⁾ See, for instance, Pissarides (1997) or Chapters 10 and 11 in European Commission (1997).

⁽³⁾ See Coricelli et al. (2000) and Lane (2000).

benchmark. Against this background, it is possible to differentiate between the following forms of wage flexibility.

- *Responsiveness of wages to the rate of unemployment:* This measure of how fast labour market disequilibrium is dissolved is called real wage flexibility.
- *Responsiveness of wages to changes in the price level or inflation:* This so-called nominal wage flexibility has attracted some attention among economists because nominal wages are usually thought to be rigid when a downward adjustment is required. Swift adjustment of wages to price shocks, on the other hand, can lead to wage–price spirals.
- *Responsiveness of wages to changes in the composition of labour demand or labour supply:* This relative wage flexibility is associated with geographical, sectoral and skill mismatch. Wage compression may inhibit the possibility that individual skills, individual productivity or geographical conditions are correctly reflected in relative wages.

Empirically, it is difficult to establish a measure of wage flexibility. The conventional empirical strategy is to estimate a wage equation and to assess the empirical values against theoretical benchmarks: for example, whether the rate of unemployment has a significant impact on wages and how large this effect is, or whether an increase in inflation translates into higher wage growth. Some further empirical problems are related to the different forms that real wage flexibility could take. In addition to the impact of unemployment on wages, real wage flexibility could be measured in wage equations through:

- the responsiveness of wages to changes in productivity;
- the responsiveness of wages to external competitiveness (for example exchange rates);
- the responsiveness of wages to labour market disequilibrium (for example, formulated as an ‘error correction term’);
- the stickiness of wages, which is expressed as the impact of past wages on current wages (the autoregressive term).

In principle, all these elasticities could be considered special forms of real wage flexibility. Usually, any overshooting of wage growth over productivity growth, any loss in

external competitiveness or any labour market disequilibrium should yield an increase in the rate of unemployment over the short or long term and vice versa. In a strict sense, this also holds for a lack of wage responsiveness to changes in the cyclical situation, which has gained some attention in the current slowdown of economic growth.

A number of institutional features in the euro-area labour market could account for a lack of nominal as well as of real wage flexibility. Of primary interest are the impact of collective bargaining on contract length and the use of wage rules in collective bargaining, including wage indexation.

Obviously, as labour market institutions are interdependent, institutions and legal settings other than those mentioned above may have an equally strong impact. The transmission mechanism has been highlighted in a recent model by Manzini and Snower (2002) in which wage bargaining with insiders and new job-seekers is an imperfect substitute. The degree of substitution depends on the firms’ broadly defined costs of labour turnover, i.e. costs of hiring and firing and productivity differences between incumbent workers and job-seekers, which determine the bargaining power of insiders relative to outsiders.

Assuming that new job-seekers are exposed to the current cyclical situation, whereas incumbent employees are to some extent sheltered from short-term variations in economic activity, the same frame can be used for explaining wage rigidities. Employment protection legislation, for instance, has an impact on wage rigidity because it strengthens the bargaining power of employees relative to outsiders and thereby affects the sensitivity of wages to changes in cyclical conditions. Another example would be the disincentives to search for a job resulting from the design of tax and benefit systems, which seem to impact, in particular, on the low-skilled unemployed. Fewer incentives to seek employment in a cyclical downturn would bolster the bargaining position of incumbents and thereby yield more stable wage growth over the cycle. While these links are apparent in theory, their empirical verification is still outstanding ⁽¹⁾.

An obvious reason for wage rigidities could be the prevalence of collective wage agreements when they

⁽¹⁾ An empirical paper using the European Community household panel is Dessy (2002), which finds union coverage to be positively and employment protection legislation negatively related to the downward wage flexibility of job-stayers. The first result suggests that higher union coverage is supportive when adjustment of wages to negative economic shocks is required.

cause collective bargaining to take place at longer intervals than individual bargaining. Most wages in the euro area are directly or indirectly agreed with reference to collective bargaining, between trade unions on the one hand, and employers' associations on the other. Even in sectors where wage bargaining at the firm or individual level is the norm, collectively agreed wages provide orientation. Contract length has, of course, a major impact on nominal rigidities: the longer the duration of a wage contract, the less frequent the occurrence of adjustment.

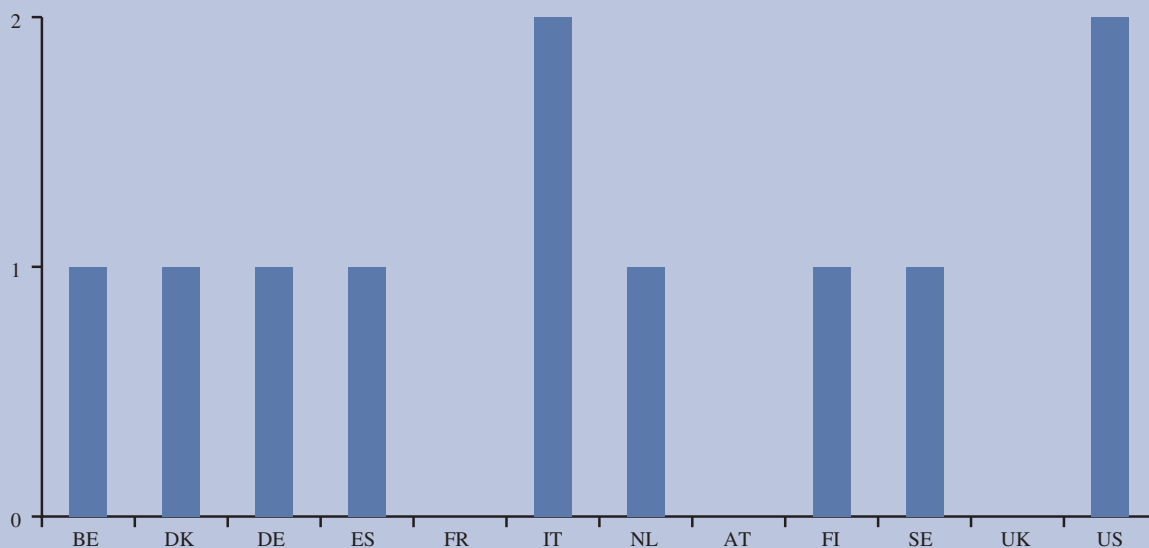
Economic theory has provided a number of reasons why contracts are infrequently adjusted, most of which are linked to the transaction costs involved in negotiating a contract. These costs, however, are not fixed but depend on economic characteristics. Two such characteristics have been subject to recent empirical research, namely the impact of the wage bargaining system and the degree of uncertainty.

Groth and Johansson (2002) argue that two counteracting factors affect the relationship between contract duration and the wage bargaining system. On the one

hand, the more centralised the economy, the lower the number of negotiations. As contract costs are therefore lower, contracting can be more frequent and contract duration shorter. On the other hand, a high degree of centralisation makes it more difficult to reach agreement, increasing contract costs and favouring longer duration. Based on this insight, the authors identify a U-shaped relationship between the degree of centralisation and contract length. Centralised and decentralised systems are associated with longer duration, while intermediate wage bargaining systems tend to have more flexible wages. The authors stress, however, that the empirical result should be considered as indicative only, due to caveats concerning the accuracy of their data on contract duration. Notwithstanding their reservations, Graph 1 displays their indicator of contract duration for EU Member States and the USA ⁽¹⁾.

⁽¹⁾ Their data set covers 17 OECD countries. UK HM Treasury (2003, p. 24) gives a detailed breakdown of labour contracts in the UK manufacturing and service sector, showing that about 95 % of labour contracts in companies are of a duration of 12 months or less.

Graph 1: Indicator of wage duration, 1985–95



NB: 0: duration smaller than or equal to one year; 1: duration between one and three years; 2: duration equal to or longer than three years.
 Source: Groth and Johansson (2002).

Other explanations stress that the advantages of long labour contracts are related to the degree of uncertainty in the economy. The lower the uncertainty, the less risky it is to agree on long-term contracts. In this context, the setting of multiannual contracts in Germany and Austria in 2000 was considered to be associated with the increased stability of the macroeconomic framework in EMU ⁽¹⁾. In microeconomic terms, the duration of a labour contract provides implicit insurance to the employee against the repercussions of economic shocks. Incentives to employers and employees to agree on a long-term contract therefore depend not only on uncertainty per se, but also on the sources of uncertainty. Testing for this hypothesis with US data, Murphy (2000) found that contract duration is indeed linked to risk sharing between employees and employers. Maturity declined with nominal uncertainty and uncertainty about relative price shocks, but increased with real uncertainty.

Two further institutional factors are of relevance when it comes to explaining wage stickiness at the aggregate level. Firstly, as collective bargaining takes place in many sectors in the 12 euro-area Member States, the flow of new agreements that feeds into actual wage behaviour must not be less continuous than under individual bargaining. More discretion can, however, be expected when wage bargaining at the central level dominates, as this may imply a single adjustment for the whole economy or of a large part of the economy at one point in time. Secondly, actual wages tend to differ from collectively agreed wages ⁽²⁾. Bonuses and other forms of payment-related pay introduce an additional moment of flexibility and the magnitude of the so-called wage drift can be expected to be greater, the less the outcome of collective wage bargaining captures the need to cater for cyclical variations ⁽³⁾.

⁽¹⁾ See 'The EU economy: 2001 review', Chapter 2.

⁽²⁾ See van het Kaar and Grünell (2001).

⁽³⁾ UK HM Treasury (2003, p. 25) provides evidence that the inclusion of bonuses and overtime increases the flexibility of pay.

Table 1

Factors influencing trade unions' wage demands in the EU Member States

	Economic growth	Inflation	Productivity	Other determinants
BE	Factor used	Determinant factor	Commitment (Doorn initiative): per hour and per worker	Institutional comparisons imposed by the State
DK	Factor used	Factor used: HICP	Factor used: per worker and per hour	
DE		Determinant factor: NCPI	Determinant factor: per hour	Redistribution component
EL		Determinant factor: NCPI	Factor used	Comparison with European average
ES	Factor used	Factor used: NCPI	Factor used: GDP per worker	
FR	Factor used	Determinant factor: NCPI		SMIC (minimum wage in France) increases corporate profits
IE		Factor used: NCPI	Factor used: estimates based on difference GDP and employment	Promotion of employment, tax cuts and wage moderation
IT		Determinant factor (sectoral level): NCPI	Determinant factor (enterprise level): real value added per worker	
LU		Determinant factor: indexation		
NL		Determinant factor: producer prices	Determinant factor: per hour and per worker	Assessment of external effects
AT	Factor used	Factor used	Factor used: GDP per worker	
PT		Determinant factor: NCPI	Determinant factor: GDP per worker	Comparison with European average
FI		Determinant factor	Determinant factor	
SE		Determinant factors: inflation target, NCPI		EU average targeted and actual inflation rates
UK		Determinant factor: NCPI		

NB: NCPI is the national consumer price index.

Source: Dufresne and Mermet (2002).

Another important source of inflexibility may be the way in which formal and informal wage setting rules are applied. Hancké and Soskice (2003) observe a tendency in many countries to guide wage bargaining along some more or less binding proposals set up by small groups of labour market experts. A survey among trade unions in the European Union carried out by the European Trade Union Confederation (ETUC) reveals that inflation and productivity are the most important factors used in wage bargaining ⁽¹⁾. The role of economic growth and other determinants varies across countries, but is considerably smaller. The use of such wage rules reduces the cyclical responsiveness of wages if past data are used instead of current outcomes, if actual inflation and productivity are known only with a lag or if trend productivity or inflation is taken as a proxy for actual developments.

Some rigidity in wages may be due to the use of past or trend productivity growth in the calculation of wage rules. As these are an inaccurate proxy of actual cyclical conditions, their use may lead to wage developments that lag behind the business cycle. Productivity developments are generally not known with great accuracy. Official data on aggregate labour productivity growth are usually released only with a considerable lag and are often subject to major revisions,

mainly due to revisions of labour input data. According to the survey mentioned above, trade unions in the EU do not use a harmonised concept of productivity, some countries relying on output per worker calculations, others on output per hour worked. More sophisticated concepts that correct for the impact of changes in either employment or capital deepening on productivity growth were not mentioned in the survey. A further important point is that labour productivity growth varies with the cycle. The use of trend productivity data therefore circumvents cyclically inappropriate wage claims based on outdated or imprecise data. But the smoothing character of trend series comes at the expense of introducing some inertia into wage behaviour.

Incorporating the inflation component into the wage rule can lead to rigidity under a number of institutional practices. For instance, wages are still price indexed in a number of Member States. This generates the same behaviour of wages as if they were adjusted to past inflation. Since wages are important determinants of prices, backward-looking wage indexation gives scope to temporary price shocks to initiate wage–price spirals. Moreover, it increases the rigidity of nominal wages. In consequence, the quantity adjustment of the labour market to a given exogenous shock is larger and more protracted than without indexation.

⁽¹⁾ See Dufresne and Mermet (2002).

Table 2

Wage indexation in euro-area Member States

	Form	Coverage
BE	Automatic 2 % increase in wages once inflation increases by 2 %	About 80 % of public employees and workers
ES	Standard in collective wage agreements to set a compensation once inflation exceeds the agreed increase	About 70 % of workers
FR	Formal indexation	Only of minimum wage
NL	Possible in collective agreements	
LU	Systematic adjustment one month after CPI increase exceeds 2.5 % on average over the last six months	All wages, pensions and benefits
EL, IT, PT, FI	Conditional indexation that applies once inflation exceeds a certain threshold	

Source: Commission services.

When the ETUC survey was conducted in 2001, trade unions did not report making use of the ECB's inflation target. Rather, they used their forecast of the national consumer price index, with only a few Member States deviating from this general rule. Provided that these inflation forecasts are not just an extrapolation of past trends, such behaviour increases the cyclical sensitivity of wages. The alternative behaviour, namely orientation towards the ECB's inflation target, while making nominal wage growth more rigid, would help to prevent the emergence of wage-price spirals as inflation would revert faster to the ECB's target.

Collective wages are not independently agreed across sectors and Member States, which may also give rise to stickiness. Wage bargaining in some countries explicitly takes wage settlements in neighbouring countries into account, for instance in Belgium and the Netherlands. In Germany, wage agreements of the IG Metall provide orientation for bargaining in other regions and sectors⁽¹⁾. Such interdependency implies that current wage growth becomes correlated with past wage setting. In consequence, wages are less sensitive to local labour market conditions than under conditions of autonomy⁽²⁾.

Obviously, over the medium to long term, institutions are adaptive to economic changes, implying that the duration of labour contracts and also trends in centralisation or coverage of collectively agreed wages are endogenous. Macroeconomic stability may therefore be an important source of wage rigidities, in particular in a period when cyclical variation picks up again after a relatively long period of increasing stability. Following this interpretation, constant wage growth in the euro area could be the result of rising macroeconomic stability during the 1990s.

Price stability may increase the importance of nominal wage rigidity. Recently, some attention has been paid to the issue that low rates of inflation increase the stickiness of wages, based on the conjecture that workers are resistant to nominal wage cuts, i.e. the lower the rate of inflation, the more important the zero threshold of nominal rigidities⁽³⁾.

The supposition that nominal wage growth cannot become negative rests on both considerations of fairness and the existence of money illusion. Wage cuts may not be socially acceptable and, moreover, inefficient if employers fear that they have negative consequences on employees' motivation and productivity. Experiments have shown that agents attach more importance to nominal rather than real variables, even if they are equal in value⁽⁴⁾. Furthermore, the legal form of a labour contract implies that any change can only be inserted through the consent of employers and employees. Once a contract expires, conditions continue to be applied until wage bargaining parties agree on new terms. This legal arrangement creates a strategic advantage for employers to resist wage cuts⁽⁵⁾.

A number of microeconomic studies have been conducted in recent years in order to detect evidence of nominal wage resistance. They indicate that a considerable number of wage-earners report having experienced nominal wage cuts. Their share among employees who stayed in their job varies between approximately 15 and 25 % in Germany, France, the UK and the USA⁽⁶⁾. The empirical analyses also display a pronounced clustering of observations for unchanged nominal wages. Graph 2 shows that the share of workers with constant nominal wages is higher in those countries where the share of those with wage cuts is lower. This negative correlation is evidence of the existence of some nominal wage rigidity. Using data from the European Community household panel, Dessy (2002) finds that nominal wage rigidities are more important in Germany, Belgium and Italy than in France, Spain or Ireland.

Knoppik and Beissinger (2001) analysed the economic significance of nominal wage rigidity in Germany. They concluded that low rates of inflation impede real wage adjustment and estimate that zero inflation would cause a 1 % increase in the rate of unemployment in Germany. Based on a simulation exercise, Coenen (2003), on the other hand, argues that the nominal wage rigidity has no significant negative effect with low inflation of 1 %.

⁽¹⁾ For a brief review of practices, see Hancké and Soskice (2003).

⁽²⁾ For a general elaboration of the impact of wage imitation on wage flexibility, see Andersen (2003).

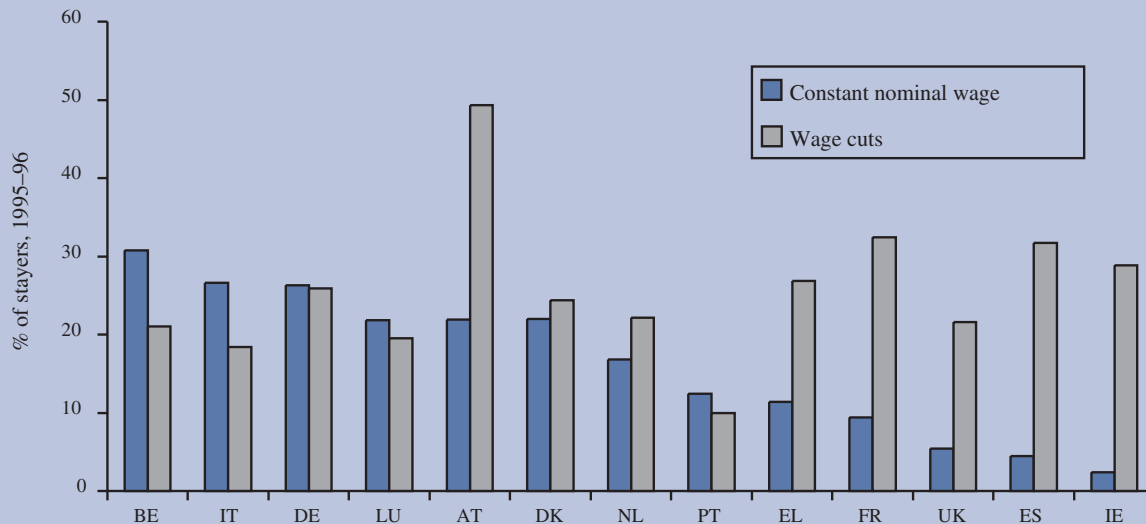
⁽³⁾ See, for example, Coenen (2003) and Kieler (2003).

⁽⁴⁾ See, for example, Shafir et al. (1997).

⁽⁵⁾ See Holden (2002) and Beissinger and Knoppik (2003).

⁽⁶⁾ See Decressin and Decressin (2002), Dessy (2002) and UK HM Treasury (2003).

Graph 2: Share of employees (not) affected by nominal wage rigidities



Source: Dessy (2002).

2.2. Wages and the recent business cycle: some stylised facts

2.2.1. Nominal euro-area wage growth: stability at a relatively low level

Stability in nominal wage growth is an important but often disputed macroeconomic feature of the euro area. Since 1999, the annual growth of nominal compensation per employee has been close to 3% and is forecast to remain at that level at least until 2004. Following a deceleration from high wage growth in the early 1990s, steadiness in actual wage growth seems to have coincided with the introduction of the euro, but, depending on the assessment of the period of extraordinarily low nominal wage growth in 1997–98, it could even have started as early as 1993⁽¹⁾.

A deceleration in wage growth was also observed in other economic areas in the early 1990s, but in the euro area it was more pronounced and durable. In 1993–94, declining rates of nominal wage growth was a common feature of the euro area, the USA and other Anglo-Saxon and Scandinavian countries. For illustrative purposes,

Graph 3 summarises nominal wage growth in three Scandinavian countries (Denmark, Norway and Sweden) and four Anglo-Saxon countries (Australia, Canada, New Zealand and the UK) into the aggregate ‘Scanglo’⁽²⁾. Wage growth in these countries was similar to that in the euro area in the first half of the 1990s; since then, it has shown a striking co-movement with that registered in the USA.

The debate about wage rigidity in the euro area has regained attention because the adjustment to the current growth slowdown has been different in the euro area than in other economic entities. Nominal wage growth in the euro area remained relatively stable, despite strong economic growth in 1999 and 2000 and a subsequent considerable weakening in economic activity, thus showing little, if any, procyclicality. In contrast to stability in the euro-area, nominal wage growth in the USA and other economic entities accelerated in line with the strengthening in growth in the late 1990s. It peaked in

(1) Note that low growth in nominal compensation per capita in the national accounts in 1998 is not mirrored by other wage indicators.

(2) The aggregate is weighted with nominal compensation in purchasing power standards. This is how Eurostat weights wage indicators for the EU aggregates. Alternative weighting mechanisms with GDP in PPS or GDP in current exchange rates did not produce considerably different results. The behaviour of the ‘Scanglo’ aggregate is strongly determined by UK data (weight 44%), while the three Scandinavian countries have only a minor impact (combined weight 15%).



2000 and witnessed another V-shape between 2001 and 2003. While it was higher on average than in the euro area, its behaviour over time is more in line with cyclical conditions. In this context, the crucial question is whether stability at a relatively low level as prevalent in the euro area may compensate for flexibility at higher average levels ⁽¹⁾.

Comparing various higher-frequency wage indicators for the euro area reveals that the notion of stable nominal wage growth is not supported by all of them. The indicators supporting the hypothesis of stable wage growth are quarterly national account (NA) figures of compensation and the Economic and Financial Affairs DG's wage indicator (see Graph 4). The latter has been on a slight downward trend since early 2000. Both Eurostat's labour cost index and the hourly earnings index consistently display an upward trend starting at the time of the introduction of the euro and continuing until recently ⁽²⁾. It is only since a

peak in autumn 2001 that wage growth started to lose pace somewhat. Some of the difference between alternative wage indicators and nominal compensation is explained by the exclusion of working time from the latter.

Taking working hours into account raises nominal wage growth on average by about 0.5 % ⁽³⁾. While this could explain most of the average difference in growth rates between the various indicators, it does not explain the difference at any point in time. In any case, once nominal compensation per employee is corrected for hours worked, the findings above need to be taken with a pinch of salt.

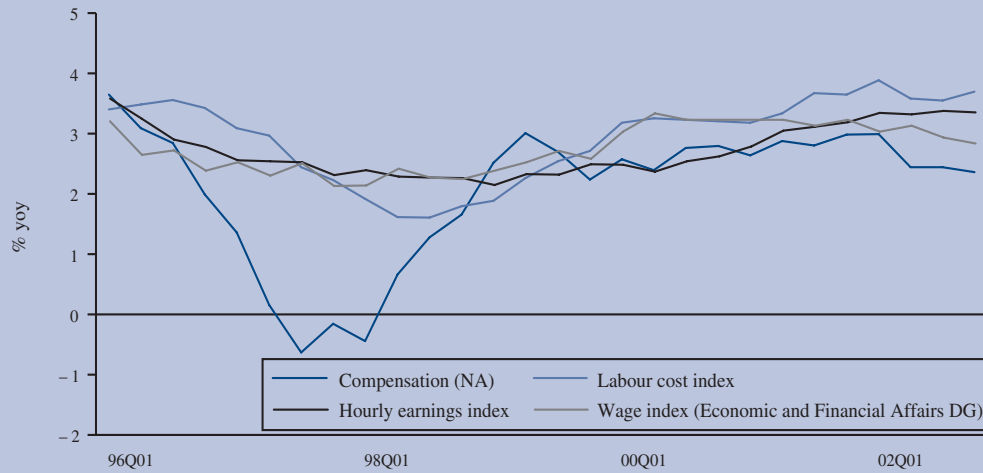
- Wage growth has accelerated since 1998. Hourly wage growth picked up to 4 % in 2001 and the information available for 2002 suggests that deceleration may have started only in the course of that year. This implies that wages lag the business cycle rather than being invariant to it.

⁽¹⁾ Here, structural and cyclical factors are strongly intertwined and a definite answer is beyond the scope of this chapter.

⁽²⁾ An upward trend also emerges in the ECB's series of nominal compensation per employee (not shown here). The difference between Eurostat and ECB data is likely due to the need to estimate wage and employment data for those countries, for instance Germany and Greece, which do not yet report them.

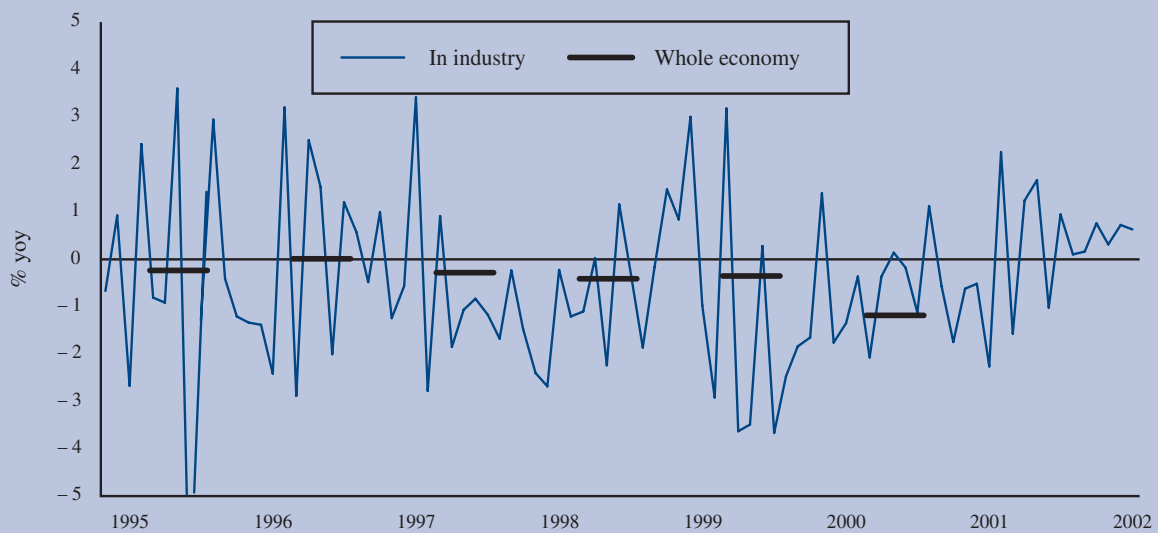
⁽³⁾ The data used here are of annual frequency and resemble the basis data from the labour force survey. More recently, Eurostat has also started to publish a monthly index on hours worked in industry which is based on business surveys in most countries of the euro area or on the labour force survey.

Graph 4: Higher-frequency (nominal) wage indicators, euro area



Source: Commission services.

Graph 5: Hours worked per person employed, euro area



Source: Commission services.

- Procyclicality in hours worked suggests that enterprises use variation in working time to adjust to changes in demand ⁽¹⁾. Taking this into account, it is not obvious whether labour costs per hour worked are always the appropriate benchmark for wage developments.

2.2.2. Unit labour cost developments

Data on nominal wage growth provide relatively little information on the economic significance of labour cost developments. Looking at nominal wage growth is to a degree justified by the fact that wage contracts are agreed in nominal terms. But in order to assess the economic meaning of an observed trend in nominal wages, it is more telling to relate them to the output generated, either in nominal or real terms. The former is the underlying concept of unit labour costs, i.e. costs of labour per employee per unit of output produced per person employed. The aggregate price level should remain broadly constant if wages rise with labour productivity, and the benchmark of a 2 % inflation rate should not be challenged in the medium term, when unit labour costs grow by less than 2 %. Taking price developments into account, real unit labour costs provide for an assessment of labour costs against the real value of output, thereby highlighting changes in the relative price of labour, which is of relevance for the level of (un-)employment and the profitability of entrepreneurial activity.

As regards the appropriateness of labour costs over the cycle, it should be noted that shocks to labour productivity and inflation mechanically translate into changes in unit labour costs. Rigidity appears because nominal wages, in which contracts are closed, are adjusted less frequently than shocks occur. For this reason, volatility in inflation and labour productivity warrants caution in interpreting high-frequency data of unit labour costs.

Growth in nominal unit labour costs increased steadily from 0.3 % in 1998 to 3.2 % in early 2002, indicating a rising pressure from wages on prices in the euro area. Quarterly data display a quite volatile development of unit labour costs, reflecting volatility in GDP and employment growth. Growth in nominal unit labour costs (NULCs) peaked in the first quarter of 2002 and fell by about 2 percentage points to 1.2 % by the end of

2002. Graph 6 indicates a strong co-movement of unit labour cost growth with inflation. This is in line with theoretical predictions, but does not allow the establishment of a causal link. Visual inspection suggests that unit labour costs do not generally lead inflation developments, except for the early 1990s. Both series' co-movement is almost contemporary or with a small lag of growth in nominal unit labour costs. Moreover, some form of asymmetry can be observed: when growth in nominal unit labour costs was very low or even negative, inflation remained at a somewhat higher level.

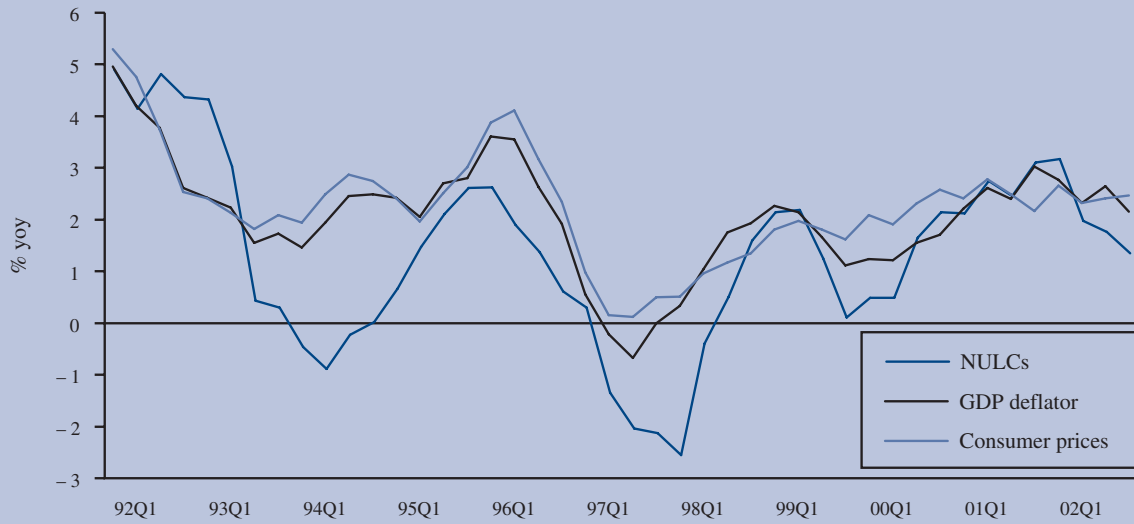
Empirically, unit labour costs in the euro area have responded to economic activity with a considerable lag. Since nominal wages have grown steadily, changes in unit labour costs have been dominated by changes in labour productivity and hence by GDP and employment growth. When plotting the annual growth of nominal unit labour costs against the output gap, as in Graph 7, a picture appears that could be interpreted as showing primarily procyclical wage growth behaviour. The reason why labour costs are high in downturns and low in upswings is, however, due to the definition of unit labour costs ⁽²⁾. It is the consequence of stability in nominal wage growth in combination with employment growth that lags GDP growth. Thus, labour productivity is high in an upswing, which mechanically generates a decline in unit labour costs given that wage growth remains steady. The impression of slow adjustment in labour costs also holds if real unit labour costs (RULCs) are looked at instead of nominal unit labour costs (see Graph 8).

Pronounced shrinking real unit labour costs are mirrored in accelerating employment growth. This empirical observation is in line with theoretical reasoning. Declining real unit labour costs imply that labour becomes cheaper in output units, which should stimulate an expansion of employment. The troughs in the growth of real unit labour costs in early 1994 and 1998 went hand in hand with a marked acceleration in employment growth. This is, however, partly linked to strong economic growth in the periods concerned, which mechanically diminished real unit labour costs and spurred employment. Overall, the trend decline in real unit labour costs came to a halt at the turn of the decade; in fact, trend growth in real unit labour costs

⁽¹⁾ It is not clear whether the scarce data available on hours worked allow establishing the notion of procyclicality. Furthermore, the euro-area aggregate hides notable differences across Member States.

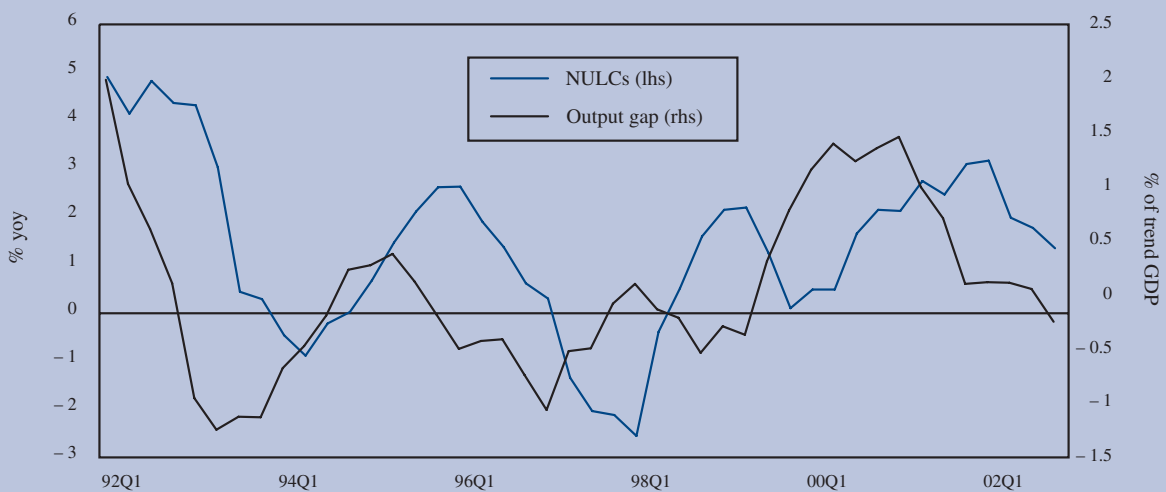
⁽²⁾ A lag would be consistent with either indexation of wage contracts or with the currently prevailing rate of inflation being taken into account in wage settlements.

Graph 6: Nominal unit labour costs and inflation, euro area



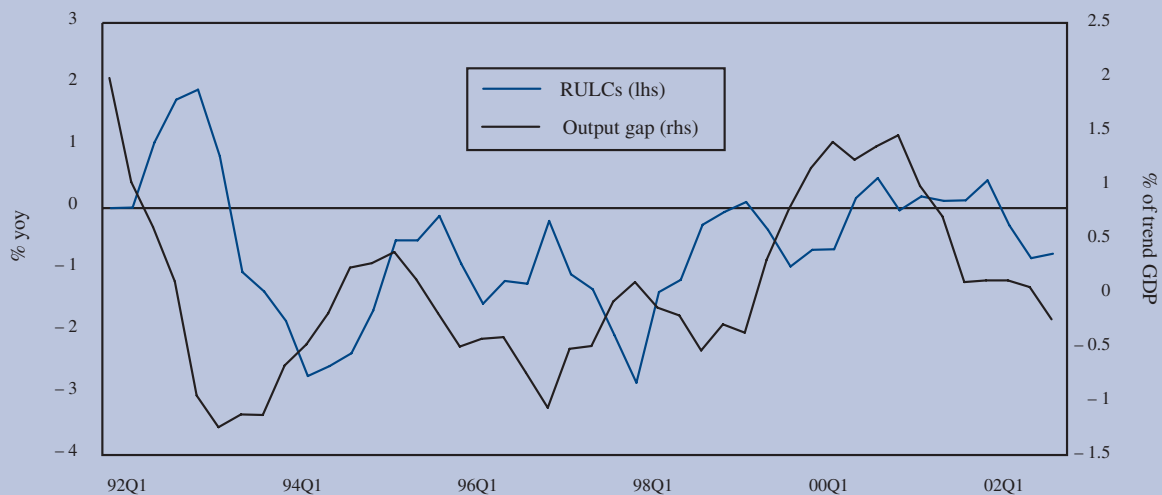
Source: Commission services.

Graph 7: Nominal unit labour costs and output gap, euro area



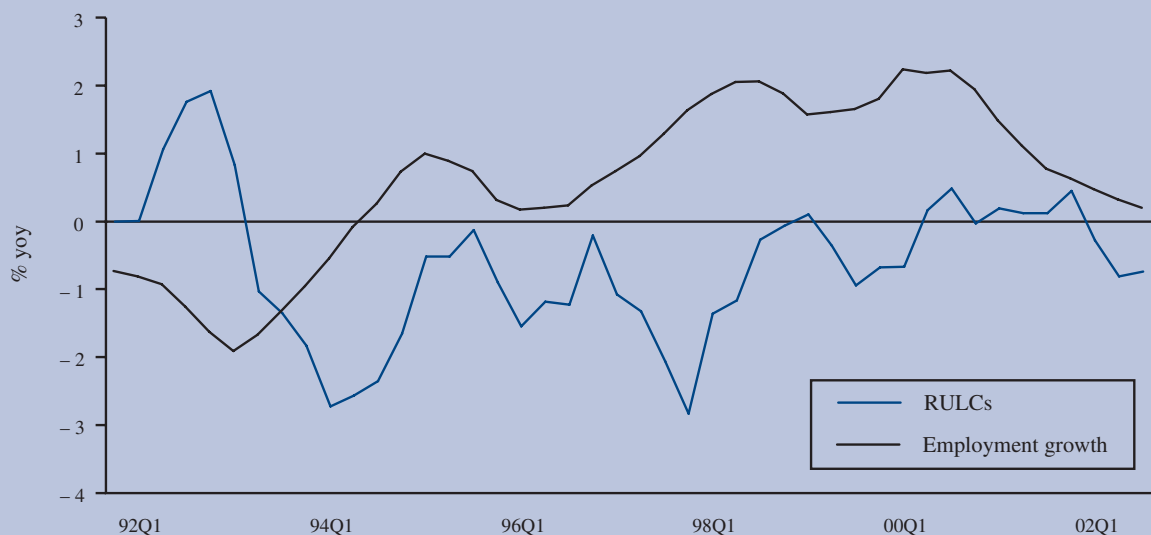
Source: Commission services.

Graph 8: Real unit labour costs and output gap, euro area



Source: Commission services.

Graph 9: Real unit labour costs and employment, euro area



Source: Commission services.

was upward sloping in the second half of the 1990s and it remains to be seen whether the most recent dip indicates a trend reversal ⁽¹⁾. Using a somewhat refined real wage gap indicator broadly confirms the impression that, while overall wage discipline has prevailed, real wage moderation has not continued in recent years ⁽²⁾.

Obviously, the wage share cannot, should not, and will not fall forever. However, real wage moderation, in the sense of reducing the mark-up of effective wages over competitive wages, helps to increase employment and lower structural unemployment over the medium term, without necessarily compromising domestic demand in the economy. This assertion is not only solidly backed by standard economic theorising, but also by the factual experience of many euro-area countries, in particular in the second half of the 1990s ⁽³⁾. Indeed, across euro-area

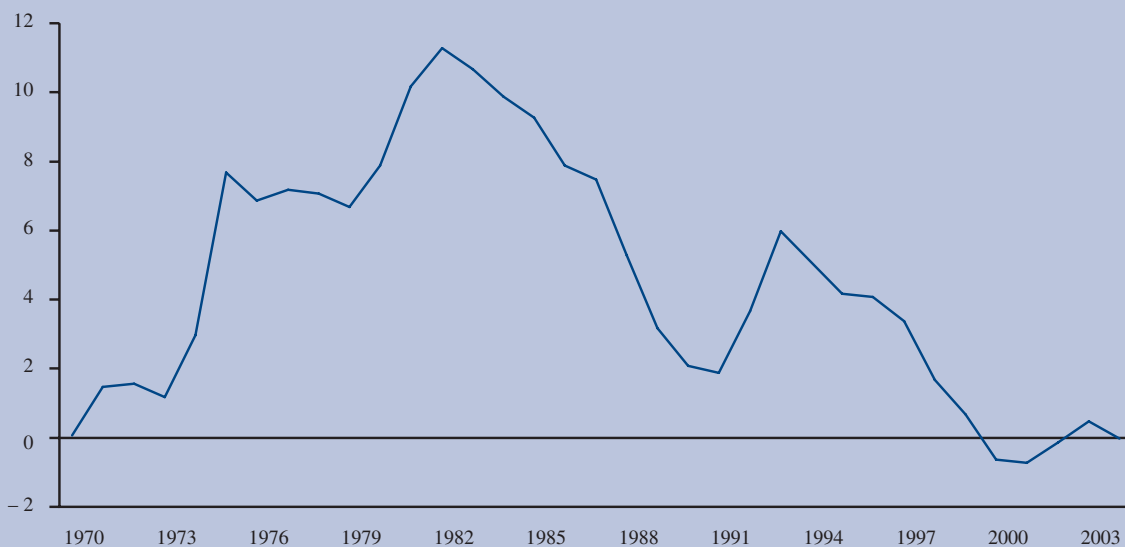
countries, no systematic relationship can be detected between the decline in real unit labour costs and the growth rate of real private consumption.

Growth in real unit labour costs has become steadier over time in the euro area. Since 1999, it has hardly responded to changes in the cyclical situation. Graph 12 gives rise to the following observations. In the euro area, growth in real unit labour costs was volatile in the period 1987–94. Since 1998, it has been in a very narrow range. In the USA, growth in real unit labour costs was broadly similar to that in the euro area in the late 1980s and early 1990s. It was relatively stable in the mid-1990s, but has been very volatile since then. Over the whole period 1987–2003, growth in real unit labour costs was very volatile in Scanglo. The comparison with other economic areas suggests that the stability currently observed in the euro area is unusual, but not unique. Comparable stability was seen in the USA in the period 1994–98, i.e. the early phase of the employment and productivity boom.

⁽¹⁾ Applying an HP filter on quarterly data, growth in real unit labour costs has been on an upward trend since 1996.
⁽²⁾ Apparent labour productivity is replaced by a measure of Harrod-neutral technical progress to calculate real wages in efficiency units; additionally, a correction factor for (higher) unemployment is applied. For a definition of the indicator, see Chapter 2 of 'The EU economy: 2002 review'.

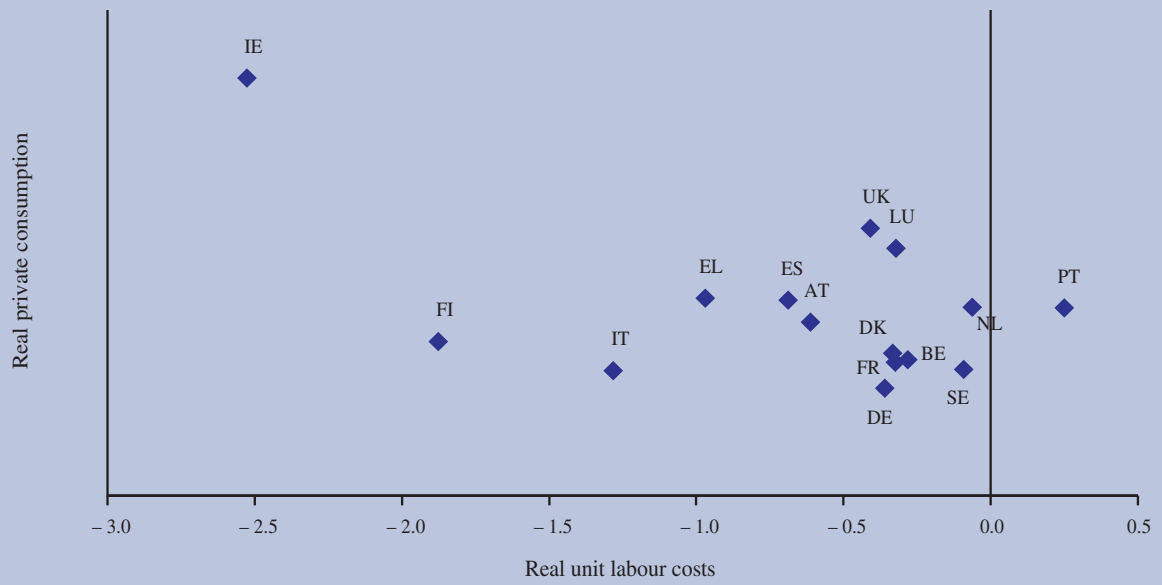
⁽³⁾ For an analysis of structural labour market developments and their interaction with real wage moderation, see in this context Chapter 2 of 'The EU economy: 2002 review'.

Graph 10: Real wage gap indicator (1970 = 100), euro area



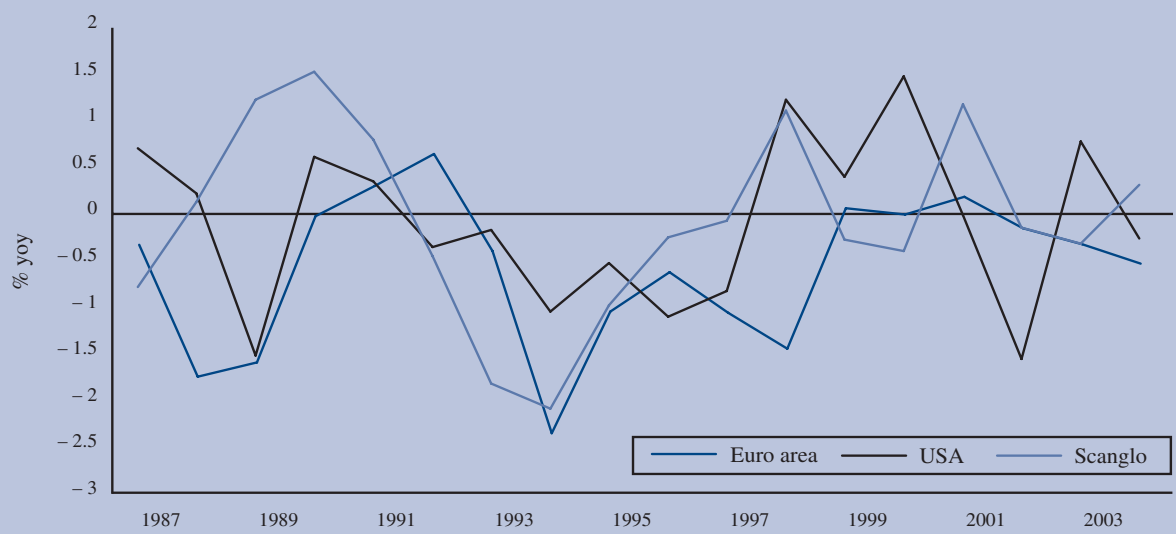
Source: Commission services.

Graph 11: Average annual percentage growth



Source: Commission services.

Graph 12: Real unit labour costs



Source: Commission services.

2.2.3. Wage dispersion across Member States

The observed stability over time of wage growth at the euro-area level is to some extent due to aggregation and hides less stable patterns in some Member States. This is witnessed by the fact that the standard deviation of nominal wage growth between 1999 and 2004 is lower for the euro area than for each Member State (see Graph 13) ⁽¹⁾. Wage growth has been fairly stable since 1999 in the larger Member States (Germany, Spain, France and Italy) and Austria but more volatile in the other seven Member States ⁽²⁾. Also the pronounced trough in 1997/98 in the euro-area aggregate is due to developments in some Member States only, namely Germany, Spain, France, the Netherlands, Austria and Finland.

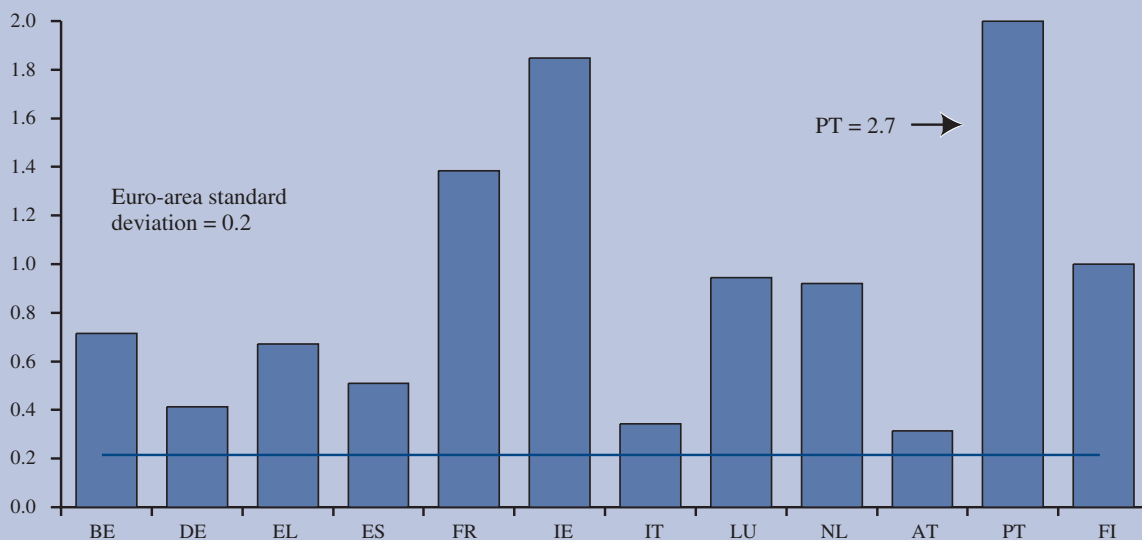
Wage growth has converged across Member States, but as labour productivity has not, dispersion of real unit labour costs has remained high. Indicators of dispersion show a remarkable convergence of wage growth at an aggregate level in the course of the 1990s and, in partic-

ular, since 1999. Both standard deviations and the range between highest and lowest wage growth in the euro-area Member States trend downwards over time. This finding is independent of whether nominal wages, real wages or nominal unit labour costs are considered the relevant wage variable. However, the true extent of convergence may be overstated in Graph 14 due to the fact that inflation and labour productivity growth declined over the 1990s. This is evidenced by the dispersion of growth in real unit labour costs as this measure allows abstracting from the impact of these two factors. The standard deviation of growth in real unit labour costs in the 12 euro-area Member States was volatile during the 1990s without any clear trend.

Dispersion in wage growth explains less of the dispersion in inflation in EMU than in the past. In the 1980s, the correlation between inflation and wage growth across the 12 euro-area Member States was close to one, suggesting that differences in wage growth were an important explanatory factor of inflation differences. The correlation came down in two steps: firstly, at the beginning of the 1990s and, secondly, in 1999 when the euro was introduced. Since then, it has tended to be upwards, implying that wage differences have gained again in importance in explaining infla-

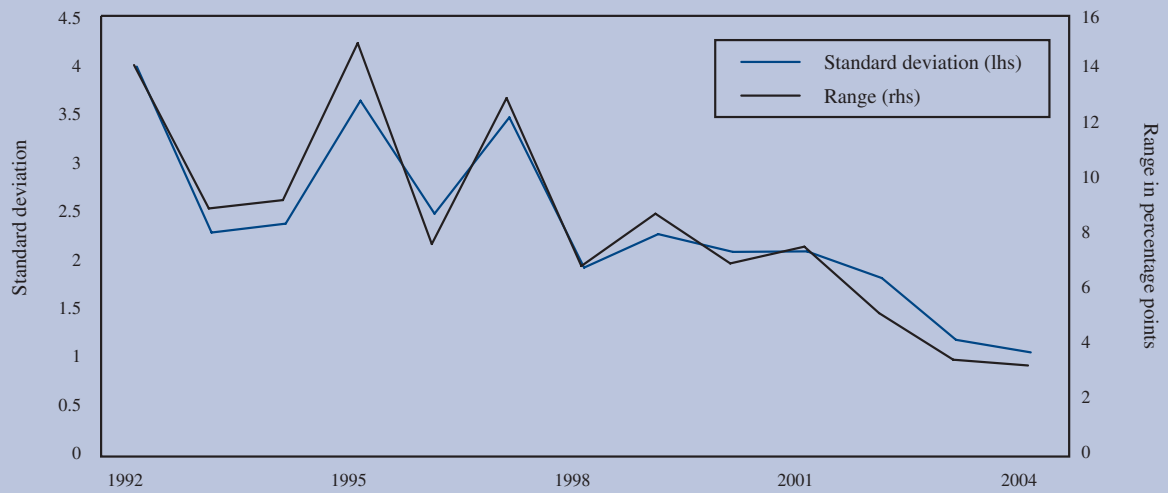
⁽¹⁾ This observation generally also holds if the coefficient of variation is used to account for differences in growth rates, and if real wage growth or growth in real unit labour costs is looked at.
⁽²⁾ This ignores high wage growth in France in 2002 due to the introduction of the 35-hour working week.

Graph 13: Standard deviation of nominal wage growth, 1999–2004



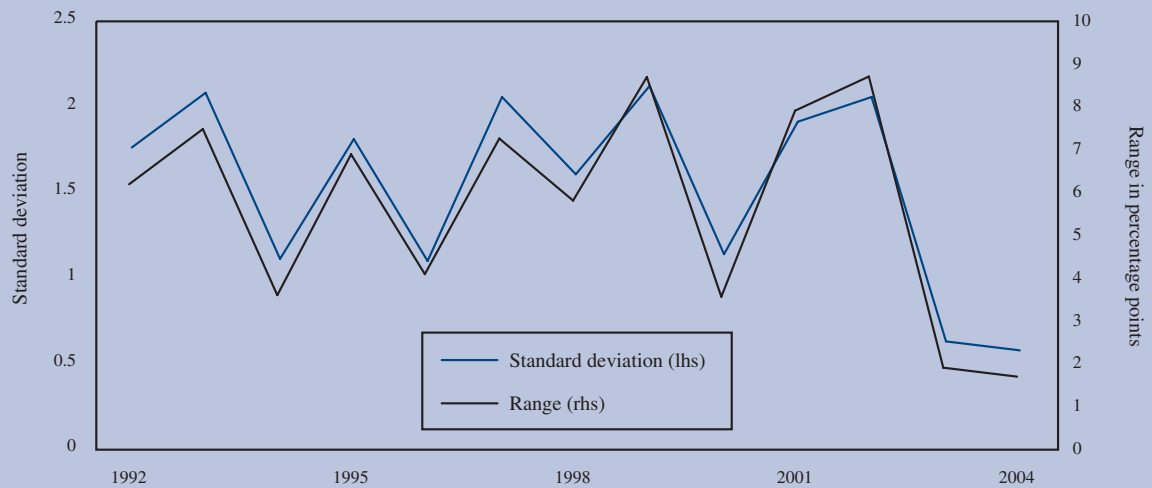
NB: France with 2000 observation, otherwise 0.1.
 Source: Commission services.

Graph 14: Dispersion of nominal wage growth, EMU Member States



Source: Commission services.

Graph 15: Dispersion of growth in real unit labour costs, EMU Member States



Source: Commission services.

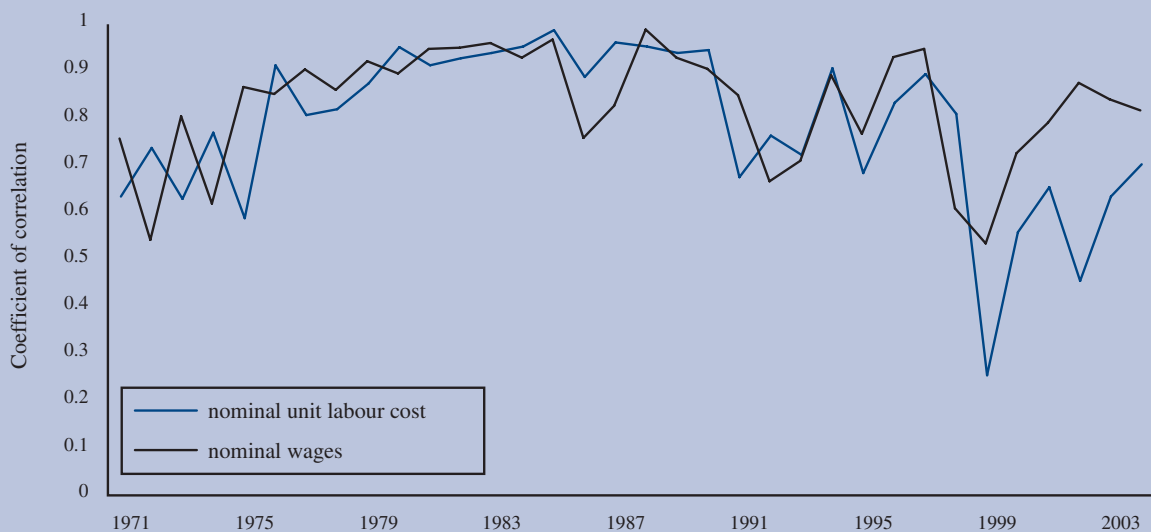
tion differences across the euro-area Member States. Strikingly, a wedge is visible in Graph 16 for the period since 1999 between the coefficient of correlation of inflation with nominal wage growth, on the one hand, and growth in nominal unit labour costs, on the other. In EMU, inflation differences are more correlated with wages than with those of unit labour costs, although the latter is the theoretically sounder concept. Differences in productivity developments may stem from differences in the take-up of new technologies and may therefore be linked to variation in sectoral structures across Member States. They entail a widening of differences in profit mark-ups across Member States, which should not be sustainable in a competitive environment.

The variation in the response to the cyclical downturn of real unit labour costs has also been high across Member States. The only countries where nominal wage growth per employee visibly declined in 2002 were Italy, Ireland, Luxembourg, the Netherlands and Finland. In all the other Member States, it either increased or remained almost constant, as in the case of Germany and Portugal. In 2003, nominal wage growth is forecast to accelerate still in three countries: Germany, Italy and Finland. A similar picture emerges if the economically more meaningful real unit

labour costs are looked at. They shrank in 5 of 12 Member States in 2002 and in six in 2003. Comparing growth rates, real unit labour costs decelerated in seven Member States in 2002 and in six in 2003. Graph 17 shows the development of growth in real unit labour costs as measured against each Member State's average and volatility in real unit labour cost growth 1996–2002. It reveals that many of the countries recorded a sizeable change, exceeding one standard deviation in at least one of the two years. However, this major change was downwards only in two countries, namely Spain and Portugal. Large increases occurred in Belgium, France, Ireland, the Netherlands, Austria and Finland.

As discussed before, monetary policy and changes in nominal exchange rates are no longer available tools to facilitate adjustment to country-specific developments in the euro area. In their place, wage and price developments have become key adjustment mechanisms to changes in competitiveness among euro-area Member States. Moderate wage growth in response to overcooling restores intra-area price competitiveness and aligns a country's growth performance. Excess wage growth, on the other hand, may be a reflex of high growth and a favourable employment performance driven by improvements in non-price competitiveness. The emerging price pressure, which will yield

Graph 16: Correlation of consumer price inflation across EMU Member States with growth in nominal unit labour costs and nominal wages



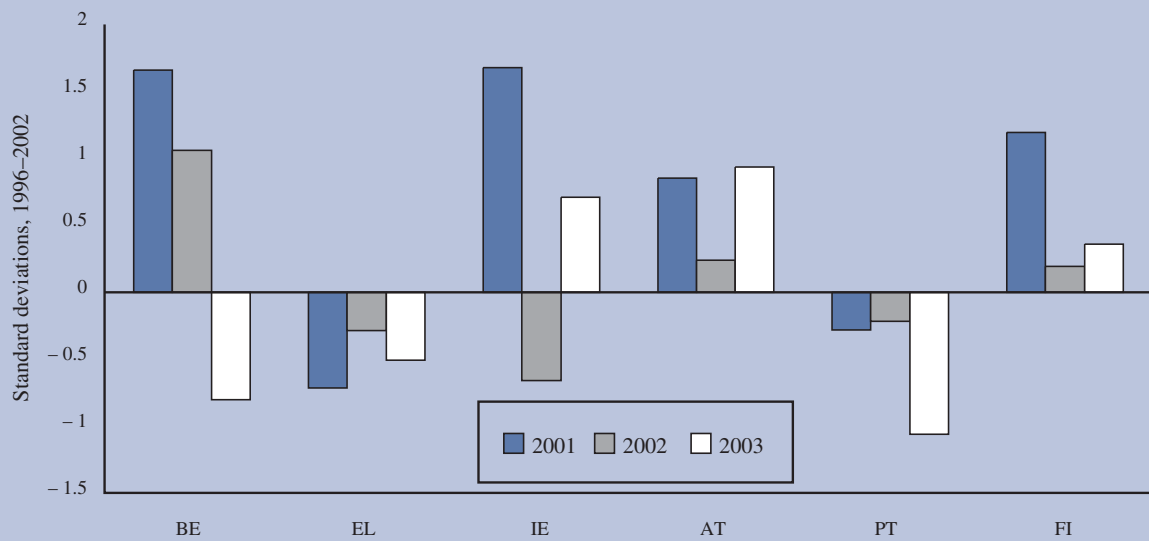
Source: Commission services.

Graph 17: Growth in real unit labour costs, Member States



NB: The scale is normalised, i.e. zero is average growth between 1996 and 2002 and the unit is in terms of standard deviation over the same period.
 Source: Commission services.

Graph 18: Growth in real unit labour costs, Member States



Source: Commission services.

increasing inflation differences within the euro area, is not necessarily unwarranted but may indicate an efficient working of market forces.

Against this background, any divergence in wage growth must be carefully assessed as it could be caused by different starting conditions when the euro was introduced, by changes in non-price competitiveness since then, or by unbalanced labour market conditions. The first two factors would not explicitly challenge policy-making. Nevertheless, even in these cases, inflation differences have to be carefully analysed and monitored in order to prevent any overshooting of wage and inflation trends, correction of which could become costly in terms of output and employment.

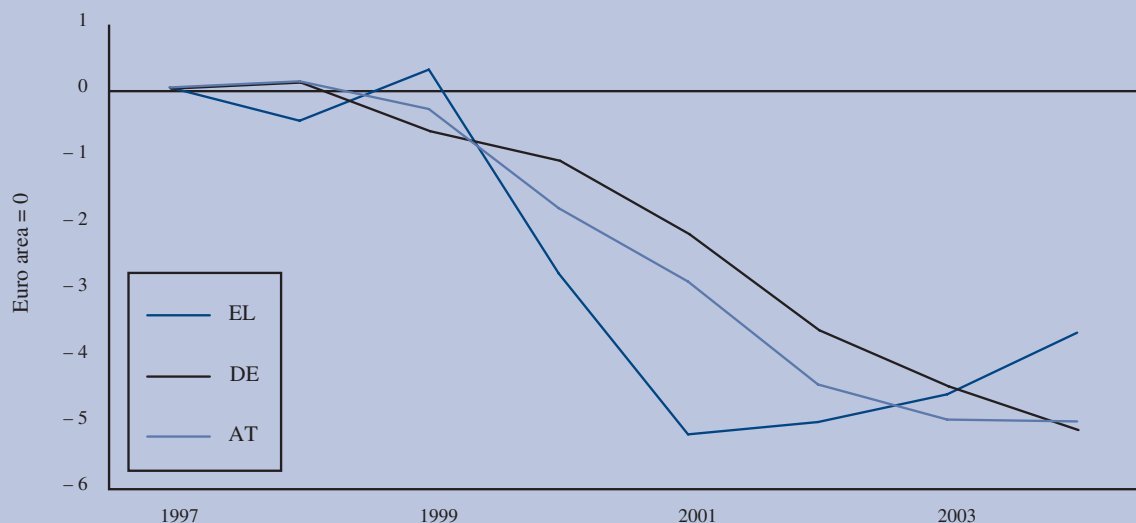
In order to identify changes in intra-euro-area price competitiveness, Graphs 19 to 21 plot the increase in nominal unit labour costs accumulated since 1997 in the different Member States. The year 1997 was used as a base year to take into account developments immediately before the introduction of the euro when variations in nominal exchange rates were materially absent. The figures are expressed as a percentage point difference from the euro-area average. The

divergence of national nominal unit labour costs from this average allows clustering of the Member States into three groups.

- *Intra-euro-area price competitiveness has considerably increased in Germany, Austria and Greece:* Germany has been identified as a laggard as regards economic growth in the euro area. Its labour market has improved less than that in other countries and, thus, the increase in price competitiveness is a welcome working of the adjustment mechanism explained above ⁽¹⁾. Austria has enjoyed a somewhat better growth performance and, in particular, much lower unemployment, but wage developments have been historically closely linked to those in Germany. Greece is a special case in so far as the country joined the euro area only in 2001. The relative decline in Greek nominal unit labour costs seems to be related to the country's efforts to qualify for the euro. Since the introduction of the euro in 2001, Greece's competitive position has deteriorated in line with its favourable growth performance.

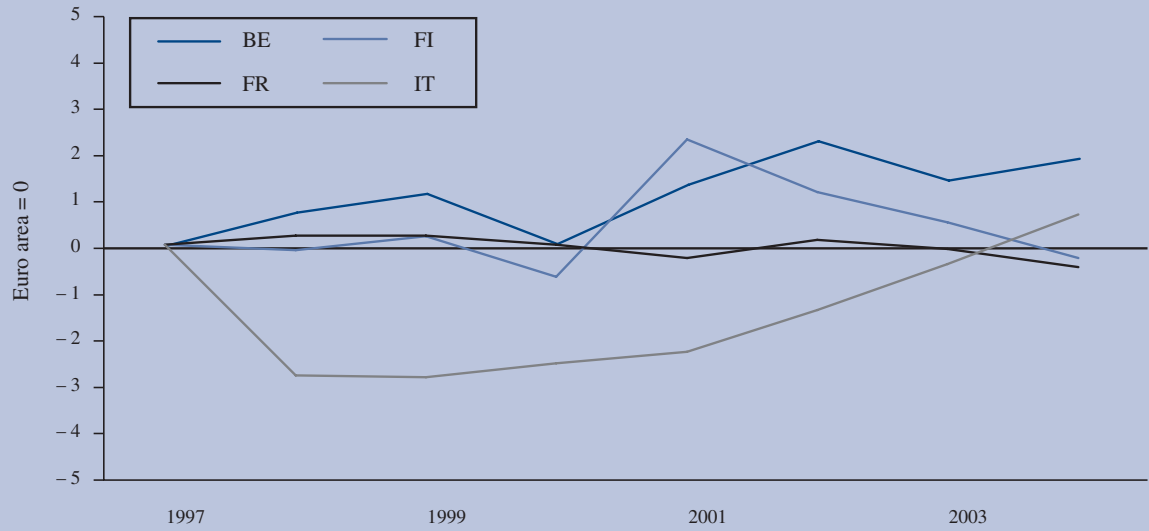
⁽¹⁾ On this issue, see 'The EU economy: 2001 review', Chapter 2.

Graph 19: Nominal unit labour costs, Member States



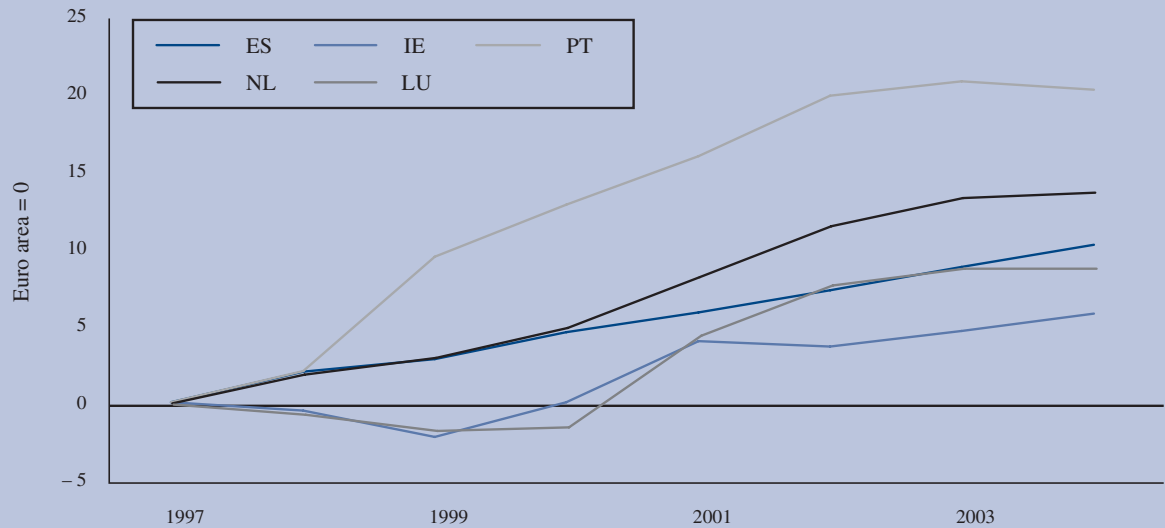
Source: Commission services.

Graph 20: Nominal unit labour costs, Member States



Source: Commission services.

Graph 21: Nominal unit labour costs, Member States



Source: Commission services.

- *Four countries have developed close to the euro-area average:* Nominal unit labour costs in France did not differ systematically between 1999 and 2003. Italy's price competitiveness improved in the run-up to EMU but gradually normalised afterwards. In 2003, the gap is almost closed. This is probably not totally consistent with the country's growth and employment performance, which has been worse than the euro-area average. Finland and Belgium have seen a marginal deterioration in intra-area competitiveness when economic growth weakened. There is, however, an interesting difference. In the course of the growth slowdown, the gap with the euro-area average closed in the case of Finland, but continued to increase in the case of Belgium.
- *Nominal labour costs grew faster than in the euro area as a whole in Spain, Ireland, Luxembourg, the Netherlands and Portugal:* All these countries witnessed higher-than-average output growth and a considerable decline in unemployment in the late 1990s. The deterioration in these countries' price competitiveness relative to the euro area is broadly consistent with their growth and employment performance until 2002. Developments in the Netherlands are to a large extent due to a build-up of price competitiveness prior to 1995 because nominal unit labour costs were below the average of the euro-area Member States for all the time since 1981. However, the most recent observations of both negative growth for three consecutive quarters in 2002/03 and the emergence of an output gap higher than that of the euro area point to the possibility that the Dutch economy has been overheating. In Portugal, with labour market conditions relatively tight until 2002, significant wage pressures have built up, eroding competitiveness and damaging employment prospects.

Observing both a loss of intra-area price competitiveness in former high-growth countries and gains in countries with relatively low growth and weak labour market performance suggests that the aforementioned adjustment mechanism, although slow and often painful, is at work in the euro area.

2.3. Phillips curve estimates

In order to evaluate the degree of nominal inertia more formally and rigorously, this section presents econometric estimates of Phillips-curve-type wage equations,

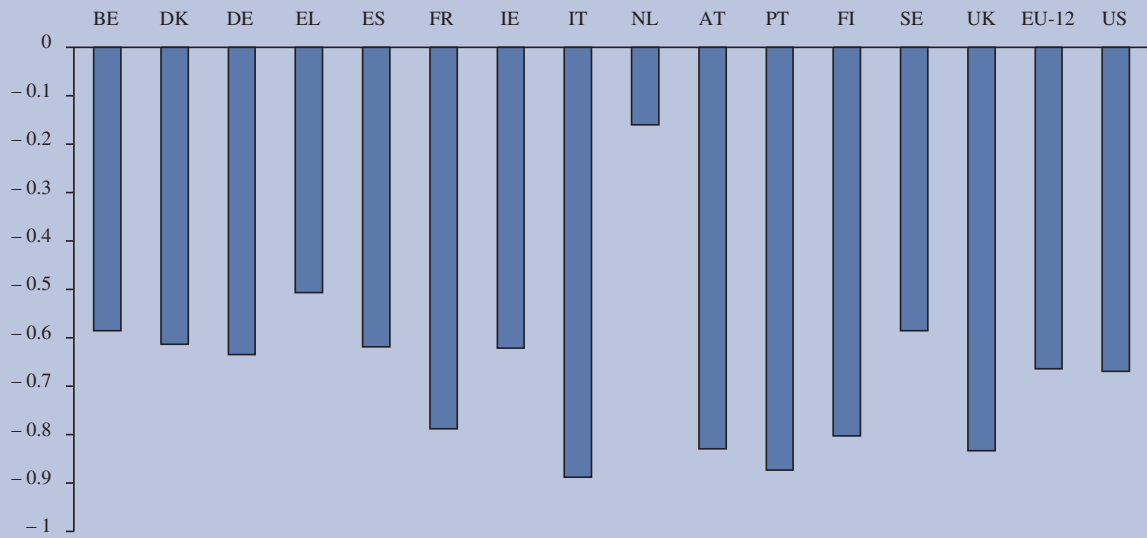
the usual economists' workhorse for this type of analysis. The standard Phillips curve suggests a relationship between the change in wage inflation and the unemployment gap, with the relationship affected by various shocks, for example to labour productivity or the terms of trade. The way wages adjust to inflation and productivity also affects the dynamic response of wages to the unemployment gap as given by different distributed lag schemes of the unemployment gap in the Phillips curve. It is also important to note that the long-run Phillips curve is vertical, i.e. equilibrium unemployment does not depend on nominal variables such as the inflation rate, the rate of money growth or nominal interest rates. A formal exposition of the model as used by the Economic and Financial Affairs DG for the present analysis can be found in Annex 1.

The Economic and Financial Affairs DG's Phillips curve estimates suggest the existence of a significant degree of nominal wage rigidity in the euro-area economy. Only about 65 % of the wage adjustment to an inflationary shock is completed within the first year. The output response to a price shock can be used as an indicator for the overall nominal inertia in the economy. As shown in Graph 22, the first-year output response to a negative inflationary shock of 1 % amounts to - 0.5 % on average in the euro area ⁽¹⁾. There is also considerable variation across euro-area countries, both with respect to the size of the output effect as well as to the duration of the adjustment process. Relatively low costs of disinflation can be found for Portugal, Austria and the UK, with similar adjustment patterns despite very different labour market institutions. The estimate for Italy also shows a fairly small impact response, though the negative effect tends to be much more persistent. The highest output cost of a disinflationary shock occurs in the Netherlands, where we find a low response of wages to the unemployment gap. Belgium, Germany, Denmark, Spain and Sweden also show negative output responses which are slightly above average. Moreover, the estimated duration of the adjustment period is also different across countries. Higher degrees of persistence can be found for Spain, France, Italy, Sweden and Finland.

The empirical estimates exhibit the striking feature that the degree of nominal rigidity found for euro-area countries does not differ greatly from that of the USA. In fact,

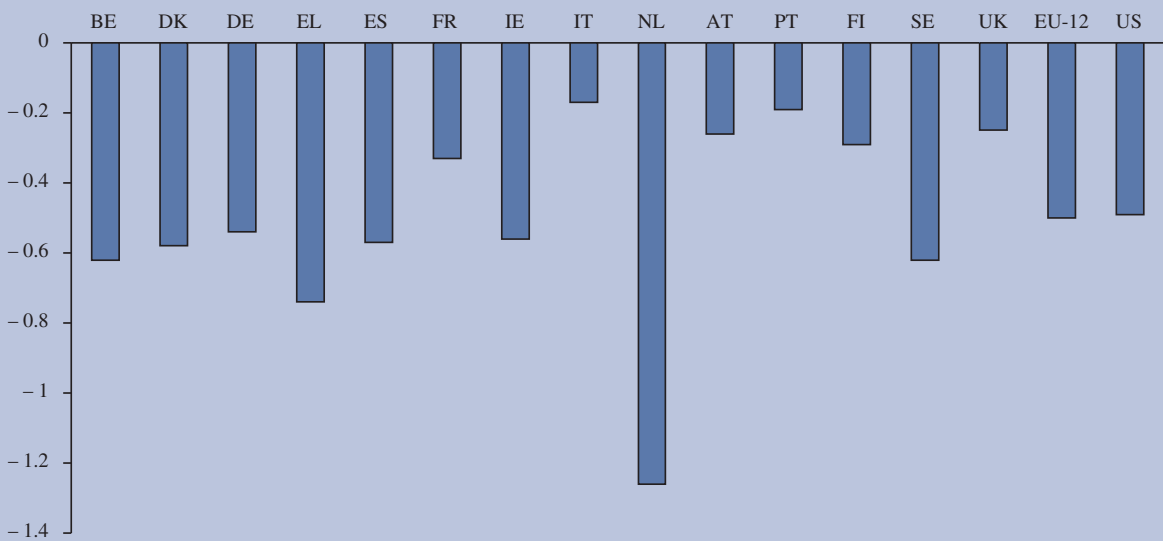
⁽¹⁾ The first-year impact response figures have been computed using the estimated Phillips curve coefficients as given in Table A2 in Annex 1.

Graph 22: First-year wage response to a 1 % disinflationary shock



Source: Commission services.

Graph 23: First-year output response to a 1 % disinflationary shock



Source: Commission services.

the aggregate wage response appears to be surprisingly similar in the EU and the USA, both in terms of the magnitude as well as the dynamics of the adjustment (see Graph 23). However, this result is not entirely new and has been confirmed by other studies. For example, testing for a common OECD Phillips curve, Turner and Seghezza (1999) found it possible to impose the restriction of a common sacrifice ratio for almost all countries examined, thus suggesting a similar inflation response of individual countries to the output gap. More recently, using the backward- and forward-looking Phillips curve specifications presented by Gali et al. (2001), one also finds very similar responses of output to inflationary shocks for the euro area and the USA. With the backward-looking model, the output response of a 1 % negative money shock is 0.8 % in both economies. In the forward-looking specification, the response to the same shock is – 0.5 % in the euro area and – 0.4 % in the USA. Last, but not least, a recent IMF study (2003) concludes that, historically, both price and output shocks appeared to have longer-lasting and more significant impacts on prices in the euro area than in the USA. However, following the hardening of most euro-area countries' commitment to stable exchange rates in the exchange rate mechanism (ERM) after the mid- to late 1980s, impulse responses look broadly similar between the USA and the euro area.

Both the fact that within-Europe countries with different labour market institutions seem to have fairly similar adjustment speeds and the similar adjustment speeds found for euro-area and US wages make it difficult to identify institutional labour market characteristics as the major determinants of nominal rigidities. Moreover, the low correlation between the degree of nominal rigidity and the level of the unemployment rate across countries suggests that nominal factors probably do not play a major role in changes in unemployment. Thus, while institutional and structural factors are probably key to an understanding of what determines the mark-up of effective wages over competitive wages over the medium term and, in consequence, the level of equilibrium unemployment, institutional labour market characteristics appear to be of less importance for the degree of nominal inertia in the economy.

2.4. Summing up

This section tried to establish some stylised facts on nominal and real wage developments in the euro area over the recent business cycle. The main findings can be summarised as follows.

- For the euro area as a whole, nominal wage growth per worker has been remarkably stable since the beginning of EMU. While accelerating slightly around the turn of the decade, growth of nominal compensation hovered around close to but below 3 % and is forecast to remain at that level well into 2004.
- With nominal wage growth per worker rather invariant to the cyclical situation, the slowdown in labour productivity growth translated into stronger increases in nominal unit labour costs in 2001 and 2002, clearly overshooting the benchmark value consistent with the monetary policy goal to keep inflation close to but below 2 %. However, with labour productivity growth expected to pick up again at the present conjuncture, nominal unit labour cost growth is forecast to return to well below 2 % next year.
- After a prolonged period of declining real unit labour costs, the fall in the wage share came to a halt at the turn of the decade. With real unit labour cost growth essentially flat over the past four years, the development has been much smoother than at the beginning of the 1990s, when a marked acceleration in real unit labour cost growth was followed by a sharp downward correction, largely reflecting strong labour shedding. In a nutshell, while overall wage discipline has been preserved, real wage moderation has not continued in recent years. However, indications are that real unit labour cost growth has re-entered negative terrain at the present conjuncture.
- The observed stability in overall wage developments at the euro-area level is to some extent due to aggregation and hides less stable patterns in some Member States. As regards different nominal unit labour cost developments across countries — the basic mechanism for intra-area realignments of labour cost competitiveness — the accumulated evidence over the past five years points towards significant improvements for Germany, Greece and Austria; in Spain, Ireland, Luxembourg, the Netherlands and Portugal, on the other hand, nominal labour costs increased considerably faster than in the euro area as a whole.
- Formal econometric analysis of Phillips-curve-type wage equations shows considerable nominal inertia in the wage inflation process in the euro area. Across EU countries, relatively low costs of disinflation can be found for Portugal, Austria and the UK. The

highest output cost of a disinflationary shock is estimated for the Netherlands, due to a fairly limited response of wages to the unemployment gap. Negative output responses which are slightly above average are also found for Belgium, Denmark, Germany, Spain and Sweden. Moreover, the estimated duration of the adjustment period is also different across countries. Spain, France, Italy, Sweden and Finland appear to be characterised by relatively higher degrees of wage inflation persistence.

- However, the empirical estimates also suggest that wage inflation persistence is not higher in the euro area than in the USA; in fact, the aggregate wage response to an inflationary shock appears to be surprisingly similar between the euro area and the USA, both in terms of the magnitude and the dynamics of the adjustment. Taken at face value, these

results would imply that the more sticky inflation developments in the euro area in recent years can hardly be ascribed to a higher degree of nominal wage rigidities.

- The finding of broadly similar degrees of nominal inertia across different countries in the euro area, and in the euro area and the USA, makes it difficult to identify institutional labour market characteristics as the major determinants of nominal rigidities. Thus, while institutional and structural factors are probably key to an understanding of what determines the mark-up of effective wages over competitive wages and, in consequence, the level of equilibrium unemployment over the medium term, institutional labour market characteristics appear to be of less importance for the degree of nominal inertia in the economy.

3. Wage interdependencies in EMU

Considerable academic research has been devoted to the impact of EMU on wages and wage bargaining institutions immediately before and since the introduction of the euro ⁽¹⁾. In the economic literature, a number of channels have been identified as to how the switch in monetary regime may affect incentives in wage bargaining. Some of them are obvious, others less so.

- In EMU, interest rates and exchange rates are no longer a tool for economic policy at the Member State level.
- The degree of product market competition is higher in EMU, which reduces the rents that could be freely allocated in wage bargaining.
- Wage bargaining has a smaller impact on the euro-area inflation rate than on the national inflation rate, which changes strategic interaction between wage bargaining and monetary policy.
- Wage bargaining institutions may adapt to the new environment.

This section explores some specific aspects of wage setting interdependencies in EMU and cross-country transmission mechanisms. The first part of the section is devoted to an investigation of shock absorption and shock transmission under two different bargaining regimes, where (i) wages respond in a traditional way purely to national conditions, or (ii) when wage setting interdependencies are present, i.e. domestic wage setting takes developments abroad into account. Moreover, we also look into the transmission mechanisms of a wage shock under different degrees of goods market integration. The analytical tool employed in this part is simulation analysis of a stylised two-country model. The second part of this section then investigates the issue of wage pattern bargaining and wage convergence from a detailed sectoral perspective, offering some insights into developments that are not visible in aggregate data.

Last, but not least, overview information on recent developments in bargaining systems is provided in Annex 3.

3.1. Transmission of shocks in EMU: the role of goods and labour market integration

3.1.1. Setting the stage

The effects of asymmetric shocks, both in the country where the shock occurs as well as the transmission to other members of the euro area, are a central policy concern. Without flexible exchange rates, the adjustment must take place predominantly via wages and prices. Depending on the amount of nominal inertia in wage and price formation, the shocks can have strong and fairly protracted real effects. Another important issue is the degree to which prices and wages can move in different directions within the euro area. To the extent to which this is possible, inflationary pressures in one group of euro-area Member States could have negative transmission effects on other Member States through an increase in real interest rates. The generally accepted view on the shock transmission within a currency union suggests that both positive demand and positive cost shocks are likely to have negative effects on other Member States ⁽²⁾.

However, in a more forward-looking perspective, it should also be considered that the new monetary regime is likely to change the structure of the euro-area economy, which itself may have implications on how shocks will be absorbed. Monetary union can be regarded as a catalyst for generating further integration in both goods and labour markets. Obviously, exploiting the benefits of economic integration is one of the major reasons for creating a monetary union. One of the possible benefits of a common currency is increased competition between domestic and foreign firms which goes along with greater openness and increased price trans-

⁽¹⁾ For a survey, see Calmfors (2001).

⁽²⁾ For a textbook-type formal analysis to illustrate the interdependencies between wage formation, inflation and monetary policy, see Annex 2.

parency (the first substantial signs that this is happening can already be observed). Better informed customers will increase the willingness to substitute between domestic and foreign goods. Apart from positive growth effects, this will also have consequences for the transmission of macro-economic shocks, since firms will be less able to increase prices in a more competitive environment. Thus, more highly integrated goods markets could have a sizeable impact on how shocks are absorbed and transmitted.

It has also been recognised that higher integration of goods markets will have implications for wage setting, even in the absence of significant changes in labour mobility. Increased product market competition results in fewer rents that could be distributed in wage bargaining. Moreover, trade unions which recognise the impact of higher goods market competition on the elasticity of labour demand will pay more attention to wage developments in other Member States. While this could lower wage mark-ups in individual Member States and therefore increase the level of employment, there may be a trade-off between the variability of employment and that of prices ⁽¹⁾. Linking domestic wages to foreign wages could increase nominal rigidity and therefore slow down the adjustment of the economy to shocks.

A dampening impact of EMU on wage flexibility may also emerge from direct changes in wage bargaining mechanisms, for example through increased cross-border cooperation of trade unions. Again, if it came into existence, it would imply that wages respond less to national determinants ⁽²⁾. However, more apparent to date is the trend towards enforced national coordination of wage bargaining, which may be a direct consequence of the lack of monetary instruments at the national level.

Indeed, a lot of attention has been paid by economists to whether EMU will be accompanied by the evolution of pan-European wage bargaining. Actually, several trade unions have started engaging in cross-border cooperation. The comprehensive documentation by Dufresne and Mermet (2002) on the ongoing efforts displays only limited progress so far without any visible impact on wage negotiations. In practical terms, there are not many possibilities to cooperate and notable differences in national structures lead to high costs of coordination, because they imply that national trade unions may have distinct preferences ⁽³⁾.

⁽¹⁾ See Calmfors and Johansson (2002) and Saint Paul and Bentolila (2001).

⁽²⁾ Hancké and Soskice (2003) analyse how a leading trade union could take others' responses to its own wage claims and economic shocks into account.

Against this background, this part of the study looks at the question of how stronger wage interdependencies and higher goods market integration might affect the way in which shocks are absorbed and transmitted in EMU. To analyse this issue, we perform simulation analyses using a stylised two-country version of the Commission's QUEST model. We look at two equally sized regions (with similar economic structures) which we call domestic and foreign, and we subject the domestic region to asymmetric demand and supply shocks and to a wage push shock. More specifically, we analyse the transmission mechanisms of the following three types of shocks:

- a (temporary) positive shock to consumer demand (1 % of private consumption over one year, phased out over five years);
- a (temporary) negative shock to TFP (1 % of TFP, phased out over five years);
- a (permanent) 10 % positive shock to the wage setting rule in the domestic economy.

The issue of interest in the first two simulation exercises is how different wage setting regimes affect the response of the two regions to asymmetric demand and supply shocks. In what may be labelled an 'early stage of EMU' scenario, it is assumed that domestic wages are set in traditional behaviour, responding purely to domestic economic conditions. In the second variant, an 'integrated EMU' scenario, we assume significant interdependencies in wage setting; this is implemented in the model simulations by giving equal weight in the determination of wages to the traditional 'local' explanatory factors and to wage developments abroad.

In the third simulation exercise, we analyse the effect of a cost push shock. In the first scenario, the cost shock is analysed for historically given price elasticities ('early stage of EMU' scenario) between domestic and foreign goods. In a second scenario, the assumption is made that goods markets are completely integrated, i.e. customers regard goods produced in both regions as perfect substitutes ('integrated EMU' scenario). In this case, competition forces price equalisation across EMU regions. Both these variants are analysed under the assumption of independent wage setting at home and abroad.

⁽³⁾ See Borghijs (2002) and Borghijs et al. (2003).

3.1.2. Demand and supply shocks under different wage setting regimes

A positive demand shock

Independent wage setting

A positive demand shock leads to higher prices and higher GDP in the domestic economy. The increase in demand is associated with a temporary rise in employment and wages. Because of different inflation rates, real interest rates are down in the domestic economy and up in the foreign economy. This mechanism leads to a negative transmission of the demand shock to the rest of EMU and a fall in both prices and wages. Note that the cross-country shock transmission is sizeable, mainly due to a strong negative investment response to a temporary rise in real interest rates.

Interdependent wage setting

With interdependent wage setting, the conditions for a slowdown of the adjustment of wages and prices are met. As can be seen from the first scenario, wages and prices in the domestic and the foreign economy move in opposite directions. With higher interdependencies in wage setting, the wage and price response slows down in both regions. In the domestic economy, this leads to a notable effect on GDP. Since wages rise less, there is initially a stronger employment effect. However, since prices do not rise as much either, there will be less of a disinflationary effect for the subsequent years over which the adjustment takes place, and therefore real interest rates will be lower. It takes approximately one year longer for the output adjustment process to work out. For the foreign economy, the differences in the adjustment process under interdependent and independent wage setting seem to be less pronounced. It appears that the smaller fall in prices and wages is compensated for by a smaller increase in real interest rates. Thus, the adjustment path of investment looks fairly similar in the two wage setting regimes.

A negative supply shock

Independent wage setting

A negative supply shock has adverse effects on investment, consumption and GDP. The initial decline of real interest rates in the domestic economy is a consequence of insufficient demand, stemming from the shock to productivity of existing capital, rather than a stimulus for increased demand. There can be a short-run positive effect on employment due to insufficient price flexibility. The supply shock is transmitted negatively to the rest of EMU via an increase of real interest rates, resulting

from the spillover effect implied by the inflationary pressures from the domestic economy. The downward pressure on wages and prices increases unemployment.

Interdependent wage setting

With interdependent wage setting, wages rise less or even fall. This helps to limit the rise in costs in the domestic economy and even slightly stabilises the response of output to the supply shock in the domestic economy relative to the case of independent wage setting. The transmission of the shock to the foreign economy is slightly more pronounced, because wages decline less than under independent wage setting. The adjustment of employment therefore takes longer.

3.1.3. Wage shocks under different degrees of goods market integration

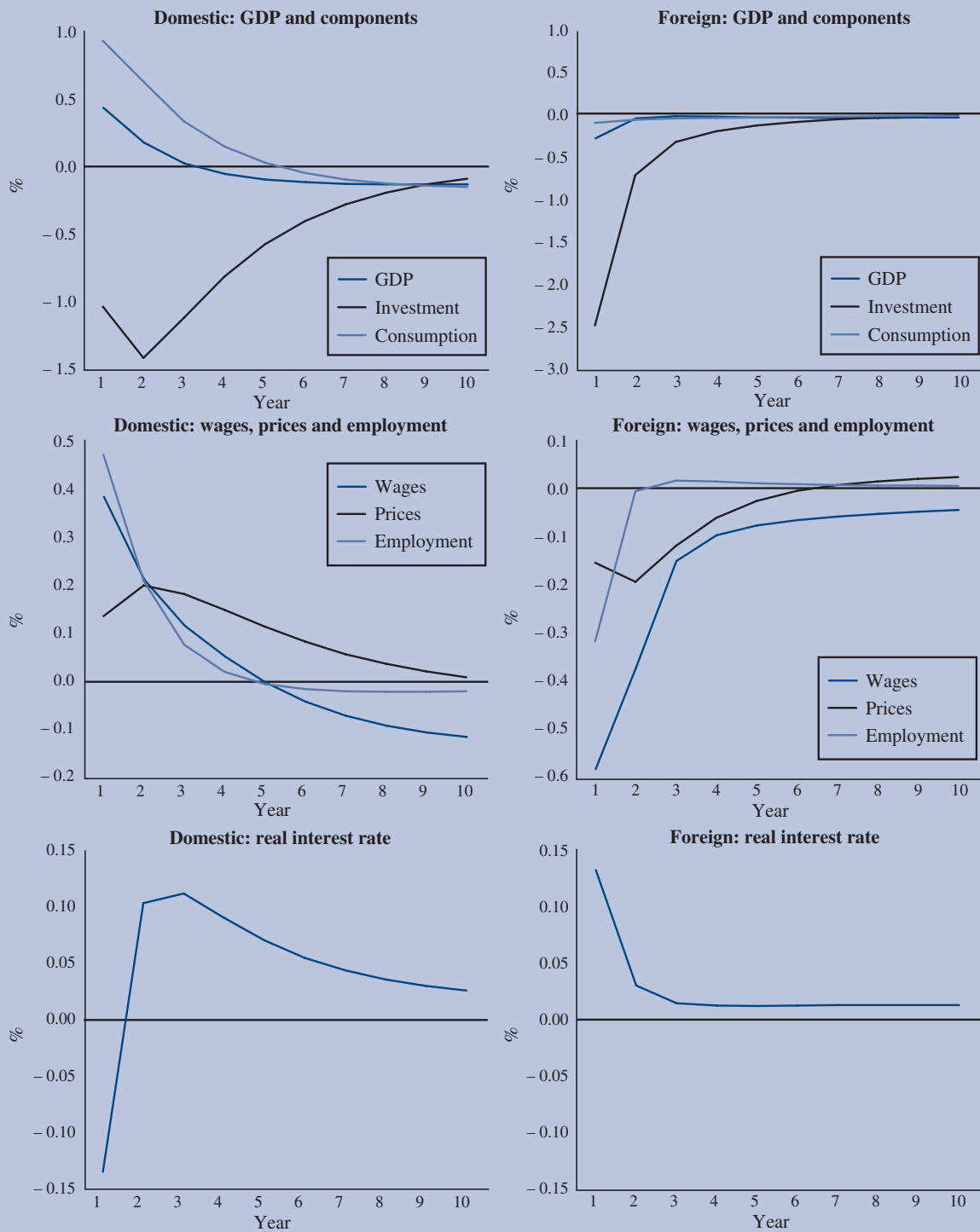
Imperfect goods market integration

The wage push shock has strong adverse effects on employment. Since prices rise domestically, there is a negative real interest rate effect which stimulates investment initially. However, the investment response is not strong enough to prevent GDP from already falling in the first year. The wage shock is transmitted negatively to the rest of EMU through an increase in real interest rates. While in the short run the transmission of the shock is negative because of adverse real interest rate effects, there is also a long-run negative terms of trade effect. Capital costs increase due to the price increase of imported investment goods. This slows down capital accumulation in the longer term.

Full goods market integration

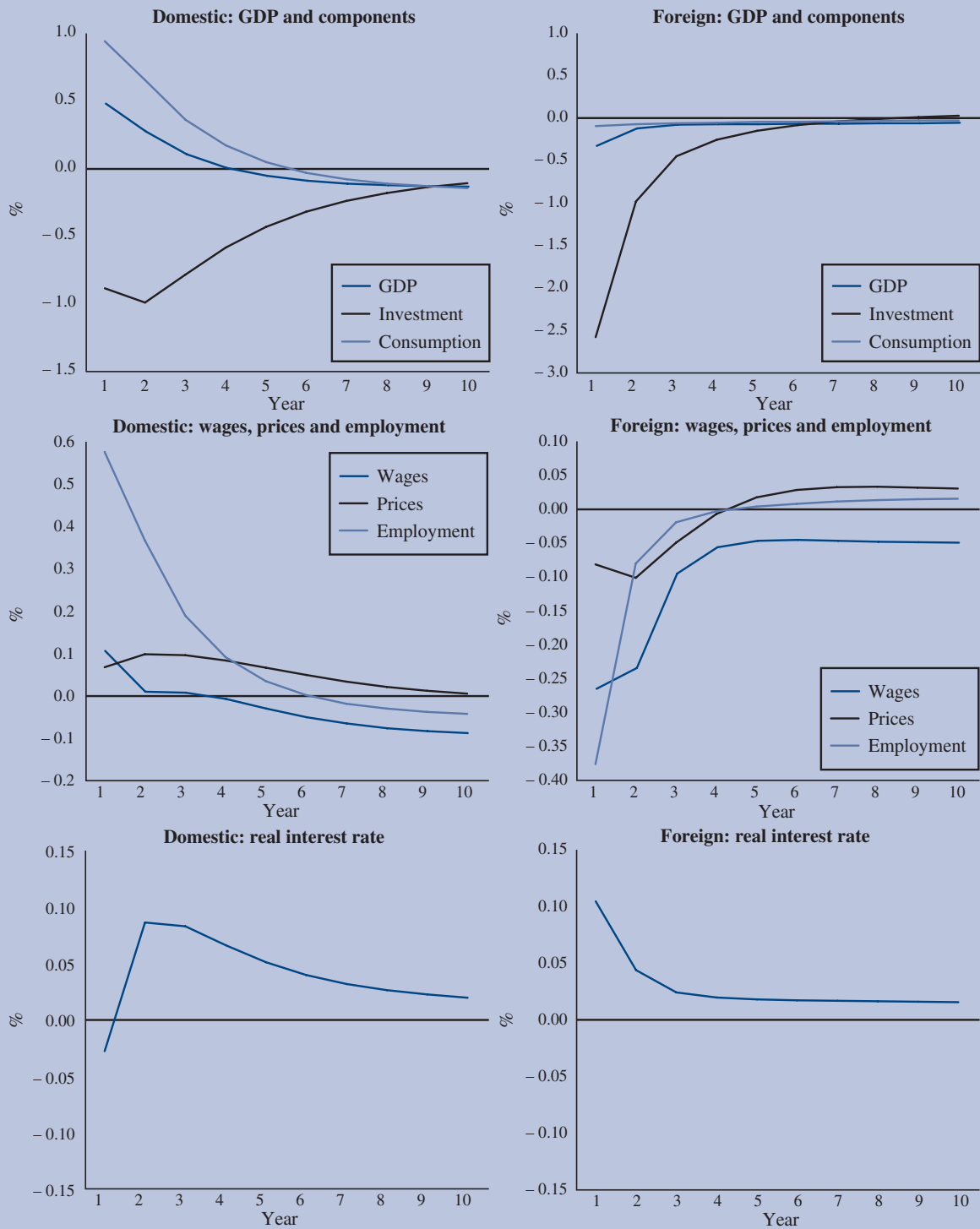
Price divergence and therefore divergence of real interest rates in EMU occur, because nationally produced goods are imperfect substitutes. To the extent to which cross-border goods market competition increases, competitive forces prevent price divergence. In such a scenario, the adjustment process will take place differently. Domestic firms can only respond to a wage increase by lowering cost, i.e. by reducing employment, which has two effects on domestic cost. First, it reduces cost by increasing the capital intensity of production; second, it reduces wages through higher unemployment. The decline of economic activity in the domestic economy lowers real interest rates in the monetary union as a whole, simply because by definition no inflation differential emerges. Thus, in this case, the wage shock is transmitted positively and is associated with a strong investment stimulus in the countries not hit by the wage shock.

Graph 24: Demand shock independent wage setting



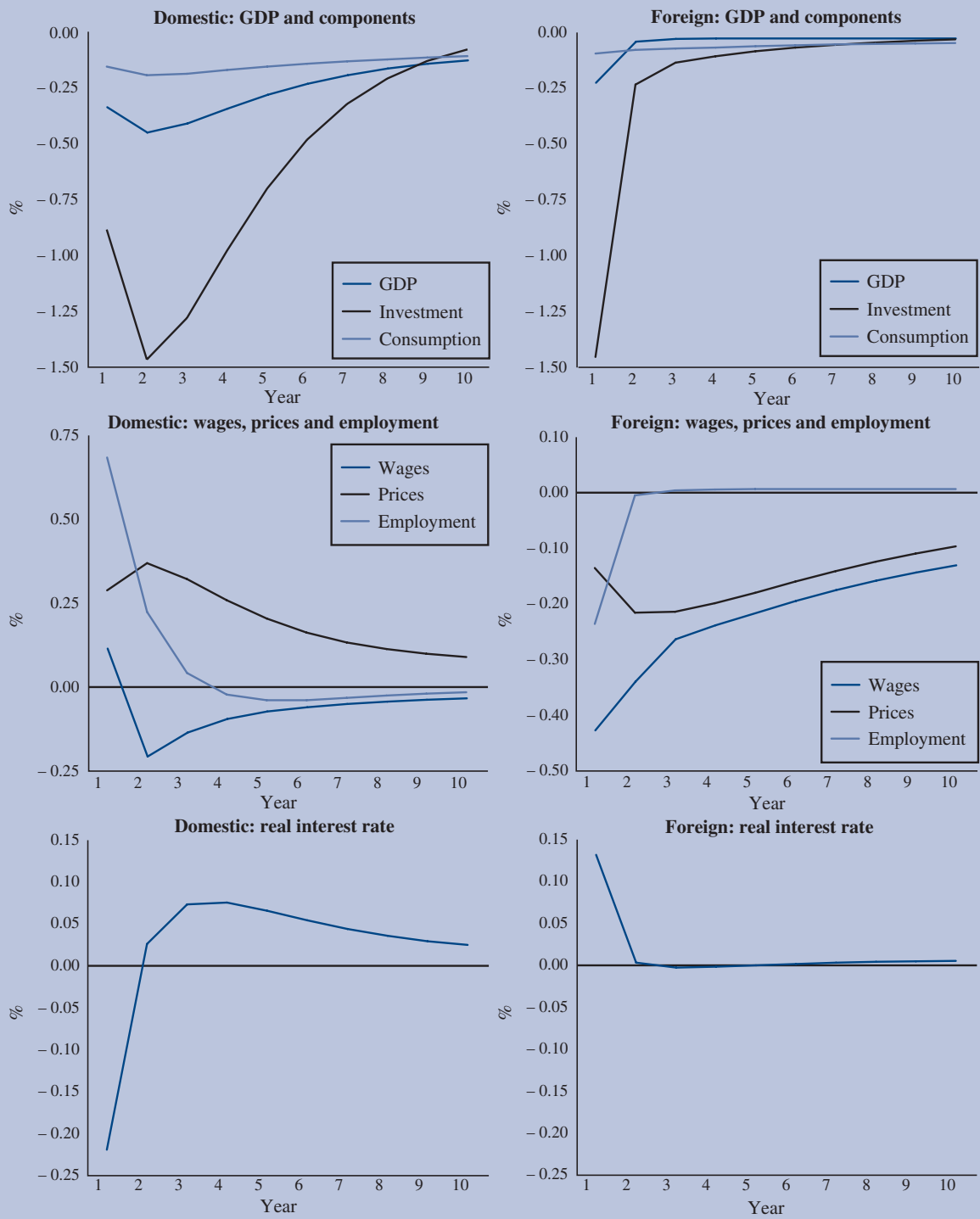
Source: Commission services.

Graph 25: Demand shock interdependent wage setting



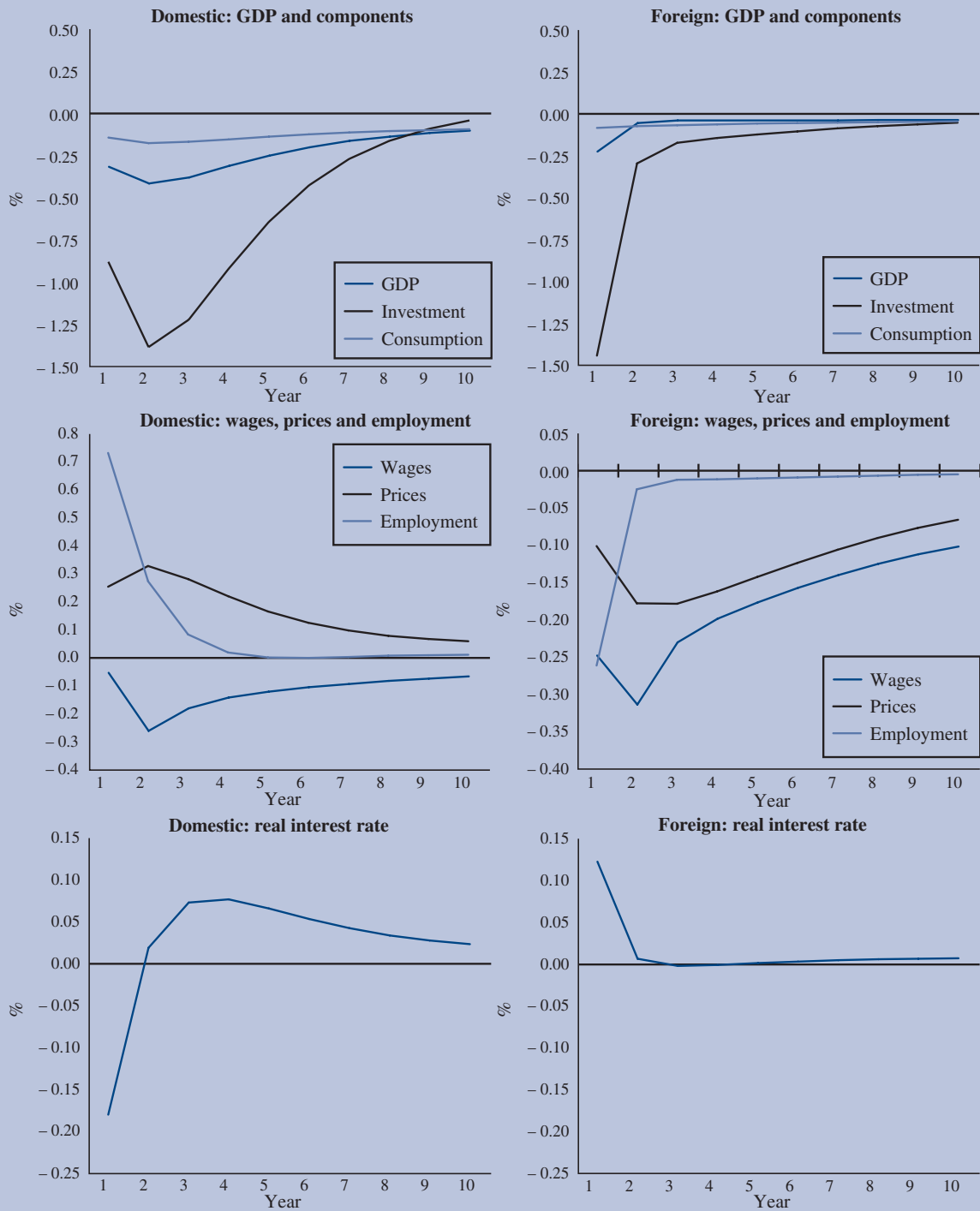
Source: Commission services.

Graph 26: Supply shock independent wage setting



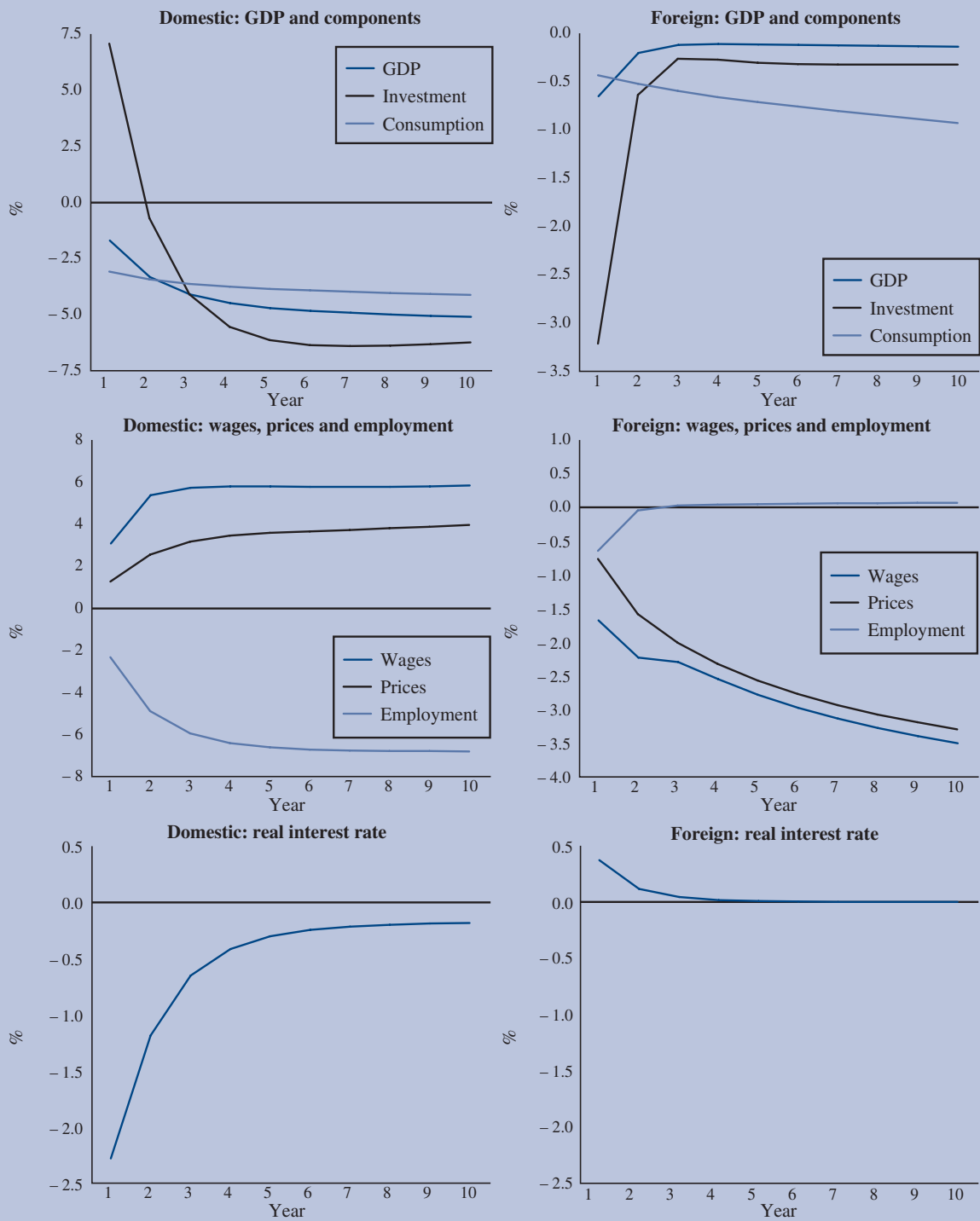
Source: Commission services.

Graph 27: Supply shock interdependent wage setting



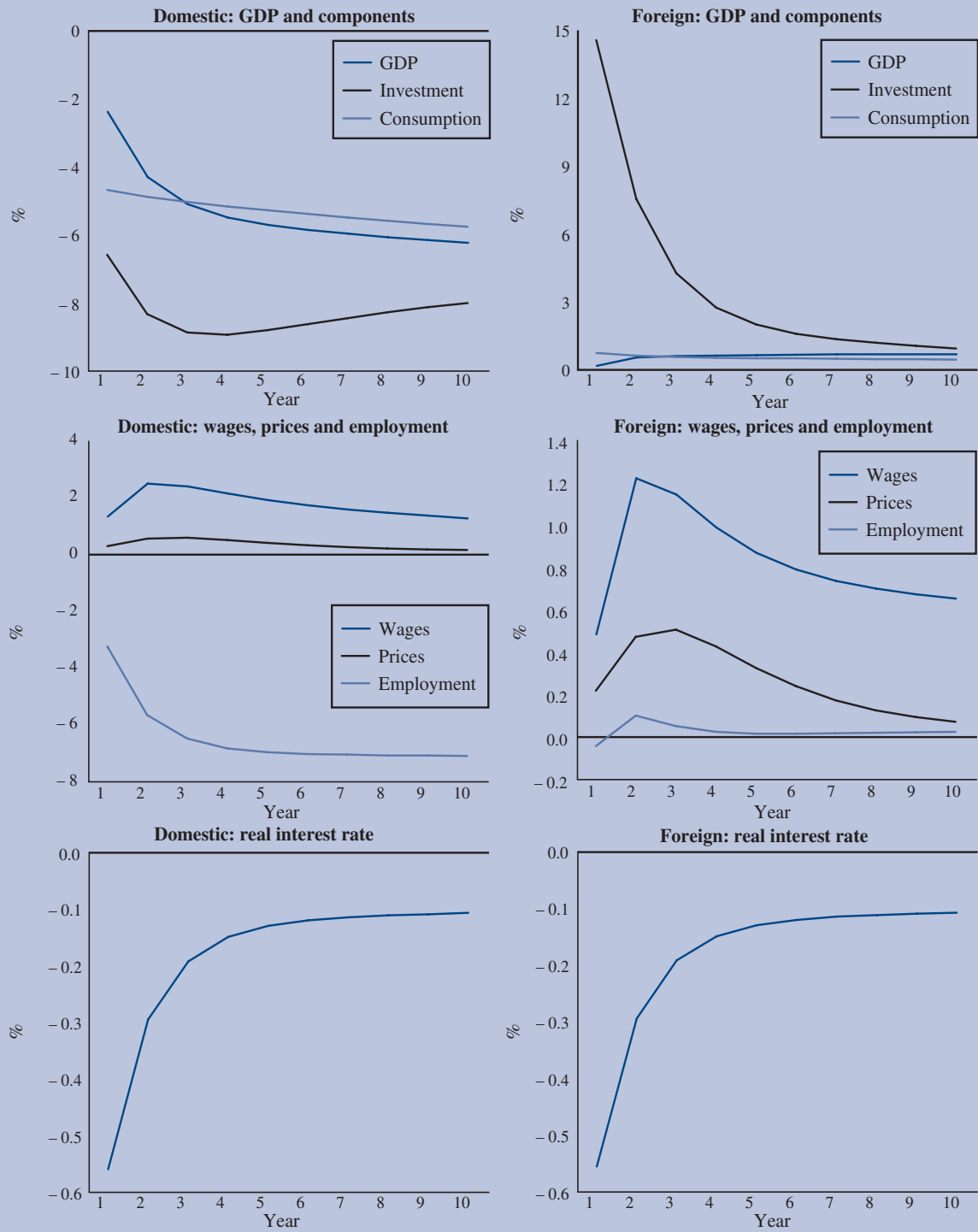
Source: Commission services.

Graph 28: Wage shock imperfectly integrated goods markets



Source: Commission services.

Graph 29: Wage shock fully integrated goods markets



Source: Commission services.

3.2. Wage pattern bargaining and sectoral wage convergence

Do wage levels converge as economic integration becomes stronger? Is there evidence for a ‘Europeanisation’ of wage bargaining? How strong are the effects of wage bargaining coordination within countries? For the first time, we are able to explore these issues from a detailed sectoral perspective. This offers insight into developments that are not visible in aggregated data, with the most obvious distinction being the relative behaviour of tradable versus non-tradable goods and services. Another example is efforts for cross-border bargaining coordination that differ greatly across sectors. The analysis is based on a data set that covers wages, value added and hours worked in 13 countries for 29 to 49 sectors from 1980 to 2001⁽¹⁾. However, in order to reconcile the wealth of the data with the scope of this chapter, the main focus here is on selected branches, which can be considered as being broadly representative of trends in the different broad sectors of the economy.

3.2.1. Economic integration, competitiveness and wage convergence

Economic integration, in particular the single market programme and EMU, can be expected to trigger price-

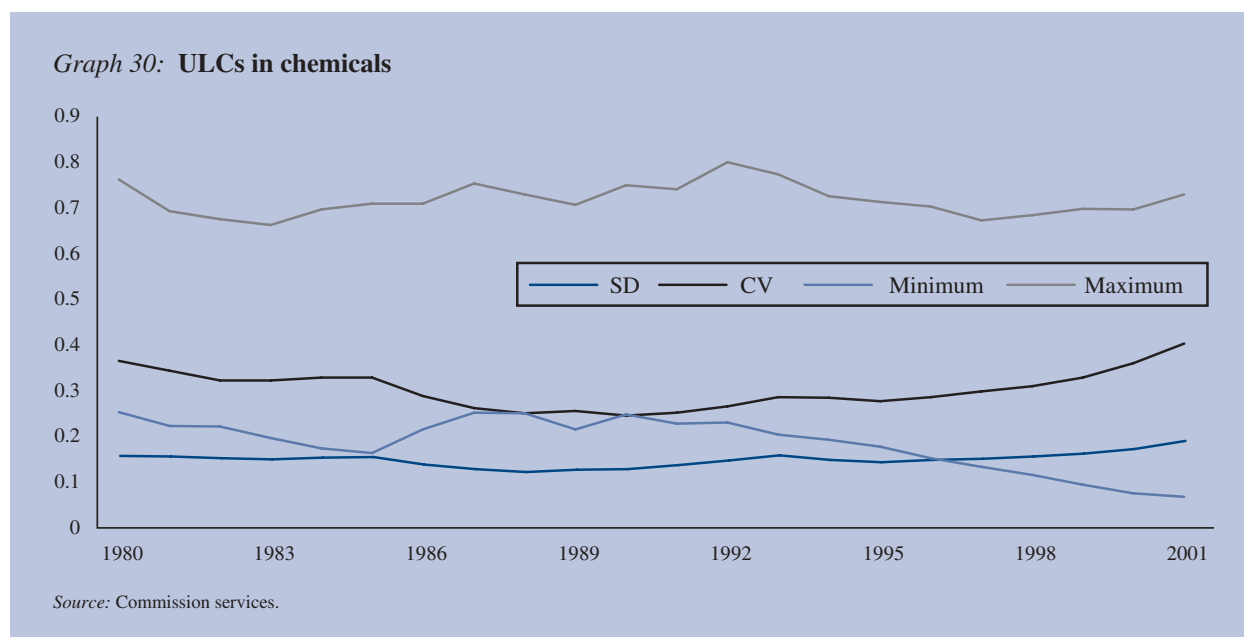
level convergence among tradable goods as competitive pressure increases⁽²⁾. As firms react to competitive pressure, convergence of unit labour costs across countries is also to be expected. In this subsection, we try to identify convergence of unit labour costs in selected branches. In a second step, we analyse the convergence of hourly wage levels, since it is wages, together with productivity, that determine unit labour costs.

The bandwidth of unit labour costs in 2001 is rather similar across branches, services and industrial sectors alike, with the exception of retail trade. This is surprising, as the bandwidth does not seem to systematically reflect the degree of competition in a given sector. Looking at the whole period under observation, unit labour costs (ULCs) do not follow a uniform pattern in the different sectors. Upward trends in some sectors (such as textiles, fabricated metals and retail) coexist with stable or even strongly decreasing ULCs in others. Graphs 30 and 31 display the band between the highest and lowest unit labour costs as well as the standard deviation (SD) and the coefficient of variation (CV) for the example of the chemicals industry and financial intermediation.

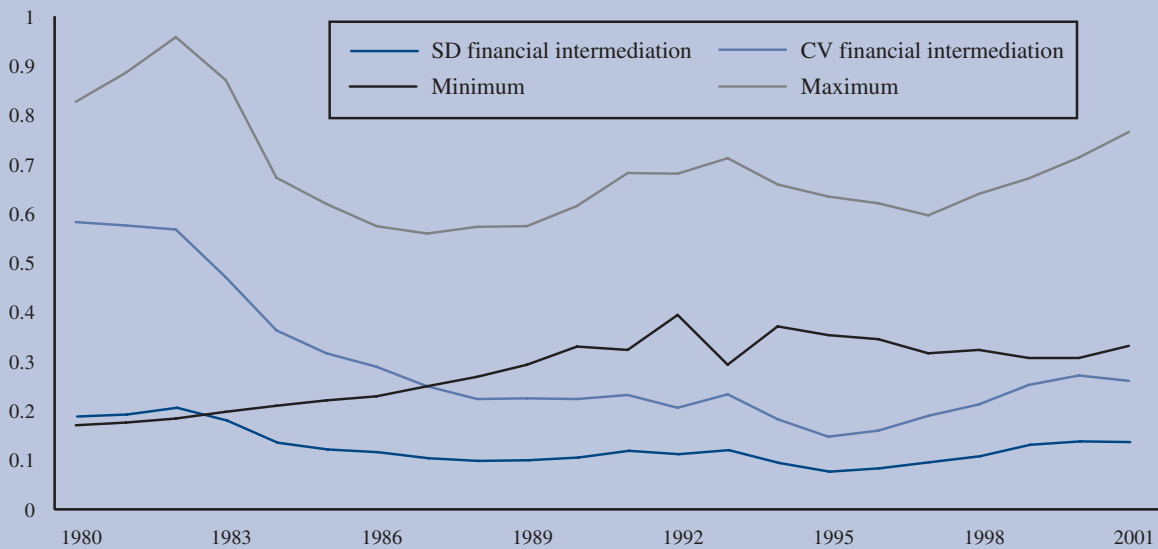
Convergence of unit labour costs was stronger in the 1980s than in the 1990s. Graph 32 shows the coefficients of vari-

⁽¹⁾ In principle, 54 sectors are included in the data set, but in all countries, disaggregated data are missing for some of these.

⁽²⁾ See European Central Bank (2002).



Graph 31: ULCs in financial intermediation



Source: Commission services.

ation of ULCs for six selected branches. In the chemicals industry as well as in textiles, and fabricated metal products, unit labour costs converged during the 1980s and early 1990s, but then diverged again in the late 1990s: the coefficient of variation first declines and then increases again. In the chemical industry, further reductions at the bottom level of ULCs account for the divergence observed in the 1990s. Not so in the textiles and fabricated metal sectors, where the divergence seems to stem mostly from increases in ULCs where they are already high.

In the ICT sector, there is a strong downward convergence of unit labour costs from high levels. The relative dispersion, though, remains broadly the same over the period and at a level comparable to that of other sectors. In the retail sector, the band between the highest and lowest ULCs is relatively wide, and diminishes only slowly in the 1990s, as the highest levels are reduced. In financial intermediation, the band is quite narrow, but starts widening again after the early 1990s. Finally, in public administration, there is a clear upward trend of ULCs, and convergence stems from a 'catching-up' of the bottom levels, whereby the band becomes remarkably narrow.

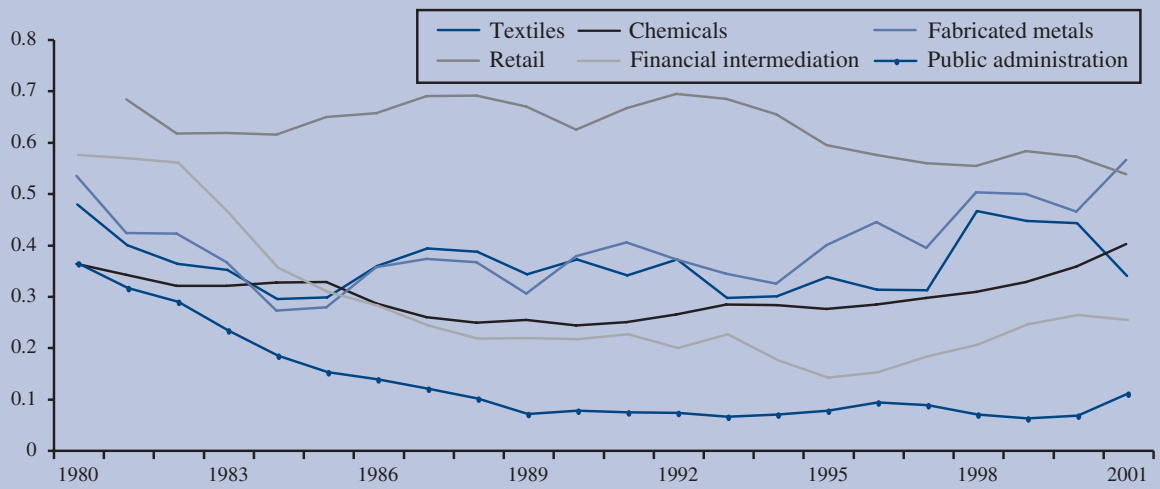
The convergence or divergence of unit labour costs captures the competitive position of industrial sectors in dif-

ferent EU Member States. Developments of unit labour costs are driven both by changes in wages and changes in productivity. As a next step, we therefore explore wage convergence.

The absolute differences in hourly compensation tend to become wider as (nominal) wages increase. There is thus no catching-up of wage levels in absolute terms. In 2001, the bandwidth of wages in the selected sectors stood between EUR 11.7 (fabricated metals) and EUR 26.6 (office machinery) (Graphs 33 and 34). This notwithstanding, there has been convergence in relative terms (coefficient of variation, Graph 35) over the past 20 years. It follows a similar, if not stronger, pattern than unit labour costs. The dispersion of wages has decreased in all selected sectors. Again, convergence was stronger in the 1980s than in the 1990s.

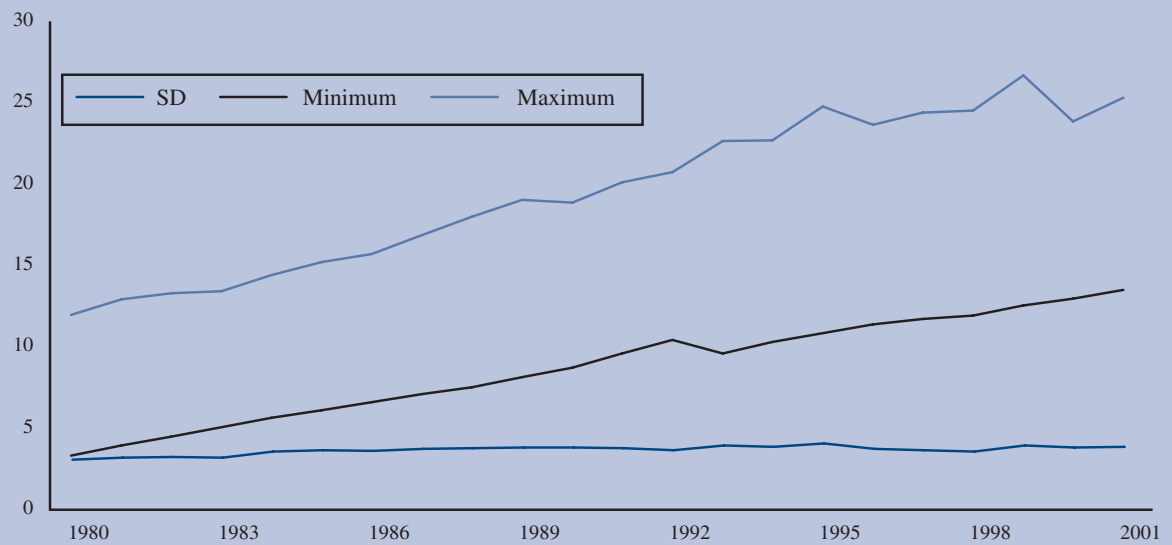
The strongest convergence can be observed in the office machinery (down from a CV of 0.6 in 1980), fabricated metals and textiles sectors. It is weakest in retail trade, where the dispersion is basically stable from the late 1980s onwards. Convergence in the chemicals sector and in public administration is quite strong until the early 1990s, but thereafter the trend is reversed and dispersion increases again. While in the chemicals sector the lower

Graph 32: Coefficients of variation of unit labour costs in selected sectors



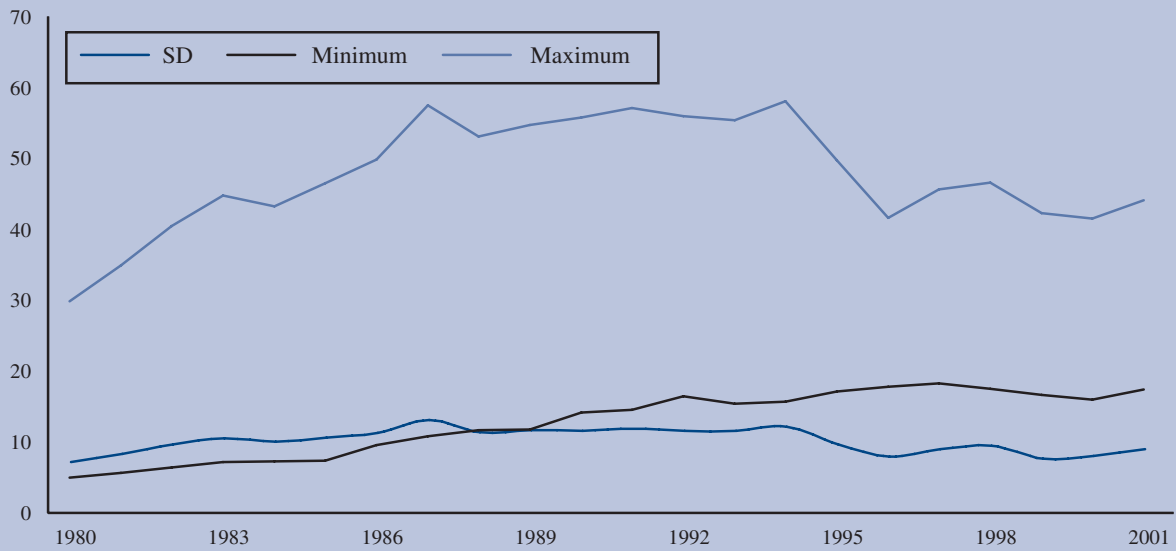
Source: Commission services.

Graph 33: Hourly wages, fabricated metals



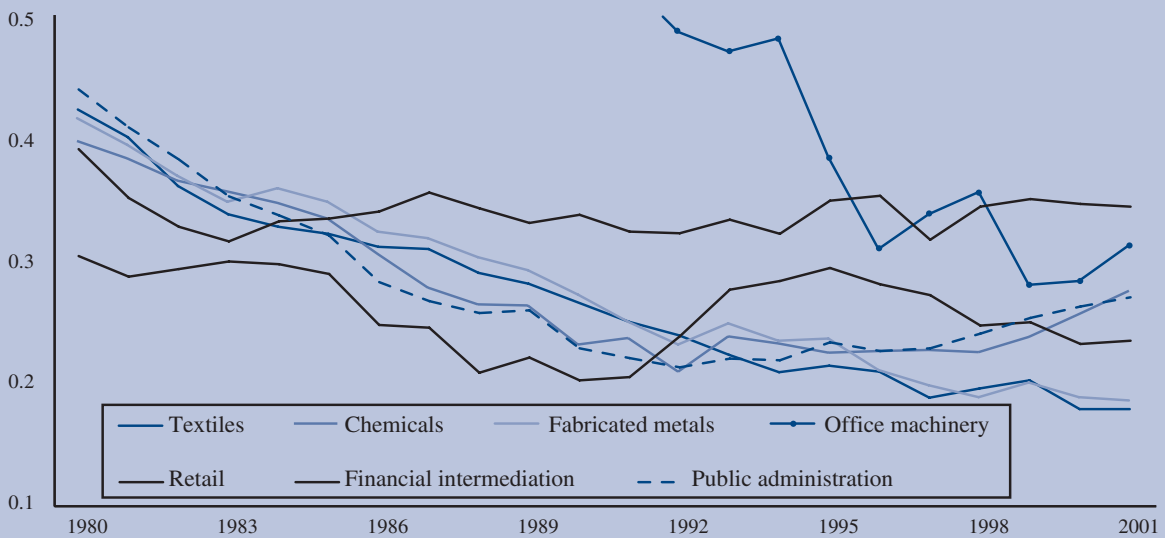
Source: Commission services.

Graph 34: Hourly wages, office machinery



Source: Commission services.

Graph 35: Coefficients of variation of hourly wages



Source: Commission services.

wages stabilised from the mid-1990s onwards, in public administration it seems to be accelerated wage growth in high-wage countries that drives the divergence. In financial intermediation, dispersion increases in the early 1990s, interrupting a decreasing trend, which resumes only a couple of years later.

In conclusion, the reduction of wage dispersion contributed to the narrowing of unit labour costs. While the gap between absolute wages continued to widen (no 'strong' catching-up), the relative dispersion of wages decreased over the past 20 years. Convergence differs across sectors in terms of strength; it seems to be generally stronger in the industrial sector than in services, potentially reflecting the intensity of competitive pressure. Wage convergence did not wait for the completion of the single market or EMU to happen: in fact, the strongest convergence occurred in the 1980s.

These results are broadly in line with those reported by Duque et al. (2002). They use different approaches to gauge the convergence of aggregate unit labour costs, wages and productivity and find that unit labour costs and wages converged in EUR-11 between 1981 and 2001, but that the same is not true for productivity. However, as the disparities remain more or less similar after 1997, they conclude that 'the introduction of the euro does not seem to have accelerated the process of wage equalisation' (p. 18).

3.2.2. Sectoral wage coordination across borders: emergence of EU-level bargaining?

In this subsection, we investigate cross-border coordination of wage bargaining. As competition is fostered by economic integration, in particular the single market and EMU, it is rational for social partners to take wage developments in other countries into account. Moreover, competitive pressures as well as business structures of internationally operating companies may have already prompted social partners at earlier stages to consider wages in other countries in their own negotiations.

So far, wage bargaining coordination takes rather soft forms. As part of policy coordination in EMU, the macroeconomic dialogue was set up among the top organisations of EU social partners, the Council, the Commission and the ECB in order to discuss the macroeconomic policy mix. During the run-up to EMU, the EU also saw some attempts by trade unions to coordinate wage bargaining, mostly through supranational wage norms by which trade unions commit to seeking wage

increases that cover inflation plus 'a balanced participation in productivity gains' ⁽¹⁾. The 1998 Doorn agreement between trade unions from Belgium, Germany, Luxembourg and the Netherlands was a trailblazer in that respect. The Doorn initiative is followed up through regular meetings that have, however, not led to any further deepening of wage coordination. The 'coordination guideline' put forward by the European Trade Union Confederation in 2000 foresees that 'qualitative' gains (such as equality of pay) should be sought as compensation if real wage increases remain below productivity gains. Among the sectoral trade union federations, the European Metalworkers' Federation (EMF) was a forerunner in establishing a coordination rule; some other industry federations have followed. In the metalworking sector, some purely regional bargaining networks also exist.

Coordination efforts and wage norms have to date mainly led to an exchange of information, sometimes including the participation of observers in wage negotiations ⁽²⁾. The wage norm seems to serve as a general benchmark, but it is hard to gauge its impact, since price and productivity developments already play a role in bargaining at national or lower levels. More far-reaching ambitions to coordinate wage bargaining are limited by the employers' strict opposition. Moreover, it is inhibited by the diversity of wage bargaining structures and practices in Member States and, even within the trade union sector itself, by the European federations' lack of a mandate to negotiate ⁽³⁾.

As far as possible stronger forms of coordination are concerned, it is important to keep their potentially detrimental effects in mind. Firstly, coordination reduces the differentiation of wages according to local labour market conditions and productivity ⁽⁴⁾. For coordination at the EU level, this is likely to imply that the response to asymmetric shocks is inhibited. The importance of that rigidity obviously depends on the strength of the coordination mechanism and the kind of shock. Fully 'Europeanised' bargaining with uniform wage increases would be more rigid than the general wage rules that apply so far. Demand shocks in a highly integrated sector are less likely to have strong asymmetric effects than supply shocks, if products are highly mobile and input factors are not. Secondly, Borghijs et al. (2003) show

⁽¹⁾ European Metalworkers' Federation (1998).

⁽²⁾ For an overview, see Dufresne and Mermet (2002) and Mermet (2002).

⁽³⁾ See Borghijs et al. (2003), Calmfors (2001) and Visser (2001).

⁽⁴⁾ See the overview in Flanagan (1999).

that strong coordination of trade unions' wage demands (such as demands for uniform wage increases) will increase wage mark-ups, thereby leading to higher unemployment ⁽¹⁾.

Since cross-border coordination is an issue of competitiveness, it is useful, in this subsection, to focus on nominal hourly wages. We chose four sectors: textiles, fabricated metal products, retail trade and financial intermediation.

Table 3 summarises correlations of wage increases across countries in the selected sectors for the period 1981–2001 ⁽²⁾. Correlations with the USA were also calculated in order to have an external reference. As could be expected, correlations appear to be stronger in the industrial sector than in services.

Table 3

Cross-country correlation of wage increases

	Significant pairs ⁽¹⁾		Average of all correlation coefficients
	Absolute	% age of possible	
Textiles	25	32	0.347
Fabricated metals	30	38	0.350
Retail trade	8	12	0.232
Financial Intermediation	12	15	0.269

⁽¹⁾ Number of pairs for which the value is above the critical value defined by Brandner and Neusser (1992). For the full sample 1981–2001, this value is 0.44.

Source: Commission services.

Textiles: For the full sample, co-movements are fairly strong, also beyond the EU. There seems to be an 'Atlantic' pattern including Finland, Sweden, the UK, the USA and to some extent France and Spain, but it does not hold if one looks at the shorter period 1990–2001. The strong correlation of Italian and Spanish wages, however, also holds in the shorter run. We have tested for potential imitation (i.e.

⁽¹⁾ The authors acknowledge, though, that there may be a counteracting effect through better anticipation of the monetary policy response.

⁽²⁾ The same was also carried out for the subperiod 1990–2001, for which a smaller number of significant correlations were detected. This is due to technical difficulties, on the one hand (smaller number of observations), and to the fact that the pace of disinflation was high in the 1980s and began levelling off in the 1990s (when inflation rates were already relatively low), on the other. The latter point implies that correlations based on the full sample may be biased upwards.

the 'convergence countries' would imitate wage developments in the 'core') by regressing Italian and Spanish wages on the unweighted average of Belgium, France, the Netherlands and Austria (Germany is excluded because of unification effects) and linear and geometric trends. For Italy, the wage increases of the core group as well as the (negative) linear trend are highly significant (Table 4), while for Spain only the linear trend variable turns out to be significant.

Table 4

Wage growth in the Italian textiles sector regressed on 'core' and trend

Variable	Coefficient	Standard error	t-statistic	Probability
C	10.032	3.171	3.164	0.005
CORE	0.887	0.359	2.470	0.024
LIN_TREND	-0.574	0.157	-3.652	0.002
R ²	0.742			
Adjusted R ²	0.713			

Source: Commission services.

Fabricated metal products: As could be expected, correlations turn out to be numerous and strong, although, for the shorter period, the picture is less clear. The sector is subject to intense competition, and the single market was completed early on. Moreover, the European Metalworkers' Federation was the first sectoral federation to adopt a rule for national bargaining, in 1998. Again, there is also a strong transatlantic dimension, probably indicating competitive pressures. The hypothesis that a long history of ECSC membership may have led to more intense wage coordination is tested by regressing Belgian wage increases on those in France, Germany, Italy and the Netherlands (i.e. founding members of the ECSC) ⁽³⁾. Again, the result is mixed: 'Germany turns out to have the wrong sign, while France is insignificant. However, Italy and the Netherlands turn out to be highly significant (Table 5). Again, we also investigate the wages in Spain and Italy in relation to the 'core', trying to disentangle trends from wage coordination. The hypothesis that wage developments of the core countries are imitated is rejected for both countries, while the negative linear trend indicating the slowdown of wage growth is highly significant.

⁽³⁾ ECSC stands for European Coal and Steel Community.

Box 1: The situation in Germany influenced by unification

Wage increases in Germany in the 1990s were strongly influenced by unification. In this context, three factors explain to a large extent the absence of significant correlations with wages in partner countries. (i) Technically, there is a break in the time series in 1992, when eastern Germany was first added to western Germany. (ii) Economically, due to the demand shock of unification, Germany moved into the recession of the early 1990s later than its neighbours. German wage growth in the early 1990s reflects this cyclical exception as well as (iii) the catching-up of eastern wages, which was particularly strong in the early years after unification due to the political will to equalise wages across the country (see graph below; note that these are monthly wages from national accounts).

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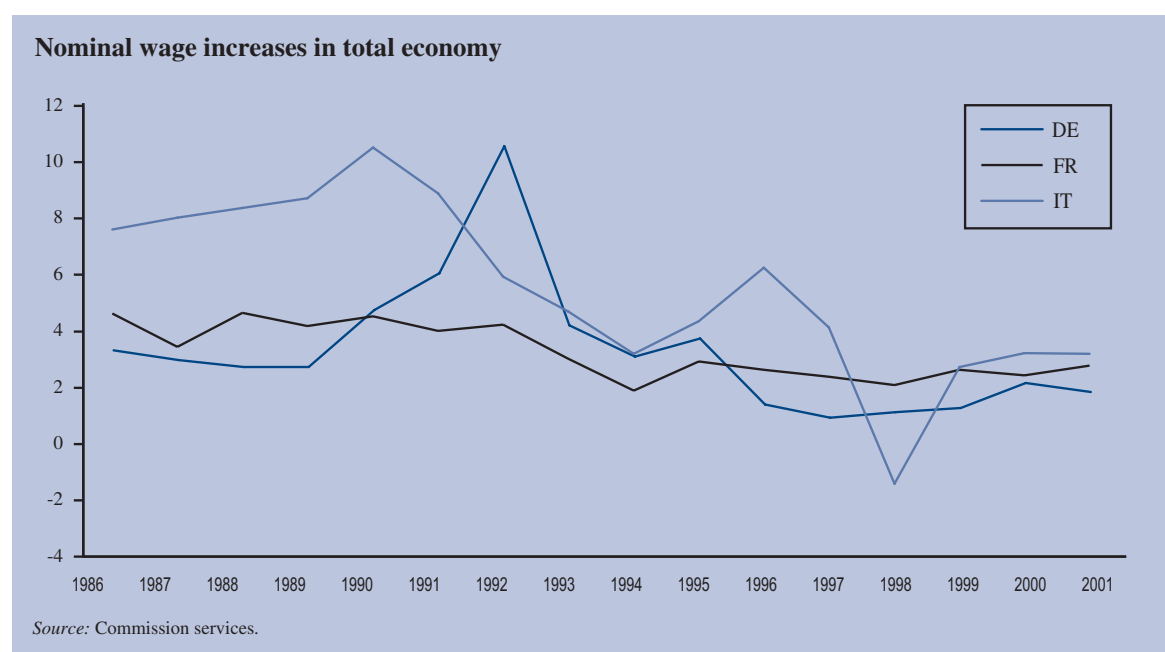


Table 5

Wage growth in the Belgian fabricated metal sector regressed on ECSC partners

Variable	Coefficient	Standard error	t-statistic	Probability
DE	-0.1222201	0.149721	-0.816	0.426
FR	0.04034	0.134436	0.3001	0.768
IT	0.341609	0.111018	3.0771	0.007
NL	0.502985	0.146058	3.4437	0.003
R ²	0.592236			
Adjusted R ²	0.520278			

Source: Commission services.

Retail trade: Since retail trade operates in local markets, there should not be much competitive pressure across

borders. Coordinated wage setting would therefore not make much sense. Indeed, cross-country correlations turn out to be the exception rather than the rule, although there are co-movements in the larger EU countries except Germany. Looking at the shorter period, the only significant correlation remaining is between Spain and Italy (a regression of Spanish on Italian wage increases turns out to be highly significant for both periods, but with little explanatory power).

Financial intermediation: Here, the number of observed correlations lies between the retail sector and the two industrial branches. Competitive pressure may be an explanation for more common wage spillovers across borders than in retail trade. The fact that correlations with the USA are quite strong, in particular in the UK, may point at the role of international players in shaping pay increases in national markets.

In conclusion, co-movements of wages clearly predate EMU and also reach beyond it: observed correlations are numerous and significant over the whole period of observation since 1980. Moreover, ‘Atlantic’ patterns are visible in three of the selected sectors. As one would expect, tradability seems to matter, as the evidence from the selected sectors suggests that correlations are stronger in the industrial sectors than in services. We had a particular look at the effect of formal coordination arrangements in the metalworking sector, but the result is mixed. The distorting effect of German unification obviously blurs the picture. As far as the ‘southerners’, Spain and Italy, are concerned, medium-term disinflation trends usually explain more of the wage developments than the imitation of wage developments in the ‘core’ group.

3.2.3. Correlation of wage developments across different sectors within a country (national coordination, pattern bargaining)

We finally look at correlations of annual increases of real wages across different sectors within the same economy ⁽¹⁾. The existence of strong correlations would indicate that wage developments in different sectors are somehow coordinated.

Correlations do not tell us which form of coordination may be prevalent, for example formal intersectoral coordination or ‘pattern bargaining’ whereby the wage agreement in one sector becomes the benchmark for negotiations in other sectors. Since only annual data are available, it is not possible either to check for forerunner–follower patterns. Therefore, the data need to be interpreted against the backdrop of other information available on forms of intersectoral wage coordination ⁽²⁾. The first finding is that correlation across sectors is relevant in all Member States for which data are available. Table 6 gives an initial impression by indicating the number of significant pairs of correlated sectors and the average value of the correlation coefficient across all sectors.

From the table, Belgium comes out clearly top of sectoral correlation, followed by a group of countries with

high sectoral correlation made up of Denmark, Germany, Italy and Austria. Spain and Finland range in the middle, while sectoral correlation is low in France, the Netherlands and the UK. The USA, which is used here as a benchmark outside the EU, also belongs to the middle group

These results are broadly in line with OECD indicators of wage bargaining coordination as well as our own earlier analyses. In Belgium, the biennial intersectoral wage norm sets a strong framework for sectoral wage negotiations. Wage correlations often reach beyond the broad sectors of the economy (e.g. there are strong co-movements of wages in the food-processing industry with certain services). The group of refining, chemical industry and rubber, and, to a lesser extent fabricated metal products and electronic valves, seems to play a central role both with respect to other industry sectors and with services (in particular, the insurance business) and the public sector.

In Germany and Austria, wage coordination is not formal, as in Belgium, but pattern bargaining is traditionally important, and strong trade union federations (DGB and ÖGB) play a coordinating role. Our analysis shows that in Austria, ‘central’ sectors, which have strong co-movements with wages in other sectors, are chemicals, refining and rubber, food-processing, and electronic valves as well as insurance. Metalworking comes out with surprisingly weak correlations. In Germany, unexpectedly, chemicals, basic and fabricated metals do not seem to be ‘central’ in terms of wage correlations, but car production is. Other sectors with numerous significant correlations are: food-processing, wood, furniture, trade and very strongly the public sector. The weak evidence for a central role of metalworking in both countries might be due to wage drift, if companies systematically pay extras to the agreed wage increases, but what influences the other sectors are negotiated wages. Further work is warranted to clarify this puzzle.

Wage negotiations at sectoral level set the framework for wage growth in Italy; the guidance from tripartite agreements is very general. Across sectors, pattern bargaining leads to a certain harmonisation. As expected, the broad metalworking sector (including mechanical engineering) plays a central role; this role is, however, even stronger for textiles and leather, as well as wood and paper. Other sectors for which we find an important number of correlations include food, chemicals, furniture, trade, and public administration.

⁽¹⁾ Social partners usually negotiate nominal wage increases. However, the sector correlations of nominal wages may be biased upwards, in the likely case that variations of inflation are incorporated in the same way into the pay increases of different sectors. In order to derive more conservative estimates, and since the focus of this subsection is not so much on competitiveness, we use real wage increases here.

⁽²⁾ See, for instance, the OECD indicators on bargaining coordination and centralisation; Barkbu et al. (2003) suggest broadening the framework by looking at five complementary indicators of coordination.

Table 6

Correlation of sectoral wage increases ⁽¹⁾

	Sectors	Significant pairs ⁽²⁾		Average of all correlation coefficients
		Absolute	% age of possible	
BE	42	708	82.2	0.60
DK	44	511 (525)	54.0 (55.4)	0.47
DE	42	505 (550)	58.1 (63.9)	0.49
ES	35	140 (183)	23.5 (30.8)	0.32
FR	40	97	12.4	0.13
IT	29	253	62.3	0.50
NL	49	95 (174)	8.1 (14.8)	0.15
AT	43	571	63.2	0.48
FI	48	286	25.4	0.27
UK	34	37 (91)	6.6 (16.2)	0.14
US	41	269 (280)	32.8 (34.1)	0.31

⁽¹⁾ Excluding data for certain years (excluded: Denmark 2000–01, Germany 1992, 2001; Spain 1981–85 and 2000–01; the Netherlands 1981–87; UK 1981–89 and 2001; USA 2001).

⁽²⁾ Number of pairs for which the value is above the critical value defined by Brandner and Neusser (1992) $[2/\sqrt{N}]$. For the full sample (1981–2001), this value is 0.44. Where the sample is smaller, the critical value is higher, but we also indicate the number of coefficients > 0.44 in brackets.

Source: Commission services.

In Denmark, intersectoral negotiations are fairly general. The framework for wage increases is mostly defined by sectoral agreements at national level, which are then supplemented by more detailed firm-level bargaining. This framework notwithstanding, our evidence indicates central roles for food-processing, mechanical engineering, construction and trade. Given that formal bargaining structures are quite decentralised, this evidence is rather surprising.

In Finland, national wage agreements define basic wage increases for two years. These are topped-up at sectoral level. If national negotiations fail, there is a certain degree of pattern bargaining across sectors. Our data show such patterns, which are limited to the industrial sector, around food, wood and paper and the broad area of metalworking. Formal intersectoral wage coordination in Spain is rather weak, but there is some pattern bargaining. The data show that chemicals, non-metal minerals and metalworking play a certain role in this respect. Moreover, the public sector seems to have a benchmarking function for a number of services.

No patterns are visible for France or the UK. In both countries, there is no formal coordination at the intersectoral level and bargaining is fairly (France) to completely (UK) decentralised. Also for the Netherlands, the data do not show any systematic pattern, although the Labour Founda-

tion usually gives general recommendations on wage developments and some pattern bargaining is reported. Data limitations and the specific labour market situation in recent years may explain the failure to detect patterns. In fact, data are only available for the period 1988–2001, part of which was marked by labour market tightness that may have triggered wage divergence.

Despite the absence of formal coordination and completely decentralised bargaining, our data also show some, albeit limited, patterns for the USA, where sectors such as wood, paper and print show some correlation with furniture, energy providers and construction, and mechanical engineering, office machines, wires and valves form a second cluster ⁽¹⁾.

In conclusion, the observed correlations across sectors permit establishing a ranking of countries that is broadly in line with our knowledge about wage bargaining structures as well as formal and informal wage coordination across sectors. Moreover, the data allow us to tentatively identify sectors which seem to play a central role in pattern bargaining. However, further analysis is required. Firstly, the ranking results for the Netherlands and Den-

⁽¹⁾ There is some pattern bargaining, though, within specific industrial branches; see Marshall and Merlo (1999).

mark (and to some extent the USA) do not conform with conventional wisdom. Secondly, the role of the presumably leading sectors in pattern bargaining is not always confirmed. It would be useful to take negotiated wages into account in future analysis in order to be able to identify wage drift.

3.2.4. Summing up

Do wage levels converge as economic integration becomes stronger?

One central finding is that the convergence of wages and unit labour costs has not waited for the single market, let alone EMU, to be completed. Generally, convergence was stronger in the 1980s than in the 1990s. We find that ULCs converged in most sectors during the observation period. However, they do not follow a uniform pattern. Strong convergence in high-tech industries contrasts with more moderate convergence in a majority of sectors and little to none in some. Hourly nominal wages generally did not converge in absolute terms, as they continued to increase. Relative dispersion, however, decreased in a large majority of sectors. Again, in the 1990s, some of the earlier convergence was reversed. Here, too, the strength of convergence differs across sectors, and it seems to be stronger in the industrial sector than in services.

Is there evidence of cross-border coordination of wage bargaining in the EU?

Looking at annual wage increases, we find strong cross-country correlations in the two selected industrial sectors (textiles and fabricated metal products), while, in retail trade, the cross-country correlation is much weaker; the financial intermediaries lie in-between. Stronger concerns about safeguarding competitiveness

in the tradables sector may explain this observation. However, more detailed analysis of co-movements in the metal sector among founding members of the ECSC leads to mixed evidence. At least in the case of Germany, this may be explained by the repercussions of unification. Concerning the two big southern Member States, the effect of a disinflation trend is generally stronger than that of imitating wage developments in the 'core'. What is more, correlations of wage increases are neither in time nor in space limited to EMU. In fact, a transatlantic dimension is discernible in three of the four selected sectors.

How strong are the effects of wage bargaining coordination within countries?

Given the relevance the literature attaches to the effect of wage bargaining coordination on the outcome of wage agreements, it is of particular interest to explore evidence of wage co-movements across sectors. We are able to establish a broad ranking of countries in terms of strong to weak correlations of sectoral wage increases. This ranking broadly coincides with our knowledge of bargaining structures and formal as well as informal bargaining coordination. Coordination is strongest in Belgium, followed by still high sectoral correlation in Denmark, Germany, Italy and Austria. Spain, Finland and the USA rank in the middle, while no systematic pattern of correlation is visible in France, the Netherlands or the UK ⁽¹⁾. Further analysis should also take wage drift into account.

⁽¹⁾ We argue that the lack of observed correlations in the case of the Netherlands may be due to data restrictions as well as the exceptional labour market situation in the late 1990s.

4. Concluding remarks

Both common macroeconomic shocks and country-specific developments have in recent years subjected the flexibility of wage setting mechanisms in the euro area to a stress test. From a bird's eye perspective, it is probably fair to say that overall wage discipline has been preserved, and concerns that the inflation overshoot would lead to extended second-round wage effects appear to have been misplaced. However, with nominal wage growth rather invariant to the cyclical situation, the slowdown in labour productivity growth translated into greater increases of nominal unit labour costs in 2001 and 2002, clearly exceeding the benchmark value consistent with the monetary policy goal to keep inflation close to but below 2 %. Still, with labour productivity growth expected to pick up again at the present conjuncture, nominal unit labour cost growth in the euro area is forecast to return to well below 2 % next year.

After a prolonged period of declining real unit labour costs, the fall in the wage share came to a halt at the turn of the decade; but indications are that real unit labour cost growth has re-entered negative terrain recently. Obviously, the wage share cannot and will not fall forever. However, real wage moderation, in the sense of reducing the mark-up of effective wages over competitive wages, helps to increase employment and lower structural unemployment over the medium term, without necessarily compromising domestic demand in the economy. This assertion is not only solidly backed by standard economic theorising, but also by the factual experience of many euro-area countries, in particular in the second half of the 1990s. It should also be noted in this context that aggregate real wage moderation is a fairly poor substitute for wage differentiation when it comes to helping to price the low-skilled back into jobs.

The observed stability in overall wage developments at the euro-area level masks fairly different nominal unit labour cost developments across countries. Over the past five years, Germany and Austria have significantly improved their relative position in the euro area. This

also holds true for Greece during the run-up period to entry into EMU. In Spain, Ireland, Luxembourg, the Netherlands and Portugal, on the other hand, nominal unit labour costs increased considerably faster than in the euro area as a whole. While the resulting realignment of intra-area labour cost competitiveness may not be unwarranted in most cases, in some others, such as in Portugal, it will require corrections that could become costly in terms of output and employment.

Conventional wisdom holds that wage formation mechanisms in Europe are characterised by a high degree of rigidity and slow adjustment to shocks. However, in line with findings from other studies, formal econometric analysis of Phillips-curve-type wage equations suggests that wage inflation persistence is not higher in the euro area than in the USA. Taken at face value, these results would imply that the more sticky inflation developments in the euro area in recent years can hardly be ascribed to a higher degree of nominal wage rigidities.

The finding of broadly similar degrees of nominal inertia across several different countries in the euro area, and in the euro area and the USA, makes it difficult to identify institutional labour market characteristics as the major determinants of nominal rigidities. Thus, while institutional and structural factors are probably key to an understanding of what determines the mark-up of effective wages over competitive wages and, in consequence, the level of equilibrium unemployment over the medium term, institutional labour market characteristics appear to be of less importance for the degree of nominal inertia in the economy.

The emergence of stronger wage interdependencies across countries and higher goods market integration can affect the way in which shocks are absorbed and transmitted in EMU. The stylised model simulation exercises presented in this chapter suggest that, with stronger interdependent wage setting, the adjustment process does not look very different in the case of a supply shock,

while it becomes more protracted in the case of a demand shock. Perhaps more significant is the difference in the transmission patterns of a wage push shock; when goods markets become fully integrated, the negative spillover effect from a 'local' wage shock to other countries tends to disappear. However, this result obviously only holds in the absence of interdependent wage setting behaviour.

Looking at the issue of wage pattern bargaining and wage convergence from a detailed sectoral perspective yields a fairly differentiated picture. One central finding is that the convergence of wages and unit labour costs has not waited for the single market, let alone EMU, to be completed. Generally, convergence was, in fact, stronger in the 1980s than in the 1990s. While unit labour costs converged in most sectors during the observation period, the strength of convergence differed across sectors, and it appears to have been stronger in the industrial sector than in services. With respect to annual wage increases, the analysis identifies strong cross-country correlations in the two selected industrial sectors (textiles and fabricated

metal products), while, in retail trade, the cross-country correlation is much weaker; the financial intermediaries lie in-between. However, correlations of wage increases are neither in time nor in space limited to EMU, with a transatlantic dimension discernible in three of the four selected sectors.

Finally, given the relevance the literature attaches to the effect of wage bargaining coordination on the outcome of wage agreements, it has been of particular interest to explore evidence of wage co-movements across sectors in individual countries. The analysis has established a broad ranking of countries in terms of strong to weak correlations of sectoral wage increases. Coordination is strongest in Belgium, followed by still high sectoral correlation in Denmark, Germany, Italy and Austria. Spain, Finland and the USA rank in the middle, while no systematic pattern of correlation is visible in France, the Netherlands or the UK. This ranking appears to be broadly consistent with general perceptions of bargaining structures and formal as well as informal bargaining coordination.

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Annex 1

The Phillips curve model used

The Phillips curve model

Following standard textbooks, there are broadly four different hypotheses trying to describe the labour market: the neoclassical view, the efficiency wage approach, the wage bargaining theory and the search model. Pissarides (1998) provides an extensive discussion of wage rules under these four hypotheses. A generic wage rule which covers all standard hypotheses has wages determined as a function of the expected price level, a measure of the reservation wage, productivity and the unemployment rate. Blanchard and Katz (1999) also use such a rule as the starting point of their discussion of the NAIRU. Such a rule as specified by equation (1) also serves as the basis for the discussion in this note.

$$w_t - pc_t^e = a_0 + (1 - \mu)b_t^e + \mu pr_t^e - \beta u_t + a_t^w \quad (1)$$

Workers/trade unions negotiate a nominal wage W_t at time t conditional on consumer price expectations pc_t^e , on the expected level of the reservation wage b_t^e , on expected productivity pr_t^e ⁽¹⁾ and on the unemployment rate u_t . The term a_t^w is a shock to the wage setting rule that can be autocorrelated.

Labour demand is formulated in terms of a first-order condition for an optimising, not necessarily perfectly competitive firm, which equates the real wage to the marginal revenue product of labour (MRPL) as expressed by equation (2). The MRPL can be decomposed into average labour productivity and a residual term (x) which can contain other factors such as a markup or efficiency shocks. The left-hand side of equation (2) can also be denoted as the ‘demand wage for labour’, which is the wage the firm is willing to pay for a given level of productivity.

$$w_t - p_t = (y_t - l_t) + x_t \quad (2)$$

⁽¹⁾ The notion of productivity entering the wage equation is discussed in more detail below.

The variable x can itself be a function of various factors, both structural (x^*) and cyclical (ρ). For expositional purposes, it is useful to distinguish between these two components, though it is not assumed that the econometrician can actually observe these components separately. Therefore we write

$$x_t = x_t^* + \rho_t \quad (3)$$

We are not making an a priori restriction about the concept of productivity used by workers in setting wages and define the concept of productivity entering the wage rule as

$$pr_t = (y_t - l_t) + \psi x_t, \quad 0 \leq \psi \leq 1 \quad (4)$$

In one extreme case, when $\psi = 0$, workers use average productivity when setting wages; and, in the other extreme, when $\psi = 1$, then workers set wages according to the marginal revenue product of labour.

We also express the reservation wage as a fraction of productivity

$$b_t = b_t^0 + pr_t \quad (5)$$

where b_t^0 is the logarithm of the replacement rate, which in general terms is the wage which can be earned if not employed. Notice that as b_t^0 is allowed to vary over time, the formulation (5) is not restricting the dynamics of the reservation wage.

Adjustment of wages to inflation and productivity

Adjustment of wages to economic conditions can be delayed because of limited information in the formation of expectations or because of institutional rigidities (e.g. a fixed contract length). We consider two types of adjustment scheme, moving average and adaptive expectations. Modelling expectations or more generally the adjustment of wages to inflation and productivity as a

moving average of current and past inflation and productivity growth as in equations (6a) and (6b) is quite popular in the NAIRU literature. With annual data, an MA (2) process seems sufficient:

$$\pi_t^e = a\pi_t + (1-a)\pi_{t-1} \quad (6a)$$

$$\Delta pr_t^e = c\Delta pr_t + (1-c)\Delta pr_{t-1} \quad (7a)$$

The degree of nominal rigidity is proportional to $(1-a)$, while the degree of real rigidity is proportional to $(1-c)$. Alternatively, we also allow for adaptive expectation schemes such as in equations (6b) and (7b). Such schemes would be consistent with formulations of the Phillips curve where the change in wage inflation responds to a quasi first or second difference in the unemployment gap. Such representations of the Phillips curve seem to be more data congruent in some countries. We also allow for combinations between (6, 7a) and (6, 7b) in the regressions.

$$\pi_t^e = a\pi_{t-1} + (1-a)\pi_{t-1}^e \quad (6b)$$

$$\Delta pr_t^e = c\Delta pr_{t-1} + (1-c)\Delta pr_{t-1}^e \quad (7b)$$

Deriving the Phillips curve

Equations (1) to (7b) can be used to derive the Phillips curve. It is useful to proceed in two steps by first deriving an expression for the structural unemployment rate and in a second step determine the dynamics of wages as a function of the unemployment gap.

Step 1: The structural unemployment rate

The structural unemployment rate is defined as the level of unemployment which is generated in this labour market when there are no expectation errors on prices and productivity and no terms of trade shocks, i.e. $pc_t^e = p_t$, $pr_t^e = pr_t$ and when the wage share is equal to its structural value, i.e. $x_t = x_t^*$. Under these conditions, the equilibrium unemployment rate is given by

$$u_t^* = [a_0 + (1-\mu)b_t^0 + (\psi-1)x_t^*] / \beta \quad (8)$$

Equation (8) shows that the equilibrium level of unemployment depends positively on the reservation wage (which itself is a function of labour taxation,

unemployment replacement rate, etc.), and negatively on the trend wage share, provided workers do not take into account changes to the demand wage in wage setting. It is also important to note that the long-run Phillips curve is vertical, i.e. u^* does not depend on nominal variables such as the inflation rate, the rate of money growth or nominal interest rates.

Step 2: Dynamics of the Phillips curve

Using equations (1) and (8), one can express wages as a function of the unemployment gap

$$w_t - pc_t^e = (y_t - l_t)^e + \psi x_t^e - (\psi - 1)x_t^* - \beta(u_t - u_t^*) + a_t^w \quad (9)$$

Equation (9) can also be reformulated in rates of change

$$\Delta w_t = \pi_t^e + \Delta(y_t - l_t)^e + \psi \Delta x_t^e - (\psi - 1)\Delta x_t^* - \beta(u_t - u_t^*) + a_t^w \quad (10)$$

Using the expectation rules (6, 7a), the following Phillips curve can be derived:

$$\Delta^2 w_t = \beta^y \Delta^2 (y_t - l_t) + \beta^x \Delta^2 x_t + \beta^{tot} \Delta^2 tot_t - \beta^u (u_t - u_t^*) + v_t^w \quad (11a)$$

Combining adaptive inflation expectations with MA expectations for productivity and the wage share yields

$$\begin{aligned} \Delta^2 w_t = & \sum_{i=0}^1 \beta_i^y \Delta^2 (y_{t-i} - l_{t-i}) \\ & + \sum_{i=0}^1 \beta_i^x c_i \Delta^2 x_{t-i} \\ & + \sum_{i=0}^1 \beta_i^{tot} c_i \Delta^2 tot_{t-i} \\ & - \beta_i^u \left[(u_t - u_t^*) - (1-a)(u_{t-1} - u_{t-1}^*) \right] \\ & + v_t^w \end{aligned} \quad (11b)$$

Adaptive inflation and adaptive productivity expectations yields

$$\begin{aligned} \Delta^2 w_t = & \sum_{i=0}^2 \beta_i^y \Delta^2 (y_{t-i} - l_{t-i}) \\ & + \sum_{i=0}^2 \beta_i^x \Delta^2 x_{t-i} \\ & + \sum_{i=0}^2 \beta_i^{tot} \Delta^2 tot_{t-i} \\ & - \beta_i^u \left[(u_t - u_t^*) - (2-a-c)(u_{t-1} - u_{t-1}^*) \right. \\ & \left. + (1-c)(u_{t-2} - u_{t-2}^*) \right] \\ & + v_t^w \end{aligned} \quad (11c)$$

The standard Phillips curve suggests a relationship between the change in wage inflation and the unemployment gap which can be subject to various shocks, in particular shocks to labour productivity, terms of trade and the wage share. The shocks are expressed as changes in the growth rate of the relevant variables. Finally, depending on how wages adjust to inflation and productivity affects the dynamic response of wages to the unemployment gap as given by different distributed lag schemes of the unemployment gap in the Phillips curve.

Adding the wage share as an additional explanatory variable

The theoretical model outlined above suggests that shocks to labour demand as captured by the variable x and represented by the wage share could play a crucial role for wages. The importance of the wage share has been recognised before (see, for example, Blanchard and Katz, 1999; Gordon, 1990). A comparison of Tables A1 and A2 shows that allowing for a second difference in the log wage share does indeed improve the fit of the regressions for nearly all countries; it also makes other shocks more significant. The estimated coefficients are consistent with the theoretical prediction for productivity, terms of trade and wage share.

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Table A.1

Regression results, 1963–2004

	Constant	$\Delta^2(Y_t - I_t)$	$\Delta^2(Y_{t-1} - I_{t-1})$	$\Delta^2 tot_t$	$\Delta^2 tot_{t-1}$	$u_t - u_t^*$	$u_{t-1} - u_{t-1}^*$	$u_{t-2} - u_{t-2}^*$	R**2	Q-statistic, p-value
BE	-0.0015 (0.50)	0.34 (2.32)		0.30 (1.15)	0.08 (0.34)	-1.46 (3.08)	1.06 (2.22)		0.28	0.49
DK	-0.0027 (0.79)						-0.86 (1.78)		0.19	0.75
DE	-0.0013 (1.53)	0.48 (1.96)	0.39 (1.14)			-1.64 (2.34)	1.50 (1.95)		0.38	0.75
EL	-0.0009 (0.23)	0.13 (0.94)				-0.61 (1.59)			0.49	0.97
ES	0.0000 (0.00)	0.32 (2.04)			0.95 (4.14)	-0.93 (3.07)	0.59 (1.75)		0.40	0.71
FR	-0.0011 (0.70)			0.58 (1.93)		-0.32 (1.50)			0.30	0.57
IE	-0.0024 (0.45)				0.56 (2.78)	-0.93 (1.46)	0.38 (0.62)		0.45	0.26
IT	-0.0020 (0.60)				0.32 (0.76)	-4.10 (2.03)	6.95 (3.34)	-2.23 (1.03)	0.06	0.41
LU	-0.0013 (0.70)	0.19 (1.47)		0.30 (1.18)		-1.22 (2.06)			0.17	0.91
NL	-0.0027 (1.32)					-0.38 (1.85)			0.11	0.60
AT	-0.0014 (0.67)					-1.27 (1.96)			0.27	0.96
PT	0.0000 (0.00)				0.37 (1.20)	-0.89 (2.31)			0.19	0.86
FI	-0.0021 (1.97)					-0.85 (2.03)	0.82 (1.56)		0.23	0.07
SE	-0.0015 (0.94)					-0.85 (1.43)	0.86 (1.30)		0.18	0.50
UK	-0.0005 (0.15)						-1.54 (2.76)		0.24	0.99

Source: Commission services, t-statistics in parentheses.

Table A.2

Regression results, 1963–2004, wage share as an additional variable

	Constant	$\Delta^2(y_t - I_t)$	$\Delta^2(y_{t-1} - I_{t-1})$	$\Delta^2 tot_t$	$\Delta^2 tot_{t-1}$	$u_t - u_t^*$	$u_{t-1} - u_{t-1}^*$	$u_{t-2} - u_{t-2}^*$	R**2	Q-statistic, p-value
BE	-0.0009 (0.35)	0.63 (5.46)		0.19 (1.43)	1.01 (5.87)	-0.24 (1.63)			0.57	0.10
DK	-0.0015 (0.63)	0.39 (2.86)		0.18 (1.46)	0.93 (9.10)	-0.35 (2.24)			0.68	0.71
DE	-0.0006 (0.35)	0.86 (8.25)		0.29 (3.75)	1.41 (11.12)	-0.38 (1.83)			0.83	0.14
EL	0.0006 (0.10)	0.54 (3.75)		0.43 (3.30)	0.56 (5.46)	-0.71 (2.18)			0.49	0.83
ES	-0.0021 (0.65)	0.77 (3.30)		0.42 (3.13)	0.45 (2.57)	-1.01 (3.75)	0.73 (2.61)		0.43	0.51
FR	-0.0002 (0.13)	0.79 (3.28)	0.26 (1.83)	0.51 (3.49)	1.13 (8.54)	-1.08 (1.83)	1.90 (1.75)	-1.29 (1.93)	0.76	0.37
IE	-0.0017 (0.42)	0.11 (0.49)		0.59 (0.86)	0.19 (1.11)	-2.71 (1.97)	-0.88 (1.56)	0.77 (1.42)	0.42	0.39
IT	-0.0006 (0.14)	0.78 (2.33)		0.21 (0.93)	0.70 (3.22)	-2.71 (1.97)	4.48 (2.76)	-2.36 (1.59)	0.32	0.13
LU	-0.0011 (0.15)	0.61 (3.29)		0.14 (1.05)		-1.03 (1.35)			0.32	0.75
NL	-0.0027 (1.13)	0.82 (4.27)		0.14 (1.05)	0.88 (6.03)	-0.06 (0.30)	-0.32 (1.29)		0.53	0.12
AT	-0.0011 (0.72)	0.42 (3.50)		0.60 (7.04)	0.78 (8.74)	-1.63 (3.85)			0.74	0.66
PT	-0.0025 (0.02)	0.80 (7.28)		0.11 (0.43)	1.02 (6.59)	-2.31 (3.92)	2.67 (2.92)	-2.70 (4.11)	0.66	0.42
FI	-0.0021 (0.58)	0.07 (0.24)		0.80 (5.79)	0.45 (2.34)	-1.21 (1.60)	1.90 (1.45)	0.82 (0.98)	0.37	0.09
SE	-0.0009 (0.24)	0.55 (2.44)		0.80 (5.79)	0.87 (5.20)	-0.47 (0.73)	0.47 (0.91)		0.53	0.32
UK	-0.0007 (0.17)	0.56 (5.09)		1.10 (10.77)	1.10 (10.77)	-1.65 (4.40)	0.49 (1.38)		0.49	0.01

Source: Commission services.

Annex 2

A model of wage interdependencies

This annex presents a simple textbook example to illustrate the interdependencies between wage formation, inflation and monetary policy resulting in potential externalities and cross-country spillover effects ⁽¹⁾. Let $i = 1 \dots N$ index countries within a currency union sharing the same monetary policy.

Wage setting (expectations augmented Phillips curve)

$$\hat{W}_{it} = \frac{W_t - W_{t-1}}{W_{t-1}} = \pi_t^e + \varepsilon_i(Y_{it} - Y_i^*)$$

where π_t^e is expected inflation (assumes that the consumer basket is the same in all countries, hence no i index), Y_{it} denotes actual activity, and Y_i^* structural activity (related to the structural unemployment rate in country i via Okun's law).

Price setting (mark-up pricing)

$$P_{it} = mW_{it}$$

$$\pi_{it} = \frac{P_{it} - P_{it-1}}{P_{it-1}} = \hat{W}_{it}$$

Aggregate inflation

$$\pi_t = \sum_{j=1}^n \alpha_j \pi_j$$

where α_j denotes the relative weight (size) of country j in the currency union, where

$$\sum_{j=1}^n \alpha_j = 1$$

⁽¹⁾ This textbook-style example has been developed with the help of Torben M. Andersen when he was a Visiting Fellow at the Economic and Financial Affairs DG in 2003.

Aggregate demand

$$Y_{it} = -\Lambda r_t + u_{it}$$

where u_{it} is an aggregate demand shock, and r_t the (expected) real rate of interest (thus representing the monetary policy instrument for given expectations). Note that for simplification all other variables of importance for aggregate demand are kept constant and hence neglected.

Country-specific inflation

$$\begin{aligned} \pi_{it} &= \pi_t^e + \varepsilon_i(Y_{it} - Y_i^*) \\ &= \pi_t^e + \varepsilon_i(-\Lambda r_t + u_{it} - Y_i^*) \end{aligned}$$

Aggregate inflation

$$\begin{aligned} \pi_t &= \sum_{j=1}^n \alpha_j [\pi_t^e + \varepsilon_j(-\Lambda r_t + u_{jt} - Y_j^*)] \\ &= \pi_t^e - \Lambda \left[\sum_{j=1}^n \alpha_j \varepsilon_j \right] r_t + \left[\sum_{j=1}^n \alpha_j \varepsilon_j u_{jt} \right] - \left[\sum_{j=1}^n \alpha_j \varepsilon_j Y_j^* \right] \end{aligned}$$

Monetary policy — inflation targeting

The monetary policy instrument is set so as to meet the inflation target — for simplicity, assumed to be zero inflation.

$$\pi_t = 0$$

which implies that (setting $\pi_t^e = 0$ in accordance with the inflation target)

$$r_t = \frac{1}{\Lambda \left[\sum_{j=1}^n \alpha_j \varepsilon_j \right]} \left[\left[\sum_{j=1}^n \alpha_j \varepsilon_j u_{jt} \right] - \left[\sum_{j=1}^n \alpha_j \varepsilon_j Y_j^* \right] \right]$$

Equilibrium output

$$Y_{it} = -\Lambda r_t + u_{it}$$

$$= \frac{1}{\sum_{j=1}^n \alpha_j \varepsilon_j} \left[\sum_{j=1}^n \alpha_j \varepsilon_j u_{jt} \right] - \left[\sum_{j=1}^n \alpha_j \varepsilon_j Y_j^* \right] + u_{it}$$

Thus,

$$\frac{\partial Y_{it}}{\partial u_{it}} = 1 - \frac{\alpha_i \varepsilon_i}{\left[\sum_{j=1}^n \alpha_j \varepsilon_j \right]} < 1 \quad \frac{\partial Y_{it}}{\partial u_{jt}} = \frac{-\alpha_j \varepsilon_j}{\left[\sum_{j=1}^n \alpha_j \varepsilon_j \right]} < 0$$

$$\frac{\partial Y_{it}}{\partial Y_j^*} = \frac{\alpha_i \varepsilon_i}{\left[\sum_{j=1}^n \alpha_j \varepsilon_j \right]} < 1 \quad \frac{\partial Y_{it}}{\partial Y_j^*} = \frac{\alpha_j \varepsilon_j}{\left[\sum_{j=1}^n \alpha_j \varepsilon_j \right]} > 0$$

Hence, there is (i) some crowding-out of a domestic demand shock, (ii) a negative transmission of demand shocks across countries, (iii) a country reducing structural unemployment and hence increasing structural output does not reap the full benefit in terms of an expansion in output, and (iv) a structural improvement in a country is to the benefit of other countries (i.e. there is a positive spillover effect, suggesting that non-cooperative policies lead to insufficient structural reforms — not all the gains are reaped by the country undertaking the reform).

Note with complete symmetry ($\varepsilon_i = \varepsilon_j$ for all i) we have

$$\frac{\partial Y_{it}}{\partial u_{it}} = 1 - \alpha_i \quad \frac{\partial Y_{it}}{\partial u_{jt}} = -\alpha_j$$

$$\frac{\partial Y_{it}}{\partial Y_j^*} = \alpha_i \quad \frac{\partial Y_{it}}{\partial Y_j^*} = \alpha_j$$

with the implications that (i) crowding-out effects are larger in large countries than in small countries, (ii) spillover effects are larger from large to small countries than vice versa, (iii) gains from structural improvements are larger in large countries than in small countries, and (iv) spillover effects from structural improvements are larger from large countries to small countries than vice versa.

Illustrative case: N = 2

$$\frac{\partial Y_{1t}}{\partial u_{1t}} = \frac{\alpha_2 \varepsilon_2}{\alpha_1 \varepsilon_1 + \alpha_2 \varepsilon_2} < 1 \quad \frac{\partial Y_{1t}}{\partial u_{2t}} = \frac{-\alpha_2 \varepsilon_2}{\alpha_1 \varepsilon_1 + \alpha_2 \varepsilon_2} < 0$$

$$\frac{\partial Y_{1t}}{\partial Y_1^*} = \frac{\alpha_1 \varepsilon_1}{\alpha_1 \varepsilon_1 + \alpha_2 \varepsilon_2} < 1 \quad \frac{\partial Y_{1t}}{\partial Y_2^*} = \frac{\alpha_2 \varepsilon_2}{\alpha_1 \varepsilon_1 + \alpha_2 \varepsilon_2} < 0$$

The following additional points emerge on the importance of asymmetries in the ‘weighted speed of adjustment’ ($\alpha_i \varepsilon_i$) (i) the more flexible foreign labour markets (i.e. the higher $\alpha_2 \varepsilon_2$), the larger the crowding-out to domestic demand shocks, and the larger the negative spillover of foreign demand shocks, (ii) the more flexible the domestic wages (i.e. the higher $\alpha_1 \varepsilon_1$), the higher the domestic benefit from an increase in the domestic structural output level, and (iii) the less the domestic gain from an improvement abroad.

Note that the role of ε is slightly different than usually perceived — a larger ε (equivalent to a smaller sacrifice ratio) is in standard interpretation equal to a more flexible labour market. However, due to the interaction between wages, inflation and monetary policy, the result here is that the larger ε is, the more wages respond to a given shock, and the larger the induced monetary policy reaction other things being equal.

Annex 3

Recent developments in bargaining systems

Recent developments in EU-15

In earlier issues of this review, two simultaneous trends in wage bargaining structures were identified. Firstly, wage determination is becoming more decentralised, mostly through informal changes in bargaining systems, and, secondly, wage coordination at the national or intersectoral level seems to be a more or less stable feature also after the start of EMU. Are these observations still relevant? Is there any new evidence of changes in bargaining systems related to EMU? In an attempt to provide insight into these issues, this section briefly presents recent developments in wage bargaining structures.

Overall, union membership continues to decline, but, as Checchi and Lucifora (2002) point out, the aggregate figures conceal the heterogeneity of countries with low and declining membership and countries with high unionisation. The available data suggest that the pace of decline has decreased as trade unions are merging and restructuring and trying to better respond to their members' preoccupations. Such reorganisation is also common among employers' associations. In Germany, some employers' associations now offer a 'light' form of membership that does not involve the obligation to apply the sectoral collective agreement.

Bargaining coverage has remained broadly stable in most Member States over the past decade. Significant reductions have been reported in Germany and the United Kingdom. In both countries, social partners have found it hard to cover new firms, in particular SMEs. In addition, in Germany, many employers, in particular in the east, have left the employers' association. This allows them to avoid the application of collective agreements. In the UK, multi-employer bargaining has further eroded. By contrast, in Denmark, coverage has increased as social partners have successfully integrated service sector branches and white-

collar workers. High levels of bargaining coverage (Table A3.1) are furthermore strongly related to extension mechanisms (i.e. provisions that make collective agreements applicable to non-signatories).

Formal wage coordination at the national or intersectoral level remained dynamic in 2002–03⁽¹⁾. In Belgium, Greece, Spain, Ireland and Finland, expiring agreements were followed up by the conclusion of new ones. In the Netherlands, for the first time in a decade, a tripartite 'social agreement' recommended a wage ceiling. In Portugal, the government proposed a 'social pact' for a medium-term orientation of bargaining and wage moderation in June 2003. However, as in the past, the extent to which these agreements are binding for lower-level negotiations varies considerably across countries. In general, some flexibility is provided for taking the specific situation of sectors and firms into account. Promises by the government to decrease taxes or to increase transfers continued to play an important role in promoting agreements; the notable exception being the Irish national agreement for 2003–05, which was for the first time concluded without such 'tax sweeteners'. In Germany, the 'Alliance for Jobs' could not be revived in 2003; in any event, with the exception of the year 2000, the Alliance had not issued any recommendations for wage settlements.

At the same time as coordination continues to strive, decentralisation of bargaining is also a confirmed trend. Variable forms of pay, related to individual achievements and to the situation of the company, are becoming more widespread. The new labour code in Portugal gives individuals the right to sign up to collective agreements.

⁽¹⁾ On the incentives for central coordination, see Calmfors (2001) who predicts that coordinated wage setting will ultimately break down as union density continues to decline.

Table A3.1

Collective bargaining coverage, 2001

	Sector			Level ⁽¹⁾	
	Total	Private	Public	Multi-employer	Single employer
BE	> 90	n.a.	n.a.	n.a.	n.a.
DK	83	71	100	45	25
DE (W/E)	n.a.	70/55	n.a.	63/46	7/10
EL	n.a.	n.a.	n.a.	n.a.	n.a.
ES	68	n.a.	n.a.	66	9
FR	90–95	n.a.	n.a.	n.a.	n.a.
IE	88 ⁽²⁾	n.a.	n.a.	n.a.	n.a.
IT	60 ⁽³⁾	n.a.	n.a.	n.a.	n.a.
LU	48	n.a.	n.a.	60	40
NL	88	86	100	68	14
AT	78	98	0	95	3
PT	62 ⁽⁴⁾	89	81	84	5
FI	90 ⁽⁴⁾	n.a.	n.a.	n.a.	n.a.
SE	> 90	> 90	100	n.a.	n.a.
UK	36	22	73	5	26

⁽¹⁾ Private sector only, except Germany and Spain. Double counting in case of multilayer negotiation.

⁽²⁾ Of companies (EIRO).

⁽³⁾ Economic and Financial Affairs DGs wage monitor.

⁽⁴⁾ Different method of calculation (EIRO, 2002).

Sources: EIRO and Commission services.

Wage differentiation in public sector collective agreements is sought in the UK, mostly because of recruiting problems in the south-east. In Germany, the *Land* of Berlin left the traditional bargaining union of all public employers in 2002–03, allowing it to reduce personnel costs. France announced a reform to relax the ‘favourability’ principle by which lower-level agreements can only be more favourable than sectoral agreements.

Bargaining systems in the 10 acceding countries

Average union membership in the central and east European (CEE) acceding countries is well below the EU level (21.9 % of employees against 30.4 % in the EU). Cyprus and Malta, however, have high union density rates of 70 and 65 %, respectively. Also, the direct coverage of collective agreements in the acceding countries (ACs) is significantly lower than in the EU. The average masks a great variety, though, that ranges from 10 to 15 % in Lithuania to almost 100 % in Slovenia (where collective bargaining is mandatory). This low bargaining

coverage in a number of ACs is mostly related to low union presence, in particular in small and medium-sized firms in the private sector.

Bargaining coordination across firms and sectors is weak in the ACs, with the exception of Slovenia. However, all ACs have tripartite bodies at national level. In the transition economies, they used to play a privileged role in accompanying and steering the restructuring of the economy and consequently benefit from well-established structures. While, during the early stages of transition, tripartism was often used to implement centralised wage policies, its impact on wage developments is far more limited today. In the CEE acceding countries, the tripartite bodies continue to issue recommendations on wage developments, but these are not binding for the concrete bargaining that takes place at lower levels. Most tripartite bodies also make recommendations to the government on increases in the minimum wage. In Latvia and Lithuania, this has some impact on the development of public sector wages, since the public sector pay scale is defined in terms of multiples of the minimum wage.

With the exception of Cyprus, Slovakia and Slovenia, sectoral-level bargaining is very weak. The main level of collective wage negotiation in most ACs is therefore the enterprise. In general, the firms of a given sector are quite diverse in terms of productivity and employers are reluctant to delegate bargaining power to their sectoral organisations (which operate, in fact, mostly as lobbies). Consequently, 'sectoral' wage agreements are most common in sectors dominated by a single producer or an oligopoly (e.g. railways, energy supply, etc.). In Slovenia, two general intersectoral collective agreements have been concluded for the private and for the public sector. These set the framework for lower-level bargaining at sectoral and, to some extent, enterprise level. Moreover, company membership in employers' organisations (chambers) as well as collective bargaining are mandatory. In Slovakia, the Tripartite Council for Economic and Social Agreement defines minimum pay increases by sector. Although

these are not legally binding, they are usually respected in the bargaining process at sectoral level. In Cyprus, sectoral-level bargaining is prevalent.

All ACs, with the exception of Cyprus, have a statutory national minimum wage. Minimum wages (MWs) vary between 28 % (Estonia) and 74 % (Malta) of the average wage. Expressed in PPS, they range from 239 (Latvia) to 752 (Malta), compared with a range from 543 (Portugal) to 1 338 (Luxembourg) in the EU.

Economy-wide indexation applies in Cyprus and Slovenia. In Slovenia, however, the indexation rule applicable in the public sector will, from 2004 onwards, also take EU inflation and exchange rate developments into account. In Poland, public sector wages are indexed, and, in Malta, Poland and Slovakia, the minimum wage.

Table A3.2

Wage bargaining structures in acceding countries

	Coverage of wage agreements ⁽¹⁾	Union density ⁽¹⁾	Bargaining coordination at national level	Main level of wage negotiation	EIRO centralisation index ⁽²⁾	Wage indexation	Minimum wage % of average wage
CZ	25–30	30	Tripartite Council for Economic and Social Agreement may make recommendations on overall wage growth	Enterprise	0 – 1 – 3	No	34
EE	29	15	Tripartite Council and National Economic and Social Council may advise on and monitor collective agreements	Enterprise	0 – 1 – 3	No	28
CY	65–70	70	Weak (several tripartite bodies, but confined to work organisation and mostly consultative)	Sectoral (enterprise)	0 – 3 – 1	Economy-wide, automatic	A legal MW exists only in some sectors
LV	< 20	30	National Tripartite Consulting Council's recommendations on the minimum wage have some impact on the public sector pay scale	Enterprise	1 – 1 – 3	No	40
LT	10–15	15	Tripartite Council issues recommendations on minimum wage; the MW, in turn, affects the public sector pay scale and has indirect influence on private sector pay	Enterprise	0 – 1 – 3	No	43
HU	34	20	Tripartite National Labour Council issues wage recommendations for lower bargaining levels	Enterprise	1 – 2 – 3	No	40
MT	n.a.	65	Tripartite Council for Economic and Social Development can issue recommendations	Enterprise	0 – 0 – 3	Minimum wage only	74
PL	40	15	Tripartite Commission for Economic and Social Issues may make recommendations for wage growth	Enterprise	1 – 1 – 3	Public sector wages and minimum wage	40
SI	Close to 100	41	Intersectoral bipartite general collective agreements; recommendations on wage policy from tripartite Social and Economic Council	Intersectoral/sectoral	3 – 2 – 1	Economy-wide (by collective agreement)	58 (target)
SK	48	40	Tripartite Council's General Agreements recommend minimum increases per sector	Sectoral (enterprise)	0 – 3 – 1	Minimum wage only	39

(1) In % of employees; union density figures and coverage of wage agreements are from EIRO (2002); industrial relations in the EU Member States and candidate countries.

(2) EIRO centralisation index: first digit intersectoral — second digit sectoral — third digit company level; scale from 0–3, where 3 = dominant, 2 = important, 1 = existing, 0 = non-existent.

Source: Commission services.

Chapter 5

Determinants of international capital flows

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1. Introduction

In the past 10 years, the growth of financial flows across borders has been tremendous. As a result of financial liberalisation, international capital flows (portfolio flows and direct investments) as well as foreign ownership of assets and firms have increased significantly in the world economy. The creation of the internal market and the common currency in Europe has strengthened these developments within the EU as well as between the EU and the rest of the world.

The purpose of this chapter is to examine determinants of international capital flows. The subject is very broad, encompassing many different aspects. We are thus forced to focus on a selected number of issues. In short, the chapter is made up of three building blocks. First, theories and evidence on capital flows are surveyed. In this context, the pattern of FDI flows in the global economy is described. Second, capital flows into the acceding countries are dealt with. Finally, determinants of long-run capital movements are considered. Here, the role of corporate governance and demographics are analysed.

Throughout the text, an EU perspective is adopted by starting from the EU as an economic unit. Thus, capital flows within the EU or within the euro area are not considered.

In more detail, the chapter is organised as follows. Theories and evidence on capital flows are initially presented. This section serves as the background for the ensuing sections containing in-depth studies of various trends, present as well as expected future ones, concerning capital flows. As foreign direct investments (FDIs) have formed a major part of international capital flows in recent decades, an empirical account of FDI flows in the world economy is presented. Since capital flows into the acceding countries played a crucial role in the rapid transition of their economies in the 1990s, aspects of this process are explored. Corporate governance has recently turned into an important research area as well as a major policy issue, following the Enron affair and similar cases of corporate scandals in the USA, and it will be a key factor in harnessing financial flows effectively to foster real convergence in the enlarged EU. Thus, possible links between corporate governance and capital flows are explored. As the impact of ageing on the global distribution of saving and investment patterns has emerged as a crucial issue lately, the role of demographics as a determinant of long-term capital flows is examined. In this section, the perspective is truly a long-term one, making forecasts far into the future. As an important stimulus for the rise in capital flows in recent decades lies in the changing legal environment, an annex provides a thorough account of the EU legal framework regarding capital flows.

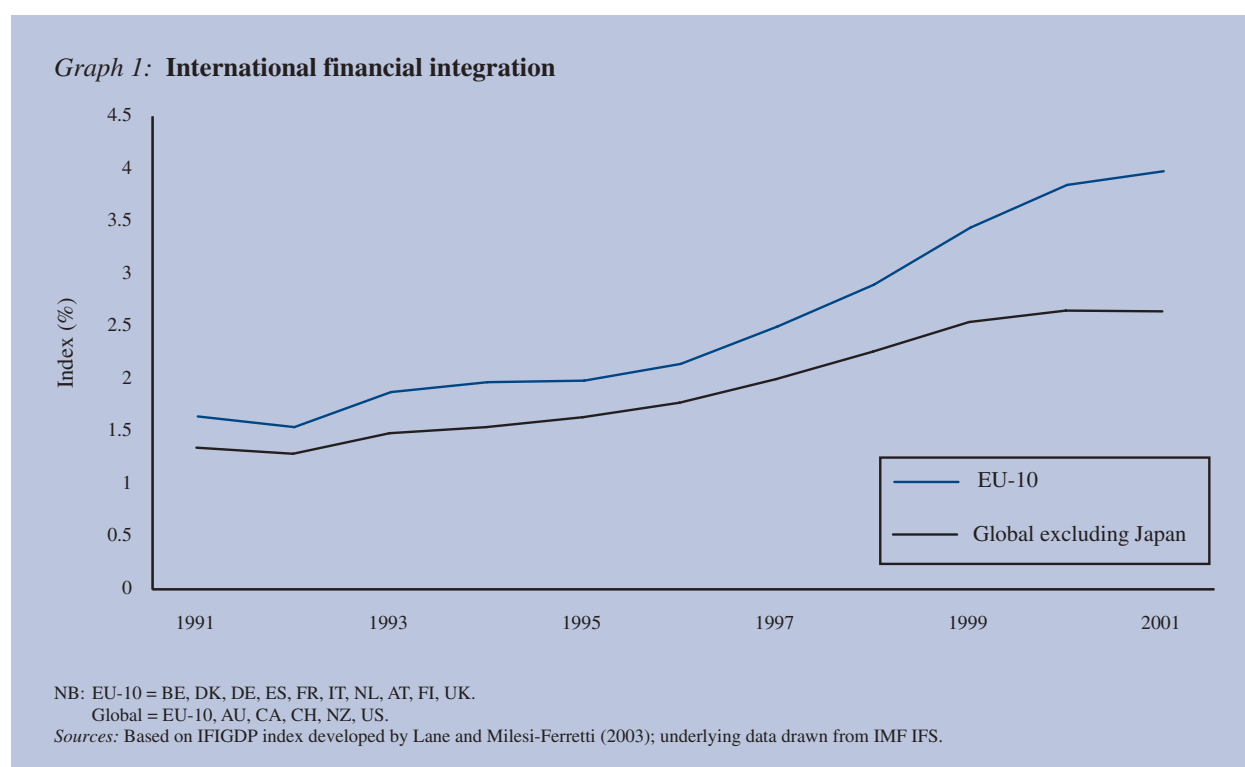
2. International capital flows: theories and evidence

2.1. Empirical review

The 1990s saw a rapid increase in the importance of cross-border financial trade. A volume-based index of the level of international financial integration (IFIGDP) has been developed by Lane and Milesi-Ferretti (2003), which measures the sum of foreign assets and foreign liabilities as a ratio of GDP. The focus on accumulated stock positions is appropriate, since the year-to-year flow data may be quite volatile and fail to take into account the impact of valuation changes on aggregate international exposures.

Graph 1 shows the evolution of this index over 1991–2001 for an aggregate of industrial countries and for a subaggregate of EU member countries⁽¹⁾. Graph 1 shows a strong positive trend, with a marked acceleration from the mid-1990s onwards. EU member countries show above-average levels of international financial integration. However, this data set does not identify the relative importance of intra-EU asset trade versus extra-EU asset trade.

⁽¹⁾ The membership of these aggregates is determined by data availability.



It is important to appreciate that this measure encompasses all forms of financial assets. However, the last decade has also seen a critical shift in the composition of international investment positions, with an increasing share of equity instruments in the international balance sheet. This is shown in Graph 2 for the same two aggregates — for the EU subgroup, the share rose from 22 % in 1991 to 39 % in 2000, but has fallen back slightly with the decline in equity market values since then.

There is considerable cross-country variation in the degree of international financial integration and the relative importance of equity versus debt components. Table 1 shows the country-by-country data for the most recent year available (2001, except 2000 for Sweden).

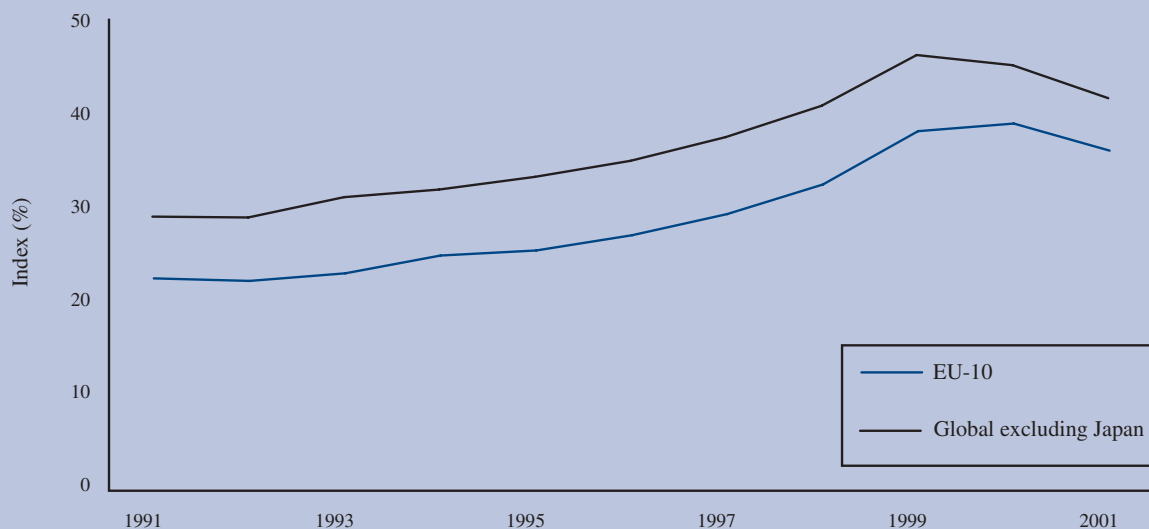
Increased financial integration has not seen a general trend towards larger net foreign asset imbalances. Although the USA has undergone a very sharp deterioration in its net position, the EU subgroup has remained very close to balance throughout (see Graph 3).

2.2. A typology of capital flows

It is useful to construct a typology of capital flows. First, it is important to make a distinction between gross capital flows and net capital flows. In recent decades, the scale of gross flows has expanded at a rapid rate, whereas the order of magnitude for net capital flows has been much smaller. There are two factors driving the growth in gross flows. One is that the liberalisation of international trade in financial services naturally engenders two-way gross flows. For instance, bank 1 in country A may place collateral with bank 2 in country B in connection with a loan from bank 1 to bank 2, thereby creating two-way capital flows.

In a similar fashion, a multinational financial institution may engage in high volumes of intra-institutional financial flows among its various affiliates. Of course, differences in national tax systems can also generate such flows, with firms and investors designing cross-border portfolios to minimise aggregate tax payments: for this reason, the gross capital flows in and out of offshore financial centres are extremely large.

Graph 2: Composition of international balance sheet: ratio of equity assets and liabilities to total assets and liabilities



NB: EU-10 = BE, DK, DE, ES, FR, IT, NL, AT, FI, UK.
Global = EU-10, AU, CA, CH, NZ, US.

Sources: Based on Geqshare variable developed by Lane and Milesi-Ferretti (2003); underlying data drawn from IMF IFS.

Table 1

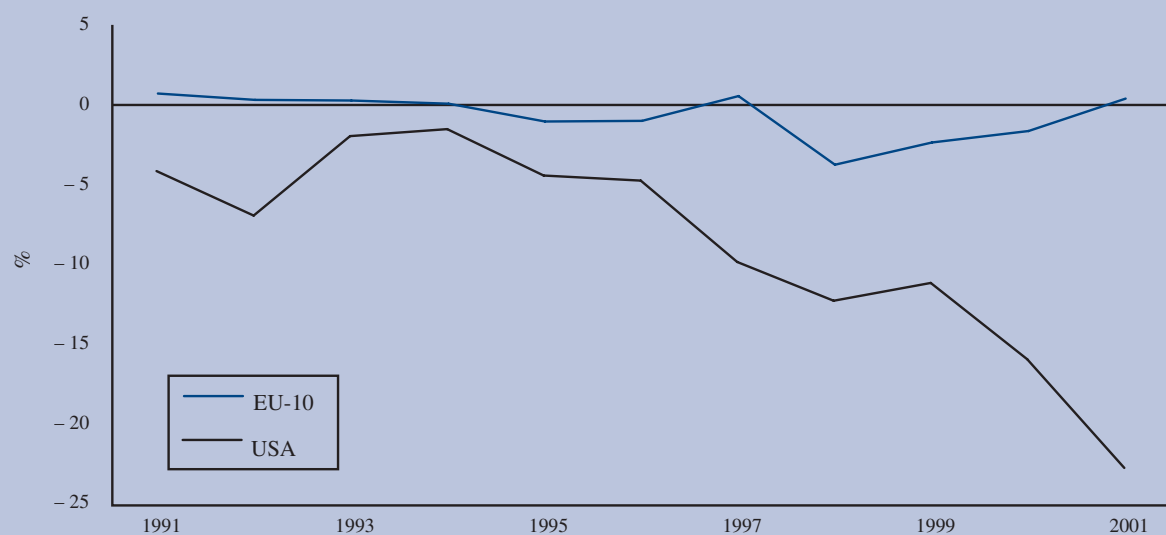
Country-by-country data

	2001 ⁽¹⁾		
	Sum of foreign assets and foreign liabilities as ratio to GDP	Sum of FDI and portfolio equity assets and liabilities as ratio to GDP	Net foreign assets as ratio to GDP
BE	6.6	2.4	0.6
DK	3.1	1.3	-0.2
DE	3.0	1.0	0.1
EL	1.5	0.2	-0.4
ES	2.4	0.9	-0.2
FR	3.6	1.7	0.1
IE	15.0	6.1	-0.1
IT	2.0	0.5	0.0
NL	6.7	3.1	-0.1
AT	3.2	0.6	-0.2
PT	3.3	0.8	-0.4
FI	3.6	2.0	-0.9
SE	3.2	1.6	-0.3
UK	6.5	2.0	0.0

⁽¹⁾ Data for Sweden are for 2000.

Source: IMF IFS.

Graph 3: Net foreign asset positions as a ratio of GDP



NB: EU-10 = BE, DK, DE, ES, FR, IT, NL, AT, FI, UK.
Source: IMF.

The other factor is that gross capital flows are also undertaken in pursuit of risk diversification. By selling shares in domestic firms to foreign investors and acquiring equity in overseas enterprises, a country can reduce its exposure to its economic risk and enjoy an income stream that is less dependent on domestic production. Indeed, a benchmark prediction is that diversification should lead to very high levels of gross capital flows. Under certain conditions, a country that represents 1 % of the world economy should sell 99 % of its domestic endowment to outside investors and, symmetrically, the ratio of foreign to domestic assets in its own portfolio should be 99:1.

With respect to net capital flows, there are both short-term and long-term factors that may generate an imbalance between capital inflows and capital outflows. Over the economic cycle, net capital flows can permit consumption and investment to temporarily diverge from their long-term trends. A country that wishes to have temporarily high consumption can borrow on international capital markets. Similarly, access to international capital markets means that domestic investment can respond to a temporary positive productivity shock without sacrificing the level of consumption. If such net capital flows are symmetrical over the cycle, phases of current account surpluses and deficits are consistent with maintaining a zero long-term net foreign asset position.

2.3. Determinants of capital flows

In discussing the determinants of capital flows, the typology above will be followed, by focusing on the theoretical approaches to the study of capital flows.

Gross capital flows

As stated, international financial intermediation generates large volumes of gross capital flows. It is well understood that increasing returns characterise some financial intermediation activities such that the location of such sectors is highly concentrated: New York is the clear financial capital of the USA; London holds a large lead in Europe. The importance of such financial centres means that residents in countries A and B may indirectly exchange assets via bilateral trades with financial centre C. With increased competition in the European Union and the growth of cross-border financial institutions, it is natural to expect the inter-

nationalisation of financial intermediation to further expand in the coming years ⁽¹⁾.

The diversification motive for gross capital flows can be linked to a number of factors. The liberalisation of external accounts and domestic financial deregulation have prompted an increase in international diversification. With respect to the latter, restrictions on domestic institutional investors (e.g. pension funds) are much less severe now than in the past. Moreover, the introduction of the single currency now allows investors in EMU member countries to invest elsewhere in the euro area without taking on foreign exchange risk.

International diversification also goes hand in hand with the development of domestic financial systems. With increased tradability of domestic assets (e.g. as family-owned firms or State-owned firms release equity to other investors), the swapping of domestic and foreign assets is made more feasible. The evidence of Lane and Milesi-Ferretti (2003) is that the growth in domestic stock market capitalisations is the dominant factor in explaining the rise in gross international asset trade.

The growth in international trade in goods and services also helps to explain the growth in gross capital flows. As has been emphasised by Obstfeld and Rogoff (2001), the gains to international risk sharing are limited by barriers to trade in goods and services: as the latter decline, the impetus to diversify investment portfolios intensifies. We note also that there are direct links between product trade and asset trade. First, trade credits are a key component of the logistics of the international trading system. Second, FDI is typically both trade creating and also involves financial transfers. FDI (among the developed nations) is also characterised by a high ratio of gross to net flows.

Short-term net capital flows

Early intertemporal models of the current account focused on the contribution that net capital flows can make to consumption smoothing: a country that is enjoying temporarily high income will run a current account surplus in order to permanently sustain a higher level of consumption into the future. This is feasible since the acquisition of foreign assets generates a positive stream of international investment income inflows that will supplement domestic sources of income even after the tem-

⁽¹⁾ See Grilli (1990) on the geography of international financial centres.

porary boom is over. By itself, this should generate a procyclical pattern in current account surpluses.

However, access to international capital markets also means that domestic investment can be externally financed. If a temporary domestic productivity shock raises the return to domestic capital, foreign capital will flow into the economy in order to take advantage of the profit opportunity. If this effect dominates the consumption-smoothing mechanism, the net effect will be a countercyclical pattern in current account surpluses. Moreover, it is important to appreciate that an elastic supply of foreign capital means that business cycles will have higher amplitudes and greater persistence, since the procyclical pattern of net capital flows amplifies the economic response to fundamental disturbances.

Of course, temporary shifts in consumption and investment that are not justified by economic fundamentals will also bring about net capital flows. An exogenous decline in the savings rate can be temporarily sustained without affecting the level of domestic investment by running a current account deficit — for instance, if Ricardian equivalence does not hold, one factor that could generate a fall in the national savings rate is an increase in the government fiscal deficit. Similarly, bubble-inspired domestic investments can also be financed by capital inflows ⁽¹⁾.

A weak or under-regulated domestic financial sector may also lead to inefficient accumulation of external debt, if domestic banks operating under government guarantee merely raise international debt to finance inefficient but politically favoured domestic enterprises. These examples illustrate that international capital mobility is not necessarily always welfare enhancing in that suboptimal policies are also made more sustainable by access to external financial markets.

Long-term net capital flows ⁽²⁾

Economic research has identified three key variables in determining long-term net foreign asset positions: output per capita, the level of public debt and demographic structure. These three variables should be interpreted as measured relative to global values. Common movements in output per capita, demographic trends and government debt should not affect net foreign assets. Rather,

they will operate via global variables such as the world real interest rate.

The first determinant, output per capita, may affect net foreign asset holdings through several channels. One channel works through different rates of return on domestic and foreign investments. Suppose the domestic marginal product of capital falls, as the domestic economy grows richer. Then domestic investment will fall and home investors will turn to overseas accumulation opportunities.

A second channel implies that an increase in domestic income may lead to a rise in the domestic savings rate. This outcome can be generated in models with habit formation in consumption preferences: as an economy grows, consumption will lag behind output. Even if the rise in the savings rate is temporary, there may be a permanent improvement in the net foreign asset position. The traditional ‘stages of the balance-of-payments’ hypothesis also suggests a positive relation between relative output per capita and the net foreign asset position ⁽³⁾.

The second determinant of long-term capital flows is the stock of public debt. Assuming departures from Ricardian equivalence, higher levels of public debt may be associated with a decline in the external position.

The third determinant of long-term capital flows, demographic trends, has recently attracted considerable research interest (see also Section 6). In short, countries with an ageing population may prepare for a rise in the ratio of retirees to workers by accumulating foreign assets to supplement domestic income streams.

On the other hand, a country with a high youth dependency ratio may invest heavily in its infrastructure (education, housing, etc.). In a country with high youth dependency, households with children may attempt to smooth consumption by borrowing or by maintaining low savings ratios. Thus, declining net foreign asset positions should be expected in countries with rising youth dependency ratios ⁽⁴⁾. The effects of demographic factors on the net foreign asset holdings may also be a function of the age structure of the working-age population ⁽⁵⁾.

⁽¹⁾ See Caballero and Hammour (2002).

⁽²⁾ This section is based on Lane and Milesi-Ferretti (2002a).

⁽³⁾ See Halevi (1971) and Fischer and Frenkel (1974).

⁽⁴⁾ See also Taylor (1994) and Higgins (1998).

⁽⁵⁾ See Mundell (1991).

The mechanisms through which our fundamentals — output per capita, public debt and demography — affect long-term net capital flows as well as interact are complicated. In addition, a host of other variables may also generate long-term deviations from a zero net foreign asset position. This is a field of much current research.

2.4. Composition of capital flows

Capital flows can take a variety of forms. One basic distinction is between debt (bank loans and bonds) and equity flows (FDI and portfolio equity), since these differ in terms of expected returns and risk profiles. For instance, Lane and Milesi-Ferretti (2003) calculate that countries with a larger share of equity liabilities versus debt liabilities typically pay out a higher average return to foreign investors. However, this may be worthwhile in that equity liabilities have attractive risk-sharing properties: in the event of a downturn, part of the losses fall on foreign investors.

Within the equity category, the distinction between FDI and portfolio equity is quite important. The former carries with it some element of control rights over production decisions in the foreign operation, such that it is not an ‘arm’s length’ relationship. Moreover, this feature also means that FDI equity investment has implications for international product trade and other international financial transactions (e.g. the foreign affiliate or subsidiary may also raise debt finance). In contrast, international portfolio equity investment is a more passive instrument and a more liquid category in that positions can be quickly reversed in international stock market trade.

The major components in the international debt category are international bank loans/deposits and international bonds. The former encompass wholesale interbank trade but also cross-border retail banking and international corporate banking. With respect to the latter category, sovereign bonds have traditionally been predominant, although the international issue of corporate bonds has grown significantly in recent years.

The growth in international trade in equity-type instruments in part reflects only the development of deeper domestic financial systems. However, the cross-border share in aggregate equity portfolios has been rising, such that there has also been a shift towards greater internationalisation of balance sheets. This has been accommodated by a relaxation of regulations that previously forced institutional investors (e.g. pension funds) to

primarily hold domestic securities. EMU has also eliminated the currency risk in cross-border equity investments within the euro area.

The currency composition of debt is also an important factor. It is well known that emerging market economies primarily raise debt in foreign currencies, whereas the USA issues virtually all its debt in dollars. The risk profile in each case is quite different: a currency depreciation can have contractionary effects for an emerging market economy, since the domestic real value of its foreign currency debt increases — this channel is not operative for major industrial nations that issue debt in domestic currency. The formation of the euro in this respect has been beneficial especially for the smaller economies and those with high debts that historically had to raise part of their debt in foreign currencies.

The maturity of debt is also critical in understanding the risk profile of a country’s international investment position. Again, the contrast between emerging markets and the industrial countries is quite stark, with the former being much more reliant on short-term debt and thereby more vulnerable to rollover risk.

A rising share of equity instruments in the international balance sheets has implications for the relation between cross-border investment positions, international investment income flows and gross national product (GNP). Consider two countries, each with EUR 100 billion in foreign assets. One country invests exclusively in debt, which annually yields 4 %, whereas the other invests exclusively in ‘growth’ equities that pay no dividends but offer an annual capital gain of 6 %. In the balance-of-payments and national accounts data, the former will receive an international investment income inflow of EUR 4 billion (raising GNP by the same amount), whereas the latter has a zero international investment income inflow and correspondingly a lower GNP. This example illustrates that income measures are an increasingly incomplete representation of wealth positions, with the shift towards equity-type instruments in international investment patterns.

2.5. Effects of international financial integration

International capital mobility fundamentally alters the shape of the macroeconomic environment. In terms of expenditure categories, all other things being equal, smoother consumption but more volatile investment

behaviour could be expected. In turn, relative prices would be affected: swings in net capital flows will also induce shifts in demand for non-tradables, with current account deficits associated with real appreciation and surpluses with real depreciation.

Moreover, international capital flows generate sharp changes in dynamic patterns. As was just stated, a current account deficit in a given year may induce contemporaneous real appreciation. However, the corresponding issuing of foreign liabilities means that a future resource outflow is required to pay a return to the foreign agents that financed the current account deficit. This will depress future domestic expenditures and induce a weakening of the real exchange rate. Such a connection between net external liabilities and the long-run real exchange rate has been robustly identified in the data by Lane and Milesi-Ferretti (2001b, 2002b).

In addition, the accumulation of a significant net external liability position is a source of potential instability. If a rise in risk aversion among international investors leads them to call in loans or demand a higher required return, the domestic economy may be pushed into a sudden adjustment, with a negative impact on domestic consumption and investment and the real exchange rate. For this reason, net debtor countries typically must pay a risk premium, raising the cost of capital for domestic borrowers.

Even if net positions are zero, gross capital flows also affect macroeconomic performance through a number of channels. In terms of long-term growth, the ability to diversify risk overseas lowers the cost of capital and may encourage domestic entrepreneurs to be more adventurous, selecting riskier projects that offer a higher expected growth rate. In a similar fashion, portfolio diversification encourages greater sectoral specialisation.

The internationalisation of portfolios plausibly increases the linkages across national economies. Since domestic and foreign consumption rates in part depend on commonly shared portfolio returns, more similar consumption patterns may be observed. In addition, the increase in asset cross-holdings has contributed to the increase in correlation in financial market returns across economies, since trends in domestic and foreign wealth are more closely linked and global factors exert a greater influence on asset pricing.

Of course, the corollary of greater insulation from internal shocks is that domestic investors become more exposed to external shocks. Moreover, if net worth acts as a constraint on investment decisions, losses incurred overseas may translate into a decline in domestic investment and generate a recession⁽¹⁾. Similarly, foreign investors may liquidate positions in the domestic economy in order to rebalance portfolios in the wake of losses made elsewhere. In these ways, the growth in gross capital flows raises the international component of business cycles relative to the country-specific element.

The growth in gross capital flows also alters the impact of currency movements for a given net foreign asset position. Tille (2003) provides a simple example of the impact of increasing financial integration on the transmission of exchange rate movements⁽²⁾. Consider two cases with the same negative net foreign asset position of minus EUR 100 billion. In case A, foreign assets and liabilities are EUR 100 billion and EUR 200 billion respectively; in case B, these stand at EUR 1 000 billion and EUR 1 100 billion. Let all foreign assets and liabilities be denominated in the domestic currency. A 10 % appreciation reduces the value of foreign assets by the same proportion in both cases. However, in case A, this translates into a wealth loss of EUR 10 billion, whereas it represents a wealth decline of EUR 100 billion in case B: a very significant difference, with corresponding implications for consumption and investment behaviour.

It should be recognised that a significant net external liability position also leaves a country vulnerable to a financing crisis, which can in itself be a source of business-cycle volatility. In turn, a sharp turnaround in the trade balance may require a large real depreciation, especially in the presence of nominal rigidities. Such sudden stops in capital inflows have been a recurrent problem for emerging market economies in recent years. There is currently much literature on the macroeconomics of 'liability dollarisation' in developing countries (see Lane, 2003b, for a review). However, a financing crisis scenario is also potentially relevant for major industrial nations such as the USA, even if the currency composition profile of foreign liabilities is less risky for these countries.

⁽¹⁾ Of course, the transmission of such shocks is most painful if the foreign assets were purchased at excessive valuation, such that the negative returns merely represent a return to fundamental value and do not predict any subsequent upswing in asset prices.

⁽²⁾ See also Lane (2004).

2.6. Capital flows and international policy coordination

The growth in global capital flows might suggest that a *prima facie* case exists for greater international monetary policy coordination⁽¹⁾. Indeed, there has been little appetite in recent years for tighter policy coordination among the major international economic powers. However, while there is no doubt that financial integration means that domestic policy-makers must pay more attention to international economic developments and policy spillovers when setting policy, it does not follow that formal policy coordination is actually required.

In fact, one important result emanating from the recent academic literature is that increased financial integration may actually reduce the gains from international monetary policy coordination. Since international diversification links consumption growth rates across countries, even self-interested countries will incorporate economic conditions overseas in setting policies and will be more reluctant to engage in beggar-thy-neighbour manipulations of the terms of trade: domestic investors will also lose out if a domestic economic policy harms other economies.

The asymmetry created by non-zero net foreign asset positions may imply larger gains to international monetary policy coordination. In Benigno (2001), for zero initial net foreign asset positions, the first best can be

well approximated by a policy of targeting domestic producer price inflation. However, such a policy induces excessive volatility in interest rates and hence inefficient cross-country wealth redistributions if initial net foreign asset positions are non-zero. Policy coordination in this case can improve welfare.

In addition, substantial non-fundamental movements in exchange rates may occasionally also justify some degree of coordinated intervention in currency markets — as indicated previously, the rise in international asset cross-holdings means that the distorting effects of misaligned currencies are plausibly larger now than in earlier periods. Indeed, the ECB and the Federal Reserve have occasionally intervened to stabilise the euro–dollar rate since the inception of EMU.

Finally, international financial integration also implies important cross-linkages between the payments and financial systems of different countries. The smooth operation of these systems therefore requires global coordination in the event of disruption to the ‘plumbing’ of the international financial system (IFS). The 11 September 2001 event provided an important challenge to the major central banks to restore stability to the international financial system. Liquidity operations began immediately and there was close coordination between the ECB and the Federal Reserve system to ensure the operation of the international payments system. The collective gains to restoring confidence to financial markets were underlined by the unprecedented simultaneous reduction in interest rates that took place on 17 September 2001.

⁽¹⁾ See also the discussion in Begg et al. (2002).

3. Foreign direct investment: the global picture

As discussed above, international capital movements can take different forms, including foreign direct investment, equity finance, bonds and bank lending. In the long-term perspective, FDI is a most important element. This section provides an empirical account of recent global trends in foreign direct investment.

At the very least, some USD 1 200 billion is traded daily on the world foreign exchange markets in order to finance international trade, to hedge currency risks or to engage in short-term investment or finance transactions ⁽¹⁾. FDI, by contrast, is typically defined as trans-border capital investment in which the investor resident in one country obtains lasting interest in, and a significant influence on, the management of an entity in another country.

FDI thus comprises the creation of new enterprises (greenfield investment), and cross-border merger and acquisition of firms, as well as reinvested earnings of the FDI enterprise and other long- and short-term loans from the parent to the affiliate. FDI flows and stocks conventionally relate to ownership of 10 % or more of the voting securities of an incorporated enterprise or the equivalent in an unincorporated enterprise.

Exploiting intangible assets, such as patents, know-how, technology, and organisational and managerial skills, in markets or sources of supply other than the enterprise's home country is an important driver for FDI. While annual volatility can be substantial, in general, trends in FDI tend to be less sensitive to short-term macro-economic fluctuations. Therefore, FDI trends provide a good proxy for the evolution of international economic integration over time and the rising stakes of economies in one another.

3.1. Global trends and recent developments

According to preliminary data, FDI flows declined in the first quarter of 2003 ⁽²⁾. This continued a downward trend, which began in 2000, and which largely reflects the cyclical growth trend in the world economy, the fall-out from the bursting of the technology bubble, diminished regional and local growth perspectives, and the end of an unprecedented privatisation cycle that had started in the early 1990s. Reductions were particularly pronounced between developed economies and in Latin America, while FDI to Asia and central Europe was broadly stable. Asia continues to receive the major share of FDI to emerging market economies, with China receiving more than half of all FDI to emerging markets in the first quarter of 2003. However, these short-term developments do not fully reflect the long-term trend of rising FDI characteristics for the world economy since the beginning of the 1980s.

Over the last two decades, notwithstanding episodes of declining FDI flows, on average the growth of FDI flows has outpaced the expansion of global trade and output (see Table 2). Today, it is the single most important category of international private capital flows to emerging market economies and developing countries, with equity finance, bonds and bank lending playing a less prominent role.

Following a historic peak at around USD 1.3 trillion in 2000, world FDI inflows (outflows) amounted to USD 651 billion (USD 647 billion) in 2002 — almost three times higher than a decade before and more than 12 times higher than 20 years before. The world's total FDI inward stock stood at USD 7.2 trillion in 2002 — over 10 times higher than in 1980 (USD 635 billion). The global FDI inward

⁽¹⁾ Bank for International Settlements (2002).

⁽²⁾ IMF (2003).

stock measured as a ratio to global GDP is roughly 20 % ⁽¹⁾. Despite the sharp fall in 2001 and 2002, the longer-term trend expansion of FDI flows appears unbroken, albeit at lower growth rates than seen in the second half of the 1990s.

The distribution of FDI flows is highly uneven. Standard economic theory predicts capital to flow from economies where capital is relatively abundant in relation to labour to economies where capital is comparatively scarce. In reality, however, the relatively capital-abundant developed economies account not only for the majority of outflows, but receive also the lion's share of global FDI inflows. The European Union and the USA accounted for almost 70 % of global inflows and almost 80 % of global outflows in the period 2000–02, while developing countries received only 21.5 % of inward flows.

Table 2

GDP, trade and FDI: global growth rates in %, 1986–2000

	1986-90	1991-95	1996-2000
GDP (in current prices)	11.5	6.5	1.2
Exports of goods and non-factor services	15.8	8.7	4.2
FDI inflows ⁽¹⁾	23.6	20.0	40.1
FDI outflows ⁽¹⁾	24.3	15.8	36.7

⁽¹⁾ Due to statistical discrepancies, FDI inflows and outflows are not of equal magnitude.

Source: Unctad (2002).

The stock figures illustrate the geographical distribution of accumulated flows in the past. The group of developed economies accounts for two thirds of worldwide inward FDI stocks and over four fifths of outward stocks (Unctad, 2003). While in absolute terms the flows to developing countries increased substantially over time, the relative share of developing countries in world inward stock fell from 44 % in 1980 to 33.7 % in 2002 (see Table 3).

The EU is the world's biggest recipient and supplier of FDI. EU FDI outflows to third countries account for roughly one third of global FDI outflows (Eurostat, 2003) ⁽²⁾. With out-

⁽¹⁾ The data presented in the text are mainly based on Unctad (2003) and earlier editions of Unctad's annual *World investment report*.

flows being higher than FDI inflows from abroad, the EU is a net investor in the rest of the world. However, the difference between outflows and inflows of FDI has narrowed substantially since its peak at almost EUR 260 billion in 2000 to EUR 64 billion in 2002 (see Tables 3 and 4).

The allocation of FDI is also highly concentrated within the group of developing countries. Over the period 1998–2000, the five largest host countries in the developing world, notably China, Hong Kong, Brazil, Argentina and Mexico, accounted for more than 60 % of total FDI flows to developing countries, and the 10 largest developing host countries received more than 75 %. Among developing countries, in 2002, China became the single biggest recipient country of FDI inflows. With FDI inflows at USD 52.7 billion, China outperformed the USA as a host country. Flows to the 47 least developed countries (as defined by the UN) remain marginal, totalling an estimated USD 4 billion, equivalent to some 0.5 % of world FDI in 2002 (World Bank, 2003).

In relation to the size of their economies, the role of developing countries as hosts for FDI inflows has increased over time, but there remains potential to gain further ground, particularly when the relative differences in the proportion of FDI to populations is taken into account. Tables 5 and 6 present data relating FDI flows to GDP and the size of the population. The FDI intensity of the economy, measured as the share of FDI flows in GDP, increased during the 1990s for all country categories. The particularly pronounced increase of flows in and out of the EU in 2000 can be attributed to exceptionally high merger and acquisition activity mainly in the information technology sector. With the exception of the most recent years, FDI inflows tended to be more important for developing economies, given that the share of FDI in their economies tends to be larger than in developed economies.

The proportion of FDI inflows to the size of the population has increased over time. On average, however, it is

⁽²⁾ The EU figures presented by Unctad grossly overstate the external dimension of the EU because they include extra-EU flows as well as intra-EU transborder FDI flows. While this measure gives a good indication of the overall importance of transborder FDI activity in the EU economy in comparison with the rest of the world, the figures for the EU are not comparable to the data provided for other countries. In order to reflect external flows only, FDI flows to and from the EU would need to be corrected for intra-EU flows. Between 1995 and 2001, the proportion between intra-EU transborder flows and extra-EU flows was roughly one to one in terms of outflows, and varied between one to one and four to one in terms of inflows (see Eurostat, 2003).

Table 3

FDI inward stock, by host economy, 1980-2002, shares in %

	1980	1985	1990	1995	2000	2001	2002
Developed economies	56.0	58.4	71.7	68.9	66.3	66.3	66.3
EU	31.1	27.4	38.4	38.4	37.2	37.5	37.8
USA	11.9	18.9	20.2	18.1	20.1	20.5	19.5
Japan	0.5	0.5	0.5	1.1	0.8	0.8	0.9
Developing economies	44.0	41.6	28.3	31.1	33.7	33.7	33.7
Asia	32.0	29.8	19.5	21.5	21.1	20.2	20.2
China	0.9	1.1	1.3	4.6	5.8	6.1	6.5
Hong Kong	25.4	18.7	10.3	7.7	7.6	6.5	6.2
Latin America and the Caribbean	7.2	8.2	6.0	6.8	10.1	10.9	11.0
Central and eastern Europe	n.a.	0.0	0.1	1.4	2.1	2.4	2.5
Africa	4.6	3.5	2.6	2.6	2.4	2.4	2.5
World	100	100	100	100	100	100	100

NB: Totals may not add up to 100 due to rounding.

Source: Unctad; own calculations.

Table 4

FDI outward stock, by home economy, 1980-2002, shares in %

	1980	1985	1990	1995	2000	2001	2002
Developed economies	88.5	89.5	92.5	89.3	86.3	87.19	87.6
EU	38.3	41.0	45.2	44.9	49.9	50.39	50.2
USA	38.2	32.1	24.4	24.2	21.7	21.95	22.0
Japan	3.5	6.0	12.0	8.2	4.7	4.77	4.8
Developing economies	11.5	10.5	7.6	10.7	13.7	12.81	12.4
Asia	1.1	1.6	2.8	6.5	10.2	9.45	9.2
China	n.a.	0.01	0.1	0.6	0.4	0.52	0.5
Latin America and the Caribbean	9.1	7.5	3.6	3.1	2.7	2.67	2.5
Central and eastern Europe			0.03	0.2	0.3	0.39	0.4
Africa	1.2	1.5	1.2	1.1	0.8	0.7	0.6
World	100	100	100	100	100	100	100

NB: Totals may not add up to 100 due to rounding.

Source: Unctad; own calculations.

Table 5

FDI flows per USD 1 000 GDP, 1990-2000, annual averages in USD

	Inflows			Outflows		
	1990-94	1995-99	2000	1990-94	1995-99	2000
Developed countries	7.1	17.4	50.9	10.9	22.7	52.8
EU	10.8	25.8	102.9	15.0	39.7	123.2
Japan	0.4	0.9	1.7	7.2	5.3	6.6
USA	5.9	16.4	30.7	8.0	13.8	16.8
Developing countries	14.7	29.1	36.7	6.5	10.7	16.5
Asia	15.7	26.8	33.9	8.5	12.1	21.2
Latin America and the Caribbean	15.1	37.0	48.1	3.5	9.5	11.1
Central and eastern Europe	8.4	25.0	38.1	0.4	2.9	5.9
Africa	8.8	16.4	15.6	3.5	9.5	11.1
World	8.6	20.0	47.7	10.0	19.9	44.4

Source: Unctad.

significantly higher in the developed economies than in the developing world. This is partly a reflection of the overall capital scarcity in developing economies, but

may also be interpreted as an indication of the relatively higher degree of international integration of the more advanced economies.

Table 6

FDI flows per capita GDP, 1990–2001, annual averages in USD

	Inflows				Outflows			
	1990–94	1995–99	2000	2001	1990–94	1995–99	2000	2001
Developed countries	162.9	474.4	1429.2	583.1	249.6	619.9	1480.2	672.9
EU	212.2	588.0	2147.5	856.7	295.7	904.0	2571.1	968.7
Japan	11.0	30.7	65.5	48.7	205.7	188.6	248.3	299.1
USA	143.0	509.0	1062.4	435.2	196.4	419.3	582.5	398.6
Developing countries	15.6	37.5	48.8	41.4	7.4	14.8	23.4	8.1
Asia	13.2	28.1	37.5	28.3	7.4	13.5	24.8	9.6
Latin America and the Caribbean	45.1	141.3	185.6	163.6	10.7	36.5	43.3	14.2
Central and eastern Europe	17.3	55.9	78.6	80.8	1.0	6.8	12.4	10.9
Africa	6.2	11.9	11.0	21.1	3.9	4.4	2.3	– 3.7
World	88.5	101.5	245.7	110.0	40.1	100.7	244.0	100.7

Source: Unctad.

Table 7

Changes in national regulations of FDI, 1991–2002

	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002
Number of countries that introduced changes												
	35	43	57	49	64	65	76	60	63	69	71	70
Number of changes												
	82	79	102	110	112	114	151	145	140	150	208	248
Of which												
More favourable	80	79	101	108	106	98	135	136	131	147	194	236
Less favourable	2	–	1	2	6	16	16	9	9	3	14	12

Source: Unctad (2003), based on national sources.

3.2. Main drivers of FDI

The FDI expansion since the 1980s was to a large extent prompted by the widespread abolition of capital controls and the opening-up for inward FDI. This development continued in the 1990s and was reinforced as a consequence of the economic downturn in 2000. Asia is one of the most rapidly liberalising regions. Table 7 gives the number of countries that introduced changes in their investment regimes, and identifies the number of changes designed to make FDI more attractive.

Cross-border merger and acquisition (M&A) activity rather than greenfield investment has been a major driver of FDI flows in recent years, in particular between the developed economies. However, following a historic peak in 2000, both the number and the value of cross-border M&As fell substantially in 2001 and 2002, partly explaining the overall fall of global FDI flows.

For illustration, Table 8 shows the evolution of the number of deals and the total value of cross-border mergers worth over USD 1 billion in the period 1987–2002. Particularly large M&A deals in 1999 and 2000,

mainly in the telecommunications sector, explain the steep rise of FDI in these years. With the boom phase in this industry taking a break, it could be argued that FDI levels are back to more 'normal' trend levels. In addition to the global economic slowdown, the sharp fall in equities and reduced corporate profits contributed to the reduction in cross-border M&As.

Table 8

Cross-border mergers worth over USD 1 billion, 1987–2002

	Number of deals	Value (billion USD)
1987	14	30.0
1988	22	49.6
1989	26	59.5
1990	33	60.9
1991	7	20.4
1992	10	21.3
1993	14	23.5
1994	24	50.9
1995	36	80.4
1996	43	94.0
1997	64	129.2
1998	86	329.7
1999	114	522.0
2000	175	866.2
2001	113	378.1
2002	81	213.9

Source: Unctad.

Proximity and trade openness are important factors explaining the geographic flow of FDI. According to OECD (2003), a significant share of FDI in the OECD area takes place between countries bound by regional trade agreements and among geographically close countries. For instance, EU Member States tend to register higher inflows from one another than from third countries, and a large fraction of the FDI flowing to Canada and Mexico originates in the USA.

3.3. FDI by industries

The sectoral composition of FDI has shifted over time. While historically FDI played a prominent role in the extractive industries, the production and service sectors have become progressively important for FDI activity. Since the second half of the 1990s, services have clearly surpassed manufactures as the most important sector, playing the predominant role in the FDI flows between developed economies (see Table 9).

The high share of the service sector in FDI inflows to developed economies in 1999 and 2000 can largely be explained by the surge of cross-border M&As in the telecommunications sector as well as in the finance sector. The weight of FDI in the service sector has also increased in developing countries, but the traditional sectors continue to play an important role, with roughly 40 % of FDI inflows being invested in the primary and secondary sectors (see Table 10).

This empirical picture is complemented by the evolution of the sectoral breakdown of cross-border mergers since the 1980s. While in the late 1980s, 62 % of all major cross-border mergers took place in the manufacturing sector, this figure diminished gradually to one third in 2001 ⁽¹⁾. At the same time, mergers in financial services and communications increased substantially. In 2001, almost half of all the major mergers took place in these industries.

3.4. Summary

In a global perspective, the EU is the biggest actor in the field of FDI. The outflow and the inflow of FDI from and to the EU are larger than for any other country. Cross-border mergers and acquisitions, more favourable FDI regimes and a cycle of privatisation have been the main driving forces behind the global flow of FDI in the past. There are reasons to expect the flow of FDI to continue to expand further in the future, albeit at lower levels than at the end of the 1990s.

⁽¹⁾ Cross-border mergers above USD 1 billion.

Table 9

Inward FDI flows by industry, 1999–2001, shares in %

Industry	1999–2000 (annual averages)			2001		
	Developed economies	Developing economies	Total	Developed economies	Developing economies	Total
Primary	2.1	8.9	3.3	10.2	7.6	9.6
Secondary	21.0	30.8	22.6	16.6	33.0	20.5
Tertiary of which:	71.0	56.3	68.5	64.9	58.4	63.3
• finance	27.5	12.1	24.9	20.2	17.0	19.3
• communication and transport	12.2	7.9	11.5	9.6	11.8	10.2
• unspecified	5.8	4.0	5.5	8.2	1.0	6.5
Total	100	100	100	100	100	100

Source: Unctad.

Table 10

Cross-border mergers by sectors, 1987-2001, shares in %

	1987–90	1991–95	1996–2000	2001
Agriculture and mining	2.4	3.9	1.2	1.1
Manufacturing	61.8	50.9	36.0	33.6
Services of which:	35.9	45.1	62.9	65.2
• finance	19.0	26.4	23.6	30.5
• communication and transport	2.4	4.2	19.8	18.9

Source: Unctad.

4. Capital flows to the acceding countries

4.1. Introduction

International financial flows to the acceding countries have been a key engine of the real convergence process in these economies. In particular for the former socialist countries, renewed access to capital markets has been a prerequisite for the rapid transformation on which they were able to embark in the last decade. Foreign capital allowed the running of a significant current account deficit, reflecting high investment needs and the containment of social costs of transition. But it was also an engine to regain access to global product markets and to import production technology.

So far, inflows have for the most part been within those limits, which have allowed them to stay sustainable, even if in most countries fiscal policies have had the important role of contributing to or ensuring such external sustainability. This was, in particular, of critical importance in those countries which opted for a fixed exchange rate regime.

The run-up to accession and the introduction of the euro, as well as continuing economic and financial transformation in these countries, may have a profound impact on the size, structure and variability of financial flows. Capital inflows are set to remain an important driver of economic growth during the early years of EU membership. But increasingly these flows will be taking place in a different context — one of deeper and more diverse domestic financial markets and, potentially, strong domestic credit growth. Building on past success, in this market setting, demands will be placed on the quality of both structural and macroeconomic policies.

To shed light on these issues, the discussion that follows reviews empirical evidence from the past decade, linking the experience with capital flows to broad patterns of policy reform across the country group. It takes note of various factors, from privatisation phasing to domestic market depth, that will likely cause a shift in the composition

of flows in the early years of EU membership. Such changes offer new economic opportunities. But, equally, they have the potential to pose new policy challenges. These, too, are considered in a concluding section.

4.2. Capital flows in the transition decade

4.2.1. The legal framework

Legal restrictions on cross-border capital flows of the 10 acceding countries (AC-10) have been gradually lifted over the past decade, even if this process has been uneven in speed among countries and has not yet been completed for all of these.

However, at the latest by the date of accession, all remaining restrictions on the financial account will have to be liberalised pursuant to Articles 56 and 57 of the EC Treaty. Afterwards, only some restrictions on certain transactions in real estate (agricultural land for all countries except Cyprus and Malta for 7 years and in Poland for 12 years and secondary residences in all except the Baltic countries for 5 years) will be permitted for a certain transition period, as provided for by the Treaty of Accession.

As of now, the overwhelming part of transactions has been liberalised. However, in several countries restrictions, mostly on operations of residents in deposit accounts abroad and on the admission of or transactions in foreign securities are still in place. At present, Cyprus still has restrictions which go beyond this limited range.

4.2.2. Overview of capital flows

Current accounts of the acceding countries have shown sizeable deficits over the past decade. They varied, for the total of AC-10, between around ECU 2 billion and ECU 3 billion in 1994 and 1995 to more than EUR 19 billion in 1999, 2000 and 2002. These deficits for the total of AC-10 showed a slight upward trend: whereas for the average of the five-year period 1993–97 they amounted to 3.3 % of

GDP, for the period 1998–2002 the deficits crept up to an average of 4.8 % of GDP

In 2003, figures for the first semester seem to support this trend towards rising current account deficits and corresponding financing needs. Behind this average are, for the last five years, deficits of nearly, or more than, 8 % in the three Baltic countries, and relatively low figures for the Czech Republic (4.4 %), Hungary

(3.6 %) and particularly Slovenia (1 %) (see Table 11 and Graph 4).

In a global perspective, these financing requirements are fairly small in absolute terms, reflecting the limited size of the economies concerned. For example, the aggregated current account deficit of the acceding countries in 2002 was equivalent to just around 3.5 % of all capital outflows of the euro area in 2002.

Table 11

Key figures of the financial account (% of GDP)

	Current account		Foreign direct investment				Portfolio investment				Other investment			
			Abroad		In the country		Credit		Debit		Credit		Debit	
	1997–2001	2002	1997–2001	2002	1997–2001	2002	1997–2001	2002	1997–2001	2002	1997–2001	2002	1997–2001	2002
CZ	-4.5	-6.3	-0.2	-0.4	8.0	13.3	-1.6	-3.3	1.5	1.3	-3.2	2.8	1.2	-0.5
EE	-7.8	-12.7	-1.9	-2.0	8.0	4.5	-1.1	-1.9	3.0	5.3	-4.3	0.5	5.9	6.0
CY	-4.5	-5.4	-1.5	-1.3	1.3	4.4	-3.2	-6.5	3.7	1.9	-5.4	21.4	12.0	-10.7
LV	-8.6	-7.8	-0.3	-0.1	5.6	4.7	-3.0	-2.6	1.2	-0.1	-2.7	-5.8	8.6	12.2
LT	-8.8	-4.8	-0.1	-0.3	4.8	5.2	-0.2	-0.9	2.4	0.9	-1.1	1.2	3.6	1.2
HU	-3.3	-4.0	-0.9	-0.4	4.3	1.3	-0.3	-0.1	1.8	2.8	-2.7	-2.4	2.4	-0.7
MT	-6.7	-4.6	-0.6	0.0	11.5	-9.6	-9.4	-10.9	0.1	0.0	-21.5	-11.5	26.8	40.9
PL	-5.1	-3.6	0.0	-0.2	4.2	2.2	0.0	-0.6	1.0	1.5	-1.2	-1.9	1.6	-0.6
SI	-1.3	1.7	-0.3	-0.5	1.4	8.4	-0.2	-0.4	1.2	0.1	-1.1	-4.0	3.1	3.0
SK	-7.4	-8.2	0.1	0.0	4.7	16.9	-0.6	1.1	2.6	1.2	-0.3	3.0	1.7	-0.9
AC-10	-4.9	-4.4	-0.3	-0.3	4.8	5.2	-0.6	-1.2	1.5	1.6	-2.1	0.1	-0.4	-1.0

Sources: IMF, national central banks, figures partly estimated.

These relatively high deficits reflect the high demand for foreign capital against the background of the transition process that these countries (with the exception of Cyprus and Malta) have had to undergo. Foreign, mostly private, capital has quite smoothly financed these deficits over the past decade (see Table 12 and Graph 5). The surplus in the financial account has in each year since 1995 been at least at the levels of the current account deficits.

4.2.3. The role of FDI

The composition of the financial flows has been significantly, and increasingly, directed towards foreign direct investment (FDI). Over the past several years, for the acceding countries as a whole, FDI inflows have amounted to around 5 % of GDP. This has also meant that the current account deficits in the acceding countries could be increasingly financed exclusively by FDI. From 2000 to 2002,

FDI inflows were in each year even larger than the respective current account deficits (see also Graph 5).

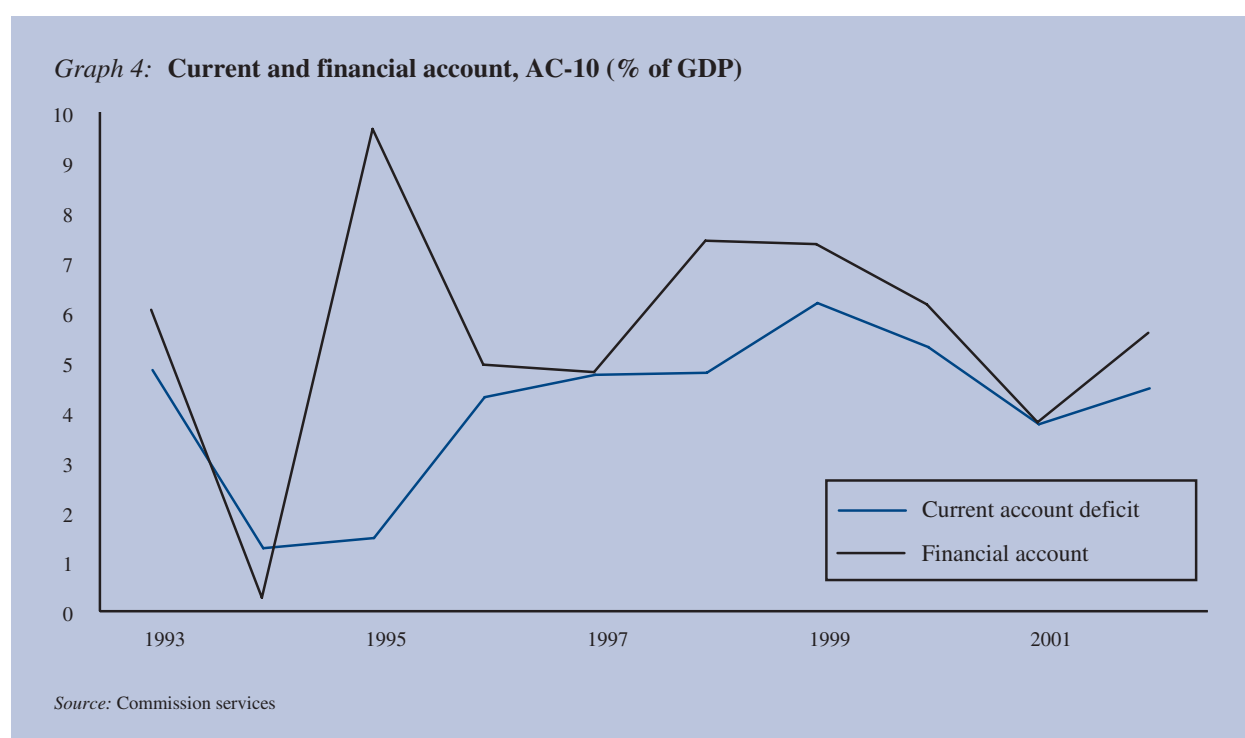
This strong development in FDI was mostly due to the respective trends in the Czech Republic, which has attracted extremely high volumes of FDI over the past years, amounting to nearly twice the current account deficits for the 1997–2002 period. But also in Hungary and Malta, FDI more than covered the current account deficits. At the other end, Latvia and Lithuania (with somewhat more than 60 %) and particularly Cyprus (less than 40 %) have witnessed a relatively smaller contribution of FDI to the financing of the current account deficits (see also Table 12). With the exception of Hungary and Malta, all acceding countries have seen a rise in the value of FDI (in euro) in the last three-year period compared with the previous one. This rise has been quite spectacular for the Czech Republic, Cyprus, Slovakia and Slovenia.

Table 12

Foreign direct investment — inflows

	% of total investment (GFCF)		% of current account deficit		% of AC-10 total FDI inflows		Growth rate 2000–02 over 1997–99
	1997–2000	2002	1997–2002	2002	1997–2002	2002	
CZ	28.7	50.6	177.4	210.7	27.1	43.0	108.0
EE	30.2	15.6	105.6	35.4	2.6	1.3	27.8
CY	7.5	23.2	29.5	81.1	0.7	2.0	240.5
LV	14.8	13.3	62.6	60.2	2.2	1.8	- 5.2
LT	29.9	32.1	54.9	107.0	3.2	3.3	4.4
HU	18.2	5.8	131.3	32.3	12.7	3.9	- 3.1
MT	48.4	- 41.7	173.9	- 208.5	2.6	- 1.7	- 45.7
PL	17.7	11.4	83.0	61.5	41.5	19.0	23.9
SI	5.5	36.9	101.0	n.a.	1.6	8.6	356.9
SK	15.2	56.7	61.5	206.9	5.8	18.6	733.6
AC-10	19.4	23.7	98.2	118.9	100.0	100.0	62.8

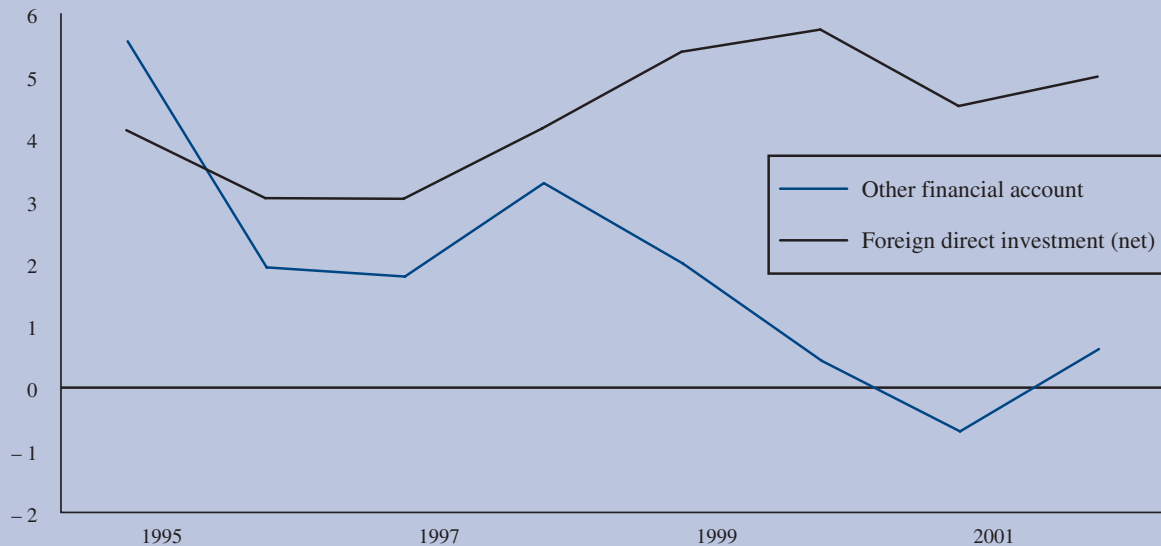
Sources: IMF, national central banks, figures partly estimated.



This dominant role of FDI contrasts to the average structure of the financial account elsewhere in Europe. For example, the euro area recorded in the years 2001 and 2002 on average only 33 % of its total financial inflows (liabilities) in the form of direct investment in the euro area. It is the result of a series of factors conducive to

FDI and restraining other forms of financial flows: FDI has been clearly driven by the large-scale privatisation of State-owned enterprises in former socialist countries. Even if exact numbers for the aggregate of the 10 countries do not exist, it is clear that the lion's share of FDI was due to the takeover of such companies by foreign

Graph 5: Financial account, AC-10 (% of GDP)



Source: Commission services

investors. Other forms of FDI ('greenfield' or 'brown-field' investments) have consequently played a much smaller role in initiating foreign direct investment. Graph 6 shows the respective annual values of FDI as a percentage of GDP in the three largest economies, hosting nearly 82 % (in euro terms) of all FDI to all acceding countries over the last decade.

Hungary had very strong inflows in the first half of the decade, but, since then, FDI inflows have been on a declining trend. In the Czech Republic, the picture is reversed, with exceptionally high FDI inflows in the past five years. Finally, for Poland, the trend was steadier, and more subdued, than in the other two countries mentioned. The respective differences in the graphs reflect the volumes and patterns of the respective privatisation programmes.

FDI has, on average, played a relatively larger role in foreign financing, the smaller the volume of foreign financing has been. Graph 7 shows the relationship between the size of the current account deficit in terms of GDP and the percentage of FDI in the current account deficit over the 1997–2002 period. There is a fairly robust negative correlation between these ($R^2 = 0.51$). However, without the exceptional case of Slovenia (depicted by the top-left entry), the relationship, though

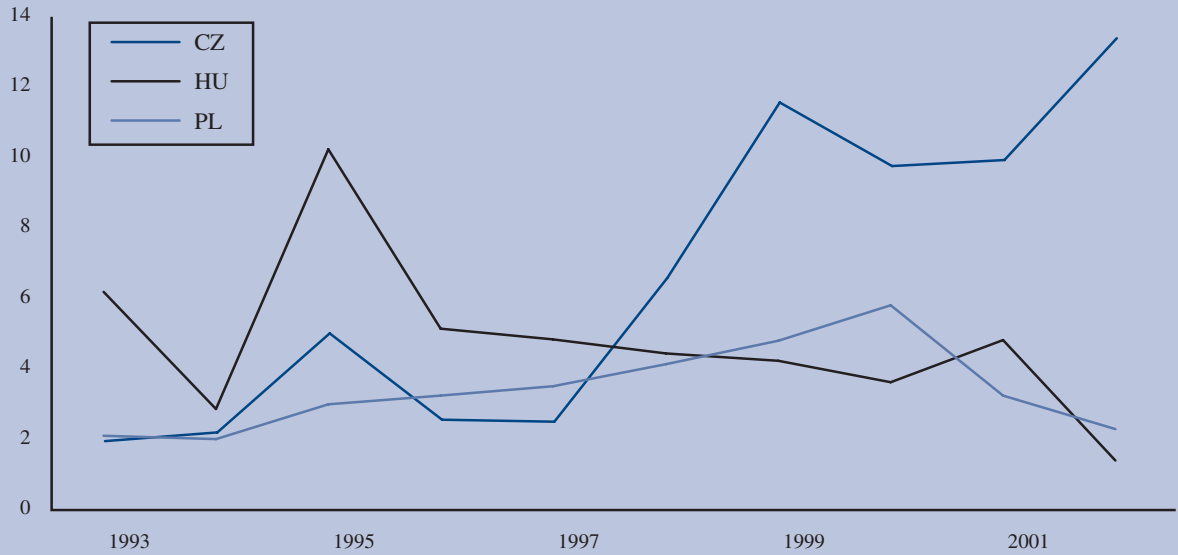
still inverse, becomes much weaker and statistically close to insignificant. Yet the absence of any indication of a positive relationship does not support the hypothesis of FDI as being itself largely current-account-deficit creating, rather than just financing that deficit.

4.2.4. Other forms of capital movements

Other kinds of capital movements have played a small and relatively decreasing role in the foreign financing of these economies. In the Czech Republic, these other forms even amounted to a net outflow of capital between 1997 and 2002, against the background of strong inflows in the years before and increasing FDI inflows over the past years. The exceptionally high volume of non-FDI capital flows in 1995 was mostly due to very strong inflows of bank deposits in the Czech Republic.

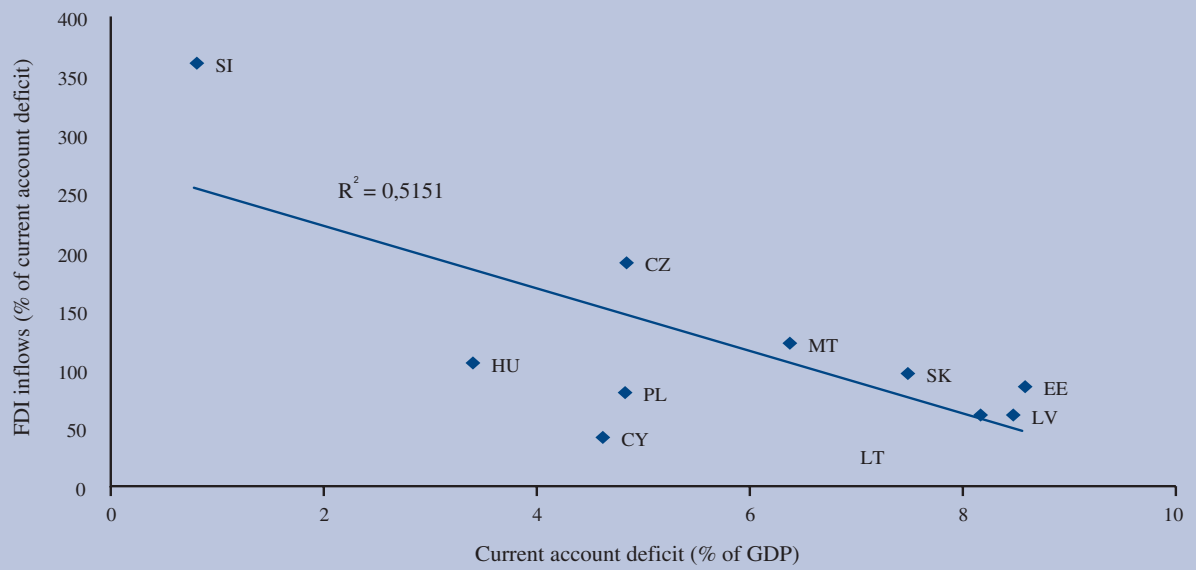
This relatively small volume of other forms of capital flow reflects overall not only the fairly small size of the banking sector and of capital markets in most acceding countries, with Cyprus and Malta being notable exceptions, but also remaining legal restrictions on such transactions, as well as the increasing convergence of interest rates and share prices to levels and cycles in industrialised countries: this has entailed correspondingly less potential for hedging or speculating through portfolio

Graph 6: FDI inflows (% of GDP)



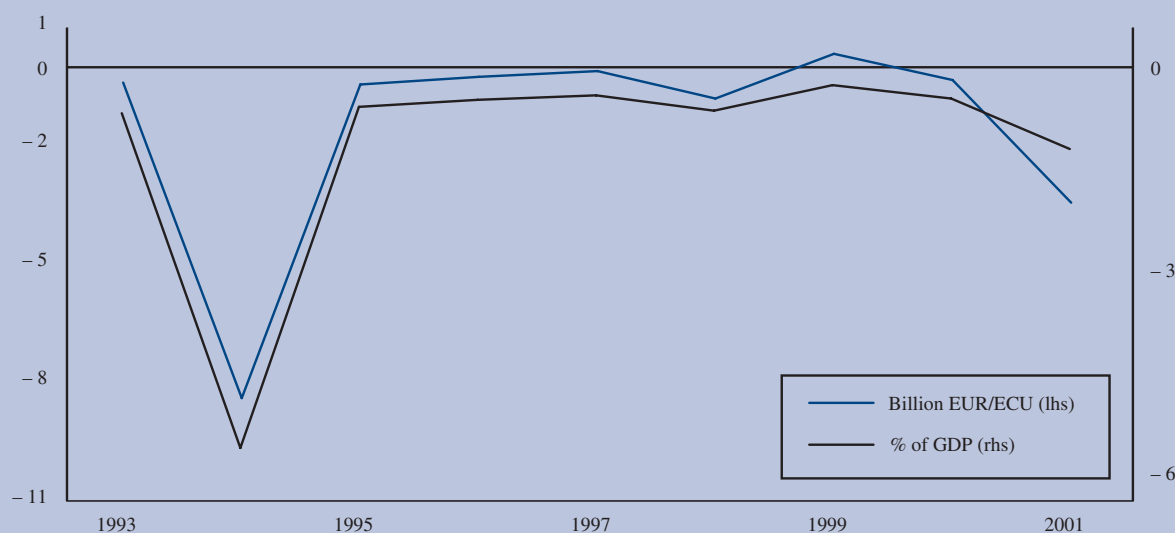
Source: Commission services

Graph 7: Current account and FDI, AC-10, 1997-2002



Source: Commission services

Graph 8: AC-10: Financial account — general government net assets



Source: Commission services

diversification. Also, the government sector has practically given up any role in channelling foreign capital in the economies of the AC-10. Over the past years, government net asset changes have been insignificant and mostly slightly negative, meaning a small outflow of capital by the government sector (see Graph 8).

Here, too, is a reflection in the capital flow pattern of shared policy priorities across these countries: government influenced the composition of flows not so much through the sequencing of liberalisation as through the impact of its own withdrawal from markets — both as an owner of enterprises and as a potential intermediary of capital flows.

The limited size of capital market financing in these countries has not yet allowed a sizeable flow of portfolio investment into AC-10. Graphs 9 and 10 show the development of capital inflows into the three largest countries among AC-10 (the Czech Republic, Hungary, Poland) in the form of equity and debt securities. Over the period 1998–2002, these three countries accounted for 86 % (equity) and 70 % (debt) of all AC-10 inflows. Overall, there is no clear obvious trend for these three countries, neither as regards the volumes of such transactions over time nor as regards the correlation among the countries. However, portfolio flows to Estonia and Lithuania were, although small in absolute terms, quite sizeable in relative terms — and far higher than the average for AC-10 in total. As mentioned above, com-

pared with the size of the total financial account, the amounts were fairly small, and, at least in relative terms, even decreasing over time.

Cross-country correlations, based on quarterly values, are fairly low (see Table 13). They are mostly slightly positive, with the exception of equity securities for the Czech Republic and Hungary with a small negative correlation. They are slightly larger, on average, for debt securities than for equity securities, at first sight somewhat surprising given the very different interest rate patterns in the three countries in the relevant period. Hence, at least on a quarterly basis, portfolio flows seem to have been mostly shaped by country-specific factors, rather than global assessments affecting the whole region.

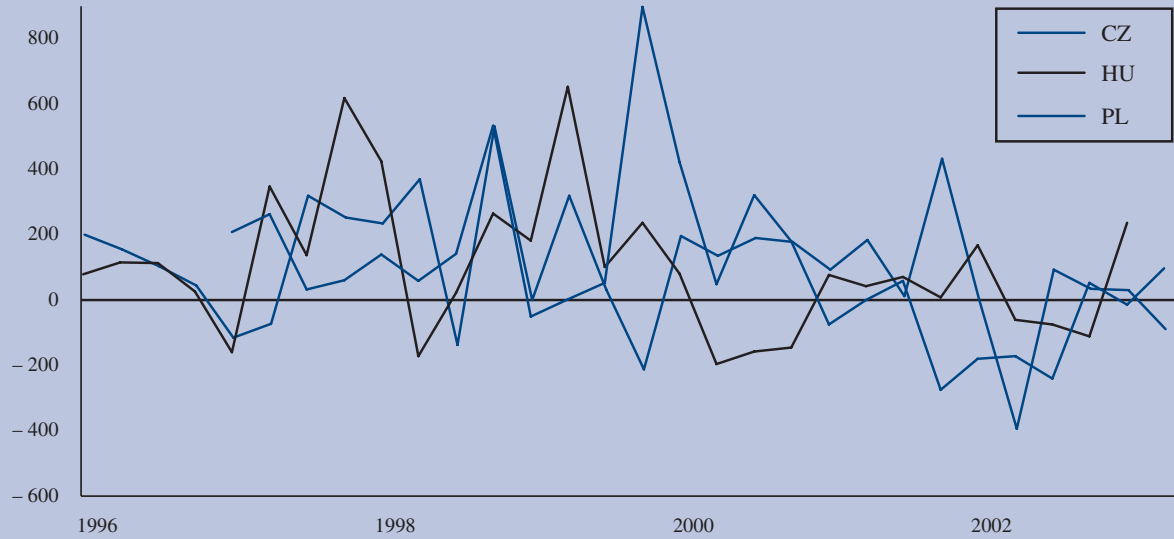
Table 13

**Portfolio investment (inflows/debit, quarterly values)
cross-country correlation**

	Equity securities			Debt securities		
	CZ	HU	PL	CZ	HU	PL
CZ	1			1		
HU	0.25	1		-0.14	1	
PL	0.00	0.16	1	0.34	0.21	1

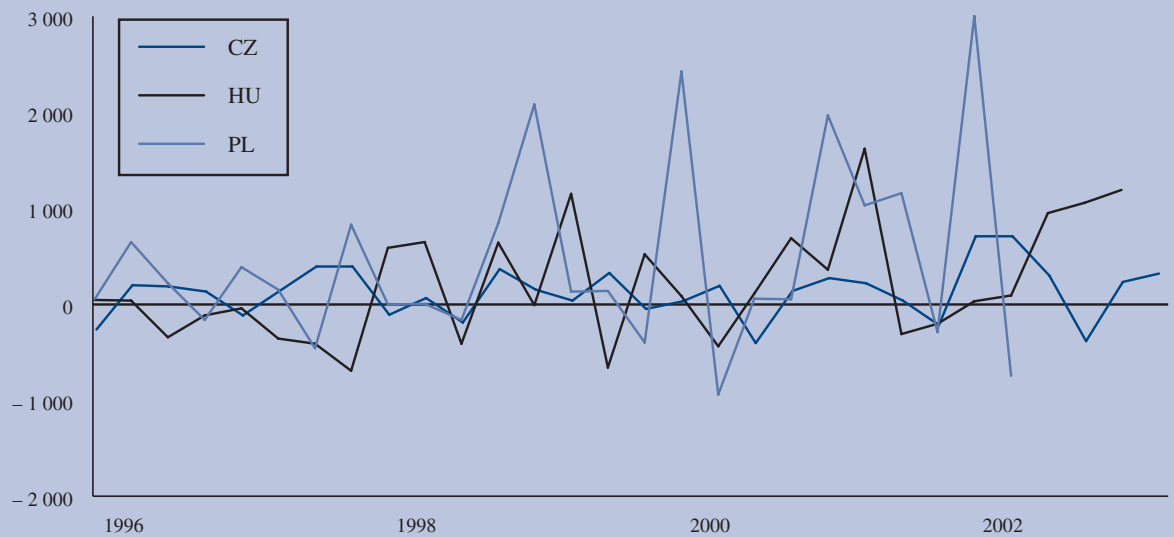
Sources: IMF, national central banks, figures partly estimated, own calculations.

Graph 9: Equity securities (inflow/liabilities; million EUR/ECU)



Source: Commission services

Graph 10: Debt securities (inflow/liabilities; million EUR/ECU)



Source: Commission services

4.2.5. Volatility of flows

Despite, in terms of global financial markets, the small sizes of financing requirements of acceding countries and the ongoing process of transition and stabilisation in most of these, financial flows into these countries have shown only moderate levels of variation over time. Looking at annual figures, thereby smoothing out some normal intra-year variation, the variation coefficients for broad categories of the financial account among countries are not particularly high (see Table 14).

As expected, they are higher for portfolio investment and particularly other investment (including the typically quite volatile cross-border bank assets and liabilities) than for FDI, and for capital outflows than for inflows. Across countries, the pattern is less clear: neither the variation of the current account deficit nor the size of the economy plays a systematic role in explaining the variation in the financial account. On the other hand, the size of the current account deficit seems to systematically add to instability over time in financial flows, as here the respective correlations are relatively high.

However, there have been several periods over the past several years during which (net) financial flows to certain countries have been fairly abruptly compressed, such as in the Czech Republic in summer/autumn 1997, Estonia in early 1999 and Lithuania in autumn 2000. The reasons and consequences of these

episodes varied from country to country, partly caused by changes in investors' expectations in the light of domestic overheating or by the impact of the economic crises in Russia.

Episodes that were more shaped by international contagion, rather than domestic imbalances, were rather short-lived. The abovementioned cases of Estonia and Lithuania might fall into this category, whereas the case of the Czech Republic had more the character of a domestic stabilisation and adjustment crisis, to which international capital flows reacted. The economic fallout of the crisis was rather sizeable and extended for the Czech economy. Yet, in all instances, it was mostly international bank transactions (changes in assets and liabilities of domestic banks) that were the channel of these rapid changes in foreign financing, whereas other forms of capital flows held up fairly well.

4.2.6. The past as a guide to the future

In sum, a hallmark of policy performance in the acceding countries has been their scale of access to international capital flows, and the effectiveness with which these have been channelled, typically, to productive investment. These inward flows have played a key role in accelerating their economic transformation — including, notably, the transition of the former socialist economies from varying degrees of central planning to readiness for EU Member States in little more than a decade.

Table 14

Financial account: variation ⁽¹⁾ over time, 1995–2002

	Current account	Financial account	Direct investment		Portfolio investment		Other investment	
			Abroad	In country	Assets	Liabilities	Assets	Liabilities
CZ	0.50	0.73	0.81	0.70	1.30	0.34	2.68	1.60
EE	0.55	0.44	0.90	0.52	1.37	0.95	0.92	0.70
CY	0.42	0.74	0.79	0.95	0.84	0.86	7.95	1.44
LV	0.57	0.39	3.89	0.36	1.16	n.a.	0.97	0.52
LT	0.32	0.34	1.25	0.63	1.87	1.00	1.93	0.57
HU	0.36	1.08	0.68	0.37	0.99	1.23	1.09	2.49
MT	0.50	0.59	1.00	1.45	0.85	17.81	2.17	1.30
PL	0.66	0.54	1.73	0.42	4.74	0.81	4.15	2.62
SI	3.14	0.62	1.16	1.45	1.13	0.78	1.27	0.52
SK	0.60	0.67	47.08	1.20	8.14	1.01	391.96	2.44
AC-10	0.39	0.25	0.63	0.41	1.00	n.a.	1.01	0.60

⁽¹⁾ Annual standard deviation/absolute value of mean.

Sources: IMF, national central banks, figures partly estimated, own calculations.

How far will the future repeat the past, both in the pattern and composition of capital inflows, and in the influence of market factors on the challenges that policy-makers face? Clearly, the pattern and composition of flows across countries will continue to reflect major specific factors in these economies — including, notably, EU accession and their specific stage of economic transition. Here, there are several respects in which the timing of EU entry may coincide with a watershed in the form of financial flows and their influence on the policy environment.

In the former socialist economies, one consideration is that the process of privatising former State-owned enterprises has already come very close to an end in many countries and is relatively advanced in the others. Hence, the sell-off to foreigners, which constituted a main driving force for FDI, will decline. On the other hand, the balance of payments will increasingly reflect the rising stock and rising profitability of foreign investment: investment income payments have strongly risen between acceding countries and the rest of the world, mostly in the form of acceding countries' debits, reflecting their position as net capital importers (see Table 15).

In 2002, for the average of acceding countries, net income payments amounted to 1.9 % of GDP, compared with an average of 1.5 % for the period 1997–2001. However, the average masks considerable country differences; in 2002 net income payments were more than 5 % of GDP for the Czech Republic and Estonia, whereas all other countries saw much smaller figures, and Cyprus even net income inflows. The very high credit and debit figures for Malta are due to the unique role of a large foreign-owned manufacturing company on the island.

A further consideration is that the rapid development under way in financial sectors in these countries, both in size and in standards of prudential supervision, has set the stage for higher debt-creating capital inflows. Also, of course, the path towards EU membership, ERM II participation and the prospects of euro adoption might also trigger further adjustments in portfolios by international investors, driven by changing risk assessments and changing financial market prices. One aspect of EU membership, moreover, is that these countries will be increasingly net recipients of EU transfers. The size and structure of the current account balance, as well as its financing, might be affected thereby.

The past is prelude. The pattern and composition of flows discussed above serve in part only as a guide to the

Table 15

Balance of payments: income (% of GDP)

	Credit		Debit		
	1997–01	2002	1997–01	2002	1995 = 100
CZ	3.3	3.1	- 5.6	- 8.5	458.5
EE	2.6	3.1	- 5.7	- 8.2	871.0
CY	5.1	5.0	- 5.4	- 4.5	124.6
LV	3.1	3.4	- 2.7	- 3.6	586.1
LT	1.3	1.2	- 3.3	- 2.7	589.2
HU	2.2	1.8	- 5.6	- 4.2	107.7
MT	21.4	21.7	- 22.2	- 21.9	344.2
PL	1.3	1.1	- 2.0	- 1.9	117.8
SI	2.2	2.2	- 2.0	- 2.5	273.7
SK	1.5	1.4	- 2.8	- 3.4	303.5
AC- 10	2.2	2.0	- 3.5	- 3.9	197.4

Sources: IMF, national central banks, figures partly estimated.

future; and many changes that have been taking place over the last few years will help shape a changed financial environment in the early years of EU membership. To the extent that changes in the macroeconomic and financial market environment show regularities across the countries, this new setting may present both opportunities and challenges to policy-makers that differ systematically from the past — the subject discussed in the next section.

4.3. Capital flows and policy challenges in a convergence setting

4.3.1. Capital inflows and the market setting

Capital inflows in the new Member States are set to remain strong, with EU membership offering a setting for continuing rapid integration through both trade and capital flows. But continuity and change are likely to go hand in hand. The composition of flows, and the domestic market setting in which they are absorbed, will evolve in ways that are important for the policy frameworks — particularly in the case of the former socialist economies.

- With a continuing decline in risk premiums, growing access to credit, and rising permanent income expectations, a strong growth in domestic bank credit to the private sector is emerging across the Baltic States and central Europe — albeit in many cases from a low base.

- At the same time, the domestic non-bank financial sector in all countries will probably continue to expand. From case to case, the growth may be in leasing units, or insurance companies, or again in private pension funds. Clearly, capital market structures are set to evolve further.
- As the domestic financial structure continues to evolve — and indeed with fiscal deficits remaining in some cases sizeable — the composition of investment inflows may well change: over time, holdings of liquid claims are likely to grow in relative terms; and again it is in the former transition economies that the scope for change is the greatest, given a current setting of heavily bank-dominated systems.
- The composition of net external financing may also shift for reasons of industrial structure: as major privatisation offerings taper down across the region, companies based in these economies may increasingly make direct investments in third countries, as they continue to move up the technology and value added chains.

Such market changes offer important opportunities. Foremost among these is the scope to progressively strengthen domestic corporate governance structures. This is a challenge in all countries, and certainly in the former transition economies — where it remains important to avoid any tendency toward Berglöf and Pajuste's (2002) cycle of 'emerging owners, eclipsing markets' — that is, a set of governance incentives dominated excessively by the interests of foreign majority shareholders. While internal company management in these economies has advanced dramatically over the past decade, there is obviously still progress to make as regards outward-looking governance: corporate governance which — with notable lapses — has been developing in advanced capital markets. This depends on steady progress in areas such as accounting and auditing, and the treatment of minority shareholders. In some cases, the rulebook is impressive, and effective implementation is the issue rather than policy design. In a word, domestic corporate governance structures need to become firmly embedded.

Domestic capital market development also has the potential to channel foreign inflows more broadly to enterprises offering high risk-adjusted returns. Thus far, for most of the acceding countries, a predominant solution for private sector borrowers has been to tap market

financing through parent companies. To some degree, this contributes to a two-tier market; and SME borrowers, or nationally owned companies (especially in less advanced regions) have found it more difficult to benefit from foreign investment. As a corollary, such investment has been concentrated in certain sectors and in government debt where there is a significant traded market — as in Hungary and Poland. There are mutual benefits to investors and domestic firms — and also the potential benefit that this process of broadening may reduce the risks of localised overheating or of bubbles in currently favoured real estate markets.

An important complexity in design for all the acceding countries is to take into account those aspects of capital market development where it makes sense to think regionally (or, indeed, globally), rather than perfecting compartmentalised local markets. In this regard, issues such as transparency and accounting emerge as crucial.

The increasing integration and depth of traded money and capital markets can bring, potentially, other benefits. It should strengthen channels for monetary policy transmission, and help ensure that policy restraint does not impact unduly on particular sectors of the economy. As investment flows help open up a wider institutional range in financial systems — injecting, as needed, the specialist skills this entails — greater institutional diversity should enhance systemic stability.

4.3.2. Financial convergence and the challenges for policy

Market changes along these lines will thus bring important benefits: as further steps along the road to financial convergence, they should help foster sustained and more broadly based growth in the real sector. But, as foreign inflows continue, and the domestic financial setting continues to develop rapidly, the emergence of a more diversified — and more liquid — market setting will also entail evolving policy challenges. There are, clearly, uncertainties about the pace with which domestic credit will expand, as well as the pattern of capital inflows. If the past is a guide, in this region and elsewhere, then policy-mix tensions may at times lead to unwarranted real appreciation, while some experience of market imperfections (overshooting, bubbles) cannot be excluded.

Experience among emerging market economies underscores that these uncertainties and risks deserve priority attention among policy-makers. Some are purely in the hands of the international capital market — with its

potentially great benefits but well-known imperfections. But others are very much in the hands of policy-makers — and the challenge of mastering fiscal tensions and honing a balanced policy mix is perhaps foremost among these. Here, the lessons of financial history make all too clear that the stakes are high: an unfortunate constellation of market factors and policy drift has the potential to set back real convergence very seriously. The notorious ‘lost decades’ experienced in other regions speak to this concern. With the anchor of EU entry, and the proven skills of policy-makers, the acceding countries have every opportunity to prove exceptional in this respect — as, indeed, the majority of these countries did as they navigated the uncharted waters of transition.

In this setting, four policy priorities deserve attention in all the acceding countries to ensure that capital inflows continue to contribute to strong and sustainable growth.

- Standards of corporate transparency and disclosure — and governance issues such as the treatment of minority shareholders — can help ensure that capital is tapped for new ventures, including by small and medium-sized enterprises, and promote the tapping of European and global markets.
- In the real economy, renewed attention needs to be given to the flexible working of markets — especially the labour market. Throughout the new Member States, wage setting mechanisms deserve careful attention — and also crucial is the nexus of insolvency procedures, collateral enforcement, and effectiveness of the judicial systems. These elements are key to ensuring an attractive setting for

domestic as well as external financiers, but also for ensuring real sector flexibility.

- Prudential supervision — including over non-banks and conglomerates — needs to ensure strengthening standards of risk assessment, so that an overly rapid decline in risk premiums or broader market exuberance do not lead to undue concentrations of risk in a few sectors, or to asset price bubbles. With a major cross-border element in ownership and flows, this is a setting in which supervisory cooperation at the macroprudential level, as well as the microprudential, will be of paramount importance.
- Last but far from least, fiscal and monetary policies have to assist in preserving macroeconomic balance at a time when domestic and cross-border credit to the private sector may be expanding rapidly, by improving the targeting of public expenditure so resources are freed for restructuring and infrastructure development, and by assuring a transparent monetary framework, with policy directed towards relatively low and stable inflation.

A central challenge, in other words, is to craft policy frameworks that are firm enough to foster stability, yet prove resilient in times of stress — thus ensuring that shocks do not wreak lasting damage in the real economy. Across the region, a second generation of financial market and insolvency reforms is indeed under way, along with the implementation of the *acquis communautaire* and international standards and codes. It is important to note that the choice of macroeconomic policy regimes and the timing of regime transitions offer important degrees of freedom here.

5. Are international capital flows driven by corporate governance?

The following makes the point that good corporate governance and transparent financial reporting can be significant forces behind international capital flows. This should not deny the importance of macroeconomic policies, exchange rate considerations or other factors, such as the freedom of cross-border movement for capital, a basic regulatory and technological framework — the enforceability of international contracts and a technical ability of offering or withdrawing capital to or from another country. However, good corporate governance can enhance economic growth and reduce investors' risk concerns, and can therefore be paramount in determining international capital flow choices ⁽¹⁾.

5.1. Corporate governance and growth

There are a host of findings underlying the role of corporate governance for economic growth. A lack of shareholder influence on corporate strategies renders company management less efficient ⁽²⁾. Solid shareholder rights have been found to be the cause of superior investment performance (Gugler et al., 2001). Good corporate governance facilitates corporate restructuring, as corporations turn more quickly to new areas of growth or declare bankruptcy when management is unable to invest resources profitably ⁽³⁾. As economic growth may be destabilising for economically dominant interest groups, good corporate governance in a broad sense is needed to prevent incumbent managers from lobbying governmental authorities for protection and economic-change-inhibiting policies ⁽⁴⁾.

Corporate governance and growth should go hand in hand as trusting investors might be more willing to confer their money to corporations where managers' strategies and actions are properly supervised or where companies have earned a reputation for shareholder control. Inadequate corporate governance structures generate a less responsive company management and delay necessary adaptations of outdated business models. After all, human nature resists change and corporate managers might prefer to maintain things as they are.

Corporate governance questions arise mainly from the separation of ownership and managerial control, which is a central feature of modern capitalism. As a general rule, high-quality corporate governance structures align the interests of the manager and the owners appropriately. In theory, investors and management could enter a contract specifying how company funds are managed and how profits are divided in every contingency. In an ideal world, this contract would be complete, i.e. stipulating exactly what management has to do in all circumstances and exactly how much of total profits are to be received by whom. In reality, uncertainty about the future means that contracts between investors and management cannot be complete.

Thus, both managers and investors must agree on residual control rights, i.e. the right to make decisions in circumstances not fully foreseen by the contract. The *ex ante* incentives for managers to maximise investment returns depend crucially on the process through which profits are expected to be divided *ex post*. These incentives induce management to add or demolish value, as rational agents cannot be expected to allocate resources optimally if they are not properly rewarded by the company's governance system.

⁽¹⁾ 'Investor' is used here interchangeably with the terms 'owner' and 'shareholder'.

⁽²⁾ For example, Emmons and Schmid (2001) find a connection between underinvestment, company overstaffing and the worker co-determination model in Germany.

⁽³⁾ See, for example, the Japanese experience as described by Peek and Rosengren (2003).

⁽⁴⁾ See, for example, He et al. (2003).

5.2. Corporate governance and investor risk

Many examples document the linkage between corporate governance and investor risk assessments. While economic fundamentals led to the Asian crisis of 1997–98, the weakness of legal institutions and lack of corporate governance exaggerated its severity in several emerging markets (Johnson et al., 1999). One lesson is therefore to strengthen corporate governance by institutional arrangements (Eichengreen, 1998) ⁽¹⁾. The feeble small investor protection in many countries outside the

USA — making investors vulnerable to fraud — can also be utilised to explain the home bias of US investors (Dahlquist et al., 2002). There is also evidence of higher company valuation in countries with better minority shareholder protection (La Porta et al., 1999).

⁽¹⁾ However, Singh et al. (2002) reject that view by stating in the abstract of their paper: 'The thesis that the deeper causes of the Asian crisis were the flawed systems of corporate governance and a poor competitive environment in the affected countries is not supported by evidence.'

Box 1: Getting corporate governance right ⁽¹⁾

The following provides a concise overview of basic principles to be considered when implementing sound principles for corporate governance. They include both incentives for managers to maximise shareholder value and mechanisms for the protection of (small) shareholders.

Performance-related compensation schemes should be carefully designed and implemented, as some variants (e.g. short-term stock options) can lead to abuse. Ideally, incentive schemes should have a long-term focus and should not only aim at 'objective' criteria — like the company share price — which could be open to manipulation. A further reason for caution in the use of these schemes is that their asymmetric nature — with good performance rewarded but no penalties for failure — can encourage excessive risk taking.

A competitive market for managerial skills helps to assess and value potential individual managers more efficiently. However, the effectiveness of such a market is limited by the fact that new managers are most often recruited by existing managers within the company.

Management's fiduciary duties to shareholders, which include 'reasonable' care, diligence and loyalty, should be clearly defined, together with liability regimes opening the possibility of seeking compensation for past actions that have harmed investors' interests.

Internal control procedures are integral to effective corporate governance practices and set the 'tone at the top'. Proposals in this area include (i) making senior management more responsible for establishing and maintaining an effective internal control system with appropriate oversight by corporate monitoring bodies, (ii) adopting

codes of conduct, which provide information and guidance to those within a company about the company's standards of ethical behaviour, (iii) establishing or improving processes to monitor compliance with policies and procedures that are implemented to prevent and/or detect illegal acts, and (iv) improving the environment for so-called 'whistle blowers'.

Measures to facilitate voting by shareholders should encourage more active oversight of a company. Non-controlling (and especially small) shareholders experience what has been termed 'rational apathy', because their voice is too small to influence the decision-makers in a company. Larger shareholders have a greater incentive to scrutinise management and stand more chance of success in efforts to remove the managers. Accordingly, these mainly institutional shareholders could be encouraged to vote in shareholder meetings, to raise issues of concern to shareholders in general, and even to solicit votes against management proposals. The voting process could also be facilitated by exploiting new technologies, like the Internet, to disseminate information and invitations to general meetings.

Diffuse ownership of shares magnifies the principal-agent problem by limiting the scope for collective action among shareholders. A possible solution would be to facilitate concentration of voting rights such as in hostile takeovers (HTs). In a typical HT, the bidder acquires control of the target firm and is then in a position to replace the management.

⁽¹⁾ This section is inspired by Zingales (1997), Shleifer and Vishny (1996) and Becht et al. (2002).

(Continued on the next page)

Box 1 (continued)

However, HTs are difficult and expensive (often made so by regulatory actions) so that only major management performance failures are likely to be addressed. A major risk associated with large shareholders is that they are likely mainly to represent their own interests, which need not coincide with the interests of other investors or the firm. Therefore, another proposal to enhance shareholder control has been to assign a special investigative right for minority shareholders, which can be an important deterrent against wrongdoing.

A company board has fiduciary duties towards shareholders and the company, and should consist both of inside and outside directors, elected by shareholders. Proposals have been made to strengthen the role of independent directors,

by ensuring that they (i) comprise a majority on a company's board, (ii) have accounting or financial management experience, (iii) qualify as 'independent' only in stringent circumstances, excluding any potential candidate who has a 'material relationship' with the company, (iv) have not been an employee of the company, and (v) should not be an employee or affiliate of a present or former auditor of the company.

The proper balance between management incentives as well as control procedures combined with measures facilitating shareholder voting and special rights for minority shareholders might help to transform corporate governance into a tool for furthering shareholder interests and creating thereby value added for the society.

The prevention of fraud within a company depends on the nature of the relationship between investor and management. A corporate governance environment in which managers enjoy a significant information advantage can give rise to discretion, which might then be used for expropriating the investor. This can be achieved in a crude way, for example by management setting up independent vehicles and selling output (or even the assets) of the company to that vehicle at below market prices, or through a more subtle form, for example through excessive remuneration and/or perks for the management.

However, fraud is not the preserve of management. Large shareholders can also conspire with management to defraud smaller shareholders or alternatively current shareholders may seek to take advantage of prospective shareholders by agreeing to publish misleading information on the company, in order to be able to sell their stakes for a high price (see Box 1 for some basic principles).

5.3. Financial reporting and capital flows

International funds prefer to hold more assets in transparent markets than in obscure environments and openness makes herding among investors less likely⁽¹⁾. Transparent financial reporting is therefore another pillar in attracting and retaining foreign capital.

Financial reporting is typically regarded as a tedious exercise, except by those professionals responsible for producing company accounts. However, a financial reporting system, which does not properly reflect the use of resources, results in suboptimal allocation and creates (or aggravates) principal-agent problems in financial markets. An additional consequence of inadequate financial reporting is that company performance is vulnerable to sudden reassessment if and when the (hidden) information subsequently emerges, with implications for shareholders, creditors, employees, and even retirees whose pension funds may be dependent on company performance.

Good financial reporting closes the gap between the information available only to insiders or good connected locals and the unsuspecting outside investor. Non-transparent financial reporting fosters corruption, which in turn might affect the composition of a country's capital inflows by diminishing its share of foreign direct investment, making a country more vulnerable to a currency crisis (Wei, 2000)⁽²⁾.

The importance of financial reporting has increased in the context of a modern financial system⁽³⁾. The process of liberalisation and deregulation since the 1980s has led to a general relaxation of controls on financial sector

⁽¹⁾ See Gelos and Wei (2002).

⁽²⁾ An assessment of the different forms of capital flows and their vulnerability to sudden withdrawal is given by Williamson (2000).

⁽³⁾ See Crockett (2002).

activities and fostered the creation and application of many new financial techniques and products. These have, in turn, facilitated an ongoing trend of disintermediation, whereby market-based finance is growing at the expense of relationship banking. As disintermediation increases the risk of information asymmetries in financial markets, adequate public disclosure becomes more significant. Indeed, sentiment in modern financial markets is increasingly driven by published earnings figures and forecasts, forming the basis of investors' perceptions of value and risk. In this context, it is worth noting that globalisation has increased the demand for internationally comparable levels and content of information disclosure.

5.4. Enforcement

However, a good 'law on the books' is not enough. The enforcement of corporate governance rules and disclosure requirements is another important aspect and many economies suffer from a weak legal follow-up on exposed infringements ⁽¹⁾.

It has been argued that market discipline and reputational concerns provide sufficient incentive for companies to disclose all relevant information in a timely manner. However, recent corporate scandals have cast doubt on this argument. A more favoured approach at the current juncture is to use the threat of heavy legal sanctions or personal honour guarantees to discourage any financial wrongdoing by company managers.

Two flaws can be found in this approach. The first is the difficulty for outsiders to verify whether the disclosed information is or is not correct. The second relates to the disclosed information's interpretation, as the same financial fact can be reported in various ways and what is viewed as 'aggressive reporting' by one regulator may be viewed as 'fraudulent' or 'reckless' by another. This is not to suggest that this approach cannot be a part of a solution. In the USA, the Sarbanes–Oxley Act requires managers to certify all financial results and threatens heavy punishments for fraudulent misrepresentation of company accounts. More generally, however, it is essential to maintain an appropriate balance between any threatened sanctions for wrongdoing and the capacity for risk taking by management.

⁽¹⁾ See on this point, for example, Berglöf and Pajuste (2002).

5.5. EU initiatives

The recent corporate scandal involving the European-based food retailer Ahold has proven that the EU is not immune to corporate malfeasance. However, the EU did not await these developments before starting to work on a series of related issues as seen in the following selective overview. Already in the financial services action plan (FSAP), measures were proposed which reinforce safeguards for financial stability and market integrity, as with the market abuse directive, which covers both insider dealing and market manipulation.

Central to fair financial reporting are high-quality accounting standards. The EU has addressed this need with the adoption of the international accountancy standards (IAS) regulation in June 2002. This requires EU listed companies to publish consolidated accounts in 2005 based on the IAS. The Commission is currently preparing to endorse most of the IAS. In a related development, the IAS Board and the equivalent US accounting standards board, the FASB, have agreed to work together with the goal of convergence of their respective accounting standards.

In addition, the EU has shifted its focus towards the additional reform of corporate governance by publishing two communications in the spring of 2003. The communication on corporate governance included an action plan, proposing among other issues:

- to strengthen shareholder rights (i) by enabling easier access to company information, and (ii) by encouraging shareholder control — through facilitating voting in absentia and cross-border voting;
- to put a special emphasis on independent non-executive directors by strengthening their responsibilities in the areas of directors' remuneration and audit committees;
- to make the company board collectively responsible for the content of financial statements and key non-financial statements.

The other Commission communication is on statutory audits dealing with public oversight issues and possibly opening a discussion on the question of EU coordination on auditor oversight. Another aim of the communication is to address auditor independence and quality assurance.

5.6. Outlook

Good corporate governance, transparent financial reporting and enforcement of the relevant laws influence economic growth rates and investor risk assessments and attract international capital flows. The EU has initiated significant projects in this regard. However, important as it may be today, the significance of corporate governance might increase even further in the coming years as declining population growth rates in maturing economies might force those countries to look beyond their immediate neighbourhood for investment opportunities.

Capital flows into distant emerging markets amplify the significance of corporate governance and financial reporting for ageing countries' investment decisions. Therefore, apart from broader stability concerns, good corporate governance might well become a strategic foreign policy goal for western policy-makers in the decades to come. In return, those emerging economies creating investor confidence may acquire through the accompanied capital inflow a crucial element for their economic growth, enabling them not only to catch up with mature economies in terms of economic wealth, but to overtake many of them.

Box 2: The location of corporate headquarters: drivers, facts and consequences

Countries and regions do not only compete for foreign direct investment, but also for corporate headquarters (HQ) themselves. The following discusses significant drivers for corporate HQ site choices, presents an empirical picture of recent global HQ location trends, and looks at the consequences of the establishment of corporate HQ for a region. The location of corporate headquarters, representing a firm's strategic centre and most important decision unit, benefits the chosen region in a number of ways; for example, a sufficient number of HQ in one place can function like a magnet in attracting HQ from other corporations as well.

Factors driving HQ location choices

Basic features driving corporate HQ's choices comprise geographical, technical, cultural and tax considerations as well as historical 'pure chance' factors, which — once having resulted in the establishment of a regional cluster for corporate HQ — can reach a significance of their own.

As the top management team cannot stay aloof from the outside world, geographical considerations like the remoteness to main company markets as well as air and land transportation links via airports play a fundamental role in a corporation's choice for its HQ. Technical issues in the form of reliable telecommunications and other infrastructure have their relevance as well. The availability of artistic performances, entertainment facilities and adequate schooling for the children of the HQ (often) international staff might be another relevant consideration. The legal environment and taxation issues are other factors as HQ in low-tax areas might reduce the firms' overall tax load. Company executives may consider the individual tax rate applicable to them personally as an additional factor

and corporate-governance-related deficiencies could turn it into a crucial one.

Another major explanatory aspect is derived from elements of the 'new economic geography' ⁽¹⁾. The theory implies that positive externalities associated with clustering can establish a virtuous path of self-sustained growth, such as the case in an agglomeration of corporate HQ. Thus, once a location acquires a critical mass of company HQ, centripetal forces attract additional HQ from other locations, allowing the cluster to establish an increasingly dominant position. Therefore, historical or 'pure chance' factors can be a significant element in the development of regional clusters of corporate HQ. Such path-dependent development can persist for long periods of time, even if the initial causes (e.g. openness, language and education) cease to be explanatory factors. Although centrifugal forces (e.g. congestion, labour costs and technology) can send clusters into decline over time, only deep crises, such as political turbulence or civil wars, are clear-cut factors of rapid decay.

An empirical picture of HQ locations

A recent Unctad study gives an indication of the self-enforcing attractiveness of a location for corporate HQ ⁽²⁾. From January 2002 to March 2003, the UK attracted more newly established or relocated HQ (181) than the whole of the USA (126). This UK strength might also be a reflection of its dominant position as an international financial centre

⁽¹⁾ See, for example, Fujita et al. (2000).

⁽²⁾ See Unctad press release 21 July 2003, 'World market for corporate HQ emerging'; additional details have been provided by Unctad.

(Continued on the next page)

Box 2 (continued)

(the city of London), which supplies a great number of trained, ambitious individuals as well as a high-quality infrastructure environment. Propelled by this factor, the EU recorded more than 40 % of all newly established or relocated HQ worldwide, while the euro area, not including the UK, saw more HQ establishments or relocations than either the USA alone or all developing countries combined.

Other, more specific examples of this self-sustained economic geography effect might be seen in the concentration of HQ in Singapore and the Netherlands, which both have been able — despite their small domestic economies — to attract more or just fewer corporate HQ in the reporting period than the much larger Germany. The following table gives an overview.

Corporate headquarters: recent trends

Recipient economy/region	Number of established or relocated HQ between January 2002 and March 2003
World	829
Developed countries	624
Developing countries	191
EU	364
UK	181
Euro area	153
USA	126
Australia	54
Singapore	46
Hong Kong, China	44
Germany	37
Netherlands	34
China	29

Source: Unctad, own calculations for the EU and euro area, own ordering.

HQ consequences for a region ⁽¹⁾

Advantageous HQ location effects for a region emanate from different sources, as (i) employees contribute to the

local tax base by working directly in the company HQ and in attached support facilities, (ii) HQ develop and attract human resources, and (iii) HQ-related purchases influence other interlinked service sectors.

- (i) HQ staff consists of a top management team, representing the core of the strategic and operating core of a firm and employees coordinating activities in different areas. In addition, corporate support functions might be established consisting of research and development (R & D) centres as well as production units. Consequently, employment opportunities for executives and managers as well as for high-quality researchers and engineers emerge in the chosen region.
- (ii) Human resource development can be cited as another positive externality for the region as HQ act like a management training institution and attract aspiring (young) people.
- (iii) An HQ might have extensive links to other — often knowledge-intensive — service sectors of the local economy through its purchases of legal, financial and IT services, but also through the need for hotel and accommodation. Spillover effects are thereby created enabling local businesses to gain know-how. HQ are also often sponsors of activities in culture, sport and education.

However, the relocation of an HQ into a region can lead to price increases for housing, restaurants and other services sought after by the HQ and its employees. While price increases on services provided by mobile factors (like waiters and taxi drivers) should induce an influx of related service providers, mostly eliminating that effect, (largely) fixed factors, like houses, land, restaurant sites and shopping locations, cannot easily be expanded and its owners might therefore very well benefit from price increases.

⁽¹⁾ This section draws from Braunerhjelm (2003).

6. Long-term international capital flows: the role of demographics ⁽¹⁾

According to the latest Eurostat and UN demographic projections (Eurostat, 2000; United Nations, 2000), the coming decades will witness large differences, at the individual country level, in both the timing and extent of the well-documented ageing phenomenon which is predicted to occur ⁽²⁾. On the basis of a no-policy change assumption, these demographic trends have the potential to result in slower rates of GDP and investment growth, lower public and private savings and large shifts in the respective shares of world output held by developed and developing countries. With such fundamental changes in the relative positions of countries in terms of savings/investment balances, the world may witness both protracted swings in current account and net foreign asset positions over the coming decades as well as substantial changes in relative real interest rates and exchange rates during the adjustment process.

6.1. Demographics and capital flows

The growing imbalances in worldwide financial flows are an ongoing focus of concern for international organisations and policy-makers. The IMF does not exclude the possibility that present external imbalances are the result of erroneous private sector decisions and financial excesses ⁽³⁾. This view is supported by the doubling of the average US current account deficit as a share of GDP over the period 1998–2002 compared with the previous four-year period, which suggests that cyclical elements are undoubtedly a significant part of the present story.

Fears regarding the overall sustainability of the worldwide pattern of imbalances are also partly based on the observation that they have largely occurred between regions with relatively similar economic structures and levels of economic development. This pattern also appears to be in contrast to the pattern of imbalances between Europe, on the one hand, and its overseas colonies in the late 19th century, when development finance was the primary driver behind net capital flows, on the other.

However, the contention of this section is that, while the present pattern of current account balances undoubtedly reflect cyclical excesses associated with the bubble-like conditions in the USA in the late 1990s, there are strong grounds for believing that more structural, long-term forces are at work as well. These existing imbalances will be slow to unwind over the coming decades. In fact, despite their similarity, Europe, Japan and the USA have undergone, and will continue to be faced with, quite different demographic, technological labour market and fiscal trends. Therefore, it is still open as to what extent these ‘sustained current account imbalances’ reflect genuine external disequilibria or whether they should be regarded, at least partly, as a normal international adjustment to permanent, country-specific shocks.

The central contention is that the strongly diverging demographic developments in Japan over recent decades allied to significant restrictions on capital flows to large parts of the developing world could have been major structural factors explaining the savings and investment divergences experienced worldwide over this period. If this view is supported by the empirical evidence, this would have deep implications for the volume, geographical destination and rates of return earned on external capital flows over the coming decades as more economies start to age in a manner similar to that of Japan.

⁽¹⁾ The analysis in this section draws heavily on the ‘external wealth of nations’ data set created by Lane and Milesi-Ferretti (2001b). This data set covers the period 1970–98 and classifies the external assets and liabilities of 66 industrial and developing countries into three main categories, foreign direct investment (FDI), portfolio equity and debt instruments. The data set relies mainly on stock data, supplemented by cumulative flow data and with the portfolio equity and FDI flows data introduced with appropriate valuation adjustments.

⁽²⁾ European Commission (2002).

⁽³⁾ IMF (2002).

As predicted by standard life-cycle models, the current account balance of countries which are ageing relatively faster compared with the world average are likely to be in surplus, since the savings rate in these countries falls less rapidly than the domestic investment requirements. Given the fact that divergent demographic trends tend also to be rather prolonged, one would therefore expect to see a build-up of foreign assets over extended periods of time.

Of course, there are other possible factors explaining capital exports from Japan and, more recently, from Europe to the USA, such as, for example, sustained differences in labour force participation rates, with strong increases in the US participation rate compared with rather stable trends in Japan and Europe. However, other influences, especially the process of technological convergence (assuming that this process has not, as some commentators have suggested, come to an end in the second half of the 1990s) and divergent fiscal developments between Europe, Japan and the USA (at least in the case of Japan) point in the opposite direction.

The analysis in this section, on the basis of the net stocks of wealth/debt for the different areas, tries to evaluate the relative importance of different explanatory factors, especially the demographic determinants, and come to some conclusions regarding the likely evolution of net foreign assets over the coming decades.

6.2. Explaining the historical behaviour of net foreign assets, 1970–98

The changes experienced over recent decades in the net external wealth holdings of the five areas covered by the Economic and Financial Affairs DG's ageing model (i.e. the EU, the USA, Japan and with the rest of the world split into fast- and slow-ageing groups of countries) have been due to a large array of cyclical and structural factors, many of which are difficult to quantify, especially for the second half of the 1990s when the bubble conditions in the USA clearly played a large role. Despite this uncertainty, there is a large degree of acceptance in the literature that there are a number of key structural determinants of changes in external wealth positions, with these variables directly affecting savings and investment patterns in the respective countries and, in turn, relative current account movements.

Future changes in external wealth/debt positions are largely determined by shifts in the relative position of countries with respect to output per capita, government

debt and demographic changes. Common, as opposed to relative, movements of the latter variables should not, however, impact on net foreign asset positions and would instead be expected to be reflected in movements in global real interest rates. In addition, the assumptions one makes regarding the degree of global capital market integration and relative differences in the generosity of public pension systems are also felt to be important factors in explaining the long-run pattern of international capital movements ⁽¹⁾.

- *GDP per capita*: Relative changes in GDP per capita are positively related to movements of the net foreign asset position of developed economies, with growing prosperity leading both to increases in the domestic savings rate and to foreign investment opportunities becoming relatively more attractive due to the potentially higher rates of return. In other words, domestic investment becomes progressively less profitable as capital productivity tends to decline as economies grow wealthier. The opposite effect is often found in developing economies, with increases in living standards typically, in the initial phases of development, leading to higher external borrowing due to an easing in the credit restrictions with which a large proportion of these countries are faced.
- *Debt*: In terms of relative changes in the debt levels of countries, in the absence of full Ricardian equivalence, both developed and developing countries tend to exhibit a negative relationship, in the sense that higher levels of debt are associated with lower levels of net foreign assets.
- *Demographic variables*: Demographic factors are also a significant determinant of changes in net foreign asset positions, with the nature of the relationship being similar for both developing and developed economies. For example, there is a positive relationship between expected changes in the old-age dependency ratio and the level of accumulated net external assets, with workers saving more in anticipation of longer retirement durations and investing less domestically due to the lower demand for replacement investment in conditions where populations are growing more slowly or actually

⁽¹⁾ See Taylor (1994), Higgins (1998), Herbertsson and Zoega (1999) and Lane and Milesi-Ferretti (2001b).

falling in size. With the prospect of shrinking labour forces leading to reductions in the productive capacity of economies over the coming decades, future retirees in those countries most affected will become increasingly dependent on the income stream from their accumulated foreign assets in order to supplement their domestic sources of income. On the other hand, changes in the youth dependency ratio are negatively related to changes in the net external asset position of countries, with high youth ratios tending to reduce domestic savings rates and often leading to increases in domestic investment in areas of an economy's social infrastructure such as education and housing ⁽¹⁾.

Historical developments in net foreign asset positions (in terms of both levels and geographical destination) also require an understanding of issues such as differences in the systems for financing pension income across countries and assumptions regarding the degree of global capital market integration.

- Differences in pension financing systems, especially in terms of the breakdown between PAYG (pay-as-you-go) and funding and also with regard to the relative generosity of the public part of the system, are factors with a potentially strong impact on savings and investment patterns in the respective countries. It is widely accepted that the EU's public pension system is relatively generous compared with other areas of the world and that the share of EU retirement income coming from the build-up of private pension assets is substantially lower compared with the USA and to a lesser extent Japan where more traditional forms of savings such as bank deposits appear to play a large role ⁽²⁾.
- Turning to global capital market integration, a model assumption of full worldwide integration is unrealistic given the empirical evidence that the slow-ageing, mainly less developed, group of coun-

tries (with roughly half of the world's total population) has made very little progress in recent decades in increasing its degree of financial market openness. An assumption of limited worldwide capital mobility has the important implication that, as age-related capital movements start to grow in the developed world in future decades, the choice of investment locations may be largely limited to other developed economies and the fast-ageing group of developing countries.

Individual countries and groups of countries have features which bear heavily on the trends for net external capital movements. For example, while over the period as a whole there have been large changes in old-age and youth dependency ratios in all world areas, in relative terms the most striking change has been in Japan's old-age dependency ratio which more than doubled compared with more modest developments elsewhere. Japan also stands out in terms of relative changes in public debt levels and negative changes in trend per capita growth rates. The EU differs in terms of the relative generosity of its public PAYG pension system and the associated small share of pension income, which is privately funded. The striking feature for the USA is its significant and expanding growth rate differential compared with other developed countries, with, for example, the EU's catching-up process over the 1960s and 1970s starting to falter in the early to mid-1980s, and with Japan starting to diverge in the 1990s.

Finally, the most noticeable features for the fast- and slow-ageing countries are the absence of any significant catching-up over the period as a whole, especially with the USA, and the highly erratic pattern of trend growth rates for the slow-ageing group. In addition, the limited integration of the slow-ageing countries into the world's financial system impacted not only on the countries themselves but also had the effect of limiting the volume, and the rate of return potential, of external capital flows from the rest of the world.

Disentangling the individual effects of the different factors on net external asset positions is problematic in a model-based analysis, as relative changes in per capita income (and the implicit rate of return differentials which underpin such changes) are closely intertwined with the ageing phenomenon itself. However, it is possible with the Economic and Financial Affairs DG's ageing model to roughly isolate the impact of the different

⁽¹⁾ According to Lane and Milesi-Ferretti (2001b), 'the relation between net foreign assets and demographic structure also accords with the thrust of the theoretical literature: a decline in the net foreign assets occurs if there is an increase in the population shares of younger age cohorts, whereas the net foreign asset position responds positively to an increase in the share of workers nearing retirement, with a maximum effect for the 50–54 age group. It is also interesting to note that the over-65 age group exerts a negative effect, consistent with the running-down of net foreign assets'.

⁽²⁾ This EU average position does not, however, apply to a number of individual EU Member States. The UK and the Netherlands, for example, have large, privately held pension fund assets.

factors on the savings/investment and current account positions of countries since the early 1970s ⁽¹⁾.

For example, in the case of the demographic changes, the model was used to assess what proportion of the current account changes could be attributed to demographic factors in the five geographical areas covered by the model (i.e. the EU, the USA, Japan, fast- and slow-ageing countries) over the last 30 years. This analysis was carried out by running the ageing model with the life expectancy and the birth rate changes which actually occurred over the period. On the basis of these demographic changes

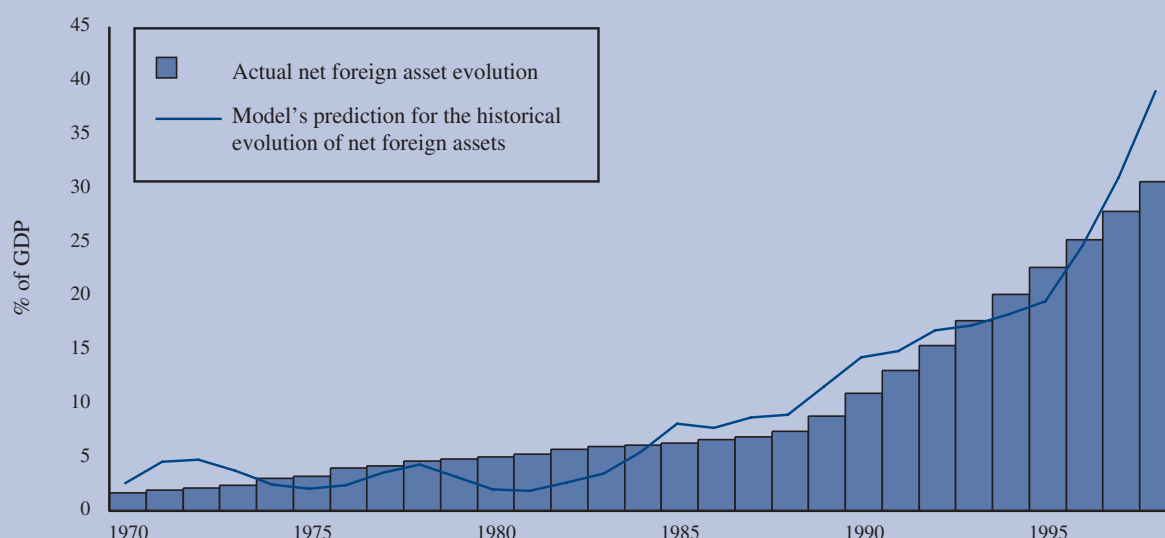
and using low coefficients for the effect of dependency ratio changes on private savings, and a constant capital to output ratio to capture the investment effects, the model was able to roughly isolate the age-related component of the current account positions of the respective areas. In fact, it turns out that the demographic factors alone would have overpredicted the changes in net foreign asset positions around the world over this period. Given this result, other factors were obviously working to dampen the effect of population changes on capital movements.

Consequently, in order to get a more accurate fit for the historical developments, the non-demographic determinants discussed earlier, namely GDP per capita, debt, pension system differences and restricted capital movements to developing economies, had to be considered. When these variables were included in the simulations, the model was able to broadly replicate the changes in the net foreign asset positions of the five areas over the period 1970–98, with Graph 11 for Japan showing the good tracking performance of the model ⁽²⁾.

⁽¹⁾ It should be underlined that changes in demographic factors are not only important in terms of determining medium- to long run balance-of-payments developments. They are also, via their effects on the net foreign asset positions of countries, an important long-run determinant of changes in real exchange rates. According to Lane and Milesi-Ferretti (2000), 'international investment income flows associated with non-zero, net foreign asset positions require some degree of real exchange rate adjustment in the long run', with the key question to be answered being 'whether countries that receive net payments from abroad (because they are net external creditors) tend to have more appreciated real exchange rates and, conversely, whether countries that make net payments abroad (because they are net debtors) have more depreciated real exchange rates'. On the basis of both cross-section and time series empirical evidence, Lane and Milesi-Ferretti conclude that there is a significant response of the real exchange rate to changes in the net external asset position of countries, with both variables predicted to move together over the long run.

⁽²⁾ See Röger (2003) for a complete analysis of the five areas.

Graph 11: Historical tracking ability of the Economic and Financial Affairs DG's ageing model: Japan's net foreign asset position, 1970–2000



Source: Commission services

It turns out (see Box 3) that, of the five factors analysed, it was demographics, growth rate differentials and the assumption regarding capital mobility which were the crucial determinants in explaining the trend evolution of net foreign asset positions of the five areas and the associated current account imbalances.

Firstly, ageing and capital market liberalisation has led to a sharp increase in the volume of worldwide capital flows over recent decades. Secondly, the nature of capital liberalisation (i.e. it was largely a developed world phenomenon) allied to growing growth rate differentials within the developed world in favour of the USA explains the geographical concentration of those capital movements into the USA.

These two conclusions are illustrated clearly in the model simulations described in Box 3. For example, when the simulations were carried out under an assumption of full global capital mobility, and taking into account all the other relative differences in terms of growth, debt, pension systems and demographics between the respective areas, the result was a prediction for the period 1970–98 of positive net foreign asset positions for the EU, the USA and Japan (i.e. persistent current account surpluses), with substantial debt positions for the fast- and slow-ageing countries (i.e. persistent current account deficits).

Compared with what actually happened, the big differences in international investment patterns were:

- firstly, the slow-ageing countries experienced actual net capital inflows from the rest of the world which were only one tenth of that which the model would have predicted on the assumption that capital markets were fully open at the world level;
- secondly, the USA experienced significant current account deficits over this period as opposed to the prediction of the model of small surpluses.

These model prediction errors were, in the case of the slow-ageing group, fully driven by the assumption of full capital mobility and, in the case of the USA, it was the combination of restricted capital movements to the slow-ageing group allied to the USA's growing relative attractiveness as an investment location compared with other developed economies which explains the sharp differences between the actual out-turn and the model prediction (see Box 3).

To summarise, in terms of isolating the crucial determinants of current account changes globally over the last 30 years, the key conclusions of this model-based analysis are as follows.

- Demographic developments have become an increasingly important determinant of changes in global current accounts over the last 15 to 20 years.
- Significant restrictions on capital movements to large areas of the developing world impacted strongly on the volume and the geographical destination of external capital flows.
- With restrictions on global capital movements and with a widening in growth rate differentials in the developed world in favour of the USA, a disproportionate share of the additional age-related capital flows were absorbed by the USA. This growing tendency towards current account deficits in the USA was exacerbated in the second half of the 1990s by the perceptions of the financial markets that growth rate differentials had widened even further in favour of the USA.

6.3. Future trends

The results from the above analysis of international capital movements over the last 30 years point to the potential for significant changes in age-related financial flows over the coming decades. Because of the persistence of demographic trends, it is unlikely that a major reversal of current patterns will occur in the immediate future.

In this context, it is the recent trends in Japan which need to be most carefully scrutinised. Japan is the first of the developed economies to be significantly affected by ageing and it is 10 to 15 years ahead of the others in terms of timing. While the growing savings–investment imbalances in Japan in the second half of the 1990s were to an extent affected by the bubble conditions in the USA, on the basis of the change over 1985–95, it is clear that trends have been influenced significantly by the ageing of the population and by the associated build-up of foreign assets to fund retirement income.

This trend for Japan is particularly important for the EU and for a number of the fast-ageing economies over the coming decades since, based on an index of the old-age dependency ratio, major demographic changes started to occur in Japan in the early 1970s, with the overall increase

in the ratio over the period 1970–2000 being of an equivalent percentage size to that which is expected to occur in the EU and other countries over the coming decades.

A combination of a faltering growth process (which is undoubtedly bubble-induced and age-related) allied to a lack of enthusiasm for reform has proven to be an exceptionally negative cocktail for Japan over the last decade. Japan is a potent reminder to other ageing developed economies of the need to adopt an ambitious reform agenda in the face of ageing, with a growth-oriented policy framework essential if these economies are to avoid a similar mixture of subdued domestic investment growth rates and large and increasing outflows of capital. While there is already some evidence of a lowering of EU investment rates in recent years, given the relatively more generous PAYG pension system in Europe and the historically lower savings propensity compared with Japan, the extent of future capital flows is likely to be of a smaller order of magnitude in the EU.

At the global level, assuming that there are no changes with regard to government debt or recent productivity trends and that policy measures aimed at changing pension systems and deepening global capital market integration are excluded, the key underlying determinant of future financial flow predictions will be the demographic changes which are expected to occur over the period 2000–50.

On this basis, if the latest population projections prove accurate and if the historical links between changes in net foreign asset positions and their structural determinants

hold in future decades, substantial changes are in prospect over the period 2000–50 for the wealth/debt positions of the different countries and regions around the globe.

In addition, with the ageing-induced pressure for a widening of growth rate differentials amongst the developed economies and an absence of truly globalised capital markets, the USA is likely to experience a protracted period of current account deficits with the opposite trend for the EU and Japan. This is not to imply that there will not be a correction of the current US deficit position, but it does suggest that, once the cyclical aspects have been addressed, the underlying structural position will remain negative. This is due to the fact that, even with only a proportion of the ‘new’ economy story remaining intact, with an absence of alternative investment locations, due to the EU and Japan facing uncertain growth prospects and with the slow-ageing group essentially cut off from the world’s capital markets due to excessive risk premiums attaching to investing in these countries, the US current account will not correct as much as some commentators are predicting.

Furthermore, to the extent that the slow-ageing group of countries fails to enact the confidence-building measures necessary to create an environment conducive to large foreign capital inflows, the type of bubble-like conditions experienced in Japan in the late 1980s and the USA in the second half of the 1990s and the downward pressure on rates of return could become more persistent concerns for global policy-makers.

Box 3: Tracking the evolution of net foreign assets: the role of global capital market restrictions

As explained in the main text, there has been a large increase in the volume of capital movements over the last few decades driven by growing capital market liberalisation and more recently by a sharp increase in age-related international capital flows. The question to be addressed is whether the combination of a life-cycle model (such as that used for the simulations in this section) allied to various capital mobility assumptions can account for the observed trend evolution of net foreign assets among the various regions of the world over the last 30 years, taking into account the relative magnitude of the demographic, growth, debt and pension system

differences which have existed in the five areas covered by the model. In broad terms, the model needs to explain why external imbalances between Europe, Japan and the USA have continuously widened in recent decades, reaching unprecedented levels, and why the fast- and slow-ageing rest of the world regions have shown very little change over time in terms of the evolution of their trend external position, despite being permanently indebted over this period. In particular, how important a role can an assumption of full capital mobility or one based on restricted capital movements play in understanding these developments?

(Continued on the next page)

Box 3 (continued)

Full capital mobility assumption: Can the broad patterns for the respective areas be explained using an assumption of perfect worldwide capital mobility? The first thing to stress is that the demographic projections imply that, over a long transition period, stretching over decades, there will be changes in the relative size of national labour forces as well as differences in the propensity to consume. Because of higher labour force growth, the marginal product of one additional unit of capital invested in a slow-ageing country will decline less than in a fast-ageing country. Under free capital mobility, this induces capital outflows to slow-ageing countries until rates of return are equalised. The extent to which capital exports occur depends on savings behaviour in the fast- and slow-ageing regions. Various factors influence the aggregate savings rate. Although the net result is likely to be a decline in the savings rate in ageing countries, capital outflows can nevertheless be substantial because of both lower replacement investment needs in fast-ageing regions and due to the investment opportunities offered by slow-ageing regions. Apart from the magnitude of capital outflows, the duration of external imbalances is also an important issue given the extreme persistence in labour force growth rate differentials between the fast- and slow-ageing regions of the world.

Consequently, with an assumption of full capital mobility, a clear pattern of international investment emerges, with the industrialised regions of the world exporting capital to developing countries and with the demographic changes dominating the evolution of net foreign asset positions in the five regions. However, both for Europe and Japan, foreign asset accumulation is dampened in the 1970s and 1980s because of higher total factor productivity growth. In addition, the peak of net foreign assets in Japan is substantially lower than that predicted by the demographic change because of the high government debt in that country. However, as explained in the main text, if the model is run with an assumption of perfect capital mobility and taking into account all the structural determinants discussed in the text, both the magnitude and timing of capital flows across the five regions is grossly at odds with the observed evolution. The model clearly overpredicts the accumulation of foreign assets in Japan and Europe and it predicts a small positive net foreign asset position in the USA in contrast to the observed large net liability position. These

capital exports from the EU, the USA and Japan would, in turn, need to be absorbed by an increase in the net liabilities of the fast- and, more importantly, the slow-ageing countries in the rest of the world. According to the model, with full capital mobility, the net liabilities of the slow-ageing group would grow strongly as a share of GDP, with foreign indebtedness reaching a level of about 120 % in 1998, which, in fact, is nearly 10 times the actual level of foreign debt accumulated over the last 30 years.

Restricted capital mobility assumption: The poor results using the full capital mobility assumption explain why imposing restrictions on international capital flows between the developed and the developing worlds (especially the slow-ageing group of developing countries, with the model imposing restrictions which are 10 times higher than for the fast-ageing countries ⁽¹⁾) greatly improves the ability of the model to explain the historical pattern of net foreign assets. Firstly, liabilities in the fast-ageing and slow-ageing groups are now stabilised close to their actual levels and, secondly, with capital restrictions in place for the latter two groups, this also dampens the overall volume of net foreign asset accumulation in the EU, the USA and Japan. However, while the net external surpluses of the latter areas are lower than in a scenario of full capital mobility, the lower volume of worldwide capital flows must nevertheless to a large extent be balanced within the more developed group of countries, with the result that the USA (with its more favourable relative growth rates compared with other developed economies and with those differentials perceived to widen over time) absorbs an increasing proportion of the net savings from Japan and to a lesser extent the EU and some of the fast-ageing developing countries and emerges in an overall net debtor position.

(1) The observed low volatility of net foreign assets in both the fast-ageing and slow-ageing countries suggests the existence of trading frictions for international financial transactions in these countries. Restrictions for international capital flows seem to be larger in the slow-ageing countries, given the strong overprediction of the model for net liabilities for the slow-ageing countries. We therefore assume strong capital market imperfections for the slow-ageing group and only mild frictions for fast-ageing countries. Concretely, it is assumed that a worsening of the net foreign asset position of 1 % leads to an increase in the risk premium of 0.4 % in the slow-ageing countries and of only 0.04 % in the fast-ageing countries.

7. Summary

During the past 20 years, international capital flows have expanded rapidly. They constitute a characteristic feature of today's increasingly integrated world economy. Most likely, international capital flows and changes in the ownership of assets across borders will attract the interest of policy-makers and economists alike in the coming years. Here, the focus has been on a limited number of issues regarding capital flows in the present global economy.

According to current economic research, the determinants behind capital flows are many. First, the liberalisation of external flows of capital has opened up the growth of cross-border transactions. The adoption of the euro has meant that a great step has been taken towards closer financial integration in Europe, eliminating foreign exchange risk within the euro area. The recent growth of domestic financial markets and of international trade has fostered international financial integration. Asset trade and product trade goes hand in hand, although the volume of asset trade today is far larger than that of product trade.

Long-term capital flows have been fostered by several factors. The growth of income per capita, rise in public debt and demographic changes are commonly regarded as the most important ones. These variables stand out as proxies for a number of underlying channels.

Capital flows can take many forms. An important distinction should be made — as is the standard approach in the finance literature — between debt and equity. Debt flows consist mainly of bank loans and bonds, and equity flows of foreign direct investments and portfolio equity. The volatility of these various flows is different. Usually, FDI flows are considered to represent long-term investment decisions and to be important drivers of economic growth.

In the past 20 years, a rapid rise in the volume of foreign direct investment has taken place in the world

economy. It has been faster than the growth of global trade and production.

Highly developed countries are heavily involved in FDI activities. The EU and the USA are the most important actors. Actually, the flows of FDI from and to the EU are larger than those for any other country. This pattern is also expected to hold in the foreseeable future.

Capital flows play an important role in the present process of merging eastern and western Europe. A large inflow of capital into the acceding countries has been a significant feature in the transformation of these economies, in particular into those countries that were part of the former Soviet empire.

Current account deficits have been financed by inflows of foreign capital. Here, FDI has played the central role. On average, these flows have corresponded to about 5 % of GDP in recent years with considerable cross-country variation among the forthcoming members of the EU.

The former members of the socialist bloc in eastern Europe initially chose varying macroeconomic policy routes when moving towards a market economy. Countries such as Poland chose shock therapy and, in due course, floating exchange rates, while others such as Estonia adopted a fixed exchange rate regime (currency boards) and domestic liberalisation. Some experimented with voucher privatisation, while some were slow to impose hard budget constraints on State-owned enterprises. By now, all countries have typically taken similar routes concerning capital flows and foreign ownership, despite initial differences. They have chosen full external liberalisation of capital flows and — if at different speeds — allowed widespread foreign ownership, including of their banking systems.

This policy approach is the main explanation for the composition of the inward capital flows. In short, domestic owners could not mobilise the financial

resources needed to take over and inject new capital into formerly State-owned companies. Thus, the privatisation of State-owned companies in eastern Europe induced large FDI flows. Foreign ownership and control replaced domestic government ownership. Other forms of capital inflows have typically been of minor importance. Portfolio investments have so far been small due to the lack of well-developed financial markets.

What will happen in the future to capital flows into the acceding countries? As the process of privatisation runs down over time, and domestic financial markets evolve — becoming more diversified and more liquid — the determinants of capital inflows will evolve accordingly. The financial situation will also change due to approaching EU membership, expectations of EU transfers and of future growth performance. Most likely the growth of domestic bank credit will be high. Substantial budget deficits will probably induce capital inflows.

The future — that is the convergence process between the acceding countries and the EU — will pose a number of challenges to domestic policy-makers. Corporate governance, corporate transparency and financial reporting and financial supervision are promising areas for improvement. More broadly, the acceding countries may, to some degree, be analysed as emerging economies. The 1990s witnessed major problems in many emerging economies that liberalised their capital flows while maintaining weak financial institutions and weak financial markets and pursuing macroeconomic and financial policies that turned out to be inconsistent with exchange rate stability — or gave hostages to fortune in the event of major shifts in the fixed rate. The outcome has been large financial imbalances driven by capital inflows and eventually financial crises and distress.

There are striking differences between the acceding countries and other emerging markets, notably in the area of financial sector development and supervision. Here, the acceding countries have gradually implemented the EU *acquis* for regulation and supervision and have opened their markets to large-scale foreign ownership.

Still, the experience from emerging markets holds some lessons. Notably that the acceding countries — by pursuing well-crafted policies — can avoid the ‘lost decades’ that have been all too common an experience elsewhere. Fiscal and monetary frameworks — and, importantly, the implementation of prudential policies — should be

oriented to ensuring that EU entry is smooth, and that the early years of membership see strong real convergence in a setting of financial stability.

Corporate governance issues have emerged as highly topical in recent years, following a number of scandals involving the USA as well as European listed firms. These issues stem primarily from the fact that ownership and control of a large company as a rule are separated, giving rise to principal-agent problems. Basically, the challenge is to improve the position of individual shareholders — including vis-à-vis majority stakeholders — giving them a stronger influence over the rewards and incentives of the firm.

There are important international aspects of corporate governance. In short, countries with good corporate governance systems should be able to attract international capital flows on better terms than countries with weak systems that invite fraudulent behaviour. The large inflow of capital into the US stock market has partially been explained by stronger small investor protection in the USA than outside it. In the future, with rising competition for capital inflows, these issues may become even more important determinants of capital flows.

Revealed weaknesses in corporate governance have invited several policy measures. The EU has already taken a number of steps to reform corporate governance in Europe such as the financial services action plan (FSAP) and the market abuse directive. At present, work is under way to strengthen accountancy standards, auditor independence and shareholder rights. In short, all these reforms are aimed at improving the standing of the individual shareholder. Such measures will make the EU more attractive for capital inflows.

In the coming decades, major differences in the demographic structure across the world economy will emerge. The changes in ageing are likely to have profound effects on the stocks and the flows of international capital. The present global financial imbalances — most prominently the large US current account deficits — have initiated a debate among economists and policy-makers concerning the proper interpretation of these patterns. Are they the reflection of some form of bubble phenomenon with no fundamental explanation or do they respond to different long-run patterns in demographics, growth and labour market performance?

The Economic and Financial Affairs DG has developed a model for addressing these issues. Calculations based on the model suggest that demographic trends have impacted on current account performance in the past decades, that restrictions on international capital flows have had major influence on international capital flows and that the USA has received a substantial part of age-related capital flows.

A forecast can be made from the model for the period 2000–50 — a truly daunting forecasting period. On the assumption that no policy changes are made and recent productivity trends remain stable, demographic changes will be the key variable driving financial flows and thus financial holdings in the world economy over this period. These results from the model also have policy implications. Countries that ‘grow old’ should take steps to make their economies more attractive to capital inflows.

To sum up, rapid financial integration in recent decades has impacted on the macroeconomic performance in the

global economy in many ways. International capital flows may serve both as a source of growth as well as of reinforcement and transmission of disturbances. Today, they play an important part in the adjustment mechanisms to disturbances by smoothing consumption. Sudden shifts in the flow of foreign finance can also create major domestic challenges, as demonstrated by the financial crises in several emerging economies in the past decade. In the future, large financial imbalances among developed countries may cause abrupt changes in capital flows and exchange rates, leading to over- and undershooting.

Looking into the future, policy frameworks will remain crucial in ensuring that capital inflows are channelled in a productive manner, and that strong growth in external and domestic sources does not give rise to macrofinancial stress. The policy recipes will doubtless evolve over time, as they have in the past. But the exceptional progress of the past decade also provides encouragement and a source of confidence as policy-makers take on these challenges.

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Annex

Capital movements in the legal framework of the Community

The tremendous rise in cross-border financial flows in the past decades has a legal or institutional foundation. The Bretton Woods system embodied the idea that capital flows were a threat to monetary and financial stability and to national policy autonomy. The experience of the 1930s was interpreted as proof that international capital flows were destabilising domestic economies. Thus, capital flows were the subject of exchange controls and regulations during the 1950s and 1960s, keeping cross-border financial transactions to a minimum.

Gradually, accompanying the breakdown of the Bretton Woods system and the rise of the Eurodollar market and new financial technologies, financial accounts were liberalised. The process was a time-consuming one. During this period, mounting financial imbalances in the world economy stimulated the growth of the Eurocurrency and Eurobond markets, which, in turn, contributed to the breakdown of residual legal restrictions. Nonetheless, some industrialised countries did not fully liberalise until the end of the 1980s and the early 1990s.

A detailed description of the present legal regime concerning capital movements within the EU as well as between the EU and the rest of the world is given in this annex.

1. Introduction

The Treaty of Rome, which came into effect on 1 January 1958, was based on the principle of four freedoms: the free movement of goods, of persons, of services and of capital. The fundamental Treaty provisions concerning capital were included in Article 67(1), which established the obligations for Member States to lift restrictions on the free flow of capital, but only 'to the extent necessary to ensure the proper functioning of the Com-

mon Market'. While the freeing of trade appeared to be a more immediate objective of the Common Market, the Treaty further specified that financial services should be liberalised concurrently with the progressive liberalisation of capital movements. This explains why the accomplishment of the free movement of capital materialised much later.

While some categories of capital movements benefited over two decades from varying degrees of liberalisation, the full liberalisation of capital movements within the European Community (EC) was finally accomplished on 1 July 1990 with the entry into force of Directive 88/361/EEC⁽¹⁾. When the Maastricht Treaty on European Union entered into force on 1 November 1993, Article 67(1) of the Treaty and Directive 88/361/EEC implementing that article were replaced by the new Articles 56 to 60.

Essentially, these articles innovated from two angles. Firstly, they are declared directly applicable to the legal order of Member States since secondary legislation (e.g. EC directives) or national transposition measures are no longer needed. Secondly, they also provide for the full liberalisation of capital movements between Member States and third countries. The unconditional character of this external liberalisation means that capital movements involving third countries are free as far as the Community is concerned, irrespective of the level of liberalisation reached by such third countries.

⁽¹⁾ Annex I to this directive sets out a nomenclature of capital movements under Community legislation, which remains valid for the purpose of defining what constitutes a capital movement.

Although the fundamental principle of freedom is enshrined in Article 56 of the EC Treaty (Article 56 EC), which stipulates that all restrictions on capital movements are prohibited, Articles 57 to 60 EC offer several possibilities either to limit this principle of absolute freedom of capital movements or to be exempted from it. Besides this set of exceptions relating specifically to the provisions of Article 56 EC, other Treaty exceptions of a more general nature can also apply on the freedom of capital movements.

Broadly, admissible exceptions can be distinguished according to their eligible user and, accordingly, the level of legislation involved (i.e. national or Community). On the one hand, Member States have the right to refer unilaterally to these exceptions with a view to maintaining or introducing restrictions either in national legislation or in their own international commitments. On the other hand, the Community has the right to amend the existing capital movement regime between third countries and itself, but only with respect to specific categories of capital movement transactions listed in the Treaty. Through these exceptions, Member States and the Community can impact negatively on foreign ownership of EC-established assets, since inward investment may be affected.

2. Third-country restrictions applicable by EC Member States

First, there exist a number of specific restrictions on capital movements.

- While Article 56 EC fully liberalises capital movements to and from third countries by default, Article 57(1) EC clearly indicates that this freedom is not unlimited since Member States have the right to maintain restrictions that existed as at 31 December 1993 under national law in relation to ‘direct investment — including in real estate — establishment, the provision of financial services or the admission of securities to capital markets’.
- Considering the relative lack of fiscal harmonisation at Community level, as well as the prospects of a further integration of the single market in the framework of economic and monetary union, Member States felt it necessary to introduce into the Maastricht Treaty the provision of Article 58(1)(a) EC, which allows for a certain degree of fiscal differentiation of taxpayers according to their place of resid-

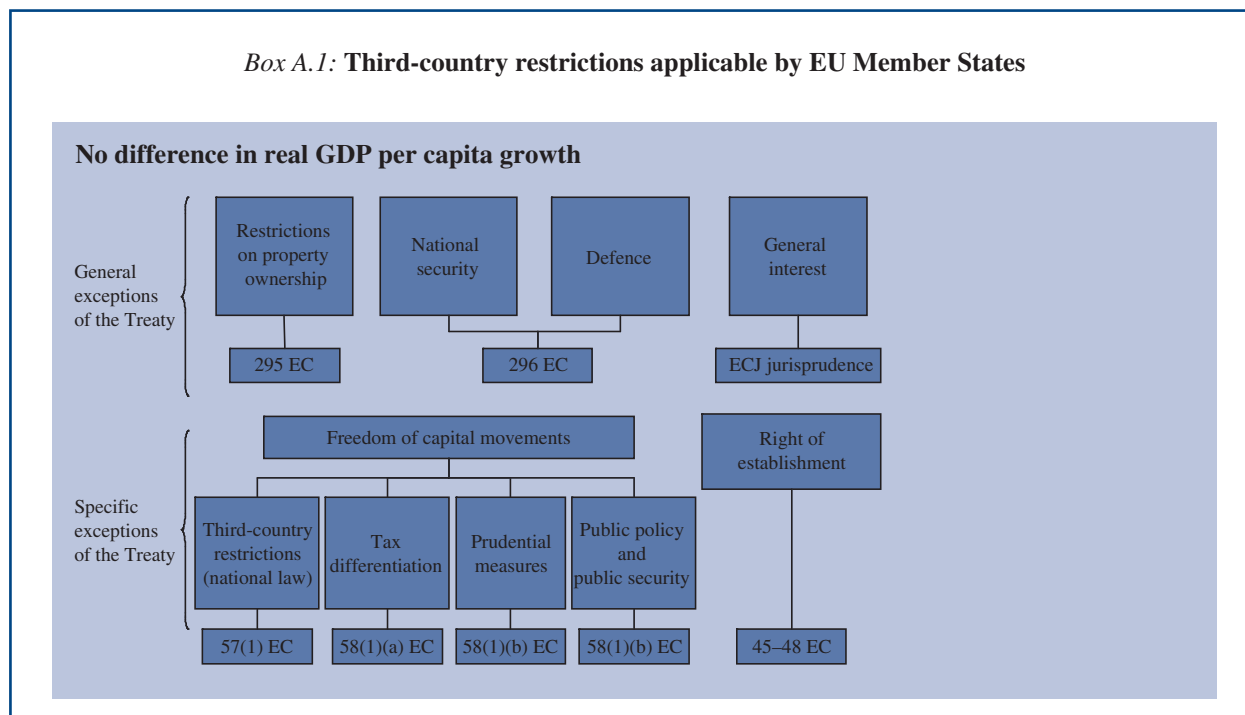
ence (fiscal non-residents benefit from tax exemptions in most Member States) or the place where the capital is invested (usually, foreign investments will be discriminated against through less favourable tax treatment).

- Prudential rules, being essentially restrictions to the freedom of capital movements, can be considered as admissible in so far as they are covered by the specific exception provided for that purpose by Article 58(1)(b) EC. Although the design of these rules is primarily the Member States’ responsibility, the existing financial legislation at Community level is the most relevant source of information with respect to national prudential rules that could be considered as compatible with the above article. Nonetheless, in the absence of EC directives, unregulated financial services have also to abide by capital movement rules, as soon as these are involved.
- Furthermore, Article 58(1)(b) EC also provides for the right of Member States ‘to take measures which are justified on grounds of public policy or public security’. These concepts have an evolutionary character, and the number of specific national concerns that could fall within their meaning might expand or contract accordingly.

Given the concise formulation of these exceptions of the Treaty (in particular, the lack of definition of concepts) as well as their primary responsibility with respect to the interpretation of the above provisions, Member States seem to benefit from a significant margin of discretion to invoke these exceptions to forbid, or at least control, specific capital movements by foreign operators. However, the present case-law of the Court of Justice of the European Communities (henceforth ECJ) demonstrates that such Treaty exceptions may not be considered as discretionary tools at the disposal of Member States to derogate from their Treaty obligations, since measures judged compatible with Treaty rules are increasingly very tightly defined and specific (e.g. fiscal differentiation arrangements under Article 58(1)(a) EC, or public policy/public security considerations under Article 58(1)(b)).

Specific restrictions to the right of establishment: Articles 56 to 60 EC exclusively govern capital movements (and payments). However, ‘establishment’ is also a subset of ‘direct investment’ under Community legislation. According to the EC definition, direct investment

Box A.1: Third-country restrictions applicable by EU Member States



includes, in particular, ‘establishment and extension of branches or new undertakings belonging solely to the person providing the capital, and the acquisition in full of existing undertakings’.

Therefore, Article 58(2) EC establishes a link between both Treaty freedoms by stating that ‘the provisions of this Chapter shall be without prejudice to the applicability of restrictions on the right of establishment which are compatible with this Treaty’. Formally, Articles 43 to 48 EC define the regime on establishment applicable within the single market on Member States’ persons. Although this regime does not provide for a specific treatment of third-country persons, these are de facto subject to the (non-discriminatory) single market requirements and restrictions enshrined in Articles 43 to 48 EC, but also to any specific restriction existing in Member States’ national legislation and Community law.

General exceptions of the Treaty: Besides the above specific categories of restrictions on the freedom of capital movements and the right of establishment, the Treaty provides also for more general exceptions in its final provisions.

- Article 295 EC states that the Treaty is neutral with regard to the system of property ownership existing in Member States. While its abstract character has

sometimes led to extended interpretation, this provision simply means that the legal order of Member States may provide for private and public ownership (e.g. for public utilities companies). However, recent ECJ rulings confirmed that Article 295 EC does not allow Member States to dismember the right of ownership in a way that national authorities would retain special control rights after privatisation of publicly owned companies.

- On the basis of Article 296 EC, Member States may derogate from their capital movement obligations when national security is threatened either in general or in connection with the production of or trade in defence material. Typical measures that could serve that purpose are restrictions on investment in defence material manufacturers.

General interest considerations: Furthermore, although general interest is not formally mentioned in the exceptions of the Treaty, the ECJ developed this notion in various rulings. By nature, it appears to be close to the concept of public policy and public security, but with a potentially broader scope of application. The use of general interest-related exceptions by some Member States have developed in the past 10 years, against a background of liberalisation at EC level of public utilities sectors (e.g. energy, post, telecom-

munications) as well as of privatisation of publicly owned enterprises active in these sectors.

Broadly, adopted measures imposed direct and indirect restrictions to foreign investment in the above-mentioned sectors or companies. The long list of national restrictions includes, in particular: authorisation procedure for investment (above certain thresholds), veto rights on important decisions of management bodies (e.g. merger, acquisition, disposal of assets), limitation of voting rights, privilege to appoint a certain number of board members, etc. Usually, such restrictions are termed 'golden shares', although the concept of 'special rights' is more appropriate in so far as the previous term refers only to a specific legal means to enforce such rights.

These important ECJ rulings clarified significantly how restrictions on investment could be implemented in national measures accompanying the privatisation of public utilities undertakings. Other pending rulings on similar

cases, dealing with different legal means to enforce restrictions or with other economic sectors, should allow the ECJ to further clarify the compatibility of general interest-related restrictions on investment with the Treaty.

3. Third-country restrictions applicable by the European Community

Existing third-country restrictions in Community legislation: As discussed earlier, the provisions of Article 57(1) EC provide, in particular, for the possibility for Member States to maintain restrictions on capital movements that existed as at 31 December 1993 under national legislation, in relation to the specific transactions mentioned in that article.

Similarly, Article 57(1) EC also provides for the right for the Community to continue to apply vis-à-vis third countries any restrictions on capital movements existing as at the same date under Community law, in relation to

Box A.2: Special-rights-related ECJ rulings

In past years, the ECJ has ruled a few times on general interest-related restrictions. In 2000, it condemned Italy for investment restrictions contained in the 1994 law on privatisation on ENI and Telecom Italia. In 2002, Portugal was condemned for its framework law on privatisation, which provided for the possibility of restricting foreign participation in many sectors. France was also condemned for holding a 'golden share' in the petroleum company Elf-Aquitaine, which established a system of prior authorisation for all shareholdings exceeding certain voting right ceilings as well as a veto right to oppose any decision to transfer or use as security the assets of four subsidiaries of the company.

In contrast, the ECJ authorised Belgium to maintain its 'golden share' in Distrigaz and Société Nationale de Transport par Canalisations (both active in the gas industry), which provides for the possibility to oppose any major strategic company's decision which could adversely affect the country's interest in the energy sector. In this case, the ECJ considered that these special powers were justified, in particular, by the exclusive application of rights to certain decisions on strategic assets of the companies in question (acquisition of capital is free) as well as the direct link with public service obligations incumbent on both companies.

In 2003, the ECJ condemned Spain for its privatisation law of 1995 which provided for a prior authorisation requirement for dissolution, sale of assets, change in business aims, and the acquisition by any investor of 10 % of the capital of privatised companies (voting rights were suspended for the excess). Prior administrative authorisations were introduced for a limited duration in 6 of the 28 privatised companies. At the time of the ECJ ruling, special rights imposed on Tabacalera (tobacco) and Argentaria (banking) had lapsed, while they were still valid for Endesa (electricity), Telefónica (telecommunications), Repsol (oil), and Indra (banking).

At the same time, the 'special share' held by the Government of the United Kingdom in British Airports' Authority plc (owner of seven domestic airports) was ruled incompatible with Treaty rules. This 'special share', inserted in the by-laws of the company in the course of its privatisation, limits all interests in the company to 15 % of voting shares and provides for an authorisation procedure, in particular, on the disposal of assets and winding-up. In contrast to other 'special rights' so far, these did not result from a genuine State measure (such as a law or an implementing decree) and did not grant privileges to the State (but imposed restrictions on all potential investors). Through this ruling, the ECJ significantly broadened the scope of application of the notion of 'investment restrictions'.

‘direct investment — including real estate — establishment, the provision of financial services or the admission of securities to capital markets’. In particular, this provision allowed the Community to give third countries access to certain areas of the single market only to the extent that it could obtain in return comparable advantages for its own economic operators.

Amendment to third-country restrictions: While Article 57(1) EC provides for the right to maintain restrictions on specific capital movement transactions existing before the entry into force of the present regime on 1 January 1994, Article 57(2) EC provides for the possibility to either further liberalise or restrict these transactions. In fact, such measures would mostly impact on the right of establishment (direct investment) and the freedom to provide services, in areas where the rights of foreign operators are currently regulated through Community legislation.

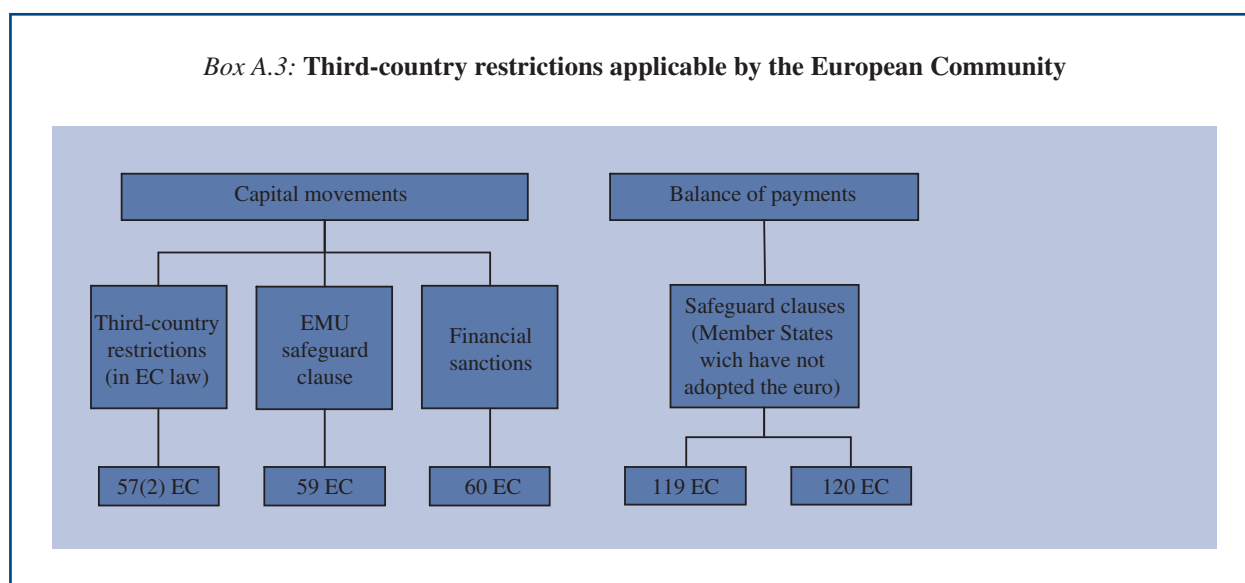
Other Community restrictions: Article 57 EC is the most relevant source of third-country restrictions applied by the Community for the protection of its economic operators through the regulation of single market access. Although other Treaty articles also allow the Community to restrict investment and establishment of foreign operators, they are less relevant for our purpose in so far as they constitute either safeguard clauses or security and foreign policy measures (and since they would probably not impact primarily on foreign direct investment and establishment).

- Should extremely disturbing capital movements with third countries endanger the operation of economic and monetary union, Article 59 EC provides for the possibility to adopt restrictive measures for a period not exceeding six months.
- Among the actions that can be undertaken when a Member State experiences serious balance-of-payments difficulties, Articles 119 and 120 EC provide for the possibility to reintroduce ‘quantitative restrictions’ or ‘protective measures’ against third countries (in particular, in the field of capital movements).
- In the context of the common foreign and security policy of the European Union, Article 60 EC provides for Community sanctions against specific third countries. In practice, these measures usually materialise in the shape of freezing of bank accounts or a ban on foreign direct investment in targeted third countries.

4. Community regimes on investment and establishment

Article 57 EC provides for the most relevant Treaty-based legal basis which entitles the Community to regulate foreign investment and establishment in the single market. In many areas, foreign operators benefit by default from the freedom to invest guaranteed by Article

Box A.3: Third-country restrictions applicable by the European Community



56 EC. In contrast, some horizontal EC regimes have an impact on foreign investors' presence in the single market and several economic sectors are regulated at EC level through secondary legislation (e.g. directives, regulations) which contains, in particular, direct and/or indirect restrictions on foreign ownership of EC firms.

The main horizontal Community regimes in the field of investment are as follows.

- *Competition policy:* The Treaty provides for a comprehensive set of provisions on competition policy which establish competition rules and merger control on a Community-wide basis. The basic principles of this competition regime are found in Articles 85 to 90 EC. There are no different rules applying to investors from third countries as compared to EC investors, and decisions are taken on an ad hoc basis.
- *Taxation policy:* In the scarce binding Community provisions on taxation, few provisions affect investment from third countries. The most relevant one provides for the application by Member States of similar tax rules in case of mergers, divisions, transfers of assets and exchanges of shares, and the grouping of parent companies and subsidiaries. Foreign companies (i.e. not established in the EC) do not benefit from this special treatment.

As far as sector-related Community regimes are concerned, the most relevant are as follows.

- *Air transport:* A direct restriction to foreign ownership results from the concept of 'Community air carrier', which is found in the EC legislation. Free market access is reserved for air carriers having their principal place of business and registered office in a Member State, and effectively controlled by Member States and/or nationals of Member States, either directly or through majority ownership. Furthermore, several air transport-related activities are protected by redress facilities against third countries applying unfair treatment on Community air carriers.
- *Maritime transport:* Foreign ownership is restricted since the freedom to provide services to maritime transport within and between Member States, and between Member States and third countries, is reserved for 'Community shipowners', which means, in particular, shipping companies estab-

lished in accordance with the legislation of a Member State and whose principal place of business is situated, and effective control exercised, in a Member State.

- *Inland waterways transport:* Transport of goods or persons within and between Member States and in transit through them is reserved for carriers established in a Member State whose vessels are owned by nationals of a Member State or legal persons majority-owned by Member States' nationals. Furthermore, the conditions for access by Member States' vessels to the arrangements under the revised Convention for the Navigation of the Rhine (which primarily involves five Member States and Switzerland) are similar to those applicable within the EC, as described above.
- *Energy:* With respect to prospecting, exploration and production of hydrocarbons, the Community may grant Member States the right to deny market entry to entities from a third country, if the latter does not grant Community entities treatment comparable to that granted by the Community to third-country residents. Moreover, according to the multilateral Energy Charter Treaty, the Community will endeavour to grant investors from other contracting parties 'most-favoured-nation' (MFN) treatment as regards investment in energy-related sectors in the single market.
- *Audiovisual:* At present, there are no Community rules which would directly restrict investments from third countries in the Community audiovisual sector or prevent a branch or subsidiary of a third-country company from operating in the Community. However, the relevant Community framework provides for various measures which impact indirectly on third-country investment and establishment. According to the European Convention on Trans-frontier Television, Community broadcasters must reserve a majority of their transmission time for 'European works', i.e. essentially originating from Member States and other European countries party to this convention (performance requirements). Moreover, Community financial support assigned to the development of European audiovisual works and training in digital technologies is reserved for Community-controlled companies and Member States' nationals (financial incentives).

- *Financial services:* The Community framework on financial services establishes certain indirect restrictions on direct investment in and establishment of financial institutions by third-country entities. When Community credit institutions, insurance companies, or securities firms are not granted effective market access by a third country (comparable to that granted to similar institutions from that third country) and national treatment in the carrying-on of their respective activities, Member States must redress the balance through suspension or limitation of pending authorisation requests relating to planned direct investments from firms established in that third country (reciprocity requirement). As third-country restrictions have been waived by the Community under the General Agreement on Trade in Services (GATS), these remain exclusively binding for non-WTO members.

5. International Member States' and EC commitments

As described above, the Community regime on capital movements not only establishes the fundamental principle of freedom of transactions and related payments, but also provides for the right of Member States and the European Community to maintain or introduce specific restrictions, in particular vis-à-vis third countries. While the completion of the freedom of capital movements meant also an advanced stage of economic and financial development and integration for the Community, this took shape during a more general process of international economic policy cooperation which impacted, in particular, on the treatment of capital movements and payments (e.g. IMF articles of agreement, OECD code of liberalisation of capital movements, GATS commitments in the field of establishment, EC/Member States' bilateral agreements).

Depending on the forum involved, either EC Member States took part individually in the liberalisation process as sovereign countries (e.g. OECD code of liberalisation), or the Community and its Member States were the relevant parties (e.g. GATS). Logically, commitments entered into by EC Member States as members of international organisations have to be consistent with the Community framework on capital movements. Therefore, such national commitments generally represent a combination of restrictions enshrined in or resulting from Community legislation (see above 'sector-related Community regimes') and

interpretations and implementations of EC Treaty restrictions (see above 'Third-country restrictions applicable by EC Member States').

Because international agreements diverge in geographical scope and methodology, the grouping of both types of liberalisation commitments (depending on existing restrictions under Community and national law) by all Member States reflects imperfectly the comprehensive Community regime on capital movements vis-à-vis third countries, but instead constitutes a reliable estimation. Moreover, it gives information on the respective nature and intensity of restrictions adopted independently by EC Member States according to Treaty exceptions, and allows us therefore to derive some general conclusions on the potential internationalisation of ownership of assets within the European Community.

The OECD code of liberalisation of capital movements: While OECD members subscribe to a general undertaking to fully liberalise capital movements on a cross-border basis, the code allows them to lodge and maintain reservations for specific transactions with a view to define freely their own pace of liberalisation. Although the code is a legally binding instrument, commitments cannot be enforced in so far as no jurisdictional body was foreseen.

In the list of reservations lodged by EC Member States, foreign direct investment is by far the most affected inward transaction in most sectors and countries. On the one hand, reservations relate in priority to strategic economic policies of the Community governing, in particular, investment and establishment (e.g. air transport, shipping, financial services). On the other hand, reservations applying to economic sectors where foreign direct investment is not restricted in accordance with Community policies and legislation generally reflect the need for some EC Member States to protect strategic domestic sectors from third-country investors (e.g. agriculture, fishing, mining, professional services, tourism, gaming).

In the field of real estate transactions, the short list of reservations does not seem to fit with the numerous national rules which govern real estate acquisition in most EC Member States. Even though it is generally liberalised in so far as it relates to direct investment and establishment, the purchase of agricultural land and secondary residences is often subject to 'authorisation procedures' which are not well-defined restrictions. With regard to short-term transactions carried out on financial

markets, most reservations are long-standing measures of a prudential nature applicable to insurance companies and private pension institutions, which usually affect the acquisition of third-country assets.

The General Agreement on Trade in Services: The GATS is the services element of the World Trade Organisation (WTO), which establishes a basic set of rules for world trade and investment in services. Apart from general undertakings to guarantee ‘most-favoured-nation’ treatment, market access and national treatment, members enter into sector-specific liberalisation commitments that are binding and subject to enforcement. Given the issue under consideration, commercial presence (e.g. subsidiaries, branches, representation offices of the parent company) must be highlighted among the several modes of services supply since it is the only one which deals directly with establishment and thereby with investment in the host country and possible restrictions thereof.

As far as MFN treatment is concerned, the bulk of sector-related exemptions concerns audiovisual services and internal waterways transport and simply reflect the preferential EC treatment enshrined in the Community framework. The rest of MFN exemptions generally result from the preferential treatment (e.g. right of establishment) granted either by the EC or specific EC Member States through bilateral agreements with specific third countries.

Market access and ‘national treatment’ commitments are also subject to limitations lodged either indistinctly by all EC Member States (which form, therefore, a restrictive Community regime towards third countries) or only by some EC Member States (in pursuance of their Treaty right to maintain certain third-country restrictions). Community restrictions on market access relate essentially to services considered as public utilities at a national or local level, in so far as these may be subject to public monopolies or exclusive rights in accordance with EC competition rules. As to restrictions lodged by specific EC Member States, they generally apply to direct investment and are implemented through ‘authorisation procedures’ that seem to give national authorities a large margin of discretion.

Besides the above general commitments and limitation thereof, sector-specific commitments are expressed with respect to a detailed GATS nomenclature of 11 aggregated categories of services.

Very broadly, the Community and its Member States have been liberal, if not very liberal, with respect to third-country presence in the field of ‘business services’ (except for aircraft rental/leasing in accordance with Community ownership and control requirement), ‘construction and related engineering services’, ‘educational services’, ‘tourism and travel-related agencies’, ‘distribution services’, ‘environmental services’, and ‘recreational, cultural, and sporting services’. The establishment of third-country entities in the EC is generally possible in the ‘financial service’ sector (i.e. insurance, banking and other financial services), although Member States have lodged a fairly large number of national limitations to market access (e.g. specific establishment requirements, service supply limitation, economic needs test, authorisation procedure) which discriminate against at the time of and after establishment.

In contrast, the Community offer has been very modest so far for ‘health-related and social services’ (essentially for health-related services), ‘transport services’ (no liberalisation commitment for maritime transport, internal waterways transport, air transport — in view of existing third-country restrictions in the EC legislation — rail, space and pipeline transport — probably for economic and political reasons), ‘communications services’ (no liberalisation commitment for postal services, courier services and audiovisual services).

Multilateral and bilateral agreements of the European Community and Member States with third parties: Since 1 January 1994, Community competence on capital movements to and from third countries clearly derives from the relevant Treaty articles. However, if Treaty coverage is formally indisputable, Article 57(1) EC grants some residual competence on specific external capital movements to Member States (see ‘Third-country restrictions applicable by EC Member States’) in so far as it acknowledges their right to freely soften or remove restrictions, without any actions of the Community in this process. For the above reasons, the Community as well as its Member States have entered separately into third-country agreements providing for specific arrangements on capital movements between both parties.

- Bilateral agreements signed between the EC and third countries contain specific provisions on capital movements and payments. Usually, the limited ambition of these provisions is to ensure the free movement of capital relating to direct investments made in companies formed in accordance with the

laws of the host country. For the Community, such a modest commitment is generally redundant with its more advanced liberalisation commitments at international level. In contrast, for many third countries with administered capital accounts, it represents a liberalisation commitment which goes beyond existing commitments at international level (e.g. GATS).

- Bilateral investment treaties (BITs) between EC Member States and third countries have a different purpose in so far as they generally cover the treatment of investors, compensation rules in case of expropriation, and a dispute-settlement mechanism. Usually, these treaties allow EC Member States, in particular, to grant specific third countries better treatment of their investments (in the Member State involved) than that which is provided by default by national legislation (establishment of specific third-country entities in these Member States is eased by these BITs). As Community investment regimes develop further (through Community legislation or international liberalisation commitments, e.g. *vis-à-vis* the GATS), the Member States' numerous BITs are sometimes not fully compatible with the Community framework.

6. Conclusions

Admissible exceptions to the EC freedom of capital movements may be classified in two groups. The first group consists of Treaty exceptions which necessitate a preliminary implementation in the Community legislation (in order to define the nature and scope of restrictions), followed by a transposition in the legal framework of Member States. The second group of Treaty exceptions gives Member States the right to directly define and apply these restrictive measures. As the Treaty does not provide for a notification of these restrictions to the Commission, the comprehensive list of restrictions to capital movements for the Community as a whole is difficult to establish with certainty, in particular with respect to direct investment originating from third countries.

In theory, this imperfect identification of third-country restrictions existing in the Community (national and EC level combined) could be clarified through the liberalisation commitments expressed in international agreements. These agreements may also be classified in two groups. The first group contains agreements where the European Community, through the Commission, makes

a proposal for itself and on behalf of its Member States, i.e. the GATS and all bilateral agreements between the EC and third parties. The second group contains agreements where Member States are parties, without any official representation of the EC as such under these agreements, i.e. the OECD code of liberalisation of capital movements and all bilateral agreements concluded between Member States and third parties. While genuine Community restrictions are generally faithfully translated into international commitments, this is less obvious for Member States' specific restrictions, due to differences in the operating principles of the agreements involved (in particular, in the areas of methodology, terminology, and enforcement rules). Despite these weaknesses, liberalisation commitments and restrictions thereon lodged by the EC and its Member States in multilateral agreements (the GATS, in particular) give a good estimation of existing restrictions on third-country ownership of EC assets.

In Community legislation, third-country restrictions are scarce and are found in six specific sectors only: air transport, maritime transport, inland waterways transport, energy, audiovisual services, and financial services. Furthermore, only the first three are protected from third-country ownership through Community ownership and control requirements (not only is this the case at world level in these sectors, but also restrictions are similar or more severe outside the Community). The other sectors are subject to less stringent indirect restrictions on third-country market access (some of these being safeguard clauses). However, this limited number of third-country restrictions in the Community framework is without prejudice to the Member States' right to maintain third-country restrictions existing in their national legislation as at 31 December 1993, as provided for by Article 57(1) EC.

At national level, there is a fairly large number of third-country restrictions remaining. Among these, many are indirect restrictions discriminating against third-country entities, but without preventing them from establishment in the Community. In contrast, as indicated in the Community position under the GATS, the lack of liberalisation commitments for some important economic sectors (notably rail, space, and pipeline transport, and postal, courier and audiovisual services) reveal some Member States' reluctance to accept significant third-country presence in these areas, and most probably the existence of third-country restrictions at national level (although the situation can be contrasted between Member States).

Against this background, any further liberalisation of investment regimes towards third countries in the Community as a whole may result either from the removal of restrictions existing in the Community framework (in the specific sectors mentioned above) or the removal of restrictions maintained unilaterally by Member States in their national legislation. Whether at Community or national level, these changes might be induced by any Community offer during negotiation rounds under international agreements, such as the GATS.

Besides this progress, deliberately planned in the context of the Community's international trade policy, the ECJ might be requested by the Commission to pro-

nounce on the compatibility with the Treaty of third-country restrictions adopted by Member States. By declaring specific restrictions illegal, such ECJ rulings would also force the Member States involved to ease or remove these. In this respect, important areas of uncertainty with respect to compatibility with the Treaty of restrictive measures on capital movements are: special control rights of Member States in privatised/private companies or economic sectors (which strongly impact on intra-EU investment in public utilities sectors) and discriminatory tax treatment resulting from the fiscal carve-out provisions of the Treaty (which constitute a very powerful, albeit indirect, impediment to direct investment and establishment).

Statistical annex

Autumn 2003

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. For DE, IE and PT, data start in the late 1980s or early 1990s. For all other Member States, most data have been reported for longer periods. ESA 79 data are used for the earlier years. Public finance ESA 95 data 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 first time, the 10 acceding countries (Cyprus, Czech Republic, Estonia, Hungary, Latvia, Lithuania, Malta, Poland, Slovakia and Slovenia) and the three accession countries (Bulgaria, Romania and Turkey) are included in this publication. Data for the acceding countries and for Bulgaria and Romania are based on ESA 95 and they start in the early 1990s. Data for Turkey are as in SNA 68.

For the USA and Japan, the definitions are as in SNA 93.

Data sources are Eurostat, national publications and the OECD.

Figures for 2003–05 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 2003–05 are based on data available up to 20 October 2003.

Starting from 2002, euro-zone countries publish national series in euro. National currency data for all years prior to the switch of the country to euro have been converted using the irrevocably fixed euro conversion rate. For presentation purposes, the currency denomination has changed, with the prefix EUR and the ISO code of the former currency (i.e. EUR-BEF for Belgium). This approach conserves the historical continuity of national series. However, cross-country comparisons and aggregations should continue to be based only on historical series established in ecu up to 1998 and their statistical continuation in euro from 1999 onwards. Exchange rates and purchasing power parities have also been converted in the same manner.

See also the explanatory notes on the tables for specific definitions.

Notes on the tables

Preliminary remarks

Notes draw heavily on the methodological guide to the European system of national and regional accounts (ESA 95). For key variables, ESA 95 codes are mentioned in brackets. For more information in addition to the notes presented for individual tables, the reader can refer to the respective parts of the ESA 95 methodology.

General remarks on the institutional sectors

The European system of national and regional accounts (ESA 95) subdivides the total economy (ESA 95 — code S.1) into institutional sectors:

Corporations

The sector non-financial corporations (S.11) consists of resident institutional units whose distributive and financial transactions are distinct from those of their owners. The sector also includes quasi-corporations, which keep a complete set of accounts but have no independent legal status. However, quasi-corporations have an economic and financial behaviour that is different from that of their owners and similar to that of corporations. Therefore, they are deemed to have autonomy of decision and are considered as distinct institutional units. The sector financial corporations (S.12) consists of all resident corporations and quasi-corporations which are principally engaged in financial intermediation and/or auxiliary financial activities, including insurance corporations and pension funds as well as the central bank.

Reference: ESA 95, paragraphs 2.21, 2.13 et seq., 2.32 et seq.

General government

General government (S.13) produces non-market output for individual and collective consumption and is engaged in the redistribution of national income and wealth. The sector comprises four subsectors: central government, State government, local government and social security funds.

Reference: ESA 95, paragraph 2.68 et seq.

Households

The households sector (S.14) covers individuals or groups of individuals as consumers and as producers of goods and non-financial services for own final use. Notably, the households sector also contains sole proprietorships and partnerships without independent legal status — other than those treated as quasi-corporations — which are market producers.

Reference: ESA 95, paragraphs 2.75 and 2.76.

Non-profit institutions serving households (NPISH)

This sector (S.15) consists of non-profit institutions which are separate legal entities and which provide goods or services to households free or at prices that are not economically significant. Their principal resources, apart from those derived from occasional sales, are derived from voluntary contributions in cash or in kind from households in their capacity as consumers, from payments made by general government (however, NPISH are not controlled and not mainly financed by general government) and from property income. Examples are, in particular, churches, sports clubs, charities, political parties and trade unions.

Reference: ESA 95, paragraphs 2.87 and 2.88.

Furthermore, ESA 95 defines the rest of the world sector (S.2) that consists of non-resident units which have economic links with resident units. Included are the institutions of the European Union and international organisations. Its accounts provide an overall view of the economic relationships linking the national economy with the rest of the world.

Reference: ESA 95, paragraph 2.89.

Tables 78–112 (country tables): Main economic indicators 1961–2005

Item 4.4 — Profitability index (1961–73 = 100)

The profitability index measures the net returns on net capital stock for the total economy.

In formal terms, the net returns on net capital stock can be calculated as follows:

$$[\text{UVND} - (\text{UWCD} \times (\text{NETD}/\text{NWT D}))] \times 100 / (\text{OKND} \times \text{PIGT})$$

where:

UVND: net domestic product at market prices;

UWCD: compensation of employees, total economy, domestic;

NETD: employment, total economy, domestic;

NWTD: employees, total economy, domestic;

OKND: net capital stock at constant prices;

PIGT: price deflator gross fixed capital formation.

Item 5.1 — Growth of net capital stock (real)

The net capital stock is the sum of the written-down values of all fixed assets still in use at the end of an accounting period. The net capital stock at constant prices in year t is calculated as follows:

$$\begin{aligned} & \text{Net capital stock at constant prices in year } t - 1 \\ & + \text{Gross fixed capital formation at constant prices in year } t \\ & - \text{Capital consumption at constant prices in year } t. \end{aligned}$$

Item 5.2 — Net capital/output ratio (real)

Net capital stock per unit of gross domestic product; ratio of net capital stock at constant prices to gross domestic product at constant market prices.

Item 5.3 — Growth of capital intensity

Capital intensity is the net capital stock at constant prices per person employed.

Item 5.4 — Labour productivity growth

Labour productivity is the gross domestic product at constant market prices per person employed.

Item 6.2 — Activity rate

The activity rate is defined as the ratio of civilian labour force (employed and unemployed) to the total population aged 15 to 64 years.

Item 6.3 — Employment rate (benchmark)

The employment rate is defined as the ratio of civilian employment (national definition) to the total population aged 15 to 64 years. Persons carrying out obligatory military service are not included.

Item 6.4 — Employment rate (full-time equivalent)

The full-time equivalent employment rate is calculated by dividing the full-time equivalent employment by the total population in the 15–64 age group (see note on Table 11).

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Symbols and abbreviations

—	nil
:	not available
%	per cent or percentage
Mio	million
Mrd	1 000 million
EUR	euro
ECU	European currency unit
PPS	purchasing power standard
GDP	gross domestic product at market prices
D_90	Germany prior to unification in 1990
EU-15	all Member States
EUR-12	BE, DE, EL, ES, FR, IE, IT, LU, NL, AT, PT, FI
AC-10	CY, CZ, EE, HU, LV, LT, MT, PL, SK, SI
EU-25	EU-15 and AC-10
ESA	European system of national and regional accounts
SNA	system of national accounts
ULC	unit labour costs
BE	Belgium
DK	Denmark
DE	Germany
EL	Greece
ES	Spain
FR	France
IE	Ireland
IT	Italy
LU	Luxembourg
NL	Netherlands
AT	Austria
PT	Portugal
FI	Finland
SE	Sweden
UK	United Kingdom
BG	Bulgaria
CY	Cyprus
CZ	Czech Republic
EE	Estonia
HU	Hungary
JP	Japan
LT	Lithuania
LV	Latvia
MT	Malta
PL	Poland
RO	Romania
SI	Slovenia
SK	Slovakia
TR	Turkey
US	United States

Table 1

Population and labour market
Total population (national accounts)

(1 000)

	BE	DK	DE ⁽¹⁾	EL	ES	FR	IE	IT	LU
1960	9 152	4 581	55 433	8 354	30 498	46 717	2 835	50 200	314
1965	9 462	4 757	58 619	8 578	32 118	49 860	2 877	52 112	331
1970	9 654	4 929	60 651	8 822	33 863	51 920	2 951	53 822	361
1975	9 799	5 060	61 829	9 077	35 694	53 891	3 178	55 441	365
1980	9 858	5 124	61 566	9 675	37 533	55 113	3 402	56 434	364
1981	9 857	5 122	61 682	9 761	37 747	55 425	3 444	56 510	365
1982	9 855	5 118	61 638	9 822	37 950	55 747	3 481	56 544	366
1983	9 854	5 114	61 423	9 879	38 130	56 042	3 506	56 564	366
1984	9 855	5 111	61 175	9 929	38 286	56 311	3 530	56 577	366
1985	9 857	5 113	61 024	9 967	38 427	56 587	3 541	56 593	367
1986	9 859	5 120	61 066	9 997	38 544	56 864	3 542	56 596	368
1987	9 870	5 127	61 077	10 017	38 639	57 173	3 543	56 602	371
1988	9 904	5 130	61 449	10 037	38 724	57 523	3 531	56 629	374
1989	9 940	5 131	62 063	10 090	38 799	57 865	3 510	56 672	378
1990	9 968	5 138	63 253	10 161	38 857	58 171	3 506	56 719	382
1991			64 074						
1991	10 006	5 150	79 984	10 247	38 926	58 464	3 526	56 751	387
1992	10 047	5 166	80 594	10 322	39 016	58 754	3 549	56 859	392
1993	10 086	5 185	81 179	10 379	39 102	59 006	3 563	57 049	398
1994	10 116	5 201	81 422	10 426	39 172	59 221	3 571	57 204	404
1995	10 137	5 230	81 661	10 635	39 223	59 430	3 601	57 301	410
1996	10 155	5 262	81 896	10 710	39 279	59 634	3 626	57 397	416
1997	10 180	5 285	82 052	10 777	39 348	59 839	3 661	57 512	421
1998	10 203	5 303	82 029	10 836	39 453	60 049	3 713	57 588	427
1999	10 222	5 321	82 087	10 884	39 626	60 294	3 754	57 646	433
2000	10 246	5 338	82 188	10 918	39 927	60 589	3 799	57 762	439
2001	10 281	5 357	82 339	10 938	40 266	60 912	3 853	57 927	442
2002	10 330	5 376	82 483	10 950	40 546	61 230	3 909	58 028	446
2003	10 365	5 390	82 549	10 972	40 809	61 475	3 956	58 129	451
2004	10 389	5 404	82 623	10 994	41 051	61 659	3 998	58 227	455
2005	10 412	5 420	82 698	11 016	41 273	61 844	4 036	58 320	459

⁽¹⁾ 1960–91 D_90.

NB: The total population of a country consists of all persons, national or foreign, who are permanently settled (i.e. for a period of one year or more) in the economic territory of the country.

The total population of a country does not include:

- foreign civilians staying on the territory for less than one year (i.e. frontier workers, seasonal workers, tourists, patients, etc.);
- national civilians staying abroad for a period of one year or more;
- national military personnel working with international organisations located in the rest of the world;
- national technical assistance personnel on long-term assignments who work abroad and are deemed to be employed by their host government, or international organisation, which is actually financing their work;
- foreign students however long they study in the country;
- members of the armed forces of a foreign country who are stationed in the country;
- the foreign personnel of foreign scientific bases located on the geographic territory of the country;
- members of foreign diplomatic missions stationed in the country.

National accounts data on population are based on an annual average.

NB: Data for France are for France as a whole, i.e. including the overseas departments (*départements d'outre mer*).

Reference: ESA 95, paragraph 11.05 et seq.

(1 000)

	NL	AT	PT	FI	SE	UK	EU-15 ⁽¹⁾	EUR-12 ⁽²⁾
1960	11 483	6 996	8 904	4 430	7 480	52 372	299 749	235 315
1965	12 293	7 217	9 045	4 564	7 734	54 350	313 919	247 077
1970	13 032	7 412	8 726	4 606	8 043	55 632	324 422	255 818
1975	13 660	7 523	9 141	4 711	8 192	56 226	333 786	264 308
1980	14 148	7 493	9 817	4 780	8 310	56 330	339 948	270 184
1981	14 247	7 512	9 903	4 800	8 320	56 352	341 048	271 255
1982	14 312	7 519	9 963	4 827	8 325	56 318	341 786	272 024
1983	14 368	7 511	10 006	4 856	8 329	56 377	342 325	272 505
1984	14 423	7 514	10 041	4 882	8 337	56 506	342 843	272 889
1985	14 488	7 522	10 064	4 902	8 350	56 685	343 485	273 337
1986	14 567	7 532	10 063	4 918	8 370	56 852	344 256	273 915
1987	14 664	7 542	10 046	4 932	8 398	57 009	345 009	274 475
1988	14 760	7 559	10 020	4 946	8 436	57 158	346 179	275 455
1989	14 846	7 602	9 989	4 964	8 493	57 358	347 698	276 716
1990	14 947	7 672	9 950	4 986	8 559	57 561	349 829	278 571
1991							351 764	280 189
1991	15 068	7 755	9 971	5 014	8 617	57 808	367 674	296 099
1992	15 182	7 841	9 963	5 042	8 668	58 006	369 401	297 561
1993	15 290	7 906	9 974	5 066	8 719	58 191	371 093	298 998
1994	15 381	7 936	9 998	5 089	8 781	58 395	372 316	299 939
1995	15 460	7 948	10 027	5 108	8 827	58 612	373 609	300 940
1996	15 526	7 959	10 056	5 125	8 841	58 807	374 688	301 778
1997	15 607	7 968	10 089	5 140	8 846	59 014	375 739	302 594
1998	15 703	7 977	10 129	5 153	8 851	59 237	376 651	303 260
1999	15 809	7 992	10 174	5 165	8 858	59 501	377 766	304 086
2000	15 922	8 012	10 231	5 176	8 871	59 756	379 173	305 208
2001	16 043	8 032	10 299	5 188	8 896	59 935	380 706	306 518
2002	16 148	8 053	10 374	5 201	8 919	59 712	381 705	307 698
2003	16 245	8 067	10 447	5 209	8 953	59 877	382 894	308 673
2004	16 326	8 093	10 509	5 217	8 991	60 043	383 978	309 541
2005	16 385	8 119	10 578	5 224	9 032	60 208	385 023	310 363

⁽¹⁾ 1960–91 including D_90.⁽²⁾ EU-15 excluding DK, SE and UK; 1960–91 including D_90.

Table 1 (Continued)

(1 000)

	CY	CZ	EE	HU	LV	LT	MT	PL	SK
1960	:	9 661	1 218	9 993	2 121	2 760	334	29 561	3 994
1965	521	9 786	1 293	10 162	2 266	2 952	324	31 496	4 371
1970	541	9 806	1 362	10 346	2 359	3 119	328	32 526	4 538
1975	538	10 064	1 429	10 541	2 456	3 280	309	34 022	4 739
1980	539	10 328	1 477	10 716	2 512	3 391	330	35 578	4 980
1981	545	10 304	1 488	10 709	2 519	3 410	333	35 902	5 016
1982	551	10 315	1 498	10 692	2 531	3 434	336	36 227	5 055
1983	557	10 323	1 509	10 665	2 546	3 462	339	36 571	5 092
1984	564	10 332	1 519	10 629	2 562	3 491	342	36 914	5 127
1985	571	10 337	1 529	10 588	2 579	3 521	345	37 203	5 162
1986	577	10 342	1 540	10 543	2 600	3 555	348	37 456	5 194
1987	581	10 350	1 552	10 495	2 627	3 593	350	37 664	5 223
1988	585	10 357	1 562	10 452	2 653	3 631	353	37 862	5 251
1989	591	10 363	1 569	10 407	2 670	3 667	357	37 963	5 276
1990	600	10 363	1 571	10 374	2 671	3 698	360	38 119	5 280
1991									
1991	611	10 309	1 568	10 373	2 662	3 704	364	38 245	5 284
1992	623	10 318	1 555	10 369	2 632	3 700	367	38 365	5 305
1993	633	10 330	1 494	10 358	2 586	3 683	371	38 459	5 325
1994	645	10 334	1 463	10 343	2 548	3 658	375	38 544	5 347
1995	656	10 327	1 437	10 329	2 485	3 629	378	38 588	5 364
1996	666	10 315	1 416	10 311	2 457	3 602	380	38 618	5 374
1997	675	10 303	1 400	10 291	2 433	3 575	383	38 650	5 383
1998	683	10 294	1 393	10 267	2 410	3 549	385	38 666	5 391
1999	691	10 285	1 379	10 238	2 391	3 524	387	38 654	5 396
2000	698	10 272	1 372	10 211	2 373	3 500	390	38 646	5 401
2001	706	10 260	1 367	10 188	2 355	3 481	393	38 641	5 379
2002	717	10 249	1 361	10 164	2 339	3 469	396	38 618	5 379
2003	721	10 259	1 356	10 123	2 332	3 462	398	38 617	5 379
2004	726	10 259	1 352	10 083	2 327	3 452	400	38 616	5 379
2005	730	10 259	1 347	10 063	2 322	3 441	402	38 613	5 379

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The total population of a country does not include:

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- national civilians staying abroad for a period of one year or more;
- national military personnel working with international organisations located in the rest of the world;
- national technical assistance personnel on long-term assignments who work abroad and are deemed to be employed by their host government, or international organisation, which is actually financing their work;
- foreign students however long they study in the country;
- members of the armed forces of a foreign country who are stationed in the country;
- the foreign personnel of foreign scientific bases located on the geographic territory of the country;
- members of foreign diplomatic missions stationed in the country.

National accounts data on population are based on an annual average.

NB: Data for France are for France as a whole, i.e. including the overseas departments (*départements d'outre mer*).

Reference: ESA 95, paragraphs 11.05 et seq.

(1 000)

	SI	AC-10 ⁽¹⁾	EU-25 ⁽²⁾	BG	RO	TR	US	JP
1960	1 585	:	:	7 867	18 412	27 754	180 760	94 100
1965	1 649	64 819	378 738	8 204	19 036	31 390	194 347	98 880
1970	1 725	66 651	391 073	8 490	20 262	35 604	205 089	103 720
1975	1 794	69 172	402 959	8 721	21 255	40 025	215 981	111 520
1980	1 901	71 751	411 699	8 862	22 211	44 438	227 726	116 800
1981	1 917	72 143	413 191	8 891	22 357	45 539	230 008	117 650
1982	1 927	72 566	414 352	8 918	22 480	46 686	232 218	118 450
1983	1 933	72 998	415 323	8 940	22 565	47 862	234 332	119 260
1984	1 937	73 417	416 261	8 961	22 645	49 068	236 394	120 020
1985	1 956	73 791	417 276	8 961	22 737	50 304	238 506	120 750
1986	1 980	74 135	418 391	8 958	22 841	51 431	240 682	121 490
1987	1 990	74 424	419 434	8 971	22 954	52 559	242 842	122 090
1988	1 995	74 702	420 881	8 981	23 062	53 713	245 061	122 610
1989	1 996	74 858	422 557	8 877	23 166	54 891	247 387	123 120
1990	1 998	75 034	424 863	8 718	23 206	56 201	249 981	123 540
1991			426 887					
1991	2 002	75 123	442 797	8 632	23 185	57 303	253 336	123 920
1992	1 996	75 230	444 631	8 540	22 789	58 399	256 677	124 320
1993	1 991	75 229	446 322	8 472	22 755	59 489	260 037	124 670
1994	1 989	75 246	447 563	8 444	22 731	60 571	263 226	124 960
1995	1 988	75 181	448 791	8 406	22 681	61 644	266 364	125 570
1996	1 991	75 131	449 819	8 362	22 608	62 697	269 485	125 864
1997	1 987	75 079	450 818	8 312	22 546	62 480	272 756	126 166
1998	1 983	75 020	451 671	8 257	22 503	63 459	275 955	126 486
1999	1 984	74 928	452 694	8 211	22 458	64 345	279 144	126 686
2000	1 989	74 851	454 024	8 170	22 435	67 461	282 489	126 919
2001	1 992	74 762	455 468	7 913	22 408	68 610	285 908	127 221
2002	1 995	74 686	456 391	7 868	22 379	69 728	288 619	127 366
2003	1 996	74 642	457 536	7 805	21 738	70 865	291 254	127 541
2004	1 996	74 588	458 567	7 743	21 628	71 949	293 952	127 669
2005	1 996	74 553	459 576	7 681	21 538	72 978	296 665	127 796

⁽¹⁾ CY, CZ, EE, HU, LV, LT, MT, PL, SK and SI.

⁽²⁾ BE, DK, DE, EL, ES, FR, IE, IT, LU, NL, AT, PT, FI, SE, UK, CY, CZ, EE, HU, LV, LT, MT, PL, SK and SI; 1960–91 including D_90.

Table 2

Population and labour market
Employment, persons; all domestic industries (national accounts)

(Annual percentage change)

	BE	DK	DE ⁽¹⁾	EL	ES	FR	IE	IT	LU
1961-70	0.5	1.1	0.2	-0.8	0.6	0.6	0.0	-0.5	0.6
1971-80	0.2	0.3	0.3	0.7	-0.6	0.5	0.9	0.7	1.2
1981	-1.9	-1.5	0.1	5.2	-2.4	-0.4	-0.9	-0.1	0.3
1982	-1.3	0.3	-0.8	-1.1	-0.9	0.1	0.0	0.2	-0.3
1983	-1.3	0.2	-0.9	0.5	-0.3	-0.3	-1.9	0.3	-0.3
1984	0.1	1.5	0.8	-0.2	-2.2	-0.2	-1.9	0.0	0.6
1985	0.6	2.3	1.4	2.5	-1.0	-0.8	-2.6	0.9	0.9
1986	0.6	2.3	1.9	0.3	2.3	0.4	0.7	0.7	2.4
1987	0.6	0.4	1.3	-0.1	4.8	0.8	0.9	0.2	2.7
1988	1.7	-0.7	1.4	1.7	3.5	0.9	0.0	1.1	3.0
1989	1.2	-0.7	1.8	0.4	3.6	1.7	-0.2	0.7	3.4
1990	0.9	-0.7	3.1	1.3	3.8	0.8	4.3	1.6	4.2
1981-90	0.1	0.3	1.0	1.0	1.1	0.3	-0.2	0.6	1.7
1991	0.1	-0.6	2.8	-2.3	1.2	0.1	-0.3	1.9	4.0
1992	-0.5	-0.8	-1.5	1.4	-1.4	-0.6	0.3	-0.5	2.5
1993	-0.8	-1.5	-1.4	1.0	-2.8	-1.3	1.5	-2.5	1.6
1994	-0.4	1.4	-0.2	1.9	-0.5	0.1	3.1	-1.5	2.5
1995	4.1	1.3	0.2	0.9	1.9	0.9	4.1	-0.1	2.5
1996	0.3	1.0	-0.3	-0.5	1.3	0.4	3.6	0.6	2.6
1997	0.9	1.2	-0.2	-2.2	2.9	0.4	5.6	0.4	3.1
1998	1.8	1.6	1.1	7.5	3.9	1.5	8.6	1.0	4.5
1999	1.4	1.2	1.2	0.1	3.5	2.0	6.0	1.1	5.0
2000	1.9	0.5	1.8	0.3	3.5	2.5	4.7	1.9	5.6
1991-2000	0.9	0.5	0.4	0.8	1.3	0.6	3.7	0.2	3.4
2001	1.5	0.4	0.4	-0.3	2.3	1.8	3.0	1.9	5.6
2002	-0.3	-0.6	-0.6	0.1	1.5	0.8	1.3	1.4	3.2
2003	-0.2	-0.6	-1.5	1.0	1.7	0.0	0.8	0.9	1.7
2004	0.5	0.4	-0.3	0.8	2.0	-0.1	1.0	0.6	0.9
2005	1.0	0.4	0.7	0.5	2.1	0.7	1.3	0.9	1.2
2001-05	0.5	0.0	-0.3	0.4	1.9	0.6	1.5	1.1	2.5

⁽¹⁾ 1961-91 D_90.

NB: Employment covers employees and self-employed persons. It is an annual average, and uses the domestic concept, which includes residents as well as non-residents who work for resident producer units.

Reference: ESA 95, paragraph 11.11 et seq.

(Annual percentage change)

	NL	AT	PT	FI	SE	UK	EU-15 ⁽¹⁾	EUR-12 ⁽²⁾
1961–70	2.0	– 0.4	0.2	0.4	0.7	0.3	0.3	0.3
1971–80	0.5	0.7	0.1	0.3	0.8	0.2	0.3	0.3
1981	– 3.1	– 0.6	1.1	1.3	0.2	– 3.3	– 0.9	– 0.4
1982	– 5.2	– 1.1	– 1.9	1.1	– 0.2	– 1.8	– 0.9	– 0.7
1983	– 3.3	– 0.3	– 1.1	0.4	0.2	– 0.2	– 0.4	– 0.5
1984	1.7	– 0.1	– 1.5	0.6	0.8	2.2	0.4	– 0.1
1985	4.4	0.2	0.0	0.1	1.0	1.0	0.7	0.6
1986	5.5	0.1	– 2.7	– 0.3	0.6	0.3	1.0	1.2
1987	4.5	0.4	2.3	0.6	0.8	2.3	1.6	1.5
1988	1.9	0.4	2.2	1.0	1.4	3.6	1.8	1.5
1989	2.6	1.3	1.9	0.9	1.5	2.9	1.9	1.7
1990	3.0	1.6	1.7	– 0.5	0.9	0.5	1.7	2.1
1981–90	1.1	0.2	0.2	0.5	0.7	0.7	0.7	0.7
1991	1.9	1.4	2.8	– 5.6	– 1.5	– 3.1	0.4	1.3
1992	1.3	0.2	– 1.6	– 7.1	– 4.5	– 2.8	– 1.3	– 0.9
1993	0.3	– 0.6	– 2.0	– 6.0	– 5.0	– 0.8	– 1.5	– 1.6
1994	0.6	– 0.1	– 1.0	– 1.4	– 0.9	0.9	– 0.1	– 0.3
1995	2.3	0.0	– 0.7	2.0	1.5	1.0	0.8	0.7
1996	2.3	– 0.6	1.6	1.3	– 0.8	1.6	0.6	0.5
1997	3.2	0.5	1.6	3.3	– 1.3	1.8	0.9	0.8
1998	2.6	1.0	2.7	2.0	1.5	1.2	1.8	2.0
1999	2.6	1.4	1.9	2.5	2.1	1.5	1.7	1.8
2000	2.2	0.8	2.1	2.3	2.4	1.1	2.0	2.2
1991–2000	1.9	0.4	0.7	– 0.7	– 0.7	0.2	0.5	0.6
2001	1.8	0.6	1.3	1.5	1.9	0.6	1.2	1.4
2002	0.9	– 0.2	0.3	0.4	0.2	0.1	0.4	0.5
2003	– 0.9	0.1	– 1.0	– 0.2	– 0.2	0.7	0.0	– 0.1
2004	– 0.6	0.3	– 0.1	0.2	0.0	0.5	0.3	0.3
2005	0.4	0.5	0.6	0.4	0.2	0.5	0.8	0.9
2001–05	0.3	0.3	0.2	0.4	0.4	0.5	0.5	0.6

⁽¹⁾ 1961–91 including D_90.⁽²⁾ EU-15 excluding DK, SE and UK; 1961–91 including D_90.

Table 2 (Continued)

(Annual percentage change)

	CY	CZ	EE	HU	LV	LT	MT	PL	SK
1961–70	:	:	:	:	:	:	:	:	:
1971–80	:	:	:	:	:	:	:	:	:
1981	:	:	:	:	:	:	:	:	:
1982	:	:	:	:	:	:	:	:	:
1983	:	:	:	:	:	:	:	:	:
1984	:	:	:	:	:	:	:	:	:
1985	:	:	:	:	:	:	:	:	:
1986	:	:	:	:	:	:	:	:	:
1987	:	:	:	:	:	:	:	:	:
1988	:	:	:	:	:	:	:	:	:
1989	:	:	:	:	:	:	:	:	:
1990	:	:	:	:	:	:	:	:	:
1981–90	:	:	:	:	:	:	:	:	:
1991	:	:	-2.8	:	-0.8	2.4	1.9	:	:
1992	:	:	-6.0	:	-7.3	-2.2	1.3	:	:
1993	:	-0.2	-7.9	-6.3	-6.9	-4.2	0.9	-2.4	:
1994	:	1.1	-3.4	-2.0	-10.1	-5.8	0.5	1.0	:
1995	:	0.7	-6.2	-3.4	-10.4	-1.9	3.2	1.8	2.1
1996	-16.8	0.2	-2.3	-0.5	-1.9	0.9	1.5	1.9	3.3
1997	-0.3	-0.7	0.0	0.1	4.4	0.6	-0.1	2.8	-1.1
1998	1.0	-1.4	-1.9	1.8	-0.3	-0.8	0.5	2.3	1.5
1999	1.3	-2.1	-4.4	3.2	-1.8	-0.5	-0.4	-2.7	-3.2
2000	2.8	-0.7	-1.5	1.0	-2.9	-3.7	2.3	-2.3	-2.5
1991–2000	:	:	-3.7	:	-3.9	-1.5	1.1	:	:
2001	1.9	0.4	0.9	0.4	2.2	-4.0	0.3	-0.6	1.0
2002	1.2	1.0	1.3	0.2	2.7	4.0	1.9	-2.3	0.2
2003	0.5	-0.5	0.5	0.5	0.5	1.5	0.4	-0.3	1.6
2004	0.7	0.0	0.2	0.8	0.5	1.3	0.4	0.5	1.3
2005	1.0	0.1	0.2	1.0	0.5	1.6	0.8	1.5	1.3
2001–05	1.0	0.2	0.6	0.6	1.3	0.8	0.8	-0.3	1.1

NB: Employment covers employees and self-employed persons. It is an annual average, and uses the domestic concept, which includes residents as well as non-residents who work for resident producer units.

Reference: ESA 95, paragraph 11.11 et seq.

(Annual percentage change)

	SI	AC-10 ⁽¹⁾	EU-25 ⁽²⁾	BG	RO	TR	US	JP
1961–70	:	:	:	:	:	:	2.0	1.4
1971–80	:	:	:	:	:	1.8	2.1	0.7
1981	:	:	:	:	:	0.9	0.9	0.8
1982	:	:	:	:	:	1.0	-1.2	0.8
1983	:	:	:	:	:	1.0	1.0	1.5
1984	:	:	:	:	:	1.5	4.4	0.3
1985	:	:	:	:	:	1.7	2.3	0.6
1986	:	:	:	:	:	1.8	1.7	0.5
1987	:	:	:	:	:	2.3	2.8	0.4
1988	:	:	:	:	:	1.5	2.9	1.2
1989	:	:	:	:	:	2.0	2.3	1.5
1990	:	:	:	:	:	1.8	1.3	1.7
1981–90	:	:	:	:	:	1.5	1.8	0.9
1991	:	:	:	-13.0	-0.5	0.6	-1.0	2.0
1992	:	:	:	-8.1	-3.0	0.5	0.1	1.1
1993	:	:	:	-1.6	-3.8	-0.2	2.0	0.4
1994	:	:	:	0.6	-0.5	2.4	2.3	0.1
1995	:	:	:	1.3	-5.2	3.7	2.2	0.1
1996	-1.5	0.9	0.7	0.1	-1.2	2.1	1.7	0.4
1997	-0.7	1.3	1.0	-3.9	-3.8	-2.5	2.3	1.0
1998	0.1	1.2	1.7	-0.2	-2.3	2.8	2.2	-0.7
1999	1.1	-1.7	1.2	-2.1	-4.5	2.1	1.9	-0.8
2000	3.8	-1.5	1.4	-3.5	2.5	-0.4	1.9	-0.1
1991–2000	:	:	:	-3.1	-2.3	1.1	1.6	0.4
2001	0.5	-0.2	1.0	-0.4	-0.8	-1.0	-0.3	-0.6
2002	-0.5	-0.6	0.2	0.8	-8.7	-0.6	-0.3	-1.2
2003	-0.5	0.0	0.0	2.0	0.5	1.7	0.8	0.5
2004	0.5	0.6	0.4	1.5	0.6	2.2	0.4	0.2
2005	0.7	1.1	0.8	1.5	0.1	2.3	0.6	0.1
2001–05	0.1	0.2	0.5	1.1	-1.7	0.9	0.2	-0.2

⁽¹⁾ CY, CZ, EE, HU, LV, LT, MT, PL, SK and SI.⁽²⁾ BE, DK, DE, EL, ES, FR, IE, IT, LU, NL, AT, PT, FI, SE, UK, CY, CZ, EE, HU, LV, LT, MT, PL, SK and SI.

Table 3

Population and labour market
Unemployment rate; total
Member States: definition Eurostat

(%)

	BE	DK	DE (1)	EL	ES	FR	IE	IT	LU
1960–70	1.9	1.1	0.6	5.0	0.9	1.8	5.4	4.9	0.0
1971–80	4.6	3.6	2.2	2.2	2.8	4.1	7.7	6.1	0.6
1981	9.4	7.9	3.9	4.0	11.2	7.3	10.8	7.4	2.4
1982	11.0	8.4	5.6	5.8	13.0	7.9	12.5	8.0	2.4
1983	10.7	8.4	6.9	7.1	14.1	7.9	13.9	7.4	3.4
1984	10.8	7.9	7.1	7.2	16.5	9.4	15.5	7.9	3.0
1985	10.1	6.7	7.2	7.0	17.7	9.8	16.8	8.2	2.9
1986	10.0	5.0	6.6	6.6	17.3	9.9	16.8	8.9	2.6
1987	9.8	5.0	6.4	6.7	16.8	10.1	16.6	9.6	2.5
1988	8.8	5.7	6.3	6.8	15.9	9.6	16.2	9.7	2.0
1989	7.4	6.8	5.6	6.7	13.9	9.1	14.7	9.7	1.8
1990	6.6	7.2	4.8	6.4	13.1	8.6	13.4	8.9	1.7
1981–90	9.5	6.9	6.0	6.4	15.0	9.0	14.7	8.6	2.5
1991			4.2						
1991	6.4	7.9	5.4	7.1	13.2	9.1	14.7	8.5	1.6
1992	7.1	8.6	6.4	7.9	14.9	10.0	15.4	8.7	2.1
1993	8.6	9.6	7.7	8.6	18.6	11.3	15.6	10.1	2.6
1994	9.8	7.7	8.2	8.9	19.8	11.8	14.3	11.0	3.2
1995	9.7	6.7	8.0	9.2	18.8	11.3	12.3	11.5	2.9
1996	9.5	6.3	8.7	9.6	18.1	11.9	11.7	11.5	2.9
1997	9.2	5.2	9.7	9.8	17.0	11.8	9.9	11.6	2.7
1998	9.3	4.9	9.1	10.9	15.2	11.4	7.5	11.7	2.7
1999	8.6	4.8	8.4	11.8	12.8	10.7	5.6	11.3	2.4
2000	6.9	4.4	7.8	11.0	11.3	9.3	4.3	10.4	2.3
1991–2000	8.5	6.6	7.9	9.5	16.0	10.9	11.1	10.6	2.5
2001	6.7	4.3	7.8	10.4	10.6	8.5	3.9	9.4	2.1
2002	7.3	4.5	8.6	10.0	11.3	8.8	4.4	9.0	2.8
2003	8.2	5.5	9.4	9.5	11.3	9.4	4.8	8.8	3.7
2004	8.3	5.2	9.6	9.2	10.9	9.7	5.1	8.8	4.2
2005	7.8	4.9	9.5	9.0	10.4	9.4	5.0	8.7	4.5
2001–05	7.7	4.9	9.0	9.6	10.9	9.2	4.6	8.9	3.5

(1) 1960–91 D_90.

NB: Total unemployed individuals as a share of the total active population. Unemployed persons are those aged at least 15 years not living in collective households who are without work during the reference week, available to start work within the next two weeks following the reference week and are seeking work (i.e. have actively sought employment at some time during the previous four weeks or are not seeking a job because they have already found a job to start later). The total active population (labour force) is the total number of the employed and unemployed population.

Reference: Eurostat, unemployment statistics.

(%)

	NL	AT	PT	FI	SE	UK	EU-15 ⁽¹⁾	EUR-11 ⁽²⁾
1960–70	0.9	2.1	2.4	2.2	1.7	1.7	2.0	2.1
1971–80	4.3	1.4	5.1	4.0	2.1	3.8	3.8	3.9
1981	8.6	1.5	7.3	4.9	2.5	8.8	7.0	6.9
1982	11.5	2.4	7.2	5.4	3.2	10.1	8.2	8.1
1983	9.2	3.0	8.2	5.5	3.7	10.8	8.6	8.4
1984	8.9	2.9	8.9	5.2	3.3	10.9	9.2	9.1
1985	7.9	3.1	9.1	4.9	2.9	11.2	9.4	9.4
1986	7.8	3.3	8.8	5.2	2.7	11.2	9.3	9.4
1987	7.7	3.5	7.2	4.8	2.2	10.3	9.2	9.4
1988	7.2	3.3	5.8	4.2	1.8	8.5	8.6	9.0
1989	6.6	2.9	5.2	3.1	1.6	7.1	7.8	8.3
1990	5.8	3.1	4.8	3.2	1.7	6.9	7.3	7.6
1981–90	8.1	2.9	7.3	4.6	2.6	9.6	8.5	8.6
1991							7.6	7.6
1991	5.5	3.4	4.2	6.6	3.1	8.6	7.8	7.8
1992	5.3	3.4	4.3	11.7	5.6	9.8	8.9	8.9
1993	6.2	4.0	5.6	16.3	9.1	10.0	10.1	10.2
1994	6.8	3.8	6.9	16.6	9.4	9.3	10.5	10.9
1995	6.6	3.9	7.3	15.4	8.8	8.5	10.1	10.6
1996	6.0	4.4	7.3	14.6	9.6	8.0	10.2	10.9
1997	4.9	4.4	6.8	12.7	9.9	6.9	10.0	10.9
1998	3.8	4.5	5.1	11.4	8.2	6.2	9.4	10.2
1999	3.2	3.9	4.5	10.2	6.7	5.9	8.7	9.3
2000	2.8	3.7	4.1	9.8	5.6	5.4	7.8	8.4
1991–2000	5.1	3.9	5.6	12.5	7.6	7.9	9.4	9.8
2001	2.4	3.6	4.1	9.1	4.9	5.0	7.4	7.9
2002	2.7	4.3	5.1	9.1	4.9	5.1	7.7	8.3
2003	4.4	4.5	6.6	9.3	5.7	4.9	8.1	8.9
2004	5.8	4.6	7.2	9.2	5.8	4.9	8.2	9.1
2005	6.1	4.1	7.3	9.1	5.7	4.9	8.1	8.9
2001–05	4.3	4.2	6.1	9.2	5.4	5.0	7.9	8.6

⁽¹⁾ 1960–91 including D_90.⁽²⁾ EU-15 excluding DK, EL, SE and UK; 1960–91 including D_90.

Table 3 (Continued)

(%)

	CY	CZ	EE	HU	LV	LT	MT	PL	SK
1960–70	:	:	:	:	:	:	:	:	:
1971–80	:	:	:	:	:	:	:	:	:
1981	:	:	:	:	:	:	:	:	:
1982	:	:	:	:	:	:	:	:	:
1983	:	:	:	:	:	:	:	:	:
1984	:	:	:	:	:	:	:	:	:
1985	:	:	:	:	:	:	:	:	:
1986	:	:	:	:	:	:	:	:	:
1987	:	:	:	:	:	:	:	:	:
1988	:	:	:	:	:	:	:	:	:
1989	:	:	:	:	:	:	:	:	:
1990	:	:	0.6	:	0.5	:	5.2	:	:
1981–90	:	:	:	:	:	:	:	:	:
1991	:	:	1.5	:	0.6	5.0	4.8	:	:
1992	:	2.7	3.7	9.8	3.9	6.1	5.2	13.7	:
1993	:	4.3	6.6	11.8	8.7	9.3	5.7	14.5	:
1994	:	4.3	7.6	10.5	16.7	8.8	5.8	14.6	13.7
1995	3.4	4.0	9.7	10.0	19.2	11.3	5.2	13.4	13.2
1996	4.5	3.9	9.9	9.6	20.4	12.2	5.6	12.2	11.3
1997	4.9	4.8	9.6	9.0	15.2	11.2	6.6	10.9	11.9
1998	5.0	6.4	9.2	8.4	14.3	11.8	6.9	10.2	12.9
1999	5.3	8.6	11.3	6.9	14.0	11.2	7.4	13.4	16.7
2000	5.2	8.7	12.5	6.3	13.7	15.7	7.0	16.4	18.7
1991–2000	:	:	8.2	:	12.7	10.3	6.0	:	:
2001	4.4	8.0	11.8	5.6	12.8	16.1	6.7	18.5	19.4
2002	3.8	7.3	9.1	5.6	12.8	13.1	7.4	19.9	18.6
2003	3.9	7.8	8.6	5.6	12.4	12.3	7.0	20.6	17.7
2004	3.7	8.1	8.4	5.6	12.0	11.1	6.8	20.9	17.1
2005	3.7	8.0	7.9	5.5	11.5	10.0	6.7	20.3	16.5
2001–05	3.9	7.8	9.2	5.6	12.3	12.5	6.9	20.0	17.9

NB: Total unemployed individuals as a share of the total active population. Unemployed persons are those aged at least 15 years not living in collective households who are without work during the reference week, available to start work within the next two weeks following the reference week and are seeking work (i.e. have actively sought employment at some time during the previous four weeks or are not seeking a job because they have already found a job to start later). The total active population (labour force) is the total number of the employed and unemployed population.

Reference: Eurostat, unemployment statistics.

(%)

	SI	AC-10 ⁽¹⁾	EU-25 ⁽²⁾	BG	RO	TR	US	JP
1960–70	:	:	:	:	:	:	4.8	1.3
1971–80	:	:	:	:	:	:	6.5	1.8
1981	:	:	:	:	:	6.7	7.7	2.2
1982	:	:	:	:	:	6.6	9.7	2.4
1983	:	:	:	:	:	7.2	9.6	2.6
1984	:	:	:	:	:	7.1	7.5	2.7
1985	:	:	:	:	:	6.7	7.2	2.6
1986	:	:	:	:	:	7.4	7.0	2.8
1987	:	:	:	:	:	7.8	6.2	2.8
1988	:	:	:	:	:	7.9	5.5	2.3
1989	:	:	:	:	:	8.1	5.3	2.3
1990	:	:	:	:	:	7.6	5.5	2.1
1981–90	:	:	:	:	:	7.3	7.1	2.5
1991	:	:	:	5.1	0.0	7.7	6.7	2.1
1992	:	:	:	11.5	5.1	8.0	7.4	2.2
1993	:	:	:	13.9	7.2	8.0	6.8	2.5
1994	:	:	:	12.3	7.6	8.0	6.1	2.9
1995	7.0	11.1	:	9.7	6.1	7.1	5.6	3.1
1996	6.9	10.5	:	9.3	3.1	6.2	5.4	3.4
1997	6.9	9.8	:	12.3	5.3	6.6	4.9	3.4
1998	7.4	9.7	:	10.6	5.4	6.8	4.5	4.1
1999	7.2	12.1	:	12.2	6.2	7.7	4.2	4.7
2000	6.6	13.6	:	16.4	6.8	6.6	4.0	4.7
1991–2000	:	:	:	11.3	5.3	7.3	5.6	3.3
2001	5.8	14.5	:	19.2	6.6	8.5	4.8	5.0
2002	6.0	14.8	:	18.1	7.0	10.4	5.8	5.4
2003	6.4	15.1	:	15.3	6.5	11.2	6.1	5.4
2004	6.1	15.2	:	13.8	6.3	10.9	6.2	5.3
2005	6.0	14.8	:	12.3	6.3	10.4	6.3	5.3
2001–05	6.1	14.9	:	15.7	6.5	10.3	5.8	5.3

⁽¹⁾ CY, CZ, EE, HU, LV, LT, MT, PL, SK and SI.

⁽²⁾ BE, DK, DE, EL, ES, FR, IE, IT, LU, NL, AT, PT, FI, SE, UK, CY, CZ, EE, HU, LV, LT, MT, PL, SK and SI.

Table 4

Output Gross domestic product at current market prices

(National currency)

	BE	DK	DE (1)	EL	ES	FR	IE	IT	LU
	Mrd EUR- BEF	Mrd DKK	Mrd EUR- DEM	Mrd EUR- GRD	Mrd EUR- ESP	Mrd EUR- FRF	Mrd EUR- IEP	Mrd EUR- ITL	Mrd EUR- LUF
1960	14.1	42	158	0.3	4.3	47	0.9	13	0.74
1965	20.9	72	239	0.6	8.8	77	1.3	22	1.00
1970	31.8	122	352	1.0	16.5	124	2.2	35	1.57
1975	57.5	223	536	2.3	38.0	230	5.3	72	2.47
1980	88.3	386	767	6.1	95.3	439	13.0	199	3.78
1981	92.6	422	800	7.3	107.0	494	15.8	238	4.03
1982	100.2	482	832	9.2	123.0	565	18.6	281	4.52
1983	106.1	532	872	11.0	140.1	625	20.6	327	4.97
1984	114.6	584	915	13.6	158.1	680	22.8	375	5.51
1985	121.9	634	955	16.6	175.6	727	24.8	420	5.84
1986	127.6	686	1 010	19.9	201.1	783	26.3	465	6.42
1987	132.8	721	1 043	22.4	224.8	826	28.1	509	6.68
1988	142.1	748	1 099	27.3	250.3	890	30.3	564	7.44
1989	154.0	789	1 168	32.4	280.5	956	33.9	618	8.50
1990	163.3	825	1 275	39.1	312.4	1 009	36.3	682	9.18
1991			1 387						
1991	171.1	858	1 502	48.3	342.6	1 049	37.7	744	10.15
1992	179.7	888	1 613	55.8	369.0	1 086	40.0	784	10.73
1993	185.1	900	1 654	62.9	381.7	1 102	43.2	807	11.84
1994	195.0	966	1 736	71.3	406.0	1 143	46.5	854	12.73
1995	202.2	1 010	1 801	79.9	437.8	1 182	52.6	923	13.21
1996	207.0	1 061	1 834	87.9	464.3	1 212	58.1	982	13.93
1997	217.2	1 116	1 872	97.2	494.1	1 251	67.1	1 026	15.49
1998	225.2	1 155	1 929	105.8	528.0	1 306	77.5	1 073	17.01
1999	235.7	1 208	1 979	112.7	565.4	1 355	89.6	1 108	18.74
2000	247.8	1 281	2 030	121.7	609.7	1 420	102.8	1 167	21.26
2001	253.8	1 325	2 074	131.0	653.3	1 476	114.7	1 220	21.99
2002	260.0	1 365	2 110	141.4	696.2	1 521	129.3	1 258	22.40
2003	265.8	1 407	2 136	153.0	741.2	1 548	133.4	1 301	23.10
2004	273.6	1 462	2 200	166.3	789.8	1 601	142.8	1 353	24.18
2005	283.8	1 524	2 261	178.0	840.6	1 662	153.8	1 407	25.50

(1) 1960–91 D_90.

NB: Gross domestic product (GDP) at market prices (ESA — code B.1*g) can be defined in three ways:

1. It is the sum of the gross value added of the various institutional sectors or the various industries plus taxes less subsidies on products (which are not allocated to sectors and industries). In this context, GDP is the balancing item in the total economy production account.
2. GDP is the sum of final uses of goods and services by resident institutional units, plus exports and minus imports of goods and services.
3. GDP is the sum of uses in the total economy generation of income account (i.e. compensation of employees, taxes on production and imports less subsidies, gross operating surplus and mixed income of the total economy).

Reference: ESA 95, paragraph 8.89.

(National currency)

	NL	AT	PT	FI	SE	UK	EU-15 ⁽¹⁾	EUR-12 ⁽²⁾
	Mrd EUR- NLG	Mrd EUR- ATS	Mrd EUR- PTE	Mrd EUR- FIM	Mrd SEK	Mrd GBP	Mrd EUR	Mrd EUR
1960	21.3	12.2	0.4	2.8	75	26	307	220
1965	34.6	18.5	0.6	4.6	117	36	481	357
1970	58.1	28.2	1.1	7.8	179	52	751	581
1975	105.4	49.2	2.2	17.8	312	106	1 394	1 113
1980	160.7	74.7	7.5	32.8	545	231	2 481	1 954
1981	168.5	79.6	8.9	37.1	596	253	2 734	2 118
1982	175.4	85.5	11.0	41.7	652	277	2 985	2 325
1983	182.2	90.9	13.7	46.5	732	303	3 187	2 498
1984	190.5	95.5	16.7	52.1	821	324	3 457	2 710
1985	199.1	100.8	20.9	56.7	893	355	3 711	2 893
1986	205.5	105.9	26.2	60.5	978	381	3 932	3 138
1987	207.8	109.9	30.7	65.7	1 059	420	4 144	3 312
1988	216.0	115.1	36.7	74.6	1 156	468	4 508	3 549
1989	229.0	123.5	43.2	83.1	1 282	514	4 923	3 881
1990	243.6	133.6	50.8	88.1	1 411	557	5 307	4 233
1991							5 670	4 525
1991	256.5	143.2	58.4	84.0	1 497	586	5 779	4 635
1992	266.5	151.8	65.8	82.0	1 485	611	6 023	4 884
1993	273.2	156.9	69.2	83.1	1 545	642	6 048	4 937
1994	287.5	165.4	74.9	87.9	1 648	681	6 342	5 156
1995	302.2	172.3	80.8	95.3	1 772	719	6 595	5 399
1996	315.1	178.0	86.2	98.6	1 817	763	6 928	5 633
1997	333.7	182.5	93.0	107.0	1 890	811	7 295	5 756
1998	354.2	190.6	101.0	116.3	1 974	859	7 638	5 992
1999	374.1	197.1	108.0	120.0	2 079	904	8 039	6 268
2000	402.3	206.7	115.5	130.1	2 197	951	8 569	6 576
2001	429.1	212.5	123.1	135.2	2 267	994	8 865	6 844
2002	444.6	218.3	129.3	139.7	2 340	1 044	9 170	7 071
2003	452.9	223.2	132.6	143.2	2 421	1 091	9 282	7 254
2004	462.6	230.0	137.2	148.0	2 523	1 142	9 630	7 528
2005	476.1	238.2	143.4	154.4	2 640	1 200	10 023	7 824

⁽¹⁾ 1960–98 ECU; 1960–91 including D_90.⁽²⁾ 1960–98 ECU; EU-15 excluding DK, SE and UK; 1960–91 including D_90.

Table 4 (Continued)

(National currency)

	CY	CZ	EE	HU	LV	LT	MT	PL	SK
	Mrd CYP	Mrd CZK	Mrd EEK	Mrd HUF	Mio LVL	Mrd LTL	Mrd MTL	Mrd PLN	Mrd SKK
1960	0.092	:	:	:	:	:	0.048	:	:
1965	0.136	:	:	:	:	:	0.053	:	:
1970	0.227	:	:	333	:	:	0.095	:	:
1975	0.257	:	:	483	:	:	0.166	:	:
1980	0.760	:	:	721	:	:	0.392	0.3	:
1981	0.876	:	:	780	:	:	0.437	0.3	:
1982	1 025	:	:	848	:	:	0.462	0.6	:
1983	1 137	:	:	896	:	:	0.458	0.7	:
1984	1 337	:	:	979	:	:	0.461	0.9	:
1985	1 482	:	:	1 034	:	:	0.476	1.0	:
1986	1 600	:	:	1 089	:	:	0.512	1.3	:
1987	1 781	:	:	1 226	:	:	0.549	1.7	:
1988	1 992	:	:	1 440	:	:	0.607	3.0	:
1989	2 256	:	:	1 723	:	:	0.670	11.8	:
1990	2 556	626	:	2 089	62	0.13	0.735	56.0	278
1991	2 675	754	:	2 498	143	0.41	0.807	80.9	320
1992	3 103	843	:	2 943	1 005	3.41	0.875	114.9	332
1993	3 285	1 020	21.8	3 548	1 467	11.59	0.940	155.8	411
1994	3 663	1 183	29.9	4 365	2 043	16.90	1 029	225.1	496
1995	4 020	1 381	40.9	5 614	2 329	24.78	1 146	308.1	577
1996	4 168	1 567	52.4	6 894	2 807	31.53	1 201	387.8	638
1997	4 380	1 680	64.0	8 541	3 270	38.52	1 288	472.4	713
1998	4 704	1 839	73.5	10 087	3 592	43.55	1 362	553.6	781
1999	5 037	1 902	76.3	11 393	3 890	42.61	1 456	615.1	844
2000	5 525	1 985	87.4	13 172	4 348	44.70	1 563	713.4	934
2001	5 877	2 175	97.9	14 850	4 813	47.50	1 634	750.8	1 010
2002	6 189	2 276	108.0	16 980	5 195	50.68	1 678	772.2	1 074
2003	7 025	2 374	115.8	18 519	5 611	53.57	1 787	803.5	1 190
2004	7 553	2 501	127.8	20 530	6 057	57.99	1 833	850.8	1 301
2005	8 172	2 651	140.8	22 619	6 590	63.15	1 891	912.6	1 401

NB: Gross domestic product (GDP) at market prices (ESA — code B.1*g) can be defined in three ways:

1. It is the sum of the gross value added of the various institutional sectors or the various industries plus taxes less subsidies on products (which are not allocated to sectors and industries). In this context, GDP is the balancing item in the total economy production account.
2. GDP is the sum of final uses of goods and services by resident institutional units, plus exports and minus imports of goods and services.
3. GDP is the sum of uses in the total economy generation of income account (i.e. compensation of employees, taxes on production and imports less subsidies, gross operating surplus and mixed income of the total economy).

Reference: ESA 95, paragraph 8.89.

(National currency)

	SI	AC-10 ⁽¹⁾	EU-25 ⁽²⁾	BG	RO	TR	US	JP
	Mrd SIT	Mrd EUR	Mrd EUR	Mio BGN	1 000 Mrd ROL	1 000 Mrd TRL	Mrd USD	Mrd JPY
1960	:	:	:	:	:	0	518	16 251
1965	:	:	:	:	:	0	709	33 361
1970	:	:	:	:	:	0	1 026	74 451
1975	:	:	:	:	:	1	1 618	150 563
1980	:	:	:	:	1	5	2 771	243 797
1981	:	:	:	:	1	8	3 104	261 513
1982	:	:	:	:	1	10	3 228	274 708
1983	:	:	:	:	1	14	3 502	286 499
1984	:	:	:	:	1	22	3 896	305 769
1985	:	:	:	:	1	35	4 174	326 816
1986	:	:	:	:	1	51	4 411	341 876
1987	:	:	:	:	1	75	4 698	356 534
1988	:	:	:	:	1	129	5 061	382 454
1989	:	:	:	:	1	227	5 439	410 469
1990	197	:	:	45	1	393	5 750	442 072
1991	349	:	:	136	2	630	5 930	469 941
1992	1 018	:	:	201	6	1 093	6 261	482 383
1993	1 435	171.8	6 220	299	20	1 982	6 582	486 412
1994	1 853	195.2	6 537	526	50	3 868	6 993	491 870
1995	2 342	221.2	6 816	880	72	7 762	7 338	498 872
1996	2 698	249.8	7 178	1 761	109	14 772	7 750	511 947
1997	3 065	277.9	7 573	17 433	253	28 836	8 256	523 051
1998	3 422	303.1	7 942	22 421	374	52 225	8 719	516 579
1999	3 840	314.2	8 353	23 790	546	77 415	9 212	509 116
2000	4 222	365.7	8 935	26 753	804	124 583	9 761	513 377
2001	4 740	413.6	9 279	29 709	1 167	178 412	10 019	507 456
2002	5 276	437.8	9 608	32 324	1 512	276 003	10 382	499 985
2003	5 729	432.7	9 715	34 813	1 820	364 735	10 825	501 798
2004	6 239	453.8	10 084	37 986	2 132	440 396	11 348	503 934
2005	6 798	486.2	10 509	41 589	2 444	513 897	11 849	506 289

⁽¹⁾ 1960–98 ECU; CY, CZ, EE, HU, LV, LT, MT, PL, SK and SI.⁽²⁾ 1960–98 ECU; BE, DK, DE, EL, ES, FR, IE, IT, LU, NL, AT, PT, FI, SE, UK, CY, CZ, EE, HU, LV, LT, MT, PL, SK and SI.

Table 5

Output
Gross domestic product at current market prices
(Mrd EUR ⁽¹⁾)

	BE	DK	DE ⁽²⁾	EL	ES	FR	IE	IT	LU
1960	10.7	5.8	70	3.5	11.4	59	1.8	38	0.57
1965	15.8	9.7	109	6.2	22.9	95	2.7	63	0.75
1970	25.1	15.9	184	11.0	38.5	144	4.2	105	1.24
1975	50.9	31.4	344	19.6	89.9	284	7.4	172	2.19
1980	87.7	49.3	594	35.0	159.1	491	15.2	323	3.76
1981	90.4	53.3	623	40.4	173.3	536	18.0	365	3.94
1982	90.4	59.1	685	47.9	190.3	576	21.3	411	4.08
1983	94.2	65.4	751	47.9	182.8	606	22.7	469	4.41
1984	101.8	71.6	800	52.6	207.8	649	24.8	525	4.89
1985	109.5	79.1	839	53.6	226.3	702	27.3	562	5.25
1986	117.6	86.4	928	49.3	243.4	755	28.2	616	5.91
1987	124.4	91.4	985	48.9	263.1	782	28.6	659	6.26
1988	132.0	94.1	1 036	55.4	302.7	830	30.8	711	6.91
1989	143.2	98.0	1 104	61.7	357.9	893	34.3	792	7.91
1990	155.3	105.0	1 215	66.2	401.7	958	37.2	868	8.73
1991			1 323						
1991	163.5	108.4	1 433	73.1	443.7	987	38.6	940	9.70
1992	174.3	113.7	1 562	77.0	463.3	1 041	41.4	951	10.40
1993	184.5	118.5	1 671	79.8	425.9	1 089	42.6	849	11.80
1994	198.4	128.0	1 764	84.4	425.1	1 139	46.1	863	12.95
1995	211.6	137.8	1 880	89.9	446.9	1 188	50.8	839	13.83
1996	212.5	144.2	1 878	98.0	480.5	1 225	57.6	971	14.30
1997	216.1	149.2	1 863	107.1	495.6	1 241	70.7	1 030	15.42
1998	223.7	154.1	1 916	109.0	525.5	1 298	77.7	1 069	16.89
1999	235.7	162.4	1 979	117.8	565.4	1 355	89.6	1 108	18.74
2000	247.8	171.8	2 030	123.1	609.7	1 420	102.8	1 167	21.26
2001	253.8	177.8	2 074	131.0	653.3	1 476	114.7	1 220	21.99
2002	260.0	183.7	2 110	141.4	696.2	1 521	129.3	1 258	22.40
2003	265.8	189.2	2 136	153.0	741.2	1 548	133.4	1 301	23.10
2004	273.6	195.9	2 200	166.3	789.8	1 601	142.8	1 353	24.18
2005	283.8	204.3	2 261	178.0	840.6	1 662	153.8	1 407	25.50

⁽¹⁾ 1960–98 ECU.⁽²⁾ 1960–91 D_90.

(Mrd EUR ⁽¹⁾)

	NL	AT	PT	FI	SE	UK	EU-15 ⁽²⁾	EUR-12 ⁽³⁾
1960	11.7	6.1	2.8	4.9	13.7	68	307	220
1965	19.7	9.1	4.2	7.9	21.2	94	481	357
1970	34.6	14.6	7.2	10.9	33.8	121	751	581
1975	74.1	31.4	14.3	23.3	60.8	189	1 394	1 113
1980	128.3	57.2	21.5	37.7	92.7	385	2 481	1 954
1981	133.8	61.8	26.1	46.1	105.8	457	2 734	2 118
1982	147.8	70.4	28.2	52.6	106.1	494	2 985	2 325
1983	158.2	78.3	27.8	55.9	107.2	516	3 187	2 498
1984	166.4	83.5	29.0	65.5	126.0	549	3 457	2 710
1985	174.7	88.6	32.2	71.8	137.0	603	3 711	2 893
1986	188.6	97.3	35.8	72.2	139.8	568	3 932	3 138
1987	196.2	103.8	37.9	77.1	144.9	596	4 144	3 312
1988	203.9	108.6	43.3	89.7	159.6	705	4 508	3 549
1989	216.1	116.6	50.0	104.6	180.6	764	4 923	3 881
1990	232.1	127.3	56.3	107.9	187.6	781	5 307	4 233
1991							5 670	4 525
1991	244.6	136.6	65.5	99.9	200.1	836	5 779	4 635
1992	258.1	147.0	75.5	84.0	197.2	828	6 023	4 884
1993	276.8	158.5	73.6	73.8	169.4	824	6 048	4 937
1994	293.6	168.1	76.3	84.4	179.8	878	6 342	5 156
1995	317.3	179.8	82.6	99.2	189.9	868	6 595	5 399
1996	324.5	182.4	88.3	100.6	213.4	938	6 928	5 633
1997	332.7	181.6	93.9	108.2	218.5	1 171	7 295	5 756
1998	351.6	189.3	100.4	115.6	221.4	1 271	7 638	5 992
1999	374.1	197.1	108.0	120.0	236.0	1 372	8 039	6 268
2000	402.3	206.7	115.5	130.1	260.1	1 561	8 569	6 576
2001	429.1	212.5	123.1	135.2	244.9	1 598	8 865	6 844
2002	444.6	218.3	129.3	139.7	255.4	1 660	9 170	7 071
2003	452.9	223.2	132.6	143.2	265.5	1 573	9 282	7 254
2004	462.6	230.0	137.2	148.0	280.7	1 625	9 630	7 528
2005	476.1	238.2	143.4	154.4	293.1	1 702	10 023	7 824

⁽¹⁾ 1960–98 ECU.⁽²⁾ 1960–91 including D_90.⁽³⁾ EU-15 excluding DK, SE and UK; 1960–91 including D_90.

Table 5 (Continued)

(Mrd EUR ⁽¹⁾)

	CY	CZ	EE	HU	LV	LT	MT	PL	SK
1960	0.24	:	:	:	:	:	0.127	:	:
1965	0.35	:	:	:	:	:	0.138	:	:
1970	0.53	:	:	:	:	:	0.222	:	:
1975	0.56	:	:	:	:	:	0.350	:	:
1980	1.55	:	:	:	:	:	0.817	41.0	:
1981	1.87	:	:	:	:	:	1 014	48.4	:
1982	2.20	:	:	:	:	:	1 144	66.6	:
1983	2.43	:	:	:	:	:	1 189	84.5	:
1984	2.89	:	:	:	:	:	1 271	96.1	:
1985	3.19	:	:	46.42	:	:	1 340	159.8	:
1986	3.14	:	:	24.92	:	:	1 328	77.5	:
1987	3.21	:	:	16.97	:	:	1 380	41.5	:
1988	3.61	:	:	17.28	:	:	1 551	41.6	:
1989	4.14	:	:	21.81	:	:	1 747	61.5	:
1990	4.39	23.26	:	16.01	:	:	1 820	28.6	:
1991	4.67	21.79	:	17.57	:	:	2 018	40.1	:
1992	5.32	22.88	:	17.03	1.15	0.82	2 118	38.6	:
1993	5.64	29.86	1 409	32.97	1.85	2.28	2 103	73.4	11.42
1994	6.27	34.63	1 940	34.91	3.08	3.57	2 291	83.3	13.00
1995	6.79	39.80	2 728	34.12	3.38	4.74	2 483	97.2	14.83
1996	7.04	45.48	3 432	35.58	4.01	6.21	2 622	113.3	16.40
1997	7.52	46.75	4 075	40.35	4.96	8.49	2 945	127.1	18.70
1998	8.15	50.64	4 668	41.93	5.44	9.71	3 132	141.3	19.76
1999	8.70	51.57	4 878	45.08	6.22	9.99	3 420	145.5	19.13
2000	9.63	55.75	5 585	50.65	7.78	12.10	3 867	178.0	21.93
2001	10.20	63.85	6 257	57.87	8.59	13.26	4 055	204.5	23.32
2002	10.76	73.87	6 904	69.89	8.94	14.65	4 103	200.2	25.15
2003	12.03	74.62	7 404	73.44	8.77	15.52	4 193	183.5	28.68
2004	12.92	78.08	8 166	80.59	9.31	16.80	4 278	187.0	30.79
2005	13.98	82.10	9 001	88.79	10.20	18.29	4 415	199.7	32.29

⁽¹⁾ 1960–98 ECU.

(Mrd EUR ⁽¹⁾)

	SI	AC-10 ⁽²⁾	EU-25 ⁽³⁾	BG	RO	TR	US	JP
1960	:	:	:	:	:	12.9	490	43
1965	:	:	:	:	:	11.2	662	87
1970	:	:	:	:	:	18.0	1 003	202
1975	:	:	:	:	:	37.6	1 304	417
1980	:	:	:	:	:	49.8	1 990	774
1981	:	:	:	:	:	64.1	2 780	1 066
1982	:	:	:	:	:	66.2	3 295	1 128
1983	:	:	:	:	:	69.7	3 933	1 356
1984	:	:	:	:	:	76.5	4 938	1 634
1985	:	:	:	:	107.6	88.3	5 470	1 810
1986	:	:	:	:	54.3	77.1	4 482	2 072
1987	:	:	:	:	37.6	75.8	4 070	2 140
1988	:	:	:	:	36.2	77.8	4 280	2 525
1989	:	:	:	:	40.1	85.4	4 937	2 702
1990	:	:	:	10.04	18.5	118.1	4 515	2 407
1991	:	:	:	4.01	15.2	122.3	4 785	2 823
1992	9.74	:	:	3.93	8.9	122.4	4 823	2 937
1993	10.83	171.8	6 220	9.25	22.6	153.9	5 621	3 737
1994	12.13	195.2	6 537	8.16	25.2	108.9	5 878	4 054
1995	15.12	221.2	6 816	10.02	27.1	129.6	5 610	4 055
1996	15.71	249.8	7 178	7.82	27.8	143.1	6 104	3 708
1997	16.93	277.9	7 573	9.17	31.2	167.8	7 280	3 816
1998	18.40	303.1	7 942	11.39	37.4	177.8	7 777	3 528
1999	19.74	314.2	8 353	12.16	33.4	173.1	8 643	4 197
2000	20.44	365.7	8 935	13.73	40.3	216.7	10 568	5 161
2001	21.75	413.6	9 279	15.25	44.9	161.8	11 186	4 669
2002	23.35	437.8	9 608	16.58	48.4	191.7	10 980	4 235
2003	24.51	432.7	9 715	17.87	48.9	218.1	9 616	3 838
2004	25.89	453.8	10 084	19.51	52.2	249.0	9 761	4 007
2005	27.43	486.2	10 509	21.36	55.3	261.7	10 269	4 150

⁽¹⁾ 1960–98 ECU.⁽²⁾ CY, CZ, EE, HU, LV, LT, MT, PL, SK and SI.⁽³⁾ BE, DK, DE, EL, ES, FR, IE, IT, LU, NL, AT, PT, FI, SE, UK, CY, CZ, EE, HU, LV, LT, MT, PL, SK and SI.

Table 6

Output Gross domestic product at current market prices

(Mrd PPS)

	BE	DK	DE (1)	EL	ES	FR	IE	IT	LU
1960	9.1	5.9	70	3.7	18.5	49	1.8	45	0.47
1965	14.3	9.4	109	7.1	34.1	80	2.7	71	0.69
1970	22.4	14.2	165	12.8	57.2	129	4.2	119	1.01
1975	42.6	24.3	295	26.2	118.5	244	8.5	219	1.87
1980	76.5	42.0	532	49.4	198.8	438	16.3	415	3.21
1981	84.0	45.3	586	53.5	218.5	488	18.6	461	3.52
1982	91.3	50.3	629	57.2	239.2	542	20.5	501	3.85
1983	96.1	53.7	670	59.4	255.4	577	21.5	533	4.16
1984	104.4	58.9	730	64.2	275.4	621	23.8	580	4.68
1985	111.1	63.9	781	68.9	295.2	660	25.6	625	5.04
1986	116.6	68.5	824	71.4	314.1	697	26.5	661	5.71
1987	122.2	70.2	857	71.5	339.6	732	28.4	697	6.08
1988	133.5	74.1	927	77.8	372.4	799	30.9	756	6.89
1989	145.7	78.3	1 016	85.1	411.6	878	34.6	820	7.97
1990	157.3	82.7	1 125	89.1	447.2	943	39.0	875	8.79
1991			1 239						
1991	168.5	89.3	1 342	97.6	493.6	1 011	42.6	941	9.92
1992	179.6	90.9	1 430	104.7	500.9	1 040	46.3	974	10.42
1993	186.6	95.5	1 435	108.4	506.5	1 025	48.5	950	11.24
1994	196.2	103.1	1 525	115.1	517.8	1 053	53.3	1 003	11.94
1995	201.4	108.9	1 586	121.7	541.4	1 089	59.3	1 046	12.44
1996	209.0	117.4	1 631	129.0	575.7	1 115	62.7	1 108	13.04
1997	220.2	123.0	1 717	134.3	610.4	1 150	73.7	1 139	14.27
1998	229.0	126.9	1 765	142.7	633.9	1 204	79.9	1 208	15.56
1999	231.7	134.5	1 858	152.8	692.7	1 279	89.5	1 267	17.50
2000	249.1	141.4	1 977	161.5	742.4	1 388	98.8	1 334	19.88
2001	259.2	142.9	1 979	164.4	787.5	1 466	105.7	1 386	20.05
2002	267.4	146.5	2 031	174.8	824.4	1 515	115.6	1 423	20.32
2003	270.5	148.6	2 046	183.3	849.2	1 519	114.9	1 441	20.47
2004	278.0	154.0	2 119	195.2	891.4	1 568	120.6	1 490	21.35
2005	287.9	159.9	2 189	205.8	938.3	1 631	128.2	1 546	22.51

(1) 1960–91 D_90.

NB: The purchasing power standard (PPS) is the artificial common reference currency unit used in the EU to express the volume of economic aggregates for the purpose of spatial comparisons in real terms. Volume aggregates in PPS are obtained by dividing their original value in national currency units by the respective purchasing power parities (PPPs). One PPS buys the same given average volume of goods and services in all countries, whereas different amounts of national currency units are needed to buy this volume of goods and services, depending on the national price level. For a given product, the PPP between two countries A and B is defined as the number of units of country B's currency that are needed in country B to purchase the same quantity of the product as one unit of country A's currency will purchase in country A. PPPs for groups of products and higher aggregates up to GDP are obtained by weighting PPPs for products by their share in expenditure.

(Mrd PPS)

	NL	AT	PT	FI	SE	UK	EU-15 ⁽¹⁾	EUR-12 ⁽²⁾
1960	13.6	6.9	3.6	3.9	9.6	66	307	226
1965	21.1	10.3	6.1	6.1	15.1	95	481	362
1970	33.9	16.5	10.2	9.5	22.9	134	751	580
1975	63.6	32.0	20.3	19.1	41.5	237	1 394	1 091
1980	111.1	57.8	39.9	34.0	68.1	399	2 481	1 973
1981	121.7	63.7	44.6	38.2	74.9	433	2 734	2 182
1982	129.8	70.3	49.3	42.6	81.9	477	2 985	2 376
1983	138.6	75.8	51.6	45.9	87.5	518	3 187	2 528
1984	151.4	80.6	53.6	50.2	96.7	563	3 457	2 739
1985	162.8	86.5	57.7	54.4	103.5	610	3 711	2 934
1986	173.1	91.1	62.0	57.4	109.6	654	3 932	3 100
1987	180.5	94.8	67.5	61.3	116.0	700	4 144	3 257
1988	194.0	102.3	75.8	67.0	124.2	767	4 508	3 543
1989	214.3	112.5	85.0	74.0	134.4	826	4 923	3 885
1990	233.5	123.3	92.5	77.2	142.3	871	5 307	4 210
1991							5 677	4 561
1991	247.5	132.9	101.8	75.6	143.9	882	5 779	4 664
1992	257.5	139.9	106.8	71.9	141.9	929	6 023	4 862
1993	263.1	145.3	110.6	75.7	146.6	940	6 048	4 866
1994	277.4	152.1	118.3	79.1	154.8	981	6 342	5 102
1995	298.1	156.6	123.5	87.7	165.3	998	6 595	5 323
1996	313.0	166.3	130.2	91.8	173.1	1 092	6 928	5 545
1997	340.6	173.9	143.7	99.2	181.9	1 174	7 295	5 816
1998	367.2	180.1	148.3	106.1	188.8	1 242	7 638	6 081
1999	384.8	191.3	156.2	110.5	197.9	1 276	8 039	6 431
2000	399.9	209.1	157.9	120.7	213.7	1 356	8 569	6 858
2001	427.9	210.0	165.5	124.9	211.4	1 415	8 865	7 096
2002	435.5	218.0	171.4	128.0	216.9	1 482	9 170	7 325
2003	434.0	220.3	170.3	128.3	219.8	1 516	9 282	7 397
2004	443.7	227.5	175.0	132.9	227.9	1 586	9 630	7 663
2005	459.2	236.3	181.6	138.2	237.4	1 661	10 023	7 964

⁽¹⁾ 1960–91 including D_90.⁽²⁾ EU-15 excluding DK, SE and UK; 1960–91 including D_90.

Table 6 (Continued)

(Mrd PPS)

	CY	CZ	EE	HU	LV	LT	MT	PL	SK
1960	:	:	:	:	:	:	:	:	:
1965	:	:	:	:	:	:	:	:	:
1970	:	:	:	:	:	:	:	:	:
1975	:	:	:	:	:	:	:	:	:
1980	:	:	:	:	:	:	:	:	:
1981	:	:	:	:	:	:	:	:	:
1982	:	:	:	:	:	:	:	:	:
1983	:	:	:	:	:	:	:	:	:
1984	:	:	:	:	:	:	:	:	:
1985	:	:	:	:	:	:	:	:	:
1986	:	:	:	:	:	:	:	:	:
1987	:	:	:	:	:	:	:	:	:
1988	:	:	:	:	:	:	:	:	:
1989	:	:	:	:	:	:	:	:	:
1990	:	109.4	:	77.6	24.50	27.83	:	176.9	:
1991	:	94.8	:	75.8	22.83	27.62	2 681	171.3	:
1992	:	95.5	:	76.2	15.35	22.33	2 880	182.4	:
1993	7.76	98.2	7.70	77.1	12.66	18.82	3 029	193.4	38.25
1994	8.39	105.0	7.69	81.7	11.55	17.35	3 271	209.6	41.41
1995	9.08	113.3	8.36	84.2	10.89	18.70	3 526	245.8	44.72
1996	9.53	123.6	9.00	87.6	11.51	19.63	3 785	262.1	48.26
1997	10.02	126.5	10.30	94.5	12.37	21.75	4 074	266.1	51.67
1998	10.79	130.8	11.20	101.0	13.53	23.34	4 264	298.2	55.50
1999	12.07	129.0	11.28	106.3	14.50	25.77	4 542	319.6	57.17
2000	11.91	130.5	12.45	114.8	16.55	27.97	4 961	353.5	57.59
2001	12.05	141.7	12.80	125.0	18.47	30.90	5 016	364.2	60.26
2002	12.61	149.8	13.63	132.9	19.86	33.75	5 052	375.0	63.16
2003	13.00	153.3	14.39	138.0	20.99	35.92	5 123	385.7	66.37
2004	13.65	159.9	15.74	145.7	22.40	38.52	5 351	405.8	69.25
2005	14.46	168.4	17.14	154.1	24.01	41.48	5 605	431.1	72.87

NB: The purchasing power standard (PPS) is the artificial common reference currency unit used in the EU to express the volume of economic aggregates for the purpose of spatial comparisons in real terms. Volume aggregates in PPS are obtained by dividing their original value in national currency units by the respective purchasing power parities (PPPs). One PPS buys the same given average volume of goods and services in all countries, whereas different amounts of national currency units are needed to buy this volume of goods and services, depending on the national price level. For a given product, the PPP between two countries A and B is defined as the number of units of country B's currency that are needed in country B to purchase the same quantity of the product as one unit of country A's currency will purchase in country A. PPPs for groups of products and higher aggregates up to GDP are obtained by weighting PPPs for products by their share in expenditure.

(Mrd PPS)

	SI	AC-10 ⁽¹⁾	EU-25 ⁽²⁾	BG	RO	TR	US	JP
1960	:	:	:	:	:	9.2	303	56
1965	:	:	:	:	:	14.2	474	107
1970	:	:	:	:	:	24.3	696	224
1975	:	:	:	:	:	51.3	1 274	445
1980	:	:	:	:	:	88.7	2 352	847
1981	:	:	:	:	:	102.3	2 652	958
1982	:	:	:	:	:	114.6	2 808	1 069
1983	:	:	:	:	:	126.2	3 074	1 148
1984	:	:	:	:	:	142.7	3 494	1 263
1985	:	:	:	:	:	155.8	3 799	1 383
1986	:	:	:	:	:	171.8	4 048	1 467
1987	:	:	:	:	:	192.6	4 285	1 569
1988	:	:	:	:	:	205.3	4 658	1 744
1989	:	:	:	:	:	217.0	5 083	1 935
1990	20.28	:	:	:	132.8	248.2	5 414	2 131
1991	18.86	:	:	44.32	121.4	255.9	5 676	2 318
1992	18.46	:	:	39.48	109.3	275.1	6 002	2 407
1993	19.47	476.4	6 524	36.97	114.3	310.8	6 136	2 476
1994	21.21	507.2	6 849	38.35	119.4	299.3	6 527	2 556
1995	23.91	562.4	7 157	40.55	129.7	324.5	6 795	2 639
1996	25.62	600.6	7 529	38.73	138.1	346.7	7 144	2 849
1997	27.60	624.9	7 920	35.07	134.9	380.1	7 685	2 969
1998	29.34	677.9	8 316	38.06	135.6	385.2	8 154	2 980
1999	30.34	710.6	8 749	49.31	113.5	360.5	8 457	2 884
2000	31.61	761.8	9 331	47.25	118.6	385.5	9 078	3 065
2001	33.52	803.9	9 669	45.52	126.0	358.7	9 248	3 112
2002	35.56	841.4	10 012	48.63	135.9	382.7	9 651	3 173
2003	35.80	868.6	10 150	52.01	143.9	396.7	9 904	3 258
2004	37.53	913.9	10 544	56.33	154.2	417.5	10 440	3 373
2005	39.59	968.7	10 992	61.07	164.9	441.7	10 966	3 481

⁽¹⁾ CY, CZ, EE, HU, LV, LT, MT, PL, SK and SI.⁽²⁾ BE, DK, DE, EL, ES, FR, IE, IT, LU, NL, AT, PT, FI, SE, UK, CY, CZ, EE, HU, LV, LT, MT, PL, SK and SI.

Table 7

Output
Gross domestic product at current market prices

(National currency; annual percentage change)

	BE	DK	DE ⁽¹⁾	EL	ES	FR	IE	IT	LU
1961-70	8.5	11.3	8.4	11.7	14.3	10.2	9.9	10.5	7.7
1971-80	10.8	12.2	8.1	19.9	19.2	13.4	19.2	19.0	9.2
1981	4.8	9.5	4.4	19.7	12.2	12.4	21.4	20.0	6.6
1982	8.2	14.2	3.9	25.8	15.0	14.4	17.8	17.9	12.1
1983	5.9	10.3	4.9	19.3	13.9	10.6	10.6	16.5	10.0
1984	8.0	9.7	4.9	24.4	12.8	8.8	11.0	14.6	10.9
1985	6.4	8.6	4.4	22.0	11.1	7.0	8.5	12.2	6.0
1986	4.7	8.1	5.7	19.5	14.5	7.6	6.1	10.6	9.9
1987	4.0	5.2	3.3	12.6	11.8	5.5	7.0	9.4	4.0
1988	7.0	3.8	5.3	21.7	11.3	7.8	7.8	11.0	11.5
1989	8.4	5.4	6.4	18.8	12.1	7.4	11.6	9.5	14.2
1990	6.0	4.7	9.1	20.7	11.4	5.6	7.3	10.4	8.0
1981-90	6.3	7.9	5.2	20.4	12.6	8.7	10.8	13.1	9.3
1991	4.8	3.9	8.8	23.5	9.7	4.0	3.8	9.1	10.6
1992	5.0	3.5	7.4	15.6	7.7	3.5	6.3	5.3	5.6
1993	3.0	1.4	2.5	12.6	3.5	1.4	8.0	3.0	10.4
1994	5.4	7.3	4.9	13.4	6.4	3.8	7.5	5.8	7.5
1995	3.7	4.6	3.8	12.1	7.8	3.4	13.2	8.1	3.8
1996	2.4	5.1	1.8	9.9	6.0	2.6	10.3	6.4	5.4
1997	4.9	5.2	2.1	10.7	6.4	3.2	15.6	4.5	11.2
1998	3.7	3.5	3.1	8.8	6.8	4.4	15.5	4.6	9.8
1999	4.6	4.5	2.6	6.5	7.1	3.8	15.6	3.3	10.2
2000	5.1	6.0	2.6	8.0	7.8	4.8	14.8	5.3	13.4
1991-2000	4.3	4.5	3.9	12.0	6.9	3.5	11.0	5.5	8.8
2001	2.4	3.5	2.2	7.7	7.1	3.9	11.6	4.6	3.4
2002	2.4	3.0	1.8	7.9	6.6	3.1	12.7	3.1	1.9
2003	2.2	3.1	1.2	8.3	6.5	1.8	3.1	3.4	3.1
2004	2.9	3.9	3.0	8.7	6.6	3.4	7.0	4.0	4.7
2005	3.7	4.3	2.7	7.0	6.4	3.8	7.7	4.0	5.5
2001-05	2.8	3.5	2.2	7.9	6.6	3.2	8.4	3.8	3.7

⁽¹⁾ 1961-91 D_90.

(National currency; annual percentage change)

	NL	AT	PT	FI	SE	UK	EU-15 ⁽¹⁾	EUR-12 ⁽²⁾
1961–70	10.5	8.7	9.5	10.9	9.1	7.2	9.3	9.9
1971–80	10.7	10.2	21.6	15.4	11.8	16.2	13.3	12.9
1981	4.9	6.6	19.5	13.2	9.3	9.7	10.3	10.5
1982	4.0	7.3	23.3	12.2	9.4	9.5	10.9	11.2
1983	3.9	6.4	24.4	11.6	12.2	9.3	9.9	9.9
1984	4.6	5.0	22.3	11.9	12.2	7.1	8.9	9.1
1985	4.5	5.5	25.2	8.9	8.9	9.4	8.2	7.9
1986	3.2	5.1	25.4	6.8	9.5	7.4	8.1	8.1
1987	1.1	3.8	17.1	8.6	8.3	10.0	6.7	6.0
1988	3.9	4.7	19.5	13.5	9.1	11.6	8.5	8.1
1989	6.0	7.3	17.6	11.4	10.9	9.8	8.6	8.3
1990	6.4	8.2	17.6	6.0	10.0	8.4	8.6	8.7
1981–90	4.2	6.0	21.2	10.4	10.0	9.2	8.9	8.8
1991	5.3	7.2	14.9	–4.6	6.1	5.2	6.9	7.4
1992	3.9	6.0	12.7	–2.4	–0.8	4.2	5.3	5.8
1993	2.5	3.4	5.2	1.3	4.1	5.2	3.1	2.8
1994	5.2	5.4	8.3	5.8	6.6	6.1	5.4	5.2
1995	5.1	4.2	7.9	8.4	7.6	5.6	5.3	5.2
1996	4.2	3.3	6.7	3.5	2.5	6.1	3.9	3.6
1997	5.9	2.5	7.9	8.5	4.0	6.2	4.3	4.0
1998	6.1	4.5	8.5	8.7	4.4	6.0	4.8	4.7
1999	5.6	3.4	7.0	3.2	5.3	5.2	4.2	4.0
2000	7.5	4.9	7.0	8.5	5.7	5.2	5.1	5.0
1991–2000	5.1	4.5	8.6	4.0	4.5	5.5	4.8	4.7
2001	6.7	2.8	6.5	3.9	3.2	4.5	4.1	4.1
2002	3.6	2.7	5.1	3.3	3.2	5.0	3.6	3.3
2003	1.9	2.2	2.6	2.5	3.5	4.5	3.0	2.6
2004	2.1	3.0	3.5	3.3	4.2	4.8	4.0	3.8
2005	2.9	3.6	4.5	4.3	4.7	5.0	4.1	3.9
2001–05	3.4	2.9	4.4	3.5	3.7	4.7	3.8	3.5

⁽¹⁾ Weighted in common currency; 1961–91 including D_90.⁽²⁾ Weighted in common currency; EU–15 excluding DK, SE and UK; 1961–91 including D_90.

Table 7 (Continued)

(National currency; annual percentage change)

	CY	CZ	EE	HU	LV	LT	MT	PL	SK
1961–70	9.5	:	:	:	:	:	7.0	:	:
1971–80	12.9	:	:	8.0	:	:	15.3	:	:
1981	15.2	:	:	8.2	:	:	11.4	9.6	:
1982	17.0	:	:	8.7	:	:	5.8	101.5	:
1983	10.9	:	:	5.7	:	:	-0.9	24.8	:
1984	17.7	:	:	9.2	:	:	0.8	23.9	:
1985	10.8	:	:	5.6	:	:	3.2	21.8	:
1986	7.9	:	:	5.3	:	:	7.5	24.0	:
1987	11.3	:	:	12.6	:	:	7.3	30.8	:
1988	11.9	:	:	17.4	:	:	10.4	74.9	:
1989	13.2	:	:	19.6	:	:	10.5	299.3	:
1990	13.3	:	:	21.3	:	:	9.6	373.5	:
1981–90	12.9	:	:	11.2	:	:	6.5	71.7	:
1991	4.7	20.4	:	19.6	129.5	209.2	9.8	44.4	15.0
1992	16.0	11.8	:	17.8	600.9	721.3	8.4	42.1	3.9
1993	5.9	21.1	:	20.6	46.0	240.3	7.5	35.5	23.8
1994	11.5	15.9	36.8	23.0	39.2	45.9	9.4	44.5	20.5
1995	9.7	16.8	36.9	28.6	14.0	46.6	11.4	36.9	16.3
1996	3.7	13.5	28.2	22.8	20.5	27.2	4.9	25.9	10.7
1997	5.1	7.2	22.2	23.9	16.5	22.2	7.2	21.8	11.6
1998	7.4	9.5	14.8	18.1	9.9	13.1	5.8	17.2	9.6
1999	7.1	3.4	3.8	12.9	8.3	-2.2	6.9	11.1	8.0
2000	9.7	4.3	14.5	15.6	11.8	4.9	7.3	16.0	10.7
1991–2000	8.0	12.2	:	20.2	52.9	78.8	7.8	29.0	12.9
2001	6.4	9.6	12.0	12.7	10.7	6.3	4.6	5.2	8.1
2002	5.3	4.6	10.3	14.3	7.9	6.7	2.7	2.9	6.3
2003	13.5	4.3	7.2	9.1	8.0	5.7	6.5	4.0	10.9
2004	7.5	5.4	10.3	10.9	7.9	8.3	2.6	5.9	9.3
2005	8.2	6.0	10.2	10.2	8.8	8.9	3.2	7.3	7.6
2001–05	8.1	6.0	10.0	11.4	8.7	7.2	3.9	5.0	8.4

(National currency; annual percentage change)

	SI	AC-10 ⁽¹⁾	EU-25 ⁽²⁾	BG	RO	TR	US	JP
1961–70	:	:	:	:	:	12.0	7.1	16.4
1971–80	:	:	:	:	:	38.2	10.5	12.6
1981	:	:	:	:	1.1	51.0	12.0	7.3
1982	:	:	:	:	16.6	32.8	4.0	5.0
1983	:	:	:	:	5.7	32.5	8.5	4.3
1984	:	:	:	:	6.2	58.2	11.3	6.7
1985	:	:	:	:	0.2	59.5	7.1	6.9
1986	:	:	:	:	2.6	45.5	5.7	4.6
1987	:	:	:	:	0.8	46.3	6.5	4.3
1988	:	:	:	:	1.4	72.9	7.7	7.3
1989	:	:	:	:	-6.6	75.9	7.5	7.3
1990	:	:	:	:	7.2	72.9	5.7	7.7
1981–90	:	:	:	:	3.4	54.0	7.6	6.1
1991	77.6	:	:	199.0	156.9	60.3	3.1	6.3
1992	191.3	:	:	48.0	173.6	73.5	5.6	2.6
1993	41.0	:	:	48.8	232.3	81.3	5.1	0.8
1994	29.1	31.2	6.1	75.8	148.4	95.2	6.2	1.1
1995	26.4	28.5	6.0	67.5	44.9	100.7	4.9	1.4
1996	15.2	20.5	4.5	100.1	51.0	90.3	5.6	2.6
1997	13.6	17.6	4.8	889.8	132.2	95.2	6.5	2.2
1998	11.7	14.5	5.2	28.6	47.8	81.1	5.6	-1.2
1999	12.2	9.2	4.4	6.1	46.0	48.2	5.6	-1.4
2000	10.0	12.6	5.3	12.5	47.3	60.9	6.0	0.8
1991–2000	35.9	:	:	89.3	98.2	77.9	5.4	1.5
2001	12.3	7.8	4.3	11.1	45.2	43.2	2.6	-1.2
2002	11.3	5.8	3.7	8.8	29.6	54.7	3.6	-1.5
2003	8.6	6.0	3.1	7.7	20.3	32.1	4.3	0.4
2004	8.9	7.3	4.1	9.1	17.2	20.7	4.8	0.4
2005	9.0	7.8	4.3	9.5	14.6	16.7	4.4	0.5
2001–05	10.0	6.9	3.9	9.2	24.9	32.8	4.0	-0.3

⁽¹⁾ Weighted in common currency; CY, CZ, EE, HU, LV, LT, MT, PL, SK and SI.⁽²⁾ Weighted in common currency; BE, DK, DE, EL, ES, FR, IE, IT, LU, NL, AT, PT, FI, SE, UK, CY, CZ, EE, HU, LV, LT, MT, PL, SK and SI.

Table 8

Output
Gross domestic product at current market prices per head of population

(EUR⁽¹⁾); EU-15 = 100⁽²⁾)

	BE	DK	DE ⁽³⁾	EL	ES	FR	IE	IT	LU
1960	114.4	122.7	122.4	41.2	36.4	123.5	63.0	73.1	176.2
1965	108.9	133.4	121.7	47.0	46.4	124.8	62.2	78.4	148.5
1970	112.2	139.6	131.0	54.0	49.2	119.6	60.9	84.5	148.0
1975	124.4	148.4	133.1	51.8	60.3	126.2	55.8	74.4	143.2
1980	121.9	131.8	132.2	49.6	58.1	122.1	61.1	78.5	141.3
1981	114.4	129.8	125.9	51.6	57.3	120.7	65.2	80.6	134.5
1982	105.0	132.3	127.2	55.9	57.4	118.4	69.9	83.2	127.8
1983	102.7	137.3	131.4	52.0	51.5	116.1	69.5	89.1	129.6
1984	102.4	139.0	129.6	52.5	53.8	114.3	69.6	92.1	132.4
1985	102.8	143.1	127.3	49.8	54.5	114.8	71.4	91.9	132.5
1986	104.4	147.7	133.1	43.2	55.3	116.3	69.8	95.3	140.6
1987	105.0	148.5	134.3	40.6	56.7	113.8	67.1	96.9	140.6
1988	102.3	140.9	129.4	42.4	60.0	110.7	67.0	96.4	142.0
1989	101.8	134.8	125.6	43.2	65.1	109.0	69.1	98.7	147.9
1990	102.7	134.8	126.6	42.9	68.1	108.5	70.0	100.9	150.7
1991	101.4	130.6	128.1	44.2	70.7	104.8	68.0	102.7	155.5
1991	103.9	134.0	114.0	45.4	72.5	107.4	69.7	105.3	159.4
1992	106.4	135.0	118.8	45.8	72.8	108.6	71.6	102.6	162.6
1993	112.2	140.3	126.3	47.2	66.8	113.3	73.3	91.3	182.0
1994	115.1	144.5	127.2	47.5	63.7	112.9	75.9	88.6	188.3
1995	118.2	149.3	130.4	47.9	64.5	113.3	80.0	83.0	191.2
1996	113.2	148.2	124.0	49.5	66.2	111.1	86.0	91.5	186.0
1997	109.4	145.4	117.0	51.2	64.9	106.8	99.5	92.2	188.6
1998	108.1	143.3	115.2	49.6	65.7	106.6	103.2	91.5	195.3
1999	108.4	143.5	113.3	50.9	67.1	105.6	112.2	90.3	203.6
2000	107.0	142.4	109.3	49.9	67.6	103.7	119.8	89.4	214.5
2001	106.0	142.6	108.2	51.4	69.7	104.0	127.9	90.5	213.9
2002	104.8	142.3	106.5	53.7	71.5	103.4	137.7	90.3	208.9
2003	105.8	144.8	106.8	57.5	74.9	103.8	139.1	92.3	211.4
2004	105.0	144.6	106.2	60.3	76.7	103.5	142.4	92.6	212.0
2005	104.7	144.8	105.0	62.1	78.2	103.2	146.4	92.7	213.5

⁽¹⁾ 1960–98 ECU.⁽²⁾ 1960–91 including D_90.⁽³⁾ 1960–91 D_90.

NB: Population is defined according to national accounts (see note on Table 1).

(EUR ⁽¹⁾); EU-15 = 100 ⁽²⁾)

	NL	AT	PT	FI	SE	UK	EU-15 ⁽²⁾	EUR-12 ⁽³⁾
1960	99.4	85.3	30.7	107.6	178.3	126.7	100.0	91.1
1965	104.4	82.6	30.0	113.5	178.9	112.4	100.0	94.2
1970	114.7	85.0	35.7	101.9	181.6	93.9	100.0	98.0
1975	129.9	100.0	37.4	118.2	177.6	80.4	100.0	100.8
1980	124.3	104.6	30.0	108.1	152.9	93.8	100.0	99.1
1981	117.2	102.7	32.9	119.7	158.6	101.2	100.0	97.4
1982	118.3	107.2	32.5	124.9	146.0	100.5	100.0	97.9
1983	118.3	112.0	29.8	123.6	138.3	98.3	100.0	98.5
1984	114.4	110.2	28.6	133.1	149.9	96.4	100.0	98.5
1985	111.6	109.1	29.6	135.5	151.8	98.4	100.0	97.9
1986	113.4	113.2	31.1	128.6	146.2	87.4	100.0	100.3
1987	111.4	114.6	31.4	130.2	143.7	87.0	100.0	100.5
1988	106.1	110.3	33.2	139.3	145.3	94.7	100.0	99.0
1989	102.8	108.3	35.3	148.8	150.2	94.0	100.0	99.1
1990	102.4	109.4	37.3	142.6	144.5	89.4	100.0	100.2
1991	100.7	109.3	40.8	123.6	144.1	89.7	100.0	100.2
1991	103.3	112.0	41.8	126.7	147.8	92.0	100.0	99.6
1992	104.3	114.9	46.5	102.1	139.5	87.6	100.0	100.7
1993	111.1	123.0	45.3	89.3	119.2	86.8	100.0	101.3
1994	112.1	124.4	44.8	97.4	120.2	88.3	100.0	100.9
1995	116.3	128.2	46.7	110.0	121.9	83.9	100.0	101.6
1996	113.0	123.9	47.5	106.2	130.6	86.3	100.0	100.9
1997	109.8	117.4	47.9	108.4	127.2	102.2	100.0	98.0
1998	110.4	117.0	48.9	110.6	123.3	105.8	100.0	97.4
1999	111.2	115.9	49.9	109.2	125.2	108.4	100.0	96.9
2000	111.8	114.2	50.0	111.3	129.8	115.6	100.0	95.3
2001	114.9	113.6	51.3	111.9	118.2	114.5	100.0	95.9
2002	114.6	112.9	51.9	111.8	119.2	115.7	100.0	95.7
2003	115.0	114.1	52.4	113.4	122.3	108.4	100.0	96.9
2004	113.0	113.3	52.1	113.1	124.5	107.9	100.0	97.0
2005	111.6	112.7	52.1	113.5	124.6	108.6	100.0	96.8

⁽¹⁾ 1960–98 ECU.⁽²⁾ 1960–91 including D_90.⁽³⁾ EU-15 excluding DK, SE and UK; 1960–91 including D_90.

Table 8 (Continued)

(EUR⁽¹⁾); EU-15 = 100⁽²⁾)

	CY	CZ	EE	HU	LV	LT	MT	PL	SK
1960	:	:	:	:	:	:	37.1	:	:
1965	44.4	:	:	:	:	:	27.7	:	:
1970	42.4	:	:	:	:	:	29.3	:	:
1975	25.0	:	:	:	:	:	27.1	:	:
1980	39.4	:	:	:	:	:	33.9	15.8	:
1981	42.8	:	:	:	:	:	38.0	16.8	:
1982	45.8	:	:	:	:	:	39.0	21.0	:
1983	46.8	:	:	:	:	:	37.7	24.8	:
1984	50.8	:	:	:	:	:	36.8	25.8	:
1985	51.8	:	:	40.6	:	:	35.9	39.8	:
1986	47.7	:	:	20.7	:	:	33.4	18.1	:
1987	46.0	:	:	13.5	:	:	32.8	9.2	:
1988	47.4	:	:	12.7	:	:	33.7	8.4	:
1989	49.5	:	:	14.8	:	:	34.6	11.4	:
1990	48.2	14.8	:	10.2	:	:	33.3	4.9	:
1991	47.4	13.1	:	10.5	:	:	34.4	6.5	:
1991	48.6	13.4	:	10.8	:	:	35.3	6.7	:
1992	52.4	13.6	:	10.1	2.7	1.4	35.4	6.2	:
1993	54.6	17.7	5.8	19.5	4.4	3.8	34.7	11.7	13.2
1994	57.1	19.7	7.8	19.8	7.1	5.7	35.9	12.7	14.3
1995	58.7	21.8	10.8	18.7	7.7	7.4	37.2	14.3	15.7
1996	57.2	23.8	13.1	18.7	8.8	9.3	37.3	15.9	16.5
1997	57.3	23.4	15.0	20.2	10.5	12.2	39.6	16.9	17.9
1998	58.8	24.3	16.5	20.1	11.1	13.5	40.1	18.0	18.1
1999	59.2	23.6	16.6	20.7	12.2	13.3	41.5	17.7	16.7
2000	61.1	24.0	18.0	22.0	14.5	15.3	43.9	20.4	18.0
2001	62.1	26.7	19.7	24.4	15.7	16.4	44.3	22.7	18.6
2002	62.4	30.0	21.1	28.6	15.9	17.6	43.1	21.6	19.5
2003	68.8	30.0	22.5	29.9	15.5	18.5	43.5	19.6	22.0
2004	71.0	30.3	24.1	31.9	16.0	19.4	42.7	19.3	22.8
2005	73.6	30.7	25.7	33.9	16.9	20.4	42.2	19.9	23.1

⁽¹⁾ 1960–98 ECU.⁽²⁾ 1960–91 including D_90.

NB: Population is defined according to national accounts (see note on Table 1).

(EUR ⁽¹⁾); EU-15 = 100 ⁽²⁾)

	SI	AC-10 ⁽³⁾	EU-25 ⁽⁴⁾	BG	RO	TR	US	JP
1960	:	:	:	:	:	45.4	264.3	44.3
1965	:	:	:	:	:	23.4	222.3	57.1
1970	:	:	:	:	:	21.8	211.2	84.2
1975	:	:	:	:	:	22.5	144.6	89.6
1980	:	:	:	:	:	15.4	119.7	90.8
1981	:	:	:	:	:	17.6	150.8	113.0
1982	:	:	:	:	:	16.2	162.5	109.1
1983	:	:	:	:	:	15.6	180.3	122.1
1984	:	:	:	:	:	15.5	207.1	135.0
1985	:	:	:	:	43.8	16.2	212.3	138.7
1986	:	:	:	:	20.8	13.1	163.1	149.3
1987	:	:	:	:	13.6	12.0	139.5	146.0
1988	:	:	:	:	12.1	11.1	134.1	158.2
1989	:	:	:	:	12.2	11.0	140.9	155.0
1990	:	:	:	7.6	5.3	13.8	119.1	128.4
1991	:	:	:	2.9	4.1	13.2	117.2	141.3
1991	:	:	:	3.0	4.2	13.6	120.2	144.9
1992	29.9	:	:	2.8	2.4	12.9	115.2	144.9
1993	33.4	14.0	85.5	6.7	6.1	15.9	132.6	183.9
1994	35.8	15.2	85.7	5.7	6.5	10.6	131.1	190.5
1995	43.1	16.7	86.0	6.8	6.8	11.9	119.3	183.0
1996	42.7	18.0	86.3	5.1	6.6	12.3	122.5	159.3
1997	43.9	19.1	86.5	5.7	7.1	13.8	137.5	155.8
1998	45.8	19.9	86.7	6.8	8.2	13.8	139.0	137.5
1999	46.8	19.7	86.7	7.0	7.0	12.6	145.5	155.7
2000	45.5	21.6	87.1	7.4	8.0	14.2	165.5	179.9
2001	46.9	23.8	87.5	8.3	8.6	10.1	168.0	157.6
2002	48.7	24.4	87.6	8.8	9.0	11.4	158.3	138.4
2003	50.7	23.9	87.6	9.4	9.3	12.7	136.2	124.2
2004	51.7	24.3	87.7	10.0	9.6	13.8	132.4	125.1
2005	52.8	25.1	87.8	10.7	9.9	13.8	133.0	124.7

⁽¹⁾ 1960–98 ECU.⁽²⁾ 1960–91 including D_90.⁽³⁾ CY, CZ, EE, HU, LV, LT, MT, PL, SK and SI.⁽⁴⁾ BE, DK, DE, EL, ES, FR, IE, IT, LU, NL, AT, PT, FI, SE, UK, CY, CZ, EE, HU, LV, LT, MT, PL, SK and SI; 1960–91 including D_90.

Table 9

Output
Gross domestic product at current market prices per head of population

(PPS; EU-15 = 100⁽¹⁾)

	BE	DK	DE ⁽²⁾	EL	ES	FR	IE	IT	LU
1960	97.3	125.7	123.7	43.7	59.3	103.0	63.0	87.1	146.6
1965	98.5	128.2	121.2	53.7	69.2	104.7	61.1	88.6	136.4
1970	100.1	124.0	117.4	62.9	73.0	107.3	61.4	95.3	121.4
1975	104.1	115.2	114.1	69.2	79.5	108.6	64.2	94.6	122.6
1980	106.3	112.4	118.3	70.0	72.6	109.0	65.8	100.9	120.8
1981	106.3	110.4	118.5	68.4	72.2	109.9	67.3	101.7	120.1
1982	106.1	112.6	116.8	66.7	72.2	111.3	67.5	101.5	120.5
1983	104.8	112.8	117.1	64.6	72.0	110.6	65.8	101.1	122.0
1984	105.0	114.3	118.3	64.1	71.3	109.4	66.7	101.6	126.6
1985	104.3	115.7	118.4	64.0	71.1	108.0	67.0	102.3	127.2
1986	103.6	117.2	118.2	62.5	71.4	107.3	65.5	102.2	135.8
1987	103.1	114.0	116.8	59.4	73.2	106.6	66.8	102.5	136.6
1988	103.5	111.0	115.9	59.5	73.8	106.7	67.3	102.5	141.4
1989	103.5	107.7	115.6	59.6	74.9	107.1	69.7	102.2	149.1
1990	104.0	106.1	117.2	57.8	75.9	106.8	73.4	101.7	151.7
1991	104.4	107.5	119.8	59.0	78.6	107.1	74.8	102.8	158.8
1991	107.1	110.3	106.7	60.6	80.7	110.0	76.8	105.5	163.0
1992	109.6	107.9	108.8	62.2	78.7	108.5	80.0	105.1	162.8
1993	113.5	113.0	108.4	64.1	79.5	106.6	83.5	102.2	173.3
1994	113.9	116.4	110.0	64.8	77.6	104.4	87.7	102.9	173.6
1995	112.6	117.9	110.0	64.8	78.2	103.8	93.2	103.4	172.0
1996	111.3	120.7	107.7	65.2	79.3	101.2	93.5	104.4	169.7
1997	111.4	119.9	107.8	64.2	79.9	99.0	103.8	102.0	174.6
1998	110.7	118.0	106.1	64.9	79.2	98.9	106.1	103.5	179.9
1999	106.5	118.8	106.4	66.0	82.1	99.7	112.1	103.3	190.1
2000	107.6	117.2	106.4	65.5	82.3	101.4	115.1	102.2	200.6
2001	108.3	114.6	103.2	64.6	84.0	103.3	117.8	102.8	195.0
2002	107.7	113.4	102.5	66.4	84.6	103.0	123.1	102.1	189.6
2003	107.7	113.7	102.2	68.9	85.8	101.9	119.8	102.2	187.3
2004	106.7	113.6	102.2	70.8	86.6	101.4	120.2	102.0	187.2
2005	106.2	113.3	101.7	71.8	87.3	101.3	122.0	101.8	188.5

⁽¹⁾ 1960–91 including D_90.⁽²⁾ 1960–91 D_90.

(PPS; EU-15 = 100 ⁽¹⁾)

	NL	AT	PT	FI	SE	UK	EU-15 ⁽¹⁾	EUR-12 ⁽²⁾
1960	115.8	95.7	39.5	86.1	124.6	122.4	100.0	93.7
1965	112.1	93.1	43.6	86.8	127.1	113.8	100.0	95.6
1970	112.5	96.3	50.7	89.1	122.8	103.8	100.0	98.0
1975	111.5	102.0	53.1	97.1	121.3	101.1	100.0	98.8
1980	107.6	105.8	55.7	97.4	112.3	97.0	100.0	100.0
1981	106.5	105.7	56.2	99.2	112.2	95.7	100.0	100.3
1982	103.9	107.0	56.6	101.0	112.6	96.9	100.0	100.0
1983	103.6	108.5	55.4	101.6	112.9	98.6	100.0	99.6
1984	104.1	106.4	53.0	102.0	115.0	98.7	100.0	99.5
1985	104.0	106.5	53.1	102.7	114.7	99.6	100.0	99.3
1986	104.0	105.9	53.9	102.2	114.6	100.7	100.0	99.1
1987	102.5	104.7	56.0	103.5	115.0	102.2	100.0	98.8
1988	100.9	104.0	58.1	104.0	113.0	103.0	100.0	98.8
1989	102.0	104.5	60.1	105.3	111.8	101.7	100.0	99.1
1990	103.0	106.0	61.3	102.1	109.6	99.8	100.0	99.6
1991	101.8	106.2	63.3	93.5	103.5	94.6	100.0	100.9
1991	104.5	109.1	64.9	96.0	106.2	97.1	100.0	100.2
1992	104.0	109.5	65.8	87.4	100.4	98.2	100.0	100.2
1993	105.6	112.8	68.1	91.7	103.2	99.1	100.0	99.9
1994	105.9	112.5	69.5	91.2	103.5	98.7	100.0	99.9
1995	109.2	111.6	69.8	97.2	106.1	96.5	100.0	100.2
1996	109.0	113.0	70.0	96.9	105.9	100.5	100.0	99.4
1997	112.4	112.4	73.4	99.4	105.9	102.5	100.0	99.0
1998	115.3	111.3	72.2	101.5	105.2	103.4	100.0	98.9
1999	114.4	112.5	72.2	100.6	105.0	100.7	100.0	99.4
2000	111.1	115.5	68.3	103.2	106.6	100.4	100.0	99.4
2001	114.5	112.3	69.0	103.4	102.0	101.4	100.0	99.4
2002	112.3	112.7	68.8	102.4	101.2	103.3	100.0	99.1
2003	110.2	112.6	67.3	101.6	101.3	104.5	100.0	98.9
2004	108.4	112.1	66.4	101.6	101.1	105.3	100.0	98.7
2005	107.7	111.8	66.0	101.6	101.0	106.0	100.0	98.6

⁽¹⁾ 1960–91 including D_90.⁽²⁾ EU-15 excluding DK, SE and UK; 1960–91 including D_90.

Table 9 (Continued)

(PPS; EU-15 = 100⁽¹⁾)

	CY	CZ	EE	HU	LV	LT	MT	PL	SK
1960	:	:	:	:	:	:	:	:	:
1965	:	:	:	:	:	:	:	:	:
1970	:	:	:	:	:	:	:	:	:
1975	:	:	:	:	:	:	:	:	:
1980	:	:	:	:	:	:	:	:	:
1981	:	:	:	:	:	:	:	:	:
1982	:	:	:	:	:	:	:	:	:
1983	:	:	:	:	:	:	:	:	:
1984	:	:	:	:	:	:	:	:	:
1985	:	:	:	:	:	:	:	:	:
1986	:	:	:	:	:	:	:	:	:
1987	:	:	:	:	:	:	:	:	:
1988	:	:	:	:	:	:	:	:	:
1989	:	:	:	:	:	:	:	:	:
1990	:	69.6	:	49.3	60.5	49.6	:	30.6	:
1991	:	57.0	:	45.3	53.1	46.2	45.6	27.8	:
1991	:	58.5	:	46.5	54.6	47.4	46.8	28.5	:
1992	:	56.8	:	45.1	35.8	37.0	48.1	29.2	:
1993	75.2	58.3	31.6	45.7	30.0	31.4	50.0	30.9	44.1
1994	76.4	59.7	30.9	46.4	26.6	27.8	51.2	31.9	45.5
1995	78.3	62.1	33.0	46.2	24.8	29.2	52.9	36.1	47.2
1996	77.4	64.8	34.4	45.9	25.3	29.5	53.9	36.7	48.6
1997	76.4	63.2	37.9	47.3	26.2	31.3	54.8	35.5	49.4
1998	77.9	62.7	39.6	48.5	27.7	32.4	54.6	38.0	50.8
1999	82.2	58.9	38.5	48.8	28.5	34.4	55.1	38.9	49.8
2000	75.5	56.2	40.2	49.8	30.9	35.4	56.3	40.5	47.2
2001	73.3	59.3	40.2	52.7	33.7	38.1	54.8	40.5	48.1
2002	73.2	60.9	41.7	54.4	35.3	40.5	53.1	40.4	48.9
2003	74.3	61.6	43.8	56.2	37.1	42.8	53.1	41.2	50.9
2004	75.0	62.1	46.4	57.6	38.4	44.5	53.3	41.9	51.3
2005	76.1	63.0	48.9	58.8	39.7	46.3	53.6	42.9	52.0

⁽¹⁾ 1960–91 including D_90.

(PPS; EU-15 = 100 ⁽¹⁾)

	SI	AC-10 ⁽²⁾	EU-25 ⁽³⁾	BG	RO	TR	US	JP
1960	:	:	:	:	:	32.3	163.4	58.1
1965	:	:	:	:	:	29.5	159.1	70.3
1970	:	:	:	:	:	29.4	146.6	93.2
1975	:	:	:	:	:	30.7	141.2	95.5
1980	:	:	:	:	:	27.3	141.5	99.4
1981	:	:	:	:	:	28.0	143.8	101.6
1982	:	:	:	:	:	28.1	138.5	103.4
1983	:	:	:	:	:	28.3	140.9	103.4
1984	:	:	:	:	:	28.8	146.6	104.3
1985	:	:	:	:	:	28.7	147.4	106.0
1986	:	:	:	:	:	29.2	147.3	105.7
1987	:	:	:	:	:	30.5	146.9	107.0
1988	:	:	:	:	:	29.4	146.0	109.2
1989	:	:	:	:	:	27.9	145.1	111.0
1990	66.9	:	:	:	37.7	29.1	142.8	113.7
1991	58.4	:	:	31.8	32.5	27.7	138.8	115.9
1991	59.9	:	:	32.7	33.3	28.4	142.5	119.0
1992	56.7	:	:	28.4	29.4	28.9	143.4	118.8
1993	60.0	38.9	89.7	26.8	30.8	32.1	144.8	121.8
1994	62.6	39.6	89.8	26.7	30.8	29.0	145.6	120.1
1995	68.1	42.4	90.3	27.3	32.4	29.8	144.5	119.1
1996	69.6	43.2	90.5	25.0	33.0	29.9	143.4	122.4
1997	71.5	42.9	90.5	21.7	30.8	31.3	145.1	121.2
1998	73.0	44.6	90.8	22.7	29.7	29.9	145.7	116.2
1999	71.9	44.6	90.8	28.2	23.8	26.3	142.4	107.0
2000	70.3	45.0	90.9	25.6	23.4	25.3	142.2	106.9
2001	72.3	46.2	91.2	24.7	24.1	22.5	138.9	105.0
2002	74.2	46.9	91.3	25.7	25.3	22.8	139.2	103.7
2003	74.0	48.0	91.5	27.5	27.3	23.1	140.3	105.4
2004	75.0	48.9	91.7	29.0	28.4	23.1	141.6	105.4
2005	76.2	49.9	91.9	30.5	29.4	23.2	142.0	104.6

⁽¹⁾ 1960–91 including D_90.⁽²⁾ CY, CZ, EE, HU, LV, LT, MT, PL, SK and SI.⁽³⁾ BE, DK, DE, EL, ES, FR, IE, IT, LU, NL, AT, PT, FI, SE, UK, CY, CZ, EE, HU, LV, LT, MT, PL, SK and SI; 1960–91 including D_90.

Table 10

Output
Gross domestic product at 1995 market prices

(National currency; annual percentage change)

	BE	DK	DE (1)	EL	ES	FR	IE	IT	LU
1961-70	4.9	4.7	4.4	8.5	7.3	5.6	4.2	5.7	3.5
1971-80	3.4	1.9	2.8	4.6	3.5	3.3	4.7	3.6	2.6
1981	-0.3	-2.1	0.1	-1.6	-0.1	1.2	3.3	0.8	-0.6
1982	0.6	2.7	-0.8	-1.1	1.2	2.6	2.3	0.6	1.1
1983	0.3	1.7	1.6	-1.1	1.8	1.5	-0.2	1.2	3.0
1984	2.5	3.5	2.8	2.0	1.8	1.6	4.3	2.8	6.2
1985	1.7	3.6	2.2	2.5	2.3	1.5	3.1	3.0	2.9
1986	1.8	4.0	2.4	0.5	3.3	2.4	0.3	2.5	10.0
1987	2.3	0.0	1.5	-2.3	5.5	2.5	4.7	3.0	4.0
1988	4.7	1.2	3.7	4.3	5.1	4.6	4.3	3.9	8.5
1989	3.5	0.2	3.9	3.8	4.8	4.2	6.2	2.9	9.8
1990	3.1	1.0	5.7	0.0	3.8	2.6	7.6	2.0	5.3
1981-90	2.0	1.6	2.3	0.7	2.9	2.5	3.6	2.3	5.0
1991	1.8	1.1	5.1	3.1	2.5	1.0	1.9	1.4	8.6
1992	1.5	0.6	2.2	0.7	0.9	1.5	3.3	0.8	1.8
1993	-1.0	0.0	-1.1	-1.6	-1.0	-0.9	2.7	-0.9	4.2
1994	3.2	5.5	2.3	2.0	2.4	2.1	5.8	2.2	3.8
1995	2.4	2.8	1.7	2.1	2.8	1.7	9.9	2.9	1.4
1996	1.2	2.5	0.8	2.4	2.4	1.1	8.1	1.1	3.3
1997	3.5	3.0	1.4	3.6	4.0	1.9	11.1	2.0	8.3
1998	2.0	2.5	2.0	3.4	4.3	3.4	8.6	1.8	6.9
1999	3.2	2.6	2.0	3.4	4.2	3.2	11.3	1.7	7.8
2000	3.8	2.9	2.9	4.4	4.2	3.8	10.1	3.1	9.1
1991-2000	2.2	2.3	1.9	2.3	2.7	1.9	7.2	1.6	5.5
2001	0.6	1.4	0.8	4.0	2.8	2.1	6.2	1.8	1.2
2002	0.7	2.1	0.2	3.8	2.0	1.2	6.9	0.4	1.3
2003	0.8	0.8	0.0	4.1	2.3	0.1	1.6	0.3	1.2
2004	1.8	2.0	1.6	4.2	2.9	1.7	3.7	1.5	1.9
2005	2.3	2.3	1.8	3.4	3.3	2.3	4.9	1.9	2.8
2001-05	1.2	1.7	0.9	3.9	2.7	1.5	4.6	1.2	1.7

(1) 1961-91 D_90.

(National currency; annual percentage change)

	NL	AT	PT	FI	SE	UK	EU-15 ⁽¹⁾	EUR-12 ⁽²⁾
1961–70	5.1	4.7	6.4	4.8	4.6	3.0	4.8	5.3
1971–80	2.9	3.6	4.7	3.8	2.0	2.0	3.0	3.2
1981	– 0.5	– 0.1	1.6	2.1	– 0.2	– 1.4	0.1	0.5
1982	– 1.3	2.1	2.1	3.2	1.2	1.9	1.0	0.7
1983	1.8	2.9	– 0.2	2.8	1.9	3.5	1.8	1.4
1984	3.1	0.4	– 1.9	3.2	4.3	2.6	2.5	2.3
1985	2.7	2.4	2.8	3.4	2.2	3.6	2.5	2.2
1986	3.1	2.1	4.1	2.3	2.7	4.0	2.8	2.5
1987	1.9	1.6	6.4	4.3	3.3	4.6	2.8	2.5
1988	3.0	3.4	7.5	4.7	2.6	5.0	4.2	4.2
1989	4.8	4.2	6.4	4.8	2.7	2.2	3.6	4.0
1990	4.1	4.7	4.0	– 0.3	1.1	0.8	3.0	3.6
1981–90	2.2	2.4	3.3	3.0	2.2	2.6	2.4	2.4
1991	2.4	3.3	4.4	– 6.4	– 1.1	– 1.4	1.8	2.5
1992	1.5	2.3	1.1	– 3.8	– 1.7	0.2	1.1	1.4
1993	0.7	0.4	– 2.0	– 1.2	1.1	2.3	– 0.3	– 0.8
1994	2.9	2.6	1.0	3.9	4.2	4.4	2.8	2.4
1995	3.0	1.6	4.3	3.4	4.0	2.8	2.4	2.2
1996	3.0	2.0	3.5	3.9	1.3	2.7	1.6	1.4
1997	3.8	1.6	4.0	6.3	2.4	3.3	2.5	2.3
1998	4.3	3.9	4.6	5.0	3.6	3.1	2.9	2.9
1999	4.0	2.7	3.8	3.4	4.6	2.8	2.9	2.8
2000	3.5	3.4	3.7	5.1	4.4	3.8	3.6	3.5
1991–2000	2.9	2.4	2.8	1.9	2.3	2.4	2.1	2.1
2001	1.2	0.8	1.6	1.2	1.1	2.1	1.7	1.6
2002	0.2	1.4	0.4	2.2	1.9	1.7	1.1	0.9
2003	– 0.9	0.9	– 0.8	1.5	1.4	2.0	0.8	0.4
2004	0.6	1.9	1.0	2.5	2.2	2.8	2.0	1.8
2005	2.0	2.5	2.0	2.7	2.6	2.9	2.4	2.3
2001–05	0.6	1.5	0.9	2.0	1.8	2.3	1.6	1.4

⁽¹⁾ Weighted in common currency; 1961–91 including D_90.⁽²⁾ Weighted in common currency; EU-15 excluding DK, SE and UK; 1961–91 including D_90.

Table 10 (Continued)

(National currency; annual percentage change)

	CY	CZ	EE	HU	LV	LT	MT	PL	SK
1961–70	:	:	:	:	:	:	:	:	:
1971–80	:	:	:	:	:	:	:	:	:
1981	:	:	:	:	:	:	:	:	:
1982	:	:	:	:	:	:	:	:	:
1983	:	:	:	:	:	:	:	:	:
1984	:	:	:	:	:	:	:	:	:
1985	:	:	:	:	:	:	:	:	:
1986	:	:	:	:	:	:	:	:	:
1987	:	:	:	:	:	:	:	:	:
1988	:	:	:	:	:	:	:	:	:
1989	:	:	:	:	:	:	:	:	:
1990	:	:	:	:	:	:	:	:	:
1981–90	:	:	:	:	:	:	:	:	:
1991	0.7	-11.6	:	-11.9	-10.4	-5.7	:	-7.0	:
1992	9.7	-0.5	:	-2.1	-34.9	-21.3	4.7	2.5	:
1993	0.7	0.1	:	-0.6	-14.9	-16.2	4.5	3.7	6.2
1994	5.9	2.2	-2.0	2.9	0.6	-9.8	5.7	5.3	5.2
1995	6.5	5.9	4.3	1.5	-1.6	6.2	6.2	7.0	6.5
1996	1.9	4.3	3.9	1.3	3.7	4.7	4.0	6.0	5.8
1997	2.3	-0.8	9.8	4.6	8.4	7.0	4.9	6.8	5.6
1998	4.8	-1.0	4.6	4.9	4.8	7.3	3.4	4.8	4.0
1999	4.7	0.5	-0.6	4.2	2.8	-1.8	4.1	4.1	1.3
2000	5.0	3.3	7.3	5.2	6.8	4.0	6.4	4.0	2.2
1991–2000	4.2	0.1	:	0.9	-4.4	-3.1	:	3.6	:
2001	4.0	3.1	6.5	3.8	7.9	6.5	-1.2	1.0	3.3
2002	2.0	2.0	6.0	3.3	6.1	6.7	1.2	1.4	4.4
2003	2.0	2.2	4.4	2.9	6.0	6.6	0.8	3.3	3.8
2004	3.4	2.6	5.6	3.2	5.2	5.7	2.7	4.2	4.1
2005	4.2	3.3	5.1	3.4	5.7	6.0	2.9	4.8	4.3
2001–05	3.1	2.6	5.5	3.3	6.2	6.3	1.3	2.9	4.0

(National currency; annual percentage change)

	SI	AC-10 ⁽¹⁾	EU-25 ⁽²⁾	BG	RO	TR	US	JP
1961–70	:	:	:	:	:	5.7	4.2	10.1
1971–80	:	:	:	:	:	4.1	3.2	4.4
1981	:	:	:	:	:	4.9	2.5	2.8
1982	:	:	:	:	:	3.6	-2.1	3.2
1983	:	:	:	:	:	5.0	4.3	2.3
1984	:	:	:	:	:	6.7	7.3	3.8
1985	:	:	:	:	:	4.2	3.8	4.6
1986	:	:	:	:	:	7.0	3.4	2.9
1987	:	:	:	:	:	9.5	3.4	4.4
1988	:	:	:	:	:	2.1	4.2	6.5
1989	:	:	:	:	:	0.3	3.5	5.2
1990	:	:	:	:	:	9.3	1.7	5.2
1981–90	:	:	:	:	:	5.2	3.2	4.1
1991	-8.9	:	:	:	-13.1	0.9	-0.5	3.3
1992	-5.5	:	:	-7.3	-8.7	6.0	3.1	1.0
1993	2.8	:	:	-1.5	1.5	8.0	2.7	0.3
1994	5.3	4.0	2.8	1.8	3.9	-5.5	4.1	1.0
1995	4.1	5.4	2.5	2.9	7.1	7.2	2.7	1.9
1996	3.8	4.6	1.7	-9.4	3.9	7.0	3.6	3.4
1997	4.4	4.8	2.6	-5.4	-6.1	7.5	4.5	1.8
1998	3.7	3.8	3.0	3.9	-4.8	3.1	4.3	-1.1
1999	5.9	3.1	2.9	2.3	-1.2	-4.7	4.1	0.1
2000	4.1	4.1	3.6	5.4	2.1	7.4	3.8	2.8
1991–2000	1.9	:	:	:	-1.7	3.6	3.2	1.4
2001	2.9	2.4	1.7	4.1	5.7	-7.5	0.3	0.4
2002	2.9	2.3	1.2	4.8	4.9	7.8	2.5	0.1
2003	2.1	3.1	0.9	4.5	4.6	5.1	2.8	2.6
2004	3.1	3.8	2.1	5.0	4.9	4.5	3.8	1.7
2005	3.7	4.2	2.5	5.5	5.1	5.0	3.3	1.5
2001–05	2.9	3.2	1.7	4.8	5.0	2.8	2.5	1.3

⁽¹⁾ Weighted in common currency; CY, CZ, EE, HU, LV, LT, MT, PL, SK and SI.⁽²⁾ Weighted in common currency; BE, DK, DE, EL, ES, FR, IE, IT, LU, NL, AT, PT, FI, SE, UK, CY, CZ, EE, HU, LV, LT, MT, PL, SK and SI.

Table 11

Output
Gross domestic product at 1995 market prices per person employed

(National currency; annual percentage change)

	BE	DK	DE ⁽¹⁾	EL	ES	FR	IE	IT	LU
1961–70	4.4	3.5	4.2	9.3	6.7	4.9	4.2	6.2	2.9
1971–80	3.2	1.6	2.5	3.9	4.2	2.8	3.7	2.6	1.4
1981	1.6	-0.6	0.0	-6.4	2.4	1.8	4.2	0.8	-0.9
1982	1.9	2.4	0.0	-0.1	2.2	2.6	2.3	0.1	1.4
1983	1.6	1.6	2.5	-1.6	2.2	1.9	1.7	0.6	3.3
1984	2.4	2.0	2.0	2.2	4.2	2.0	6.3	2.4	5.6
1985	1.1	1.3	0.8	0.0	3.4	2.4	5.9	2.1	2.0
1986	1.3	1.6	0.5	0.2	0.9	2.2	-0.4	1.7	7.4
1987	1.7	-0.3	0.1	-2.2	0.7	1.9	3.8	2.5	1.2
1988	2.9	2.0	2.3	2.6	1.6	3.7	4.3	2.9	5.3
1989	2.3	0.8	2.0	3.4	1.2	2.5	6.5	2.6	6.1
1990	2.2	1.7	2.5	-1.3	0.0	1.9	3.2	1.0	1.1
1981–90	1.9	1.2	1.3	-0.3	1.9	2.3	3.8	1.7	3.2
1991	1.8	1.7	2.3	5.6	1.4	1.1	2.3	0.6	4.5
1992	2.0	1.4	3.8	-0.7	2.4	2.3	3.0	1.4	-0.7
1993	-0.2	1.5	0.3	-2.5	1.9	0.9	1.2	2.2	2.6
1994	3.6	4.0	2.5	0.1	2.9	2.2	2.6	3.2	1.3
1995	-1.6	1.5	1.5	1.2	0.9	1.2	5.6	2.9	-1.0
1996	0.8	1.5	1.1	2.8	1.2	1.2	4.3	0.8	0.7
1997	2.5	1.7	1.6	6.0	0.9	1.7	5.2	1.6	5.1
1998	0.2	0.9	0.9	-3.8	0.2	2.1	0.0	0.8	2.3
1999	1.8	1.4	0.8	3.3	0.5	1.3	5.0	1.1	2.7
2000	1.9	2.4	1.1	4.2	0.6	1.1	5.2	1.4	3.3
1991–2000	1.3	1.8	1.6	1.6	1.3	1.5	3.4	1.6	2.1
2001	-0.8	1.1	0.4	4.4	0.4	0.3	3.1	0.1	-4.2
2002	1.0	2.7	0.8	3.7	0.5	0.5	5.5	-0.7	-1.8
2003	1.0	1.5	1.6	3.0	0.6	0.3	0.7	-0.5	-0.5
2004	1.3	1.6	1.9	3.3	0.9	1.8	2.7	1.0	1.0
2005	1.3	1.8	1.1	2.9	1.1	1.7	3.5	1.2	1.6
2001–05	0.8	1.7	1.2	3.5	0.7	0.9	3.1	0.2	-0.8

⁽¹⁾ 1961–91 D_90.

NB: The calculation is based on employed persons, all domestic industries, or, where applicable, on full-time equivalents. Full-time equivalent employment, which equals the number of full-time equivalent jobs, is defined as total hours worked divided by the average annual number of hours worked in full-time jobs within the economic territory.

Reference: ESA 95, paragraph 11.32.

(National currency; annual percentage change)

	NL	AT	PT	FI	SE	UK	EU-15 ⁽¹⁾	EUR-12 ⁽²⁾
1961–70	3.8	5.1	6.2	4.4	3.9	2.7	4.5	5.1
1971–80	2.7	3.0	4.7	3.5	1.2	1.7	2.6	2.8
1981	0.9	0.7	0.6	0.8	–0.3	2.0	1.0	0.8
1982	1.3	3.4	4.1	2.0	1.4	3.8	1.7	1.2
1983	3.7	3.2	1.0	2.4	1.7	3.7	2.2	1.9
1984	3.0	0.7	–0.4	2.6	3.4	0.3	2.1	2.5
1985	0.7	2.4	2.8	3.3	1.1	2.5	1.9	1.8
1986	1.0	2.2	7.0	2.6	2.1	3.6	1.9	1.5
1987	0.1	1.4	4.0	3.7	2.5	2.2	1.3	1.2
1988	1.4	3.2	5.2	3.7	1.2	1.3	2.3	2.7
1989	2.6	3.0	4.5	3.8	1.2	–0.7	1.8	2.4
1990	1.4	3.1	2.2	0.1	0.2	0.3	1.4	1.6
1981–90	1.6	2.3	3.1	2.5	1.4	1.9	1.7	1.7
1991	1.2	2.1	1.5	–0.8	0.4	1.8	1.6	1.4
1992	0.3	2.2	2.8	3.5	2.8	3.1	2.6	2.5
1993	0.8	1.3	0.0	5.0	6.4	3.1	1.4	1.0
1994	3.1	2.8	2.0	5.4	5.1	3.5	2.8	2.7
1995	1.0	2.0	5.1	1.4	2.5	1.8	1.6	1.6
1996	0.5	2.2	1.9	2.5	2.2	1.1	1.1	1.1
1997	0.7	1.1	2.4	2.8	3.8	1.5	1.6	1.6
1998	1.4	2.4	1.8	2.9	2.1	1.9	1.1	0.9
1999	1.6	1.5	1.9	0.8	2.4	1.2	1.2	1.2
2000	1.6	2.4	1.5	2.8	1.9	2.7	1.6	1.4
1991–2000	1.2	2.0	2.1	2.6	2.9	2.2	1.7	1.5
2001	–0.1	0.1	0.3	–0.3	–0.8	1.5	0.5	0.3
2002	0.0	1.4	0.2	1.8	1.7	1.6	0.8	0.5
2003	0.2	0.8	0.2	1.7	1.6	1.4	0.8	0.6
2004	1.5	1.6	1.1	2.3	2.2	2.3	1.7	1.5
2005	1.7	1.9	1.5	2.3	2.4	2.4	1.6	1.4
2001–05	0.7	1.2	0.6	1.6	1.4	1.8	1.1	0.9

⁽¹⁾ Weighted in common currency; 1961–91 including D_90.⁽²⁾ Weighted in common currency; EU-15 excluding DK, SE and UK; 1961–91 including D_90.

Table 11 (Continued)

(National currency; annual percentage change)

	CY	CZ	EE	HU	LV	LT	MT	PL	SK
1961–70	:	:	:	:	:	:	:	:	:
1971–80	:	:	:	:	:	:	:	:	:
1981	:	:	:	:	:	:	:	:	:
1982	:	:	:	:	:	:	:	:	:
1983	:	:	:	:	:	:	:	:	:
1984	:	:	:	:	:	:	:	:	:
1985	:	:	:	:	:	:	:	:	:
1986	:	:	:	:	:	:	:	:	:
1987	:	:	:	:	:	:	:	:	:
1988	:	:	:	:	:	:	:	:	:
1989	:	:	:	:	:	:	:	:	:
1990	:	:	:	:	:	:	:	:	:
1981–90	:	:	:	:	:	:	:	:	:
1991	:	:	:	:	-9.6	-7.9	:	:	:
1992	:	:	:	:	-29.7	-19.5	3.4	:	:
1993	:	0.3	:	6.0	-8.6	-12.6	3.6	6.2	:
1994	:	1.1	1.4	5.0	12.0	-4.2	5.2	4.2	:
1995	:	5.2	11.1	5.1	9.8	8.2	3.0	5.1	4.3
1996	1.1	4.1	6.4	1.8	5.7	10.9	2.5	4.0	2.4
1997	2.2	-0.1	9.8	4.4	3.8	9.3	5.0	3.9	6.8
1998	3.8	0.4	7.0	3.0	5.1	7.4	2.9	2.4	2.4
1999	2.6	2.6	4.3	1.0	4.7	3.3	4.5	6.9	4.7
2000	2.5	4.0	10.5	4.2	10.1	2.7	4.0	6.4	4.9
1991–2000	:	:	:	:	-0.5	-0.7	:	:	:
2001	1.9	2.7	5.6	3.4	5.6	7.9	-1.4	1.7	2.3
2002	0.8	1.0	4.4	3.0	3.2	2.6	-0.7	3.8	4.2
2003	1.5	2.7	3.9	2.4	5.4	5.0	0.4	3.6	2.2
2004	2.7	2.6	5.4	2.4	4.7	4.3	2.3	3.7	2.7
2005	3.2	3.2	4.9	2.4	5.2	4.4	2.1	3.2	2.9
2001–05	2.0	2.4	4.8	2.7	4.8	4.8	0.5	3.2	2.9

NB: The calculation is based on employed persons, all domestic industries, or, where applicable, on full-time equivalents. Full-time equivalent employment, which equals the number of full-time equivalent jobs, is defined as total hours worked divided by the average annual number of hours worked in full-time jobs within the economic territory.

Reference: ESA 95, paragraph 11.32.

(National currency; annual percentage change)

	SI	AC-10 ⁽¹⁾	EU-25 ⁽²⁾	BG	RO	TR	US	JP
1961–70	:	:	:	:	:	:	2.3	8.6
1971–80	:	:	:	:	:	2.2	1.2	3.7
1981	:	:	:	:	:	4.0	1.5	2.0
1982	:	:	:	:	:	2.5	-0.4	2.3
1983	:	:	:	:	:	3.9	3.4	0.8
1984	:	:	:	:	:	5.1	2.3	3.5
1985	:	:	:	:	:	2.5	1.4	4.0
1986	:	:	:	:	:	5.1	1.7	2.4
1987	:	:	:	:	:	7.1	0.4	4.0
1988	:	:	:	:	:	0.6	1.2	5.3
1989	:	:	:	:	:	-1.7	1.0	3.7
1990	:	:	:	:	:	7.4	0.6	3.5
1981–90	:	:	:	:	:	3.6	1.3	3.1
1991	:	:	:	:	-12.6	0.4	0.6	1.2
1992	:	:	:	1.0	-5.9	5.5	3.2	-0.1
1993	:	:	:	0.1	5.5	8.2	0.6	-0.1
1994	:	:	:	1.2	4.5	-7.7	1.5	0.9
1995	:	:	:	1.6	13.0	3.4	0.2	1.8
1996	5.4	3.7	1.1	-9.5	5.2	4.8	1.7	3.0
1997	5.2	3.5	1.6	-1.5	-2.3	10.3	2.0	0.8
1998	3.7	2.5	1.2	4.1	-2.5	0.3	2.0	-0.5
1999	4.8	5.1	1.8	4.5	3.5	-6.7	2.2	1.0
2000	0.3	5.5	2.1	9.2	-0.3	7.8	1.8	2.9
1991–2000	:	:	:	:	0.6	2.5	1.6	1.1
2001	2.4	2.5	0.8	4.5	6.6	-6.5	0.6	1.0
2002	3.5	3.1	1.0	3.9	14.8	8.5	2.8	1.4
2003	2.6	3.1	0.9	2.5	4.1	3.3	2.0	2.1
2004	2.6	3.2	1.7	3.4	4.3	2.2	3.4	1.5
2005	3.0	3.1	1.6	3.9	5.0	2.6	2.7	1.4
2001–05	2.8	3.0	1.2	3.6	6.9	1.9	2.3	1.5

⁽¹⁾ Weighted in common currency; CY, CZ, EE, HU, LV, LT, MT, PL, SK and SI.⁽²⁾ Weighted in common currency; BE, DK, DE, EL, ES, FR, IE, IT, LU, NL, AT, PT, FI, SE, UK, CY, CZ, EE, HU, LV, LT, MT, PL, SK and SI.

Table 12

Output Industrial production; construction excluded

(Annual percentage change)

	BE	DK	DE (1)	EL	ES	FR	IE	IT	LU
1961-70	5.0	6.2	5.8	:	:	5.4	:	7.0	2.3
1971-80	2.2	1.9	1.5	7.1	5.1	2.9	:	3.5	0.4
1981	-2.8	0.1	-1.8	0.8	-0.8	-1.0	5.4	-2.2	-5.6
1982	0.0	2.7	-3.2	0.9	-1.2	-0.8	-0.7	-3.1	2.3
1983	1.9	3.3	0.7	-0.4	2.6	0.1	7.9	-2.4	5.4
1984	2.5	9.5	3.0	2.3	0.9	1.7	9.9	3.3	11.7
1985	2.5	4.2	4.8	3.3	1.8	1.4	3.4	0.2	-1.1
1986	0.8	6.0	1.8	-0.3	3.3	0.6	2.2	4.1	1.9
1987	2.1	-5.1	0.4	-1.2	4.6	1.2	8.9	2.6	-0.6
1988	5.8	5.3	3.6	5.1	3.1	4.6	10.7	6.9	8.7
1989	3.4	0.9	4.9	1.8	5.1	3.7	11.6	3.9	7.8
1990	1.5	0.7	5.2	-2.5	-0.3	3.1	4.7	-1.7	2.6
1981-90	1.8	2.7	1.9	1.0	1.9	1.4	6.3	1.1	3.2
1991	-1.9	0.1	3.5	-1.0	-0.6	-0.2	3.3	-1.0	0.4
1992	-0.4	2.5	-2.4	-1.1	-3.5	-1.0	9.1	-0.9	-0.8
1993	-5.1	-3.2	-7.9	-2.9	-4.7	-3.8	5.6	-2.2	-4.3
1994	2.1	10.3	3.2	1.3	7.7	4.2	11.9	5.9	5.9
1995	6.5	3.9	0.8	1.8	4.9	2.3	20.5	5.7	2.0
1996	0.5	1.1	0.7	1.2	-1.3	0.9	8.1	-1.7	0.1
1997	4.7	4.8	3.7	1.3	7.0	3.9	17.5	3.8	5.8
1998	3.4	3.2	4.1	7.1	5.5	5.1	19.8	1.3	-0.1
1999	0.9	0.1	1.5	3.9	2.6	2.0	14.8	0.0	11.5
2000	5.3	5.7	6.2	0.5	4.4	3.5	15.4	4.0	4.3
1992-2000	1.9	3.1	1.0	1.4	2.4	1.9	13.5	1.7	2.6
2001	-2.1	1.3	0.5	1.4	-1.5	1.1	10.2	-1.2	1.8
2002	1.5	1.5	-1.1	0.4	0.2	-1.0	7.8	-1.3	1.0
2003	0.2	1.9	6.3	1.5	1.7	0.2	3.0	-0.1	0.4
2004	1.2	1.6	6.3	2.0	1.7	3.2	7.0	2.0	0.6
2005	1.7	1.7	6.3	2.0	1.7	103.2	9.0	2.2	2.4
2001-05	0.5	1.6	3.6	1.5	0.7	16.0	7.4	0.3	1.2

(1) 1961-91 D_90.

NB: Industrial production is calculated as an index (production index) which shows the output and the activity of the industrial branches; it provides a measure of the volume trend in value added at factor cost over a given reference period. The term 'production' is used within the scope of European and national short-term indicators (short-term business statistics). Industrial production, construction excluded, covers NACE Sections C, D and E.

(Annual percentage change)

	NL	AT	PT	FI	SE	UK	EU-15 ⁽¹⁾	EUR-12 ⁽²⁾
1961–70	7.3	5.6	5.4	7.5	6.1	2.5	:	:
1971–80	2.9	4.0	6.5	4.6	1.0	1.0	:	:
1981	-2.0	-1.1	2.3	2.6	-2.4	-3.2	-1.8	-1.5
1982	-3.8	-0.5	7.7	0.9	-0.6	1.9	-1.4	-2.1
1983	1.9	0.9	3.6	3.2	4.5	3.7	0.9	0.2
1984	5.0	4.9	2.5	4.7	5.7	0.0	2.4	2.8
1985	4.8	4.7	-1.3	3.4	2.9	5.5	3.2	2.6
1986	0.2	1.2	7.3	1.5	0.1	1.4	2.0	2.1
1987	1.1	1.0	4.4	4.6	2.5	4.1	2.0	1.7
1988	0.1	4.4	3.8	4.3	1.3	5.2	4.5	4.5
1989	5.1	5.8	6.7	2.4	3.7	2.1	3.9	4.4
1990	2.4	6.8	9.0	-1.6	8.9	0.0	2.1	2.4
1981–90	1.4	2.8	4.6	2.6	2.6	2.1	1.8	1.7
1991	1.8	1.9	0.0	-8.7	-4.8	-3.3	-0.1	0.8
1992	-0.2	-1.2	-2.3	0.8	-1.9	0.4	-1.2	-1.6
1993	-1.1	-1.5	-5.2	5.5	-0.8	2.1	-3.4	-4.7
1994	4.9	4.0	-0.2	11.3	9.5	5.2	4.8	4.5
1995	4.1	4.9	11.6	6.1	9.2	1.8	3.2	3.3
1996	2.4	1.0	5.3	2.9	1.5	1.2	0.5	0.3
1997	0.2	6.4	2.6	8.6	5.6	1.1	3.6	4.1
1998	2.2	8.2	5.7	9.2	3.6	1.0	3.5	4.1
1999	1.4	6.0	3.0	5.7	2.2	0.8	1.5	1.7
2000	4.0	8.9	-1.9	11.8	6.3	1.7	4.5	5.0
1992–2000	2.0	4.0	1.9	6.8	3.8	1.7	1.9	1.8
2001	1.4	0.8	3.1	0.1	-0.3	-2.2	-0.2	0.2
2002	-2.1	0.1	-0.2	1.7	-1.2	-3.5	-1.2	-0.8
2003	-2.9	4.1	0.0	0.9	1.4	-0.3	1.9	2.4
2004	-0.6	4.1	0.9	1.5	3.5	1.9	3.4	3.7
2005	1.9	4.1	1.8	2.8	4.0	2.1	19.3	23.3
2001–05	-0.5	2.6	1.1	1.4	1.5	-0.4	4.4	5.4

⁽¹⁾ 1961–91 including D_90.⁽²⁾ EU-15 excluding DK, SE and UK; 1961–91 including D_90.

Table 12 (Continued)

(Annual percentage change)

	CY	CZ	EE	HU	LV	LT	MT	PL	SK
1961–70	:	:	:	:	:	:	:	:	:
1971–80	:	:	:	:	:	:	:	:	:
1981	:	:	:	2.8	:	:	:	:	:
1982	:	:	:	2.5	:	:	:	:	:
1983	:	:	:	0.6	:	:	:	:	:
1984	:	:	:	3.0	:	:	:	:	:
1985	:	:	:	2.6	:	:	:	:	:
1986	:	:	:	1.7	:	:	:	4.2	:
1987	:	:	:	2.4	:	:	:	3.2	:
1988	:	:	:	-1.0	:	:	:	4.9	:
1989	:	:	:	-5.1	:	:	:	-2.8	:
1990	:	:	:	-9.3	:	:	:	-25.4	:
1981–90	:	:	:	-0.1	:	:	:	:	:
1991	:	-21.9	:	-18.3	:	:	:	-16.0	:
1992	:	-8.0	:	-9.8	:	:	:	3.5	:
1993	:	-5.3	:	3.9	:	:	:	4.8	:
1994	:	2.1	:	9.5	:	:	:	13.1	:
1995	:	-0.7	:	4.7	:	:	:	10.6	:
1996	:	2.0	:	3.3	1.4	:	:	9.4	:
1997	:	4.5	:	11.1	5.9	4.5	:	11.3	:
1998	:	1.6	:	19.9	2.0	8.2	:	4.7	:
1999	:	-3.2	:	10.3	-8.8	-11.2	:	4.7	-2.0
2000	4.5	5.4	14.6	18.2	3.8	5.3	:	7.5	8.4
1991–2000	:	-2.7	:	4.7	:	:	:	5.0	:
2001	-0.3	6.5	8.9	3.6	7.1	15.9	:	0.4	7.5
2002	0.1	9.5	6.0	2.7	5.9	7.5	:	1.4	6.7
2003	4.5	4.5	4.4	2.5	4.3	5.6	:	5.0	6.1
2004	8.0	8.0	5.7	3.2	5.6	4.7	:	6.0	6.1
2005	8.0	8.0	5.1	3.2	6.6	5.5	:	7.5	6.1
2001–05	4.0	7.3	6.0	3.1	5.9	7.8	:	4.0	6.5

NB: Industrial production is calculated as an index (production index) which shows the output and the activity of the industrial branches; it provides a measure of the volume trend in value added at factor cost over a given reference period. The term 'production' is used within the scope of European and national short-term indicators (short-term business statistics). Industrial production, construction excluded, covers NACE Sections C, D and E.

(Annual percentage change)

	SI	AC-10 ⁽¹⁾	EU-25 ⁽²⁾	BG	RO	TR	US	JP
1961–70	:	:	:	:	:	:	4.9	13.5
1971–80	:	:	:	:	:	:	2.9	4.1
1981	:	:	:	:	:	8.0	1.2	1.0
1982	:	:	:	:	:	8.1	- 5.2	0.3
1983	:	:	:	:	:	8.3	2.6	3.2
1984	:	:	:	:	:	11.1	8.9	9.3
1985	:	:	:	:	:	5.9	1.1	3.7
1986	:	:	:	:	:	11.8	0.9	- 0.2
1987	:	:	:	:	:	10.6	4.8	3.4
1988	:	:	:	:	:	1.6	4.8	9.4
1989	:	:	:	:	:	3.6	0.8	5.8
1990	:	:	:	:	:	9.5	0.8	4.2
1981–90	:	:	:	:	:	7.8	2.0	4.0
1991	:	:	:	:	:	2.6	- 1.6	1.9
1992	:	:	:	:	:	5.0	2.7	- 5.7
1993	:	:	:	:	0.8	8.0	3.2	- 3.5
1994	:	:	:	:	3.1	- 6.1	5.3	1.3
1995	:	:	:	:	9.4	12.7	4.8	3.3
1996	:	:	:	:	6.3	7.5	4.3	2.3
1997	:	:	:	:	- 7.3	11.5	7.3	3.5
1998	:	:	:	:	- 16.8	1.3	5.6	- 6.2
1999	:	:	:	:	- 4.4	- 3.7	4.3	0.3
2000	:	:	:	:	6.6	6.0	4.6	5.6
1991–2000	:	:	:	:	:	4.3	4.0	0.2
2001	:	:	:	2.2	8.2	- 8.7	- 3.5	- 6.4
2002	:	:	:	4.6	6.0	9.4	- 0.7	- 3.4
2003	:	:	:	:	:	6.4	:	:
2004	:	:	:	:	:	6.5	:	:
2005	:	:	:	:	:	6.5	:	:
2001–05	:	:	:	:	:	3.8	:	:

⁽¹⁾ CY, CZ, EE, HU, LV, LT, MT, PL, SK and SI.

⁽²⁾ BE, DK, DE, EL, ES, FR, IE, IT, LU, NL, AT, PT, FI, SE, UK, CY, CZ, EE, HU, LV, LT, MT, PL, SK and SI; 1961–91 including D_90.

Table 13

National final uses
Private final consumption expenditure at current prices

(Percentage of gross domestic product at market prices)

	BE	DK	DE (1)	EL	ES	FR	IE	IT	LU
1960–70	56.7	58.3	55.6	70.5	65.9	56.8	75.7	57.6	56.8
1971–80	54.1	53.5	55.6	62.2	63.4	55.3	68.3	57.8	55.7
1981	57.5	54.0	57.4	66.2	64.7	57.0	68.9	58.4	61.4
1982	58.3	53.0	57.3	65.7	64.4	57.2	62.6	58.6	60.9
1983	58.9	52.1	57.2	67.0	63.7	56.9	62.5	57.9	60.2
1984	57.7	51.9	57.0	64.6	62.3	56.7	61.6	58.2	58.7
1985	58.5	51.9	56.6	63.8	62.0	57.0	62.4	58.3	59.3
1986	57.6	52.3	55.4	64.4	61.3	56.3	62.8	58.3	55.9
1987	57.3	50.9	55.9	68.9	61.3	56.7	62.1	58.3	56.7
1988	56.0	50.2	55.1	69.0	60.5	55.6	62.5	57.8	55.1
1989	55.4	49.9	55.0	69.9	60.8	55.3	61.7	58.4	52.2
1990	55.4	49.1	54.4	71.2	60.2	55.3	59.1	57.5	52.0
1981–90	57.3	51.5	56.1	67.1	62.1	56.4	62.6	58.2	57.2
1991			53.8						
1991	56.0	49.3	56.8	71.0	60.1	55.5	59.5	58.1	52.0
1992	55.3	49.5	56.7	72.7	60.8	55.5	59.4	59.3	50.1
1993	54.8	50.0	57.5	73.1	60.7	55.8	57.8	58.5	48.2
1994	54.5	51.1	56.8	73.0	60.5	55.6	57.6	58.9	47.9
1995	54.2	50.5	56.9	73.1	59.8	55.5	54.2	58.7	47.9
1996	54.7	50.3	57.4	73.7	59.6	55.8	53.7	58.3	48.1
1997	54.1	50.2	57.7	72.1	59.3	55.0	51.2	58.9	45.6
1998	54.3	50.3	57.6	71.7	59.2	54.8	49.3	59.4	44.7
1999	53.7	49.6	58.4	70.6	59.2	54.8	48.2	60.3	42.2
2000	54.0	47.5	58.9	68.9	58.9	54.4	47.5	60.5	39.9
1991–2000	54.6	49.8	57.5	72.0	59.8	55.3	53.8	59.1	46.7
2001	54.6	47.3	59.4	68.1	58.4	54.7	46.7	60.0	41.7
2002	54.4	47.9	58.6	67.2	58.2	54.8	45.1	60.2	42.8
2003	55.0	47.9	58.9	66.0	58.2	55.6	46.1	61.1	43.2
2004	55.0	48.3	58.7	64.8	58.0	55.5	45.6	61.3	42.8
2005	55.2	48.5	58.7	64.5	57.8	55.3	45.2	61.4	42.0
2001–05	54.8	48.0	58.9	66.1	58.1	55.2	45.7	60.8	42.5

(1) 1960–91 D_90.

NB: Private final consumption expenditure (P.3) includes final consumption expenditure of private households and of non-profit institutions serving households (NPISH). Final consumption expenditure consists of expenditure incurred by resident institutional units on goods or services that are used for the direct satisfaction of individual needs or wants or the collective needs of members of the community. Final consumption expenditure of households also includes the following borderline cases:

- service of owner-occupied dwellings;
- items not treated as intermediate consumption, like materials for small repairs to and interior decoration of dwellings of a kind typically carried out by tenants as well as owners;
- items not treated as capital formation, in particular consumer durables, that continue to perform their function in several accounting periods.

Goods and services financed by the government and supplied to households as social transfers in kind are not included.

Reference: ESA 95, paragraphs 3.75 and 3.76.

(Percentage of gross domestic product at market prices)

	NL	AT	PT	FI	SE	UK	EU-15 ⁽¹⁾	EUR-12 ⁽²⁾
1960–70	53.7	57.4	67.4	58.6	54.1	63.2	58.5	57.5
1971–80	51.9	54.4	68.1	53.6	50.8	60.3	56.7	56.4
1981	51.6	55.3	68.1	52.4	50.5	59.6	57.9	57.9
1982	51.7	55.8	68.0	53.5	51.3	59.6	57.9	58.0
1983	51.7	57.3	67.8	53.3	49.8	59.9	57.7	57.7
1984	51.3	56.7	69.1	52.5	48.5	60.0	57.4	57.4
1985	51.3	56.6	66.4	52.8	49.2	59.9	57.4	57.4
1986	50.9	55.8	63.6	52.9	49.5	61.8	57.1	56.7
1987	51.6	55.8	62.9	52.7	50.6	61.7	57.3	57.0
1988	50.4	55.8	62.7	51.3	50.4	62.5	56.9	56.3
1989	49.8	55.7	61.9	50.7	49.1	62.5	56.9	56.3
1990	49.6	55.5	62.5	50.1	48.8	62.6	56.5	55.9
1981–90	51.0	56.0	65.3	52.2	49.8	61.0	57.3	57.1
1991							56.8	56.0
1991	49.9	54.9	63.4	53.5	51.3	63.2	57.5	56.9
1992	49.9	55.4	64.4	54.5	52.1	63.9	57.8	57.2
1993	49.8	56.0	66.1	54.1	51.5	64.8	58.0	57.3
1994	49.4	55.9	65.1	52.9	50.6	64.2	57.7	56.9
1995	49.0	56.2	63.3	51.2	48.8	63.9	57.3	56.7
1996	49.9	57.2	63.4	52.1	49.0	64.5	57.7	57.1
1997	49.4	57.6	62.5	50.6	49.3	64.5	57.8	56.9
1998	49.7	56.9	62.2	49.5	49.0	64.9	57.9	56.9
1999	50.1	56.9	62.4	50.3	48.9	65.6	58.3	57.3
2000	49.9	56.8	62.0	49.5	49.1	65.9	58.4	57.3
1991–2000	49.7	56.4	63.5	51.8	50.0	64.6	57.8	57.0
2001	49.7	57.2	60.9	50.3	48.6	66.4	58.5	57.3
2002	49.9	56.8	60.4	50.9	48.7	66.4	58.3	57.0
2003	49.4	56.9	60.4	52.1	48.9	65.8	58.4	57.5
2004	49.0	57.2	60.3	52.2	48.7	64.9	58.2	57.4
2005	48.7	57.2	59.7	52.2	48.4	64.0	58.0	57.3
2001–05	49.3	57.1	60.3	51.5	48.7	65.5	58.3	57.3

⁽¹⁾ 1960–91 including D_90.⁽²⁾ EU-15 excluding DK, SE and UK; 1960–91 including D_90.

Table 13 (Continued)

(Percentage of gross domestic product at market prices)

	CY	CZ	EE	HU	LV	LT	MT	PL	SK
1960–70	77.6	:	:	:	:	:	74.1	:	:
1971–80	74.2	:	:	45.7	:	:	72.0	:	:
1981	65.5	:	:	48.0	:	:	64.0	74.1	:
1982	66.2	:	:	47.6	:	:	66.2	62.7	:
1983	67.4	:	:	48.2	:	:	67.0	64.8	:
1984	63.7	:	:	48.1	:	:	68.9	63.3	:
1985	63.8	:	:	49.3	:	:	70.0	52.7	:
1986	61.2	:	:	50.1	:	:	67.1	52.4	:
1987	59.5	:	:	49.8	:	:	64.0	51.6	:
1988	60.7	:	:	47.3	:	:	63.9	49.3	:
1989	59.5	:	:	46.9	:	:	63.5	51.4	:
1990	60.0	49.3	:	48.1	77.9	:	62.7	48.5	:
1981–90	62.7	:	:	48.4	:	:	65.7	57.1	:
1991	65.6	47.4	:	54.8	46.2	:	61.3	60.1	:
1992	62.5	51.7	:	57.7	39.8	:	60.7	62.6	:
1993	58.9	50.5	58.2	59.7	53.1	73.1	59.7	64.0	53.8
1994	57.6	51.3	61.1	58.0	59.0	68.0	59.1	63.4	51.7
1995	64.5	50.8	58.6	53.9	63.1	65.5	61.1	61.2	50.5
1996	66.0	52.2	60.7	52.0	67.8	65.4	63.7	63.3	52.9
1997	67.0	53.6	59.3	50.5	66.7	61.8	62.4	63.7	53.0
1998	68.4	52.5	58.9	50.9	64.5	60.7	62.1	63.6	54.5
1999	67.0	53.6	58.2	52.5	62.9	64.6	62.8	64.4	56.5
2000	69.2	54.1	56.3	52.2	61.9	64.2	63.8	63.7	54.7
1991–2000	64.7	51.8	:	54.2	58.5	:	61.7	63.0	:
2001	69.1	53.1	55.9	53.0	62.1	64.3	63.9	64.8	55.5
2002	69.3	52.8	57.3	54.6	62.7	62.6	64.5	66.2	56.2
2003	65.7	53.0	57.9	58.6	63.0	61.7	62.3	66.1	55.0
2004	64.4	53.8	57.3	58.3	63.0	61.1	62.5	65.7	55.5
2005	63.2	54.2	55.8	57.6	62.5	60.2	62.4	65.2	55.4
2001–05	66.3	53.4	56.8	56.4	62.7	62.0	63.1	65.6	55.5

NB: Private final consumption expenditure (P.3) includes final consumption expenditure of private households and of non-profit institutions serving households (NPISH). Final consumption expenditure consists of expenditure incurred by resident institutional units on goods or services that are used for the direct satisfaction of individual needs or wants or the collective needs of members of the community. Final consumption expenditure of households also includes the following borderline cases:

- service of owner-occupied dwellings;
- items not treated as intermediate consumption, like materials for small repairs to and interior decoration of dwellings of a kind typically carried out by tenants as well as owners;
- items not treated as capital formation, in particular consumer durables, that continue to perform their function in several accounting periods.

Goods and services financed by the government and supplied to households as social transfers in kind are not included.

Reference: ESA 95, paragraphs 3.75 and 3.76.

(Percentage of gross domestic product at market prices)

	SI	AC-10 ⁽¹⁾	EU-25 ⁽²⁾	BG	RO	TR	US	JP
1960–70	:	:	:	:	:	79.9	62.9	53.1
1971–80	:	:	:	:	:	76.9	63.1	52.7
1981	:	:	:	:	60.9	74.4	62.6	54.3
1982	:	:	:	:	60.3	76.4	64.4	55.3
1983	:	:	:	:	56.3	77.3	65.3	55.8
1984	:	:	:	:	56.8	78.7	64.1	55.0
1985	:	:	:	:	56.3	74.0	65.0	54.4
1986	:	:	:	:	55.7	70.1	65.6	54.1
1987	:	:	:	:	57.9	71.1	66.1	54.2
1988	:	:	:	:	58.5	66.1	66.3	53.4
1989	:	:	:	:	58.8	68.8	66.1	53.2
1990	53.2	:	:	:	65.9	69.0	66.6	53.0
1981–90	:	:	:	:	58.7	72.6	65.2	54.3
1991	54.8	:	:	54.1	60.7	67.7	67.0	52.7
1992	55.1	:	:	65.6	62.7	66.2	67.2	53.5
1993	58.5	59.5	58.0	73.5	63.7	65.0	67.7	54.3
1994	56.7	58.9	57.7	74.0	63.5	65.9	67.4	55.4
1995	59.6	57.5	57.3	70.7	67.6	68.2	67.7	55.5
1996	58.7	58.9	57.7	74.5	69.5	70.2	67.6	55.4
1997	57.7	59.0	57.8	73.0	74.2	68.4	67.0	55.2
1998	57.3	59.0	57.9	67.5	75.7	66.7	67.2	55.8
1999	57.3	59.9	58.3	71.3	74.3	65.1	67.8	56.3
2000	56.6	59.7	58.4	69.2	70.1	68.9	68.5	55.7
1991–2000	57.2	:	:	69.3	68.2	67.2	67.5	55.0
2001	55.9	60.2	58.6	69.5	69.4	66.6	69.7	56.4
2002	54.6	60.6	58.4	69.4	67.1	66.3	70.3	57.2
2003	54.5	60.8	58.5	70.0	67.4	67.0	70.7	57.0
2004	54.2	60.5	58.3	69.3	66.9	67.2	70.6	56.9
2005	53.4	60.2	58.1	69.2	66.1	67.2	70.1	56.8
2001–05	54.5	60.5	58.4	69.5	67.4	66.8	70.3	56.9

⁽¹⁾ CY, CZ, EE, HU, LV, LT, MT, PL, SK and SI.⁽²⁾ BE, DK, DE, EL, ES, FR, IE, IT, LU, NL, AT, PT, FI, SE, UK, CY, CZ, EE, HU, LV, LT, MT, PL, SK and SI.

Table 14

National final uses
Private final consumption expenditure at current prices per head of population

(EUR⁽¹⁾); EU-15 = 100⁽²⁾)

	BE	DK	DE ⁽³⁾	EL	ES	FR	IE	IT	LU
1960	116.1	123.8	114.9	54.1	41.0	118.6	84.4	70.6	160.8
1965	105.1	130.9	115.7	55.6	53.5	120.8	80.0	77.0	149.4
1970	104.5	137.3	125.4	62.2	55.0	116.9	77.7	86.3	133.7
1975	117.3	138.4	131.7	56.3	66.6	123.2	65.3	76.4	145.8
1980	119.3	123.8	131.2	56.2	65.3	119.3	73.5	80.0	146.6
1981	113.7	121.3	124.9	59.1	64.0	118.9	77.7	81.3	142.8
1982	105.8	121.0	125.9	63.5	63.8	116.9	75.6	84.1	134.3
1983	104.8	124.0	130.3	60.5	56.9	114.5	75.2	89.5	135.2
1984	103.0	125.6	128.7	59.1	58.4	113.0	74.7	93.3	135.4
1985	104.8	129.5	125.6	55.3	58.9	114.1	77.6	93.3	136.8
1986	105.4	135.3	129.1	48.7	59.3	114.7	76.7	97.4	137.6
1987	104.9	131.9	130.8	48.8	60.6	112.6	72.7	98.4	139.0
1988	100.6	124.3	125.4	51.4	63.8	108.1	73.6	97.9	137.4
1989	99.1	118.2	121.4	53.1	69.6	105.9	74.9	101.5	135.8
1990	100.6	117.0	121.9	54.1	72.6	106.3	73.3	102.7	138.7
1991	99.9	113.5	121.3	55.3	74.9	102.3	71.3	105.0	142.4
1991	101.2	115.0	112.5	56.0	75.8	103.7	72.2	106.4	144.3
1992	101.8	115.5	116.5	57.5	76.5	104.2	73.5	105.1	141.0
1993	106.1	121.0	125.1	59.4	69.9	109.0	73.0	92.0	151.2
1994	108.8	128.2	125.3	60.1	66.8	108.8	75.8	90.5	156.3
1995	111.9	131.4	129.4	61.0	67.3	109.7	75.6	85.0	159.7
1996	107.3	129.1	123.3	63.2	68.4	107.5	80.0	92.5	155.1
1997	102.4	126.4	116.8	63.9	66.6	101.6	88.1	94.0	148.7
1998	101.5	124.6	114.7	61.5	67.2	101.0	87.9	94.0	150.8
1999	99.9	122.2	113.6	61.6	68.2	99.3	92.8	93.4	147.5
2000	99.0	116.0	110.3	58.9	68.2	96.7	97.4	92.7	146.8
2001	98.8	115.2	109.9	59.8	69.5	97.3	102.1	92.8	152.3
2002	97.8	116.9	107.0	61.9	71.4	97.2	106.4	93.2	153.4
2003	99.5	118.8	107.6	65.0	74.6	98.8	109.8	96.5	156.3
2004	99.3	120.0	107.2	67.1	76.4	98.6	111.6	97.5	155.7
2005	99.6	121.1	106.3	69.0	78.0	98.5	114.0	98.1	154.7

⁽¹⁾ 1960–98 ECU.⁽²⁾ 1960–91 including D_90.⁽³⁾ 1960–91 D_90.

(EUR ⁽¹⁾); EU-15 = 100 ⁽²⁾)

	NL	AT	PT	FI	SE	UK	EU-15 ⁽²⁾	EUR-12 ⁽³⁾
1960	88.1	83.8	36.7	106.5	169.8	138.0	100.0	88.9
1965	96.2	82.5	34.1	117.3	164.3	121.3	100.0	92.7
1970	107.4	81.0	40.7	99.4	164.8	100.8	100.0	97.1
1975	116.9	96.5	49.3	110.5	154.6	85.4	100.0	100.7
1980	114.8	99.7	34.5	99.4	132.4	96.6	100.0	99.3
1981	104.6	98.2	38.7	108.5	138.4	104.3	100.0	97.5
1982	105.5	103.3	38.1	115.3	129.3	103.4	100.0	98.0
1983	106.0	111.2	35.0	114.2	119.3	102.0	100.0	98.5
1984	102.3	108.8	34.4	121.7	126.8	100.7	100.0	98.6
1985	99.7	107.5	34.3	124.6	130.1	102.6	100.0	98.0
1986	101.1	110.7	34.7	119.1	126.7	94.6	100.0	99.6
1987	100.2	111.6	34.4	119.8	126.8	93.6	100.0	99.9
1988	94.0	108.1	36.6	125.5	128.5	104.0	100.0	97.8
1989	89.9	106.0	38.4	132.8	129.6	103.4	100.0	98.1
1990	89.8	107.5	41.2	126.6	124.7	99.1	100.0	99.1
1991	88.6	105.7	45.5	116.4	130.2	99.9	100.0	98.8
1991	89.7	107.1	46.1	117.9	131.9	101.3	100.0	98.6
1992	89.9	110.2	51.7	96.3	125.8	96.8	100.0	99.6
1993	95.4	118.8	51.6	83.4	105.9	97.0	100.0	100.1
1994	96.0	120.6	50.6	89.4	105.4	98.4	100.0	99.7
1995	99.5	125.6	51.6	98.2	103.8	93.5	100.0	100.6
1996	97.7	122.8	52.2	95.9	110.9	96.5	100.0	99.9
1997	93.9	116.9	51.8	95.0	108.5	114.1	100.0	96.5
1998	94.8	115.1	52.5	94.7	104.4	118.7	100.0	95.8
1999	95.7	113.0	53.4	94.2	105.0	121.9	100.0	95.2
2000	95.5	111.1	53.0	94.4	109.1	130.4	100.0	93.5
2001	97.5	111.1	53.4	96.2	98.3	130.0	100.0	93.9
2002	98.0	109.9	53.8	97.6	99.5	131.7	100.0	93.6
2003	97.3	111.2	54.1	101.1	102.3	122.0	100.0	95.3
2004	95.2	111.3	53.9	101.5	104.2	120.4	100.0	95.6
2005	93.8	111.2	53.6	102.2	104.0	119.9	100.0	95.6

⁽¹⁾ 1960–98 ECU.⁽²⁾ 1960–91 including D_90.⁽³⁾ EU-15 excluding DK, SE and UK; 1960–91 including D_90.

Table 14 (Continued)

(EUR ⁽¹⁾); EU-15 = 100 ⁽²⁾)

	CY	CZ	EE	HU	LV	LT	MT	PL	SK
1960	:	:	:	:	:	:	44.1	:	:
1965	56.2	:	:	:	:	:	35.3	:	:
1970	56.8	:	:	:	:	:	40.5	:	:
1975	35.5	:	:	:	:	:	33.9	:	:
1980	46.1	:	:	:	:	:	38.4	18.5	:
1981	48.4	:	:	:	:	:	42.1	21.5	:
1982	52.3	:	:	:	:	:	44.6	22.8	:
1983	54.6	:	:	:	:	:	43.8	27.9	:
1984	56.3	:	:	:	:	:	44.2	28.5	:
1985	57.6	:	:	34.8	:	:	43.8	36.5	:
1986	51.2	:	:	18.2	:	:	39.3	16.6	:
1987	47.7	:	:	11.7	:	:	36.6	8.3	:
1988	50.5	:	:	10.5	:	:	37.9	7.3	:
1989	51.8	:	:	12.2	:	:	38.6	10.3	:
1990	51.2	12.9	:	8.7	:	:	37.0	4.2	:
1991	54.7	10.9	:	10.1	:	:	37.1	6.9	:
1991	55.4	11.1	:	10.3	:	:	37.6	7.0	:
1992	56.6	12.2	:	10.0	1.8	:	37.1	6.7	:
1993	55.5	15.4	5.8	20.1	4.0	4.8	35.8	12.9	12.2
1994	57.0	17.5	8.2	19.9	7.3	6.8	36.8	14.0	12.8
1995	66.0	19.4	11.0	17.6	8.5	8.5	39.7	15.2	13.8
1996	65.4	21.6	13.8	16.8	10.4	10.6	41.2	17.4	15.1
1997	66.5	21.7	15.4	17.6	12.1	13.1	42.8	18.7	16.4
1998	69.6	22.0	16.8	17.7	12.4	14.2	43.0	19.8	17.0
1999	68.0	21.7	16.6	18.6	13.2	14.8	44.7	19.6	16.2
2000	72.4	22.3	17.4	19.6	15.4	16.8	47.9	22.2	16.8
2001	73.3	24.3	18.8	22.1	16.6	18.0	48.4	25.2	17.7
2002	74.2	27.2	20.7	26.8	17.1	18.9	47.7	24.5	18.8
2003	77.4	27.2	22.3	30.0	16.7	19.5	46.4	22.2	20.7
2004	78.6	28.0	23.7	31.9	17.3	20.4	45.8	21.8	21.8
2005	80.2	28.8	24.7	33.7	18.2	21.2	45.4	22.3	22.0

⁽¹⁾ 1960–98 ECU.⁽²⁾ 1960–91 including D_90.

(EUR ⁽¹⁾); EU-15 = 100 ⁽²⁾)

	SI	AC-10 ⁽³⁾	EU-25 ⁽⁴⁾	BG	RO	TR	US	JP
1960	:	:	:	:	:	62.5	284.0	40.7
1965	:	:	:	:	:	32.2	238.9	53.6
1970	:	:	:	:	:	29.3	236.9	73.0
1975	:	:	:	:	:	29.6	160.7	83.6
1980	:	:	:	:	:	22.6	133.3	87.5
1981	:	:	:	:	:	22.6	163.2	106.0
1982	:	:	:	:	:	21.4	180.7	104.2
1983	:	:	:	:	:	21.0	204.1	118.2
1984	:	:	:	:	:	21.2	231.4	129.5
1985	:	:	:	:	42.9	20.9	240.3	131.5
1986	:	:	:	:	20.3	16.1	187.5	141.4
1987	:	:	:	:	13.8	14.9	160.9	138.0
1988	:	:	:	:	12.4	12.9	156.3	148.4
1989	:	:	:	:	12.7	13.3	163.9	145.0
1990	:	:	:	:	6.1	16.9	140.4	120.5
1991	:	:	:	2.7	4.3	15.8	138.2	131.1
1991	:	:	:	2.8	4.4	16.0	140.0	132.8
1992	28.5	:	:	3.2	2.6	14.7	134.0	134.1
1993	33.7	14.4	85.6	8.5	6.7	17.8	154.8	172.2
1994	35.2	15.5	85.8	7.3	7.2	12.1	153.4	183.1
1995	44.8	16.7	86.1	8.3	8.0	14.2	140.9	177.1
1996	43.4	18.3	86.4	6.5	8.0	15.0	143.5	152.8
1997	43.9	19.5	86.6	7.2	9.1	16.4	159.3	148.8
1998	45.3	20.3	86.8	7.9	10.7	15.9	161.3	132.6
1999	46.0	20.3	86.8	8.5	8.9	14.1	169.3	150.4
2000	44.1	22.1	87.2	8.8	9.6	16.8	194.2	171.6
2001	44.8	24.5	87.6	9.8	10.2	11.5	200.2	151.9
2002	45.6	25.4	87.8	10.4	10.3	13.0	191.1	135.8
2003	47.2	24.9	87.7	11.3	10.7	14.6	164.9	121.1
2004	48.1	25.2	87.8	12.0	11.1	15.9	160.6	122.3
2005	48.6	26.0	88.0	12.7	11.2	16.0	160.8	122.3

⁽¹⁾ 1960–98 ECU.⁽²⁾ 1960–91 including D_90.⁽³⁾ CY, CZ, EE, HU, LV, LT, MT, PL, SK and SI.⁽⁴⁾ BE, DK, DE, EL, ES, FR, IE, IT, LU, NL, AT, PT, FI, SE, UK, CY, CZ, EE, HU, LV, LT, MT, PL, SK and SI; 1960–91 including D_90.

Table 15

National final uses
Private final consumption expenditure at current prices per head of population

(PPS; EU-15 = 100 ⁽¹⁾)

	BE	DK	DE ⁽²⁾	EL	ES	FR	IE	IT	LU
1960	98.4	126.4	115.8	57.1	66.7	98.6	84.1	83.8	133.4
1965	94.4	125.1	114.6	63.1	79.2	100.7	78.0	86.4	136.5
1970	92.4	121.0	111.4	71.7	80.9	104.0	77.8	96.4	108.8
1975	97.1	106.2	111.6	74.2	86.8	104.8	74.3	96.1	123.3
1980	103.2	104.8	116.5	78.7	80.9	105.6	78.5	102.0	124.4
1981	104.9	102.4	116.8	77.8	80.2	107.6	79.6	102.0	126.7
1982	106.3	102.4	114.9	75.3	79.7	109.2	72.5	102.1	125.9
1983	106.2	101.2	115.3	74.5	78.9	108.4	70.8	100.9	126.4
1984	104.9	102.6	116.6	71.7	76.9	107.4	71.1	102.3	128.5
1985	105.7	104.0	116.2	70.7	76.4	106.6	72.5	103.2	130.6
1986	103.7	106.4	113.7	70.0	76.0	105.0	71.5	103.6	131.9
1987	102.2	100.4	112.9	70.8	77.6	104.6	71.7	103.3	134.0
1988	101.1	97.2	111.5	71.6	77.9	103.3	73.3	103.4	135.9
1989	100.1	93.8	111.0	72.8	79.5	103.3	75.1	104.3	135.9
1990	101.1	91.5	112.0	72.4	80.2	103.9	76.2	102.8	138.6
1991	102.3	92.8	112.8	73.4	82.7	104.1	78.0	104.5	144.6
1991	103.8	94.3	104.9	74.5	84.0	105.7	79.2	106.1	146.8
1992	104.3	91.8	106.0	77.7	82.3	103.5	81.6	107.0	140.3
1993	106.6	96.8	106.7	80.2	82.6	101.8	82.6	102.3	143.0
1994	106.8	102.4	107.5	81.4	80.8	99.8	86.9	104.3	142.9
1995	105.6	102.9	108.3	81.9	80.9	99.7	87.4	105.1	142.5
1996	104.7	104.3	106.3	82.5	81.3	97.2	86.3	104.7	140.4
1997	103.9	103.8	107.2	79.8	81.7	93.7	91.5	103.5	137.1
1998	103.6	102.3	105.3	80.2	80.8	93.4	90.1	105.8	138.5
1999	97.9	100.9	106.3	79.7	83.3	93.4	92.5	106.6	137.4
2000	99.4	95.3	107.3	77.2	83.0	94.4	93.5	105.8	137.1
2001	100.9	92.5	104.8	75.1	83.8	96.6	94.0	105.4	138.9
2002	100.5	93.1	103.0	76.5	84.5	96.7	95.1	105.4	139.1
2003	101.0	93.0	102.7	77.7	85.2	96.7	94.3	106.6	138.1
2004	100.5	94.0	102.8	78.5	85.9	96.3	93.9	107.1	137.1
2005	100.7	94.5	102.5	79.5	86.7	96.3	94.7	107.4	136.1

⁽¹⁾ 1960–91 including D_90.⁽²⁾ 1960–91 D_90.

(PPS; EU-15 = 100 (1))

	NL	AT	PT	FI	SE	UK	EU-15 (1)	EUR-12 (2)
1960	102.2	93.7	47.1	84.9	118.2	132.9	100.0	91.6
1965	102.8	92.3	49.3	89.3	116.0	122.0	100.0	94.2
1970	104.4	91.0	57.4	86.2	110.5	110.5	100.0	97.0
1975	99.2	97.2	69.1	89.8	104.4	106.2	100.0	98.4
1980	98.6	100.0	63.6	88.8	96.5	99.1	100.0	100.2
1981	94.4	100.4	65.7	89.3	97.3	98.0	100.0	100.5
1982	92.1	102.5	66.1	92.7	99.1	99.1	100.0	100.2
1983	92.2	106.9	64.6	93.2	96.7	101.7	100.0	99.7
1984	92.5	104.4	63.3	92.7	96.6	102.4	100.0	99.5
1985	92.3	104.3	61.1	93.9	97.7	103.3	100.0	99.3
1986	92.1	102.7	59.6	93.8	98.6	108.1	100.0	98.2
1987	91.4	101.1	60.9	94.4	100.7	109.1	100.0	98.1
1988	88.8	101.2	63.5	93.0	99.3	112.3	100.0	97.5
1989	88.6	101.6	65.0	93.3	95.8	111.0	100.0	98.0
1990	89.7	103.4	67.3	90.0	93.9	109.8	100.0	98.3
1991	89.0	102.2	70.2	87.5	93.0	104.8	100.0	99.4
1991	90.4	103.8	71.3	88.9	94.4	106.4	100.0	99.0
1992	89.1	104.3	72.8	81.9	90.0	107.9	100.0	98.9
1993	90.0	108.1	77.0	84.9	91.0	109.9	100.0	98.4
1994	90.0	108.2	77.9	83.0	90.0	109.1	100.0	98.5
1995	92.7	108.5	76.4	86.1	89.6	106.7	100.0	98.9
1996	93.5	111.1	76.4	86.9	89.3	111.5	100.0	98.0
1997	95.8	111.5	79.0	86.7	89.9	113.9	100.0	97.5
1998	98.7	109.1	77.3	86.6	88.7	115.6	100.0	97.2
1999	98.2	109.4	77.0	86.6	87.8	113.0	100.0	97.8
2000	94.9	112.3	72.4	87.4	89.5	113.2	100.0	97.8
2001	97.2	109.8	71.8	88.8	84.8	115.1	100.0	97.6
2002	95.9	109.7	71.2	89.3	84.5	117.5	100.0	97.2
2003	93.0	109.4	69.3	90.3	84.4	117.2	100.0	97.2
2004	91.0	109.8	68.5	90.8	84.3	117.0	100.0	97.3
2005	90.2	109.9	67.7	91.2	84.0	116.7	100.0	97.3

(1) 1960–91 including D_90.

(2) EU-15 excluding DK, SE and UK; 1960–91 including D_90.

Table 15 (Continued)

(PPS; EU-15 = 100 ⁽¹⁾)

	CY	CZ	EE	HU	LV	LT	MT	PL	SK
1960	:	:	:	:	:	:	:	:	:
1965	:	:	:	:	:	:	:	:	:
1970	:	:	:	:	:	:	:	:	:
1975	:	:	:	:	:	:	:	:	:
1980	:	:	:	:	:	:	:	:	:
1981	:	:	:	:	:	:	:	:	:
1982	:	:	:	:	:	:	:	:	:
1983	:	:	:	:	:	:	:	:	:
1984	:	:	:	:	:	:	:	:	:
1985	:	:	:	:	:	:	:	:	:
1986	:	:	:	:	:	:	:	:	:
1987	:	:	:	:	:	:	:	:	:
1988	:	:	:	:	:	:	:	:	:
1989	:	:	:	:	:	:	:	:	:
1990	:	60.3	:	41.7	82.7	:	:	26.1	:
1991	:	47.3	:	43.5	43.0	:	49.0	29.2	:
1991	:	48.0	:	44.2	43.7	:	49.7	29.7	:
1992	:	50.5	:	44.7	24.5	:	50.2	31.4	:
1993	75.8	50.4	31.5	46.7	27.3	39.3	51.2	33.8	40.6
1994	75.7	52.7	32.4	46.3	27.0	32.6	52.1	34.8	40.4
1995	87.4	54.6	33.4	43.0	27.1	33.1	55.9	38.2	41.2
1996	87.8	58.1	35.9	41.1	29.5	33.1	59.0	40.0	44.2
1997	88.3	58.4	38.7	41.2	30.1	33.4	58.9	38.9	45.1
1998	91.7	56.7	40.2	42.5	30.7	33.9	58.4	41.6	47.6
1999	94.2	54.0	38.3	43.8	30.7	38.0	59.2	42.8	48.2
2000	89.4	52.0	38.7	44.5	32.7	38.9	61.4	44.1	44.1
2001	86.6	53.8	38.4	47.7	35.7	41.9	59.8	44.8	45.6
2002	86.9	55.0	40.9	50.9	38.0	43.5	58.7	45.9	47.1
2003	83.4	55.7	43.3	56.3	39.9	45.1	56.5	46.5	47.8
2004	82.7	57.2	45.6	57.4	41.4	46.5	57.0	47.1	48.8
2005	82.6	58.8	46.9	58.2	42.7	47.9	57.5	48.1	49.5

⁽¹⁾ 1960–91 including D_90.

(PPS; EU-15 = 100 ⁽¹⁾)

	SI	AC-10 ⁽²⁾	EU-25 ⁽³⁾	BG	RO	TR	US	JP
1960	:	:	:	:	:	44.3	175.1	53.2
1965	:	:	:	:	:	40.4	169.9	65.6
1970	:	:	:	:	:	39.2	163.0	80.1
1975	:	:	:	:	:	40.0	155.2	88.2
1980	:	:	:	:	:	40.0	156.3	95.0
1981	:	:	:	:	:	35.8	154.7	94.7
1982	:	:	:	:	:	36.8	153.1	98.1
1983	:	:	:	:	:	37.7	158.4	99.4
1984	:	:	:	:	:	39.3	162.6	99.4
1985	:	:	:	:	:	36.7	165.9	99.9
1986	:	:	:	:	:	35.7	168.0	99.3
1987	:	:	:	:	:	37.6	168.0	100.3
1988	:	:	:	:	:	33.9	168.8	101.7
1989	:	:	:	:	:	33.5	167.6	103.1
1990	62.5	:	:	:	43.7	35.3	167.1	105.9
1991	56.0	:	:	30.1	34.5	32.8	162.8	106.9
1991	56.9	:	:	30.6	35.0	33.3	165.3	108.6
1992	53.7	:	:	32.0	31.7	32.9	165.8	109.2
1993	60.1	39.5	89.8	33.7	33.6	35.7	167.8	113.3
1994	61.1	40.0	89.9	34.0	33.7	32.9	169.0	114.5
1995	70.3	42.0	90.3	33.4	37.9	35.2	169.3	114.3
1996	70.3	43.5	90.6	32.1	39.5	36.1	166.6	116.6
1997	71.2	43.2	90.5	27.3	39.4	37.0	167.5	115.3
1998	72.0	44.9	90.8	26.4	38.8	34.4	168.5	111.6
1999	70.5	45.5	91.0	34.4	30.2	29.3	165.2	103.1
2000	68.2	45.7	91.0	30.3	28.1	29.8	166.6	101.8
2001	69.0	47.1	91.3	29.3	28.6	25.5	165.5	101.2
2002	69.4	48.6	91.6	30.6	29.1	26.0	167.8	101.7
2003	68.8	49.8	91.8	32.8	31.4	26.4	169.3	102.5
2004	69.5	50.8	92.0	34.4	32.6	26.6	171.2	102.6
2005	70.0	51.8	92.2	36.3	33.4	26.8	171.1	102.2

⁽¹⁾ 1960–91 including D_90.⁽²⁾ CY, CZ, EE, HU, LV, LT, MT, PL, SK and SI.⁽³⁾ BE, DK, DE, EL, ES, FR, IE, IT, LU, NL, AT, PT, FI, SE, UK, CY, CZ, EE, HU, LV, LT, MT, PL, SK and SI; 1960–91 including D_90.

Table 16

National final uses
Private final consumption expenditure at 1995 prices

(National currency; annual percentage change)

	BE	DK	DE (1)	EL	ES	FR	IE	IT	LU
1961-70	3.7	4.3	5.1	7.1	7.3	5.4	3.4	6.4	4.4
1971-80	4.0	1.3	3.4	5.3	3.8	3.4	4.1	4.0	4.1
1981	0.3	-1.8	-0.5	-0.6	-1.0	1.5	1.7	1.9	1.7
1982	2.6	1.9	-1.1	3.1	0.0	2.8	-6.9	1.1	0.4
1983	-0.2	1.0	1.4	1.9	0.4	0.5	0.8	0.3	0.5
1984	0.4	2.1	2.0	0.5	-0.2	0.5	2.0	3.0	1.4
1985	2.7	4.0	1.9	0.6	2.3	1.6	4.6	3.1	2.7
1986	2.8	5.9	3.9	-1.4	3.4	3.6	2.9	4.0	3.3
1987	1.7	-2.2	3.7	2.8	6.0	3.0	3.3	3.8	4.6
1988	3.5	-2.1	2.6	5.9	4.9	2.7	4.4	4.0	6.0
1989	3.4	-0.1	3.2	6.0	5.4	3.0	5.9	3.7	4.8
1990	3.3	0.1	5.2	2.6	3.5	2.7	0.6	2.1	3.8
1981-90	2.0	0.9	2.2	2.1	2.4	2.2	1.9	2.7	2.9
1991	3.0	1.6	3.6	2.8	2.9	0.7	1.8	2.9	7.0
1992	1.9	1.9	2.7	2.3	2.2	0.9	2.9	1.9	-2.3
1993	-0.5	0.5	0.1	-0.7	-1.9	-0.4	2.9	-3.7	2.1
1994	2.4	6.5	1.1	2.0	1.1	1.2	4.4	1.5	4.0
1995	1.6	1.2	2.1	2.9	1.7	1.2	3.6	1.7	1.8
1996	1.0	2.5	1.0	2.4	2.2	1.3	6.5	1.2	4.4
1997	2.2	2.9	0.6	2.7	3.2	0.2	7.1	3.2	3.9
1998	3.1	2.3	1.8	3.5	4.4	3.4	7.2	3.2	6.6
1999	2.1	0.7	3.7	2.5	4.7	3.2	9.5	2.6	2.6
2000	3.2	-1.9	2.0	2.0	4.0	2.6	8.3	2.7	4.6
1991-2000	2.0	1.8	1.9	2.2	2.4	1.4	5.4	1.7	3.4
2001	0.7	0.4	1.4	2.9	2.8	2.7	5.3	1.0	4.5
2002	0.8	1.9	-1.0	2.8	2.6	1.2	2.0	0.4	2.3
2003	1.6	1.0	0.7	2.7	3.1	1.3	2.0	2.0	1.9
2004	1.6	2.9	1.1	3.0	3.2	1.5	2.8	1.9	1.8
2005	2.2	2.6	1.4	3.0	3.4	2.0	3.8	2.0	2.0
2001-05	1.4	1.7	0.7	2.9	3.0	1.7	3.2	1.5	2.5

(1) 1961-91 D_90.

(National currency; annual percentage change)

	NL	AT	PT	FI	SE	UK	EU-15 ⁽¹⁾	EUR-12 ⁽²⁾
1961–70	6.2	4.1	5.4	5.2	3.8	2.5	4.8	5.6
1971–80	3.3	4.0	3.9	3.1	1.6	2.3	3.3	3.6
1981	-4.2	1.3	2.9	1.3	-0.6	0.1	0.2	0.3
1982	-1.2	2.6	2.4	4.6	0.8	0.9	0.9	0.8
1983	1.0	4.9	-1.4	3.2	-2.2	4.1	1.4	0.9
1984	1.1	-1.1	-2.9	3.1	1.7	2.2	1.5	1.4
1985	2.9	1.8	0.7	3.6	3.2	3.8	2.5	2.2
1986	2.9	1.9	5.6	3.4	5.2	6.3	4.1	3.5
1987	2.7	2.6	5.3	4.9	5.3	5.5	3.8	3.6
1988	0.8	3.1	6.9	5.4	2.6	7.6	3.8	3.3
1989	3.0	4.3	2.9	5.3	1.2	3.4	3.4	3.6
1990	3.8	4.5	6.4	-1.1	-0.4	1.0	2.8	3.4
1981–90	1.3	2.6	2.8	3.3	1.7	3.5	2.4	2.3
1991	2.7	2.5	4.2	-3.8	1.0	-1.5	1.7	2.4
1992	0.5	3.0	4.7	-4.0	-1.3	0.5	1.6	1.9
1993	0.3	0.8	1.1	-3.8	-3.0	2.9	-0.4	-1.0
1994	1.4	2.4	1.0	2.5	1.9	3.1	1.7	1.4
1995	2.9	2.6	0.6	4.1	1.1	1.7	1.8	1.9
1996	4.0	3.2	3.0	3.7	1.6	3.6	1.9	1.6
1997	3.0	1.7	3.3	3.4	2.7	3.6	2.0	1.6
1998	4.8	2.7	5.0	4.3	3.0	3.9	3.2	3.1
1999	4.7	2.4	5.1	3.5	3.8	4.4	3.6	3.5
2000	3.5	3.3	2.6	3.1	4.9	4.6	3.0	2.7
1991–2000	2.8	2.5	3.1	1.2	1.5	2.7	2.0	1.9
2001	1.4	1.4	1.2	2.0	0.2	3.1	2.0	1.8
2002	0.8	0.8	0.6	1.5	1.3	3.6	1.2	0.5
2003	-1.1	1.1	-0.9	3.2	1.8	2.3	1.5	1.3
2004	-0.1	1.8	0.8	2.5	2.3	2.2	1.8	1.6
2005	1.4	2.2	0.9	2.6	2.3	2.3	2.1	2.0
2001–05	0.5	1.5	0.5	2.3	1.6	2.7	1.7	1.5

⁽¹⁾ Weighted in common currency; 1961–91 including D_90.⁽²⁾ Weighted in common currency; EU-15 excluding DK, SE and UK; 1961–91 including D_90.

Table 16 (Continued)

(National currency; annual percentage change)

	CY	CZ	EE	HU	LV	LT	MT	PL	SK
1961–70	:	:	:	:	:	:	:	:	:
1971–80	:	:	:	:	:	:	:	:	:
1981	:	:	:	:	:	:	:	:	:
1982	:	:	:	:	:	:	:	:	:
1983	:	:	:	:	:	:	:	:	:
1984	:	:	:	:	:	:	:	:	:
1985	:	:	:	:	:	:	:	:	:
1986	:	:	:	:	:	:	:	:	:
1987	:	:	:	:	:	:	:	:	:
1988	:	:	:	:	:	:	:	:	:
1989	:	:	:	:	:	:	:	:	:
1990	:	:	:	:	:	:	:	:	:
1981–90	:	:	:	:	:	:	:	:	:
1991	:	:	:	-5.5	-26.0	:	:	6.6	:
1992	:	:	:	1.4	-43.4	:	:	2.4	:
1993	:	:	:	3.5	-7.4	:	:	5.4	:
1994	:	:	0.6	0.2	3.2	:	:	3.9	1.5
1995	20.0	5.9	3.4	-6.5	-1.7	:	:	3.7	4.0
1996	3.6	7.9	9.2	-3.5	10.3	6.5	7.1	8.6	8.8
1997	4.0	2.4	7.8	1.9	4.1	5.3	1.6	6.9	5.7
1998	8.5	-1.6	4.3	4.9	3.9	4.7	2.5	4.8	6.3
1999	0.8	1.7	-2.7	5.6	3.8	3.3	6.1	5.4	3.3
2000	10.1	2.5	6.7	5.5	6.1	6.6	7.4	2.7	-1.8
1991–2000	:	:	:	0.6	-6.4	:	:	5.0	:
2001	4.8	3.6	5.2	5.7	8.9	3.9	2.0	2.1	3.9
2002	2.5	4.0	9.4	10.2	6.7	5.0	2.5	3.3	5.3
2003	2.8	4.8	6.5	9.8	6.0	5.1	1.6	3.0	1.6
2004	3.3	3.3	5.0	4.0	5.0	4.7	1.0	3.3	2.6
2005	3.6	4.2	3.5	4.6	5.0	4.6	1.2	3.7	3.2
2001–05	3.4	4.0	5.9	6.8	6.3	4.7	1.7	3.1	3.3

(National currency; annual percentage change)

	SI	AC-10 ⁽¹⁾	EU-25 ⁽²⁾	BG	RO	TR	US	JP
1961–70	:	:	:	:	:	4.9	4.4	9.0
1971–80	:	:	:	:	:	5.1	3.3	4.7
1981	:	:	:	:	:	-8.8	1.3	0.8
1982	:	:	:	:	:	7.4	1.2	4.2
1983	:	:	:	:	:	6.5	5.5	2.9
1984	:	:	:	:	:	8.3	5.4	2.5
1985	:	:	:	:	:	-1.0	5.0	3.7
1986	:	:	:	:	:	5.7	4.2	3.2
1987	:	:	:	:	:	-0.6	3.3	4.1
1988	:	:	:	:	:	1.3	4.0	5.0
1989	:	:	:	:	:	-0.9	2.7	4.7
1990	:	:	:	:	:	13.1	1.8	4.5
1981–90	:	:	:	:	:	2.9	3.4	3.6
1991	-11.1	:	:	:	-16.3	2.0	-0.2	2.9
1992	-3.6	:	:	1.0	-7.5	4.4	2.9	2.6
1993	14.1	:	:	-0.8	0.9	8.4	3.4	1.4
1994	4.1	:	:	-2.6	2.4	-6.4	3.8	2.7
1995	9.3	:	:	-0.5	12.9	6.1	3.0	1.8
1996	2.6	6.1	2.0	-3.9	8.1	7.8	3.2	2.4
1997	2.5	4.9	2.1	-10.7	-3.5	8.6	3.6	0.9
1998	3.0	3.9	3.2	2.7	1.0	0.4	4.8	-0.1
1999	5.9	4.4	3.7	9.6	-2.1	-3.6	4.9	0.2
2000	0.3	3.1	3.0	4.3	-0.6	6.7	4.3	1.0
1991–2000	2.5	:	:	:	-0.8	3.3	3.4	1.6
2001	2.4	3.2	2.1	5.2	6.2	-9.6	2.5	1.7
2002	1.1	4.4	1.3	4.2	3.0	3.1	3.1	1.4
2003	2.3	4.3	1.7	6.5	5.0	3.5	3.0	1.2
2004	3.0	3.5	1.8	5.0	4.5	3.8	3.5	1.3
2005	3.0	3.9	2.2	5.5	4.2	4.0	2.5	1.2
2001–05	2.4	3.9	1.8	5.3	4.6	0.8	2.9	1.4

⁽¹⁾ Weighted in common currency; CY, CZ, EE, HU, LV, LT, MT, PL, SK and SI.⁽²⁾ Weighted in common currency; BE, DK, DE, EL, ES, FR, IE, IT, LU, NL, AT, PT, FI, SE, UK, CY, CZ, EE, HU, LV, LT, MT, PL, SK and SI.

Table 17

National final uses**Final consumption expenditure of general government at current prices***(Percentage of gross domestic product at market prices)*

	BE	DK	DE (1)	EL	ES	FR	IE	IT	LU
1960–70	16.9	17.4	14.6	11.0	9.2	16.7	13.9	15.7	13.1
1971–80	20.8	24.3	18.6	12.3	11.5	19.3	18.1	16.7	16.6
1981	24.2	28.4	20.5	14.8	14.9	22.4	21.0	18.2	20.6
1982	23.9	28.7	20.2	14.4	15.1	23.1	20.9	18.3	19.5
1983	23.5	27.9	19.9	15.0	15.5	23.3	20.4	18.7	18.7
1984	23.5	26.6	19.7	15.4	15.3	23.7	19.7	18.4	18.2
1985	22.9	25.9	19.6	16.1	15.6	23.7	19.5	18.6	18.7
1986	22.8	24.6	19.4	15.2	15.4	23.4	19.8	18.3	18.2
1987	22.6	25.8	19.5	15.4	15.9	23.1	18.6	19.1	19.3
1988	21.2	26.3	19.3	14.1	15.7	22.7	17.1	19.5	18.3
1989	20.6	25.9	18.5	15.0	16.2	22.3	15.9	19.3	17.9
1990	20.3	25.6	18.1	15.1	16.7	22.3	16.4	20.2	18.3
1981–90	22.6	26.6	19.5	15.0	15.6	23.0	18.9	18.9	18.8
1991			17.6						
1991	21.0	25.7	19.2	14.2	17.4	22.5	17.4	20.3	17.7
1992	21.1	25.8	19.8	13.7	18.3	23.1	17.8	20.1	18.4
1993	21.4	26.8	19.9	14.3	18.8	24.5	17.6	19.9	18.3
1994	21.2	25.9	19.7	13.8	18.2	24.1	17.4	19.1	17.8
1995	21.4	25.8	19.8	15.3	18.1	23.9	16.4	17.9	18.5
1996	21.7	25.9	19.9	14.5	17.9	24.2	15.8	18.1	18.9
1997	21.2	25.5	19.5	15.1	17.5	24.2	15.1	18.2	17.9
1998	21.1	26.0	19.2	15.3	17.5	23.4	14.4	17.9	16.8
1999	21.2	25.8	19.1	15.4	17.4	23.3	14.0	18.0	16.8
2000	21.2	25.3	19.0	15.7	17.6	23.2	13.9	18.3	15.7
1991–2000	21.2	25.8	19.5	14.7	17.9	23.6	16.0	18.8	17.7
2001	21.7	25.9	19.0	15.3	17.5	23.2	14.8	18.8	16.9
2002	22.3	26.3	19.2	15.5	17.8	23.9	15.1	18.8	18.0
2003	22.6	26.5	19.2	15.6	17.9	24.3	15.9	19.0	19.0
2004	22.9	26.4	18.7	15.9	18.0	24.2	16.1	18.8	19.4
2005	22.8	26.2	18.5	15.7	18.1	24.1	16.0	18.6	19.5
2001–05	22.5	26.2	18.9	15.6	17.9	23.9	15.6	18.8	18.6

(1) 1960–91 D_90.

NB: Final consumption expenditure of general government (P.3) includes two categories of expenditure:

1. The value of goods and services produced by general government itself other than own-account capital formation and sales (collective consumption).
2. Purchases by general government of goods and services produced by market producers that are supplied to households — without any transformation — as social transfers in kind. This implies that general government just pays for goods and services that the sellers provide to households (individual consumption). Individual consumption expenditure of general government includes, for example, expenditure for health, for social security and welfare and for culture, except for expenditures on general administration, regulation, research, etc. in each of these categories. Collective consumption expenditure among other things consists of expenses for management and regulation of society, for the provision of security and defence as well as for the protection of the environment.

Reference: ESA 95, paragraphs 3.79 and 3.85.

(Percentage of gross domestic product at market prices)

	NL	AT	PT	FI	SE	UK	EU-15 ⁽¹⁾	EUR-12 ⁽²⁾
1960–70	18.6	14.2	11.6	14.2	19.0	17.5	15.9	15.2
1971–80	23.3	17.2	12.9	17.3	26.1	20.3	18.9	18.1
1981	25.5	18.9	13.9	19.0	30.2	22.2	21.2	20.3
1982	25.8	19.3	13.8	19.2	30.1	22.1	21.2	20.4
1983	25.5	19.4	14.0	19.7	29.3	21.9	21.2	20.5
1984	24.3	19.4	13.9	19.7	28.3	21.7	21.0	20.3
1985	24.3	19.6	14.4	20.6	28.0	20.9	20.9	20.4
1986	24.2	19.9	14.2	21.0	27.6	20.9	20.6	20.2
1987	25.2	19.9	14.1	21.3	26.8	20.4	20.7	20.4
1988	24.6	19.6	14.6	20.4	26.2	19.7	20.4	20.1
1989	23.8	19.3	15.4	20.2	26.4	19.4	20.0	19.7
1990	23.5	18.9	16.2	21.6	27.5	19.8	20.1	19.7
1981–90	24.7	19.4	14.5	20.3	28.0	20.9	20.7	20.2
1991							20.3	19.8
1991	23.7	19.2	18.0	24.9	27.5	20.7	20.7	20.3
1992	24.3	19.6	18.0	25.4	28.3	21.1	21.0	20.6
1993	24.7	20.4	18.6	24.2	29.4	20.5	21.3	21.1
1994	24.2	20.5	18.7	23.4	28.4	20.0	21.0	20.7
1995	24.0	20.4	18.6	22.8	27.3	19.6	20.7	20.5
1996	23.1	20.3	18.9	23.2	27.9	19.2	20.7	20.5
1997	22.9	19.7	19.0	22.3	27.3	18.3	20.3	20.3
1998	22.7	19.5	18.9	21.6	27.5	17.9	19.9	19.9
1999	22.9	19.8	19.7	21.6	27.5	18.4	20.0	19.9
2000	22.7	19.2	20.5	20.6	26.8	18.7	20.0	19.9
1991–2000	23.5	19.9	18.9	23.0	27.8	19.4	20.6	20.4
2001	23.4	18.9	20.8	21.0	27.2	19.2	20.2	20.0
2002	24.5	18.6	21.2	21.7	28.0	20.0	20.6	20.3
2003	25.1	18.6	21.3	22.2	28.3	21.0	21.0	20.6
2004	25.0	18.6	21.0	22.5	28.4	21.2	20.9	20.4
2005	24.7	18.4	20.5	22.5	28.3	21.4	20.8	20.2
2001–05	24.5	18.6	21.0	22.0	28.1	20.6	20.7	20.3

⁽¹⁾ 1960–91 including D_90.⁽²⁾ EU-15 excluding DK, SE and UK; 1960–91 including D_90.

Table 17 (Continued)

(Percentage of gross domestic product at market prices)

	CY	CZ	EE	HU	LV	LT	MT	PL	SK
1960–70	9.7	:	:	:	:	:	17.3	:	:
1971–80	13.2	:	:	24.7	:	:	18.1	:	:
1981	14.6	:	:	24.6	:	:	17.3	9.5	:
1982	14.8	:	:	24.1	:	:	18.4	8.2	:
1983	15.1	:	:	24.6	:	:	18.0	8.8	:
1984	14.1	:	:	23.6	:	:	17.4	9.3	:
1985	14.1	:	:	24.5	:	:	17.7	18.1	:
1986	14.4	:	:	25.8	:	:	17.5	17.8	:
1987	16.6	:	:	25.0	:	:	17.9	17.3	:
1988	16.7	:	:	28.4	:	:	17.3	16.0	:
1989	16.0	:	:	25.0	:	:	17.8	6.0	:
1990	17.3	22.9	:	25.7	8.6	19.2	17.6	18.7	21.9
1981–90	15.4	:	:	25.1	:	:	17.7	13.0	:
1991	18.4	22.6	:	25.7	10.3	10.8	18.2	21.9	20.6
1992	19.0	21.5	:	26.5	11.9	13.1	18.8	20.7	25.6
1993	16.8	21.9	20.9	28.6	20.1	15.5	20.1	19.5	24.3
1994	16.6	21.6	23.8	26.2	20.1	19.6	20.4	16.8	20.7
1995	16.0	19.9	26.1	23.6	22.4	22.6	20.5	16.8	20.5
1996	18.0	20.0	24.8	22.0	21.8	22.8	21.6	16.4	22.4
1997	18.8	19.8	23.0	21.9	18.7	23.3	20.5	16.0	21.5
1998	19.2	18.6	22.6	21.7	21.4	24.7	19.7	15.4	21.7
1999	17.1	19.6	23.4	21.5	20.5	22.6	18.7	15.5	19.8
2000	16.5	19.6	21.0	20.8	19.7	22.0	18.6	17.9	19.8
1991–2000	17.6	20.5	:	23.9	18.7	19.7	19.7	17.7	21.7
2001	17.7	20.0	20.0	21.4	19.3	20.2	20.1	17.9	20.1
2002	17.7	21.4	19.7	25.3	19.4	20.4	20.3	18.0	19.9
2003	19.7	22.2	19.8	25.5	19.4	21.0	19.6	18.0	19.0
2004	18.8	22.2	19.2	26.5	19.1	21.4	19.2	17.8	18.1
2005	19.0	22.1	19.2	26.9	18.7	21.5	18.7	17.5	18.1
2001–05	18.6	21.6	19.6	25.1	19.2	20.9	19.6	17.9	19.1

NB: Final consumption expenditure of general government (P.3) includes two categories of expenditure:

1. The value of goods and services produced by general government itself other than own-account capital formation and sales (collective consumption).
2. Purchases by general government of goods and services produced by market producers that are supplied to households — without any transformation — as social transfers in kind. This implies that general government just pays for goods and services that the sellers provide to households (individual consumption). Individual consumption expenditure of general government includes, for example, expenditure for health, for social security and welfare and for culture, except for expenditures on general administration, regulation, research, etc. in each of these categories. Collective consumption expenditure among other things consists of expenses for management and regulation of society, for the provision of security and defence as well as for the protection of the environment.

Reference: ESA 95, paragraphs 3.79 and 3.85.

(Percentage of gross domestic product at market prices)

	SI	AC-10 ⁽¹⁾	EU-25 ⁽²⁾	BG	RO	TR	US	JP
1960–70	:	:	:	:	:	8.6	17.8	10.6
1971–80	:	:	:	:	:	11.2	17.3	12.5
1981	:	:	:	:	5.1	10.9	16.9	13.5
1982	:	:	:	:	4.1	9.5	17.8	13.8
1983	:	:	:	:	4.0	10.5	17.7	14.0
1984	:	:	:	:	3.7	8.9	17.3	13.9
1985	:	:	:	:	3.9	8.9	17.6	13.7
1986	:	:	:	:	3.6	9.0	17.8	13.9
1987	:	:	:	:	3.3	7.8	17.8	13.9
1988	:	:	:	:	3.6	7.6	17.2	13.6
1989	:	:	:	:	11.6	9.3	16.8	13.4
1990	17.4	:	:	18.2	13.3	11.0	17.0	13.3
1981–90	:	:	:	:	5.6	9.3	17.4	13.7
1991	19.0	:	:	19.0	15.2	12.4	17.2	13.3
1992	20.3	:	:	20.3	14.3	12.9	16.8	13.7
1993	21.1	22.0	21.4	18.9	12.3	13.0	16.2	14.2
1994	20.2	20.0	20.9	17.2	13.8	11.6	15.7	14.5
1995	20.0	19.2	20.7	15.3	13.7	10.8	15.3	15.0
1996	19.9	18.9	20.6	11.8	13.1	11.6	15.0	15.1
1997	19.7	18.6	20.2	12.6	12.3	12.3	14.6	15.1
1998	19.6	18.2	19.9	14.5	14.5	12.7	14.3	15.6
1999	19.5	18.1	19.9	15.2	14.5	15.2	14.4	16.3
2000	20.0	19.0	19.9	16.8	16.1	14.1	14.6	16.8
1991–2000	19.9	:	:	16.2	14.0	12.6	15.4	15.0
2001	20.6	19.2	20.2	17.4	15.7	14.2	15.1	17.4
2002	20.5	20.1	20.6	18.0	15.6	14.0	15.6	17.9
2003	20.7	20.5	21.0	17.8	16.3	14.1	15.9	17.7
2004	21.2	20.5	20.9	17.4	16.3	13.6	15.6	17.7
2005	21.6	20.5	20.7	17.5	16.8	13.3	15.5	18.0
2001–05	20.9	20.2	20.7	17.6	16.1	13.8	15.6	17.7

⁽¹⁾ CY, CZ, EE, HU, LV, LT, MT, PL, SK and SI.⁽²⁾ BE, DK, DE, EL, ES, FR, IE, IT, LU, NL, AT, PT, FI, SE, UK, CY, CZ, EE, HU, LV, LT, MT, PL, SK and SI.

Table 18

National final uses
Final consumption expenditure of general government at 1995 prices

(National currency; annual percentage change)

	BE	DK	DE (1)	EL	ES	FR	IE	IT	LU
1961-70	5.5	6.0	4.4	6.3	4.3	4.1	4.5	4.0	3.4
1971-80	4.1	3.9	3.8	6.2	5.5	3.4	6.3	3.5	3.0
1981	3.1	2.0	2.4	6.8	4.1	3.4	0.3	3.4	1.4
1982	-0.7	2.7	-0.6	-2.0	4.8	4.7	3.3	2.9	1.5
1983	0.6	0.1	0.2	3.6	3.2	2.2	-0.4	3.6	1.9
1984	0.2	-0.2	2.1	2.7	1.9	2.8	-0.7	1.8	2.2
1985	2.9	2.1	1.8	3.8	4.3	2.2	1.8	3.0	2.0
1986	1.3	0.9	2.4	-1.1	4.6	2.4	2.6	2.6	6.4
1987	2.7	2.1	1.8	0.2	9.2	2.2	-4.8	4.8	9.6
1988	-0.7	-0.2	2.4	-5.5	3.6	3.2	-5.0	4.0	4.3
1989	1.2	-0.8	-1.1	5.4	8.3	1.6	-1.3	0.2	8.2
1990	-0.4	-0.2	3.1	0.6	6.3	2.5	5.4	2.5	6.7
1981-90	1.0	0.8	1.4	1.4	5.0	2.7	0.1	2.9	4.4
1991	3.6	0.6	1.9	-1.5	6.0	2.7	2.7	1.7	4.0
1992	1.5	0.8	5.0	-3.0	3.5	3.8	3.0	0.6	3.2
1993	-0.2	4.1	0.1	2.6	2.7	4.6	0.1	-0.2	5.2
1994	1.4	3.0	2.4	-1.1	0.5	0.7	4.1	-0.9	1.0
1995	1.3	2.1	1.5	5.6	2.4	-0.1	3.9	-2.2	4.8
1996	2.5	3.4	1.8	0.9	1.3	2.3	3.5	1.0	5.6
1997	0.2	0.8	0.3	3.0	2.9	2.1	5.8	0.2	3.0
1998	1.0	3.1	1.9	1.7	3.7	-0.1	6.0	0.2	1.3
1999	3.6	2.0	0.8	2.1	4.2	1.5	8.0	1.3	7.3
2000	2.7	1.1	1.0	2.2	5.1	2.8	8.4	1.6	4.8
1991-2000	1.8	2.1	1.7	1.2	3.2	2.0	4.5	0.3	4.0
2001	2.7	2.1	1.0	-1.0	3.6	2.9	11.5	3.6	7.0
2002	2.0	2.1	1.7	5.1	4.4	4.1	10.7	1.7	4.2
2003	1.7	0.8	1.1	3.7	4.0	2.4	3.8	1.5	3.6
2004	2.0	0.7	0.5	4.3	4.3	1.5	2.0	1.0	3.6
2005	1.8	0.6	0.5	2.0	4.0	1.9	2.0	1.2	3.8
2001-05	2.0	1.2	1.0	2.8	4.0	2.6	5.9	1.8	4.4

(1) 1961-91 D_90.

(National currency; annual percentage change)

	NL	AT	PT	FI	SE	UK	EU-15 ⁽¹⁾	EUR-12 ⁽²⁾
1961–70	3.1	3.1	9.5	5.1	5.7	2.2	4.0	4.3
1971–80	3.5	3.4	8.4	5.0	3.2	2.4	3.6	3.8
1981	3.2	1.8	5.5	4.7	2.4	0.2	2.6	3.1
1982	2.5	3.3	3.7	2.6	0.7	0.6	1.9	2.2
1983	2.1	1.9	3.8	2.1	0.6	1.9	1.7	1.8
1984	0.2	0.7	0.2	3.0	2.1	1.3	1.8	1.9
1985	5.0	1.3	6.4	4.4	1.7	-0.3	2.1	2.7
1986	4.2	1.8	7.2	3.1	1.8	1.5	2.4	2.6
1987	4.8	0.1	3.8	4.3	1.2	0.0	2.5	3.1
1988	1.8	1.1	8.6	2.0	1.1	0.2	2.2	2.7
1989	1.9	1.7	6.4	2.3	3.0	1.0	1.1	1.1
1990	2.2	2.3	4.2	4.2	2.5	2.2	2.7	2.9
1981–90	2.8	1.6	5.0	3.3	1.7	0.9	2.1	2.4
1991	2.9	3.2	9.6	1.9	3.4	3.0	2.7	2.6
1992	2.9	3.5	-0.9	-2.5	0.2	0.7	2.5	3.0
1993	1.6	3.7	-0.2	-4.2	6.6	-0.7	1.4	1.5
1994	1.5	3.0	4.3	0.8	-0.8	1.0	1.1	1.2
1995	1.5	1.3	1.0	2.0	-0.4	1.4	0.7	0.6
1996	-0.4	1.2	3.4	2.6	0.7	0.7	1.6	1.7
1997	3.2	-1.5	2.2	2.9	-0.9	-0.3	1.0	1.2
1998	3.6	2.8	4.1	2.0	3.4	1.3	1.5	1.4
1999	2.5	3.0	5.6	1.4	1.7	3.2	2.0	1.8
2000	2.0	-0.1	4.0	0.0	-1.1	1.9	1.9	2.1
1991–2000	2.1	2.0	3.3	0.7	1.2	1.2	1.6	1.7
2001	4.2	-1.4	3.4	2.2	0.9	1.7	2.3	2.5
2002	3.8	0.1	2.9	4.0	2.1	2.4	2.7	2.9
2003	0.7	-0.1	-0.9	1.8	0.8	3.6	2.0	1.7
2004	-0.1	0.3	-0.2	1.6	0.6	2.1	1.4	1.3
2005	0.4	0.3	0.1	1.5	0.7	2.0	1.5	1.4
2001–05	1.8	-0.2	1.1	2.2	1.0	2.4	2.0	2.0

⁽¹⁾ Weighted in common currency; 1961–91 including D_90.⁽²⁾ Weighted in common currency; EU-15 excluding DK, SE and UK; 1961–91 including D_90.

Table 18 (Continued)

(National currency; annual percentage change)

	CY	CZ	EE	HU	LV	LT	MT	PL	SK
1961-70	:	:	:	:	:	:	:	:	:
1971-80	:	:	:	:	:	:	:	:	:
1981	:	:	:	:	:	:	:	:	:
1982	:	:	:	:	:	:	:	:	:
1983	:	:	:	:	:	:	:	:	:
1984	:	:	:	:	:	:	:	:	:
1985	:	:	:	:	:	:	:	:	:
1986	:	:	:	:	:	:	:	:	:
1987	:	:	:	:	:	:	:	:	:
1988	:	:	:	:	:	:	:	:	:
1989	:	:	:	:	:	:	:	:	:
1990	:	:	:	:	:	:	:	:	:
1981-90	:	:	:	:	:	:	:	:	:
1991	:	- 12.3	:	- 2.7	- 3.3	:	:	9.6	:
1992	:	- 6.7	:	- 1.1	8.0	:	:	5.9	:
1993	:	3.6	:	9.8	- 0.1	:	:	2.4	5.9
1994	:	0.2	5.5	- 7.4	- 1.2	:	:	1.2	- 10.1
1995	1.3	- 4.3	16.3	- 6.7	1.3	:	:	4.8	2.1
1996	12.6	3.6	- 1.0	- 2.3	1.8	2.5	8.4	2.0	17.4
1997	4.0	- 4.4	1.8	3.1	0.3	6.3	- 1.1	3.1	- 4.5
1998	7.3	- 4.4	4.5	1.8	6.1	6.0	- 4.0	1.4	11.5
1999	- 7.7	2.3	3.8	1.5	0.0	- 8.1	- 0.6	1.0	- 7.7
2000	0.2	- 1.0	1.5	1.9	- 1.9	3.9	5.4	1.1	1.3
1991-2000	:	- 2.5	:	- 0.3	1.0	:	:	3.2	:
2001	11.5	5.3	0.9	4.3	0.3	0.3	3.0	0.6	5.1
2002	3.1	5.7	5.0	2.3	1.5	4.3	2.5	0.9	4.0
2003	3.3	3.0	5.7	3.3	1.9	4.4	5.1	1.8	- 1.1
2004	- 7.0	- 0.8	3.9	1.2	2.2	7.2	0.1	2.0	1.3
2005	2.0	0.5	5.8	1.5	2.0	6.0	0.2	2.0	1.4
2001-05	2.4	2.7	4.3	2.5	1.6	4.4	2.2	1.5	2.1

(National currency; annual percentage change)

	SI	AC-10 ⁽¹⁾	EU-25 ⁽²⁾	BG	RO	TR	US	JP
1961–70	:	:	:	:	:	6.5	3.5	4.8
1971–80	:	:	:	:	:	4.3	1.0	4.8
1981	:	:	:	:	:	48.8	2.1	5.3
1982	:	:	:	:	:	-10.6	2.5	4.8
1983	:	:	:	:	:	16.6	3.5	4.7
1984	:	:	:	:	:	1.9	2.9	3.5
1985	:	:	:	:	:	14.1	5.5	1.2
1986	:	:	:	:	:	9.2	4.9	4.6
1987	:	:	:	:	:	9.4	3.7	3.5
1988	:	:	:	:	:	-1.1	1.3	3.7
1989	:	:	:	:	:	0.8	1.4	2.7
1990	:	:	:	:	:	8.0	2.6	2.6
1981–90	:	:	:	:	:	8.8	3.0	3.6
1991	-0.3	:	:	:	10.6	3.7	0.6	3.4
1992	-1.7	:	:	-14.9	2.2	3.6	0.2	2.6
1993	5.3	:	:	-12.5	2.7	8.6	-1.1	3.2
1994	2.1	:	:	-11.8	11.0	-5.5	-0.1	2.7
1995	2.5	:	:	-8.2	1.0	6.8	-0.2	4.2
1996	3.4	3.0	1.6	-28.9	1.5	8.6	0.7	2.9
1997	2.4	1.0	1.0	-1.3	-8.5	4.1	1.3	1.0
1998	5.4	1.9	1.5	4.0	1.8	7.8	1.5	2.1
1999	2.9	0.1	1.9	2.0	-4.5	6.5	3.1	4.4
2000	2.3	1.1	1.9	22.7	11.9	7.1	2.8	4.7
1991–2000	2.4	:	:	:	2.8	5.1	0.9	3.1
2001	4.0	2.7	2.3	1.3	5.2	-8.5	4.0	2.6
2002	2.5	2.4	2.7	3.9	2.5	5.4	5.0	2.3
2003	2.4	2.4	2.0	3.0	3.8	1.0	3.7	1.1
2004	2.8	1.3	1.4	3.5	2.5	2.5	1.7	1.3
2005	2.7	1.8	1.5	4.0	2.0	3.0	2.6	1.3
2001–05	2.9	2.1	2.0	3.1	3.2	0.6	3.4	1.7

⁽¹⁾ Weighted in common currency; CY, CZ, EE, HU, LV, LT, MT, PL, SK and SI.⁽²⁾ Weighted in common currency; BE, DK, DE, EL, ES, FR, IE, IT, LU, NL, AT, PT, FI, SE, UK, CY, CZ, EE, HU, LV, LT, MT, PL, SK and SI.

Table 19

National final uses
Gross fixed capital formation at current prices; total economy

(Percentage of gross domestic product at market prices)

	BE	DK	DE (1)	EL	ES	FR	IE	IT	LU
1960–70	23.9	24.2	25.5	22.8	24.5	24.1	19.7	25.4	23.3
1971–80	23.9	23.5	23.0	28.2	25.2	24.5	25.3	25.3	23.8
1981	20.2	16.8	22.2	26.1	22.7	23.1	28.7	25.2	23.2
1982	19.0	17.5	21.0	23.6	22.5	22.5	25.6	23.8	22.8
1983	17.5	17.9	21.1	25.3	21.9	21.2	22.4	22.6	19.4
1984	17.2	18.9	20.7	20.5	20.1	20.4	20.7	22.3	18.3
1985	17.6	20.7	20.3	22.0	20.6	20.3	18.4	21.8	16.1
1986	17.5	22.5	20.1	22.8	21.2	20.4	17.8	20.9	20.5
1987	17.9	22.0	20.1	21.6	22.4	21.0	16.6	20.9	23.6
1988	19.7	20.5	20.4	21.5	24.2	21.9	15.9	21.3	23.7
1989	21.4	20.5	21.1	22.6	25.6	22.5	17.1	21.3	23.2
1990	22.5	19.9	21.8	23.1	25.9	22.6	18.7	21.5	23.5
1981–90	19.1	19.7	20.9	22.9	22.7	21.6	20.2	22.2	21.4
1991			22.1						
1991	21.0	19.1	23.8	22.6	25.1	22.0	17.1	21.0	25.3
1992	20.7	17.9	24.0	21.3	23.1	20.9	16.9	20.5	21.4
1993	20.0	17.1	23.0	20.3	21.3	19.4	15.5	18.4	23.7
1994	19.5	17.3	23.1	18.6	21.1	19.1	16.5	18.0	22.4
1995	19.9	18.6	22.4	18.6	22.0	18.8	17.5	18.3	21.6
1996	19.9	18.6	21.8	19.5	21.6	18.5	19.1	18.3	21.4
1997	20.4	19.6	21.4	19.8	21.9	18.0	20.8	18.3	22.3
1998	20.6	20.6	21.4	21.1	22.9	18.4	22.4	18.5	22.6
1999	20.9	19.8	21.6	22.7	24.1	19.2	23.9	19.0	23.8
2000	21.2	20.6	21.7	23.6	25.3	20.2	24.2	19.8	20.9
1991–2000	20.4	18.9	22.4	20.8	22.8	19.4	19.4	19.0	22.5
2001	20.9	20.1	20.3	23.9	25.4	20.1	23.5	19.8	22.9
2002	19.8	19.6	18.6	23.9	25.2	19.5	22.1	19.7	22.5
2003	19.4	18.8	18.0	24.5	25.5	19.2	22.2	18.9	21.9
2004	19.5	18.7	18.0	24.8	25.8	19.1	21.9	18.8	21.3
2005	19.8	19.0	18.0	24.5	26.1	19.2	21.5	18.9	21.2
2001–05	19.9	19.2	18.6	24.3	25.6	19.4	22.3	19.2	22.0

(1) 1960–91 D_90.

NB: Gross fixed capital formation (P.51) consists of resident producers' acquisitions, less disposals, of fixed assets during a given period plus certain additions to the value of non-produced assets realised by the productive activity of producer or institutional units. Fixed assets are tangible or intangible assets produced as outputs from the process of production that are themselves used repeatedly, or continuously, in the process of production for more than one year. Additions to the value of non-produced assets pertaining, in particular, to land, for example the draining of marshes or the irrigation of deserts by the construction of dykes, ditches and irrigation channels. Examples of intangible fixed assets are mineral exploration and computer software.

Reference: ESA 95, paragraphs 3.102–3.111.

(Percentage of gross domestic product at market prices)

	NL	AT	PT	FI	SE	UK	EU-15 ⁽¹⁾	EUR-12 ⁽²⁾
1960–70	27.1	25.6	24.6	27.0	24.6	18.7	23.8	25.0
1971–80	23.4	26.5	27.8	28.7	21.7	19.9	23.6	24.4
1981	20.7	25.3	32.4	26.7	19.6	17.1	22.0	23.3
1982	19.8	22.8	32.6	26.9	19.5	17.1	21.2	22.3
1983	19.9	22.1	30.6	27.1	19.7	17.0	20.7	21.6
1984	20.3	21.6	24.7	25.5	19.9	18.1	20.4	20.9
1985	21.0	22.3	22.9	25.7	20.6	18.1	20.3	20.8
1986	21.6	22.0	23.2	25.2	19.9	18.0	20.3	20.6
1987	21.9	22.5	25.7	25.9	20.7	18.8	20.7	21.0
1988	22.5	23.3	27.4	27.1	21.6	20.5	21.5	21.7
1989	22.8	23.4	26.6	29.8	23.6	21.7	22.3	22.4
1990	22.5	23.7	26.2	28.7	23.0	20.5	22.3	22.6
1981–90	21.3	22.9	27.2	26.9	20.8	18.7	21.2	21.7
1991							21.5	22.2
1991	21.9	24.2	24.9	24.4	20.6	17.9	21.9	22.7
1992	21.6	23.7	23.7	20.1	18.0	16.5	21.2	22.2
1993	20.7	23.2	22.2	16.7	15.6	15.7	19.9	20.8
1994	20.3	23.5	22.3	15.8	15.5	15.9	19.8	20.7
1995	20.3	23.3	22.8	16.8	16.0	16.3	19.8	20.6
1996	21.1	23.3	23.3	17.4	16.1	16.5	19.6	20.3
1997	21.5	23.5	25.6	18.6	15.7	16.5	19.4	20.2
1998	21.5	23.6	26.9	19.3	16.4	17.5	19.9	20.5
1999	22.5	23.5	27.3	19.6	17.2	17.1	20.2	21.0
2000	22.1	24.0	28.1	19.8	17.7	16.9	20.6	21.6
1991–2000	21.3	23.6	24.7	18.9	16.9	16.7	20.2	21.0
2001	21.7	23.2	27.2	20.6	17.8	16.8	20.2	21.1
2002	20.7	22.1	25.0	18.9	17.1	16.3	19.4	20.2
2003	20.1	22.2	22.7	18.1	16.5	16.4	19.1	19.8
2004	20.0	22.2	22.7	17.8	16.3	16.8	19.2	19.8
2005	20.1	22.4	23.3	17.9	16.5	17.1	19.3	19.9
2001–05	20.5	22.4	24.2	18.7	16.8	16.7	19.4	20.2

⁽¹⁾ 1960–91 including D_90.⁽²⁾ EU-15 excluding DK, SE and UK; 1960–91 including D_90.

Table 19 (Continued)

(Percentage of gross domestic product at market prices)

	CY	CZ	EE	HU	LV	LT	MT	PL	SK
1960–70	19.9	:	:	:	:	:	24.1	:	:
1971–80	27.3	:	:	32.7	:	:	23.3	:	:
1981	31.5	:	:	26.5	:	:	24.2	18.7	:
1982	29.7	:	:	25.2	:	:	26.0	20.1	:
1983	27.8	:	:	24.5	:	:	28.8	20.1	:
1984	30.8	:	:	23.0	:	:	27.4	20.8	:
1985	27.2	:	:	22.5	:	:	26.4	21.2	:
1986	24.0	:	:	24.1	:	:	23.9	21.9	:
1987	23.5	:	:	24.7	:	:	27.9	22.6	:
1988	24.6	:	:	21.6	:	:	27.4	22.5	:
1989	27.5	:	:	21.6	:	:	28.1	16.4	:
1990	24.6	25.3	:	19.3	23.0	27.6	31.7	21.0	31.3
1981–90	27.1	:	:	23.3	:	:	27.2	20.5	:
1991	24.3	24.1	:	20.9	6.2	22.4	29.6	19.5	28.3
1992	25.7	27.9	:	19.9	11.2	23.0	27.5	16.8	32.9
1993	22.6	28.4	24.2	18.9	13.8	23.1	29.4	15.9	30.0
1994	20.5	28.7	26.8	20.1	14.9	23.1	29.7	17.9	26.6
1995	19.1	32.0	25.9	20.0	15.2	22.0	31.9	18.6	25.0
1996	20.3	31.9	26.7	21.4	18.3	21.9	28.7	20.7	32.2
1997	18.9	30.6	28.0	22.2	18.8	23.5	25.3	23.5	34.2
1998	19.2	29.1	29.6	23.6	27.3	24.6	24.5	25.1	36.1
1999	18.1	27.8	24.9	23.9	25.2	22.6	23.3	25.5	29.6
2000	17.5	28.3	25.4	24.1	26.5	19.2	26.2	23.9	25.9
1991–2000	20.6	28.9	:	21.5	17.7	22.5	27.6	20.7	30.1
2001	17.3	27.7	26.5	23.6	27.0	20.6	23.2	20.9	28.8
2002	18.7	26.3	28.5	22.3	26.4	21.5	20.7	19.1	29.8
2003	16.1	25.4	30.1	21.5	27.0	21.8	21.5	19.0	28.3
2004	16.4	25.7	29.5	22.3	28.2	22.4	21.7	19.9	29.2
2005	16.5	25.3	28.5	23.5	29.3	22.9	22.1	21.2	29.3
2001–05	17.0	26.1	28.6	22.7	27.6	21.8	21.9	20.0	29.1

NB: Gross fixed capital formation (P.51) consists of resident producers' acquisitions, less disposals, of fixed assets during a given period plus certain additions to the value of non-produced assets realised by the productive activity of producer or institutional units. Fixed assets are tangible or intangible assets produced as outputs from the process of production that are themselves used repeatedly, or continuously, in the process of production for more than one year. Additions to the value of non-produced assets pertaining, in particular, to land, for example the draining of marshes or the irrigation of deserts by the construction of dykes, ditches and irrigation channels. Examples of intangible fixed assets are mineral exploration and computer software.

Reference: ESA 95, paragraphs 3.102–3.111.

(Percentage of gross domestic product at market prices)

	SI	AC-10 ⁽¹⁾	EU-25 ⁽²⁾	BG	RO	TR	US	JP
1960–70	:	:	:	:	:	15.9	18.1	32.2
1971–80	:	:	:	:	:	19.0	19.3	33.0
1981	:	:	:	:	33.6	19.3	19.9	30.9
1982	:	:	:	:	29.7	19.3	18.8	29.8
1983	:	:	:	:	30.0	18.9	18.6	28.3
1984	:	:	:	:	30.0	18.9	19.5	28.0
1985	:	:	:	:	30.1	21.8	19.5	27.8
1986	:	:	:	:	29.7	25.0	19.3	27.7
1987	:	:	:	:	29.0	24.7	18.6	28.7
1988	:	:	:	:	28.0	26.1	18.3	30.1
1989	:	:	:	:	29.9	22.8	18.0	31.1
1990	18.8	:	:	21.3	19.8	22.9	17.3	32.2
1981–90	:	:	:	:	29.0	22.0	18.8	29.5
1991	20.6	:	:	18.2	14.4	23.8	16.1	31.7
1992	18.6	:	:	16.2	19.2	23.6	16.2	30.4
1993	18.8	20.3	19.9	13.0	17.9	26.5	16.7	29.2
1994	20.1	21.3	19.8	13.8	20.3	24.6	17.2	28.2
1995	20.4	22.1	19.9	15.3	21.4	23.8	17.7	27.7
1996	21.4	23.8	19.7	13.5	23.0	25.1	18.2	28.3
1997	22.7	25.0	19.6	11.0	21.2	26.4	18.7	27.9
1998	23.6	26.1	20.1	13.0	18.2	24.6	19.4	26.8
1999	26.4	25.6	20.4	15.1	17.7	21.9	19.9	26.2
2000	25.7	24.6	20.8	15.7	18.9	22.4	20.1	26.2
1991–2000	21.8	:	:	14.5	19.2	24.3	18.0	28.3
2001	24.0	23.1	20.3	18.2	20.5	18.2	19.2	25.6
2002	22.6	22.0	19.5	18.1	21.1	16.7	18.1	24.1
2003	23.2	21.8	19.2	18.8	22.2	17.7	18.0	23.8
2004	23.4	22.5	19.3	19.3	23.3	18.7	18.4	23.3
2005	23.8	23.2	19.5	20.3	24.7	19.8	18.8	22.7
2001–05	23.4	22.5	19.6	18.9	22.4	18.2	18.5	23.9

⁽¹⁾ CY, CZ, EE, HU, LV, LT, MT, PL, SK and SI.⁽²⁾ BE, DK, DE, EL, ES, FR, IE, IT, LU, NL, AT, PT, FI, SE, UK, CY, CZ, EE, HU, LV, LT, MT, PL, SK and SI.

Table 20

National final uses
Gross fixed capital formation at 1995 prices; total economy

(National currency; annual percentage change)

	BE	DK	DE (1)	EL	ES	FR	IE	IT	LU
1961-70	5.8	7.0	4.2	8.4	11.3	7.8	9.6	5.1	3.4
1971-80	2.3	-0.7	1.2	2.8	1.6	2.7	5.7	1.8	2.6
1981	-15.5	-19.6	-4.9	-9.8	-1.7	-0.6	7.3	-1.2	-7.4
1982	-4.0	7.0	-5.0	-2.3	1.0	0.0	-3.4	-3.5	-0.5
1983	-5.3	1.8	2.9	5.2	-1.2	-2.2	-9.0	-1.1	-11.8
1984	2.3	10.9	-0.1	-15.9	-4.8	-0.8	-2.7	3.4	0.1
1985	4.5	14.3	-0.2	9.5	6.7	3.1	-7.8	0.4	-9.5
1986	3.1	16.4	2.9	-0.5	10.5	6.0	0.0	2.3	37.1
1987	4.9	-0.8	1.8	-6.0	12.2	6.0	-2.3	4.2	17.7
1988	16.0	-3.2	4.6	6.7	13.6	9.5	-1.6	6.7	11.5
1989	11.8	-0.6	6.7	7.1	12.0	7.3	15.6	4.2	6.9
1990	8.6	-2.2	7.7	5.0	6.5	3.3	12.1	4.0	3.4
1981-90	2.3	1.9	1.6	-0.4	5.3	3.1	0.5	1.9	3.9
1991	-4.1	-3.4	5.2	4.8	1.7	-1.5	-7.0	1.0	15.8
1992	1.1	-2.1	4.5	-3.2	-4.1	-1.6	0.0	-1.4	-15.1
1993	-2.5	-3.8	-4.4	-3.5	-8.9	-6.4	-5.1	-10.9	20.6
1994	0.4	7.7	4.0	-2.7	1.9	1.5	11.8	0.1	0.0
1995	3.4	11.6	-0.6	4.2	7.7	2.0	15.3	6.0	-1.5
1996	0.9	3.9	-0.8	8.4	2.1	0.0	16.8	3.6	3.8
1997	7.1	10.9	0.6	6.8	5.0	-0.1	18.9	2.1	12.7
1998	3.3	10.0	3.0	10.6	10.0	7.0	14.9	4.0	11.8
1999	4.4	1.4	4.1	11.0	8.8	8.3	14.0	5.0	14.6
2000	4.4	8.6	2.7	8.0	5.7	7.8	7.1	7.1	-3.5
1991-2000	1.8	4.3	1.8	4.3	2.8	1.6	8.3	1.5	5.4
2001	0.3	2.1	-4.2	6.5	3.3	1.9	0.2	2.6	10.1
2002	-2.5	0.3	-6.7	5.7	1.0	-1.6	1.5	0.5	-1.4
2003	-0.3	-2.0	-1.7	8.7	2.8	-1.3	-1.1	-2.1	-1.7
2004	2.0	2.9	2.8	7.1	3.9	1.4	2.5	2.0	1.0
2005	3.6	4.6	2.1	3.5	4.5	3.3	3.0	2.9	3.2
2001-05	0.6	1.5	-1.6	6.3	3.1	0.8	1.2	1.2	2.2

(1) 1961-91 D_90.

(National currency; annual percentage change)

	NL	AT	PT	FI	SE	UK	EU-15 ⁽¹⁾	EUR-12 ⁽²⁾
1961–70	6.8	5.9	6.9	4.4	5.1	5.2	5.9	6.1
1971–80	0.3	3.7	4.1	2.2	0.6	0.5	1.6	1.9
1981	-9.1	-0.4	5.5	1.6	-5.8	-8.9	-4.3	-3.2
1982	-3.6	-8.0	2.3	5.2	0.6	5.9	-1.2	-2.5
1983	2.8	0.7	-7.1	3.0	2.6	5.1	0.7	-0.1
1984	5.3	-0.4	-17.4	-2.0	7.5	9.2	1.4	-0.3
1985	6.7	6.2	-3.5	2.7	7.0	4.1	2.8	2.1
1986	6.5	1.3	10.9	0.8	1.1	1.9	4.1	4.3
1987	1.1	3.8	18.0	4.5	8.0	9.3	5.0	4.4
1988	5.3	7.4	14.8	11.7	6.4	14.9	8.4	7.8
1989	5.2	4.1	3.7	12.5	12.1	6.0	6.9	7.1
1990	2.6	6.2	7.6	-4.6	0.2	-2.6	3.6	5.1
1981–90	2.2	2.0	3.0	3.4	3.8	4.3	2.7	2.4
1991	0.3	6.6	3.3	-18.5	-8.6	-8.2	-0.6	1.1
1992	0.7	0.6	4.5	-16.4	-11.6	-0.9	-0.4	0.1
1993	-3.2	-0.9	-5.5	-15.2	-10.3	0.3	-5.7	-6.3
1994	2.1	4.6	2.7	-3.6	6.6	4.7	2.7	2.3
1995	4.1	1.3	6.6	11.2	9.9	3.1	2.9	2.5
1996	6.3	2.2	5.7	6.7	4.5	5.7	1.9	1.3
1997	6.6	2.0	13.9	13.8	-0.3	6.8	3.1	2.5
1998	4.2	3.9	11.5	8.4	7.8	12.7	6.5	5.3
1999	7.8	2.1	6.4	2.5	8.2	1.6	5.3	6.0
2000	1.4	6.2	4.4	4.1	6.6	3.6	4.9	5.0
1991–2000	3.0	2.8	5.2	-1.4	1.0	2.8	2.0	1.9
2001	-0.1	-2.3	0.1	4.3	0.8	3.6	0.6	0.0
2002	-4.5	-2.8	-5.1	-4.0	-2.5	1.8	-1.9	-2.6
2003	-3.2	1.9	-9.2	-2.7	-1.1	3.1	-0.4	-1.0
2004	0.5	2.5	1.0	0.5	2.2	4.8	2.7	2.4
2005	2.3	3.8	5.2	2.3	4.9	4.8	3.4	3.0
2001–05	-1.0	0.6	-1.7	0.0	0.8	3.6	0.9	0.4

⁽¹⁾ Weighted in common currency; 1961–91 including D_90.⁽²⁾ Weighted in common currency; EU-15 excluding DK, SE and UK; 1961–91 including D_90.

Table 20 (Continued)

(National currency; annual percentage change)

	CY	CZ	EE	HU	LV	LT	MT	PL	SK
1961–70	:	:	:	:	:	:	:	:	:
1971–80	:	:	:	:	:	:	:	:	:
1981	:	:	:	:	:	:	:	:	:
1982	:	:	:	:	:	:	:	:	:
1983	:	:	:	:	:	:	:	:	:
1984	:	:	:	:	:	:	:	:	:
1985	:	:	:	:	:	:	:	:	:
1986	:	:	:	:	:	:	:	:	:
1987	:	:	:	:	:	:	:	:	:
1988	:	:	:	:	:	:	:	:	:
1989	:	:	:	:	:	:	:	:	:
1990	:	:	:	:	:	:	:	:	:
1981–90	:	:	:	:	:	:	:	:	:
1991	:	-27.3	:	-10.4	-63.9	:	:	-4.5	:
1992	:	16.5	:	-2.6	-28.7	:	:	2.4	:
1993	:	0.2	:	2.0	-15.8	:	:	2.9	-3.1
1994	:	9.1	6.3	12.5	0.8	:	:	9.2	-2.5
1995	-1.7	19.8	4.1	-4.3	8.7	:	:	16.6	1.8
1996	7.4	8.2	11.4	6.7	22.3	15.2	-8.4	19.7	30.9
1997	-4.5	-2.9	17.6	9.2	20.7	24.5	-4.5	21.7	14.3
1998	8.0	0.7	11.3	13.3	44.0	21.8	-3.4	14.2	11.0
1999	-1.4	-1.0	-14.8	5.9	-4.0	-6.1	4.0	6.5	-18.5
2000	4.1	5.3	13.3	7.7	20.0	-9.0	17.4	3.0	1.2
1991–2000	:	2.0	:	3.7	-5.3	:	:	8.9	:
2001	2.5	5.5	12.2	3.5	17.0	13.5	-11.2	-9.8	9.6
2002	10.1	0.6	16.1	5.8	10.4	12.4	-4.0	-5.8	-0.6
2003	-4.5	-0.5	12.0	3.0	9.5	8.1	5.3	2.3	1.9
2004	7.4	2.7	5.0	6.8	9.5	8.5	2.4	9.0	5.0
2005	7.7	3.2	4.0	7.3	9.5	8.7	3.8	11.5	5.4
2001–05	4.5	2.3	9.8	5.3	11.1	10.2	-0.9	1.1	4.2

(National currency; annual percentage change)

	SI	AC-10 ⁽¹⁾	EU-25 ⁽²⁾	BG	RO	TR	US	JP
1961–70	:	:	:	:	:	8.1	4.7	15.7
1971–80	:	:	:	:	:	2.1	3.6	3.5
1981	:	:	:	:	:	31.6	0.5	2.3
1982	:	:	:	:	:	-5.7	-7.4	-0.1
1983	:	:	:	:	:	2.6	6.6	-0.8
1984	:	:	:	:	:	0.9	15.8	4.2
1985	:	:	:	:	:	11.5	5.4	5.1
1986	:	:	:	:	:	8.4	1.4	5.0
1987	:	:	:	:	:	45.1	-0.1	9.0
1988	:	:	:	:	:	-1.0	3.6	12.1
1989	:	:	:	:	:	2.2	3.1	8.6
1990	:	:	:	:	:	15.9	-0.4	8.1
1981–90	:	:	:	:	:	10.2	2.7	5.3
1991	-11.5	:	:	:	-31.6	0.4	-5.4	2.3
1992	-12.9	:	:	-7.3	11.0	6.4	5.8	-2.4
1993	10.7	:	:	-17.5	8.3	26.4	6.8	-2.8
1994	14.1	:	:	1.1	20.7	-16.0	8.0	-1.5
1995	16.8	:	:	16.1	6.9	9.1	5.9	0.7
1996	11.2	14.2	2.4	-21.2	5.7	14.1	8.6	6.4
1997	13.8	12.0	3.5	-23.9	1.7	14.8	9.5	0.9
1998	10.2	11.0	6.7	32.9	-5.7	-3.9	10.5	-3.9
1999	22.6	2.5	5.2	25.3	-4.8	-15.7	7.9	-0.9
2000	2.6	4.2	4.9	8.2	5.5	16.9	5.6	2.7
1991–2000	7.2	:	:	:	0.8	4.4	6.2	0.1
2001	-0.4	-1.7	0.5	19.9	9.1	-31.5	-2.9	-0.9
2002	1.3	-0.6	-1.8	9.3	8.3	-0.8	-2.2	-4.8
2003	5.2	2.4	-0.2	12.0	9.3	8.5	2.8	3.8
2004	5.5	6.6	2.9	10.0	9.8	8.3	5.8	1.6
2005	7.0	7.8	3.6	12.0	10.0	9.0	6.2	0.4
2001–05	3.7	2.8	1.0	12.6	9.3	-2.7	1.8	-0.1

⁽¹⁾ Weighted in common currency; CY, CZ, EE, HU, LV, LT, MT, PL, SK and SI.⁽²⁾ Weighted in common currency; BE, DK, DE, EL, ES, FR, IE, IT, LU, NL, AT, PT, FI, SE, UK, CY, CZ, EE, HU, LV, LT, MT, PL, SK and SI.

Table 21

National final uses**Changes in inventories and acquisitions less disposals of valuables at current prices; total economy***(Percentage of gross domestic product at market prices)*

	BE	DK	DE (1)	EL	ES	FR	IE	IT	LU
1960–70	0.8	1.7	1.8	2.1	2.0	1.9	1.4	1.1	0.8
1971–80	0.8	0.7	0.9	3.4	1.2	1.3	1.4	0.8	-1.7
1981	0.6	0.1	-0.7	-4.9	-0.2	-0.1	-1.1	0.4	-0.9
1982	0.9	0.5	-0.9	2.0	-0.1	0.5	1.4	0.7	-0.1
1983	-0.2	0.2	0.0	-0.8	-0.3	-0.1	0.7	0.4	3.1
1984	1.1	1.5	0.3	5.0	0.4	0.1	1.4	1.5	4.7
1985	-0.1	1.2	-0.1	4.6	0.0	-0.1	0.9	1.8	2.0
1986	-0.4	1.1	0.1	3.0	0.4	0.2	0.6	1.1	1.2
1987	0.2	-0.5	-0.3	-1.8	0.6	0.2	0.1	1.3	1.1
1988	0.4	0.2	0.3	0.6	0.9	0.6	-0.2	1.3	1.8
1989	0.3	0.6	0.5	-0.2	0.8	0.8	1.0	1.1	2.0
1990	0.0	0.4	0.5	-0.3	0.8	0.8	2.3	0.8	2.4
1981–90	0.3	0.5	0.0	0.7	0.3	0.3	0.7	1.0	1.7
1991			0.6						
1991	0.1	0.0	0.5	0.9	0.7	0.5	2.1	0.7	2.4
1992	0.1	0.2	-0.2	-0.3	0.7	-0.1	-0.6	0.3	2.7
1993	0.3	-0.7	-0.5	-0.4	0.0	-1.1	-0.4	-0.1	0.5
1994	0.8	0.3	0.0	0.1	0.4	-0.1	-0.4	0.5	0.5
1995	0.2	1.1	0.2	0.3	0.3	0.5	0.9	1.0	-0.2
1996	-0.3	0.4	-0.1	0.3	0.3	-0.2	0.7	0.3	0.3
1997	-0.1	1.2	0.0	0.3	0.3	-0.1	1.2	0.6	0.8
1998	-0.3	1.0	0.4	0.2	0.4	0.6	1.6	0.8	1.1
1999	-0.2	0.0	0.1	-0.1	0.5	0.4	0.5	0.6	0.7
2000	0.4	0.6	0.0	0.3	0.4	0.9	0.8	0.4	2.7
1991–2000	0.1	0.4	0.0	0.2	0.4	0.1	0.6	0.5	1.2
2001	-0.4	0.3	-0.7	0.1	0.3	0.3	0.4	-0.1	1.1
2002	-0.2	0.3	-0.6	0.2	0.3	-0.2	0.0	0.2	-0.7
2003	-0.8	0.1	-0.3	0.0	0.1	-0.3	0.0	0.4	-0.6
2004	-0.5	0.1	-0.3	0.0	0.1	0.1	0.0	0.4	-0.6
2005	-0.5	0.1	0.0	0.0	0.1	0.1	0.0	0.3	-0.6
2001–05	-0.5	0.2	-0.4	0.0	0.2	0.0	0.1	0.2	-0.3

(1) 1960–91 D_90.

NB: Changes in inventories (P.52) are measured by the value of entries into inventories less the value of withdrawals and the value of any recurrent losses of goods held in inventories. Inventories consist of materials and supply, work in progress, finished goods and goods for resale.

Valuables (P.53) are non-financial goods that are not used primarily for production or consumption, do not deteriorate (physically) over time and are held primarily as stores of value. They encompass precious metals (gold, silver, platinum), antiques, paintings, etc.

Reference: ESA 95, paragraphs 3.117, 3.119, 3.125 and 3.126.

(Percentage of gross domestic product at market prices)

	NL	AT	PT	FI	SE	UK	EU-15 ⁽¹⁾	EUR-12 ⁽²⁾
1960–70	1.8	1.7	2.7	0.9	1.4	1.0	1.5	1.7
1971–80	0.5	1.4	2.9	1.0	0.8	0.5	0.9	1.0
1981	-0.7	-0.6	3.7	0.9	-0.4	-1.1	-0.4	-0.3
1982	-1.0	-0.1	3.0	0.8	-0.6	-0.4	0.0	0.1
1983	-0.2	-0.7	-0.9	0.0	-1.1	0.5	0.0	0.0
1984	-0.3	0.7	-1.3	0.5	-0.6	0.4	0.5	0.6
1985	-0.5	0.5	-1.2	-0.1	0.3	0.2	0.4	0.4
1986	0.2	0.3	-1.0	-0.6	-0.2	0.2	0.3	0.4
1987	-0.6	0.0	0.7	-0.2	0.0	0.3	0.2	0.2
1988	-0.4	0.8	3.2	0.7	0.1	0.9	0.7	0.6
1989	1.0	1.0	1.8	1.3	0.3	0.5	0.7	0.8
1990	0.8	1.1	1.6	0.4	0.2	-0.3	0.5	0.7
1981–90	-0.2	0.3	1.0	0.4	-0.2	0.1	0.3	0.3
1991							0.3	0.5
1991	0.6	0.5	0.9	-2.1	-1.1	-0.9	0.3	0.5
1992	0.7	0.2	1.3	-1.4	-0.2	-0.3	0.0	0.1
1993	-0.8	-0.2	0.0	-0.6	-0.3	0.0	-0.4	-0.5
1994	0.0	0.1	0.8	1.4	1.1	0.6	0.3	0.2
1995	0.7	1.0	1.4	1.3	1.2	0.6	0.5	0.5
1996	0.2	0.4	0.9	-0.3	0.4	0.2	0.1	0.0
1997	0.3	0.6	0.7	0.4	0.5	0.6	0.3	0.2
1998	0.7	0.6	0.8	0.9	0.8	0.6	0.6	0.5
1999	0.1	1.1	1.0	0.0	0.2	0.7	0.4	0.3
2000	0.1	0.5	0.7	0.8	0.7	0.6	0.4	0.4
1991–2000	0.3	0.5	0.9	0.0	0.3	0.3	0.2	0.2
2001	0.1	0.5	0.9	0.1	0.3	0.3	0.0	-0.1
2002	-0.2	0.3	0.9	0.4	0.1	0.2	-0.1	-0.1
2003	-0.2	0.2	0.6	0.1	0.4	0.0	-0.1	-0.1
2004	0.0	0.0	0.5	0.1	0.4	0.0	0.0	0.0
2005	0.1	0.0	0.5	0.1	0.4	0.1	0.1	0.1
2001–05	0.0	0.2	0.7	0.2	0.3	0.1	0.0	-0.1

⁽¹⁾ 1960–91 including D_90.⁽²⁾ EU-15 excluding DK, SE and UK; 1960–91 including D_90.

Table 21 (Continued)

(Percentage of gross domestic product at market prices)

	CY	CZ	EE	HU	LV	LT	MT	PL	SK
1960–70	1.1	:	:	:	:	:	2.4	:	:
1971–80	2.9	:	:	3.6	:	:	2.1	:	:
1981	2.3	:	:	3.2	:	:	2.9	– 0.2	:
1982	2.0	:	:	3.3	:	:	5.5	7.8	:
1983	2.3	:	:	1.9	:	:	1.2	4.9	:
1984	2.8	:	:	2.7	:	:	1.5	5.6	:
1985	3.2	:	:	2.5	:	:	1.7	6.5	:
1986	1.9	:	:	2.9	:	:	1.6	7.0	:
1987	2.1	:	:	1.9	:	:	– 0.4	6.3	:
1988	2.9	:	:	3.7	:	:	1.4	10.1	:
1989	3.4	:	:	5.0	:	:	1.5	22.1	:
1990	2.4	– 0.1	:	6.1	17.1	5.0	1.7	4.6	2.2
1981–90	2.5	:	:	3.3	:	:	1.8	7.5	:
1991	1.5	– 1.1	:	– 0.5	27.6	1.9	1.9	0.4	6.9
1992	3.0	– 1.7	:	– 3.8	30.1	– 7.3	0.0	– 1.6	– 4.8
1993	1.4	– 1.0	2.5	1.1	– 4.6	– 3.9	0.4	– 0.3	– 5.3
1994	4.9	1.0	0.6	2.1	4.2	– 4.7	1.0	– 0.3	– 5.6
1995	2.7	2.0	0.7	2.4	1.7	1.3	0.1	1.1	– 0.2
1996	1.9	2.3	1.1	4.1	0.3	– 0.3	– 0.1	1.1	2.5
1997	0.8	2.0	2.9	4.3	4.3	1.9	0.2	1.1	0.3
1998	1.5	0.9	– 0.3	5.3	0.4	1.7	– 0.8	1.0	– 2.2
1999	1.5	0.3	– 0.4	4.8	1.7	0.6	0.6	0.9	– 2.1
2000	2.2	1.4	2.4	6.7	0.5	1.0	2.1	1.1	0.1
1991–2000	2.2	0.6	:	2.6	6.6	– 0.8	0.6	0.5	– 1.1
2001	1.0	1.8	2.4	3.5	2.8	0.4	– 3.0	0.1	1.0
2002	1.2	1.8	2.9	1.7	2.1	1.1	– 4.1	0.0	1.3
2003	5.0	2.0	7.6	0.0	2.7	0.8	– 0.2	0.1	1.1
2004	5.7	0.8	6.9	0.0	2.5	1.2	– 0.2	0.5	1.2
2005	6.1	0.8	6.3	0.0	2.3	1.3	– 0.1	0.5	1.1
2001–05	3.8	1.4	5.2	1.1	2.5	1.0	– 1.5	0.2	1.1

NB: Changes in inventories (P.52) are measured by the value of entries into inventories less the value of withdrawals and the value of any recurrent losses of goods held in inventories. Inventories consist of materials and supply, work in progress, finished goods and goods for resale.

Valuables (P.53) are non-financial goods that are not used primarily for production or consumption, do not deteriorate (physically) over time and are held primarily as stores of value. They encompass precious metals (gold, silver, platinum), antiques, paintings, etc.

Reference: ESA 95, paragraphs 3.117, 3.119, 3.125 and 3.126.

(Percentage of gross domestic product at market prices)

	SI	AC-10 ⁽¹⁾	EU-25 ⁽²⁾	BG	RO	TR	US	JP
1960–70	:	:	:	:	:	0.6	0.9	3.1
1971–80	:	:	:	:	:	0.5	0.7	1.1
1981	:	:	:	:	2.7	2.5	1.0	0.6
1982	:	:	:	:	4.0	0.4	–0.4	0.5
1983	:	:	:	:	4.0	–0.4	–0.1	0.1
1984	:	:	:	:	4.2	–0.4	1.6	0.4
1985	:	:	:	:	2.9	0.4	0.6	0.7
1986	:	:	:	:	4.7	0.8	0.3	0.5
1987	:	:	:	:	2.8	0.9	0.6	0.2
1988	:	:	:	:	0.4	–1.0	0.2	0.7
1989	:	:	:	:	–3.1	0.7	0.5	0.7
1990	–1.6	:	:	9.1	10.5	1.5	0.2	0.6
1981–90	:	:	:	:	3.3	0.5	0.5	0.5
1991	–3.7	:	:	4.4	13.7	–1.1	0.0	0.7
1992	–1.0	:	:	3.7	12.2	0.2	0.2	0.2
1993	0.5	–0.5	–0.4	2.3	11.0	1.1	0.3	0.1
1994	0.8	0.2	0.3	–4.4	4.5	–3.1	0.9	–0.1
1995	1.9	1.5	0.6	0.4	2.9	1.6	0.4	0.4
1996	0.9	1.8	0.1	–5.4	2.9	–0.5	0.4	0.7
1997	0.7	1.7	0.3	–1.1	–0.5	–1.3	0.8	0.6
1998	0.9	1.4	0.6	3.9	–0.4	–0.4	0.8	0.0
1999	1.0	1.2	0.4	2.8	–1.6	1.5	0.6	–0.3
2000	1.2	1.9	0.5	2.6	0.6	2.2	0.7	–0.1
1991–2000	0.3	:	:	0.9	4.5	0.0	0.5	0.2
2001	0.2	1.0	0.0	2.4	2.1	–1.4	–0.6	0.0
2002	0.8	0.8	0.0	1.6	2.0	4.7	0.0	–0.4
2003	2.0	0.9	0.0	1.4	1.3	7.1	0.0	–0.1
2004	1.8	0.9	0.1	1.3	1.1	6.9	0.3	0.0
2005	2.1	0.9	0.1	1.2	0.8	6.7	0.6	0.1
2001–05	1.4	0.9	0.0	1.6	1.4	4.8	0.1	–0.1

⁽¹⁾ CY, CZ, EE, HU, LV, LT, MT, PL, SK and SI.⁽²⁾ BE, DK, DE, EL, ES, FR, IE, IT, LU, NL, AT, PT, FI, SE, UK, CY, CZ, EE, HU, LV, LT, MT, PL, SK and SI.

Table 22

National final uses
Domestic demand including stocks at current prices

(Percentage of gross domestic product at market prices)

	BE	DK	DE (1)	EL	ES	FR	IE	IT	LU
1960–70	100.3	101.7	97.8	106.7	102.4	100.2	108.1	99.7	95.0
1971–80	100.2	102.1	98.1	105.7	101.6	100.6	111.2	100.5	95.0
1981	102.5	99.3	99.4	102.2	102.1	102.5	115.7	102.2	104.2
1982	102.1	99.6	97.7	106.1	101.8	103.2	108.8	101.4	103.0
1983	99.7	98.1	98.3	107.0	100.8	101.4	104.2	99.5	101.1
1984	99.5	98.9	97.7	106.0	98.0	100.9	101.7	100.4	99.6
1985	99.0	99.8	96.5	107.0	98.3	100.9	99.5	100.5	96.0
1986	97.6	100.6	95.0	105.8	98.2	100.3	99.0	98.7	95.8
1987	98.0	98.2	95.2	104.5	100.1	101.0	95.7	99.5	100.6
1988	97.4	97.1	95.1	105.7	101.4	100.8	93.7	99.9	98.9
1989	97.6	96.9	95.1	107.8	103.4	100.9	94.2	100.2	95.2
1990	98.1	94.9	94.7	109.8	103.5	101.0	95.4	100.0	96.2
1981–90	99.1	98.3	96.5	106.2	100.8	101.3	100.8	100.2	99.1
1991			94.1						
1991	98.0	94.1	100.2	109.5	103.3	100.5	95.0	100.0	97.4
1992	97.2	93.4	100.2	108.1	102.9	99.4	92.4	100.1	92.6
1993	96.4	93.2	99.8	108.1	100.8	98.5	89.4	96.8	90.7
1994	96.0	94.7	99.7	106.2	100.2	98.7	90.1	96.5	88.6
1995	95.7	95.9	99.4	107.3	100.2	98.6	88.6	95.9	87.8
1996	95.9	95.1	99.0	108.0	99.5	98.3	88.4	95.1	88.6
1997	95.6	96.5	98.6	107.3	99.0	97.0	87.4	96.0	86.5
1998	95.7	98.0	98.5	108.3	99.9	97.3	88.8	96.6	85.2
1999	95.7	95.2	99.2	108.5	101.3	97.7	86.6	97.9	83.5
2000	96.9	94.0	99.6	108.5	102.2	98.8	87.0	99.0	79.2
1991–2000	96.3	95.0	99.4	108.0	100.9	98.5	89.4	97.4	88.0
2001	96.8	93.5	98.0	107.3	101.7	98.4	85.0	98.5	82.6
2002	96.4	94.1	95.7	106.8	101.5	97.9	81.3	98.9	82.7
2003	96.2	93.4	95.8	106.1	101.7	98.8	83.3	99.4	83.4
2004	96.9	93.7	95.2	105.5	101.9	98.8	82.7	99.2	82.9
2005	97.4	93.9	95.1	104.7	102.1	98.7	81.7	99.2	82.1
2001–05	96.7	93.7	96.0	106.1	101.8	98.5	82.8	99.0	82.7

(1) 1960–91 D_90.

NB: Domestic demand is the sum of:

- Final consumption expenditure (P.3)
- + Gross fixed capital formation (P.51)
- + Changes in inventories (P.52)
- + Acquisitions less disposals of valuables (P.53).

(Percentage of gross domestic product at market prices)

	NL	AT	PT	FI	SE	UK	EU-15 ⁽¹⁾	EUR-12 ⁽²⁾
1960–70	100.9	100.1	103.9	101.5	99.9	100.5	100.0	99.8
1971–80	99.1	100.7	109.6	101.2	99.8	101.0	100.2	100.0
1981	97.2	101.6	117.4	99.0	99.9	97.8	100.7	101.3
1982	96.4	98.8	116.7	99.8	100.2	98.3	100.3	100.7
1983	96.8	99.1	111.0	100.0	97.7	99.3	99.6	99.8
1984	95.6	100.0	106.3	97.6	96.2	100.1	99.3	99.3
1985	96.1	99.8	102.4	99.3	98.2	99.2	99.0	99.0
1986	96.9	99.0	101.2	98.8	96.7	100.8	98.4	97.9
1987	98.1	99.7	104.4	99.9	98.0	101.2	98.9	98.6
1988	97.1	99.6	107.9	100.7	98.3	103.7	99.5	98.8
1989	97.4	99.3	105.7	102.1	99.4	104.1	99.9	99.1
1990	96.3	98.9	106.5	101.6	99.5	102.6	99.4	98.9
1981–90	96.8	99.6	107.9	99.9	98.4	100.7	99.5	99.4
1991							98.9	98.6
1991	96.1	99.3	107.2	100.9	98.3	101.0	100.3	100.4
1992	96.5	99.2	107.4	99.0	98.2	101.2	100.1	100.1
1993	94.4	99.6	107.0	95.3	96.3	101.0	98.8	98.7
1994	93.9	100.4	106.8	94.2	95.5	100.7	98.7	98.5
1995	94.1	100.8	106.2	92.1	93.3	100.5	98.4	98.3
1996	94.3	101.1	106.6	92.4	93.4	100.5	98.1	97.9
1997	94.1	101.5	107.7	92.0	92.8	99.9	97.8	97.6
1998	94.6	100.6	108.8	91.2	93.7	101.0	98.2	97.8
1999	95.7	100.9	110.4	91.5	93.9	101.8	98.9	98.5
2000	94.8	100.6	111.2	90.8	94.4	102.1	99.4	99.1
1991–2000	94.8	100.4	107.9	93.9	95.0	101.0	98.9	98.7
2001	94.8	99.7	109.8	91.7	94.0	102.8	98.9	98.3
2002	94.9	97.8	107.5	91.4	93.9	102.8	98.2	97.4
2003	94.4	97.9	105.2	92.5	94.0	103.1	98.4	97.7
2004	94.0	97.9	104.8	92.7	93.8	102.9	98.3	97.5
2005	93.6	98.0	104.4	92.7	93.6	102.6	98.1	97.5
2001–05	94.3	98.3	106.3	92.2	93.9	102.9	98.4	97.7

⁽¹⁾ 1960–91 including D_90.⁽²⁾ EU-15 excluding DK, SE and UK; 1960–91 including D_90.

Table 22 (Continued)

(Percentage of gross domestic product at market prices)

	CY	CZ	EE	HU	LV	LT	MT	PL	SK
1960–70	109.1	:	:	:	:	:	117.9	:	:
1971–80	118.4	:	:	104.7	:	:	115.5	:	:
1981	114.7	:	:	101.1	:	:	108.4	102.0	:
1982	113.5	:	:	99.2	:	:	116.2	98.8	:
1983	113.4	:	:	98.1	:	:	115.0	98.6	:
1984	112.2	:	:	96.8	:	:	115.2	98.9	:
1985	109.0	:	:	97.9	:	:	115.8	98.5	:
1986	102.3	:	:	101.5	:	:	110.1	99.1	:
1987	102.4	:	:	100.5	:	:	109.3	97.7	:
1988	105.7	:	:	97.3	:	:	110.0	97.9	:
1989	107.2	:	:	96.7	:	:	110.9	95.8	:
1990	105.1	97.4	:	97.4	101.3	108.6	113.7	92.9	:
1981–90	108.6	:	:	98.6	:	:	112.4	98.0	:
1991	110.7	93.0	:	101.0	90.2	91.4	111.1	101.9	:
1992	111.0	99.1	:	100.3	93.1	96.6	107.1	98.5	:
1993	100.4	99.2	104.3	108.2	83.7	107.8	109.7	99.0	102.7
1994	100.4	102.7	110.9	106.5	97.9	106.0	110.2	97.9	93.4
1995	103.5	104.8	108.0	99.8	102.4	111.5	113.7	97.7	95.8
1996	106.7	106.4	111.5	99.5	108.1	109.8	113.9	101.6	110.1
1997	105.4	106.0	111.6	99.0	108.5	110.5	108.4	104.3	108.9
1998	107.6	101.2	110.4	101.5	113.5	111.7	105.6	105.2	110.1
1999	103.0	101.3	104.9	102.7	110.3	110.3	105.6	106.4	103.8
2000	105.2	103.3	104.1	103.9	108.7	106.5	110.7	106.6	100.5
1991–2000	105.4	101.7	:	102.2	101.7	106.2	109.6	101.9	:
2001	104.4	102.7	103.7	101.5	111.2	105.5	104.2	103.7	105.5
2002	107.2	102.3	109.4	102.2	110.6	105.7	104.4	103.4	107.3
2003	106.1	102.6	112.7	104.7	112.0	105.3	106.5	103.3	103.6
2004	104.9	102.5	110.3	105.5	112.8	106.1	106.4	104.0	104.1
2005	104.3	102.4	107.3	106.1	112.7	105.9	106.3	104.6	104.1
2001–05	105.4	102.5	108.7	104.0	111.9	105.7	105.5	103.8	104.9

NB: Domestic demand is the sum of:

- Final consumption expenditure (P.3)
- + Gross fixed capital formation (P.51)
- + Changes in inventories (P.52)
- + Acquisitions less disposals of valuables (P.53).

(Percentage of gross domestic product at market prices)

	SI	AC-10 ⁽¹⁾	EU-25 ⁽²⁾	BG	RO	TR	US	JP
1960–70	:	:	:	:	:	103.9	99.7	99.5
1971–80	:	:	:	:	:	107.3	100.4	99.3
1981	:	:	:	:	102.3	107.0	100.5	99.3
1982	:	:	:	:	98.1	105.3	100.6	99.3
1983	:	:	:	:	94.3	106.0	101.5	98.3
1984	:	:	:	:	94.7	105.9	102.6	97.4
1985	:	:	:	:	93.2	105.0	102.7	96.6
1986	:	:	:	:	93.7	104.9	103.0	96.1
1987	:	:	:	:	93.0	104.6	103.0	97.0
1988	:	:	:	:	90.5	98.9	102.1	97.8
1989	:	:	:	:	97.2	101.6	101.5	98.5
1990	87.8	:	:	:	109.5	104.3	101.2	99.1
1981–90	:	:	:	:	96.6	104.3	101.9	97.9
1991	90.7	:	:	95.7	103.9	102.8	100.3	98.4
1992	93.0	:	:	105.8	108.4	103.0	100.4	97.8
1993	98.9	101.2	98.9	107.6	105.0	105.7	100.9	97.8
1994	97.8	100.5	98.7	100.6	102.1	99.0	101.2	98.0
1995	101.9	100.3	98.5	101.6	105.6	104.5	101.1	98.6
1996	101.0	103.4	98.2	94.6	108.4	106.3	101.1	99.5
1997	100.7	104.3	98.0	95.4	107.1	105.8	101.1	98.9
1998	101.4	104.6	98.5	99.8	108.0	103.6	101.7	98.2
1999	104.2	104.8	99.1	105.8	104.8	103.7	102.7	98.4
2000	103.6	105.2	99.7	105.4	105.6	107.5	103.7	98.6
1991–2000	99.3	:	:	101.2	105.9	104.2	101.5	98.4
2001	100.6	103.4	99.1	107.6	107.8	97.6	103.5	99.4
2002	98.6	103.4	98.5	106.6	105.8	101.7	104.1	98.7
2003	100.9	103.8	98.7	108.1	106.7	103.2	104.6	98.4
2004	101.1	104.3	98.5	107.6	107.2	103.8	105.0	98.0
2005	101.3	104.6	98.4	108.3	107.6	104.5	105.1	97.5
2001–05	100.5	103.9	98.6	107.6	107.0	102.2	104.5	98.4

⁽¹⁾ CY, CZ, EE, HU, LV, LT, MT, PL, SK and SI.⁽²⁾ BE, DK, DE, EL, ES, FR, IE, IT, LU, NL, AT, PT, FI, SE, UK, CY, CZ, EE, HU, LV, LT, MT, PL, SK and SI.

Table 23

National final uses
Domestic demand including stocks at 1995 prices

(National currency; annual percentage change)

	BE	DK	DE (1)	EL	ES	FR	IE	IT	LU
1961-70	4.6	5.0	4.7	8.8	7.8	5.7	4.6	5.7	3.6
1971-80	3.6	1.4	2.8	4.2	3.5	3.1	4.6	3.4	3.0
1981	-2.9	-4.2	-2.1	-1.8	-1.9	0.3	2.8	-0.3	1.2
1982	-0.1	3.3	-1.8	1.0	1.0	3.1	-2.4	0.9	1.1
1983	-1.7	0.7	2.3	0.1	0.3	0.3	-2.2	0.3	-0.6
1984	2.2	3.9	1.7	0.3	-0.2	1.1	0.7	3.3	2.5
1985	1.7	4.7	1.1	2.9	3.2	1.7	1.2	3.2	0.1
1986	2.7	6.5	3.7	0.4	5.3	3.5	2.1	3.1	8.9
1987	3.1	-2.0	2.4	-2.7	7.9	3.2	0.3	4.3	7.8
1988	4.9	0.2	3.7	5.9	6.8	4.7	1.3	4.1	7.8
1989	4.0	-0.1	3.2	5.3	7.3	3.9	7.7	3.1	6.4
1990	3.3	-0.7	5.3	2.2	4.6	2.8	5.5	2.7	4.7
1981-90	1.7	1.2	1.9	1.3	3.4	2.4	1.7	2.4	4.0
1991	1.6	-0.1	3.8	3.5	3.0	0.5	0.2	2.1	8.6
1992	1.8	0.9	2.8	-0.6	1.0	0.8	-0.1	0.9	-4.1
1993	-0.9	-0.3	-1.1	-1.0	-3.3	-1.6	1.0	-5.1	4.6
1994	2.4	7.0	2.3	1.1	1.5	2.1	5.1	1.7	2.4
1995	1.5	4.2	1.7	3.5	3.1	1.6	6.5	2.0	0.7
1996	0.9	2.2	0.3	3.3	1.9	0.7	7.7	0.9	5.0
1997	2.7	4.9	0.6	3.5	3.5	0.7	11.8	2.7	6.5
1998	2.7	4.0	2.4	4.6	5.7	4.0	8.8	3.1	7.3
1999	2.5	0.1	2.8	3.8	5.6	3.6	7.5	3.2	6.6
2000	3.6	1.9	1.8	3.7	4.5	4.1	9.1	2.3	5.1
1991-2000	1.9	2.4	1.7	2.5	2.6	1.6	5.7	1.3	4.2
2001	0.4	0.9	-0.8	2.9	3.0	2.0	3.9	1.8	4.2
2002	0.8	1.2	-1.6	3.8	2.6	1.0	2.8	1.1	-0.4
2003	0.9	0.5	0.6	4.0	3.1	1.0	1.6	1.5	1.5
2004	1.9	2.3	1.3	4.2	3.5	1.6	2.6	1.7	2.0
2005	2.4	2.4	1.6	3.0	3.8	2.2	3.3	2.0	2.7
2001-05	1.3	1.5	0.2	3.6	3.2	1.6	2.8	1.6	2.0

(1) 1961-91 D_90.

(National currency; annual percentage change)

	NL	AT	PT	FI	SE	UK	EU-15 ⁽¹⁾	EUR-12 ⁽²⁾
1961–70	5.6	4.5	6.8	5.2	4.5	2.8	4.9	5.5
1971–80	2.6	3.7	4.7	3.5	1.6	1.8	2.8	3.1
1981	-3.4	-1.1	3.4	-0.2	-2.1	-1.5	-1.3	-1.1
1982	-1.1	0.3	2.2	4.4	0.6	2.4	0.9	0.5
1983	2.0	3.1	-5.7	2.8	-0.5	4.7	1.5	0.9
1984	2.1	0.9	-6.7	2.1	3.8	3.1	2.0	1.6
1985	3.1	2.0	0.9	4.9	4.0	2.9	2.3	2.1
1986	3.8	1.8	8.3	2.7	2.8	4.6	3.7	3.5
1987	1.9	2.4	9.9	5.8	4.2	5.0	3.6	3.5
1988	2.2	3.3	10.7	6.5	3.1	8.1	4.8	4.4
1989	4.8	3.7	4.9	6.3	4.0	3.0	3.8	4.0
1990	3.2	4.4	5.3	-0.8	0.8	-0.4	2.8	3.7
1981–90	1.8	2.1	3.2	3.4	2.1	3.2	2.4	2.3
1991	2.0	3.5	6.1	-7.8	-2.0	-2.5	1.2	2.1
1992	1.3	2.3	3.4	-6.1	-2.0	0.8	1.2	1.4
1993	-1.6	0.6	-2.1	-5.4	-2.1	2.1	-1.6	-2.2
1994	2.3	3.5	1.5	3.0	3.2	3.6	2.4	2.1
1995	3.5	2.6	4.1	2.7	2.2	1.9	2.1	2.1
1996	2.8	1.9	3.0	3.8	0.9	3.0	1.3	1.0
1997	3.9	1.5	5.1	4.8	1.1	3.7	2.1	1.8
1998	4.8	2.9	6.7	4.2	4.3	5.0	3.8	3.6
1999	4.3	2.9	5.9	2.0	3.3	3.8	3.5	3.5
2000	2.5	2.6	3.1	2.5	3.8	3.8	3.1	2.9
1991–2000	2.6	2.4	3.6	0.3	1.2	2.5	1.9	1.8
2001	1.7	-0.2	1.3	1.9	0.1	2.7	1.4	1.1
2002	0.0	0.0	-0.5	0.3	0.7	2.9	0.8	0.3
2003	-1.0	0.9	-2.9	1.3	1.2	2.4	1.3	1.1
2004	0.2	1.7	0.7	2.2	1.8	2.8	1.9	1.7
2005	1.4	2.3	1.7	2.3	2.3	2.8	2.3	2.2
2001–05	0.5	0.9	0.1	1.6	1.2	2.7	1.5	1.3

⁽¹⁾ Weighted in common currency; 1961–91 including D_90.⁽²⁾ Weighted in common currency; EU-15 excluding DK, SE and UK; 1961–91 including D_90.

Table 23 (Continued)

(National currency; annual percentage change)

	CY	CZ	EE	HU	LV	LT	MT	PL	SK
1961–70	:	:	:	:	:	:	:	:	:
1971–80	:	:	:	:	:	:	:	:	:
1981	:	:	:	:	:	:	:	:	:
1982	:	:	:	:	:	:	:	:	:
1983	:	:	:	:	:	:	:	:	:
1984	:	:	:	:	:	:	:	:	:
1985	:	:	:	:	:	:	:	:	:
1986	:	:	:	:	:	:	:	:	:
1987	:	:	:	:	:	:	:	:	:
1988	:	:	:	:	:	:	:	:	:
1989	:	:	:	:	:	:	:	:	:
1990	:	:	:	:	:	:	:	:	:
1981–90	:	:	:	:	:	:	:	:	:
1991	:	-21.4	:	-10.2	-21.1	:	:	1.0	:
1992	:	4.7	:	-2.7	-32.4	:	:	0.2	:
1993	:	2.2	:	8.5	-26.3	:	:	6.0	:
1994	:	8.4	4.0	2.1	4.4	:	:	4.3	-4.5
1995	10.0	8.4	4.4	-4.8	-2.8	:	:	7.5	10.3
1996	3.7	7.3	7.6	0.4	8.1	8.4	2.8	9.7	17.9
1997	2.0	-0.7	11.6	4.7	5.0	12.6	-0.1	9.3	3.8
1998	9.0	-2.4	6.3	8.3	13.1	8.0	-1.1	6.5	6.9
1999	0.2	0.3	-5.9	5.0	2.6	-1.5	5.8	4.9	-6.2
2000	5.2	4.0	8.5	4.5	3.3	1.9	10.8	2.8	-0.9
1991–2000	:	0.7	:	1.4	-5.9	:	:	5.2	:
2001	4.2	5.1	8.2	1.7	11.1	6.7	-5.4	-2.2	7.5
2002	5.5	3.4	10.3	5.1	5.0	7.4	-1.0	0.7	4.7
2003	1.8	2.4	8.6	6.1	6.9	5.9	3.2	2.6	1.3
2004	2.2	2.6	5.4	4.7	5.8	6.3	2.7	4.3	3.2
2005	3.7	3.5	4.2	4.6	5.3	5.8	2.9	5.1	3.5
2001–05	3.5	3.4	7.3	4.5	6.8	6.4	0.5	2.1	4.0

(National currency; annual percentage change)

	SI	AC-10 ⁽¹⁾	EU-25 ⁽²⁾	BG	RO	TR	US	JP
1961–70	:	:	:	:	:	5.7	4.2	10.1
1971–80	:	:	:	:	:	4.6	2.8	4.1
1981	:	:	:	:	:	1.3	2.3	1.9
1982	:	:	:	:	:	2.0	–0.9	3.0
1983	:	:	:	:	:	6.1	5.5	1.8
1984	:	:	:	:	:	6.6	8.0	3.3
1985	:	:	:	:	:	2.7	4.2	4.1
1986	:	:	:	:	:	6.9	3.5	3.7
1987	:	:	:	:	:	7.6	3.1	5.2
1988	:	:	:	:	:	–1.0	3.2	7.3
1989	:	:	:	:	:	1.4	2.8	5.6
1990	:	:	:	:	:	14.2	1.4	5.2
1981–90	:	:	:	:	:	4.7	3.3	4.1
1991	–8.7	:	:	:	–17.5	–0.6	–1.1	2.9
1992	–2.4	:	:	–4.1	–8.5	6.1	3.1	0.6
1993	10.9	:	:	–5.4	0.6	13.3	3.2	0.2
1994	5.5	:	:	–5.0	–0.6	–12.2	4.5	1.2
1995	9.6	:	:	5.2	10.8	11.5	2.5	2.5
1996	3.5	7.5	1.5	–15.3	5.9	7.3	3.7	3.9
1997	4.7	5.9	2.3	–5.8	–6.1	8.9	4.7	0.9
1998	5.4	5.3	3.9	7.9	0.2	0.8	5.5	–1.5
1999	9.5	3.1	3.5	10.1	–4.7	–3.8	5.1	0.2
2000	1.5	3.2	3.1	4.4	5.5	9.8	4.4	2.4
1991–2000	3.8	:	:	:	–1.7	3.8	3.5	1.3
2001	0.9	1.0	1.3	5.4	9.4	–17.5	0.2	1.1
2002	2.1	2.6	0.9	3.9	3.9	9.1	3.0	–0.6
2003	2.8	3.3	1.4	8.2	6.7	5.1	3.0	2.2
2004	3.4	4.0	2.0	6.1	5.9	4.2	4.1	1.4
2005	4.0	4.5	2.4	7.4	5.6	4.7	3.5	1.1
2001–05	2.6	3.1	1.6	6.2	6.3	0.6	2.8	1.1

⁽¹⁾ Weighted in common currency; CY, CZ, EE, HU, LV, LT, MT, PL, SK and SI.⁽²⁾ Weighted in common currency; BE, DK, DE, EL, ES, FR, IE, IT, LU, NL, AT, PT, FI, SE, UK, CY, CZ, EE, HU, LV, LT, MT, PL, SK and SI.

Table 24

Prices**Price deflator gross domestic product at market prices ⁽¹⁾***(National currency; annual percentage change)*

	BE	DK	DE ⁽²⁾	EL	ES	FR	IE	IT	LU
1961–70	3.4	6.3	3.8	3.0	6.5	4.4	5.5	4.5	4.1
1971–80	7.1	10.1	5.2	14.6	15.1	9.8	13.8	14.9	6.5
1981	5.1	11.8	4.3	21.6	12.3	11.0	17.5	19.0	7.2
1982	7.6	11.1	4.8	27.2	13.6	11.5	15.2	17.2	10.8
1983	5.6	8.4	3.3	20.6	11.9	9.0	10.8	15.1	6.8
1984	5.4	6.0	2.0	21.9	10.9	7.0	6.4	11.5	4.4
1985	4.6	4.9	2.2	19.0	8.6	5.4	5.3	8.9	3.0
1986	2.8	4.0	3.3	18.9	10.9	5.1	5.8	7.9	-0.1
1987	1.7	5.1	1.8	15.3	5.9	2.9	2.2	6.2	0.1
1988	2.2	2.5	1.5	16.7	5.9	3.0	3.4	6.8	2.8
1989	4.8	5.2	2.3	14.5	6.9	3.1	5.1	6.5	4.0
1990	2.8	3.7	3.2	20.7	7.3	2.9	-0.3	8.2	2.5
1981–90	4.3	6.2	2.9	19.6	9.4	6.1	7.0	10.6	4.1
1991	2.9	2.8	3.5	19.8	6.9	3.0	1.8	7.6	1.8
1992	3.4	2.9	5.0	14.8	6.7	2.0	2.8	4.5	3.7
1993	4.0	1.4	3.7	14.4	4.5	2.3	5.2	3.9	6.0
1994	2.1	1.7	2.5	11.2	3.9	1.7	1.7	3.5	3.5
1995	1.3	1.8	2.0	9.8	4.9	1.7	3.0	5.0	2.3
1996	1.2	2.5	1.0	7.4	3.5	1.4	2.1	5.3	2.0
1997	1.4	2.2	0.7	6.8	2.3	1.3	4.0	2.4	2.7
1998	1.7	1.0	1.1	5.2	2.4	0.9	6.3	2.7	2.7
1999	1.4	1.8	0.5	3.0	2.8	0.5	3.8	1.6	2.2
2000	1.2	3.1	-0.3	3.4	3.5	1.0	4.3	2.1	3.9
1991–2000	2.1	2.1	2.0	9.5	4.1	1.6	3.5	3.8	3.1
2001	1.8	2.0	1.3	3.5	4.2	1.8	5.1	2.7	2.2
2002	1.7	0.9	1.6	4.0	4.4	1.8	5.4	2.7	0.6
2003	1.4	2.2	1.2	4.1	4.1	1.7	1.5	3.0	1.9
2004	1.1	1.8	1.3	4.3	3.6	1.7	3.2	2.5	2.7
2005	1.4	2.0	0.9	3.5	3.1	1.5	2.7	2.1	2.6
2001–05	1.5	1.8	1.3	3.9	3.9	1.7	3.6	2.6	2.0

⁽¹⁾ Ratio of GDP at current market prices to GDP at constant prices.⁽²⁾ 1961–91 D_90.

(National currency; annual percentage change)

	NL	AT	PT	FI	SE	UK	EU-15 ⁽¹⁾	EUR-12 ⁽²⁾
1961–70	5.2	3.8	2.9	5.9	4.3	4.1	4.3	4.3
1971–80	7.6	6.4	16.1	11.1	9.6	13.9	10.0	9.4
1981	5.4	6.6	17.6	10.9	9.5	11.3	10.2	10.0
1982	5.4	5.1	20.7	8.7	8.1	7.5	9.8	10.3
1983	2.1	3.4	24.6	8.6	10.1	5.5	7.9	8.3
1984	1.4	4.7	24.7	8.4	7.5	4.5	6.3	6.6
1985	1.8	3.0	21.7	5.2	6.5	5.7	5.5	5.5
1986	0.1	2.9	20.5	4.4	6.5	3.3	5.2	5.5
1987	-0.7	2.2	10.1	4.1	4.8	5.3	3.8	3.5
1988	0.9	1.2	11.2	8.4	6.4	6.3	4.2	3.8
1989	1.1	2.9	10.5	6.3	8.0	7.4	4.8	4.2
1990	2.2	3.3	13.1	6.4	8.8	7.6	5.4	4.9
1981–90	2.0	3.5	17.3	7.1	7.6	6.4	6.3	6.2
1991	2.9	3.8	10.1	1.9	7.3	6.6	5.1	4.8
1992	2.3	3.6	11.4	1.4	1.0	4.0	4.2	4.4
1993	1.9	2.9	7.4	2.6	2.9	2.8	3.4	3.6
1994	2.3	2.7	7.3	1.8	2.3	1.6	2.6	2.8
1995	2.0	2.5	3.4	4.8	3.4	2.6	2.8	2.9
1996	1.2	1.3	3.0	-0.3	1.2	3.4	2.3	2.1
1997	2.0	0.9	3.8	2.1	1.5	2.9	1.8	1.6
1998	1.7	0.5	3.8	3.5	0.8	2.8	1.9	1.7
1999	1.6	0.7	3.1	-0.2	0.7	2.3	1.3	1.1
2000	3.9	1.4	3.2	3.2	1.3	1.4	1.4	1.4
1991–2000	2.2	2.0	5.6	2.1	2.2	3.0	2.7	2.6
2001	5.4	2.1	4.8	2.7	2.0	2.3	2.4	2.4
2002	3.4	1.4	4.6	1.1	1.3	3.2	2.5	2.4
2003	2.8	1.3	3.4	1.0	2.1	2.4	2.2	2.1
2004	1.5	1.2	2.5	0.8	2.0	1.9	2.0	2.0
2005	0.9	1.1	2.4	1.6	2.0	2.0	1.7	1.6
2001–05	2.8	1.4	3.5	1.4	1.9	2.4	2.1	2.1

⁽¹⁾ Weighted in common currency; 1961–91 including D_90.⁽²⁾ Weighted in common currency; EU-15 excluding DK, SE and UK; 1961–91 including D_90.

Table 24 (Continued)

(National currency; annual percentage change)

	CY	CZ	EE	HU	LV	LT	MT	PL	SK
1961-70	:	:	:	:	:	:	:	:	:
1971-80	:	:	:	:	:	:	:	:	:
1981	:	:	:	:	:	:	:	:	:
1982	:	:	:	:	:	:	:	:	:
1983	:	:	:	:	:	:	:	:	:
1984	:	:	:	:	:	:	:	:	:
1985	:	:	:	:	:	:	:	:	:
1986	:	:	:	:	:	:	:	:	:
1987	:	:	:	:	:	:	:	:	:
1988	:	:	:	:	:	:	:	:	:
1989	:	:	:	:	:	:	:	:	:
1990	:	:	:	:	:	:	:	:	:
1981-90	:	:	:	:	:	:	:	:	:
1991	3.9	36.2	:	35.7	156.2	227.9	:	55.3	:
1992	5.8	12.4	:	20.3	975.9	943.0	3.6	38.6	:
1993	5.1	21.0	:	21.3	71.5	306.2	2.8	30.6	16.6
1994	5.3	13.4	39.6	19.5	38.3	61.6	3.5	37.2	14.6
1995	3.0	10.2	31.3	26.7	16.0	38.0	4.8	28.0	9.2
1996	1.8	8.8	23.3	21.2	16.2	21.5	0.8	18.7	4.6
1997	2.7	8.0	11.3	18.5	7.5	14.2	2.3	14.0	5.7
1998	2.5	10.6	9.8	12.6	4.9	5.4	2.3	11.8	5.5
1999	2.2	3.0	4.5	8.4	5.3	-0.4	2.7	6.8	6.6
2000	4.5	1.1	6.7	9.9	4.6	0.9	0.9	11.5	8.3
1991-2000	3.7	12.1	:	19.2	59.9	84.4	:	24.4	:
2001	2.3	6.3	5.2	8.6	2.5	-0.2	5.8	4.2	4.7
2002	3.2	2.6	4.1	10.7	1.8	0.0	1.4	1.4	1.8
2003	11.3	2.1	2.7	6.0	1.9	-0.8	5.6	0.7	6.8
2004	3.9	2.7	4.4	7.4	2.6	2.4	-0.1	1.6	5.1
2005	3.9	2.6	4.9	6.5	3.0	2.7	0.3	2.4	3.2
2001-05	4.9	3.3	4.3	7.8	2.4	0.8	2.6	2.1	4.3

(National currency; annual percentage change)

	SI	AC-10 ⁽¹⁾	EU-25 ⁽²⁾	BG	RO	TR	US	JP
1961–70	:	:	:	:	:	6.0	2.7	5.7
1971–80	:	:	:	:	:	32.8	7.0	7.8
1981	:	:	:	:	:	44.0	9.3	4.4
1982	:	:	:	:	:	28.2	6.2	1.8
1983	:	:	:	:	:	26.3	4.0	1.9
1984	:	:	:	:	:	48.2	3.7	2.8
1985	:	:	:	:	:	53.1	3.2	2.2
1986	:	:	:	:	:	36.0	2.2	1.6
1987	:	:	:	:	:	33.6	3.0	– 0.1
1988	:	:	:	:	:	69.3	3.4	0.7
1989	:	:	:	:	:	75.5	3.8	2.0
1990	:	:	:	:	:	58.3	3.9	2.4
1981–90	:	:	:	:	:	46.4	4.3	2.0
1991	94.9	:	:	:	195.6	58.8	3.6	2.9
1992	208.2	:	:	59.6	199.7	63.7	2.4	1.6
1993	37.1	:	:	51.1	227.3	67.8	2.4	0.5
1994	22.6	26.2	3.2	72.7	139.0	106.5	2.1	0.1
1995	21.4	21.9	3.4	62.8	35.3	87.2	2.2	– 0.5
1996	11.0	15.2	2.7	120.8	45.3	77.8	1.9	– 0.8
1997	8.8	12.2	2.1	946.0	147.2	81.5	2.0	0.3
1998	7.6	10.3	2.2	23.8	55.3	75.7	1.2	– 0.1
1999	5.9	5.9	1.5	3.7	47.7	55.6	1.4	– 1.5
2000	5.6	8.2	1.7	6.7	44.2	49.9	2.1	– 1.9
1991–2000	33.4	:	:	:	101.7	71.7	2.1	0.1
2001	9.1	5.2	2.5	6.7	37.3	54.8	2.4	– 1.6
2002	8.1	3.4	2.5	3.8	23.6	43.5	1.1	– 1.6
2003	6.4	2.8	2.2	3.1	15.0	25.8	1.4	– 2.2
2004	5.6	3.4	2.0	3.9	11.7	15.6	1.0	– 1.3
2005	5.0	3.5	1.8	3.8	9.1	11.2	1.1	– 1.1
2001–05	6.8	3.6	2.2	4.3	18.9	29.1	1.4	– 1.5

⁽¹⁾ Weighted in common currency; CY, CZ, EE, HU, LV, LT, MT, PL, SK and SI.⁽²⁾ Weighted in common currency; BE, DK, DE, EL, ES, FR, IE, IT, LU, NL, AT, PT, FI, SE, UK, CY, CZ, EE, HU, LV, LT, MT, PL, SK and SI.

Table 25

Prices
Price deflator private final consumption expenditure

(National currency; annual percentage change)

	BE	DK	DE ⁽¹⁾	EL	ES	FR	IE	IT	LU
1961-70	3.1	5.8	2.7	2.4	5.8	4.2	5.1	3.8	2.5
1971-80	7.1	10.4	5.1	13.9	15.0	9.8	14.0	14.6	6.5
1981	7.6	12.2	6.1	23.2	14.1	13.0	19.6	18.0	8.6
1982	7.0	9.8	5.0	21.1	14.4	11.6	14.9	17.0	10.6
1983	7.1	7.4	3.2	19.4	12.3	9.6	9.5	14.9	8.3
1984	5.6	7.0	2.5	19.3	10.6	7.8	7.3	11.6	6.5
1985	5.0	4.5	1.8	19.6	8.1	5.8	5.1	9.1	4.3
1986	0.3	2.8	-0.5	22.4	9.3	2.6	3.7	6.4	0.3
1987	1.7	4.8	0.5	17.2	5.5	3.2	2.4	5.2	0.9
1988	1.0	4.6	1.3	15.1	4.8	2.8	4.0	5.9	2.3
1989	3.8	4.7	2.8	13.6	6.7	3.8	4.0	6.7	3.2
1990	2.6	2.9	2.7	19.8	6.6	3.0	2.1	6.4	3.6
1981-90	4.1	6.0	2.5	19.0	9.2	6.3	7.1	10.0	4.8
1991	2.9	2.8	3.8	19.7	6.4	3.5	2.7	7.0	3.4
1992	1.8	1.9	4.4	15.7	6.6	2.5	3.0	5.5	4.2
1993	2.6	2.0	3.9	14.1	5.3	2.4	2.2	5.5	4.0
1994	2.2	3.0	2.6	11.0	4.9	2.1	2.7	4.9	2.6
1995	1.5	1.9	1.9	9.0	4.8	2.0	2.8	6.0	2.0
1996	2.2	2.1	1.7	8.2	3.5	1.9	2.6	4.4	1.4
1997	1.6	2.2	2.0	5.6	2.6	1.4	2.9	2.2	1.4
1998	1.0	1.3	1.1	4.5	2.2	0.7	3.9	2.1	1.1
1999	1.3	2.4	0.3	2.3	2.4	0.4	3.2	2.1	1.5
2000	2.3	3.5	1.5	3.3	3.2	1.5	4.3	2.9	2.6
1991-2000	1.9	2.3	2.3	9.2	4.2	1.8	3.0	4.3	2.4
2001	2.8	2.6	1.6	3.3	3.3	1.6	4.3	2.7	3.3
2002	1.4	2.4	1.3	3.6	3.5	2.0	6.6	3.0	2.3
2003	1.6	2.1	1.1	3.6	3.2	1.9	3.5	2.9	2.1
2004	1.4	1.8	1.7	3.5	2.9	1.7	3.0	2.4	1.8
2005	1.8	2.0	1.2	3.4	2.6	1.5	2.7	2.1	1.6
2001-05	1.8	2.2	1.4	3.5	3.1	1.7	4.0	2.6	2.2

⁽¹⁾ 1961-91 D_90.

(National currency; annual percentage change)

	NL	AT	PT	FI	SE	UK	EU-15 ⁽¹⁾	EUR-12 ⁽²⁾
1961–70	4.1	3.5	2.8	4.7	4.1	3.9	3.8	3.7
1971–80	7.1	6.2	17.3	11.3	9.6	13.2	10.0	9.4
1981	7.0	6.9	20.2	11.6	12.1	10.9	11.4	11.5
1982	5.3	5.5	20.3	9.3	10.2	8.5	10.1	10.5
1983	2.9	4.0	25.8	7.8	11.3	5.5	8.2	8.7
1984	2.8	5.1	28.5	6.9	7.6	5.0	6.8	7.2
1985	1.4	3.5	19.4	5.7	6.9	5.2	5.5	5.6
1986	-0.4	1.7	13.8	3.5	4.6	4.2	3.5	3.3
1987	-0.3	1.2	9.9	3.3	5.2	4.2	3.3	3.1
1988	0.9	1.5	11.5	4.8	5.9	5.0	3.7	3.4
1989	1.5	2.6	12.8	4.6	6.9	6.2	4.9	4.5
1990	2.1	3.3	11.6	6.0	9.7	7.5	5.1	4.4
1981–90	2.3	3.5	17.2	6.3	8.0	6.2	6.2	6.2
1991	3.3	3.5	11.8	5.8	10.5	7.8	5.6	5.1
1992	3.2	3.9	9.2	3.6	2.1	4.9	4.5	4.6
1993	2.1	3.5	6.9	4.6	6.0	3.5	4.1	4.1
1994	2.9	2.8	5.6	0.9	2.7	2.1	3.1	3.3
1995	1.4	2.0	4.3	0.8	2.8	3.4	3.0	3.0
1996	1.9	1.9	3.7	1.6	1.3	3.4	2.6	2.5
1997	2.0	1.5	2.9	1.9	1.9	2.5	2.1	2.0
1998	1.7	0.5	2.8	2.0	0.8	2.6	1.7	1.5
1999	1.8	0.8	2.1	1.2	1.1	1.7	1.3	1.1
2000	3.3	1.4	3.5	3.6	1.2	1.1	2.0	2.2
1991–2000	2.4	2.2	5.2	2.6	3.0	3.3	3.0	2.9
2001	4.7	2.2	3.5	3.4	2.1	2.2	2.3	2.3
2002	3.1	1.1	3.6	3.0	2.0	1.3	2.1	2.3
2003	2.1	1.4	3.4	1.7	2.0	1.2	1.8	2.0
2004	1.3	1.7	2.6	1.1	1.5	1.2	1.8	2.0
2005	0.9	1.4	2.5	1.7	1.6	1.2	1.6	1.7
2001–05	2.4	1.5	3.1	2.2	1.8	1.4	1.9	2.1

⁽¹⁾ Weighted in common currency; 1961–91 including D_90.⁽²⁾ Weighted in common currency; EU-15 excluding DK, SE and UK; 1961–91 including D_90.

Table 25 (Continued)

(National currency; annual percentage change)

	CY	CZ	EE	HU	LV	LT	MT	PL	SK
1961-70	:	:	:	:	:	:	:	:	:
1971-80	:	:	:	:	:	:	:	:	:
1981	:	:	:	:	:	:	:	:	:
1982	:	:	:	:	:	:	:	:	:
1983	:	:	:	:	:	:	:	:	:
1984	:	:	:	:	:	:	:	:	:
1985	:	:	:	:	:	:	:	:	:
1986	:	:	:	:	:	:	:	:	:
1987	:	:	:	:	:	:	:	:	:
1988	:	:	:	:	:	:	:	:	:
1989	:	:	:	:	:	:	:	:	:
1990	:	:	:	:	:	:	:	:	:
1981-90	:	:	:	:	:	:	:	:	:
1991	:	:	:	44.2	84.1	:	:	67.8	:
1992	:	:	:	22.1	967.9	:	:	44.4	:
1993	:	:	:	20.6	110.3	:	:	31.5	:
1994	:	:	42.8	19.4	50.0	:	:	37.9	14.1
1995	2.3	9.2	27.1	27.7	24.0	:	:	27.2	9.2
1996	2.4	8.0	21.5	22.9	17.3	19.1	2.0	20.0	6.7
1997	2.6	7.5	10.7	18.0	10.1	9.7	3.4	14.7	5.8
1998	1.1	9.1	9.4	13.6	2.2	6.0	2.7	11.5	6.1
1999	4.0	3.7	5.3	10.2	1.7	0.8	1.9	6.8	8.5
2000	2.9	2.8	3.9	9.1	3.9	-2.1	1.5	11.6	9.0
1991-2000	:	:	:	20.4	59.6	:	:	26.2	:
2001	1.3	3.8	5.7	8.2	1.9	2.3	2.8	4.9	5.6
2002	3.0	-0.1	3.4	6.9	2.2	-1.0	1.0	1.8	2.4
2003	4.8	0.0	1.8	6.7	2.3	-0.9	1.3	0.8	6.8
2004	2.0	3.5	4.0	5.9	2.8	2.3	1.8	1.9	7.5
2005	2.4	2.6	3.7	4.1	2.8	2.6	1.9	2.7	4.0
2001-05	2.7	1.9	3.7	6.4	2.4	1.0	1.8	2.4	5.2

(National currency; annual percentage change)

	SI	AC-10 ⁽¹⁾	EU-25 ⁽²⁾	BG	RO	TR	US	JP
1961–70	:	:	:	:	:	5.9	2.4	5.6
1971–80	:	:	:	:	:	32.9	7.0	8.8
1981	:	:	:	:	:	46.2	8.8	4.9
1982	:	:	:	:	:	26.8	5.7	2.8
1983	:	:	:	:	:	26.1	4.3	2.3
1984	:	:	:	:	:	48.7	3.7	2.7
1985	:	:	:	:	:	51.5	3.5	1.8
1986	:	:	:	:	:	30.5	2.4	0.7
1987	:	:	:	:	:	49.3	3.8	0.4
1988	:	:	:	:	:	58.8	3.9	0.6
1989	:	:	:	:	:	84.5	4.4	2.1
1990	:	:	:	:	:	53.4	4.6	2.6
1981–90	:	:	:	:	:	46.7	4.5	2.1
1991	105.8	:	:	:	182.9	54.3	3.8	2.7
1992	204.2	:	:	77.6	205.5	62.6	3.1	1.6
1993	31.1	:	:	68.0	234.5	64.3	2.4	1.0
1994	20.2	:	:	81.9	141.9	111.3	2.0	0.5
1995	21.7	:	:	60.7	36.7	95.7	2.3	– 0.3
1996	10.5	16.1	3.1	119.6	43.5	81.6	2.1	– 0.1
1997	9.0	12.3	2.5	985.1	156.9	75.3	1.9	1.0
1998	7.6	10.0	2.0	15.8	49.4	75.8	1.1	– 0.1
1999	6.0	6.4	1.5	2.2	46.2	50.2	1.6	– 0.7
2000	8.4	8.5	2.2	4.5	39.7	59.5	2.5	– 1.3
1991–2000	33.4	:	:	:	101.0	72.1	2.3	0.4
2001	8.1	5.1	2.4	6.0	35.5	53.0	2.0	– 1.5
2002	7.6	2.5	2.1	4.3	21.5	49.5	1.4	– 1.5
2003	5.9	2.2	1.9	2.0	15.1	29.0	1.7	– 1.2
2004	5.2	3.4	1.9	3.0	11.4	16.6	1.2	– 1.0
2005	4.3	3.1	1.7	3.5	8.6	12.2	1.1	– 0.8
2001–05	6.2	3.2	2.0	3.8	18.1	31.0	1.5	– 1.2

⁽¹⁾ Weighted in common currency; CY, CZ, EE, HU, LV, LT, MT, PL, SK and SI.⁽²⁾ Weighted in common currency; BE, DK, DE, EL, ES, FR, IE, IT, LU, NL, AT, PT, FI, SE, UK, CY, CZ, EE, HU, LV, LT, MT, PL, SK and SI.

Table 26

Prices
Price deflator exports of goods and services

(National currency; annual percentage change)

	BE	DK	DE ⁽¹⁾	EL	ES	FR	IE	IT	LU
1961-70	2.4	2.9	1.7	1.0	6.6	2.3	1.9	1.8	2.0
1971-80	6.9	8.9	5.1	14.9	13.2	9.3	14.3	15.5	5.9
1981	9.4	13.1	5.6	22.2	14.9	13.3	16.4	21.2	9.6
1982	13.1	10.6	4.2	21.2	13.6	12.4	10.8	16.1	15.5
1983	7.3	5.4	2.0	21.3	16.7	9.2	9.1	8.2	5.9
1984	8.2	7.2	3.2	14.3	12.5	9.0	8.1	9.7	5.2
1985	2.8	3.7	2.7	15.1	8.1	3.9	3.1	8.6	3.9
1986	-6.6	-5.4	-1.2	12.2	-0.4	-4.3	-6.3	-3.0	-2.3
1987	-3.4	-1.3	-1.0	8.9	3.5	-0.9	0.5	1.0	-2.1
1988	3.7	-0.8	1.7	11.9	4.7	2.3	5.6	3.4	2.0
1989	7.2	6.8	2.5	13.9	6.0	4.1	7.3	6.6	4.3
1990	-1.7	0.7	-0.1	15.9	0.8	-1.5	-8.1	3.0	0.1
1981-90	3.8	3.9	1.9	15.6	7.9	4.6	4.4	7.3	4.1
1991	-0.6	1.7	0.9	14.0	1.5	-0.6	-0.3	3.9	1.2
1992	-1.1	2.5	1.0	10.1	2.9	-1.7	-2.0	0.9	1.8
1993	-1.3	-0.3	0.7	9.1	5.0	-2.3	6.8	10.4	5.7
1994	1.3	0.6	1.0	8.6	4.6	-0.1	0.2	3.3	3.1
1995	1.0	1.4	2.0	8.7	5.9	0.6	1.9	8.8	1.5
1996	1.7	1.7	0.1	5.6	1.5	1.7	-0.3	1.0	1.5
1997	4.8	3.0	1.2	3.6	3.3	2.0	1.2	0.3	4.0
1998	-1.3	-2.6	0.2	4.1	0.6	-1.3	2.8	1.0	2.7
1999	0.0	-1.0	-0.8	1.9	0.4	-1.1	2.4	0.0	2.7
2000	9.6	9.2	2.9	8.0	7.3	2.5	5.8	4.3	7.9
1991-2000	1.4	1.6	0.9	7.3	3.3	-0.1	1.8	3.3	3.2
2001	1.5	2.2	0.9	1.3	2.7	0.0	4.1	3.7	2.2
2002	-0.9	-2.9	0.2	2.4	1.1	-1.6	1.0	-1.0	-2.7
2003	-1.3	0.5	-0.5	2.9	1.2	-0.2	-4.1	0.3	-1.5
2004	-0.7	1.1	0.4	2.7	2.0	0.4	1.7	1.2	1.0
2005	1.5	1.2	1.1	2.3	2.2	0.7	2.3	1.3	1.5
2001-05	0.0	0.4	0.4	2.3	1.8	-0.1	1.0	1.1	0.1

⁽¹⁾ 1961-91 D_90.

(National currency; annual percentage change)

	NL	AT	PT	FI	SE	UK	EU-15 ⁽¹⁾	EUR-12 ⁽²⁾
1961–70	1.3	2.3	1.6	4.8	1.9	3.2	2.3	2.1
1971–80	7.0	4.9	17.2	11.8	10.0	13.4	9.3	8.5
1981	14.0	6.0	18.5	8.4	8.9	8.5	11.1	11.6
1982	3.7	4.7	19.8	6.1	11.1	6.9	9.0	9.2
1983	- 0.1	1.5	30.0	6.6	12.3	8.0	6.5	6.0
1984	5.1	3.9	30.2	8.6	6.8	7.6	7.1	7.0
1985	1.4	3.0	17.6	3.0	4.0	5.1	4.4	4.3
1986	- 15.8	0.5	4.5	- 3.6	- 1.5	- 8.2	- 4.6	- 4.1
1987	- 5.0	- 1.7	10.8	1.7	2.6	2.9	- 0.2	- 0.8
1988	0.2	2.2	11.7	4.9	5.1	0.3	2.3	2.6
1989	4.0	2.3	11.8	5.7	6.5	8.2	5.1	4.5
1990	- 0.8	0.9	6.3	0.4	1.8	4.4	0.7	0.1
1981–90	0.4	2.3	15.8	4.1	5.7	4.2	4.0	3.9
1991	0.1	0.7	3.4	- 0.3	1.6	1.6	1.1	1.0
1992	- 2.0	0.4	0.5	6.1	- 2.8	1.6	0.3	0.2
1993	- 2.1	0.3	4.9	6.5	9.1	8.8	3.0	1.9
1994	0.5	1.3	6.4	1.3	3.7	1.0	1.5	1.5
1995	0.9	1.9	5.6	4.9	6.9	3.2	3.1	3.0
1996	0.5	1.1	- 1.6	- 0.4	- 4.6	1.3	0.7	0.8
1997	2.7	0.8	2.6	- 0.8	- 0.2	- 4.0	1.0	1.9
1998	- 1.4	0.2	0.8	- 1.0	- 1.3	- 3.8	- 0.7	- 0.1
1999	- 0.7	- 0.1	0.2	- 5.1	- 1.6	- 0.6	- 0.5	- 0.4
2000	8.2	2.3	5.1	3.4	2.2	2.2	4.4	4.7
1991–2000	0.6	0.9	2.8	1.4	1.2	1.1	1.4	1.4
2001	1.6	- 0.1	2.6	- 2.5	2.8	- 0.7	1.2	1.5
2002	- 0.8	- 0.5	0.2	- 4.7	- 1.9	1.3	- 0.4	- 0.5
2003	- 1.7	- 0.7	- 0.8	- 3.0	- 1.3	1.4	- 0.3	- 0.6
2004	0.0	0.6	0.7	- 0.5	0.2	1.7	0.7	0.6
2005	0.7	0.8	0.9	0.6	1.1	1.5	1.2	1.2
2001–05	0.0	0.0	0.7	- 2.1	0.2	1.0	0.5	0.4

⁽¹⁾ Weighted in common currency; 1961–91 including D_90.⁽²⁾ Weighted in common currency; EU-15 excluding DK, SE and UK; 1961–91 including D_90.

Table 26 (Continued)

(National currency; annual percentage change)

	CY	CZ	EE	HU	LV	LT	MT	PL	SK
1961-70	:	:	:	:	:	:	:	:	:
1971-80	:	:	:	:	:	:	:	:	:
1981	:	:	:	:	:	:	:	:	:
1982	:	:	:	:	:	:	:	:	:
1983	:	:	:	:	:	:	:	:	:
1984	:	:	:	:	:	:	:	:	:
1985	:	:	:	:	:	:	:	:	:
1986	:	:	:	:	:	:	:	:	:
1987	:	:	:	:	:	:	:	:	:
1988	:	:	:	:	:	:	:	:	:
1989	:	:	:	:	:	:	:	:	:
1990	:	:	:	:	:	:	:	:	:
1981-90	:	:	:	:	:	:	:	:	:
1991	:	49.5	:	29.8	150.1	:	:	20.6	:
1992	:	5.8	:	10.1	1284.1	:	:	29.2	:
1993	:	4.7	:	12.9	72.4	:	:	27.2	0.0
1994	:	5.0	43.0	18.6	-3.6	:	:	31.7	13.3
1995	2.5	6.4	24.3	33.9	11.3	:	:	19.6	8.2
1996	0.8	2.7	16.7	19.0	8.8	10.6	3.4	7.6	4.2
1997	4.5	5.7	10.2	15.2	2.5	4.5	0.8	13.9	-1.4
1998	2.1	3.5	4.2	12.8	5.2	-7.2	0.8	13.2	1.7
1999	2.6	0.5	0.1	4.5	-0.9	0.4	2.2	6.0	5.5
2000	4.3	2.7	8.0	9.8	3.7	9.8	15.0	1.7	12.2
1991-2000	:	7.9	:	16.3	54.4	:	:	16.7	:
2001	3.6	-0.7	7.2	2.9	0.8	-2.4	-6.4	-5.3	5.2
2002	0.1	-6.3	-2.0	-4.5	3.9	-5.1	3.0	4.8	-0.5
2003	-1.2	0.9	0.5	5.7	2.2	-3.3	1.4	8.4	-1.8
2004	3.1	0.8	3.5	5.2	2.8	2.0	1.4	2.7	0.6
2005	2.9	1.2	4.0	3.7	2.9	2.5	1.4	2.4	1.7
2001-05	1.7	-0.8	2.6	2.5	2.5	-1.3	0.1	2.5	1.0

(National currency; annual percentage change)

	SI	AC-10 ⁽¹⁾	EU-25 ⁽²⁾	BG	RO	TR	US	JP
1961–70	:	:	:	:	:	4.8	2.2	0.6
1971–80	:	:	:	:	:	36.2	8.8	5.4
1981	:	:	:	:	:	43.5	7.4	2.6
1982	:	:	:	:	:	42.7	0.4	2.7
1983	:	:	:	:	:	25.9	0.5	-4.8
1984	:	:	:	:	:	57.1	1.0	0.0
1985	:	:	:	:	:	64.4	-2.7	-2.6
1986	:	:	:	:	:	28.8	-1.6	-12.8
1987	:	:	:	:	:	30.8	2.6	-4.4
1988	:	:	:	:	:	74.9	5.3	-2.3
1989	:	:	:	:	:	53.2	1.9	3.5
1990	:	:	:	:	:	38.2	0.7	1.4
1981–90	:	:	:	:	:	45.2	1.5	-1.8
1991	104.7	:	:	:	231.7	61.0	1.4	-2.3
1992	187.9	:	:	:	314.8	62.5	-0.3	-2.5
1993	30.4	:	:	:	148.8	59.9	0.0	-6.6
1994	17.3	:	:	:	125.8	164.8	1.2	-3.0
1995	9.1	:	:	:	37.3	73.0	2.4	-1.9
1996	13.0	8.5	1.1	122.0	50.8	69.0	-1.3	2.9
1997	5.3	8.9	1.4	822.6	116.1	87.0	-1.5	1.7
1998	2.9	7.4	-0.3	9.0	16.6	60.1	-2.2	0.5
1999	2.1	3.5	-0.3	5.7	63.7	52.1	-0.8	-8.5
2000	10.5	5.9	4.5	20.6	40.0	39.9	1.4	-3.8
1991–2000	29.8	:	:	:	98.0	70.4	0.0	-2.4
2001	8.2	0.0	1.1	0.7	32.5	86.9	-0.8	1.3
2002	4.5	-0.8	-0.4	-2.0	17.9	19.0	-0.3	-1.9
2003	2.4	3.7	-0.1	-0.1	13.8	18.4	2.1	-1.7
2004	1.7	2.5	0.8	1.2	9.8	14.1	1.3	-1.6
2005	1.7	2.4	1.3	1.6	9.0	12.5	1.7	-1.4
2001–05	3.7	1.5	0.6	0.3	16.3	27.6	0.8	-1.1

⁽¹⁾ Weighted in common currency; CY, CZ, EE, HU, LV, LT, MT, PL, SK and SI.⁽²⁾ Weighted in common currency; BE, DK, DE, EL, ES, FR, IE, IT, LU, NL, AT, PT, FI, SE, UK, CY, CZ, EE, HU, LV, LT, MT, PL, SK and SI.

Table 27

Prices
Price deflator imports of goods and services

(National currency; annual percentage change)

	BE	DK	DE ⁽¹⁾	EL	ES	FR	IE	IT	LU
1961-70	2.3	2.5	0.0	0.8	3.0	2.2	2.0	1.2	1.8
1971-80	7.6	10.7	6.2	16.8	14.8	11.6	15.7	18.8	7.2
1981	13.6	16.0	11.3	14.6	28.7	19.3	18.6	25.2	10.1
1982	13.7	9.3	2.3	23.6	12.2	13.2	7.5	11.2	13.8
1983	7.6	4.7	0.8	16.6	22.0	8.9	5.2	6.0	7.9
1984	8.1	7.8	5.4	24.0	11.9	10.2	9.4	9.5	7.4
1985	2.0	1.7	2.6	17.6	2.1	2.3	2.6	7.4	3.1
1986	-10.4	-11.2	-11.5	8.0	-16.2	-12.8	-10.1	-14.2	-1.7
1987	-4.3	-1.6	-4.8	6.9	-2.8	-1.4	1.3	-1.7	-1.2
1988	2.3	-1.4	1.8	9.2	0.1	1.4	6.4	4.8	0.8
1989	6.6	6.8	5.3	14.7	1.9	6.0	6.2	6.9	3.8
1990	-1.5	-0.6	-0.9	13.7	-2.8	-1.8	-3.7	-1.8	1.6
1981-90	3.5	2.9	1.1	14.7	5.0	4.2	4.1	4.9	4.5
1991	-0.6	2.8	2.3	12.3	-1.5	-0.2	2.4	0.5	2.5
1992	-2.8	-0.8	-1.2	12.3	1.2	-3.0	-1.2	1.1	2.7
1993	-2.8	-0.5	-1.0	7.4	6.1	-3.3	4.5	14.8	3.2
1994	1.8	0.7	0.6	5.6	5.8	0.5	2.4	4.8	2.1
1995	2.0	1.2	0.8	7.5	4.4	0.4	3.8	11.1	1.3
1996	2.5	-0.1	0.5	5.0	0.7	2.3	-0.5	-2.9	0.9
1997	5.5	2.2	3.1	2.8	3.5	1.5	0.7	1.4	3.6
1998	-2.2	-2.5	-2.0	3.8	-0.3	-2.5	2.5	-1.3	1.2
1999	0.7	-2.4	-1.0	1.7	0.7	-1.4	2.6	0.2	2.3
2000	12.0	9.7	7.7	9.3	9.7	5.5	7.5	12.4	7.7
1991-2000	1.5	1.0	0.9	6.7	3.0	-0.1	2.4	4.0	2.7
2001	1.5	2.3	0.9	1.6	0.5	-1.0	3.6	2.0	3.0
2002	-1.7	-0.2	-1.7	0.6	-1.0	-2.8	-0.9	-2.4	-2.0
2003	-1.7	-0.8	-2.2	0.6	-0.1	0.0	-2.8	-2.1	-1.5
2004	0.1	1.1	-0.7	0.6	0.9	0.0	1.6	0.0	0.3
2005	2.0	1.3	1.6	1.0	1.6	0.6	2.1	1.0	0.8
2001-05	0.0	0.7	-0.4	0.9	0.4	-0.7	0.7	-0.3	0.1

⁽¹⁾ 1961-91 D_90.

(National currency; annual percentage change)

	NL	AT	PT	FI	SE	UK	EU-15 ⁽¹⁾	EUR-12 ⁽²⁾
1961–70	0.8	2.2	1.1	4.5	2.3	2.9	1.7	1.3
1971–80	7.7	5.7	19.5	13.2	11.9	13.8	10.9	10.3
1981	14.6	8.0	25.6	10.8	11.3	7.8	15.1	16.5
1982	1.6	2.9	18.1	4.1	14.4	7.0	8.3	8.2
1983	0.0	1.8	29.9	7.0	13.3	7.5	6.3	5.8
1984	5.7	4.6	31.2	4.2	3.5	8.8	8.1	8.2
1985	1.2	3.8	13.0	3.2	3.5	4.0	3.5	3.5
1986	-16.7	-0.6	-6.8	-7.0	-6.8	-4.4	-10.5	-11.9
1987	-3.0	-2.0	9.5	-0.4	3.8	2.4	-1.6	-2.6
1988	-0.2	2.3	11.7	1.2	4.1	-0.9	1.7	2.2
1989	4.6	3.3	10.6	5.2	5.7	6.5	5.8	5.6
1990	-1.3	0.6	4.1	1.1	3.3	3.3	-0.2	-1.0
1981–90	0.4	2.4	14.1	2.8	5.4	4.1	3.4	3.2
1991	0.3	1.2	1.0	2.8	0.3	0.3	0.9	1.0
1992	-1.1	0.3	-4.2	7.7	-2.4	0.0	-0.7	-0.8
1993	-2.1	0.8	4.4	8.0	13.9	8.6	2.9	1.6
1994	0.1	1.2	4.3	0.0	4.0	3.0	2.0	1.8
1995	0.2	0.5	3.9	0.0	5.7	5.9	3.1	2.6
1996	1.2	2.1	1.6	0.9	-4.2	0.1	0.5	0.8
1997	2.2	1.8	2.7	0.9	0.8	-7.1	1.1	2.6
1998	-1.5	0.1	-1.2	-2.6	-0.5	-5.8	-2.1	-1.5
1999	0.5	-0.1	-0.3	-2.0	1.1	-1.2	-0.4	-0.2
2000	8.3	3.2	8.3	7.0	4.5	3.1	7.4	8.3
1991–2000	0.8	1.1	2.0	2.2	2.2	0.6	1.5	1.6
2001	0.5	-0.3	0.5	-2.8	4.6	0.0	0.8	0.7
2002	-0.6	-1.7	-2.4	-2.9	0.4	-2.0	-1.7	-1.8
2003	-2.8	-0.6	-1.1	-0.1	-1.2	1.1	-1.1	-1.5
2004	-0.2	0.8	0.5	0.6	0.1	1.3	0.2	0.0
2005	0.8	1.1	0.7	1.2	1.1	1.0	1.2	1.3
2001–05	-0.5	-0.1	-0.4	-0.8	1.0	0.3	-0.1	-0.3

⁽¹⁾ Weighted in common currency; 1961–91 including D_90.⁽²⁾ Weighted in common currency; EU-15 excluding DK, SE and UK; 1961–91 including D_90.

Table 27 (Continued)

(National currency; annual percentage change)

	CY	CZ	EE	HU	LV	LT	MT	PL	SK
1961-70	:	:	:	:	:	:	:	:	:
1971-80	:	:	:	:	:	:	:	:	:
1981	:	:	:	:	:	:	:	:	:
1982	:	:	:	:	:	:	:	:	:
1983	:	:	:	:	:	:	:	:	:
1984	:	:	:	:	:	:	:	:	:
1985	:	:	:	:	:	:	:	:	:
1986	:	:	:	:	:	:	:	:	:
1987	:	:	:	:	:	:	:	:	:
1988	:	:	:	:	:	:	:	:	:
1989	:	:	:	:	:	:	:	:	:
1990	:	:	:	:	:	:	:	:	:
1981-90	:	:	:	:	:	:	:	:	:
1991	:	92.5	:	34.1	112.9	:	:	31.7	:
1992	:	1.4	:	10.0	1760.2	:	:	21.7	:
1993	:	-1.8	:	9.7	89.2	:	:	18.7	2.3
1994	:	-0.6	42.3	15.6	9.2	:	:	27.0	13.1
1995	2.2	5.8	20.7	32.7	25.9	:	:	18.0	7.4
1996	3.0	1.0	17.1	20.6	12.2	3.7	4.7	10.4	7.1
1997	2.8	5.2	8.2	13.4	9.3	0.1	1.0	15.7	0.7
1998	-1.1	-1.4	1.9	11.7	0.4	-4.2	2.9	10.8	-0.5
1999	2.6	1.2	0.1	5.5	-4.4	-4.0	0.2	7.1	7.7
2000	8.0	5.5	6.5	12.4	6.7	4.3	14.5	7.7	11.9
1991-2000	:	8.5	:	16.2	62.6	:	:	16.6	:
2001	1.8	-3.1	4.6	2.4	0.7	-2.4	-6.4	-4.0	7.8
2002	-1.0	-7.9	0.6	-5.3	4.2	-3.7	1.4	5.2	-1.1
2003	-1.5	1.3	0.5	5.5	3.1	-2.7	1.2	6.6	-3.4
2004	3.0	0.9	1.5	4.8	3.0	2.4	1.2	3.3	2.1
2005	2.8	1.0	2.0	3.3	3.0	2.6	1.2	2.0	2.3
2001-05	1.0	-1.6	1.8	2.1	2.8	-0.8	-0.3	2.6	1.5

(National currency; annual percentage change)

	SI	AC-10 ⁽¹⁾	EU-25 ⁽²⁾	BG	RO	TR	US	JP
1961–70	:	:	:	:	:	4.7	1.7	1.0
1971–80	:	:	:	:	:	36.8	13.7	11.4
1981	:	:	:	:	:	43.5	5.4	2.1
1982	:	:	:	:	:	42.8	-3.4	6.5
1983	:	:	:	:	:	25.8	-3.8	-5.4
1984	:	:	:	:	:	57.1	-0.9	-2.6
1985	:	:	:	:	:	64.4	-3.2	-2.2
1986	:	:	:	:	:	28.8	0.0	-31.6
1987	:	:	:	:	:	33.1	5.9	-7.1
1988	:	:	:	:	:	79.0	4.9	-4.6
1989	:	:	:	:	:	66.7	2.5	6.7
1990	:	:	:	:	:	28.4	2.7	8.1
1981–90	:	:	:	:	:	45.9	1.0	-3.7
1991	116.2	:	:	:	209.7	60.2	-0.5	-5.1
1992	186.1	:	:	:	353.9	63.1	0.1	-5.1
1993	23.1	:	:	:	146.1	48.9	-0.9	-8.3
1994	14.4	:	:	:	142.1	163.3	0.9	-4.3
1995	6.6	:	:	:	37.6	85.0	2.7	-1.3
1996	11.6	9.0	1.0	120.5	52.9	80.4	-1.8	8.5
1997	4.6	8.9	1.6	857.7	114.1	74.1	-3.6	5.7
1998	1.4	5.1	-1.7	0.1	12.3	62.5	-5.4	-2.7
1999	1.5	4.1	-0.1	4.3	58.9	48.2	0.1	-7.9
2000	13.8	8.9	7.5	15.0	35.8	50.6	4.5	1.2
1991–2000	28.9	:	:	:	97.7	71.2	-0.4	-2.1
2001	6.2	-0.4	0.7	0.1	32.2	89.2	-2.9	3.0
2002	2.4	-1.2	-1.7	-1.7	16.0	30.2	0.3	-1.9
2003	3.2	3.2	-0.8	-1.7	13.5	23.9	3.9	-0.8
2004	1.7	2.8	0.4	0.0	10.1	15.7	2.1	-4.0
2005	1.7	2.2	1.3	1.6	9.5	13.5	1.6	-2.0
2001–05	3.0	1.3	0.0	-0.3	16.0	32.0	0.9	-1.2

⁽¹⁾ Weighted in common currency; CY, CZ, EE, HU, LV, LT, MT, PL, SK and SI.⁽²⁾ Weighted in common currency; BE, DK, DE, EL, ES, FR, IE, IT, LU, NL, AT, PT, FI, SE, UK, CY, CZ, EE, HU, LV, LT, MT, PL, SK and SI.

Table 28

Prices
Terms of trade of goods and services (national accounts)

(1995 = 100)

	BE	DK	DE ⁽¹⁾	EL	ES	FR	IE	IT	LU
1960	100.9	100.4	82.1	101.2	59.7	115.1	117.2	104.2	113.1
1965	99.4	105.2	84.5	104.3	64.4	119.3	120.7	108.1	104.0
1970	101.5	104.3	97.1	103.7	84.0	116.4	115.7	110.2	116.0
1975	98.7	97.6	95.8	91.3	78.2	104.8	109.2	90.3	105.9
1980	95.2	89.0	88.2	88.1	73.3	94.4	102.2	83.5	102.1
1981	91.7	86.8	83.7	94.0	65.4	89.7	100.3	80.8	101.6
1982	91.2	87.8	85.2	92.1	66.2	89.0	103.4	84.4	103.1
1983	91.0	88.4	86.2	95.9	63.4	89.3	107.2	86.2	101.2
1984	91.1	88.0	84.4	88.4	63.7	88.4	105.9	86.3	99.2
1985	91.8	89.7	84.5	86.5	67.5	89.7	106.4	87.3	100.0
1986	95.7	95.5	94.3	89.9	80.2	98.5	111.0	98.7	99.3
1987	96.7	95.8	98.0	91.5	85.4	99.0	110.0	101.4	98.4
1988	98.0	96.3	97.9	93.8	89.3	99.9	109.2	100.0	99.5
1989	98.6	96.4	95.3	93.2	92.9	98.1	110.4	99.7	99.9
1990	98.3	97.6	96.0	95.0	96.3	98.5	105.4	104.6	98.5
1991	98.3	96.6	94.7	96.5	99.2	98.1	102.6	108.1	97.3
1992	100.0	99.8	96.8	94.6	100.9	99.4	101.9	107.9	96.4
1993	101.5	100.0	98.5	96.2	99.8	100.5	104.1	103.7	98.7
1994	100.9	99.8	98.8	98.9	98.6	99.8	101.8	102.1	99.7
1995	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
1996	99.2	101.8	99.6	100.5	100.8	99.4	100.2	104.0	100.6
1997	98.5	102.6	97.8	101.3	100.7	99.8	100.7	102.9	101.0
1998	99.5	102.6	100.0	101.7	101.7	101.1	101.0	105.3	102.5
1999	98.8	104.1	100.2	101.8	101.3	101.3	100.8	105.1	102.8
2000	96.7	103.6	95.8	100.6	99.2	98.4	99.2	97.6	103.0
2001	96.6	103.5	95.8	100.3	101.3	99.4	99.7	99.2	102.3
2002	97.4	100.6	97.7	102.1	103.5	100.6	101.7	100.6	101.5
2003	97.8	101.9	99.4	104.4	104.8	100.5	100.3	103.0	101.6
2004	97.0	101.9	100.4	106.6	105.9	100.9	100.5	104.2	102.3
2005	96.5	101.7	100.0	107.9	106.5	101.0	100.7	104.6	103.0

⁽¹⁾ 1960–91 D_90.

NB: The terms of trade indicate the ratio of the change of export prices of goods and services to the change of import prices of goods and services. They are equal to the ratio of the price index for exports of goods and services to the price index for imports of goods and services.

(1995 = 100)

	NL	AT	PT	FI	SE	UK
1960	101.3	107.3	90.2	96.7	123.8	101.0
1965	105.4	111.2	91.8	103.8	117.3	102.2
1970	106.8	108.0	94.4	99.5	119.1	103.9
1975	103.2	106.4	80.4	99.6	114.6	90.1
1980	99.9	100.5	77.2	88.3	100.2	100.4
1981	99.4	98.6	72.9	86.4	98.0	101.1
1982	101.4	100.3	73.9	88.0	95.1	101.0
1983	101.3	100.0	74.0	87.8	94.3	101.5
1984	100.7	99.4	73.4	91.4	97.3	100.4
1985	100.9	98.7	76.4	91.2	97.8	101.4
1986	102.0	99.7	85.6	94.5	103.4	97.3
1987	99.9	100.0	86.6	96.5	102.2	97.8
1988	100.2	99.9	86.6	100.0	103.2	98.9
1989	99.6	99.0	87.5	100.5	103.9	100.4
1990	100.1	99.3	89.4	99.8	102.5	101.4
1991	99.9	98.8	91.5	96.8	103.9	102.7
1992	99.0	98.9	96.0	95.4	103.5	104.4
1993	98.9	98.5	96.4	94.1	99.2	104.6
1994	99.3	98.6	98.4	95.3	98.8	102.6
1995	100.0	100.0	100.0	100.0	100.0	100.0
1996	99.3	99.0	96.8	98.8	99.6	101.2
1997	99.8	98.0	96.7	97.2	98.7	104.5
1998	99.9	98.0	98.7	98.7	97.9	106.7
1999	98.7	98.0	99.1	95.7	95.2	107.3
2000	98.6	97.1	96.2	92.5	93.0	106.3
2001	99.6	97.2	98.2	92.7	91.5	105.5
2002	99.5	98.5	100.8	91.0	89.4	109.1
2003	100.6	98.4	101.1	88.4	89.4	109.4
2004	100.8	98.1	101.4	87.4	89.4	109.7
2005	100.7	97.8	101.6	86.8	89.5	110.2

Table 28 (Continued)

(1995 = 100)

	CY	CZ	EE	HU	LV	LT	MT	PL	SK
1960	:	:	:	:	:	:	:	:	:
1965	:	:	:	:	:	:	:	:	:
1970	:	:	:	:	:	:	:	:	:
1975	:	:	:	:	:	:	:	:	:
1980	:	:	:	:	:	:	:	:	:
1981	:	:	:	:	:	:	:	:	:
1982	:	:	:	:	:	:	:	:	:
1983	:	:	:	:	:	:	:	:	:
1984	:	:	:	:	:	:	:	:	:
1985	:	:	:	:	:	:	:	:	:
1986	:	:	:	:	:	:	:	:	:
1987	:	:	:	:	:	:	:	:	:
1988	:	:	:	:	:	:	:	:	:
1989	:	:	:	:	:	:	:	:	:
1990	:	109.1	:	96.9	160.9	:	:	91.3	:
1991	:	84.7	:	93.8	189.0	:	:	83.6	:
1992	:	88.4	:	93.9	140.6	:	:	88.8	101.4
1993	:	94.2	96.6	96.6	128.1	:	:	95.2	99.1
1994	99.7	99.5	97.1	99.1	113.1	:	:	98.7	99.3
1995	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
1996	97.8	101.6	99.7	98.7	97.0	106.6	98.7	97.5	97.3
1997	99.5	102.1	101.5	100.2	90.9	111.4	98.5	96.0	95.2
1998	102.7	107.2	103.8	101.1	95.3	107.8	96.6	98.1	97.3
1999	102.8	106.4	103.9	100.2	98.7	112.9	98.4	97.1	95.4
2000	99.3	103.7	105.3	97.9	96.0	118.8	98.9	91.7	95.6
2001	101.0	106.2	107.9	98.3	96.0	118.8	98.8	90.5	93.4
2002	102.1	108.1	105.2	99.1	95.8	117.0	100.4	90.1	94.0
2003	102.5	107.6	105.2	99.3	95.0	116.3	100.6	91.7	95.5
2004	102.6	107.5	107.3	99.7	94.8	115.9	100.8	91.1	94.1
2005	102.7	107.7	109.4	100.1	94.6	115.8	101.0	91.4	93.6

NB: The terms of trade indicate the ratio of the change of export prices of goods and services to the change of import prices of goods and services. They are equal to the ratio of the price index for exports of goods and services to the price index for imports of goods and services.

(1995 = 100)

	SI	BG	RO	TR	US	JP
1960	:	:	:	108.4	137.7	137.2
1965	:	:	:	112.5	138.6	136.8
1970	:	:	:	108.8	143.8	132.0
1975	:	:	:	79.2	115.3	103.5
1980	:	:	:	104.2	92.6	75.5
1981	:	:	:	104.1	94.3	75.8
1982	:	:	:	104.1	98.1	73.1
1983	:	:	:	104.1	102.4	73.5
1984	:	:	:	104.1	104.3	75.5
1985	:	:	:	104.1	104.9	75.2
1986	:	:	:	104.1	103.3	96.0
1987	:	:	:	102.3	100.1	98.8
1988	:	:	:	99.9	100.4	101.2
1989	:	:	:	91.8	99.8	98.2
1990	94.3	:	108.6	98.8	97.9	92.1
1991	89.3	:	116.3	99.3	99.7	94.9
1992	89.9	:	106.3	99.0	99.3	97.5
1993	95.2	:	107.5	106.3	100.2	99.3
1994	97.7	:	100.2	106.9	100.4	100.6
1995	100.0	100.0	100.0	100.0	100.0	100.0
1996	101.3	100.7	98.6	93.7	100.5	94.8
1997	102.0	97.0	99.5	100.6	102.6	91.2
1998	103.5	105.6	103.4	99.1	106.0	94.2
1999	104.1	107.0	106.5	101.7	105.1	93.7
2000	101.1	112.2	109.8	94.5	101.9	89.0
2001	103.0	113.0	110.0	93.4	104.2	87.6
2002	105.1	112.6	111.7	85.4	103.7	87.6
2003	104.3	114.3	112.0	81.6	101.9	86.9
2004	104.2	115.7	111.7	80.5	101.2	89.0
2005	104.2	115.6	111.2	79.8	101.3	89.6

Table 29

Wage costs
Nominal compensation per employee; total economy

(National currency; annual percentage change)

	BE	DK	DE (1)	EL	ES	FR	IE	IT	LU
1961–70	7.9	10.7	8.6	9.4	14.1	9.5	9.8	10.7	6.7
1971–80	12.2	12.0	8.3	18.3	20.4	13.8	18.6	18.5	10.6
1981	7.0	9.7	4.6	21.3	15.6	14.0	18.1	22.5	8.3
1982	7.3	12.2	4.0	27.5	13.8	14.3	14.2	16.1	6.9
1983	6.3	8.7	3.1	21.6	13.9	10.2	12.8	15.8	6.9
1984	7.3	6.2	2.9	20.8	10.4	7.5	10.7	11.7	7.1
1985	4.7	5.4	2.4	21.0	9.2	6.7	9.2	10.0	4.3
1986	3.6	5.0	3.2	12.0	9.5	4.5	5.1	7.5	5.1
1987	2.2	8.5	2.9	11.3	7.1	3.3	5.1	7.9	3.8
1988	2.4	5.6	2.6	20.1	7.5	4.5	7.0	8.2	3.6
1989	6.1	4.2	2.6	23.2	7.4	4.0	6.5	8.6	8.5
1990	7.0	4.0	4.7	17.9	10.1	4.4	4.2	10.4	4.7
1981–90	5.4	6.9	3.3	19.6	10.4	7.3	9.2	11.8	5.9
1991	7.7	3.9	6.0	15.3	10.1	3.9	4.5	8.8	5.4
1992	5.7	4.1	10.5	11.5	11.3	4.1	7.8	5.8	6.5
1993	4.7	2.3	4.1	9.8	7.4	2.9	5.5	4.6	5.7
1994	4.4	1.5	3.0	10.9	3.7	1.7	2.2	3.0	3.9
1995	-1.9	3.1	3.6	13.0	3.7	2.8	2.7	4.2	1.3
1996	1.5	3.6	1.3	8.6	4.5	2.5	3.5	6.1	1.9
1997	2.9	3.5	0.8	16.4	2.3	2.2	4.2	4.0	2.5
1998	1.0	3.4	1.0	1.8	2.7	1.9	5.2	-1.5	1.6
1999	3.4	3.7	1.2	6.5	2.7	2.5	5.2	2.6	3.6
2000	2.1	3.8	2.1	5.8	3.7	2.3	8.1	3.1	4.7
1991–2000	3.1	3.3	3.3	9.9	5.2	2.7	4.9	4.0	3.7
2001	3.6	4.8	1.7	5.3	3.8	2.6	9.0	3.0	3.7
2002	4.3	3.8	1.5	8.4	3.9	2.8	5.2	2.4	3.1
2003	2.2	3.7	1.9	6.5	4.1	2.7	5.1	3.0	2.7
2004	3.0	3.5	1.9	7.0	3.8	2.6	5.0	3.0	2.0
2005	3.0	3.6	2.2	5.5	3.4	2.7	4.8	2.7	2.3
2001–05	3.2	3.9	1.9	6.5	3.8	2.7	5.8	2.8	2.8

(1) 1961–91 D_90.

NB: Compensation of employees (D.1) is the total remuneration payable by an employer to an employee in return for work done by the latter during the accounting period. Compensation of employees encompasses wages and salaries in cash and wages and salaries in kind (D.11) as well as employers' social contributions (D.12). The system of accounts records the employers' contributions to social insurance funds as two transactions: employers pay employers' social contributions to their employees, and employees pay the same contributions to social insurance funds (rerouting).

For several countries, nominal compensation per employee is based on full-time equivalents (see note on Table 11).

Depending on the availability, data relate to the domestic or national concept.

Reference: ESA 95, paragraphs 1.39, 4.02, 11.12 and 11.32.

(National currency; annual percentage change)

	NL	AT	PT	FI	SE	UK	EU-15 ⁽¹⁾	EUR-12 ⁽²⁾
1961–70	10.6	8.6	9.7	9.8	8.5	7.0	9.0	9.7
1971–80	11.0	10.1	22.6	15.1	11.4	16.1	13.3	12.9
1981	3.6	8.3	21.0	14.0	9.2	13.3	11.7	11.3
1982	6.0	5.7	21.5	9.6	6.2	8.6	10.0	10.3
1983	3.3	3.9	21.8	10.0	7.9	7.8	8.5	8.6
1984	0.5	5.4	21.2	10.4	8.2	5.5	6.8	7.1
1985	1.4	5.5	22.5	10.3	7.5	7.8	6.5	6.2
1986	2.1	5.6	21.6	7.3	8.7	7.9	5.8	5.2
1987	1.5	3.6	14.4	7.7	7.0	6.5	4.8	4.3
1988	1.1	3.3	13.1	8.9	7.5	8.4	5.3	4.7
1989	0.7	4.5	15.2	10.3	11.3	8.9	5.8	4.9
1990	3.3	5.4	19.2	9.4	11.3	10.0	7.3	6.5
1981–90	2.3	5.1	19.1	9.8	8.5	8.4	7.2	6.9
1991	4.9	6.7	18.1	6.3	6.8	9.4	7.1	6.6
1992	4.8	5.9	16.3	2.0	3.9	5.9	7.1	7.6
1993	3.5	4.8	6.0	0.5	4.4	3.7	4.1	4.2
1994	3.0	4.0	5.6	3.4	5.9	2.8	3.0	3.0
1995	1.5	4.5	16.2	4.0	2.7	3.7	3.5	3.5
1996	1.3	1.2	6.1	2.6	7.3	3.1	2.8	2.6
1997	2.1	1.5	6.0	1.5	4.7	4.5	2.5	2.1
1998	3.5	2.5	5.3	4.4	2.6	5.6	2.1	1.2
1999	3.7	2.1	5.4	2.2	1.2	4.4	2.6	2.2
2000	4.7	2.2	5.6	3.7	7.0	6.0	3.5	2.8
1991–2000	3.3	3.5	9.0	3.0	4.6	4.9	3.8	3.6
2001	5.5	1.4	5.5	4.7	5.0	4.7	3.3	2.9
2002	4.9	2.2	5.3	2.3	3.9	4.3	3.1	2.7
2003	4.1	2.5	2.7	3.1	3.7	4.3	3.1	2.7
2004	1.4	2.9	2.3	3.0	3.7	4.4	2.9	2.5
2005	1.1	2.9	2.5	3.1	3.8	4.4	3.0	2.6
2001–05	3.4	2.4	3.7	3.2	4.0	4.4	3.1	2.7

⁽¹⁾ Weighted in common currency; 1961–91 including D_90.⁽²⁾ Weighted in common currency; EU-15 excluding DK, SE and UK; 1961–91 including D_90.

Table 29 (Continued)

(National currency; annual percentage change)

	CY	CZ	EE	HU	LV	LT	MT	PL	SK
1961–70	:	:	:	:	:	:	:	:	:
1971–80	:	:	:	:	:	:	:	:	:
1981	:	:	:	:	:	:	:	:	:
1982	:	:	:	:	:	:	:	:	:
1983	:	:	:	:	:	:	:	:	:
1984	:	:	:	:	:	:	:	:	:
1985	:	:	:	:	:	:	:	:	:
1986	:	:	:	:	:	:	:	:	:
1987	:	:	:	:	:	:	:	:	:
1988	:	:	:	:	:	:	:	:	:
1989	:	:	:	:	:	:	:	:	:
1990	:	:	:	:	:	:	:	:	:
1981–90	:	:	:	:	:	:	:	:	:
1991	:	:	:	:	:	:	9.3	:	:
1992	:	:	:	:	:	:	6.8	73.4	:
1993	:	3.8	:	23.1	:	:	10.2	33.0	:
1994	:	19.1	56.2	17.9	:	67.7	6.4	40.4	:
1995	7.4	19.3	41.9	21.6	:	74.1	9.0	34.0	18.3
1996	6.3	16.4	24.2	20.2	27.3	33.5	6.3	28.4	6.1
1997	11.8	7.2	19.6	20.8	13.0	26.2	3.5	20.6	15.1
1998	0.1	8.7	15.6	13.9	6.2	17.2	4.7	16.0	9.7
1999	4.8	6.8	14.8	5.0	7.5	6.6	6.7	13.0	8.2
2000	7.2	6.4	9.7	15.8	6.9	-2.3	2.1	13.3	12.3
1991–2000	:	:	:	:	:	:	6.5	:	:
2001	4.7	7.3	7.5	15.8	6.4	3.0	10.2	13.3	5.8
2002	:	6.5	6.7	17.7	4.7	2.1	-0.7	4.7	9.8
2003	:	6.5	10.1	12.9	5.7	3.7	1.4	3.2	7.5
2004	:	6.3	8.6	8.0	7.5	3.9	2.1	3.4	8.1
2005	:	6.3	8.0	6.7	7.5	4.2	2.0	4.9	6.1
2001–05	:	6.6	8.2	12.2	6.3	3.4	2.9	5.8	7.4

NB: Compensation of employees (D.1) is the total remuneration payable by an employer to an employee in return for work done by the latter during the accounting period. Compensation of employees encompasses wages and salaries in cash and wages and salaries in kind (D.11) as well as employers' social contributions (D.12). The system of accounts records the employers' contributions to social insurance funds as two transactions: employers pay employers' social contributions to their employees, and employees pay the same contributions to social insurance funds (rerouting).

For several countries, nominal compensation per employee is based on full-time equivalents (see note on Table 11).

Depending on the availability, data relate to the domestic or national concept.

Reference: ESA 95, paragraphs 1.39, 4.02, 11.12 and 11.32.

(National currency; annual percentage change)

	SI	AC-10 ⁽¹⁾	EU-25 ⁽²⁾	BG	RO	TR	US	JP
1961–70	:	:	:	:	:	:	5.2	13.5
1971–80	:	:	:	:	:	:	8.1	13.1
1981	:	:	:	:	:	:	9.5	6.4
1982	:	:	:	:	:	:	7.7	3.8
1983	:	:	:	:	:	:	5.4	2.2
1984	:	:	:	:	:	:	5.1	3.9
1985	:	:	:	:	:	:	4.6	2.9
1986	:	:	:	:	:	:	4.1	3.2
1987	:	:	:	:	:	:	4.2	3.3
1988	:	:	:	:	:	:	4.8	3.8
1989	:	:	:	:	:	102.8	3.2	4.8
1990	:	:	:	:	:	90.9	5.2	5.5
1981–90	:	:	:	:	:	:	5.4	4.0
1991	:	:	:	:	127.4	90.9	4.6	4.8
1992	:	:	:	:	187.8	63.1	5.3	1.3
1993	:	:	:	:	207.6	75.2	2.8	0.8
1994	:	:	:	:	132.6	61.8	2.4	1.3
1995	:	:	:	:	54.3	71.2	1.8	1.7
1996	11.0	21.2	3.3	72.7	53.5	90.3	2.5	0.7
1997	12.0	16.9	3.0	848.0	103.1	103.0	3.1	1.4
1998	9.2	12.9	2.6	52.5	128.1	76.2	4.5	- 0.2
1999	9.3	10.1	3.3	6.0	41.2	84.4	4.1	- 1.1
2000	15.1	11.7	4.2	10.2	74.9	53.1	5.4	0.2
1991–2000	:	:	:	:	104.3	76.3	3.7	1.1
2001	11.6	11.2	3.9	12.3	- 0.5	40.5	2.9	- 0.7
2002	10.5	:	:	8.2	6.0	47.2	1.8	- 1.8
2003	7.6	:	:	8.1	:	39.8	2.1	0.6
2004	7.0	:	:	7.8	:	32.2	4.0	0.5
2005	6.5	:	:	10.2	:	27.5	3.8	0.5
2001–05	8.6	:	:	9.3	:	37.2	2.9	- 0.2

⁽¹⁾ Weighted in common currency; CY, CZ, EE, HU, LV, LT, MT, PL, SK and SI.⁽²⁾ Weighted in common currency; BE, DK, DE, EL, ES, FR, IE, IT, LU, NL, AT, PT, FI, SE, UK, CY, CZ, EE, HU, LV, LT, MT, PL, SK and SI.

Table 30

Wage costs
Real compensation per employee, deflator GDP; total economy

(National currency; annual percentage change)

	BE	DK	DE ⁽¹⁾	EL	ES	FR	IE	IT	LU
1961-70	4.3	4.1	4.6	6.3	7.1	4.9	4.1	5.9	2.5
1971-80	4.7	1.7	2.9	3.1	4.6	3.6	4.2	3.1	3.9
1981	1.8	- 1.8	0.3	- 0.2	2.9	2.7	0.5	2.9	1.1
1982	- 0.2	1.0	- 0.8	0.2	0.2	2.5	- 0.9	- 0.9	- 3.5
1983	0.6	0.3	- 0.1	0.8	1.8	1.1	1.7	0.6	0.1
1984	1.8	0.1	0.9	- 0.9	- 0.4	0.4	4.1	0.2	2.6
1985	0.1	0.4	0.2	1.7	0.6	1.2	3.7	1.0	1.3
1986	0.8	1.0	0.0	- 5.8	- 1.2	- 0.6	- 0.6	- 0.4	5.2
1987	0.5	3.2	1.1	- 3.4	1.1	0.4	2.8	1.6	3.8
1988	0.2	3.0	1.1	2.9	1.4	1.5	3.5	1.4	0.8
1989	1.2	- 1.0	0.3	7.6	0.4	0.9	1.4	2.0	4.3
1990	4.1	0.4	1.4	- 2.3	2.6	1.4	4.6	2.0	2.1
1981-90	1.1	0.6	0.4	0.0	0.9	1.1	2.1	1.0	1.7
1991	4.7	1.1	2.4	- 3.7	2.9	0.9	2.7	1.1	3.6
1992	2.2	1.2	5.2	- 2.9	4.3	2.1	4.8	1.2	2.7
1993	0.7	0.9	0.4	- 4.0	2.8	0.5	0.3	0.6	- 0.2
1994	2.3	- 0.3	0.5	- 0.2	- 0.2	0.1	0.5	- 0.4	0.4
1995	- 3.1	1.3	1.6	2.9	- 1.2	1.1	- 0.3	- 0.8	- 1.0
1996	0.3	1.1	0.3	1.1	1.0	1.0	1.4	0.8	- 0.1
1997	1.5	1.3	0.2	9.0	0.0	0.9	0.2	1.6	- 0.2
1998	- 0.6	2.4	- 0.1	- 3.3	0.3	1.0	- 1.1	- 4.1	- 1.0
1999	2.0	1.9	0.7	3.4	- 0.1	1.9	1.3	1.0	1.4
2000	0.9	0.7	2.3	2.4	0.2	1.3	3.7	1.0	0.8
1991-2000	1.1	1.2	1.3	0.4	1.0	1.1	1.3	0.2	0.6
2001	1.8	2.7	0.4	1.7	- 0.3	0.8	3.8	0.3	1.5
2002	2.5	2.9	0.0	4.2	- 0.6	1.0	- 0.2	- 0.3	2.6
2003	0.8	1.4	0.7	2.4	0.1	1.0	3.5	0.0	0.8
2004	1.9	1.7	0.6	2.6	0.2	0.8	1.7	0.5	- 0.7
2005	1.6	1.6	1.3	2.0	0.3	1.2	2.0	0.6	- 0.2
2001-05	1.7	2.1	0.6	2.6	- 0.1	1.0	2.1	0.2	0.8

⁽¹⁾ 1961-91 D_90.

(National currency; annual percentage change)

	NL	AT	PT	FI	SE	UK	EU-15 ⁽¹⁾	EUR-12 ⁽²⁾
1961–70	5.1	4.6	6.6	3.7	4.1	2.7	4.5	5.1
1971–80	3.2	3.5	5.6	3.6	1.6	1.9	3.0	3.2
1981	– 1.7	1.5	2.9	2.8	– 0.3	1.8	1.4	1.2
1982	0.6	0.6	0.7	0.8	– 1.8	1.1	0.1	0.0
1983	1.2	0.5	– 2.2	1.3	– 2.1	2.2	0.5	0.3
1984	– 0.9	0.7	– 2.8	1.8	0.6	1.0	0.4	0.4
1985	– 0.4	2.4	0.6	4.8	0.9	2.0	0.9	0.6
1986	2.0	2.7	0.9	2.8	2.1	4.4	0.6	– 0.3
1987	2.2	1.4	3.9	3.4	2.1	1.2	1.0	0.8
1988	0.1	2.1	1.8	0.5	1.1	1.9	1.0	0.9
1989	– 0.4	1.6	4.2	3.7	3.0	1.4	0.9	0.7
1990	1.0	2.0	5.3	2.9	2.3	2.2	1.8	1.5
1981–90	0.4	1.5	1.5	2.5	0.8	1.9	0.9	0.6
1991	2.0	2.8	7.3	4.3	– 0.4	2.6	1.9	1.7
1992	2.4	2.2	4.4	0.6	2.9	1.9	2.9	3.1
1993	1.6	1.8	– 1.3	– 2.0	1.4	1.0	0.6	0.6
1994	0.7	1.3	– 1.6	1.6	3.5	1.2	0.4	0.2
1995	– 0.5	2.0	12.4	– 0.8	– 0.6	1.0	0.6	0.6
1996	0.1	– 0.1	3.0	2.9	6.0	– 0.2	0.5	0.4
1997	0.1	0.6	2.2	– 0.6	3.1	1.6	0.7	0.5
1998	1.7	2.0	1.4	0.9	1.8	2.8	0.2	– 0.5
1999	2.1	1.4	2.2	2.4	0.5	2.0	1.3	1.1
2000	0.8	0.8	2.4	0.5	5.6	4.5	2.0	1.3
1991–2000	1.1	1.5	3.2	1.0	2.4	1.8	1.1	0.9
2001	0.1	– 0.6	0.7	2.0	2.9	2.4	0.9	0.4
2002	1.5	0.9	0.7	1.2	2.5	1.0	0.6	0.3
2003	1.3	1.2	– 0.6	2.0	1.6	1.9	0.9	0.6
2004	– 0.1	1.7	– 0.2	2.1	1.7	2.4	0.9	0.5
2005	0.2	1.8	0.1	1.5	1.7	2.3	1.2	0.9
2001–05	0.6	1.0	0.1	1.8	2.1	2.0	0.9	0.6

⁽¹⁾ Weighted in common currency; 1961–91 including D_90.⁽²⁾ Weighted in common currency; EU-15 excluding DK, SE and UK; 1961–91 including D_90.

Table 30 (Continued)

(National currency; annual percentage change)

	CY	CZ	EE	HU	LV	LT	MT	PL	SK
1961–70	:	:	:	:	:	:	:	:	:
1971–80	:	:	:	:	:	:	:	:	:
1981	:	:	:	:	:	:	:	:	:
1982	:	:	:	:	:	:	:	:	:
1983	:	:	:	:	:	:	:	:	:
1984	:	:	:	:	:	:	:	:	:
1985	:	:	:	:	:	:	:	:	:
1986	:	:	:	:	:	:	:	:	:
1987	:	:	:	:	:	:	:	:	:
1988	:	:	:	:	:	:	:	:	:
1989	:	:	:	:	:	:	:	:	:
1990	:	:	:	:	:	:	:	:	:
1981–90	:	:	:	:	:	:	:	:	:
1991	:	:	:	:	:	:	:	:	:
1992	:	:	:	:	:	:	3.1	25.1	:
1993	:	-14.3	:	1.5	:	:	7.2	1.8	:
1994	:	5.1	11.9	-1.4	:	3.7	2.8	2.3	:
1995	4.3	8.3	8.1	-4.1	:	26.1	4.0	4.7	8.3
1996	4.5	7.0	0.7	-0.8	9.6	9.8	5.4	8.1	1.4
1997	8.8	-0.7	7.5	2.0	5.1	10.5	1.2	5.8	9.0
1998	-2.3	-1.8	5.3	1.1	1.3	11.2	2.4	3.8	4.0
1999	2.5	3.7	9.9	-3.2	2.1	7.0	3.9	5.8	1.5
2000	2.6	5.3	2.9	5.4	2.2	-3.1	1.2	1.6	3.7
1991–2000	:	:	:	:	:	:	:	:	:
2001	2.3	1.0	2.2	6.7	3.7	3.2	4.1	8.8	1.0
2002	:	3.8	2.5	6.3	2.8	2.1	-2.1	3.2	7.8
2003	:	4.4	7.2	6.5	3.7	4.5	-4.0	2.4	0.6
2004	:	3.5	4.0	0.6	4.8	1.5	2.3	1.8	2.9
2005	:	3.6	2.9	0.1	4.4	1.5	1.7	2.4	2.7
2001–05	:	3.2	3.7	4.0	3.9	2.6	0.4	3.7	3.0

(National currency; annual percentage change)

	SI	AC-10 ⁽¹⁾	EU-25 ⁽²⁾	BG	RO	TR	US	JP
1961–70	:	:	:	:	:	:	2.4	7.3
1971–80	:	:	:	:	:	:	1.1	4.9
1981	:	:	:	:	:	:	0.2	2.0
1982	:	:	:	:	:	:	1.4	2.0
1983	:	:	:	:	:	:	1.4	0.3
1984	:	:	:	:	:	:	1.3	1.1
1985	:	:	:	:	:	:	1.4	0.7
1986	:	:	:	:	:	:	1.8	1.5
1987	:	:	:	:	:	:	1.1	3.4
1988	:	:	:	:	:	:	1.4	3.1
1989	:	:	:	:	:	15.6	-0.6	2.7
1990	:	:	:	:	:	20.6	1.2	3.0
1981–90	:	:	:	:	:	:	1.1	2.0
1991	:	:	:	:	-23.1	20.2	1.0	1.8
1992	:	:	:	:	-4.0	-0.4	2.8	-0.3
1993	:	:	:	:	-6.0	4.5	0.4	0.2
1994	:	:	:	:	-2.7	-21.6	0.4	1.2
1995	:	:	:	:	14.1	-8.5	-0.4	2.2
1996	0.1	5.2	0.6	-21.8	5.7	7.0	0.6	1.4
1997	3.0	4.2	0.8	-9.4	-17.8	11.8	1.1	1.1
1998	1.4	2.4	0.4	23.2	46.9	0.3	3.2	-0.1
1999	3.2	4.0	1.8	2.2	-4.4	18.6	2.6	0.5
2000	8.9	3.3	2.4	3.3	21.3	2.2	3.3	2.1
1991–2000	:	:	:	:	1.3	2.7	1.5	1.0
2001	2.3	5.7	1.4	5.3	-27.6	-9.3	0.5	0.9
2002	2.2	:	:	4.2	-14.2	2.5	0.7	-0.2
2003	1.1	:	:	4.9	:	11.2	0.7	2.8
2004	1.3	:	:	3.7	:	14.4	3.0	1.8
2005	1.4	:	:	6.2	:	14.7	2.7	1.6
2001–05	1.7	:	:	4.9	:	6.3	1.5	1.4

⁽¹⁾ Weighted in common currency; CY, CZ, EE, HU, LV, LT, MT, PL, SK and SI.⁽²⁾ Weighted in common currency; BE, DK, DE, EL, ES, FR, IE, IT, LU, NL, AT, PT, FI, SE, UK, CY, CZ, EE, HU, LV, LT, MT, PL, SK and SI.

Table 31

Wage costs**Real compensation per employee, deflator private consumption; total economy***(National currency; annual percentage change)*

	BE	DK	DE ⁽¹⁾	EL	ES	FR	IE	IT	LU
1961-70	4.6	4.6	5.7	6.9	7.8	5.1	4.4	6.7	4.1
1971-80	4.7	1.4	3.0	3.8	4.7	3.6	4.0	3.3	3.8
1981	-0.5	-2.2	-1.5	-1.5	1.3	0.8	-1.3	3.8	-0.2
1982	0.3	2.2	-1.0	5.3	-0.5	2.4	-0.6	-0.7	-3.3
1983	-0.8	1.2	-0.1	1.8	1.4	0.5	3.0	0.7	-1.2
1984	1.7	-0.7	0.4	1.3	-0.2	-0.3	3.2	0.1	0.5
1985	-0.2	0.8	0.6	1.1	1.0	0.8	3.8	0.9	0.0
1986	3.3	2.2	3.8	-8.5	0.2	1.8	1.4	1.0	4.8
1987	0.4	3.5	2.4	-5.1	1.5	0.1	2.6	2.5	2.9
1988	1.4	1.0	1.3	4.3	2.5	1.7	2.9	2.2	1.3
1989	2.2	-0.6	-0.2	8.4	0.6	0.3	2.4	1.8	5.1
1990	4.3	1.1	2.0	-1.6	3.3	1.3	2.1	3.8	1.0
1981-90	1.2	0.8	0.8	0.5	1.1	0.9	1.9	1.6	1.1
1991	4.8	1.0	2.1	-3.7	3.4	0.4	1.8	1.7	2.0
1992	3.8	2.2	5.8	-3.6	4.5	1.5	4.7	0.3	2.2
1993	2.1	0.3	0.2	-3.8	2.0	0.4	3.2	-0.9	1.7
1994	2.2	-1.5	0.4	0.0	-1.1	-0.4	-0.5	-1.8	1.3
1995	-3.4	1.2	1.7	3.7	-1.1	0.8	-0.1	-1.7	-0.7
1996	-0.7	1.5	-0.4	0.3	1.0	0.6	0.9	1.7	0.5
1997	1.3	1.3	-1.2	10.3	-0.3	0.8	1.3	1.7	1.1
1998	0.0	2.0	-0.1	-2.6	0.5	1.2	1.2	-3.6	0.6
1999	2.1	1.3	0.9	4.1	0.3	2.0	1.9	0.4	2.1
2000	-0.2	0.2	0.6	2.4	0.5	0.8	3.6	0.2	2.1
1991-2000	1.2	0.9	1.0	0.6	1.0	0.8	1.8	-0.2	1.3
2001	0.8	2.2	0.2	1.9	0.5	1.0	4.5	0.4	0.4
2002	2.8	1.4	0.2	4.6	0.4	0.9	-1.3	-0.6	0.8
2003	0.6	1.5	0.8	2.8	0.9	0.8	1.5	0.2	0.6
2004	1.6	1.7	0.2	3.4	0.9	0.9	1.9	0.6	0.2
2005	1.3	1.6	1.0	2.0	0.8	1.1	2.0	0.6	0.7
2001-05	1.4	1.7	0.5	2.9	0.7	0.9	1.7	0.2	0.6

⁽¹⁾ 1961-91 D_90.

(National currency; annual percentage change)

	NL	AT	PT	FI	SE	UK	EU-15 ⁽¹⁾	EUR-12 ⁽²⁾
1961–70	6.3	4.9	6.6	4.8	4.3	3.0	5.1	5.8
1971–80	3.6	3.7	4.5	3.4	1.6	2.5	3.0	3.2
1981	- 3.2	1.3	0.7	2.1	- 2.6	2.2	0.2	- 0.2
1982	0.6	0.2	1.0	0.3	- 3.7	0.1	- 0.2	- 0.2
1983	0.4	- 0.1	- 3.2	2.0	- 3.1	2.3	0.3	0.0
1984	- 2.3	0.3	- 5.6	3.2	0.6	0.5	- 0.1	- 0.1
1985	0.0	2.0	2.6	4.4	0.6	2.5	0.9	0.5
1986	2.5	3.9	6.8	3.7	3.9	3.5	2.2	1.8
1987	1.8	2.3	4.1	4.3	1.7	2.2	1.4	1.2
1988	0.2	1.8	1.4	4.0	1.5	3.2	1.5	1.3
1989	- 0.8	1.9	2.1	5.4	4.2	2.6	0.9	0.4
1990	1.1	2.0	6.8	3.3	1.4	2.3	2.1	2.0
1981–90	0.0	1.5	1.6	3.3	0.4	2.1	0.9	0.7
1991	1.6	3.1	5.7	0.5	- 3.4	1.4	1.4	1.4
1992	1.6	2.0	6.5	- 1.5	1.8	1.0	2.5	2.9
1993	1.4	1.2	- 0.9	- 3.9	- 1.5	0.3	0.0	0.1
1994	0.1	1.2	0.0	2.4	3.1	0.8	- 0.1	- 0.3
1995	0.1	2.5	11.5	3.2	0.0	0.3	0.4	0.4
1996	- 0.6	- 0.7	2.4	0.9	5.9	- 0.2	0.1	0.0
1997	0.1	0.0	3.0	- 0.4	2.8	2.0	0.4	0.1
1998	1.7	2.0	2.4	2.4	1.8	2.9	0.4	- 0.2
1999	1.9	1.3	3.2	0.9	0.1	2.6	1.3	1.1
2000	1.4	0.8	2.1	0.1	5.7	4.8	1.5	0.6
1991–2000	0.9	1.3	3.5	0.4	1.6	1.6	0.8	0.6
2001	0.7	- 0.7	2.0	1.2	2.8	2.4	1.0	0.5
2002	1.7	1.1	1.6	- 0.7	1.8	2.9	1.0	0.4
2003	2.0	1.1	- 0.7	1.4	1.7	3.1	1.2	0.7
2004	0.0	1.2	- 0.2	1.8	2.2	3.1	1.1	0.5
2005	0.1	1.5	0.0	1.4	2.2	3.1	1.3	0.8
2001–05	0.9	0.9	0.5	1.0	2.1	3.0	1.1	0.6

⁽¹⁾ Weighted in common currency; 1961–91 including D_90.⁽²⁾ Weighted in common currency; EU-15 excluding DK, SE and UK; 1961–91 including D_90.

Table 31 (Continued)

(National currency; annual percentage change)

	CY	CZ	EE	HU	LV	LT	MT	PL	SK
1961–70	:	:	:	:	:	:	:	:	:
1971–80	:	:	:	:	:	:	:	:	:
1981	:	:	:	:	:	:	:	:	:
1982	:	:	:	:	:	:	:	:	:
1983	:	:	:	:	:	:	:	:	:
1984	:	:	:	:	:	:	:	:	:
1985	:	:	:	:	:	:	:	:	:
1986	:	:	:	:	:	:	:	:	:
1987	:	:	:	:	:	:	:	:	:
1988	:	:	:	:	:	:	:	:	:
1989	:	:	:	:	:	:	:	:	:
1990	:	:	:	:	:	:	:	:	:
1981–90	:	:	:	:	:	:	:	:	:
1991	:	:	:	:	:	:	:	:	:
1992	:	:	:	:	:	:	:	20.1	:
1993	:	:	:	2.1	:	:	:	1.1	:
1994	:	:	9.3	– 1.3	:	:	:	1.8	:
1995	5.0	9.3	11.6	– 4.8	:	:	:	5.3	8.3
1996	3.8	7.8	2.3	– 2.2	8.5	12.0	4.3	7.0	– 0.6
1997	9.0	– 0.2	8.1	2.4	2.6	15.0	0.1	5.1	8.9
1998	– 1.0	– 0.4	5.6	0.3	3.9	10.6	1.9	4.0	3.4
1999	0.8	2.9	9.0	– 4.8	5.7	5.8	4.7	5.8	– 0.3
2000	4.2	3.4	5.7	6.1	2.9	– 0.2	0.6	1.5	3.0
1991–2000	:	:	:	:	:	:	:	:	:
2001	3.3	3.4	1.8	7.0	4.4	0.7	7.2	8.1	0.2
2002	:	6.6	3.2	10.1	2.4	3.1	– 1.6	2.8	7.2
2003	:	6.5	8.2	5.8	3.4	4.6	0.1	2.4	0.6
2004	:	2.7	4.4	2.0	4.6	1.6	0.3	1.5	0.5
2005	:	3.6	4.1	2.5	4.5	1.6	0.1	2.1	2.0
2001–05	:	4.6	4.3	5.4	3.9	2.3	1.2	3.4	2.1

(National currency; annual percentage change)

	SI	AC-10 ⁽¹⁾	EU-25 ⁽²⁾	BG	RO	TR	US	JP
1961–70	:	:	:	:	:	:	2.7	7.5
1971–80	:	:	:	:	:	:	1.0	4.0
1981	:	:	:	:	:	:	0.7	1.5
1982	:	:	:	:	:	:	1.9	1.0
1983	:	:	:	:	:	:	1.1	-0.1
1984	:	:	:	:	:	:	1.3	1.2
1985	:	:	:	:	:	:	1.2	1.1
1986	:	:	:	:	:	:	1.6	2.5
1987	:	:	:	:	:	:	0.4	2.9
1988	:	:	:	:	:	:	0.9	3.2
1989	:	:	:	:	:	9.9	-1.1	2.6
1990	:	:	:	:	:	24.5	0.5	2.8
1981–90	:	:	:	:	:	:	0.8	1.9
1991	:	:	:	:	-19.6	23.7	0.8	2.0
1992	:	:	:	:	-5.8	0.3	2.2	-0.2
1993	:	:	:	:	-8.0	6.7	0.4	-0.2
1994	:	:	:	:	-3.8	-23.4	0.4	0.8
1995	:	:	:	:	12.8	-12.5	-0.5	2.0
1996	0.5	4.4	0.2	-21.3	7.0	4.8	0.4	0.7
1997	2.8	4.1	0.5	-12.6	-20.9	15.8	1.2	0.5
1998	1.5	2.6	0.6	31.6	52.7	0.2	3.4	0.0
1999	3.1	3.5	1.8	3.7	-3.5	22.8	2.4	-0.4
2000	6.2	3.0	1.9	5.4	25.2	-4.0	2.8	1.5
1991–2000	:	:	:	:	1.7	2.4	1.3	0.7
2001	3.3	5.8	1.4	6.0	-26.6	-8.2	0.9	0.8
2002	2.7	:	:	3.7	-12.7	-1.6	0.4	-0.3
2003	1.6	:	:	6.0	:	8.4	0.4	1.8
2004	1.7	:	:	4.7	:	13.4	2.8	1.5
2005	2.1	:	:	6.5	:	13.7	2.6	1.3
2001–05	2.3	:	:	5.4	:	4.8	1.4	1.0

⁽¹⁾ Weighted in common currency; CY, CZ, EE, HU, LV, LT, MT, PL, SK and SI.

⁽²⁾ Weighted in common currency; BE, DK, DE, EL, ES, FR, IE, IT, LU, NL, AT, PT, FI, SE, UK, CY, CZ, EE, HU, LV, LT, MT, PL, SK and SI.

Table 32

Wage costs
Adjusted wage share; total economy ⁽¹⁾

(Percentage of gross domestic product at factor cost)

	BE	DK	DE ⁽²⁾	EL	ES	FR	IE	IT	LU
1960–70	67.1	71.1	69.9	85.8	72.1	74.5	78.9	75.1	59.3
1971–80	72.2	74.3	72.2	69.1	74.0	75.8	76.9	76.6	67.5
1981	75.5	74.9	73.1	71.9	74.6	79.4	77.1	76.7	73.8
1982	74.3	73.0	72.4	72.6	73.3	79.6	75.5	76.3	70.8
1983	73.5	72.3	70.6	75.0	73.6	78.8	75.8	76.9	69.9
1984	72.7	71.3	69.8	72.9	70.8	77.8	73.9	75.2	68.4
1985	72.2	71.1	69.1	73.2	69.3	77.0	71.5	74.4	68.3
1986	71.7	71.8	68.5	69.5	67.8	74.6	71.6	72.9	66.6
1987	71.5	74.0	69.0	69.3	67.7	73.7	70.8	72.8	68.4
1988	69.6	74.5	68.2	69.5	67.2	72.4	69.8	72.5	65.5
1989	69.3	72.3	67.3	71.5	66.8	71.1	68.2	72.1	64.6
1990	70.5	70.8	66.8	72.2	68.4	70.8	67.4	73.5	65.3
1981–90	72.1	72.6	69.5	71.8	69.9	75.5	72.2	74.3	68.1
1991			67.0						
1991	72.4	70.2	68.5	66.8	69.4	70.6	67.5	74.2	64.8
1992	72.7	69.4	69.6	65.8	71.2	70.1	69.3	74.2	67.0
1993	73.6	69.2	69.9	64.1	70.7	70.0	68.0	73.5	66.2
1994	73.0	66.9	68.7	63.8	68.9	69.1	67.6	71.1	65.3
1995	71.7	66.8	68.4	65.0	67.4	69.3	63.8	68.9	65.5
1996	71.7	66.9	67.9	64.4	67.3	69.6	61.7	68.6	64.8
1997	71.2	67.0	67.1	66.6	67.1	69.1	59.0	69.1	61.7
1998	70.6	68.7	66.5	67.1	67.4	68.3	58.5	68.0	59.7
1999	70.9	69.0	66.8	68.0	67.4	68.7	56.6	67.7	59.7
2000	70.2	67.2	67.7	67.1	67.2	68.5	56.2	67.4	58.5
1991–2000	71.8	68.2	68.1	65.9	68.4	69.3	62.8	70.3	63.3
2001	71.7	68.5	67.5	65.1	66.5	68.6	55.7	67.1	61.4
2002	72.9	68.7	67.0	65.1	65.9	68.9	52.6	67.5	64.1
2003	72.7	68.6	66.4	64.6	65.5	69.3	54.5	67.7	64.8
2004	73.1	68.5	65.6	63.8	65.0	68.8	54.0	67.3	63.8
2005	73.4	68.3	65.7	63.1	64.4	68.5	53.1	66.9	62.8
2001–05	72.7	68.5	66.4	64.4	65.4	68.8	54.0	67.3	63.4

⁽¹⁾ Compensation per employee as percentage of GDP at factor cost per person employed.

⁽²⁾ 1960–91 D_90.

NB: GDP at factor cost, which is not an ESA 95 term, can easily be derived by subtracting net taxes on production from GDP at market prices. For several countries, adjusted wage share is based on full-time equivalents (see note on Table 11).

(Percentage of gross domestic product at factor cost)

	NL	AT	PT	FI	SE	UK	EU-15 ⁽¹⁾	EUR-12 ⁽²⁾
1960–70	65.8	75.8	63.3	76.1	70.7	72.3	72.2	72.4
1971–80	72.1	76.3	75.8	73.8	72.7	73.1	73.9	74.1
1981	70.4	76.7	74.9	73.4	73.0	74.4	75.2	75.5
1982	69.7	74.5	73.8	72.6	70.3	73.1	74.4	74.9
1983	67.9	72.6	72.2	71.7	68.4	71.6	73.5	74.1
1984	65.4	73.3	70.2	71.8	67.1	72.1	72.5	72.9
1985	64.6	73.1	68.9	73.0	67.4	71.5	71.9	72.2
1986	65.6	72.9	67.0	73.5	67.7	72.6	71.1	71.0
1987	66.9	73.0	67.0	73.6	67.8	72.0	71.1	71.0
1988	66.1	72.2	65.5	72.3	67.3	72.4	70.4	70.1
1989	64.1	71.3	65.1	72.2	68.3	73.6	70.0	69.3
1990	64.1	70.3	67.0	73.5	70.4	74.8	70.4	69.6
1981–90	66.5	73.0	69.2	72.8	68.8	72.8	72.0	72.0
1991							70.8	69.9
1991	64.6	70.5	70.8	76.9	70.0	75.9	71.1	70.3
1992	66.0	70.6	72.7	74.4	68.7	75.0	71.3	70.8
1993	67.1	71.0	71.0	69.2	66.7	73.1	70.7	70.5
1994	65.5	70.3	69.0	66.9	65.6	71.6	69.3	69.1
1995	65.2	69.8	73.1	64.9	63.6	71.2	68.7	68.5
1996	65.2	68.3	73.9	65.7	66.7	70.1	68.4	68.2
1997	64.8	68.4	73.9	64.1	66.8	70.4	68.2	67.8
1998	65.2	67.8	73.9	62.8	67.6	71.1	67.9	67.3
1999	65.9	68.1	74.3	63.9	67.5	72.0	68.3	67.5
2000	65.3	66.7	74.0	62.0	68.6	73.3	68.5	67.5
1991–2000	65.5	69.1	72.7	67.1	67.2	72.4	69.2	68.8
2001	65.8	66.0	74.1	63.2	71.3	73.5	68.6	67.3
2002	66.5	65.7	74.8	63.1	72.3	73.1	68.5	67.3
2003	67.4	65.7	73.8	63.4	72.8	73.5	68.4	67.2
2004	66.6	65.9	72.9	63.1	72.4	73.6	68.0	66.7
2005	65.7	65.8	71.9	62.4	72.1	73.7	67.8	66.4
2001–05	66.4	65.8	73.5	63.0	72.2	73.5	68.3	67.0

⁽¹⁾ 1960–91 including D_90.⁽²⁾ EU-15 excluding DK, SE and UK; 1960–91 including D_90.

Table 32 (Continued)

(Percentage of gross domestic product at factor cost)

	CY	CZ	EE	HU	LV	LT	MT	PL	SK
1960–70	:	:	:	:	:	:	:	:	:
1971–80	:	:	:	:	:	:	:	:	:
1981	:	:	:	:	:	:	:	:	:
1982	:	:	:	:	:	:	:	:	:
1983	:	:	:	:	:	:	:	:	:
1984	:	:	:	:	:	:	:	:	:
1985	:	:	:	:	:	:	:	:	:
1986	:	:	:	:	:	:	:	:	:
1987	:	:	:	:	:	:	:	:	:
1988	:	:	:	:	:	:	:	:	:
1989	:	:	:	:	:	:	:	:	:
1990	:	:	:	:	:	:	56.6	:	:
1981–90	:	:	:	:	:	:	:	:	:
1991	:	:	:	:	:	:	57.7	:	:
1992	:	64.6	:	82.2	:	:	57.6	81.6	:
1993	:	56.5	65.8	78.9	:	35.3	59.0	80.3	:
1994	:	58.4	73.8	73.2	:	39.3	57.3	79.2	50.0
1995	66.5	59.9	71.4	67.8	67.3	46.8	59.9	78.9	51.2
1996	68.3	61.6	67.9	65.6	69.1	45.9	60.7	82.4	51.0
1997	72.0	60.8	67.0	63.3	70.1	48.2	59.1	83.3	51.2
1998	67.4	58.8	64.2	62.1	68.2	49.4	58.0	83.9	52.2
1999	67.1	59.8	67.2	60.1	65.6	51.0	58.6	83.6	50.5
2000	67.9	60.6	63.2	60.8	60.4	47.5	57.5	79.6	50.1
1991–2000	:	:	:	:	:	:	58.5	:	:
2001	68.6	58.8	61.0	61.9	59.3	45.3	61.2	85.0	49.0
2002	:	60.5	60.3	:	58.7	45.3	60.7	84.8	50.9
2003	:	62.2	61.4	:	57.8	:	:	84.3	:
2004	:	63.2	61.3	:	58.0	:	:	83.4	:
2005	:	63.6	60.6	:	57.8	:	:	82.7	:
2001–05	:	61.7	60.9	:	58.3	:	:	84.0	:

NB: GDP at factor cost, which is not an ESA 95 term, can easily be derived by subtracting net taxes on production from GDP at market prices. For several countries, adjusted wage share is based on full-time equivalents (see note on Table 11).

(Percentage of gross domestic product at factor cost)

	SI	AC-10 ⁽¹⁾	EU-25 ⁽²⁾	BG	RO	TR	US	JP
1960–70	:	:	:	:	:	:	70.5	72.9
1971–80	:	:	:	:	:	:	70.6	76.7
1981	:	:	:	:	:	:	70.0	77.5
1982	:	:	:	:	:	:	71.2	77.2
1983	:	:	:	:	:	:	69.7	76.7
1984	:	:	:	:	:	:	69.0	75.2
1985	:	:	:	:	:	:	69.0	73.0
1986	:	:	:	:	:	:	69.0	72.2
1987	:	:	:	:	:	:	69.4	72.4
1988	:	:	:	:	:	57.0	69.5	71.0
1989	:	:	:	:	:	66.9	68.5	70.3
1990	:	:	:	:	76.7	75.9	68.9	69.9
1981–90	:	:	:	:	:	:	69.4	73.5
1991	:	:	:	:	69.3	91.1	69.4	69.9
1992	:	:	:	:	66.7	85.8	69.2	70.3
1993	:	:	:	:	64.3	83.5	69.0	70.3
1994	:	:	:	:	60.1	70.2	68.3	70.6
1995	77.1	70.1	68.7	70.3	61.0	63.0	67.9	70.9
1996	73.6	71.5	68.5	61.5	60.7	64.5	67.0	70.0
1997	71.7	71.5	68.3	55.9	51.4	66.2	66.4	70.1
1998	70.6	71.3	68.1	66.1	80.2	65.8	67.1	70.9
1999	70.1	70.9	68.4	:	75.2	84.0	67.3	70.6
2000	75.9	69.7	68.6	:	93.4	81.9	68.3	69.9
1991–2000	:	:	:	:	68.2	75.6	68.0	70.3
2001	75.7	72.2	68.7	:	:	80.1	68.2	69.9
2002	75.0	:	:	:	:	74.5	66.8	68.9
2003	:	:	:	:	:	81.3	65.9	69.3
2004	:	:	:	:	:	90.4	65.5	69.4
2005	:	:	:	:	:	100.5	65.5	69.6
2001–05	:	:	:	:	:	85.4	66.4	69.4

⁽¹⁾ CY, CZ, EE, HU, LV, LT, MT, PL, SK and SI.⁽²⁾ BE, DK, DE, EL, ES, FR, IE, IT, LU, NL, AT, PT, FI, SE, UK, CY, CZ, EE, HU, LV, LT, MT, PL, SK and SI.

Table 33

Wage costs**Nominal unit labour costs; total economy ⁽¹⁾***(National currency; 1995 = 100)*

	BE	DK	DE ⁽²⁾	EL	ES	FR	IE	IT	NL
1960	19.2	10.7	26.9	2.6	4.2	13.5	8.6	5.2	20.4
1965	22.3	14.8	32.9	2.4	5.9	16.8	10.8	6.8	28.3
1970	26.7	20.9	40.4	2.6	8.2	20.9	14.6	7.9	38.3
1975	45.5	36.7	57.8	4.2	15.2	34.7	28.1	15.5	63.6
1980	61.8	55.3	69.8	9.4	34.8	57.6	55.4	33.2	83.3
1981	65.1	61.0	73.0	12.2	39.2	64.5	62.8	40.4	85.6
1982	68.5	66.9	75.9	15.6	43.7	71.8	70.2	46.8	89.6
1983	71.7	71.6	76.4	19.3	48.7	77.6	77.8	53.9	89.3
1984	75.1	74.5	77.1	22.8	51.6	81.8	81.0	58.8	87.1
1985	77.9	77.5	78.3	27.6	54.5	85.3	83.5	63.3	87.6
1986	79.7	80.1	80.4	30.8	59.1	87.2	88.1	66.9	88.6
1987	80.0	87.2	82.6	35.1	62.8	88.4	89.2	70.5	89.8
1988	79.6	90.2	82.9	41.1	66.5	89.1	91.6	74.1	89.5
1989	82.5	93.2	83.4	48.9	70.5	90.5	91.7	78.5	87.9
1990	86.4	95.4	85.1	58.4	77.6	92.7	92.5	85.8	89.5
1991	91.5	97.4	88.2	63.8	84.3	95.3	94.6	92.7	92.8
1992	94.8	100.0	93.9	71.7	91.6	97.0	99.0	96.7	97.0
1993	99.5	100.8	97.5	80.8	96.5	98.9	103.2	98.9	99.5
1994	100.3	98.4	98.0	89.5	97.3	98.4	102.8	98.8	99.5
1995	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
1996	100.6	102.1	100.2	105.6	103.3	101.2	99.2	105.3	100.8
1997	101.0	104.0	99.5	116.0	104.8	101.8	98.3	107.8	102.2
1998	101.8	106.6	99.7	122.7	107.4	101.6	103.3	105.3	104.3
1999	103.5	109.1	100.0	126.5	109.7	102.7	103.5	106.8	106.4
2000	103.7	110.6	101.0	128.5	113.0	103.9	106.4	108.6	109.7
2001	108.3	114.6	102.3	129.7	116.9	106.4	112.5	111.8	115.8
2002	111.8	116.0	103.1	135.5	120.8	108.9	112.2	115.2	121.4
2003	113.1	118.5	103.4	140.1	125.0	111.5	117.0	119.3	126.1
2004	115.0	120.7	103.4	145.0	128.7	112.3	119.7	121.7	126.0
2005	116.9	122.8	104.5	148.6	131.6	113.4	121.1	123.6	125.3

⁽¹⁾ Ratio of compensation per employee to real GDP per person employed (labour productivity). For several countries, nominal unit labour costs are based on full-time equivalents (see note on Table 11).

⁽²⁾ 1960–91 D_90.

(National currency; 1995 = 100)

	AT	PT	FI	SE	UK	EU-11 ⁽¹⁾	EU-14 ⁽²⁾
1960	24.3	2.2	10.4	11.9	8.5	15.0	13.4
1965	30.0	2.4	13.9	14.7	10.0	18.9	16.5
1970	33.6	3.0	17.2	18.3	12.8	23.2	20.5
1975	52.3	6.8	33.4	28.1	25.9	37.8	34.5
1980	65.8	14.8	49.6	48.0	47.9	56.1	53.9
1981	70.7	17.8	56.1	52.6	53.2	61.4	59.2
1982	72.3	20.7	60.2	55.1	55.6	66.4	63.7
1983	72.8	25.0	64.7	58.5	57.8	70.1	67.2
1984	76.2	30.4	69.6	61.2	60.8	72.8	70.0
1985	78.6	36.2	74.3	65.0	63.9	75.5	72.9
1986	81.3	41.1	77.7	69.2	66.5	78.2	75.7
1987	83.0	45.3	80.7	72.2	69.3	80.4	78.2
1988	83.0	48.7	84.8	76.8	74.1	81.6	80.2
1989	84.2	53.7	90.0	84.4	81.3	83.3	83.1
1990	86.1	62.6	98.4	93.8	89.1	86.7	87.4
1991	90.0	72.8	105.5	99.8	95.7	90.8	91.9
1992	93.2	82.4	104.0	100.9	98.3	95.1	95.8
1993	96.5	87.3	99.5	99.0	98.9	98.1	98.3
1994	97.6	90.4	97.6	99.7	98.2	98.4	98.4
1995	100.0	100.0	100.0	100.0	100.0	100.0	100.0
1996	99.0	104.1	100.0	105.0	102.0	101.4	101.7
1997	99.4	107.8	98.7	105.9	105.1	101.8	102.6
1998	99.5	111.5	100.2	106.5	108.9	102.1	103.3
1999	100.1	115.3	101.5	105.3	112.3	103.2	104.6
2000	99.9	120.0	102.4	110.6	115.9	104.6	106.4
2001	101.2	126.3	107.5	117.0	119.6	107.5	109.4
2002	102.1	132.8	108.0	119.4	122.8	109.6	111.6
2003	103.8	136.0	109.5	122.0	126.4	111.7	113.9
2004	105.2	137.7	110.2	123.8	128.9	112.7	115.1
2005	106.2	139.1	111.1	125.5	131.4	113.9	116.5

⁽¹⁾ EU-15 excluding DK, LU, SE and UK; export weighted.⁽²⁾ EU-15 excluding LU; export weighted.

Table 33 (Continued)

(National currency; 1995 = 100)

	CY	CZ	EE	HU	LV	LT	MT	PL	SK
1960	:	:	:	:	:	:	:	:	:
1965	:	:	:	:	:	:	:	:	:
1970	:	:	:	:	:	:	:	:	:
1975	:	:	:	:	:	:	:	:	:
1980	:	:	:	:	:	:	:	:	:
1981	:	:	:	:	:	:	:	:	:
1982	:	:	:	:	:	:	:	:	:
1983	:	:	:	:	:	:	:	:	:
1984	:	:	:	:	:	:	:	:	:
1985	:	:	:	:	:	:	:	:	:
1986	:	:	:	:	:	:	:	:	:
1987	:	:	:	:	:	:	:	:	:
1988	:	:	:	:	:	:	:	:	:
1989	:	:	:	:	:	:	:	:	:
1990	:	:	:	:	:	:	:	:	:
1991	:	:	:	:	:	:	:	:	:
1992	:	:	:	:	:	:	:	:	:
1993	:	:	:	:	:	:	:	:	:
1994	:	:	:	:	:	:	:	:	:
1995	:	:	:	:	:	:	:	:	:
1996	:	:	:	:	:	:	:	:	:
1997	:	:	:	:	:	:	:	:	:
1998	:	:	:	:	:	:	:	:	:
1999	:	:	:	:	:	:	:	:	:
2000	:	:	:	:	:	:	:	:	:
2001	:	:	:	:	:	:	:	:	:
2002	:	:	:	:	:	:	:	:	:
2003	:	:	:	:	:	:	:	:	:
2004	:	:	:	:	:	:	:	:	:
2005	:	:	:	:	:	:	:	:	:

(National currency; 1995 = 100)

	SI	BG	RO	TR	US	JP
1960	:	:	:	:	23.6	23.4
1965	:	:	:	:	24.4	29.7
1970	:	:	:	:	31.2	36.2
1975	:	:	:	:	41.9	69.1
1980	:	:	:	:	60.7	86.8
1981	:	:	:	:	65.5	90.5
1982	:	:	:	:	70.8	91.9
1983	:	:	:	:	72.2	93.1
1984	:	:	:	:	74.1	93.5
1985	:	:	:	:	76.5	92.5
1986	:	:	:	:	78.3	93.2
1987	:	:	:	:	81.2	92.6
1988	:	:	:	:	84.2	91.3
1989	:	:	:	:	86.0	92.3
1990	:	:	:	:	89.9	94.0
1991	:	:	:	:	93.5	97.4
1992	:	:	:	:	95.4	98.8
1993	:	:	:	:	97.5	99.7
1994	:	:	:	:	98.4	100.1
1995	:	:	:	:	100.0	100.0
1996	:	:	:	:	100.8	97.7
1997	:	:	:	:	101.9	98.3
1998	:	:	:	:	104.4	98.6
1999	:	:	:	:	106.3	96.6
2000	:	:	:	:	110.1	94.1
2001	:	:	:	:	112.6	92.5
2002	:	:	:	:	111.6	89.6
2003	:	:	:	:	111.7	88.3
2004	:	:	:	:	112.3	87.4
2005	:	:	:	:	113.5	86.6

Table 34

Wage costs
Real unit labour costs; total economy ⁽¹⁾

(1995 = 100)

	BE	DK	DE ⁽²⁾	EL	ES	FR	IE	IT	NL
1960	93.2	104.1	100.5	154.4	102.5	106.3	121.8	112.7	95.5
1965	92.8	109.1	102.8	127.8	107.0	106.9	120.1	113.3	103.5
1970	92.4	110.9	104.5	116.4	106.6	106.5	120.8	110.0	107.8
1975	103.7	114.7	109.8	104.7	111.2	113.5	126.3	120.8	116.0
1980	107.2	112.3	109.1	108.5	110.9	115.0	125.7	115.8	113.3
1981	107.4	110.9	109.4	115.6	111.4	116.0	121.3	118.3	110.5
1982	105.1	109.4	108.5	115.9	109.2	115.9	117.6	117.2	109.6
1983	104.1	108.0	105.8	118.7	108.8	114.9	117.6	117.1	107.0
1984	103.4	106.1	104.6	115.1	104.0	113.2	115.1	114.6	102.9
1985	102.5	105.2	104.0	117.0	101.1	111.9	112.8	113.4	101.7
1986	102.0	104.5	103.5	110.1	98.9	108.9	112.5	111.1	102.7
1987	100.7	108.2	104.5	108.6	99.2	107.3	111.5	110.1	104.9
1988	98.1	109.2	103.2	109.0	99.1	105.0	110.7	108.5	103.6
1989	97.1	107.2	101.4	113.4	98.4	103.4	105.3	107.9	100.6
1990	98.8	105.8	100.4	112.2	100.9	103.0	106.7	108.9	100.2
1991	101.7	105.2	100.5	102.4	102.5	102.8	107.2	109.5	101.0
1992	102.0	104.9	101.8	100.2	104.4	102.6	109.1	109.2	103.1
1993	102.9	104.4	102.0	98.6	105.2	102.2	108.1	107.5	103.9
1994	101.5	100.1	99.9	98.3	102.1	100.1	105.9	103.7	101.5
1995	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
1996	99.5	99.7	99.2	98.3	99.8	99.8	97.2	100.0	99.6
1997	98.4	99.3	97.8	101.1	98.9	99.0	92.6	100.0	99.0
1998	97.6	100.8	96.9	101.7	99.0	98.0	91.5	95.1	99.4
1999	97.8	101.2	96.8	101.8	98.4	98.5	88.3	95.0	99.9
2000	96.8	99.6	98.0	100.0	98.0	98.7	87.1	94.6	99.0
2001	99.4	101.2	98.0	97.5	97.3	99.3	87.6	94.8	99.2
2002	100.8	101.4	97.2	98.0	96.3	99.8	82.8	95.1	100.6
2003	100.5	101.4	96.4	97.3	95.7	100.5	85.1	95.5	101.7
2004	101.1	101.5	95.1	96.6	95.1	99.5	84.3	95.1	100.1
2005	101.4	101.2	95.2	95.7	94.4	99.0	83.1	94.6	98.6

⁽¹⁾ Ratio of compensation per employee to nominal GDP per person employed. For several countries, real unit labour costs are based on full-time equivalents (see note on Table 11).

⁽²⁾ 1960–91 D_90.

(1995 = 100)

	AT	PT	FI	SE	UK	EU-11 ⁽¹⁾	EU-14 ⁽²⁾
1960	108.3	95.1	118.5	111.7	103.6	103.5	104.2
1965	108.2	92.5	122.3	113.3	103.8	105.4	105.5
1970	102.7	98.1	110.7	113.4	104.4	105.3	105.7
1975	111.2	128.3	120.0	113.2	114.5	112.9	113.1
1980	108.3	106.7	111.6	118.2	105.9	111.7	111.0
1981	109.2	109.2	113.7	118.2	105.7	112.3	111.4
1982	106.3	105.6	112.4	114.6	102.9	111.2	110.0
1983	103.5	102.2	111.2	110.4	101.4	109.5	108.2
1984	103.5	99.7	110.3	107.3	102.1	107.7	106.8
1985	103.6	97.6	112.0	107.1	101.6	106.8	106.0
1986	104.1	92.0	112.2	107.0	102.3	105.6	105.1
1987	104.1	92.0	111.9	106.6	101.2	105.7	105.0
1988	102.9	89.0	108.4	106.4	101.8	104.1	103.9
1989	101.4	88.8	108.3	108.4	103.9	102.5	103.1
1990	100.3	91.5	111.3	110.7	105.9	102.4	103.4
1991	101.1	96.7	117.0	109.7	106.6	103.0	103.8
1992	101.0	98.2	113.8	109.8	105.3	103.7	104.2
1993	101.6	96.9	106.1	104.7	103.1	103.4	103.4
1994	100.1	93.5	102.2	103.1	100.8	101.0	101.0
1995	100.0	100.0	100.0	100.0	100.0	100.0	100.0
1996	97.7	101.1	100.4	103.7	98.7	99.4	99.5
1997	97.3	100.9	97.0	103.1	98.8	98.4	98.7
1998	96.9	100.5	95.1	102.8	99.7	97.0	97.7
1999	96.8	100.8	96.6	100.9	100.5	97.0	97.7
2000	95.2	101.7	94.4	104.7	102.3	97.0	98.1
2001	94.5	102.2	96.5	108.5	103.1	97.3	98.7
2002	94.0	102.7	95.9	109.4	102.5	97.1	98.4
2003	94.4	101.8	96.2	109.5	103.1	97.1	98.5
2004	94.6	100.5	96.1	108.9	103.2	96.3	97.8
2005	94.4	99.1	95.3	108.2	103.1	95.9	97.5

⁽¹⁾ EU-15 excluding DK, LU, SE and UK; export weighted.⁽²⁾ EU-15 excluding LU; export weighted.

Table 34 (Continued)

(1995 = 100)

	CY	CZ	EE	HU	LV	LT	MT	PL	SK
1960	:	:	:	:	:	:	:	:	:
1965	:	:	:	:	:	:	:	:	:
1970	:	:	:	:	:	:	:	:	:
1975	:	:	:	:	:	:	:	:	:
1980	:	:	:	:	:	:	:	:	:
1981	:	:	:	:	:	:	:	:	:
1982	:	:	:	:	:	:	:	:	:
1983	:	:	:	:	:	:	:	:	:
1984	:	:	:	:	:	:	:	:	:
1985	:	:	:	:	:	:	:	:	:
1986	:	:	:	:	:	:	:	:	:
1987	:	:	:	:	:	:	:	:	:
1988	:	:	:	:	:	:	:	:	:
1989	:	:	:	:	:	:	:	:	:
1990	:	:	:	:	:	:	:	:	:
1991	:	:	:	:	:	:	:	:	:
1992	:	:	:	:	:	:	:	:	:
1993	:	:	:	:	:	:	:	:	:
1994	:	:	:	:	:	:	:	:	:
1995	:	:	:	:	:	:	:	:	:
1996	:	:	:	:	:	:	:	:	:
1997	:	:	:	:	:	:	:	:	:
1998	:	:	:	:	:	:	:	:	:
1999	:	:	:	:	:	:	:	:	:
2000	:	:	:	:	:	:	:	:	:
2001	:	:	:	:	:	:	:	:	:
2002	:	:	:	:	:	:	:	:	:
2003	:	:	:	:	:	:	:	:	:
2004	:	:	:	:	:	:	:	:	:
2005	:	:	:	:	:	:	:	:	:

(1995 = 100)

	SI	BG	RO	TR	US	JP
1960	:	:	:	:	104.8	110.0
1965	:	:	:	:	100.7	105.8
1970	:	:	:	:	105.6	97.7
1975	:	:	:	:	102.9	114.9
1980	:	:	:	:	104.5	110.4
1981	:	:	:	:	103.2	110.4
1982	:	:	:	:	105.0	110.0
1983	:	:	:	:	103.0	109.4
1984	:	:	:	:	101.9	106.9
1985	:	:	:	:	101.9	103.5
1986	:	:	:	:	102.1	102.6
1987	:	:	:	:	102.8	102.0
1988	:	:	:	:	103.0	99.9
1989	:	:	:	:	101.4	99.0
1990	:	:	:	:	102.0	98.5
1991	:	:	:	:	102.3	99.1
1992	:	:	:	:	101.9	99.0
1993	:	:	:	:	101.7	99.3
1994	:	:	:	:	100.6	99.6
1995	:	:	:	:	100.0	100.0
1996	:	:	:	:	98.9	98.5
1997	:	:	:	:	98.0	98.8
1998	:	:	:	:	99.2	99.2
1999	:	:	:	:	99.5	98.7
2000	:	:	:	:	101.0	98.0
2001	:	:	:	:	100.9	97.8
2002	:	:	:	:	98.8	96.3
2003	:	:	:	:	97.6	97.1
2004	:	:	:	:	97.2	97.3
2005	:	:	:	:	97.2	97.5

Table 35

Wage costs**Nominal unit labour costs; total economy ⁽¹⁾****Performance relative to the rest of 22 industrial countries; double export weights**

(USD; 1995 = 100)

	BE	DK	DE ⁽²⁾	EL	ES	FR	IE	IT	NL
1960	96.8	65.4	72.5	161.8	66.0	117.1	101.8	110.8	71.7
1965	90.5	75.0	76.5	127.3	77.5	119.5	107.8	120.8	86.2
1970	87.3	81.3	85.4	109.8	74.7	106.4	109.8	113.6	95.3
1975	98.8	95.9	90.9	84.3	88.4	114.0	105.8	107.0	111.2
1980	101.9	89.7	90.3	86.4	100.1	116.2	113.3	106.3	112.2
1981	93.7	84.7	81.6	93.7	93.9	109.6	107.6	105.9	102.1
1982	83.6	83.5	82.7	102.6	92.3	104.8	112.2	107.6	105.1
1983	82.0	85.7	82.5	99.3	82.3	101.2	115.7	115.4	102.7
1984	81.8	83.6	79.0	97.5	82.4	98.6	112.0	115.5	95.4
1985	82.6	84.9	77.3	96.5	82.0	100.2	112.3	114.5	92.8
1986	87.3	91.1	85.7	82.8	86.0	104.6	121.6	123.3	98.2
1987	88.5	99.9	91.2	82.1	88.7	103.5	116.4	127.5	101.4
1988	85.0	98.2	88.1	87.1	94.4	98.9	113.3	126.5	98.2
1989	85.1	95.3	84.4	93.2	101.0	95.6	107.3	130.6	92.3
1990	89.6	99.0	85.9	96.8	110.2	98.2	108.2	141.0	93.0
1991	90.5	94.7	83.6	89.3	113.6	93.6	103.6	143.0	91.3
1992	92.2	96.3	88.9	89.2	115.9	94.5	108.1	139.1	93.8
1993	95.3	97.9	93.6	90.5	104.9	96.3	105.2	115.9	97.0
1994	97.6	95.3	93.8	93.4	98.8	96.2	104.2	110.3	97.0
1995	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
1996	97.3	100.0	96.2	102.0	102.5	99.9	100.3	114.1	97.5
1997	92.6	97.6	89.2	108.2	97.7	95.3	99.8	115.4	93.8
1998	92.6	99.7	88.8	107.0	99.0	94.9	98.5	111.3	94.9
1999	91.6	99.1	86.0	108.4	98.0	92.8	94.2	108.9	94.4
2000	86.9	94.0	80.9	101.3	95.6	87.8	89.4	104.0	92.7
2001	88.7	96.0	79.6	98.5	96.4	87.4	92.5	104.3	95.8
2002	90.9	96.8	80.0	102.4	98.8	89.4	92.8	107.7	99.8
2003	94.1	101.9	83.6	108.3	104.7	95.2	102.6	116.1	106.1
2004	95.2	102.8	83.0	111.4	107.2	95.3	104.6	118.0	105.3
2005	:	:	:	:	:	:	:	:	:

⁽¹⁾ Ratio of compensation per employee to real GDP per person employed. For several countries, nominal unit labour costs are based on full-time equivalents (see note on Table 11). Double export weights calculate for each market the total supply as the sum of home supply (i.e. the part of the domestic production that is not exported) and foreign supply (all competitor countries' exports to the market). The share of each country in the total market is then calculated. In a further step, these weights per market are weighted together for each exporting country in the total market. Double export weights take into account that exporters to a given market compete not only with domestic producers there but also with other exporters to that market ('third-market effect').

⁽²⁾ 1960–91 D_90.

(USD; 1995 = 100)

	AT	PT	FI	SE	UK	EU-11 ⁽¹⁾	EU-14 ⁽²⁾
1960	83.9	88.4	110.3	133.8	114.3	79.5	86.3
1965	83.4	78.5	121.1	134.5	114.4	87.9	97.2
1970	75.8	84.6	94.2	137.8	101.0	88.2	91.7
1975	86.5	110.8	106.3	130.0	97.4	103.0	105.6
1980	89.6	73.5	94.4	134.9	118.3	104.3	118.0
1981	86.4	78.2	99.9	132.6	122.1	89.5	99.3
1982	85.5	74.1	101.5	116.3	114.1	87.8	92.8
1983	84.7	67.5	99.3	105.6	106.3	85.9	86.3
1984	85.4	66.4	105.3	108.6	103.3	81.1	79.9
1985	85.6	67.8	109.0	110.8	104.9	80.2	79.8
1986	91.9	69.1	109.6	113.7	99.3	92.5	91.7
1987	94.6	68.4	111.0	113.3	99.2	98.9	99.5
1988	92.2	67.6	114.7	116.7	109.8	93.3	97.8
1989	90.3	69.5	120.8	124.6	113.3	89.7	95.7
1990	91.1	75.7	127.4	130.1	117.7	97.8	109.2
1991	90.2	84.3	125.0	131.6	121.9	94.0	105.6
1992	91.4	94.8	103.9	130.1	116.0	99.4	110.3
1993	94.7	91.5	84.7	101.8	104.5	96.0	97.4
1994	95.6	90.7	89.2	101.4	103.8	94.2	94.7
1995	100.0	100.0	100.0	100.0	100.0	100.0	100.0
1996	95.8	103.1	95.9	113.9	102.5	100.7	104.1
1997	92.6	103.0	90.5	109.0	121.3	90.7	98.4
1998	92.5	104.1	90.1	106.0	129.1	89.5	99.7
1999	91.0	104.8	88.3	101.3	130.9	84.9	93.5
2000	86.8	103.9	83.2	103.9	136.3	75.4	82.7
2001	85.3	106.5	85.9	97.9	134.4	75.5	81.7
2002	85.5	110.7	86.2	100.7	137.4	79.1	87.6
2003	89.1	115.3	90.7	107.6	134.0	90.2	102.0
2004	89.7	115.9	90.9	110.3	134.4	91.0	103.5
2005	:	:	:	:	:	:	:

⁽¹⁾ EU-15 excluding DK, LU, SE and UK relative to 11 industrial countries.⁽²⁾ EU-15 excluding LU relative to eight industrial non-member countries.

Table 35 (Continued)

(USD; 1995 = 100)

	CY	CZ	EE	HU	LV	LT	MT	PL	SK
1960	:	:	:	:	:	:	:	:	:
1965	:	:	:	:	:	:	:	:	:
1970	:	:	:	:	:	:	:	:	:
1975	:	:	:	:	:	:	:	:	:
1980	:	:	:	:	:	:	:	:	:
1981	:	:	:	:	:	:	:	:	:
1982	:	:	:	:	:	:	:	:	:
1983	:	:	:	:	:	:	:	:	:
1984	:	:	:	:	:	:	:	:	:
1985	:	:	:	:	:	:	:	:	:
1986	:	:	:	:	:	:	:	:	:
1987	:	:	:	:	:	:	:	:	:
1988	:	:	:	:	:	:	:	:	:
1989	:	:	:	:	:	:	:	:	:
1990	:	:	:	:	:	:	:	:	:
1991	:	:	:	:	:	:	:	:	:
1992	:	:	:	:	:	:	:	:	:
1993	:	:	:	:	:	:	:	:	:
1994	:	:	:	:	:	:	:	:	:
1995	:	:	:	:	:	:	:	:	:
1996	:	:	:	:	:	:	:	:	:
1997	:	:	:	:	:	:	:	:	:
1998	:	:	:	:	:	:	:	:	:
1999	:	:	:	:	:	:	:	:	:
2000	:	:	:	:	:	:	:	:	:
2001	:	:	:	:	:	:	:	:	:
2002	:	:	:	:	:	:	:	:	:
2003	:	:	:	:	:	:	:	:	:
2004	:	:	:	:	:	:	:	:	:
2005	:	:	:	:	:	:	:	:	:

(USD; 1995 = 100)

	SI	BG	RO	TR	US	JP
1960	:	:	:	:	176.1	34.1
1965	:	:	:	:	151.6	38.7
1970	:	:	:	:	158.1	37.9
1975	:	:	:	:	107.1	52.4
1980	:	:	:	:	98.8	55.7
1981	:	:	:	:	108.2	60.3
1982	:	:	:	:	125.9	53.9
1983	:	:	:	:	133.2	59.0
1984	:	:	:	:	142.4	60.7
1985	:	:	:	:	149.1	59.5
1986	:	:	:	:	126.8	75.5
1987	:	:	:	:	114.1	78.9
1988	:	:	:	:	107.6	83.0
1989	:	:	:	:	109.7	77.5
1990	:	:	:	:	103.8	67.9
1991	:	:	:	:	101.2	73.1
1992	:	:	:	:	97.6	75.7
1993	:	:	:	:	100.8	89.9
1994	:	:	:	:	100.2	96.8
1995	:	:	:	:	100.0	100.0
1996	:	:	:	:	104.4	84.0
1997	:	:	:	:	110.7	78.8
1998	:	:	:	:	117.6	73.3
1999	:	:	:	:	116.6	82.6
2000	:	:	:	:	123.6	87.3
2001	:	:	:	:	129.8	75.6
2002	:	:	:	:	125.3	69.0
2003	:	:	:	:	112.3	67.3
2004	:	:	:	:	108.4	69.7
2005	:	:	:	:	:	:

Table 36

Foreign trade and current balance
Exports of goods and services at current prices (national accounts)

(Percentage of gross domestic product at market prices)

	BE	DK	DE (1)	EL	ES	FR	IE	IT	LU
1960	38.7	31.6	19.6	12.1	8.3	13.9	29.4	12.7	91.3
1965	43.0	28.7	18.6	9.4	8.2	12.7	32.2	14.5	85.0
1970	51.9	27.2	21.8	9.7	12.5	15.1	34.1	16.1	93.6
1975	53.0	29.3	24.8	17.3	12.7	18.2	39.4	20.2	97.4
1980	57.6	32.2	27.0	23.6	14.8	20.4	45.7	21.6	93.2
1981	62.1	36.0	29.3	26.1	16.9	21.3	44.7	23.0	91.3
1982	66.8	35.7	30.4	21.0	17.6	20.8	44.3	22.5	93.7
1983	69.4	35.8	29.5	20.1	19.8	21.4	48.3	21.6	95.0
1984	74.0	36.3	31.5	20.5	22.1	23.0	54.9	22.3	106.5
1985	71.8	36.4	33.3	19.7	21.6	22.9	55.6	22.5	114.4
1986	65.8	31.9	30.7	21.6	18.8	20.3	50.6	19.9	104.7
1987	64.2	31.2	29.6	22.1	18.4	19.7	54.1	19.2	101.8
1988	68.3	33.2	30.2	19.9	17.9	20.4	57.7	18.8	103.4
1989	73.0	35.1	32.1	19.5	17.2	21.7	61.1	19.7	106.3
1990	70.8	35.8	32.7	18.1	16.3	21.2	57.0	19.7	104.1
1991			34.9						
1991	69.2	37.2	26.3	17.3	16.3	21.5	57.9	18.5	104.0
1992	67.6	36.5	24.5	18.2	16.8	21.5	60.8	19.1	102.9
1993	64.5	35.4	22.8	17.2	18.3	20.7	66.0	22.3	103.2
1994	67.1	35.5	23.6	17.7	21.0	21.5	70.8	23.9	106.6
1995	69.1	35.4	24.5	17.6	22.6	22.5	76.4	27.0	109.1
1996	70.6	35.8	25.3	17.5	23.9	23.1	77.5	25.8	111.1
1997	74.7	36.4	27.9	19.7	26.7	25.5	79.7	26.4	119.3
1998	75.4	35.8	29.0	19.8	27.2	26.1	85.8	26.4	127.3
1999	75.7	38.1	29.6	22.4	27.5	25.9	87.6	25.5	136.1
2000	85.6	44.3	33.8	25.6	30.1	28.5	97.4	28.3	151.3
2001	85.8	45.1	35.3	23.8	29.9	27.9	98.4	28.4	153.4
2002	83.9	44.9	35.9	20.9	28.4	27.1	93.7	26.9	146.1
2003	80.0	44.7	35.6	20.2	28.1	26.1	84.1	25.5	140.7
2004	78.9	45.2	36.9	20.2	28.4	26.5	84.8	26.1	141.0
2005	80.5	45.8	39.0	20.3	29.3	27.5	86.8	26.9	143.9

(1) 1960–91 D_90.

NB: Exports of goods (P.61) are to be valued free on board (fob) at the border of the exporting country. This value consists of:

- the value of the goods at basic prices;
- the related transport and distributive services up to that point of the border;
- any taxes less subsidies on the goods exported; for intra-EU deliveries, this includes VAT and other taxes on the goods paid in the exporting country.

Exports of services (P.62) consist of all services rendered by residents to non-residents. They include expenditures by non-resident tourists and business travellers, royalties and licence fees, installation of equipment abroad when a project is of limited duration by its nature, etc.

Reference: ESA 95, paragraphs 3.138, 3.140 and 3.142.

(Percentage of gross domestic product at market prices)

	NL	AT	PT	FI	SE	UK	EU-15 ⁽¹⁾	EUR-12 ⁽²⁾
1960	47.0	23.6	15.5	21.6	22.6	20.0	19.6	18.9
1965	42.2	24.4	23.7	19.5	21.4	18.4	18.7	18.3
1970	44.0	30.2	21.6	24.7	23.7	22.3	21.8	21.4
1975	48.6	30.9	18.0	22.7	27.6	25.4	24.8	24.5
1980	51.6	36.0	24.2	31.6	29.3	27.1	27.2	27.0
1981	56.9	37.2	23.0	32.1	29.9	26.7	28.6	28.7
1982	56.4	36.4	23.4	29.7	32.3	26.2	28.6	28.8
1983	56.0	35.8	27.7	29.5	35.6	26.4	28.8	28.8
1984	60.6	37.9	33.0	30.3	36.3	28.3	30.6	30.7
1985	61.9	39.8	33.0	28.8	35.1	28.8	31.0	31.1
1986	51.8	36.2	29.4	26.3	32.7	25.6	27.9	28.0
1987	50.4	35.1	30.9	25.4	32.3	25.4	27.2	27.2
1988	52.5	37.6	31.2	24.2	32.0	23.0	27.1	27.6
1989	55.4	39.3	33.3	23.6	31.7	23.7	28.3	28.8
1990	54.5	39.6	32.9	22.7	29.9	24.0	28.1	28.6
1991							28.2	28.9
1991	54.7	39.1	30.0	22.0	28.1	23.2	26.2	26.4
1992	52.5	37.6	27.6	26.3	28.1	23.6	25.9	25.9
1993	52.5	36.0	26.6	32.1	31.9	25.5	26.4	26.2
1994	55.0	36.5	28.4	34.9	35.4	26.5	27.9	27.6
1995	57.4	36.8	30.2	36.7	39.2	28.3	29.6	29.3
1996	57.9	37.9	29.8	37.3	37.9	29.3	30.0	29.7
1997	61.1	41.8	30.4	38.8	41.4	28.7	31.9	32.1
1998	61.0	43.4	30.8	38.6	42.5	26.8	32.2	32.9
1999	60.3	45.5	29.7	37.8	42.6	26.4	32.4	33.1
2000	67.5	50.3	31.5	43.0	45.8	28.1	36.0	37.2
2001	65.3	52.5	31.0	40.0	45.3	27.3	36.0	37.5
2002	62.6	52.8	30.2	38.7	43.3	26.1	35.1	36.7
2003	60.2	51.8	30.1	37.2	43.0	25.2	34.2	35.5
2004	61.6	53.5	30.8	37.3	43.9	25.7	34.8	36.2
2005	63.6	56.0	31.8	38.1	45.3	26.5	36.1	37.6

⁽¹⁾ 1960–91 including D_90.⁽²⁾ EU-15 excluding DK, SE and UK; 1960–91 including D_90.

Table 36 (Continued)

(Percentage of gross domestic product at market prices)

	CY	CZ	EE	HU	LV	LT	MT	PL	SK
1960	32.6	:	:	:	:	:	58.6	:	:
1965	34.4	:	:	:	:	:	53.9	:	:
1970	37.9	:	:	:	:	:	49.7	:	:
1975	35.5	:	:	:	:	:	82.8	:	:
1980	45.3	:	:	39.1	:	:	91.0	28.2	:
1981	50.3	:	:	39.5	:	:	81.5	23.2	:
1982	50.9	:	:	38.0	:	:	69.2	19.4	:
1983	50.4	:	:	40.2	:	:	67.2	17.2	:
1984	54.7	:	:	41.1	:	:	70.2	17.7	:
1985	48.7	:	:	42.2	:	:	72.5	18.2	:
1986	45.1	:	:	39.6	:	:	72.3	18.2	:
1987	47.3	:	:	37.9	:	:	78.2	21.4	:
1988	48.2	:	:	36.8	:	:	79.1	22.8	:
1989	51.5	:	:	36.0	:	:	81.1	19.1	:
1990	51.5	45.2	:	31.1	47.7	52.1	85.3	28.6	26.5
1991	47.1	52.8	:	32.8	35.2	29.7	87.0	23.5	46.3
1991	47.1	52.8	:	32.8	35.2	29.7	87.0	23.5	46.3
1992	49.8	54.7	:	31.4	79.9	23.4	91.9	23.7	70.3
1993	47.3	54.8	69.6	26.4	73.2	82.5	95.4	22.9	56.7
1994	47.5	50.5	75.3	28.9	46.5	55.4	96.7	23.6	59.8
1995	55.4	53.6	72.0	44.4	47.3	51.5	93.8	25.4	58.3
1996	55.8	52.5	67.1	48.5	51.3	53.4	87.0	24.3	54.1
1997	56.4	56.5	78.4	55.1	51.1	54.3	85.1	25.5	56.9
1998	53.6	58.8	79.7	62.6	51.3	46.6	87.7	28.2	59.7
1999	54.8	60.6	77.2	65.2	43.9	39.8	90.7	26.1	61.4
2000	56.8	69.8	93.7	74.9	45.6	45.7	102.7	28.3	70.8
2001	57.2	70.8	89.4	74.4	44.4	50.9	87.4	28.0	73.4
2002	51.5	65.2	84.2	64.5	45.5	54.1	87.8	30.0	72.8
2003	45.0	66.2	82.8	65.0	47.1	54.1	85.7	33.3	75.1
2004	45.3	66.1	85.5	65.3	48.8	54.9	87.6	35.1	76.6
2005	45.6	66.5	90.4	65.9	50.4	55.6	89.5	36.7	78.5

NB: Exports of goods (P.61) are to be valued free on board (fob) at the border of the exporting country. This value consists of:

- the value of the goods at basic prices;
- the related transport and distributive services up to that point of the border;
- any taxes less subsidies on the goods exported; for intra-EU deliveries, this includes VAT and other taxes on the goods paid in the exporting country.

Exports of services (P.62) consist of all services rendered by residents to non-residents. They include expenditures by non-resident tourists and business travellers, royalties and licence fees, installation of equipment abroad when a project is of limited duration by its nature, etc.

Reference: ESA 95, paragraphs 3.138, 3.140 and 3.142.

(Percentage of gross domestic product at market prices)

	SI	AC-10 ⁽¹⁾	EU-25 ⁽²⁾	BG	RO	TR	US	JP
1960	:	:	:	:	:	4.5	4.9	10.5
1965	:	:	:	:	:	4.5	5.0	10.3
1970	:	:	:	:	:	4.4	5.6	10.6
1975	:	:	:	:	:	5.0	8.4	12.6
1980	:	:	:	:	22.5	5.4	10.1	13.5
1981	:	:	:	:	27.9	8.4	9.8	14.5
1982	:	:	:	:	23.7	12.1	8.8	14.3
1983	:	:	:	:	26.6	13.0	7.9	13.7
1984	:	:	:	:	27.9	16.2	7.8	14.7
1985	:	:	:	:	28.9	16.4	7.3	14.1
1986	:	:	:	:	27.1	13.8	7.3	11.1
1987	:	:	:	:	26.6	15.6	7.8	10.1
1988	:	:	:	:	25.5	18.7	8.8	9.8
1989	:	:	:	:	20.9	16.2	9.4	10.3
1990	90.8	:	:	:	16.7	13.3	9.7	10.4
1991	83.5	:	:	43.5	17.6	13.8	10.1	9.9
1991	83.5	:	:	43.5	17.6	13.8	10.1	9.9
1992	63.1	:	:	47.1	27.8	14.4	10.2	9.8
1993	58.8	37.1	26.7	38.2	23.0	13.7	10.0	9.1
1994	60.0	37.1	28.1	45.1	24.9	21.4	10.4	9.0
1995	52.3	40.6	29.9	44.7	27.6	19.9	11.2	9.1
1996	52.8	39.9	30.4	55.4	28.1	21.5	11.3	9.7
1997	54.4	42.5	32.3	58.3	29.2	24.6	11.7	10.7
1998	53.8	44.8	32.7	47.1	22.6	24.3	11.1	10.7
1999	49.8	44.1	32.8	44.6	28.0	23.2	10.7	10.0
2000	56.5	48.7	36.5	55.7	32.9	24.0	11.3	10.8
2001	57.9	48.6	36.6	55.6	33.3	33.7	10.3	10.4
2002	57.9	48.4	35.7	53.1	35.4	28.8	9.8	11.2
2003	56.5	51.1	34.9	53.9	37.3	29.0	9.6	11.7
2004	55.5	52.5	35.6	55.7	38.3	30.7	9.8	12.3
2005	54.8	53.6	36.9	58.7	39.7	33.4	10.1	13.1

⁽¹⁾ CY, CZ, EE, HU, LV, LT, MT, PL, SK and SI.⁽²⁾ BE, DK, DE, EL, ES, FR, IE, IT, LU, NL, AT, PT, FI, SE, UK, CY, CZ, EE, HU, LV, LT, MT, PL, SK and SI.

Table 37

Foreign trade and current balance
Exports of goods and services at 1995 prices

(National currency; annual percentage change)

	BE	DK	DE (1)	EL	ES	FR	IE	IT	LU
1961-70	9.1	6.5	7.7	8.1	11.7	8.6	9.5	11.1	5.9
1971-80	4.7	4.7	5.0	14.1	7.1	7.0	7.3	6.1	3.1
1981	3.4	8.1	7.2	8.4	11.3	3.7	2.0	5.5	-4.8
1982	2.8	2.5	3.7	-16.5	5.6	-0.6	5.5	-0.9	-0.3
1983	2.6	4.7	-0.5	-5.8	9.6	4.4	10.5	3.7	5.3
1984	6.5	3.9	8.8	10.9	12.0	7.1	16.6	7.7	18.0
1985	0.3	5.0	7.3	1.8	0.7	2.6	6.6	3.9	9.5
1986	2.8	0.4	-1.3	16.8	0.2	-0.4	3.1	0.8	3.0
1987	5.0	4.3	0.7	5.9	5.3	3.4	13.7	4.5	3.3
1988	9.7	11.2	5.5	-2.1	3.8	8.7	8.9	5.1	11.1
1989	8.2	4.2	10.3	1.9	1.4	10.0	10.3	7.8	12.6
1990	4.6	6.2	11.3	-3.5	4.7	4.8	8.7	7.5	5.6
1981-90	4.6	5.0	5.2	1.4	5.4	4.3	8.5	4.5	6.1
1991	3.1	6.1	14.9	4.1	8.2	5.9	5.7	-1.4	9.2
1992	3.7	-0.9	-0.8	10.0	7.5	5.4	13.9	7.3	2.7
1993	-0.4	-1.5	-5.5	-2.6	7.8	0.0	9.7	9.0	4.8
1994	8.4	7.0	7.6	7.4	16.7	7.7	15.1	9.8	7.7
1995	5.5	2.9	5.7	3.0	9.4	7.7	20.0	12.6	4.6
1996	3.0	4.3	5.1	3.5	10.4	3.5	12.2	0.6	5.8
1997	5.9	4.1	11.2	20.0	15.3	11.8	17.4	6.4	14.8
1998	6.0	4.3	7.0	5.3	8.2	8.3	21.0	3.4	14.1
1999	5.1	12.3	5.5	18.1	7.7	4.3	15.2	0.1	14.8
2000	8.4	13.0	13.7	14.1	10.0	12.6	20.6	11.7	16.8
1991-2000	4.8	5.1	6.3	8.1	10.1	6.6	15.0	5.9	9.4
2001	1.3	3.0	5.6	-1.1	3.6	1.6	8.3	1.1	2.6
2002	1.0	5.8	3.4	-7.7	0.0	1.5	6.2	-1.0	-0.3
2003	-1.1	2.1	0.9	1.9	4.1	-1.6	-3.4	-2.3	0.9
2004	2.2	3.9	6.2	5.5	5.5	4.5	6.0	4.9	3.8
2005	4.2	4.5	7.5	5.2	7.4	6.9	7.9	5.9	6.1
2001-05	1.5	3.8	4.7	0.6	4.1	2.5	4.9	1.7	2.6

(1) 1961-91 D_90.

(National currency; annual percentage change)

	NL	AT	PT	FI	SE	UK	EU-15 ⁽¹⁾	EUR-12 ⁽²⁾
1961–70	8.4	9.0	11.5	7.3	7.6	5.0	7.9	8.7
1971–80	5.1	6.9	5.0	5.7	3.8	4.5	5.5	5.8
1981	1.4	3.8	–4.4	5.9	2.4	–0.8	4.1	5.0
1982	–0.4	0.5	4.7	–2.2	6.7	0.9	1.3	1.1
1983	3.2	2.9	13.6	4.0	10.0	1.8	2.9	2.7
1984	7.7	6.9	11.6	5.9	7.1	6.6	7.9	8.3
1985	5.1	7.7	6.7	0.4	1.2	5.9	4.6	4.5
1986	2.7	–4.8	6.8	1.4	3.4	4.3	1.1	0.4
1987	3.5	2.3	11.2	2.9	4.3	6.1	3.6	3.1
1988	8.1	9.8	8.2	3.1	2.8	0.7	5.9	6.7
1989	7.5	9.7	12.2	3.0	3.2	4.5	7.8	8.7
1990	5.6	7.8	9.5	1.5	1.8	5.5	6.9	7.4
1981–90	4.4	4.6	7.9	2.6	4.3	3.5	4.6	4.8
1991	5.6	5.2	1.2	–7.4	–1.9	–0.1	6.0	7.3
1992	1.8	1.5	3.2	10.1	2.2	4.3	3.4	3.4
1993	4.8	–1.4	–3.3	16.3	8.3	4.4	1.6	0.9
1994	9.7	5.6	8.4	13.6	14.1	9.2	9.1	9.0
1995	8.8	3.0	8.8	8.5	11.5	9.3	8.1	7.9
1996	4.6	5.2	7.1	5.7	3.7	8.6	5.0	4.5
1997	8.8	12.4	7.1	13.7	13.8	8.4	10.2	10.5
1998	7.4	8.1	9.1	9.2	8.6	2.8	6.7	7.3
1999	5.1	8.5	2.9	6.5	7.4	4.3	5.4	5.3
2000	11.3	13.4	8.0	19.3	11.3	9.4	12.1	12.6
1991–2000	6.8	6.1	5.2	9.3	7.8	6.0	6.7	6.8
2001	1.7	7.5	1.9	–0.8	–0.8	2.5	3.0	3.3
2002	0.1	3.7	2.1	4.9	0.4	–0.9	1.4	1.7
2003	–0.3	1.1	3.1	1.6	4.2	–0.6	0.0	–0.1
2004	4.3	5.7	5.1	4.2	6.0	5.1	5.1	5.1
2005	5.6	7.6	7.0	5.8	6.8	6.6	6.6	6.7
2001–05	2.3	5.1	3.8	3.1	3.3	2.5	3.2	3.3

⁽¹⁾ Weighted in common currency; 1961–91 including D_90.⁽²⁾ Weighted in common currency; EU-15 excluding DK, SE and UK; 1961–91 including D_90.

Table 37 (Continued)

(National currency; annual percentage change)

	CY	CZ	EE	HU	LV	LT	MT	PL	SK
1961–70	:	:	:	:	:	:	:	:	:
1971–80	:	:	:	:	:	:	:	:	:
1981	:	:	:	:	:	:	:	:	:
1982	:	:	:	:	:	:	:	:	:
1983	:	:	:	:	:	:	:	:	:
1984	:	:	:	:	:	:	:	:	:
1985	:	:	:	:	:	:	:	:	:
1986	:	:	:	:	:	:	:	:	:
1987	:	:	:	:	:	:	:	:	:
1988	:	:	:	:	:	:	:	:	:
1989	:	:	:	:	:	:	:	:	:
1990	:	:	:	:	:	:	:	:	:
1981–90	:	:	:	:	:	:	:	:	:
1991	:	-6.0	:	-3.1	-32.2	:	:	-1.7	:
1992	:	9.5	:	2.7	14.9	:	:	10.8	:
1993	:	15.8	:	-10.3	-22.4	:	:	3.2	-0.2
1994	:	1.7	3.5	13.6	-8.4	:	:	13.1	12.2
1995	24.8	16.7	5.3	47.5	4.3	:	:	22.9	4.8
1996	3.6	8.2	2.4	12.6	20.2	19.3	-5.9	12.0	-1.3
1997	1.7	9.2	29.5	22.3	13.1	18.7	4.0	12.2	19.0
1998	0.0	10.0	12.0	18.9	4.9	4.6	8.1	14.3	13.2
1999	6.5	6.1	0.5	12.4	-6.4	-16.8	8.2	-2.6	5.2
2000	9.0	17.0	28.6	21.0	12.0	9.8	5.6	23.2	13.8
1991–2000	:	8.6	:	12.8	-1.5	:	:	10.4	:
2001	3.4	11.9	-0.2	8.8	6.9	21.2	-4.9	10.3	6.5
2002	-5.1	2.8	6.0	3.8	6.3	19.5	0.2	4.8	5.9
2003	0.4	4.9	5.0	4.1	9.4	9.4	2.5	6.5	16.4
2004	4.9	4.5	10.0	5.8	8.7	7.7	3.5	8.8	10.9
2005	5.9	5.4	12.0	7.3	9.4	7.4	3.9	9.8	8.4
2001–05	1.8	5.8	6.5	5.9	8.1	12.9	1.0	8.0	9.6

(National currency; annual percentage change)

	SI	AC-10 ⁽¹⁾	EU-25 ⁽²⁾	BG	RO	TR	US	JP
1961–70	:	:	:	:	:	6.5	6.2	15.9
1971–80	:	:	:	:	:	3.7	7.7	9.4
1981	:	:	:	:	:	63.5	1.1	12.4
1982	:	:	:	:	:	34.0	-7.1	0.8
1983	:	:	:	:	:	13.1	-2.4	4.9
1984	:	:	:	:	:	25.4	8.4	14.8
1985	:	:	:	:	:	-1.9	2.7	5.5
1986	:	:	:	:	:	-5.1	7.4	-5.5
1987	:	:	:	:	:	26.4	11.2	-0.5
1988	:	:	:	:	:	18.4	16.1	5.9
1989	:	:	:	:	:	-0.3	11.8	9.1
1990	:	:	:	:	:	2.6	8.7	7.0
1981–90	:	:	:	:	:	16.0	5.6	5.3
1991	-20.1	:	:	:	-18.5	3.7	6.5	4.1
1992	-23.5	:	:	:	4.1	11.0	6.2	3.9
1993	0.6	:	:	:	10.6	7.7	3.3	-0.1
1994	12.3	:	:	:	19.0	15.2	8.9	3.5
1995	1.1	:	:	:	17.0	8.0	10.3	4.1
1996	2.8	8.4	5.1	11.8	2.0	22.0	8.2	6.5
1997	11.3	13.8	10.3	12.8	11.4	19.1	12.3	11.3
1998	7.4	12.3	6.9	-4.7	-1.7	12.0	2.1	-2.3
1999	1.6	3.2	5.3	-5.0	10.5	-7.0	3.4	1.5
2000	13.0	18.5	12.4	16.6	23.4	19.2	9.7	12.4
1991–2000	-0.2	:	:	:	7.1	10.8	7.0	4.4
2001	6.4	9.2	3.3	10.0	11.1	7.4	-5.4	-6.1
2002	6.5	4.5	1.5	6.2	16.9	11.0	-1.6	8.2
2003	3.4	6.2	0.4	9.5	11.2	12.3	0.7	7.0
2004	5.3	7.0	5.2	11.3	9.6	12.1	5.0	7.2
2005	5.7	7.7	6.7	13.7	9.1	12.8	6.2	8.9
2001–05	5.4	6.9	3.4	10.1	11.6	11.1	0.9	4.9

⁽¹⁾ Weighted in common currency; CY, CZ, EE, HU, LV, LT, MT, PL, SK and SI.⁽²⁾ Weighted in common currency; BE, DK, DE, EL, ES, FR, IE, IT, LU, NL, AT, PT, FI, SE, UK, CY, CZ, EE, HU, LV, LT, MT, PL, SK and SI.

Table 38

Foreign trade and current balance
Intra-EU-15 exports of goods
Foreign trade statistics

(Percentage of gross domestic product at market prices)

	BE/LU	DK	DE ⁽¹⁾	EL	ES	FR	IE	IT	NL
1960	19.2	13.8	6.3	2.4	3.5	4.2	17.9	3.7	19.9
1965	26.7	14.8	9.0	2.5	2.2	5.4	17.7	6.0	22.7
1970	33.7	13.0	10.8	3.2	3.1	7.3	18.7	6.8	25.5
1975	33.2	14.4	11.9	5.1	3.5	8.3	28.4	8.6	29.1
1980	38.3	16.0	14.1	5.3	5.1	9.4	31.4	9.6	31.8
1981	39.1	16.3	14.6	4.3	5.0	9.2	28.6	9.1	34.7
1982	42.3	16.2	15.5	4.5	5.5	9.0	28.9	9.5	35.3
1983	43.9	16.4	15.0	5.7	6.3	9.4	31.2	9.1	35.8
1984	44.7	15.8	15.9	6.7	7.5	10.1	35.8	9.1	38.4
1985	44.8	15.9	16.8	6.3	7.6	10.3	35.9	9.6	39.5
1986	43.1	14.4	13.9	7.7	7.1	9.7	34.1	9.3	34.0
1987	42.7	14.4	16.1	8.1	7.4	10.0	37.2	9.3	32.2
1988	42.3	15.2	16.9	5.6	7.7	10.6	39.7	9.4	31.8
1989	46.8	16.3	18.1	7.6	7.7	11.3	42.3	9.8	33.7
1990	44.4	16.8	16.5	6.5	7.8	11.3	39.1	9.6	33.5
1991	43.3	17.2	14.3	6.4	8.0	11.4	39.2	9.2	33.1
1992	40.2	17.3	13.4	6.8	7.8	11.2	40.6	8.9	31.0
1993	39.7	15.6	11.4	5.5	8.4	10.0	41.2	9.7	28.4
1994	41.1	15.4	11.8	5.3	10.2	10.9	45.4	10.6	29.6
1995	41.0	15.7	12.4	5.7	11.1	11.6	47.6	12.0	30.5
1996	42.2	15.4	12.6	5.3	11.9	11.6	43.4	11.4	30.7
1997	46.9	17.1	13.5	4.8	13.2	12.6	45.2	11.1	38.0
1998	50.2	17.0	14.0	4.8	13.2	13.0	49.9	11.4	29.3
1999	52.8	17.4	14.5	4.7	13.2	13.2	48.4	11.5	31.0
2000	57.6	18.8	16.6	4.2	14.0	14.4	49.5	12.0	34.3
2001	60.9	19.2	16.5	3.7	14.1	13.4	50.0	12.0	32.7
2002	58.3	19.5	16.4	3.5	13.4	12.9	46.2	11.1	32.8
2003	59.9	19.5	16.4	3.4	13.4	12.5	36.7	10.5	31.2
2004	61.3	20.1	16.9	3.3	13.4	12.7	36.5	10.7	31.7
2005	62.2	20.7	17.8	3.3	13.7	13.2	36.9	10.9	33.0

⁽¹⁾ 1960–90 D_90.

NB: There might be some minor differences between exports according to national accounts and according to foreign trade statistics. They are due to different data vintages and revision schemes, in some cases to conceptual differences and partly to different basic data sources.

(Percentage of gross domestic product at market prices)

	AT	PT	FI	SE	UK	EU-15 ⁽¹⁾
1960	:	4.3	:	:	3.3	:
1965	9.6	6.4	10.5	11.0	4.7	8.1
1970	10.8	6.8	13.2	11.9	6.1	9.9
1975	10.0	7.0	10.7	13.0	7.8	11.4
1980	13.1	10.1	15.5	14.1	10.6	13.3
1981	13.1	9.1	13.7	13.6	9.7	13.1
1982	13.1	10.2	12.3	14.5	9.8	13.4
1983	12.9	12.8	12.6	16.5	10.3	13.7
1984	13.8	15.5	13.4	16.6	11.5	14.5
1985	14.9	15.9	12.5	16.2	11.9	14.9
1986	14.8	15.3	12.3	15.5	10.1	13.4
1987	15.0	16.4	13.0	15.5	10.3	14.0
1988	16.1	16.8	11.9	15.9	9.5	14.1
1989	16.8	18.1	11.7	16.0	10.0	14.8
1990	17.5	18.5	11.7	14.9	10.7	14.4
1991	16.5	16.4	12.0	13.8	10.8	13.8
1992	15.9	15.3	14.4	13.6	10.6	13.4
1993	14.2	14.3	15.8	14.8	9.6	12.6
1994	14.6	15.9	16.8	15.9	11.0	13.6
1995	15.6	17.5	17.3	18.3	12.2	14.6
1996	16.0	16.4	16.7	17.2	12.3	14.5
1997	17.2	17.8	17.2	18.0	11.5	15.4
1998	18.4	17.5	18.0	19.9	10.8	15.4
1999	18.2	17.7	18.1	17.3	10.0	15.5
2000	19.3	18.3	20.3	17.5	10.5	16.9
2001	20.2	17.8	18.9	18.9	10.9	16.9
2002	20.2	16.7	18.1	18.3	10.3	16.3
2003	19.6	16.5	17.6	18.2	9.6	15.9
2004	19.7	16.8	17.7	18.5	9.8	16.2
2005	20.4	17.4	18.2	19.1	10.0	16.7

⁽¹⁾ 1960–90 including D_90.

Table 39

Foreign trade and current balance
Extra-EU-15 exports of goods
Foreign trade statistics

(Percentage of gross domestic product at market prices)

	BE/LU	DK	DE (1)	EL	ES	FR	IE	IT	NL
1960	12.4	10.4	9.3	3.1	2.5	6.8	4.2	5.5	12.6
1965	9.3	7.0	6.2	2.5	1.7	4.4	3.1	4.7	7.7
1970	9.4	7.2	7.4	2.5	2.9	4.7	4.7	5.5	7.8
1975	10.4	7.9	9.2	4.3	3.4	6.4	6.2	7.7	9.0
1980	11.9	7.9	9.1	5.3	4.3	6.8	8.7	7.6	9.6
1981	13.7	10.2	10.7	5.2	5.5	7.7	10.2	9.4	11.3
1982	14.3	9.6	10.8	4.7	5.4	7.4	9.8	8.7	10.5
1983	15.4	10.4	10.3	4.7	5.9	7.5	11.4	8.3	10.8
1984	16.7	11.6	11.3	5.0	6.7	8.1	13.5	8.6	11.8
1985	16.4	11.4	11.9	4.8	6.5	8.0	14.0	8.8	11.7
1986	13.5	9.8	9.3	4.0	4.3	6.3	11.3	6.8	9.4
1987	12.5	9.0	9.8	3.4	3.8	5.9	11.3	6.0	8.8
1988	12.2	9.8	9.5	2.7	3.7	5.9	11.8	5.8	11.2
1989	14.1	9.7	9.9	3.5	3.5	6.3	12.4	6.3	11.7
1990	12.2	9.2	9.3	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	9.6	7.8	3.1	2.8	6.0	12.0	5.5	10.8
1993	12.8	11.2	8.0	3.9	3.8	6.1	16.7	7.3	12.1
1994	13.5	12.0	8.5	4.0	4.2	6.3	17.3	7.9	12.2
1995	16.1	11.4	8.9	3.7	4.2	6.7	18.3	9.1	12.2
1996	16.3	11.3	9.3	4.3	4.8	6.6	18.8	9.1	12.4
1997	18.9	11.0	10.8	4.4	5.7	7.5	21.6	9.3	10.9
1998	16.0	10.6	11.3	4.1	5.4	7.6	23.8	8.8	13.2
1999	16.0	10.9	11.3	4.1	5.3	7.3	26.1	8.4	11.8
2000	19.8	12.2	12.7	5.4	6.1	8.7	30.8	10.0	14.1
2001	19.5	12.8	14.2	5.1	5.8	8.5	30.7	10.3	11.4
2002	16.9	12.8	14.4	4.3	5.5	8.2	26.4	9.9	9.0
2003	12.2	12.8	14.6	4.2	5.3	7.8	25.0	9.4	8.5
2004	11.5	12.4	15.1	4.1	5.3	7.8	24.6	9.7	9.0
2005	11.5	12.2	16.0	4.0	5.4	8.1	24.8	10.1	9.2

(1) 1960-90 D_90.

(Percentage of gross domestic product at market prices)

	AT	PT	FI	SE	UK	EU-15 ⁽¹⁾
1960	:	6.8	:	:	11.1	:
1965	6.7	6.6	6.3	6.5	8.5	6.0
1970	8.4	6.1	7.5	7.7	9.5	6.8
1975	9.3	4.0	8.3	10.1	10.9	8.2
1980	8.9	5.3	11.4	9.8	10.7	8.5
1981	9.8	5.3	13.6	10.6	10.3	9.6
1982	9.6	4.9	13.1	11.3	10.2	9.3
1983	9.2	5.8	12.6	12.3	9.7	9.3
1984	10.1	7.3	12.7	12.9	10.3	10.0
1985	10.4	7.2	12.2	13.0	10.1	10.1
1986	8.7	5.0	10.7	11.6	9.0	8.1
1987	7.7	4.5	9.6	11.0	8.8	7.8
1988	8.1	4.6	8.5	10.6	7.9	7.6
1989	8.4	5.1	8.5	10.0	8.2	8.0
1990	8.3	4.5	7.7	9.1	8.0	7.4
1991	7.8	3.7	6.6	8.4	7.0	7.0
1992	7.4	3.6	7.6	8.3	7.1	6.8
1993	7.5	3.6	11.3	10.3	8.2	7.8
1994	7.9	3.9	12.8	12.8	8.5	8.3
1995	8.9	4.2	13.9	12.9	9.0	8.8
1996	9.0	4.2	15.0	13.4	9.5	9.1
1997	10.4	4.2	16.2	14.8	9.5	9.8
1998	10.2	4.0	15.3	14.4	8.2	9.7
1999	10.1	3.6	14.5	12.8	8.1	9.4
2000	11.4	4.5	17.5	14.6	8.7	10.9
2001	12.2	4.4	17.7	15.9	9.2	11.2
2002	12.7	4.3	16.9	15.3	8.5	10.7
2003	13.2	4.2	16.2	15.0	8.4	10.4
2004	14.2	4.2	16.3	15.3	8.6	10.6
2005	15.1	4.4	16.5	15.9	9.0	11.0

⁽¹⁾ 1960–90 including D_90.

Table 40

Foreign trade and current balances
Imports of goods and services at current prices (national accounts)

(Percentage of gross domestic product at market prices)

	BE	DK	DE (1)	EL	ES	FR	IE	IT	LU
1960	39.7	32.8	16.9	16.1	7.0	12.4	35.1	13.2	78.8
1965	43.3	30.1	18.2	18.9	13.3	12.3	41.3	12.5	85.4
1970	49.7	30.1	19.6	16.8	13.5	15.3	42.4	16.0	80.9
1975	53.0	30.1	22.4	23.3	16.4	17.9	45.9	20.4	94.1
1980	61.0	33.3	27.7	27.8	17.2	22.8	59.3	24.5	95.3
1981	64.7	35.3	28.7	28.3	19.0	23.8	58.9	25.2	95.6
1982	68.9	35.4	28.1	27.1	19.4	24.0	52.1	23.9	96.8
1983	69.1	33.9	27.7	27.2	20.6	22.8	51.9	21.2	96.2
1984	73.5	35.2	29.2	26.5	20.1	23.9	56.2	22.8	106.1
1985	70.7	36.1	29.8	26.7	19.9	23.9	54.8	23.0	110.4
1986	63.4	32.5	25.7	27.4	17.0	20.6	49.4	18.5	100.5
1987	62.2	29.5	24.8	26.6	18.5	20.7	49.7	18.7	102.4
1988	65.6	30.3	25.4	25.6	19.3	21.2	51.4	18.7	102.3
1989	70.7	32.0	27.3	27.3	20.6	22.6	55.5	19.9	101.5
1990	68.9	30.8	27.4	27.9	19.7	22.2	52.4	19.7	100.3
1991			28.9						
1991	67.2	31.3	26.5	26.8	19.6	22.0	52.9	18.6	101.4
1992	64.8	29.9	24.8	26.3	19.7	21.0	53.2	19.1	95.6
1993	60.9	28.6	22.6	25.3	19.1	19.2	55.4	19.0	94.0
1994	63.1	30.1	23.3	23.9	21.2	20.1	60.9	20.4	95.2
1995	64.8	31.3	23.8	24.9	22.8	21.1	65.0	23.0	96.8
1996	66.5	30.8	24.3	25.5	23.4	21.4	65.9	20.9	99.8
1997	70.3	32.9	26.5	27.0	25.7	22.5	67.0	22.3	105.8
1998	71.1	33.8	27.5	28.2	27.2	23.5	74.6	22.9	112.5
1999	71.4	33.3	28.8	31.0	28.8	23.7	74.2	23.5	119.7
2000	82.5	38.3	33.4	34.1	32.4	27.3	84.4	27.3	130.4
2001	82.6	38.6	33.3	31.1	31.6	26.3	83.4	26.9	136.0
2002	80.2	39.0	31.6	27.7	29.9	25.0	75.0	25.8	128.7
2003	76.3	38.1	31.4	26.3	29.8	24.9	67.5	24.9	124.2
2004	75.9	38.9	32.1	25.6	30.3	25.2	67.6	25.3	123.9
2005	77.8	39.7	34.1	24.9	31.4	26.1	68.6	26.1	126.0

(1) 1960–91 D_90.

NB: Imports of goods (P.71) are valued at the cost, insurance and freight (cif) price at the border of the importing country. The cif price is the price of a good delivered at the frontier of the importing country before the payment of any import duties or other taxes on imports or trade and transport margins within the country.

Imports of services (P.72) consist of all services rendered by non-residents to residents (see note on Table 36).

Reference: ESA 95, paragraphs 3.138, 3.141, 3.142 et seq.

(Percentage of gross domestic product at market prices)

	NL	AT	PT	FI	SE	UK	EU-15 ⁽¹⁾	EUR-12 ⁽²⁾
1960	45.6	24.5	20.3	22.6	23.0	21.4	19.2	17.9
1965	43.3	25.1	27.0	21.4	22.0	19.4	19.0	18.5
1970	46.1	29.4	26.5	26.2	24.0	21.5	21.5	21.1
1975	46.1	30.5	28.1	28.9	27.6	27.1	24.9	24.2
1980	52.7	38.1	36.0	33.0	30.9	24.9	28.6	29.1
1981	54.1	38.8	38.8	31.1	29.8	23.8	29.1	30.0
1982	52.8	35.2	38.6	29.5	32.6	24.4	28.9	29.5
1983	52.8	34.9	37.8	29.5	33.3	25.6	28.4	28.6
1984	56.2	37.8	38.7	27.9	32.5	28.5	30.0	30.0
1985	58.0	39.6	35.5	28.1	33.3	27.8	30.0	30.1
1986	48.8	35.2	30.8	25.2	29.4	26.5	26.3	25.9
1987	48.5	34.8	35.4	25.3	30.4	26.6	26.1	25.8
1988	49.6	37.2	39.1	24.9	30.3	26.6	26.6	26.3
1989	52.7	38.7	38.9	25.7	31.1	27.8	28.1	27.9
1990	50.8	38.4	39.5	24.3	29.4	26.6	27.5	27.5
1991							27.1	27.5
1991	50.7	38.4	37.2	22.8	26.4	24.2	26.5	26.8
1992	49.0	36.8	35.0	25.3	26.3	24.8	26.0	26.0
1993	47.0	35.5	33.6	27.4	28.2	26.5	25.3	24.9
1994	48.9	36.9	35.2	29.1	30.9	27.2	26.5	26.2
1995	51.5	37.6	36.4	28.8	32.5	28.8	28.0	27.6
1996	52.2	39.0	36.4	29.8	31.3	29.8	28.1	27.6
1997	55.2	43.4	38.2	30.8	34.1	28.6	29.7	29.7
1998	55.5	44.0	39.7	29.8	36.2	27.8	30.4	30.7
1999	55.9	46.3	40.1	29.3	36.4	28.2	31.3	31.7
2000	62.2	50.9	42.8	33.7	40.2	30.1	35.4	36.4
2001	60.1	52.2	40.7	31.6	39.3	30.1	34.9	35.8
2002	57.5	50.6	37.7	30.1	37.2	29.1	33.4	34.1
2003	54.7	49.7	35.3	29.7	37.1	28.5	32.6	33.2
2004	55.6	51.4	35.6	30.0	37.6	28.8	33.1	33.7
2005	57.2	54.0	36.2	30.7	38.9	29.2	34.2	35.0

⁽¹⁾ 1960–91 including D_90.⁽²⁾ EU-15 excluding DK, SE and UK; 1960–91 including D_90.

Table 40 (Continued)

(Percentage of gross domestic product at market prices)

	CY	CZ	EE	HU	LV	LT	MT	PL	SK
1960	43.3	:	:	:	:	:	69.9	:	:
1965	40.4	:	:	:	:	:	71.0	:	:
1970	47.5	:	:	:	:	:	79.6	:	:
1975	56.7	:	:	:	:	:	96.3	:	:
1980	63.1	:	:	41.2	:	:	96.4	31.1	:
1981	63.3	:	:	40.6	:	:	89.9	25.3	:
1982	64.2	:	:	37.2	:	:	85.4	17.3	:
1983	64.0	:	:	38.3	:	:	82.2	15.5	:
1984	67.1	:	:	37.9	:	:	85.3	15.7	:
1985	58.8	:	:	40.1	:	:	88.3	16.9	:
1986	48.7	:	:	41.1	:	:	82.4	16.8	:
1987	50.2	:	:	38.3	:	:	87.6	19.0	:
1988	53.6	:	:	34.1	:	:	89.2	20.0	:
1989	59.9	:	:	32.7	:	:	92.0	14.9	:
1990	57.0	42.6	:	28.5	49.0	60.6	98.9	21.5	35.5
1991	57.1	45.7	:	33.7	25.5	21.1	98.1	25.4	49.3
1991	57.1	45.7	:	33.7	25.5	21.1	98.1	25.4	49.3
1992	60.6	53.8	:	31.7	73.1	19.9	99.0	22.2	74.3
1993	47.8	54.1	73.9	34.6	57.0	90.4	105.0	22.0	61.0
1994	47.9	53.2	86.2	35.4	44.4	61.4	106.9	21.5	54.2
1995	58.9	58.4	80.0	44.3	49.7	63.0	107.5	23.0	55.8
1996	62.4	58.9	78.6	48.0	59.4	63.3	101.0	25.8	64.6
1997	61.8	62.5	90.0	54.1	59.6	64.8	93.5	29.8	66.4
1998	61.3	60.0	90.1	64.1	64.8	58.3	93.2	33.4	70.4
1999	57.7	61.9	82.1	67.8	54.2	50.1	96.3	32.5	65.7
2000	62.0	73.2	97.7	78.7	54.3	52.2	113.4	34.9	73.3
2001	61.6	73.5	93.1	75.9	55.6	56.4	92.2	31.8	81.5
2002	58.8	67.5	93.6	66.7	56.1	59.8	89.0	33.3	79.9
2003	51.1	68.7	95.6	69.7	59.1	59.4	89.0	35.6	78.6
2004	50.2	68.7	95.9	70.8	61.5	61.0	90.8	37.8	80.6
2005	49.9	69.0s	97.6	71.9	63.1	61.5	92.6	39.7	82.4

NB: Imports of goods (P.71) are valued at the cost, insurance and freight (cif) price at the border of the importing country. The cif price is the price of a good delivered at the frontier of the importing country before the payment of any import duties or other taxes on imports or trade and transport margins within the country.

Imports of services (P.72) consist of all services rendered by non-residents to residents (see note on Table 36).

Reference: ESA 95, paragraphs 3.138, 3.141, 3.142 et seq.

(Percentage of gross domestic product at market prices)

	SI	AC-10 ⁽¹⁾	EU-25 ⁽²⁾	BG	RO	TR	US	JP
1960	:	:	:	:	:	5.8	4.4	10.1
1965	:	:	:	:	:	5.1	4.4	9.0
1970	:	:	:	:	:	5.8	5.4	9.4
1975	:	:	:	:	:	11.3	7.6	12.6
1980	:	:	:	:	22.2	11.8	10.6	14.4
1981	:	:	:	:	25.1	12.6	10.2	13.7
1982	:	:	:	:	18.5	14.6	9.4	13.6
1983	:	:	:	:	18.6	16.2	9.4	12.0
1984	:	:	:	:	20.1	19.3	10.4	12.1
1985	:	:	:	:	20.0	18.6	10.0	10.8
1986	:	:	:	:	18.1	15.9	10.3	7.2
1987	:	:	:	:	17.8	17.8	10.8	7.2
1988	:	:	:	:	15.7	17.6	10.9	7.6
1989	:	:	:	:	18.2	17.8	10.8	8.8
1990	78.5	:	:	:	26.2	17.6	10.9	9.4
1991	74.2	:	:	39.2	21.5	16.6	10.5	8.3
1991	74.2	:	:	39.2	21.5	16.6	10.5	8.3
1992	56.2	:	:	52.9	36.2	17.3	10.6	7.6
1993	57.7	38.4	25.6	45.8	28.0	19.3	10.9	6.9
1994	57.8	37.6	26.8	45.7	27.0	20.4	11.6	7.0
1995	54.2	41.0	28.4	46.3	33.2	24.4	12.3	7.7
1996	53.8	43.3	28.6	50.0	36.6	27.8	12.4	9.2
1997	55.2	46.9	30.3	53.7	36.2	30.4	12.8	9.6
1998	55.3	49.4	31.2	46.8	30.6	27.9	12.8	8.8
1999	54.0	48.9	31.9	50.3	32.9	26.9	13.5	8.5
2000	60.1	54.0	36.2	61.1	38.5	31.5	15.0	9.3
2001	58.5	52.1	35.7	63.1	41.1	31.3	13.8	9.7
2002	56.5	51.8	34.2	59.7	41.2	30.5	13.9	9.9
2003	56.1	54.4	33.6	62.0	44.0	32.3	14.3	10.1
2004	55.4	56.1	34.1	63.3	45.5	34.7	14.7	10.3
2005	54.8	57.4	35.3	67.0	47.3	38.1	15.2	10.7

⁽¹⁾ CY, CZ, EE, HU, LV, LT, MT, PL, SK and SI.⁽²⁾ BE, DK, DE, EL, ES, FR, IE, IT, LU, NL, AT, PT, FI, SE, UK, CY, CZ, EE, HU, LV, LT, MT, PL, SK and SI.

Table 41

Foreign trade and current balance
Imports of goods and services at 1995 prices

(National currency; annual percentage change)

	BE	DK	DE (1)	EL	ES	FR	IE	IT	LU
1961-70	8.5	7.6	9.9	11.3	18.5	10.2	9.8	11.3	6.1
1971-80	5.0	2.4	5.4	8.0	6.3	5.8	6.5	4.6	3.5
1981	-2.1	-0.2	-2.6	6.5	-3.6	-1.9	1.7	-1.6	-2.9
1982	1.4	4.7	-0.4	-2.6	4.9	2.0	-3.1	0.5	-0.3
1983	-1.2	1.0	2.5	2.6	-1.2	-3.4	4.7	-2.4	1.2
1984	6.3	5.7	4.7	-2.1	-1.3	3.5	9.9	12.4	13.9
1985	0.4	9.7	3.8	4.4	7.5	4.2	3.2	5.3	7.0
1986	4.6	9.5	3.1	13.9	17.2	6.5	6.3	4.0	1.7
1987	6.8	-3.1	4.7	2.1	24.8	7.7	6.2	12.2	7.3
1988	10.3	8.3	5.7	7.3	16.1	8.8	4.9	5.9	10.5
1989	9.5	4.1	8.5	10.5	17.7	8.0	13.5	8.9	9.1
1990	4.9	1.2	10.7	8.4	9.6	5.5	5.1	11.5	5.0
1981-90	4.0	4.0	4.0	5.0	8.8	4.0	5.1	5.5	5.1
1991	2.7	3.0	12.2	5.8	10.3	3.1	2.4	2.3	9.1
1992	4.2	-0.4	1.5	1.1	6.8	1.8	8.2	7.4	-3.1
1993	-0.4	-2.7	-5.5	0.6	-5.2	-3.7	7.5	-10.9	5.2
1994	7.2	12.3	7.4	1.5	11.4	8.2	15.5	8.1	6.7
1995	4.3	7.3	5.6	8.9	11.1	8.0	16.4	9.7	4.2
1996	2.6	3.5	3.1	7.0	8.0	1.6	12.5	-0.3	7.6
1997	5.1	10.0	8.3	14.2	13.2	6.9	16.8	10.1	13.9
1998	7.3	8.9	9.1	9.2	13.2	11.6	25.5	8.9	15.3
1999	4.2	5.5	8.4	15.0	12.6	6.2	12.1	5.6	14.6
2000	8.5	11.3	10.5	8.9	10.6	14.6	21.3	8.9	14.8
1991-2000	4.5	5.8	5.9	7.1	9.1	5.7	13.6	4.8	8.7
2001	1.1	1.9	0.9	-3.4	4.0	1.3	6.5	1.0	4.8
2002	1.2	4.2	-1.7	-4.7	1.8	0.6	2.3	1.5	-1.6
2003	-1.1	1.5	2.8	2.4	6.4	1.5	-4.5	1.7	1.0
2004	2.3	4.8	5.9	5.1	7.2	4.6	5.5	5.7	4.1
2005	4.4	5.1	7.6	3.1	8.5	6.7	7.1	6.2	6.4
2001-05	1.5	3.5	3.0	0.4	5.5	2.9	3.3	3.2	2.9

(1) 1961-91 D_90.

(National currency; annual percentage change)

	NL	AT	PT	FI	SE	UK	EU-15 ⁽¹⁾	EUR-12 ⁽¹⁾
1961–70	9.8	8.3	11.3	7.8	7.2	4.2	8.7	10.1
1971–80	4.1	7.1	4.9	4.3	2.4	3.7	4.8	5.3
1981	-6.1	0.3	2.3	-3.7	-5.3	-2.8	-2.5	-2.4
1982	0.0	-5.3	3.9	2.2	4.6	4.9	1.4	0.6
1983	3.9	3.5	-6.1	4.3	1.2	6.5	1.2	0.2
1984	5.3	9.0	-4.4	1.4	5.7	9.9	6.1	5.4
1985	6.5	6.4	1.4	6.4	8.0	2.5	4.4	4.4
1986	4.2	-6.0	16.9	2.9	3.8	6.9	5.3	4.9
1987	3.7	4.8	23.1	9.4	7.6	7.9	7.5	7.8
1988	6.4	9.3	18.0	10.6	4.5	12.8	8.5	7.9
1989	7.7	8.0	5.9	9.1	7.7	7.4	8.7	9.1
1990	3.8	6.9	14.5	-0.6	0.7	0.5	6.4	8.0
1981–90	3.5	3.5	7.1	4.1	3.8	5.6	4.6	4.5
1991	4.9	5.8	7.2	-12.9	-4.9	-4.5	4.1	6.1
1992	1.5	1.4	10.7	0.5	1.5	6.8	3.5	3.2
1993	0.3	-1.1	-3.3	1.5	-2.2	3.3	-3.1	-4.2
1994	9.4	8.2	8.8	12.4	12.2	5.8	8.1	8.3
1995	10.5	5.6	7.4	7.4	7.2	5.6	7.3	7.6
1996	4.4	4.9	4.9	5.9	3.0	9.7	4.2	3.3
1997	9.5	12.0	10.0	11.2	12.5	9.8	9.3	9.1
1998	8.5	5.7	14.2	7.9	11.3	9.3	9.9	10.0
1999	5.8	9.0	8.5	3.5	4.9	7.9	7.5	7.6
2000	10.5	11.6	5.4	16.9	11.5	9.1	10.9	11.2
1991–2000	6.5	6.3	7.3	5.1	5.5	6.2	6.1	6.1
2001	2.4	5.9	0.9	0.2	-3.5	4.5	2.0	1.8
2002	-0.2	1.2	-0.5	1.3	-2.7	3.6	0.7	0.1
2003	-0.4	1.1	-2.9	1.1	4.3	0.9	1.5	1.5
2004	4.0	5.7	3.9	4.0	5.6	4.7	5.1	5.2
2005	5.0	7.6	5.5	5.5	7.0	5.5	6.5	6.6
2001–05	2.2	4.3	1.3	2.4	2.1	3.8	3.1	3.0

⁽¹⁾ Weighted in common currency; 1961–91 including D_90.⁽²⁾ Weighted in common currency; EU-15 excluding DK, SE and UK; 1961–91 including D_90.

Table 41 (Continued)

(National currency; annual percentage change)

	CY	CZ	EE	HU	LV	LT	MT	PL	SK
1961–70	:	:	:	:	:	:	:	:	:
1971–80	:	:	:	:	:	:	:	:	:
1981	:	:	:	:	:	:	:	:	:
1982	:	:	:	:	:	:	:	:	:
1983	:	:	:	:	:	:	:	:	:
1984	:	:	:	:	:	:	:	:	:
1985	:	:	:	:	:	:	:	:	:
1986	:	:	:	:	:	:	:	:	:
1987	:	:	:	:	:	:	:	:	:
1988	:	:	:	:	:	:	:	:	:
1989	:	:	:	:	:	:	:	:	:
1990	:	:	:	:	:	:	:	:	:
1981–90	:	:	:	:	:	:	:	:	:
1991	:	- 32.8	:	5.4	- 43.9	:	:	29.7	:
1992	:	29.7	:	0.7	8.0	:	:	1.8	:
1993	:	23.8	:	20.0	- 39.8	:	:	13.1	- 0.6
1994	:	14.7	12.2	8.8	- 0.7	:	:	11.3	- 5.4
1995	32.1	21.2	5.4	21.2	1.4	:	:	24.2	11.5
1996	6.6	13.4	7.6	10.4	28.5	23.3	- 5.9	28.0	19.8
1997	1.2	8.1	29.1	23.1	6.8	25.0	- 1.7	21.4	13.8
1998	7.7	6.6	12.9	25.2	19.0	6.2	2.5	18.5	16.9
1999	- 1.6	5.4	- 5.4	13.3	- 5.2	- 12.4	10.1	1.0	- 6.3
2000	9.0	17.0	27.9	19.4	4.9	4.7	10.4	15.6	10.2
1991–2000	:	9.2	:	14.5	- 5.0	:	:	16.1	:
2001	3.8	13.6	2.1	6.1	12.6	17.7	- 9.2	- 0.1	11.7
2002	1.5	4.3	10.2	6.1	4.5	17.4	- 2.2	2.6	5.3
2003	0.3	4.8	9.0	8.0	10.4	8.0	5.2	4.3	12.8
2004	2.4	4.3	9.0	7.5	9.1	8.6	3.5	8.6	9.8
2005	4.7	5.4	10.0	8.4	8.3	7.0	3.9	10.5	7.6
2001–05	2.5	6.4	8.0	7.2	8.9	11.6	0.1	5.1	9.4

(National currency; annual percentage change)

	SI	AC-10 ⁽¹⁾	EU-25 ⁽²⁾	BG	RO	TR	US	JP
1961–70	:	:	:	:	:	7.0	7.5	14.5
1971–80	:	:	:	:	:	8.3	3.8	5.4
1981	:	:	:	:	:	12.5	2.6	0.4
1982	:	:	:	:	:	8.3	- 1.3	- 2.5
1983	:	:	:	:	:	16.9	12.6	- 3.1
1984	:	:	:	:	:	19.7	24.4	10.5
1985	:	:	:	:	:	- 6.6	6.4	- 2.5
1986	:	:	:	:	:	- 3.5	8.4	3.2
1987	:	:	:	:	:	23.0	6.1	11.3
1988	:	:	:	:	:	- 4.5	3.8	19.5
1989	:	:	:	:	:	6.9	4.0	15.7
1990	:	:	:	:	:	33.0	3.8	7.0
1981–90	:	:	:	:	:	9.9	6.9	5.7
1991	- 22.4	:	:	:	- 31.8	- 5.2	- 0.5	- 1.1
1992	- 22.9	:	:	:	1.3	10.9	6.6	- 0.7
1993	17.6	:	:	:	4.4	35.8	9.1	- 1.4
1994	13.1	:	:	:	- 1.2	- 21.9	12.0	7.8
1995	11.3	:	:	:	29.7	29.6	8.2	12.8
1996	2.3	15.7	4.7	- 1.9	8.7	20.5	8.6	13.2
1997	11.5	15.5	9.7	10.9	7.5	22.4	13.7	1.2
1998	10.3	14.8	10.2	12.1	11.3	2.3	11.8	- 6.8
1999	8.0	3.2	7.2	9.3	- 1.5	- 3.7	10.9	3.0
2000	7.6	15.0	11.1	18.6	27.1	25.4	13.2	9.5
1991–2000	2.6	:	:	:	4.2	10.2	9.3	3.5
2001	3.0	5.9	2.2	14.8	17.2	- 24.8	- 2.9	0.1
2002	4.9	4.7	0.9	4.7	12.1	15.7	3.7	2.0
2003	4.5	6.3	1.9	13.7	13.2	13.0	3.6	3.9
2004	5.7	7.2	5.2	11.3	10.1	12.0	6.0	5.9
2005	6.1	8.0	6.6	14.2	8.9	13.0	6.2	6.5
2001–05	4.8	6.4	3.3	11.7	12.3	4.5	3.3	3.6

⁽¹⁾ Weighted in common currency; CY, CZ, EE, HU, LV, LT, MT, PL, SK and SI.⁽²⁾ Weighted in common currency; BE, DK, DE, EL, ES, FR, IE, IT, LU, NL, AT, PT, FI, SE, UK, CY, CZ, EE, HU, LV, LT, MT, PL, SK and SI.

Table 42

Foreign trade and current balance
Intra-EU-15 imports of goods
Foreign trade statistics

(Percentage of gross domestic product at market prices)

	BE/LU	DK	DE ⁽¹⁾	EL	ES	FR	IE	IT	NL
1960	18.8	16.1	5.5	8.5	2.1	3.5	20.9	4.4	19.8
1965	24.1	18.0	8.1	10.0	6.4	5.0	25.2	4.7	23.6
1970	29.2	18.6	9.1	9.9	5.3	7.6	27.8	7.1	25.4
1975	32.9	17.5	10.0	10.8	5.5	8.4	30.3	8.5	22.7
1980	37.2	19.0	12.3	9.6	5.1	10.3	39.6	11.0	25.0
1981	38.1	19.0	12.9	10.5	5.2	10.3	39.6	10.1	25.1
1982	41.7	19.3	12.9	10.9	5.7	11.0	34.5	10.0	25.4
1983	44.3	18.7	13.1	11.6	6.3	11.0	32.6	9.2	25.5
1984	46.6	19.4	13.7	12.0	6.4	11.6	34.2	9.9	27.7
1985	46.6	19.8	14.2	12.6	6.8	11.8	33.3	10.7	30.2
1986	42.8	18.3	12.4	14.3	7.9	10.9	29.2	9.9	27.6
1987	41.8	16.5	12.1	14.8	9.3	11.2	28.2	10.0	27.4
1988	42.8	16.0	12.2	12.4	10.2	11.5	29.5	10.2	28.0
1989	44.8	16.2	13.0	15.7	11.0	12.3	31.5	10.7	29.1
1990	44.1	15.9	13.3	15.9	10.8	12.0	30.3	10.1	28.6
1991	43.3	16.0	13.0	15.2	10.7	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	27.1
1993	36.9	14.1	9.8	14.8	10.0	9.7	25.4	8.8	21.7
1994	37.5	14.7	10.1	14.5	11.7	10.5	27.2	9.9	23.2
1995	39.1	15.9	10.7	15.4	12.6	11.2	27.3	11.2	23.4
1996	41.2	15.2	10.8	15.2	13.4	11.2	27.6	10.3	23.0
1997	42.9	17.9	11.6	14.6	14.5	11.6	27.5	10.8	25.3
1998	43.8	18.7	11.7	16.2	15.5	12.3	27.4	11.1	21.7
1999	45.9	18.2	11.9	16.2	16.5	12.2	26.7	11.4	22.5
2000	50.6	19.4	13.8	14.8	17.1	13.9	28.6	12.2	23.0
2001	54.1	19.4	13.0	13.1	17.0	13.0	29.1	12.2	21.4
2002	51.5	20.1	12.2	12.3	16.0	12.5	25.2	11.5	20.9
2003	52.6	20.8	12.4	12.0	16.2	12.3	19.5	11.2	19.8
2004	53.7	21.8	12.5	11.9	16.5	12.4	19.2	11.2	19.9
2005	54.4	22.6	13.3	11.9	16.9	12.8	19.2	11.5	20.7

⁽¹⁾ 1960–90 D_90.

NB: There might be some minor differences between imports according to national accounts and according to foreign trade statistics. They are due to different data vintages and revision schemes, in some cases to conceptual differences and partly to different basic data sources.

(Percentage of gross domestic product at market prices)

	AT	PT	FI	SE	UK	EU-15 ⁽¹⁾
1960	:	9.5	:	:	3.9	:
1965	14.8	11.5	12.0	12.2	5.2	8.3
1970	16.3	12.5	14.7	13.0	6.2	10.1
1975	16.0	10.6	14.8	14.9	10.3	11.5
1980	20.0	15.1	14.3	15.3	10.6	13.2
1981	18.9	16.5	12.7	14.3	10.1	13.0
1982	18.2	17.3	12.5	15.7	10.7	13.3
1983	18.3	15.8	12.2	16.6	11.6	13.6
1984	19.0	15.7	12.2	16.5	12.9	14.3
1985	19.9	15.0	12.5	17.4	12.9	14.8
1986	19.4	16.5	12.4	15.5	13.0	13.8
1987	19.2	20.5	13.0	15.9	13.1	13.9
1988	20.1	24.6	11.4	15.6	13.2	14.1
1989	21.3	24.6	12.6	15.5	13.7	14.8
1990	21.9	25.6	11.9	14.4	13.0	14.5
1991	21.0	24.3	10.3	12.7	11.4	13.8
1992	20.0	23.9	11.4	12.3	11.7	13.4
1993	18.1	21.0	11.9	13.4	10.5	11.9
1994	18.9	21.9	12.7	15.1	11.8	12.8
1995	20.2	23.2	13.1	17.2	12.7	13.8
1996	20.6	23.0	14.2	16.3	12.8	13.7
1997	21.6	24.7	14.5	17.4	12.1	14.3
1998	22.2	25.4	14.5	19.5	11.6	14.5
1999	22.1	27.0	13.8	17.4	11.1	14.6
2000	22.7	28.1	14.7	18.3	11.1	15.8
2001	23.3	26.8	14.7	19.3	11.5	15.6
2002	22.3	24.2	14.1	18.5	11.4	14.9
2003	21.7	22.3	13.5	18.2	11.2	14.7
2004	22.3	22.3	13.5	18.7	11.5	14.9
2005	23.4	22.7	13.9	19.3	11.7	15.4

⁽¹⁾ 1960–90 including D_90.

Table 43

Foreign trade and current balance
Extra-EU-15 imports of goods

(Percentage of gross domestic product at market prices)

	BE/LU	DK	DE (1)	EL	ES	FR	IE	IT	NL
1960	14.4	13.4	8.3	10.3	3.9	6.5	11.8	7.5	16.8
1965	11.9	9.0	6.9	7.1	5.9	5.1	10.3	6.3	11.9
1970	13.0	8.3	6.7	7.5	6.7	5.3	9.1	6.8	12.5
1975	13.0	9.1	7.4	11.1	8.9	6.9	10.7	9.2	14.7
1980	18.7	9.2	10.1	12.0	10.2	9.4	13.1	10.8	18.1
1981	20.9	10.5	10.6	9.0	11.4	10.0	13.1	12.2	19.2
1982	20.9	9.8	10.2	10.5	11.2	9.5	12.1	11.4	17.8
1983	17.6	9.1	9.7	10.7	11.7	8.5	12.9	10.1	18.2
1984	19.1	9.9	10.5	11.2	11.2	8.7	15.2	10.4	19.7
1985	17.5	10.0	10.5	12.2	10.7	8.3	15.0	10.5	18.7
1986	13.7	8.5	8.4	8.9	6.9	6.4	12.4	7.0	13.1
1987	13.3	7.5	7.9	8.2	6.8	6.3	13.1	6.5	12.9
1988	13.2	7.8	8.3	6.3	6.7	6.6	13.2	6.3	13.4
1989	15.1	8.5	9.1	8.0	7.1	7.1	14.6	6.8	14.7
1990	13.4	7.7	8.9	7.6	6.4	7.1	13.4	6.2	14.0
1991	13.3	7.9	8.9	8.6	6.3	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	11.6	7.9	7.7	8.7	6.0	6.1	18.0	6.0	14.0
1994	12.5	8.6	8.1	6.9	6.6	6.3	19.7	6.5	14.2
1995	12.9	8.1	8.2	6.6	6.8	6.4	21.3	7.3	14.7
1996	13.7	8.4	8.4	7.7	6.8	6.5	21.3	6.6	16.1
1997	17.8	7.6	9.5	7.6	7.6	7.4	21.4	7.0	17.7
1998	18.0	7.8	10.2	8.5	7.3	7.4	23.5	6.9	18.1
1999	18.6	7.4	10.6	8.1	8.0	7.6	22.7	7.2	19.6
2000	22.4	8.7	12.9	11.4	10.0	9.8	24.8	9.7	24.0
2001	22.7	8.7	13.1	10.9	9.5	9.3	20.9	9.4	21.3
2002	21.3	8.2	12.5	11.1	9.0	9.0	17.9	8.9	19.4
2003	17.2	6.9	12.6	10.3	8.7	8.9	16.2	8.7	18.1
2004	16.5	6.5	12.9	9.8	8.7	8.9	16.0	8.9	18.7
2005	17.0	6.2	13.8	9.1	9.2	9.2	16.0	9.2	19.2

(1) 1960–90 D_90.

(Percentage of gross domestic product at market prices)

	AT	PT	FI	SE	UK	EU-15 ⁽¹⁾
1960	:	8.9	:	:	13.7	:
1965	6.7	9.3	7.4	7.1	11.0	7.7
1970	7.5	9.1	9.1	7.2	11.3	7.8
1975	8.1	11.2	11.6	9.1	12.4	9.2
1980	10.6	16.0	15.5	10.6	11.3	11.2
1981	11.6	17.7	14.9	10.2	9.9	11.5
1982	10.2	17.4	13.5	10.8	9.8	11.1
1983	9.5	17.6	13.6	10.7	10.2	10.6
1984	10.7	19.2	11.9	10.0	11.5	11.2
1985	10.9	16.1	11.7	9.9	10.9	10.9
1986	8.6	10.2	9.1	8.2	9.6	8.3
1987	8.0	10.3	9.3	8.4	9.3	8.0
1988	8.4	10.4	8.3	8.7	9.5	8.2
1989	8.9	10.0	8.8	9.1	10.0	8.8
1990	8.9	9.9	7.9	8.4	9.6	8.4
1991	8.9	8.2	7.3	7.4	8.8	8.2
1992	8.4	7.3	8.0	7.2	8.9	7.7
1993	8.0	7.2	9.0	8.1	9.9	7.9
1994	8.7	7.9	10.5	9.2	9.7	8.2
1995	8.0	7.9	9.6	7.7	10.4	8.5
1996	8.5	7.4	10.0	7.3	11.1	8.7
1997	9.3	7.7	10.7	8.1	10.9	9.5
1998	9.4	7.5	10.5	8.2	10.3	9.6
1999	9.3	7.6	11.0	8.1	10.5	10.0
2000	10.8	9.3	13.5	9.9	11.8	12.2
2001	11.3	8.9	12.8	9.6	12.7	12.1
2002	10.6	7.2	12.2	9.1	11.5	11.3
2003	11.0	7.1	12.6	9.1	11.1	11.0
2004	11.6	7.3	12.8	9.1	11.1	11.1
2005	12.3	7.4	13.1	9.4	11.3	11.5

⁽¹⁾ 1960–90 including D_90.

Table 44

Foreign trade and current balance**Balance on current transactions with the rest of the world (national accounts)***(Percentage of gross domestic product at market prices)*

	BE	DK	DE (1)	EL	ES	FR	IE	IT	LU
1960	0.2	- 1.1	1.6	- 0.4	3.8	1.5	- 0.1	0.8	12.5
1965	1.0	- 1.8	- 1.3	- 4.6	- 3.8	1.2	- 4.4	3.6	0.7
1970	2.8	- 3.6	1.0	- 1.8	0.2	0.8	- 4.0	0.8	15.5
1975	- 0.1	- 1.6	1.1	0.5	- 2.9	0.8	- 1.5	- 0.3	17.0
1980	- 4.0	- 3.6	- 1.6	1.9	- 2.5	- 2.8	- 11.7	- 2.3	19.0
1981	- 3.2	- 2.8	- 0.6	3.1	- 2.7	- 3.0	- 14.6	- 2.4	21.3
1982	- 3.2	- 4.2	0.8	- 0.6	- 2.5	- 4.1	- 10.5	- 1.8	34.4
1983	- 0.9	- 2.6	0.8	- 1.7	- 1.7	- 2.5	- 6.8	0.2	39.5
1984	- 0.5	- 3.4	1.6	- 1.3	1.1	- 2.1	- 5.8	- 0.7	39.1
1985	0.4	- 4.5	2.8	- 3.2	1.2	- 2.0	- 3.8	- 1.0	:
1986	1.8	- 5.4	4.3	- 2.2	1.3	- 1.2	- 3.3	0.4	:
1987	1.7	- 2.9	4.0	0.7	- 0.2	- 1.6	- 0.2	- 0.3	:
1988	2.3	- 1.4	4.2	- 0.3	- 1.3	- 1.8	0.6	- 0.8	:
1989	1.9	- 1.6	4.4	- 2.2	- 3.4	- 1.8	- 1.1	- 1.4	:
1990	1.5	0.4	3.3	- 2.9	- 3.8	- 1.9	- 1.8	- 1.6	:
1991			1.0						
1991	2.0	0.9	- 1.0	- 2.1	- 3.7	- 1.5	- 0.4	- 2.1	:
1992	2.7	2.1	- 0.7	- 0.2	- 3.7	- 0.4	0.4	- 2.5	:
1993	4.4	2.8	- 0.5	- 0.8	- 1.2	0.7	3.7	0.8	:
1994	5.6	1.5	- 1.2	1.3	- 1.6	0.2	2.9	1.2	:
1995	5.7	0.7	- 0.8	- 0.9	0.0	0.3	2.8	2.2	:
1996	5.1	1.5	- 0.3	- 2.4	0.1	0.9	3.3	3.2	:
1997	5.4	0.4	- 0.1	- 2.1	0.4	2.5	3.1	2.8	:
1998	5.3	- 0.9	- 0.3	- 3.5	- 0.9	2.4	0.8	1.9	:
1999	5.4	1.8	- 0.8	- 5.7	- 2.1	2.6	0.3	1.0	:
2000	4.0	1.6	- 1.1	- 6.3	- 3.3	1.3	- 0.4	- 0.2	:
2001	4.0	3.1	0.6	- 5.7	- 3.1	1.5	- 0.7	0.3	:
2002	4.5	2.9	3.1	- 5.8	- 2.7	1.6	- 0.7	- 0.3	:
2003	5.2	2.8	3.0	- 5.2	- 3.1	0.7	- 0.7	- 0.5	:
2004	4.5	2.7	3.6	- 4.6	- 3.2	0.8	- 0.5	- 0.4	:
2005	4.2	2.7	3.7	- 3.9	- 3.4	0.8	- 0.2	- 0.4	:

(1) 1960-91 D_90.

NB: Balance on current transactions with the rest of the world is identical to the current external balance (B.12). It is the sum of:

The external balance of goods and services (exports minus imports)

+ The net factor income from the rest of the world

+ The net current transfers from the rest of the world.

Factor income (primary income) from the rest of the world contains compensation of employees, property income, and subsidies and taxes on production and imports.

Reference: ESA 95, Table 8.16 ('External account of primary incomes and current transfers').

(Percentage of gross domestic product at market prices)

	NL	AT	PT	FI	SE	UK	EU-11 ⁽¹⁾	EU-14 ⁽²⁾
1960	3.0	- 1.1	- 4.0	- 0.9	- 0.6	- 0.7	1.3	0.7
1965	0.1	- 0.5	- 0.4	- 2.3	- 0.8	0.1	0.2	0.1
1970	0.2	0.6	1.9	- 2.4	- 0.8	1.8	0.8	0.8
1975	2.7	- 0.1	- 5.5	- 7.6	- 0.5	- 1.5	0.2	- 0.1
1980	- 0.5	- 3.1	- 5.9	- 3.1	- 2.2	1.4	- 2.3	- 1.7
1981	2.5	- 2.7	- 12.2	- 1.3	- 0.9	2.6	- 1.9	- 1.1
1982	3.4	0.3	- 13.5	- 2.4	- 2.6	1.5	- 1.5	- 1.1
1983	3.7	- 0.2	- 8.3	- 2.6	- 0.3	1.1	- 0.5	- 0.3
1984	5.0	- 0.7	- 3.4	0.0	1.3	0.4	0.0	0.1
1985	3.3	- 0.5	0.4	- 1.5	- 0.8	0.6	0.3	0.2
1986	2.4	0.0	2.1	- 1.2	1.4	- 0.6	1.3	0.9
1987	2.5	- 0.7	0.3	- 2.2	0.6	- 1.8	0.9	0.4
1988	3.4	- 0.2	- 2.6	- 2.8	0.3	- 4.2	0.7	- 0.1
1989	3.3	0.0	- 0.1	- 5.0	- 1.2	- 5.1	0.3	- 0.6
1990	2.7	0.6	- 1.0	- 5.0	- 1.9	- 4.0	- 0.1	- 0.7
1991							- 0.8	- 1.0
1991	2.9	- 0.4	- 2.0	- 5.4	- 1.5	- 1.8	- 1.4	- 1.4
1992	2.1	- 0.4	- 2.3	- 4.7	- 2.7	- 2.1	- 1.1	- 1.2
1993	4.6	- 0.8	- 2.1	- 1.4	- 1.3	- 1.9	0.4	0.1
1994	5.9	- 1.6	- 3.8	1.0	1.2	- 1.0	0.2	0.1
1995	6.4	- 2.6	- 2.9	4.0	3.7	- 1.3	0.7	0.5
1996	5.4	- 2.3	- 3.8	4.0	3.5	- 0.9	1.1	0.9
1997	6.2	- 3.0	- 6.1	5.4	4.3	- 0.1	1.5	1.3
1998	3.0	- 2.3	- 7.1	5.7	3.9	- 0.5	0.9	0.8
1999	4.0	- 3.0	- 8.7	6.2	4.2	- 2.3	0.5	0.2
2000	4.8	- 2.6	- 10.8	7.2	4.0	- 2.1	- 0.2	- 0.4
2001	3.5	- 1.9	- 9.9	6.9	4.2	- 1.8	0.4	0.2
2002	2.1	0.5	- 7.7	7.5	4.2	- 1.8	1.1	0.7
2003	2.4	0.5	- 4.5	6.7	4.0	- 2.3	0.9	0.5
2004	3.8	0.5	- 4.2	6.5	4.1	- 2.2	1.2	0.7
2005	5.2	0.5	- 3.8	6.7	4.4	- 1.7	1.3	0.9

⁽¹⁾ EU-15 excluding DK, LU, SE and UK; 1960–91 including D_90.⁽²⁾ EU-15 excluding LU; 1960–91 including D_90.

Table 44 (Continued)

(Percentage of gross domestic product at market prices)

	CY	CZ	EE	HU	LV	LT	MT	PL	SK
1960	:	:	:	:	:	:	:	:	:
1965	:	:	:	:	:	:	:	:	:
1970	:	:	:	:	:	:	:	:	:
1975	:	:	:	:	:	:	:	:	:
1980	:	:	:	:	:	:	:	:	:
1981	:	:	:	:	:	:	:	:	:
1982	:	:	:	:	:	:	:	:	:
1983	:	:	:	:	:	:	:	:	:
1984	:	:	:	:	:	:	:	:	:
1985	:	:	:	:	:	:	:	:	:
1986	:	:	:	:	:	:	:	:	:
1987	:	:	:	:	:	:	:	:	:
1988	:	:	:	:	:	:	:	:	:
1989	:	:	:	:	:	:	:	:	:
1990	:	:	:	:	0.1	:	:	:	:
1991	:	:	:	:	11.7	:	:	3.4	:
1991	:	:	:	:	11.7	:	:	3.4	:
1992	:	1.7	:	:	14.0	:	:	9.7	:
1993	:	0.7	1.3	:	19.7	:	:	0.2	-4.1
1994	1.2	-2.5	-7.2	:	5.5	-2.1	:	2.4	5.3
1995	-2.1	-4.2	-4.4	:	-0.4	-9.9	:	1.5	3.0
1996	-5.7	-6.8	-9.2	:	-5.5	-9.2	:	-1.1	-9.0
1997	-4.2	-6.5	-12.2	:	-6.2	-10.2	:	-3.7	-8.7
1998	-6.8	-2.2	-9.2	:	-10.6	-11.9	:	-4.2	-9.0
1999	-1.7	-2.7	-4.7	:	-9.8	-11.2	:	-5.5	-3.5
2000	-3.5	-5.3	-5.8	:	-6.9	-6.0	:	-6.1	-2.5
2001	-4.0	:	-6.0	:	-9.6	-4.8	:	-2.9	-7.4
2002	-5.3	:	-12.3	-4.0	-7.8	-5.4	:	-3.5	-8.3
2003	-4.4	-6.6	-15.2	-6.2	-8.6	-5.7	-6.6	-2.9	-3.8
2004	-3.1	-6.9	-12.2	-6.1	-9.5	-5.8	-6.3	-3.4	-4.4
2005	-2.8	-6.6	-8.5	-5.8	-9.6	-5.9	-5.7	-3.6	-4.4

NB: Balance on current transactions with the rest of the world is identical to the current external balance (B.12). It is the sum of:

The external balance of goods and services (exports minus imports)

+ The net factor income from the rest of the world

+ The net current transfers from the rest of the world.

Factor income (primary income) from the rest of the world contains compensation of employees, property income, and subsidies and taxes on production and imports.

Reference: ESA 95, Table 8.16 ('External account of primary incomes and current transfers').

(Percentage of gross domestic product at market prices)

	SI	AC-10 ⁽¹⁾	EU-25 ⁽¹⁾	BG	RO	TR	US	JP
1960	:	:	:	:	:	-1.3	0.6	0.5
1965	:	:	:	:	:	-0.8	0.9	1.1
1970	:	:	:	:	:	-0.5	0.4	1.0
1975	:	:	:	:	:	-3.7	1.3	-0.1
1980	:	:	:	:	:	-5.0	0.4	-1.1
1981	:	:	:	:	:	-2.6	0.2	0.4
1982	:	:	:	:	:	-1.3	0.0	0.6
1983	:	:	:	:	:	-3.0	-0.9	1.7
1984	:	:	:	:	:	-2.3	-2.2	2.8
1985	:	:	:	:	:	-1.4	-2.7	3.6
1986	:	:	:	:	:	-1.9	-3.2	4.1
1987	:	:	:	:	:	-1.8	-3.2	3.3
1988	:	:	:	:	:	1.1	-2.2	2.6
1989	:	:	:	:	:	-0.2	-1.6	2.1
1990	2.4	:	:	:	-8.6	-3.2	-1.2	1.5
1991	8.5	:	:	-4.3	-1.2	-2.1	0.3	2.0
1991	8.5	:	:	-4.3	-1.2	-2.1	0.3	2.0
1992	7.3	:	:	-7.4	-6.9	-2.0	-0.6	3.0
1993	2.2	:	:	-9.4	-2.0	-4.9	-1.1	3.0
1994	3.9	:	:	-2.4	0.1	1.5	-1.5	2.7
1995	-0.4	:	:	-4.8	-4.4	-3.3	-1.3	2.1
1996	0.2	:	:	2.4	-7.5	-4.9	-1.4	1.4
1997	0.3	:	:	3.5	-6.3	-3.9	-1.5	2.2
1998	-0.6	:	:	-0.2	-7.3	-1.1	-2.3	3.0
1999	-3.3	:	:	-4.8	-1.7	-2.5	-3.0	2.6
2000	-2.8	:	:	-5.5	-4.1	-6.7	-4.1	2.5
2001	0.1	:	:	-6.1	-5.6	1.3	-3.8	2.1
2002	1.7	:	:	-4.7	-3.5	-2.6	-4.7	2.9
2003	0.5	-4.5	:	-6.2	-4.8	-3.6	-5.3	3.0
2004	0.3	-4.7	:	-5.9	-5.1	-4.0	-5.6	3.4
2005	0.1	-4.7	:	-6.7	-5.5	-4.2	-5.8	3.7

⁽¹⁾ CY, CZ, EE, HU, LV, LT, MT, PL, SK and SI.⁽²⁾ BE, DK, DE, EL, ES, FR, IE, IT, LU, NL, AT, PT, FI, SE, UK, CY, CZ, EE, HU, LV, LT, MT, PL, SK and SI.

Table 45

Saving Gross national saving

(Percentage of gross domestic product at market prices)

	BE	DK	DE (1)	EL	ES	FR	IE	IT	LU
1960	19.4	24.9	28.9	13.7	22.7	24.4	16.3	25.5	35.8
1965	24.1	24.6	27.2	24.7	24.1	26.8	19.4	23.6	30.8
1970	27.1	22.8	29.6	28.4	27.0	27.6	20.4	27.6	41.3
1975	21.7	20.5	22.1	30.5	25.6	24.3	21.7	24.6	39.9
1980	20.5	16.6	22.4	27.0	21.7	22.3	15.9	25.5	44.2
1981	17.6	14.1	20.9	23.3	19.8	20.0	13.5	23.2	45.8
1982	16.7	13.8	20.9	24.4	19.9	18.8	17.1	22.8	59.3
1983	16.4	15.5	21.9	22.4	19.9	18.6	16.8	23.1	63.8
1984	17.8	17.1	22.6	23.7	21.5	18.3	16.8	23.1	63.8
1985	17.9	17.4	23.1	23.0	21.9	18.1	15.3	22.6	:
1986	19.0	18.3	24.6	23.1	22.9	19.4	14.9	22.4	:
1987	19.8	18.6	23.8	20.0	22.8	19.6	16.3	21.9	:
1988	22.5	19.2	24.9	21.3	23.8	20.8	16.3	21.8	:
1989	23.6	19.5	26.1	20.0	23.0	21.6	17.1	21.0	:
1990	23.9	20.7	25.5	20.0	22.8	21.5	18.0	20.7	:
1991			23.6						
1991	23.1	20.0	23.3	21.7	22.1	20.9	17.7	19.6	:
1992	23.5	20.3	23.1	21.0	20.2	20.5	15.6	18.3	:
1993	24.6	19.2	21.9	19.5	20.1	19.0	17.7	19.2	:
1994	25.9	19.1	21.9	20.4	19.9	19.2	18.0	19.7	:
1995	25.8	20.4	21.8	18.0	22.3	19.5	20.8	21.6	:
1996	24.6	20.4	21.3	17.4	22.0	19.2	22.3	21.9	:
1997	25.7	21.2	21.4	17.9	22.5	20.4	24.2	21.6	:
1998	25.7	20.8	21.5	17.8	22.4	21.4	25.9	21.2	:
1999	26.1	21.5	20.8	16.8	22.5	22.3	24.7	20.7	:
2000	25.8	22.8	20.6	17.6	22.5	22.4	25.2	20.0	:
2001	24.5	23.5	20.2	18.3	22.6	22.0	22.8	20.0	:
2002	24.1	22.8	21.1	18.2	22.8	20.9	20.5	19.7	:
2003	23.8	21.8	20.7	19.3	22.5	19.6	20.6	18.8	:
2004	23.5	21.6	21.4	20.2	22.7	19.8	20.5	18.8	:
2005	23.5	22.0	21.7	20.6	22.8	20.0	20.5	18.8	:

(1) 1960–91 D_90.

NB: Gross national saving (B.8g) measures the proportion of national disposable income that is not used for final consumption expenditure. Gross (national) saving always means the saving before deducting consumption of fixed capital.

Reference: ESA 95, paragraph 8.96.

(Percentage of gross domestic product at market prices)

	NL	AT	PT	FI	SE	UK	EU-11 ⁽¹⁾	EU-14 ⁽²⁾
1960	30.3	27.1	15.0	27.1	24.1	18.7	25.8	24.1
1965	27.1	27.5	21.3	23.7	26.3	20.8	25.9	24.9
1970	29.7	30.3	25.5	29.1	24.8	22.3	28.3	27.1
1975	24.9	25.9	10.8	27.5	23.8	17.1	23.7	22.7
1980	22.4	26.1	26.9	27.3	20.1	18.7	23.0	22.1
1981	22.6	24.7	22.4	26.3	18.3	17.9	21.2	20.4
1982	22.3	23.9	20.6	24.7	16.3	18.0	20.8	20.0
1983	23.3	22.2	20.0	24.4	18.4	18.5	21.1	20.5
1984	25.0	23.2	18.8	25.4	20.6	19.0	21.6	21.0
1985	23.8	23.1	21.0	24.4	20.2	18.9	21.5	20.9
1986	24.2	23.2	25.4	23.8	21.0	17.5	22.4	21.5
1987	23.9	23.3	27.8	23.7	21.3	17.3	22.1	21.3
1988	25.5	23.9	28.0	26.2	22.0	17.2	23.1	22.0
1989	27.1	24.4	28.3	26.1	22.7	17.1	23.5	22.4
1990	26.0	25.0	26.8	24.8	21.3	16.2	23.2	22.0
1991							21.9	20.8
1991	25.4	24.8	23.8	17.1	18.0	15.3	21.9	20.7
1992	24.4	23.9	22.7	14.4	15.1	14.0	21.2	20.0
1993	24.6	22.4	20.1	15.5	14.0	13.9	20.7	19.6
1994	26.2	22.3	19.2	18.8	17.7	15.5	21.0	20.1
1995	27.4	21.6	21.4	22.2	20.9	15.7	21.7	20.9
1996	26.7	21.4	20.4	21.1	20.1	15.8	21.4	20.6
1997	27.9	21.3	20.1	24.5	20.5	16.9	21.9	21.0
1998	25.2	21.8	20.6	25.8	21.1	17.7	22.0	21.2
1999	26.6	21.2	19.6	25.8	21.7	15.5	21.9	20.8
2000	27.1	22.0	18.0	27.8	22.5	15.4	21.8	20.7
2001	25.2	21.7	18.2	27.3	22.3	15.3	21.4	20.4
2002	22.6	22.9	18.1	26.4	21.4	14.8	21.2	20.1
2003	22.4	22.9	18.5	24.9	20.8	14.2	20.6	19.5
2004	23.8	22.7	18.8	24.5	20.8	14.7	20.9	19.9
2005	25.4	22.9	19.8	24.6	21.2	15.6	21.2	20.3

⁽¹⁾ EU-15 excluding DK, LU, SE and UK; 1960–91 including D_90.⁽²⁾ EU-15 excluding LU; 1960–91 including D_90.

Table 45 (Continued)

(Percentage of gross domestic product at market prices)

	CY	CZ	EE	HU	LV	LT	MT	PL	SK
1960	:	:	:	:	:	:	:	:	:
1965	:	:	:	:	:	:	:	:	:
1970	:	:	:	:	:	:	:	:	:
1975	:	:	:	:	:	:	:	:	:
1980	:	:	:	:	:	:	:	:	:
1981	:	:	:	:	:	:	:	:	:
1982	:	:	:	:	:	:	:	:	:
1983	:	:	:	:	:	:	:	:	:
1984	:	:	:	:	:	:	:	:	:
1985	:	:	:	:	:	:	:	:	:
1986	:	:	:	:	:	:	:	:	:
1987	:	:	:	:	:	:	:	:	:
1988	:	:	:	:	:	:	:	:	:
1989	:	:	:	:	:	:	:	:	:
1990	:	:	:	:	15.0	:	:	:	:
1991	:	:	:	:	45.5	:	:	23.3	:
1991	:	:	:	:	45.5	:	:	23.3	:
1992	:	27.5	:	:	55.4	:	:	24.9	:
1993	:	27.5	26.4	:	30.3	:	:	15.8	22.1
1994	27.0	27.3	18.8	:	24.3	16.3	:	20.0	27.3
1995	20.6	29.9	18.8	:	16.5	13.4	:	21.2	29.5
1996	16.8	27.4	16.8	:	13.1	12.5	:	20.7	26.2
1997	15.3	26.1	17.1	:	16.9	15.2	:	20.9	26.3
1998	13.1	27.8	19.7	:	17.1	14.4	:	22.0	25.5
1999	17.1	25.4	18.6	:	17.2	11.9	:	20.9	24.5
2000	15.8	24.4	20.9	:	20.1	14.2	:	19.0	25.4
2001	13.7	:	21.8	:	20.2	16.2	:	18.1	25.1
2002	:	:	20.1	:	20.7	17.3	:	:	22.7
2003	:	:	21.9	:	21.1	:	:	:	25.6
2004	:	:	23.6	:	21.2	:	:	:	26.0
2005	:	:	25.7	:	22.0	:	:	:	26.1

NB: Gross national saving (B.8g) measures the proportion of national disposable income that is not used for final consumption expenditure. Gross (national) saving always means the saving before deducting consumption of fixed capital.

Reference: ESA 95, paragraph 8.96.

(Percentage of gross domestic product at market prices)

	SI	AC-10 ⁽¹⁾	EU-25 ⁽²⁾	BG	RO	TR	US	JP
1960	:	:	:	:	:	14.7	19.0	33.4
1965	:	:	:	:	:	14.1	21.1	33.0
1970	:	:	:	:	:	19.4	18.4	40.0
1975	:	:	:	:	:	19.0	18.7	32.7
1980	:	:	:	:	:	12.1	20.4	31.5
1981	:	:	:	:	:	19.2	21.1	31.9
1982	:	:	:	:	:	18.4	18.4	30.9
1983	:	:	:	:	:	15.5	17.6	30.2
1984	:	:	:	:	:	16.3	18.9	31.2
1985	:	:	:	:	:	20.7	17.5	32.2
1986	:	:	:	:	:	23.9	16.4	32.3
1987	:	:	:	:	:	24.3	15.9	32.3
1988	:	:	:	:	:	26.2	16.3	33.5
1989	:	:	:	:	:	23.2	16.9	34.0
1990	19.5	:	:	:	21.7	21.1	16.4	34.2
1991	25.4	:	:	18.3	26.9	20.6	16.4	34.3
1991	25.4	:	:	18.3	26.9	20.6	16.4	34.3
1992	24.9	:	:	12.5	24.5	21.8	15.8	33.6
1993	21.5	:	:	5.9	26.9	22.7	15.9	32.3
1994	24.8	:	:	6.9	24.9	23.0	16.6	30.8
1995	21.9	:	:	10.9	19.9	22.2	16.8	30.2
1996	22.5	:	:	10.7	18.3	19.7	17.1	30.4
1997	23.6	:	:	13.4	14.3	21.2	18.0	30.8
1998	24.0	:	:	17.5	10.5	23.1	18.0	29.8
1999	24.1	:	:	14.5	14.4	20.8	17.5	28.4
2000	24.1	:	:	13.8	15.4	17.8	16.7	28.7
2001	24.3	:	:	14.6	:	19.8	14.9	27.7
2002	25.1	:	:	14.6	:	18.7	13.4	26.5
2003	26.1	:	:	14.0	18.7	21.8	13.2	26.8
2004	25.9	:	:	14.7	19.3	22.3	13.6	26.7
2005	26.2	:	:	14.8	20.0	23.1	14.1	26.4

⁽¹⁾ CY, CZ, EE, HU, LV, LT, MT, PL, SK and SI.⁽²⁾ BE, DK, DE, EL, ES, FR, IE, IT, LU, NL, AT, PT, FI, SE, UK, CY, CZ, EE, HU, LV, LT, MT, PL, SK and SI.

Table 46

Saving
Gross saving; private sector
ESA 95

(Percentage of gross domestic product at market prices)

	BE	DK	DE (1)	EL	ES	FR	IE	IT	LU
1975	21.9	18.1	22.0	:	:	:	:	:	:
1976	22.8	16.3	21.2	:	:	:	:	:	:
1977	21.2	16.6	20.0	:	:	:	:	:	:
1978	21.8	17.0	21.1	:	:	20.8	:	:	:
1979	20.6	15.9	20.8	:	:	19.0	:	:	:
1980	24.6	15.9	20.1	:	:	18.3	:	28.3	:
1975–80	22.2	16.6	20.9	:	:	:	:	:	:
1981	25.4	16.8	20.1	:	:	18.1	:	29.6	:
1982	23.7	18.9	20.1	:	:	17.2	:	28.7	:
1983	24.0	19.2	20.8	:	:	17.4	:	29.8	:
1984	24.3	18.7	20.7	:	:	17.1	:	30.4	:
1985	24.2	16.9	20.4	:	:	17.2	:	30.3	:
1986	25.5	13.6	22.0	:	:	18.7	:	29.5	:
1987	24.6	14.6	22.0	:	:	17.8	:	28.5	:
1988	26.5	16.0	23.5	29.1	:	19.1	:	27.9	:
1989	28.9	17.6	22.6	29.5	:	19.2	:	27.8	:
1990	28.6	20.5	24.2	29.3	:	19.1	19.1	27.2	:
1981–90	25.6	17.3	21.6	:	:	18.1	:	29.0	:
1991			22.9						
1991	28.3	21.0	21.9	27.8	:	19.3	19.1	26.7	:
1992	29.1	20.6	21.5	27.7	:	20.3	17.0	26.6	:
1993	29.1	20.3	21.1	27.2	:	20.8	18.9	26.1	:
1994	28.2	19.7	20.8	26.9	:	20.4	17.6	25.7	:
1995	27.7	20.9	22.0	24.8	24.2	20.6	20.7	25.4	:
1996	26.1	19.5	21.8	22.7	23.3	19.5	20.5	25.6	:
1997	25.2	19.0	21.5	19.4	22.1	20.4	20.9	21.8	:
1998	23.9	18.0	21.0	17.8	21.2	20.4	21.6	21.1	:
1999	24.0	16.6	19.6	15.2	19.6	20.1	18.2	18.9	:
2000	23.1	18.6	18.9	15.5	19.2	20.0	17.4	18.6	:
1991–2000	26.5	19.4	21.0	22.5	:	20.2	19.2	23.7	:
2001	22.2	19.0	20.0	15.8	18.8	19.8	17.4	19.0	:
2002	21.9	19.5	21.8	16.2	18.6	20.4	16.7	19.2	:
2003	22.8	19.5	22.1	17.4	18.2	20.2	17.6	18.9	:
2004	22.3	18.9	22.6	19.0	18.1	20.0	17.7	18.5	:
2005	21.8	18.7	22.5	19.5	18.1	20.1	17.6	18.6	:
2001–05	22.2	19.1	21.8	17.6	18.4	20.1	17.4	18.8	:

(1) 1975–91 D_90.

NB: The private sector includes non-financial corporations, financial corporations, private households and non-profit institutions serving households (NPISH).

For private households and NPISH, gross saving (B.8g) measures the proportion of disposable income that is not used for final consumption expenditure. For financial and non-financial corporations, gross saving equals disposable income minus adjustment for the change in net equity of households in pension funds' reserves. The adjustment for the change in net equity of households in pension funds' reserves (D.8) represents the adjustment needed to make appear in the saving of households the change in the actuarial reserves on which households have a definite claim.

Reference: ESA 95, paragraphs 8.36, 4.141 et seq.

(Percentage of gross domestic product at market prices)

	NL	AT	PT	FI	SE	UK	EU-11 ⁽¹⁾	EU-14 ⁽²⁾
1975	22.4	:	:	17.0	:	15.6	:	:
1976	22.4	21.9	:	13.5	:	17.8	:	:
1977	20.6	20.4	18.7	14.0	:	18.8	:	:
1978	20.1	21.9	26.4	17.0	:	20.7	:	:
1979	20.5	22.7	28.7	19.2	:	20.3	:	:
1980	20.7	21.6	29.2	19.2	:	18.4	:	:
1975–80	21.1	:	:	16.7	:	18.6	:	:
1981	21.7	20.2	26.0	17.0	:	18.2	:	:
1982	23.0	21.5	22.1	17.1	:	17.6	:	:
1983	23.9	20.5	20.1	18.5	:	18.6	:	:
1984	25.1	20.0	20.6	18.1	:	19.3	:	:
1985	22.7	19.9	23.8	17.1	:	18.8	:	:
1986	23.8	21.3	29.1	15.9	:	17.5	:	:
1987	23.9	22.4	31.6	17.9	:	16.7	:	:
1988	25.2	22.4	28.3	16.5	:	14.7	:	:
1989	28.1	22.8	28.0	15.7	:	13.6	:	:
1990	27.6	22.6	29.8	15.3	:	13.6	:	:
1981–90	24.5	21.4	25.9	16.9	:	16.9	:	:
1991								
1991	24.7	22.8	27.9	13.7	:	14.9	:	:
1992	25.4	20.9	23.6	16.0	:	17.2	:	:
1993	24.4	21.5	24.1	19.5	19.4	18.8	:	:
1994	26.7	22.2	23.7	20.9	23.3	19.4	:	:
1995	28.5	22.0	23.4	22.8	24.0	18.6	23.1	22.5
1996	26.1	20.5	21.3	20.5	19.6	17.9	22.4	21.7
1997	26.6	19.5	19.7	22.6	18.7	17.5	21.7	20.9
1998	23.4	20.1	19.4	21.2	16.6	16.0	21.1	20.0
1999	23.2	19.7	18.3	20.8	17.2	12.9	19.9	18.5
2000	22.5	20.3	17.3	18.2	16.3	12.7	19.4	18.1
1991–2000	25.1	21.0	21.9	19.6	:	16.6	:	:
2001	21.6	18.1	18.4	19.3	14.8	13.0	19.6	18.3
2002	20.9	20.2	18.2	19.4	17.2	14.7	20.3	19.2
2003	21.6	21.0	20.7	19.9	17.4	14.8	20.4	19.4
2004	23.3	20.5	20.4	20.3	17.2	14.9	20.6	19.5
2005	24.5	20.4	21.1	20.4	17.2	15.2	20.6	19.6
2001–05	22.4	20.0	19.8	19.9	16.7	14.5	20.3	19.2

⁽¹⁾ EU-15 excluding DK, LU, SE and UK; 1975–91 including D_90.⁽²⁾ EU-15 excluding LU; 1975–91 including D_90.

Table 46 (Continued)

(Percentage of gross domestic product at market prices)

	CY	CZ	EE	HU	LV	LT	MT	PL	SK
1975	:	:	:	:	:	:	:	:	:
1976	:	:	:	:	:	:	:	:	:
1977	:	:	:	:	:	:	:	:	:
1978	:	:	:	:	:	:	:	:	:
1979	:	:	:	:	:	:	:	:	:
1980	:	:	:	:	:	:	:	:	:
1975–80	:	:	:	:	:	:	:	:	:
1981	:	:	:	:	:	:	:	:	:
1982	:	:	:	:	:	:	:	:	:
1983	:	:	:	:	:	:	:	:	:
1984	:	:	:	:	:	:	:	:	:
1985	:	:	:	:	:	:	:	:	:
1986	:	:	:	:	:	:	:	:	:
1987	:	:	:	:	:	:	:	:	:
1988	:	:	:	:	:	:	:	:	:
1989	:	:	:	:	:	:	:	:	:
1990	:	:	:	:	4.7	:	:	:	:
1981–90	:	:	:	:	:	:	:	:	:
1991	:	:	:	:	37.0	:	:	26.2	:
1992	:	18.3	:	:	52.3	:	:	27.2	:
1993	:	20.1	11.3	:	25.4	:	:	15.9	25.2
1994	:	20.9	7.3	:	22.3	:	:	18.8	25.6
1995	:	22.1	12.4	:	17.6	10.4	:	20.0	22.0
1996	:	21.1	11.9	:	12.1	10.9	:	18.9	22.8
1997	:	20.6	9.3	:	14.8	13.5	:	18.8	23.3
1998	:	23.3	13.7	:	15.4	13.7	:	19.4	22.4
1999	:	21.3	13.1	:	18.7	11.3	:	18.3	22.2
2000	:	21.0	15.7	:	19.4	13.1	:	17.5	24.6
1991–2000	:	:	:	:	23.5	:	:	20.1	:
2001	:	:	:	:	18.6	:	:	:	:
2002	:	:	:	:	19.8	:	:	:	:
2003	:	:	:	:	:	:	:	:	:
2004	:	:	:	:	:	:	:	:	:
2005	:	:	:	:	:	:	:	:	:
2001–05	:	:	:	:	:	:	:	:	:

NB: The private sector includes non-financial corporations, financial corporations, private households and non-profit institutions serving households (NPISH).

For private households and NPISH, gross saving (B.8g) measures the proportion of disposable income that is not used for final consumption expenditure. For financial and non-financial corporations, gross saving equals disposable income minus adjustment for the change in net equity of households in pension funds' reserves. The adjustment for the change in net equity of households in pension funds' reserves (D.8) represents the adjustment needed to make appear in the saving of households the change in the actuarial reserves on which households have a definite claim.

Reference: ESA 95, paragraphs 8.36, 4.141 et seq.

(Percentage of gross domestic product at market prices)

	SI	AC-10 ⁽¹⁾	EU-25 ⁽²⁾	BG	RO	TR	US	JP
1975	:	:	:	:	:	:	21.1	:
1976	:	:	:	:	:	:	20.4	:
1977	:	:	:	:	:	:	20.1	:
1978	:	:	:	:	:	:	20.2	:
1979	:	:	:	:	:	:	20.6	:
1980	:	:	:	:	:	:	20.6	:
1975–80	:	:	:	:	:	:	20.5	:
1981	:	:	:	:	:	:	21.2	:
1982	:	:	:	:	:	:	21.2	:
1983	:	:	:	:	:	:	21.1	:
1984	:	:	:	:	:	:	21.7	:
1985	:	:	:	:	:	:	20.2	:
1986	:	:	:	:	:	:	19.3	:
1987	:	:	:	:	:	:	17.9	:
1988	:	:	:	:	:	:	17.8	:
1989	:	:	:	:	:	:	17.9	:
1990	:	:	:	:	:	:	18.2	26.5
1981–90	:	:	:	:	:	:	19.7	:
1991	:	:	:	:	:	:	18.9	26.6
1992	:	:	:	:	:	:	19.3	26.3
1993	:	:	:	:	:	:	18.6	27.2
1994	:	:	:	:	:	:	18.0	27.1
1995	:	:	:	:	:	:	17.6	27.5
1996	:	:	:	:	:	:	17.1	27.6
1997	:	:	:	:	:	:	16.6	28.0
1998	:	:	:	:	:	:	15.4	28.4
1999	:	:	:	6.7	:	:	14.3	28.6
2000	:	:	:	8.9	:	:	12.7	28.8
1991–2000	:	:	:	:	:	:	16.9	27.6
2001	:	:	:	:	:	:	12.8	27.7
2002	:	:	:	:	:	:	14.3	27.6
2003	:	:	:	:	:	:	15.1	28.4
2004	:	:	:	:	:	:	16.0	28.7
2005	:	:	:	:	:	:	16.4	28.6
2001–05	:	:	:	:	:	:	14.9	28.2

⁽¹⁾ CY, CZ, EE, HU, LV, LT, MT, PL, SK and SI.⁽²⁾ BE, DK, DE, EL, ES, FR, IE, IT, LU, NL, AT, PT, FI, SE, UK, CY, CZ, EE, HU, LV, LT, MT, PL, SK and SI.

Table 47

Saving
Gross saving; general government
ESA 95

(Percentage of gross domestic product at market prices)

	BE	DK	DE (1)	EL	ES	FR	IE	IT	LU
1975	-0.2	2.5	0.1	:	:	:	:	:	:
1976	-0.5	3.9	2.0	:	:	:	:	:	:
1977	-0.6	3.8	2.8	:	:	:	:	:	:
1978	-1.5	3.6	2.5	:	:	2.5	:	:	:
1979	-2.3	2.5	2.6	:	:	4.0	:	:	:
1980	-4.1	0.7	2.3	:	:	4.1	:	-2.8	:
1975-80	-1.5	2.8	2.0	:	:	:	:	:	:
1981	-7.8	-2.7	0.7	:	:	1.9	:	-6.4	:
1982	-7.0	-5.1	0.9	:	:	1.6	:	-6.0	:
1983	-7.6	-3.7	1.2	:	:	1.2	:	-6.7	:
1984	-6.5	-1.7	1.9	:	:	1.2	:	-7.3	:
1985	-6.3	0.5	2.6	:	:	0.9	:	-7.7	:
1986	-6.5	4.7	2.5	:	:	0.7	:	-7.1	:
1987	-4.7	4.0	1.8	:	:	1.7	:	-6.6	:
1988	-4.0	3.2	1.4	-7.8	:	1.7	:	-6.2	:
1989	-5.3	1.9	3.5	-9.5	:	2.3	:	-6.8	:
1990	-4.7	0.2	1.4	-9.3	:	2.5	-1.1	-6.6	10.6
1981-90	-6.0	0.1	1.8	:	:	1.6	:	-6.7	:
1991			0.8						
1991	-5.2	-1.0	1.4	-6.2	:	1.7	-1.4	-7.2	7.5
1992	-5.6	-0.4	1.6	-6.7	:	0.2	-1.4	-8.3	7.1
1993	-4.5	-1.0	0.8	-7.7	:	-1.9	-1.2	-6.9	8.1
1994	-2.4	-0.6	1.1	-6.5	:	-1.2	0.5	-6.0	8.5
1995	-2.0	-0.5	-0.1	-6.8	-1.8	-1.1	0.0	-3.8	8.0
1996	-1.5	0.9	-0.5	-5.2	-1.2	-0.3	1.8	-3.7	7.8
1997	0.5	2.2	-0.1	-1.5	0.4	-0.1	3.3	-0.2	8.5
1998	1.7	2.8	0.5	0.1	1.2	1.1	4.3	0.1	8.6
1999	2.1	4.9	1.2	1.6	2.9	2.1	6.5	1.7	8.7
2000	2.7	4.2	1.6	2.1	3.2	2.3	7.8	1.4	11.1
1991-2000	-1.4	1.1	0.8	-3.7	:	0.3	2.0	-3.3	8.4
2001	2.4	4.5	0.2	2.5	3.8	2.2	5.4	1.0	9.6
2002	2.1	3.3	-0.7	2.0	4.2	0.4	3.8	0.5	8.2
2003	1.0	2.3	-1.4	1.9	4.3	-0.6	3.1	-0.1	6.9
2004	1.2	2.7	-1.3	1.1	4.5	-0.2	2.8	0.3	3.6
2005	1.7	3.2	-0.8	1.1	4.7	-0.1	2.9	0.2	2.9
2001-05	1.7	3.2	-0.8	1.7	4.3	0.3	3.6	0.4	6.2

(1) 1975-91 D_90.

NB: Saving (B.8) is obtained by subtracting final consumption expenditure from disposable income or by subtracting actual final consumption from adjusted disposable income. It is the (positive or negative) amount resulting from current transactions which establishes the link with accumulation. If saving is positive, non-spent income is used for the acquisition of assets or for paying off liabilities. If saving is negative, certain assets are liquidated or certain liabilities increase.

Reference: ESA 95, paragraphs 8.36, 8.42 and 8.43.

(Percentage of gross domestic product at market prices)

	NL	AT	PT	FI	SE	UK	EU-15 ⁽¹⁾	EUR-12 ⁽²⁾
1975	2.5	:	:	10.5	:	1.5	:	:
1976	2.8	3.2	:	12.5	:	0.8	:	:
1977	3.2	4.2	1.0	10.9	:	1.2	:	:
1978	2.0	3.9	-1.6	8.1	:	-0.3	:	:
1979	2.2	3.8	-0.9	7.6	:	0.0	:	:
1980	1.7	4.5	-2.3	8.1	:	0.3	:	:
1975-80	2.4	:	:	9.6	:	0.6	:	:
1981	0.8	4.5	-3.6	9.4	:	-0.2	:	:
1982	-0.7	2.4	-1.5	7.6	:	0.4	:	:
1983	-0.6	1.7	-0.1	5.9	:	-0.1	:	:
1984	-0.1	3.2	-1.8	7.3	:	-0.3	:	:
1985	1.1	3.2	-2.8	7.3	:	0.1	:	:
1986	0.4	1.9	-3.8	7.9	:	0.0	:	:
1987	0.0	0.9	-3.7	5.8	:	0.5	:	:
1988	0.3	1.5	-0.3	9.7	:	2.6	:	:
1989	-1.0	1.7	0.4	10.4	:	3.4	:	:
1990	-1.6	2.4	-2.9	9.5	:	2.6	:	:
1981-90	-0.1	2.3	-2.0	8.1	:	0.9	:	:
1991								
1991	0.7	2.0	-4.0	3.4	:	0.4	:	:
1992	-1.0	2.9	-0.9	-1.6	:	-3.2	:	:
1993	0.1	0.9	-4.0	-4.0	-5.4	-4.8	:	:
1994	-0.5	0.1	-4.4	-2.0	-5.6	-3.9	:	:
1995	-1.1	-0.4	-2.1	-0.7	-3.1	-2.9	-1.6	-1.3
1996	0.6	0.9	-0.8	0.7	0.5	-2.1	-1.1	-1.0
1997	1.3	1.8	0.4	1.9	1.8	-0.6	0.1	0.2
1998	1.8	1.8	1.2	4.6	4.5	1.7	1.2	0.9
1999	3.4	1.6	1.3	5.0	4.6	2.5	2.2	2.0
2000	4.6	1.7	0.7	9.7	6.2	2.8	2.6	2.4
1991-2000	1.0	1.3	-1.3	1.7	:	-1.0	:	:
2001	3.6	3.7	-0.2	8.0	7.5	2.3	2.1	1.8
2002	1.7	2.8	0.0	7.0	4.2	0.1	0.9	0.9
2003	0.8	1.9	-2.2	5.0	3.4	-0.6	0.2	0.2
2004	0.5	2.2	-1.7	4.1	3.6	-0.2	0.4	0.4
2005	0.8	2.5	-1.2	4.2	4.1	0.4	0.7	0.6
2001-05	1.5	2.6	-1.1	5.7	4.6	0.4	0.9	0.8

⁽¹⁾ 1975-91 including D_90.⁽²⁾ EU-15 excluding DK, SE and UK; 1975-91 including D_90.

Table 47 (Continued)

(Percentage of gross domestic product at market prices)

	CY	CZ	EE	HU	LV	LT	MT	PL	SK
1975	:	:	:	:	:	:	:	:	:
1976	:	:	:	:	:	:	:	:	:
1977	:	:	:	:	:	:	:	:	:
1978	:	:	:	:	:	:	:	:	:
1979	:	:	:	:	:	:	:	:	:
1980	:	:	:	:	:	:	:	:	:
1975–80	:	:	:	:	:	:	:	:	:
1981	:	:	:	:	:	:	:	:	:
1982	:	:	:	:	:	:	:	:	:
1983	:	:	:	:	:	:	:	:	:
1984	:	:	:	:	:	:	:	:	:
1985	:	:	:	:	:	:	:	:	:
1986	:	:	:	:	:	:	:	:	:
1987	:	:	:	:	:	:	:	:	:
1988	:	:	:	:	:	:	:	:	:
1989	:	:	:	:	:	:	:	:	:
1990	:	:	:	:	10.3	:	:	:	:
1981–90	:	:	:	:	:	:	:	:	:
1991	:	:	:	:	8.4	:	:	-2.9	:
1992	:	9.2	:	:	3.1	:	:	-2.3	:
1993	:	7.4	15.1	:	4.9	:	:	-0.1	-3.1
1994	:	6.4	11.5	:	2.0	:	:	1.2	1.7
1995	:	7.8	6.5	:	-1.1	3.0	:	1.2	7.5
1996	:	6.3	5.0	:	1.0	1.6	:	1.8	3.5
1997	:	5.5	7.8	:	2.1	1.7	:	2.1	3.0
1998	:	4.6	5.9	:	1.6	0.7	:	2.6	3.0
1999	:	4.1	5.5	:	-1.5	0.6	:	2.5	2.3
2000	:	3.4	5.2	:	0.6	1.0	:	1.5	0.8
1991–2000	:	:	:	:	2.1	:	:	0.8	:
2001	:	2.3	:	:	1.6	:	:	:	:
2002	:	2.4	:	:	0.9	:	:	:	:
2003	:	:	:	:	:	:	:	:	:
2004	:	:	:	:	:	:	:	:	:
2005	:	:	:	:	:	:	:	:	:
2001–05	:	:	:	:	:	:	:	:	:

NB: Saving (B.8) is obtained by subtracting final consumption expenditure from disposable income or by subtracting actual final consumption from adjusted disposable income. It is the (positive or negative) amount resulting from current transactions which establishes the link with accumulation. If saving is positive, non-spent income is used for the acquisition of assets or for paying off liabilities. If saving is negative, certain assets are liquidated or certain liabilities increase.

Reference: ESA 95, paragraphs 8.36, 8.42 and 8.43.

(Percentage of gross domestic product at market prices)

	SI	AC-10 ⁽¹⁾	EU-25 ⁽²⁾	BG	RO	TR	US ⁽³⁾	JP
1975	:	:	:	:	:	:	-2.4	:
1976	:	:	:	:	:	:	-0.9	:
1977	:	:	:	:	:	:	-0.1	:
1978	:	:	:	:	:	:	1.1	:
1979	:	:	:	:	:	:	1.4	:
1980	:	:	:	:	:	:	-0.2	:
1975-80	:	:	:	:	:	:	-0.2	:
1981	:	:	:	:	:	:	-0.1	:
1982	:	:	:	:	:	:	-2.7	:
1983	:	:	:	:	:	:	-3.6	:
1984	:	:	:	:	:	:	-2.7	:
1985	:	:	:	:	:	:	-2.8	:
1986	:	:	:	:	:	:	-2.9	:
1987	:	:	:	:	:	:	-2.0	:
1988	:	:	:	:	:	:	-1.5	:
1989	:	:	:	:	:	:	-0.9	:
1990	:	:	:	:	:	:	-1.8	7.7
1981-90	:	:	:	:	:	:	-2.1	:
1991	:	:	:	:	:	:	-2.5	7.8
1992	:	:	:	:	:	:	-3.5	7.3
1993	:	:	:	:	:	:	-2.7	5.1
1994	:	:	:	:	:	:	-1.4	3.7
1995	:	:	:	:	:	:	-0.8	2.7
1996	:	:	:	:	:	:	0.1	2.8
1997	:	:	:	:	:	:	1.3	2.8
1998	:	:	:	:	:	:	2.6	1.3
1999	:	:	:	7.7	:	:	3.2	-0.2
2000	:	:	:	4.9	:	:	3.9	-0.1
1991-2000	:	:	:	:	:	:	0.0	3.3
2001	:	:	:	:	:	:	2.1	0.1
2002	:	:	:	:	:	:	-0.8	-1.1
2003	:	:	:	:	:	:	-1.9	-1.6
2004	:	:	:	:	:	:	-2.4	-1.9
2005	:	:	:	:	:	:	-2.2	-2.2
2001-05	:	:	:	:	:	:	-1.0	-1.4

⁽¹⁾ CY, CZ, EE, HU, LV, LT, MT, PL, SK and SI.⁽²⁾ BE, DK, DE, EL, ES, FR, IE, IT, LU, NL, AT, PT, FI, SE, UK, CY, CZ, EE, HU, LV, LT, MT, PL, SK and SI.⁽³⁾ Former definition.

Table 48

Money, interest rates and exchange rates
Money supply (M2/M3)

(End year; annual percentage change)

	BE/LU	DK	DE (1)	EL	ES	FR	IE	IT	NL
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	13.8	10.9	16.8	10.1	-2.9	16.3	8.1	7.8
1994	-4.8	-5.0	1.6	9.2	7.1	1.8	10.2	0.9	0.3
1995	0.0	3.0	3.6	16.1	9.2	4.6	12.4	-2.0	4.3
1996	6.9	9.7	8.7	13.8	7.4	-3.3	15.9	4.0	6.0
1997	6.1	6.1	3.6	20.3	4.3	2.0	22.1	9.0	5.6
1998	9.8	4.0	7.3	15.5	1.1	2.7	17.3	6.5	11.7
1999	:	-0.4	:	12.8	:	:	:	:	:
2000	:	-1.5	:	14.6	:	:	:	:	:
1991-2000	:	3.5	:	14.7	:	:	:	:	:
2001	:	6.7	:	:	:	:	:	:	:
2002	:	4.6	:	:	:	:	:	:	:

(1) 1961-90 D_90.

NB: Definitions:

BE: M3H;

DK: M2;

DE: M3, until 1990 D_90, from 1991 onwards DE; UK: M4;

EL: M3;

ES: ALP;

FR: M3;

IE: M3;

IT: M2;

NL: M3;

AT: M3;

PT: L;

FI: until 1984 M1, from 1985 onwards M3;

SE: M3;

EU: chain weighted arithmetic mean;

weights: GDP at current market prices and PPS;

CY: M2;

CZ: M2;

EE: M2;

HU: M3;

LV: M3;

LT: M2;

MT: M3;

PL: M2;

SK: M2;

SI: M3;

BG: M3;

RO: M2;

TR: M3;

US: M2;

JP: M2 plus certificates of deposit.

(End year; annual percentage change)

	AT	PT	FI	SE	UK	EU-15 ⁽¹⁾	EUR-11 ⁽²⁾	EUR-12 ⁽³⁾
1961–70	11.0	:	11.0	:	:	:	12.2	12.3
1971	15.3	21.0	13.8	9.9	16.2	16.0	16.2	16.4
1972	16.5	23.4	17.1	11.8	23.2	18.5	17.6	17.7
1973	10.8	28.9	15.6	12.8	21.8	17.6	16.9	16.9
1974	9.6	12.1	17.5	8.9	10.8	13.5	14.2	14.3
1975	11.7	13.1	22.1	12.7	11.7	15.3	15.6	15.9
1976	14.4	16.4	8.9	5.1	11.3	13.9	14.6	14.9
1977	11.4	21.8	11.9	9.4	14.8	14.7	14.7	14.9
1978	13.6	26.0	15.3	18.0	15.0	15.1	14.9	15.2
1979	6.3	31.1	17.2	16.4	14.4	13.6	13.3	13.4
1980	9.1	28.4	11.2	10.8	17.1	11.6	10.2	10.5
1971–80	11.9	22.2	15.1	11.6	15.6	15.0	14.8	15.0
1981	10.3	24.0	14.9	13.6	20.4	12.0	9.6	10.3
1982	14.6	24.1	12.9	7.7	12.0	12.4	12.3	12.7
1983	7.2	17.0	12.2	7.0	13.2	10.9	9.9	10.2
1984	7.5	24.8	15.7	7.2	13.5	10.6	9.5	10.0
1985	6.6	28.5	16.7	-0.7	13.0	10.2	9.5	9.9
1986	10.2	26.3	8.6	10.7	15.6	10.3	8.9	9.2
1987	7.4	19.7	21.2	4.2	16.3	10.3	9.1	9.4
1988	4.1	17.8	24.6	5.2	17.6	10.4	8.8	9.1
1989	6.7	10.6	6.1	10.0	19.1	11.3	9.4	9.7
1990	7.6	10.9	6.8	11.3	11.8	8.6	7.7	7.8
1981–90	8.2	20.4	14.0	7.6	15.2	10.7	9.5	9.8
1991	8.0	18.1	6.8	4.0	5.9	6.7	7.5	:
1992	4.2	13.6	-0.1	3.2	3.6	3.1	7.1	:
1993	4.0	6.2	3.8	4.0	4.6	6.9	6.4	:
1994	5.3	9.4	1.9	0.3	4.7	1.9	2.3	:
1995	5.7	8.0	0.4	2.7	9.9	5.2	5.5	:
1996	1.8	8.8	-1.3	11.4	9.5	7.8	3.9	:
1997	1.2	6.2	8.8	1.3	12.1	7.5	3.9	:
1998	6.4	7.8	2.4	2.1	8.2	4.1	4.9	:
1999	:	:	:	12.4	3.6	:	5.5	:
2000	:	:	:	2.8	8.2	:	4.2	:
1991–2000	:	:	:	4.4	7.0	:	5.1	:
2001	:	:	:	6.7	6.7	:	:	7.6
2002	:	:	:	4.5	7.2	:	:	6.8

⁽¹⁾ 1961–90 including D_90.⁽²⁾ EU-15 excluding DK, EL, SE and UK; 1961–90 including D_90.⁽³⁾ EU-15 excluding DK, SE and UK; 1961–90 including D_90.

Table 48 (Continued)

(End year; annual percentage change)

	CY	CZ	EE	HU	LV	LT	MT	PL	SK
1961–70	:	:	:	:	:	:	:	:	:
1971	:	:	:	:	:	:	:	:	:
1972	:	:	:	:	:	:	:	:	:
1973	:	:	:	:	:	:	:	:	:
1974	:	:	:	:	:	:	:	:	:
1975	:	:	:	:	:	:	:	:	:
1976	:	:	:	:	:	:	:	:	:
1977	:	:	:	:	:	:	:	:	:
1978	:	:	:	:	:	:	:	:	:
1979	:	:	:	:	:	:	:	:	:
1980	:	:	:	:	:	:	:	:	:
1971–80	:	:	:	:	:	:	:	:	:
1981	:	:	:	:	:	:	:	:	:
1982	:	:	:	:	:	:	:	:	:
1983	:	:	:	:	:	:	:	:	:
1984	:	:	:	:	:	:	:	:	:
1985	:	:	:	:	:	:	:	:	:
1986	:	:	:	:	:	:	:	:	:
1987	:	:	:	:	:	:	:	:	:
1988	:	:	:	:	:	:	:	:	:
1989	:	:	:	:	:	:	:	:	:
1990	:	:	:	:	:	:	:	:	:
1981–90	:	:	:	:	:	:	:	:	:
1991	:	:	:	:	:	:	:	:	:
1992	:	:	:	:	:	:	:	:	:
1993	:	:	:	:	:	:	:	:	:
1994	12.5	20.7	40.1	13.8	47.4	63.0	14.9	38.2	:
1995	11.9	23.7	34.5	21.0	-23.1	28.9	7.7	34.9	21.4
1996	11.0	7.6	35.6	22.7	19.9	-3.5	10.5	31.1	16.7
1997	10.7	9.2	42.3	22.7	38.7	34.1	9.6	29.1	8.8
1998	8.8	5.4	0.0	16.9	5.9	14.5	8.6	25.2	4.2
1999	17.2	7.7	23.6	13.1	8.0	7.7	9.9	19.3	11.4
2000	9.0	5.6	27.5	18.1	27.9	16.5	4.0	11.8	15.4
1991–2000	:	:	:	:	:	:	:	:	:
2001	13.3	13.0	21.2	17.1	20.8	21.4	8.4	13.7	11.8
2002	10.3	:	-8.7	9.5	21.0	16.9	10.4	-4.5	3.4

NB: Definitions:

BE: M3H;
 DK: M2;
 DE: M3, until 1990 D_90, from 1991 onwards DE;
 EL: M3;
 ES: ALP;
 FR: M3;
 IE: M3;
 IT: M2;
 NL: M3;
 AT: M3;

PT: L;
 FI: until 1984 M1, from 1985 onwards M3;
 SE: M3;
 UK: M4;
 EU: chain weighted arithmetic mean;
 weights: GDP at current market prices and PPS;
 CY: M2;
 CZ: M2;
 EE: M2;
 HU: M3;
 LV: M3;

LT: M2;
 MT: M3;
 PL: M2;
 SK: M2;
 SI: M3;
 BG: M3;
 RO: M2;
 TR: M3;
 US: M2;
 JP: M2 plus certificates of deposit.

(End year; annual percentage change)

	SI	AC-10 ⁽¹⁾	EU-25 ⁽²⁾	BG	RO	TR	US	JP
1961–70	:	:	:	:	:	:	7.2	18.3
1971	:	:	:	:	:	:	13.5	24.3
1972	:	:	:	:	:	:	13.0	24.7
1973	:	:	:	:	:	:	6.9	16.8
1974	:	:	:	:	:	:	5.5	11.5
1975	:	:	:	:	:	:	12.6	16.5
1976	:	:	:	:	:	:	13.7	15.4
1977	:	:	:	:	:	:	10.6	13.4
1978	:	:	:	:	:	:	8.0	14.0
1979	:	:	:	:	:	:	7.8	10.8
1980	:	:	:	:	:	:	8.9	9.5
1971–80	:	:	:	:	:	:	10.1	15.7
1981	:	:	:	:	:	:	10.1	11.0
1982	:	:	:	:	:	:	8.8	7.9
1983	:	:	:	:	:	:	11.8	7.3
1984	:	:	:	:	:	:	8.7	7.8
1985	:	:	:	:	:	:	8.0	8.7
1986	:	:	:	:	:	:	9.5	9.2
1987	:	:	:	:	:	:	3.6	10.8
1988	:	:	:	:	:	:	5.8	10.2
1989	:	:	:	:	:	:	5.5	12.0
1990	:	:	:	:	:	:	3.8	11.7
1981–90	:	:	:	:	:	:	7.6	9.7
1991	:	:	:	:	:	:	3.1	3.6
1992	:	:	:	:	:	:	1.6	-0.4
1993	:	:	:	:	:	:	2.2	1.4
1994	43.3	:	:	:	138.1	151.6	-1.6	2.9
1995	28.1	:	:	:	71.6	102.3	4.1	3.2
1996	20.5	:	:	125.2	66.0	124.8	4.3	3.1
1997	24.3	:	:	363.8	104.9	98.7	5.6	3.5
1998	19.8	:	:	10.6	48.9	86.9	8.7	4.4
1999	13.2	:	:	12.4	45.0	99.0	6.1	4.3
2000	15.3	:	:	31.3	38.0	41.1	6.1	1.9
1991–2000	:	:	:	:	:	:	4.0	2.8
2001	30.4	:	:	25.2	46.2	86.0	10.5	3.4
2002	17.2	:	:	12.3	38.1	:	6.6	1.8

⁽¹⁾ CY, CZ, EE, HU, LV, LT, MT, PL, SK and SI.⁽²⁾ BE, DK, DE, EL, ES, FR, IE, IT, LU, NL, AT, PT, FI, SE, UK, CY, CZ, EE, HU, LV, LT, MT, PL, SK and SI.

Table 49

Money, interest rates and exchange rates

Nominal short-term interest rates

(%)

	BE	DK	DE (1)	EL	ES	FR	IE	IT	NL
1961–70	5.2	6.8	5.0	:	:	5.4	:	3.7	3.8
1971	5.4	7.6	7.1	:	:	6.0	6.5	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	10.3	9.3	4.3	:	:	8.7	11.7	16.0	7.4
1977	7.4	14.7	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	14.3	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	11.3	11.3	7.0
1981	15.6	14.9	12.4	16.8	16.2	15.3	16.7	19.3	11.8
1982	14.3	16.4	8.8	18.9	16.3	14.6	17.5	19.9	8.2
1983	10.4	11.9	5.8	16.6	20.1	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	11.2	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	8.1	10.5	7.2	23.5	11.7	8.6	9.3	10.2	6.9
1994	5.6	6.1	5.3	24.6	8.0	5.9	5.9	8.5	5.2
1995	4.7	6.1	4.5	16.4	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	6.1	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	3.4	3.0	10.1	3.0	3.0	3.0	3.0	3.0
2000	4.4	5.0	4.4	7.7	4.4	4.4	4.4	4.4	4.4
1991–2000	5.5	6.3	5.3	16.9	8.0	5.9	6.9	8.3	5.2
2001	4.3	4.7	4.3	4.3	4.3	4.3	4.3	4.3	4.3
2002	3.3	3.5	3.3	3.3	3.3	3.3	3.3	3.3	3.3

(1) 1961–90 D_90.

NB: Definitions:

- BE: 1961–84, four-month certificates of 'Fonds des Rentes'; from 1985, three-month Treasury certificates.
- DK: 1961–76, discount rate; 1977–88, call money; from 1989, three-month interbank rates.
- DE: Three-month interbank rates.
- EL: 1960–April 1980, credit for working capital to industry; May 1980–87, interbank sight deposits; from 1988, one-month interbank rates; since December 1994, three-month Athibor.
- ES: Three-month interbank rates.
- FR: 1960–68, call money; 1969–81, one-month sale and repurchase agreements on private sector paper; from 1982, three-month sale and repurchase agreement on private sector paper (PIBOR).
- IE: 1961–70, three-month interbank deposits in London; from 1971, three-month interbank rates in Dublin.
- IT: 1960–70, 12-month Treasury bills; 1971–84, interbank sight deposits; from 1985, three-month interbank rates.
- NL: 1960–September 1972, three-month Treasury bills; from October 1972, three-month interbank rates.
- AT: 1960–79, day-to-day money; 1980–94 onwards, three-month interbank rates; from 1995, three-month VIBOR.
- PT: 1966–July 1985, six-month deposits; August 1985–92, three-month Treasury bills; from January 1993, three-month interbank rates.
- FI: Three-month Helibor.
- SE: 1982–86, three-month Treasury discount notes; from 1987 onwards, three-month Stibor.
- UK: 1961–September 1964, three-month Treasury bills; from October 1964, three-month interbank rates.
- EU-15: Weighted geometric mean; weights: gross domestic product at current market prices and PPS.
- US: Three-month money market.
- JP: Bonds traded with three-month repurchase agreements; from January 1989, rates of three-month certificate of deposit.

(%)

	AT	PT	FI	SE	UK	EU-7 ⁽¹⁾	EU-15 ⁽²⁾	EUR-12 ⁽³⁾
1961–70	:	:	:	:	6.3	5.1	:	:
1971	4.4	4.3	8.1	:	6.2	6.2	:	:
1972	5.2	4.4	7.8	:	6.8	5.6	:	:
1973	6.9	4.4	9.3	:	11.8	9.9	:	:
1974	7.3	5.3	10.4	:	13.4	12.3	:	:
1975	5.5	6.8	11.7	:	10.6	7.9	:	:
1976	4.7	8.4	12.4	:	11.6	9.5	:	:
1977	7.5	11.1	11.8	:	8.0	8.3	:	9.1
1978	6.4	15.5	8.6	:	9.5	7.9	:	8.5
1979	5.6	16.1	8.5	:	13.9	10.3	:	10.0
1980	10.3	16.3	13.8	:	16.8	13.4	:	13.0
1971–80	6.4	9.3	10.2	:	10.8	9.1	:	:
1981	11.4	16.0	12.7	:	14.2	14.9	:	15.1
1982	8.8	16.8	13.7	13.3	12.2	13.3	13.6	13.9
1983	5.4	20.9	14.2	11.4	10.1	10.9	11.8	12.2
1984	6.6	22.5	15.8	11.9	10.0	10.6	11.3	11.5
1985	6.2	21.0	12.8	14.2	12.2	10.0	10.6	10.1
1986	5.3	15.6	11.7	9.8	10.9	8.5	9.1	8.7
1987	4.4	13.9	10.0	9.6	9.7	7.9	8.8	8.5
1988	4.6	13.0	10.0	10.3	10.3	8.0	8.5	8.0
1989	7.5	13.7	12.6	11.6	13.9	10.3	10.8	10.2
1990	8.5	16.9	14.0	13.8	14.8	11.0	11.7	11.0
1981–90	6.9	17.0	12.7	:	11.8	10.5	:	10.9
1991	9.1	17.7	13.1	11.8	11.5	10.3	11.0	10.8
1992	9.3	16.2	13.3	13.4	9.6	10.6	11.2	11.5
1993	7.2	13.3	7.8	8.8	5.9	7.9	8.6	9.1
1994	5.0	11.1	5.3	7.6	5.5	6.1	6.6	6.8
1995	4.5	9.8	5.8	8.9	6.7	6.5	7.0	7.0
1996	3.3	7.4	3.6	5.9	6.0	5.0	5.4	5.3
1997	3.5	5.7	3.2	4.5	6.8	4.7	4.9	4.5
1998	3.6	4.3	3.6	4.3	7.3	4.6	4.7	4.2
1999	3.0	3.0	3.0	3.3	5.5	3.5	3.5	3.1
2000	4.4	4.4	4.4	4.1	6.2	4.8	4.7	4.5
1991–2000	5.3	9.3	6.3	7.3	7.1	6.4	6.8	6.7
2001	4.3	4.3	4.3	4.1	5.0	4.4	4.4	4.3
2002	3.3	3.3	3.3	4.2	4.1	3.5	3.5	3.3

(¹) BE, DK, DE, FR, IT, NL and UK; 1961–90 including D_90.

(²) 1961–90 including D_90.

(³) EU-15 excluding DK, SE and UK; 1961–90 including D_90.

Table 49 (Continued)

(%)

	CY	CZ	EE	HU	LV	LT	MT	PL	SK
1961–70	:	:	:	:	:	:	:	:	:
1971	:	:	:	:	:	:	:	:	:
1972	:	:	:	:	:	:	:	:	:
1973	:	:	:	:	:	:	:	:	:
1974	:	:	:	:	:	:	:	:	:
1975	:	:	:	:	:	:	:	:	:
1976	:	:	:	:	:	:	:	:	:
1977	:	:	:	:	:	:	:	:	:
1978	:	:	:	:	:	:	:	:	:
1979	:	:	:	:	:	:	:	:	:
1980	:	:	:	:	:	:	:	:	:
1971–80	:	:	:	:	:	:	:	:	:
1981	:	:	:	:	:	:	:	:	:
1982	:	:	:	:	:	:	:	:	:
1983	:	:	:	:	:	:	:	:	:
1984	:	:	:	:	:	:	:	:	:
1985	:	:	:	:	:	:	:	:	:
1986	:	:	:	:	:	:	:	:	:
1987	:	:	:	:	:	:	:	:	:
1988	:	:	:	:	:	:	:	:	:
1989	:	:	:	:	:	:	:	:	:
1990	:	:	:	:	:	:	:	:	:
1981–90	:	:	:	:	:	:	:	:	:
1991	:	:	:	:	:	:	:	:	:
1992	:	:	:	:	:	:	:	:	:
1993	:	13.1	:	:	:	:	:	:	:
1994	:	9.1	:	27.8	:	:	:	:	:
1995	:	11.0	:	31.3	:	:	4.8	27.6	8.4
1996	:	12.0	7.1	24.3	:	:	5.0	21.4	11.9
1997	:	16.0	7.6	20.4	6.0	:	5.1	23.7	21.8
1998	:	14.3	12.5	17.9	6.9	:	5.4	20.4	21.1
1999	6.3	6.9	6.6	15.1	7.5	13.9	5.2	14.7	15.7
2000	6.4	5.4	4.7	11.4	4.0	8.6	4.9	18.8	8.6
1991–2000	:	:	:	:	:	:	:	:	:
2001	5.9	5.2	4.5	10.9	6.1	5.9	4.9	16.1	7.8
2002	4.4	3.5	3.4	9.2	3.3	3.7	4.0	9.0	7.8

NB: Definitions:

- BE: 1961–84, four-month certificates of 'Fonds des Rentes'; from 1985, three-month Treasury certificates.
DK: 1961–76, discount rate; 1977–88, call money; from 1989, three-month interbank rates.
DE: Three-month interbank rates.
EL: 1960–April 1980, credit for working capital to industry; May 1980–87, interbank sight deposits; from 1988, one-month interbank rates; since December 1994, three-month Athibor.
ES: Three-month interbank rates.
FR: 1960–68, call money; 1969–81, one-month sale and repurchase agreements on private sector paper; from 1982, three-month sale and repurchase agreement on private sector paper (PIBOR).
IE: 1961–70, three-month interbank deposits in London; from 1971, three-month interbank rates in Dublin.
IT: 1960–70, 12-month Treasury bills; 1971–84, interbank sight deposits; from 1985, three-month interbank rates.
NL: 1960–September 1972, three-month Treasury bills; from October 1972, three-month interbank rates.
AT: 1960–79, day-to-day money; 1980–94 onwards, three-month interbank rates; from 1995, three-month VIBOR.
PT: 1966–July 1985, six-month deposits; August 1985–92, three-month Treasury bills; from January 1993, three-month interbank rates.
FI: Three-month Helibor.
SE: 1982–86, three-month Treasury discount notes; from 1987 onwards, three-month Stibor.
UK: 1961–September 1964, three-month Treasury bills; from October 1964, three-month interbank rates.
EU-15: Weighted geometric mean; weights: gross domestic product at current market prices and PPS.
US: Three-month money market.
JP: Bonds traded with three-month repurchase agreements; from January 1989, rates of three-month certificate of deposit.

(%)

	SI	AC-10 ⁽¹⁾	EU-25 ⁽²⁾	BG	RO	TR	US	JP
1961–70	:	:	:	:	:	:	4.3	:
1971	:	:	:	:	:	:	4.3	6.5
1972	:	:	:	:	:	:	4.2	5.2
1973	:	:	:	:	:	:	7.2	8.3
1974	:	:	:	:	:	:	7.9	14.7
1975	:	:	:	:	:	:	5.8	10.1
1976	:	:	:	:	:	:	5.0	7.3
1977	:	:	:	:	:	:	5.3	6.4
1978	:	:	:	:	:	:	7.4	5.1
1979	:	:	:	:	:	:	10.1	5.9
1980	:	:	:	:	:	:	11.6	10.7
1971–80	:	:	:	:	:	:	6.9	8.0
1981	:	:	:	:	:	:	14.0	7.4
1982	:	:	:	:	:	:	10.6	6.9
1983	:	:	:	:	:	:	8.7	6.5
1984	:	:	:	:	:	:	9.5	6.3
1985	:	:	:	:	:	:	7.5	6.5
1986	:	:	:	:	:	:	6.0	5.0
1987	:	:	:	:	:	:	5.9	3.9
1988	:	:	:	:	:	:	6.9	4.0
1989	:	:	:	:	:	:	8.4	5.4
1990	:	:	:	:	:	:	7.7	7.8
1981–90							8.5	6.0
1991	:	:	:	:	:	:	5.5	7.4
1992	:	:	:	:	:	:	3.5	4.4
1993	:	:	:	:	:	:	3.1	3.0
1994	29.1	:	:	:	:	:	4.7	2.3
1995	:	:	:	:	43.0	:	6.0	1.2
1996	:	:	:	:	53.7	:	5.5	0.6
1997	:	:	:	:	80.8	:	5.7	0.6
1998	10.3	:	:	5.9	69.5	:	5.5	0.8
1999	8.6	12.6	4.2	5.9	79.6	:	5.4	0.2
2000	10.9	12.9	5.4	4.6	50.7	:	6.5	0.3
1991–2000	:	:	:	:	:	:	5.1	2.1
2001	10.9	11.4	4.9	5.1	41.3	:	3.8	0.2
2002	8.0	7.4	3.8	4.9	27.3	:	1.8	0.1

(¹) CY, CZ, EE, HU, LV, LT, MT, PL, SK and SI.

(²) BE, DK, DE, EL, ES, FR, IE, IT, LU, NL, AT, PT, FI, SE, UK, CY, CZ, EE, HU, LV, LT, MT, PL, SK and SI; 1961–90 including D_90.

Table 50

Money, interest rates and exchange rates

Nominal long-term interest rates

(%)

	BE	DK	DE (1)	EL	ES	FR	IE	IT	LU
1961-70	6.3	8.3	6.8	:	:	6.5	:	6.7	:
1971	7.3	11.0	8.0	:	:	8.4	9.2	8.3	:
1972	7.0	11.0	7.9	:	:	8.0	9.1	7.5	:
1973	7.5	12.6	9.3	9.3	:	9.0	10.7	7.4	6.8
1974	8.8	15.9	10.4	10.5	:	11.0	14.6	9.9	7.3
1975	8.5	12.7	8.5	9.4	:	10.3	14.0	11.5	6.7
1976	9.1	14.9	7.8	10.2	:	10.5	14.6	13.1	7.2
1977	8.8	16.2	6.2	9.5	:	11.0	12.9	14.6	7.0
1978	8.5	16.8	5.7	10.0	:	10.6	12.8	13.7	6.6
1979	9.7	16.7	7.4	11.2	13.3	10.9	15.1	14.1	6.8
1980	12.2	18.7	8.5	17.1	16.0	13.1	15.4	16.1	7.4
1971-80	8.7	14.6	8.0	:	:	10.3	12.8	11.6	:
1981	13.8	19.3	10.4	17.7	15.8	15.9	17.3	20.6	8.7
1982	13.5	20.5	9.0	15.4	16.0	15.7	17.0	20.9	10.4
1983	11.8	14.4	7.9	18.2	16.9	13.6	13.9	18.0	9.8
1984	12.0	14.0	7.8	18.5	16.5	12.5	14.6	15.0	10.3
1985	10.6	11.2	6.9	15.8	13.4	10.9	12.7	14.3	9.5
1986	7.9	10.1	5.9	15.8	11.4	8.4	11.1	11.7	8.7
1987	7.8	11.3	5.8	17.4	12.8	9.4	11.3	11.3	8.0
1988	7.9	9.6	6.1	16.6	11.7	9.0	9.4	12.1	7.1
1989	8.7	9.9	7.0	:	13.7	8.8	8.9	12.9	7.7
1990	10.0	10.7	8.9	:	14.6	9.9	10.1	12.1	8.6
1981-90	10.4	13.1	7.6	:	14.3	11.4	12.6	14.9	8.9
1991	9.3	9.2	8.5	:	12.3	9.0	9.3	13.1	8.2
1992	8.7	8.9	7.9	:	11.7	8.6	9.3	13.3	7.9
1993	7.2	7.3	6.5	23.3	10.2	6.8	7.7	11.2	6.8
1994	7.8	7.8	6.9	20.7	10.0	7.2	7.9	10.5	7.2
1995	7.5	8.3	6.9	17.0	11.3	7.5	8.3	12.2	7.2
1996	6.5	7.2	6.2	14.5	8.7	6.3	7.3	9.4	6.3
1997	5.8	6.3	5.6	9.9	6.4	5.6	6.3	6.9	5.6
1998	4.8	4.9	4.6	8.5	4.8	4.6	4.8	4.9	4.7
1999	4.8	4.9	4.5	6.3	4.7	4.6	4.7	4.7	4.7
2000	5.6	5.6	5.3	6.1	5.5	5.4	5.5	5.6	5.5
1991-2000	6.8	7.0	6.3	:	8.6	6.6	7.1	9.2	6.4
2001	5.1	5.1	4.8	5.3	5.1	4.9	5.0	5.2	4.9
2002	5.0	5.1	4.8	5.1	5.0	4.9	5.0	5.0	4.7

(1) 1961-90 D_90.

NB: Definitions:

- BE: Central government bonds over five 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.
- DE: Public sector bonds outstanding (over three years); from 1993, central government benchmark bond of 10 years.
- EL: Central government bonds, based on 12-month Treasury bonds.
- ES: 1979-87, State bonds of two to four years; 1988-92, central government bonds at more than two years; from 1993, central government benchmark bond of 10 years.
- FR: 1960-79, public sector bonds; 1980-92, central government bonds of 7 to 10 years; from 1993, central government benchmark bond of 10 years.
- IE: 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.
- IT: 1960-84, Crediop bonds; 1985-91, rate of specialised industrial credit institutions (gross rate); 1992, public sector bonds outstanding; from 1993, central government benchmark bond of 10 years.
- LU: 1973-93, central government bonds of five to seven 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 five central government bonds with the longest maturity; from 1993, central government benchmark bond of 10 years.
- AT: Government bonds of more than one year, secondary market; from 1995, central government benchmark bond of 10 years.
- PT: Weighted average of public and private bonds over five years; from 1993, central government benchmark bond of 10 years.
- FI: 1960-79, non-central government taxable bonds; 1980-94, government bonds of five to seven years, secondary market; from 1995, central government benchmark bond of 10 years.
- SE: Central government bonds of 9 to 11 years; from 1995, central government benchmark bond of 10 years.
- UK: Central government bonds of 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).

(%)

NL	
1961-70	5.6
1971	7.1
1972	6.7
1973	7.3
1974	10.7
1975	9.2
1976	9.2
1977	8.5
1978	8.1
1979	9.2
1980	10.7
1971-80	8.7
1981	12.2
1982	10.5
1983	8.8
1984	8.6
1985	7.3
1986	6.4
1987	6.4
1988	6.4
1989	7.2
1990	8.9
1981-90	8.3
1991	8.7
1992	8.1
1993	6.4
1994	6.9
1995	6.9
1996	6.2
1997	5.6
1998	4.6
1999	4.6
2000	5.4
1991-2000	6.3
2001	5.0
2002	4.9

Table 50 (Continued)

(%)

	AT	PT	FI	SE	UK	EU-9 ⁽¹⁾	EU-15 ⁽²⁾	EUR-12 ⁽³⁾	US
1961-70	6.3	8.3	6.8	:	:	6.5	:	6.7	:
1971	7.3	11.0	8.0	:	:	8.4	9.2	8.3	:
1972	7.0	11.0	7.9	:	:	8.0	9.1	7.5	:
1973	7.5	12.6	9.3	9.3	:	9.0	10.7	7.4	6.8
1974	8.8	15.9	10.4	10.5	:	11.0	14.6	9.9	7.3
1975	8.5	12.7	8.5	9.4	:	10.3	14.0	11.5	6.7
1976	9.1	14.9	7.8	10.2	:	10.5	14.6	13.1	7.2
1977	8.8	16.2	6.2	9.5	:	11.0	12.9	14.6	7.0
1978	8.5	16.8	5.7	10.0	:	10.6	12.8	13.7	6.6
1979	9.7	16.7	7.4	11.2	13.3	10.9	15.1	14.1	6.8
1980	12.2	18.7	8.5	17.1	16.0	13.1	15.4	16.1	7.4
1971-80	8.7	14.6	8.0	:	:	10.3	12.8	11.6	:
1981	13.8	19.3	10.4	17.7	15.8	15.9	17.3	20.6	8.7
1982	13.5	20.5	9.0	15.4	16.0	15.7	17.0	20.9	10.4
1983	11.8	14.4	7.9	18.2	16.9	13.6	13.9	18.0	9.8
1984	12.0	14.0	7.8	18.5	16.5	12.5	14.6	15.0	10.3
1985	10.6	11.2	6.9	15.8	13.4	10.9	12.7	14.3	9.5
1986	7.9	10.1	5.9	15.8	11.4	8.4	11.1	11.7	8.7
1987	7.8	11.3	5.8	17.4	12.8	9.4	11.3	11.3	8.0
1988	7.9	9.6	6.1	16.6	11.7	9.0	9.4	12.1	7.1
1989	8.7	9.9	7.0	:	13.7	8.8	8.9	12.9	7.7
1990	10.0	10.7	8.9	:	14.6	9.9	10.1	12.1	8.6
1981-90	10.4	13.1	7.6	:	14.3	11.4	12.6	14.9	8.9
1991	9.3	9.2	8.5	:	12.3	9.0	9.3	13.1	8.2
1992	8.7	8.9	7.9	:	11.7	8.6	9.3	13.3	7.9
1993	7.2	7.3	6.5	23.3	10.2	6.8	7.7	11.2	6.8
1994	7.8	7.8	6.9	20.7	10.0	7.2	7.9	10.5	7.2
1995	7.5	8.3	6.9	17.0	11.3	7.5	8.3	12.2	7.2
1996	6.5	7.2	6.2	14.5	8.7	6.3	7.3	9.4	6.3
1997	5.8	6.3	5.6	9.9	6.4	5.6	6.3	6.9	5.6
1998	4.8	4.9	4.6	8.5	4.8	4.6	4.8	4.9	4.7
1999	4.8	4.9	4.5	6.3	4.7	4.6	4.7	4.7	4.7
2000	5.6	5.6	5.3	6.1	5.5	5.4	5.5	5.6	5.5
1991-2000	6.8	7.0	6.3	:	8.6	6.6	7.1	9.2	6.4
2001	5.1	5.1	4.8	5.3	5.1	4.9	5.0	5.2	4.9
2002	5.0	5.1	4.8	5.1	5.0	4.9	5.0	5.0	4.7

(¹) BE, DK, DE, FR, IT, NL, UK, SE and FI; 1961-90 including D_90.

(²) 1961-90 including D_90.

(³) EU-15 excluding DK, SE and UK; 1961-90 including D_90.

NB: Definitions:

- BE: Central government bonds over five 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.
 DE: Public sector bonds outstanding (over three years); from 1993, central government benchmark bond of 10 years.
 EL: Central government bonds, based on 12-month Treasury bonds.
 ES: 1979-87, State bonds of two to four years; 1988-92, central government bonds at more than two years; from 1993, central government benchmark bond of 10 years.
 FR: 1960-79, public sector bonds; 1980-92, central government bonds of 7 to 10 years; from 1993, central government benchmark bond of 10 years.
 IE: 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.
 IT: 1960-84, Crediop bonds; 1985-91, rate of specialised industrial credit institutions (gross rate); 1992, public sector bonds outstanding; from 1993, central government benchmark bond of 10 years.
 LU: 1973-93, central government bonds of five to seven 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 five central government bonds with the longest maturity; from 1993, central government benchmark bond of 10 years.
 AT: Government bonds of more than one year, secondary market; from 1995, central government benchmark bond of 10 years.
 PT: Weighted average of public and private bonds over five years; from 1993, central government benchmark bond of 10 years.
 FI: 1960-79, non-central government taxable bonds; 1980-94, government bonds of five to seven years, secondary market; from 1995, central government benchmark bond of 10 years.
 SE: Central government bonds of 9 to 11 years; from 1995, central government benchmark bond of 10 years.
 UK: Central government bonds of 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).

(%)

JP	
1961-70	5.6
1971	7.1
1972	6.7
1973	7.3
1974	10.7
1975	9.2
1976	9.2
1977	8.5
1978	8.1
1979	9.2
1980	10.7
1971-80	8.7
1981	12.2
1982	10.5
1983	8.8
1984	8.6
1985	7.3
1986	6.4
1987	6.4
1988	6.4
1989	7.2
1990	8.9
1981-90	8.3
1991	8.7
1992	8.1
1993	6.4
1994	6.9
1995	6.9
1996	6.2
1997	5.6
1998	4.6
1999	4.6
2000	5.4
1991-2000	6.3
2001	5.0
2002	4.9

Table 51

Money, interest rates and exchange rates
ECU–EUR exchange rates ⁽¹⁾
(Annual average, national currency units per EUR ⁽¹⁾)

	EUR-BEF	DKK	EUR-DEM	EUR-GRD	EUR-ESP	EUR-FRF	EUR-IEP	EUR-ITL
1960	1.3091	7.2954	2.2681	0.09299	0.3809	0.7950	0.4790	0.3409
1965	1.3260	7.3893	2.1879	0.09419	0.3855	0.8052	0.4851	0.3453
1970	1.2670	7.6668	1.9129	0.09000	0.4289	0.8656	0.5408	0.3300
1975	1.1296	7.1227	1.5591	0.11737	0.4223	0.8109	0.7108	0.4181
1980	1.0064	7.8274	1.2906	0.17437	0.5992	0.8947	0.8583	0.6142
1981	1.0237	7.9226	1.2853	0.18085	0.6171	0.9208	0.8774	0.6524
1982	1.1084	8.1569	1.2148	0.19176	0.6464	0.9804	0.8756	0.6837
1983	1.1264	8.1319	1.1609	0.22917	0.7663	1.0322	0.9078	0.6972
1984	1.1265	8.1465	1.1443	0.25947	0.7607	1.0476	0.9218	0.7134
1985	1.1134	8.0188	1.1383	0.31031	0.7761	1.0359	0.9081	0.7478
1986	1.0857	7.9357	1.0881	0.40330	0.8261	1.0366	0.9314	0.7550
1987	1.0670	7.8847	1.0592	0.45860	0.8544	1.0563	0.9846	0.7721
1988	1.0766	7.9515	1.0606	0.49178	0.8270	1.0727	0.9849	0.7940
1989	1.0754	8.0493	1.0585	0.52484	0.7838	1.0708	0.9864	0.7801
1990	1.0517	7.8565	1.0492	0.59108	0.7778	1.0541	0.9749	0.7860
1991	1.0467	7.9086	1.0485	0.66094	0.7721	1.0631	0.9749	0.7918
1992	1.0311	7.8093	1.0330	0.72495	0.7965	1.0440	0.9659	0.8240
1993	1.0033	7.5936	0.9901	0.78817	0.8963	1.0113	1.0157	0.9509
1994	0.9831	7.5433	0.9840	0.84527	0.9551	1.0035	1.0077	0.9890
1995	0.9557	7.3280	0.9580	0.88918	0.9796	0.9947	1.0355	1.1001
1996	0.9742	7.3593	0.9763	0.89669	0.9661	0.9899	1.0075	1.0117
1997	1.0048	7.4836	1.0044	0.90787	0.9970	1.0081	0.9491	0.9964
1998	1.0070	7.4993	1.0068	0.97060	1.0048	1.0064	0.9983	1.0038
1999	1.0000	7.4355	1.0000	0.95618	1.0000	1.0000	1.0000	1.0000
2000	1.0000	7.4538	1.0000	0.98805	1.0000	1.0000	1.0000	1.0000
2001	1.0000	7.4521	1.0000	1.00000	1.0000	1.0000	1.0000	1.0000
2002	1.0000	7.4305	1.0000	1.00000	1.0000	1.0000	1.0000	1.0000

⁽¹⁾ 1960–98 ECU.

(Annual average, national currency units per EUR ⁽¹⁾)

	EUR-LUF	EUR-NLG	EUR-ATS	EUR-PTE	EUR-FIM	SEK	GBP
1960	1.3091	1.8213	1.9957	0.1515	0.5685	5.4640	0.37722
1965	1.3260	1.7573	2.0214	0.1534	0.5757	5.5340	0.38207
1970	1.2670	1.6792	1.9315	0.1465	0.7221	5.2882	0.42593
1975	1.1296	1.4226	1.5659	0.1568	0.7643	5.1413	0.56003
1980	1.0064	1.2526	1.3058	0.3469	0.8699	5.8810	0.59849
1981	1.0237	1.2593	1.2874	0.3417	0.8061	5.6347	0.55311
1982	1.1084	1.1861	1.2136	0.3891	0.7917	6.1434	0.56046
1983	1.1264	1.1513	1.1605	0.4923	0.8322	6.8212	0.58701
1984	1.1265	1.1450	1.1435	0.5770	0.7945	6.5110	0.59063
1985	1.1134	1.1394	1.1368	0.6497	0.7895	6.5213	0.58898
1986	1.0857	1.0895	1.0875	0.7337	0.8375	6.9957	0.67154
1987	1.0670	1.0592	1.0589	0.81.11	0.8519	7.3100	0.70457
1988	1.0766	1.0595	1.0600	0.8483	0.8315	7.2419	0.66443
1989	1.0754	1.0597	1.0588	0.8650	0.7944	7.0994	0.67330
1990	1.0517	1.0492	1.0494	0.9034	0.8165	7.5205	0.71385
1991	1.0467	1.0487	1.0487	0.8909	0.8413	7.4793	0.70101
1992	1.0311	1.0323	1.0332	0.8715	0.9767	7.5330	0.73765
1993	1.0033	0.9871	0.9901	0.9396	1.1262	9.1215	0.77999
1994	0.9831	0.9794	0.9840	0.9821	1.0412	9.1631	0.77590
1995	0.9557	0.9524	0.9580	0.9782	0.9601	9.3319	0.82879
1996	0.9742	0.9710	0.9763	0.9765	0.9802	8.5147	0.81380
1997	1.0048	1.032	1.0046	0.9906	0.9891	8.6512	0.69230
1998	1.0070	1.0072	1.0068	1.0061	1.0062	8.9159	0.67643
1999	1.0000	1.0000	1.0000	1.0000	1.0000	8.8075	0.65874
2000	1.0000	1.0000	1.0000	1.0000	1.0000	8.4452	0.60948
2001	1.0000	1.0000	1.0000	1.0000	1.0000	9.2551	0.62187
2002	1.0000	1.0000	1.0000	1.0000	1.0000	9.1611	0.62883

⁽¹⁾ 1960–98 ECU.

Table 51 (Continued)

(Annual average, national currency units per EUR ⁽¹⁾)

	CYP	CZK	EEK	HUF 100	LVL	LTL	MTL	PLN
1960	0.37925	:	:	:	:	:	0.37925	:
1965	0.38301	:	:	:	:	:	0.38301	:
1970	0.42653	:	:	:	:	:	0.42653	:
1975	0.45704	:	:	:	:	:	0.47330	:
1980	0.49072	:	:	:	:	:	0.48003	0.0061
1981	0.46885	:	:	:	:	:	0.43054	0.0057
1982	0.46556	:	:	:	:	:	0.40366	0.0083
1983	0.46847	:	:	:	:	:	0.38477	0.0082
1984	0.46288	:	:	:	:	:	0.36270	0.0089
1985	0.46411	:	:	0.2227	:	:	0.35514	0.0065
1986	0.50898	:	:	0.4369	:	:	0.38558	0.0167
1987	0.55474	:	:	0.7227	:	:	0.39803	0.0408
1988	0.55171	:	:	0.8335	:	:	0.39100	0.0712
1989	0.54477	:	:	0.7899	:	:	0.38370	0.1925
1990	0.58189	26.927	:	1.3052	:	:	0.40363	1.9618
1991	0.57335	34.597	:	1.4220	:	:	0.39982	2.0169
1992	0.58368	36.827	15.672	1.7278	0.87635	4.1707	0.41295	2.9748
1993	0.58294	34.169	15.491	1.0761	0.79360	5.0868	0.44702	2.1222
1994	0.58393	34.151	15.396	1.2503	0.66410	4.7319	0.44885	2.7015
1995	0.59162	34.696	14.990	1.6455	0.68954	5.2320	0.46143	3.1705
1996s	0.59190	34.457	15.276	1.9374	0.69961	5.0790	0.45816	3.4223
1997	0.58263	35.930	15.715	2.1165	0.65940	4.5362	0.43750	3.7155
1998	0.57742	36.320	15.753	2.4057	0.66024	4.4844	0.43498	3.9178
1999	0.57885	36.884	15.647	2.5277	0.62560	4.2641	0.42577	4.2274
2000	0.57392	35.600	15.647	2.6005	0.55923	3.6952	0.40414	4.0082
2001	0.57589	34.069	15.647	2.5659	0.56006	3.5823	0.40301	3.6721
2002	0.57530	30.804	15.647	2.4296	0.58105	3.4594	0.40894	3.8574

⁽¹⁾ 1960–98 ECU.

(Annual average, national currency units per EUR ⁽¹⁾)

	SKK	SIT	BGN	ROL 1 000	TRL 1 000	USD	JPY 100
1960	:	:	:	:	0.0	1.0562	3.8023
1965	:	:	:	:	0.0	1.0698	3.8513
1970	:	:	:	:	0.0	1.0222	3.6800
1975	:	:	:	:	0.0	1.2408	3.6073
1980	:	:	:	:	0.1	1.3923	3.1504
1981	:	:	:	:	0.1	1.1164	2.4538
1982	:	:	:	:	0.2	0.9797	2.4355
1983	:	:	:	:	0.2	0.8902	2.1135
1984	:	:	:	:	0.3	0.7890	1.8709
1985	:	:	0.0005	0.008	0.4	0.7631	1.8056
1986	:	:	0.0009	0.015	0.7	0.9842	1.6500
1987	:	:	0.0013	0.022	1..0	1.1544	1.6660
1988	:	:	0.0014	0.024	1..7	1.1825	1.5146
1989	:	:	0.0011	0.020	2..7	1.1017	1.5194
1990	:	:	0.0045	0.046	3..3	1.2734	1.8366
1991	:	:	0.0339	0.145	5..2	1.2392	1.6649
1992	:	104.56	0.0511	0.674	8.9	1.2981	1.6422
1993	36.032	132.49	0.0323	0.886	12.9	1.1710	1.3015
1994	38.118	152.77	0.0644	1.972	35.5	1.1895	1.2132
1995	38.865	154.88	0.0879	2.662	59.9	1.3080	1.2301
1996	38.923	171.78	0.2251	3.922	103.2	1.2698	1.3808
1997	38.106	181.00	1.9016	8.112	171.8	1.1340	1.3708
1998	39.541	185.96	1.9691	9.985	293.7	1.1211	1.4642
1999	44.123	194.47	1.9558	16.345	447.2	1.0658	1.2132
2000	42.602	206.61	1.9479	19.922	574.8	0.9236	0.9947
2001	43.300	217.98	1.9482	26.004	1102.4	0.8956	1.0868
2002	42.694	225.98	1.9492	31.270	1439.7	0.9456	1.1806

⁽¹⁾ 1960–98 ECU.

Table 52

Money, interest rates and exchange rates

Conversion rates between the euro and the former national currencies of the euro zone

EUR 1	=	40.3399	Belgian francs
	=	1.95583	German marks
	=	340.75	Greek drachma
	=	166.386	Spanish pesetas
	=	6.55957	French francs
	=	0.787564	Irish pounds
	=	1936.27	Italian lire
	=	40.3399	Luxembourg francs
	=	2.20371	Dutch guilders
	=	13.7603	Austrian schillings
	=	200.482	Portuguese escudos
	=	5.94573	Finnish markkaa

Table 53

Money, interest rates and exchange rates**Nominal effective exchange rates****Performance relative to the rest of 22 industrial countries; double export weights**

(1995 = 100)

	BE	DK	DE (1)	EL	ES	FR	IE	IT	NL
1960	78.0	89.0	35.0	985.6	214.1	122.7	148.0	350.3	55.5
1965	76.7	88.1	36.7	973.8	212.3	121.4	147.9	346.1	57.6
1970	78.2	84.1	41.8	983.9	186.5	108.4	141.3	353.3	58.4
1975	83.8	93.4	52.4	751.0	194.3	115.2	125.5	268.8	66.2
1980	94.1	88.5	67.2	509.6	145.9	106.2	109.6	180.5	74.6
1981	89.6	82.8	64.1	466.1	133.9	98.0	100.8	160.5	72.0
1982	81.7	79.8	67.9	429.9	128.8	90.6	100.8	151.0	76.0
1983	80.0	80.1	71.3	351.8	109.4	85.0	97.8	146.8	78.0
1984	78.7	77.8	70.6	303.3	108.0	81.6	94.5	139.5	77.1
1985	79.4	78.9	71.1	257.5	106.3	82.8	95.8	133.0	77.4
1986	84.8	85.3	79.7	204.4	106.9	87.9	102.0	140.3	83.9
1987	88.4	89.2	85.6	184.2	107.8	89.1	99.9	142.4	88.2
1988	87.4	87.6	85.2	171.4	111.8	87.2	98.3	137.7	88.0
1989	86.7	85.4	84.3	158.6	116.8	86.1	97.4	138.4	87.2
1990	91.2	91.6	88.8	145.0	122.1	91.3	103.1	143.2	90.5
1991	91.1	90.2	87.9	128.8	122.4	89.5	101.9	140.8	90.0
1992	93.0	92.6	90.8	119.2	119.7	92.8	105.1	136.6	92.2
1993	93.9	95.2	94.1	109.9	105.5	95.3	100.2	114.3	95.4
1994	95.6	95.3	94.3	102.6	99.1	96.0	99.7	109.5	95.8
1995	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
1996	98.0	99.2	97.5	98.2	100.9	100.2	102.5	109.4	97.9
1997	93.7	96.0	92.4	95.6	96.1	96.2	104.3	109.2	93.7
1998	94.0	96.9	93.0	89.9	96.0	97.1	99.4	109.4	93.8
1999	92.6	95.3	91.0	89.5	94.5	95.1	96.4	106.8	92.5
2000	89.3	91.0	86.5	83.7	91.2	90.8	90.9	102.1	89.5
2001	89.8	92.3	87.0	83.1	91.5	91.3	91.4	102.5	90.1
2002	90.7	93.4	88.3	83.9	92.5	92.6	93.2	104.0	90.8
2003	94.2	97.4	93.1	87.1	96.3	97.3	99.8	109.2	94.1
2004	94.6	97.3	93.6	87.4	96.7	97.8	100.6	109.8	94.4
2005	94.4	97.0	93.3	87.3	96.6	97.6	100.3	109.5	94.2

(1) 1960–91 D_90.

NB: The nominal effective exchange rate of a country or of a currency area displays changes in the value of that country's currency relative to the currencies of its principal trading partners. It is calculated as a weighted average of the bilateral exchange rates with those currencies. For double export weights, see footnote 1 on Table 35.

(1995 = 100)

	AT	PT	FI	SE	UK	EU-11 ⁽¹⁾	EU-14 ⁽²⁾
1960	53.1	553.9	152.2	155.8	212.3	79.0	127.1
1965	52.3	550.6	150.6	154.3	212.1	81.0	129.8
1970	52.5	579.6	118.9	160.9	185.2	84.1	124.7
1975	63.1	569.2	114.2	167.2	142.5	99.5	132.2
1980	76.0	269.9	104.3	152.2	139.9	101.9	129.9
1981	74.4	261.3	106.7	149.8	141.7	87.0	107.3
1982	77.5	228.1	108.2	135.5	136.9	84.5	100.4
1983	79.7	180.8	103.0	121.5	128.3	81.2	91.3
1984	79.3	151.7	105.1	123.9	122.6	76.4	83.2
1985	79.9	135.1	105.9	123.6	122.7	75.5	82.1
1986	86.0	125.7	105.8	124.1	115.6	87.4	94.3
1987	89.7	117.0	107.3	123.9	114.8	94.9	103.2
1988	89.5	110.8	109.0	124.3	121.9	92.1	102.2
1989	88.8	107.2	112.6	124.8	117.7	91.1	99.1
1990	91.8	105.5	114.6	123.1	116.4	101.2	112.0
1991	91.3	106.3	110.2	122.8	117.4	98.0	107.9
1992	93.4	110.0	96.2	124.3	112.9	101.3	110.6
1993	96.2	102.8	83.6	101.1	103.6	96.0	96.9
1994	96.3	98.7	90.0	100.0	104.1	94.3	94.8
1995	100.0	100.0	100.0	100.0	100.0	100.0	100.0
1996	98.0	100.5	97.3	109.7	101.6	100.5	102.7
1997	94.9	97.9	94.0	105.2	117.7	91.6	97.5
1998	95.4	96.8	93.5	103.5	122.3	92.1	99.8
1999	94.2	95.6	91.5	101.7	121.6	87.8	93.6
2000	91.5	92.9	87.3	101.2	125.1	78.9	83.0
2001	91.8	93.2	88.4	92.7	122.9	79.8	82.8
2002	92.5	93.9	89.5	94.7	123.8	82.3	86.3
2003	95.5	97.1	94.1	100.5	118.5	91.9	97.2
2004	95.8	97.5	94.5	102.5	117.5	93.0	98.3
2005	95.6	97.4	94.2	101.8	116.7	92.5	97.2

⁽¹⁾ EU-15 excluding DK, LU, SE and UK relative to 11 industrial countries.

⁽²⁾ EU-15 excluding LU relative to eight industrial non-member countries.

Table 53 (Continued)

(1995 = 100)

	CY	CZ	EE	HU	LV	LT	MT	PL	SK
1960	:	:	:	:	:	:	:	:	:
1965	:	:	:	:	:	:	:	:	:
1970	:	:	:	:	:	:	:	:	:
1975	:	:	:	:	:	:	:	:	:
1980	:	:	:	:	:	:	:	:	:
1981	:	:	:	:	:	:	:	:	:
1982	:	:	:	:	:	:	:	:	:
1983	:	:	:	:	:	:	:	:	:
1984	:	:	:	:	:	:	:	:	:
1985	:	:	:	:	:	:	:	:	:
1986	:	:	:	:	:	:	:	:	:
1987	:	:	:	:	:	:	:	:	:
1988	:	:	:	:	:	:	:	:	:
1989	:	:	:	:	:	:	:	:	:
1990	:	:	:	:	:	:	:	:	:
1991	:	:	:	:	:	:	:	:	:
1992	:	:	:	:	:	:	:	:	:
1993	:	:	:	:	:	:	:	:	:
1994	:	:	:	:	:	:	:	:	:
1995	:	:	:	:	:	:	:	:	:
1996	:	:	:	:	:	:	:	:	:
1997	:	:	:	:	:	:	:	:	:
1998	:	:	:	:	:	:	:	:	:
1999	:	:	:	:	:	:	:	:	:
2000	:	:	:	:	:	:	:	:	:
2001	:	:	:	:	:	:	:	:	:
2002	:	:	:	:	:	:	:	:	:
2003	:	:	:	:	:	:	:	:	:
2004	:	:	:	:	:	:	:	:	:
2005	:	:	:	:	:	:	:	:	:

(1995 = 100)

	SI	BG	RO	TR	US	JP
1960	:	:	:	:	82.7	24.1
1965	:	:	:	:	83.7	24.1
1970	:	:	:	:	85.0	24.5
1975	:	:	:	:	73.4	27.1
1980	:	:	:	:	71.0	34.6
1981	:	:	:	:	79.6	39.3
1982	:	:	:	:	94.3	37.7
1983	:	:	:	:	104.3	42.3
1984	:	:	:	:	114.0	44.9
1985	:	:	:	:	121.9	46.4
1986	:	:	:	:	108.1	60.7
1987	:	:	:	:	100.9	66.6
1988	:	:	:	:	97.8	73.9
1989	:	:	:	:	102.3	70.6
1990	:	:	:	:	98.1	63.8
1991	:	:	:	:	97.8	69.4
1992	:	:	:	:	96.3	73.0
1993	:	:	:	:	99.9	87.9
1994	:	:	:	:	99.0	94.9
1995	:	:	:	:	100.0	100.0
1996	:	:	:	:	105.7	87.2
1997	:	:	:	:	114.0	82.3
1998	:	:	:	:	121.0	77.7
1999	:	:	:	:	120.3	90.9
2000	:	:	:	:	125.8	101.7
2001	:	:	:	:	132.2	92.2
2002	:	:	:	:	130.8	87.4
2003	:	:	:	:	119.1	87.2
2004	:	:	:	:	115.6	92.2
2005	:	:	:	:	116.1	94.8

Table 54

General government (% of GDP at market prices)
Taxes linked to imports and production (indirect taxes); general government
ESA 95

(Percentage of gross domestic product at market prices)

	BE	DK	DE (1)	EL	ES	FR	IE	IT	LU
1970	13.9	:	12.5	:	:	:	:	:	:
1971	13.5	17.7	12.5	:	:	:	:	:	:
1972	12.5	18.0	12.5	:	:	:	:	:	:
1973	12.3	15.9	12.1	:	:	:	:	:	:
1974	12.2	14.9	11.6	:	:	:	:	:	:
1975	11.9	14.6	11.5	:	:	:	:	:	:
1976	12.3	15.2	11.5	:	:	:	:	:	:
1977	12.7	16.2	11.5	:	:	:	:	:	:
1978	12.7	17.3	11.6	:	:	14.4	:	:	:
1979	12.6	18.0	11.8	:	:	15.1	:	:	:
1980	11.7	17.7	11.8	:	:	15.0	:	8.4	:
1981	11.8	17.4	11.5	:	:	15.1	:	7.9	:
1982	11.8	16.6	11.3	:	:	15.3	:	8.6	:
1983	12.2	16.8	11.3	:	:	15.3	:	9.3	:
1984	11.9	17.1	11.3	:	:	15.7	:	9.3	:
1985	11.8	17.3	11.1	:	:	15.8	:	9.0	:
1986	11.4	18.6	10.8	:	:	15.4	:	9.1	:
1987	11.7	18.4	10.8	:	:	15.5	:	9.4	:
1988	11.7	18.3	10.7	12.5	:	15.3	:	10.1	:
1989	11.7	17.4	10.9	11.3	:	14.9	:	10.3	:
1990	11.8	16.7	11.0	12.9	:	14.8	14.4	10.7	11.8
1991			11.0						
1991	11.7	16.4	11.1	13.5	:	14.6	14.0	11.1	11.7
1992	11.8	16.3	11.1	14.8	:	14.4	14.0	11.3	12.4
1993	12.1	16.6	11.5	14.0	:	14.7	13.1	12.0	13.1
1994	12.4	17.0	11.8	13.8	:	15.2	14.0	11.8	13.3
1995	12.2	16.9	11.4	13.5	10.2	15.4	13.5	12.1	12.5
1996	12.7	17.3	11.4	14.0	10.2	16.1	13.7	11.8	12.6
1997	12.9	17.5	11.4	14.3	10.5	16.0	13.5	12.4	12.8
1998	12.9	18.2	11.6	14.4	11.1	16.0	13.1	15.3	12.9
1999	13.2	18.1	12.2	15.1	11.7	15.9	13.1	15.1	13.7
2000	13.1	17.2	12.0	15.2	11.7	15.5	13.3	15.0	14.1
2001	12.7	17.3	11.9	14.8	11.4	15.0	12.1	14.5	13.6
2002	13.0	17.4	11.9	14.3	11.6	15.1	12.1	14.6	13.7
2003	13.0	17.2	11.8	14.1	11.8	15.0	12.8	14.5	13.7
2004	13.0	16.9	11.8	13.7	11.7	15.1	12.7	14.6	13.8
2005	13.0	16.8	11.8	13.6	11.7	15.1	12.5	14.6	14.0

(1) 1970–91 D_90.

NB: Member States have provided figures for the last statistical period according to ESA 95 specifications starting from the years mentioned below:

1970: BE, DE, NL, UK; 1976: AT; 1980: IT; 1993: SE;
 1971: DK; 1977: PT; 1988: EL; 1995: ES.
 1975: FI; 1978: FR; 1990: IE, LU;

Taxes on production and imports (D.2) levied by general government consist of compulsory, unrequited payments, which are levied in respect of the production and importation of goods and services, the employment of labour, and the ownership or use of land, buildings or other assets used in production. (Taxes on production and imports are also levied by the institutions of the European Union. However, they are not included in this table.) Taxes on production and imports comprise:

- value-added-type taxes (D.211);
- taxes and duties on imports excluding VAT (D.212);
- taxes on products, except VAT and import taxes (D.214);
- other taxes on production (D.29).

Taxes on products (except VAT and import taxes) (D.214) include, for example, car registration taxes, taxes on entertainment, taxes on insurance premiums, and taxes on lotteries, gambling and betting, other than those on winnings. Other taxes on production (D.29) consist of all taxes that enterprises incur as a result of engaging in production, independently of the quantity or value of the goods and services produced or sold. They include taxes on the total wage bill and payroll taxes, taxes on the use of fixed assets (vehicles, machinery, equipment) for purposes of production, as well as taxes on the ownership or use of land, buildings or other structures utilised by enterprises in production.

Reference: ESA 95, paragraphs 4.14–4.23.

(Percentage of gross domestic product at market prices)

	NL	AT	PT	FI	SE	UK	EU-15 ⁽¹⁾	EUR-12 ⁽²⁾
1970	9.6	:	:	:	:	14.5	:	:
1971	9.8	:	:	:	:	13.3	:	:
1972	10.1	:	:	:	:	12.5	:	:
1973	10.0	:	:	:	:	11.1	:	:
1974	9.5	:	:	:	:	11.5	:	:
1975	9.7	:	:	12.3	:	11.1	:	:
1976	10.1	15.9	:	12.3	:	10.9	:	:
1977	10.9	16.3	11.1	13.3	:	11.3	:	:
1978	10.9	15.8	10.4	13.6	:	11.2	:	:
1979	10.7	15.7	10.2	13.4	:	11.9	:	:
1980	10.3	15.7	11.9	13.3	:	13.2	:	:
1981	9.9	15.8	12.1	13.6	:	13.5	:	:
1982	9.9	15.6	12.5	13.6	:	13.7	:	:
1983	10.0	15.7	13.2	13.5	:	13.3	:	:
1984	10.3	16.3	13.0	14.3	:	13.6	:	:
1985	10.3	16.2	12.7	14.4	:	13.0	:	:
1986	10.6	16.0	13.3	14.9	:	13.1	:	:
1987	11.1	16.1	12.8	15.0	:	13.1	:	:
1988	11.0	16.0	13.4	16.1	:	13.1	:	:
1989	10.3	15.9	12.9	15.9	:	12.6	:	:
1990	10.3	15.6	12.9	15.2	:	12.2	:	:
1991								
1991	10.4	15.4	13.0	15.3	:	13.2	:	:
1992	10.4	15.5	13.8	15.0	:	13.1	:	:
1993	11.2	15.6	13.0	14.6	16.9	12.7	:	:
1994	10.7	15.5	13.6	14.7	16.4	13.1	:	:
1995	10.7	14.2	13.6	13.6	15.6	13.1	12.8	12.5
1996	11.2	14.5	14.0	13.7	16.1	13.0	12.9	12.7
1997	11.4	14.9	13.8	14.3	16.3	13.3	13.1	12.9
1998	11.6	14.9	14.3	14.0	17.1	13.2	13.6	13.5
1999	12.2	15.0	14.8	14.2	18.4	13.6	14.0	13.8
2000	12.1	14.6	14.4	13.6	16.3	13.6	13.7	13.6
2001	12.7	14.6	14.4	13.3	16.4	13.4	13.5	13.3
2002	12.6	14.9	15.0	13.7	17.1	13.5	13.6	13.4
2003	12.8	14.9	14.6	13.8	17.5	13.5	13.6	13.3
2004	12.9	14.9	14.6	13.5	17.5	13.7	13.6	13.4
2005	12.9	14.7	14.6	13.3	17.5	13.8	13.6	13.3

⁽¹⁾ 1970–91 including D_90.⁽²⁾ EU-15 excluding DK, SE and UK; 1970–91 including D_90.

Table 54 (Continued)

(Percentage of gross domestic product at market prices)

	CY	CZ	EE	HU	LV	LT	MT	PL	SK
1970	:	:	:	:	:	:	:	:	:
1971	:	:	:	:	:	:	:	:	:
1972	:	:	:	:	:	:	:	:	:
1973	:	:	:	:	:	:	:	:	:
1974	:	:	:	:	:	:	:	:	:
1975	:	:	:	:	:	:	:	:	:
1976	:	:	:	:	:	:	:	:	:
1977	:	:	:	:	:	:	:	:	:
1978	:	:	:	:	:	:	:	:	:
1979	:	:	:	:	:	:	:	:	:
1980	:	:	:	:	:	:	:	:	:
1981	:	:	:	:	:	:	:	:	:
1982	:	:	:	:	:	:	:	:	:
1983	:	:	:	:	:	:	:	:	:
1984	:	:	:	:	:	:	:	:	:
1985	:	:	:	:	:	:	:	:	:
1986	:	:	:	:	:	:	:	:	:
1987	:	:	:	:	:	:	:	:	:
1988	:	:	:	:	:	:	:	:	:
1989	:	:	:	:	:	:	:	:	:
1990	:	:	:	:	21.9	:	:	:	:
1991	:	:	:	:	12.8	:	:	16.4	:
1992	:	14.8	:	:	7.2	:	:	14.0	:
1993	:	14.9	13.8	:	11.7	9.6	:	16.1	13.4
1994	:	14.6	15.2	:	13.6	11.3	:	16.5	16.5
1995	:	13.8	14.6	17.9	15.2	12.7	:	16.0	15.6
1996	:	13.3	15.0	16.9	13.9	12.1	:	16.1	15.5
1997	:	13.0	15.6	15.6	14.2	15.0	:	15.3	14.4
1998	:	12.2	13.6	15.9	15.2	14.3	:	14.9	13.4
1999	:	12.8	13.1	16.3	14.3	14.0	:	15.4	13.1
2000	:	12.8	14.0	16.2	13.1	12.7	:	14.8	13.0
2001	:	12.0	:	:	12.7	:	:	:	:
2002	:	11.8	:	:	12.3	:	:	:	:
2003	:	:	:	:	:	:	:	:	:
2004	:	:	:	:	:	:	:	:	:
2005	:	:	:	:	:	:	:	:	:

NB: Member States have provided figures for the last statistical period according to ESA 95 specifications starting from the years mentioned below:

1970: BE, DE, NL, UK; 1976: AT; 1980: IT; 1993: SE;
 1971: DK; 1977: PT; 1988: EL; 1995: ES.
 1975: FI; 1978: FR; 1990: IE, LU;

Taxes on production and imports (D.2) levied by general government consist of compulsory, unrequited payments, which are levied in respect of the production and importation of goods and services, the employment of labour, and the ownership or use of land, buildings or other assets used in production. (Taxes on production and imports are also levied by the institutions of the European Union. However, they are not included in this table.) Taxes on production and imports comprise:

- value-added-type taxes (D.211);
- taxes and duties on imports excluding VAT (D.212);
- taxes on products, except VAT and import taxes (D.214);
- other taxes on production (D.29).

Taxes on products (except VAT and import taxes) (D.214) include, for example, car registration taxes, taxes on entertainment, taxes on insurance premiums, and taxes on lotteries, gambling and betting, other than those on winnings. Other taxes on production (D.29) consist of all taxes that enterprises incur as a result of engaging in production, independently of the quantity or value of the goods and services produced or sold. They include taxes on the total wage bill and payroll taxes, taxes on the use of fixed assets (vehicles, machinery, equipment) for purposes of production, as well as taxes on the ownership or use of land, buildings or other structures utilised by enterprises in production.

Reference: ESA 95, paragraphs 4.14–4.23.

(Percentage of gross domestic product at market prices)

	SI	AC-10 ⁽¹⁾	EU-25 ⁽²⁾	BG	RO	TR	US ⁽³⁾	JP
1970	:	:	:	:	:	:	9.2	:
1971	:	:	:	:	:	:	9.3	:
1972	:	:	:	:	:	:	9.1	:
1973	:	:	:	:	:	:	8.8	:
1974	:	:	:	:	:	:	8.7	:
1975	:	:	:	:	:	:	8.7	:
1976	:	:	:	:	:	:	8.4	:
1977	:	:	:	:	:	:	8.2	:
1978	:	:	:	:	:	:	7.8	:
1979	:	:	:	:	:	:	7.4	:
1980	:	:	:	:	:	:	7.7	:
1981	:	:	:	:	:	:	8.0	:
1982	:	:	:	:	:	:	8.0	:
1983	:	:	:	:	:	:	8.0	:
1984	:	:	:	:	:	:	7.9	:
1985	:	:	:	:	:	:	7.9	:
1986	:	:	:	:	:	:	7.9	:
1987	:	:	:	:	:	:	7.9	:
1988	:	:	:	:	:	:	7.8	:
1989	:	:	:	:	:	:	7.7	:
1990	:	:	:	:	:	:	7.8	7.9
1991	:	:	:	:	:	:	8.1	7.3
1992	:	:	:	:	:	:	8.2	7.8
1993	:	:	:	:	:	:	8.2	7.5
1994	:	:	:	:	:	:	8.2	7.6
1995	:	:	:	:	:	:	8.1	7.7
1996	:	:	:	:	:	:	8.0	7.9
1997	:	:	:	:	:	:	7.8	7.8
1998	:	:	:	:	:	:	7.8	8.3
1999	:	:	:	13.2	:	:	7.7	8.4
2000	:	:	:	13.8	:	:	7.7	8.4
2001	:	:	:	:	:	:	7.7	8.5
2002	:	:	:	:	:	:	7.7	8.5
2003	:	:	:	:	:	:	7.7	8.2
2004	:	:	:	:	:	:	7.6	8.2
2005	:	:	:	:	:	:	7.6	8.2

⁽¹⁾ CY, CZ, EE, HU, LV, LT, MT, PL, SK and SI.⁽²⁾ BE, DK, DE, EL, ES, FR, IE, IT, LU, NL, AT, PT, FI, SE, UK, CY, CZ, EE, HU, LV, LT, MT, PL, SK and SI.⁽³⁾ Former definition.

Table 55

General government (% of GDP at market prices)
Current taxes on income and wealth (direct taxes); general government
ESA 95

(Percentage of gross domestic product at market prices)

	BE	DK	DE (1)	EL	ES	FR	IE	IT	LU
1970	10.5	:	11.0	:	:	:	:	:	:
1971	11.2	23.9	11.4	:	:	:	:	:	:
1972	11.8	23.1	11.1	:	:	:	:	:	:
1973	12.9	24.1	12.6	:	:	:	:	:	:
1974	13.8	27.2	13.0	:	:	:	:	:	:
1975	15.6	23.8	12.0	:	:	:	:	:	:
1976	15.2	24.1	12.7	:	:	:	:	:	:
1977	16.5	23.5	13.7	:	:	:	:	:	:
1978	17.4	23.7	12.9	:	:	6.8	:	:	:
1979	17.8	24.0	12.6	:	:	7.1	:	:	:
1980	17.1	25.0	12.7	:	:	7.6	:	9.5	:
1981	17.0	24.9	12.1	:	:	7.8	:	10.3	:
1982	17.9	24.5	12.0	:	:	8.0	:	11.6	:
1983	17.9	25.7	11.9	:	:	8.1	:	12.1	:
1984	18.4	26.7	12.0	:	:	8.4	:	12.3	:
1985	18.1	27.8	12.4	:	:	8.3	:	12.4	:
1986	17.8	28.6	12.1	:	:	8.3	:	12.6	:
1987	17.5	29.0	12.2	:	:	8.3	:	12.7	:
1988	16.9	30.3	12.0	5.2	:	7.9	:	13.2	:
1989	15.4	30.0	12.4	5.0	:	8.0	:	13.9	:
1990	15.7	28.3	11.0	5.5	:	8.2	13.2	14.2	16.8
1991			11.7						
1991	15.4	28.5	11.4	5.7	:	8.5	13.9	14.4	15.2
1992	14.8	29.0	11.7	5.1	:	8.3	14.2	14.7	14.3
1993	15.9	30.1	11.5	5.6	:	8.2	14.9	16.1	16.1
1994	16.1	30.8	11.0	6.8	:	8.5	15.3	15.0	16.7
1995	16.7	30.4	11.1	7.4	10.1	8.5	13.6	14.8	17.5
1996	16.6	30.6	11.5	7.1	10.3	8.9	14.1	15.4	17.9
1997	17.1	30.3	11.2	7.8	10.5	9.5	14.0	16.1	17.4
1998	17.6	29.9	11.5	9.5	10.2	11.7	13.8	14.5	16.4
1999	17.1	30.8	12.0	9.9	10.2	12.2	13.7	15.2	15.7
2000	17.3	29.6	12.5	10.8	10.5	12.2	13.5	14.7	15.5
2001	17.6	29.9	11.1	9.6	10.4	12.5	13.0	15.1	15.6
2002	17.6	29.7	10.8	9.5	10.9	11.6	11.6	14.2	16.3
2003	17.2	29.3	10.7	9.2	10.7	11.4	11.5	13.7	16.3
2004	17.0	29.4	10.7	8.9	10.7	11.2	11.3	13.6	13.9
2005	16.9	29.3	10.7	8.7	10.7	11.2	11.3	13.5	12.9

(1) 1970–91 D_90.

NB: Member States have provided figures for the last statistical period according to ESA 95 specifications starting from the years mentioned below:

1970: BE, DE, NL, UK; 1976: AT; 1980: IT; 1993: SE;
 1971: DK; 1977: PT; 1988: EL; 1995: ES.
 1975: FI; 1978: FR; 1990: IE, LU;

Current taxes on income and wealth (D.5) levied by general government cover all compulsory, unrequited payments, in cash or in kind, levied periodically on the income and wealth of institutional units. They are subdivided into taxes on income, and other current taxes.

Taxes on income (D.51) include:

- taxes on individual or household income (income from employment, property, entrepreneurship, pensions, etc.), including taxes deducted by employees (pay-as-you-earn taxes); taxes on the income of owners of unincorporated enterprises are included here;
- taxes on the income or profits of corporations;
- taxes on holding gains;
- taxes on winnings from lottery or gambling, payable on the amounts received by winners.

Other current taxes (D.59) include:

- current taxes on capital which consist of taxes that are payable periodically on the ownership or use of land or buildings by owners, and current taxes on net wealth and other assets (in particular, valuables);
- poll taxes, levied per adult or per household, independently of income or wealth;
- expenditure taxes, payable on the total expenditures of persons or households;
- payments of households for licences to own or use vehicles, boats or aircraft (not used for business purposes), or for licences to hunt, shoot or fish, etc. (but driving or pilots' licences, television or radio licences, library admission, etc. are not included; they are regarded as purchases of services rendered by government);
- taxes on international transactions (e.g. travel abroad or foreign remittances), except those payable by producers and import duties paid by households.

Reference: ESA 95, paragraphs 4.77–4.80.

(Percentage of gross domestic product at market prices)

	NL	AT	PT	FI	SE	UK	EU-15 ⁽¹⁾	EUR-12 ⁽²⁾
1970	12.7	:	:	:	:	16.8	:	:
1971	13.6	:	:	:	:	16.3	:	:
1972	14.2	:	:	:	:	15.0	:	:
1973	14.3	:	:	:	:	14.9	:	:
1974	14.6	:	:	:	:	17.6	:	:
1975	15.1	:	:	16.3	:	18.2	:	:
1976	14.9	10.6	:	19.0	:	17.3	:	:
1977	14.9	10.8	5.3	17.6	:	16.2	:	:
1978	15.0	12.1	5.4	15.3	:	15.5	:	:
1979	15.2	11.7	5.9	14.3	:	15.0	:	:
1980	15.3	11.9	5.7	14.4	:	15.8	:	:
1981	14.6	12.4	6.5	15.9	:	16.8	:	:
1982	14.5	11.9	6.9	15.7	:	17.3	:	:
1983	13.3	11.5	7.8	15.7	:	16.9	:	:
1984	12.6	11.9	7.6	16.1	:	17.0	:	:
1985	12.4	12.6	7.7	16.7	:	17.1	:	:
1986	13.0	12.6	5.9	17.7	:	16.4	:	:
1987	13.7	12.1	5.3	15.8	:	16.0	:	:
1988	13.9	12.0	6.5	17.2	:	16.1	:	:
1989	13.5	11.1	7.6	16.9	:	16.5	:	:
1990	15.0	11.7	7.7	17.6	:	16.7	:	:
1991								
1991	16.3	12.3	8.5	17.7	:	15.7	:	:
1992	15.3	12.7	9.5	16.7	:	14.8	:	:
1993	16.2	12.8	8.6	15.8	19.3	13.8	:	:
1994	13.4	11.3	8.4	17.2	19.1	14.2	:	:
1995	12.4	12.0	8.9	17.4	19.5	14.9	12.5	11.4
1996	12.9	13.1	9.5	19.0	20.9	14.8	13.0	11.9
1997	12.4	13.5	9.6	18.5	20.9	15.1	13.2	12.1
1998	12.2	13.6	9.3	18.9	21.7	16.3	13.7	12.4
1999	12.2	13.4	9.8	18.9	21.2	16.2	14.0	12.8
2000	12.1	13.3	10.4	21.4	21.2	16.7	14.2	13.0
2001	11.9	15.1	9.8	19.6	22.2	16.8	14.0	12.6
2002	12.0	14.0	9.7	19.4	19.3	15.6	13.3	12.2
2003	11.1	14.0	8.5	18.2	18.9	15.5	13.0	11.9
2004	11.0	14.2	8.1	17.9	19.1	15.6	13.0	11.7
2005	10.9	14.4	8.1	17.9	19.0	15.7	13.0	11.7

⁽¹⁾ 1970–91 including D_90.⁽²⁾ EU-15 excluding DK, SE and UK; 1970–91 including D_90.

Table 55 (Continued)

(Percentage of gross domestic product at market prices)

	CY	CZ	EE	HU	LV	LT	MT	PL	SK
1970	:	:	:	:	:	:	:	:	:
1971	:	:	:	:	:	:	:	:	:
1972	:	:	:	:	:	:	:	:	:
1973	:	:	:	:	:	:	:	:	:
1974	:	:	:	:	:	:	:	:	:
1975	:	:	:	:	:	:	:	:	:
1976	:	:	:	:	:	:	:	:	:
1977	:	:	:	:	:	:	:	:	:
1978	:	:	:	:	:	:	:	:	:
1979	:	:	:	:	:	:	:	:	:
1980	:	:	:	:	:	:	:	:	:
1981	:	:	:	:	:	:	:	:	:
1982	:	:	:	:	:	:	:	:	:
1983	:	:	:	:	:	:	:	:	:
1984	:	:	:	:	:	:	:	:	:
1985	:	:	:	:	:	:	:	:	:
1986	:	:	:	:	:	:	:	:	:
1987	:	:	:	:	:	:	:	:	:
1988	:	:	:	:	:	:	:	:	:
1989	:	:	:	:	:	:	:	:	:
1990	:	:	:	:	12.5	:	:	:	:
1991	:	:	:	11.2	12.2	:	:	12.1	:
1992	:	17.9	:	10.1	8.8	:	:	14.6	:
1993	:	11.5	13.6	10.4	12.8	10.8	:	15.9	9.9
1994	:	10.3	12.5	10.3	7.1	10.3	:	14.5	6.7
1995	:	10.0	11.5	9.4	8.6	9.1	:	14.1	11.6
1996	:	9.2	10.2	9.5	8.4	8.5	:	12.4	10.5
1997	:	8.6	10.3	8.8	9.6	6.7	:	12.3	10.1
1998	:	8.7	11.1	8.9	10.2	9.3	:	11.6	10.0
1999	:	8.6	10.8	9.2	9.7	9.4	:	8.1	9.1
2000	:	9.1	8.6	9.8	9.0	8.7	:	7.7	7.6
2001	:	9.1	:	:	9.0	:	:	:	:
2002	:	10.1	:	:	9.3	:	:	:	:
2003	:	:	:	:	:	:	:	:	:
2004	:	:	:	:	:	:	:	:	:
2005	:	:	:	:	:	:	:	:	:

NB: Member States have provided figures for the last statistical period according to ESA 95 specifications starting from the years mentioned below:

1970: BE, DE, NL, UK; 1976: AT; 1980: IT; 1993: SE;
 1971: DK; 1977: PT; 1988: EL; 1995: ES.
 1975: FI; 1978: FR; 1990: IE, LU;

Current taxes on income and wealth (D.5) levied by general government cover all compulsory, unrequited payments, in cash or in kind, levied periodically on the income and wealth of institutional units. They are subdivided into taxes on income, and other current taxes.

Taxes on income (D.51) include:

- taxes on individual or household income (income from employment, property, entrepreneurship, pensions, etc.), including taxes deducted by employees (pay-as-you-earn taxes); taxes on the income of owners of unincorporated enterprises are included here;
- taxes on the income or profits of corporations;
- taxes on holding gains;
- taxes on winnings from lottery or gambling, payable on the amounts received by winners.

Other current taxes (D.59) include:

- current taxes on capital which consist of taxes that are payable periodically on the ownership or use of land or buildings by owners, and current taxes on net wealth and other assets (in particular, valuables);
- poll taxes, levied per adult or per household, independently of income or wealth;
- expenditure taxes, payable on the total expenditures of persons or households;
- payments of households for licences to own or use vehicles, boats or aircraft (not used for business purposes), or for licences to hunt, shoot or fish, etc. (but driving or pilots' licences, television or radio licences, library admission, etc. are not included; they are regarded as purchases of services rendered by government);
- taxes on international transactions (e.g. travel abroad or foreign remittances), except those payable by producers and import duties paid by households.

Reference: ESA 95, paragraphs 4.77–4.80.

(Percentage of gross domestic product at market prices)

	SI	AC-10 ⁽¹⁾	EU-25 ⁽²⁾	BG	RO	TR	US ⁽³⁾	JP
1970	:	:	:	:	:	:	13.6	:
1971	:	:	:	:	:	:	12.7	:
1972	:	:	:	:	:	:	13.7	:
1973	:	:	:	:	:	:	13.4	:
1974	:	:	:	:	:	:	13.8	:
1975	:	:	:	:	:	:	12.4	:
1976	:	:	:	:	:	:	13.3	:
1977	:	:	:	:	:	:	13.6	:
1978	:	:	:	:	:	:	13.9	:
1979	:	:	:	:	:	:	14.2	:
1980	:	:	:	:	:	:	14.0	:
1981	:	:	:	:	:	:	13.9	:
1982	:	:	:	:	:	:	13.2	:
1983	:	:	:	:	:	:	12.5	:
1984	:	:	:	:	:	:	12.4	:
1985	:	:	:	:	:	:	12.6	:
1986	:	:	:	:	:	:	12.6	:
1987	:	:	:	:	:	:	13.4	:
1988	:	:	:	:	:	:	13.0	:
1989	:	:	:	:	:	:	13.3	:
1990	:	:	:	:	:	:	13.0	13.2
1991	:	:	:	:	:	:	12.5	13.2
1992	:	:	:	:	:	:	12.4	12.4
1993	:	:	:	:	:	:	12.8	11.3
1994	:	:	:	:	:	:	13.0	10.2
1995	:	:	:	:	:	:	13.5	9.7
1996	:	:	:	:	:	:	14.1	9.7
1997	:	:	:	:	:	:	14.6	9.7
1998	:	:	:	:	:	:	15.0	8.4
1999	:	:	:	9.8	:	:	15.3	8.1
2000	:	:	:	9.4	:	:	15.8	8.6
2001	:	:	:	:	:	:	14.9	9.1
2002	:	:	:	:	:	:	12.8	9.1
2003	:	:	:	:	:	:	11.8	9.0
2004	:	:	:	:	:	:	11.2	9.0
2005	:	:	:	:	:	:	11.3	9.0

⁽¹⁾ CY, CZ, EE, HU, LV, LT, MT, PL, SK and SI.⁽²⁾ BE, DK, DE, EL, ES, FR, IE, IT, LU, NL, AT, PT, FI, SE, UK, CY, CZ, EE, HU, LV, LT, MT, PL, SK and SI.⁽³⁾ Former definition.

Table 56

General government (% of GDP at market prices)
Social contributions received; general government
ESA 95

(Percentage of gross domestic product at market prices)

	BE	DK	DE (1)	EL	ES	FR	IE	IT	LU
1970	11.3	:	12.1	:	:	:	:	:	:
1971	11.9	2.4	12.7	:	:	:	:	:	:
1972	12.1	2.5	13.2	:	:	:	:	:	:
1973	12.4	1.7	14.0	:	:	:	:	:	:
1974	12.7	1.5	14.6	:	:	:	:	:	:
1975	13.8	1.5	15.7	:	:	:	:	:	:
1976	13.9	1.5	16.2	:	:	:	:	:	:
1977	14.1	1.5	16.1	:	:	:	:	:	:
1978	14.0	1.5	15.9	:	:	17.8	:	:	:
1979	14.1	1.6	16.0	:	:	18.8	:	:	:
1980	14.0	1.8	16.2	:	:	19.3	:	14.1	:
1981	14.4	2.0	16.8	:	:	19.3	:	13.5	:
1982	14.6	2.3	17.1	:	:	20.0	:	14.1	:
1983	15.1	2.8	16.7	:	:	20.4	:	14.6	:
1984	15.8	2.8	16.7	:	:	20.8	:	13.7	:
1985	16.3	2.8	16.8	:	:	20.8	:	13.8	:
1986	16.6	2.0	16.8	:	:	20.3	:	14.0	:
1987	17.0	2.9	16.9	:	:	20.5	:	13.9	:
1988	16.4	2.2	16.7	10.9	:	20.3	:	14.0	:
1989	16.0	2.2	16.5	11.4	:	20.4	:	13.9	:
1990	16.1	2.3	16.1	11.7	:	20.5	7.1	14.4	12.5
1991			16.3						
1991	16.8	2.3	17.2	11.3	:	20.4	7.4	14.8	12.3
1992	17.0	2.4	17.6	11.1	:	20.7	7.5	15.1	13.0
1993	17.3	2.5	18.2	12.0	:	20.8	7.6	15.3	12.8
1994	17.0	2.8	18.6	12.3	:	20.6	7.3	15.0	12.2
1995	16.8	2.6	18.8	12.6	13.0	20.5	6.8	14.8	12.5
1996	16.7	2.6	19.4	12.9	13.2	20.7	6.3	15.0	12.1
1997	16.5	2.6	19.7	13.3	13.1	20.3	5.9	15.3	11.5
1998	16.6	2.6	19.3	13.6	13.0	18.1	5.6	12.8	11.2
1999	16.4	3.2	19.0	13.7	13.1	18.3	5.6	12.7	11.3
2000	16.1	3.3	18.6	14.0	13.3	18.2	5.7	12.7	11.3
2001	16.4	3.2	18.5	13.9	13.5	18.2	5.8	12.6	12.0
2002	16.7	2.7	18.4	14.0	13.6	18.3	5.7	12.7	12.4
2003	16.6	2.6	18.5	13.9	13.7	18.6	5.9	12.7	12.7
2004	16.5	2.6	18.2	13.7	13.8	18.5	5.9	12.8	12.5
2005	16.4	2.6	18.1	13.7	13.8	18.4	5.8	12.7	12.3

(1) 1970–91 D_90.

NB: Member States have provided figures for the last statistical period according to ESA 95 specifications starting from the years mentioned below:

1970: BE, DE, NL, UK; 1976: AT; 1980: IT; 1993: SE;
1971: DK; 1977: PT; 1988: EL; 1995: ES.
1975: FI; 1978: FR; 1990: IE, LU;

Actual and imputed social contributions (D.611 + D.612) paid to general government, in particular to social security funds. They comprise compulsory and voluntary social contributions of employers and employees as well as of self-employed and non-employed persons.

(Percentage of gross domestic product at market prices)

	NL	AT	PT	FI	SE	UK	EU-15 ⁽¹⁾	EUR-12 ⁽²⁾
1970	13.7	:	:	:	:	6.2	:	:
1971	14.4	:	:	:	:	6.1	:	:
1972	14.7	:	:	:	:	6.4	:	:
1973	15.9	:	:	:	:	6.6	:	:
1974	16.9	:	:	:	:	7.3	:	:
1975	17.5	:	:	10.6	:	8.0	:	:
1976	17.2	12.5	:	11.4	:	8.3	:	:
1977	17.1	12.9	8.7	11.8	:	8.0	:	:
1978	17.4	14.4	7.3	10.8	:	7.5	:	:
1979	18.1	14.3	6.8	10.6	:	7.3	:	:
1980	17.9	14.7	7.6	10.9	:	7.6	:	:
1981	18.4	14.9	8.2	11.1	:	8.0	:	:
1982	19.2	14.8	8.4	10.7	:	8.2	:	:
1983	21.0	14.8	8.1	10.3	:	8.5	:	:
1984	19.9	15.3	7.8	10.5	:	8.5	:	:
1985	19.9	15.6	8.0	11.5	:	8.4	:	:
1986	19.3	15.7	9.3	11.5	:	8.4	:	:
1987	20.0	15.7	9.3	11.5	:	8.1	:	:
1988	19.9	15.9	9.3	11.4	:	8.0	:	:
1989	18.2	15.8	9.2	11.5	:	7.8	:	:
1990	16.5	15.6	9.5	12.9	:	7.5	:	:
1991								
1991	17.3	15.7	10.0	13.7	:	7.6	:	:
1992	17.8	16.3	10.4	14.6	:	7.6	:	:
1993	17.7	16.9	10.7	15.1	13.3	7.6	:	:
1994	18.6	17.3	10.8	15.8	13.4	7.6	:	:
1995	17.2	17.4	11.0	14.8	13.7	7.5	15.7	17.4
1996	16.6	17.5	10.9	14.2	14.7	7.4	15.8	17.6
1997	16.6	17.4	11.2	13.4	14.5	7.4	15.5	17.5
1998	16.4	17.2	11.2	13.1	14.5	7.4	14.6	16.4
1999	17.1	17.2	11.4	13.2	13.2	7.4	14.5	16.4
2000	17.1	16.9	11.8	12.3	14.9	7.6	14.3	16.2
2001	15.3	16.7	11.9	12.6	15.5	7.6	14.2	16.0
2002	14.9	16.6	12.2	12.4	15.6	7.4	14.2	16.0
2003	15.9	16.5	12.4	12.3	15.3	7.9	14.4	16.1
2004	15.8	16.4	12.8	12.3	15.3	8.1	14.4	16.0
2005	15.7	16.3	12.8	12.3	15.2	8.3	14.3	15.9

⁽¹⁾ 1970–91 including D_90.⁽²⁾ EU-15 excluding DK, SE and UK; 1970–91 including D_90.

Table 56 (Continued)

(Percentage of gross domestic product at market prices)

	CY	CZ	EE	HU	LV	LT	MT	PL	SK
1970	:	:	:	:	:	:	:	:	:
1971	:	:	:	:	:	:	:	:	:
1972	:	:	:	:	:	:	:	:	:
1973	:	:	:	:	:	:	:	:	:
1974	:	:	:	:	:	:	:	:	:
1975	:	:	:	:	:	:	:	:	:
1976	:	:	:	:	:	:	:	:	:
1977	:	:	:	:	:	:	:	:	:
1978	:	:	:	:	:	:	:	:	:
1979	:	:	:	:	:	:	:	:	:
1980	:	:	:	:	:	:	:	:	:
1981	:	:	:	:	:	:	:	:	:
1982	:	:	:	:	:	:	:	:	:
1983	:	:	:	:	:	:	:	:	:
1984	:	:	:	:	:	:	:	:	:
1985	:	:	:	:	:	:	:	:	:
1986	:	:	:	:	:	:	:	:	:
1987	:	:	:	:	:	:	:	:	:
1988	:	:	:	:	:	:	:	:	:
1989	:	:	:	:	:	:	:	:	:
1990	:	:	:	:	4.1	:	:	:	:
1991	:	:	:	17.6	10.3	:	:	11.7	:
1992	:	12.6	:	18.7	9.4	:	:	13.6	:
1993	:	15.2	12.6	19.6	13.1	:	:	13.1	12.5
1994	:	15.9	14.1	18.0	12.9	:	:	12.2	12.9
1995	:	16.1	13.8	15.6	13.5	7.8	:	12.5	14.4
1996	:	16.2	12.9	14.3	12.1	8.2	:	12.8	14.4
1997	:	16.2	12.4	14.0	11.9	8.8	:	12.9	13.6
1998	:	15.6	12.3	13.9	12.0	9.3	:	12.8	14.5
1999	:	15.8	13.0	12.5	11.9	9.5	:	15.7	13.8
2000	:	15.8	12.1	12.8	11.2	9.6	:	14.2	14.0
2001	:	15.4	:	:	10.2	:	:	:	:
2002	:	16.0	:	:	10.1	:	:	:	:
2003	:	:	:	:	:	:	:	:	:
2004	:	:	:	:	:	:	:	:	:
2005	:	:	:	:	:	:	:	:	:

NB: Member States have provided figures for the last statistical period according to ESA 95 specifications starting from the years mentioned below:

1970: BE, DE, NL, UK;

1976: AT;

1980: IT;

1993: SE;

1971: DK;

1977: PT;

1988: EL;

1995: ES.

1975: FI;

1978: FR;

1990: IE, LU;

Actual and imputed social contributions (D.611 + D.612) paid to general government, in particular to social security funds. They comprise compulsory and voluntary social contributions of employers and employees as well as of self-employed and non-employed persons.

(Percentage of gross domestic product at market prices)

	SI	AC-10 ⁽¹⁾	EU-25 ⁽²⁾	BG	RO	TR	US ⁽³⁾	JP
1970	:	:	:	:	:	:	4.5	:
1971	:	:	:	:	:	:	4.6	:
1972	:	:	:	:	:	:	4.8	:
1973	:	:	:	:	:	:	5.5	:
1974	:	:	:	:	:	:	5.7	:
1975	:	:	:	:	:	:	5.5	:
1976	:	:	:	:	:	:	5.6	:
1977	:	:	:	:	:	:	5.6	:
1978	:	:	:	:	:	:	5.8	:
1979	:	:	:	:	:	:	6.0	:
1980	:	:	:	:	:	:	6.0	:
1981	:	:	:	:	:	:	6.3	:
1982	:	:	:	:	:	:	6.5	:
1983	:	:	:	:	:	:	6.5	:
1984	:	:	:	:	:	:	6.6	:
1985	:	:	:	:	:	:	6.7	:
1986	:	:	:	:	:	:	6.9	:
1987	:	:	:	:	:	:	6.9	:
1988	:	:	:	:	:	:	7.1	:
1989	:	:	:	:	:	:	7.1	:
1990	:	:	:	:	:	:	7.1	8.8
1991	:	:	:	:	:	:	7.3	8.9
1992	:	:	:	:	:	:	7.3	9.1
1993	:	:	:	:	:	:	7.3	9.2
1994	:	:	:	:	:	:	7.3	9.4
1995	:	:	:	:	:	:	7.3	9.8
1996	:	:	:	:	:	:	7.2	10.0
1997	:	:	:	:	:	:	7.1	10.1
1998	:	:	:	:	:	:	7.1	10.3
1999	:	:	:	11.9	:	:	7.2	10.4
2000	:	:	:	12.2	:	:	7.2	10.4
2001	:	:	:	:	:	:	7.2	10.7
2002	:	:	:	:	:	:	7.2	10.8
2003	:	:	:	:	:	:	7.1	10.8
2004	:	:	:	:	:	:	7.1	10.8
2005	:	:	:	:	:	:	7.1	10.8

⁽¹⁾ CY, CZ, EE, HU, LV, LT, MT, PL, SK and SI.⁽²⁾ BE, DK, DE, EL, ES, FR, IE, IT, LU, NL, AT, PT, FI, SE, UK, CY, CZ, EE, HU, LV, LT, MT, PL, SK and SI.⁽³⁾ Former definition.

Table 57

General government (% of GDP at market prices)
Actual social contributions received; general government
ESA 95

(Percentage of gross domestic product at market prices)

	BE	DK	DE (1)	EL	ES	FR	IE	IT	LU
1970	10.1	:	11.1	:	:	:	:	:	:
1971	10.6	1.6	11.6	:	:	:	:	:	:
1972	10.8	1.7	12.1	:	:	:	:	:	:
1973	11.1	0.8	12.9	:	:	:	:	:	:
1974	11.3	0.6	13.4	:	:	:	:	:	:
1975	12.3	0.6	14.4	:	:	:	:	:	:
1976	12.4	0.6	14.9	:	:	:	:	:	:
1977	12.5	0.6	14.9	:	:	:	:	:	:
1978	12.4	0.6	14.7	:	:	16.0	:	:	:
1979	12.4	0.7	14.8	:	:	17.1	:	:	:
1980	12.3	0.8	15.0	:	:	17.6	:	12.8	:
1981	12.5	1.0	15.6	:	:	17.6	:	12.2	:
1982	12.7	1.2	15.9	:	:	18.2	:	12.7	:
1983	13.3	1.8	15.5	:	:	18.6	:	13.1	:
1984	13.9	1.8	15.5	:	:	19.0	:	12.2	:
1985	14.5	1.9	15.6	:	:	19.0	:	12.2	:
1986	14.8	1.5	15.6	:	:	18.5	:	12.4	:
1987	15.2	1.9	15.7	:	:	18.7	:	12.4	:
1988	14.6	1.4	15.6	8.3	:	18.6	:	12.5	:
1989	14.3	1.4	15.3	8.7	:	18.8	:	12.5	:
1990	14.4	1.5	15.0	9.0	:	18.9	5.3	12.9	11.1
1991			15.3						
1991	14.9	1.5	16.2	8.8	:	18.8	5.4	13.3	11.0
1992	15.1	1.5	16.6	8.7	:	19.0	5.6	13.4	11.6
1993	15.4	1.6	17.2	9.7	:	19.1	5.6	13.5	11.5
1994	15.0	1.6	17.6	10.1	:	18.8	5.4	13.2	10.9
1995	14.8	1.6	17.7	10.5	12.0	18.7	5.0	13.0	11.2
1996	14.6	1.6	18.3	10.8	12.2	18.9	4.6	14.6	11.0
1997	14.5	1.6	18.5	11.1	12.2	18.4	4.4	14.9	10.5
1998	14.5	1.6	18.2	11.5	12.1	16.3	4.2	12.5	10.2
1999	14.4	2.2	17.9	11.4	12.2	16.5	4.3	12.4	10.4
2000	14.1	2.4	17.6	11.8	12.4	16.3	4.4	12.4	10.5
2001	14.4	2.3	17.5	11.7	12.7	16.3	4.5	12.3	11.1
2002	14.7	1.7	17.4	11.8	12.7	16.5	4.4	12.4	11.5
2003	14.5	1.7	17.5	11.7	12.8	16.7	4.6	12.4	11.8
2004	14.4	1.7	17.2	11.5	12.9	16.6	4.6	12.4	11.6
2005	14.3	1.7	17.1	11.5	12.9	16.6	4.5	12.4	11.4

(1) 1970–91 D_90.

NB: Member States have provided figures for the last statistical period according to ESA 95 specifications starting from the years mentioned below:

1970: BE, DE, NL, UK; 1976: AT; 1980: IT; 1993: SE;
1971: DK; 1977: PT; 1988: EL; 1995: ES.
1975: FI; 1978: FR; 1990: IE, LU;

Actual social contributions (D.611) are paid by residents or non-residents to social security funds, i.e. to the general government sector (but also to insurance enterprises or autonomous as well as non-autonomous pension funds administering social insurance schemes) in order to secure the entitlement of social benefits. They consist of employers' actual social contributions, employees' actual social contributions, and social contributions by self-employed and non-employed persons.

Reference: ESA 95, paragraph 4.92.

(Percentage of gross domestic product at market prices)

	NL	AT	PT	FI	SE	UK	EU-15 ⁽¹⁾	EUR-12 ⁽²⁾
1970	12.2	:	:	:	:	5.7	:	:
1971	12.9	:	:	:	:	5.5	:	:
1972	13.1	:	:	:	:	5.8	:	:
1973	14.4	:	:	:	:	5.9	:	:
1974	15.2	:	:	:	:	6.6	:	:
1975	15.7	:	:	9.1	:	7.3	:	:
1976	15.4	10.6	:	9.8	:	7.5	:	:
1977	15.3	11.0	8.3	10.2	:	7.2	:	:
1978	15.5	12.4	6.9	9.2	:	6.7	:	:
1979	16.1	12.4	6.4	9.1	:	6.5	:	:
1980	16.2	12.7	7.1	9.3	:	6.7	:	:
1981	16.7	12.9	7.7	9.5	:	7.0	:	:
1982	17.6	12.8	7.7	9.0	:	7.3	:	:
1983	19.5	12.7	7.4	8.6	:	7.6	:	:
1984	18.5	13.1	7.1	8.8	:	7.6	:	:
1985	18.6	13.5	7.2	9.7	:	7.5	:	:
1986	18.0	13.5	8.5	9.7	:	7.6	:	:
1987	18.7	13.5	8.4	9.7	:	7.3	:	:
1988	18.6	13.7	8.4	10.6	:	7.3	:	:
1989	16.9	13.6	8.3	10.7	:	7.1	:	:
1990	15.2	13.4	8.6	12.1	:	6.8	:	:
1991								
1991	16.0	13.5	9.0	13.4	:	6.8	:	:
1992	16.6	14.1	9.3	14.3	:	6.7	:	:
1993	16.5	14.6	9.5	14.8	12.9	6.8	:	:
1994	17.3	15.1	9.7	15.6	12.7	6.8	:	:
1995	16.0	15.2	10.1	14.6	13.1	6.8	14.4	16.0
1996	15.5	15.3	10.2	14.0	14.2	6.7	14.7	16.4
1997	15.5	15.3	10.5	13.2	14.0	6.8	14.4	16.3
1998	15.3	15.2	10.5	13.0	14.0	6.7	13.5	15.3
1999	16.0	15.2	10.6	13.2	12.7	6.8	13.4	15.2
2000	16.0	14.9	10.9	12.3	14.3	6.9	13.3	15.0
2001	14.3	14.9	11.0	12.6	14.9	7.0	13.2	14.9
2002	13.9	14.8	11.3	12.4	15.0	6.7	13.1	14.9
2003	14.8	14.6	11.5	12.3	14.7	7.4	13.4	15.0
2004	14.7	14.6	11.8	12.3	14.7	7.6	13.4	14.9
2005	14.6	14.5	11.8	12.3	14.6	7.8	13.3	14.8

⁽¹⁾ 1970–91 including D_90.⁽²⁾ EU-15 excluding DK, SE and UK; 1970–91 including D_90.

Table 57 (Continued)

(Percentage of gross domestic product at market prices)

	CY	CZ	EE	HU	LV	LT	MT	PL	SK
1970	:	:	:	:	:	:	:	:	:
1971	:	:	:	:	:	:	:	:	:
1972	:	:	:	:	:	:	:	:	:
1973	:	:	:	:	:	:	:	:	:
1974	:	:	:	:	:	:	:	:	:
1975	:	:	:	:	:	:	:	:	:
1976	:	:	:	:	:	:	:	:	:
1977	:	:	:	:	:	:	:	:	:
1978	:	:	:	:	:	:	:	:	:
1979	:	:	:	:	:	:	:	:	:
1980	:	:	:	:	:	:	:	:	:
1981	:	:	:	:	:	:	:	:	:
1982	:	:	:	:	:	:	:	:	:
1983	:	:	:	:	:	:	:	:	:
1984	:	:	:	:	:	:	:	:	:
1985	:	:	:	:	:	:	:	:	:
1986	:	:	:	:	:	:	:	:	:
1987	:	:	:	:	:	:	:	:	:
1988	:	:	:	:	:	:	:	:	:
1989	:	:	:	:	:	:	:	:	:
1990	:	:	:	:	4.1	:	:	:	:
1991	:	:	:	:	10.3	:	:	11.7	:
1992	:	12.6	:	:	9.4	:	:	13.6	:
1993	:	15.2	12.6	:	13.0	:	:	13.1	12.2
1994	:	15.9	14.1	:	12.8	:	:	12.2	12.5
1995	:	16.1	13.8	:	13.4	7.8	:	12.5	14.3
1996	:	16.2	12.9	:	12.1	8.2	:	12.8	14.3
1997	:	16.2	12.4	:	11.8	8.8	:	12.9	13.6
1998	:	15.6	12.3	:	11.9	9.3	:	12.8	14.4
1999	:	15.8	13.0	:	11.6	9.5	:	15.7	13.7
2000	:	15.8	12.1	:	11.0	9.6	:	14.2	13.9
2001	:	15.4	:	:	10.0	:	:	:	:
2002	:	16.0	:	:	10.0	:	:	:	:
2003	:	:	:	:	:	:	:	:	:
2004	:	:	:	:	:	:	:	:	:
2005	:	:	:	:	:	:	:	:	:

NB: Member States have provided figures for the last statistical period according to ESA 95 specifications starting from the years mentioned below:

1970: BE, DE, NL, UK; 1976: AT; 1980: IT; 1993: SE;
 1971: DK; 1977: PT; 1988: EL; 1995: ES.
 1975: FI; 1978: FR; 1990: IE, LU;

Actual social contributions (D.611) are paid by residents or non-residents to social security funds, i.e. to the general government sector (but also to insurance enterprises or autonomous as well as non-autonomous pension funds administering social insurance schemes) in order to secure the entitlement of social benefits. They consist of employers' actual social contributions, employees' actual social contributions, and social contributions by self-employed and non-employed persons.

Reference: ESA 95, paragraph 4.92.

(Percentage of gross domestic product at market prices)

	SI	AC-10 ⁽¹⁾	EU-25 ⁽²⁾	BG	RO	TR	US ⁽³⁾	JP
1970	:	:	:	:	:	:	:	:
1971	:	:	:	:	:	:	:	:
1972	:	:	:	:	:	:	:	:
1973	:	:	:	:	:	:	:	:
1974	:	:	:	:	:	:	:	:
1975	:	:	:	:	:	:	:	:
1976	:	:	:	:	:	:	:	:
1977	:	:	:	:	:	:	:	:
1978	:	:	:	:	:	:	:	:
1979	:	:	:	:	:	:	:	:
1980	:	:	:	:	:	:	:	:
1981	:	:	:	:	:	:	:	:
1982	:	:	:	:	:	:	:	:
1983	:	:	:	:	:	:	:	:
1984	:	:	:	:	:	:	:	:
1985	:	:	:	:	:	:	:	:
1986	:	:	:	:	:	:	:	:
1987	:	:	:	:	:	:	:	:
1988	:	:	:	:	:	:	:	:
1989	:	:	:	:	:	:	:	:
1990	:	:	:	:	:	:	:	8.3
1991	:	:	:	:	:	:	:	8.4
1992	:	:	:	:	:	:	:	8.6
1993	:	:	:	:	:	:	:	8.7
1994	:	:	:	:	:	:	:	8.9
1995	:	:	:	:	:	:	:	9.4
1996	:	:	:	:	:	:	:	9.5
1997	:	:	:	:	:	:	:	9.7
1998	:	:	:	:	:	:	:	9.9
1999	:	:	:	11.6	:	:	:	9.9
2000	:	:	:	11.7	:	:	:	9.9
2001	:	:	:	:	:	:	:	10.2
2002	:	:	:	:	:	:	:	10.2
2003	:	:	:	:	:	:	:	10.2
2004	:	:	:	:	:	:	:	10.2
2005	:	:	:	:	:	:	:	10.2

⁽¹⁾ CY, CZ, EE, HU, LV, LT, MT, PL, SK and SI.⁽²⁾ BE, DK, DE, EL, ES, FR, IE, IT, LU, NL, AT, PT, FI, SE, UK, CY, CZ, EE, HU, LV, LT, MT, PL, SK and SI.⁽³⁾ Former definition.

Table 58

General government (% of GDP at market prices)
Other current revenue; general government
ESA 95

(Percentage of gross domestic product at market prices)

	BE	DK	DE (1)	EL	ES	FR	IE	IT	LU
1970	4.3	:	2.4	:	:	:	:	:	:
1971	4.0	4.0	2.5	:	:	:	:	:	:
1972	3.7	4.0	2.5	:	:	:	:	:	:
1973	3.7	3.5	2.5	:	:	:	:	:	:
1974	3.5	4.4	2.5	:	:	:	:	:	:
1975	4.0	4.8	2.5	:	:	:	:	:	:
1976	3.9	5.1	2.6	:	:	:	:	:	:
1977	4.0	5.3	2.5	:	:	:	:	:	:
1978	3.9	5.6	2.8	:	:	3.4	:	:	:
1979	4.0	5.9	2.8	:	:	3.3	:	:	:
1980	4.4	6.6	3.0	:	:	3.5	:	2.6	:
1981	4.8	6.9	3.4	:	:	3.7	:	2.8	:
1982	5.1	7.1	3.9	:	:	3.9	:	2.6	:
1983	4.6	7.3	3.8	:	:	4.0	:	2.7	:
1984	4.4	7.7	3.8	:	:	3.9	:	2.7	:
1985	4.3	7.4	3.8	:	:	4.1	:	2.8	:
1986	3.9	7.4	3.6	:	:	4.1	:	3.3	:
1987	3.6	6.8	3.3	:	:	4.0	:	2.8	:
1988	3.4	7.3	3.0	2.3	:	3.8	:	2.8	:
1989	3.4	7.5	3.5	2.3	:	3.8	:	2.8	:
1990	3.5	7.6	3.4	2.4	:	3.9	3.3	3.1	7.8
1991			3.9						
1991	3.5	7.4	3.4	2.9	:	4.2	4.1	3.2	7.1
1992	3.4	8.1	3.9	3.3	:	4.1	3.9	2.8	7.2
1993	3.4	8.5	3.8	4.0	:	4.2	3.8	3.1	5.8
1994	3.1	7.5	3.9	4.8	:	3.9	3.4	2.9	5.7
1995	3.1	6.8	3.5	4.5	4.1	3.7	2.8	3.1	5.6
1996	3.2	7.1	3.4	4.4	4.2	4.0	2.9	3.2	5.4
1997	3.0	6.7	3.2	4.8	4.0	3.9	2.7	3.2	5.3
1998	3.0	6.6	3.1	4.1	3.7	3.7	2.5	3.2	5.1
1999	2.8	6.0	3.0	3.9	3.6	3.6	2.2	3.3	4.7
2000	2.9	5.8	2.9	3.6	3.4	3.6	2.2	3.0	4.5
2001	3.0	6.1	3.1	4.2	3.6	3.7	2.3	3.2	4.8
2002	2.9	5.7	3.0	4.1	3.4	3.6	2.2	3.1	4.8
2003	3.0	5.6	2.9	4.0	3.4	3.8	2.2	3.0	5.1
2004	3.1	5.4	2.8	3.7	3.4	3.9	2.2	3.0	4.9
2005	3.1	5.3	2.7	3.6	3.5	3.9	2.2	3.0	4.8

(1) 1970–91 D_90.

NB: Member States have provided figures for the last statistical period according to ESA 95 specifications starting from the years mentioned below:

1970: BE, DE, NL, UK; 1976: AT; 1980: IT; 1993: SE;
 1971: DK; 1977: PT; 1988: EL; 1995: ES.
 1975: FI; 1978: FR; 1990: IE, LU;

Other current revenue of general government is the sum of:
 Gross operating surplus (B.2g)
 + Property income (D.4), receivable
 + other current transfers (D.7), receivable
 (consolidated).

Regarding the 'other current transfers', of particular importance are transfers connected with current international cooperation, non-life insurance claims and miscellaneous current transfers. The last include refunds of households or corporations to general government, fines and penalties, etc.

Reference: ESA 95, paragraph 4.109 et seq.

(Percentage of gross domestic product at market prices)

	NL	AT	PT	FI	SE	UK	EU-15 ⁽¹⁾	EUR-12 ⁽²⁾
1970	4.9	:	:	:	:	4.9	:	:
1971	4.7	:	:	:	:	5.0	:	:
1972	4.9	:	:	:	:	4.8	:	:
1973	4.8	:	:	:	:	4.9	:	:
1974	5.3	:	:	:	:	5.5	:	:
1975	6.1	:	:	3.6	:	5.1	:	:
1976	7.1	4.5	:	3.9	:	5.4	:	:
1977	7.4	4.5	2.3	4.1	:	5.2	:	:
1978	7.3	4.8	2.3	4.3	:	4.9	:	:
1979	8.0	4.8	2.9	4.3	:	4.9	:	:
1980	8.6	5.2	2.3	4.3	:	5.3	:	:
1981	9.8	5.6	2.7	4.6	:	5.6	:	:
1982	9.9	5.5	3.1	4.8	:	5.7	:	:
1983	9.9	5.4	3.7	5.1	:	5.1	:	:
1984	10.5	5.5	3.4	5.3	:	5.3	:	:
1985	11.1	5.5	3.0	5.5	:	5.3	:	:
1986	9.2	5.5	3.9	5.5	:	4.4	:	:
1987	7.9	5.6	4.2	5.5	:	4.1	:	:
1988	7.1	5.6	4.1	5.4	:	3.9	:	:
1989	7.1	5.7	4.0	5.6	:	3.9	:	:
1990	7.2	5.8	3.7	6.3	:	3.7	:	:
1991								
1991	7.6	5.7	4.1	7.4	:	3.9	:	:
1992	7.2	6.1	5.2	8.2	:	3.1	:	:
1993	7.0	5.9	4.9	8.6	9.1	3.1	:	:
1994	6.4	5.7	3.5	6.6	8.3	2.9	:	:
1995	6.0	5.7	4.1	7.3	8.2	2.8	3.9	3.8
1996	5.8	5.2	4.3	6.8	7.8	3.0	3.9	3.8
1997	5.5	3.8	4.0	6.2	6.9	2.6	3.6	3.7
1998	5.0	3.6	4.0	6.0	6.9	2.6	3.5	3.5
1999	4.7	3.6	4.0	5.4	6.1	2.7	3.4	3.4
2000	4.8	3.5	3.6	6.2	5.9	2.5	3.3	3.4
2001	5.3	4.4	3.7	6.4	5.0	2.7	3.5	3.5
2002	4.9	4.3	4.0	6.1	5.0	2.3	3.3	3.4
2003	4.8	4.2	4.0	6.1	7.2	2.3	3.4	3.4
2004	4.5	4.1	4.4	6.0	7.1	2.3	3.4	3.4
2005	4.4	4.0	4.5	5.9	6.9	2.3	3.3	3.4

⁽¹⁾ 1970–91 including D_90.⁽²⁾ EU-15 excluding DK, SE and UK; 1970–91 including D_90.

Table 58 (Continued)

(Percentage of gross domestic product at market prices)

	CY	CZ	EE	HU	LV	LT	MT	PL	SK
1970	:	:	:	:	:	:	:	:	:
1971	:	:	:	:	:	:	:	:	:
1972	:	:	:	:	:	:	:	:	:
1973	:	:	:	:	:	:	:	:	:
1974	:	:	:	:	:	:	:	:	:
1975	:	:	:	:	:	:	:	:	:
1976	:	:	:	:	:	:	:	:	:
1977	:	:	:	:	:	:	:	:	:
1978	:	:	:	:	:	:	:	:	:
1979	:	:	:	:	:	:	:	:	:
1980	:	:	:	:	:	:	:	:	:
1981	:	:	:	:	:	:	:	:	:
1982	:	:	:	:	:	:	:	:	:
1983	:	:	:	:	:	:	:	:	:
1984	:	:	:	:	:	:	:	:	:
1985	:	:	:	:	:	:	:	:	:
1986	:	:	:	:	:	:	:	:	:
1987	:	:	:	:	:	:	:	:	:
1988	:	:	:	:	:	:	:	:	:
1989	:	:	:	:	:	:	:	:	:
1990	:	:	:	:	4.6	:	:	:	:
1991	:	:	:	:	0.8	:	:	6.3	:
1992	:	4.1	:	:	1.7	:	:	7.7	:
1993	:	5.2	10.4	:	4.9	:	:	6.3	11.1
1994	:	4.9	9.7	:	8.4	:	:	3.8	13.5
1995	:	4.5	7.9	:	4.8	6.5	:	2.9	13.8
1996	:	4.7	6.5	:	9.7	7.0	:	2.7	12.9
1997	:	4.8	6.7	:	6.1	7.8	:	3.0	19.6
1998	:	4.1	10.4	:	8.2	5.6	:	2.8	19.2
1999	:	4.0	15.8	:	6.3	5.0	:	2.8	15.2
2000	:	3.5	14.0	:	7.3	5.9	:	4.4	15.1
2001	:	4.0	:	:	6.5	:	:	:	:
2002	:	3.7	:	:	8.1	:	:	:	:
2003	:	:	:	:	:	:	:	:	:
2004	:	:	:	:	:	:	:	:	:
2005	:	:	:	:	:	:	:	:	:

NB: Member States have provided figures for the last statistical period according to ESA 95 specifications starting from the years mentioned below:

1970: BE, DE, NL, UK;

1976: AT;

1980: IT;

1993: SE;

1971: DK;

1977: PT;

1988: EL;

1995: ES.

1975: FI;

1978: FR;

1990: IE, LU;

Other current revenue of general government is the sum of:

Gross operating surplus (B.2g)

+ Property income (D.4), receivable

+ other current transfers (D.7), receivable

(consolidated).

Regarding the 'other current transfers', of particular importance are transfers connected with current international cooperation, non-life insurance claims and miscellaneous current transfers. The last include refunds of households or corporations to general government, fines and penalties, etc.

Reference: ESA 95, paragraph 4.109 et seq.

(Percentage of gross domestic product at market prices)

	SI	AC-10 ⁽¹⁾	EU-25 ⁽²⁾	BG	RO	TR	US ⁽³⁾	JP
1970	:	:	:	:	:	:	:	:
1971	:	:	:	:	:	:	:	:
1972	:	:	:	:	:	:	:	:
1973	:	:	:	:	:	:	2.0	:
1974	:	:	:	:	:	:	2.2	:
1975	:	:	:	:	:	:	2.1	:
1976	:	:	:	:	:	:	2.0	:
1977	:	:	:	:	:	:	2.0	:
1978	:	:	:	:	:	:	2.1	:
1979	:	:	:	:	:	:	2.3	:
1980	:	:	:	:	:	:	2.5	:
1981	:	:	:	:	:	:	2.7	:
1982	:	:	:	:	:	:	3.0	:
1983	:	:	:	:	:	:	3.0	:
1984	:	:	:	:	:	:	3.0	:
1985	:	:	:	:	:	:	3.1	:
1986	:	:	:	:	:	:	3.2	:
1987	:	:	:	:	:	:	3.1	:
1988	:	:	:	:	:	:	3.1	:
1989	:	:	:	:	:	:	3.1	:
1990	:	:	:	:	:	:	3.0	4.0
1991	:	:	:	:	:	:	3.1	4.1
1992	:	:	:	:	:	:	2.9	4.0
1993	:	:	:	:	:	:	2.7	4.0
1994	:	:	:	:	:	:	2.7	4.1
1995	:	:	:	:	:	:	2.8	4.2
1996	:	:	:	:	:	:	2.8	4.2
1997	:	:	:	:	:	:	2.8	4.2
1998	:	:	:	:	:	:	2.6	4.3
1999	:	:	:	11.9	:	:	2.7	4.4
2000	:	:	:	13.7	:	:	2.7	4.4
2001	:	:	:	:	:	:	2.7	4.4
2002	:	:	:	:	:	:	2.8	4.4
2003	:	:	:	:	:	:	3.4	4.4
2004	:	:	:	:	:	:	3.4	4.4
2005	:	:	:	:	:	:	3.4	4.5

⁽¹⁾ CY, CZ, EE, HU, LV, LT, MT, PL, SK and SI.⁽²⁾ BE, DK, DE, EL, ES, FR, IE, IT, LU, NL, AT, PT, FI, SE, UK, CY, CZ, EE, HU, LV, LT, MT, PL, SK and SI.⁽³⁾ Former definition.

Table 59

General government (% of GDP at market prices)
Total current revenue; general government
ESA 95

(Percentage of gross domestic product at market prices)

	BE	DK	DE (1)	EL	ES	FR	IE	IT	LU
1970	40.2	:	38.0	:	:	:	:	:	:
1971	40.6	48.0	39.1	:	:	:	:	:	:
1972	40.2	47.6	39.3	:	:	:	:	:	:
1973	41.3	45.1	41.2	:	:	:	:	:	:
1974	42.2	48.1	41.6	:	:	:	:	:	:
1975	45.3	44.7	41.7	:	:	:	:	:	:
1976	45.3	45.9	43.0	:	:	:	:	:	:
1977	47.2	46.5	43.7	:	:	:	:	:	:
1978	48.0	48.2	43.3	:	:	42.4	:	:	:
1979	48.5	49.5	43.2	:	:	44.4	:	:	:
1980	47.2	51.2	43.7	:	:	45.4	:	34.7	:
1981	48.0	51.2	43.8	:	:	45.9	:	34.5	:
1982	49.4	50.5	44.3	:	:	47.2	:	37.0	:
1983	49.8	52.6	43.7	:	:	47.8	:	38.7	:
1984	50.4	54.3	43.8	:	:	48.8	:	38.0	:
1985	50.4	55.3	44.1	:	:	49.0	:	38.1	:
1986	49.7	56.6	43.3	:	:	48.1	:	39.0	:
1987	49.9	57.2	43.1	:	:	48.3	:	38.9	:
1988	48.4	58.1	42.4	30.9	:	47.3	:	40.0	:
1989	46.4	57.0	43.3	30.1	:	47.2	:	40.8	:
1990	47.1	55.0	41.6	32.5	:	47.5	38.0	42.4	48.8
1991			43.0						
1991	47.4	54.6	43.0	33.3	:	47.6	39.3	43.5	46.3
1992	46.9	55.8	44.3	34.3	:	47.5	39.7	43.8	46.9
1993	48.7	57.8	44.9	35.6	:	48.0	39.4	46.5	47.9
1994	48.7	58.1	45.4	37.7	:	48.2	40.0	44.8	47.9
1995	48.8	56.8	44.8	38.1	37.4	48.1	36.7	44.8	48.2
1996	49.3	57.7	45.7	38.4	37.8	49.7	37.0	45.5	48.1
1997	49.4	57.1	45.5	40.1	38.0	49.7	36.1	47.2	47.1
1998	50.0	57.4	45.5	41.5	38.0	49.4	35.0	45.9	45.6
1999	49.5	58.1	46.2	42.5	38.6	50.0	34.6	46.3	45.3
2000	49.4	55.8	46.1	43.5	38.8	49.4	34.6	45.5	45.4
2001	49.7	56.5	44.5	42.4	38.9	49.4	33.2	45.3	45.9
2002	50.2	55.5	44.1	41.8	39.6	48.6	31.6	44.6	47.2
2003	49.7	54.7	43.9	41.2	39.6	48.8	32.3	44.0	47.7
2004	49.6	54.4	43.5	40.0	39.6	48.8	32.1	43.9	45.2
2005	49.4	54.0	43.3	39.6	39.7	48.7	31.8	43.7	43.9

(1) 1970–91 D_90.

NB: Member States have provided figures for the last statistical period according to ESA 95 specifications starting from the years mentioned below:

1970: BE, DE, NL, UK; 1976: AT; 1980: IT; 1993: SE;
 1971: DK; 1977: PT; 1988: EL; 1995: ES.
 1975: FI; 1978: FR; 1990: IE, LU;

Total current revenue of general government is the sum of:

Gross operating surplus (B.2g)
 + Property income (D.4), receivable
 + Other current transfers (D.7), receivable
 + Taxes on production and imports (D.2), receivable
 + Current taxes on income and wealth (D.5), receivable
 + Social contributions (D.61), receivable
 (consolidated).

(Percentage of gross domestic product at market prices)

	NL	AT	PT	FI	SE	UK	EU-15 ⁽¹⁾	EUR-12 ⁽²⁾
1970	40.9	:	:	:	:	42.5	:	:
1971	42.5	:	:	:	:	40.7	:	:
1972	43.9	:	:	:	:	38.7	:	:
1973	45.1	:	:	:	:	37.5	:	:
1974	46.3	:	:	:	:	41.9	:	:
1975	48.4	:	:	42.8	:	42.5	:	:
1976	49.2	43.5	:	46.6	:	41.9	:	:
1977	50.3	44.6	27.4	46.9	:	40.7	:	:
1978	50.7	47.1	25.4	44.0	:	39.1	:	:
1979	51.9	46.6	25.8	42.6	:	39.1	:	:
1980	52.0	47.5	27.5	42.9	:	41.8	:	:
1981	52.7	48.8	29.4	45.2	:	43.9	:	:
1982	53.6	47.8	30.8	44.7	:	44.9	:	:
1983	54.2	47.4	32.8	44.7	:	43.8	:	:
1984	53.3	49.0	31.9	46.2	:	44.3	:	:
1985	53.7	50.0	31.3	48.1	:	43.8	:	:
1986	52.2	49.7	32.4	49.6	:	42.4	:	:
1987	52.7	49.6	31.5	47.8	:	41.2	:	:
1988	51.9	49.6	33.3	50.0	:	41.1	:	:
1989	49.1	48.4	33.7	49.9	:	40.8	:	:
1990	49.0	48.6	33.7	52.0	:	40.1	:	:
1991								
1991	51.5	49.1	35.5	54.1	:	40.4	:	:
1992	50.8	50.7	38.9	54.5	:	38.6	:	:
1993	52.1	51.2	37.2	54.1	58.6	37.2	:	:
1994	49.0	49.8	36.3	54.4	57.1	37.7	:	:
1995	46.3	49.4	37.6	53.0	57.1	38.3	44.8	45.2
1996	46.5	50.3	38.7	53.8	59.5	38.1	45.6	46.0
1997	45.9	49.5	38.6	52.4	58.6	38.5	45.5	46.2
1998	45.2	49.2	38.9	51.9	60.3	39.5	45.4	45.8
1999	46.2	49.1	40.0	51.7	58.9	39.9	45.8	46.3
2000	46.1	48.3	40.3	53.5	58.3	40.3	45.6	46.1
2001	45.2	50.8	39.8	51.9	59.1	40.5	45.1	45.4
2002	44.4	49.8	40.9	51.5	56.9	38.8	44.4	44.9
2003	44.6	49.5	39.5	50.3	59.0	39.3	44.4	44.7
2004	44.1	49.6	39.9	49.7	59.0	39.7	44.3	44.5
2005	43.9	49.4	40.0	49.4	58.7	40.0	44.2	44.3

⁽¹⁾ 1970–91 including D_90.⁽²⁾ EU-15 excluding DK, SE and UK; 1970–91 including D_90.

Table 59 (Continued)

(Percentage of gross domestic product at market prices)

	CY	CZ	EE	HU	LV	LT	MT	PL	SK
1970	:	:	:	:	:	:	:	:	:
1971	:	:	:	:	:	:	:	:	:
1972	:	:	:	:	:	:	:	:	:
1973	:	:	:	:	:	:	:	:	:
1974	:	:	:	:	:	:	:	:	:
1975	:	:	:	:	:	:	:	:	:
1976	:	:	:	:	:	:	:	:	:
1977	:	:	:	:	:	:	:	:	:
1978	:	:	:	:	:	:	:	:	:
1979	:	:	:	:	:	:	:	:	:
1980	:	:	:	:	:	:	:	:	:
1981	:	:	:	:	:	:	:	:	:
1982	:	:	:	:	:	:	:	:	:
1983	:	:	:	:	:	:	:	:	:
1984	:	:	:	:	:	:	:	:	:
1985	:	:	:	:	:	:	:	:	:
1986	:	:	:	:	:	:	:	:	:
1987	:	:	:	:	:	:	:	:	:
1988	:	:	:	:	:	:	:	:	:
1989	:	:	:	:	:	:	:	:	:
1990	:	:	:	:	43.1	:	:	:	:
1991	:	:	:	:	36.0	:	:	46.4	:
1992	:	49.4	:	:	27.1	:	:	49.9	:
1993	:	46.7	50.4	:	42.5	:	:	51.4	47.0
1994	:	45.7	51.5	:	41.9	:	:	47.0	49.6
1995	:	44.4	47.8	:	42.1	36.0	:	45.4	55.4
1996	:	43.4	44.5	:	44.1	35.8	:	44.1	53.3
1997	:	42.7	45.1	:	41.8	38.3	:	43.5	57.7
1998	:	40.6	47.5	:	45.6	38.5	:	42.2	57.2
1999	:	41.3	52.7	:	42.2	37.9	:	42.0	51.1
2000	:	41.1	48.7	:	40.7	36.8	:	41.1	49.7
2001	:	40.5	:	:	38.4	:	:	:	:
2002	:	41.5	:	:	39.8	:	:	:	:
2003	:	:	:	:	:	:	:	:	:
2004	:	:	:	:	:	:	:	:	:
2005	:	:	:	:	:	:	:	:	:

NB: Member States have provided figures for the last statistical period according to ESA 95 specifications starting from the years mentioned below:

1970: BE, DE, NL, UK;

1976: AT;

1980: IT;

1993: SE;

1971: DK;

1977: PT;

1988: EL;

1995: ES.

1975: FI;

1978: FR;

1990: IE, LU;

Total current revenue of general government is the sum of:

Gross operating surplus (B.2g)

+ Property income (D.4), receivable

+ Other current transfers (D.7), receivable

+ Taxes on production and imports (D.2), receivable

+ Current taxes on income and wealth (D.5), receivable

+ Social contributions (D.61), receivable

(consolidated).

(Percentage of gross domestic product at market prices)

	SI	AC-10 ⁽¹⁾	EU-25 ⁽²⁾	BG	RO	TR	US ⁽³⁾	JP
1970	:	:	:	:	:	:	:	:
1971	:	:	:	:	:	:	:	:
1972	:	:	:	:	:	:	:	:
1973	:	:	:	:	:	:	29.7	:
1974	:	:	:	:	:	:	30.5	:
1975	:	:	:	:	:	:	28.7	:
1976	:	:	:	:	:	:	29.3	:
1977	:	:	:	:	:	:	29.5	:
1978	:	:	:	:	:	:	29.7	:
1979	:	:	:	:	:	:	29.9	:
1980	:	:	:	:	:	:	30.2	:
1981	:	:	:	:	:	:	31.0	:
1982	:	:	:	:	:	:	30.6	:
1983	:	:	:	:	:	:	30.0	:
1984	:	:	:	:	:	:	29.9	:
1985	:	:	:	:	:	:	30.4	:
1986	:	:	:	:	:	:	30.6	:
1987	:	:	:	:	:	:	31.2	:
1988	:	:	:	:	:	:	31.0	:
1989	:	:	:	:	:	:	31.2	:
1990	:	:	:	:	:	:	31.0	33.9
1991	:	:	:	:	:	:	31.0	33.5
1992	:	:	:	:	:	:	30.7	33.3
1993	:	:	:	:	:	:	31.0	32.0
1994	:	:	:	:	:	:	31.2	31.3
1995	:	:	:	:	:	:	31.7	31.4
1996	:	:	:	:	:	:	32.1	31.7
1997	:	:	:	:	:	:	32.3	31.8
1998	:	:	:	:	:	:	32.6	31.3
1999	:	:	:	46.8	:	:	32.8	31.4
2000	:	:	:	49.1	:	:	33.4	31.8
2001	:	:	:	:	:	:	32.6	32.7
2002	:	:	:	:	:	:	30.4	32.7
2003	:	:	:	:	:	:	30.0	32.3
2004	:	:	:	:	:	:	29.3	32.3
2005	:	:	:	:	:	:	29.4	32.5

⁽¹⁾ CY, CZ, EE, HU, LV, LT, MT, PL, SK and SI.⁽²⁾ BE, DK, DE, EL, ES, FR, IE, IT, LU, NL, AT, PT, FI, SE, UK, CY, CZ, EE, HU, LV, LT, MT, PL, SK and SI.⁽³⁾ Former definition.

Table 60

General government (% of GDP at market prices)
Final consumption expenditure of general government
ESA 95

(Percentage of gross domestic product at market prices)

	BE	DK	DE (1)	EL	ES	FR	IE	IT	LU
1970	16.9	:	15.3	:	:	:	:	:	:
1971	17.9	22.2	16.4	:	:	:	:	:	:
1972	18.4	22.0	16.7	:	:	:	:	:	:
1973	18.7	22.1	17.3	:	:	:	:	:	:
1974	19.0	24.1	18.8	:	:	:	:	:	:
1975	21.2	25.3	19.9	:	:	:	:	:	:
1976	21.4	24.7	19.3	:	:	:	:	:	:
1977	21.9	24.6	19.2	:	:	:	:	:	:
1978	22.7	25.2	19.3	:	:	20.7	:	:	:
1979	23.1	25.7	19.3	:	:	20.8	:	:	:
1980	23.0	27.3	19.9	:	:	21.5	:	16.9	:
1981	24.2	28.4	20.5	:	:	22.4	:	18.2	:
1982	23.9	28.7	20.2	:	:	23.1	:	18.3	:
1983	23.5	27.9	19.9	:	:	23.3	:	18.7	:
1984	23.5	26.6	19.7	:	:	23.7	:	18.4	:
1985	22.9	25.9	19.6	:	:	23.7	:	18.6	:
1986	22.8	24.6	19.4	:	:	23.4	:	18.3	:
1987	22.6	25.8	19.5	:	:	23.1	:	19.1	:
1988	21.2	26.3	19.3	14.2	:	22.7	:	19.5	:
1989	20.6	25.9	18.5	15.0	:	22.3	:	19.3	:
1990	20.3	25.6	18.1	15.0	:	22.3	16.4	20.2	18.0
1991			17.6						
1991	21.0	25.7	19.2	13.8	:	22.5	17.4	20.3	17.4
1992	21.1	25.8	19.8	13.7	:	23.1	17.8	20.1	18.0
1993	21.4	26.8	19.9	14.3	:	24.5	17.6	19.9	17.9
1994	21.2	25.9	19.7	13.7	:	24.1	17.4	19.1	17.4
1995	21.4	25.8	19.8	15.3	18.1	23.9	16.4	17.9	18.4
1996	21.7	25.9	19.9	14.5	17.9	24.2	15.8	18.1	18.9
1997	21.2	25.5	19.5	15.1	17.5	24.2	15.1	18.2	17.9
1998	21.1	26.0	19.2	15.3	17.5	23.4	14.4	17.9	16.8
1999	21.2	25.8	19.1	15.4	17.4	23.3	14.0	18.0	16.8
2000	21.2	25.3	19.0	15.7	17.6	23.2	13.9	18.3	15.7
2001	21.7	25.9	19.0	15.3	17.5	23.2	14.8	18.8	16.9
2002	22.3	26.3	19.2	15.5	17.8	23.9	15.1	18.8	18.1
2003	22.6	26.5	19.2	15.6	17.9	24.6	15.9	19.0	19.0
2004	22.9	26.4	18.7	15.9	18.0	24.4	16.1	18.8	19.4
2005	22.8	26.2	18.5	15.7	18.1	24.2	16.0	18.6	19.5

(1) 1970–91 D_90.

NB: Member States have provided figures for the last statistical period according to ESA 95 specifications starting from the years mentioned below:

1970: BE, DE, NL, UK; 1976: AT; 1980: IT; 1993: SE;
1971: DK; 1977: PT; 1988: EL; 1995: ES.
1975: FI; 1978: FR; 1990: IE, LU;

Final consumption expenditure (P.3) of general government includes two categories of expenditure:

1. The value of goods and services produced by general government itself other than own-account capital formation and sales (collective consumption).
2. Purchases by general government of goods and services produced by market producers that are supplied to households — without any transformation — as social transfers in kind. This implies that general government just pays for goods and services that the sellers provide to households (individual consumption).

For additional information on individual and collective consumption expenditure, see notes on Tables 17 and 62.

Reference: ESA 95, paragraphs 3.79 and 3.85.

(Percentage of gross domestic product at market prices)

	NL	AT	PT	FI	SE	UK	EU-15 ⁽¹⁾	EUR-12 ⁽²⁾
1970	19.9	:	:	:	:	18.0	:	:
1971	20.9	:	:	:	:	18.4	:	:
1972	21.4	:	:	:	:	18.7	:	:
1973	21.2	:	:	:	:	18.6	:	:
1974	22.2	:	:	:	:	20.4	:	:
1975	23.8	:	:	17.5	:	22.3	:	:
1976	23.8	18.2	:	18.5	:	22.1	:	:
1977	24.3	17.9	14.1	19.0	:	20.7	:	:
1978	24.7	18.6	13.4	18.7	:	20.3	:	:
1979	25.4	18.5	13.0	18.3	:	20.0	:	:
1980	25.3	18.5	14.6	18.4	:	21.5	:	:
1981	25.5	18.9	14.5	19.0	:	22.2	:	:
1982	25.8	19.3	14.2	19.2	:	22.1	:	:
1983	25.5	19.4	14.1	19.7	:	21.9	:	:
1984	24.3	19.4	14.1	19.7	:	21.7	:	:
1985	24.3	19.6	14.3	20.6	:	20.9	:	:
1986	24.2	19.9	14.2	21.0	:	20.9	:	:
1987	25.2	19.9	13.8	21.3	:	20.4	:	:
1988	24.6	19.6	14.3	20.4	:	19.7	:	:
1989	23.8	19.3	15.0	20.2	:	19.4	:	:
1990	23.5	18.9	15.9	21.6	:	19.8	:	:
1991								
1991	23.7	19.2	17.6	24.9	:	20.7	:	:
1992	24.3	19.6	17.6	25.4	:	21.1	:	:
1993	24.7	20.4	18.2	24.2	29.4	20.5	:	:
1994	24.2	20.5	18.1	23.4	28.4	20.0	:	:
1995	24.0	20.4	18.6	22.8	27.3	19.6	20.7	20.5
1996	23.1	20.3	18.9	23.2	27.9	19.2	20.7	20.5
1997	22.9	19.7	19.0	22.3	27.3	18.3	20.3	20.3
1998	22.7	19.5	18.9	21.6	27.5	17.9	19.9	19.9
1999	22.9	19.8	19.7	21.6	27.5	18.4	20.0	19.9
2000	22.7	19.2	20.5	20.6	26.8	18.7	20.0	19.9
2001	23.4	18.9	20.8	21.0	27.2	19.2	20.2	20.0
2002	24.5	18.6	21.1	21.7	28.0	20.0	20.6	20.3
2003	25.1	18.6	21.2	22.2	28.3	21.0	21.0	20.6
2004	25.0	18.6	20.9	22.5	28.4	21.2	20.9	20.4
2005	24.7	18.4	20.4	22.5	28.3	21.4	20.8	20.2

⁽¹⁾ 1970–91 including D_90.⁽²⁾ EU-15 excluding DK, SE and UK; 1970–91 including D_90.

Table 60 (Continued)

(Percentage of gross domestic product at market prices)

	CY	CZ	EE	HU	LV	LT	MT	PL	SK
1970	:	:	:	:	:	:	:	:	:
1971	:	:	:	:	:	:	:	:	:
1972	:	:	:	:	:	:	:	:	:
1973	:	:	:	:	:	:	:	:	:
1974	:	:	:	:	:	:	:	:	:
1975	:	:	:	:	:	:	:	:	:
1976	:	:	:	:	:	:	:	:	:
1977	:	:	:	:	:	:	:	:	:
1978	:	:	:	:	:	:	:	:	:
1979	:	:	:	:	:	:	:	:	:
1980	:	:	:	:	:	:	:	:	:
1981	:	:	:	:	:	:	:	:	:
1982	:	:	:	:	:	:	:	:	:
1983	:	:	:	:	:	:	:	:	:
1984	:	:	:	:	:	:	:	:	:
1985	:	:	:	:	:	:	:	:	:
1986	:	:	:	:	:	:	:	:	:
1987	:	:	:	:	:	:	:	:	:
1988	:	:	:	:	:	:	:	:	:
1989	:	:	:	:	:	:	:	:	:
1990	:	:	:	:	8.6	:	:	:	:
1991	:	:	:	25.7	10.3	:	:	21.9	:
1992	:	19.4	:	26.5	11.9	:	:	20.7	:
1993	:	21.7	20.9	28.6	20.1	15.5	:	19.5	24.3
1994	:	21.6	23.8	26.2	20.1	19.6	:	16.8	20.7
1995	:	19.9	26.1	23.6	22.4	22.6	:	16.8	20.5
1996	:	20.0	24.8	22.0	21.8	22.8	:	16.4	22.4
1997	:	19.8	23.0	21.9	18.7	23.3	:	16.0	21.5
1998	:	18.6	22.6	21.7	21.4	24.7	:	15.4	21.7
1999	:	19.6	23.4	21.5	20.5	22.6	:	15.5	19.8
2000	:	19.6	21.0	20.8	19.7	22.0	:	17.9	19.8
2001	:	20.0	:	:	19.3	:	:	:	:
2002	:	20.7	:	:	19.4	:	:	:	:
2003	:	:	:	:	:	:	:	:	:
2004	:	:	:	:	:	:	:	:	:
2005	:	:	:	:	:	:	:	:	:

NB: Member States have provided figures for the last statistical period according to ESA 95 specifications starting from the years mentioned below:

1970: BE, DE, NL, UK; 1976: AT; 1980: IT; 1993: SE;
 1971: DK; 1977: PT; 1988: EL; 1995: ES.
 1975: FI; 1978: FR; 1990: IE, LU;

Final consumption expenditure (P.3) of general government includes two categories of expenditure:

1. The value of goods and services produced by general government itself other than own-account capital formation and sales (collective consumption).
2. Purchases by general government of goods and services produced by market producers that are supplied to households — without any transformation — as social transfers in kind. This implies that general government just pays for goods and services that the sellers provide to households (individual consumption).

For additional information on individual and collective consumption expenditure, see notes on Tables 17 and 62.

Reference: ESA 95, paragraphs 3.79 and 3.85.

(Percentage of gross domestic product at market prices)

	SI	AC-10 ⁽¹⁾	EU-25 ⁽²⁾	BG	RO	TR	US ⁽³⁾	JP
1970	:	:	:	:	:	:	18.6	:
1971	:	:	:	:	:	:	18.2	:
1972	:	:	:	:	:	:	17.9	:
1973	:	:	:	:	:	:	17.1	:
1974	:	:	:	:	:	:	17.6	:
1975	:	:	:	:	:	:	18.1	:
1976	:	:	:	:	:	:	17.4	:
1977	:	:	:	:	:	:	17.1	:
1978	:	:	:	:	:	:	16.5	:
1979	:	:	:	:	:	:	16.3	:
1980	:	:	:	:	:	:	16.9	:
1981	:	:	:	:	:	:	16.9	:
1982	:	:	:	:	:	:	17.8	:
1983	:	:	:	:	:	:	17.7	:
1984	:	:	:	:	:	:	17.3	:
1985	:	:	:	:	:	:	17.6	:
1986	:	:	:	:	:	:	17.8	:
1987	:	:	:	:	:	:	17.8	:
1988	:	:	:	:	:	:	17.2	:
1989	:	:	:	:	:	:	16.8	:
1990	:	:	:	:	:	:	17.0	13.3
1991	:	:	:	:	:	:	17.2	13.3
1992	:	:	:	:	:	:	16.8	13.7
1993	:	:	:	:	:	:	16.2	14.2
1994	:	:	:	:	:	:	15.7	14.5
1995	:	:	:	:	:	:	15.3	15.0
1996	:	:	:	:	:	:	15.0	15.1
1997	:	:	:	:	:	:	14.6	15.1
1998	:	:	:	:	:	:	14.3	15.6
1999	:	:	:	16.5	:	:	14.4	16.3
2000	:	:	:	17.9	:	:	14.6	16.8
2001	:	:	:	:	:	:	15.1	17.4
2002	:	:	:	:	:	:	15.6	17.9
2003	:	:	:	:	:	:	16.0	17.7
2004	:	:	:	:	:	:	15.7	17.7
2005	:	:	:	:	:	:	15.6	18.0

⁽¹⁾ CY, CZ, EE, HU, LV, LT, MT, PL, SK and SI.⁽²⁾ BE, DK, DE, EL, ES, FR, IE, IT, LU, NL, AT, PT, FI, SE, UK, CY, CZ, EE, HU, LV, LT, MT, PL, SK and SI.⁽³⁾ Former definition.

Table 61

**General government (% of GDP at market prices)
Compensation of employees; general government
ESA 95**

(Percentage of gross domestic product at market prices)

	BE	DK	DE ⁽¹⁾	EL	ES	FR	IE	IT	LU
1970	9.7	:	8.6	:	:	:	:	:	:
1971	10.1	14.5	9.3	:	:	:	:	:	:
1972	10.6	14.6	9.5	:	:	:	:	:	:
1973	10.8	14.9	9.9	:	:	:	:	:	:
1974	11.0	16.0	10.7	:	:	:	:	:	:
1975	12.2	17.2	11.2	:	:	:	:	:	:
1976	12.2	17.1	10.8	:	:	:	:	:	:
1977	12.5	16.7	10.7	:	:	:	:	:	:
1978	12.9	17.0	10.1	:	:	12.6	:	:	:
1979	13.2	17.3	9.9	:	:	12.6	:	:	:
1980	13.3	18.0	10.0	:	:	12.9	:	11.0	:
1981	13.9	19.0	10.0	:	:	13.3	:	12.1	:
1982	13.7	19.5	10.0	:	:	13.7	:	11.9	:
1983	13.2	19.0	9.8	:	:	13.8	:	11.9	:
1984	13.3	18.0	9.5	:	:	13.8	:	11.8	:
1985	12.7	17.4	9.4	:	:	13.8	:	11.6	:
1986	12.5	16.7	9.3	:	:	13.7	:	11.6	:
1987	12.1	17.4	9.3	:	:	13.3	:	11.8	:
1988	11.4	18.2	9.1	11.1	:	12.8	:	12.0	:
1989	11.2	18.0	8.7	12.1	:	12.5	:	11.9	:
1990	11.2	17.7	8.4	12.5	:	12.5	10.4	12.6	10.1
1991			8.3						
1991	11.5	17.7	9.0	11.5	:	12.7	11.0	12.6	9.7
1992	11.5	17.8	9.2	10.9	:	13.0	11.3	12.4	10.0
1993	11.9	18.1	9.3	10.9	:	13.5	11.4	12.3	9.8
1994	11.9	17.5	9.0	10.6	:	13.5	11.0	11.9	9.6
1995	11.9	17.3	9.0	11.3	11.3	13.7	10.2	11.2	9.7
1996	11.9	17.3	8.9	10.7	11.3	13.9	9.7	11.5	9.7
1997	11.7	17.1	8.7	11.6	10.9	13.8	9.2	11.6	9.2
1998	11.6	17.5	8.5	11.6	10.7	13.7	8.5	10.7	8.8
1999	11.6	17.4	8.4	11.7	10.6	13.7	8.1	10.6	8.3
2000	11.4	16.9	8.2	11.7	10.4	13.5	8.0	10.6	7.8
2001	11.6	17.2	8.0	11.6	10.4	13.5	8.4	10.7	8.1
2002	12.0	17.6	7.9	11.9	10.3	13.7	8.3	10.7	8.6
2003	11.9	17.6	7.9	11.7	10.3	13.8	8.9	10.9	9.1
2004	11.8	17.6	7.7	11.4	10.3	13.7	9.1	10.7	9.1
2005	11.7	17.5	7.6	11.4	10.3	13.6	9.0	10.6	9.0

⁽¹⁾ 1970–91 D_90.

NB: Member States have provided figures for the last statistical period according to ESA 95 specifications starting from the years mentioned below:

1970: BE, DE, NL, UK; 1976: AT; 1980: IT; 1993: SE;
 1971: DK; 1977: PT; 1988: EL; 1995: ES.
 1975: FI; 1978: FR; 1990: IE, LU;

Compensation of employees paid by general government. Compensation of employees (D.1) is the total remuneration payable by an employer to an employee in return for work done by the latter during the accounting period. Compensation of employees encompasses wages and salaries in cash and wages and salaries in kind (D.11) as well as employers' social contributions (D.12) (see note on Table 29).

Reference: ESA 95, paragraph 4.02.

(Percentage of gross domestic product at market prices)

	NL	AT	PT	FI	SE	UK	EU-15 ⁽¹⁾	EUR-12 ⁽²⁾
1970	12.5	:	:	:	:	10.8	:	:
1971	12.8	:	:	:	:	11.4	:	:
1972	13.2	:	:	:	:	11.9	:	:
1973	13.1	:	:	:	:	11.7	:	:
1974	13.5	:	:	:	:	12.9	:	:
1975	14.3	:	:	12.2	:	14.3	:	:
1976	14.1	11.4	:	13.0	:	13.9	:	:
1977	14.2	11.2	9.5	13.2	:	12.9	:	:
1978	14.3	11.8	9.5	13.0	:	12.4	:	:
1979	14.5	11.6	9.4	12.8	:	12.0	:	:
1980	14.2	11.6	9.9	12.7	:	13.0	:	:
1981	13.9	11.9	10.2	13.1	:	13.4	:	:
1982	13.9	12.1	10.0	13.5	:	13.2	:	:
1983	13.5	12.1	10.2	13.9	:	13.1	:	:
1984	12.8	12.2	10.1	14.0	:	12.8	:	:
1985	12.4	12.3	10.0	14.6	:	12.3	:	:
1986	12.2	12.5	10.2	14.8	:	12.3	:	:
1987	12.4	12.6	10.3	14.9	:	12.2	:	:
1988	11.9	12.3	10.7	14.4	:	11.8	:	:
1989	11.3	12.1	11.4	14.2	:	11.4	:	:
1990	10.9	11.9	11.8	15.0	:	11.5	:	:
1991								
1991	10.8	12.1	12.9	17.4	:	11.7	:	:
1992	11.1	12.3	13.8	17.9	:	11.8	:	:
1993	11.2	12.7	14.1	16.6	18.5	10.5	:	:
1994	10.9	12.7	13.6	15.7	17.7	8.9	:	:
1995	10.8	12.6	13.6	15.2	16.7	8.3	11.1	11.1
1996	10.4	12.4	13.7	15.5	17.2	7.9	11.0	11.2
1997	10.2	11.5	13.8	14.6	16.8	7.5	10.8	11.1
1998	10.1	11.3	14.0	13.8	16.2	7.2	10.4	10.7
1999	10.2	11.4	14.4	13.8	15.8	7.1	10.4	10.7
2000	10.0	11.0	15.0	13.2	15.7	7.3	10.2	10.6
2001	10.1	9.9	15.2	13.3	16.0	7.5	10.3	10.5
2002	10.5	9.7	15.4	13.5	16.3	7.8	10.4	10.6
2003	10.7	9.6	15.1	13.8	16.4	8.2	10.5	10.7
2004	10.7	9.5	14.7	13.8	16.4	8.2	10.5	10.5
2005	10.6	9.3	14.3	13.8	16.4	8.3	10.4	10.4

⁽¹⁾ 1970–91 including D_90.⁽²⁾ EU-15 excluding DK, SE and UK; 1970–91 including D_90.

Table 61 (Continued)

(Percentage of gross domestic product at market prices)

	CY	CZ	EE	HU	LV	LT	MT	PL	SK
1970	:	:	:	:	:	:	:	:	:
1971	:	:	:	:	:	:	:	:	:
1972	:	:	:	:	:	:	:	:	:
1973	:	:	:	:	:	:	:	:	:
1974	:	:	:	:	:	:	:	:	:
1975	:	:	:	:	:	:	:	:	:
1976	:	:	:	:	:	:	:	:	:
1977	:	:	:	:	:	:	:	:	:
1978	:	:	:	:	:	:	:	:	:
1979	:	:	:	:	:	:	:	:	:
1980	:	:	:	:	:	:	:	:	:
1981	:	:	:	:	:	:	:	:	:
1982	:	:	:	:	:	:	:	:	:
1983	:	:	:	:	:	:	:	:	:
1984	:	:	:	:	:	:	:	:	:
1985	:	:	:	:	:	:	:	:	:
1986	:	:	:	:	:	:	:	:	:
1987	:	:	:	:	:	:	:	:	:
1988	:	:	:	:	:	:	:	:	:
1989	:	:	:	:	:	:	:	:	:
1990	:	:	:	:	3.2	:	:	:	:
1991	:	:	:	12.6	4.6	:	:	10.7	:
1992	:	7.2	:	13.7	6.6	:	:	12.5	:
1993	:	7.4	9.1	14.1	9.6	6.1	:	11.9	11.1
1994	:	7.9	11.0	14.0	10.6	9.2	:	10.9	9.4
1995	:	7.8	12.4	12.2	12.5	10.4	:	11.4	9.5
1996	:	8.0	11.9	10.9	12.2	11.1	:	11.4	9.6
1997	:	7.9	11.5	10.9	11.6	11.6	:	11.4	9.3
1998	:	7.3	11.3	10.9	12.0	13.1	:	10.8	9.4
1999	:	7.9	12.6	10.9	12.3	13.7	:	10.9	9.4
2000	:	7.8	11.5	10.7	11.8	13.1	:	11.3	8.8
2001	:	8.0	:	:	11.1	:	:	:	:
2002	:	8.2	:	:	10.8	:	:	:	:
2003	:	:	:	:	:	:	:	:	:
2004	:	:	:	:	:	:	:	:	:
2005	:	:	:	:	:	:	:	:	:

NB: Member States have provided figures for the last statistical period according to ESA 95 specifications starting from the years mentioned below:

1970: BE, DE, NL, UK; 1976: AT; 1980: IT; 1993: SE;
 1971: DK; 1977: PT; 1988: EL; 1995: ES.
 1975: FI; 1978: FR; 1990: IE, LU;

Compensation of employees paid by general government. Compensation of employees (D.1) is the total remuneration payable by an employer to an employee in return for work done by the latter during the accounting period. Compensation of employees encompasses wages and salaries in cash and wages and salaries in kind (D.11) as well as employers' social contributions (D.12) (see note on Table 29).

Reference: ESA 95, paragraph 4.02.

(Percentage of gross domestic product at market prices)

	SI	AC-10 ⁽¹⁾	EU-25 ⁽²⁾	BG	RO	TR	US ⁽³⁾	JP
1970	:	:	:	:	:	:	11.5	:
1971	:	:	:	:	:	:	11.7	:
1972	:	:	:	:	:	:	11.6	:
1973	:	:	:	:	:	:	11.3	:
1974	:	:	:	:	:	:	11.4	:
1975	:	:	:	:	:	:	11.6	:
1976	:	:	:	:	:	:	11.4	:
1977	:	:	:	:	:	:	11.1	:
1978	:	:	:	:	:	:	10.7	:
1979	:	:	:	:	:	:	10.4	:
1980	:	:	:	:	:	:	10.6	:
1981	:	:	:	:	:	:	10.4	:
1982	:	:	:	:	:	:	10.9	:
1983	:	:	:	:	:	:	10.7	:
1984	:	:	:	:	:	:	10.5	:
1985	:	:	:	:	:	:	10.6	:
1986	:	:	:	:	:	:	10.6	:
1987	:	:	:	:	:	:	10.6	:
1988	:	:	:	:	:	:	10.4	:
1989	:	:	:	:	:	:	10.3	:
1990	:	:	:	:	:	:	10.5	:
1991	:	:	:	:	:	:	10.8	:
1992	:	:	:	:	:	:	10.6	:
1993	:	:	:	:	:	:	10.5	:
1994	:	:	:	:	:	:	10.2	:
1995	:	:	:	:	:	:	9.9	:
1996	:	:	:	:	:	:	9.7	:
1997	:	:	:	:	:	:	9.5	:
1998	:	:	:	:	:	:	9.3	:
1999	:	:	:	10.5	:	:	9.2	:
2000	:	:	:	10.0	:	:	9.1	:
2001	:	:	:	:	:	:	9.4	:
2002	:	:	:	:	:	:	9.6	:
2003	:	:	:	:	:	:	:	:
2004	:	:	:	:	:	:	:	:
2005	:	:	:	:	:	:	:	:

⁽¹⁾ CY, CZ, EE, HU, LV, LT, MT, PL, SK and SI.⁽²⁾ BE, DK, DE, EL, ES, FR, IE, IT, LU, NL, AT, PT, FI, SE, UK, CY, CZ, EE, HU, LV, LT, MT, PL, SK and SI.⁽³⁾ Former definition.

Table 62

General government (% of GDP at market prices)
Collective consumption expenditure
ESA 95

(Percentage of gross domestic product at market prices)

	BE	DK	DE (1)	EL	ES	FR	IE	IT	LU
1970	7.4	:	8.3	:	:	:	:	:	:
1971	7.8	7.3	8.9	:	:	:	:	:	:
1972	7.9	7.2	8.9	:	:	:	:	:	:
1973	8.1	7.0	9.1	:	:	:	:	:	:
1974	7.9	7.8	9.7	:	:	:	:	:	:
1975	8.6	7.8	10.1	:	:	:	:	:	:
1976	8.5	7.3	9.6	:	:	:	:	:	:
1977	8.7	7.5	9.4	:	:	:	:	:	:
1978	9.2	7.9	9.5	:	:	9.0	:	:	:
1979	9.4	8.1	9.5	:	:	9.1	:	:	:
1980	9.4	8.8	9.7	:	:	9.4	:	:	:
1981	9.9	9.0	10.0	:	:	9.8	:	:	:
1982	9.6	8.8	10.0	:	:	10.0	:	:	:
1983	9.4	8.5	9.8	:	:	10.2	:	:	:
1984	9.2	8.3	9.5	:	:	10.3	:	:	:
1985	9.1	8.0	9.4	:	:	10.3	:	:	:
1986	9.0	7.7	9.3	:	:	10.2	:	:	:
1987	8.7	8.3	9.4	:	:	10.1	:	:	:
1988	8.1	8.3	9.1	9.5	:	10.0	:	:	:
1989	7.8	8.3	9.0	10.0	:	9.5	:	:	:
1990	7.6	8.2	8.7	10.2	:	9.4	6.6	7.9	7.8
1991			7.7						
1991	7.8	8.5	8.7	9.3	:	9.6	7.0	7.8	7.4
1992	7.6	8.6	8.7	8.9	:	9.8	7.0	7.7	7.7
1993	7.8	9.3	8.8	8.6	:	10.4	6.6	7.9	7.4
1994	7.9	9.0	8.5	8.1	:	10.0	6.4	7.7	7.3
1995	7.9	8.4	8.4	9.4	8.0	9.8	6.5	7.3	8.0
1996	7.8	8.5	8.4	8.5	7.8	9.9	6.3	7.3	8.0
1997	7.8	8.1	8.1	8.8	7.7	10.0	5.9	7.2	7.7
1998	7.6	8.2	8.0	9.3	7.5	9.4	5.8	7.1	7.1
1999	7.8	8.0	8.0	9.4	7.4	9.3	5.4	7.1	6.9
2000	7.9	7.7	7.9	9.7	7.5	9.3	5.1	7.0	6.5
2001	8.0	7.7	7.9	9.3	7.6	9.2	5.4	7.2	7.0
2002	8.2	7.6	7.9	9.7	7.7	9.4	5.5	7.1	7.5
2003	8.4	7.6	7.9	9.7	7.8	9.6	5.8	7.1	7.9
2004	8.5	7.6	7.8	9.9	7.9	9.5	5.9	7.1	8.0
2005	8.4	7.6	7.7	9.8	7.9	9.5	5.8	7.0	8.0

(1) 1970–91 D_90.

NB: Member States have provided figures for the last statistical period according to ESA 95 specifications starting from the years mentioned below:

1970: BE, DE, NL, UK; 1976: AT; 1980: IT; 1993: SE;
 1971: DK; 1977: PT; 1988: EL; 1995: ES.
 1975: FI; 1978: FR; 1990: IE, LU;

Services for collective consumption (P42) are provided simultaneously to all members of the community or to all members of a particular section of the community.

Collective services have the following characteristics:

- they can be delivered simultaneously to every member of the community or to particular sections of the community;
- the use of such services is usually passive and does not require the explicit agreement or active participation of all the individuals concerned;
- the provision of a collective service to one individual does not reduce the amount available to another in the same community; there is no rivalry in acquisition.

Collective goods and services are provided by general government. The collective consumption expenditure is the remainder of the government final consumption expenditure. It consists in particular of:

- the management and regulation of society;
- the provision of security and defence;
- the maintenance of law and order, legislation and regulation;
- the maintenance of public health;
- the protection of the environment;
- research and development;
- infrastructure and economic development.

Reference: ESA 95, paragraphs 3.83 and 3.85.

(Percentage of gross domestic product at market prices)

	NL	AT	PT	FI	SE	UK	EU-15 ⁽¹⁾	EUR-12 ⁽²⁾
1970	11.0	:	:	:	:	9.1	:	:
1971	11.3	:	:	:	:	9.3	:	:
1972	11.4	:	:	:	:	9.5	:	:
1973	11.3	:	:	:	:	9.3	:	:
1974	11.7	:	:	:	:	9.4	:	:
1975	12.5	:	:	7.2	:	10.2	:	:
1976	12.4	7.9	:	7.3	:	10.2	:	:
1977	12.6	7.7	6.5	7.5	:	9.6	:	:
1978	12.8	7.9	6.6	7.2	:	9.8	:	:
1979	13.2	7.9	6.6	7.0	:	9.7	:	:
1980	13.0	7.7	7.7	7.1	:	10.4	:	:
1981	13.0	7.7	7.3	7.3	:	10.6	:	:
1982	13.1	7.9	7.2	7.4	:	10.6	:	:
1983	13.1	8.1	8.4	7.6	:	10.3	:	:
1984	12.4	8.2	7.2	7.3	:	10.3	:	:
1985	12.4	8.2	6.4	7.5	:	10.0	:	:
1986	12.2	8.3	6.6	7.5	:	9.9	:	:
1987	12.6	8.2	6.2	7.6	:	9.4	:	:
1988	12.4	8.0	6.0	7.2	:	8.8	:	:
1989	12.1	7.8	6.5	7.0	:	8.8	:	:
1990	11.9	7.6	6.9	7.6	:	9.0	:	:
1991								
1991	11.8	7.6	7.9	8.9	:	9.3	:	:
1992	11.8	7.6	7.7	9.4	:	9.1	:	:
1993	11.9	7.8	7.6	9.1	9.2	8.9	:	:
1994	11.6	7.8	7.9	8.9	9.0	8.6	:	:
1995	11.6	8.1	7.6	8.5	8.4	8.3	8.6	8.6
1996	11.3	8.1	7.3	8.6	8.6	8.0	8.5	8.6
1997	11.0	7.8	7.8	8.5	8.4	7.5	8.3	8.5
1998	10.8	7.8	7.6	8.1	8.3	7.2	8.1	8.2
1999	10.9	7.8	7.9	8.0	8.4	7.4	8.1	8.2
2000	10.6	7.5	8.4	7.5	8.4	7.5	8.0	8.2
2001	11.0	7.3	8.5	7.4	8.5	7.6	8.1	8.2
2002	11.4	7.0	8.6	7.6	8.7	7.7	8.2	8.3
2003	11.5	7.0	8.7	7.8	8.8	7.9	8.3	8.3
2004	11.3	6.9	8.5	7.9	8.8	8.0	8.2	8.3
2005	11.2	6.8	8.3	7.9	8.8	8.1	8.2	8.2

⁽¹⁾ 1970–91 including D_90.⁽²⁾ EU-15 excluding DK, SE and UK; 1970–91 including D_90.

Table 62 (Continued)

(Percentage of gross domestic product at market prices)

	CY	CZ	EE	HU	LV	LT	MT	PL	SK
1970	:	:	:	:	:	:	:	:	:
1971	:	:	:	:	:	:	:	:	:
1972	:	:	:	:	:	:	:	:	:
1973	:	:	:	:	:	:	:	:	:
1974	:	:	:	:	:	:	:	:	:
1975	:	:	:	:	:	:	:	:	:
1976	:	:	:	:	:	:	:	:	:
1977	:	:	:	:	:	:	:	:	:
1978	:	:	:	:	:	:	:	:	:
1979	:	:	:	:	:	:	:	:	:
1980	:	:	:	:	:	:	:	:	:
1981	:	:	:	:	:	:	:	:	:
1982	:	:	:	:	:	:	:	:	:
1983	:	:	:	:	:	:	:	:	:
1984	:	:	:	:	:	:	:	:	:
1985	:	:	:	:	:	:	:	:	:
1986	:	:	:	:	:	:	:	:	:
1987	:	:	:	:	:	:	:	:	:
1988	:	:	:	:	:	:	:	:	:
1989	:	:	:	:	:	:	:	:	:
1990	:	:	:	:	2.1	:	:	:	:
1991	:	:	:	10.6	3.3	:	:	11.6	:
1992	:	9.3	:	11.4	4.8	:	:	11.0	:
1993	:	8.9	8.7	13.8	6.3	8.4	:	9.7	7.9
1994	:	8.6	10.9	12.1	8.0	8.9	:	6.9	17.2
1995	:	7.7	12.6	11.0	10.1	10.2	:	7.5	16.2
1996	:	7.6	12.2	10.2	10.1	10.4	:	7.2	12.2
1997	:	8.0	11.1	10.5	9.1	10.8	:	7.4	9.6
1998	:	8.0	10.7	10.2	11.1	11.5	:	7.3	9.7
1999	:	8.2	11.4	10.2	10.1	8.9	:	7.2	10.3
2000	:	8.5	10.1	9.7	9.3	9.7	:	9.9	10.9
2001	:	8.7	:	:	9.6	:	:	:	:
2002	:	9.0	:	:	9.6	:	:	:	:
2003	:	:	:	:	:	:	:	:	:
2004	:	:	:	:	:	:	:	:	:
2005	:	:	:	:	:	:	:	:	:

NB: Member States have provided figures for the last statistical period according to ESA 95 specifications starting from the years mentioned below:

1970: BE, DE, NL, UK; 1976: AT; 1980: IT; 1993: SE;
 1971: DK; 1977: PT; 1988: EL; 1995: ES.
 1975: FI; 1978: FR; 1990: IE, LU;

Services for collective consumption (P.42) are provided simultaneously to all members of the community or to all members of a particular section of the community.

Collective services have the following characteristics:

- they can be delivered simultaneously to every member of the community or to particular sections of the community;
- the use of such services is usually passive and does not require the explicit agreement or active participation of all the individuals concerned;
- the provision of a collective service to one individual does not reduce the amount available to another in the same community; there is no rivalry in acquisition.

Collective goods and services are provided by general government. The collective consumption expenditure is the remainder of the government final consumption expenditure. It consists in particular of:

- the management and regulation of society;
- the provision of security and defence;
- the maintenance of law and order, legislation and regulation;
- the maintenance of public health;
- the protection of the environment;
- research and development;
- infrastructure and economic development.

Reference: ESA 95, paragraphs 3.83 and 3.85.

(Percentage of gross domestic product at market prices)

	SI	AC-10 ⁽¹⁾	EU-25 ⁽²⁾	BG	RO	TR	US ⁽³⁾	JP
1970	:	:	:	:	:	:	:	:
1971	:	:	:	:	:	:	:	:
1972	:	:	:	:	:	:	:	:
1973	:	:	:	:	:	:	:	:
1974	:	:	:	:	:	:	:	:
1975	:	:	:	:	:	:	:	:
1976	:	:	:	:	:	:	:	:
1977	:	:	:	:	:	:	:	:
1978	:	:	:	:	:	:	:	:
1979	:	:	:	:	:	:	:	:
1980	:	:	:	:	:	:	:	:
1981	:	:	:	:	:	:	:	:
1982	:	:	:	:	:	:	:	:
1983	:	:	:	:	:	:	:	:
1984	:	:	:	:	:	:	:	:
1985	:	:	:	:	:	:	:	:
1986	:	:	:	:	:	:	:	:
1987	:	:	:	:	:	:	:	:
1988	:	:	:	:	:	:	:	:
1989	:	:	:	:	:	:	:	:
1990	:	:	:	:	:	:	:	6.0
1991	:	:	:	:	:	:	:	6.0
1992	:	:	:	:	:	:	:	6.1
1993	:	:	:	:	:	:	:	6.4
1994	:	:	:	:	:	:	:	6.5
1995	:	:	:	:	:	:	:	6.7
1996	:	:	:	:	:	:	:	6.7
1997	:	:	:	:	:	:	:	6.7
1998	:	:	:	:	:	:	:	7.0
1999	:	:	:	8.9	:	:	:	7.3
2000	:	:	:	9.7	:	:	:	7.4
2001	:	:	:	:	:	:	:	7.6
2002	:	:	:	:	:	:	:	7.7
2003	:	:	:	:	:	:	:	7.3
2004	:	:	:	:	:	:	:	7.2
2005	:	:	:	:	:	:	:	7.3

⁽¹⁾ CY, CZ, EE, HU, LV, LT, MT, PL, SK and SI.⁽²⁾ BE, DK, DE, EL, ES, FR, IE, IT, LU, NL, AT, PT, FI, SE, UK, CY, CZ, EE, HU, LV, LT, MT, PL, SK and SI.⁽³⁾ Former definition.

Table 63

General government (% of GDP at market prices)

Social transfers in kind

ESA 95

(Percentage of gross domestic product at market prices)

	BE	DK	DE (1)	EL	ES	FR	IE	IT	LU
1970	9.5	:	7.0	:	:	:	:	:	:
1971	10.0	14.8	7.5	:	:	:	:	:	:
1972	10.5	14.8	7.8	:	:	:	:	:	:
1973	10.6	15.1	8.2	:	:	:	:	:	:
1974	11.1	16.3	9.0	:	:	:	:	:	:
1975	12.6	17.5	9.8	:	:	:	:	:	:
1976	12.9	17.5	9.8	:	:	:	:	:	:
1977	13.2	17.0	9.8	:	:	:	:	:	:
1978	13.5	17.3	9.8	:	:	11.6	:	:	:
1979	13.6	17.6	9.9	:	:	11.8	:	:	:
1980	13.5	18.5	10.2	:	:	12.1	:	:	:
1981	14.3	19.4	10.5	:	:	12.6	:	:	:
1982	14.2	19.9	10.2	:	:	13.1	:	:	:
1983	14.2	19.4	10.1	:	:	13.1	:	:	:
1984	14.2	18.2	10.2	:	:	13.5	:	:	:
1985	13.9	17.9	10.2	:	:	13.4	:	:	:
1986	13.8	17.0	10.1	:	:	13.2	:	:	:
1987	13.9	17.5	10.1	:	:	13.0	:	:	:
1988	13.1	18.0	10.2	4.7	:	12.8	:	:	:
1989	12.7	17.7	9.5	4.9	:	12.8	:	:	:
1990	12.7	17.4	9.4	4.8	:	12.9	9.8	12.3	10.2
1991			9.9						
1991	13.1	17.3	10.5	4.5	:	13.0	10.4	12.5	9.9
1992	13.4	17.2	11.0	4.8	:	13.2	10.8	12.3	10.4
1993	13.6	17.5	11.1	5.7	:	14.1	10.9	12.0	10.5
1994	13.3	16.9	11.2	5.6	:	14.1	11.0	11.4	10.1
1995	13.5	17.4	11.4	5.9	10.1	14.1	9.9	10.6	10.4
1996	13.9	17.4	11.6	6.0	10.1	14.2	9.5	10.8	10.9
1997	13.4	17.3	11.3	6.3	9.9	14.2	9.2	11.0	10.2
1998	13.4	17.8	11.2	6.0	9.9	14.1	8.6	10.8	9.6
1999	13.4	17.9	11.1	6.0	10.1	14.0	8.6	10.9	9.9
2000	13.3	17.6	11.1	6.0	10.1	14.0	8.8	11.2	9.2
2001	13.7	18.1	11.1	6.0	9.9	14.0	9.4	11.7	10.0
2002	14.1	18.7	11.2	5.9	10.0	14.5	9.6	11.7	10.6
2003	14.3	18.8	11.3	5.9	10.1	15.0	10.1	11.9	11.1
2004	14.4	18.8	10.9	6.0	10.2	14.9	10.2	11.7	11.4
2005	14.4	18.6	10.7	5.9	10.1	14.8	10.1	11.6	11.5

(1) 1970–91 D_90.

NB: Member States have provided figures for the last statistical period according to ESA 95 specifications starting from the years mentioned below:

1970: BE, DE, NL, UK; 1976: AT; 1980: IT; 1993: SE;
 1971: DK; 1977: PT; 1988: EL; 1995: ES.
 1975: FI; 1978: FR; 1990: IE, LU;

Social transfers in kind (D.63) consist of individual goods and services provided as transfers in kind to individual households by government units and non-profit institutions serving households (NPISH), whether purchased on the market or produced as non-market output by government units and NPISH. Social transfers in kind include the following:

1. Social benefits in kind

Social benefits in kind (D.631) are social transfers in kind intended to relieve the household from the financial burden of social risks or needs. They encompass the following cases:

- *Social security benefits, reimbursements (D.6311)*
These benefits consist of reimbursement by social security funds of approved expenditures made by households on specific goods or services.
- *Other social security benefits in kind (D.6312)*
These benefits consist of social transfers in kind, except reimbursements, made by social security funds to households. Most of 'other social security benefits' are likely to consist of medical or dental treatments, hospital accommodation, spectacles, etc. The service is provided directly to the beneficiaries, without reimbursement, by market or non-market producers.
- *Social assistance benefits in kind (D.6313)*
These benefits consist of transfers in kind provided to households by government units or NPISH that are similar in nature to social security benefits in kind but are not provided in the context of social insurance schemes. Social assistance benefits in kind include, if not covered by a social insurance scheme, for example, social housing, dwelling allowance and reductions on transport prices (provided that there is a social purpose).

2. Transfers of individual non-market goods or services (D.632)

Transfers of individual non-market goods or services consist of goods or services which are provided free to individual households or at prices which are not economically significant by non-market producers of government units or NPISH. They cover, for example, education and cultural services.

Social transfers in kind are equal to the individual consumption expenditure of general government.

Reference: ESA 95, paragraphs 4.104–4.106.

(Percentage of gross domestic product at market prices)

	NL	AT	PT	FI	SE	UK	EU-15 ⁽¹⁾	EUR-12 ⁽²⁾
1970	8.9	:	:	:	:	8.9	:	:
1971	9.5	:	:	:	:	9.1	:	:
1972	10.0	:	:	:	:	9.3	:	:
1973	10.0	:	:	:	:	9.2	:	:
1974	10.5	:	:	:	:	11.0	:	:
1975	11.3	:	:	10.4	:	12.1	:	:
1976	11.4	10.3	:	11.2	:	11.9	:	:
1977	11.7	10.2	7.6	11.5	:	11.1	:	:
1978	11.9	10.7	6.8	11.5	:	10.5	:	:
1979	12.2	10.6	6.4	11.3	:	10.3	:	:
1980	12.3	10.8	6.9	11.4	:	11.1	:	:
1981	12.5	11.2	7.3	11.8	:	11.6	:	:
1982	12.7	11.4	7.0	11.9	:	11.5	:	:
1983	12.4	11.2	5.7	12.1	:	11.6	:	:
1984	11.9	11.2	6.8	12.4	:	11.4	:	:
1985	12.0	11.4	7.9	13.1	:	10.9	:	:
1986	12.0	11.6	7.6	13.5	:	11.0	:	:
1987	12.6	11.7	7.6	13.7	:	11.0	:	:
1988	12.1	11.6	8.2	13.2	:	10.9	:	:
1989	11.7	11.5	8.5	13.2	:	10.6	:	:
1990	11.6	11.4	9.0	14.0	:	10.7	:	:
1991								
1991	11.9	11.6	9.7	15.9	:	11.4	:	:
1992	12.5	12.0	9.9	16.1	:	12.0	:	:
1993	12.7	12.6	10.7	15.1	20.2	11.6	:	:
1994	12.6	12.7	10.3	14.5	19.4	11.4	:	:
1995	12.5	12.4	11.0	14.3	18.9	11.3	12.1	11.9
1996	11.9	12.2	11.7	14.6	19.2	11.1	12.2	12.0
1997	11.9	11.9	11.3	13.8	18.8	10.8	12.0	11.8
1998	11.9	11.7	11.3	13.5	19.2	10.7	11.9	11.7
1999	12.0	12.0	11.8	13.6	19.1	11.0	11.9	11.7
2000	12.0	11.8	12.1	13.2	18.5	11.2	11.9	11.7
2001	12.3	11.6	12.3	13.6	18.8	11.7	12.1	11.9
2002	13.1	11.6	12.5	14.0	19.3	12.4	12.5	12.1
2003	13.6	11.7	12.6	14.4	19.5	13.1	12.7	12.3
2004	13.6	11.7	12.4	14.6	19.5	13.2	12.7	12.1
2005	13.5	11.6	12.1	14.6	19.5	13.3	12.6	12.0

⁽¹⁾ 1970–91 including D_90.⁽²⁾ EU-15 excluding DK, SE and UK; 1970–91 including D_90.

Table 63 (Continued)

(Percentage of gross domestic product at market prices)

	CY	CZ	EE	HU	LV	LT	MT	PL	SK
1970	:	:	:	:	:	:	:	:	:
1971	:	:	:	:	:	:	:	:	:
1972	:	:	:	:	:	:	:	:	:
1973	:	:	:	:	:	:	:	:	:
1974	:	:	:	:	:	:	:	:	:
1975	:	:	:	:	:	:	:	:	:
1976	:	:	:	:	:	:	:	:	:
1977	:	:	:	:	:	:	:	:	:
1978	:	:	:	:	:	:	:	:	:
1979	:	:	:	:	:	:	:	:	:
1980	:	:	:	:	:	:	:	:	:
1981	:	:	:	:	:	:	:	:	:
1982	:	:	:	:	:	:	:	:	:
1983	:	:	:	:	:	:	:	:	:
1984	:	:	:	:	:	:	:	:	:
1985	:	:	:	:	:	:	:	:	:
1986	:	:	:	:	:	:	:	:	:
1987	:	:	:	:	:	:	:	:	:
1988	:	:	:	:	:	:	:	:	:
1989	:	:	:	:	:	:	:	:	:
1990	:	:	:	:	6.5	:	:	:	:
1991	:	:	:	15.1	7.0	:	:	10.3	:
1992	:	10.0	:	15.1	7.1	:	:	9.8	:
1993	:	12.8	12.2	14.7	13.8	7.1	:	9.8	16.4
1994	:	13.0	12.9	14.2	12.1	10.7	:	9.9	3.6
1995	:	12.2	13.5	12.6	12.3	12.4	:	9.3	4.4
1996	:	12.4	12.6	11.8	11.6	12.5	:	9.2	10.3
1997	:	11.8	11.9	11.4	9.6	12.5	:	8.6	11.9
1998	:	10.6	12.0	11.5	10.3	13.3	:	8.1	12.0
1999	:	11.4	12.0	11.4	10.4	13.7	:	8.3	9.5
2000	:	11.0	11.0	11.1	10.4	12.3	:	8.0	8.9
2001	:	11.3	:	:	9.7	:	:	:	:
2002	:	11.8	:	:	9.8	:	:	:	:
2003	:	:	:	:	:	:	:	:	:
2004	:	:	:	:	:	:	:	:	:
2005	:	:	:	:	:	:	:	:	:

NB: Member States have provided figures for the last statistical period according to ESA 95 specifications starting from the years mentioned below:

1970: BE, DE, NL, UK; 1976: AT; 1980: IT; 1993: SE;
 1971: DK; 1977: PT; 1988: EL; 1995: ES.
 1975: FI; 1978: FR; 1990: IE, LU;

Social transfers in kind (D.63) consist of individual goods and services provided as transfers in kind to individual households by government units and non-profit institutions serving households (NPISH), whether purchased on the market or produced as non-market output by government units and NPISH. Social transfers in kind include the following:

1. Social benefits in kind

Social benefits in kind (D.631) are social transfers in kind intended to relieve the household from the financial burden of social risks or needs. They encompass the following cases:

• *Social security benefits, reimbursements (D.6311)*

These benefits consist of reimbursement by social security funds of approved expenditures made by households on specific goods or services.

• *Other social security benefits in kind (D.6312)*

These benefits consist of social transfers in kind, except reimbursements, made by social security funds to households. Most of 'other social security benefits' are likely to consist of medical or dental treatments, hospital accommodation, spectacles, etc. The service is provided directly to the beneficiaries, without reimbursement, by market or non-market producers.

• *Social assistance benefits in kind (D.6313)*

These benefits consist of transfers in kind provided to households by government units or NPISH that are similar in nature to social security benefits in kind but are not provided in the context of social insurance schemes. Social assistance benefits in kind include, if not covered by a social insurance scheme, for example, social housing, dwelling allowance and reductions on transport prices (provided that there is a social purpose).

2. Transfers of individual non-market goods or services (D.632)

Transfers of individual non-market goods or services consist of goods or services which are provided free to individual households or at prices which are not economically significant by non-market producers of government units or NPISH. They cover, for example, education and cultural services.

Social transfers in kind are equal to the individual consumption expenditure of general government.

Reference: ESA 95, paragraphs 4.104–4.106.

(Percentage of gross domestic product at market prices)

	SI	AC-10 ⁽¹⁾	EU-25 ⁽²⁾	BG	RO	TR	US ⁽³⁾	JP
1970	:	:	:	:	:	:	:	:
1971	:	:	:	:	:	:	:	:
1972	:	:	:	:	:	:	:	:
1973	:	:	:	:	:	:	:	:
1974	:	:	:	:	:	:	:	:
1975	:	:	:	:	:	:	:	:
1976	:	:	:	:	:	:	:	:
1977	:	:	:	:	:	:	:	:
1978	:	:	:	:	:	:	:	:
1979	:	:	:	:	:	:	:	:
1980	:	:	:	:	:	:	:	:
1981	:	:	:	:	:	:	:	:
1982	:	:	:	:	:	:	:	:
1983	:	:	:	:	:	:	:	:
1984	:	:	:	:	:	:	:	:
1985	:	:	:	:	:	:	:	:
1986	:	:	:	:	:	:	:	:
1987	:	:	:	:	:	:	:	:
1988	:	:	:	:	:	:	:	:
1989	:	:	:	:	:	:	:	:
1990	:	:	:	:	:	:	:	7.3
1991	:	:	:	:	:	:	:	7.3
1992	:	:	:	:	:	:	:	7.6
1993	:	:	:	:	:	:	:	7.9
1994	:	:	:	:	:	:	:	8.1
1995	:	:	:	:	:	:	:	8.3
1996	:	:	:	:	:	:	:	8.5
1997	:	:	:	:	:	:	:	8.5
1998	:	:	:	:	:	:	:	8.6
1999	:	:	:	7.7	:	:	:	9.0
2000	:	:	:	8.2	:	:	:	9.4
2001	:	:	:	:	:	:	:	9.8
2002	:	:	:	:	:	:	:	10.2
2003	:	:	:	:	:	:	:	10.5
2004	:	:	:	:	:	:	:	10.6
2005	:	:	:	:	:	:	:	10.6

⁽¹⁾ CY, CZ, EE, HU, LV, LT, MT, PL, SK and SI.⁽²⁾ BE, DK, DE, EL, ES, FR, IE, IT, LU, NL, AT, PT, FI, SE, UK, CY, CZ, EE, HU, LV, LT, MT, PL, SK and SI.⁽³⁾ Former definition.

Table 64

General government (% of GDP at market prices)
Social benefits other than social transfers in kind; general government
ESA 95

(Percentage of gross domestic product at market prices)

	BE	DK	DE (1)	EL	ES	FR	IE	IT	LU
1970	11.7	:	12.8	:	:	:	:	:	:
1971	11.9	11.0	13.0	:	:	:	:	:	:
1972	12.3	11.0	13.5	:	:	:	:	:	:
1973	12.8	10.5	13.5	:	:	:	:	:	:
1974	13.2	12.0	14.6	:	:	:	:	:	:
1975	15.6	13.2	17.5	:	:	:	:	:	:
1976	15.8	13.1	17.2	:	:	:	:	:	:
1977	16.5	13.7	17.1	:	:	:	:	:	:
1978	16.8	14.5	16.7	:	:	14.9	:	:	:
1979	17.2	14.9	16.3	:	:	15.1	:	:	:
1980	17.3	16.0	16.3	:	:	15.5	:	12.6	:
1981	18.5	17.2	16.9	:	:	16.4	:	14.1	:
1982	18.8	17.4	17.3	:	:	17.1	:	14.4	:
1983	19.4	16.9	16.7	:	:	17.3	:	15.2	:
1984	18.7	16.6	16.1	:	:	17.5	:	14.8	:
1985	18.3	15.8	15.7	:	:	17.7	:	15.1	:
1986	18.0	15.1	15.4	:	:	17.5	:	15.1	:
1987	17.6	15.8	15.7	:	:	17.2	:	15.0	:
1988	16.9	17.0	15.6	14.4	:	17.0	:	15.0	:
1989	16.3	17.8	15.4	14.7	:	16.7	:	15.4	:
1990	16.2	17.9	14.7	14.6	:	16.9	11.9	15.5	14.5
1991			13.6						
1991	16.7	18.4	15.7	14.4	:	17.3	12.6	15.6	15.2
1992	16.7	18.9	16.3	14.3	:	17.7	13.0	16.5	15.6
1993	17.1	19.8	17.4	14.6	:	18.5	12.9	17.0	16.0
1994	16.7	21.2	17.7	14.9	:	18.4	12.7	17.3	16.0
1995	16.6	20.4	18.1	15.1	13.9	18.5	11.8	16.7	16.5
1996	16.6	19.8	19.3	15.4	13.8	18.7	11.4	16.9	16.3
1997	16.3	18.8	19.3	15.6	13.3	18.8	10.6	17.3	15.5
1998	16.1	18.3	18.9	15.7	12.8	18.4	9.8	17.0	14.8
1999	15.6	17.8	18.9	15.8	12.4	18.2	8.8	17.1	14.5
2000	15.2	17.3	18.7	16.6	12.3	17.8	8.1	16.8	13.6
2001	15.5	17.3	18.8	16.3	12.2	17.7	8.5	16.6	14.4
2002	16.1	17.5	19.4	16.4	12.3	18.1	8.3	17.1	15.7
2003	16.8	17.8	19.8	16.3	12.4	18.5	8.8	17.3	16.9
2004	16.8	17.6	19.8	16.1	12.3	18.5	8.7	17.5	17.6
2005	16.6	17.2	19.5	16.1	12.3	18.4	8.6	17.4	17.2

(1) 1970–91 D_90.

NB: Member States have provided figures for the last statistical period according to ESA 95 specifications starting from the years mentioned below:

1970: BE, DE, NL, UK; 1976: AT; 1980: IT; 1993: SE;
 1971: DK; 1977: PT; 1988: EL; 1995: ES.
 1975: FI; 1978: FR; 1990: IE, LU;

Social benefits other than social transfers in kind (D.62) comprise the following:

1. Social security benefits in cash (D.621)
Benefits paid to households by social security funds (excluding reimbursements), for example retirement pensions.
2. Privately funded social benefits (D.622)
Benefits (in cash or in kind) payable to households by insurance enterprises or other institutional units administering privately funded social insurance schemes, for example retirement pensions paid by an autonomous pension fund.
3. Unfunded employee social benefits (D.623)
Benefits payable to employees, their dependants or survivors by employers administering unfunded social insurance schemes. They include:
 - the continued payment of normal wages during periods of absence from work as a result of ill health, accident, maternity, etc.;
 - the payment of family, education or other allowances in respect of dependants;
 - the payment of retirement or survivors' pensions to ex-employees or their survivors in the event of redundancy, incapacity, accidental death, etc.;
 - general medical services not related to the employee's work;
 - convalescent and retirement homes.
4. Social assistance benefits in cash (D.624)
Benefits payable to households by government units or NPISH to meet the same needs as social insurance benefits but which are not made under a social insurance scheme incorporating social contributions and social insurance benefits. Included are children's allowance, welfare affairs and services, grants referring to students' financial assistance scheme, etc.

Reference: ESA 95, paragraph 4.103.

(Percentage of gross domestic product at market prices)

	NL	AT	PT	FI	SE	UK	EU-15 ⁽¹⁾	EUR-12 ⁽²⁾
1970	12.3	:	:	:	:	8.8	:	:
1971	13.0	:	:	:	:	8.7	:	:
1972	13.7	:	:	:	:	9.4	:	:
1973	14.1	:	:	:	:	9.0	:	:
1974	15.1	:	:	:	:	9.8	:	:
1975	16.7	:	:	9.4	:	10.2	:	:
1976	17.0	15.4	:	10.4	:	10.7	:	:
1977	17.2	15.6	6.4	11.6	:	10.9	:	:
1978	17.8	17.0	6.6	12.0	:	11.3	:	:
1979	18.3	16.9	6.4	11.3	:	11.4	:	:
1980	18.6	16.8	7.3	11.0	:	11.9	:	:
1981	19.2	17.2	8.5	11.2	:	13.4	:	:
1982	20.4	17.6	8.9	12.3	:	14.2	:	:
1983	20.7	17.7	9.0	13.1	:	14.1	:	:
1984	19.9	17.9	8.9	13.2	:	14.2	:	:
1985	18.7	18.2	8.8	14.0	:	14.2	:	:
1986	18.2	18.4	9.1	14.5	:	14.3	:	:
1987	18.2	18.9	9.4	14.6	:	13.5	:	:
1988	17.9	18.6	9.2	13.9	:	12.5	:	:
1989	17.3	18.0	8.9	13.6	:	11.9	:	:
1990	18.2	17.8	9.3	14.9	:	12.0	:	:
1991								
1991	17.8	17.8	10.0	18.6	:	14.2	:	:
1992	17.9	18.1	10.2	22.4	:	15.6	:	:
1993	17.8	19.5	11.2	23.9	22.6	16.0	:	:
1994	16.5	19.6	12.6	23.8	22.1	15.6	:	:
1995	15.3	19.5	11.8	22.1	20.6	15.3	17.2	17.3
1996	14.8	19.5	11.8	21.5	19.6	14.8	17.4	17.7
1997	13.9	18.9	11.7	19.8	18.9	14.4	17.1	17.6
1998	13.0	18.5	11.7	18.3	18.7	13.7	16.6	17.1
1999	12.5	18.7	11.9	18.1	18.2	13.4	16.4	17.0
2000	11.8	18.5	12.4	16.5	17.5	13.3	16.1	16.6
2001	11.7	18.7	12.5	16.4	17.4	13.7	16.1	16.6
2002	11.8	18.6	13.0	16.8	17.6	13.5	16.4	17.0
2003	12.5	19.0	13.8	17.1	18.4	13.6	16.7	17.3
2004	12.8	19.0	14.0	17.2	18.1	13.6	16.7	17.3
2005	12.7	18.9	14.1	17.1	17.8	13.3	16.5	17.1

⁽¹⁾ 1970–91 including D_90.⁽²⁾ EU-15 excluding DK, SE and UK; 1970–91 including D_90.

Table 64 (Continued)

(Percentage of gross domestic product at market prices)

	CY	CZ	EE	HU	LV	LT	MT	PL	SK
1970	:	:	:	:	:	:	:	:	:
1971	:	:	:	:	:	:	:	:	:
1972	:	:	:	:	:	:	:	:	:
1973	:	:	:	:	:	:	:	:	:
1974	:	:	:	:	:	:	:	:	:
1975	:	:	:	:	:	:	:	:	:
1976	:	:	:	:	:	:	:	:	:
1977	:	:	:	:	:	:	:	:	:
1978	:	:	:	:	:	:	:	:	:
1979	:	:	:	:	:	:	:	:	:
1980	:	:	:	:	:	:	:	:	:
1981	:	:	:	:	:	:	:	:	:
1982	:	:	:	:	:	:	:	:	:
1983	:	:	:	:	:	:	:	:	:
1984	:	:	:	:	:	:	:	:	:
1985	:	:	:	:	:	:	:	:	:
1986	:	:	:	:	:	:	:	:	:
1987	:	:	:	:	:	:	:	:	:
1988	:	:	:	:	:	:	:	:	:
1989	:	:	:	:	:	:	:	:	:
1990	:	:	:	:	6.3	:	:	:	:
1991	:	:	:	18.7	10.9	:	:	17.9	:
1992	:	12.9	:	19.3	9.7	:	:	20.0	:
1993	:	11.8	11.2	19.5	13.8	:	:	19.9	14.0
1994	:	11.7	10.4	18.3	14.7	:	:	18.8	12.8
1995	:	11.4	10.6	15.8	14.2	8.8	:	18.1	12.2
1996	:	11.7	11.2	13.9	14.3	9.1	:	18.0	12.3
1997	:	12.4	10.7	13.1	13.9	9.5	:	17.7	12.2
1998	:	12.3	9.9	13.6	14.8	10.2	:	17.3	12.2
1999	:	12.8	11.4	13.5	16.4	11.6	:	18.3	12.9
2000	:	13.3	10.4	12.9	13.5	10.9	:	16.8	12.3
2001	:	12.9	:	:	12.1	:	:	:	:
2002	:	13.2	:	:	11.9	:	:	:	:
2003	:	:	:	:	:	:	:	:	:
2004	:	:	:	:	:	:	:	:	:
2005	:	:	:	:	:	:	:	:	:

NB: Member States have provided figures for the last statistical period according to ESA 95 specifications starting from the years mentioned below:

1970: BE, DE, NL, UK; 1976: AT; 1980: IT; 1993: SE;
 1971: DK; 1977: PT; 1988: EL; 1995: ES.
 1975: FI; 1978: FR; 1990: IE, LU;

Social benefits other than social transfers in kind (D.62) comprise the following:

1. Social security benefits in cash (D.621)
Benefits paid to households by social security funds (excluding reimbursements), for example retirement pensions.
2. Privately funded social benefits (D.622)
Benefits (in cash or in kind) payable to households by insurance enterprises or other institutional units administering privately funded social insurance schemes, for example retirement pensions paid by an autonomous pension fund.
3. Unfunded employee social benefits (D.623)
Benefits payable to employees, their dependants or survivors by employers administering unfunded social insurance schemes. They include:
 - the continued payment of normal wages during periods of absence from work as a result of ill health, accident, maternity, etc.;
 - the payment of family, education or other allowances in respect of dependants;
 - the payment of retirement or survivors' pensions to ex-employees or their survivors in the event of redundancy, incapacity, accidental death, etc.;
 - general medical services not related to the employee's work;
 - convalescent and retirement homes.
4. Social assistance benefits in cash (D.624)
Benefits payable to households by government units or NPISH to meet the same needs as social insurance benefits but which are not made under a social insurance scheme incorporating social contributions and social insurance benefits. Included are children's allowance, welfare affairs and services, grants referring to students' financial assistance scheme, etc.

Reference: ESA 95, paragraph 4.103.

(Percentage of gross domestic product at market prices)

	SI	AC-10 ⁽¹⁾	EU-25 ⁽²⁾	BG	RO	TR	US ⁽³⁾	JP
1970	:	:	:	:	:	:	7.0	:
1971	:	:	:	:	:	:	7.6	:
1972	:	:	:	:	:	:	7.7	:
1973	:	:	:	:	:	:	7.9	:
1974	:	:	:	:	:	:	8.7	:
1975	:	:	:	:	:	:	10.1	:
1976	:	:	:	:	:	:	9.8	:
1977	:	:	:	:	:	:	9.4	:
1978	:	:	:	:	:	:	8.9	:
1979	:	:	:	:	:	:	8.9	:
1980	:	:	:	:	:	:	9.8	:
1981	:	:	:	:	:	:	9.9	:
1982	:	:	:	:	:	:	10.6	:
1983	:	:	:	:	:	:	10.5	:
1984	:	:	:	:	:	:	9.7	:
1985	:	:	:	:	:	:	9.7	:
1986	:	:	:	:	:	:	9.7	:
1987	:	:	:	:	:	:	9.5	:
1988	:	:	:	:	:	:	9.4	:
1989	:	:	:	:	:	:	9.5	:
1990	:	:	:	:	:	:	10.0	7.3
1991	:	:	:	:	:	:	10.9	7.0
1992	:	:	:	:	:	:	11.6	7.2
1993	:	:	:	:	:	:	11.8	7.6
1994	:	:	:	:	:	:	11.6	7.9
1995	:	:	:	:	:	:	11.7	8.4
1996	:	:	:	:	:	:	11.6	8.6
1997	:	:	:	:	:	:	11.3	8.7
1998	:	:	:	:	:	:	11.0	9.2
1999	:	:	:	11.9	:	:	10.7	9.8
2000	:	:	:	14.3	:	:	10.6	9.9
2001	:	:	:	:	:	:	11.3	10.3
2002	:	:	:	:	:	:	12.1	10.7
2003	:	:	:	:	:	:	12.3	10.9
2004	:	:	:	:	:	:	12.3	11.0
2005	:	:	:	:	:	:	12.2	11.2

⁽¹⁾ CY, CZ, EE, HU, LV, LT, MT, PL, SK and SI.⁽²⁾ BE, DK, DE, EL, ES, FR, IE, IT, LU, NL, AT, PT, FI, SE, UK, CY, CZ, EE, HU, LV, LT, MT, PL, SK and SI.⁽³⁾ Former definition.

Table 65

General government (% of GDP at market prices)
Interest including flows on swaps and FRAs (forward rate agreements); general government
Excessive deficit procedure

(Percentage of gross domestic product at market prices)

	BE	DK	DE (1)	EL	ES	FR	IE	IT	LU
1970	3.6	:	1.0	:	:	:	:	:	:
1971	3.7	1.3	1.0	:	:	:	:	:	:
1972	3.7	1.3	1.1	:	:	:	:	:	:
1973	3.7	1.2	1.1	:	:	:	:	:	:
1974	3.8	1.2	1.3	:	:	:	:	:	:
1975	4.1	1.2	1.4	:	:	:	:	:	:
1976	4.2	1.3	1.7	:	:	:	:	:	:
1977	4.7	1.8	1.7	:	:	:	:	:	:
1978	5.1	2.1	1.7	:	:	1.3	:	:	:
1979	5.8	3.4	1.8	:	:	1.4	:	:	:
1980	6.6	3.8	2.1	:	:	1.4	:	4.7	:
1981	8.3	5.1	2.5	:	:	1.9	:	5.3	:
1982	9.5	5.8	2.9	:	:	2.0	:	6.9	:
1983	9.9	7.8	3.0	:	:	2.5	:	8.2	:
1984	10.1	9.3	3.0	:	:	2.6	:	8.7	:
1985	11.1	9.6	3.0	:	:	2.8	:	8.7	:
1986	11.4	8.5	2.9	:	:	2.8	:	9.0	:
1987	10.6	8.0	2.9	:	:	2.7	:	8.2	:
1988	10.3	7.6	2.8	7.4	:	2.6	:	8.6	:
1989	11.3	7.2	2.7	7.5	:	2.7	:	9.5	:
1990	11.9	7.3	2.7	10.0	:	2.9	7.9	10.5	0.4
1991			2.9						
1991	11.3	7.3	2.8	9.6	:	3.0	7.6	11.9	0.3
1992	11.1	6.6	3.3	11.5	:	3.2	7.1	12.6	0.3
1993	11.1	7.3	3.3	12.6	:	3.5	6.7	13.0	0.3
1994	9.6	6.7	3.3	13.9	:	3.6	6.1	11.4	0.4
1995	9.3	6.4	3.7	12.7	5.2	3.8	5.4	11.5	0.4
1996	8.8	6.1	3.7	12.0	5.3	3.9	4.6	11.5	0.4
1997	8.0	5.7	3.6	9.6	4.8	3.7	4.2	9.4	0.3
1998	7.5	5.3	3.6	9.0	4.3	3.6	3.4	8.3	0.4
1999	7.0	4.7	3.5	8.3	3.5	3.3	2.4	6.7	0.3
2000	6.7	4.2	3.4	7.8	3.3	3.2	2.1	6.5	0.3
2001	6.6	3.9	3.3	7.1	3.1	3.2	1.6	6.4	0.3
2002	6.0	3.5	3.1	6.1	2.8	3.2	1.4	5.7	0.3
2003	5.6	3.3	3.1	6.0	2.5	3.2	1.5	5.3	0.1
2004	5.0	3.0	3.2	5.6	2.3	3.2	1.5	5.0	0.1
2005	4.6	2.8	3.2	5.4	2.2	3.2	1.4	5.1	0.1

(1) 1970–91 D_90.

NB: Member States have provided figures for the last statistical period according to ESA 95 specifications starting from the years mentioned below:

1970: BE, DE, NL, UK; 1976: AT; 1980: IT; 1993: SE;
1971: DK; 1977: PT; 1988: EL; 1995: ES.
1975: FI; 1978: FR; 1990: IE, LU;

Interest (D.41) paid by general government, consolidated.

Reference: ESA 95, paragraph 4.42 et seq.

(Percentage of gross domestic product at market prices)

	NL	AT	PT	FI	SE	UK	EU-15 ⁽¹⁾	EUR-12 ⁽²⁾
1970	2.9	:	:	:	:	4.1	:	:
1971	2.9	:	:	:	:	3.8	:	:
1972	2.7	:	:	:	:	3.8	:	:
1973	2.8	:	:	:	:	3.8	:	:
1974	3.0	:	:	:	:	4.4	:	:
1975	3.0	:	:	0.6	:	4.1	:	:
1976	3.0	1.7	:	0.6	:	4.5	:	:
1977	3.1	1.8	1.4	0.7	:	4.5	:	:
1978	3.2	2.2	2.3	0.8	:	4.4	:	:
1979	3.4	2.3	2.5	0.9	:	4.6	:	:
1980	3.8	2.4	2.6	1.0	:	4.9	:	:
1981	4.5	2.7	4.3	1.1	:	5.3	:	:
1982	5.2	3.0	4.7	1.2	:	5.3	:	:
1983	5.7	3.0	5.5	1.5	:	5.0	:	:
1984	6.1	3.3	6.1	1.6	:	5.2	:	:
1985	6.3	3.5	6.9	1.8	:	5.2	:	:
1986	6.3	3.6	8.3	1.7	:	4.8	:	:
1987	6.2	3.9	7.5	1.7	:	4.5	:	:
1988	6.1	4.0	6.6	1.6	:	4.1	:	:
1989	5.8	4.0	6.1	1.4	:	4.0	:	:
1990	5.9	4.1	8.6	1.4	:	3.7	:	:
1991								
1991	6.1	4.2	8.8	1.9	:	3.1	:	:
1992	6.3	4.3	8.5	2.6	:	3.0	:	:
1993	6.2	4.3	7.7	4.5	5.8	3.1	:	:
1994	5.8	4.1	6.6	4.2	6.4	3.3	:	:
1995	5.9	4.3	6.3	4.0	6.6	3.6	5.4	5.6
1996	5.6	4.2	5.4	4.3	6.6	3.6	5.5	5.7
1997	5.2	3.9	4.2	4.3	6.3	3.6	5.0	5.2
1998	4.8	3.8	3.5	3.6	5.5	3.5	4.6	4.8
1999	4.5	3.6	3.2	3.1	4.6	2.9	4.1	4.3
2000	3.8	3.6	3.2	2.9	4.0	2.7	3.8	4.1
2001	3.4	3.5	3.1	2.7	3.2	2.4	3.7	4.0
2002	3.1	3.4	3.0	2.2	2.9	2.0	3.3	3.6
2003	3.0	3.3	2.9	2.1	2.7	2.1	3.3	3.6
2004	2.7	3.3	2.8	2.0	2.6	2.1	3.2	3.4
2005	2.6	3.2	2.8	1.8	2.7	2.0	3.2	3.4

⁽¹⁾ 1970–91 including D_90.⁽²⁾ EU-15 excluding DK, SE and UK; 1970–91 including D_90.

Table 65 (Continued)

(Percentage of gross domestic product at market prices)

	CY	CZ	EE	HU	LV	LT	MT	PL	SK
1970	:	:	:	:	:	:	:	:	:
1971	:	:	:	:	:	:	:	:	:
1972	:	:	:	:	:	:	:	:	:
1973	:	:	:	:	:	:	:	:	:
1974	:	:	:	:	:	:	:	:	:
1975	:	:	:	:	:	:	:	:	:
1976	:	:	:	:	:	:	:	:	:
1977	:	:	:	:	:	:	:	:	:
1978	:	:	:	:	:	:	:	:	:
1979	:	:	:	:	:	:	:	:	:
1980	:	:	:	:	:	:	:	:	:
1981	:	:	:	:	:	:	:	:	:
1982	:	:	:	:	:	:	:	:	:
1983	:	:	:	:	:	:	:	:	:
1984	:	:	:	:	:	:	:	:	:
1985	:	:	:	:	:	:	:	:	:
1986	:	:	:	:	:	:	:	:	:
1987	:	:	:	:	:	:	:	:	:
1988	:	:	:	:	:	:	:	:	:
1989	:	:	:	:	:	:	:	:	:
1990	:	:	:	:	0.1	:	:	:	:
1991	:	:	:	:	0.0	:	:	4.8	:
1992	:	1.5	:	:	0.1	:	:	5.8	:
1993	:	1.8	0.2	:	0.2	:	:	8.6	2.8
1994	:	1.4	0.2	:	1.0	:	:	6.6	3.4
1995	:	1.2	0.2	:	1.4	0.4	:	6.2	2.3
1996	:	1.3	0.4	:	1.7	0.9	:	4.8	2.5
1997	:	1.3	0.5	:	1.1	0.8	:	4.7	2.2
1998	:	1.3	0.5	:	0.9	1.1	:	4.0	2.4
1999	5.5	1.0	0.4	7.5	0.9	1.5	3.8	3.2	3.4
2000	5.7	1.0	0.3	5.7	1.1	1.8	4.0	3.3	4.1
2001	4.9	1.1	0.3	5.0	1.0	1.8	3.6	3.2	3.1
2002	4.9	1.4	0.2	4.0	0.9	1.6	3.8	3.1	3.5
2003	4.8	1.3	0.3	3.6	0.9	1.5	3.9	3.2	2.9
2004	4.6	1.0	0.3	3.2	0.8	1.4	4.2	3.0	2.6
2005	4.5	1.2	0.3	2.8	0.8	1.3	4.2	3.1	2.5

NB: Member States have provided figures for the last statistical period according to ESA 95 specifications starting from the years mentioned below:

1970: BE, DE, NL, UK;

1976: AT;

1980: IT;

1993: SE;

1971: DK;

1977: PT;

1988: EL;

1995: ES.

1975: FI;

1978: FR;

1990: IE, LU;

Interest (D.41) paid by general government, consolidated.

Reference: ESA 95, paragraph 4.42 et seq.

(Percentage of gross domestic product at market prices)

	SI	AC-10 ⁽¹⁾	EU-25 ⁽²⁾	BG	RO	TR	US ⁽³⁾	JP ⁽⁴⁾
1970	:	:	:	:	:	:	2.3	:
1971	:	:	:	:	:	:	2.2	:
1972	:	:	:	:	:	:	2.1	:
1973	:	:	:	:	:	:	2.3	:
1974	:	:	:	:	:	:	2.4	:
1975	:	:	:	:	:	:	2.5	:
1976	:	:	:	:	:	:	2.6	:
1977	:	:	:	:	:	:	2.5	:
1978	:	:	:	:	:	:	2.6	:
1979	:	:	:	:	:	:	2.9	:
1980	:	:	:	:	:	:	3.2	:
1981	:	:	:	:	:	:	3.8	:
1982	:	:	:	:	:	:	4.3	:
1983	:	:	:	:	:	:	4.5	:
1984	:	:	:	:	:	:	4.8	:
1985	:	:	:	:	:	:	5.1	:
1986	:	:	:	:	:	:	5.1	:
1987	:	:	:	:	:	:	5.0	:
1988	:	:	:	:	:	:	5.0	:
1989	:	:	:	:	:	:	5.1	:
1990	:	:	:	:	:	:	5.2	3.6
1991	:	:	:	:	:	:	5.3	3.5
1992	:	:	:	:	:	:	5.1	3.5
1993	:	:	:	:	:	:	4.8	3.4
1994	:	:	:	:	:	:	4.7	3.4
1995	:	:	:	:	:	:	4.9	3.4
1996	:	:	:	:	:	:	4.7	3.4
1997	:	:	:	:	:	:	4.5	3.4
1998	:	:	:	:	:	:	4.3	3.4
1999	2.3	3.3	4.0	3.8	5.4	21.7	3.9	3.4
2000	2.2	3.2	3.8	4.0	4.4	14.0	3.7	3.3
2001	1.5	3.0	3.6	3.7	3.9	27.2	3.4	3.2
2002	1.6	2.8	3.3	2.2	3.0	19.9	3.0	3.3
2003	1.7	2.7	3.3	2.2	2.4	20.6	2.9	3.6
2004	1.8	2.5	3.1	2.4	2.3	20.3	2.9	3.7
2005	1.8	2.5	3.1	2.4	2.4	20.1	3.0	3.8

⁽¹⁾ CY, CZ, EE, HU, LV, LT, MT, PL, SK and SI.⁽²⁾ BE, DK, DE, EL, ES, FR, IE, IT, LU, NL, AT, PT, FI, SE, UK, CY, CZ, EE, HU, LV, LT, MT, PL, SK and SI.⁽³⁾ Former definition.⁽⁴⁾ SNA 93.

Table 66

General government (% of GDP at market prices)
Subsidies; general government
ESA 95

(Percentage of gross domestic product at market prices)

	BE	DK	DE (1)	EL	ES	FR	IE	IT	LU
1970	2.3	:	1.5	:	:	:	:	:	:
1971	2.2	3.3	1.5	:	:	:	:	:	:
1972	2.4	3.7	1.8	:	:	:	:	:	:
1973	2.5	1.8	1.7	:	:	:	:	:	:
1974	2.3	2.2	1.7	:	:	:	:	:	:
1975	2.6	1.5	1.8	:	:	:	:	:	:
1976	2.7	1.6	1.7	:	:	:	:	:	:
1977	2.9	1.3	1.7	:	:	:	:	:	:
1978	2.9	1.3	1.9	:	:	2.2	:	:	:
1979	3.0	1.4	1.9	:	:	2.2	:	:	:
1980	2.8	1.6	1.8	:	:	2.1	:	2.7	:
1981	2.9	1.7	1.8	:	:	2.3	:	2.7	:
1982	2.6	1.9	1.8	:	:	2.4	:	2.9	:
1983	2.8	1.9	1.7	:	:	2.4	:	2.7	:
1984	2.9	1.8	1.8	:	:	2.7	:	2.8	:
1985	2.4	1.6	1.9	:	:	2.6	:	2.6	:
1986	2.3	1.4	1.9	:	:	2.6	:	2.8	:
1987	2.0	1.4	2.0	:	:	2.5	:	2.4	:
1988	2.1	2.1	2.0	2.0	:	2.1	:	2.2	:
1989	1.7	2.2	2.0	1.5	:	2.0	:	2.2	:
1990	1.7	2.2	1.8	1.2	:	1.8	1.1	1.9	2.5
1991			1.7						
1991	1.7	2.1	2.2	0.6	:	1.7	1.1	1.9	2.6
1992	1.6	2.7	1.9	0.5	:	1.7	1.2	1.8	2.7
1993	1.6	2.6	1.9	0.5	:	1.7	1.3	2.0	2.4
1994	1.5	2.6	2.1	0.4	:	1.6	1.1	1.7	2.7
1995	1.5	2.5	2.1	0.4	1.1	1.5	1.0	1.5	1.8
1996	1.6	2.6	2.0	0.5	1.0	1.5	1.0	1.5	2.0
1997	1.4	2.4	1.8	0.2	0.9	1.5	1.0	1.2	1.8
1998	1.5	2.3	1.9	0.1	1.1	1.4	0.8	1.3	1.8
1999	1.5	2.3	1.8	0.2	1.2	1.3	0.8	1.2	1.5
2000	1.5	2.2	1.7	0.2	1.2	1.2	0.7	1.2	1.6
2001	1.6	2.1	1.6	0.1	1.1	1.3	0.9	1.2	1.6
2002	1.6	2.2	1.5	0.2	1.2	1.3	0.8	1.0	1.7
2003	1.6	2.1	1.4	0.1	1.1	1.3	0.8	1.0	1.8
2004	1.6	2.0	1.3	0.1	1.1	1.2	0.7	1.0	1.8
2005	1.5	2.0	1.2	0.1	1.0	1.2	0.7	1.0	1.7

(1) 1970–91 D_90.

NB: Member States have provided figures for the last statistical period according to ESA 95 specifications starting from the years mentioned below:

1970: BE, DE, NL, UK; 1976: AT; 1980: IT; 1993: SE;
 1971: DK; 1977: PT; 1988: EL; 1995: ES.
 1975: FI; 1978: FR; 1990: IE, LU;

Subsidies (D.3) are defined by ESA 95 as current unrequited payments which general government or the institutions of the European Union make to resident producers with the objective of influencing their levels of production, their prices or the remuneration of the factors of production. The table contains only subsidies paid by general government. Data cover 'subsidies on products' as well as 'other subsidies on production'.

Subsidies on products (D.31) are subsidies payable per unit of a good or service produced or imported. The subsidy may be a specific amount of money per unit of quantity of a good or service, or it may be calculated *ad valorem* as a specified percentage of the price per unit. A subsidy may also be calculated as the difference between a specified target price and the market price actually paid by the buyer.

Other subsidies on production (D.39) consist of subsidies except subsidies on products which resident producer units may receive as a consequence of engaging in production. They include, in particular:

- subsidies on payroll or workforce, for example payments on the employment of particular types of persons such as physically handicapped persons or persons who have been unemployed for long periods;
- subsidies to reduce pollution;
- grants for interest relief made to resident producer units.

It should be noted that investment grants are not treated as subsidies; they are part of capital transfers.

Reference: ESA 95, paragraphs 4.30, 4.33, 4.36 and 4.37.

(Percentage of gross domestic product at market prices)

	NL	AT	PT	FI	SE	UK	EU-15 ⁽¹⁾	EUR-12 ⁽²⁾
1970	0.9	:	:	:	:	1.8	:	:
1971	1.0	:	:	:	:	1.7	:	:
1972	1.1	:	:	:	:	1.8	:	:
1973	1.1	:	:	:	:	1.9	:	:
1974	1.2	:	:	:	:	3.5	:	:
1975	1.4	:	:	3.4	:	3.3	:	:
1976	1.7	3.0	:	3.3	:	2.7	:	:
1977	1.7	3.1	3.3	3.3	:	2.2	:	:
1978	1.8	3.3	3.7	3.1	:	2.1	:	:
1979	1.8	3.1	4.0	3.3	:	2.1	:	:
1980	1.8	3.2	4.6	3.2	:	2.2	:	:
1981	1.8	3.2	4.9	3.2	:	2.2	:	:
1982	2.0	3.2	3.9	3.0	:	1.8	:	:
1983	2.1	3.1	3.6	3.1	:	1.7	:	:
1984	2.2	3.0	4.0	3.1	:	1.9	:	:
1985	2.4	3.2	3.4	3.1	:	1.7	:	:
1986	2.3	3.6	3.4	3.1	:	1.3	:	:
1987	2.3	3.5	2.7	3.0	:	1.2	:	:
1988	2.3	3.3	2.4	2.9	:	1.0	:	:
1989	2.3	3.2	2.1	2.7	:	0.9	:	:
1990	2.3	3.1	1.7	2.8	:	0.9	:	:
1991								
1991	2.2	3.3	1.6	3.3	:	0.8	:	:
1992	2.3	3.3	1.9	3.5	:	0.9	:	:
1993	2.1	3.4	2.4	3.3	4.5	0.8	:	:
1994	2.0	2.9	1.7	3.1	4.1	0.8	:	:
1995	1.1	2.9	1.3	2.8	3.7	0.8	1.6	1.7
1996	1.2	2.6	1.5	2.0	3.2	0.7	1.6	1.6
1997	1.5	2.6	1.2	1.8	2.7	0.7	1.4	1.5
1998	1.5	2.8	1.5	1.6	2.2	0.6	1.4	1.5
1999	1.6	2.6	1.7	1.6	2.0	0.5	1.4	1.5
2000	1.5	2.4	1.1	1.5	1.6	0.5	1.3	1.4
2001	1.5	2.6	1.3	1.4	1.5	0.6	1.3	1.4
2002	1.5	2.8	1.5	1.4	1.6	0.6	1.2	1.3
2003	1.4	3.0	1.5	1.4	1.5	0.7	1.2	1.3
2004	1.2	2.9	1.5	1.4	1.6	0.7	1.2	1.2
2005	1.1	2.8	1.5	1.3	1.3	0.7	1.1	1.2

⁽¹⁾ 1970–91 including D_90.⁽²⁾ EU-15 excluding DK, SE and UK; 1970–91 including D_90.

Table 66 (Continued)

(Percentage of gross domestic product at market prices)

	CY	CZ	EE	HU	LV	LT	MT	PL	SK
1970	:	:	:	:	:	:	:	:	:
1971	:	:	:	:	:	:	:	:	:
1972	:	:	:	:	:	:	:	:	:
1973	:	:	:	:	:	:	:	:	:
1974	:	:	:	:	:	:	:	:	:
1975	:	:	:	:	:	:	:	:	:
1976	:	:	:	:	:	:	:	:	:
1977	:	:	:	:	:	:	:	:	:
1978	:	:	:	:	:	:	:	:	:
1979	:	:	:	:	:	:	:	:	:
1980	:	:	:	:	:	:	:	:	:
1981	:	:	:	:	:	:	:	:	:
1982	:	:	:	:	:	:	:	:	:
1983	:	:	:	:	:	:	:	:	:
1984	:	:	:	:	:	:	:	:	:
1985	:	:	:	:	:	:	:	:	:
1986	:	:	:	:	:	:	:	:	:
1987	:	:	:	:	:	:	:	:	:
1988	:	:	:	:	:	:	:	:	:
1989	:	:	:	:	:	:	:	:	:
1990	:	:	:	:	15.3	:	:	:	:
1991	:	:	:	3.8	6.0	:	:	2.7	:
1992	:	5.2	:	2.1	0.8	:	:	2.4	:
1993	:	3.3	1.0	1.8	0.7	2.3	:	2.1	4.5
1994	:	3.5	1.0	2.4	0.5	1.6	:	2.1	4.3
1995	:	3.0	0.8	2.1	1.3	1.1	:	1.6	4.8
1996	:	2.6	0.7	1.7	0.9	1.3	:	1.3	4.0
1997	:	2.8	0.7	1.3	1.1	0.9	:	1.1	4.4
1998	:	3.0	1.1	1.7	1.3	1.1	:	1.3	2.9
1999	:	3.0	1.2	1.3	1.5	1.1	:	1.1	2.7
2000	:	2.9	1.1	1.3	1.1	0.8	:	0.7	2.5
2001	:	3.3	:	:	0.7	:	:	:	:
2002	:	3.0	:	:	0.8	:	:	:	:
2003	:	:	:	:	:	:	:	:	:
2004	:	:	:	:	:	:	:	:	:
2005	:	:	:	:	:	:	:	:	:

NB: Member States have provided figures for the last statistical period according to ESA 95 specifications starting from the years mentioned below:

1970: BE, DE, NL, UK; 1976: AT; 1980: IT; 1993: SE;
 1971: DK; 1977: PT; 1988: EL; 1995: ES.
 1975: FI; 1978: FR; 1990: IE, LU;

Subsidies (D.3) are defined by ESA 95 as current unrequited payments which general government or the institutions of the European Union make to resident producers with the objective of influencing their levels of production, their prices or the remuneration of the factors of production. The table contains only subsidies paid by general government. Data cover 'subsidies on products' as well as 'other subsidies on production'.

Subsidies on products (D.31) are subsidies payable per unit of a good or service produced or imported. The subsidy may be a specific amount of money per unit of quantity of a good or service, or it may be calculated *ad valorem* as a specified percentage of the price per unit. A subsidy may also be calculated as the difference between a specified target price and the market price actually paid by the buyer.

Other subsidies on production (D.39) consist of subsidies except subsidies on products which resident producer units may receive as a consequence of engaging in production. They include, in particular:

- subsidies on payroll or workforce, for example payments on the employment of particular types of persons such as physically handicapped persons or persons who have been unemployed for long periods;
- subsidies to reduce pollution;
- grants for interest relief made to resident producer units.

It should be noted that investment grants are not treated as subsidies; they are part of capital transfers.

Reference: ESA 95, paragraphs 4.30, 4.33, 4.36 and 4.37.

(Percentage of gross domestic product at market prices)

	SI	AC-10 ⁽¹⁾	EU-25 ⁽²⁾	BG	RO	TR	US ⁽³⁾	JP
1970	:	:	:	:	:	:	0.5	:
1971	:	:	:	:	:	:	0.4	:
1972	:	:	:	:	:	:	0.5	:
1973	:	:	:	:	:	:	0.4	:
1974	:	:	:	:	:	:	0.2	:
1975	:	:	:	:	:	:	0.3	:
1976	:	:	:	:	:	:	0.3	:
1977	:	:	:	:	:	:	0.3	:
1978	:	:	:	:	:	:	0.4	:
1979	:	:	:	:	:	:	0.3	:
1980	:	:	:	:	:	:	0.4	:
1981	:	:	:	:	:	:	0.4	:
1982	:	:	:	:	:	:	0.4	:
1983	:	:	:	:	:	:	0.6	:
1984	:	:	:	:	:	:	0.5	:
1985	:	:	:	:	:	:	0.5	:
1986	:	:	:	:	:	:	0.6	:
1987	:	:	:	:	:	:	0.7	:
1988	:	:	:	:	:	:	0.6	:
1989	:	:	:	:	:	:	0.5	:
1990	:	:	:	:	:	:	0.5	1.1
1991	:	:	:	:	:	:	0.5	0.9
1992	:	:	:	:	:	:	0.5	0.8
1993	:	:	:	:	:	:	0.6	0.8
1994	:	:	:	:	:	:	0.5	0.8
1995	:	:	:	:	:	:	0.5	0.8
1996	:	:	:	:	:	:	0.4	0.8
1997	:	:	:	:	:	:	0.4	0.8
1998	:	:	:	:	:	:	0.4	0.7
1999	:	:	:	1.8	:	:	0.5	0.8
2000	:	:	:	1.9	:	:	0.5	0.9
2001	:	:	:	:	:	:	0.6	0.8
2002	:	:	:	:	:	:	0.4	0.8
2003	:	:	:	:	:	:	0.6	0.8
2004	:	:	:	:	:	:	0.6	0.7
2005	:	:	:	:	:	:	0.6	0.7

⁽¹⁾ CY, CZ, EE, HU, LV, LT, MT, PL, SK and SI.⁽²⁾ BE, DK, DE, EL, ES, FR, IE, IT, LU, NL, AT, PT, FI, SE, UK, CY, CZ, EE, HU, LV, LT, MT, PL, SK and SI.⁽³⁾ Former definition.

Table 67

General government (% of GDP at market prices)
Other current expenditure; general government
ESA 95

(Percentage of gross domestic product at market prices)

	BE	DK	DE (1)	EL	ES	FR	IE	IT	LU
1970	2.5	:	0.8	:	:	:	:	:	:
1971	2.2	0.7	0.9	:	:	:	:	:	:
1972	2.2	0.8	0.9	:	:	:	:	:	:
1973	2.2	0.9	0.9	:	:	:	:	:	:
1974	1.7	1.0	0.9	:	:	:	:	:	:
1975	1.9	1.1	1.0	:	:	:	:	:	:
1976	1.7	1.2	1.1	:	:	:	:	:	:
1977	1.8	1.4	1.2	:	:	:	:	:	:
1978	2.0	1.4	1.2	:	:	0.8	:	:	:
1979	1.7	1.7	1.2	:	:	0.8	:	:	:
1980	1.7	1.7	1.3	:	:	0.8	:	0.6	:
1981	1.8	1.7	1.3	:	:	0.9	:	0.5	:
1982	1.7	1.8	1.3	:	:	1.0	:	0.5	:
1983	1.8	1.8	1.3	:	:	1.1	:	0.6	:
1984	1.8	1.9	1.4	:	:	1.0	:	0.6	:
1985	2.0	1.9	1.3	:	:	1.2	:	0.7	:
1986	1.7	2.1	1.2	:	:	1.0	:	0.8	:
1987	1.7	2.1	1.2	:	:	1.1	:	0.8	:
1988	1.8	2.0	1.3	0.7	:	1.2	:	0.9	:
1989	1.8	2.0	1.3	1.0	:	1.2	:	1.2	:
1990	1.7	1.8	3.0	0.9	:	1.2	1.8	0.9	2.8
1991			6.3						
1991	1.9	2.1	1.8	1.0	:	1.4	2.0	1.1	3.2
1992	1.9	2.1	1.4	1.0	:	1.6	2.0	1.1	3.1
1993	2.0	2.3	1.5	1.4	:	1.7	2.2	1.4	3.2
1994	2.1	2.3	1.4	1.2	:	1.6	2.3	1.2	3.0
1995	2.0	2.2	1.2	1.3	0.9	1.6	2.1	1.1	3.1
1996	2.1	2.4	1.3	1.2	1.0	1.7	2.4	1.3	2.7
1997	2.1	2.4	1.4	1.1	1.1	1.6	2.2	1.3	3.0
1998	2.1	2.6	1.4	1.3	1.2	1.6	2.2	1.3	3.3
1999	2.1	2.5	1.6	1.2	1.2	1.7	2.1	1.4	3.5
2000	2.0	2.6	1.7	1.1	1.2	1.6	2.0	1.3	3.1
2001	2.0	2.6	1.6	1.1	1.2	1.6	2.0	1.4	3.2
2002	2.1	2.6	1.7	1.3	1.3	1.8	2.2	1.4	3.2
2003	2.0	2.6	1.8	1.2	1.3	1.8	2.3	1.4	3.0
2004	2.0	2.5	1.8	1.2	1.3	1.7	2.3	1.4	2.7
2005	2.0	2.5	1.8	1.1	1.4	1.7	2.3	1.4	2.5

(1) 1970–91 D_90.

NB: Member States have provided figures for the last statistical period according to ESA 95 specifications starting from the years mentioned below:

1970: BE, DE, NL, UK; 1976: AT; 1980: IT; 1993: SE;
 1971: DK; 1977: PT; 1988: EL; 1995: ES.
 1975: FI; 1978: FR; 1990: IE, LU;

Other current expenditure of general government consists of:

- property income except interest, payable;
- current taxes on income and wealth (D.5), payable;
- other current transfers (D.7), payable (consolidated).

Property income except interest only comprises rents (D.45), since the remaining kinds of property income as classified by ESA 95 — distributed income of corporations, reinvested earnings on direct foreign investment and property income attributed to insurance policy holders — are not included in general government uses.

Among other current transfers (D.7) which are relevant are, in particular, net non-life insurance premiums (D.71), current international cooperation (D.74) and miscellaneous current transfers (D.75).

The last comprise, for example:

- transfers of EU Member States to the institutions of the European Union according to the GNP-based fourth own resource;
- bonus payments on savings granted at intervals by general government to households in order to reward them for their saving during the period;
- ex gratia payments made by government units to other institutional units in compensation for injuries or damage caused by natural disasters other than those classified as capital transfers.

Reference: ESA 95, paragraphs 4.136–4.139.

(Percentage of gross domestic product at market prices)

	NL	AT	PT	FI	SE	UK	EU-15 ⁽¹⁾	EUR-12 ⁽²⁾
1970	0.5	:	:	:	:	0.9	:	:
1971	0.7	:	:	:	:	1.0	:	:
1972	0.7	:	:	:	:	1.1	:	:
1973	0.8	:	:	:	:	1.0	:	:
1974	0.7	:	:	:	:	1.0	:	:
1975	1.0	:	:	1.4	:	1.1	:	:
1976	0.8	2.0	:	1.3	:	1.2	:	:
1977	0.9	2.0	1.1	1.2	:	1.1	:	:
1978	1.2	2.2	1.0	1.2	:	1.3	:	:
1979	0.8	2.2	0.9	1.2	:	0.9	:	:
1980	0.8	2.2	0.8	1.2	:	0.9	:	:
1981	0.9	2.3	0.7	1.3	:	1.1	:	:
1982	0.9	2.2	0.7	1.3	:	1.1	:	:
1983	0.8	2.4	0.7	1.4	:	1.1	:	:
1984	1.0	2.2	0.6	1.3	:	1.1	:	:
1985	0.9	2.3	0.7	1.4	:	1.2	:	:
1986	0.8	2.3	1.2	1.5	:	1.1	:	:
1987	0.8	2.3	1.9	1.5	:	1.0	:	:
1988	0.8	2.5	1.2	1.5	:	1.2	:	:
1989	0.8	2.4	1.1	1.6	:	1.1	:	:
1990	0.8	2.3	1.2	1.7	:	1.1	:	:
1991								
1991	0.9	2.5	1.5	2.1	:	1.1	:	:
1992	1.0	2.5	1.4	2.2	:	1.1	:	:
1993	1.1	2.7	1.7	2.3	1.7	1.6	:	:
1994	1.1	2.7	1.6	1.9	1.9	1.8	:	:
1995	1.1	2.5	1.6	2.0	2.0	1.8	1.5	1.4
1996	1.2	2.6	1.9	2.2	1.7	2.0	1.5	1.4
1997	1.2	2.5	2.0	2.4	1.7	2.0	1.6	1.5
1998	1.3	2.7	2.1	2.3	1.9	2.1	1.7	1.5
1999	1.4	2.8	2.2	2.4	1.8	2.2	1.7	1.6
2000	1.7	2.6	2.4	2.4	2.2	2.3	1.8	1.6
2001	1.7	3.3	2.2	2.3	2.3	2.2	1.8	1.6
2002	1.8	3.4	2.3	2.4	2.3	2.5	1.9	1.7
2003	1.8	3.5	2.3	2.5	4.7	2.4	2.0	1.8
2004	1.9	3.5	2.4	2.5	4.7	2.3	1.9	1.8
2005	1.9	3.5	2.4	2.4	4.5	2.2	1.9	1.7

⁽¹⁾ 1970–91 including D_90.⁽²⁾ EU-15 excluding DK, SE and UK; 1970–91 including D_90.

Table 67 (Continued)

(Percentage of gross domestic product at market prices)

	CY	CZ	EE	HU	LV	LT	MT	PL	SK
1970	:	:	:	:	:	:	:	:	:
1971	:	:	:	:	:	:	:	:	:
1972	:	:	:	:	:	:	:	:	:
1973	:	:	:	:	:	:	:	:	:
1974	:	:	:	:	:	:	:	:	:
1975	:	:	:	:	:	:	:	:	:
1976	:	:	:	:	:	:	:	:	:
1977	:	:	:	:	:	:	:	:	:
1978	:	:	:	:	:	:	:	:	:
1979	:	:	:	:	:	:	:	:	:
1980	:	:	:	:	:	:	:	:	:
1981	:	:	:	:	:	:	:	:	:
1982	:	:	:	:	:	:	:	:	:
1983	:	:	:	:	:	:	:	:	:
1984	:	:	:	:	:	:	:	:	:
1985	:	:	:	:	:	:	:	:	:
1986	:	:	:	:	:	:	:	:	:
1987	:	:	:	:	:	:	:	:	:
1988	:	:	:	:	:	:	:	:	:
1989	:	:	:	:	:	:	:	:	:
1990	:	:	:	:	2.6	:	:	:	:
1991	:	:	:	:	0.4	:	:	2.0	:
1992	:	1.3	:	:	1.4	:	:	3.2	:
1993	:	0.7	1.5	:	2.8	:	:	1.5	4.5
1994	:	1.1	3.7	:	3.6	:	:	1.4	6.6
1995	:	1.1	3.1	:	3.9	0.0	:	1.5	8.0
1996	:	1.5	1.9	:	4.4	0.1	:	1.7	8.6
1997	:	0.9	2.0	:	4.8	2.1	:	1.9	14.4
1998	:	0.8	7.4	:	5.5	0.7	:	1.6	14.9
1999	:	0.7	10.8	:	4.4	0.5	:	1.4	10.0
2000	:	1.0	10.7	:	4.6	0.3	:	0.8	10.1
2001	:	0.8	:	:	3.6	:	:	:	:
2002	:	0.8	:	:	5.9	:	:	:	:
2003	:	:	:	:	:	:	:	:	:
2004	:	:	:	:	:	:	:	:	:
2005	:	:	:	:	:	:	:	:	:

NB: Member States have provided figures for the last statistical period according to ESA 95 specifications starting from the years mentioned below:

1970: BE, DE, NL, UK; 1976: AT; 1980: IT; 1993: SE;
 1971: DK; 1977: PT; 1988: EL; 1995: ES.
 1975: FI; 1978: FR; 1990: IE, LU;

Other current expenditure of general government consists of:

- property income except interest, payable;
- current taxes on income and wealth (D.5), payable;
- other current transfers (D.7), payable (consolidated).

Property income except interest only comprises rents (D.45), since the remaining kinds of property income as classified by ESA 95 — distributed income of corporations, reinvested earnings on direct foreign investment and property income attributed to insurance policy holders — are not included in general government uses.

Among other current transfers (D.7) which are relevant are, in particular, net non-life insurance premiums (D.71), current international cooperation (D.74) and miscellaneous current transfers (D.75).

The last comprise, for example:

- transfers of EU Member States to the institutions of the European Union according to the GNP-based fourth own resource;
- bonus payments on savings granted at intervals by general government to households in order to reward them for their saving during the period;
- ex gratia payments made by government units to other institutional units in compensation for injuries or damage caused by natural disasters other than those classified as capital transfers.

Reference: ESA 95, paragraphs 4.136–4.139.

(Percentage of gross domestic product at market prices)

	SI	AC-10 ⁽¹⁾	EU-25 ⁽²⁾	BG	RO	TR	US ⁽³⁾	JP
1970	:	:	:	:	:	:	0.2	:
1971	:	:	:	:	:	:	0.2	:
1972	:	:	:	:	:	:	0.2	:
1973	:	:	:	:	:	:	0.2	:
1974	:	:	:	:	:	:	0.2	:
1975	:	:	:	:	:	:	0.2	:
1976	:	:	:	:	:	:	0.2	:
1977	:	:	:	:	:	:	0.2	:
1978	:	:	:	:	:	:	0.2	:
1979	:	:	:	:	:	:	0.2	:
1980	:	:	:	:	:	:	0.2	:
1981	:	:	:	:	:	:	0.2	:
1982	:	:	:	:	:	:	0.2	:
1983	:	:	:	:	:	:	0.2	:
1984	:	:	:	:	:	:	0.2	:
1985	:	:	:	:	:	:	0.3	:
1986	:	:	:	:	:	:	0.3	:
1987	:	:	:	:	:	:	0.2	:
1988	:	:	:	:	:	:	0.2	:
1989	:	:	:	:	:	:	0.2	:
1990	:	:	:	:	:	:	0.2	0.8
1991	:	:	:	:	:	:	-0.5	1.1
1992	:	:	:	:	:	:	0.3	0.8
1993	:	:	:	:	:	:	0.3	0.9
1994	:	:	:	:	:	:	0.2	0.9
1995	:	:	:	:	:	:	0.1	1.0
1996	:	:	:	:	:	:	0.2	1.0
1997	:	:	:	:	:	:	0.1	1.0
1998	:	:	:	:	:	:	0.1	1.0
1999	:	:	:	5.1	:	:	0.1	1.3
2000	:	:	:	6.1	:	:	0.1	1.0
2001	:	:	:	:	:	:	0.1	1.1
2002	:	:	:	:	:	:	0.1	1.1
2003	:	:	:	:	:	:	0.2	1.1
2004	:	:	:	:	:	:	0.2	1.0
2005	:	:	:	:	:	:	0.2	1.0

⁽¹⁾ CY, CZ, EE, HU, LV, LT, MT, PL, SK and SI.⁽²⁾ BE, DK, DE, EL, ES, FR, IE, IT, LU, NL, AT, PT, FI, SE, UK, CY, CZ, EE, HU, LV, LT, MT, PL, SK and SI.⁽³⁾ Former definition.

Table 68

General government (% of GDP at market prices)
Total current expenditure; general government
Excessive deficit procedure

(Percentage of gross domestic product at market prices)

	BE	DK	DE (1)	EL	ES	FR	IE	IT	LU
1970	36.9	:	31.3	:	:	:	:	:	:
1971	37.9	38.5	32.7	:	:	:	:	:	:
1972	39.0	38.8	33.9	:	:	:	:	:	:
1973	40.0	36.6	34.7	:	:	:	:	:	:
1974	40.1	40.5	37.3	:	:	:	:	:	:
1975	45.5	42.3	41.6	:	:	:	:	:	:
1976	45.8	42.0	41.0	:	:	:	:	:	:
1977	47.9	42.7	40.9	:	:	:	:	:	:
1978	49.5	44.5	40.8	:	:	39.9	:	:	:
1979	50.8	47.0	40.6	:	:	40.4	:	:	:
1980	51.3	50.4	41.4	:	:	41.4	:	37.5	:
1981	55.8	54.0	43.0	:	:	44.0	:	40.9	:
1982	56.4	55.6	43.5	:	:	45.6	:	42.9	:
1983	57.4	56.3	42.6	:	:	46.6	:	45.4	:
1984	56.9	56.0	41.9	:	:	47.6	:	45.4	:
1985	56.7	54.9	41.5	:	:	48.0	:	45.8	:
1986	56.2	51.8	40.8	:	:	47.4	:	46.1	:
1987	54.6	53.1	41.3	:	:	46.6	:	45.5	:
1988	52.3	54.9	41.0	38.6	:	45.6	:	46.2	:
1989	51.7	55.1	39.8	39.5	:	44.8	:	47.7	:
1990	51.7	54.7	40.3	41.7	:	45.0	39.1	49.0	38.2
1991			42.2						
1991	52.5	55.6	41.7	39.5	:	46.0	40.7	50.7	38.7
1992	52.5	56.2	42.7	41.0	:	47.3	41.1	52.1	39.8
1993	53.2	58.8	44.1	43.3	:	49.8	40.6	53.4	39.8
1994	51.0	58.7	44.3	44.2	:	49.3	39.5	50.7	39.4
1995	50.7	57.3	44.9	44.9	39.2	49.2	36.7	48.6	40.2
1996	50.7	56.8	46.2	43.6	39.0	50.0	35.1	49.2	40.3
1997	48.9	54.9	45.6	41.6	37.6	49.7	33.1	47.4	38.6
1998	48.3	54.6	45.0	41.4	36.8	48.4	30.5	45.8	37.0
1999	47.4	53.1	45.0	40.9	35.8	47.9	28.0	44.5	36.6
2000	46.6	51.5	44.5	41.4	35.6	47.1	26.8	44.0	34.3
2001	47.3	51.9	44.4	39.9	35.1	47.1	27.9	44.3	36.3
2002	48.0	52.1	44.8	39.5	35.3	48.2	27.8	43.9	38.9
2003	48.7	52.3	45.3	39.3	35.2	49.4	29.3	44.1	40.8
2004	48.3	51.6	44.8	38.9	35.1	49.0	29.4	43.7	41.6
2005	47.6	50.6	44.1	38.4	35.0	48.8	29.0	43.5	41.1

(1) 1970–91 D_90.

NB: Member States have provided figures for the last statistical period according to ESA 95 specifications starting from the years mentioned below:

1970: BE, DE, NL, UK; 1976: AT; 1980: IT; 1993: SE;
 1971: DK; 1977: PT; 1988: EL; 1995: ES.
 1975: FI; 1978: FR; 1990: IE, LU;

Total current expenditure of general government is the sum of:

Property income (D.4), payable
 + Subsidies (D.3), payable
 + Current taxes on income and wealth (D.5), payable
 + Social benefits other than social transfers in kind (D.62), payable
 + Other current transfers (D.7), payable
 + Final consumption expenditure (P.3) of general government.

(Percentage of gross domestic product at market prices)

	NL	AT	PT	FI	SE	UK	EU-15 ⁽¹⁾	EUR-12 ⁽²⁾
1970	36.5	:	:	:	:	33.6	:	:
1971	38.4	:	:	:	:	33.6	:	:
1972	39.6	:	:	:	:	34.8	:	:
1973	40.0	:	:	:	:	34.3	:	:
1974	42.1	:	:	:	:	39.1	:	:
1975	45.9	:	:	32.3	:	40.9	:	:
1976	46.4	40.3	:	34.1	:	41.1	:	:
1977	47.1	40.3	26.3	35.9	:	39.5	:	:
1978	48.7	43.2	27.0	35.8	:	39.4	:	:
1979	49.7	42.8	26.7	35.0	:	39.0	:	:
1980	50.3	43.0	29.8	34.8	:	41.5	:	:
1981	51.9	44.3	33.0	35.8	:	44.2	:	:
1982	54.3	45.4	32.4	37.0	:	44.5	:	:
1983	54.8	45.6	32.9	38.7	:	43.9	:	:
1984	53.4	45.9	33.7	39.0	:	44.1	:	:
1985	52.6	46.8	34.1	40.8	:	43.1	:	:
1986	51.8	47.8	36.2	41.7	:	42.4	:	:
1987	52.7	48.6	35.3	42.0	:	40.6	:	:
1988	51.6	48.0	33.7	40.3	:	38.5	:	:
1989	50.0	46.8	33.3	39.5	:	37.3	:	:
1990	50.6	46.2	36.7	42.5	:	37.5	:	:
1991								
1991	50.8	47.1	39.6	50.7	:	40.0	:	:
1992	51.8	47.7	39.8	56.1	:	41.8	:	:
1993	51.9	50.3	41.3	58.1	64.0	42.0	:	:
1994	49.6	49.7	40.7	56.4	62.8	41.6	:	:
1995	47.4	49.7	39.6	53.7	60.2	41.2	46.4	46.5
1996	45.9	49.3	39.6	53.1	59.0	40.2	46.7	47.0
1997	44.7	47.6	38.2	50.5	56.9	39.0	45.4	46.0
1998	43.4	47.3	37.7	47.4	55.8	37.8	44.2	44.9
1999	42.8	47.4	38.6	46.8	54.1	37.4	43.6	44.3
2000	41.5	46.4	39.5	43.9	52.1	37.6	43.0	43.6
2001	41.6	47.0	39.9	43.9	51.6	38.2	43.0	43.6
2002	42.7	46.8	40.9	44.5	52.5	38.7	43.4	44.0
2003	43.8	47.5	41.7	45.3	55.6	39.8	44.2	44.5
2004	43.6	47.2	41.5	45.5	55.4	39.8	43.9	44.1
2005	43.0	46.8	41.2	45.2	54.6	39.6	43.5	43.7

⁽¹⁾ 1970–91 including D_90.⁽²⁾ EU-15 excluding DK, SE and UK; 1970–91 including D_90.

Table 68 (Continued)

(Percentage of gross domestic product at market prices)

	CY	CZ	EE	HU	LV	LT	MT	PL	SK
1970	:	:	:	:	:	:	:	:	:
1971	:	:	:	:	:	:	:	:	:
1972	:	:	:	:	:	:	:	:	:
1973	:	:	:	:	:	:	:	:	:
1974	:	:	:	:	:	:	:	:	:
1975	:	:	:	:	:	:	:	:	:
1976	:	:	:	:	:	:	:	:	:
1977	:	:	:	:	:	:	:	:	:
1978	:	:	:	:	:	:	:	:	:
1979	:	:	:	:	:	:	:	:	:
1980	:	:	:	:	:	:	:	:	:
1981	:	:	:	:	:	:	:	:	:
1982	:	:	:	:	:	:	:	:	:
1983	:	:	:	:	:	:	:	:	:
1984	:	:	:	:	:	:	:	:	:
1985	:	:	:	:	:	:	:	:	:
1986	:	:	:	:	:	:	:	:	:
1987	:	:	:	:	:	:	:	:	:
1988	:	:	:	:	:	:	:	:	:
1989	:	:	:	:	:	:	:	:	:
1990	:	:	:	:	32.8	:	:	:	:
1991	:	:	:	:	27.6	:	:	49.3	:
1992	:	40.2	:	:	24.0	:	:	52.2	:
1993	:	39.3	34.8	:	37.6	:	:	51.5	50.1
1994	:	39.3	39.2	:	39.9	:	:	45.7	47.9
1995	:	36.6	40.8	:	43.2	33.0	:	44.2	47.9
1996	:	37.0	39.1	:	43.1	34.2	:	42.2	49.8
1997	:	37.2	37.0	:	39.7	36.6	:	41.4	54.7
1998	:	36.0	41.5	:	43.9	37.8	:	39.6	54.2
1999	:	37.2	47.2	:	43.7	37.3	:	39.5	48.8
2000	:	37.7	43.5	:	40.0	35.8	:	39.6	48.9
2001	:	38.2	:	:	36.8	:	:	:	:
2002	:	39.1	:	:	38.9	:	:	:	:
2003	:	:	:	:	:	:	:	:	:
2004	:	:	:	:	:	:	:	:	:
2005	:	:	:	:	:	:	:	:	:

NB: Member States have provided figures for the last statistical period according to ESA 95 specifications starting from the years mentioned below:

1970: BE, DE, NL, UK;

1976: AT;

1980: IT;

1993: SE;

1971: DK;

1977: PT;

1988: EL;

1995: ES.

1975: FI;

1978: FR;

1990: IE, LU;

Total current expenditure of general government is the sum of:

Property income (D.4), payable

+ Subsidies (D.3), payable

+ Current taxes on income and wealth (D.5), payable

+ Social benefits other than social transfers in kind (D.62), payable

+ Other current transfers (D.7), payable

+ Final consumption expenditure (P.3) of general government.

(Percentage of gross domestic product at market prices)

	SI	AC-10 ⁽¹⁾	EU-25 ⁽²⁾	BG	RO	TR	US ⁽³⁾	JP ⁽⁴⁾
1970	:	:	:	:	:	:	:	:
1971	:	:	:	:	:	:	:	:
1972	:	:	:	:	:	:	:	:
1973	:	:	:	:	:	:	:	:
1974	:	:	:	:	:	:	:	:
1975	:	:	:	:	:	:	:	:
1976	:	:	:	:	:	:	:	:
1977	:	:	:	:	:	:	:	:
1978	:	:	:	:	:	:	:	:
1979	:	:	:	:	:	:	:	:
1980	:	:	:	:	:	:	:	:
1981	:	:	:	:	:	:	:	:
1982	:	:	:	:	:	:	:	:
1983	:	:	:	:	:	:	:	:
1984	:	:	:	:	:	:	:	:
1985	:	:	:	:	:	:	:	:
1986	:	:	:	:	:	:	:	:
1987	:	:	:	:	:	:	:	:
1988	:	:	:	:	:	:	:	:
1989	:	:	:	:	:	:	:	:
1990	:	:	:	:	:	:	:	:
1991	:	:	:	:	:	:	:	:
1992	:	:	:	:	:	:	:	:
1993	:	:	:	:	:	:	:	:
1994	:	:	:	:	:	:	:	:
1995	:	:	:	:	:	:	:	:
1996	:	:	:	:	:	:	:	:
1997	:	:	:	:	:	:	:	:
1998	:	:	:	:	:	:	:	:
1999	:	:	:	39.1	:	:	:	:
2000	:	:	:	44.2	:	:	:	:
2001	:	:	:	:	:	:	:	:
2002	:	:	:	:	:	:	:	:
2003	:	:	:	:	:	:	:	:
2004	:	:	:	:	:	:	:	:
2005	:	:	:	:	:	:	:	:

⁽¹⁾ CY, CZ, EE, HU, LV, LT, MT, PL, SK and SI.⁽²⁾ BE DK DE EL ES FR IE IT LU NL AT PT FI SE UK CY, CZ, EE, HU, LV, LT, MT, PL, SK and SI.⁽³⁾ Former definition.⁽⁴⁾ SNA 93.

Table 69

General government (% of GDP at market prices)
Gross saving; general government
Excessive deficit procedure

(Percentage of gross domestic product at market prices)

	BE	DK	DE (1)	EL	ES	FR	IE	IT	LU
1970	3.3	:	6.7	:	:	:	:	:	:
1971	2.8	9.5	6.4	:	:	:	:	:	:
1972	1.2	8.8	5.4	:	:	:	:	:	:
1973	1.4	8.6	6.6	:	:	:	:	:	:
1974	2.0	7.6	4.4	:	:	:	:	:	:
1975	-0.2	2.5	0.1	:	:	:	:	:	:
1976	-0.5	3.9	2.0	:	:	:	:	:	:
1977	-0.6	3.8	2.8	:	:	:	:	:	:
1978	-1.5	3.6	2.5	:	:	2.5	:	:	:
1979	-2.3	2.5	2.6	:	:	4.0	:	:	:
1980	-4.1	0.7	2.3	:	:	4.1	:	-2.8	:
1981	-7.8	-2.7	0.7	:	:	1.9	:	-6.4	:
1982	-7.0	-5.1	0.9	:	:	1.6	:	-6.0	:
1983	-7.6	-3.7	1.2	:	:	1.2	:	-6.7	:
1984	-6.5	-1.7	1.9	:	:	1.2	:	-7.3	:
1985	-6.3	0.5	2.6	:	:	0.9	:	-7.7	:
1986	-6.5	4.7	2.5	:	:	0.7	:	-7.1	:
1987	-4.7	4.0	1.8	:	:	1.7	:	-6.6	:
1988	-4.0	3.2	1.4	-7.8	:	1.7	:	-6.2	:
1989	-5.3	1.9	3.5	-9.5	:	2.3	:	-6.8	:
1990	-4.6	0.2	1.4	-9.3	:	2.5	-1.1	-6.6	10.6
1991			0.8						
1991	-5.1	-1.0	1.4	-6.2	:	1.7	-1.4	-7.2	7.5
1992	-5.5	-0.4	1.6	-6.7	:	0.2	-1.4	-8.3	7.1
1993	-4.5	-1.0	0.8	-7.7	:	-1.9	-1.2	-6.9	8.1
1994	-2.3	-0.6	1.1	-6.5	:	-1.2	0.5	-6.0	8.5
1995	-2.0	-0.5	-0.1	-6.8	-1.8	-1.1	0.0	-3.8	8.0
1996	-1.5	0.9	-0.5	-5.2	-1.2	-0.3	1.8	-3.7	7.8
1997	0.5	2.2	-0.1	-1.5	0.4	0.0	2.9	-0.2	8.5
1998	1.7	2.8	0.5	0.1	1.2	1.1	4.4	0.1	8.6
1999	2.1	4.9	1.2	1.7	2.9	2.1	6.6	1.7	8.7
2000	2.8	4.3	1.6	2.1	3.3	2.3	7.8	1.5	11.1
2001	2.4	4.6	0.2	2.5	3.8	2.2	5.3	1.0	9.6
2002	2.2	3.4	-0.7	2.4	4.3	0.4	3.7	0.7	8.2
2003	1.0	2.4	-1.4	1.9	4.3	-0.6	3.0	-0.1	6.9
2004	1.3	2.8	-1.3	1.1	4.5	-0.2	2.7	0.3	3.6
2005	1.8	3.4	-0.8	1.1	4.7	-0.1	2.8	0.2	2.9

(1) 1970-91 D_90.

NB: Member States have provided figures for the last statistical period according to ESA 95 specifications starting from the years mentioned below:

1970: BE, DE, NL, UK; 1976: AT; 1980: IT; 1993: SE;
1971: DK; 1977: PT; 1988: EL; 1995: ES.
1975: FI; 1978: FR; 1990: IE, LU;

(Percentage of gross domestic product at market prices)

	NL	AT	PT	FI	SE	UK	EU-15 ⁽¹⁾	EUR-12 ⁽²⁾
1970	4.4	:	:	:	:	8.9	:	:
1971	4.1	:	:	:	:	7.1	:	:
1972	4.2	:	:	:	:	4.0	:	:
1973	5.1	:	:	:	:	3.2	:	:
1974	4.2	:	:	:	:	2.8	:	:
1975	2.5	:	:	10.5	:	1.5	:	:
1976	2.8	3.2	:	12.5	:	0.8	:	:
1977	3.2	4.2	1.0	10.9	:	1.2	:	:
1978	2.0	3.9	-1.6	8.1	:	-0.3	:	:
1979	2.2	3.8	-0.9	7.6	:	0.0	:	:
1980	1.7	4.5	-2.3	8.1	:	0.3	:	:
1981	0.8	4.5	-3.6	9.4	:	-0.2	:	:
1982	-0.7	2.4	-1.5	7.6	:	0.4	:	:
1983	-0.6	1.7	-0.1	5.9	:	-0.1	:	:
1984	-0.1	3.2	-1.8	7.3	:	-0.3	:	:
1985	1.1	3.2	-2.8	7.3	:	0.1	:	:
1986	0.4	1.9	-3.8	7.9	:	0.0	:	:
1987	0.0	0.9	-3.7	5.8	:	0.6	:	:
1988	0.3	1.5	-0.3	9.7	:	2.6	:	:
1989	-1.0	1.7	0.4	10.4	:	3.5	:	:
1990	-1.6	2.4	-2.9	9.5	:	2.6	:	:
1991								
1991	0.7	2.0	-4.0	3.4	:	0.5	:	:
1992	-1.0	2.9	-0.9	-1.6	:	-3.2	:	:
1993	0.1	0.9	-4.0	-4.0	-5.4	-4.8	:	:
1994	-0.5	0.1	-4.4	-2.0	-5.6	-3.9	:	:
1995	-1.1	-0.3	-2.0	-0.7	-3.1	-2.9	-1.6	-1.3
1996	0.6	1.0	-0.8	0.7	0.5	-2.1	-1.1	-1.0
1997	1.3	2.0	0.4	1.9	1.8	-0.6	0.2	0.2
1998	1.8	1.9	1.2	4.6	4.5	1.7	1.2	0.9
1999	3.4	1.7	1.3	5.0	4.7	2.5	2.3	2.0
2000	4.6	1.8	0.7	9.7	6.2	2.8	2.6	2.4
2001	3.6	3.8	-0.2	8.0	7.4	2.3	2.1	1.8
2002	1.7	3.0	0.0	7.0	4.5	0.1	1.0	1.0
2003	0.8	2.0	-2.1	5.0	3.4	-0.5	0.2	0.2
2004	0.5	2.3	-1.6	4.1	3.6	-0.2	0.4	0.4
2005	0.8	2.7	-1.2	4.2	4.1	0.4	0.7	0.6

⁽¹⁾ 1970-91 including D_90.⁽²⁾ EU-15 excluding DK, SE and UK; 1970-91 including D_90.

Table 69 (Continued)

(Percentage of gross domestic product at market prices)

	CY	CZ	EE	HU	LV	LT	MT	PL	SK
1970	:	:	:	:	:	:	:	:	:
1971	:	:	:	:	:	:	:	:	:
1972	:	:	:	:	:	:	:	:	:
1973	:	:	:	:	:	:	:	:	:
1974	:	:	:	:	:	:	:	:	:
1975	:	:	:	:	:	:	:	:	:
1976	:	:	:	:	:	:	:	:	:
1977	:	:	:	:	:	:	:	:	:
1978	:	:	:	:	:	:	:	:	:
1979	:	:	:	:	:	:	:	:	:
1980	:	:	:	:	:	:	:	:	:
1981	:	:	:	:	:	:	:	:	:
1982	:	:	:	:	:	:	:	:	:
1983	:	:	:	:	:	:	:	:	:
1984	:	:	:	:	:	:	:	:	:
1985	:	:	:	:	:	:	:	:	:
1986	:	:	:	:	:	:	:	:	:
1987	:	:	:	:	:	:	:	:	:
1988	:	:	:	:	:	:	:	:	:
1989	:	:	:	:	:	:	:	:	:
1990	:	:	:	:	10.3	:	:	:	:
1991	:	:	:	:	8.4	:	:	-2.9	:
1992	:	9.2	:	:	3.1	:	:	-2.3	:
1993	:	7.4	15.1	:	4.9	:	:	-0.1	-3.1
1994	:	6.4	11.5	:	2.0	:	:	1.2	1.7
1995	:	7.8	6.5	:	-1.1	3.0	:	1.2	7.5
1996	:	6.3	5.0	:	1.0	1.6	:	1.8	3.5
1997	:	5.5	7.8	:	2.1	1.7	:	2.1	3.0
1998	:	4.6	5.9	:	1.6	0.7	:	2.6	3.0
1999	:	4.1	5.5	:	-1.5	0.6	:	2.5	2.3
2000	:	3.4	5.2	:	0.6	1.0	:	1.5	0.8
2001	:	2.3	:	:	1.6	:	:	:	:
2002	:	2.4	:	:	0.9	:	:	:	:
2003	:	:	:	:	:	:	:	:	:
2004	:	:	:	:	:	:	:	:	:
2005	:	:	:	:	:	:	:	:	:

NB: Member States have provided figures for the last statistical period according to ESA 95 specifications starting from the years mentioned below:

1970: BE, DE, NL, UK;

1971: DK;

1975: FI;

1976: AT;

1977: PT;

1978: FR;

1980: IT;

1988: EL;

1990: IE, LU;

1993: SE;

1995: ES.

(Percentage of gross domestic product at market prices)

	SI	AC-10 ⁽¹⁾	EU-25 ⁽²⁾	BG	RO	TR	US ⁽³⁾	JP ⁽⁴⁾
1970	:	:	:	:	:	:	:	:
1971	:	:	:	:	:	:	:	:
1972	:	:	:	:	:	:	:	:
1973	:	:	:	:	:	:	1.9	:
1974	:	:	:	:	:	:	1.4	:
1975	:	:	:	:	:	:	-2.4	:
1976	:	:	:	:	:	:	-0.9	:
1977	:	:	:	:	:	:	-0.1	:
1978	:	:	:	:	:	:	1.1	:
1979	:	:	:	:	:	:	1.4	:
1980	:	:	:	:	:	:	-0.2	:
1981	:	:	:	:	:	:	-0.1	:
1982	:	:	:	:	:	:	-2.7	:
1983	:	:	:	:	:	:	-3.6	:
1984	:	:	:	:	:	:	-2.7	:
1985	:	:	:	:	:	:	-2.8	:
1986	:	:	:	:	:	:	-2.9	:
1987	:	:	:	:	:	:	-2.0	:
1988	:	:	:	:	:	:	-1.5	:
1989	:	:	:	:	:	:	-0.9	:
1990	:	:	:	:	:	:	-1.8	7.7
1991	:	:	:	:	:	:	-2.5	7.8
1992	:	:	:	:	:	:	-3.5	7.3
1993	:	:	:	:	:	:	-2.7	5.1
1994	:	:	:	:	:	:	-1.4	3.7
1995	:	:	:	:	:	:	-0.8	2.7
1996	:	:	:	:	:	:	0.1	2.8
1997	:	:	:	:	:	:	1.3	2.8
1998	:	:	:	:	:	:	2.6	1.3
1999	:	:	:	7.7	:	:	3.2	-0.2
2000	:	:	:	4.9	:	:	3.9	-0.1
2001	:	:	:	:	:	:	2.1	0.1
2002	:	:	:	:	:	:	-0.8	-1.1
2003	:	:	:	:	:	:	-1.9	-1.6
2004	:	:	:	:	:	:	-2.4	-1.9
2005	:	:	:	:	:	:	-2.2	-2.2

⁽¹⁾ CY, CZ, EE, HU, LV, LT, MT, PL, SK and SI.⁽²⁾ BE, DK, DE, EL, ES, FR, IE, IT, LU, NL, AT, PT, FI, SE, UK, CY, CZ, EE, HU, LV, LT, MT, PL, SK and SI.⁽³⁾ Former definition.⁽⁴⁾ SNA 93.

Table 70

General government (% of GDP at market prices)
Capital transfers received; general government
ESA 95

(Percentage of gross domestic product at market prices)

	BE ⁽¹⁾	DK	DE ⁽²⁾	EL	ES	FR	IE	IT	LU
1970	0.4	:	0.3	:	:	:	:	:	:
1971	0.4	0.3	0.4	:	:	:	:	:	:
1972	0.3	0.3	0.5	:	:	:	:	:	:
1973	0.3	0.4	0.5	:	:	:	:	:	:
1974	0.3	0.4	0.5	:	:	:	:	:	:
1975	0.3	0.5	0.6	:	:	:	:	:	:
1976	0.3	0.5	0.7	:	:	:	:	:	:
1977	0.4	0.6	0.5	:	:	:	:	:	:
1978	0.4	0.6	0.5	:	:	-0.1	:	:	:
1979	0.4	0.6	0.5	:	:	-0.2	:	:	:
1980	0.4	0.6	0.5	:	:	-0.1	:	0.2	:
1981	0.4	0.6	0.5	:	:	0.0	:	0.3	:
1982	0.3	0.3	0.4	:	:	-0.3	:	0.9	:
1983	0.3	0.3	0.4	:	:	-0.1	:	1.2	:
1984	0.3	0.3	0.3	:	:	-0.3	:	0.5	:
1985	0.3	0.5	0.3	:	:	0.0	:	0.3	:
1986	0.3	0.3	0.3	:	:	0.1	:	0.3	:
1987	0.3	0.4	0.3	:	:	0.3	:	0.2	:
1988	0.3	0.4	0.3	0.8	:	0.2	:	0.3	:
1989	0.3	0.3	0.3	0.8	:	0.2	:	0.4	:
1990	0.3	0.6	0.3	1.0	:	0.0	1.5	0.2	0.2
1991			0.3						
1991	0.3	0.4	0.3	1.2	:	0.4	1.7	0.3	0.2
1992	0.3	0.4	0.3	1.7	:	0.2	1.6	2.2	0.2
1993	0.4	0.5	0.4	1.8	:	0.2	1.8	0.9	0.2
1994	0.4	0.4	0.4	1.7	:	0.2	1.4	0.4	0.2
1995	0.4	0.5	0.5	1.6	1.4	0.4	1.8	0.9	0.2
1996	0.4	0.4	0.4	2.2	1.4	0.3	1.7	0.4	0.2
1997	0.6	0.5	0.4	2.4	1.0	0.8	1.8	1.0	0.2
1998	0.4	0.5	0.5	2.6	0.6	0.3	1.6	0.7	0.1
1999	0.6	0.6	0.4	2.0	0.7	0.4	1.6	0.5	0.2
2000	0.5	0.5	0.4	3.1	0.6	0.4	1.3	0.4	0.2
2001	0.6	0.5	0.4	2.6	0.6	0.3	1.3	0.3	0.2
2002	0.5	0.8	0.4	2.3	0.7	0.4	1.2	0.4	0.2
2003	1.9	0.5	0.4	2.2	0.7	0.4	1.2	1.7	0.3
2004	1.1	0.5	0.4	2.1	0.7	0.4	1.2	0.8	0.3
2005	0.6	0.5	0.4	2.0	0.7	0.4	1.2	0.2	0.3

(¹) Including transfers of the Belgacom pension fund (1.4 and 0.5 % of GDP in 2003 and 2004 respectively). Eurostat is still investigating this operation.

(²) 1970–91 D_90.

NB: Member States have provided figures for the last statistical period according to ESA 95 specifications starting from the years mentioned below:

1970: BE, DE, NL, UK; 1976: AT; 1980: IT; 1993: SE;
 1971: DK; 1977: PT; 1988: EL; 1995: ES.
 1975: FI; 1978: FR; 1990: IE, LU;

Capital transfers (D.9) are made in cash or in kind. A capital transfer in kind consists of the transfer of ownership of an asset (other than inventories and cash), or the cancellation of a liability by a creditor, without any counterpart being received in return.

A capital transfer in cash consists of the transfer of cash that the first party has raised by disposing of an asset (other than inventories), or that the second party, the recipient, is expected, or required, to use for the acquisition of an asset (other than inventories) as a condition on which the transfer is made. Capital transfers cover capital taxes, investment grants and other capital transfers.

Capital taxes (D.91)

These consist of taxes levied at irregular or very infrequent intervals on the values of the assets or net worth owned by institutional units or on the values of assets transferred between institutional units as a result of legacies, gifts *inter vivos* or other transfers. They include, in particular, inheritance taxes, death duties and taxes on gifts *inter vivos* as well as certain betterment levies (e.g. taxes on the increase in the value of agricultural land due to planning permission to develop the land for commercial or residential purposes).

Investment grants (D.92)

These consist of capital transfers in cash or in kind made by government or by the rest of the world (e.g. by the institutions of the European Union) to other resident or non-resident institutional units to finance all or part of the costs of their acquiring fixed assets. Investment grants to general government include all payments (except grants for interest relief) made to subsectors of general government, for example transfers from central government to local authorities, for the purpose of financing capital formation. However, investment grants within general government are flows internal to the general government sector and do not appear in a consolidated account for the sector as a whole (such as in this table). Investment grants received by general government also include transfers from the rest of the world, with the objective of financing capital formation by non-resident units.

Other capital transfers (D.99)

These cover transfers other than investment grants and capital taxes which do not themselves redistribute income but redistribute saving or wealth among the different sectors or subsectors of the economy or the rest of the world. They include, for example:

- legacies, large gifts *inter vivos* and donations between units belonging to different sectors;
- transfers between subsectors of general government designed to cover unexpected expenditure or accumulated deficits. These transfers are flows within the general government sector and do not appear in a consolidated account for the sector as a whole;
- the counterpart transaction of cancellation of debts by agreement between institutional units belonging to different sectors or subsectors, for example the cancellation by the government of a debt owed to it by a foreign country.

Reference: ESA 95, paragraphs 4.145–4.165.

(Percentage of gross domestic product at market prices)

	NL	AT	PT	FI	SE	UK	EU-15 ⁽¹⁾	EUR-12 ⁽²⁾
1970	0.4	:	:	:	:	0.8	:	:
1971	0.4	:	:	:	:	0.7	:	:
1972	0.3	:	:	:	:	0.8	:	:
1973	0.4	:	:	:	:	0.6	:	:
1974	0.4	:	:	:	:	0.5	:	:
1975	0.4	:	:	0.1	:	0.3	:	:
1976	0.6	0.1	:	0.1	:	0.3	:	:
1977	0.2	0.1	0.2	0.1	:	0.3	:	:
1978	0.3	0.1	0.3	0.1	:	0.2	:	:
1979	0.3	0.1	0.3	0.1	:	0.2	:	:
1980	0.3	0.1	0.2	0.1	:	0.2	:	:
1981	0.3	0.1	0.2	0.1	:	0.3	:	:
1982	0.3	0.1	0.2	0.1	:	0.3	:	:
1983	0.2	0.2	0.4	0.1	:	0.2	:	:
1984	0.3	0.2	0.8	0.1	:	0.3	:	:
1985	0.3	0.2	0.4	0.3	:	0.3	:	:
1986	0.3	0.2	0.7	0.1	:	0.3	:	:
1987	0.3	0.2	0.8	0.1	:	0.3	:	:
1988	0.3	0.2	1.1	0.1	:	0.3	:	:
1989	0.3	0.2	1.4	0.1	:	0.3	:	:
1990	0.3	0.1	1.4	0.2	:	0.3	:	:
1991								
1991	0.3	0.2	1.8	0.2	:	0.3	:	:
1992	0.3	0.2	2.1	0.2	:	0.3	:	:
1993	0.4	0.1	1.9	0.3	0.2	0.2	:	:
1994	0.4	0.1	1.7	0.2	0.1	0.3	:	:
1995	0.3	0.2	1.9	0.2	0.2	0.3	0.6	0.6
1996	0.6	0.2	2.1	0.2	0.2	0.3	0.5	0.6
1997	0.4	0.3	2.3	0.3	0.2	0.3	0.6	0.7
1998	0.4	0.1	1.6	0.3	0.2	0.3	0.5	0.5
1999	0.4	0.3	1.8	0.3	0.2	0.3	0.5	0.5
2000	0.4	0.2	1.4	0.3	0.2	0.3	0.5	0.5
2001	0.4	0.2	1.9	0.3	0.2	0.5	0.5	0.5
2002	0.4	0.2	2.0	0.4	0.2	0.6	0.5	0.5
2003	0.4	0.2	4.2	0.4	0.1	0.7	0.8	0.8
2004	0.4	0.2	2.5	0.4	0.1	0.7	0.6	0.6
2005	0.4	0.2	2.1	0.4	0.1	0.7	0.5	0.5

⁽¹⁾ 1970–91 including D_90.⁽²⁾ EU-15 excluding DK, SE and UK; 1970–91 including D_90.

Table 70 (Continued)

(Percentage of gross domestic product at market prices)

	CY	CZ	EE	HU	LV	LT	MT	PL	SK
1970	:	:	:	:	:	:	:	:	:
1971	:	:	:	:	:	:	:	:	:
1972	:	:	:	:	:	:	:	:	:
1973	:	:	:	:	:	:	:	:	:
1974	:	:	:	:	:	:	:	:	:
1975	:	:	:	:	:	:	:	:	:
1976	:	:	:	:	:	:	:	:	:
1977	:	:	:	:	:	:	:	:	:
1978	:	:	:	:	:	:	:	:	:
1979	:	:	:	:	:	:	:	:	:
1980	:	:	:	:	:	:	:	:	:
1981	:	:	:	:	:	:	:	:	:
1982	:	:	:	:	:	:	:	:	:
1983	:	:	:	:	:	:	:	:	:
1984	:	:	:	:	:	:	:	:	:
1985	:	:	:	:	:	:	:	:	:
1986	:	:	:	:	:	:	:	:	:
1987	:	:	:	:	:	:	:	:	:
1988	:	:	:	:	:	:	:	:	:
1989	:	:	:	:	:	:	:	:	:
1990	:	:	:	:	0.0	:	:	:	:
1991	:	:	:	:	0.0	:	:	0.0	:
1992	:	0.2	:	:	1.3	:	:	0.0	:
1993	:	1.7	0.0	:	1.3	0.1	:	0.0	1.1
1994	:	1.7	0.0	:	1.2	0.3	:	9.3	1.6
1995	:	0.6	0.0	:	0.9	0.0	:	0.2	1.0
1996	:	0.2	0.0	:	0.8	0.0	:	0.1	2.5
1997	:	0.1	0.0	:	2.8	0.0	:	0.0	3.0
1998	:	0.1	0.0	:	3.5	0.0	:	0.0	2.3
1999	:	0.1	0.0	:	2.6	0.1	:	0.0	2.1
2000	:	0.2	0.7	:	2.2	0.0	:	-0.1	2.7
2001	:	0.0	:	:	2.4	:	:	:	:
2002	:	0.1	:	:	2.1	:	:	:	:
2003	:	:	:	:	:	:	:	:	:
2004	:	:	:	:	:	:	:	:	:
2005	:	:	:	:	:	:	:	:	:

NB: Member States have provided figures for the last statistical period according to ESA 95 specifications starting from the years mentioned below:

1970: BE, DE, NL, UK; 1976: AT; 1980: IT; 1993: SE;
 1971: DK; 1977: PT; 1988: EL; 1995: ES.
 1975: FI; 1978: FR; 1990: IE, LU;

Capital transfers (D.9) are made in cash or in kind. A capital transfer in kind consists of the transfer of ownership of an asset (other than inventories and cash), or the cancellation of a liability by a creditor, without any counterpart being received in return.

A capital transfer in cash consists of the transfer of cash that the first party has raised by disposing of an asset (other than inventories), or that the second party, the recipient, is expected, or required, to use for the acquisition of an asset (other than inventories) as a condition on which the transfer is made. Capital transfers cover capital taxes, investment grants and other capital transfers.

Capital taxes (D.91)

These consist of taxes levied at irregular or very infrequent intervals on the values of the assets or net worth owned by institutional units or on the values of assets transferred between institutional units as a result of legacies, gifts *inter vivos* or other transfers. They include, in particular, inheritance taxes, death duties and taxes on gifts *inter vivos* as well as certain betterment levies (e.g. taxes on the increase in the value of agricultural land due to planning permission to develop the land for commercial or residential purposes).

Investment grants (D.92)

These consist of capital transfers in cash or in kind made by government or by the rest of the world (e.g. by the institutions of the European Union) to other resident or non-resident institutional units to finance all or part of the costs of their acquiring fixed assets. Investment grants to general government include all payments (except grants for interest relief) made to subsectors of general government, for example transfers from central government to local authorities, for the purpose of financing capital formation. However, investment grants within general government are flows internal to the general government sector and do not appear in a consolidated account for the sector as a whole (such as in this table). Investment grants received by general government also include transfers from the rest of the world, with the objective of financing capital formation by non-resident units.

Other capital transfers (D.99)

These cover transfers other than investment grants and capital taxes which do not themselves redistribute income but redistribute saving or wealth among the different sectors or subsectors of the economy or the rest of the world. They include, for example:

- legacies, large gifts *inter vivos* and donations between units belonging to different sectors;
- transfers between subsectors of general government designed to cover unexpected expenditure or accumulated deficits. These transfers are flows within the general government sector and do not appear in a consolidated account for the sector as a whole;
- the counterpart transaction of cancellation of debts by agreement between institutional units belonging to different sectors or subsectors, for example the cancellation by the government of a debt owed to it by a foreign country.

Reference: ESA 95, paragraphs 4.145–4.165.

(Percentage of gross domestic product at market prices)

	SI	AC-10 ⁽¹⁾	EU-25 ⁽²⁾	BG	RO	TR	US ⁽³⁾	JP
1970	:	:	:	:	:	:	0.4	:
1971	:	:	:	:	:	:	0.5	:
1972	:	:	:	:	:	:	0.5	:
1973	:	:	:	:	:	:	0.5	:
1974	:	:	:	:	:	:	0.4	:
1975	:	:	:	:	:	:	0.4	:
1976	:	:	:	:	:	:	0.4	:
1977	:	:	:	:	:	:	0.5	:
1978	:	:	:	:	:	:	0.3	:
1979	:	:	:	:	:	:	0.3	:
1980	:	:	:	:	:	:	0.3	:
1981	:	:	:	:	:	:	0.3	:
1982	:	:	:	:	:	:	0.3	:
1983	:	:	:	:	:	:	0.2	:
1984	:	:	:	:	:	:	0.2	:
1985	:	:	:	:	:	:	0.2	:
1986	:	:	:	:	:	:	0.2	:
1987	:	:	:	:	:	:	0.2	:
1988	:	:	:	:	:	:	0.2	:
1989	:	:	:	:	:	:	0.2	:
1990	:	:	:	:	:	:	0.1	0.8
1991	:	:	:	:	:	:	0.2	0.7
1992	:	:	:	:	:	:	0.3	0.9
1993	:	:	:	:	:	:	0.3	0.9
1994	:	:	:	:	:	:	0.3	0.9
1995	:	:	:	:	:	:	0.3	0.8
1996	:	:	:	:	:	:	0.3	0.8
1997	:	:	:	:	:	:	0.3	0.7
1998	:	:	:	:	:	:	0.4	0.7
1999	:	:	:	0.1	:	:	0.4	0.7
2000	:	:	:	0.3	:	:	0.4	0.6
2001	:	:	:	:	:	:	0.4	0.6
2002	:	:	:	:	:	:	0.3	0.6
2003	:	:	:	:	:	:	0.2	0.5
2004	:	:	:	:	:	:	0.2	0.5
2005	:	:	:	:	:	:	0.2	0.6

⁽¹⁾ CY, CZ, EE, HU, LV, LT, MT, PL, SK and SI.⁽²⁾ BE, DK, DE, EL, ES, FR, IE, IT, LU, NL, AT, PT, FI, SE, UK, CY, CZ, EE, HU, LV, LT, MT, PL, SK and SI.⁽³⁾ Former definition.

Table 71

General government (% of GDP at market prices)
Total revenue; general government
ESA 95

(Percentage of gross domestic product at market prices)

	BE ⁽¹⁾	DK	DE ⁽²⁾	EL	ES	FR	IE	IT	LU
1970	40.1	:	39.6	:	:	:	:	:	:
1971	40.4	47.9	40.8	:	:	:	:	:	:
1972	39.9	47.7	41.2	:	:	:	:	:	:
1973	41.0	45.2	43.3	:	:	:	:	:	:
1974	41.7	48.2	43.9	:	:	:	:	:	:
1975	44.9	44.9	44.1	:	:	:	:	:	:
1976	44.9	46.0	45.6	:	:	:	:	:	:
1977	46.8	46.9	46.1	:	:	:	:	:	:
1978	47.6	48.5	44.9	:	:	43.4	:	:	:
1979	48.1	49.8	44.5	:	:	45.2	:	:	:
1980	46.8	51.3	45.0	:	:	46.5	:	34.5	:
1981	47.4	51.4	44.8	:	:	47.1	:	34.4	:
1982	48.6	50.4	45.4	:	:	48.1	:	37.5	:
1983	49.0	52.6	44.7	:	:	49.0	:	39.6	:
1984	49.6	54.4	44.9	:	:	49.9	:	38.4	:
1985	49.5	55.4	45.1	:	:	50.4	:	38.2	:
1986	48.8	56.6	44.3	:	:	49.5	:	39.2	:
1987	49.1	57.5	44.0	:	:	49.9	:	39.0	:
1988	47.7	58.7	43.3	32.4	:	48.9	:	40.2	:
1989	45.8	57.6	44.1	31.8	:	48.6	:	41.1	:
1990	46.6	56.0	42.5	34.5	:	48.6	40.4	42.6	48.1
1991			43.8						
1991	46.9	55.4	44.1	35.6	:	49.1	42.0	43.8	45.6
1992	46.5	56.8	45.5	37.2	:	48.8	42.3	46.0	46.2
1993	48.3	58.9	46.2	38.6	:	49.3	42.3	47.4	47.3
1994	48.4	59.1	46.6	40.7	:	49.4	42.3	45.3	47.3
1995	48.5	58.0	46.1	40.9	38.4	49.7	39.4	45.8	47.6
1996	49.1	58.8	46.9	41.7	38.8	51.4	39.4	46.1	47.5
1997	49.5	58.3	46.6	43.7	38.6	51.9	38.6	48.4	46.5
1998	50.0	58.7	46.6	45.3	38.3	51.2	37.2	46.8	45.1
1999	49.7	59.5	47.3	45.8	39.0	51.8	36.8	47.1	44.8
2000	49.5	57.2	47.1	47.8	39.0	51.3	36.5	46.2	44.9
2001	50.0	58.0	45.5	46.3	39.1	51.0	34.9	45.8	45.3
2002	50.5	57.4	45.0	45.4	39.8	50.4	33.1	45.2	46.7
2003	51.4	56.4	44.9	44.6	39.8	50.5	34.0	45.9	47.5
2004	50.4	56.0	44.4	43.4	39.9	50.5	33.7	44.9	46.5
2005	49.7	55.6	44.2	42.8	39.9	50.5	33.5	44.1	46.3

⁽¹⁾ Including transfers of the Belgacom pension fund (1.4 and 0.5 % of GDP in 2003 and 2004 respectively). Eurostat is still investigating this operation.

⁽²⁾ 1970–91 D_90.

NB: Member States have provided figures for the last statistical period according to ESA 95 specifications starting from the years mentioned below:

1970: BE, DE, NL, UK; 1976: AT; 1980: IT; 1993: SE;
 1971: DK; 1977: PT; 1988: EL; 1995: ES.
 1975: FI; 1978: FR; 1990: IE, LU;

Total general government revenue is the sum of:
 Sales of market output (P.11) and output for own final use (P.12)
 + Payments for other non-market output (P.131)
 + Other subsidies on production (D.39), received
 + Taxes on production and imports (D.2), received
 + Property income (D.4), received
 + Current taxes on income and wealth (D.5), received
 + Social contributions (D.61), received
 + Other current transfers (D.7), received
 + Capital transfers (D.9), received.

For total general government revenue, see also annex to Regulation (EC) No 1221/2002 of the European Parliament and of the Council of 10 June 2002, and Table 2, 'Main aggregates of general government', of the ESA 95 transmission programme.

(Percentage of gross domestic product at market prices)

	NL	AT	PT	FI	SE	UK	EU-15 ⁽¹⁾	EUR-12 ⁽²⁾
1970	41.6	:	:	:	:	44.8	:	:
1971	43.1	:	:	:	:	42.8	:	:
1972	44.3	:	:	:	:	40.8	:	:
1973	45.5	:	:	:	:	39.5	:	:
1974	46.6	:	:	:	:	44.1	:	:
1975	48.6	:	:	44.0	:	44.4	:	:
1976	49.6	45.4	:	48.0	:	44.0	:	:
1977	50.3	46.6	27.8	48.2	:	42.8	:	:
1978	50.7	49.2	25.9	45.6	:	39.9	:	:
1979	51.8	48.7	26.3	44.2	:	39.7	:	:
1980	52.0	49.6	27.8	44.5	:	42.4	:	:
1981	52.7	51.0	29.6	46.9	:	44.7	:	:
1982	53.6	50.0	30.9	46.5	:	45.7	:	:
1983	54.3	49.5	33.0	46.6	:	44.8	:	:
1984	53.6	51.2	32.6	48.3	:	44.6	:	:
1985	54.1	52.1	31.7	50.4	:	43.9	:	:
1986	52.7	51.9	33.4	51.9	:	42.9	:	:
1987	53.2	51.6	32.8	50.1	:	41.8	:	:
1988	52.4	51.7	34.8	52.3	:	41.6	:	:
1989	49.5	50.5	35.7	52.1	:	41.3	:	:
1990	49.4	50.6	35.5	54.0	:	40.7	:	:
1991								
1991	52.2	51.2	37.5	56.7	:	40.9	:	:
1992	51.6	52.9	41.5	57.5	:	39.1	:	:
1993	53.2	53.7	39.7	56.9	61.5	37.6	:	:
1994	50.1	52.4	38.3	57.2	60.5	38.1	:	:
1995	47.3	52.0	39.6	55.7	60.3	38.7	46.1	46.5
1996	47.8	52.8	41.0	56.7	62.4	38.6	46.8	47.3
1997	47.1	52.1	41.2	55.1	61.4	38.9	46.8	47.6
1998	46.4	51.7	41.0	54.4	63.0	39.9	46.6	47.1
1999	47.6	51.8	42.4	54.2	61.6	40.3	47.0	47.6
2000	47.5	50.8	42.3	56.1	60.9	40.8	46.7	47.2
2001	46.6	51.9	42.1	54.3	61.7	41.2	46.2	46.5
2002	45.9	51.0	43.3	54.2	59.5	39.8	45.5	46.1
2003	45.9	50.2	44.2	53.4	59.2	40.0	45.7	46.2
2004	45.5	50.4	42.8	52.7	59.2	40.4	45.4	45.7
2005	45.1	49.8	42.6	52.0	58.8	40.8	45.2	45.4

⁽²⁾ 1970–91 including D_90.⁽³⁾ EU-15 excluding DK, SE and UK; 1970–91 including D_90.

Table 71 (Continued)

(Percentage of gross domestic product at market prices)

	CY	CZ	EE	HU	LV	LT	MT	PL	SK
1970	:	:	:	:	:	:	:	:	:
1971	:	:	:	:	:	:	:	:	:
1972	:	:	:	:	:	:	:	:	:
1973	:	:	:	:	:	:	:	:	:
1974	:	:	:	:	:	:	:	:	:
1975	:	:	:	:	:	:	:	:	:
1976	:	:	:	:	:	:	:	:	:
1977	:	:	:	:	:	:	:	:	:
1978	:	:	:	:	:	:	:	:	:
1979	:	:	:	:	:	:	:	:	:
1980	:	:	:	:	:	:	:	:	:
1981	:	:	:	:	:	:	:	:	:
1982	:	:	:	:	:	:	:	:	:
1983	:	:	:	:	:	:	:	:	:
1984	:	:	:	:	:	:	:	:	:
1985	:	:	:	:	:	:	:	:	:
1986	:	:	:	:	:	:	:	:	:
1987	:	:	:	:	:	:	:	:	:
1988	:	:	:	:	:	:	:	:	:
1989	:	:	:	:	:	:	:	:	:
1990	:	:	:	:	43.1	:	:	:	:
1991	:	:	:	:	36.1	:	:	42.8	:
1992	:	48.9	:	:	28.1	:	:	49.7	:
1993	:	47.8	:	:	42.0	:	:	51.6	:
1994	:	47.0	:	:	44.4	:	:	57.0	:
1995	:	44.9	:	:	44.1	35.3	:	46.6	:
1996	:	43.6	:	:	43.5	35.1	:	45.8	:
1997	:	42.6	:	:	45.4	37.9	:	44.9	:
1998	:	41.4	:	:	48.3	38.1	:	43.6	:
1999	:	42.2	:	:	44.9	38.0	:	43.3	:
2000	:	42.0	:	:	42.5	36.4	:	40.8	:
2001	36.3	41.5	37.6	54.3	40.8	34.9	40.1	42.0	35.0
2002	36.3	42.8	39.5	44.5	41.9	35.2	42.6	40.4	36.5
2003	35.4	42.8	41.1	43.2	43.4	35.2	39.0	41.3	33.4
2004	35.4	44.3	39.3	44.4	41.1	35.5	39.1	42.2	33.3
2005	35.4	44.1	39.3	44.2	36.2	35.9	39.2	41.8	33.7

NB: Member States have provided figures for the last statistical period according to ESA 95 specifications starting from the years mentioned below:

1970: BE, DE, NL, UK; 1976: AT; 1980: IT; 1993: SE;
1971: DK; 1977: PT; 1988: EL; 1995: ES.
1975: FI; 1978: FR; 1990: IE, LU;

Total general government revenue is the sum of:
Sales of market output (P.11) and output for own final use (P.12)
+ Payments for other non-market output (P.131)
+ Other subsidies on production (D.39), received
+ Taxes on production and imports (D.2), received
+ Property income (D.4), received
+ Current taxes on income and wealth (D.5), received
+ Social contributions (D.61), received
+ Other current transfers (D.7), received
+ Capital transfers (D.9), received.

For total general government revenue, see also annex to Regulation (EC) No 1221/2002 of the European Parliament and of the Council of 10 June 2002, and Table 2, 'Main aggregates of general government', of the ESA 95 transmission programme.

(Percentage of gross domestic product at market prices)

	SI	AC-10 ⁽¹⁾	EU-25 ⁽²⁾	BG	RO	TR	US ⁽³⁾	JP
1970	:	:	:	:	:	:	:	:
1971	:	:	:	:	:	:	:	:
1972	:	:	:	:	:	:	:	:
1973	:	:	:	:	:	:	30.2	:
1974	:	:	:	:	:	:	30.9	:
1975	:	:	:	:	:	:	29.1	:
1976	:	:	:	:	:	:	29.7	:
1977	:	:	:	:	:	:	29.9	:
1978	:	:	:	:	:	:	30.0	:
1979	:	:	:	:	:	:	30.2	:
1980	:	:	:	:	:	:	30.5	:
1981	:	:	:	:	:	:	31.3	:
1982	:	:	:	:	:	:	30.9	:
1983	:	:	:	:	:	:	30.2	:
1984	:	:	:	:	:	:	30.1	:
1985	:	:	:	:	:	:	30.6	:
1986	:	:	:	:	:	:	30.8	:
1987	:	:	:	:	:	:	31.5	:
1988	:	:	:	:	:	:	31.2	:
1989	:	:	:	:	:	:	31.5	:
1990	:	:	:	:	:	:	31.1	34.6
1991	:	:	:	:	:	:	31.2	34.2
1992	:	:	:	:	:	:	31.0	34.2
1993	:	:	:	:	:	:	31.2	32.9
1994	:	:	:	:	:	:	31.5	32.1
1995	:	:	:	:	:	:	31.9	32.2
1996	:	:	:	:	:	:	32.3	32.4
1997	:	:	:	:	:	:	32.6	32.6
1998	:	:	:	:	:	:	33.0	32.0
1999	:	:	:	:	:	:	33.2	32.1
2000	:	:	:	:	:	:	33.8	32.4
2001	41.5	42.7	46.1	40.2	:	:	32.9	33.3
2002	41.7	41.1	45.3	38.7	:	:	30.8	33.3
2003	41.6	41.0	45.5	40.2	:	:	30.3	32.9
2004	42.2	41.8	45.3	38.9	:	:	29.5	32.9
2005	42.4	41.5	45.0	37.9	:	:	29.6	33.1

⁽¹⁾ CY, CZ, EE, HU, LV, LT, MT, PL, SK and SI.⁽²⁾ BE, DK, DE, EL, ES, FR, IE, IT, LU, NL, AT, PT, FI, SE, UK, CY, CZ, EE, HU, LV, LT, MT, PL, SK and SI.⁽³⁾ Former definition.

Table 72

General government (% of GDP at market prices)
Gross fixed capital formation; general government
ESA 95

(Percentage of gross domestic product at market prices)

	BE	DK	DE (1)	EL	ES	FR	IE	IT	LU
1970	4.3	:	4.8	:	:	:	:	:	:
1971	5.0	4.3	4.7	:	:	:	:	:	:
1972	5.0	4.0	4.2	:	:	:	:	:	:
1973	4.3	3.4	3.9	:	:	:	:	:	:
1974	3.9	3.5	4.4	:	:	:	:	:	:
1975	4.4	3.5	4.2	:	:	:	:	:	:
1976	4.5	3.3	3.8	:	:	:	:	:	:
1977	4.4	3.3	3.6	:	:	:	:	:	:
1978	4.2	3.4	3.6	:	:	3.1	:	:	:
1979	4.4	3.5	3.7	:	:	3.1	:	:	:
1980	4.7	3.1	3.7	:	:	3.2	:	3.0	:
1981	4.7	2.8	3.4	:	:	3.3	:	3.6	:
1982	4.4	2.4	3.0	:	:	3.4	:	3.5	:
1983	3.9	2.0	2.8	:	:	3.1	:	3.5	:
1984	3.2	1.9	2.6	:	:	3.1	:	3.4	:
1985	3.0	2.1	2.6	:	:	3.2	:	3.5	:
1986	2.7	1.8	2.7	:	:	3.2	:	3.4	:
1987	2.4	2.2	2.6	:	:	3.2	:	3.4	:
1988	2.4	2.1	2.5	2.9	:	3.5	:	3.3	:
1989	1.8	1.9	2.5	2.9	:	3.5	:	3.2	:
1990	1.7	1.6	2.5	2.7	:	3.5	2.1	3.3	4.6
1991			2.3						
1991	1.7	1.5	2.7	3.0	:	3.6	2.2	3.2	4.8
1992	1.8	1.9	2.9	3.3	:	3.7	2.1	3.0	5.2
1993	2.0	1.8	2.8	3.1	:	3.5	2.3	2.6	5.2
1994	2.0	1.8	2.7	3.0	:	3.4	2.3	2.3	4.3
1995	1.8	1.8	2.3	3.2	3.7	3.3	2.3	2.1	4.6
1996	1.6	2.0	2.1	3.2	3.1	3.2	2.4	2.2	4.7
1997	1.6	1.9	1.9	3.4	3.1	3.0	2.5	2.2	4.2
1998	1.6	1.7	1.9	3.6	3.3	2.9	2.7	2.4	4.6
1999	1.8	1.7	1.9	3.5	3.4	3.0	3.2	2.4	4.4
2000	1.8	1.7	1.8	4.1	3.1	3.2	3.7	2.4	3.8
2001	1.6	1.9	1.7	4.0	3.3	3.1	4.5	2.5	4.2
2002	1.6	1.8	1.6	3.8	3.4	3.1	4.4	1.8	4.7
2003	1.5	1.6	1.6	3.9	3.5	3.1	4.0	2.6	5.2
2004	1.5	1.6	1.5	3.8	3.6	3.1	4.0	2.4	4.8
2005	1.6	1.6	1.4	3.7	3.8	3.1	4.0	2.7	4.9

(1) 1970–91 D_90.

NB: Member States have provided figures for the last statistical period according to ESA 95 specifications starting from the years mentioned below:

1970: BE, DE, NL, UK; 1976: AT; 1980: IT; 1993: SE;
 1971: DK; 1977: PT; 1988: EL; 1995: ES.
 1975: FI; 1978: FR; 1990: IE, LU;

Gross fixed capital formation (P.51) consists of producers' acquisitions, less disposals, of fixed assets during a given period plus certain additions to the value of non-produced assets realised by the productive activity of producer or institutional units. Fixed assets are tangible or intangible assets produced as outputs from the process of production that are themselves used repeatedly, or continuously, in the process of production for more than one year. For further information, see note on Table 19.

Gross fixed capital formation of general government also includes:

- structures and equipment used by the military, which are similar to those utilised by civilian producers, such as docks, airfields, roads and hospitals;
- light weapons and armoured vehicles used by non-military units. (The purchase of military weapons and their supporting systems is still a part of intermediate consumption and not included in gross fixed capital formation.)

Reference: ESA 95, paragraphs 3.102–3.111.

(Percentage of gross domestic product at market prices)

	NL	AT	PT	FI	SE	UK	EU-15 ⁽¹⁾	EUR-12 ⁽²⁾
1970	5.2	:	:	:	:	4.8	:	:
1971	5.2	:	:	:	:	4.5	:	:
1972	4.6	:	:	:	:	4.3	:	:
1973	4.1	:	:	:	:	5.0	:	:
1974	4.0	:	:	:	:	5.2	:	:
1975	4.3	:	:	4.0	:	4.8	:	:
1976	4.2	4.9	:	3.7	:	4.4	:	:
1977	3.7	4.8	2.8	3.7	:	3.3	:	:
1978	3.7	5.0	4.4	3.7	:	2.9	:	:
1979	3.7	4.6	4.3	3.5	:	2.8	:	:
1980	3.8	4.3	4.2	3.7	:	2.6	:	:
1981	3.7	4.2	5.0	3.6	:	2.1	:	:
1982	3.5	3.9	4.5	3.7	:	1.9	:	:
1983	3.3	3.7	4.0	3.8	:	2.2	:	:
1984	3.4	3.6	3.4	3.5	:	2.4	:	:
1985	3.2	3.5	3.3	3.6	:	2.3	:	:
1986	2.9	3.7	3.2	3.5	:	2.4	:	:
1987	3.0	3.4	3.3	3.8	:	2.2	:	:
1988	3.0	3.2	3.6	3.7	:	1.8	:	:
1989	3.0	3.2	3.3	3.2	:	2.2	:	:
1990	3.0	3.1	3.3	3.7	:	2.6	:	:
1991								
1991	3.0	3.1	3.5	3.8	:	2.4	:	:
1992	3.2	3.1	3.9	3.6	:	2.3	:	:
1993	3.0	3.3	4.0	2.9	3.8	2.1	:	:
1994	2.9	3.3	3.7	3.0	4.1	2.1	:	:
1995	3.0	3.1	3.7	2.8	4.0	2.0	2.6	2.7
1996	3.1	2.8	4.2	2.9	3.5	1.5	2.5	2.6
1997	2.9	2.0	4.4	3.2	3.1	1.2	2.2	2.4
1998	2.9	1.8	3.9	2.9	3.2	1.2	2.3	2.5
1999	3.0	1.7	4.1	2.8	3.2	1.1	2.3	2.5
2000	3.1	1.5	3.8	2.6	2.9	1.1	2.3	2.5
2001	3.2	1.2	4.1	2.8	3.0	1.2	2.3	2.5
2002	3.3	1.3	3.4	2.9	3.2	1.3	2.2	2.4
2003	3.4	1.2	3.4	2.7	3.3	1.5	2.4	2.5
2004	3.4	1.2	2.6	2.6	3.2	1.9	2.4	2.5
2005	3.4	1.1	3.2	2.5	3.1	2.2	2.5	2.5

⁽¹⁾ 1970–91 including D_90.⁽²⁾ EU-15 excluding DK, SE and UK; 1970–91 including D_90.

Table 72 (Continued)

(Percentage of gross domestic product at market prices)

	CY	CZ	EE	HU	LV	LT	MT	PL	SK
1970	:	:	:	:	:	:	:	:	:
1971	:	:	:	:	:	:	:	:	:
1972	:	:	:	:	:	:	:	:	:
1973	:	:	:	:	:	:	:	:	:
1974	:	:	:	:	:	:	:	:	:
1975	:	:	:	:	:	:	:	:	:
1976	:	:	:	:	:	:	:	:	:
1977	:	:	:	:	:	:	:	:	:
1978	:	:	:	:	:	:	:	:	:
1979	:	:	:	:	:	:	:	:	:
1980	:	:	:	:	:	:	:	:	:
1981	:	:	:	:	:	:	:	:	:
1982	:	:	:	:	:	:	:	:	:
1983	:	:	:	:	:	:	:	:	:
1984	:	:	:	:	:	:	:	:	:
1985	:	:	:	:	:	:	:	:	:
1986	:	:	:	:	:	:	:	:	:
1987	:	:	:	:	:	:	:	:	:
1988	:	:	:	:	:	:	:	:	:
1989	:	:	:	:	:	:	:	:	:
1990	:	:	:	:	1.3	:	:	:	:
1991	:	:	:	:	1.9	:	:	2.9	:
1992	:	3.8	:	:	3.0	:	:	3.4	:
1993	:	3.3	4.9	:	2.3	3.0	:	3.7	5.5
1994	:	5.4	4.9	:	3.5	3.3	:	3.4	4.5
1995	:	5.6	4.8	:	1.1	3.5	:	3.5	2.3
1996	:	5.1	5.2	:	1.2	2.5	:	3.9	3.8
1997	:	5.4	4.7	:	2.0	2.4	:	4.2	5.4
1998	:	5.7	4.6	:	3.0	2.6	:	4.2	4.0
1999	:	4.1	4.5	:	3.3	2.6	:	3.7	2.9
2000	:	5.0	3.8	3.8	3.0	2.4	:	3.6	2.8
2001	:	4.7	:	:	2.8	:	:	:	:
2002	:	4.6	:	:	3.3	:	:	:	:
2003	:	:	:	:	:	:	:	:	:
2004	:	:	:	:	:	:	:	:	:
2005	:	:	:	:	:	:	:	:	:

NB: Member States have provided figures for the last statistical period according to ESA 95 specifications starting from the years mentioned below:

1970: BE, DE, NL, UK; 1976: AT; 1980: IT; 1993: SE;
 1971: DK; 1977: PT; 1988: EL; 1995: ES.
 1975: FI; 1978: FR; 1990: IE, LU;

Gross fixed capital formation (P.51) consists of producers' acquisitions, less disposals, of fixed assets during a given period plus certain additions to the value of non-produced assets realised by the productive activity of producer or institutional units. Fixed assets are tangible or intangible assets produced as outputs from the process of production that are themselves used repeatedly, or continuously, in the process of production for more than one year. For further information, see note on Table 19.

Gross fixed capital formation of general government also includes:

- structures and equipment used by the military, which are similar to those utilised by civilian producers, such as docks, airfields, roads and hospitals;
- light weapons and armoured vehicles used by non-military units. (The purchase of military weapons and their supporting systems is still a part of intermediate consumption and not included in gross fixed capital formation.)

Reference: ESA 95, paragraphs 3.102–3.111.

(Percentage of gross domestic product at market prices)

	SI	AC-10 ⁽¹⁾	EU-25 ⁽²⁾	BG	RO	TR	US ⁽³⁾	JP
1970	:	:	:	:	:	:	3.2	:
1971	:	:	:	:	:	:	3.1	:
1972	:	:	:	:	:	:	2.9	:
1973	:	:	:	:	:	:	2.8	:
1974	:	:	:	:	:	:	3.0	:
1975	:	:	:	:	:	:	3.1	:
1976	:	:	:	:	:	:	2.8	:
1977	:	:	:	:	:	:	2.5	:
1978	:	:	:	:	:	:	2.6	:
1979	:	:	:	:	:	:	2.6	:
1980	:	:	:	:	:	:	2.7	:
1981	:	:	:	:	:	:	2.5	:
1982	:	:	:	:	:	:	2.4	:
1983	:	:	:	:	:	:	2.3	:
1984	:	:	:	:	:	:	2.3	:
1985	:	:	:	:	:	:	2.4	:
1986	:	:	:	:	:	:	2.5	:
1987	:	:	:	:	:	:	2.5	:
1988	:	:	:	:	:	:	2.5	:
1989	:	:	:	:	:	:	2.5	:
1990	:	:	:	:	:	:	2.6	4.8
1991	:	:	:	:	:	:	2.6	4.9
1992	:	:	:	:	:	:	2.6	5.4
1993	:	:	:	:	:	:	2.5	6.2
1994	:	:	:	:	:	:	2.5	6.2
1995	:	:	:	:	:	:	2.5	6.1
1996	:	:	:	:	:	:	2.5	6.3
1997	:	:	:	:	:	:	2.6	5.5
1998	:	:	:	:	:	:	2.6	5.5
1999	:	:	:	3.9	:	:	2.7	5.8
2000	:	:	:	3.7	:	:	2.7	5.1
2001	:	:	:	:	:	:	2.8	4.9
2002	:	:	:	:	:	:	2.8	4.7
2003	:	:	:	:	:	:	3.3	4.4
2004	:	:	:	:	:	:	3.3	4.1
2005	:	:	:	:	:	:	3.4	3.9

⁽¹⁾ CY, CZ, EE, HU, LV, LT, MT, PL, SK and SI.⁽²⁾ BE, DK, DE, EL, ES, FR, IE, IT, LU, NL, AT, PT, FI, SE, UK, CY, CZ, EE, HU, LV, LT, MT, PL, SK and SI.⁽³⁾ Former definition.

Table 73

General government (% of GDP at market prices)
Other capital expenditure, including capital transfers; general government ⁽¹⁾
ESA 95

(Percentage of gross domestic product at market prices)

	BE	DK	DE ⁽²⁾	EL	ES	FR	IE	IT	LU
1970	1.5	:	1.7	:	:	:	:	:	:
1971	1.3	0.4	1.9	:	:	:	:	:	:
1972	1.2	0.1	2.1	:	:	:	:	:	:
1973	1.3	0.5	2.0	:	:	:	:	:	:
1974	1.2	0.8	2.1	:	:	:	:	:	:
1975	1.1	0.7	2.2	:	:	:	:	:	:
1976	1.1	0.9	2.4	:	:	:	:	:	:
1977	1.1	0.7	2.3	:	:	:	:	:	:
1978	1.2	0.4	2.0	:	:	0.6	:	:	:
1979	2.2	0.3	2.0	:	:	0.8	:	:	:
1980	1.1	0.5	2.0	:	:	0.8	:	1.5	:
1981	3.6	1.0	1.8	:	:	0.9	:	1.5	:
1982	1.5	1.2	1.8	:	:	0.8	:	1.6	:
1983	3.6	1.0	1.7	:	:	0.7	:	1.4	:
1984	1.5	0.4	1.6	:	:	0.7	:	1.5	:
1985	1.3	0.4	1.5	:	:	0.7	:	1.8	:
1986	1.2	- 0.1	1.3	:	:	0.8	:	2.0	:
1987	1.2	- 0.2	1.3	:	:	0.8	:	2.1	:
1988	1.2	0.0	1.2	1.7	:	0.9	:	2.1	:
1989	0.8	0.1	1.2	2.0	:	0.9	:	2.0	:
1990	0.8	0.3	1.2	4.8	:	1.1	1.0	2.2	1.4
1991			1.6						
1991	0.9	0.3	1.9	3.1	:	0.8	1.0	1.7	1.8
1992	1.0	0.4	1.6	3.9	:	0.9	1.0	1.5	1.8
1993	1.2	0.4	1.5	4.3	:	0.8	1.1	1.7	1.5
1994	1.1	0.4	1.3	1.5	:	1.2	1.5	1.5	1.7
1995	1.0	0.5	1.6	1.7	2.5	1.5	1.6	2.5	1.5
1996	1.1	0.3	1.2	1.2	2.0	0.9	1.2	1.6	1.3
1997	1.5	0.4	1.2	1.5	1.5	0.8	1.1	1.3	1.2
1998	1.3	0.5	1.3	1.6	1.6	1.1	0.9	1.5	1.0
1999	1.4	0.6	1.3	2.0	1.4	1.3	2.7	1.6	1.0
2000	1.3	0.6	- 1.1	3.1	1.4	0.9	1.1	0.2	1.1
2001	0.9	0.1	1.7	2.7	1.5	0.9	1.2	1.4	- 0.6
2002	1.1	0.4	1.6	2.0	1.5	0.9	0.7	1.6	1.3
2003	1.2	0.4	1.7	1.9	1.5	0.9	1.0	1.6	2.6
2004	1.2	0.4	1.6	1.8	1.5	0.9	1.0	1.4	1.2
2005	1.2	0.3	1.5	1.8	1.4	0.8	1.0	1.3	0.9

⁽¹⁾ Including one-off proceeds (treated as negative expenditure) relative to the allocation of mobile phone licences (UMTS).⁽²⁾ 1970-91 D_90.

NB: Member States have provided figures for the last statistical period according to ESA 95 specifications starting from the years mentioned below:

1970: BE, DE, NL, UK; 1976: AT; 1980: IT; 1993: SE;
1971: DK; 1977: PT; 1988: EL; 1995: ES.
1975: FI; 1978: FR; 1990: IE, LU;

Other capital expenditure, including capital transfers are defined as:

Capital transfers (D.9), payable

+ Changes in inventories (P.52) and acquisitions less disposals of valuables (P.53)

+ Acquisitions less disposals of non-financial non-produced assets (K.2).

Non-financial non-produced assets (K.2) consist of land and other tangible non-produced assets that may be used in the production of goods and services, and intangible non-produced assets. Acquisitions and disposals of other tangible non-produced assets cover subsoil assets (coal, oil and natural gas reserves, and metallic as well as non-metallic mineral reserves), non-cultivated biological resources and water resources. Examples of intangible non-financial non-produced assets are patents, leases, other transferable contracts, purchased goodwill, and transferable contracts with authors.

Reference: ESA 95, paragraphs 3.125, 3.126, 6.06 et seq.

(Percentage of gross domestic product at market prices)

	NL	AT	PT	FI	SE	UK	EU-15 ⁽¹⁾	EUR-12 ⁽²⁾
1970	1.2	:	:	:	:	2.3	:	:
1971	1.0	:	:	:	:	1.8	:	:
1972	0.7	:	:	:	:	2.1	:	:
1973	0.9	:	:	:	:	2.4	:	:
1974	0.8	:	:	:	:	1.6	:	:
1975	1.4	:	:	1.4	:	1.6	:	:
1976	1.3	2.2	:	1.0	:	1.4	:	:
1977	0.5	1.8	1.4	0.9	:	1.5	:	:
1978	0.6	1.8	1.8	0.6	:	1.4	:	:
1979	1.2	1.6	1.5	0.6	:	1.1	:	:
1980	2.2	2.0	1.2	0.7	:	1.2	:	:
1981	2.3	2.3	0.7	0.6	:	2.4	:	:
1982	2.3	2.1	1.7	0.8	:	1.5	:	:
1983	1.9	2.5	1.6	0.7	:	1.3	:	:
1984	2.0	2.4	1.3	0.5	:	1.2	:	:
1985	1.8	2.6	3.5	0.5	:	1.0	:	:
1986	2.3	2.4	1.7	0.6	:	0.6	:	:
1987	2.5	2.2	0.9	0.5	:	0.5	:	:
1988	1.7	2.0	0.9	0.8	:	0.6	:	:
1989	1.3	1.8	1.5	0.4	:	0.7	:	:
1990	1.0	1.9	1.8	0.5	:	1.8	:	:
1991								
1991	0.7	2.0	1.8	0.7	:	1.4	:	:
1992	0.4	2.0	2.1	0.6	:	1.2	:	:
1993	0.3	2.0	1.8	0.6	2.6	1.2	:	:
1994	0.4	1.9	1.3	0.9	0.9	1.0	:	:
1995	0.4	2.0	1.5	0.6	0.6	1.2	1.6	1.7
1996	-0.1	2.2	1.8	0.9	0.0	0.9	1.1	1.2
1997	-0.2	2.1	2.0	0.3	0.6	0.7	1.0	1.1
1998	0.0	2.5	2.0	0.3	-0.7	0.6	1.1	1.3
1999	0.2	2.5	1.8	0.3	0.2	0.6	1.2	1.3
2000	-0.3	2.0	1.2	0.3	0.0	-1.9	-0.2	0.2
2001	0.8	2.5	1.9	0.3	0.1	0.9	1.2	1.4
2002	0.5	2.1	1.3	0.3	0.1	1.0	1.2	1.3
2003	0.3	2.0	1.6	0.2	0.1	1.4	1.3	1.4
2004	0.3	1.9	1.5	0.2	0.1	1.3	1.2	1.3
2005	0.3	1.9	1.5	0.2	0.1	1.3	1.2	1.2

⁽¹⁾ 1970–91 including D_90.⁽²⁾ EU-15 excluding DK, SE and UK; 1970–91 including D_90.

Table 73 (Continued)

(Percentage of gross domestic product at market prices)

	CY	CZ	EE	HU	LV	LT	MT	PL	SK
1970	:	:	:	:	:	:	:	:	:
1971	:	:	:	:	:	:	:	:	:
1972	:	:	:	:	:	:	:	:	:
1973	:	:	:	:	:	:	:	:	:
1974	:	:	:	:	:	:	:	:	:
1975	:	:	:	:	:	:	:	:	:
1976	:	:	:	:	:	:	:	:	:
1977	:	:	:	:	:	:	:	:	:
1978	:	:	:	:	:	:	:	:	:
1979	:	:	:	:	:	:	:	:	:
1980	:	:	:	:	:	:	:	:	:
1981	:	:	:	:	:	:	:	:	:
1982	:	:	:	:	:	:	:	:	:
1983	:	:	:	:	:	:	:	:	:
1984	:	:	:	:	:	:	:	:	:
1985	:	:	:	:	:	:	:	:	:
1986	:	:	:	:	:	:	:	:	:
1987	:	:	:	:	:	:	:	:	:
1988	:	:	:	:	:	:	:	:	:
1989	:	:	:	:	:	:	:	:	:
1990	:	:	:	:	1.4	:	:	:	:
1991	:	:	:	:	0.2	:	:	3.5	:
1992	:	8.0	:	:	2.0	:	:	1.4	:
1993	:	29.2	0.0	:	1.5	:	:	0.6	23.7
1994	:	6.1	1.9	:	1.1	:	:	1.3	4.9
1995	:	15.2	1.9	:	0.9	1.5	:	0.4	6.9
1996	:	3.4	2.0	:	1.1	2.7	:	0.9	9.6
1997	:	2.5	1.6	:	1.3	0.5	:	0.7	6.7
1998	:	3.6	2.3	:	2.8	1.1	:	0.7	6.6
1999	:	3.7	3.8	:	3.2	3.7	:	0.8	9.2
2000	:	2.5	2.3	:	2.6	0.9	:	0.3	14.2
2001	:	3.5	:	:	2.7	:	:	:	:
2002	:	4.9	:	:	2.8	:	:	:	:
2003	:	:	:	:	:	:	:	:	:
2004	:	:	:	:	:	:	:	:	:
2005	:	:	:	:	:	:	:	:	:

NB: Member States have provided figures for the last statistical period according to ESA 95 specifications starting from the years mentioned below:

1970: BE, DE, NL, UK;

1976: AT;

1980: IT;

1993: SE;

1971: DK;

1977: PT;

1988: EL;

1995: ES.

1975: FI;

1978: FR;

1990: IE, LU;

Other capital expenditure, including capital transfers are defined as:

Capital transfers (D.9), payable

+ Changes in inventories (P.52) and acquisitions less disposals of valuables (P.53)

+ Acquisitions less disposals of non-financial non-produced assets (K.2).

Non-financial non-produced assets (K.2) consist of land and other tangible non-produced assets that may be used in the production of goods and services, and intangible non-produced assets. Acquisitions and disposals of other tangible non-produced assets cover subsoil assets (coal, oil and natural gas reserves, and metallic as well as non-metallic mineral reserves), non-cultivated biological resources and water resources. Examples of intangible non-financial non-produced assets are patents, leases, other transferable contracts, purchased goodwill, and transferable contracts with authors.

Reference: ESA 95, paragraphs 3.125, 3.126, 6.06 et seq.

(Percentage of gross domestic product at market prices)

	SI	AC-10 ⁽¹⁾	EU-25 ⁽²⁾	BG	RO	TR	US ⁽³⁾	JP
1970	:	:	:	:	:	:	:	:
1971	:	:	:	:	:	:	:	:
1972	:	:	:	:	:	:	:	:
1973	:	:	:	:	:	:	:	:
1974	:	:	:	:	:	:	:	:
1975	:	:	:	:	:	:	:	:
1976	:	:	:	:	:	:	:	:
1977	:	:	:	:	:	:	:	:
1978	:	:	:	:	:	:	:	:
1979	:	:	:	:	:	:	:	:
1980	:	:	:	:	:	:	:	:
1981	:	:	:	:	:	:	:	:
1982	:	:	:	:	:	:	:	:
1983	:	:	:	:	:	:	:	:
1984	:	:	:	:	:	:	:	:
1985	:	:	:	:	:	:	:	:
1986	:	:	:	:	:	:	:	:
1987	:	:	:	:	:	:	:	:
1988	:	:	:	:	:	:	:	:
1989	:	:	:	:	:	:	:	:
1990	:	:	:	:	:	:	:	1.6
1991	:	:	:	:	:	:	:	1.7
1992	:	:	:	:	:	:	:	1.9
1993	:	:	:	:	:	:	:	2.2
1994	:	:	:	:	:	:	:	2.1
1995	:	:	:	:	:	:	:	2.2
1996	:	:	:	:	:	:	:	2.2
1997	:	:	:	:	:	:	:	1.9
1998	:	:	:	:	:	:	:	7.3
1999	:	:	:	3.6	:	:	:	1.9
2000	:	:	:	2.1	:	:	:	2.9
2001	:	:	:	:	:	:	:	1.8
2002	:	:	:	:	:	:	:	1.8
2003	:	:	:	:	:	:	:	1.8
2004	:	:	:	:	:	:	:	1.7
2005	:	:	:	:	:	:	:	1.6

⁽¹⁾ CY, CZ, EE, HU, LV, LT, MT, PL, SK and SI.⁽²⁾ BE, DK, DE, EL, ES, FR, IE, IT, LU, NL, AT, PT, FI, SE, UK, CY, CZ, EE, HU, LV, LT, MT, PL, SK and SI.⁽³⁾ Former definition.

Table 74

General government (% of GDP at market prices)
Total expenditure; general government ⁽¹⁾
Excessive deficit procedure

(Percentage of gross domestic product at market prices)

	BE	DK	DE ⁽²⁾	EL	ES	FR	IE	IT	LU
1970	42.2	:	39.1	:	:	:	:	:	:
1971	43.5	42.9	40.6	:	:	:	:	:	:
1972	44.7	42.6	41.6	:	:	:	:	:	:
1973	44.9	40.2	42.1	:	:	:	:	:	:
1974	44.6	44.4	45.6	:	:	:	:	:	:
1975	50.3	46.1	49.9	:	:	:	:	:	:
1976	50.7	45.8	49.1	:	:	:	:	:	:
1977	52.6	46.5	48.7	:	:	:	:	:	:
1978	54.1	48.0	47.5	:	:	44.7	:	:	:
1979	56.5	50.5	47.2	:	:	45.3	:	:	:
1980	56.3	53.6	47.9	:	:	46.5	:	41.7	:
1981	63.1	57.3	48.8	:	:	49.3	:	45.5	:
1982	61.2	58.8	48.9	:	:	51.0	:	47.7	:
1983	63.8	59.0	47.7	:	:	51.7	:	50.0	:
1984	60.5	58.0	46.9	:	:	52.7	:	50.1	:
1985	59.8	56.8	46.3	:	:	53.4	:	50.9	:
1986	58.9	53.3	45.4	:	:	52.7	:	51.4	:
1987	57.0	55.0	45.8	:	:	51.9	:	50.8	:
1988	55.0	57.2	45.3	44.0	:	51.3	:	51.5	:
1989	53.4	57.3	44.0	45.4	:	50.4	:	52.9	:
1990	53.3	57.0	44.5	50.2	:	50.7	43.2	54.3	43.2
1991			46.7						
1991	54.3	57.8	47.1	46.7	:	51.6	44.8	55.5	44.5
1992	54.5	59.0	48.1	49.4	:	52.9	45.2	56.7	46.0
1993	55.6	61.7	49.3	52.0	:	55.2	45.1	57.7	45.7
1994	53.3	61.6	49.0	49.9	:	54.9	44.3	54.6	44.5
1995	52.8	60.3	49.6	51.0	45.0	55.2	41.5	53.4	45.5
1996	52.9	59.8	50.3	49.2	43.7	55.5	39.6	53.2	45.6
1997	51.4	58.0	49.3	47.8	41.8	55.0	37.5	51.1	43.3
1998	50.7	57.6	48.8	47.8	41.4	53.8	34.9	49.9	42.0
1999	50.1	56.2	48.7	47.6	40.2	53.5	34.5	48.8	41.3
2000	49.3	54.6	45.7	49.8	39.8	52.7	32.1	46.9	38.5
2001	49.4	55.0	48.3	47.8	39.4	52.6	34.0	48.5	39.1
2002	50.4	55.4	48.5	46.5	39.7	53.5	33.3	47.5	44.2
2003	51.1	55.4	49.1	46.3	39.8	54.7	34.8	48.5	48.0
2004	50.8	54.7	48.4	45.7	39.7	54.3	34.9	47.7	48.6
2005	50.1	53.6	47.6	45.1	39.7	54.1	34.5	47.6	48.8

⁽¹⁾ Including one-off proceeds (treated as negative expenditure) relative to the allocation of mobile phone licences (UMTS).⁽²⁾ 1970–91 D_90.

NB: Member States have provided figures for the last statistical period according to ESA 95 specifications starting from the years mentioned below:

1970: BE, DE, NL, UK; 1976: AT; 1980: IT; 1993: SE;
 1971: DK; 1977: PT; 1988: EL; 1995: ES.
 1975: FI; 1978: FR; 1990: IE, LU;

Total general government expenditure is the sum of:

Intermediate consumption (P.2)

+ Gross capital formation (P.5)

+ Compensation of employees (D.1), payable

+ Other taxes on production (D.29), payable

+ Subsidies (D.3), payable

+ Property income (D.4), payable

+ Current taxes on income and wealth (D.5), payable

+ Social benefits other than social transfers in kind (D.62), payable

+ Social transfers in kind related to expenditure on products supplied to households via market producers (D.6311 + D.63121 + D.63131), payable

+ Other current transfers (D.7), payable

+ Adjustment for the change in the net equity of households on pension funds' reserves (D.8)

+ Capital transfers (D.9), payable

+ Acquisition of non-produced non-financial assets (K.2).

For total general government expenditure, see also annex to Regulation (EC) No 1221/2002 of the European Parliament and of the Council of 10 June 2002, and Table 2, 'Main aggregates of general government', of the ESA 95 transmission programme.

Intermediate consumption (P.2) consists of the value of goods and services consumed as inputs by a process of production, excluding fixed assets whose consumption is recorded as consumption of fixed capital. The goods and services may be either transformed or used up by the production process. Intermediate consumption basically also comprises the costs of using rented fixed assets, for example the leasing of cars, and small durable goods which are inexpensive and used for relatively simple operations like hand tools and small devices such as pocket calculators.

Furthermore, intermediate consumption of general government includes, in particular, military weapons of destruction and the equipment needed to deliver them (in contrast, light weapons or armoured vehicles acquired by police and security forces are treated as gross fixed capital formation).

The adjustment for the change in the net equity of households in pension funds' reserves (D.8) represents the adjustment needed to make appear in the saving of households the change in the actuarial reserves on which households have a definite claim.

The adjustment for the change in net equity of households in pension funds' reserves is part of the expenditure of the insurance enterprises sector and other sectors, such as the general government sector, administering non-autonomous pension funds.

Reference: ESA 95, paragraphs 3.69, 3.70, 4.141 and 4.144.

(Percentage of gross domestic product at market prices)

	NL	AT	PT	FI	SE	UK	EU-15 ⁽¹⁾	EUR-12 ⁽²⁾
1970	43.1	:	:	:	:	42.1	:	:
1971	44.7	:	:	:	:	41.4	:	:
1972	45.0	:	:	:	:	42.5	:	:
1973	44.9	:	:	:	:	43.8	:	:
1974	46.9	:	:	:	:	48.2	:	:
1975	51.5	:	:	38.9	:	49.5	:	:
1976	51.7	49.0	:	40.1	:	49.7	:	:
1977	51.1	48.7	30.8	41.8	:	47.2	:	:
1978	52.7	51.9	33.5	41.6	:	46.6	:	:
1979	54.3	51.0	32.7	40.6	:	45.6	:	:
1980	56.0	51.3	35.3	40.6	:	48.1	:	:
1981	57.6	52.8	38.8	41.6	:	51.9	:	:
1982	59.8	53.4	38.5	43.4	:	51.5	:	:
1983	59.8	53.8	38.4	45.0	:	51.1	:	:
1984	58.9	53.9	38.4	45.0	:	51.1	:	:
1985	57.7	54.9	40.8	46.9	:	49.6	:	:
1986	57.3	55.8	41.3	47.9	:	45.6	:	:
1987	58.4	56.1	40.0	48.5	:	43.5	:	:
1988	56.6	55.2	38.5	47.0	:	41.1	:	:
1989	54.5	53.6	38.8	45.2	:	40.4	:	:
1990	54.8	53.1	42.1	48.6	:	42.2	:	:
1991								
1991	54.8	54.2	45.1	57.7	:	43.9	:	:
1992	55.8	54.9	46.2	63.0	:	45.6	:	:
1993	56.0	57.9	47.8	64.2	73.1	45.6	:	:
1994	53.6	57.4	46.0	62.9	71.0	44.9	:	:
1995	51.4	57.2	45.0	59.6	67.7	44.5	51.3	51.6
1996	49.6	56.6	45.8	59.7	65.3	42.7	51.0	51.6
1997	48.2	54.0	44.8	56.4	63.1	41.1	49.3	50.2
1998	47.2	54.1	44.1	52.8	60.7	39.8	48.3	49.4
1999	46.9	54.1	45.2	52.1	60.2	39.2	47.7	48.9
2000	45.3	52.2	45.1	49.0	57.4	36.9	45.7	47.1
2001	46.6	51.6	46.3	49.1	57.2	40.5	47.1	48.1
2002	47.5	51.1	46.0	50.0	58.2	41.3	47.4	48.3
2003	48.5	51.2	47.1	50.9	59.0	42.8	48.4	49.0
2004	48.2	50.9	46.1	51.0	58.7	43.1	48.0	48.4
2005	47.5	50.0	46.4	50.1	57.8	43.2	47.6	48.0

⁽¹⁾ 1970–91 including D_90.⁽²⁾ EU-15 excluding DK, SE and UK; 1970–91 including D_90.

Table 74 (Continued)

(Percentage of gross domestic product at market prices)

	CY	CZ	EE	HU	LV	LT	MT	PL	SK
1970	:	:	:	:	:	:	:	:	:
1971	:	:	:	:	:	:	:	:	:
1972	:	:	:	:	:	:	:	:	:
1973	:	:	:	:	:	:	:	:	:
1974	:	:	:	:	:	:	:	:	:
1975	:	:	:	:	:	:	:	:	:
1976	:	:	:	:	:	:	:	:	:
1977	:	:	:	:	:	:	:	:	:
1978	:	:	:	:	:	:	:	:	:
1979	:	:	:	:	:	:	:	:	:
1980	:	:	:	:	:	:	:	:	:
1981	:	:	:	:	:	:	:	:	:
1982	:	:	:	:	:	:	:	:	:
1983	:	:	:	:	:	:	:	:	:
1984	:	:	:	:	:	:	:	:	:
1985	:	:	:	:	:	:	:	:	:
1986	:	:	:	:	:	:	:	:	:
1987	:	:	:	:	:	:	:	:	:
1988	:	:	:	:	:	:	:	:	:
1989	:	:	:	:	:	:	:	:	:
1990	:	:	:	:	35.5	:	:	:	:
1991	:	:	:	:	29.7	:	:	52.2	:
1992	:	51.3	:	:	28.7	:	:	56.8	:
1993	:	71.2	:	:	39.6	:	:	56.1	:
1994	:	50.4	:	:	45.8	:	:	51.2	:
1995	:	57.2	:	:	46.4	37.3	:	49.0	:
1996	:	45.5	:	:	44.0	38.8	:	48.7	:
1997	:	45.0	:	:	43.8	39.1	:	47.7	:
1998	:	46.0	:	:	49.0	41.1	:	45.9	:
1999	:	45.9	:	:	50.2	43.7	:	45.2	:
2000	:	46.1	:	:	45.2	38.8	:	43.3	:
2001	39.3	47.3	37.3	58.5	42.4	37.1	46.9	45.0	42.1
2002	39.8	49.9	38.5	53.7	44.9	36.9	48.8	44.3	43.7
2003	40.6	50.8	41.1	48.6	46.0	37.8	46.6	45.6	38.5
2004	39.1	50.6	39.7	48.8	43.8	38.7	44.9	48.1	37.3
2005	38.3	49.3	38.9	47.8	38.2	38.6	43.3	46.7	37.1

NB: Member States have provided figures for the last statistical period according to ESA 95 specifications starting from the years mentioned below:

1970: BE, DE, NL, UK; 1976: AT; 1980: IT; 1993: SE;
 1971: DK; 1977: PT; 1988: EL; 1995: ES.
 1975: FI; 1978: FR; 1990: IE, LU;

Total general government expenditure is the sum of:

Intermediate consumption (P.2)

+ Gross capital formation (P.5)

+ Compensation of employees (D.1), payable

+ Other taxes on production (D.29), payable

+ Subsidies (D.3), payable

+ Property income (D.4), payable

+ Current taxes on income and wealth (D.5), payable

+ Social benefits other than social transfers in kind (D.62), payable

+ Social transfers in kind related to expenditure on products supplied to households via market producers (D.6311 + D.63121 + D.63131), payable

+ Other current transfers (D.7), payable

+ Adjustment for the change in the net equity of households on pension funds' reserves (D.8)

+ Capital transfers (D.9), payable

+ Acquisition of non-produced non-financial assets (K.2).

For total general government expenditure, see also annex to Regulation (EC) No 1221/2002 of the European Parliament and of the Council of 10 June 2002, and Table 2, 'Main aggregates of general government', of the ESA 95 transmission programme.

Intermediate consumption (P.2) consists of the value of goods and services consumed as inputs by a process of production, excluding fixed assets whose consumption is recorded as consumption of fixed capital. The goods and services may be either transformed or used up by the production process. Intermediate consumption basically also comprises the costs of using rented fixed assets, for example the leasing of cars, and small durable goods which are inexpensive and used for relatively simple operations like hand tools and small devices such as pocket calculators.

Furthermore, intermediate consumption of general government includes, in particular, military weapons of destruction and the equipment needed to deliver them (in contrast, light weapons or armoured vehicles acquired by police and security forces are treated as gross fixed capital formation).

The adjustment for the change in the net equity of households in pension funds' reserves (D.8) represents the adjustment needed to make appear in the saving of households the change in the actuarial reserves on which households have a definite claim.

The adjustment for the change in net equity of households in pension funds' reserves is part of the expenditure of the insurance enterprises sector and other sectors, such as the general government sector, administering non-autonomous pension funds.

Reference: ESA 95, paragraphs 3.69, 3.70, 4.141 and 4.144.

(Percentage of gross domestic product at market prices)

	SI	AC-10 ⁽¹⁾	EU-25 ⁽²⁾	BG	RO	TR	US ⁽³⁾	JP ⁽⁴⁾
1970	:	:	:	:	:	:	31.7	:
1971	:	:	:	:	:	:	31.8	:
1972	:	:	:	:	:	:	31.5	:
1973	:	:	:	:	:	:	30.5	:
1974	:	:	:	:	:	:	31.8	:
1975	:	:	:	:	:	:	34.4	:
1976	:	:	:	:	:	:	33.1	:
1977	:	:	:	:	:	:	32.1	:
1978	:	:	:	:	:	:	31.2	:
1979	:	:	:	:	:	:	31.1	:
1980	:	:	:	:	:	:	33.1	:
1981	:	:	:	:	:	:	33.5	:
1982	:	:	:	:	:	:	35.7	:
1983	:	:	:	:	:	:	35.8	:
1984	:	:	:	:	:	:	34.9	:
1985	:	:	:	:	:	:	35.7	:
1986	:	:	:	:	:	:	36.1	:
1987	:	:	:	:	:	:	35.8	:
1988	:	:	:	:	:	:	34.9	:
1989	:	:	:	:	:	:	34.7	:
1990	:	:	:	:	:	:	35.5	32.6
1991	:	:	:	:	:	:	36.2	32.4
1992	:	:	:	:	:	:	36.9	33.4
1993	:	:	:	:	:	:	36.2	35.3
1994	:	:	:	:	:	:	35.1	35.9
1995	:	:	:	:	:	:	35.0	36.9
1996	:	:	:	:	:	:	34.6	37.5
1997	:	:	:	:	:	:	33.6	36.3
1998	:	:	:	:	:	:	32.7	42.8
1999	:	:	:	:	:	:	32.5	39.2
2000	:	:	:	:	:	:	32.3	39.9
2001	42.8	46.4	47.1	40.0	:	:	33.4	39.4
2002	44.0	46.3	47.4	39.4	:	:	34.2	40.4
2003	43.8	46.0	48.3	40.2	:	:	35.3	40.2
2004	44.0	46.8	47.9	39.7	:	:	35.0	40.1
2005	44.1	45.6	47.5	38.8	:	:	35.1	40.2

⁽¹⁾ CY, CZ, EE, HU, LV, LT, MT, PL, SK and SI.⁽²⁾ BE, DK, DE, EL, ES, FR, IE, IT, LU, NL, AT, PT, FI, SE, UK, CY, CZ, EE, HU, LV, LT, MT, PL, SK and SI.⁽³⁾ Former definition.⁽⁴⁾ SNA 93.

Table 75

General government (% of GDP at market prices)
Net lending (+) or net borrowing (-); general government ⁽¹⁾
Excessive deficit procedure

(Percentage of gross domestic product at market prices)

	BE ⁽²⁾	DK	DE ⁽³⁾ ⁽⁴⁾	EL	ES	FR	IE	IT	LU
1970	-2.1	:	0.5	:	:	:	:	:	:
1971	-3.1	5.0	0.2	:	:	:	:	:	:
1972	-4.7	5.1	-0.4	:	:	:	:	:	:
1973	-3.9	5.1	1.1	:	:	:	:	:	:
1974	-2.9	3.8	-1.7	:	:	:	:	:	:
1975	-5.4	-1.3	-5.8	:	:	:	:	:	:
1976	-5.8	0.2	-3.5	:	:	:	:	:	:
1977	-5.8	0.4	-2.6	:	:	:	:	:	:
1978	-6.5	0.4	-2.6	:	:	-1.3	:	:	:
1979	-8.4	-0.7	-2.7	:	:	-0.1	:	:	:
1980	-9.5	-2.4	-2.9	:	:	0.0	:	-7.1	:
1981	-15.7	-5.9	-4.0	:	:	-2.2	:	-11.1	:
1982	-12.5	-8.4	-3.5	:	:	-2.9	:	-10.2	:
1983	-14.8	-6.4	-2.9	:	:	-2.8	:	-10.3	:
1984	-10.9	-3.7	-2.0	:	:	-2.8	:	-11.7	:
1985	-10.2	-1.4	-1.1	:	:	-3.0	:	-12.7	:
1986	-10.1	3.3	-1.1	:	:	-3.2	:	-12.2	:
1987	-7.9	2.5	-1.8	:	:	-2.0	:	-11.8	:
1988	-7.3	1.5	-2.0	-11.6	:	-2.5	:	-11.3	:
1989	-7.6	0.3	0.1	-13.6	:	-1.8	:	-11.7	:
1990	-6.8	-1.0	-2.0	-15.7	:	-2.1	-2.8	-11.8	4.9
1991			-2.8						
1991	-7.4	-2.4	-2.9	-11.0	:	-2.4	-2.9	-11.7	1.1
1992	-8.0	-2.2	-2.6	-12.2	:	-4.2	-3.0	-10.7	0.2
1993	-7.3	-2.9	-3.1	-13.4	:	-6.0	-2.7	-10.3	1.5
1994	-5.0	-2.4	-2.4	-9.3	:	-5.5	-2.0	-9.3	2.7
1995	-4.3	-2.3	-3.5	-10.2	-6.6	-5.5	-2.1	-7.6	2.1
1996	-3.8	-1.0	-3.4	-7.4	-4.9	-4.1	-0.1	-7.1	1.9
1997	-2.0	0.4	-2.7	-4.0	-3.2	-3.0	1.1	-2.7	3.2
1998	-0.7	1.1	-2.2	-2.5	-3.0	-2.7	2.4	-3.1	3.2
1999	-0.4	3.3	-1.5	-1.8	-1.2	-1.8	2.4	-1.7	3.5
2000	0.2	2.6	1.3	-1.9	-0.8	-1.4	4.4	-0.6	6.4
2001	0.6	3.1	-2.8	-1.5	-0.3	-1.5	0.9	-2.6	6.2
2002	0.1	1.9	-3.5	-1.2	0.1	-3.1	-0.2	-2.3	2.4
2003	0.2	0.9	-4.2	-1.7	0.0	-4.2	-0.9	-2.6	-0.6
2004	-0.4	1.3	-3.9	-2.4	0.1	-3.8	-1.2	-2.8	-2.1
2005	-0.4	1.9	-3.4	-2.3	0.2	-3.6	-1.1	-3.5	-2.5

⁽¹⁾ Including one-off proceeds relative to the allocation of mobile phone licences (UMTS).⁽²⁾ Including transfers of the Belgacom pension fund (1.4 and 0.5 % of GDP in 2003 and 2004 respectively). Eurostat is still investigating this operation.⁽³⁾ 1970-91 D_90.⁽⁴⁾ Not including unification-related debt and asset assumptions by the federal government in 1995 (Treuhand, eastern housing companies and Deutsche Kreditbank) equal to EUR-DEM 116.3 billion.

NB: Member States have provided figures for the last statistical period according to ESA 95 specifications starting from the years mentioned below:

1970: BE, DE, NL, UK; 1976: AT; 1980: IT; 1993: SE;
 1971: DK; 1977: PT; 1988: EL; 1995: ES.
 1975: FI; 1978: FR; 1990: IE, LU;

Net lending/net borrowing (B.9) is the balancing item in the capital account. It is defined as:

Net saving (B.8n)

+ Capital transfers (D.9), receivable

- Capital transfers (D.9), payable

- Gross capital formation (P.5)

+ Consumption of fixed capital (K.1)

- Acquisition less disposals of non-financial non-produced assets (K.2).

Net lending/net borrowing of general government can also be defined as total general government revenue (see Table 71) minus total general government expenditure (see Table 74).

Reference: ESA 95, paragraph 8.47.

(Percentage of gross domestic product at market prices)

	NL ⁽¹⁾	AT	PT	FI	SE	UK	EU-15 ⁽²⁾	EUR-12 ⁽³⁾
1970	-1.5	:	:	:	:	2.6	:	:
1971	-1.6	:	:	:	:	1.5	:	:
1972	-0.7	:	:	:	:	-1.7	:	:
1973	0.5	:	:	:	:	-3.6	:	:
1974	-0.3	:	:	:	:	-3.6	:	:
1975	-2.9	:	:	5.1	:	-4.5	:	:
1976	-2.1	-3.7	:	7.9	:	-4.6	:	:
1977	-0.8	-2.2	-3.0	6.4	:	-3.3	:	:
1978	-2.1	-2.7	-7.5	4.0	:	-4.4	:	:
1979	-2.5	-2.4	-6.5	3.6	:	-3.6	:	:
1980	-4.0	-1.7	-7.6	3.9	:	-3.2	:	:
1981	-5.0	-1.8	-9.1	5.3	:	-4.4	:	:
1982	-6.2	-3.4	-7.6	3.2	:	-2.7	:	:
1983	-5.5	-4.3	-5.4	1.6	:	-3.4	:	:
1984	-5.3	-2.7	-5.8	3.3	:	-3.6	:	:
1985	-3.6	-2.8	-9.1	3.5	:	-2.9	:	:
1986	-4.6	-4.0	-7.9	4.0	:	-2.6	:	:
1987	-5.3	-4.5	-7.2	1.6	:	-1.8	:	:
1988	-4.2	-3.5	-3.8	5.3	:	0.5	:	:
1989	-5.0	-3.1	-3.1	6.9	:	0.8	:	:
1990	-5.3	-2.4	-6.6	5.5	:	-1.6	:	:
1991								
1991	-2.7	-3.0	-7.6	-1.0	:	-3.1	:	:
1992	-4.2	-2.0	-4.8	-5.5	:	-6.4	:	:
1993	-2.8	-4.2	-8.1	-7.2	-11.6	-7.9	:	:
1994	-3.5	-5.0	-7.7	-5.7	-10.5	-6.7	:	:
1995	-4.2	-5.2	-5.5	-3.9	-7.4	-5.8	-5.2	-5.1
1996	-1.8	-3.8	-4.8	-2.9	-2.9	-4.2	-4.2	-4.3
1997	-1.1	-1.9	-3.6	-1.3	-1.7	-2.2	-2.5	-2.6
1998	-0.8	-2.4	-3.2	1.6	2.3	0.1	-1.7	-2.3
1999	0.7	-2.3	-2.8	2.2	1.5	1.1	-0.7	-1.3
2000	2.2	-1.5	-2.8	7.1	3.4	3.9	1.0	0.2
2001	0.0	0.3	-4.2	5.2	4.5	0.7	-0.9	-1.6
2002	-1.6	-0.2	-2.7	4.2	1.3	-1.5	-1.9	-2.2
2003	-2.6	-1.0	-2.9	2.4	0.2	-2.8	-2.7	-2.8
2004	-2.7	-0.6	-3.3	1.7	0.5	-2.7	-2.6	-2.7
2005	-2.4	-0.2	-3.9	1.9	1.0	-2.4	-2.4	-2.7

(1) Not including for 1995 a net amount of EUR-NLG 14.9 billion of exceptional expenditure related to the reform of the financing of the social housing societies.

(2) 1970–91 including D_90.

(3) EU-15 excluding DK, SE and UK; 1970–91 including D_90.

Table 75 (Continued)

(Percentage of gross domestic product at market prices)

	CY	CZ	EE	HU	LV	LT	MT	PL	SK
1970	:	:	:	:	:	:	:	:	:
1971	:	:	:	:	:	:	:	:	:
1972	:	:	:	:	:	:	:	:	:
1973	:	:	:	:	:	:	:	:	:
1974	:	:	:	:	:	:	:	:	:
1975	:	:	:	:	:	:	:	:	:
1976	:	:	:	:	:	:	:	:	:
1977	:	:	:	:	:	:	:	:	:
1978	:	:	:	:	:	:	:	:	:
1979	:	:	:	:	:	:	:	:	:
1980	:	:	:	:	:	:	:	:	:
1981	:	:	:	:	:	:	:	:	:
1982	:	:	:	:	:	:	:	:	:
1983	:	:	:	:	:	:	:	:	:
1984	:	:	:	:	:	:	:	:	:
1985	:	:	:	:	:	:	:	:	:
1986	:	:	:	:	:	:	:	:	:
1987	:	:	:	:	:	:	:	:	:
1988	:	:	:	:	:	:	:	:	:
1989	:	:	:	:	:	:	:	:	:
1990	:	:	:	:	7.6	:	:	:	:
1991	:	:	:	:	6.4	:	:	-9.4	:
1992	:	-2.5	:	:	-0.5	:	:	-7.1	:
1993	:	-23.4	10.2	:	2.4	-0.8	:	-4.5	-31.2
1994	:	-3.4	4.6	:	-1.5	-0.9	:	5.8	-6.1
1995	:	-12.3	-0.1	:	-2.3	-2.0	:	-2.5	-0.9
1996	:	-1.9	-2.3	:	-0.5	-3.7	:	-2.9	-7.4
1997	:	-2.4	1.5	:	1.6	-1.2	:	-2.8	-6.2
1998	:	-4.7	-0.9	:	-0.7	-3.0	:	-2.3	-5.2
1999	-4.4	-3.7	-2.8	-5.6	-5.3	-5.7	-8.2	-2.0	-7.8
2000	-3.1	-4.0	-0.3	-3.0	-2.7	-2.3	-7.0	-2.5	-13.5
2001	-3.0	-5.8	0.3	-4.2	-1.6	-2.2	-6.8	-3.1	-7.2
2002	-3.5	-7.1	0.9	-9.2	-3.0	-1.7	-6.2	-3.9	-7.2
2003	-5.2	-8.0	0.0	-5.4	-2.7	-2.6	-7.6	-4.3	-5.1
2004	-3.7	-6.3	-0.4	-4.4	-2.7	-3.1	-5.8	-5.9	-4.0
2005	-2.9	-5.2	0.4	-3.6	-2.0	-2.7	-4.1	-4.9	-3.4

NB: Member States have provided figures for the last statistical period according to ESA 95 specifications starting from the years mentioned below:

1970: BE, DE, NL, UK;

1976: AT;

1980: IT;

1993: SE;

1971: DK;

1977: PT;

1988: EL;

1995: ES.

1975: FI;

1978: FR;

1990: IE, LU;

Net lending/net borrowing (B.9) is the balancing item in the capital account. It is defined as:

Net saving (B.8n)

+ Capital transfers (D.9), receivable

- Capital transfers (D.9), payable

- Gross capital formation (P.5)

+ Consumption of fixed capital (K.1)

- Acquisition less disposals of non-financial non-produced assets (K.2).

Net lending/net borrowing of general government can also be defined as total general government revenue (see Table 71) minus total general government expenditure (see Table 74).

Reference: ESA 95, paragraph 8.47.

(Percentage of gross domestic product at market prices)

	SI	AC-10 ⁽¹⁾	EU-25 ⁽²⁾	BG	RO	TR	US ⁽³⁾	JP ⁽⁴⁾
1970	:	:	:	:	:	:	-2.0	:
1971	:	:	:	:	:	:	-2.8	:
1972	:	:	:	:	:	:	-1.3	:
1973	:	:	:	:	:	:	-0.2	:
1974	:	:	:	:	:	:	-1.0	:
1975	:	:	:	:	:	:	-5.2	:
1976	:	:	:	:	:	:	-3.3	:
1977	:	:	:	:	:	:	-2.2	:
1978	:	:	:	:	:	:	-1.3	:
1979	:	:	:	:	:	:	-0.9	:
1980	:	:	:	:	:	:	-2.6	:
1981	:	:	:	:	:	:	-2.2	:
1982	:	:	:	:	:	:	-4.9	:
1983	:	:	:	:	:	:	-5.6	:
1984	:	:	:	:	:	:	-4.8	:
1985	:	:	:	:	:	:	-5.1	:
1986	:	:	:	:	:	:	-5.3	:
1987	:	:	:	:	:	:	-4.4	:
1988	:	:	:	:	:	:	-3.7	:
1989	:	:	:	:	:	:	-3.3	:
1990	:	:	:	:	:	:	-4.4	2.0
1991	:	:	:	:	:	:	-5.0	1.8
1992	:	:	:	:	:	:	-5.9	0.8
1993	:	:	:	:	:	:	-5.0	-2.4
1994	:	:	:	:	:	:	-3.7	-3.7
1995	:	:	:	:	:	:	-3.1	-4.7
1996	:	:	:	:	:	:	-2.2	-5.0
1997	:	:	:	:	:	:	-1.0	-3.8
1998	-2.2	:	:	:	:	:	0.3	-10.7
1999	-2.1	-3.5	-0.8	0.4	-4.5	-18.4	0.7	-7.2
2000	-3.1	-3.5	0.8	-0.5	-4.6	-5.8	1.5	-7.4
2001	-1.3	-3.7	-1.1	0.2	-3.3	-26.9	-0.5	-6.1
2002	-2.3	-5.2	-2.1	-0.7	-2.6	-10.0	-3.4	-7.1
2003	-2.2	-5.0	-2.8	0.0	-2.7	-8.0	-5.0	-7.3
2004	-1.8	-5.0	-2.7	-0.7	-3.0	-6.3	-5.5	-7.2
2005	-1.7	-4.1	-2.5	-1.0	-3.0	-4.9	-5.4	-7.1

⁽¹⁾ CY, CZ, EE, HU, LV, LT, MT, PL, SK and SI.⁽²⁾ BE, DK, DE, EL, ES, FR, IE, IT, LU, NL, AT, PT, FI, SE, UK, CY, CZ, EE, HU, LV, LT, MT, PL, SK and SI.⁽³⁾ Former definition.⁽⁴⁾ SNA 93.

Table 76

General government (% of GDP at market prices)
Net lending (+) or net borrowing (-) excluding interest; general government ⁽¹⁾
Excessive deficit procedure

(Percentage of gross domestic product at market prices)

	BE ⁽²⁾	DK	DE ⁽³⁾ ⁽⁴⁾	EL	ES	FR	IE	IT	LU
1970	1.4	:	1.4	:	:	:	:	:	:
1971	0.6	6.4	1.1	:	:	:	:	:	:
1972	-1.0	6.4	0.7	:	:	:	:	:	:
1973	-0.1	6.3	2.3	:	:	:	:	:	:
1974	1.0	5.0	-0.4	:	:	:	:	:	:
1975	-1.3	-0.1	-4.3	:	:	:	:	:	:
1976	-1.6	1.5	-1.9	:	:	:	:	:	:
1977	-1.0	2.2	-0.9	:	:	:	:	:	:
1978	-1.5	2.5	-0.9	:	:	0.0	:	:	:
1979	-2.7	2.7	-0.8	:	:	1.2	:	:	:
1980	-2.9	1.5	-0.8	:	:	1.4	:	-2.5	:
1981	-7.4	-0.9	-1.5	:	:	-0.3	:	-5.8	:
1982	-3.1	-2.6	-0.6	:	:	-0.9	:	-3.4	:
1983	-4.9	1.4	0.1	:	:	-0.3	:	-2.2	:
1984	-0.8	5.6	1.0	:	:	-0.2	:	-3.0	:
1985	0.8	8.1	1.9	:	:	-0.2	:	-3.9	:
1986	1.3	11.8	1.7	:	:	-0.3	:	-3.2	:
1987	2.7	10.5	1.0	:	:	0.8	:	-3.6	:
1988	3.0	9.1	0.8	-4.2	:	0.1	:	-2.7	:
1989	3.7	7.5	2.8	-6.1	:	0.9	:	-2.2	:
1990	5.1	6.3	0.7	-5.7	:	0.8	5.1	-1.3	5.3
1991			0.1						
1991	3.9	4.9	-0.1	-1.4	:	0.6	4.8	0.2	1.4
1992	3.2	4.4	0.7	-0.7	:	-0.9	4.2	2.0	0.6
1993	3.8	4.4	0.2	-0.8	:	-2.5	3.9	2.8	1.9
1994	4.6	4.2	0.9	4.7	:	-2.0	4.1	2.1	3.1
1995	4.9	4.1	0.2	2.6	-1.4	-1.8	3.3	3.9	2.4
1996	5.1	5.1	0.3	4.6	0.4	-0.1	4.4	4.4	2.3
1997	6.0	6.1	0.9	5.6	1.6	0.7	5.3	6.7	3.6
1998	6.8	6.5	1.4	6.5	1.2	0.9	5.7	5.2	3.5
1999	6.6	8.0	2.0	6.5	2.4	1.6	4.7	5.0	3.8
2000	6.9	6.8	4.7	5.9	2.5	1.8	6.5	5.8	6.6
2001	7.1	7.0	0.4	5.7	2.8	1.7	2.5	3.8	6.4
2002	6.1	5.4	-0.4	4.9	2.8	0.1	1.2	3.4	2.7
2003	5.8	4.2	-1.1	4.3	2.6	-0.9	0.7	2.7	-0.4
2004	4.6	4.3	-0.7	3.3	2.5	-0.6	0.3	2.2	-2.0
2005	4.2	4.7	-0.2	3.1	2.5	-0.4	0.4	1.6	-2.4

⁽¹⁾ Including one-off proceeds relative to the allocation of mobile phone licences (UMTS).⁽²⁾ Including transfers of the Belgacom pension fund (1.4 and 0.5 % of GDP in 2003 and 2004 respectively). Eurostat is still investigating this operation.⁽³⁾ 1970-91 D_90.⁽⁴⁾ Not including unification-related debt and asset assumptions by the federal government in 1995 (Treuhand, eastern housing companies and Deutsche Kreditbank) equal to EUR-DEM 116.3 billion.

NB: Member States have provided figures for the last statistical period according to ESA 95 specifications starting from the years mentioned below:

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1980: IT;

1993: SE;

1971: DK;

1977: PT;

1988: EL;

1995: ES.

1975: FI;

1978: FR;

1990: IE, LU;

Net lending/net borrowing excluding interest is calculated as total general government revenue minus total general government expenditure excluding interest, payable.

(Percentage of gross domestic product at market prices)

	NL ⁽¹⁾	AT	PT	FI	SE	UK	EU-15 ⁽²⁾	EUR-12 ⁽³⁾
1970	1.4	:	:	:	:	6.7	:	:
1971	1.3	:	:	:	:	5.3	:	:
1972	2.0	:	:	:	:	2.1	:	:
1973	3.3	:	:	:	:	0.2	:	:
1974	2.7	:	:	:	:	0.8	:	:
1975	0.2	:	:	5.7	:	-0.4	:	:
1976	1.0	-2.0	:	8.5	:	-0.2	:	:
1977	2.3	-0.3	-1.6	7.2	:	1.3	:	:
1978	1.1	-0.6	-5.3	4.8	:	0.1	:	:
1979	0.9	-0.1	-4.0	4.5	:	1.1	:	:
1980	-0.2	0.8	-5.0	4.9	:	1.7	:	:
1981	-0.4	0.9	-4.8	6.4	:	0.9	:	:
1982	-1.0	-0.3	-2.9	4.4	:	2.7	:	:
1983	0.2	-1.4	0.1	3.1	:	1.6	:	:
1984	0.8	0.6	0.3	5.0	:	1.6	:	:
1985	2.7	0.7	-2.2	5.3	:	2.3	:	:
1986	1.7	-0.3	0.4	5.6	:	2.2	:	:
1987	0.9	-0.5	0.3	3.3	:	2.7	:	:
1988	1.9	0.5	2.9	6.9	:	4.6	:	:
1989	0.8	0.9	3.1	8.3	:	4.8	:	:
1990	0.5	1.6	2.0	6.9	:	2.1	:	:
1991								
1991	3.4	1.2	1.2	0.9	:	0.0	:	:
1992	2.1	2.3	3.8	-3.0	:	-3.4	:	:
1993	3.4	0.1	-0.3	-2.8	-5.8	-4.8	:	:
1994	2.3	-0.9	-1.1	-1.5	-4.1	-3.4	:	:
1995	1.7	-0.9	0.8	0.1	-0.8	-2.2	0.2	0.5
1996	3.8	0.4	0.6	1.3	3.6	-0.6	1.3	1.4
1997	4.1	2.0	0.7	3.0	4.6	1.4	2.5	2.5
1998	4.1	1.4	0.3	5.2	7.7	3.6	2.9	2.5
1999	5.1	1.3	0.4	5.3	6.1	4.0	3.3	3.0
2000	6.0	2.2	0.4	10.0	7.5	6.6	4.8	4.2
2001	3.4	3.8	-1.1	8.0	7.7	3.1	2.7	2.3
2002	1.5	3.2	0.3	6.4	4.2	0.5	1.4	1.4
2003	0.4	2.4	0.0	4.6	2.8	-0.7	0.6	0.7
2004	0.0	2.7	-0.6	3.7	3.1	-0.7	0.6	0.7
2005	0.2	3.1	-1.0	3.7	3.6	-0.4	0.7	0.8

⁽¹⁾ Not including for 1995 a net amount of EUR-NLG 14.9 billion of exceptional expenditure related to the reform of the financing of the social housing societies.

⁽²⁾ 1970-91 including D_90.

⁽³⁾ EU-15 excluding DK, SE and UK; 1970-91 including D_90.

Table 76 (Continued)

(Percentage of gross domestic product at market prices)

	CY	CZ	EE	HU	LV	LT	MT	PL	SK
1970	:	:	:	:	:	:	:	:	:
1971	:	:	:	:	:	:	:	:	:
1972	:	:	:	:	:	:	:	:	:
1973	:	:	:	:	:	:	:	:	:
1974	:	:	:	:	:	:	:	:	:
1975	:	:	:	:	:	:	:	:	:
1976	:	:	:	:	:	:	:	:	:
1977	:	:	:	:	:	:	:	:	:
1978	:	:	:	:	:	:	:	:	:
1979	:	:	:	:	:	:	:	:	:
1980	:	:	:	:	:	:	:	:	:
1981	:	:	:	:	:	:	:	:	:
1982	:	:	:	:	:	:	:	:	:
1983	:	:	:	:	:	:	:	:	:
1984	:	:	:	:	:	:	:	:	:
1985	:	:	:	:	:	:	:	:	:
1986	:	:	:	:	:	:	:	:	:
1987	:	:	:	:	:	:	:	:	:
1988	:	:	:	:	:	:	:	:	:
1989	:	:	:	:	:	:	:	:	:
1990	:	:	:	:	7.7	:	:	:	:
1991	:	:	:	:	6.4	:	:	-4.6	:
1992	:	-1.0	:	:	-0.4	:	:	-1.2	:
1993	:	-21.6	10.4	:	2.6	:	:	4.1	-28.5
1994	:	-2.0	4.9	:	-0.5	:	:	12.4	-2.7
1995	:	-11.2	0.1	:	-0.9	-1.6	:	3.8	1.5
1996	:	-0.6	-1.8	:	1.2	-2.7	:	1.9	-4.9
1997	:	-1.1	2.0	:	2.7	-0.3	:	1.9	-4.0
1998	:	-3.4	-0.4	:	0.2	-1.9	:	1.8	-2.8
1999	1.1	-2.6	-2.4	1.9	-4.5	-4.1	-4.3	1.2	-4.5
2000	2.7	-3.0	0.0	2.7	-1.7	-0.6	-3.0	0.8	-9.4
2001	1.9	-4.7	0.5	0.8	-0.5	-0.4	-3.2	0.2	-4.0
2002	1.4	-5.7	1.2	-5.2	-2.1	-0.1	-2.4	-0.8	-3.7
2003	-0.5	-6.7	0.3	-1.9	-1.8	-1.0	-3.7	-1.1	-2.2
2004	0.9	-5.2	-0.1	-1.3	-1.9	-1.7	-1.6	-2.8	-1.4
2005	1.6	-4.0	0.6	-0.8	-1.2	-1.4	0.1	-1.9	-0.9

NB: Member States have provided figures for the last statistical period according to ESA 95 specifications starting from the years mentioned below:

1970: BE, DE, NL, UK;

1976: AT;

1980: IT;

1993: SE;

1971: DK;

1977: PT;

1988: EL;

1995: ES.

1975: FI;

1978: FR;

1990: IE, LU;

Net lending/net borrowing excluding interest is calculated as total general government revenue minus total general government expenditure excluding interest, payable.

(Percentage of gross domestic product at market prices)

	SI	AC-10 ⁽¹⁾	EU-25 ⁽²⁾	BG	RO	TR	US ⁽³⁾	JP ⁽⁴⁾
1970	:	:	:	:	:	:	0.2	:
1971	:	:	:	:	:	:	-0.6	:
1972	:	:	:	:	:	:	0.8	:
1973	:	:	:	:	:	:	2.0	:
1974	:	:	:	:	:	:	1.4	:
1975	:	:	:	:	:	:	-2.8	:
1976	:	:	:	:	:	:	-0.8	:
1977	:	:	:	:	:	:	0.4	:
1978	:	:	:	:	:	:	1.4	:
1979	:	:	:	:	:	:	2.0	:
1980	:	:	:	:	:	:	0.6	:
1981	:	:	:	:	:	:	1.5	:
1982	:	:	:	:	:	:	-0.6	:
1983	:	:	:	:	:	:	-1.2	:
1984	:	:	:	:	:	:	0.1	:
1985	:	:	:	:	:	:	0.0	:
1986	:	:	:	:	:	:	-0.2	:
1987	:	:	:	:	:	:	0.7	:
1988	:	:	:	:	:	:	1.3	:
1989	:	:	:	:	:	:	1.8	:
1990	:	:	:	:	:	:	0.8	5.6
1991	:	:	:	:	:	:	0.3	5.4
1992	:	:	:	:	:	:	-0.9	4.3
1993	:	:	:	:	:	:	-0.2	1.0
1994	:	:	:	:	:	:	1.0	-0.4
1995	:	:	:	:	:	:	1.8	-1.2
1996	:	:	:	:	:	:	2.5	-1.6
1997	:	:	:	:	:	:	3.5	-0.4
1998	:	:	:	:	:	:	4.5	-7.3
1999	0.2	-0.1	3.2	4.1	0.9	3.4	4.6	-3.8
2000	-0.9	-0.3	4.6	3.6	-0.3	8.2	5.2	-4.2
2001	0.2	-0.8	2.6	3.9	0.6	0.3	2.9	-2.9
2002	-0.7	-2.4	1.2	1.5	0.4	9.8	-0.4	-3.7
2003	-0.5	-2.2	0.5	2.2	-0.3	12.6	-2.2	-3.7
2004	-0.1	-2.5	0.5	1.6	-0.6	14.0	-2.6	-3.5
2005	0.1	-1.6	0.6	1.4	-0.6	15.1	-2.4	-3.3

⁽¹⁾ CY, CZ, EE, HU, LV, LT, MT, PL, SK and SI.⁽²⁾ BE, DK, DE, EL, ES, FR, IE, IT, LU, NL, AT, PT, FI, SE, UK, CY, CZ, EE, HU, LV, LT, MT, PL, SK and SI.⁽³⁾ Former definition.⁽⁴⁾ SNA 93.

Table 77

General government (% of GDP at market prices)
General government consolidated gross debt ⁽¹⁾
EU Member States: ESA 95 and former definition (linked series)

(Percentage of gross domestic product at market prices)

	BE	DK	DE ⁽²⁾	EL	ES	FR	IE	IT	LU
1970	65.3	:	18.2	19.8	15.0	:	53.5	37.9	19.0
1971	64.5	12.1	18.3	20.2	15.6	:	51.3	42.7	19.1
1972	64.1	10.6	18.5	21.2	14.2	:	48.1	49.0	17.0
1973	61.9	8.3	18.0	17.5	12.6	:	45.0	51.3	13.8
1974	57.8	5.8	19.0	23.3	12.1	:	56.4	51.4	11.3
1975	59.5	6.5	24.3	20.2	12.3	:	63.6	57.2	12.3
1976	60.1	10.6	25.8	19.7	12.1	:	68.8	56.3	11.1
1977	63.6	14.1	26.8	19.9	13.2	20.1	65.4	56.4	11.3
1978	67.3	23.6	28.2	25.8	13.3	21.2	67.4	61.7	10.4
1979	70.3	29.5	29.2	25.2	15.0	21.2	73.5	61.0	9.6
1980	78.6	36.5	31.2	25.0	16.8	19.8	75.1	58.2	9.3
1981	91.9	48.2	34.8	29.7	20.6	21.9	81.1	60.2	9.7
1982	102.3	60.2	37.7	33.5	25.6	25.5	91.2	65.1	9.7
1983	113.2	69.2	39.4	38.5	31.0	26.9	101.9	70.0	10.2
1984	117.3	72.9	40.1	45.9	37.1	29.1	106.4	75.2	10.2
1985	122.3	70.0	40.7	53.6	42.3	30.8	109.5	81.9	9.7
1986	127.6	62.1	40.6	55.7	43.7	31.3	121.7	86.2	9.4
1987	132.4	58.0	41.6	62.6	44.0	33.4	122.9	90.4	8.2
1988	132.4	60.2	42.0	68.4	40.3	33.4	118.3	92.6	6.5
1989	129.1	58.0	40.7	72.0	41.7	34.1	108.1	95.4	5.4
1990	129.2	57.8	42.3	79.6	43.6	35.1	101.4	97.2	4.4
1991			43.3						
1991	130.9	62.5	40.4	82.2	44.3	35.8	102.8	100.6	3.8
1992	132.5	66.3	42.9	87.8	46.8	39.6	100.1	107.7	4.7
1993	138.2	78.0	46.9	110.1	58.4	45.3	96.2	118.1	5.7
1994	135.9	73.5	49.3	107.9	61.1	48.4	90.4	123.8	5.4
1995	134.0	69.3	57.0	108.7	63.9	54.6	82.7	123.2	5.6
1996	130.2	65.1	59.8	111.3	68.1	57.1	74.1	122.1	6.2
1997	124.8	61.2	61.0	108.2	66.6	59.3	65.0	120.2	6.1
1998	119.6	56.2	60.9	105.8	64.6	59.5	54.9	116.3	6.3
1999	114.8	53.0	61.2	105.2	63.1	58.5	48.6	114.9	5.9
2000	109.5	47.3	60.2	106.2	60.5	57.2	38.4	110.6	5.5
2001	108.7	45.4	59.4	106.9	56.8	56.8	36.1	109.5	5.5
2002	106.1	45.5	60.8	104.7	53.8	59.0	32.4	106.7	5.7
2003	103.5	42.9	63.8	100.6	51.3	62.6	33.5	106.4	4.9
2004	101.0	41.0	65.0	97.1	48.8	64.3	33.8	106.1	4.7
2005	97.8	37.9	65.8	95.0	46.3	65.6	33.8	106.1	4.1

⁽¹⁾ ESA 95 as from 1996.⁽²⁾ 1970–91 D_90.

NB: General government gross debt is defined by Article 1(5) of Council Regulation (EC) No 3605/93, 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.'

For currency and deposits (AF.2), financial derivatives (AF.33) and for loans (AF.4), see ESA 95, paragraphs 7.46–7.51.

(Percentage of gross domestic product at market prices)

	NL	AT	PT	FI	SE	UK	EU-15 ⁽¹⁾	EUR-12 ⁽²⁾
1970	:	18.9	:	11.7	27.4	78.7	:	:
1971	:	17.8	:	10.6	27.8	75.0	:	:
1972	:	17.0	:	9.6	27.6	69.7	:	:
1973	:	17.0	15.3	7.8	27.0	64.9	:	:
1974	:	17.2	15.0	6.2	27.3	65.0	:	:
1975	40.8	23.3	22.2	6.7	26.6	61.2	:	:
1976	40.6	26.7	27.3	6.2	24.8	60.6	:	:
1977	40.0	29.1	28.8	7.9	26.9	59.5	34.0	31.0
1978	41.2	32.8	31.5	11.2	31.1	57.1	35.9	33.1
1979	43.4	34.7	35.6	11.3	35.6	53.8	36.5	33.8
1980	45.9	36.2	32.3	11.5	40.3	53.2	37.8	34.7
1981	49.8	37.9	41.1	11.8	48.4	53.5	41.2	38.0
1982	55.3	40.3	44.0	14.2	57.9	52.4	44.8	42.1
1983	61.4	44.7	49.1	15.7	61.6	52.6	48.0	45.9
1984	65.5	47.3	54.2	15.5	62.9	54.5	50.8	48.9
1985	70.3	49.2	61.5	16.2	62.4	52.7	52.9	52.0
1986	72.0	53.7	60.3	17.0	61.9	51.2	53.8	53.7
1987	74.3	57.6	58.1	18.1	54.8	48.7	55.0	56.0
1988	77.2	59.0	57.6	16.9	49.1	42.3	54.0	56.5
1989	77.1	58.0	56.4	14.7	44.0	36.7	53.2	56.8
1990	76.9	57.2	58.3	14.2	42.3	34.0	54.0	58.1
1991							55.9	59.9
1991	76.8	57.5	60.7	22.6	51.3	34.4	54.9	58.6
1992	77.9	57.2	54.4	40.5	65.2	39.2	59.0	61.9
1993	79.3	61.8	59.1	55.9	71.2	45.4	64.5	67.2
1994	76.4	64.7	62.1	58.0	73.8	48.5	66.8	69.5
1995	77.2	69.2	64.3	57.1	73.6	51.8	70.2	73.0
1996	75.2	69.1	62.9	57.1	73.5	52.2	72.0	75.4
1997	69.9	64.7	59.1	54.1	70.5	50.8	71.0	75.4
1998	66.8	63.7	55.0	48.6	68.0	47.6	68.8	73.7
1999	63.1	67.5	54.3	47.0	62.7	45.0	67.3	72.7
2000	55.9	67.0	53.3	44.6	52.8	42.1	64.1	70.2
2001	52.9	67.1	55.5	44.0	54.4	38.9	62.8	69.2
2002	52.4	66.7	58.1	42.7	52.7	38.5	62.5	69.0
2003	54.6	66.4	57.7	44.6	51.7	39.6	64.1	70.4
2004	55.5	65.2	58.8	44.5	51.4	40.5	64.4	70.7
2005	55.5	63.2	60.2	44.3	50.0	41.0	64.4	70.7

⁽¹⁾ 1970–91 including D_90.⁽²⁾ EU-15 excluding DK, SE and UK; 1970–91 including D_90.

Table 77 (Continued)

(Percentage of gross domestic product at market prices)

	CY	CZ	EE	HU	LV	LT	MT	PL	SK
1970	:	:	:	:	:	:	:	:	:
1971	:	:	:	:	:	:	:	:	:
1972	:	:	:	:	:	:	:	:	:
1973	:	:	:	:	:	:	:	:	:
1974	:	:	:	:	:	:	:	:	:
1975	:	:	:	:	:	:	:	:	:
1976	:	:	:	:	:	:	:	:	:
1977	:	:	:	:	:	:	:	:	:
1978	:	:	:	:	:	:	:	:	:
1979	:	:	:	:	:	:	:	:	:
1980	:	:	:	:	:	:	:	:	:
1981	:	:	:	:	:	:	:	:	:
1982	:	:	:	:	:	:	:	:	:
1983	:	:	:	:	:	:	:	:	:
1984	:	:	:	:	:	:	:	:	:
1985	:	:	:	:	:	:	:	:	:
1986	:	:	:	:	:	:	:	:	:
1987	:	:	:	:	:	:	:	:	:
1988	:	:	:	:	:	:	:	:	:
1989	:	:	:	:	:	:	:	:	:
1990	:	:	:	:	:	:	:	:	:
1991	:	:	:	:	:	:	:	:	:
1992	:	:	:	:	:	:	:	:	:
1993	:	:	:	:	:	:	:	:	:
1994	:	:	:	:	:	:	:	:	:
1995	:	:	:	:	:	:	:	:	:
1996	:	:	:	:	:	:	:	:	:
1997	:	12.9	6.9	64.2	:	15.6	51.5	46.9	28.6
1998	55.5	13.7	6.0	61.9	10.6	16.8	64.9	41.6	28.6
1999	56.7	14.3	6.5	61.2	13.7	23.4	60.8	42.7	43.8
2000	54.4	16.6	5.0	55.5	13.9	24.3	61.1	37.2	46.9
2001	55.6	23.3	4.7	53.4	15.7	23.4	62.0	37.2	48.8
2002	59.8	27.1	5.7	56.3	15.2	22.7	64.2	41.6	44.3
2003	60.3	30.7	5.4	57.9	16.7	23.3	66.4	45.1	45.1
2004	58.9	34.5	5.3	56.9	18.2	23.6	69.4	49.2	45.2
2005	56.8	38.3	4.5	55.5	18.7	23.7	70.6	51.5	45.4

NB: General government gross debt is defined by Article 1(5) of Council Regulation (EC) No 3605/93, 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.'

For currency and deposits (AF.2), financial derivatives (AF.33) and for loans (AF.4), see ESA 95, paragraphs 7.46–7.51.

(Percentage of gross domestic product at market prices)

	SI	AC-10 ⁽¹⁾	EU-25 ⁽²⁾	BG	RO	TR	US	JP
1970	:	:	:	:	:	:	49.9	11.9
1971	:	:	:	:	:	:	50.5	13.1
1972	:	:	:	:	:	:	48.8	17.4
1973	:	:	:	:	:	:	45.9	17.0
1974	:	:	:	:	:	:	45.0	17.9
1975	:	:	:	:	:	:	48.5	22.7
1976	:	:	:	:	:	:	48.6	28.9
1977	:	:	:	:	:	:	47.3	34.5
1978	:	:	:	:	:	:	46.2	43.6
1979	:	:	:	:	:	:	44.9	48.7
1980	:	:	:	:	:	:	45.6	54.3
1981	:	:	:	:	:	:	44.7	59.3
1982	:	:	:	:	:	:	49.8	63.4
1983	:	:	:	:	:	:	52.9	68.9
1984	:	:	:	:	:	:	54.5	71.1
1985	:	:	:	:	:	:	59.6	71.4
1986	:	:	:	:	:	:	63.1	75.1
1987	:	:	:	:	:	:	64.7	75.5
1988	:	:	:	:	:	:	65.3	73.4
1989	:	:	:	:	:	:	65.6	70.4
1990	:	:	:	:	:	:	67.3	68.3
1991	:	:	:	:	:	:	72.1	64.5
1992	:	:	:	:	:	:	74.6	68.4
1993	:	:	:	:	:	:	76.2	74.3
1994	:	:	:	:	:	:	75.4	79.3
1995	:	:	:	:	:	:	74.8	86.6
1996	:	:	:	:	:	:	74.1	93.9
1997	:	:	:	:	16.5	53.1	71.3	99.9
1998	23.9	36.6	67.6	:	18.0	50.1	68.1	111.2
1999	25.1	38.5	66.2	79.3	24.0	67.4	64.9	124.9
2000	26.4	35.9	63.0	73.6	23.9	57.6	59.2	133.1
2001	25.9	36.7	61.7	66.2	23.1	105.4	59.3	141.5
2002	27.0	39.8	61.5	53.2	22.7	95.0	61.4	147.3
2003	27.4	42.4	63.1	50.8	21.5	89.1	64.1	153.5
2004	27.0	44.6	63.5	48.6	21.4	86.2	66.3	159.9
2005	26.4	45.9	63.5	46.6	21.6	83.4	:	:

⁽¹⁾ CY, CZ, EE, HU, LV, LT, MT, PL, SK and SI.⁽²⁾ BE, DK, DE, EL, ES, FR, IE, IT, LU, NL, AT, PT, FI, SE, UK, CY, CZ, EE, HU, LV, LT, MT, PL, SK and SI.

Table 78

Main economic indicators 1961–2005 Belgium

(Annual percentage change, unless otherwise stated)

	1961–73	1974–85	1986–90	1991–95	1996
1. Growth of GDP and its components (real)					
1.1. Private consumption	4.3	2.2	2.9	1.7	1.0
1.2. Government consumption	5.5	2.5	0.8	1.5	2.5
1.3. Gross fixed capital formation	5.1	-0.5	8.8	-0.4	0.9
1.4. of which equipment	:	:	:	:	3.8
1.5. of which construction	:	:	:	:	-1.8
1.6. Exports of goods and services	9.3	2.8	6.0	4.0	3.0
1.7. Imports of goods and services	8.9	2.0	7.2	3.6	2.6
1.8. GDP	4.9	1.9	3.1	1.6	1.2
2. Demand components: Contribution to changes in GDP (%)					
2.1. Consumption	3.5	1.9	1.8	1.3	1.1
2.2. Investment	1.1	-0.1	1.6	-0.1	0.2
2.3. Stockbuilding	0.2	-0.1	0.1	0.0	-0.1
2.4. Domestic demand	4.8	1.6	3.5	1.2	0.8
2.5. Exports	4.1	1.5	3.4	2.6	2.0
2.6. Final demand	8.9	3.1	7.0	3.9	2.9
2.7. Imports	-3.9	-1.2	-3.8	-2.2	-1.7
2.8. Net exports	0.2	0.3	-0.4	0.4	0.3
3. Gross savings and investment in % of GDP at current prices					
3.1. Private sector savings	22.4	23.1	26.8	28.5	26.1
3.2. Net savings of households	:	:	8.5	10.6	8.7
3.3. General government savings	1.7	-3.5	-5.1	-3.9	-1.5
3.4. National savings	24.1	19.6	21.8	24.6	24.6
3.5. Gross capital formation	25.6	22.4	19.9	20.5	19.6
3.6. Current account	1.4	-1.4	1.9	4.1	5.1
4. Determinants of investment					
4.1. Capacity utilisation (survey) (a)	:	75.6	78.7	78.0	79.5
4.2. Trend GDP gap	0.0	0.1	-0.1	0.0	-1.5
4.3. Potential GDP gap	:	-0.4	0.3	-0.2	-1.5
4.4. Profitability index (1961–73 = 100)	100.0	74.5	98.4	90.5	91.0
5. Growth potential					
5.1. Growth of net capital stock (real)	3.2	2.5	2.4	2.4	1.9
5.2. Net capital/output ratio (real)	2.7	2.6	2.5	2.6	2.6
5.3. Growth of capital intensity	2.7	2.8	1.4	1.9	1.6
5.4. Labour productivity growth	4.4	2.2	2.1	1.1	0.8
5.5. Total factor productivity growth	3.4	1.2	1.5	0.4	0.3
6. Employment and unemployment					
6.1. Employment	0.5	-0.3	1.2	-0.1	0.6
6.2. Activity rate	59.9	60.5	59.3	60.6	61.7
6.3. Employment rate (benchmark)	58.7	56.0	54.3	55.5	55.8
6.4. Employment rate (full-time equivalent)	:	:	:	53.6	53.3
6.5. Unemployment rate (Eurostat definition)	1.9	7.6	8.5	8.3	9.5
7. Prices and wages					
7.1. Nominal wages per head	9.1	9.6	4.2	4.1	1.5
7.2. Real wages per head (b)	5.2	2.2	2.3	1.8	-0.7
7.3. Nominal unit labour costs	4.5	7.2	2.1	3.0	0.6
7.4. Real unit labour costs	0.4	0.4	-0.7	0.2	-0.5
7.5. GDP deflator	4.1	6.7	2.8	2.7	1.2
7.6. Private consumption deflator	3.7	7.2	1.9	2.2	2.2
7.7. Terms of trade	0.1	-0.9	1.4	0.3	-0.8
8. General government budget, % of GDP					
8.1. Expenditure (c)	38.5	56.1	55.5	54.1	52.9
8.2. Current revenues (c)	36.0	47.1	47.6	47.7	49.1
8.3. Net borrowing (-) or lending (+) (c)	-2.5	-9.0	-7.9	-6.4	-3.8
8.4. Net borrowing cyclically adjusted (c)	-2.5	-8.8	-8.1	-6.3	-2.8
8.5. Debt (end of period) (d)	61.9	122.3	129.2	134.0	130.2
9. Monetary conditions					
9.1. Long-term interest rate	6.5	10.6	8.5	8.1	6.5
9.2. Short-term interest rate	5.3	10.8	8.1	7.4	3.2
9.3. Yield curve (9.1–9.2)	1.3	-0.2	0.4	0.7	3.3
9.4. Real long-term interest rate (e)	2.3	3.7	5.5	5.2	5.2
9.5. Nominal effective exchange rate	0.4	-0.2	2.8	1.9	-2.0
9.6. Real effective exchange rate (1995 = 100; ULC in total economy)	90.5	95.6	87.1	95.1	97.3

(a) Manufacturing industry.

(b) Private consumption deflator.

(c) From 1974 (ESA 95 data), 1961–73 average according to the former definition.

(d) Break in 1990 (ESA 95 data).

(e) GDP deflator.

NB: see also notes on p. 335.

(Annual percentage change, unless otherwise stated)

1997	1998	1999	2000	2001	2002	2003	2004	2005
2.2	3.1	2.1	3.2	0.7	0.8	1.6	1.6	2.2
0.2	1.0	3.6	2.7	2.7	2.0	1.7	2.0	1.8
7.1	3.3	4.4	4.4	0.3	-2.5	-0.3	2.0	3.6
8.2	3.6	8.4	5.0	0.6	-2.7	-0.5	2.0	4.0
8.6	1.1	-0.2	4.1	-0.6	-2.2	0.5	2.1	3.2
5.9	6.0	5.1	8.4	1.3	1.0	-1.1	2.2	4.2
5.1	7.3	4.2	8.5	1.1	1.2	-1.1	2.3	4.4
3.5	2.0	3.2	3.8	0.6	0.7	0.8	1.8	2.3
1.2	1.9	1.9	2.3	0.9	0.8	1.3	1.3	1.6
1.4	0.7	0.9	0.9	0.1	-0.5	-0.1	0.4	0.7
0.0	0.1	-0.1	0.1	-0.2	0.2	-0.3	0.1	0.0
2.6	2.6	2.4	3.5	0.4	0.7	0.9	1.8	2.3
4.2	4.3	3.8	6.4	1.0	0.8	-1.0	1.9	3.6
6.8	7.1	6.2	10.1	1.4	1.6	-0.1	3.7	5.9
-3.3	-4.9	-3.0	-6.0	-0.8	-0.9	0.9	-1.9	-3.6
0.8	-0.6	0.8	0.4	0.2	0.0	-0.1	0.0	0.0
25.2	23.9	24.0	23.1	22.2	21.9	22.8	22.3	21.8
7.7	6.9	6.4	5.7	6.5	:	:	:	:
0.5	1.7	2.1	2.7	2.4	2.1	1.0	1.2	1.7
25.7	25.7	26.1	25.8	24.5	24.1	23.8	23.5	23.5
20.3	20.3	20.7	21.6	20.5	19.6	18.6	19.0	19.4
5.4	5.3	5.4	4.0	4.0	4.5	5.2	4.5	4.2
81.4	82.7	80.9	84.0	82.3	79.6	78.6	:	:
-0.2	-0.3	0.8	2.6	1.3	0.1	-0.9	-0.8	-0.3
-0.2	0.0	1.1	2.5	1.2	0.1	-0.8	-0.8	-0.4
95.9	97.5	97.1	99.8	91.4	89.5	90.4	88.5	87.9
2.2	2.2	2.3	2.4	2.2	1.8	1.7	1.7	1.9
2.6	2.6	2.6	2.6	2.6	2.6	2.7	2.7	2.6
1.3	0.4	0.9	0.5	0.7	2.1	1.9	1.2	0.9
2.5	0.2	1.8	1.9	-0.8	1.0	1.0	1.3	1.3
2.0	0.1	1.5	1.7	-1.1	0.2	0.3	0.8	1.0
0.7	1.3	1.2	1.9	1.5	-0.1	-0.2	0.5	1.0
61.9	62.8	63.1	63.0	63.4	63.6	63.7	63.9	63.9
56.1	56.8	57.5	58.5	59.2	58.8	58.4	58.5	58.9
53.8	53.9	55.7	57.4	55.7	55.3	:	:	:
9.2	9.3	8.6	6.9	6.7	7.3	8.2	8.3	7.8
2.9	1.0	3.4	2.1	3.6	4.3	2.2	3.0	3.0
1.3	0.0	2.1	-0.2	0.8	2.8	0.6	1.6	1.3
0.4	0.8	1.6	0.2	4.5	3.2	1.1	1.7	1.7
-1.0	-0.9	0.2	-1.0	2.6	1.5	-0.3	0.6	0.3
1.4	1.7	1.4	1.2	1.8	1.7	1.4	1.1	1.4
1.6	1.0	1.3	2.3	2.8	1.4	1.6	1.4	1.8
-0.7	1.0	-0.7	-2.2	0.0	0.8	0.4	-0.8	-0.5
51.4	50.7	50.1	49.3	49.4	50.4	51.1	50.8	50.1
49.5	50.0	49.7	49.5	50.0	50.5	51.4	50.4	49.7
-2.0	-0.7	-0.4	0.2	0.6	0.1	0.2	-0.4	-0.4
-1.8	-0.7	-1.1	-1.3	-0.4	0.0	0.8	0.1	-0.2
124.8	119.6	114.8	109.5	108.7	106.1	103.5	101.0	97.8
5.8	4.8	4.8	5.6	5.1	5.0	:	:	:
3.4	3.5	3.0	4.4	4.3	3.3	:	:	:
2.3	1.2	1.8	1.2	0.9	1.7	:	:	:
4.3	3.0	3.3	4.3	3.3	3.2	:	:	:
-4.3	0.3	-1.4	-3.6	0.6	1.0	3.8	0.4	-0.2
92.6	92.6	91.6	86.9	88.7	90.9	94.1	95.2	:

Table 79

Main economic indicators 1961–2005 Denmark

(Annual percentage change, unless otherwise stated)

	1961–73	1974–85	1986–90	1991–95	1996
1. Growth of GDP and its components (real)					
1.1. Private consumption	3.7	1.2	0.3	2.3	2.5
1.2. Government consumption	5.7	2.7	0.3	2.1	3.4
1.3. Gross fixed capital formation	6.7	-1.0	1.7	1.8	3.9
1.4. of which equipment	:	2.5	1.8	1.4	-2.4
1.5. of which construction	:	-3.0	0.6	-1.8	10.1
1.6. Exports of goods and services	6.5	4.3	5.2	2.7	4.3
1.7. Imports of goods and services	7.1	2.3	3.9	3.8	3.5
1.8. GDP	4.4	1.5	1.3	2.0	2.5
2. Demand components: Contribution to changes in GDP (%)					
2.1. Consumption	3.4	1.4	0.3	1.7	2.1
2.2. Investment	1.5	-0.2	0.3	0.3	0.7
2.3. Stockbuilding	-0.1	0.0	-0.1	0.1	-0.7
2.4. Domestic demand	4.8	1.1	0.8	2.2	2.1
2.5. Exports	1.3	1.0	1.6	0.9	1.5
2.6. Final demand	6.2	2.2	1.9	3.1	3.6
2.7. Imports	-1.7	-0.6	-1.0	-1.1	-1.1
2.8. Net exports	-0.4	0.5	0.5	-0.2	0.4
3. Gross savings and investment in % of GDP at current prices					
3.1. Private sector savings	17.6	17.1	16.5	20.5	19.5
3.2. Net savings of households	:	:	-0.9	0.3	-0.8
3.3. General government savings	6.2	1.0	2.8	-0.7	0.9
3.4. National savings	23.8	18.1	19.3	19.8	20.4
3.5. Gross capital formation	26.0	21.6	21.4	18.2	18.9
3.6. Current account	-1.9	-3.5	-2.2	1.6	1.5
4. Determinants of investment					
4.1. Capacity utilisation (survey) (a)	:	:	64.8	80.2	81.2
4.2. Trend GDP gap	0.6	-0.7	1.4	-1.6	0.0
4.3. Potential GDP gap	:	-1.0	0.8	-1.7	0.3
4.4. Profitability index (1961–73 = 100)	100.0	76.9	85.2	96.9	113.8
5. Growth potential					
5.1. Growth of net capital stock (real)	4.3	1.9	1.8	0.7	0.9
5.2. Net capital/output ratio (real)	2.9	3.2	3.1	3.1	2.9
5.3. Growth of capital intensity	3.1	1.6	1.7	0.7	-0.1
5.4. Labour productivity growth	3.3	1.2	1.2	2.0	1.5
5.5. Total factor productivity growth	2.1	0.6	0.5	1.7	1.5
6. Employment and unemployment					
6.1. Employment	1.3	0.5	0.9	-0.6	1.1
6.2. Activity rate	72.1	76.9	81.5	80.0	78.3
6.3. Employment rate (benchmark)	71.4	72.2	76.7	73.4	73.2
6.4. Employment rate (full-time equivalent)	:	:	:	66.0	67.0
6.5. Unemployment rate (Eurostat definition)	1.0	6.1	5.9	8.1	6.3
7. Prices and wages					
7.1. Nominal wages per head	10.8	10.6	5.4	3.0	3.6
7.2. Real wages per head (b)	4.0	0.8	1.4	0.6	1.5
7.3. Nominal unit labour costs	7.3	9.3	4.2	1.0	2.1
7.4. Real unit labour costs	0.3	-0.2	0.1	-1.1	-0.3
7.5. GDP deflator	7.0	9.5	4.1	2.1	2.5
7.6. Private consumption deflator	6.6	9.7	4.0	2.3	2.1
7.7. Terms of trade	0.4	-1.3	1.7	0.5	1.8
8. General government budget, % of GDP					
8.1. Expenditure (c)	34.7	52.1	56.0	60.1	59.8
8.2. Current revenues (c)	38.4	50.0	57.3	57.6	58.8
8.3. Net borrowing (-) or lending (+) (c)	2.1	-2.1	1.3	-2.4	-1.0
8.4. Net borrowing cyclically adjusted (c)	:	-1.4	0.7	-1.0	-1.2
8.5. Debt (end of period) (d)	8.3	70.0	57.8	69.3	65.1
9. Monetary conditions					
9.1. Long-term interest rate	9.0	15.9	10.3	8.3	7.2
9.2. Short-term interest rate	7.0	12.6	9.6	8.7	3.9
9.3. Yield curve (9.1–9.2)	2.0	3.3	0.8	-0.4	3.3
9.4. Real long-term interest rate (e)	1.8	5.9	6.0	6.1	4.6
9.5. Nominal effective exchange rate	0.1	-1.1	3.0	1.8	-0.8
9.6. Real effective exchange rate (1995 = 100; ULC in total economy)	77.1	91.0	96.7	96.8	100.0

(a) Manufacturing industry.

(b) Private consumption deflator.

(c) From 1974 (ESA 95 data), 1961–73 average according to the former definition.

(d) Break in 1990 (ESA 95 data).

(e) GDP deflator.

NB: see also notes on p. 335.

(Annual percentage change, unless otherwise stated)

1997	1998	1999	2000	2001	2002	2003	2004	2005
2.9	2.3	0.7	-1.9	0.4	1.9	1.0	2.9	2.6
0.8	3.1	2.0	1.1	2.1	2.1	0.8	0.7	0.6
10.9	10.0	1.4	8.6	2.1	0.3	-2.0	2.9	4.6
15.1	13.8	5.5	10.8	5.6	0.7	-5.6	2.0	5.5
4.9	4.2	-5.7	7.3	-5.8	3.2	0.7	3.2	3.1
4.1	4.3	12.3	13.0	3.0	5.8	2.1	3.9	4.5
10.0	8.9	5.5	11.3	1.9	4.2	1.5	4.8	5.1
3.0	2.5	2.6	2.9	1.4	2.1	0.8	2.0	2.3
1.7	1.9	0.8	-0.7	0.7	1.4	0.7	1.5	1.4
2.1	2.0	0.3	1.8	0.5	0.1	-0.5	0.6	1.0
0.9	-0.1	-1.1	0.6	-0.3	-0.3	0.3	0.0	-0.1
4.6	3.9	0.1	1.8	0.8	1.1	0.5	2.2	2.3
1.5	1.6	4.5	5.3	1.3	2.6	1.0	1.9	2.2
6.1	5.5	4.6	7.1	2.2	3.7	1.4	4.0	4.4
-3.2	-3.0	-2.0	-4.2	-0.8	-1.7	-0.6	-2.0	-2.2
-1.7	-1.4	2.6	1.1	0.6	0.9	0.3	-0.1	0.0
19.0	18.0	16.6	18.6	19.0	19.5	19.5	18.9	18.7
-2.0	-1.5	-3.4	-2.2	-0.6	:	:	:	:
2.2	2.8	4.9	4.2	4.5	3.3	2.3	2.7	3.2
21.2	20.8	21.5	22.8	23.5	22.8	21.8	21.6	22.0
20.8	21.7	19.7	21.2	20.4	19.9	19.0	19.0	19.2
0.4	-0.9	1.8	1.6	3.1	2.9	2.8	2.7	2.7
83.2	85.5	82.2	82.5	82.8	81.2	80.8	:	:
0.6	0.7	1.0	1.7	0.9	0.8	-0.4	-0.4	-0.2
0.9	1.0	1.4	1.9	1.0	1.0	-0.1	-0.1	0.0
119.0	118.4	122.9	129.6	128.3	130.2	131.5	134.8	139.4
1.4	1.8	1.6	1.9	1.7	1.6	1.3	1.4	1.7
2.9	2.9	2.8	2.8	2.8	2.8	2.8	2.8	2.8
0.1	0.2	0.4	1.4	1.4	2.2	1.9	1.0	1.2
1.7	0.9	1.4	2.4	1.1	2.7	1.5	1.6	1.8
1.7	0.8	1.3	1.8	0.5	1.8	0.7	1.2	1.4
2.1	0.4	0.5	0.7	0.2	-0.4	-0.6	0.4	0.4
78.8	78.7	79.0	79.1	79.1	78.9	79.1	79.1	79.0
74.6	74.8	75.1	75.6	75.7	75.3	74.7	74.9	75.0
68.1	67.8	69.7	69.3	69.8	69.7	:	:	:
5.2	4.9	4.8	4.4	4.3	4.5	5.5	5.2	4.9
3.5	3.4	3.7	3.8	4.8	3.8	3.7	3.5	3.6
1.3	2.0	1.3	0.2	2.2	1.4	1.5	1.7	1.6
1.8	2.5	2.3	1.4	3.7	1.2	2.2	1.9	1.7
-0.4	1.5	0.4	-1.6	1.6	0.2	0.0	0.1	-0.2
2.2	1.0	1.8	3.1	2.0	0.9	2.2	1.8	2.0
2.2	1.3	2.4	3.5	2.6	2.4	2.1	1.8	2.0
0.8	0.0	1.4	-0.5	-0.1	-2.8	1.3	0.0	-0.1
58.0	57.6	56.2	54.6	55.0	55.4	55.4	54.7	53.6
58.3	58.7	59.5	57.2	58.0	57.4	56.4	56.0	55.6
0.4	1.1	3.3	2.6	3.1	1.9	0.9	1.3	1.9
-0.3	0.4	2.2	1.1	2.0	1.1	1.0	1.4	1.9
61.2	56.2	53.0	47.3	45.4	45.5	42.9	41.0	37.9
6.3	4.9	4.9	5.6	5.1	5.1	:	:	:
3.7	4.1	3.4	5.0	4.7	3.5	:	:	:
2.6	0.8	1.5	0.6	0.4	1.5	:	:	:
4.0	3.9	3.0	2.5	3.0	4.1	:	:	:
-3.2	1.0	-1.7	-4.5	1.5	1.2	4.3	-0.1	-0.3
97.6	99.7	99.1	94.0	96.0	96.8	101.9	102.8	:

Table 80

Main economic indicators 1961–2005 Germany

(Annual percentage change, unless otherwise stated)

	1961–70	1971–85	1986–90	1991–95	1996
1. Growth of GDP and its components (real) (a)					
1.1. Private consumption	5.1	2.5	3.7	1.9	1.0
1.2. Government consumption	4.4	2.9	1.7	2.2	1.8
1.3. Gross fixed capital formation	4.2	0.3	4.7	1.6	-0.8
1.4. of which equipment	6.3	0.9	6.3	-2.6	1.7
1.5. of which construction	3.3	-0.2	3.5	4.0	-2.9
1.6. Exports of goods and services	7.7	5.1	5.2	4.2	5.1
1.7. Imports of goods and services	9.9	4.1	6.5	4.1	3.1
1.8. GDP	4.4	2.2	3.4	2.0	0.8
2. Demand components: Contribution to changes in GDP (%) (b)					
2.1. Consumption	3.4	1.9	2.3	1.5	0.9
2.2. Investment	1.1	0.1	1.0	0.4	-0.2
2.3. Stockbuilding	0.0	-0.1	0.1	0.0	-0.5
2.4. Domestic demand	4.6	1.9	3.4	1.8	0.3
2.5. Exports	1.2	1.1	1.4	1.2	1.2
2.6. Final demand	5.8	3.0	4.9	3.0	1.5
2.7. Imports	-1.3	-0.7	-1.4	-1.0	-0.7
2.8. Net exports	-0.1	0.4	0.0	0.2	0.5
3. Gross savings and investment in % of GDP at current prices (b)					
3.1. Private sector savings	:	20.9	22.9	21.4	21.8
3.2. Net savings of households	:	:	8.3	7.9	7.0
3.3. General government savings	:	2.8	2.1	1.0	-0.5
3.4. National savings	27.3	23.7	25.0	22.4	21.3
3.5. Gross capital formation	27.4	22.8	20.9	23.3	21.6
3.6. Current account	0.7	0.9	4.1	-0.9	-0.3
4. Determinants of investment					
4.1. Capacity utilisation (survey) (b) (c)	:	80.4	86.0	83.6	82.2
4.2. Trend GDP gap (b)	-0.3	0.2	-1.2	2.0	-0.5
4.3. Potential GDP gap (b)	:	0.0	-0.5	1.6	-0.9
4.4. Profitability index (1961–73 = 100) (a)	104.1	75.5	78.4	82.3	84.8
5. Growth potential					
5.1. Growth of net capital stock (real) (a)	5.3	2.9	1.9	2.5	2.1
5.2. Net capital/output ratio (real) (b)	3.2	3.5	3.5	3.3	3.5
5.3. Growth of capital intensity (a)	5.1	2.7	0.0	2.5	2.4
5.4. Labour productivity growth (a)	4.2	2.0	1.5	2.1	1.1
5.5. Total factor productivity growth (a)	2.3	1.0	1.5	1.1	0.1
6. Employment and unemployment					
6.1. Employment (a)	0.1	0.0	1.4	-0.2	-0.4
6.2. Activity rate (b)	68.8	66.6	66.6	72.1	71.9
6.3. Employment rate (b) (benchmark)	68.4	64.3	62.6	67.1	65.8
6.4. Employment rate (b) (full-time equivalent)	:	:	:	61.0	58.7
6.5. Unemployment rate (b) (Eurostat definition)	0.6	3.5	5.9	7.1	8.7
7. Prices and wages (a)					
7.1. Nominal wages per head	8.6	6.6	3.2	5.4	1.3
7.2. Real wages per head (d)	5.7	1.9	1.8	2.0	-0.4
7.3. Nominal unit labour costs	4.2	4.5	1.7	3.3	0.2
7.4. Real unit labour costs	0.4	0.0	-0.7	-0.1	-0.8
7.5. GDP deflator	3.8	4.5	2.4	3.3	1.0
7.6. Private consumption deflator	2.7	4.6	1.3	3.3	1.7
7.7. Terms of trade	1.7	-0.9	2.6	0.8	-0.4
8. General government budget, % of GDP (b)					
8.1. Expenditure (e)	:	46.6	45.0	48.6	50.3
8.2. Current revenues (e)	:	44.3	43.6	45.7	46.9
8.3. Net borrowing (-) or lending (+) (e)	:	-2.3	-1.4	-2.9	-3.4
8.4. Net borrowing cyclically adjusted (e)	:	-2.4	-0.7	-3.8	-3.2
8.5. Debt (end of period) (f)	18.0	40.7	42.3	57.0	59.8
9. Monetary conditions					
9.1. Long-term interest rate (b)	6.8	8.1	6.8	7.3	6.2
9.2. Short-term interest rate (b)	5.0	7.1	5.7	7.1	3.3
9.3. Yield curve (9.1–9.2) (b)	1.8	1.0	1.1	0.2	3.0
9.4. Real long-term interest rate (b) (g)	2.9	3.4	4.2	3.8	5.1
9.5. Nominal effective exchange rate (a)	1.8	3.6	4.5	2.4	-2.5
9.6. Real effective exchange rate (a) (1995 = 100; ULC in total economy)	77.4	88.6	87.0	92.0	96.2

(a) 1961–91: West Germany.

(b) 1961–90: West Germany.

(c) Manufacturing industry.

(d) Private consumption deflator.

(e) ESA 95 data.

(f) Break in 1991 (ESA 95 data).

(g) GDP deflator.

NB: see also notes on p. 335.

(Annual percentage change, unless otherwise stated)

1997	1998	1999	2000	2001	2002	2003	2004	2005
0.6	1.8	3.7	2.0	1.4	-1.0	0.7	1.1	1.4
0.3	1.9	0.8	1.0	1.0	1.7	1.1	0.5	0.5
0.6	3.0	4.1	2.7	-4.2	-6.7	-1.7	2.8	2.1
3.7	9.2	7.2	10.1	-4.9	-9.1	0.8	4.8	4.7
-1.5	-1.0	1.4	-2.6	-4.8	-5.8	-3.9	0.7	-1.2
11.2	7.0	5.5	13.7	5.6	3.4	0.9	6.2	7.5
8.3	9.1	8.4	10.5	0.9	-1.7	2.8	5.9	7.6
1.4	2.0	2.0	2.9	0.8	0.2	0.0	1.6	1.8
0.4	1.4	2.3	1.3	1.0	-0.3	0.6	0.7	0.9
0.1	0.7	0.9	0.6	-1.0	-1.4	-0.3	0.6	0.4
0.0	0.3	-0.4	-0.1	-0.8	0.1	0.3	0.0	0.2
0.5	2.4	2.8	1.8	-0.8	-1.6	0.6	1.3	1.5
2.9	2.0	1.6	4.2	1.9	1.2	0.3	2.3	2.9
3.4	4.3	4.4	6.0	1.1	-0.4	0.9	3.5	4.4
-2.0	-2.4	-2.4	-3.1	-0.3	0.5	-0.9	-1.9	-2.6
0.8	-0.4	-0.7	1.1	1.6	1.7	-0.5	0.4	0.3
21.5	21.0	19.6	18.9	20.0	21.8	22.1	22.6	22.5
6.7	6.6	6.3	6.4	6.8	6.9	:	:	:
-0.1	0.5	1.2	1.6	0.2	-0.7	-1.4	-1.3	-0.8
21.4	21.5	20.8	20.6	20.2	21.1	20.7	21.4	21.7
21.5	21.8	21.7	21.7	19.6	17.9	17.7	17.7	18.0
-0.1	-0.3	-0.8	-1.1	0.6	3.1	3.0	3.6	3.7
83.2	85.5	84.0	85.9	85.1	82.3	81.7	:	:
-0.8	-0.5	0.0	1.4	0.9	-0.3	-1.6	-1.3	-0.9
-0.9	-0.7	-0.1	1.3	0.8	-0.3	-1.6	-1.4	-1.2
87.8	91.2	92.8	89.6	89.7	92.2	94.7	100.2	101.8
2.0	2.0	2.1	2.1	1.6	1.1	0.9	1.0	1.1
3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5
2.1	0.9	0.9	0.3	1.2	1.7	2.5	1.3	0.4
1.6	0.9	0.8	1.1	0.4	0.8	1.6	1.9	1.1
0.7	0.5	0.5	0.9	0.0	0.1	0.6	1.4	1.0
-0.1	1.1	1.6	1.8	0.5	-0.6	-1.5	-0.3	0.7
72.4	72.8	73.5	74.3	74.8	74.7	74.1	74.0	74.3
65.7	66.4	67.5	68.8	69.3	68.7	67.5	67.2	67.6
57.9	57.7	58.3	58.6	58.6	58.1	:	:	:
9.7	9.1	8.4	7.8	7.8	8.6	9.4	9.6	9.5
0.8	1.0	1.2	2.1	1.7	1.5	1.9	1.9	2.2
-1.2	-0.1	0.9	0.6	0.2	0.2	0.8	0.2	1.0
-0.7	0.2	0.3	1.0	1.3	0.7	0.3	0.0	1.0
-1.4	-0.9	-0.2	1.2	0.0	-0.8	-0.9	-1.3	0.1
0.7	1.1	0.5	-0.3	1.3	1.6	1.2	1.3	0.9
2.0	1.1	0.3	1.5	1.6	1.3	1.1	1.7	1.2
-1.8	2.3	0.2	-4.4	0.1	1.9	1.7	1.0	-0.5
49.3	48.8	48.7	45.7	48.3	48.5	49.1	48.4	47.6
46.6	46.6	47.3	47.1	45.5	45.0	44.9	44.4	44.2
-2.7	-2.2	-1.5	1.3	-2.8	-3.5	-4.2	-3.9	-3.4
-2.3	-2.0	-1.5	-1.9	-3.3	-3.4	-3.5	-3.3	-3.0
61.0	60.9	61.2	60.2	59.4	60.8	63.8	65.0	65.8
5.6	4.6	4.5	5.3	4.8	4.8	:	:	:
3.3	3.5	3.0	4.4	4.3	3.3	:	:	:
2.3	1.1	1.5	0.9	0.5	1.5	:	:	:
4.9	3.4	4.0	5.5	3.5	3.1	:	:	:
-5.2	0.6	-2.1	-4.9	0.6	1.5	5.5	0.6	-0.3
89.2	88.8	86.0	80.9	79.6	80.0	83.6	83.0	:

Table 81

Main economic indicators 1961–2005 Greece

(Annual percentage change, unless otherwise stated)

	1961–73	1974–85	1986–90	1991–95	1996
1. Growth of GDP and its components (real)					
1.1. Private consumption	6.8	3.4	3.1	1.9	2.4
1.2. Government consumption	6.2	5.0	-0.1	0.5	0.9
1.3. Gross fixed capital formation	9.6	-2.2	2.3	-0.2	8.4
1.4. of which equipment	12.8	0.7	5.4	4.6	23.1
1.5. of which construction	8.9	-3.3	0.8	-2.8	1.8
1.6. Exports of goods and services	11.5	5.5	3.6	4.3	3.5
1.7. Imports of goods and services	12.8	3.0	8.4	3.5	7.0
1.8. GDP	8.5	1.7	1.2	1.2	2.4
2. Demand components: Contribution to changes in GDP (%)					
2.1. Consumption	4.5	1.0	1.1	1.4	1.9
2.2. Investment	2.4	-0.2	0.3	0.0	1.6
2.3. Stockbuilding	1.3	-0.2	0.0	0.1	0.0
2.4. Domestic demand	9.4	1.6	2.3	1.4	3.5
2.5. Exports	0.8	0.6	0.5	0.7	0.6
2.6. Final demand	10.2	2.2	2.8	2.0	4.1
2.7. Imports	-1.6	-0.4	-1.5	-0.8	-1.7
2.8. Net exports	-0.8	0.2	-1.0	-0.1	-1.1
3. Gross savings and investment in % of GDP at current prices					
3.1. Private sector savings	22.4	28.5	28.6	26.9	22.7
3.2. Net savings of households	:	:	:	:	7.3
3.3. General government savings	3.7	-1.6	-7.8	-6.8	-5.2
3.4. National savings	26.1	26.9	20.9	20.1	17.4
3.5. Gross capital formation	28.1	27.1	22.6	20.8	19.8
3.6. Current account	-1.8	0.3	-1.4	-0.5	-2.4
4. Determinants of investment					
4.1. Capacity utilisation (survey) (a)	:	:	76.4	76.5	75.6
4.2. Trend GDP gap	0.6	-0.1	-0.6	-0.3	-2.0
4.3. Potential GDP gap	:	0.3	-1.1	-1.8	-3.0
4.4. Profitability index (1961–73 = 100)	100.0	81.9	63.6	83.4	89.1
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	4.4	4.5
5.3. Growth of capital intensity	8.5	3.7	2.0	1.9	2.8
5.4. Labour productivity growth	9.0	0.7	0.5	0.7	2.8
5.5. Total factor productivity growth	6.0	-0.5	-0.2	0.0	1.8
6. Employment and unemployment					
6.1. Employment	-0.5	1.0	0.7	0.5	1.2
6.2. Activity rate	60.1	57.3	58.7	58.3	60.5
6.3. Employment rate (benchmark)	57.4	55.1	54.8	53.4	54.7
6.4. Employment rate (full-time equivalent)	:	:	:	53.4	54.6
6.5. Unemployment rate (Eurostat definition)	4.4	3.8	6.6	8.3	9.6
7. Prices and wages					
7.1. Nominal wages per head	10.1	21.5	16.8	12.1	8.6
7.2. Real wages per head (b)	6.4	2.7	-0.7	-1.5	0.3
7.3. Nominal unit labour costs	1.0	20.6	16.2	11.3	5.6
7.4. Real unit labour costs	-3.2	1.3	-0.8	-2.3	-1.7
7.5. GDP deflator	4.4	19.1	17.2	13.9	7.4
7.6. Private consumption deflator	3.6	18.2	17.6	13.8	8.2
7.7. Terms of trade	0.0	-1.3	1.9	1.0	0.5
8. General government budget, % of GDP					
8.1. Expenditure (c)	23.2	32.1	43.4	49.8	49.2
8.2. Current revenues (c)	23.6	27.1	31.4	38.6	41.7
8.3. Net borrowing (-) or lending (+) (c)	0.5	-5.0	-10.2	-10.2	-7.4
8.4. Net borrowing cyclically adjusted (c)	0.4	-4.9	-10.8	-10.5	-6.3
8.5. Debt (end of period) (d)	17.5	53.6	79.6	108.7	111.3
9. Monetary conditions					
9.1. Long-term interest rate	:	13.6	:	:	14.5
9.2. Short-term interest rate	:	:	17.8	22.1	13.8
9.3. Yield curve (9.1–9.2)	:	:	:	:	0.7
9.4. Real long-term interest rate (e)	:	-4.6	:	:	6.6
9.5. Nominal effective exchange rate	-1.3	-9.3	-100.8	-7.2	-1.8
9.6. Real effective exchange rate (1995 = 100; ULC in total economy)	120.6	93.2	88.4	92.5	102.0

(a) Manufacturing industry 2000.

(b) Private consumption deflator.

(c) Break in 1995 (ESA 95 data), 1991–95 average according to the former definition.

(d) Break in 1990 (ESA 95 data).

(e) GDP deflator.

NB: see also notes on p. 335.

(Annual percentage change, unless otherwise stated)

1997	1998	1999	2000	2001	2002	2003	2004	2005
2.7	3.5	2.5	2.0	2.9	2.8	2.7	3.0	3.0
3.0	1.7	2.1	2.2	-1.0	5.1	3.7	4.3	2.0
6.8	10.6	11.0	8.0	6.5	5.7	8.7	7.1	3.5
5.2	16.5	21.4	14.1	4.9	6.9	7.7	6.6	3.0
7.1	9.2	5.4	3.6	7.0	3.7	8.7	7.8	4.0
20.0	5.3	18.1	14.1	-1.1	-7.7	1.9	5.5	5.2
14.2	9.2	15.0	8.9	-3.4	-4.7	2.4	5.1	3.1
3.6	3.4	3.4	4.4	4.0	3.8	4.1	4.2	3.4
2.4	2.8	2.1	1.8	1.9	2.6	2.4	2.6	2.3
1.3	2.1	2.4	1.9	1.6	1.4	2.2	1.9	0.9
0.0	-0.1	-0.4	0.5	-0.3	0.1	-0.2	0.0	0.0
3.8	4.9	4.2	4.1	3.1	4.1	4.4	4.5	3.2
3.6	1.1	3.8	3.4	-0.3	-1.9	0.4	1.2	1.1
7.3	6.0	7.9	7.5	3.0	2.2	4.8	5.7	4.4
-3.7	-2.7	-4.6	-3.0	1.2	1.5	-0.7	-1.5	-0.9
-0.1	-1.6	-0.8	0.4	0.9	-0.4	-0.3	-0.3	0.2
19.4	17.8	15.2	15.5	15.8	16.2	17.4	19.0	19.5
7.2	6.5	4.4	3.0	1.8	1.2	:	:	:
-1.5	0.1	1.6	2.1	2.5	2.0	1.9	1.1	1.1
17.9	17.8	16.8	17.6	18.3	18.2	19.3	20.2	20.6
20.1	21.3	22.5	23.9	24.0	24.1	24.5	24.8	24.5
-2.1	-3.5	-5.7	-6.3	-5.7	-5.8	-5.2	-4.6	-3.9
74.4	75.8	75.7	78.1	77.6	77.0	76.6	:	:
-1.2	-0.9	-0.7	0.2	0.6	0.7	1.0	1.3	1.0
-2.1	-1.3	-0.8	0.0	0.7	0.7	1.2	2.0	2.1
87.3	86.9	87.0	90.1	96.1	97.0	100.4	103.8	106.1
2.5	2.9	3.2	3.5	3.7	3.7	4.0	4.2	4.2
4.5	4.5	4.5	4.4	4.4	4.4	4.4	4.4	4.4
4.9	-4.3	3.2	3.2	4.0	3.7	3.0	3.4	3.6
6.0	-3.8	3.3	4.2	4.4	3.7	3.0	3.3	2.9
4.3	-2.3	2.2	3.0	3.0	2.4	2.0	2.2	1.6
-0.4	3.0	-0.7	0.2	-0.7	0.8	1.0	0.8	0.5
60.1	62.5	62.7	62.0	61.1	60.9	61.0	61.2	61.2
54.2	55.7	55.3	55.2	54.8	54.8	55.3	55.6	55.8
54.4	55.0	54.5	55.3	55.1	56.3	:	:	:
9.8	10.9	11.8	11.0	10.4	10.0	9.5	9.2	9.0
16.4	1.8	6.5	5.8	5.3	8.4	6.5	7.0	5.5
10.3	-2.6	4.1	2.4	1.9	4.6	2.8	3.4	2.0
9.8	5.8	3.1	1.6	0.9	4.5	3.4	3.5	2.5
2.9	0.5	0.1	-1.7	-2.5	0.5	-0.7	-0.7	-0.9
6.8	5.2	3.0	3.4	3.5	4.0	4.1	4.3	3.5
5.6	4.5	2.3	3.3	3.3	3.6	3.6	3.5	3.4
0.8	0.3	0.2	-1.2	-0.3	1.7	2.3	2.1	1.2
47.8	47.8	47.6	49.8	47.8	46.5	46.3	45.7	45.1
43.7	45.3	45.8	47.8	46.3	45.4	44.6	43.4	42.8
-4.0	-2.5	-1.8	-1.9	-1.5	-1.2	-1.7	-2.4	-2.3
-3.2	-1.9	-1.4	-1.9	-2.2	-1.5	-2.2	-3.1	-3.2
108.2	105.8	105.2	106.2	106.9	104.7	100.6	97.1	95.0
9.9	8.5	6.3	6.1	5.3	5.1	:	:	:
12.8	14.0	10.1	7.7	4.3	3.3	:	:	:
-2.9	-5.5	-3.8	-1.6	1.0	1.8	:	:	:
2.9	3.1	3.2	2.6	1.7	1.1	:	:	:
-2.6	-5.9	-0.5	-6.4	-0.7	1.0	3.8	0.4	-0.2
108.2	107.0	108.4	101.3	98.5	102.4	108.3	111.4	:

Table 82

Main economic indicators 1961–2005

Spain

(Annual percentage change, unless otherwise stated)

	1961–73	1974–85	1986–90	1991–95	1996
1. Growth of GDP and its components (real)					
1.1. Private consumption	7.2	1.5	4.6	1.2	2.2
1.2. Government consumption	4.5	4.8	6.4	3.0	1.3
1.3. Gross fixed capital formation	10.5	-0.6	10.9	-0.5	2.1
1.4. of which equipment	:	-0.2	11.9	-2.5	8.1
1.5. of which construction	:	-1.0	11.0	0.1	-1.9
1.6. Exports of goods and services	11.9	6.0	3.1	9.9	10.4
1.7. Imports of goods and services	17.3	2.5	17.0	6.7	8.0
1.8. GDP	7.2	1.8	4.5	1.5	2.4
2. Demand components: Contribution to changes in GDP (%)					
2.1. Consumption	5.4	1.6	3.8	1.2	1.5
2.2. Investment	2.2	-0.1	2.2	-0.1	0.5
2.3. Stockbuilding	0.2	-0.1	0.2	-0.1	-0.1
2.4. Domestic demand	7.8	1.4	6.2	1.1	1.9
2.5. Exports	1.2	0.8	0.5	1.8	2.3
2.6. Final demand	9.0	2.2	6.7	2.8	4.3
2.7. Imports	-1.8	-0.4	-2.2	-1.3	-1.8
2.8. Net exports	-0.6	0.5	-1.7	0.5	0.5
3. Gross savings and investment in % of GDP at current prices					
3.1. Private sector savings	:	21.3	21.8	21.6	23.3
3.2. Net savings of households	:	:	:	:	6.4
3.3. General government savings	:	1.2	1.3	-0.7	-1.2
3.4. National savings	25.4	22.5	23.1	20.9	22.0
3.5. Gross capital formation	27.5	24.5	24.5	22.9	21.9
3.6. Current account	-0.7	-1.5	-1.5	-2.0	0.1
4. Determinants of investment					
4.1. Capacity utilisation (survey) (a)	:	:	59.7	76.0	77.1
4.2. Trend GDP gap	0.2	-0.2	1.1	0.1	-2.4
4.3. Potential GDP gap	:	-0.2	0.6	-1.0	-2.9
4.4. Profitability index (1961–73 = 100)	100.0	83.3	112.9	104.9	112.0
5. Growth potential					
5.1. Growth of net capital stock (real)	4.9	3.7	3.8	3.4	3.0
5.2. Net capital/output ratio (real)	2.4	2.6	2.7	2.9	3.0
5.3. Growth of capital intensity	4.2	5.1	0.2	3.8	1.8
5.4. Labour productivity growth	6.5	3.2	0.9	1.9	1.2
5.5. Total factor productivity growth	4.9	1.4	0.8	0.5	0.6
6. Employment and unemployment					
6.1. Employment	0.7	-1.3	3.6	-0.3	1.3
6.2. Activity rate	62.6	58.5	59.2	61.6	62.3
6.3. Employment rate (benchmark)	62.4	54.0	50.4	51.5	51.3
6.4. Employment rate (full-time equivalent)	:	:	48.5	49.5	49.2
6.5. Unemployment rate (Eurostat definition)	0.8	8.2	15.4	17.1	18.1
7. Prices and wages					
7.1. Nominal wages per head	14.6	18.0	8.3	7.2	4.5
7.2. Real wages per head (b)	7.6	2.4	1.6	1.5	1.0
7.3. Nominal unit labour costs	7.6	14.3	7.3	5.2	3.3
7.4. Real unit labour costs	0.5	-0.6	0.0	-0.2	-0.2
7.5. GDP deflator	7.2	15.0	7.4	5.4	3.5
7.6. Private consumption deflator	6.5	15.3	6.6	5.6	3.5
7.7. Terms of trade	3.0	-2.2	7.4	0.8	0.8
8. General government budget, % of GDP					
8.1. Expenditure (c)	:	31.0	41.0	45.4	43.7
8.2. Current revenues (c)	:	28.6	36.9	39.7	38.8
8.3. Net borrowing (-) or lending (+) (c)	:	-2.6	-4.1	-5.6	-4.9
8.4. Net borrowing cyclically adjusted (c)	:	-2.5	-4.5	-5.6	-4.0
8.5. Debt (end of period) (d)	12.6	42.3	43.6	63.9	68.1
9. Monetary conditions					
9.1. Long-term interest rate	:	:	12.8	11.1	8.7
9.2. Short-term interest rate	:	:	13.9	11.1	7.5
9.3. Yield curve (9.1–9.2)	:	:	-1.0	0.0	1.2
9.4. Real long-term interest rate (e)	:	:	5.1	5.4	5.0
9.5. Nominal effective exchange rate	-0.8	-4.9	2.8	-3.9	0.9
9.6. Real effective exchange rate (1995 = 100; ULC in total economy)	75.9	90.2	96.1	106.6	102.5

(a) Manufacturing industry 2000.

(b) Private consumption deflator.

(c) Break in 1995 (ESA 95 data), 1991–95 average according to the former definition.

(d) Break in 1990 (ESA 95 data).

(e) GDP deflator.

NB: see also notes on p. 335.

(Annual percentage change, unless otherwise stated)

1997	1998	1999	2000	2001	2002	2003	2004	2005
3.2	4.4	4.7	4.0	2.8	2.6	3.1	3.2	3.4
2.9	3.7	4.2	5.1	3.6	4.4	4.0	4.3	4.0
5.0	10.0	8.8	5.7	3.3	1.0	2.8	3.9	4.5
10.8	14.5	7.8	4.7	-1.2	-5.4	1.6	4.7	7.1
2.3	7.8	9.0	6.1	5.8	4.2	3.4	3.1	3.0
15.3	8.2	7.7	10.0	3.6	0.0	4.1	5.5	7.4
13.2	13.2	12.6	10.6	4.0	1.8	6.4	7.2	8.5
4.0	4.3	4.2	4.2	2.8	2.0	2.3	2.9	3.3
2.4	3.2	3.5	3.2	2.3	2.3	2.6	2.7	2.8
1.1	2.2	2.1	1.4	0.8	0.3	0.7	1.0	1.1
0.0	0.2	0.1	-0.1	-0.1	0.0	-0.1	0.0	0.0
3.5	5.6	5.6	4.6	3.0	2.6	3.1	3.6	4.0
3.7	2.2	2.2	2.9	1.1	0.0	1.3	1.7	2.3
7.2	7.8	7.8	7.5	4.1	2.6	4.4	5.3	6.3
-3.2	-3.5	-3.6	-3.2	-1.3	-0.6	-2.1	-2.4	-3.0
0.6	-1.3	-1.4	-0.4	-0.2	-0.6	-0.9	-0.8	-0.7
22.1	21.2	19.6	19.2	18.8	18.6	18.2	18.1	18.1
5.6	4.6	3.7	3.1	:	:	:	:	:
0.4	1.2	2.9	3.2	3.8	4.2	4.3	4.5	4.7
22.5	22.4	22.5	22.5	22.6	22.8	22.5	22.7	22.8
22.1	23.3	24.6	25.7	25.7	25.5	25.6	25.9	26.3
0.4	-0.9	-2.1	-3.3	-3.1	-2.7	-3.1	-3.2	-3.4
78.3	80.3	79.7	80.6	79.6	77.2	78.8	:	:
-1.5	-0.3	0.8	1.8	1.6	0.5	-0.2	-0.4	-0.2
-1.6	-0.2	0.8	1.4	0.8	-0.4	-1.3	-1.7	-1.7
114.7	116.5	116.7	111.6	111.6	112.5	110.4	110.3	111.1
3.1	3.5	3.9	4.0	4.0	3.8	3.8	3.8	3.8
3.0	2.9	2.9	2.9	3.0	3.0	3.0	3.1	3.1
0.0	-0.5	0.2	0.4	1.5	2.3	2.1	1.7	1.6
0.9	0.2	0.5	0.6	0.4	0.5	0.6	0.9	1.1
0.9	0.4	0.4	0.4	-0.1	-0.3	-0.1	0.2	0.5
2.9	3.9	3.5	3.5	2.3	1.5	1.7	2.0	2.1
63.1	64.0	64.2	64.9	65.3	66.5	67.3	68.0	68.8
52.6	54.5	56.1	57.7	58.5	59.0	59.6	60.5	61.6
50.6	52.5	54.2	55.7	56.6	57.1	57.7	58.6	59.6
17.0	15.2	12.8	11.3	10.6	11.3	11.3	10.9	10.4
2.3	2.7	2.7	3.7	3.8	3.9	4.1	3.8	3.4
-0.3	0.5	0.3	0.5	0.5	0.4	0.9	0.9	0.8
1.4	2.5	2.1	3.1	3.4	3.3	3.5	2.9	2.2
-0.9	0.1	-0.6	-0.4	-0.7	-1.0	-0.6	-0.6	-0.8
2.3	2.4	2.8	3.5	4.2	4.4	4.1	3.6	3.1
2.6	2.2	2.4	3.2	3.3	3.5	3.2	2.9	2.6
-0.1	1.0	-0.3	-2.1	2.2	2.1	1.3	1.0	0.5
41.8	41.4	40.2	39.8	39.4	39.7	39.8	39.7	39.7
38.6	38.3	39.0	39.0	39.1	39.8	39.8	39.9	39.9
-3.2	-3.0	-1.2	-0.8	-0.3	0.1	0.0	0.1	0.2
-2.6	-2.9	-1.5	-1.6	-0.9	-0.2	0.1	0.3	0.3
66.6	64.6	63.1	60.5	56.8	53.8	51.3	48.8	46.3
6.4	4.8	4.7	5.5	5.1	5.0	:	:	:
5.4	4.3	3.0	4.4	4.3	3.3	:	:	:
1.0	0.6	1.8	1.1	0.9	1.6	:	:	:
4.0	2.4	1.9	2.0	0.9	0.5	:	:	:
-4.8	-0.1	-1.6	-3.5	0.4	1.1	4.1	0.5	-0.2
97.7	99.0	98.0	95.6	96.4	98.8	104.7	107.2	:

Table 83

Main economic indicators 1961–2005

France

(Annual percentage change, unless otherwise stated)

	1961–73	1974–85	1986–90	1991–95	1996
1. Growth of GDP and its components (real)					
1.1. Private consumption	5.3	2.2	3.0	0.7	1.3
1.2. Government consumption	4.0	3.2	2.4	2.3	2.3
1.3. Gross fixed capital formation	7.7	0.5	6.4	-1.2	0.0
1.4. of which equipment	:	2.9	9.0	-0.1	2.4
1.5. of which construction	:	-1.2	4.1	-2.1	-3.0
1.6. Exports of goods and services	9.1	4.6	5.2	5.3	3.5
1.7. Imports of goods and services	10.4	2.4	7.3	3.4	1.6
1.8. GDP	5.4	2.2	3.3	1.1	1.1
2. Demand components: Contribution to changes in GDP (%)					
2.1. Consumption	3.8	1.9	2.3	0.9	1.3
2.2. Investment	1.7	0.1	1.2	-0.2	0.0
2.3. Stockbuilding	0.1	-0.1	0.1	0.0	-0.6
2.4. Domestic demand	5.6	1.9	3.6	0.7	0.7
2.5. Exports	1.3	0.8	0.9	1.1	0.8
2.6. Final demand	6.9	2.6	4.7	1.7	1.4
2.7. Imports	-1.5	-0.4	-1.2	-0.7	-0.3
2.8. Net exports	-0.2	0.4	-0.4	0.4	0.4
3. Gross savings and investment in % of GDP at current prices					
3.1. Private sector savings	22.0	:	18.8	20.3	19.5
3.2. Net savings of households	:	:	4.3	6.2	6.3
3.3. General government savings	4.2	:	1.8	-0.5	-0.3
3.4. National savings	26.2	21.9	20.6	19.8	19.2
3.5. Gross capital formation	26.5	23.7	22.2	20.0	18.3
3.6. Current account	0.6	-1.7	-1.6	-0.1	0.9
4. Determinants of investment					
4.1. Capacity utilisation (survey) (a)	:	82.8	85.9	83.4	83.6
4.2. Trend GDP gap	0.2	-0.2	0.5	0.0	-2.0
4.3. Potential GDP gap	:	-0.5	0.1	0.0	-1.4
4.4. Profitability index (1961–73 = 100)	100.0	73.7	96.8	106.3	112.7
5. Growth potential					
5.1. Growth of net capital stock (real)	4.5	3.1	2.7	2.0	1.5
5.2. Net capital/output ratio (real)	2.7	2.9	2.9	3.0	3.0
5.3. Growth of capital intensity	3.8	3.0	1.9	2.5	1.6
5.4. Labour productivity growth	4.7	2.2	2.4	1.5	1.2
5.5. Total factor productivity growth	3.3	1.1	1.7	0.6	0.6
6. Employment and unemployment					
6.1. Employment	0.7	0.1	0.9	-0.1	0.4
6.2. Activity rate	68.0	68.0	66.6	67.2	67.9
6.3. Employment rate (benchmark)	66.8	63.9	60.4	60.2	60.1
6.4. Employment rate (full-time equivalent)	:	:	58.6	57.9	57.1
6.5. Unemployment rate (Eurostat definition)	2.0	6.3	9.5	10.7	11.9
7. Prices and wages					
7.1. Nominal wages per head	9.9	13.0	4.1	3.1	2.5
7.2. Real wages per head (b)	5.0	2.3	1.0	0.5	0.6
7.3. Nominal unit labour costs	5.0	10.6	1.7	1.5	1.2
7.4. Real unit labour costs	-0.1	0.5	-1.7	-0.6	-0.2
7.5. GDP deflator	5.1	10.0	3.4	2.1	1.4
7.6. Private consumption deflator	4.7	10.5	3.1	2.5	1.9
7.7. Terms of trade	0.3	-2.4	1.9	0.3	-0.6
8. General government budget, % of GDP					
8.1. Expenditure (c)	36.7	:	51.4	54.0	55.5
8.2. Current revenues (c)	37.2	:	49.1	49.2	51.4
8.3. Net borrowing (-) or lending (+) (c)	0.4	:	-2.3	-4.7	-4.1
8.4. Net borrowing cyclically adjusted (c)	:	:	-2.3	-4.7	-3.5
8.5. Debt (end of period) (d)	:	30.8	35.1	54.6	57.1
9. Monetary conditions					
9.1. Long-term interest rate	6.9	12.2	9.1	7.8	6.3
9.2. Short-term interest rate	5.7	11.0	8.7	8.2	3.9
9.3. Yield curve (9.1–9.2)	1.2	1.2	0.4	-0.4	2.4
9.4. Real long-term interest rate (e)	1.8	2.0	5.5	5.6	4.8
9.5. Nominal effective exchange rate	-0.7	-2.5	2.0	1.8	0.2
9.6. Real effective exchange rate (1995 = 100; ULC in total economy)	115.1	107.6	100.2	96.1	99.9

(a) Manufacturing industry.

(b) Private consumption deflator.

(c) Break in 1978 (ESA 95 data), 1974–85 average according to the former definition.

(d) Break in 1990 (ESA 95 data).

(e) GDP deflator.

NB: see also notes on p. 335.

(Annual percentage change, unless otherwise stated)

1997	1998	1999	2000	2001	2002	2003	2004	2005
0.2	3.4	3.2	2.6	2.7	1.2	1.3	1.5	2.0
2.1	-0.1	1.5	2.8	2.9	4.1	2.4	1.5	1.9
-0.1	7.0	8.3	7.8	1.9	-1.6	-1.3	1.4	3.3
2.8	12.5	11.9	10.4	2.5	-3.2	-1.0	1.7	4.0
-3.4	1.9	6.1	7.1	1.4	-1.0	-1.6	1.5	3.1
11.8	8.3	4.3	12.6	1.6	1.5	-1.6	4.5	6.9
6.9	11.6	6.2	14.6	1.3	0.6	1.5	4.6	6.7
1.9	3.4	3.2	3.8	2.1	1.2	0.1	1.7	2.3
0.6	1.8	2.1	2.1	2.2	1.6	1.3	1.2	1.6
0.0	1.3	1.6	1.5	0.4	-0.3	-0.3	0.3	0.7
0.1	0.8	-0.1	0.4	-0.6	-0.4	-0.1	0.2	0.0
0.6	3.9	3.6	4.0	2.0	0.9	0.9	1.6	2.2
2.7	2.1	1.1	3.4	0.5	0.4	-0.5	1.3	2.0
3.4	6.0	4.8	7.3	2.4	1.4	0.5	2.9	4.2
-1.5	-2.6	-1.5	-3.6	-0.4	-0.2	-0.4	-1.3	-1.9
1.3	-0.5	-0.3	-0.2	0.1	0.3	-0.9	0.0	0.1
20.4	20.4	20.1	20.0	19.8	20.4	20.2	20.0	20.1
7.0	6.7	6.5	6.8	7.2	7.6	:	:	:
-0.1	1.1	2.1	2.3	2.2	0.4	-0.6	-0.2	-0.1
20.4	21.4	22.3	22.4	22.0	20.9	19.6	19.8	20.0
17.8	19.1	19.7	21.1	20.5	19.3	18.9	19.2	19.3
2.5	2.4	2.6	1.3	1.5	1.6	0.7	0.8	0.8
83.5	85.0	85.3	87.5	87.4	85.3	84.5	:	:
-2.1	-0.8	0.3	2.0	2.1	1.3	-0.6	-0.8	-0.4
-1.3	0.2	1.2	2.5	2.1	1.3	-0.7	-1.1	-1.0
116.5	123.2	124.1	123.0	121.3	119.6	114.7	117.9	120.6
1.4	1.7	2.0	2.3	2.2	2.0	1.8	1.7	1.8
3.0	3.0	2.9	2.9	2.9	2.9	3.0	3.0	3.0
1.2	0.4	0.1	-0.4	0.4	1.3	2.0	1.8	1.2
1.7	2.1	1.3	1.1	0.3	0.5	0.3	1.8	1.7
1.3	2.0	1.3	1.2	0.1	0.0	-0.4	1.1	1.3
0.4	1.5	2.0	2.5	1.8	0.8	0.0	-0.1	0.7
68.0	68.5	69.2	69.6	69.9	70.4	70.5	70.3	70.2
60.2	61.0	62.0	63.3	64.2	64.4	64.1	63.8	63.8
57.0	57.6	58.5	59.8	60.6	60.8	60.4	60.1	60.1
11.8	11.4	10.7	9.3	8.5	8.8	9.4	9.7	9.4
2.2	1.9	2.5	2.3	2.6	2.8	2.7	2.6	2.7
0.8	1.2	2.0	0.8	1.0	0.9	0.8	0.9	1.1
0.5	-0.2	1.1	1.2	2.3	2.3	2.4	0.8	1.0
-0.8	-1.1	0.6	0.2	0.6	0.5	0.7	-0.9	-0.5
1.3	0.9	0.5	1.0	1.8	1.8	1.7	1.7	1.5
1.4	0.7	0.4	1.5	1.6	2.0	1.9	1.7	1.5
0.5	1.2	0.2	-2.9	1.1	1.2	-0.1	0.4	0.1
55.0	53.8	53.5	52.7	52.6	53.5	54.7	54.3	54.1
51.9	51.2	51.8	51.3	51.0	50.4	50.5	50.5	50.5
-3.0	-2.7	-1.8	-1.4	-1.5	-3.1	-4.2	-3.8	-3.6
-2.5	-2.7	-2.3	-2.4	-2.5	-3.7	-3.9	-3.3	-3.2
59.3	59.5	58.5	57.2	56.8	59.0	62.6	64.3	65.6
5.6	4.6	4.6	5.4	4.9	4.9	:	:	:
3.5	3.6	3.0	4.4	4.3	3.3	:	:	:
2.1	1.1	1.6	1.0	0.7	1.5	:	:	:
4.2	3.7	4.0	4.4	3.1	3.0	:	:	:
-4.0	1.0	-2.0	-4.5	0.5	1.4	5.1	0.5	-0.3
95.3	94.9	92.8	87.8	87.4	89.4	95.2	95.3	:

Table 84

Main economic indicators 1961–2005

Ireland

(Annual percentage change, unless otherwise stated)

	1961–73	1974–85	1986–90	1991–95	1996
1. Growth of GDP and its components (real)					
1.1. Private consumption	3.8	2.2	3.4	3.1	6.5
1.2. Government consumption	5.2	3.7	-0.7	2.7	3.5
1.3. Gross fixed capital formation	9.9	0.7	4.5	2.6	16.8
1.4. of which equipment	:	1.6	6.0	2.1	11.8
1.5. of which construction	:	0.6	3.3	3.7	18.7
1.6. Exports of goods and services	8.7	8.0	8.9	12.8	12.2
1.7. Imports of goods and services	9.7	4.4	7.1	9.9	12.5
1.8. GDP	4.4	3.8	4.6	4.7	8.1
2. Demand components: Contribution to changes in GDP (%)					
2.1. Consumption	3.7	2.3	2.0	2.3	4.1
2.2. Investment	1.9	0.2	0.8	0.4	2.9
2.3. Stockbuilding	0.1	0.0	0.4	-0.2	0.0
2.4. Domestic demand	5.7	2.5	3.2	2.3	6.8
2.5. Exports	2.5	3.0	4.8	8.0	9.4
2.6. Final demand	8.3	5.5	8.0	10.7	16.7
2.7. Imports	-3.8	-1.9	-3.6	-5.6	-8.1
2.8. Net exports	-1.3	1.1	1.2	2.4	1.2
3. Gross savings and investment in % of GDP at current prices					
3.1. Private sector savings	19.0	22.9	19.5	18.7	20.5
3.2. Net savings of households	:	:	:	:	:
3.3. General government savings	0.9	-4.5	-3.0	-0.7	1.8
3.4. National savings	19.9	18.4	16.5	18.0	22.3
3.5. Gross capital formation	21.5	25.4	17.8	17.0	19.9
3.6. Current account	-2.5	-7.9	-1.2	1.9	3.3
4. Determinants of investment					
4.1. Capacity utilisation (survey) (a)	:	:	73.5	76.2	77.6
4.2. Trend GDP gap	-0.3	1.0	-0.8	-3.5	-3.1
4.3. Potential GDP gap	:	1.2	-3.2	-3.9	-2.2
4.4. Profitability index (1961–73 = 100)	100.0	81.4	108.4	118.9	152.9
5. Growth potential					
5.1. Growth of net capital stock (real)	4.9	4.8	2.5	2.2	3.4
5.2. Net capital/output ratio (real)	3.1	3.4	3.5	3.1	2.8
5.3. Growth of capital intensity	4.8	4.7	1.4	0.5	-0.2
5.4. Labour productivity growth	4.3	3.7	3.5	2.9	4.3
5.5. Total factor productivity growth	2.5	1.9	2.9	2.7	4.4
6. Employment and unemployment					
6.1. Employment	0.1	0.3	1.0	2.0	3.7
6.2. Activity rate	66.4	62.3	61.2	62.1	63.4
6.3. Employment rate (benchmark)	62.7	55.8	51.7	53.1	56.1
6.4. Employment rate (full-time equivalent)	:	:	:	49.2	51.5
6.5. Unemployment rate (Eurostat definition)	5.6	10.6	15.5	14.5	11.7
7. Prices and wages					
7.1. Nominal wages per head	11.3	16.7	5.6	4.5	3.5
7.2. Real wages per head (b)	4.7	2.6	2.3	1.8	0.9
7.3. Nominal unit labour costs	6.8	12.5	2.1	1.6	-0.8
7.4. Real unit labour costs	-0.4	-0.2	-1.1	-1.3	-2.8
7.5. GDP deflator	7.2	12.8	3.2	2.9	2.1
7.6. Private consumption deflator	6.3	13.8	3.2	2.7	2.6
7.7. Terms of trade	0.8	-1.7	-0.2	-1.0	0.2
8. General government budget, % of GDP					
8.1. Expenditure (c)	30.5	45.1	43.2	44.2	39.6
8.2. Current revenues (c)	26.5	35.2	37.9	41.7	39.4
8.3. Net borrowing (-) or lending (+) (c)	-3.5	-9.9	-5.3	-2.5	-0.1
8.4. Net borrowing cyclically adjusted (c)	:	-100.2	-4.9	-1.1	0.6
8.5. Debt (end of period) (d)	45.0	109.5	101.4	82.7	74.1
9. Monetary conditions					
9.1. Long-term interest rate	:	14.6	10.2	8.5	7.3
9.2. Short-term interest rate	:	13.4	10.5	8.8	5.4
9.3. Yield curve (9.1–9.2)	:	1.1	-0.4	-0.3	1.9
9.4. Real long-term interest rate (e)	:	1.6	6.8	5.5	5.1
9.5. Nominal effective exchange rate	-0.8	-2.8	1.5	-0.6	2.5
9.6. Real effective exchange rate (1995 = 100; ULC in total economy)	107.9	109.5	113.4	104.2	100.3

(a) Manufacturing industry.

(b) Private consumption deflator.

(c) Break in 1990 (ESA 95 data).

(d) Break in 1990 (ESA 95 data).

(e) GDP deflator.

NB: see also notes on p. 335.

(Annual percentage change, unless otherwise stated)

1997	1998	1999	2000	2001	2002	2003	2004	2005
7.1	7.2	9.5	8.3	5.3	2.0	2.0	2.8	3.8
5.8	6.0	8.0	8.4	11.5	10.7	3.8	2.0	2.0
18.9	14.9	14.0	7.1	0.2	1.5	-1.1	2.5	3.0
17.7	24.9	17.3	7.5	-6.4	-2.4	-5.0	5.0	5.0
18.3	10.1	12.4	6.6	4.8	5.0	1.7	0.8	1.7
17.4	21.0	15.2	20.6	8.3	6.2	-3.4	6.0	7.9
16.8	25.5	12.1	21.3	6.5	2.3	-4.5	5.5	7.1
11.1	8.6	11.3	10.1	6.2	6.9	1.6	3.7	4.9
4.7	4.6	6.0	5.3	4.2	2.6	1.5	1.6	2.1
3.6	3.0	3.0	1.6	0.0	0.3	-0.2	0.5	0.6
0.6	0.6	-1.3	0.5	-0.4	-0.4	0.0	0.0	0.0
10.5	7.8	6.6	7.8	3.3	2.3	1.3	2.1	2.6
13.8	17.6	14.2	19.9	8.8	6.7	-3.7	6.1	8.2
22.9	25.9	21.8	27.6	12.2	9.1	-2.4	8.2	10.8
-101.3	-108.1	-9.9	-107.6	-5.9	-2.1	4.0	-4.5	-5.9
2.5	-0.5	4.3	2.3	2.9	4.6	0.3	1.6	2.2
20.9	21.6	18.2	17.4	17.4	16.7	17.6	17.7	17.6
:	:	:	:	:	:	:	:	:
3.3	4.3	6.5	7.8	5.4	3.8	3.1	2.8	2.9
24.2	25.9	24.7	25.2	22.8	20.5	20.6	20.5	20.5
22.0	24.0	24.4	25.0	23.9	22.2	22.2	21.9	21.5
3.1	0.8	0.3	-0.4	-0.7	-0.7	-0.7	-0.5	-0.2
75.9	76.6	75.9	78.6	78.4	75.9	75.6	:	:
0.0	0.8	4.1	6.7	5.9	6.3	1.7	-0.2	-0.8
0.9	1.3	4.2	6.4	5.1	5.0	0.3	-1.8	-2.6
173.1	180.6	189.7	190.3	186.3	203.9	183.8	185.2	190.7
4.3	5.1	5.7	5.6	5.3	4.8	4.3	4.2	4.1
2.6	2.5	2.4	2.3	2.3	2.2	2.3	2.3	2.3
-1.2	-3.2	-0.2	0.9	2.3	3.4	3.5	3.2	2.8
5.2	0.0	5.0	5.2	3.1	5.5	0.7	2.7	3.5
5.7	1.2	5.1	4.8	2.3	4.2	-0.5	1.5	2.5
4.0	8.4	6.5	5.1	2.8	1.9	0.8	1.0	1.3
63.5	65.7	67.3	68.5	68.8	69.0	68.8	68.8	68.8
57.2	60.7	63.5	65.5	66.1	66.0	65.6	65.3	65.4
53.2	55.5	58.6	60.6	60.7	60.7	:	:	:
9.9	7.5	5.6	4.3	3.9	4.4	4.8	5.1	5.0
4.2	5.2	5.2	8.1	9.0	5.2	5.1	5.0	4.8
1.3	1.2	1.9	3.6	4.5	-1.3	1.5	1.9	2.0
-0.9	5.1	0.2	2.8	5.7	-0.3	4.3	2.2	1.2
-4.8	-1.1	-3.5	-1.4	0.6	-5.5	2.8	-1.0	-1.5
4.0	6.3	3.8	4.3	5.1	5.4	1.5	3.2	2.7
2.9	3.9	3.2	4.3	4.3	6.6	3.5	3.0	2.7
0.5	0.3	-0.2	-1.6	0.5	2.0	-1.4	0.2	0.2
37.5	34.9	34.5	32.1	34.0	33.3	34.8	34.9	34.5
38.6	37.2	36.8	36.5	34.9	33.1	34.0	33.7	33.5
1.1	2.4	2.4	4.4	0.9	-0.2	-0.9	-1.2	-1.1
0.8	1.9	1.0	2.4	-0.7	-1.9	-1.0	-0.6	-0.2
65.0	54.9	48.6	38.4	36.1	32.4	33.5	33.8	33.8
6.3	4.8	4.7	5.5	5.0	5.0	:	:	:
6.1	5.5	3.0	4.4	4.3	3.3	:	:	:
0.2	-0.7	1.7	1.1	0.8	1.7	:	:	:
2.2	-1.4	0.8	1.2	-0.1	-0.4	:	:	:
1.8	-4.6	-3.1	-5.7	0.6	1.9	7.2	0.8	-0.3
99.8	98.5	94.2	89.4	92.5	92.8	102.6	104.6	:

Table 85

Main economic indicators 1961–2005

Italy

(Annual percentage change, unless otherwise stated)

	1961–73	1974–85	1986–90	1991–95	1996
1. Growth of GDP and its components (real)					
1.1. Private consumption	5.9	3.0	3.5	0.9	1.2
1.2. Government consumption	4.1	3.0	2.8	-0.2	1.0
1.3. Gross fixed capital formation	4.5	0.6	4.3	-1.2	3.6
1.4. of which equipment	:	1.8	6.3	-0.1	3.7
1.5. of which construction	:	-0.3	2.4	-2.4	3.6
1.6. Exports of goods and services	10.2	4.9	5.1	7.4	0.6
1.7. Imports of goods and services	10.3	3.2	8.5	3.0	-0.3
1.8. GDP	5.3	2.7	2.9	1.3	1.1
2. Demand components: Contribution to changes in GDP (%)					
2.1. Consumption	4.2	2.3	2.6	0.5	0.9
2.2. Investment	1.0	0.1	0.8	-0.2	0.7
2.3. Stockbuilding	0.0	0.0	-0.1	0.0	-0.7
2.4. Domestic demand	5.2	2.4	3.4	0.3	0.8
2.5. Exports	1.4	0.8	0.9	1.7	0.2
2.6. Final demand	6.7	3.2	4.4	1.9	1.0
2.7. Imports	-1.4	-0.5	-1.5	-0.7	0.1
2.8. Net exports	0.0	0.3	-0.6	1.0	0.2
3. Gross savings and investment in % of GDP at current prices					
3.1. Private sector savings	24.6	30.6	28.2	26.1	25.6
3.2. Net savings of households	:	:	18.8	15.1	13.6
3.3. General government savings	0.1	-5.8	-6.7	-6.4	-3.7
3.4. National savings	24.7	24.8	21.5	19.7	21.9
3.5. Gross capital formation	25.8	25.5	22.3	19.7	18.7
3.6. Current account	1.4	-0.8	-0.7	-0.1	3.2
4. Determinants of investment					
4.1. Capacity utilisation (survey) (a)	:	:	77.8	76.3	76.5
4.2. Trend GDP gap	0.2	-0.2	0.8	-0.3	-0.8
4.3. Potential GDP gap	:	-0.1	0.7	-0.5	-0.2
4.4. Profitability index (1961–73 = 100)	100.0	60.0	86.8	96.0	116.1
5. Growth potential					
5.1. Growth of net capital stock (real)	5.1	3.3	2.6	2.0	1.7
5.2. Net capital/output ratio (real)	2.9	3.0	3.1	3.2	3.2
5.3. Growth of capital intensity	5.4	2.3	1.9	2.8	1.4
5.4. Labour productivity growth	5.5	1.8	2.1	2.1	0.8
5.5. Total factor productivity growth	3.7	1.0	1.5	1.1	0.3
6. Employment and unemployment					
6.1. Employment	-0.3	0.6	0.9	-0.6	0.6
6.2. Activity rate	59.1	60.8	62.2	62.5	62.3
6.3. Employment rate (benchmark)	58.5	57.8	57.3	57.5	56.6
6.4. Employment rate (full-time equivalent)	:	59.4	59.8	58.8	57.8
6.5. Unemployment rate (Eurostat definition)	5.0	6.9	9.4	10.0	11.5
7. Prices and wages					
7.1. Nominal wages per head	11.4	18.2	8.5	5.3	6.1
7.2. Real wages per head (b)	6.3	2.0	2.2	-0.5	1.7
7.3. Nominal unit labour costs	5.6	16.1	6.2	3.1	5.3
7.4. Real unit labour costs	0.1	-0.1	-0.8	-1.7	0.0
7.5. GDP deflator	5.4	16.3	7.1	4.9	5.3
7.6. Private consumption deflator	4.9	16.0	6.1	5.8	4.4
7.7. Terms of trade	-0.5	-0.9	3.7	-0.9	4.0
8. General government budget, % of GDP					
8.1. Expenditure (c)	32.3	43.9	52.2	55.6	53.2
8.2. Current revenues (c)	28.9	34.0	40.4	45.7	46.1
8.3. Net borrowing (-) or lending (+) (c)	-3.1	-9.6	-101.8	-9.9	-7.1
8.4. Net borrowing cyclically adjusted (c)	:	-9.5	-102	-9.7	-7.0
8.5. Debt (end of period) (d)	51.3	81.9	97.2	123.2	122.1
9. Monetary conditions					
9.1. Long-term interest rate	7.0	15.1	12.0	12.1	9.4
9.2. Short-term interest rate	4.2	15.5	12.1	11.0	8.7
9.3. Yield curve (9.1–9.2)	2.7	-0.3	-0.1	1.0	0.7
9.4. Real long-term interest rate (e)	1.5	-0.9	4.6	6.8	3.9
9.5. Nominal effective exchange rate	-0.9	-6.8	1.5	-6.9	9.4
9.6. Real effective exchange rate (1995 = 100; ULC in total economy)	114.2	105.6	129.8	121.7	114.1

(a) Manufacturing industry.

(b) Private consumption deflator.

(c) Break in 1980 (ESA 95 data), 1974–85 average according to the former definition.

(d) Break in 1990 (ESA 95 data).

(e) GDP deflator.

NB: see also notes on p. 335.

(Annual percentage change, unless otherwise stated)

1997	1998	1999	2000	2001	2002	2003	2004	2005
3.2	3.2	2.6	2.7	1.0	0.4	2.0	1.9	2.0
0.2	0.2	1.3	1.6	3.6	1.7	1.5	1.0	1.2
2.1	4.0	5.0	7.1	2.6	0.5	-2.1	2.0	2.9
6.3	7.2	7.1	8.7	2.3	0.2	-6.4	2.8	3.9
-2.0	-0.2	2.6	5.9	3.2	0.3	3.0	0.4	1.7
6.4	3.4	0.1	11.7	1.1	-1.0	-2.3	4.9	5.9
10.1	8.9	5.6	8.9	1.0	1.5	1.7	5.7	6.2
2.0	1.8	1.7	3.1	1.8	0.4	0.3	1.5	1.9
1.9	1.9	1.8	2.0	1.2	0.6	1.4	1.3	1.5
0.4	0.7	1.0	1.4	0.5	0.1	-0.4	0.4	0.6
0.3	0.3	0.3	-1.1	0.0	0.4	0.5	0.0	0.0
2.6	3.0	3.1	2.3	1.7	1.1	1.5	1.7	2.0
1.7	1.0	0.0	3.3	0.3	-0.3	-0.7	1.4	1.8
4.3	4.0	3.1	5.6	2.1	0.8	0.8	3.1	3.8
-2.3	-2.2	-1.5	-2.4	-0.3	-0.4	-0.5	-1.7	-1.9
-0.6	-1.2	-1.4	0.9	0.1	-0.7	-1.2	-0.3	-0.1
21.8	21.1	18.9	18.6	19.0	19.2	18.9	18.5	18.6
10.7	8.2	6.7	6.0	6.8	:	:	:	:
-0.2	0.1	1.7	1.4	1.0	0.5	-0.1	0.3	0.2
21.6	21.2	20.7	20.0	20.0	19.7	18.8	18.8	18.8
18.9	19.3	19.7	20.2	19.7	19.9	19.3	19.2	19.2
2.8	1.9	1.0	-0.2	0.3	-0.3	-0.5	-0.4	-0.4
76.4	78.5	76.0	78.8	78.9	77.3	76.4	:	:
-0.4	-0.3	-0.2	1.3	1.6	0.4	-0.7	-0.7	-0.2
0.3	0.3	0.3	1.5	1.3	0.0	-1.2	-1.2	-0.8
117.1	132.1	131.4	133.7	133.8	130.7	129.3	131.8	134.5
1.7	1.8	1.9	2.2	2.2	2.1	1.9	1.9	1.9
3.2	3.2	3.2	3.2	3.2	3.3	3.3	3.3	3.3
1.3	0.8	1.3	0.5	0.6	1.1	1.1	1.4	1.2
1.6	0.8	1.1	1.4	0.1	-0.7	-0.5	1.0	1.2
1.2	0.5	0.6	1.2	-0.1	-1.0	-0.8	0.5	0.8
0.4	1.0	1.1	1.9	1.9	1.4	0.9	0.6	0.9
62.5	63.2	63.8	64.4	64.9	65.6	66.2	66.9	67.6
56.8	57.4	58.2	59.3	60.5	61.4	62.2	62.7	63.5
58.0	58.6	59.1	60.2	61.2	62.0	62.7	63.2	63.8
11.6	11.7	11.3	10.4	9.4	9.0	8.8	8.8	8.7
4.0	-1.5	2.6	3.1	3.0	2.4	3.0	3.0	2.7
1.7	-3.6	0.4	0.2	0.4	-0.6	0.2	0.6	0.6
2.3	-2.3	1.5	1.7	2.9	3.1	3.5	2.0	1.5
0.0	-4.9	-0.1	-0.4	0.2	0.4	0.5	-0.5	-0.6
2.4	2.7	1.6	2.1	2.7	2.7	3.0	2.5	2.1
2.2	2.1	2.1	2.9	2.7	3.0	2.9	2.4	2.1
-1.1	2.3	-0.1	-7.2	1.6	1.4	2.4	1.2	0.4
51.1	49.9	48.8	46.9	48.5	47.5	48.5	47.7	47.6
48.4	46.8	47.1	46.2	45.8	45.2	45.9	44.9	44.1
-2.7	-3.1	-1.7	-0.6	-2.6	-2.3	-2.6	-2.8	-3.5
-2.8	-3.2	-1.9	-2.5	-3.2	-2.3	-2.1	-2.3	-3.2
120.2	116.3	114.9	110.6	109.5	106.7	106.4	106.1	106.1
6.9	4.9	4.7	5.6	5.2	5.0	:	:	:
6.8	4.9	3.0	4.4	4.3	3.3	:	:	:
0.1	0.0	1.8	1.2	0.9	1.7	:	:	:
4.4	2.1	3.1	3.4	2.4	2.2	:	:	:
-0.2	0.1	-2.3	-4.4	0.4	1.4	5.0	0.5	-0.3
115.4	111.3	108.9	104.0	104.3	107.7	116.1	118.0	:

Table 86

Main economic indicators 1961–2005 Luxembourg

(Annual percentage change, unless otherwise stated)

	1961–73	1974–85	1986–90	1991–95	1996
1. Growth of GDP and its components (real)					
1.1. Private consumption	4.6	2.6	4.5	2.5	4.4
1.2. Government consumption	3.4	2.4	7.0	3.6	5.6
1.3. Gross fixed capital formation	4.9	-2.7	14.7	3.2	3.8
1.6. Exports of goods and services	6.3	2.9	7.0	5.8	5.8
1.7. Imports of goods and services	6.4	2.7	6.7	4.4	7.6
1.8. GDP	4.0	1.8	7.5	4.0	3.3
2. Demand components: Contribution to changes in GDP (%)					
2.1. Consumption	2.9	1.9	3.8	1.9	3.1
2.2. Investment	1.5	-0.7	2.9	0.7	0.8
2.3. Stockbuilding	-0.4	0.3	0.2	-0.4	0.5
2.4. Domestic demand	4.0	1.5	6.9	2.2	4.4
2.5. Exports	5.2	2.9	6.9	5.9	6.3
2.6. Final demand	9.2	4.4	13.8	8.1	10.7
2.7. Imports	-5.1	-2.6	-6.3	-4.1	-7.3
2.8. Net exports	0.1	0.3	0.6	1.8	-1.1
3. Gross savings and investment in % of GDP at current prices					
3.1. Private sector savings	29.0	:	:	:	:
3.2. Net savings of households	:	:	:	:	:
3.3. General government savings	5.0	8.2	:	7.8	7.8
3.4. National savings	34.0	:	:	:	:
3.5. Gross capital formation	24.2	20.7	24.6	24.1	21.6
3.6. Current account	6.9	:	:	:	:
4. Determinants of investment					
4.1. Capacity utilisation (survey) (a)	:	:	83.1	81.2	79.0
4.2. Trend GDP gap	0.1	-0.9	1.0	1.2	-5.3
4.3. Potential GDP gap	:	:	:	:	:
4.4. Profitability index (1961–73 = 100)	100.0	76.8	129.7	147.5	158.4
5. Growth potential					
5.1. Growth of net capital stock (real)	1.4	1.7	3.5	4.1	3.5
5.2. Net capital/output ratio (real)	2.7	2.3	1.9	1.7	1.8
5.3. Growth of capital intensity	0.4	1.2	0.3	1.5	0.8
5.4. Labour productivity growth	3.0	1.3	4.2	1.3	0.7
5.5. Total factor productivity growth	2.8	0.8	4.1	0.7	0.4
6. Employment and unemployment					
6.1. Employment	1.1	0.5	3.1	2.6	2.6
6.2. Activity rate	61.3	62.6	62.0	62.6	62.5
6.3. Employment rate (benchmark)	63.2	64.3	67.4	75.2	78.5
6.4. Employment rate (full-time equivalent)	:	:	:	58.3	57.4
6.5. Unemployment rate (Eurostat definition)	0.0	1.7	2.1	2.5	2.9
7. Prices and wages					
7.1. Nominal wages per head	7.4	9.2	5.1	4.6	1.9
7.2. Real wages per head (b)	4.2	1.7	3.0	1.3	0.5
7.3. Nominal unit labour costs	4.3	7.8	0.9	3.2	1.2
7.4. Real unit labour costs	-0.2	1.1	-0.9	-0.2	-0.8
7.5. GDP deflator	4.4	6.7	1.8	3.5	2.0
7.6. Private consumption deflator	3.0	7.4	2.1	3.2	1.4
7.7. Terms of trade	0.1	-1.1	-0.3	0.3	0.6
8. General government budget, % of GDP					
8.1. Expenditure (c)	29.6	45.1	:	45.2	45.6
8.2. Current revenues (c)	31.5	47.0	:	46.8	47.5
8.3. Net borrowing (-) or lending (+) (c)	1.8	1.8	:	1.5	1.9
8.4. Net borrowing cyclically adjusted (c)	:	2.6	:	0.9	5.3
8.5. Debt (end of period) (d)	13.8	9.7	4.4	5.6	6.2
9. Monetary conditions					
9.1. Long-term interest rate	:	8.1	8.0	7.5	6.3
9.4. Real long-term interest rate (e)	:	1.5	6.1	3.9	4.3

(a) Manufacturing industry.

(b) Private consumption deflator.

(c) Break in 1990 (ESA 95 data).

(d) Break in 1990 (ESA 95 data).

(e) GDP deflator.

NB: see also notes on p. 335.

(Annual percentage change, unless otherwise stated)

1997	1998	1999	2000	2001	2002	2003	2004	2005
3.9	6.6	2.6	4.6	4.5	2.3	1.9	1.8	2.0
3.0	1.3	7.3	4.8	7.0	4.2	3.6	3.6	3.8
12.7	11.8	14.6	-3.5	10.1	-1.4	-1.7	1.0	3.2
14.8	14.1	14.8	16.8	2.6	-0.3	0.9	3.8	6.1
13.9	15.3	14.6	14.8	4.8	-1.6	1.0	4.1	6.4
8.3	6.9	7.8	9.1	1.2	1.3	1.2	1.9	2.8
2.4	3.3	2.4	2.8	3.0	1.7	1.5	1.5	1.6
2.8	2.7	3.4	-0.9	2.2	-0.3	-0.4	0.2	0.7
0.6	0.4	-0.3	2.3	-1.6	-1.9	0.2	0.0	0.0
5.8	6.4	5.8	4.5	3.5	-0.4	1.3	1.7	2.3
16.5	16.7	18.7	22.6	3.8	-0.5	1.3	5.4	8.8
22.3	23.1	24.3	26.7	7.4	-0.9	2.5	7.1	11.1
-104	-106.2	-106.7	-107.9	-6.1	2.1	-1.3	-5.2	-8.3
2.5	0.5	2.0	4.7	-2.3	1.6	-0.1	0.2	0.5
:	:	:	:	:	:	:	:	:
8.5	8.6	8.7	11.1	9.6	8.2	6.9	3.6	2.9
:	:	:	:	:	:	:	:	:
23.0	23.7	24.5	23.5	24.0	21.8	21.3	20.7	20.6
:	:	:	:	:	:	:	:	:
82.4	88.0	84.9	87.8	88.7	85.1	84.9	:	:
-2.3	-0.5	2.5	7.2	4.3	2.0	-0.2	-1.4	-1.5
:	:	:	:	:	:	:	:	:
188.9	210.8	222.2	243.8	206.7	181.5	168.2	171.7	176.6
5.0	5.9	7.2	5.8	6.3	5.8	4.8	4.3	4.2
1.7	1.7	1.7	1.7	1.7	1.8	1.9	1.9	1.9
1.9	1.3	2.1	0.2	0.7	2.5	3.0	3.4	3.0
5.1	2.3	2.7	3.3	-4.2	-1.8	-0.5	1.0	1.6
4.3	1.7	1.8	3.2	-4.4	-2.8	-1.7	-0.4	0.4
3.1	4.5	5.0	5.6	5.6	3.2	1.7	0.9	1.2
62.4	63.1	63.7	64.7	65.4	63.9	65.0	65.3	65.6
80.1	82.8	85.9	89.5	93.4	91.9	92.6	92.6	92.9
58.3	58.0	59.1	60.4	60.0	60.9	:	:	:
2.7	2.7	2.4	2.3	2.1	2.8	3.7	4.2	4.5
2.5	1.6	3.6	4.7	3.7	3.1	2.7	2.0	2.3
1.1	0.6	2.1	2.1	0.4	0.8	0.6	0.2	0.7
-2.5	-0.6	0.9	1.4	8.2	5.1	3.2	1.0	0.7
-5.0	-3.2	-1.3	-2.5	5.9	4.5	1.3	-1.7	-1.8
2.7	2.7	2.2	3.9	2.2	0.6	1.9	2.7	2.6
1.4	1.1	1.5	2.6	3.3	2.3	2.1	1.8	1.6
0.4	1.5	0.3	0.2	-0.7	-0.7	0.0	0.7	0.7
43.3	42.0	41.3	38.5	39.1	44.2	48.0	48.6	48.8
46.5	45.1	44.8	44.9	45.3	46.7	47.5	46.5	46.3
3.2	3.2	3.5	6.4	6.2	2.4	-0.6	-2.1	-2.5
4.6	3.5	2.1	2.4	3.7	1.3	-0.5	-1.3	-1.7
6.1	6.3	5.9	5.5	5.5	5.7	4.9	4.7	4.1
5.6	4.7	4.7	5.5	4.9	4.7	:	:	:
2.8	2.0	2.4	1.5	2.6	4.1	:	:	:

Table 87

Main economic indicators 1961–2005 Netherlands

(Annual percentage change, unless otherwise stated)

	1961–73	1974–85	1986–90	1991–95	1996
1. Growth of GDP and its components (real)					
1.1. Private consumption	5.6	1.8	2.6	1.6	4.0
1.2. Government consumption	3.2	3.1	3.0	2.1	-0.4
1.3. Gross fixed capital formation	5.3	0.2	4.1	0.8	6.3
1.4. of which equipment	:	2.9	3.9	1.3	9.4
1.5. of which construction	:	-1.6	3.8	0.8	2.2
1.6. Exports of goods and services	8.9	3.1	5.5	6.1	4.6
1.7. Imports of goods and services	9.2	2.4	5.2	5.3	4.4
1.8. GDP	4.8	1.9	3.4	2.1	3.0
2. Demand components: Contribution to changes in GDP (%)					
2.1. Consumption	3.7	1.7	2.1	1.3	1.9
2.2. Investment	1.3	0.0	0.9	0.2	1.3
2.3. Stockbuilding	0.0	0.0	0.2	0.0	-0.5
2.4. Domestic demand	5.1	1.6	3.1	1.4	2.7
2.5. Exports	3.1	1.2	2.4	3.1	2.6
2.6. Final demand	8.2	2.8	5.5	4.5	5.3
2.7. Imports	-3.4	-0.9	-2.2	-2.5	-2.2
2.8. Net exports	-0.3	0.3	0.3	0.7	0.4
3. Gross savings and investment in % of GDP at current prices					
3.1. Private sector savings	24.0	22.7	26.2	25.9	26.1
3.2. Net savings of households	:	:	8.8	8.4	7.5
3.3. General government savings	4.0	1.2	-0.8	-0.4	0.6
3.4. National savings	28.0	23.9	25.3	25.6	26.7
3.5. Gross capital formation	27.9	21.6	22.5	21.2	21.3
3.6. Current account	1.0	2.3	2.9	4.4	5.4
4. Determinants of investment					
4.1. Capacity utilisation (survey) (a)	:	80.1	84.9	83.2	83.9
4.2. Trend GDP gap	-0.1	-0.1	0.0	-0.5	-1.4
4.3. Potential GDP gap	:	-0.4	0.0	-0.3	-0.7
4.4. Profitability index (1961–73 = 100)	100.0	77.7	85.1	87.9	97.4
5. Growth potential					
5.1. Growth of net capital stock (real)	5.1	2.7	2.2	1.7	1.9
5.2. Net capital/output ratio (real)	3.1	3.3	3.3	3.2	3.1
5.3. Growth of capital intensity	4.2	2.8	0.2	0.9	-0.6
5.4. Labour productivity growth	3.9	2.0	1.3	1.3	0.5
5.5. Total factor productivity growth	2.3	0.9	1.2	0.9	0.7
6. Employment and unemployment					
6.1. Employment	1.4	0.1	3.5	1.3	2.3
6.2. Activity rate	68.7	64.7	66.6	70.5	73.0
6.3. Employment rate (benchmark)	68.1	60.6	62.3	66.4	68.9
6.4. Employment rate (full-time equivalent)	61.7	53.7	51.2	53.2	54.8
6.5. Unemployment rate (Eurostat definition)	1.1	6.9	7.0	6.1	6.0
7. Prices and wages					
7.1. Nominal wages per head	11.4	6.8	1.7	3.5	1.3
7.2. Real wages per head (b)	6.3	1.1	1.0	0.9	-0.6
7.3. Nominal unit labour costs	7.2	4.7	0.4	2.2	0.8
7.4. Real unit labour costs	1.1	-0.7	-0.3	0.0	-0.4
7.5. GDP deflator	6.0	5.4	0.7	2.3	1.2
7.6. Private consumption deflator	4.9	5.6	0.8	2.6	1.9
7.7. Terms of trade	0.5	-0.6	-0.2	0.0	-0.7
8. General government budget, % of GDP					
8.1. Expenditure (c)	37.1	53.2	54.9	54.3	49.6
8.2. Current revenues (c)	36.7	50.0	50.0	50.9	47.8
8.3. Net borrowing (-) or lending (+) (c)	-0.7	-3.4	-4.9	-3.5	-1.8
8.4. Net borrowing cyclically adjusted (c)	:	-3.3	-4.9	-3.3	-1.4
8.5. Debt (end of period) (d)	:	70.3	76.9	77.2	75.2
9. Monetary conditions					
9.1. Long-term interest rate	5.9	9.4	7.1	7.4	6.2
9.2. Short-term interest rate	4.1	7.7	6.4	7.0	3.0
9.3. Yield curve (9.1–9.2)	1.8	1.7	0.7	0.4	3.2
9.4. Real long-term interest rate (e)	-0.1	3.8	6.3	5.0	4.9
9.5. Nominal effective exchange rate	0.8	1.9	3.2	2.0	-2.1
9.6. Real effective exchange rate (1995 = 100; ULC in total economy)	90.3	108.3	96.6	95.8	97.5

(a) Manufacturing industry.

(b) Private consumption deflator.

(c) Break in 1988 (ESA 95 data).

(d) Break in 1990 (ESA 95 data).

(e) GDP deflator.

NB: see also notes on p. 335.

(Annual percentage change, unless otherwise stated)

1997	1998	1999	2000	2001	2002	2003	2004	2005
3.0	4.8	4.7	3.5	1.4	0.8	-1.1	-0.1	1.4
3.2	3.6	2.5	2.0	4.2	3.8	0.7	-0.1	0.4
6.6	4.2	7.8	1.4	-0.1	-4.5	-3.2	0.5	2.3
9.3	2.3	10.1	-3.5	-3.2	-4.2	-8.7	-1.5	2.6
2.4	3.6	6.2	4.9	2.1	-3.7	0.4	1.7	2.0
8.8	7.4	5.1	11.3	1.7	0.1	-0.3	4.3	5.6
9.5	8.5	5.8	10.5	2.4	-0.2	-0.4	4.0	5.0
3.8	4.3	4.0	3.5	1.2	0.2	-0.9	0.6	2.0
2.2	3.2	2.9	2.2	1.7	1.3	-0.4	-0.1	0.8
1.4	0.9	1.7	0.3	0.0	-1.0	-0.6	0.1	0.5
0.1	0.4	-0.5	0.0	-0.1	-0.3	0.1	0.1	0.1
3.7	4.5	4.1	2.4	1.6	0.0	-0.9	0.2	1.3
5.1	4.5	3.2	7.2	1.1	0.1	-0.2	3.0	4.0
8.8	9.0	7.3	9.6	2.7	0.1	-1.1	3.2	5.3
-5.0	-4.7	-3.3	-6.1	-1.5	0.1	0.2	-2.5	-3.3
0.2	-0.2	-0.1	1.1	-0.4	0.2	0.0	0.5	0.7
26.6	23.4	23.2	22.5	21.6	20.9	21.6	23.3	24.5
7.7	7.3	5.3	3.6	4.9	4.7	:	:	:
1.3	1.8	3.4	4.6	3.6	1.7	0.8	0.5	0.8
27.9	25.2	26.6	27.1	25.2	22.6	22.4	23.8	25.4
21.7	22.2	22.6	22.2	21.7	20.5	19.9	20.0	20.2
6.2	3.0	4.0	4.8	3.5	2.1	2.4	3.8	5.2
84.4	85.3	84.0	84.7	84.6	82.9	81.8	:	:
-0.4	1.2	2.7	3.9	3.0	1.5	-1.1	-1.9	-1.4
0.3	1.8	3.0	3.9	2.6	0.7	-2.0	-3.0	-2.7
101.6	102.6	101.4	103.8	102.7	96.5	91.8	94.6	98.6
2.2	2.2	2.5	2.4	2.2	1.7	1.4	1.3	1.4
3.1	3.0	3.0	3.0	3.0	3.0	3.1	3.1	3.1
-1.0	-0.7	0.2	0.5	0.9	1.5	2.5	2.1	1.0
0.7	1.4	1.6	1.6	-0.1	0.0	0.2	1.5	1.7
1.0	1.7	1.6	1.4	-0.4	-0.5	-0.7	0.6	1.3
3.2	2.6	2.6	2.2	1.8	0.9	-0.9	-0.6	0.4
74.3	75.1	76.2	77.2	77.8	78.3	78.6	78.9	79.2
70.9	72.4	74.0	75.2	76.1	76.3	75.2	74.5	74.5
56.3	57.7	58.7	59.5	59.8	59.6	58.6	57.9	57.9
4.9	3.8	3.2	2.8	2.4	2.7	4.4	5.8	6.1
2.1	3.5	3.7	4.7	5.5	4.9	4.1	1.4	1.1
0.1	1.7	1.9	1.4	0.7	1.7	2.0	0.0	0.1
1.4	2.0	2.1	3.1	5.5	4.9	3.9	-0.1	-0.6
-0.6	0.3	0.5	-0.8	0.1	1.4	1.1	-1.6	-1.5
2.0	1.7	1.6	3.9	5.4	3.4	2.8	1.5	0.9
2.0	1.7	1.8	3.3	4.7	3.1	2.1	1.3	0.9
0.4	0.2	-1.2	-0.1	1.1	-0.2	1.1	0.2	-0.1
48.2	47.2	46.9	45.3	46.6	47.5	48.5	48.2	47.5
47.1	46.4	47.6	47.5	46.6	45.9	45.9	45.5	45.1
-1.1	-0.8	0.7	2.2	0.0	-1.6	-2.6	-2.7	-2.4
-1.3	-2.0	-1.3	-1.0	-1.7	-2.1	-1.3	-0.7	-0.6
69.9	66.8	63.1	55.9	52.9	52.4	54.6	55.5	55.5
5.6	4.6	4.6	5.4	5.0	4.9	:	:	:
3.3	3.4	3.0	4.4	4.3	3.3	:	:	:
2.3	1.2	1.7	1.0	0.7	1.6	:	:	:
3.5	2.9	3.0	1.4	-0.4	1.5	:	:	:
-4.4	0.1	-1.3	-3.2	0.6	0.8	3.6	0.4	-0.2
93.8	94.9	94.4	92.7	95.8	99.8	106.1	105.3	:

Table 88

Main economic indicators 1961–2005

Austria

(Annual percentage change, unless otherwise stated)

	1961–73	1974–85	1986–90	1991–95	1996
1. Growth of GDP and its components (real)					
1.1. Private consumption	4.6	2.6	3.3	2.3	3.2
1.2. Government consumption	3.2	2.7	1.4	3.0	1.2
1.3. Gross fixed capital formation	6.5	0.8	4.5	2.4	2.2
1.4. of which equipment	5.5	2.1	5.0	0.3	4.7
1.5. of which construction	7.2	-0.1	4.0	3.6	0.3
1.6. Exports of goods and services	8.6	5.8	4.8	2.7	5.2
1.7. Imports of goods and services	8.6	4.7	4.4	3.9	4.9
1.8. GDP	4.9	2.3	3.2	2.0	2.0
2. Demand components: Contribution to changes in GDP (%)					
2.1. Consumption	3.1	2.0	2.1	1.8	2.0
2.2. Investment	1.7	0.2	1.0	0.6	0.5
2.3. Stockbuilding	0.0	-0.1	0.1	0.0	-0.6
2.4. Domestic demand	4.9	2.1	3.1	2.5	1.9
2.5. Exports	2.3	1.6	1.6	1.0	1.9
2.6. Final demand	7.2	3.7	4.8	3.4	3.9
2.7. Imports	-2.3	-1.4	-1.4	-1.4	-1.9
2.8. Net exports	0.0	0.2	0.2	-0.4	0.1
3. Gross savings and investment in % of GDP at current prices					
3.1. Private sector savings	21.2	21.3	22.3	21.9	20.5
3.2. Net savings of households	:	:	:	:	6.3
3.3. General government savings	7.3	3.8	1.7	1.1	0.9
3.4. National savings	28.5	25.1	24.0	23.0	21.4
3.5. Gross capital formation	28.9	26.7	24.0	24.1	23.7
3.6. Current account	0.1	-1.5	-0.1	-1.1	-2.3
4. Determinants of investment					
4.1. Capacity utilisation (survey) (a)	:	:	:	:	80.2
4.2. Trend GDP gap	-0.1	0.2	-0.9	0.9	-0.8
4.3. Potential GDP gap	:	-0.1	-0.4	0.6	-0.8
4.4. Profitability index (1961–73 = 100)	100.0	99.4	109.3	117.1	123.3
5. Growth potential					
5.1. Growth of net capital stock (real)	4.0	3.5	2.8	3.1	2.9
5.2. Net capital/output ratio (real)	2.8	2.9	3.1	3.1	3.2
5.3. Growth of capital intensity	4.0	3.5	2.1	3.1	3.1
5.4. Labour productivity growth	4.9	2.3	2.6	2.1	2.2
5.5. Total factor productivity growth	3.4	1.0	1.8	0.9	1.1
6. Employment and unemployment					
6.1. Employment	0.0	0.1	0.8	0.2	-0.6
6.2. Activity rate	80.3	78.6	75.9	76.0	75.0
6.3. Employment rate (benchmark)	79.1	77.4	73.7	73.4	71.9
6.4. Employment rate (full-time equivalent)	:	:	61.9	61.2	60.0
6.5. Unemployment rate (Eurostat definition)	1.8	1.9	3.2	3.7	4.4
7. Prices and wages					
7.1. Nominal wages per head	9.4	7.8	4.5	5.2	1.2
7.2. Real wages per head (b)	5.1	1.9	2.4	2.0	-0.7
7.3. Nominal unit labour costs	4.3	5.4	1.8	3.0	-1.0
7.4. Real unit labour costs	-0.3	0.0	-0.6	-0.1	-2.3
7.5. GDP deflator	4.6	5.4	2.5	3.1	1.3
7.6. Private consumption deflator	4.1	5.7	2.1	3.1	1.9
7.7. Terms of trade	0.3	-1.0	0.1	0.1	-1.0
8. General government budget, % of GDP					
8.1. Expenditure (c)	37.6	47.0	54.8	56.3	56.6
8.2. Current revenues (c)	38.4	44.7	51.3	52.4	52.8
8.3. Net borrowing (-) or lending (+) (c)	0.8	-2.3	-3.5	-3.9	-3.8
8.4. Net borrowing cyclically adjusted (c)	0.8	-2.3	-3.2	-4.1	-3.6
8.5. Debt (end of period) (d)	17.0	49.2	57.2	69.2	69.1
9. Monetary conditions					
9.1. Long-term interest rate	:	8.9	7.4	7.6	6.3
9.2. Short-term interest rate	:	7.1	6.1	7.0	3.3
9.3. Yield curve (9.1–9.2)	:	1.8	1.3	0.5	3.0
9.4. Real long-term interest rate (e)	:	3.3	4.8	4.3	4.9
9.5. Nominal effective exchange rate	0.6	2.8	2.8	1.7	-2.0
9.6. Real effective exchange rate (1995 = 100; ULC in total economy)	81.7	87.7	92.0	94.4	95.8

(a) Manufacturing industry.

(b) Private consumption deflator.

(c) Break in 1975 (ESA 95 data), 1974–85 average according to the former definition.

(d) Break in 1990 (ESA 95 data).

(e) GDP deflator.

NB: see also notes on p. 335.

(Annual percentage change, unless otherwise stated)

1997	1998	1999	2000	2001	2002	2003	2004	2005
1.7	2.7	2.4	3.3	1.4	0.8	1.1	1.8	2.2
-1.5	2.8	3.0	-0.1	-1.4	0.1	-0.1	0.3	0.3
2.0	3.9	2.1	6.2	-2.3	-2.8	1.9	2.5	3.8
5.8	4.5	4.6	11.6	-3.2	-6.7	2.7	3.9	6.3
-1.0	2.3	0.3	1.9	-2.5	-0.7	1.3	1.6	1.9
12.4	8.1	8.5	13.4	7.5	3.7	1.1	5.7	7.6
12.0	5.7	9.0	11.6	5.9	1.2	1.1	5.7	7.6
1.6	3.9	2.7	3.4	0.8	1.4	0.9	1.9	2.5
0.6	2.1	2.0	1.9	0.5	0.5	0.6	1.1	1.3
0.5	0.9	0.5	1.5	-0.6	-0.6	0.4	0.6	0.9
0.3	0.0	0.6	-0.7	-0.1	-0.1	-0.1	0.0	0.1
1.6	3.0	2.8	2.6	-0.2	0.0	0.9	1.7	2.2
4.7	3.4	3.7	6.2	3.8	2.0	0.6	3.2	4.4
6.1	6.4	6.8	8.8	3.7	1.7	1.5	4.8	6.6
-4.7	-2.4	-3.9	-5.3	-2.9	-0.6	-0.6	-3.0	-4.1
0.0	1.0	-0.2	0.8	0.9	1.4	0.0	0.2	0.3
19.5	20.1	19.7	20.3	18.1	20.2	21.0	20.5	20.4
4.6	5.2	5.3	5.2	4.6	:	:	:	:
1.8	1.8	1.6	1.7	3.7	2.8	1.9	2.2	2.5
21.3	21.8	21.2	22.0	21.7	22.9	22.9	22.7	22.9
24.3	24.1	24.2	24.6	23.6	22.4	22.3	22.2	22.4
-3.0	-2.3	-3.0	-2.6	-1.9	0.5	0.5	0.5	0.5
82.0	83.7	81.9	84.5	83.1	80.5	79.8	:	:
-1.4	0.2	0.7	2.0	0.7	0.1	-0.8	-0.8	-0.3
-1.4	0.4	0.7	1.9	0.5	0.0	-0.9	-0.8	0.0
121.7	124.0	123.6	129.0	127.9	128.3	126.1	126.1	127.4
2.9	2.9	2.9	3.1	2.7	2.3	2.3	2.3	2.4
3.3	3.2	3.2	3.2	3.3	3.3	3.4	3.4	3.4
2.4	1.5	1.8	2.1	2.1	2.3	2.1	2.0	1.9
1.1	2.4	1.5	2.4	0.1	1.4	0.8	1.6	1.9
0.2	1.9	0.9	1.7	-0.6	0.5	0.0	0.9	1.3
0.5	1.0	1.4	0.8	0.6	-0.2	0.1	0.3	0.5
75.2	75.9	76.2	76.2	76.3	76.3	76.2	76.3	76.4
72.2	72.7	73.5	73.7	73.8	73.3	73.1	73.1	73.6
60.2	60.9	61.3	61.6	61.7	61.4	61.3	61.3	61.7
4.4	4.5	3.9	3.7	3.6	4.3	4.5	4.6	4.1
1.5	2.5	2.1	2.2	1.4	2.2	2.5	2.9	2.9
0.0	2.0	1.3	0.8	-0.7	1.1	1.1	1.2	1.5
0.4	0.1	0.6	-0.2	1.3	0.8	1.7	1.3	0.9
-0.5	-0.4	-0.1	-1.6	-0.7	-0.5	0.4	0.1	-0.1
0.9	0.5	0.7	1.4	2.1	1.4	1.3	1.2	1.1
1.5	0.5	0.8	1.4	2.2	1.1	1.4	1.7	1.4
-1.0	0.1	-0.1	-0.9	0.2	1.3	-0.1	-0.3	-0.3
54.0	54.1	54.1	52.2	51.6	51.1	51.2	50.9	50.0
52.1	51.7	51.8	50.8	51.9	51.0	50.2	50.4	49.8
-1.9	-2.4	-2.3	-1.5	0.3	-0.2	-1.0	-0.6	-0.2
-1.4	-2.4	-2.5	-2.4	0.1	-0.2	-0.7	-0.3	-0.1
64.7	63.7	67.5	67.0	67.1	66.7	66.4	65.2	63.2
5.7	4.7	4.7	5.6	5.1	5.0	:	:	:
3.5	3.6	3.0	4.4	4.3	3.3	:	:	:
2.2	1.1	1.7	1.2	0.8	1.7	:	:	:
4.8	4.2	4.0	4.1	2.9	3.6	:	:	:
-3.1	0.4	-1.2	-2.9	0.3	0.8	3.2	0.3	-0.2
92.6	92.5	91.0	86.8	85.3	85.5	89.1	89.7	:

Table 89

Main economic indicators 1961–2005

Portugal

(Annual percentage change, unless otherwise stated)

	1961–73	1974–85	1986–90	1991–95	1996
1. Growth of GDP and its components (real)					
1.1. Private consumption	6.0	1.4	5.4	2.3	3.0
1.2. Government consumption	9.1	6.7	6.0	2.7	3.4
1.3. Gross fixed capital formation	7.9	-1.3	10.9	2.2	5.7
1.4. of which equipment	:	:	13.3	0.0	7.7
1.5. of which construction	:	:	8.5	3.5	4.3
1.6. Exports of goods and services	12.0	3.4	9.6	3.6	7.1
1.7. Imports of goods and services	11.7	0.6	15.5	6.1	4.9
1.8. GDP	6.9	2.2	5.7	1.7	3.5
2. Demand components: Contribution to changes in GDP (%)					
2.1. Consumption	5.4	1.9	4.4	2.0	2.5
2.2. Investment	1.7	-0.3	2.5	0.5	1.3
2.3. Stockbuilding	0.9	-0.2	1.1	0.0	-0.6
2.4. Domestic demand	8.0	1.4	8.0	2.7	3.2
2.5. Exports	2.4	1.1	2.7	1.0	2.1
2.6. Final demand	10.5	2.6	10.8	3.5	5.3
2.7. Imports	-3.5	-0.3	-5.1	-2.0	-1.8
2.8. Net exports	-1.1	0.8	-2.3	-0.9	0.3
3. Gross savings and investment in % of GDP at current prices					
3.1. Private sector savings	18.4	22.9	29.4	24.5	21.3
3.2. Net savings of households	:	:	:	:	3.1
3.3. General government savings	3.5	-2.5	-2.1	-3.1	-0.8
3.4. National savings	21.9	20.3	27.3	21.4	20.4
3.5. Gross capital formation	25.6	28.9	27.5	24.1	24.2
3.6. Current account	0.4	-6.6	-0.2	-2.6	-3.8
4. Determinants of investment					
4.1. Capacity utilisation (survey) (a)	:	:	:	77.5	78.8
4.2. Trend GDP gap	0.2	-0.5	0.2	0.0	-1.9
4.3. Potential GDP gap	:	-1.2	0.5	-0.1	-1.3
4.4. Profitability index (1961–73 = 100)	100.0	52.8	105.5	105.9	89.3
5. Growth potential					
5.1. Growth of net capital stock (real)	2.7	4.7	3.7	3.4	3.0
5.2. Net capital/output ratio (real)	2.3	2.1	2.2	2.3	2.3
5.3. Growth of capital intensity	2.4	5.1	2.6	4.0	1.4
5.4. Labour productivity growth	6.6	2.6	4.6	2.3	1.9
5.5. Total factor productivity growth	5.7	0.8	3.6	0.8	1.4
6. Employment and unemployment					
6.1. Employment	0.0	0.7	1.8	-0.4	0.7
6.2. Activity rate	68.8	69.1	69.6	70.1	69.6
6.3. Employment rate (benchmark)	67.1	64.2	65.2	66.1	64.5
6.4. Employment rate (full-time equivalent)	:	:	:	63.8	61.8
6.5. Unemployment rate (Eurostat definition)	2.5	7.0	6.4	5.7	7.3
7. Prices and wages					
7.1. Nominal wages per head	10.9	24.1	16.7	12.3	6.1
7.2. Real wages per head (b)	6.7	1.6	4.2	4.5	2.4
7.3. Nominal unit labour costs	4.0	20.9	11.6	9.8	4.1
7.4. Real unit labour costs	0.1	0.1	-1.3	1.8	1.1
7.5. GDP deflator	3.9	20.8	13.0	7.9	3.0
7.6. Private consumption deflator	3.9	22.2	11.9	7.5	3.7
7.7. Terms of trade	0.3	-1.7	3.2	2.3	-3.2
8. General government budget, % of GDP					
8.1. Expenditure (c)	18.5	35.2	40.1	46.0	45.8
8.2. Current revenues (c)	19.7	28.4	34.4	39.3	41.0
8.3. Net borrowing (-) or lending (+) (c)	1.2	-6.8	-5.7	-6.7	-4.8
8.4. Net borrowing cyclically adjusted (c)	1.1	-6.6	-5.8	-6.6	-4.3
8.5. Debt (end of period) (d)	15.3	61.5	58.3	64.3	62.9
9. Monetary conditions					
9.1. Long-term interest rate	:	:	16.8	11.8	8.6
9.2. Short-term interest rate	:	14.7	14.6	13.6	7.4
9.3. Yield curve (9.1–9.2)	:	:	2.1	-1.8	1.2
9.4. Real long-term interest rate (e)	:	:	3.3	3.7	5.4
9.5. Nominal effective exchange rate	0.5	-101.6	-4.8	-1.1	0.5
9.6. Real effective exchange rate (1995 = 100; ULC in total economy)	81.5	82.2	70.1	92.3	103.1

(a) Manufacturing industry 2000.

(b) Private consumption deflator.

(c) Break in 1977 (ESA 95 data), 1974–85 average according to the former definition.

(d) Break in 1990 (ESA 95 data).

(e) GDP deflator.

NB: see also notes on p. 335.

(Annual percentage change, unless otherwise stated)

1997	1998	1999	2000	2001	2002	2003	2004	2005
3.3	5.0	5.1	2.6	1.2	0.6	-0.9	0.8	0.9
2.2	4.1	5.6	4.0	3.4	2.9	-0.9	-0.2	0.1
13.9	11.5	6.4	4.4	0.1	-5.1	-9.2	1.0	5.2
16.4	18.5	9.2	4.9	-3.8	-8.1	-8.3	1.4	7.1
13.9	6.9	3.7	4.5	2.7	-3.4	-100	0.7	3.5
7.1	9.1	2.9	8.0	1.9	2.1	3.1	5.1	7.0
10.0	14.2	8.5	5.4	0.9	-0.5	-2.9	3.9	5.5
4.0	4.6	3.8	3.7	1.6	0.4	-0.8	1.0	2.0
2.5	3.9	4.2	2.4	1.4	0.9	-0.8	0.5	0.6
3.2	2.9	1.7	1.2	0.0	-1.4	-2.4	0.2	1.2
-0.2	0.2	0.3	-0.3	0.0	0.0	0.0	0.1	0.0
5.4	7.2	6.4	3.4	1.4	-0.5	-3.2	0.8	1.8
2.2	2.9	1.0	2.7	0.7	0.7	1.1	1.9	2.7
7.7	10.1	7.3	6.0	2.1	0.2	-2.1	2.7	4.5
-3.7	-5.5	-3.6	-2.4	-0.4	0.2	1.3	-1.7	-2.5
-1.5	-2.6	-2.6	0.3	0.2	1.0	2.4	0.2	0.2
19.7	19.4	18.3	17.3	18.4	18.2	20.7	20.4	21.1
1.9	1.3	:	:	:	:	:	:	:
0.4	1.2	1.3	0.7	-0.2	0.0	-2.2	-1.7	-1.2
20.1	20.6	19.6	18.0	18.2	18.1	18.5	18.8	19.8
26.2	27.7	28.3	28.8	28.1	25.8	23.5	23.5	24.1
-6.1	-7.1	-8.7	-100.8	-9.9	-7.7	-4.5	-4.2	-3.8
80.9	81.4	80.8	81.2	81.7	79.4	77.3	:	:
-0.8	1.1	2.3	3.6	3.1	1.5	-1.2	-2.0	-1.7
-0.2	1.2	2.1	3.1	1.9	0.0	-2.5	-3.4	-3.5
90.3	93.2	91.6	81.8	79.7	79.2	77.6	79.8	83.8
4.0	4.8	4.9	4.7	4.2	3.3	2.0	1.9	2.2
2.3	2.3	2.4	2.4	2.5	2.5	2.6	2.6	2.6
2.4	2.0	3.0	2.5	2.9	3.1	3.1	2.0	1.7
2.4	1.8	1.9	1.5	0.3	0.2	0.2	1.1	1.5
1.5	1.1	0.8	0.6	-0.7	-0.9	-0.9	0.3	0.9
2.0	2.7	1.9	2.1	1.3	0.3	-1.0	-0.1	0.6
70.3	70.7	71.3	72.2	72.6	73.1	73.1	73.0	73.1
65.5	67.0	68.0	69.2	69.6	69.2	68.1	67.6	67.5
62.5	64.8	65.7	66.8	67.2	67.1	:	:	:
6.8	5.1	4.5	4.1	4.1	5.1	6.6	7.2	7.3
6.0	5.3	5.4	5.6	5.5	5.3	2.7	2.3	2.5
3.0	2.4	3.2	2.1	2.0	1.6	-0.7	-0.2	0.0
3.6	3.4	3.4	4.1	5.2	5.1	2.5	1.3	1.0
-0.2	-0.4	0.3	0.9	0.4	0.5	-0.9	-1.2	-1.4
3.8	3.8	3.1	3.2	4.8	4.6	3.4	2.5	2.4
2.9	2.8	2.1	3.5	3.5	3.6	3.4	2.6	2.5
-0.1	2.0	0.5	-3.0	2.0	2.7	0.3	0.2	0.2
44.8	44.1	45.2	45.1	46.3	46.0	47.1	46.1	46.4
41.2	41.0	42.4	42.3	42.1	43.3	44.2	42.8	42.6
-3.6	-3.2	-2.8	-2.8	-4.2	-2.7	-2.9	-3.3	-3.9
-3.5	-3.6	-3.5	-4.2	-4.9	-2.7	-2.0	-2.1	-2.6
59.1	55.0	54.3	53.3	55.5	58.1	57.7	58.8	60.2
6.4	4.9	4.8	5.6	5.2	5.0	:	:	:
5.7	4.3	3.0	4.4	4.3	3.3	:	:	:
0.6	0.6	1.8	1.2	0.9	1.7	:	:	:
2.5	1.0	1.6	2.4	0.4	0.4	:	:	:
-2.6	-1.1	-1.2	-2.9	0.4	0.8	3.4	0.4	-0.1
103.0	104.1	104.8	103.9	106.5	110.7	115.3	115.9	:

Table 90

Main economic indicators 1961–2005 Finland

(Annual percentage change, unless otherwise stated)

	1961–73	1974–85	1986–90	1991–95	1996
1. Growth of GDP and its components (real)					
1.1. Private consumption	5.2	2.6	3.6	-1.1	3.7
1.2. Government consumption	5.4	3.9	3.2	-0.4	2.6
1.3. Gross fixed capital formation	4.8	1.2	4.8	-9.1	6.7
1.4. of which equipment	4.6	1.9	6.5	-9.8	10.0
1.5. of which construction	5.1	0.6	3.6	-9.9	6.5
1.6. Exports of goods and services	7.2	4.3	2.4	7.9	5.7
1.7. Imports of goods and services	7.3	3.0	6.2	1.4	5.9
1.8. GDP	5.0	3.0	3.1	-0.9	3.9
2. Demand components: Contribution to changes in GDP (%)					
2.1. Consumption	3.7	2.2	2.5	-0.7	2.5
2.2. Investment	1.4	0.3	1.2	-2.1	1.1
2.3. Stockbuilding	0.1	0.0	0.1	0.3	-1.5
2.4. Domestic demand	5.4	2.7	4.1	-2.8	3.5
2.5. Exports	1.3	1.0	0.6	2.5	2.1
2.6. Final demand	6.6	3.7	4.5	-0.5	4.2
2.7. Imports	-1.4	-0.7	-1.5	-0.5	-1.7
2.8. Net exports	0.0	0.3	-0.9	2.0	0.4
3. Gross savings and investment in % of GDP at current prices					
3.1. Private sector savings	18.8	18.4	16.3	18.6	20.5
3.2. Net savings of households	:	:	1.1	3.6	0.2
3.3. General government savings	7.5	7.8	8.7	-1.0	0.7
3.4. National savings	26.3	26.2	24.9	17.6	21.1
3.5. Gross capital formation	28.0	28.4	27.6	18.5	17.1
3.6. Current account	-1.5	-2.2	-3.3	-1.3	4.0
4. Determinants of investment					
4.1. Capacity utilisation (survey) (a)	:	:	:	:	83.2
4.2. Trend GDP gap	0.1	-0.3	4.7	-5.1	-3.4
4.3. Potential GDP gap	:	-0.3	3.4	-4.7	-1.4
4.4. Profitability index (1961–73 = 100)	100.0	77.1	81.5	75.7	110.0
5. Growth potential					
5.1. Growth of net capital stock (real)	5.3	3.4	3.1	-0.2	-0.1
5.2. Net capital/output ratio (real)	3.2	3.3	3.2	3.5	3.2
5.3. Growth of capital intensity	4.8	3.0	2.7	3.6	-1.4
5.4. Labour productivity growth	4.5	2.6	2.8	2.9	2.5
5.5. Total factor productivity growth	2.8	1.5	1.8	1.6	3.1
6. Employment and unemployment					
6.1. Employment	0.2	1.0	0.5	-3.5	1.4
6.2. Activity rate	72.6	74.7	76.3	73.1	72.6
6.3. Employment rate (benchmark)	70.9	70.9	73.1	63.4	62.0
6.4. Employment rate (full-time equivalent)	:	:	:	:	57.5
6.5. Unemployment rate (Eurostat definition)	2.3	4.9	4.1	13.3	14.6
7. Prices and wages					
7.1. Nominal wages per head	11.1	13.1	8.7	3.2	2.6
7.2. Real wages per head (b)	5.1	2.3	4.1	0.1	0.9
7.3. Nominal unit labour costs	6.3	10.3	5.8	0.3	0.0
7.4. Real unit labour costs	-0.4	0.0	-0.1	-2.1	0.4
7.5. GDP deflator	6.7	10.3	5.9	2.5	-0.3
7.6. Private consumption deflator	5.7	10.6	4.4	3.1	1.6
7.7. Terms of trade	0.1	-0.6	1.8	0.0	-1.2
8. General government budget, % of GDP					
8.1. Expenditure (c)	30.0	39.7	47.4	61.5	59.7
8.2. Current revenues (c)	32.9	43.3	52.1	56.8	56.7
8.3. Net borrowing (-) or lending (+) (c)	2.9	3.7	4.6	-4.7	-2.9
8.4. Net borrowing cyclically adjusted (c)	2.9	3.9	2.5	-1.3	-1.9
8.5. Debt (end of period) (d)	7.8	16.2	14.2	57.1	57.1
9. Monetary conditions					
9.1. Long-term interest rate	8.0	11.2	11.7	10.1	7.1
9.2. Short-term interest rate	:	12.2	11.6	9.0	3.6
9.3. Yield curve (9.1–9.2)	:	-1.0	0.1	1.0	3.5
9.4. Real long-term interest rate (e)	1.2	0.9	5.5	7.4	7.4
9.5. Nominal effective exchange rate	-2.4	-0.4	1.6	-2.7	-2.7
9.6. Real effective exchange rate (1995 = 100; ULC in total economy)	106.8	102.1	116.7	100.6	95.9

(a) Manufacturing industry 2000.

(b) Private consumption deflator.

(c) Break in 1975 (ESA 95 data), 1974–85 average according to the former definition.

(d) Break in 1990 (ESA 95 data).

(e) GDP deflator.

NB: see also notes on p. 335.

(Annual percentage change, unless otherwise stated)

1997	1998	1999	2000	2001	2002	2003	2004	2005
3.4	4.3	3.5	3.1	2.0	1.5	3.2	2.5	2.6
2.9	2.0	1.4	0.0	2.2	4.0	1.8	1.6	1.5
13.8	8.4	2.5	4.1	4.3	-4.0	-2.7	0.5	2.3
11.1	6.0	-3.2	-1.0	13.3	-102.4	-7.5	-1.5	2.0
16.2	10.0	5.0	6.2	-0.7	-2.6	-0.5	1.3	2.4
13.7	9.2	6.5	19.3	-0.8	4.9	1.6	4.2	5.8
11.2	7.9	3.5	16.9	0.2	1.3	1.1	4.0	5.5
6.3	5.0	3.4	5.1	1.2	2.2	1.5	2.5	2.7
2.4	2.6	2.0	1.5	1.4	1.5	1.9	1.6	1.6
2.4	1.6	0.5	0.8	0.8	-0.8	-0.5	0.1	0.4
0.6	0.8	-1.2	1.0	-0.7	0.6	3.9	-3.1	0.0
4.4	3.8	1.8	2.2	1.7	0.3	1.1	1.9	1.9
5.1	3.7	2.7	8.2	-0.4	2.3	0.8	2.1	2.9
10.2	8.3	3.9	10.7	1.3	3.4	1.9	3.8	4.7
-3.3	-2.4	-1.1	-5.4	-0.1	-0.4	-0.4	-1.4	-1.9
1.8	1.2	1.6	2.9	-0.5	1.9	0.4	0.7	1.0
22.6	21.2	20.8	18.2	19.3	19.4	19.9	20.3	20.4
1.3	0.3	0.9	0.1	-0.1	-0.2	:	:	:
1.9	4.6	5.0	9.7	8.0	7.0	5.0	4.1	4.2
24.5	25.8	25.8	27.8	27.3	26.4	24.9	24.5	24.6
19.1	20.1	19.6	20.6	20.6	19.4	18.7	18.4	18.4
5.4	5.7	6.2	7.2	6.9	7.5	6.7	6.5	6.7
87.2	88.9	86.1	86.8	85.7	82.7	81.9	:	:
-0.1	1.8	2.1	4.2	2.3	1.6	0.3	0.0	0.0
1.4	2.8	2.4	3.9	1.5	0.7	-0.5	-0.5	-0.2
129.3	142.9	137.8	147.9	139.0	147.3	148.7	151.5	157.4
0.5	1.0	1.0	1.2	1.4	1.0	0.7	0.7	0.8
3.1	2.9	2.9	2.8	2.8	2.7	2.7	2.7	2.6
-2.7	-1.0	-1.5	-1.0	-0.1	0.6	1.0	0.5	0.4
2.8	2.9	0.8	2.8	-0.3	1.8	1.7	2.3	2.3
3.9	3.3	1.4	3.2	-0.2	1.6	1.3	2.1	2.2
2.0	2.4	3.3	1.7	1.4	0.2	-0.2	0.2	0.4
72.3	72.6	73.7	74.5	74.8	74.8	74.7	74.7	74.8
63.1	64.3	66.2	67.1	67.9	67.9	67.7	67.8	67.9
59.5	60.6	64.2	64.9	65.7	65.8	:	:	:
12.7	11.4	10.2	9.8	9.1	9.1	9.3	9.2	9.1
1.5	4.4	2.2	3.7	4.7	2.3	3.1	3.0	3.1
-0.4	2.4	0.9	0.1	1.2	-0.7	1.4	1.8	1.4
-1.3	1.5	1.3	0.9	5.0	0.4	1.4	0.7	0.7
-3.3	-2.0	1.5	-2.2	2.2	-0.6	0.3	-0.1	-0.8
2.1	3.5	-0.2	3.2	2.7	1.1	1.0	0.8	1.6
1.9	2.0	1.2	3.6	3.4	3.0	1.7	1.1	1.7
-1.6	1.6	-3.1	-3.3	0.3	-1.9	-2.9	-1.1	-0.6
56.4	52.8	52.1	49.0	49.1	50.0	50.9	51.0	50.1
55.1	54.4	54.2	56.1	54.3	54.2	53.4	52.7	52.0
-1.3	1.6	2.2	7.1	5.2	4.2	2.4	1.7	1.9
-2.2	-0.2	0.6	4.5	4.2	3.8	2.8	2.1	2.0
54.1	48.6	47.0	44.6	44.0	42.7	44.6	44.5	44.3
6.0	4.8	4.7	5.5	5.0	5.0	:	:	:
3.2	3.6	3.0	4.4	4.3	3.3	:	:	:
2.7	1.2	1.8	1.1	0.8	1.7	:	:	:
3.8	1.2	4.9	2.2	2.3	3.8	:	:	:
-3.4	-0.5	-2.1	-4.6	1.2	1.3	5.2	0.4	-0.3
90.5	90.1	88.3	83.2	85.9	86.2	90.7	90.9	:

Table 91

Main economic indicators 1961–2005 Sweden

(Annual percentage change, unless otherwise stated)

	1961–73	1974–85	1986–90	1991–95	1996
1. Growth of GDP and its components (real)					
1.1. Private consumption	3.4	1.1	2.7	-0.1	1.6
1.2. Government consumption	4.9	2.7	1.9	1.8	0.7
1.3. Gross fixed capital formation	4.4	0.9	5.4	-3.2	4.5
1.4. of which equipment	:	3.2	6.9	-0.7	9.6
1.5. of which construction	:	-1.1	4.0	-6.7	0.5
1.6. Exports of goods and services	7.7	3.4	3.1	6.7	3.7
1.7. Imports of goods and services	6.0	2.5	4.8	2.6	3.0
1.8. GDP	4.1	1.8	2.5	1.3	1.3
2. Demand components: Contribution to changes in GDP (%)					
2.1. Consumption	3.1	1.3	2.0	0.4	1.0
2.2. Investment	0.9	0.1	1.0	-0.6	0.7
2.3. Stockbuilding	-0.1	0.0	0.0	0.2	-0.9
2.4. Domestic demand	3.9	1.6	2.9	-0.2	0.8
2.5. Exports	1.3	0.9	0.9	2.3	1.5
2.6. Final demand	5.3	2.4	3.9	2.3	2.3
2.7. Imports	-1.2	-0.6	-1.4	-0.8	-1.0
2.8. Net exports	0.2	0.3	-0.4	1.5	0.5
3. Gross savings and investment in % of GDP at current prices					
3.1. Private sector savings	:	16.7	16.2	21.0	19.6
3.2. Net savings of households	:	:	:	:	3.7
3.3. General government savings	:	2.9	5.4	-3.9	0.5
3.4. National savings	24.7	19.6	21.7	17.1	20.1
3.5. Gross capital formation	25.6	21.2	21.8	17.3	16.5
3.6. Current account	0.2	-1.1	-0.2	-0.1	3.5
4. Determinants of investment					
4.1. Capacity utilisation (survey) (a)	:	:	:	:	85.0
4.2. Trend GDP gap	0.2	-0.4	2.3	-2.0	-1.4
4.3. Potential GDP gap	:	0.0	2.4	-2.2	-1.2
4.4. Profitability index (1961–73 = 100)	100.0	89.4	110.0	124.3	151.8
5. Growth potential					
5.1. Growth of net capital stock (real)	3.6	2.0	2.2	0.8	1.1
5.2. Net capital/output ratio (real)	2.8	2.9	2.8	2.9	2.8
5.3. Growth of capital intensity	3.0	1.2	1.2	2.9	1.9
5.4. Labour productivity growth	3.5	1.0	1.4	3.4	2.2
5.5. Total factor productivity growth	2.4	0.6	1.0	2.3	1.4
6. Employment and unemployment					
6.1. Employment	0.6	0.9	0.8	-2.2	-0.6
6.2. Activity rate	73.9	80.2	82.3	79.2	77.9
6.3. Employment rate (benchmark)	72.5	78.2	80.6	73.5	70.3
6.4. Employment rate (full-time equivalent)	:	:	:	:	62.8
6.5. Unemployment rate (Eurostat definition)	1.9	2.4	2.0	7.2	9.6
7. Prices and wages					
7.1. Nominal wages per head	8.4	10.7	9.2	4.8	7.3
7.2. Real wages per head (b)	3.5	0.4	2.5	0.0	5.9
7.3. Nominal unit labour costs	4.7	9.6	7.6	1.3	5.0
7.4. Real unit labour costs	-0.2	-0.2	0.7	-2.0	3.7
7.5. GDP deflator	4.9	9.8	6.9	3.4	1.2
7.6. Private consumption deflator	4.8	10.2	6.5	4.8	1.3
7.7. Terms of trade	-0.5	-1.4	0.9	-0.5	-0.4
8. General government budget, % of GDP					
8.1. Expenditure (c)	:	57.8	58.4	64.5	65.3
8.2. Current revenues (c)	:	56.0	61.5	57.1	62.4
8.3. Net borrowing (-) or lending (+) (c)	:	-1.7	3.1	-7.4	-2.9
8.4. Net borrowing cyclically adjusted (c)	:	-1.3	1.4	-6.0	-2.1
8.5. Debt (end of period) (d)	27.0	62.4	42.3	73.6	73.5
9. Monetary conditions					
9.1. Long-term interest rate	6.3	11.0	11.5	9.8	8.0
9.2. Short-term interest rate	:	:	11.0	10.1	5.9
9.3. Yield curve (9.1–9.2)	:	:	0.5	-0.3	2.2
9.4. Real long-term interest rate (e)	1.4	1.2	4.3	6.3	6.7
9.5. Nominal effective exchange rate	0.3	-2.2	-0.1	-4.1	9.7
9.6. Real effective exchange rate (1995 = 100; ULC in total economy)	136.9	127.0	119.7	113.0	113.9

(a) Manufacturing industry.

(b) Private consumption deflator.

(c) Break in 1993 (ESA 95 data), 1991–95 average according to the former definition.

(d) Break in 1995 (ESA 95 data).

(e) GDP deflator.

NB: see also notes on p. 335.

(Annual percentage change, unless otherwise stated)

1997	1998	1999	2000	2001	2002	2003	2004	2005
2.7	3.0	3.8	4.9	0.2	1.3	1.8	2.3	2.3
-0.9	3.4	1.7	-1.1	0.9	2.1	0.8	0.6	0.7
-0.3	7.8	8.2	6.6	0.8	-2.5	-1.1	2.2	4.9
3.5	10.2	11.8	6.8	-1.1	-4.0	-2.1	2.5	4.7
-7.7	1.9	0.0	4.2	4.9	1.0	0.2	2.0	5.1
13.8	8.6	7.4	11.3	-0.8	0.4	4.2	6.0	6.8
12.5	11.3	4.9	11.5	-3.5	-2.7	4.3	5.6	7.0
2.4	3.6	4.6	4.4	1.1	1.9	1.4	2.2	2.6
1.1	2.3	2.3	2.1	0.3	1.1	1.1	1.3	1.3
0.0	1.2	1.4	1.1	0.1	-0.4	-0.2	0.4	0.8
0.2	0.3	-0.5	0.4	-0.4	-0.1	0.2	0.0	0.0
1.0	3.9	3.0	3.4	0.0	0.6	1.1	1.6	2.0
5.6	3.8	3.4	5.4	-0.4	0.2	2.1	3.1	3.6
6.7	7.8	6.6	9.1	-0.4	0.8	3.0	4.4	5.4
-4.1	-4.1	-1.9	-4.5	1.5	1.1	-1.7	-2.2	-2.8
1.4	-0.3	1.5	0.9	1.1	1.3	0.4	0.9	0.8
18.7	16.6	17.2	16.3	14.8	17.2	17.4	17.2	17.2
2.6	1.3	1.7	1.2	2.7	4.4	:	:	:
1.8	4.5	4.6	6.2	7.5	4.2	3.4	3.6	4.1
20.5	21.1	21.7	22.5	22.3	21.4	20.8	20.8	21.2
16.2	17.2	17.5	18.5	18.1	17.2	16.9	16.7	16.9
4.3	3.9	4.2	4.0	4.2	4.2	4.0	4.1	4.4
85.8	85.0	85.8	87.5	83.6	83.1	83.5	:	:
-1.5	-0.5	1.4	3.1	1.6	1.0	0.0	-0.2	0.0
-1.0	-0.2	1.5	3.0	1.4	0.7	-0.3	-0.6	-0.7
156.9	159.4	166.4	156.1	138.4	135.3	138.9	146.1	154.3
1.0	1.2	1.4	1.5	1.2	0.9	0.7	0.8	1.1
2.7	2.7	2.6	2.5	2.5	2.5	2.5	2.4	2.4
2.3	-0.3	-0.6	-0.9	-0.7	0.7	0.9	0.8	0.9
3.8	2.1	2.4	1.9	-0.8	1.7	1.6	2.2	2.4
2.9	2.2	2.7	2.2	-0.5	1.5	1.2	1.9	2.0
-1.0	1.5	2.2	2.2	1.9	0.1	-0.2	0.0	0.2
77.2	76.7	76.9	77.3	77.8	77.5	77.5	77.1	76.6
69.5	70.3	71.6	72.9	73.9	73.5	72.9	72.4	72.0
61.9	62.4	63.8	65.1	68.4	68.1	:	:	:
9.9	8.2	6.7	5.6	4.9	4.9	5.7	5.8	5.7
4.7	2.6	1.2	7.0	5.0	3.9	3.7	3.7	3.8
2.8	1.8	0.1	5.7	2.8	1.8	1.7	2.2	2.2
0.9	0.5	-1.2	5.0	5.8	2.1	2.1	1.5	1.4
-0.7	-0.2	-1.8	3.7	3.7	0.8	0.1	-0.5	-0.6
1.5	0.8	0.7	1.3	2.0	1.3	2.1	2.0	2.0
1.9	0.8	1.1	1.2	2.1	2.0	2.0	1.5	1.6
-0.9	-0.8	-2.7	-2.3	-1.7	-2.3	-0.1	0.1	0.0
63.1	60.7	60.2	57.4	57.2	58.2	59.0	58.7	57.8
61.4	63.0	61.6	60.9	61.7	59.5	59.2	59.2	58.8
-1.7	2.3	1.5	3.4	4.5	1.3	0.2	0.5	1.0
-1.0	2.4	0.4	1.4	3.5	0.8	0.4	0.9	1.5
70.5	68.0	62.7	52.8	54.4	52.7	51.7	51.4	50.0
6.6	5.0	5.0	5.4	5.1	5.3	:	:	:
4.5	4.3	3.3	4.1	4.1	4.2	:	:	:
2.2	0.7	1.7	1.3	1.0	1.1	:	:	:
5.0	4.2	4.3	4.0	3.0	3.9	:	:	:
-4.1	-1.6	-1.8	-0.5	-8.3	2.1	6.1	2.0	-0.7
109.0	106.0	101.3	103.9	97.9	100.7	107.6	110.3	:

Table 92

Main economic indicators 1961–2005 United Kingdom

(Annual percentage change, unless otherwise stated)

	1961–73	1974–85	1986–90	1991–95	1996
1. Growth of GDP and its components (real)					
1.1. Private consumption	3.1	1.6	4.7	1.3	3.6
1.2. Government consumption	2.6	1.4	1.0	1.1	0.7
1.3. Gross fixed capital formation	4.6	0.9	5.7	-0.3	5.7
1.4. of which equipment	:	1.9	4.9	1.1	9.7
1.5. of which construction	:	-0.7	8.1	-1.8	-0.5
1.6. Exports of goods and services	5.4	3.3	4.2	5.4	8.6
1.7. Imports of goods and services	5.2	2.6	7.0	3.3	9.7
1.8. GDP	3.3	1.4	3.3	1.7	2.7
2. Demand components: Contribution to changes in GDP (%)					
2.1. Consumption	2.4	1.3	3.2	1.1	2.5
2.2. Investment	0.8	0.1	1.0	-0.1	0.9
2.3. Stockbuilding	0.1	-0.1	-0.1	0.2	-0.4
2.4. Domestic demand	3.3	1.2	4.1	1.2	3.0
2.5. Exports	0.8	0.7	0.9	1.4	2.4
2.6. Final demand	4.2	2.0	5.0	2.6	5.5
2.7. Imports	-0.9	-0.5	-1.7	-0.9	-2.8
2.8. Net exports	0.0	0.1	-0.7	0.5	-0.4
3. Gross savings and investment in % of GDP at current prices					
3.1. Private sector savings	16.3	18.3	15.2	17.8	17.9
3.2. Net savings of households	:	4.0	1.6	4.6	3.9
3.3. General government savings	4.1	0.5	1.8	-2.9	-2.1
3.4. National savings	20.4	18.8	17.1	14.9	15.8
3.5. Gross capital formation	20.0	19.1	20.2	16.5	16.8
3.6. Current account	0.4	0.2	-3.2	-1.6	-0.9
4. Determinants of investment					
4.1. Capacity utilisation (survey) (a)	:	79.1	84.6	81.0	82.5
4.2. Trend GDP gap	0.2	-0.8	2.8	-1.7	-0.6
4.3. Potential GDP gap	:	-1.0	2.3	-1.8	0.0
4.4. Profitability index (1961–73 = 100)	100.0	75.3	90.6	102.4	124.7
5. Growth potential					
5.1. Growth of net capital stock (real)	3.1	1.7	2.2	1.3	1.8
5.2. Net capital/output ratio (real)	3.0	3.1	2.9	2.9	2.8
5.3. Growth of capital intensity	2.8	1.8	0.3	2.3	0.2
5.4. Labour productivity growth	2.9	1.5	1.4	2.7	1.1
5.5. Total factor productivity growth	1.9	0.8	1.2	1.8	1.0
6. Employment and unemployment					
6.1. Employment	0.3	-0.1	2.0	-0.7	1.2
6.2. Activity rate	71.0	72.6	75.2	75.8	75.8
6.3. Employment rate (benchmark)	69.6	67.6	68.5	68.8	69.7
6.4. Employment rate (full-time equivalent)	:	:	:	59.2	59.4
6.5. Unemployment rate (Eurostat definition)	1.9	6.8	8.8	9.2	8.0
7. Prices and wages					
7.1. Nominal wages per head	8.2	13.8	8.3	5.1	3.1
7.2. Real wages per head (b)	3.3	1.7	2.7	0.8	-0.2
7.3. Nominal unit labour costs	5.1	12.1	6.9	2.3	2.0
7.4. Real unit labour costs	0.1	-0.2	0.8	-1.1	-1.3
7.5. GDP deflator	5.1	12.4	6.0	3.5	3.4
7.6. Private consumption deflator	4.8	11.9	5.4	4.3	3.4
7.7. Terms of trade	-0.4	0.5	0.0	-0.3	1.2
8. General government budget, % of GDP					
8.1. Expenditure (c)	35.7	49.2	42.5	44.9	42.7
8.2. Current revenues (c)	35.4	43.4	41.7	38.9	38.6
8.3. Net borrowing (-) or lending (+) (c)	-0.3	-3.7	-0.9	-6.0	-4.2
8.4. Net borrowing cyclically adjusted (c)	-0.3	-3.1	-2.0	-5.1	-4.2
8.5. Debt (end of period) (d)	64.9	52.7	34.0	51.8	52.2
9. Monetary conditions					
9.1. Long-term interest rate	7.6	13.0	10.1	8.6	7.9
9.2. Short-term interest rate	6.8	11.9	11.9	7.9	6.0
9.3. Yield curve (9.1–9.2)	0.8	1.1	-1.8	0.7	1.9
9.4. Real long-term interest rate (e)	2.4	0.7	3.9	4.9	4.4
9.5. Nominal effective exchange rate	-2.1	-2.2	-1.0	-3.0	1.6
9.6. Real effective exchange rate (1995 = 100; ULC in total economy)	107.2	100.6	107.9	109.3	102.5

(a) Manufacturing industry.

(b) Private consumption deflator.

(c) From 1974 (ESA 95 data), 1961–73 average according to the former definition.

(d) Break in 1990 (ESA 95 data).

(e) GDP deflator.

NB: see also notes on p. 335.

(Annual percentage change, unless otherwise stated)

1997	1998	1999	2000	2001	2002	2003	2004	2005
3.6	3.9	4.4	4.6	3.1	3.6	2.3	2.2	2.3
-0.3	1.3	3.2	1.9	1.7	2.4	3.6	2.1	2.0
6.8	12.7	1.6	3.6	3.6	1.8	3.1	4.8	4.8
10.5	17.2	7.9	1.8	0.8	-6.7	-0.8	4.8	6.4
4.4	3.5	2.7	4.3	-6.7	6.9	6.3	5.0	3.5
8.4	2.8	4.3	9.4	2.5	-0.9	-0.6	5.1	6.6
9.8	9.3	7.9	9.1	4.5	3.6	0.9	4.7	5.5
3.3	3.1	2.8	3.8	2.1	1.7	2.0	2.8	2.9
2.3	2.8	3.5	3.4	2.4	2.8	2.2	1.9	2.0
1.1	2.2	0.3	0.7	0.7	0.3	0.6	0.9	0.9
0.3	0.1	0.2	-0.1	-0.2	-0.2	-0.3	0.2	0.1
3.7	5.0	3.9	3.9	2.8	3.0	2.5	3.0	2.9
2.5	0.9	1.3	3.0	0.8	-0.3	-0.2	1.6	2.2
6.2	5.9	5.2	6.7	3.7	2.8	2.4	4.5	4.9
-3.0	-3.0	-2.7	-3.3	-1.7	-1.4	-0.4	-1.8	-2.2
-0.5	-2.2	-1.4	-0.3	-0.9	-1.7	-0.5	-0.2	-0.1
17.5	16.0	12.9	12.7	13.0	14.7	14.8	14.9	15.2
4.0	1.6	0.6	0.7	1.5	0.3	:	:	:
-0.6	1.7	2.5	2.8	2.3	0.1	-0.6	-0.2	0.4
16.9	17.7	15.5	15.4	15.3	14.8	14.2	14.7	15.6
17.1	18.2	17.8	17.5	17.1	16.5	16.3	16.8	17.2
-0.1	-0.5	-2.3	-2.1	-1.8	-1.8	-2.3	-2.2	-1.7
83.8	83.7	79.4	81.3	79.7	79.0	78.4	:	:
0.0	0.4	0.5	1.5	1.0	0.1	-0.6	-0.4	-0.2
0.6	0.8	0.6	1.5	0.7	-0.2	-0.9	-0.7	-0.6
131.7	135.4	135.8	132.2	132.3	138.8	137.0	136.6	137.0
1.9	2.5	2.5	2.4	2.4	2.3	2.4	2.5	2.7
2.8	2.8	2.8	2.7	2.7	2.7	2.8	2.7	2.7
0.1	1.3	0.9	1.3	1.8	2.2	1.7	2.0	2.2
1.5	1.9	1.2	2.7	1.5	1.6	1.4	2.3	2.4
1.4	1.4	0.9	2.2	0.9	0.8	0.8	1.6	1.6
2.0	1.2	1.4	1.6	1.0	0.1	0.7	0.5	0.5
76.1	76.2	76.7	77.1	77.2	77.0	76.9	76.9	76.9
70.9	71.5	72.1	73.0	73.3	73.0	73.1	73.1	73.1
60.2	60.7	61.2	61.7	62.2	62.1	:	:	:
6.9	6.2	5.9	5.4	5.0	5.1	4.9	4.9	4.9
4.5	5.6	4.4	6.0	4.7	4.3	4.3	4.4	4.4
2.0	2.9	2.6	4.8	2.4	2.9	3.1	3.1	3.1
3.0	3.7	3.1	3.2	3.1	2.6	2.9	2.0	1.9
0.1	0.9	0.8	1.8	0.8	-0.6	0.5	0.1	-0.1
2.9	2.8	2.3	1.4	2.3	3.2	2.4	1.9	2.0
2.5	2.6	1.7	1.1	2.2	1.3	1.2	1.2	1.2
3.3	2.1	0.6	-0.9	-0.7	3.4	0.2	0.3	0.5
41.1	39.8	39.2	36.9	40.5	41.3	42.8	43.1	43.2
38.9	39.9	40.3	40.8	41.2	39.8	40.0	40.4	40.8
-2.2	0.1	1.1	3.9	0.7	-1.5	-2.8	-2.7	-2.4
-2.5	-0.3	0.8	0.8	0.4	-1.4	-2.4	-2.3	-2.1
50.8	47.6	45.0	42.1	38.9	38.5	39.6	40.5	41.0
7.1	5.6	5.0	5.3	5.0	4.9	:	:	:
6.8	7.3	5.5	6.2	5.0	4.1	:	:	:
0.3	-1.7	-0.5	-0.9	0.0	0.9	:	:	:
4.2	2.7	2.6	3.9	2.6	1.6	:	:	:
15.9	3.9	-0.5	2.8	-1.7	0.7	-4.3	-0.9	-0.7
121.3	129.1	130.9	136.3	134.4	137.4	134.0	134.4	:

Table 93

Main economic indicators 1961–2005

EU-15

(Annual percentage change, unless otherwise stated)

	1961–73	1974–85	1986–90	1991–95	1996
1. Growth of GDP and its components (real) (a)					
1.1. Private consumption	4.8	2.1	3.6	1.3	1.9
1.2. Government consumption	4.0	2.8	2.2	1.7	1.6
1.3. Gross fixed capital formation	5.6	0.2	5.6	-0.3	1.9
1.4. of which equipment	:	1.9	:	:	4.8
1.5. of which construction	:	-1.0	:	:	-0.9
1.6. Exports of goods and services	8.0	4.2	5.0	5.6	5.0
1.7. Imports of goods and services	8.6	2.8	7.3	3.9	4.1
1.8. GDP	4.7	2.0	3.2	1.5	1.6
2. Demand components: Contribution to changes in GDP (%) (b)					
2.1. Consumption	3.5	1.7	2.5	1.1	1.4
2.2. Investment	1.2	0.0	1.1	0.0	0.4
2.3. Stockbuilding	0.0	-0.1	0.1	0.0	-0.5
2.4. Domestic demand	4.8	1.7	3.7	1.1	1.3
2.5. Exports	:	0.4	0.1	0.7	0.7
2.6. Final demand	:	2.1	3.8	1.8	2.0
2.7. Imports	:	-0.1	-0.5	-0.2	-0.4
2.8. Net exports	-0.1	0.3	-0.4	0.5	0.3
3. Gross savings and investment in % of GDP at current prices (b)					
3.1. Private sector savings	:	21.7	21.6	21.9	22.1
3.2. Net savings of households	:	:	:	:	7.1
3.3. General government savings	:	0.4	0.3	-1.6	-2.0
3.4. National savings	25.1	22.1	21.9	20.3	20.6
3.5. Gross capital formation	25.5	22.8	21.9	20.7	19.7
3.6. Current account	0.5	-0.5	0.0	-0.4	0.9
4. Determinants of investment					
4.1. Capacity utilisation (survey) (b) (c)	:	79.3	83.1	80.7	81.0
4.2. Trend GDP gap (b)	0.2	-0.3	0.5	0.1	-1.2
4.3. Potential GDP gap (b)	:	-0.4	0.5	-0.1	-1.0
4.4. Profitability index (1961–73 = 100) (a)	100.0	73.2	88.8	94.4	104.1
5. Growth potential					
5.1. Growth of net capital stock (real) (a)	4.5	2.8	2.4	2.1	1.9
5.2. Net capital/output ratio (real) (b)	2.9	3.1	3.1	3.1	3.1
5.3. Growth of capital intensity (a)	4.2	2.7	0.9	2.6	1.4
5.4. Labour productivity growth (a)	4.4	1.9	1.8	2.1	1.1
5.5. Total factor productivity growth (a)	3.0	1.0	1.4	1.1	0.5
6. Employment and unemployment					
6.1. Employment (a)	0.3	0.1	1.5	-0.4	0.7
6.2. Activity rate (b)	65.6	65.0	65.7	67.3	67.5
6.3. Employment rate (b) (benchmark)	64.2	61.0	60.1	61.0	60.7
6.4. Employment rate (b) (full-time equivalent)	:	:	:	:	55.4
6.5. Unemployment rate (b) (Eurostat definition)	:	:	:	9.5	10.2
7. Prices and wages (a)					
7.1. Nominal wages per head	9.7	11.7	5.8	5.0	2.8
7.2. Real wages per head (d)	5.0	1.5	1.6	0.8	0.1
7.3. Nominal unit labour costs	5.1	9.5	4.0	2.9	1.7
7.4. Real unit labour costs	0.0	-0.2	-0.7	-0.7	-0.6
7.5. GDP deflator	5.1	9.7	4.7	3.6	2.3
7.6. Private consumption deflator	4.6	10.0	4.1	4.1	2.6
8. General government budget, % of GDP (b)					
8.1. Expenditure (e)	:	45.5	47.5	50.0	50.4
8.2. Current revenues (e)	:	41.8	44.2	44.9	45.0
8.3. Net borrowing (-) or lending (+) (e)	:	-3.7	-3.3	-5.1	-5.4
8.4. Net borrowing cyclically adjusted (e)	:	-3.5	-3.5	-5.1	-5.0
8.5. Debt (end of period) (f)	:	53.0	54.1	70.3	72.1
9. Monetary conditions					
9.1. Long-term interest rate (b)	7.1	11.9	9.8	9.0	7.5
9.2. Short-term interest rate (b)	5.6	11.2	9.8	8.9	5.4
9.3. Yield curve (9.1–9.2) (b)	1.3	0.7	0.0	0.2	2.1
9.4. Real long-term interest rate (b) (g)	1.8	1.2	4.6	5.1	4.9
9.5. Nominal effective exchange rate (a)	0.3	-3.8	6.4	-2.2	2.7
9.6. Real effective exchange rate (a) (1995 = 100; ULC in total economy)	94.2	97.2	98.8	101.6	104.1

(a) 1961–91: including West Germany.

(b) 1961–90: including West Germany.

(c) Manufacturing industry.

(d) Private consumption deflator.

(e) Break in 1995 (ESA 95 data), 1991–95 average according to the former definition.

(f) Break in 1995 (ESA 95 data).

(g) GDP deflator.

NB: see also notes on p. 335.

(Annual percentage change, unless otherwise stated)

1997	1998	1999	2000	2001	2002	2003	2004	2005
2.0	3.2	3.6	3.0	2.0	1.2	1.5	1.8	2.1
1.0	1.5	2.0	1.9	2.3	2.7	2.0	1.4	1.5
3.1	6.4	5.3	5.0	0.6	-1.9	-0.4	2.7	3.4
6.5	10.8	8.4	7.1	-0.4	-4.9	-1.7	3.4	4.8
0.3	1.9	3.3	3.0	-0.9	-0.5	0.6	2.0	1.9
10.1	6.6	5.3	12.0	3.0	1.4	0.0	5.1	6.6
9.3	9.9	7.4	10.9	2.0	0.7	1.5	5.1	6.5
2.5	2.9	2.8	3.6	1.7	1.1	0.8	2.0	2.4
1.3	2.2	2.5	2.2	1.6	1.2	1.3	1.3	1.5
0.6	1.3	1.1	1.0	0.1	-0.4	-0.1	0.6	0.7
0.1	0.3	-0.1	-0.1	-0.4	0.0	0.1	0.0	0.0
2.1	3.7	3.4	3.1	1.4	0.8	1.4	1.9	2.2
1.4	0.7	0.5	2.2	0.7	0.0	0.1	0.8	1.1
3.5	4.5	3.9	5.2	2.0	0.9	1.4	2.7	3.3
-1.0	-1.5	-1.1	-1.7	-0.3	0.2	-0.7	-0.7	-1.0
0.4	-0.9	-0.6	0.5	0.3	0.2	-0.6	0.0	0.1
20.9	20.0	18.5	18.1	18.3	19.2	19.4	19.5	19.6
6.6	5.5	:	:	:	:	:	:	:
0.1	1.2	2.2	2.6	2.1	0.9	0.2	0.4	0.7
21.0	21.2	20.8	20.7	20.4	20.1	19.5	19.9	20.3
19.7	20.4	20.6	21.1	20.2	19.3	19.0	19.2	19.4
1.3	0.8	0.2	-0.4	0.2	0.7	0.5	0.7	0.9
81.8	83.3	81.6	83.4	83.1	81.1	80.6	:	:
-0.9	-0.2	0.5	1.9	1.5	0.5	-0.8	-0.8	-0.5
-0.5	0.1	0.7	1.9	1.3	0.2	-1.1	-1.2	-1.1
108.9	113.5	114.6	113.1	111.9	112.6	111.5	114.4	116.6
1.9	2.2	2.3	2.4	2.2	1.9	1.8	1.8	1.9
3.1	3.1	3.1	3.1	3.1	3.1	3.1	3.1	3.1
1.1	0.4	0.7	0.5	1.0	1.6	1.8	1.5	1.2
1.6	1.1	1.2	1.6	0.5	0.7	0.7	1.6	1.6
1.2	1.0	1.0	1.4	0.1	0.1	0.0	1.0	1.1
1.0	1.7	2.0	2.2	1.4	0.5	0.0	0.4	0.8
67.9	68.5	69.1	69.8	70.3	70.6	70.7	70.9	71.1
61.1	62.1	63.2	64.4	65.2	65.2	65.1	65.1	65.5
55.6	56.2	57.2	58.1	58.7	58.9	:	:	:
10.0	9.4	8.7	7.8	7.4	7.7	8.1	8.2	8.1
2.5	2.1	2.6	3.5	3.3	3.1	3.1	2.9	3.0
0.4	0.4	1.3	1.5	1.0	1.0	1.2	1.1	1.3
0.9	0.9	1.4	1.9	2.8	2.3	2.3	1.2	1.3
-0.9	-0.9	0.0	0.4	0.4	-0.2	0.1	-0.7	-0.4
1.8	1.9	1.3	1.4	2.4	2.5	2.2	1.9	1.7
2.1	1.7	1.3	2.0	2.3	2.1	1.8	1.8	1.6
49.3	48.3	47.7	45.7	47.1	47.4	48.4	48.0	47.6
46.8	46.6	47.0	46.7	46.2	45.5	45.7	45.4	45.2
-2.5	-1.7	-0.7	1.0	-0.9	-1.9	-2.7	-2.6	-2.4
-2.3	-1.8	-1.1	-1.2	-1.6	-2.1	-2.2	-2.0	-2.0
71.1	69.0	67.4	64.3	63.0	62.7	64.3	64.6	64.5
6.3	4.9	4.7	5.4	5.0	4.9	:	:	:
4.9	4.7	3.5	4.7	4.4	3.5	:	:	:
1.4	0.3	1.2	0.7	0.6	1.5	:	:	:
4.3	2.9	3.3	3.9	2.5	2.3	:	:	:
-5.0	2.4	-6.2	-101.3	-0.3	4.3	12.6	1.1	-1.1
98.4	99.7	93.5	82.7	81.7	87.6	102.0	103.5	:

Table 94

Main economic indicators 1961–2005

EUR-12 (a)

(Annual percentage change, unless otherwise stated)

	1961–73	1974–85	1986–90	1991–95	1996
1. Growth of GDP and its components (real) (b)					
1.1. Private consumption	5.4	2.2	3.5	1.3	1.6
1.2. Government consumption	4.3	3.0	2.5	1.8	1.7
1.3. Gross fixed capital formation	5.7	0.1	5.7	-0.1	1.3
1.4. of which equipment	:	1.8	:	:	4.0
1.5. of which construction	:	-1.1	:	:	-1.1
1.6. Exports of goods and services	8.7	4.5	5.2	5.7	4.5
1.7. Imports of goods and services	9.8	2.9	7.5	4.1	3.3
1.8. GDP	5.1	2.1	3.3	1.5	1.4
2. Demand components: Contribution to changes in GDP (%) (c)					
2.1. Consumption	3.8	1.8	2.5	1.1	1.2
2.2. Investment	1.4	0.0	1.1	0.0	0.3
2.3. Stockbuilding	0.1	-0.1	0.1	0.0	-0.5
2.4. Domestic demand	5.3	1.8	3.7	1.1	1.0
2.8. Net exports	-0.1	0.4	-0.4	0.5	0.4
3. Gross savings and investment in % of GDP at current prices (c)					
3.1. Private sector savings	:	22.5	23.0	22.6	22.6
3.2. Net savings of households	:	:	:	:	7.8
3.3. General government savings	:	0.4	-0.2	-1.3	-1.5
3.4. National savings	26.2	22.9	22.8	21.3	21.4
3.5. Gross capital formation	26.8	23.6	22.2	21.5	20.3
3.6. Current account	0.6	-0.5	0.6	-0.2	1.1
4. Determinants of investment					
4.1. Capacity utilisation (survey) (c) (d)	:	79.3	82.8	80.8	80.6
4.2. Trend GDP gap (c)	0.2	-0.2	0.0	0.5	-1.3
4.3. Potential GDP gap (c)	:	-0.3	0.1	0.2	-1.1
4.4. Profitability index (1961–73 = 100) (b)	100.0	70.8	88.3	93.2	100.5
5. Growth potential					
5.1. Growth of net capital stock (real) (b)	4.9	3.0	2.5	2.3	2.0
5.2. Net capital/output ratio (real) (c)	2.9	3.1	3.1	3.2	3.2
5.3. Growth of capital intensity (b)	4.6	2.9	1.0	2.6	1.7
5.4. Labour productivity growth (b)	4.8	2.1	1.9	1.9	1.1
5.5. Total factor productivity growth (b)	3.2	1.1	1.5	0.9	0.5
6. Employment and unemployment					
6.1. Employment (b)	0.3	0.1	1.5	-0.3	0.6
6.2. Activity rate (c)	64.0	62.7	63.0	65.2	65.5
6.3. Employment rate (c) (benchmark)	62.5	58.9	57.5	58.9	58.5
6.4. Employment rate (c) (full-time equivalent)	:	:	:	:	54.3
6.5. Unemployment rate (c) (Eurostat definition)	:	:	:	9.6	10.8
7. Prices and wages (b)					
7.1. Nominal wages per head	10.3	11.3	5.1	5.0	2.6
7.2. Real wages per head (e)	5.6	1.4	1.3	0.9	0.0
7.3. Nominal unit labour costs	5.2	9.0	3.2	3.1	1.5
7.4. Real unit labour costs	0.1	-0.3	-1.1	-0.6	-0.7
7.5. GDP deflator	5.1	9.3	4.4	3.7	2.1
7.6. Private consumption deflator	4.4	9.7	3.7	4.0	2.5
8. General government budget, % of GDP (c)					
8.1. Expenditure (f)	:	45.1	48.2	50.6	51.0
8.2. Current revenues (f)	:	41.2	44.0	45.6	46.0
8.3. Net borrowing (-) or lending (+) (f)	:	-3.9	-4.2	-5.0	-5.1
8.4. Net borrowing cyclically adjusted (f)	:	-3.8	-4.2	-5.2	-4.7
8.5. Debt (end of period) (g)	:	52.1	58.2	73.2	75.6
9. Monetary conditions					
9.1. Long-term interest rate (c)	6.9	11.6	9.6	9.1	7.4
9.2. Short-term interest rate (c)	5.2	11.0	9.3	9.0	5.3
9.3. Yield curve (9.1–9.2) (c)	1.7	0.6	0.3	0.1	2.2
9.4. Real long-term interest rate (c) (h)	1.6	1.5	4.7	5.1	4.9
9.5. Nominal effective exchange rate (b)	1.4	-1.9	6.0	-0.2	0.5
9.6. Real effective exchange rate (b) (1995 = 100; ULC in total economy)	88.4	95.5	94.4	96.7	100.7

(a) EU-15 excluding DK, SE and UK.

(b) 1961–91: including West Germany.

(c) 1961–90: including West Germany.

(d) Manufacturing industry.

(e) Private consumption deflator.

(f) Break in 1995 (ESA 95 data), 1991–95 average according to the former definition.

(g) Break in 1990 (ESA 95 data).

(h) GDP deflator.

NB: see also notes on p. 335.

(Annual percentage change, unless otherwise stated)

1997	1998	1999	2000	2001	2002	2003	2004	2005
1.6	3.1	3.5	2.7	1.8	0.5	1.3	1.6	2.0
1.2	1.4	1.8	2.1	2.5	2.9	1.7	1.3	1.4
2.5	5.3	6.0	5.1	0.0	-2.6	-1.0	2.4	3.0
5.7	9.4	8.5	8.2	-0.9	-4.6	-1.8	3.2	4.5
-0.1	1.6	3.7	2.7	0.1	-1.7	-0.4	1.5	1.6
10.4	7.3	5.2	12.5	3.3	1.7	-0.1	5.1	6.7
9.1	10.0	7.5	11.2	1.7	0.1	1.5	5.2	6.6
2.3	2.9	2.8	3.5	1.7	0.9	0.4	1.8	2.3
1.2	2.0	2.3	2.0	1.5	0.9	1.1	1.2	1.4
0.5	1.1	1.3	1.1	0.0	-0.6	-0.2	0.5	0.6
0.1	0.4	-0.1	-0.1	-0.4	0.0	0.2	0.0	0.0
1.8	3.5	3.4	2.9	1.1	0.3	1.0	1.7	2.1
0.6	-0.6	-0.6	0.6	0.6	0.6	-0.6	0.1	0.2
21.7	21.1	19.9	19.4	19.6	20.3	20.4	20.6	20.6
7.3	6.5	:	:	:	:	:	:	:
0.2	0.9	2.0	2.4	1.8	0.9	0.2	0.4	0.6
21.9	22.0	21.9	21.8	21.4	21.2	20.6	20.9	21.2
20.4	21.0	21.4	22.0	21.0	20.1	19.7	19.8	20.0
1.5	0.9	0.5	-0.2	0.4	1.1	0.9	1.2	1.3
81.0	82.9	81.8	83.8	83.6	81.4	80.9	:	:
-1.1	-0.3	0.5	1.9	1.6	0.6	-0.9	-0.9	-0.6
-0.7	0.0	0.7	2.0	1.4	0.3	-1.2	-1.4	-1.2
104.8	110.1	110.9	110.0	109.3	109.3	108.3	111.7	114.0
2.0	2.1	2.3	2.5	2.2	1.9	1.7	1.7	1.8
3.2	3.2	3.2	3.1	3.2	3.2	3.2	3.2	3.2
1.3	0.2	0.7	0.3	0.9	1.5	1.9	1.5	1.0
1.6	0.9	1.2	1.3	0.3	0.5	0.6	1.5	1.4
1.1	0.8	0.9	1.2	-0.1	-0.1	-0.1	0.9	1.0
0.9	1.9	2.2	2.4	1.5	0.6	-0.1	0.3	0.9
65.9	66.6	67.3	68.1	68.6	69.1	69.2	69.4	69.8
58.9	59.9	61.1	62.4	63.2	63.4	63.1	63.2	63.7
54.3	55.0	56.0	57.0	57.5	57.8	:	:	:
10.8	10.2	9.4	8.5	8.0	8.4	8.9	9.1	8.9
2.1	1.2	2.2	2.7	2.9	2.7	2.7	2.5	2.6
0.0	-0.2	1.1	0.5	0.5	0.4	0.7	0.5	0.8
0.5	0.3	1.0	1.4	2.5	2.2	2.1	1.0	1.1
-1.1	-1.4	-0.1	0.0	0.1	-0.2	-0.1	-1.0	-0.5
1.6	1.7	1.1	1.4	2.4	2.4	2.1	2.0	1.6
2.0	1.5	1.1	2.2	2.3	2.3	2.0	2.0	1.7
50.2	49.4	48.9	47.1	48.1	48.3	49.0	48.4	48.0
47.6	47.1	47.6	47.2	46.5	46.1	46.2	45.7	45.4
-2.6	-2.3	-1.3	0.2	-1.6	-2.2	-2.8	-2.7	-2.7
-2.3	-2.3	-1.7	-1.9	-2.3	-2.4	-2.3	-2.2	-2.2
75.5	73.9	72.9	70.4	69.4	69.2	70.6	70.9	70.9
6.1	4.8	4.7	5.4	5.0	4.9	:	:	:
4.5	4.2	3.1	4.5	4.3	3.3	:	:	:
1.5	0.6	1.5	1.0	0.7	1.6	:	:	:
4.3	2.9	3.4	3.9	2.5	2.4	:	:	:
-8.8	0.5	-4.7	-100.2	1.2	3.1	11.7	1.2	-0.6
90.7	89.5	84.9	75.4	75.5	79.1	90.2	91.0	:

Table 95

Main economic indicators 1961–2005 Cyprus

(Annual percentage change, unless otherwise stated)

	1992	1993	1994	1995	1996
1. Growth of GDP and its components (real)					
1.1. Private consumption	:	:	:	20.0	3.6
1.2. Government consumption	:	:	:	1.3	12.6
1.3. Gross fixed capital formation	:	:	:	-1.7	7.4
1.4. of which equipment	:	:	:	-2.3	24.6
1.5. of which construction	:	:	:	:	0.9
1.6. Exports of goods and services	:	:	:	24.8	3.6
1.7. Imports of goods and services	:	:	:	32.1	6.6
1.8. GDP	9.7	0.7	5.9	6.5	1.9
2. Demand components: Contribution to changes in GDP (%)					
2.1. Consumption	:	:	:	11.7	4.3
2.2. Investment	:	:	:	-0.4	1.4
2.3. Stockbuilding	:	:	:	-1.9	-0.8
2.4. Domestic demand	:	:	:	10.0	3.8
2.5. Exports	:	:	:	11.7	2.0
2.6. Final demand	:	:	:	20.4	6.8
2.7. Imports	:	:	:	-105.2	-3.9
2.8. Net exports	:	:	:	-3.5	-1.9
3. Gross savings and investment in % of GDP at current prices					
3.1. Private sector savings	:	:	:	:	:
3.2. Net savings of households	:	:	:	:	:
3.3. General government savings	:	:	:	:	:
3.4. National savings	:	:	27.0	20.6	16.8
3.5. Gross capital formation	28.7	24.0	25.4	21.9	22.2
3.6. Current account	:	:	1.2	-2.1	-5.7
4. Determinants of investment					
4.1. Capacity utilisation (survey) (a)	:	:	:	:	:
4.2. Trend GDP gap	:	:	:	:	:
4.3. Potential GDP gap	:	:	:	:	:
4.4. Profitability index (1961–73 = 100)	:	:	:	:	:
5. Growth potential					
5.1. Growth of net capital stock (real)	:	:	:	:	:
5.2. Net capital/output ratio (real)	:	:	:	:	:
5.3. Growth of capital intensity	:	:	:	:	:
5.4. Labour productivity growth	:	:	:	:	1.1
5.5. Total factor productivity growth	:	:	:	:	:
6. Employment and unemployment					
6.1. Employment	:	:	:	:	:
6.2. Activity rate	:	:	:	:	:
6.3. Employment rate (benchmark)	:	:	:	:	:
6.4. Employment rate (full-time equivalent)	:	:	:	:	:
6.5. Unemployment rate (Eurostat definition)	:	:	:	3.4	4.5
7. Prices and wages					
7.1. Nominal wages per head	:	:	:	7.4	6.3
7.2. Real wages per head (b)	:	:	:	5.0	3.8
7.3. Nominal unit labour costs	:	:	:	:	5.1
7.4. Real unit labour costs	:	:	:	:	3.3
7.5. GDP deflator	5.8	5.1	5.3	3.0	1.8
7.6. Private consumption deflator	:	:	:	2.3	2.4
7.7. Terms of trade	:	:	:	0.3	-2.2
8. General government budget, % of GDP					
8.1. Expenditure	:	:	:	:	:
8.2. Current revenues	:	:	:	:	:
8.3. Net borrowing (-) or lending (+)	:	:	:	:	:
8.4. Net borrowing cyclically adjusted	:	:	:	:	:
8.5. Debt (end of period)	:	:	:	:	:
9. Monetary conditions					
9.1. Long-term interest rate	:	:	:	:	:
9.2. Short-term interest rate	:	:	:	:	:
9.3. Yield curve (9.1–9.2)	:	:	:	:	:
9.4. Real long-term interest rate (c)	:	:	:	:	:
9.5. Nominal effective exchange rate	:	:	:	:	:
9.6. Real effective exchange rate (1995 = 100; ULC in total economy)	:	:	:	:	:

(a) Manufacturing industry 2000.

(b) Private consumption deflator.

(c) GDP deflator.

NB: see also notes on p. 335.

(Annual percentage change, unless otherwise stated)

1997	1998	1999	2000	2001	2002	2003	2004	2005
4.0	8.5	0.8	10.1	4.8	2.5	2.8	3.3	3.6
4.0	7.3	-7.7	0.2	11.5	3.1	3.3	-7.0	2.0
-4.5	8.0	-1.4	4.1	2.5	10.1	-4.5	7.4	7.7
-4.8	24.3	-3.4	16.2	3.9	16.4	:	:	:
-4.5	0.5	-0.2	-3.5	1.5	5.7	:	:	:
1.7	0.0	6.5	9.0	3.4	-5.1	0.4	4.9	5.9
1.2	7.7	-1.6	9.0	3.8	1.5	0.3	2.4	4.7
2.3	4.8	4.7	5.0	4.0	2.0	2.0	3.4	4.2
3.3	7.0	-0.9	6.8	5.2	2.3	2.5	1.1	2.8
-0.9	1.5	-0.3	0.8	0.5	1.8	-0.9	1.4	1.5
-1.1	0.8	0.1	0.9	-1.2	0.2	0.3	-0.1	-0.4
2.1	9.5	0.2	5.4	4.4	5.8	1.9	2.4	3.9
0.9	0.0	3.5	4.9	1.9	-2.9	0.2	2.5	3.1
2.2	9.3	3.8	11.9	6.0	2.3	2.1	4.9	7.0
-0.7	-4.7	1.0	-5.3	-2.3	-0.9	-0.2	-1.4	-2.8
0.2	-4.7	4.5	-0.4	-0.4	-3.8	0.0	1.1	0.3
:	:	:	:	:	:	:	:	:
:	:	:	:	:	:	:	:	:
:	:	:	:	:	:	:	:	:
15.3	13.1	17.1	15.8	13.7	:	:	:	:
19.7	20.7	19.6	19.8	18.3	19.9	20.2	21.1	21.5
-4.2	-6.8	-1.7	-3.5	-4.0	-5.3	-4.4	-3.1	-2.8
:	:	:	:	:	:	:	:	:
:	:	:	:	:	:	:	:	:
:	:	:	:	:	:	:	:	:
:	:	:	:	:	:	:	:	:
:	:	:	:	:	:	:	:	:
2.2	3.8	2.6	2.5	1.9	0.8	1.5	2.7	3.2
:	:	:	:	:	:	:	:	:
:	:	:	:	:	:	:	:	:
:	:	:	:	:	:	:	:	:
:	:	:	:	:	:	:	:	:
4.9	5.0	5.3	5.2	4.4	3.8	3.9	3.7	3.7
11.8	0.1	4.8	7.2	4.7	:	:	:	:
9.0	-1.0	0.8	4.2	3.3	:	:	:	:
9.4	-3.5	2.1	4.5	2.7	:	:	:	:
6.5	-5.9	-0.1	0.1	0.4	:	:	:	:
2.7	2.5	2.2	4.5	2.3	3.2	11.3	3.9	3.9
2.6	1.1	4.0	2.9	1.3	3.0	4.8	2.0	2.4
1.7	3.3	0.0	-3.4	1.8	1.1	0.4	0.1	0.1
:	:	:	:	39.3	39.8	40.6	39.1	38.3
:	:	:	:	36.3	36.3	35.4	35.4	35.4
:	:	-4.4	-3.1	-3.0	-3.5	-5.2	-3.7	-2.9
:	:	:	:	:	:	:	:	:
:	55.5	56.7	54.4	55.6	59.8	60.3	58.9	56.8
6.9	6.7	7.4	7.6	7.7	5.4	:	:	:
:	:	6.3	6.4	5.9	4.4	:	:	:
:	:	1.1	1.1	1.7	1.0	:	:	:
4.1	4.1	5.0	2.9	5.3	2.0	:	:	:
:	:	:	:	:	:	:	:	:
:	:	:	:	:	:	:	:	:

Table 96

Main economic indicators 1961–2005 Czech Republic

(Annual percentage change, unless otherwise stated)

	1992	1993	1994	1995	1996
1. Growth of GDP and its components (real)					
1.1. Private consumption	:	:	:	5.9	7.9
1.2. Government consumption	- 6.7	3.6	0.2	- 4.3	3.6
1.3. Gross fixed capital formation	16.5	0.2	9.1	19.8	8.2
1.4. of which equipment	24.3	- 5.0	16.2	30.0	:
1.5. of which construction	:	:	:	:	:
1.6. Exports of goods and services	9.5	15.8	1.7	16.7	8.2
1.7. Imports of goods and services	29.7	23.8	14.7	21.2	13.4
1.8. GDP	- 0.5	0.1	2.2	5.9	4.3
2. Demand components: Contribution to changes in GDP (%)					
2.1. Consumption	:	:	:	2.0	4.7
2.2. Investment	3.7	0.1	2.4	5.6	2.6
2.3. Stockbuilding	- 1.8	0.7	2.3	1.0	0.3
2.4. Domestic demand	4.2	2.1	8.1	8.6	7.7
2.5. Exports	3.7	6.7	0.8	8.1	4.4
2.6. Final demand	7.9	8.8	8.9	16.8	12.1
2.7. Imports	- 8.4	- 8.7	- 6.7	- 100.8	- 7.8
2.8. Net exports	- 4.7	- 2.0	- 5.9	- 2.7	- 3.4
3. Gross savings and investment in % of GDP at current prices					
3.1. Private sector savings	18.3	20.1	20.9	22.1	21.1
3.2. Net savings of households	- 103.1	3.5	2.8	4.3	4.1
3.3. General government savings	9.2	7.4	6.4	7.8	6.3
3.4. National savings	27.5	27.5	27.3	29.9	27.4
3.5. Gross capital formation	26.3	27.4	29.8	34.0	34.2
3.6. Current account	1.7	0.7	- 2.5	- 4.2	- 6.8
4. Determinants of investment					
4.1. Capacity utilisation (survey) (a)	:	:	:	:	81.6
4.2. Trend GDP gap	:	:	:	:	:
4.3. Potential GDP gap	:	:	:	:	:
4.4. Profitability index (1961–73 = 100)	:	:	:	:	:
5. Growth potential					
5.1. Growth of net capital stock (real)	:	:	:	:	:
5.2. Net capital/output ratio (real)	:	:	:	:	:
5.3. Growth of capital intensity	:	:	:	:	:
5.4. Labour productivity growth	:	0.3	1.1	5.2	4.1
5.5. Total factor productivity growth	:	:	:	:	:
6. Employment and unemployment					
6.1. Employment	- 2.9	2.7	1.2	0.9	0.1
6.2. Activity rate	69.3	71.6	72.0	72.1	72.0
6.3. Employment rate (benchmark)	67.7	69.0	69.4	69.7	69.5
6.4. Employment rate (full-time equivalent)	:	:	:	:	:
6.5. Unemployment rate (Eurostat definition)	2.7	4.3	4.3	4.0	3.9
7. Prices and wages					
7.1. Nominal wages per head	:	3.8	19.1	19.3	16.4
7.2. Real wages per head (b)	:	:	:	9.3	7.8
7.3. Nominal unit labour costs	:	3.5	17.8	13.5	11.8
7.4. Real unit labour costs	:	- 104.5	3.9	2.9	2.8
7.5. GDP deflator	12.4	21.0	13.4	10.2	8.8
7.6. Private consumption deflator	:	:	:	9.2	8.0
7.7. Terms of trade	4.3	6.6	5.6	0.5	1.6
8. General government budget, % of GDP					
8.1. Expenditure	51.3	71.2	50.4	57.2	45.5
8.2. Current revenues	48.9	47.8	47.0	44.9	43.6
8.3. Net borrowing (-) or lending (+)	- 2.5	- 23.4	- 3.4	- 102.3	- 1.9
8.4. Net borrowing cyclically adjusted	:	:	:	:	:
8.5. Debt (end of period)	:	:	:	:	:
9. Monetary conditions					
9.1. Long-term interest rate	:	:	:	:	:
9.2. Short-term interest rate	:	13.1	9.1	11.0	12.0
9.3. Yield curve (9.1–9.2)	:	:	:	:	:
9.4. Real long-term interest rate (c)	:	:	:	:	:
9.5. Nominal effective exchange rate	:	:	:	:	:
9.6. Real effective exchange rate (1995 = 100; ULC in total economy)	:	:	:	:	:

(a) Manufacturing industry 2000.

(b) Private consumption deflator.

(c) GDP deflator.

NB: see also notes on p. 335.

(Annual percentage change, unless otherwise stated)

1997	1998	1999	2000	2001	2002	2003	2004	2005
2.4	-1.6	1.7	2.5	3.6	4.0	4.8	3.3	4.2
-4.4	-4.4	2.3	-1.0	5.3	5.7	3.0	-0.8	0.5
-2.9	0.7	-1.0	5.3	5.5	0.6	-0.5	2.7	3.2
:	:	:	:	:	:	:	:	:
:	:	:	:	:	:	:	:	:
9.2	10.0	6.1	17.0	11.9	2.8	4.9	4.5	5.4
8.1	6.6	5.4	17.0	13.6	4.3	4.8	4.3	5.4
-0.8	-1.0	0.5	3.3	3.1	2.0	2.2	2.6	3.3
0.4	-1.7	1.3	1.2	2.9	3.2	3.2	1.7	2.5
-1.0	0.2	-0.3	1.7	1.8	0.2	-0.2	0.9	1.0
-0.2	-1.1	-0.7	1.3	0.7	0.3	-0.4	0.3	0.3
-0.7	-2.6	0.4	4.3	5.4	3.7	2.6	2.9	3.9
5.1	6.1	4.2	12.3	9.7	2.4	4.4	4.1	5.0
4.4	3.5	4.5	16.5	15.1	6.1	7.0	7.0	8.9
-5.1	-4.5	-4.0	-103.3	-102	-4.2	-4.8	-4.4	-5.6
0.0	1.6	0.1	-1.0	-2.3	-1.7	-0.4	-0.3	-0.6
20.6	23.3	21.3	21.0	:	:	:	:	:
3.4	2.9	1.7	0.8	:	:	:	:	:
5.5	4.6	4.1	3.4	2.3	2.4	:	:	:
26.1	27.8	25.4	24.4	:	:	:	:	:
32.6	30.0	28.1	29.7	29.5	28.1	27.4	26.5	26.0
-6.5	-2.2	-2.7	-5.3	:	:	-6.6	-6.9	-6.6
82.8	82.6	81.5	84.6	85.7	83.3	85.1	:	:
:	:	:	:	:	:	:	:	:
:	:	:	:	:	:	:	:	:
:	:	:	:	:	:	:	:	:
:	:	:	:	:	:	:	:	:
:	:	:	:	:	:	:	:	:
-0.1	0.4	2.6	4.0	2.7	1.0	2.7	2.6	3.2
:	:	:	:	:	:	:	:	:
-0.6	-1.4	-2.3	-0.7	0.7	1.1	-0.5	0.0	0.1
72.1	72.3	72.2	71.5	71.1	71.0	71.0	70.2	70.2
68.9	67.7	66.0	65.3	65.4	65.8	65.4	64.5	64.6
68.7	66.6	64.8	64.1	64.4	64.8	:	:	:
4.8	6.4	8.6	8.7	8.0	7.3	7.8	8.1	8.0
7.2	8.7	6.8	6.4	7.3	6.5	6.5	6.3	6.3
-0.2	-0.4	2.9	3.4	3.4	6.6	6.5	2.7	3.6
7.3	8.2	4.0	2.3	4.5	5.4	3.7	3.6	3.1
-0.7	-2.2	1.1	1.3	-1.7	2.8	1.6	0.9	0.4
8.0	10.6	3.0	1.1	6.3	2.6	2.1	2.7	2.6
7.5	9.1	3.7	2.8	3.8	-0.1	0.0	3.5	2.6
0.5	5.0	-0.7	-2.6	2.5	1.7	-0.4	-0.1	0.2
45.0	46.0	45.9	46.1	47.3	49.9	50.8	50.6	49.3
42.6	41.4	42.2	42.0	41.5	42.8	42.8	44.3	44.1
-2.4	-4.7	-3.7	-4.0	-5.8	-7.1	-8.0	-6.3	-5.2
:	:	:	:	:	:	:	:	:
12.9	13.7	14.3	16.6	23.3	27.1	30.7	34.5	38.3
:	:	:	6.9	6.3	4.9	:	:	:
16.0	14.3	6.9	5.4	5.2	3.5	:	:	:
:	:	:	1.6	1.1	1.3	:	:	:
:	:	:	5.8	0.0	2.2	:	:	:
:	:	:	:	:	:	:	:	:
:	:	:	:	:	:	:	:	:

Table 97

Main economic indicators 1961–2005

Estonia

(Annual percentage change, unless otherwise stated)

	1992	1993	1994	1995	1996
1. Growth of GDP and its components (real)					
1.1. Private consumption	:	:	0.6	3.4	9.2
1.2. Government consumption	:	:	5.5	16.3	-1.0
1.3. Gross fixed capital formation	:	:	6.3	4.1	11.4
1.4. of which equipment	:	:	:	:	4.5
1.5. of which construction	:	:	:	:	13.5
1.6. Exports of goods and services	:	:	3.5	5.3	2.4
1.7. Imports of goods and services	:	:	12.2	5.4	7.6
1.8. GDP	:	:	-2.0	4.3	3.9
2. Demand components: Contribution to changes in GDP (%)					
2.1. Consumption	:	:	1.5	5.8	5.1
2.2. Investment	:	:	1.5	1.1	2.9
2.3. Stockbuilding	:	:	-1.4	0.2	0.4
2.4. Domestic demand	:	:	4.1	4.7	8.3
2.5. Exports	:	:	2.4	3.8	1.7
2.6. Final demand	:	:	4.1	10.8	10.3
2.7. Imports	:	:	-8.4	-4.2	-6.1
2.8. Net exports	:	:	-6.1	-0.4	-4.3
3. Gross savings and investment in % of GDP at current prices					
3.1. Private sector savings	:	11.3	7.3	12.4	11.9
3.2. Net savings of households	:	2.0	2.4	6.5	4.8
3.3. General government savings	:	15.1	11.5	6.5	5.0
3.4. National savings	:	26.4	18.8	18.8	16.8
3.5. Gross capital formation	:	26.7	27.4	26.6	27.8
3.6. Current account	:	1.3	-7.2	-4.4	-9.2
4. Determinants of investment					
4.1. Capacity utilisation (survey) (a)	:	:	:	:	57.4
4.2. Trend GDP gap	:	:	:	:	:
4.3. Potential GDP gap	:	:	:	:	:
4.4. Profitability index (1961–73 = 100)	:	:	:	:	:
5. Growth potential					
5.1. Growth of net capital stock (real)	:	:	:	:	:
5.2. Net capital/output ratio (real)	:	:	:	:	:
5.3. Growth of capital intensity	:	:	:	:	:
5.4. Labour productivity growth	:	:	1.4	11.1	6.4
5.5. Total factor productivity growth	:	:	:	:	:
6. Employment and unemployment					
6.1. Employment	-6.0	-7.9	-3.4	-6.2	-2.3
6.2. Activity rate	77.3	74.7	73.7	71.4	70.5
6.3. Employment rate (benchmark)	74.4	69.7	68.1	64.4	63.5
6.4. Employment rate (full-time equivalent)	:	:	:	:	:
6.5. Unemployment rate (Eurostat definition)	3.7	6.6	7.6	9.7	9.9
7. Prices and wages					
7.1. Nominal wages per head	:	:	56.2	41.9	24.2
7.2. Real wages per head (b)	:	:	9.3	11.6	2.3
7.3. Nominal unit labour costs	:	:	54.0	27.7	16.7
7.4. Real unit labour costs	:	:	10.3	-2.7	-5.3
7.5. GDP deflator	:	:	39.6	31.3	23.3
7.6. Private consumption deflator	:	:	42.8	27.1	21.5
7.7. Terms of trade	:	:	0.5	3.0	-0.3
8. General government budget, % of GDP					
8.1. Expenditure	:	:	:	:	:
8.2. Current revenues	:	:	:	:	:
8.3. Net borrowing (-) or lending (+)	:	10.2	4.6	-0.1	-2.3
8.4. Net borrowing cyclically adjusted	:	:	:	:	:
8.5. Debt (end of period)	:	:	:	:	:
9. Monetary conditions					
9.1. Long-term interest rate	:	:	:	:	:
9.2. Short-term interest rate	:	:	:	:	7.1
9.3. Yield curve (9.1–9.2)	:	:	:	:	:
9.4. Real long-term interest rate (c)	:	:	:	:	:
9.5. Nominal effective exchange rate	:	:	:	:	:
9.6. Real effective exchange rate (1995 = 100; ULC in total economy)	:	:	:	:	:

(a) Manufacturing industry 2000.

(b) Private consumption deflator.

(c) GDP deflator.

NB: see also notes on p. 335.

(Annual percentage change, unless otherwise stated)

1997	1998	1999	2000	2001	2002	2003	2004	2005
7.8	4.3	-2.7	6.7	5.2	9.4	6.5	5.0	3.5
1.8	4.5	3.8	1.5	0.9	5.0	5.7	3.9	5.8
17.6	11.3	-104.8	13.3	12.2	16.1	12.0	5.0	4.0
10.1	-1.9	-5.8	:	:	:	:	:	:
7.7	9.0	-108.1	:	:	:	:	:	:
29.5	12.0	0.5	28.6	-0.2	6.0	5.0	10.0	12.0
29.1	12.9	-5.4	27.9	2.1	10.2	9.0	9.0	10.0
9.8	4.6	-0.6	7.3	6.5	6.0	4.4	5.6	5.1
5.3	3.7	-0.8	4.3	3.2	6.5	5.1	3.9	3.4
4.9	3.3	-4.7	3.6	3.5	4.9	4.0	1.8	1.4
2.5	-3.6	-0.2	3.5	-0.7	1.8	0.9	0.9	0.3
13.0	7.2	-6.8	9.4	9.1	11.6	10.0	6.6	5.1
20.9	10.0	0.4	25.9	-0.2	6.1	5.1	10.2	12.8
33.4	13.7	-5.2	37.1	6.8	18.4	15.1	16.8	17.9
-24.1	-102.6	5.7	-27.9	-2.5	-101.7	-100.7	-101.2	-102.8
-3.2	-2.5	6.2	-2.1	-2.7	-5.6	-5.6	-0.9	0.0
9.3	13.7	13.1	15.7	:	:	:	:	:
4.5	5.1	0.6	0.7	0.8	:	:	:	:
7.8	5.9	5.5	5.2	:	:	:	:	:
17.1	19.7	18.6	20.9	21.8	20.1	21.9	23.6	25.7
31.0	29.3	24.5	27.8	28.9	31.4	33.8	32.7	31.2
-102.2	-9.2	-4.7	-5.8	-6.0	-102.3	-105.2	-102.2	-8.5
62.4	63.8	63.5	66.7	72.6	74.5	73.6	:	:
:	:	:	:	:	:	:	:	:
:	:	:	:	:	:	:	:	:
:	:	:	:	:	:	:	:	:
:	:	:	:	:	:	:	:	:
9.8	7.0	4.3	10.5	5.6	4.4	3.9	5.4	4.9
:	:	:	:	:	:	:	:	:
0.0	-1.9	-4.4	-1.5	0.9	1.3	0.5	0.2	0.2
70.4	68.9	69.4	71.3	71.3	70.1	70.1	70.1	70.0
63.8	62.6	61.6	62.4	62.9	63.7	64.1	64.2	64.5
63.6	62.3	61.0	61.0	61.4	62.4	:	:	:
9.6	9.2	11.3	12.5	11.8	9.1	8.6	8.4	7.9
19.6	15.6	14.8	9.7	7.5	6.7	10.1	8.6	8.0
8.1	5.6	9.0	5.7	1.8	3.2	8.2	4.4	4.1
9.0	8.1	10.1	-0.7	1.8	2.2	6.0	3.0	3.0
-2.1	-1.5	5.4	-6.9	-3.2	-1.8	3.2	-1.4	-1.9
11.3	9.8	4.5	6.7	5.2	4.1	2.7	4.4	4.9
10.7	9.4	5.3	3.9	5.7	3.4	1.8	4.0	3.7
1.8	2.3	0.1	1.4	2.5	-2.6	0.0	2.0	2.0
:	:	:	:	37.3	38.5	41.1	39.7	38.9
:	:	:	:	37.6	39.5	41.1	39.3	39.3
1.5	-0.9	-2.8	-0.3	0.3	0.9	0.0	-0.4	0.4
:	:	:	:	:	:	:	:	:
6.9	6.0	6.5	5.0	4.7	5.7	5.4	5.3	4.5
:	:	:	:	:	:	:	:	:
7.6	12.5	6.6	4.7	4.5	3.4	:	:	:
:	:	:	:	:	:	:	:	:
:	:	:	:	:	:	:	:	:
:	:	:	:	:	:	:	:	:
:	:	:	:	:	:	:	:	:

Table 98

Main economic indicators 1961–2005 Hungary

(Annual percentage change, unless otherwise stated)

	1992	1993	1994	1995	1996
1. Growth of GDP and its components (real)					
1.1. Private consumption	1.4	3.5	0.2	-6.5	-3.5
1.2. Government consumption	-1.1	9.8	-7.4	-6.7	-2.3
1.3. Gross fixed capital formation	-2.6	2.0	12.5	-4.3	6.7
1.4. of which equipment	:	:	:	:	:
1.5. of which construction	:	:	:	:	:
1.6. Exports of goods and services	2.7	-100.3	13.6	47.5	12.6
1.7. Imports of goods and services	0.7	20.0	8.8	21.2	10.4
1.8. GDP	-2.1	-0.6	2.9	1.5	1.3
2. Demand components: Contribution to changes in GDP (%)					
2.1. Consumption	0.5	4.5	-2.0	-5.5	-2.5
2.2. Investment	-0.5	0.4	2.4	-0.9	1.3
2.3. Stockbuilding	-3.3	4.5	1.6	0.2	1.5
2.4. Domestic demand	-2.7	8.4	2.2	-5.2	0.4
2.5. Exports	0.8	-3.2	3.8	14.5	5.6
2.6. Final demand	-1.9	5.2	6.0	9.4	6.0
2.7. Imports	-0.2	-5.8	-3.1	-7.9	-4.6
2.8. Net exports	0.6	-9.0	0.7	6.7	1.0
3. Gross savings and investment in % of GDP at current prices					
3.1. Private sector savings	:	:	:	:	:
3.2. Net savings of households	:	:	:	:	:
3.3. General government savings	:	:	:	:	:
3.4. National savings	:	:	:	:	:
3.5. Gross capital formation	16.1	20.0	22.2	22.4	25.5
3.6. Current account	:	:	:	:	:
4. Determinants of investment					
4.1. Capacity utilisation (survey) (a)	:	:	:	:	77.4
4.2. Trend GDP gap	:	:	:	:	:
4.3. Potential GDP gap	:	:	:	:	:
4.4. Profitability index (1961–73 = 100)	:	:	:	:	:
5. Growth potential					
5.1. Growth of net capital stock (real)	:	:	:	:	:
5.2. Net capital/output ratio (real)	:	:	:	:	:
5.3. Growth of capital intensity	:	:	:	:	:
5.4. Labour productivity growth	:	6.0	5.0	5.1	1.8
5.5. Total factor productivity growth	:	:	:	:	:
6. Employment and unemployment					
6.1. Employment	:	-6.3	-2.1	-1.9	-0.5
6.2. Activity rate	63.3	60.5	58.3	56.8	56.4
6.3. Employment rate (benchmark)	57.1	53.4	52.2	51.2	50.9
6.4. Employment rate (full-time equivalent)	:	:	:	:	52.1
6.5. Unemployment rate (Eurostat definition)	9.8	11.8	10.5	10.0	9.6
7. Prices and wages					
7.1. Nominal wages per head	:	23.1	17.9	21.6	20.2
7.2. Real wages per head (b)	:	2.1	-1.3	-4.8	-2.2
7.3. Nominal unit labour costs	:	16.1	12.3	15.7	18.0
7.4. Real unit labour costs	:	-4.3	-6.1	-8.7	-2.6
7.5. GDP deflator	20.3	21.3	19.5	26.7	21.2
7.6. Private consumption deflator	22.1	20.6	19.4	27.7	22.9
7.7. Terms of trade	0.1	2.9	2.6	0.9	-1.3
8. General government budget, % of GDP					
8.1. Expenditure	:	:	:	:	:
8.2. Current revenues	:	:	:	:	:
8.3. Net borrowing (-) or lending (+)	:	:	:	:	:
8.4. Net borrowing cyclically adjusted	:	:	:	:	:
8.5. Debt (end of period)	:	:	:	:	:
9. Monetary conditions					
9.1. Long-term interest rate	:	:	:	:	:
9.2. Short-term interest rate	:	:	27.8	31.3	24.3
9.3. Yield curve (9.1–9.2)	:	:	:	:	:
9.4. Real long-term interest rate (c)	:	:	:	:	:
9.5. Nominal effective exchange rate	:	:	:	:	:
9.6. Real effective exchange rate (1995 = 100; ULC in total economy)	:	:	:	:	:

(a) Manufacturing industry 2000.

(b) Private consumption deflator.

(c) GDP deflator.

NB: see also notes on p. 335.

(Annual percentage change, unless otherwise stated)

1997	1998	1999	2000	2001	2002	2003	2004	2005
1.9	4.9	5.6	5.5	5.7	10.2	9.8	4.0	4.6
3.1	1.8	1.5	1.9	4.3	2.3	3.3	1.2	1.5
9.2	13.3	5.9	7.7	3.5	5.8	3.0	6.8	7.3
:	:	:	:	:	:	:	:	:
:	:	:	:	:	:	:	:	:
22.3	18.9	12.4	21.0	8.8	3.8	4.1	5.8	7.3
23.1	25.2	13.3	19.4	6.1	6.1	8.0	7.5	8.4
4.6	4.9	4.2	5.2	3.8	3.3	2.9	3.2	3.4
1.7	2.8	3.1	3.2	3.8	5.6	5.9	2.5	3.0
1.9	2.9	1.4	1.9	0.9	1.4	0.7	1.7	1.9
1.1	2.5	0.5	-0.3	-2.9	-2.0	-0.6	0.6	0.0
4.7	8.2	5.1	4.7	1.7	5.0	6.1	4.9	4.8
11.0	10.9	8.1	14.8	7.2	3.1	3.4	4.9	6.2
15.7	19.2	13.2	19.5	8.9	8.1	9.5	9.7	11.0
-101.1	-104.3	-9.0	-104.3	-5.1	-4.9	-6.6	-6.5	-7.6
-0.1	-3.4	-0.9	0.5	2.1	-1.8	-3.2	-1.6	-1.4
:	:	:	:	:	:	:	:	:
:	:	:	:	:	:	:	:	:
:	:	:	:	:	:	:	:	:
:	:	:	:	:	:	:	:	:
26.6	28.9	28.7	30.9	27.1	24.0	21.5	22.4	23.5
:	:	:	:	:	-4.0	-6.2	-6.1	-5.8
79.9	79.9	78.6	82.0	81.7	78.8	79.4	:	:
:	:	:	:	:	:	:	:	:
:	:	:	:	:	:	:	:	:
:	:	:	:	:	:	:	:	:
:	:	:	:	:	:	:	:	:
4.4	3.0	1.0	4.2	3.4	3.0	2.4	2.4	2.4
:	:	:	:	:	:	:	:	:
0.3	1.9	3.1	1.7	0.4	0.1	0.5	0.8	1.0
56.2	57.0	57.8	58.4	58.2	58.3	58.4	58.7	58.9
51.1	52.1	53.8	54.8	55.0	55.0	55.1	55.4	55.6
52.0	53.1	55.4	56.0	56.3	56.5	:	:	:
9.0	8.4	6.9	6.3	5.6	5.6	5.6	5.6	5.5
20.8	13.9	5.0	15.8	15.8	17.7	12.9	8.0	6.7
2.4	0.3	-4.8	6.1	7.0	10.1	5.8	2.0	2.5
15.7	10.6	4.0	11.2	12.0	14.3	10.3	5.5	4.2
-2.3	-1.8	-4.1	1.2	3.1	3.2	4.1	-1.8	-2.2
18.5	12.6	8.4	9.9	8.6	10.7	6.0	7.4	6.5
18.0	13.6	10.2	9.1	8.2	6.9	6.7	5.9	4.1
1.5	0.9	-0.9	-2.3	0.4	0.8	0.2	0.4	0.4
:	:	:	:	58.5	53.7	48.6	48.8	47.8
:	:	:	:	54.3	44.5	43.2	44.4	44.2
:	:	-5.6	-3.0	-4.2	-9.2	-5.4	-4.4	-3.6
:	:	:	:	:	:	:	:	:
64.2	61.9	61.2	55.5	53.4	56.3	57.9	56.9	55.5
:	:	9.9	8.6	7.9	7.1	:	:	:
20.4	17.9	15.1	11.4	10.9	9.2	:	:	:
:	:	-5.2	-2.8	-2.9	-2.1	:	:	:
:	:	1.4	-1.2	-0.6	-3.3	:	:	:
:	:	:	:	:	:	:	:	:
:	:	:	:	:	:	:	:	:

Table 99

Main economic indicators 1961–2005

Latvia

(Annual percentage change, unless otherwise stated)

	1992	1993	1994	1995	1996
1. Growth of GDP and its components (real)					
1.1. Private consumption	-43.4	-7.4	3.2	-1.7	10.3
1.2. Government consumption	8.0	-0.1	-1.2	1.3	1.8
1.3. Gross fixed capital formation	-28.7	-105.8	0.8	8.7	22.3
1.4. of which equipment	:	:	:	:	:
1.5. of which construction	:	:	:	:	:
1.6. Exports of goods and services	14.9	-22.4	-8.4	4.3	20.2
1.7. Imports of goods and services	8.0	-39.8	-0.7	1.4	28.5
1.8. GDP	-34.9	-104.9	0.6	-1.6	3.7
2. Demand components: Contribution to changes in GDP (%)					
2.1. Consumption	-27.4	-4.2	1.7	-0.8	6.9
2.2. Investment	-3.7	-2.2	0.1	1.2	3.4
2.3. Stockbuilding	-5.0	-23.9	2.6	-3.3	-1.5
2.4. Domestic demand	-36.0	-30.3	4.4	-2.9	8.3
2.5. Exports	4.5	-102	-4.1	1.9	9.6
2.6. Final demand	-31.5	-42.4	0.3	-10	17.5
2.7. Imports	-3.3	27.5	0.3	-0.7	-104.2
2.8. Net exports	1.2	15.5	-3.8	1.2	-4.6
3. Gross savings and investment in % of GDP at current prices					
3.1. Private sector savings	52.3	25.4	22.3	17.6	12.1
3.2. Net savings of households	11.2	1.8	1.0	-1.5	0.3
3.3. General government savings	3.1	4.9	2.0	-1.1	1.0
3.4. National savings	55.4	30.3	24.3	16.5	13.1
3.5. Gross capital formation	41.2	9.2	19.1	16.9	18.6
3.6. Current account	14.0	19.7	5.5	-0.4	-5.5
4. Determinants of investment					
4.1. Capacity utilisation (survey) (a)	:	:	:	:	53.7
4.2. Trend GDP gap	:	:	:	:	:
4.3. Potential GDP gap	:	:	:	:	:
4.4. Profitability index (1961–73 = 100)	:	:	:	:	:
5. Growth potential					
5.1. Growth of net capital stock (real)	:	:	:	:	:
5.2. Net capital/output ratio (real)	:	:	:	:	:
5.3. Growth of capital intensity	:	:	:	:	:
5.4. Labour productivity growth	-29.7	-8.6	12.0	9.8	5.7
5.5. Total factor productivity growth	:	:	:	:	:
6. Employment and unemployment					
6.1. Employment	:	:	:	:	:
6.2. Activity rate	:	:	:	:	:
6.3. Employment rate (benchmark)	:	:	:	:	:
6.4. Employment rate (full-time equivalent)	:	:	:	:	:
6.5. Unemployment rate (Eurostat definition)	3.9	8.7	16.7	19.2	20.4
7. Prices and wages					
7.1. Nominal wages per head	:	:	:	:	27.3
7.2. Real wages per head (b)	:	:	:	:	8.5
7.3. Nominal unit labour costs	:	:	:	:	20.5
7.4. Real unit labour costs	:	:	:	:	3.7
7.5. GDP deflator	975.9	71.5	38.3	16.0	16.2
7.6. Private consumption deflator	967.9	110.3	50.0	24.0	17.3
7.7. Terms of trade	-25.6	-8.9	-101.7	-101.6	-3.0
8. General government budget, % of GDP					
8.1. Expenditure	28.7	39.6	45.8	46.4	44.0
8.2. Current revenues	28.1	42.0	44.4	44.1	43.5
8.3. Net borrowing (-) or lending (+)	-0.5	2.4	-1.5	-2.3	-0.5
8.4. Net borrowing cyclically adjusted	:	:	:	:	:
8.5. Debt (end of period)	:	:	:	:	:
9. Monetary conditions					
9.1. Long-term interest rate	:	:	:	:	:
9.2. Short-term interest rate	:	:	:	:	:
9.3. Yield curve (9.1–9.2)	:	:	:	:	:
9.4. Real long-term interest rate (c)	:	:	:	:	:
9.5. Nominal effective exchange rate	:	:	:	:	:
9.6. Real effective exchange rate (1995 = 100; ULC in total economy)	:	:	:	:	:

(a) Manufacturing industry 2000.

(b) Private consumption deflator.

(c) GDP deflator.

NB: see also notes on p. 335.

(Annual percentage change, unless otherwise stated)

1997	1998	1999	2000	2001	2002	2003	2004	2005
4.1	3.9	3.8	6.1	8.9	6.7	6.0	5.0	5.0
0.3	6.1	0.0	-1.9	0.3	1.5	1.9	2.2	2.0
20.7	44.0	-4.0	20.0	17.0	10.4	9.5	9.5	9.5
:	:	:	:	:	:	:	:	:
:	:	:	:	:	:	:	:	:
13.1	4.9	-6.4	12.0	6.9	6.3	9.4	8.7	9.4
6.8	19.0	-5.2	4.9	12.6	4.5	10.4	9.1	8.3
8.4	4.8	2.8	6.8	7.9	6.1	6.0	5.2	5.7
2.8	3.8	2.5	3.5	5.7	4.6	4.2	3.6	3.5
3.7	8.8	-1.1	5.1	4.9	3.3	3.1	3.2	3.3
-1.5	-1.4	-1.1	-4.9	2.8	0.3	0.2	-0.4	-0.9
5.4	13.5	2.9	3.7	12.0	5.6	7.5	6.4	6.0
7.2	2.8	-3.6	6.3	3.8	3.4	5.1	4.9	5.4
13.0	14.6	-0.9	10.6	14.9	9.1	12.7	11.3	11.4
-4.2	-101.5	3.6	-3.1	-7.8	-2.9	-6.7	-6.1	-5.7
3.0	-8.8	-0.1	3.2	-4.1	0.5	-1.6	-1.2	-0.3
14.8	15.4	18.7	19.4	18.6	19.8	:	:	:
2.0	1.3	-1.0	0.5	0.5	:	:	:	:
2.1	1.6	-1.5	0.6	1.6	0.9	:	:	:
16.9	17.1	17.2	20.1	20.2	20.7	21.1	21.2	22.0
23.1	27.7	26.9	27.0	29.8	28.5	29.7	30.7	31.5
-6.2	-100.6	-9.8	-6.9	-9.6	-7.8	-8.6	-9.5	-9.6
56.2	61.8	57.1	59.4	63.3	71.0	69.0	:	:
:	:	:	:	:	:	:	:	:
:	:	:	:	:	:	:	:	:
:	:	:	:	:	:	:	:	:
:	:	:	:	:	:	:	:	:
3.8	5.1	4.7	10.1	5.6	3.2	5.4	4.7	5.2
:	:	:	:	:	:	:	:	:
:	:	:	:	:	:	:	:	:
:	:	:	:	:	:	:	:	:
15.2	58.2	57.2	56.0	57.6	59.9	:	:	:
15.2	14.3	14.0	13.7	12.8	12.8	12.4	12.0	11.5
13.0	6.2	7.5	6.9	6.4	4.7	5.7	7.5	7.5
2.6	3.9	5.7	2.9	4.4	2.4	3.4	4.6	4.5
8.8	1.1	2.7	-2.9	0.7	1.4	0.3	2.7	2.2
1.2	-3.6	-2.5	-7.2	-1.8	-0.4	-1.6	0.1	-0.7
7.5	4.9	5.3	4.6	2.5	1.8	1.9	2.6	3.0
10.1	2.2	1.7	3.9	1.9	2.2	2.3	2.8	2.8
-6.2	4.8	3.6	-2.8	0.1	-0.2	-0.8	-0.2	-0.2
43.8	49.0	50.2	45.2	42.4	44.9	46.0	43.8	38.2
45.4	48.3	44.9	42.5	40.8	41.9	43.4	41.1	36.2
1.6	-0.7	-5.3	-2.7	-1.6	-3.0	-2.7	-2.7	-2.0
:	:	:	:	:	:	:	:	:
:	10.6	13.7	13.9	15.7	15.2	16.7	18.2	18.7
:	:	:	:	:	:	:	:	:
6.0	6.9	7.5	4.0	6.1	3.3	:	:	:
:	:	:	:	:	:	:	:	:
:	:	:	:	:	:	:	:	:
:	:	:	:	:	:	:	:	:
:	:	:	:	:	:	:	:	:

Table 100

Main economic indicators 1961–2005

Lithuania

(Annual percentage change, unless otherwise stated)

	1992	1993	1994	1995	1996
1. Growth of GDP and its components (real)					
1.1. Private consumption	:	:	:	:	6.5
1.2. Government consumption	:	:	:	:	2.5
1.3. Gross fixed capital formation	:	:	:	:	15.2
1.4. of which equipment	:	:	:	:	52.4
1.5. of which construction	:	:	:	:	2.1
1.6. Exports of goods and services	:	:	:	:	19.3
1.7. Imports of goods and services	:	:	:	:	23.3
1.8. GDP	- 21.3	- 106.2	- 9.8	6.2	4.7
2. Demand components: Contribution to changes in GDP (%)					
2.1. Consumption	:	:	:	:	4.9
2.2. Investment	:	:	:	:	3.4
2.3. Stockbuilding	:	:	:	:	- 0.4
2.4. Domestic demand	:	:	:	:	9.4
2.5. Exports	:	:	:	:	10.0
2.6. Final demand	:	:	:	:	17.6
2.7. Imports	:	:	:	:	- 104.7
2.8. Net exports	:	:	:	:	- 4.7
3. Gross savings and investment in % of GDP at current prices					
3.1. Private sector savings	:	:	:	10.4	10.9
3.2. Net savings of households	:	:	- 6.1	3.4	2.2
3.3. General government savings	:	:	:	3.0	1.6
3.4. National savings	:	:	16.3	13.4	12.5
3.5. Gross capital formation	15.7	19.2	18.4	23.3	21.6
3.6. Current account	:	:	- 2.1	- 9.9	- 9.2
4. Determinants of investment					
4.1. Capacity utilisation (survey) (a)	:	:	:	:	46.4
4.2. Trend GDP gap	:	:	:	:	:
4.3. Potential GDP gap	:	:	:	:	:
4.4. Profitability index (1961–73 = 100)	:	:	:	:	:
5. Growth potential					
5.1. Growth of net capital stock (real)	:	:	:	:	:
5.2. Net capital/output ratio (real)	:	:	:	:	:
5.3. Growth of capital intensity	:	:	:	:	:
5.4. Labour productivity growth	- 5	- 102.6	- 4.2	8.2	10.9
5.5. Total factor productivity growth	:	:	:	:	:
6. Employment and unemployment					
6.1. Employment	- 2.2	- 4.2	- 5.8	- 1.9	0.9
6.2. Activity rate	79.3	78.9	74.1	74.8	76.3
6.3. Employment rate (benchmark)	74.7	71.9	67.9	66.8	67.4
6.4. Employment rate (full-time equivalent)	:	:	:	46.6	44.0
6.5. Unemployment rate (Eurostat definition)	6.1	9.3	8.8	11.3	12.2
7. Prices and wages					
7.1. Nominal wages per head	:	:	67.7	74.1	33.5
7.2. Real wages per head (b)	:	:	:	:	12.0
7.3. Nominal unit labour costs	:	:	75.1	60.9	20.3
7.4. Real unit labour costs	:	:	8.3	16.5	- 1.0
7.5. GDP deflator	943.0	306.2	61.6	38.0	21.5
7.6. Private consumption deflator	:	:	:	:	19.1
7.7. Terms of trade	:	:	:	:	6.6
8. General government budget, % of GDP					
8.1. Expenditure	:	:	:	37.3	38.8
8.2. Current revenues	:	:	:	35.3	35.1
8.3. Net borrowing (-) or lending (+)	:	- 0.8	- 0.9	- 2.0	- 3.7
8.4. Net borrowing cyclically adjusted	:	:	:	:	:
8.5. Debt (end of period)	:	:	:	:	:
9. Monetary conditions					
9.1. Long-term interest rate	:	:	:	:	:
9.2. Short-term interest rate	:	:	:	:	:
9.3. Yield curve (9.1–9.2)	:	:	:	:	:
9.4. Real long-term interest rate (c)	:	:	:	:	:
9.5. Nominal effective exchange rate	:	:	:	:	:
9.6. Real effective exchange rate (1995 = 100; ULC in total economy)	:	:	:	:	:

(a) Manufacturing industry 2000.

(b) Private consumption deflator.

(c) GDP deflator.

NB: see also notes on p. 335.

(Annual percentage change, unless otherwise stated)

1997	1998	1999	2000	2001	2002	2003	2004	2005
5.3	4.7	3.3	6.6	3.9	5.0	5.1	4.7	4.6
6.3	6.0	-8.1	3.9	0.3	4.3	4.4	7.2	6.0
24.5	21.8	-6.1	-9.0	13.5	12.4	8.1	8.5	8.7
44.5	13.2	-5.2	-0.3	22.2	12.3	:	:	:
18.7	24.0	-7.9	-107	8.9	13.2	:	:	:
18.7	4.6	-106.8	9.8	21.2	19.5	9.4	7.7	7.4
25.0	6.2	-102.4	4.7	17.7	17.4	8.0	8.6	7.0
7.0	7.3	-1.8	4.0	6.5	6.7	6.6	5.7	6.0
4.9	4.4	0.3	5.3	2.8	4.2	4.2	4.4	4.1
5.9	6.2	-2.0	-2.7	3.6	3.5	2.4	2.6	2.7
2.8	0.1	1.2	-1.4	1.5	0.3	1.0	1.2	0.4
14.5	9.7	-1.8	2.3	8.1	8.9	7.1	7.6	7.1
11.0	3.0	-100.7	5.3	12.1	12.6	6.8	5.7	5.6
24.7	13.7	-101.3	6.3	19.8	20.6	13.6	13.1	12.5
-108.5	-5.4	10.6	-3.6	-103.6	-104.8	-7.5	-8.1	-6.8
-7.5	-2.4	0.0	1.6	-1.5	-2.2	-0.7	-2.4	-1.2
13.5	13.7	11.3	13.1	:	:	:	:	:
2.5	2.3	1.4	0.9	:	:	:	:	:
1.7	0.7	0.6	1.0	:	:	:	:	:
15.2	14.4	11.9	14.2	16.2	17.3	:	:	:
25.4	26.3	23.1	20.2	21.0	22.6	22.6	23.6	24.2
-100.2	-101.9	-101.2	-6.0	-4.8	-5.4	-5.7	-5.8	-5.9
50.6	53.0	51.5	53.6	60.6	63.6	66.3	:	:
:	:	:	:	:	:	:	:	:
:	:	:	:	:	:	:	:	:
:	:	:	:	:	:	:	:	:
:	:	:	:	:	:	:	:	:
9.3	7.4	3.3	2.7	7.9	2.6	5.0	4.3	4.4
:	:	:	:	:	:	:	:	:
0.6	-0.8	-0.5	-3.7	-4.0	4.0	1.5	1.3	1.6
75.9	75.8	74.8	78.1	77.9	77.6	77.6	77.9	78.1
67.8	67.2	66.7	66.3	65.7	68.3	68.9	70.0	71.0
43.1	43.0	40.8	42.6	43.4	:	:	:	:
11.2	11.8	11.2	15.7	16.1	13.1	12.3	11.1	10.0
26.2	17.2	6.6	-2.3	3.0	2.1	3.7	3.9	4.2
15.0	10.6	5.8	-0.2	0.7	3.1	4.6	1.6	1.6
15.4	9.1	3.2	-4.8	-4.5	-0.5	-1.2	-0.4	-0.2
1.1	3.6	3.5	-5.7	-4.3	-0.5	-0.5	-2.7	-2.8
14.2	5.4	-0.4	0.9	-0.2	0.0	-0.8	2.4	2.7
9.7	6.0	0.8	-2.1	2.3	-1.0	-0.9	2.3	2.6
4.4	-3.2	4.6	5.2	0.0	-1.5	-0.6	-0.3	-0.1
39.1	41.1	43.7	38.8	37.1	36.9	37.8	38.7	38.6
37.9	38.1	38.0	36.4	34.9	35.2	35.2	35.5	35.9
-1.2	-3.0	-5.7	-2.3	-2.2	-1.7	-2.6	-3.1	-2.7
15.6	16.8	23.4	24.3	23.4	22.7	23.3	23.6	23.7
:	:	:	:	:	6.0	:	:	:
:	:	13.9	8.6	5.9	3.7	:	:	:
:	:	:	:	:	2.2	:	:	:
:	:	:	:	:	6.0	:	:	:
:	:	:	:	:	:	:	:	:
:	:	:	:	:	:	:	:	:

Table 101

Main economic indicators 1961–2005

Malta

(Annual percentage change, unless otherwise stated)

	1992	1993	1994	1995	1996
1. Growth of GDP and its components (real)					
1.1. Private consumption	:	:	:	:	7.1
1.2. Government consumption	:	:	:	:	8.4
1.3. Gross fixed capital formation	:	:	:	:	-8.4
1.4. of which equipment	:	:	:	:	:
1.5. of which construction	:	:	:	:	:
1.6. Exports of goods and services	:	:	:	:	-5.9
1.7. Imports of goods and services	:	:	:	:	-5.9
1.8. GDP	4.7	4.5	5.7	6.2	4.0
2. Demand components: Contribution to changes in GDP (%)					
2.1. Consumption	:	:	:	:	6.1
2.2. Investment	:	:	:	:	-2.7
2.3. Stockbuilding	:	:	:	:	-0.2
2.4. Domestic demand	:	:	:	:	3.2
2.5. Exports	:	:	:	:	-5.5
2.6. Final demand	:	:	:	:	-2.4
2.7. Imports	:	:	:	:	6.4
2.8. Net exports	:	:	:	:	0.8
3. Gross savings and investment in % of GDP at current prices					
3.1. Private sector savings	:	:	:	:	:
3.2. Net savings of households	:	:	:	:	:
3.3. General government savings	:	:	:	:	:
3.4. National savings	:	:	:	:	:
3.5. Gross capital formation	27.6	29.8	30.7	32.0	28.6
3.6. Current account	:	:	:	:	:
4. Determinants of investment					
4.1. Capacity utilisation (survey) (a)	:	:	:	:	:
4.2. Trend GDP gap	:	:	:	:	:
4.3. Potential GDP gap	:	:	:	:	:
4.4. Profitability index (1961–73 = 100)	:	:	:	:	:
5. Growth potential					
5.1. Growth of net capital stock (real)	:	:	:	:	:
5.2. Net capital/output ratio (real)	:	:	:	:	:
5.3. Growth of capital intensity	:	:	:	:	:
5.4. Labour productivity growth	3.4	3.6	5.2	3.0	2.5
5.5. Total factor productivity growth	:	:	:	:	:
6. Employment and unemployment					
6.1. Employment	:	:	:	:	:
6.2. Activity rate	:	:	:	:	:
6.3. Employment rate (benchmark)	:	:	:	:	:
6.4. Employment rate (full-time equivalent)	:	:	:	:	:
6.5. Unemployment rate (Eurostat definition)	5.2	5.7	5.8	5.2	5.6
7. Prices and wages					
7.1. Nominal wages per head	6.8	10.2	6.4	9.0	6.3
7.2. Real wages per head (b)	:	:	:	:	4.3
7.3. Nominal unit labour costs	3.3	6.4	1.1	5.9	3.7
7.4. Real unit labour costs	-0.2	3.4	-2.3	1.0	2.9
7.5. GDP deflator	3.6	2.8	3.5	4.8	0.8
7.6. Private consumption deflator	:	:	:	:	2.0
7.7. Terms of trade	:	:	:	:	-1.3
8. General government budget, % of GDP					
8.1. Expenditure	:	:	:	:	:
8.2. Current revenues	:	:	:	:	:
8.3. Net borrowing (-) or lending (+)	:	:	:	:	:
8.4. Net borrowing cyclically adjusted	:	:	:	:	:
8.5. Debt (end of period)	:	:	:	:	:
9. Monetary conditions					
9.1. Long-term interest rate	:	:	:	:	:
9.2. Short-term interest rate	:	:	:	4.8	5.0
9.3. Yield curve (9.1–9.2)	:	:	:	:	:
9.4. Real long-term interest rate (c)	:	:	:	:	:
9.5. Nominal effective exchange rate	:	:	:	:	:
9.6. Real effective exchange rate (1995 = 100; ULC in total economy)	:	:	:	:	:

(a) Manufacturing industry 2000.

(b) Private consumption deflator.

(c) GDP deflator.

NB: see also notes on p. 335.

(Annual percentage change, unless otherwise stated)

1997	1998	1999	2000	2001	2002	2003	2004	2005
1.6	2.5	6.1	7.4	2.0	2.5	1.6	1.0	1.2
-1.1	-4.0	-0.6	5.4	3.0	2.5	5.1	0.1	0.2
-4.5	-3.4	4.0	17.4	-101.2	-4.0	5.3	2.4	3.8
:	:	:	:	:	:	:	:	:
:	:	:	:	:	:	:	:	:
4.0	8.1	8.2	5.6	-4.9	0.2	2.5	3.5	3.9
-1.7	2.5	10.1	10.4	-9.2	-2.2	5.2	3.5	3.9
4.9	3.4	4.1	6.4	-1.2	1.2	0.8	2.7	2.9
0.8	0.7	3.6	5.5	1.8	2.1	2.0	0.7	0.8
-1.3	-0.9	1.0	4.1	-2.9	-0.9	1.2	0.6	0.9
0.4	-1.0	1.4	1.6	-5.1	-2.1	0.1	1.6	1.3
-0.2	-1.1	6.0	11.3	-5.9	-1.0	3.3	2.9	3.1
3.4	6.9	7.2	5.1	-4.4	0.2	2.2	3.1	3.5
3.2	5.7	13.2	16.4	-100.3	-0.8	5.4	5.9	6.5
1.6	-2.3	-9.1	-100	9.1	2.0	-4.6	-3.2	-3.6
5.0	4.6	-1.9	-4.9	4.7	2.2	-2.4	-0.1	-0.1
:	:	:	:	:	:	:	:	:
:	:	:	:	:	:	:	:	:
:	:	:	:	:	:	:	:	:
:	:	:	:	:	:	:	:	:
25.6	23.7	24.0	28.3	20.2	19.1	24.9	25.1	25.6
:	:	:	:	:	:	-6.6	-6.3	-5.7
:	:	:	:	:	:	:	:	:
:	:	:	:	:	:	:	:	:
:	:	:	:	:	:	:	:	:
:	:	:	:	:	:	:	:	:
5.0	2.9	4.5	4.0	-1.4	-0.7	0.4	2.3	2.1
:	:	:	:	:	:	:	:	:
:	:	:	:	:	:	:	:	:
:	:	:	:	:	:	:	:	:
6.6	6.9	7.4	7.0	6.7	7.4	7.0	6.8	6.7
3.5	4.7	6.7	2.1	10.2	-0.7	1.4	2.1	2.0
0.1	1.9	4.7	0.6	7.2	-1.6	0.1	0.3	0.1
-1.4	1.8	2.1	-1.8	11.8	0.1	0.9	-0.2	-0.1
-3.6	-0.5	-0.6	-2.7	5.6	-1.4	-4.4	-0.1	-0.4
2.3	2.3	2.7	0.9	5.8	1.4	5.6	-0.1	0.3
3.4	2.7	1.9	1.5	2.8	1.0	1.3	1.8	1.9
-0.2	-2.0	2.0	0.5	0.0	1.5	0.3	0.1	0.2
:	:	:	:	46.9	48.8	46.6	44.9	43.3
:	:	:	:	40.1	42.6	39.0	39.1	39.2
:	:	-8.2	-7.0	-6.8	-6.2	-7.6	-5.8	-4.1
:	:	:	:	:	:	:	:	:
51.5	64.9	60.8	61.1	62.0	64.2	66.4	69.4	70.6
:	:	:	5.8	6.1	5.7	:	:	:
5.1	5.4	5.2	4.9	4.9	4.0	:	:	:
:	:	:	0.9	1.2	1.7	:	:	:
:	:	:	4.9	0.3	4.2	:	:	:
:	:	:	:	:	:	:	:	:
:	:	:	:	:	:	:	:	:

Table 102

Main economic indicators 1961–2005

Poland

(Annual percentage change, unless otherwise stated)

	1992	1993	1994	1995	1996
1. Growth of GDP and its components (real)					
1.1. Private consumption	2.4	5.4	3.9	3.7	8.6
1.2. Government consumption	5.9	2.4	1.2	4.8	2.0
1.3. Gross fixed capital formation	2.4	2.9	9.2	16.6	19.7
1.4. of which equipment	:	:	:	:	:
1.5. of which construction	:	:	:	:	:
1.6. Exports of goods and services	10.8	3.2	13.1	22.9	12.0
1.7. Imports of goods and services	1.8	13.1	11.3	24.2	28.0
1.8. GDP	2.5	3.7	5.3	7.0	6.0
2. Demand components: Contribution to changes in GDP (%)					
2.1. Consumption	2.5	3.8	2.7	3.2	5.6
2.2. Investment	0.4	0.5	1.5	2.8	3.7
2.3. Stockbuilding	-2.7	1.5	0.0	1.3	0.2
2.4. Domestic demand	0.2	5.7	4.2	7.3	9.4
2.5. Exports	2.1	0.7	2.7	5.0	3.0
2.6. Final demand	2.8	6.0	7.4	11.8	12.5
2.7. Imports	-0.3	-2.3	-2.1	-4.8	-6.4
2.8. Net exports	1.8	-1.6	0.6	0.2	-3.4
3. Gross savings and investment in % of GDP at current prices					
3.1. Private sector savings	27.2	15.9	18.8	20.0	18.9
3.2. Net savings of households	:	:	:	:	:
3.3. General government savings	-2.3	-0.1	1.2	1.2	1.8
3.4. National savings	24.9	15.8	20.0	21.2	20.7
3.5. Gross capital formation	15.2	15.6	17.6	19.7	21.9
3.6. Current account	9.7	0.2	2.4	1.5	-1.1
4. Determinants of investment					
4.1. Capacity utilisation (survey) (a)	:	:	:	:	76.1
4.2. Trend GDP gap	:	:	:	:	:
4.3. Potential GDP gap	:	:	:	:	:
4.4. Profitability index (1961–73 = 100)	:	:	:	:	:
5. Growth potential					
5.1. Growth of net capital stock (real)	:	:	:	:	:
5.2. Net capital/output ratio (real)	:	:	:	:	:
5.3. Growth of capital intensity	:	:	:	:	:
5.4. Labour productivity growth	:	6.2	4.2	5.1	4.0
5.5. Total factor productivity growth	:	:	:	:	:
6. Employment and unemployment					
6.1. Employment	-0.9	-1.9	-1.6	0.9	1.2
6.2. Activity rate	70.0	68.8	67.6	66.9	67.0
6.3. Employment rate (benchmark)	60.7	59.1	57.8	58.0	58.3
6.4. Employment rate (full-time equivalent)	:	:	:	:	:
6.5. Unemployment rate (Eurostat definition)	13.7	14.5	14.6	13.4	12.2
7. Prices and wages					
7.1. Nominal wages per head	73.4	33.0	40.4	34.0	28.4
7.2. Real wages per head (b)	20.1	1.1	1.8	5.3	7.0
7.3. Nominal unit labour costs	:	25.1	34.7	27.5	23.4
7.4. Real unit labour costs	:	-4.2	-1.8	-0.4	4.0
7.5. GDP deflator	38.6	30.6	37.2	28.0	18.7
7.6. Private consumption deflator	44.4	31.5	37.9	27.2	20.0
7.7. Terms of trade	6.2	7.1	3.7	1.3	-2.5
8. General government budget, % of GDP					
8.1. Expenditure	56.8	56.1	51.2	49.0	48.7
8.2. Current revenues	49.7	51.6	57.0	46.6	45.8
8.3. Net borrowing (-) or lending (+)	-7.1	-4.5	5.8	-2.5	-2.9
8.4. Net borrowing cyclically adjusted	:	:	:	:	:
8.5. Debt (end of period)	:	:	:	:	:
9. Monetary conditions					
9.1. Long-term interest rate	:	:	:	:	:
9.2. Short-term interest rate	:	:	:	27.6	21.4
9.3. Yield curve (9.1–9.2)	:	:	:	:	:
9.4. Real long-term interest rate (c)	:	:	:	:	:
9.5. Nominal effective exchange rate	:	:	:	:	:
9.6. Real effective exchange rate (1995 = 100; ULC in total economy)	:	:	:	:	:

(a) Manufacturing industry 2000.

(b) Private consumption deflator.

(c) GDP deflator.

NB: see also notes on p. 335.

(Annual percentage change, unless otherwise stated)

1997	1998	1999	2000	2001	2002	2003	2004	2005
6.9	4.8	5.4	2.7	2.1	3.3	3.0	3.3	3.7
3.1	1.4	1.0	1.1	0.6	0.9	1.8	2.0	2.0
21.7	14.2	6.5	3.0	-9.8	-5.8	2.3	9.0	11.5
:	:	:	:	:	:	:	:	:
:	:	:	:	:	:	:	:	:
12.2	14.3	-2.6	23.2	10.3	4.8	6.5	8.8	9.8
21.4	18.5	1.0	15.6	-0.1	2.6	4.3	8.6	10.5
6.8	4.8	4.1	4.0	1.0	1.4	3.3	4.2	4.8
4.8	3.3	3.5	1.9	1.4	2.2	2.2	2.4	2.6
4.6	3.4	1.7	0.8	-2.6	-1.3	0.5	1.9	2.5
0.1	0.1	-0.1	0.4	-1.2	-0.1	0.0	0.1	0.1
9.4	6.7	5.1	3.0	-2.4	0.8	2.7	4.3	5.2
3.3	4.0	-0.8	6.7	3.5	1.5	2.1	3.0	3.5
12.8	10.7	4.4	9.4	1.0	2.3	4.8	7.3	8.7
-5.9	-5.9	-0.4	-5.4	0.0	-0.9	-1.5	-3.1	-3.9
-2.7	-1.8	-1.2	1.3	3.6	0.6	0.6	-0.1	-0.4
18.8	19.4	18.3	17.5	:	:	:	:	:
:	:	:	:	:	:	:	:	:
2.1	2.6	2.5	1.5	:	:	:	:	:
20.9	22.0	20.9	19.0	18.1	:	:	:	:
24.6	26.2	26.4	25.0	21.0	19.2	19.2	20.5	21.9
-3.7	-4.2	-5.5	-6.1	-2.9	-3.5	-2.9	-3.4	-3.6
76.5	76.7	73.6	72.4	69.3	69.9	72.0	:	:
:	:	:	:	:	:	:	:	:
:	:	:	:	:	:	:	:	:
:	:	:	:	:	:	:	:	:
:	:	:	:	:	:	:	:	:
3.9	2.4	6.9	6.4	1.7	3.8	3.6	3.7	3.2
:	:	:	:	:	:	:	:	:
1.5	1.1	-3.9	-1.6	-2.2	-3.0	-0.3	0.5	1.5
65.8	65.5	64.8	65.5	65.3	64.5	64.2	64.3	64.3
58.7	58.8	56.1	54.8	53.2	51.6	50.9	50.8	51.2
:	:	:	:	52.9	50.7	:	:	:
10.9	10.2	13.4	16.4	18.5	19.9	20.6	20.9	20.3
20.6	16.0	13.0	13.3	13.3	4.7	3.2	3.4	4.9
5.1	4.0	5.8	1.5	8.1	2.8	2.4	1.5	2.1
16.0	13.3	5.7	6.4	11.5	0.9	-0.4	-0.3	1.6
1.8	1.3	-1.0	-4.6	7.0	-0.6	-1.1	-1.8	-0.8
14.0	11.8	6.8	11.5	4.2	1.4	0.7	1.6	2.4
14.7	11.5	6.8	11.6	4.9	1.8	0.8	1.9	2.7
-1.5	2.2	-1.0	-5.6	-1.3	-0.4	1.7	-0.6	0.4
47.7	45.9	45.2	43.3	45.0	44.3	45.6	48.1	46.7
44.9	43.6	43.3	40.8	42.0	40.4	41.3	42.2	41.8
-2.8	-2.3	-2.0	-2.5	-3.1	-3.9	-4.3	-5.9	-4.9
:	:	:	:	:	:	:	:	:
46.9	41.6	42.7	37.2	37.2	41.6	45.1	49.2	51.5
:	:	9.5	11.8	10.7	7.3	:	:	:
23.7	20.4	14.7	18.8	16.1	9.0	:	:	:
:	:	-5.2	-7.0	-5.4	-1.7	:	:	:
:	:	2.6	0.2	6.2	5.8	:	:	:
:	:	:	:	:	:	:	:	:
:	:	:	:	:	:	:	:	:

Table 103

Main economic indicators 1961–2005 Slovakia

(Annual percentage change, unless otherwise stated)

	1992	1993	1994	1995	1996
1. Growth of GDP and its components (real)					
1.1. Private consumption	:	:	1.5	4.0	8.8
1.2. Government consumption	:	5.9	-100.1	2.1	17.4
1.3. Gross fixed capital formation	:	-3.1	-2.5	1.8	30.9
1.4. of which equipment	:	:	:	:	:
1.5. of which construction	:	:	:	:	:
1.6. Exports of goods and services	:	-0.2	12.2	4.8	-1.3
1.7. Imports of goods and services	:	-0.6	-5.4	11.5	19.8
1.8. GDP	:	6.2	5.2	6.5	5.8
2. Demand components: Contribution to changes in GDP (%)					
2.1. Consumption	:	:	-1.7	2.5	8.1
2.2. Investment	:	-1.0	-0.7	0.5	7.8
2.3. Stockbuilding	:	0.0	-2.2	6.8	1.8
2.4. Domestic demand	:	:	-4.7	9.8	17.6
2.5. Exports	:	-0.1	6.7	2.8	-0.8
2.6. Final demand	:	:	2.0	12.6	16.9
2.7. Imports	:	0.4	3.2	-6.1	-10.1
2.8. Net exports	:	0.3	9.8	-3.3	-10.8
3. Gross savings and investment in % of GDP at current prices					
3.1. Private sector savings	:	25.2	25.6	22.0	22.8
3.2. Net savings of households	:	:	:	:	:
3.3. General government savings	:	-3.1	1.7	7.5	3.5
3.4. National savings	:	22.1	27.3	29.5	26.2
3.5. Gross capital formation	28.1	24.7	21.0	24.8	34.8
3.6. Current account	:	-4.1	5.3	3.0	-9.0
4. Determinants of investment					
4.1. Capacity utilisation (survey) (a)	:	:	:	:	78.0
4.2. Trend GDP gap	:	:	:	:	:
4.3. Potential GDP gap	:	:	:	:	:
4.4. Profitability index (1961–73 = 100)	:	:	:	:	:
5. Growth potential					
5.1. Growth of net capital stock (real)	:	:	:	:	:
5.2. Net capital/output ratio (real)	:	:	:	:	:
5.3. Growth of capital intensity	:	:	:	:	:
5.4. Labour productivity growth	:	:	:	4.3	2.4
5.5. Total factor productivity growth	:	:	:	:	:
6. Employment and unemployment					
6.1. Employment	:	:	:	:	:
6.2. Activity rate	:	:	:	:	:
6.3. Employment rate (benchmark)	:	:	:	:	:
6.4. Employment rate (full-time equivalent)	:	:	:	:	:
6.5. Unemployment rate (Eurostat definition)	:	:	13.7	13.2	11.3
7. Prices and wages					
7.1. Nominal wages per head	:	:	:	18.3	6.1
7.2. Real wages per head (b)	:	:	:	8.3	-0.6
7.3. Nominal unit labour costs	:	:	:	13.4	3.6
7.4. Real unit labour costs	:	:	:	3.8	-1.0
7.5. GDP deflator	:	16.6	14.6	9.2	4.6
7.6. Private consumption deflator	:	:	14.1	9.2	6.7
7.7. Terms of trade	:	-2.3	0.2	0.7	-2.7
8. General government budget, % of GDP					
8.1. Expenditure	:	:	:	:	:
8.2. Current revenues	:	:	:	:	:
8.3. Net borrowing (-) or lending (+)	:	-31.2	-6.1	-0.9	-7.4
8.4. Net borrowing cyclically adjusted	:	:	:	:	:
8.5. Debt (end of period)	:	:	:	:	:
9. Monetary conditions					
9.1. Long-term interest rate	:	:	:	:	:
9.2. Short-term interest rate	:	:	:	8.4	11.9
9.3. Yield curve (9.1–9.2)	:	:	:	:	:
9.4. Real long-term interest rate (c)	:	:	:	:	:
9.5. Nominal effective exchange rate	:	:	:	:	:
9.6. Real effective exchange rate (1995 = 100; ULC in total economy)	:	:	:	:	:

(a) Manufacturing industry 2000.

(b) Private consumption deflator.

(c) GDP deflator.

NB: see also notes on p. 335.

(Annual percentage change, unless otherwise stated)

1997	1998	1999	2000	2001	2002	2003	2004	2005
5.7	6.3	3.3	-1.8	3.9	5.3	1.6	2.6	3.2
-4.5	11.5	-7.7	1.3	5.1	4.0	-1.1	1.3	1.4
14.3	11.0	-108.5	1.2	9.6	-0.6	1.9	5.0	5.4
:	:	:	:	:	:	:	:	:
:	:	:	:	:	:	:	:	:
19.0	13.2	5.2	13.8	6.5	5.9	16.4	10.9	8.4
13.8	16.9	-6.3	10.2	11.7	5.3	12.8	9.8	7.6
5.6	4.0	1.3	2.2	3.3	4.4	3.8	4.1	4.3
2.0	5.7	0.1	-0.7	3.1	3.6	0.6	1.6	1.9
4.4	3.7	-6.6	0.4	2.7	-0.2	0.5	1.4	1.5
-2.4	-2.0	-0.4	-0.6	1.6	1.5	0.2	0.2	0.0
4.2	7.4	-6.9	-0.9	7.5	4.8	1.4	3.2	3.5
10.2	8.0	3.4	9.4	4.9	4.6	13.0	9.7	8.0
14.3	15.4	-3.5	8.5	12.4	9.5	14.4	12.9	11.5
-8.7	-101.4	4.8	-7.2	-8.9	-4.4	-100.6	-8.8	-7.2
1.5	-3.5	8.2	2.2	-4.0	0.3	2.4	0.8	0.8
23.3	22.4	22.2	24.6	:	:	:	:	:
:	:	:	:	:	:	:	:	:
3.0	3.0	2.3	0.8	:	:	:	:	:
26.3	25.5	24.5	25.4	25.1	22.7	25.6	26.0	26.1
34.4	33.9	27.5	26.0	29.8	31.1	29.6	30.5	30.6
-8.7	-9.0	-3.5	-2.5	-7.4	-8.3	-3.8	-4.4	-4.4
80.0	82.3	79.5	84.5	84.9	78.4	77.1	:	:
:	:	:	:	:	:	:	:	:
:	:	:	:	:	:	:	:	:
:	:	:	:	:	:	:	:	:
:	:	:	:	:	:	:	:	:
6.8	2.4	4.7	4.9	2.3	4.2	2.2	2.7	2.9
:	:	:	:	:	:	:	:	:
:	:	:	:	:	:	:	:	:
:	:	:	:	:	:	:	:	:
11.9	60.6	58.0	56.4	55.7	55.8	:	:	:
11.9	12.9	16.7	18.7	19.4	18.6	17.7	17.1	16.5
15.1	9.7	8.2	12.3	5.8	9.8	7.5	8.1	6.1
8.9	3.4	-0.3	3.0	0.2	7.2	0.6	0.5	2.0
7.8	7.1	3.4	7.1	3.4	5.4	5.2	5.2	3.1
2.0	1.5	-3.1	-1.1	-1.2	3.5	-1.5	0.1	-0.2
5.7	5.5	6.6	8.3	4.7	1.8	6.8	5.1	3.2
5.8	6.1	8.5	9.0	5.6	2.4	6.8	7.5	4.0
-2.2	2.2	-2.0	0.3	-2.4	0.6	1.6	-1.5	-0.6
:	:	:	:	42.1	43.7	38.5	37.3	37.1
:	:	:	:	35.0	36.5	33.4	33.3	33.7
-6.2	-5.2	-7.8	-103.5	-7.2	-7.2	-5.1	-4.0	-3.4
:	:	:	:	:	:	:	:	:
28.6	28.6	43.8	46.9	48.8	44.3	45.1	45.2	45.4
:	:	:	8.3	8.1	6.9	:	:	:
21.8	21.1	15.7	8.6	7.8	7.8	:	:	:
:	:	:	-0.2	0.3	-0.9	:	:	:
:	:	:	0.0	3.2	5.0	:	:	:
:	:	:	:	:	:	:	:	:
:	:	:	:	:	:	:	:	:

Table 104

Main economic indicators 1961–2005 Slovenia

(Annual percentage change, unless otherwise stated)

	1992	1993	1994	1995	1996
1. Growth of GDP and its components (real)					
1.1. Private consumption	- 3.6	14.1	4.1	9.3	2.6
1.2. Government consumption	- 1.7	5.3	2.1	2.5	3.4
1.3. Gross fixed capital formation	- 12.9	10.7	14.1	16.8	11.2
1.4. of which equipment	-20.8	27.8	23.9	19.7	2.1
1.5. of which construction	- 5.3	- 5.2	1.7	10.1	20.9
1.6. Exports of goods and services	-23.5	0.6	12.3	1.1	2.8
1.7. Imports of goods and services	- 22.9	17.6	13.1	11.3	2.3
1.8. GDP	- 5.5	2.8	5.3	4.1	3.8
2. Demand components: Contribution to changes in GDP (%)					
2.1. Consumption	- 2.2	8.4	2.8	5.8	2.3
2.2. Investment	- 2.2	1.7	2.4	3.1	2.3
2.3. Stockbuilding	1.5	1.3	0.3	1.2	- 0.9
2.4. Domestic demand	- 2.1	9.8	5.3	9.3	3.6
2.5. Exports	- 15	0.3	6.2	0.6	1.5
2.6. Final demand	- 17.7	11.7	11.7	10.7	5.1
2.7. Imports	11.6	- 7.3	- 6.2	- 5.7	- 1.3
2.8. Net exports	- 3.4	- 7.0	0.0	- 5.1	0.2
3. Gross savings and investment in % of GDP at current prices					
3.1. Private sector savings	:	:	:	:	:
3.2. Net savings of households	:	:	:	:	:
3.3. General government savings	:	:	:	:	:
3.4. National savings	24.9	21.5	24.8	21.9	22.5
3.5. Gross capital formation	17.6	19.3	20.9	22.3	22.3
3.6. Current account	7.3	2.2	3.9	- 0.4	0.2
4. Determinants of investment					
4.1. Capacity utilisation (survey) (a)	:	:	:	:	77.5
4.2. Trend GDP gap	:	:	:	:	:
4.3. Potential GDP gap	:	:	:	:	:
4.4. Profitability index (1961–73 = 100)	:	:	:	:	:
5. Growth potential					
5.1. Growth of net capital stock (real)	:	:	:	:	:
5.2. Net capital/output ratio (real)	:	:	:	:	:
5.3. Growth of capital intensity	:	:	:	:	:
5.4. Labour productivity growth	:	:	:	:	5.4
5.5. Total factor productivity growth	:	:	:	:	:
6. Employment and unemployment					
6.1. Employment	:	:	:	:	:
6.2. Activity rate	:	:	:	:	:
6.3. Employment rate (benchmark)	:	:	:	:	:
6.4. Employment rate (full-time equivalent)	:	:	:	:	60.5
6.5. Unemployment rate (Eurostat definition)	:	:	:	7.0	6.9
7. Prices and wages					
7.1. Nominal wages per head	:	:	:	:	11.0
7.2. Real wages per head (b)	:	:	:	:	0.5
7.3. Nominal unit labour costs	:	:	:	:	5.3
7.4. Real unit labour costs	:	:	:	:	- 5.1
7.5. GDP deflator	208.2	37.1	22.6	21.4	11.0
7.6. Private consumption deflator	204.2	31.1	20.2	21.7	10.5
7.7. Terms of trade	0.6	6.0	2.6	2.4	1.3
8. General government budget, % of GDP					
8.1. Expenditure	:	:	:	:	:
8.2. Current revenues	:	:	:	:	:
8.3. Net borrowing (-) or lending (+)	:	:	:	:	:
8.4. Net borrowing cyclically adjusted	:	:	:	:	:
8.5. Debt (end of period)	:	:	:	:	:
9. Monetary conditions					
9.1. Long-term interest rate	:	:	:	:	:
9.2. Short-term interest rate	:	:	29.1	:	:
9.3. Yield curve (9.1–9.2)	:	:	:	:	:
9.4. Real long-term interest rate (c)	:	:	:	:	:
9.5. Nominal effective exchange rate	:	:	:	:	:
9.6. Real effective exchange rate (1995 = 100; ULC in total economy)	:	:	:	:	:

(a) Manufacturing industry 2000.

(b) Private consumption deflator.

(c) GDP deflator.

NB: see also notes on p. 335.

(Annual percentage change, unless otherwise stated)

1997	1998	1999	2000	2001	2002	2003	2004	2005
2.5	3.0	5.9	0.3	2.4	1.1	2.3	3.0	3.0
2.4	5.4	2.9	2.3	4.0	2.5	2.4	2.8	2.7
13.8	10.2	22.6	2.6	-0.4	1.3	5.2	5.5	7.0
17.0	15.4	25.7	3.0	5.3	3.9	:	:	:
10.1	4.9	17.8	1.0	-6.5	-1.3	:	:	:
11.3	7.4	1.6	13.0	6.4	6.5	3.4	5.3	5.7
11.5	10.3	8.0	7.6	3.0	4.9	4.5	5.7	6.1
4.4	3.7	5.9	4.1	2.9	2.9	2.1	3.1	3.7
1.9	2.8	3.9	0.6	2.1	1.1	1.7	2.2	2.1
3.0	2.4	5.7	0.8	-0.1	0.4	1.4	1.5	2.0
-0.2	0.3	0.2	0.3	-1.1	0.7	-0.2	-0.2	0.0
4.8	5.5	9.8	1.6	1.0	2.1	2.9	3.5	4.1
5.8	4.1	0.9	7.1	3.8	4.0	2.3	3.7	4.0
10.6	9.6	10.8	8.8	4.6	6.2	5.2	7.1	8.1
-6.2	-5.9	-4.9	-4.7	-1.9	-3.1	-3.1	-4.0	-4.4
-0.3	-1.8	-3.9	2.4	1.9	0.8	-0.8	-0.3	-0.4
:	:	:	:	:	:	:	:	:
:	:	:	:	:	:	:	:	:
:	:	:	:	:	:	:	:	:
23.6	24.0	24.1	24.1	24.3	25.1	26.1	25.9	26.2
23.4	24.6	27.4	27.0	24.2	23.5	25.8	25.8	26.4
0.3	-0.6	-3.3	-2.8	0.1	1.7	0.5	0.3	0.1
78.8	80.4	77.9	79.7	80.9	81.0	80.4	:	:
:	:	:	:	:	:	:	:	:
:	:	:	:	:	:	:	:	:
:	:	:	:	:	:	:	:	:
:	:	:	:	:	:	:	:	:
5.2	3.7	4.8	0.3	2.4	3.5	2.6	2.6	3.0
:	:	:	:	:	:	:	:	:
:	:	:	:	:	:	:	:	:
:	:	:	:	:	:	:	:	:
60.9	61.8	60.8	61.5	62.4	62.7	:	:	:
6.9	7.4	7.2	6.6	5.8	6.0	6.4	6.1	6.0
12.0	9.2	9.3	15.1	11.6	10.5	7.6	7.0	6.5
2.8	1.5	3.1	6.2	3.3	2.7	1.6	1.7	2.1
6.5	5.3	4.3	14.7	9.0	6.8	4.8	4.3	3.4
-2.1	-2.2	-1.5	8.6	-0.1	-1.2	-1.4	-1.2	-1.5
8.8	7.6	5.9	5.6	9.1	8.1	6.4	5.6	5.0
9.0	7.6	6.0	8.4	8.1	7.6	5.9	5.2	4.3
0.7	1.4	0.6	-2.9	1.9	2.0	-0.7	0.0	0.0
:	:	:	:	42.8	44.0	43.8	44.0	44.1
:	:	:	:	41.5	41.7	41.6	42.2	42.4
:	-2.2	-2.1	-3.1	-1.3	-2.3	-2.2	-1.8	-1.7
:	:	:	:	:	:	:	:	:
:	23.9	25.1	26.4	25.9	27.0	27.4	27.0	26.4
:	:	:	:	:	:	:	:	:
:	10.3	8.6	10.9	10.9	8.0	:	:	:
:	:	:	:	:	:	:	:	:
:	:	:	:	:	:	:	:	:
:	:	:	:	:	:	:	:	:
:	:	:	:	:	:	:	:	:

Table 105

Main economic indicators 1961–2005

AC-10

(Annual percentage change, unless otherwise stated)

	1992	1993	1994	1995	1996
1. Growth of GDP and its components (real)					
1.1. Private consumption	:	:	:	:	6.1
1.2. Government consumption	:	:	:	:	3.0
1.3. Gross fixed capital formation	:	:	:	:	14.2
1.4. of which equipment	:	:	:	:	:
1.5. of which construction	:	:	:	:	:
1.6. Exports of goods and services	:	:	:	:	8.4
1.7. Imports of goods and services	:	:	:	:	15.7
1.8. GDP	:	:	4.0	5.4	4.6
2. Demand components: Contribution to changes in GDP (%)					
2.1. Consumption	:	:	:	:	4.1
2.2. Investment	:	:	:	:	3.1
2.3. Stockbuilding	:	:	:	:	0.4
2.4. Domestic demand	:	:	:	:	7.6
2.5. Exports	:	:	:	:	3.4
2.6. Final demand	:	:	:	:	11.0
2.7. Imports	:	:	:	:	-6.4
2.8. Net exports	:	:	:	:	-3.0
3. Gross savings and investment in % of GDP at current prices					
3.1. Private sector savings	:	:	:	:	:
3.2. Net savings of households	:	:	:	:	:
3.3. General government savings	:	:	:	:	:
3.4. National savings	:	:	:	:	:
3.5. Gross capital formation	:	19.8	21.6	23.5	25.6
3.6. Current account	:	:	:	:	:
4. Determinants of investment					
4.1. Capacity utilisation (survey) (a)	:	:	:	:	:
4.2. Trend GDP gap	:	:	:	:	:
4.3. Potential GDP gap	:	:	:	:	:
4.4. Profitability index (1961–73 = 100)	:	:	:	:	:
5. Growth potential					
5.1. Growth of net capital stock (real)	:	:	:	:	:
5.2. Net capital/output ratio (real)	:	:	:	:	:
5.3. Growth of capital intensity	:	:	:	:	:
5.4. Labour productivity growth	:	:	:	:	3.7
5.5. Total factor productivity growth	:	:	:	:	:
6. Employment and unemployment					
6.1. Employment	:	:	:	:	:
6.2. Activity rate	:	:	:	:	:
6.3. Employment rate (benchmark)	:	:	:	:	:
6.4. Employment rate (full-time equivalent)	:	:	:	:	:
6.5. Unemployment rate (Eurostat definition)	:	:	:	11.1	10.5
7. Prices and wages					
7.1. Nominal wages per head	:	:	:	:	21.2
7.2. Real wages per head (b)	:	:	:	:	4.4
7.3. Nominal unit labour costs	:	:	:	:	16.9
7.4. Real unit labour costs	:	:	:	:	1.4
7.5. GDP deflator	:	:	26.2	21.9	15.2
7.6. Private consumption deflator	:	:	:	:	16.1
7.7. Terms of trade	:	:	:	:	:
8. General government budget, % of GDP					
8.1. Expenditure	:	:	:	:	:
8.2. Current revenues	:	:	:	:	:
8.3. Net borrowing (-) or lending (+)	:	:	:	:	:
8.4. Net borrowing cyclically adjusted	:	:	:	:	:
8.5. Debt (end of period)	:	:	:	:	:
9. Monetary conditions					
9.1. Long-term interest rate	:	:	:	:	:
9.2. Short-term interest rate	:	:	:	:	:
9.3. Yield curve (9.1–9.2)	:	:	:	:	:
9.4. Real long-term interest rate (c)	:	:	:	:	:
9.5. Nominal effective exchange rate	:	:	-9.4	-8.7	-4.9
9.6. Real effective exchange rate (1995 = 100; ULC in total economy)	:	:	:	100.0	106.7

(a) Manufacturing industry 2000.

(b) Private consumption deflator.

(c) GDP deflator.

NB: see also notes on p. 335.

(Annual percentage change, unless otherwise stated)

1997	1998	1999	2000	2001	2002	2003	2004	2005
4.9	3.9	4.4	3.1	3.2	4.4	4.3	3.5	3.9
1.0	1.9	0.1	1.1	2.7	2.4	2.4	1.3	1.8
12.0	11.0	2.5	4.2	-1.7	-0.6	2.4	6.6	7.8
:	:	:	:	:	:	:	:	:
:	:	:	:	:	:	:	:	:
13.8	12.3	3.2	18.5	9.2	4.5	6.2	7.0	7.7
15.5	14.8	3.2	15.0	5.9	4.7	6.3	7.2	8.0
4.8	3.8	3.1	4.1	2.4	2.3	3.1	3.8	4.2
3.1	2.6	2.6	2.1	2.4	3.0	3.0	2.3	2.7
2.9	2.8	0.7	1.1	-0.4	-0.1	0.6	1.6	2.0
0.0	0.0	-0.1	0.3	-0.9	-0.1	-0.1	0.3	0.1
6.1	5.6	3.3	3.4	1.1	2.7	3.5	4.2	4.8
5.8	5.6	1.5	9.1	5.2	2.5	3.6	4.2	4.8
11.8	11.1	4.8	12.4	6.1	5.3	7.1	8.4	9.6
-7.0	-7.4	-1.6	-8.3	-3.8	-2.9	-3.9	-4.7	-5.4
-1.3	-1.7	-0.2	0.8	1.4	-0.4	-0.4	-0.4	-0.5
:	:	:	:	:	:	:	:	:
:	:	:	:	:	:	:	:	:
:	:	:	:	:	:	:	:	:
:	:	:	:	:	:	:	:	:
26.8	27.5	26.8	26.5	24.1	22.9	22.7	23.4	24.2
:	:	:	:	:	:	-4.5	-4.7	-4.7
:	:	:	:	:	:	:	:	:
:	:	:	:	:	:	:	:	:
:	:	:	:	:	:	:	:	:
:	:	:	:	:	:	:	:	:
3.5	2.5	5.2	5.5	2.5	3.1	3.0	3.2	3.1
:	:	:	:	:	:	:	:	:
:	:	:	:	:	:	:	:	:
:	:	:	:	:	:	:	:	:
9.8	9.7	12.1	13.6	14.5	14.8	15.1	15.2	14.8
16.9	12.9	10.1	11.7	11.2	:	:	:	:
4.1	2.6	3.5	3.0	5.8	:	:	:	:
12.9	10.2	4.7	5.9	8.5	:	:	:	:
0.7	-0.1	-1.1	-2.1	3.1	:	:	:	:
12.2	10.3	5.9	8.2	5.2	3.4	2.8	3.4	3.5
12.3	10.0	6.4	8.5	5.1	2.5	2.2	3.4	3.1
:	:	:	:	:	:	:	:	:
:	:	:	:	46.4	46.3	46.0	46.8	45.6
:	:	:	:	42.7	41.1	41.0	41.8	41.5
:	:	-3.5	-3.5	-3.7	-5.2	-5.0	-5.0	-4.1
:	:	:	:	:	:	:	:	:
:	36.6	38.5	35.9	36.7	39.8	42.4	44.6	45.9
:	:	:	:	:	:	:	:	:
:	:	12.6	12.9	11.4	7.4	:	:	:
:	:	:	:	:	:	:	:	:
:	:	:	:	:	:	:	:	:
-2.4	-3.2	-5.4	0.0	4.6	3.2	-2.7	-1.5	-0.6
112.2	116.3	112.7	117.3	128.8	:	:	:	:

Table 106

Main economic indicators 1961–2005

EU-25

(Annual percentage change, unless otherwise stated)

	1992	1993	1994	1995	1996
1. Growth of GDP and its components (real)					
1.1. Private consumption	:	:	:	:	2.0
1.2. Government consumption	:	:	:	:	1.6
1.3. Gross fixed capital formation	:	:	:	:	2.4
1.4. of which equipment	:	:	:	:	:
1.5. of which construction	:	:	:	:	:
1.6. Exports of goods and services	:	:	:	:	5.1
1.7. Imports of goods and services	:	:	:	:	4.7
1.8. GDP	:	:	2.8	2.5	1.7
2. Demand components: Contribution to changes in GDP (%)					
2.1. Consumption	:	:	:	:	1.5
2.2. Investment	:	:	:	:	0.5
2.3. Stockbuilding	:	:	:	:	-0.5
2.4. Domestic demand	:	:	:	:	1.5
2.5. Exports	:	:	:	:	1.5
2.6. Final demand	:	:	:	:	3.0
2.7. Imports	:	:	:	:	-1.3
2.8. Net exports	:	:	:	:	0.2
3. Gross savings and investment in % of GDP at current prices					
3.1. Private sector savings	:	:	:	:	:
3.2. Net savings of households	:	:	:	:	:
3.3. General government savings	:	:	:	:	:
3.4. National savings	:	:	:	:	:
3.5. Gross capital formation	:	19.5	20.1	20.5	19.9
3.6. Current account	:	:	:	:	:
4. Determinants of investment					
4.1. Capacity utilisation (survey) (a)	:	:	:	:	:
4.2. Trend GDP gap	:	:	:	:	:
4.3. Potential GDP gap	:	:	:	:	:
4.4. Profitability index (1961–73 = 100)	:	:	:	:	:
5. Growth potential					
5.1. Growth of net capital stock (real)	:	:	:	:	:
5.2. Net capital/output ratio (real)	:	:	:	:	:
5.3. Growth of capital intensity	:	:	:	:	:
5.4. Labour productivity growth	:	:	:	:	1.1
5.5. Total factor productivity growth	:	:	:	:	:
6. Employment and unemployment					
6.1. Employment	:	:	:	:	:
6.2. Activity rate	:	:	:	:	:
6.3. Employment rate (benchmark)	:	:	:	:	:
6.4. Employment rate (full-time equivalent)	:	:	:	:	:
6.5. Unemployment rate (Eurostat definition)	:	:	:	:	:
7. Prices and wages					
7.1. Nominal wages per head	:	:	:	:	3.3
7.2. Real wages per head (b)	:	:	:	:	0.2
7.3. Nominal unit labour costs	:	:	:	:	2.2
7.4. Real unit labour costs	:	:	:	:	-0.5
7.5. GDP deflator	:	:	3.2	3.4	2.7
7.6. Private consumption deflator	:	:	:	:	3.1
7.7. Terms of trade	:	:	:	:	:
8. General government budget, % of GDP					
8.1. Expenditure	:	:	:	:	:
8.2. Current revenues	:	:	:	:	:
8.3. Net borrowing (-) or lending (+)	:	:	:	:	:
8.4. Net borrowing cyclically adjusted	:	:	:	:	:
8.5. Debt (end of period)	:	:	:	:	:
9. Monetary conditions					
9.1. Long-term interest rate	:	:	:	:	:
9.2. Short-term interest rate	:	:	:	:	:
9.3. Yield curve (9.1–9.2)	:	:	:	:	:
9.4. Real long-term interest rate (c)	:	:	:	:	:
9.5. Nominal effective exchange rate	:	:	4.6	8.0	8.5
9.6. Real effective exchange rate (1995 = 100; ULC in total economy)	:	:	:	100.0	104.5

(a) Manufacturing industry 2000.

(b) Private consumption deflator.

(c) GDP deflator.

NB: see also notes on p. 335.

(Annual percentage change, unless otherwise stated)

1997	1998	1999	2000	2001	2002	2003	2004	2005
2.1	3.2	3.7	3.0	2.1	1.3	1.7	1.8	2.2
1.0	1.5	1.9	1.9	2.3	2.7	2.0	1.4	1.5
3.5	6.7	5.2	4.9	0.5	-1.8	-0.2	2.9	3.6
:	:	:	:	:	:	:	:	:
:	:	:	:	:	:	:	:	:
10.3	6.9	5.3	12.4	3.3	1.5	0.4	5.2	6.7
9.7	10.2	7.2	11.1	2.2	0.9	1.9	5.2	6.6
2.6	3.0	2.9	3.6	1.7	1.2	0.9	2.1	2.5
1.4	2.2	2.5	2.2	1.7	1.3	1.4	1.4	1.6
0.7	1.3	1.1	1.0	0.1	-0.4	0.0	0.6	0.8
0.1	0.3	-0.1	-0.1	-0.4	0.0	0.1	0.0	0.1
2.2	3.8	3.4	3.1	1.3	0.9	1.4	2.0	2.4
3.2	2.3	1.8	4.4	1.3	0.6	0.2	2.0	2.7
5.4	6.1	5.3	7.4	2.6	1.5	1.6	4.0	5.0
-2.8	-3.2	-2.4	-3.9	-0.9	-0.4	-0.7	-2.0	-2.6
0.4	-0.9	-0.6	0.5	0.4	0.2	-0.5	0.0	0.1
:	:	:	:	:	:	:	:	:
:	:	:	:	:	:	:	:	:
:	:	:	:	:	:	:	:	:
:	:	:	:	:	:	:	:	:
20.0	20.7	20.8	21.3	20.4	19.5	19.2	19.4	19.7
:	:	:	:	:	:	:	:	:
:	:	:	:	:	:	:	:	:
:	:	:	:	:	:	:	:	:
:	:	:	:	:	:	:	:	:
:	:	:	:	:	:	:	:	:
:	:	:	:	:	:	:	:	:
:	:	:	:	:	:	:	:	:
1.6	1.2	1.8	2.1	0.7	0.9	0.8	1.7	1.6
:	:	:	:	:	:	:	:	:
:	:	:	:	:	:	:	:	:
:	:	:	:	:	:	:	:	:
:	:	57.0	57.8	58.2	58.2	:	:	:
:	:	:	:	:	:	:	:	:
3.0	2.6	3.3	4.2	3.9	:	:	:	:
0.5	0.6	1.8	1.9	1.4	:	:	:	:
1.3	1.3	1.5	2.0	3.1	:	:	:	:
-0.8	-0.8	0.0	0.3	0.6	:	:	:	:
2.1	2.2	1.5	1.7	2.5	2.5	2.2	2.0	1.8
2.5	2.0	1.5	2.2	2.4	2.1	1.9	1.9	1.7
:	:	:	:	:	:	:	:	:
:	:	:	:	47.1	47.4	48.3	47.9	47.5
:	:	:	:	46.1	45.3	45.5	45.3	45.0
:	:	-0.8	0.8	-1.1	-2.1	-2.8	-2.7	-2.5
:	:	:	:	:	:	:	:	:
:	67.6	66.2	63.0	61.7	61.5	63.1	63.5	63.5
:	:	:	:	:	:	:	:	:
:	:	4.2	5.4	4.9	3.8	:	:	:
:	:	:	:	:	:	:	:	:
:	:	:	:	:	:	:	:	:
4.3	6.2	-1.8	-8.0	4.2	6.0	12.2	1.5	-0.2
99.3	98.6	92.0	81.9	83.0	:	:	:	:

Table 107

Main economic indicators 1961–2005 Bulgaria

(Annual percentage change, unless otherwise stated)

	1992	1993	1994	1995	1996
1. Growth of GDP and its components (real)					
1.1. Private consumption	1.0	-0.8	-2.6	-0.5	-3.9
1.2. Government consumption	-14.9	-12.5	-11.8	-8.2	-28.9
1.3. Gross fixed capital formation	-7.3	-17.5	1.1	16.1	-21.2
1.4. of which equipment	:	:	:	:	:
1.5. of which construction	:	:	:	:	:
1.6. Exports of goods and services	:	:	:	:	11.8
1.7. Imports of goods and services	:	:	:	:	-1.9
1.8. GDP	-7.3	-1.5	1.8	2.9	-9.4
2. Demand components: Contribution to changes in GDP (%)					
2.1. Consumption	-2.9	-3.4	-4.3	-1.8	-7.2
2.2. Investment	-1.2	-2.8	0.1	2.2	-3.2
2.3. Stockbuilding	6.4	6.4	9.7	4.1	-5.1
2.4. Domestic demand	-4.3	-6.0	-5.4	5.2	-15.5
2.5. Exports	:	:	:	:	5.3
2.6. Final demand	:	:	:	:	-10.3
2.7. Imports	:	:	:	:	0.9
2.8. Net exports	:	:	:	:	6.2
3. Gross savings and investment in % of GDP at current prices					
3.1. Private sector savings	:	:	:	:	:
3.2. Net savings of households	:	:	:	:	:
3.3. General government savings	:	:	:	:	:
3.4. National savings	12.5	5.9	6.9	10.9	10.7
3.5. Gross capital formation	19.9	15.3	9.4	15.7	8.1
3.6. Current account	-7.4	-9.4	-2.4	-4.8	2.4
4. Determinants of investment					
4.1. Capacity utilisation (survey) (a)	:	:	:	:	61.4
4.2. Trend GDP gap	:	:	:	:	:
4.3. Potential GDP gap	:	:	:	:	:
4.4. Profitability index (1961–73 = 100)	:	:	:	:	:
5. Growth potential					
5.1. Growth of net capital stock (real)	:	:	:	:	:
5.2. Net capital/output ratio (real)	:	:	:	:	:
5.3. Growth of capital intensity	:	:	:	:	:
5.4. Labour productivity growth	1.0	0.1	1.2	1.6	-9.5
5.5. Total factor productivity growth	:	:	:	:	:
6. Employment and unemployment					
6.1. Employment	:	:	:	:	:
6.2. Activity rate	:	:	:	:	:
6.3. Employment rate (benchmark)	:	:	:	:	:
6.4. Employment rate (full-time equivalent)	:	:	:	:	:
6.5. Unemployment rate (Eurostat definition)	11.5	13.9	12.3	9.7	9.3
7. Prices and wages					
7.1. Nominal wages per head	:	:	:	:	72.7
7.2. Real wages per head (b)	:	:	:	:	-21.3
7.3. Nominal unit labour costs	:	:	:	:	90.8
7.4. Real unit labour costs	:	:	:	:	-13.6
7.5. GDP deflator	59.6	51.1	72.7	62.8	120.8
7.6. Private consumption deflator	77.6	68.0	81.9	60.7	119.6
7.7. Terms of trade	:	:	:	:	0.7
8. General government budget, % of GDP					
8.1. Expenditure	:	:	:	:	:
8.2. Current revenues	:	:	:	:	:
8.3. Net borrowing (-) or lending (+)	:	:	:	:	:
8.4. Net borrowing cyclically adjusted	:	:	:	:	:
8.5. Debt (end of period)	:	:	:	:	:
9. Monetary conditions					
9.1. Long-term interest rate	:	:	:	:	:
9.2. Short-term interest rate	:	:	:	:	:
9.3. Yield curve (9.1–9.2)	:	:	:	:	:
9.4. Real long-term interest rate (c)	:	:	:	:	:
9.5. Nominal effective exchange rate	:	:	:	:	:
9.6. Real effective exchange rate (1995 = 100; ULC in total economy)	:	:	:	:	:

(a) Manufacturing industry 2000.

(b) Private consumption deflator.

(c) GDP deflator.

NB: see also notes on p. 335.

(Annual percentage change, unless otherwise stated)

1997	1998	1999	2000	2001	2002	2003	2004	2005
-10.7	2.7	9.6	4.3	5.2	4.2	6.5	5.0	5.5
-1.3	4.0	2.0	22.7	1.3	3.9	3.0	3.5	4.0
-23.9	32.9	25.3	8.2	19.9	9.3	12.0	10.0	12.0
:	:	:	:	:	:	:	:	:
:	:	:	:	:	:	:	:	:
12.8	-4.7	-5.0	16.6	10.0	6.2	9.5	11.3	13.7
10.9	12.1	9.3	18.6	14.8	4.7	13.7	11.3	14.2
-5.4	3.9	2.3	5.4	4.1	4.8	4.5	5.0	5.5
-8.2	2.4	7.0	6.1	4.0	3.7	5.3	4.3	4.7
-3.2	3.5	3.5	1.4	3.4	1.8	2.5	2.2	2.8
6.0	4.7	:	:	:	:	2.0	1.0	1.6
-5.5	7.5	9.9	4.7	5.6	4.2	9.7	7.5	9.1
7.0	-3.1	-3.0	9.3	6.2	4.0	6.3	7.8	10.0
0.1	11.0	8.2	18.0	15.3	8.7	16.0	15.3	19.2
-5.5	-7.1	-5.9	-12.6	-11.3	-3.9	-11.5	-10.3	-13.7
1.6	-10.2	-8.9	-3.3	-5.1	0.1	-5.2	-2.5	-3.7
:	:	6.7	8.9	:	:	:	:	:
:	:	:	:	:	:	:	:	:
:	:	7.7	4.9	:	:	:	:	:
13.4	17.5	14.5	13.8	14.6	14.6	14.0	14.7	14.8
9.9	16.9	17.9	18.3	20.7	19.7	20.6	21.1	22.0
3.5	-0.2	-4.8	-5.5	-6.1	-4.7	-6.2	-5.9	-6.7
61.8	59.8	53.7	59.9	57.7	56.9	60.1	:	:
:	:	:	:	:	:	:	:	:
:	:	:	:	:	:	:	:	:
:	:	:	:	:	:	:	:	:
:	:	:	:	:	:	:	:	:
:	:	:	:	:	:	:	:	:
:	:	:	:	:	:	:	:	:
-1.5	4.1	4.5	9.2	4.5	3.9	2.5	3.4	3.9
:	:	:	:	:	:	:	:	:
:	:	:	:	:	:	:	:	:
:	:	:	:	:	:	:	:	:
12.3	10.6	12.2	16.4	19.2	18.1	15.3	13.8	12.3
848.0	52.5	6.0	10.2	12.3	8.2	8.1	7.8	10.2
-12.6	31.6	3.7	5.4	6.0	3.7	6.0	4.7	6.5
862.6	46.5	1.4	0.9	7.5	4.1	5.5	4.3	6.1
-8.0	18.4	-2.2	-5.4	0.8	0.2	2.4	0.3	2.2
946.0	23.8	3.7	6.7	6.7	3.8	3.1	3.9	3.8
985.1	15.8	2.2	4.5	6.0	4.3	2.0	3.0	3.5
-3.7	8.9	1.3	4.8	0.7	-0.4	1.5	1.2	0.0
:	:	:	:	40.0	39.4	40.2	39.7	38.8
:	:	:	:	40.2	38.7	40.2	38.9	37.9
:	:	0.4	-0.5	0.2	-0.7	0.0	-0.7	-1
:	:	:	:	:	:	:	:	:
:	:	79.3	73.6	66.2	53.2	50.8	48.6	46.6
:	:	:	:	:	8.3	:	:	:
:	5.9	5.9	4.6	5.1	4.9	:	:	:
:	:	:	:	:	3.4	:	:	:
:	:	:	:	:	4.3	:	:	:
:	:	:	:	:	:	:	:	:
:	:	:	:	:	:	:	:	:

Table 108

Main economic indicators 1961–2005 Romania

(Annual percentage change, unless otherwise stated)

	1992	1993	1994	1995	1996
1. Growth of GDP and its components (real)					
1.1. Private consumption	- 7.5	0.9	2.4	12.9	8.1
1.2. Government consumption	2.2	2.7	11.0	1.0	1.5
1.3. Gross fixed capital formation	11.0	8.3	20.7	6.9	5.7
1.4. of which equipment	5.7	11.0	22.8	- 7.1	6.9
1.5. of which construction	:	:	:	:	:
1.6. Exports of goods and services	4.1	10.6	19.0	17.0	2.0
1.7. Imports of goods and services	1.3	4.4	- 1.2	29.7	8.7
1.8. GDP	- 8.7	1.5	3.9	7.1	3.9
2. Demand components: Contribution to changes in GDP (%)					
2.1. Consumption	- 4.6	1.0	3.0	8.4	5.7
2.2. Investment	1.6	1.4	3.8	1.5	1.2
2.3. Stockbuilding	- 10.8	- 4.2	- 9.1	- 3.6	- 0.6
2.4. Domestic demand	- 9.1	0.6	- 0.6	11.0	6.3
2.5. Exports	0.7	2.1	4.2	4.3	0.6
2.6. Final demand	- 13.1	0.3	2.0	10.6	6.8
2.7. Imports	- 0.3	- 1.2	0.3	- 8.2	- 2.9
2.8. Net exports	0.4	0.9	4.5	- 3.8	- 2.3
3. Gross savings and investment in % of GDP at current prices					
3.1. Private sector savings	:	:	:	:	:
3.2. Net savings of households	:	:	:	:	:
3.3. General government savings	:	:	:	:	:
3.4. National savings	24.5	26.9	24.9	19.9	18.3
3.5. Gross capital formation	31.4	28.9	24.8	24.3	25.9
3.6. Current account	- 6.9	- 2.0	0.1	- 4.4	- 7.5
4. Determinants of investment					
4.1. Capacity utilisation (survey) (a)	:	:	:	:	:
4.2. Trend GDP gap	:	:	:	:	:
4.3. Potential GDP gap	:	:	:	:	:
4.4. Profitability index (1961–73 = 100)	:	:	:	:	:
5. Growth potential					
5.1. Growth of net capital stock (real)	:	:	:	:	:
5.2. Net capital/output ratio (real)	:	:	:	:	:
5.3. Growth of capital intensity	:	:	:	:	:
5.4. Labour productivity growth	- 5.9	5.5	4.5	13.0	5.2
5.5. Total factor productivity growth	:	:	:	:	:
6. Employment and unemployment					
6.1. Employment	:	:	:	:	:
6.2. Activity rate	:	:	:	:	:
6.3. Employment rate (benchmark)	:	:	:	:	:
6.4. Employment rate (full-time equivalent)	:	:	:	:	:
6.5. Unemployment rate (Eurostat definition)	5.1	7.2	7.6	6.1	3.1
7. Prices and wages					
7.1. Nominal wages per head	187.8	207.6	132.6	54.3	53.5
7.2. Real wages per head (b)	- 5.8	- 8.0	- 3.8	12.8	7.0
7.3. Nominal unit labour costs	205.8	191.6	122.7	36.5	45.9
7.4. Real unit labour costs	2.0	- 100.9	- 6.8	0.9	0.4
7.5. GDP deflator	199.7	227.3	139.0	35.3	45.3
7.6. Private consumption deflator	205.5	234.5	141.9	36.7	43.5
7.7. Terms of trade	- 8.6	1.1	- 6.8	- 0.2	- 1.4
8. General government budget, % of GDP					
8.1. Expenditure	:	:	:	:	:
8.2. Current revenues	:	:	:	:	:
8.3. Net borrowing (-) or lending (+)	:	:	:	:	:
8.4. Net borrowing cyclically adjusted	:	:	:	:	:
8.5. Debt (end of period)	:	:	:	:	:
9. Monetary conditions					
9.1. Long-term interest rate	:	:	:	:	:
9.2. Short-term interest rate	:	:	:	43.0	53.7
9.3. Yield curve (9.1–9.2)	:	:	:	:	:
9.4. Real long-term interest rate (c)	:	:	:	:	:
9.5. Nominal effective exchange rate	:	:	:	:	:
9.6. Real effective exchange rate (1995 = 100; ULC in total economy)	:	:	:	:	:

(a) Manufacturing industry 2000.

(b) Private consumption deflator.

(c) GDP deflator.

NB: see also notes on p. 335.

(Annual percentage change, unless otherwise stated)

1997	1998	1999	2000	2001	2002	2003	2004	2005
-3.5	1.0	-2.1	-0.6	6.2	3.0	5.0	4.5	4.2
-8.5	1.8	-4.5	11.9	5.2	2.5	3.8	2.5	2.0
1.7	-5.7	-4.8	5.5	9.1	8.3	9.3	9.8	10.0
23.8	-4.2	-7.8	7.4	:	:	:	:	:
:	:	:	:	:	:	:	:	:
11.4	-1.7	10.5	23.4	11.1	16.9	11.2	9.6	9.1
7.5	11.3	-1.5	27.1	17.2	12.1	13.2	10.1	8.9
-6.1	-4.8	-1.2	2.1	5.7	4.9	4.6	4.9	5.1
-3.6	1.0	-2.3	1.2	5.3	2.6	4.2	3.6	3.3
0.4	-1.3	-1.1	1.2	2.1	2.0	2.3	2.5	2.7
-2.6	0.0	-0.7	1.5	1.2	0.0	1.3	0.8	0.6
-6.5	0.2	-5.3	6.0	10.6	4.6	7.7	7.0	6.6
3.1	-0.6	3.5	8.7	5.0	8.0	5.9	5.4	5.3
-2.7	-1.5	-1.0	14.0	14.6	12.6	13.6	12.4	12.0
-2.6	-4.5	0.7	-12.5	-9.9	-7.7	-9.0	-7.5	-6.9
0.5	-5.1	4.2	-3.8	-4.9	0.2	-3.1	-2.1	-1.6
:	:	:	:	:	:	:	:	:
:	-5.9	-1.1	0.9	:	:	:	:	:
:	:	:	:	:	:	:	:	:
14.3	10.5	14.4	15.4	:	:	18.7	19.3	20.0
20.6	17.7	16.1	19.5	22.6	23.1	23.4	24.4	25.6
-6.3	-7.3	-1.7	-4.1	-5.6	-3.5	-4.8	-5.1	-5.5
:	:	:	:	:	:	:	:	:
:	:	:	:	:	:	:	:	:
:	:	:	:	:	:	:	:	:
:	:	:	:	:	:	:	:	:
:	:	:	:	:	:	:	:	:
-2.3	-2.5	3.5	-0.3	6.6	14.8	4.1	4.3	5.0
:	:	:	:	:	:	:	:	:
:	:	:	:	:	:	:	:	:
:	:	:	:	:	:	:	:	:
67.5	65.6	64.5	63.8	62.9	58.4	:	:	:
5.3	5.4	6.2	6.8	6.6	7.0	6.5	6.3	6.3
103.1	128.1	41.2	74.9	-0.5	6.0	:	:	:
-20.9	52.7	-3.5	25.2	-26.6	-102.7	:	:	:
108.0	134.0	36.5	75.5	-6.6	-7.6	:	:	:
-105.9	50.7	-7.6	21.7	-32.0	-25.3	:	:	:
147.2	55.3	47.7	44.2	37.3	23.6	15.0	11.7	9.1
156.9	49.4	46.2	39.7	35.5	21.5	15.1	11.4	8.6
0.9	3.9	3.0	3.0	0.2	1.6	0.3	-0.2	-0.4
:	:	:	:	:	:	:	:	:
:	:	:	:	:	:	:	:	:
:	:	-4.5	-4.6	-3.3	-2.6	-2.7	-3.0	-3.0
:	:	:	:	:	:	:	:	:
16.5	18.0	24.0	23.9	23.1	22.7	21.5	21.4	21.6
:	:	:	:	:	:	:	:	:
80.8	69.5	79.6	50.7	41.3	27.3	:	:	:
:	:	:	:	:	:	:	:	:
:	:	:	:	:	:	:	:	:
:	:	:	:	:	:	:	:	:
:	:	:	:	:	:	:	:	:

Table 109

Main economic indicators 1961–2005 Turkey

(Annual percentage change, unless otherwise stated)

	1992	1993	1994	1995	1996
1. Growth of GDP and its components (real)					
1.1. Private consumption	4.4	8.4	-6.4	6.1	7.8
1.2. Government consumption	3.6	8.6	-5.5	6.8	8.6
1.3. Gross fixed capital formation	6.4	26.4	-106	9.1	14.1
1.4. of which equipment	7.9	48.3	-32.2	25.5	23.9
1.5. of which construction	5.2	9.3	1.2	-2.4	5.2
1.6. Exports of goods and services	11.0	7.7	15.2	8.0	22.0
1.7. Imports of goods and services	10.9	35.8	-21.9	29.6	20.5
1.8. GDP	6.0	8.0	-5.5	7.2	7.0
2. Demand components: Contribution to changes in GDP (%)					
2.1. Consumption	3.5	6.7	-5.1	4.9	6.3
2.2. Investment	1.4	5.9	-4.2	2.1	3.4
2.3. Stockbuilding	1.4	1.1	-4.1	4.7	-2.1
2.4. Domestic demand	6.3	13.7	-103.2	11.6	7.6
2.5. Exports	1.7	1.2	2.5	1.6	4.4
2.6. Final demand	7.3	15.3	-100.2	12.4	12.6
2.7. Imports	-2.0	-6.9	5.3	-6.0	-5.0
2.8. Net exports	-0.3	-5.7	7.8	-4.4	-0.6
3. Gross savings and investment in % of GDP at current prices					
3.1. Private sector savings	:	:	:	:	:
3.2. Net savings of households	:	:	:	:	:
3.3. General government savings	:	:	:	:	:
3.4. National savings	21.8	22.7	23.0	22.2	19.7
3.5. Gross capital formation	23.9	27.6	21.5	25.5	24.6
3.6. Current account	-2.0	-4.9	1.5	-3.3	-4.9
4. Determinants of investment					
4.1. Capacity utilisation (survey) (a)	:	:	:	:	:
4.2. Trend GDP gap	:	:	:	:	:
4.3. Potential GDP gap	:	:	:	:	:
4.4. Profitability index (1961–73 = 100)	:	:	:	:	:
5. Growth potential					
5.1. Growth of net capital stock (real)	6.0	7.5	5.4	5.7	6.3
5.2. Net capital/output ratio (real)	3.0	2.9	3.3	3.2	3.2
5.3. Growth of capital intensity	5.4	7.7	2.9	1.9	4.1
5.4. Labour productivity growth	5.5	8.2	-7.7	3.4	4.8
5.5. Total factor productivity growth	3.7	5.7	-8.5	2.8	3.5
6. Employment and unemployment					
6.1. Employment	0.3	-5.4	7.5	2.5	2.5
6.2. Activity rate	57.9	53.6	55.9	55.4	54.8
6.3. Employment rate (benchmark)	53.1	48.9	51.2	51.2	51.2
6.4. Employment rate (full-time equivalent)	:	:	:	:	:
6.5. Unemployment rate (Eurostat definition)	8.0	8.0	8.0	7.1	6.2
7. Prices and wages					
7.1. Nominal wages per head	63.1	75.2	61.8	71.2	90.3
7.2. Real wages per head (b)	0.3	6.7	-23.4	-102.5	4.8
7.3. Nominal unit labour costs	54.6	61.9	75.3	65.6	81.5
7.4. Real unit labour costs	-5.6	-3.5	-105.1	-101.5	2.0
7.5. GDP deflator	63.7	67.8	106.5	87.2	77.8
7.6. Private consumption deflator	62.6	64.3	111.3	95.7	81.6
7.7. Terms of trade	-0.4	7.4	0.6	-6.5	-6.3
8. General government budget, % of GDP					
8.1. Expenditure	:	:	:	:	:
8.2. Current revenues	:	:	:	:	:
8.3. Net borrowing (-) or lending (+)	:	:	:	:	:
8.4. Net borrowing cyclically adjusted	:	:	:	:	:
8.5. Debt (end of period)	:	:	:	:	:
9. Monetary conditions					
9.1. Long-term interest rate	:	:	:	:	:
9.2. Short-term interest rate	:	:	:	:	:
9.3. Yield curve (9.1–9.2)	:	:	:	:	:
9.4. Real long-term interest rate (c)	:	:	:	:	:
9.5. Nominal effective exchange rate	:	:	:	:	:
9.6. Real effective exchange rate (1995 = 100; ULC in total economy)	:	:	:	:	:

(a) Manufacturing industry 2000.

(b) Private consumption deflator.

(c) GDP deflator.

NB: see also notes on p. 335.

(Annual percentage change, unless otherwise stated)

1997	1998	1999	2000	2001	2002	2003	2004	2005
8.6	0.4	-3.6	6.7	-9.6	3.1	3.5	3.8	4.0
4.1	7.8	6.5	7.1	-8.5	5.4	1.0	2.5	3.0
14.8	-3.9	-105.7	16.9	-31.5	-0.8	8.5	8.3	9.0
22.5	-9.1	-21.5	34.5	-48.0	6.1	8.5	8.3	9.0
6.6	2.5	-9.4	0.2	-100.6	-5.8	8.5	8.3	9.0
19.1	12.0	-7.0	19.2	7.4	11.0	12.3	12.1	12.8
22.4	2.3	-3.7	25.4	-24.8	15.7	13.0	12.0	13.0
7.5	3.1	-4.7	7.4	-7.5	7.8	5.1	4.5	5.0
6.4	1.1	-1.7	5.5	-7.6	2.7	2.3	2.7	2.8
3.8	-1.1	-4.0	3.8	-7.7	-0.1	1.4	1.4	1.6
-0.8	0.8	1.8	1.0	-3.6	6.2	1.1	-0.1	0.1
9.3	0.8	-3.9	10.2	-108.8	8.7	4.9	4.0	4.6
4.3	3.0	-1.9	5.1	2.2	3.8	4.3	4.6	5.2
13.9	3.8	-5.5	15.1	-106.6	11.7	9.2	8.6	9.8
-6.2	-0.7	1.1	-8.0	9.1	-4.7	-4.2	-4.1	-4.8
-1.8	2.3	-0.8	-2.9	11.3	-0.9	0.2	0.5	0.4
:	:	:	:	:	:	:	:	:
:	:	:	:	:	:	:	:	:
:	:	:	:	:	:	:	:	:
21.2	23.1	20.8	17.8	19.8	18.7	21.8	22.3	23.1
25.1	24.2	23.4	24.5	16.8	21.3	22.1	22.8	23.6
-3.9	-1.1	-2.5	-6.7	1.3	-2.6	-3.6	-4.0	-4.2
:	:	:	:	:	:	:	:	:
:	:	:	:	:	:	:	:	:
:	:	:	:	:	:	:	:	:
:	:	:	:	:	:	:	:	:
7.0	6.1	4.4	3.4	2.6	2.3	2.6	2.9	3.2
3.2	3.3	3.6	3.5	3.9	3.7	3.6	3.5	3.5
9.7	3.2	2.3	3.8	3.7	3.0	0.9	0.6	0.9
10.3	0.3	-6.7	7.8	-6.5	8.5	3.3	2.2	2.6
7.1	-0.7	-7.3	6.5	-7.6	7.5	3.0	2.0	2.3
-0.1	2.5	2.6	-3.9	-4.1	2.8	1.7	2.3	2.3
53.6	53.9	54.6	50.5	49.6	50.2	50.7	50.8	50.9
50.0	50.2	50.4	47.2	44.4	44.9	44.9	45.1	45.5
:	:	:	:	:	:	:	:	:
6.6	6.8	7.7	6.6	8.5	10.4	11.2	10.9	10.4
103.0	76.2	84.4	53.1	40.5	47.2	39.8	32.2	27.5
15.8	0.2	22.8	-4.0	-8.2	-1.6	8.4	13.4	13.7
84.2	75.7	97.6	42.1	50.3	35.6	35.3	29.3	24.3
1.4	0.0	27.0	-5.2	-2.9	-5.5	7.6	11.9	11.8
81.5	75.7	55.6	49.9	54.8	43.5	25.8	15.6	11.2
75.3	75.8	50.2	59.5	53.0	49.5	29.0	16.6	12.2
7.4	-1.5	2.6	-7.1	-1.2	-8.6	-4.4	-1.4	-0.9
:	:	:	:	:	:	:	:	:
:	:	:	:	:	:	:	:	:
:	:	-108.4	-5.8	-26.9	-100	-8.0	-6.3	-4.9
:	:	:	:	:	:	:	:	:
53.1	50.1	67.4	57.6	105.4	95.0	89.1	86.2	83.4
:	:	:	:	:	:	:	:	:
:	:	:	:	:	:	:	:	:
:	:	:	:	:	:	:	:	:
:	:	:	:	:	:	:	:	:
:	:	:	:	:	:	:	:	:
:	:	:	:	:	:	:	:	:

Table 110

Main economic indicators 1961–2005

United States

(Annual percentage change, unless otherwise stated)

	1961–73	1974–85	1986–90	1991–95	1996
1. Growth of GDP and its components (real)					
1.1. Private consumption	4.5	3.0	3.2	2.6	3.2
1.2. Government consumption	2.5	2.4	2.8	-0.1	0.7
1.3. Gross fixed capital formation	5.3	2.7	1.5	4.1	8.6
1.4. of which equipment	8.0	4.7	3.7	7.7	11.0
1.5. of which construction	3.9	1.4	-0.3	0.7	6.0
1.6. Exports of goods and services	7.0	4.1	11.0	7.0	8.2
1.7. Imports of goods and services	7.4	5.0	5.2	7.0	8.6
1.8. GDP	4.4	2.8	3.2	2.4	3.6
2. Demand components: Contribution to changes in GDP (%)					
2.1. Consumption	3.5	2.5	2.7	1.7	2.3
2.2. Investment	0.8	0.4	0.3	0.7	1.5
2.3. Stockbuilding	0.1	0.0	-0.1	0.1	0.0
2.4. Domestic demand	4.4	2.9	2.9	2.4	3.8
2.5. Exports	0.3	0.2	0.8	0.7	0.9
2.6. Final demand	4.7	3.1	3.6	3.1	4.6
2.7. Imports	-0.4	-0.4	-0.5	-0.7	-1.0
2.8. Net exports	-0.1	-0.1	0.3	-0.1	-0.1
3. Gross savings and investment in % of GDP at current prices					
3.1. Private sector savings	:	20.6	18.2	18.5	17.1
3.2. Net savings of households	:	:	:	:	:
3.3. General government savings	:	-1.0	-1.8	-2.2	0.1
3.4. National savings	19.7	19.7	16.4	16.3	17.1
3.5. Gross capital formation	19.2	20.0	18.7	17.2	18.6
3.6. Current account	0.5	-0.3	-2.3	-0.9	-1.4
4. Determinants of investment					
4.1. Capacity utilisation (survey) (a)	:	:	:	:	:
4.2. Trend GDP gap	:	:	:	:	:
4.3. Potential GDP gap	:	:	:	:	:
4.4. Profitability index (1961–73 = 100)	100.0	87.3	98.5	109.4	123.2
5. Growth potential					
5.1. Growth of net capital stock (real)	3.3	2.7	2.5	2.1	2.8
5.2. Net capital/output ratio (real)	2.8	2.7	2.5	2.5	2.5
5.3. Growth of capital intensity	1.3	0.9	0.3	0.9	1.0
5.4. Labour productivity growth	2.4	1.0	1.0	1.2	1.7
5.5. Total factor productivity growth	1.9	0.6	0.9	0.9	1.4
6. Employment and unemployment					
6.1. Employment	2.0	1.8	2.2	1.1	1.7
6.2. Activity rate	70.4	75.1	80.3	82.1	83.3
6.3. Employment rate (benchmark)	67.3	69.8	75.9	77.3	79.4
6.4. Employment rate (full-time equivalent)	60.9	62.6	68.1	69.2	71.5
6.5. Unemployment rate (Eurostat definition)	4.9	7.5	5.9	6.5	5.4
7. Prices and wages					
7.1. Nominal wages per head	5.6	7.7	4.3	3.4	2.5
7.2. Real wages per head (b)	2.7	0.7	0.5	0.7	0.4
7.3. Nominal unit labour costs	3.2	6.6	3.3	2.1	0.8
7.4. Real unit labour costs	-0.1	-0.1	0.0	-0.4	-1.1
7.5. GDP deflator	3.2	6.8	3.3	2.5	1.9
7.6. Private consumption deflator	2.9	6.9	3.8	2.7	2.1
7.7. Terms of trade	-0.4	-1.8	-1.4	0.4	0.5
8. General government budget, % of GDP					
8.1. Expenditure	30.0	33.5	35.4	35.9	34.6
8.2. Current revenues	:	30.3	31.2	31.4	32.3
8.3. Net borrowing (-) or lending (+)	-1.3	-3.3	-4.2	-4.5	-2.2
8.4. Net borrowing cyclically adjusted	:	:	:	:	:
8.5. Debt (end of period)	45.9	59.6	67.3	74.8	74.1
9. Monetary conditions					
9.1. Long-term interest rate	5.0	9.5	8.6	7.0	6.5
9.2. Short-term interest rate	4.5	8.6	7.0	4.6	5.5
9.3. Yield curve (9.1–9.2)	0.5	0.9	1.6	2.4	1.1
9.4. Real long-term interest rate (c)	1.7	2.6	5.1	4.3	4.5
9.5. Nominal effective exchange rate	-1.0	4.4	-4.2	0.4	5.7
9.6. Real effective exchange rate (1995 = 100; ULC in total economy)	153.1	116.4	112.4	99.9	104.4

(a) Manufacturing industry 2000.

(b) Private consumption deflator.

(c) GDP deflator.

NB: see also notes on p. 335.

(Annual percentage change, unless otherwise stated)

1997	1998	1999	2000	2001	2002	2003	2004	2005
3.6	4.8	4.9	4.3	2.5	3.1	3.0	3.5	2.5
1.3	1.5	3.1	2.8	4.0	5.0	3.7	1.7	2.6
9.5	10.5	7.9	5.6	-2.9	-2.2	2.8	5.8	6.2
13.2	14.5	11.6	8.1	-5.4	-1.6	4.1	7.7	7.7
5.6	6.0	3.9	2.7	-0.1	-2.7	0.8	2.9	3.8
12.3	2.1	3.4	9.7	-5.4	-1.6	0.7	5.0	6.2
13.7	11.8	10.9	13.2	-2.9	3.7	3.6	6.0	6.2
4.5	4.3	4.1	3.8	0.3	2.5	2.8	3.8	3.3
2.6	3.4	3.8	3.3	2.2	2.9	2.7	2.7	2.1
1.7	2.0	1.6	1.2	-0.6	-0.5	0.6	1.2	1.3
0.4	0.2	-0.2	0.0	-1.4	0.7	-0.1	0.4	0.3
4.8	5.6	5.2	4.5	0.2	3.1	3.1	4.3	3.7
1.4	0.3	0.4	1.1	-0.7	-0.2	0.1	0.5	0.7
6.2	5.8	5.6	5.7	-0.4	3.0	3.4	4.8	4.4
-1.7	-1.6	-1.6	-2.0	0.5	-0.6	-0.6	-1.0	-1.0
-0.3	-1.3	-1.2	-0.9	-0.2	-0.8	-0.5	-0.4	-0.4
16.6	15.4	14.3	12.7	12.8	14.3	15.1	16.0	16.4
:	:	:	:	:	:	:	:	:
1.3	2.6	3.2	3.9	2.1	-0.8	-1.9	-2.4	-2.2
18.0	18.0	17.5	16.7	14.9	13.4	13.2	13.6	14.1
19.5	20.3	20.5	20.7	18.6	18.1	18.0	18.7	19.4
-1.5	-2.3	-3.0	-4.1	-3.8	-4.7	-5.3	-5.6	-5.8
:	:	:	:	:	:	:	:	:
:	:	:	:	:	:	:	:	:
:	:	:	:	:	:	:	:	:
129.6	129.2	129.4	124.9	119.4	126.8	132.4	135.9	136.9
3.2	3.6	3.8	3.8	3.0	2.4	2.5	2.7	3.0
2.4	2.4	2.4	2.4	2.5	2.5	2.5	2.4	2.4
0.7	1.2	1.8	1.8	3.3	2.8	1.6	2.3	2.4
2.0	2.0	2.2	1.8	0.6	2.8	2.0	3.4	2.7
1.7	1.5	1.5	1.1	-0.6	1.8	1.4	2.5	1.8
2.3	2.2	1.9	1.9	-0.3	-0.3	0.8	0.4	0.6
83.8	84.3	84.6	85.1	84.7	84.5	84.6	84.3	84.9
80.3	81.1	81.7	82.3	81.3	80.3	80.2	79.8	80.2
72.3	73.2	73.7	74.3	73.4	72.5	72.4	72.0	72.5
4.9	4.5	4.2	4.0	4.8	5.8	6.1	6.2	6.3
3.1	4.5	4.1	5.4	2.9	1.8	2.1	4.0	3.8
1.2	3.4	2.4	2.8	0.9	0.4	0.4	2.8	2.6
1.1	2.4	1.8	3.6	2.3	-1.0	0.1	0.6	1.1
-0.9	1.2	0.4	1.4	0.0	-2.1	-1.3	-0.4	0.0
2.0	1.2	1.4	2.1	2.4	1.1	1.4	1.0	1.1
1.9	1.1	1.6	2.5	2.0	1.4	1.7	1.2	1.1
2.1	3.3	-0.9	-3.0	2.2	-0.5	-1.7	-0.7	0.1
33.6	32.7	32.5	32.3	33.4	34.2	35.3	35.0	35.1
32.6	33.0	33.2	33.8	32.9	30.8	30.3	29.5	29.6
-1.0	0.3	0.7	1.5	-0.5	-3.4	-5.0	-5.5	-5.4
:	:	:	:	:	:	:	:	:
71.3	68.1	64.9	59.2	59.3	61.4	64.1	66.3	:
6.5	5.3	5.6	6.0	5.0	4.6	:	:	:
5.7	5.5	5.4	6.5	3.8	1.8	:	:	:
0.8	-0.2	0.2	-0.5	1.2	2.8	:	:	:
4.4	4.0	4.1	3.8	2.6	3.4	:	:	:
7.9	6.1	-0.6	4.6	5.1	-1.1	-8.9	-2.9	0.4
110.7	117.6	116.6	123.6	129.8	125.3	112.3	108.4	:

Table 111

Main economic indicators 1961–2005 Japan

(Annual percentage change, unless otherwise stated)

	1961–73	1974–85	1986–90	1991–95	1996
1. Growth of GDP and its components (real)					
1.1. Private consumption	8.7	3.2	4.3	2.3	2.4
1.2. Government consumption	4.9	4.3	3.4	3.2	2.9
1.3. Gross fixed capital formation	14.0	1.6	8.6	-0.8	6.4
1.4. of which equipment	:	4.2	9.9	-0.7	13.9
1.5. of which construction	:	0.6	8.6	-1.6	1.5
1.6. Exports of goods and services	14.1	8.9	3.0	3.1	6.5
1.7. Imports of goods and services	14.3	1.4	11.2	3.3	13.2
1.8. GDP	9.4	3.4	4.9	1.5	3.4
2. Demand components: Contribution to changes in GDP (%)					
2.1. Consumption	6.0	2.4	2.9	1.7	1.8
2.2. Investment	3.6	0.4	2.4	-0.2	1.8
2.3. Stockbuilding	0.1	0.0	0.0	0.0	0.3
2.4. Domestic demand	9.7	2.8	5.3	1.5	3.9
2.5. Exports	0.7	0.7	0.2	0.3	0.6
2.6. Final demand	10.3	3.5	5.6	1.7	4.4
2.7. Imports	-0.9	-0.1	-0.7	-0.2	-1.0
2.8. Net exports	-0.3	0.6	-0.4	0.0	-0.4
3. Gross savings and investment in % of GDP at current prices					
3.1. Private sector savings	:	:	:	26.9	27.6
3.2. Net savings of households	:	:	:	8.8	6.6
3.3. General government savings	:	:	:	5.3	2.8
3.4. National savings	36.1	32.2	33.2	32.2	30.4
3.5. Gross capital formation	35.8	31.5	30.5	29.7	29.0
3.6. Current account	0.6	0.8	2.7	2.5	1.4
4. Determinants of investment					
4.1. Capacity utilisation (survey) (a)	:	:	:	:	:
4.2. Trend GDP gap	:	:	:	:	:
4.3. Potential GDP gap	:	:	:	:	:
4.4. Profitability index (1961–73 = 100)	100.0	68.3	97.2	85.6	83.1
5. Growth potential					
5.1. Growth of net capital stock (real)	6.9	5.8	5.0	3.9	3.2
5.2. Net capital/output ratio (real)	2.4	2.7	3.0	3.2	3.3
5.3. Growth of capital intensity	5.5	5.1	3.9	3.1	2.8
5.4. Labour productivity growth	7.9	2.7	3.8	0.7	3.0
5.5. Total factor productivity growth	6.1	1.1	2.5	-0.3	2.1
6. Employment and unemployment					
6.1. Employment	1.3	0.7	1.0	0.8	0.4
6.2. Activity rate	77.1	75.9	75.4	78.3	79.5
6.3. Employment rate (benchmark)	76.2	74.3	73.7	76.4	76.9
6.4. Employment rate (full-time equivalent)	:	:	:	:	:
6.5. Unemployment rate (Eurostat definition)	1.2	2.2	2.5	2.6	3.4
7. Prices and wages					
7.1. Nominal wages per head	14.2	8.3	4.1	2.0	0.7
7.2. Real wages per head (b)	7.6	1.7	2.8	0.9	0.7
7.3. Nominal unit labour costs	5.8	5.5	0.3	1.2	-2.3
7.4. Real unit labour costs	-0.4	-0.1	-1.0	0.3	-1.5
7.5. GDP deflator	6.2	5.6	1.3	0.9	-0.8
7.6. Private consumption deflator	6.1	6.5	1.3	1.1	-0.1
7.7. Terms of trade	-0.1	-4.8	4.1	1.7	-5.2
8. General government budget, % of GDP					
8.1. Expenditure	:	:	:	34.8	37.5
8.2. Current revenues	:	:	:	33.1	32.4
8.3. Net borrowing (-) or lending (+)	:	:	:	-1.6	-5.0
8.4. Net borrowing cyclically adjusted	:	:	:	:	:
8.5. Debt (end of period)	17.0	71.4	68.3	86.6	93.9
9. Monetary conditions					
9.1. Long-term interest rate	:	7.8	5.5	4.7	3.0
9.2. Short-term interest rate	:	7.8	5.2	3.6	0.6
9.3. Yield curve (9.1–9.2)	:	0.0	0.3	1.0	2.5
9.4. Real long-term interest rate (c)	:	2.2	4.1	3.7	3.8
9.5. Nominal effective exchange rate	1.6	3.8	6.6	9.4	-102.8
9.6. Real effective exchange rate (1995 = 100; ULC in total economy)	39.2	58.7	76.6	87.1	84.0

(a) Manufacturing industry 2000.

(b) Private consumption deflator.

(c) GDP deflator.

NB: see also notes on p. 335.

(Annual percentage change, unless otherwise stated)

1997	1998	1999	2000	2001	2002	2003	2004	2005
0.9	-0.1	0.2	1.0	1.7	1.4	1.2	1.3	1.2
1.0	2.1	4.4	4.7	2.6	2.3	1.1	1.3	1.3
0.9	-3.9	-0.9	2.7	-0.9	-4.8	3.8	1.6	0.4
4.2	-6.6	-0.6	7.4	1.0	:	:	:	:
-0.9	-3.8	-1.3	-1.2	-3.5	:	:	:	:
11.3	-2.3	1.5	12.4	-6.1	8.2	7.0	7.2	8.9
1.2	-6.8	3.0	9.5	0.1	2.0	3.9	5.9	6.5
1.8	-1.1	0.1	2.8	0.4	0.1	2.6	1.7	1.5
0.7	0.3	0.8	1.3	1.3	1.1	0.9	0.9	0.9
0.3	-1.1	-0.2	0.7	-0.2	-1.3	1.0	0.4	0.1
0.0	-0.6	-0.3	0.3	0.0	-0.4	0.3	0.1	0.1
0.9	-1.5	0.2	2.3	1.1	-0.5	2.1	1.4	1.0
1.1	-0.2	0.1	1.3	-0.7	0.9	0.8	0.9	1.1
1.9	-1.7	0.3	3.6	0.4	0.3	2.9	2.3	2.1
-0.1	0.6	-0.2	-0.8	0.0	-0.2	-0.3	-0.5	-0.6
0.9	0.3	-0.1	0.5	-0.7	0.7	0.4	0.3	0.5
28.0	28.4	28.6	28.8	27.7	27.6	28.4	28.7	28.6
6.4	7.2	7.1	6.1	4.1	:	:	:	:
2.8	1.3	-0.2	-0.1	0.1	-1.1	-1.6	-1.9	-2.2
30.8	29.8	28.4	28.7	27.7	26.5	26.8	26.7	26.4
28.5	26.8	25.9	26.2	25.6	23.6	23.7	23.3	22.7
2.2	3.0	2.6	2.5	2.1	2.9	3.0	3.4	3.7
:	:	:	:	:	:	:	:	:
:	:	:	:	:	:	:	:	:
:	:	:	:	:	:	:	:	:
81.4	75.6	75.5	77.0	74.9	79.5	83.0	85.9	88.7
3.1	2.4	2.2	2.1	1.8	1.3	1.5	1.5	1.4
3.4	3.5	3.6	3.6	3.6	3.6	3.6	3.6	3.6
2.0	3.1	3.1	2.3	2.4	2.6	1.0	1.3	1.3
0.8	-0.5	1.0	2.9	1.0	1.4	2.1	1.5	1.4
0.2	-1.4	0.0	2.2	0.2	0.5	1.7	1.1	1.0
1.0	-0.7	-0.8	-0.1	-0.6	-1.2	0.5	0.2	0.1
80.4	80.6	80.5	81.0	80.8	80.5	81.2	81.4	81.7
77.8	77.4	76.9	77.3	76.9	76.3	77.0	77.3	77.5
:	:	:	:	:	:	:	:	:
3.4	4.1	4.7	4.7	5.0	5.4	5.4	5.3	5.3
1.4	-0.2	-1.1	0.2	-0.7	-1.8	0.6	0.5	0.5
0.5	0.0	-0.4	1.5	0.8	-0.3	1.8	1.5	1.3
0.6	0.3	-2.0	-2.7	-1.7	-3.1	-1.4	-1.0	-0.9
0.3	0.4	-0.5	-0.8	-0.1	-1.5	0.8	0.3	0.1
0.3	-0.1	-1.5	-1.9	-1.6	-1.6	-2.2	-1.3	-1.1
1.0	-0.1	-0.7	-1.3	-1.5	-1.5	-1.2	-1.0	-0.8
-3.8	3.3	-0.6	-5.0	-1.6	0.1	-0.8	2.5	0.6
36.3	42.8	39.2	39.9	39.4	40.4	40.2	40.1	40.2
32.6	32.0	32.1	32.4	33.3	33.3	32.9	32.9	33.1
-3.8	-100.7	-7.2	-7.4	-6.1	-7.1	-7.3	-7.2	-7.1
:	:	:	:	:	:	:	:	:
99.9	111.2	124.9	133.1	141.5	147.3	153.5	159.9	:
2.2	1.3	1.8	1.8	1.3	1.3	:	:	:
0.6	0.8	0.2	0.3	0.2	0.1	:	:	:
1.5	0.6	1.5	1.5	1.2	1.2	:	:	:
1.8	1.4	3.3	3.7	2.9	2.9	:	:	:
-5.6	-5.7	17.1	11.8	-9.3	-5.2	-0.2	5.7	2.8
78.8	73.3	82.6	87.3	75.6	69.0	67.3	69.7	:

List of contents of *European Economy*

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