Structural Indicators of European Economic Reform:

Measuring Europe's Progress

HM TREASURY

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Measuring Europe's Progress

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SUMMARY

Areas where progress has been made in the EU:

- In 2001 **GDP growth** was higher in the EU than in the US (1.6 per cent compared to 0.9 per cent), after many years when US growth had been stronger. The level of output in the US remains higher than in the EU.
- Whilst the **total employment rate** rose by 0.7 percentage points to 63.9 per cent in 2001, it is difficult to ascertain the degree to which this is a structural or a cyclical change.
- The average **tax rate on low wage earners** has been falling slowly, from 39.0 per cent in 1999 to 38.4 per cent in 2001.
- Since 1994 ICT expenditure as share of GDP has grown markedly, with a recent increase in **IT expenditure** from 3.9 per cent in 1999 to 4.2 in 2000, and a similar increase in **communications expenditure** from 2.5 per cent in 1999 to 2.7 per cent in 2000.
- Growth in **internet access at home** has remained high, with access rising from just 12 per cent of households in 1998 to over 28 per cent in 2000 and up to almost 38 per cent in 2001. **Internet access in enterprises** has also risen, from 70 per cent in 2000 to 89 per cent in 2001.
- Sectoral and ad hoc **State Aid** has fallen as a share of GDP, from 1.1 per cent in 1997 to 0.9 per cent in 1999.
- The share of people living in **jobless households** has fallen in the EU since 1997, and fell by a further 0.4 percentage points from 4.5 per cent in 2000 to 4.1 per cent in 2001.
- Emissions of **greenhouse gases** fell by 2 per cent between 1998 and 1999.

Areas where the EU has made less progress:

- Although some Member States compare well with the US, the gap in **labour productivity per worker** has increased, from 37.4 per cent higher in the US in 2000 to 38.5 per cent higher in 2001.
- In 2001 the **total employment rate of older workers** rose to only 38.3 per cent from 37.8 per cent in 2000. This compares poorly with the Lisbon target of 50 per cent by 2010.
- **Business R&D** as a share of GDP increased from 1.19 per cent in 1998 to 1.25 per cent in 1999, but then fell marginally in 2000 to 1.24 per cent. **Total R&D spending** as a share of GDP fell slightly from 1.92 per cent in 1999 to 1.90 per cent in 2001.
- Despite high growth in 1999 and 2000, both early stage and expansion & replacement **venture capital** as a share of GDP fell by almost half in 2001.
- **Intra-EU trade** fell slightly by just over 1 per cent of GDP from 2000 to 2001, but there will be a strong cyclical element in this. **External EU trade** remained constant in relation to GDP in 2001.
- **Industrial electricity prices** fell only slightly, by 1.7 per cent in 2001. For **households,** electricity prices showed a smaller decline of 0.7 per cent in 2001.
- **Gas prices** have increased every year since 1999. For **industrial** users, gas prices rose by over 22 per cent in 2001, and for **households** prices rose by 12 per cent in 2001.
- Many Member States still have **monopolies in network industries,** notably electricity.
- Between 1996 and 2000 **long-term unemployment** as a share of the total active population has been falling, but it rose again from 3.6 per cent in 2000 to 3.9 per cent in 2001.

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HEADLINE INDICATORS

- The gap with the US in terms of **GDP per capita** increased through the 1990s. **GDP growth** in the EU was less than in the US through the 1990s, but in 2001 EU growth exceeded that of the US.
- The EU experienced a rise of 0.7 percentage points in the total **employment rate** in 2001, to reach 63.9 per cent, moving closer to the 2010 target of 70 per cent. The **female employment rate** in the EU rose through the late 1990s to reach 54.7 per cent in 2001.
- In 2001 the **older workers employment rate** (age 55-64) rose by 0.5 percentage points to 38.3 per cent.
- EU **R&D expenditure** has changed little as a share of GDP at around 1.9 per cent in 2000, and is falling increasingly far behind the US at over 2.6 per cent.
- Expenditure on **information technology** lags the US although the gap narrowed slightly in 2000 and 2001. EU **communications expenditure** is much closer to that of the US and even exceeded the US in 2001.
- There have been large increases in **internet access** for both households and firms in the EU, with close to 90 per cent of enterprises and over a third of all citizens having access in 2001.
- **Telecommunications prices** for national calls and calls to the US have exhibited a downward trend since 1997 and fell further in 2001, whereas local call prices remained constant. Both industrial and household gas prices have increased sharply since 1999, which coincides with increases in commodity prices.
- **Business investment** increased across the EU in the late 1990s, with an increase of 0.4 percentage points to 18.3 per cent in 2000, but this could be cyclical.
- The level of **capital raised on the stock market** (as a share of GDP) increased in the EU from 1.1 per cent in 1997 to 4.5 per cent in 2001, exceeding the US at 3.6 per cent.
- There was a fall in **long-term unemployment** in the EU between 1996 and 2000, but 2001 saw an increase of 0.3 percentage points to 3.9 per cent of the active population.
- **Regional differences in unemployment** have been increasing.
- Despite some gains in 2000, the share of **18-24 year olds not in further education** fell slightly to 17.7 per cent in 2001.
- **Greenhouse gas emissions** in the EU have remained just below 1990 levels.

INTRODUCTION

The Lisbon agenda and structural indicators

I.1 At Lisbon in March 2000 the European Council set itself the ambitious goal of becoming the most competitive and dynamic knowledge-based economy in the world, capable of sustainable economic growth with more and better jobs and greater social

cohesion. This wide ranging and aspirational objective calls for coherent, targeted policy based upon strong evidence and followed up by close monitoring. Recognising this, at Lisbon the Council also called for development of a set of commonly agreed structural indicators.

I.2 A set of 35 structural indicators was subsequently agreed at Nice in December 2000, covering general economic background, employment, research and innovation, economic reform, and social cohesion. At Nice the Council also called on Finance Ministers to select a shortlist of headline indicators. At Göteborg Council a further set of indicators on the environment was called for. A revised and updated set was agreed at Laeken, bringing the set to 42.[1]

I.3 This paper examines the progress that has been made according to the structural indicators, assessing where Europe is making progress and where more effort is needed. The White Paper "Realising Europe's Potential: Economic Reform in Europe" sets out the UK position on and priorities for reform and draws heavily on the structural indicators.

Using the indicators

I.4 By establishing a consensus in Europe, the structural indicators sustain the momentum to reform through improved monitoring, better-quality policy discussion and more intensive peer pressure. Indicators on key policy areas help to identify best practice, to monitor progress against targets – such as the Lisbon employment targets – and to highlight strengths and weaknesses.

I.5 The US represents a useful benchmark for the EU. It is comparable in both size of the economy and population. It is the best example of a large single market, facilitating comparison for measuring the progress of the European Single Market.

Highest and lowest EU3

I.6 The structural indicators in this paper are presented to show comparisons between the 15 EU Member States as a whole (EU15), the US, and the highest and lowest EU three. **Highest EU3 and lowest EU3 are defined as the simple average of the three highest or lowest performing Member States in that year.** The figures show the range of performance within the EU, providing context for the aggregate EU numbers and showing the degree of convergence within the EU.

I.7 While extremely useful, the structural indicators should be interpreted prudently. For example, some indicators are highly dependent upon the state of the economic cycle –employment growth, for example, may reflect GDP growth. None of the indicators have been adjusted for cyclical factors. Similarly, some indicators, such as regional variation of unemployment, are highly dependent upon the size of the economy. Another complication is the lag between policy implementation and policy effect.

I.8 The remainder of this chapter examines the shortlist of structural indicators called for at Nice, which are pulled from all categories of the main set. The remaining chapters examine the remaining indicators in each set of general economic background, employment, research and innovation, social cohesion and the environment.

GROSS DOMESTIC PRODUCT

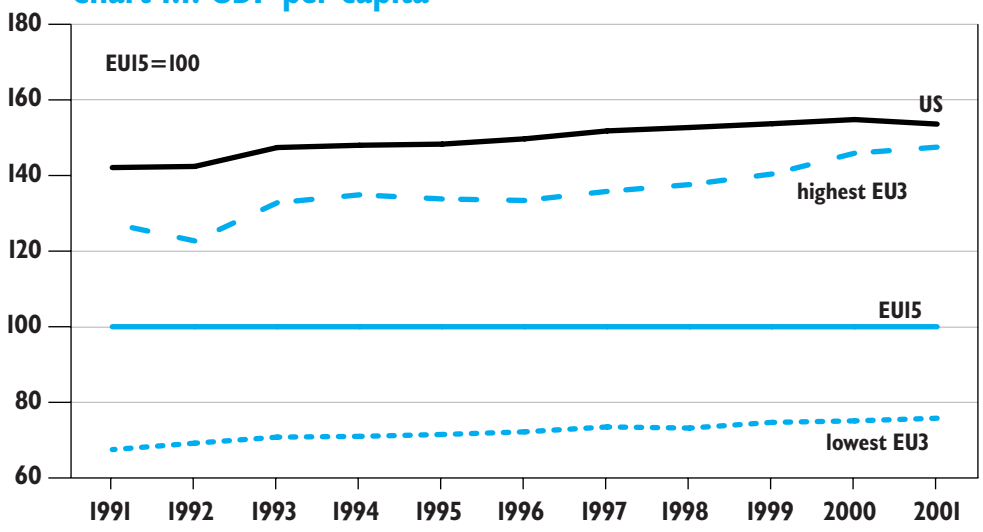
GDP per capita

I.9 **The US pulled ahead of the EU in terms of GDP per capita during the 1990s**, rising from a position of 42.4 per cent greater than the EU in 1991, up to almost 54.8 per cent higher in 2000. However, in 2001 this gap narrowed slightly to 53.6 per cent. Nonetheless, there remains much more that the EU needs to do to catch-up with US in terms of GDP per capita.

[1] The full data set of indicators is available online at http://europa.eu.int/comm/eurostat/
On website, select language, then click on 'Structural Indicators' in the 'Key Indicators' box. Data on website are updated periodically; data in this ducument are accurate as at 26 Febuary 2002.

I.10 The GDP per capita of the highest three EU Member States are still noticeably below that of the US. The three lowest Member States are dramatically below, at under half the GDP per capita of the US.

Chart I.1: GDP per capita

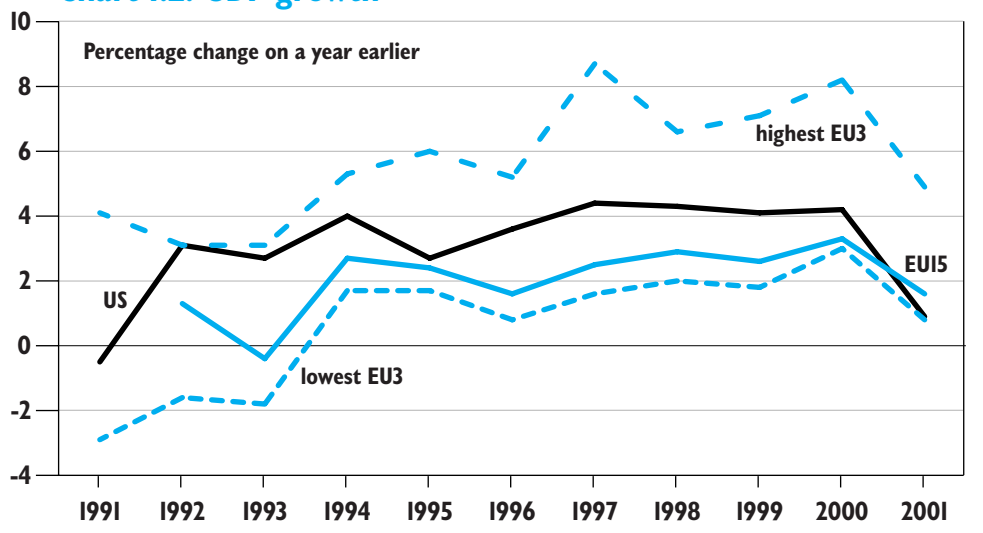


Real GDP per capita in purchasing power standard. Weighted average EU 15=100 in each year. Figures for 2001 are forecasts.
Source: Eurostat, National Accounts

Real GDP growth

I.11 EU growth as a whole lagged the US by an average of about 1.5 percentage points through the 1990s. However, in 2001 EU growth outstripped the US. Some countries have been notable growth success stories: in every year in the 1990s there were some Member States who grew faster than the US.

Chart I.2: GDP growth



Growth rate of GDP at constant prices. Figures for 2001 are forecasts.
Source: Eurostat, National Accounts.

EMPLOYMENT

I.12 Employment is a central strand of the Lisbon agenda. Lisbon included the agreement of EU-wide employment targets to be reached by 2010, which means that steady progress has to be made over the next eight years. At Stockholm, the Council reaffirmed that "increasing employment rates demands active employment policies as foreseen in the European Employment Strategy, implementation of which needs to be strengthened".

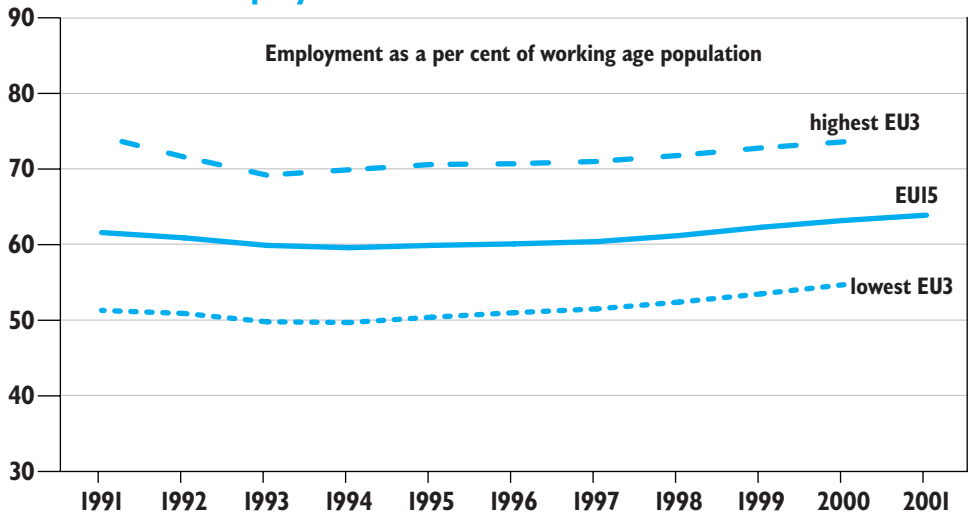
Total employment rate

I.13 At Lisbon the Council agreed to an **employment rate target of 70 per cent in 2010** across the EU as a whole. An **interim target of 67 per cent employment rate by January 2005** was agreed at Stockholm.

I.14 In 2000, the employment rate in the EU was 63.2 per cent, and in 2001 it increased to 63.9 per cent. To reach the 2010 target, the EU must raise employment by 0.7 percentage points per annum, which is similar to the average annual increase achieved over the last five years. Employment rates will be subject to cyclical fluctuations in the economy. These cyclical fluctuations can make it difficult to assess the structural progress in the economies.

I.15 In four Member States the employment rate is already above 70 per cent, and another three are within 3 percentage points of the target. However, three Member States have employment rates of below 60 per cent.

Chart I.3: Employment



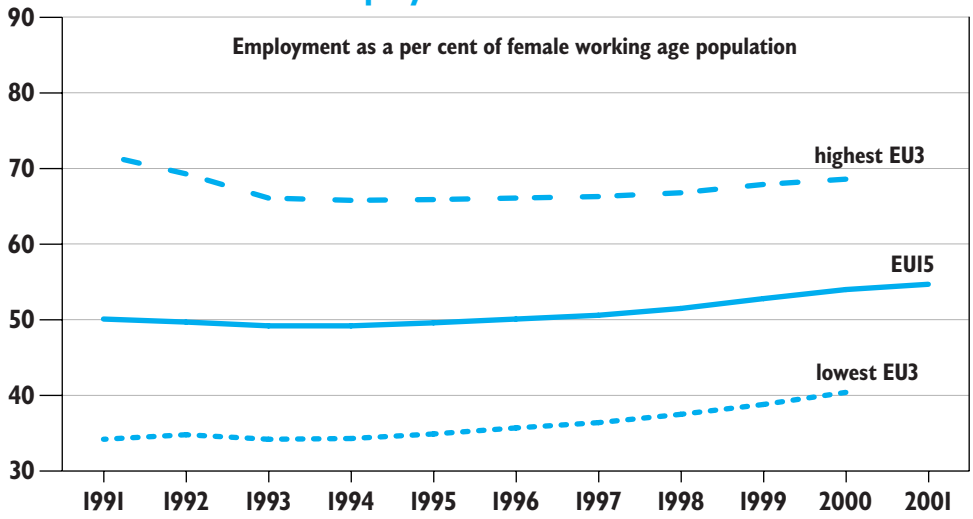
Expressed as employed persons aged 15-64 as a share of the total working age population. Figures for 2001 are estimates.
Source: Eurostat (Labour Force Survey).

Female employment rate

I.16 At Lisbon a target was set of **60 per cent for the female employment rate in 2010, and an interim target of 57 per cent by January 2005** was agreed at Stockholm. In 2001 the employment rate amongst women in the EU was 54.7 per cent, with six Member States already meeting the 2010 target.

I.17 For the EU as a whole the female employment rate was relatively stable in the early 1990s, but since 1995 has risen by an average of 0.8 percentage points per annum. In order to achieve the 2010 target an increase of 0.6 percentage points per annum is needed. In 1999 and 2000 female employment rate rose quite significantly, by over 1.2 percentage points per annum, and growth was 0.7 percentage points in 2001. Hence, if current growth rates in the EU were maintained then the EU would be on track to reach the female employment target. However, like any employment rate, it is influenced by the cyclical pattern of the economy.

Chart I.4: Female employment

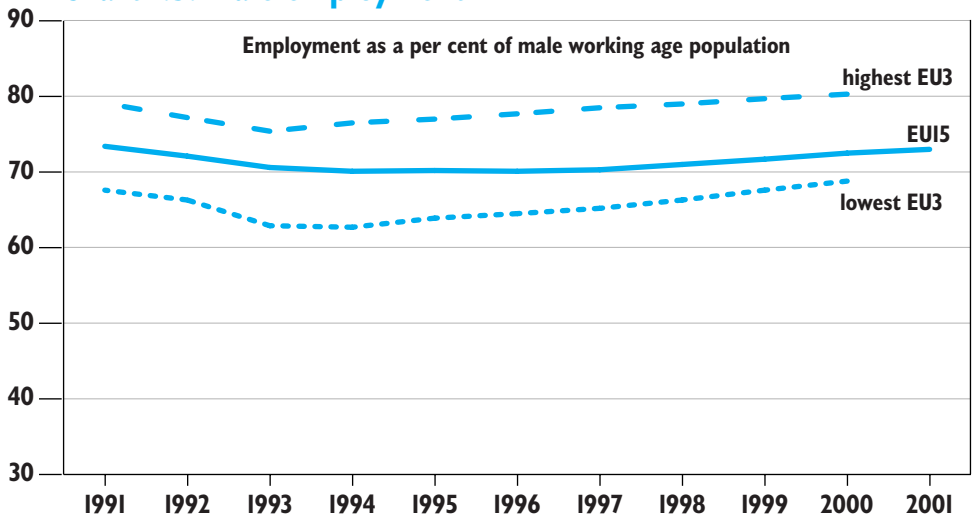


Expressed as employed females aged 15-64 as a share of the total female working age population.
Source: Eurostat (Labour Force Survey).

Male employment

I.18 Male employment is notably higher than female employment across the EU and has remained relatively constant around or above 70 per cent over the decade. After some downturn in the early 1990s, it recovered later in the decade. In 2000, male employment rose by 0.7 percentage points, continuing the higher levels of growth in employment rate experienced in 1998 and 1999.

Chart I.5: Male employment



Expressed as employed males aged 15-64 as a share of the total male working age population.
Source: Eurostat (Labour Force Survey).

EMPLOYMENT OF OLDER WORKERS

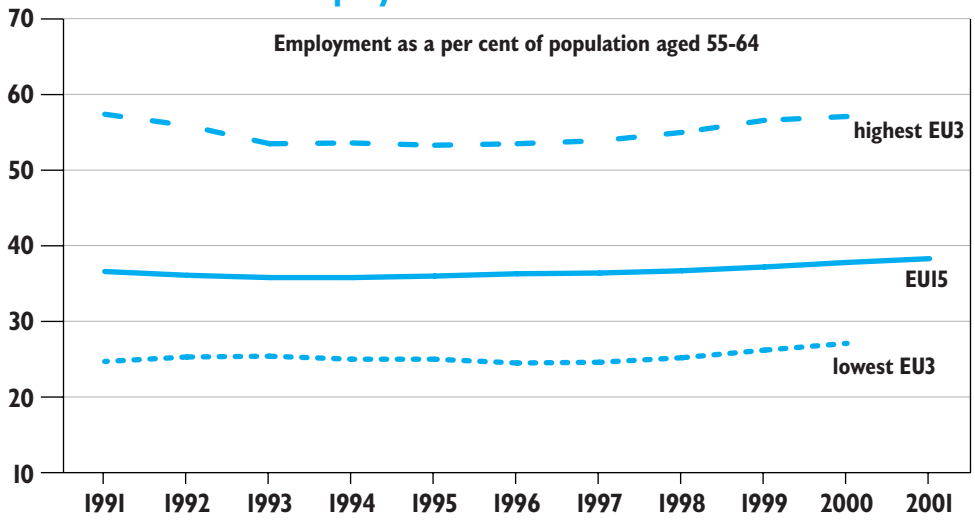
Employment rate of older workers

I.19 At Stockholm the Council agreed a target for increasing the average **EU employment rate among older women and men (age 55–64) to 50 per cent by 2010**. From 1991 to 2000 the employment rate amongst older workers remained between 35 and 38 per cent. Four Member States already exceed the target of 50 per cent employment, while five have employment rates below 30 per cent.

I.20 Although the average EU rate fell in the early 1990s, since 1995 the employment rate amongst older workers has risen by around 0.4 percentage points per annum, in part reflecting the favourable cyclical position. If this recent growth continues the employment rate amongst older workers will reach 41 per cent by 2010. The indicator thus suggests that the **EU is unlikely to reach the 2010 target for employment of older workers on current trends**.

I.21 In 2001, the increase in the employment rate of older workers was 0.5 percentage points, which is promising but still below the requisite rate for reaching the Lisbon target. This growth was also at a time of strong GDP growth, so may have been largely cyclical.

Chart I.6: Total employment rate of older workers



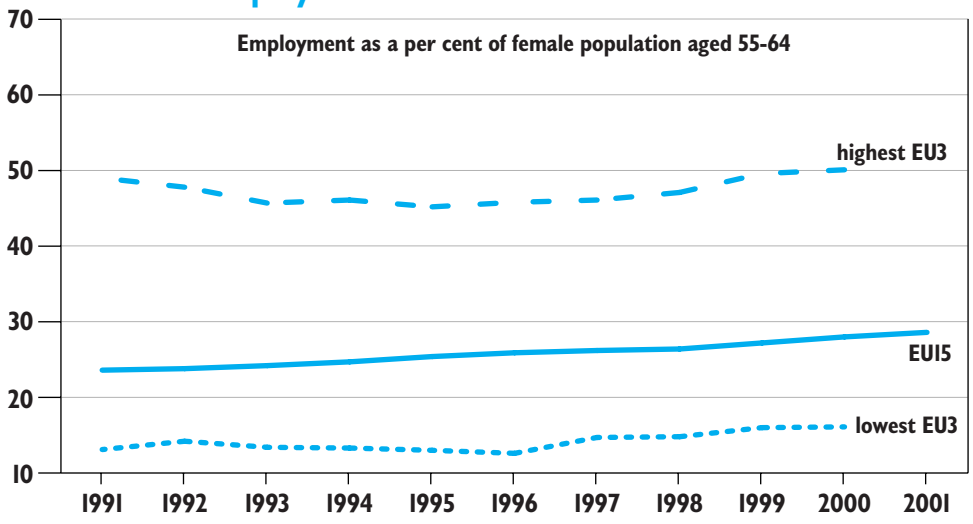
Expressed as employees aged 55-64 as a share of the total population aged 55-64.
Source: Eurostat (Labour Force Survey).

Employment rate of female older workers

I.22 The breakdown of employment amongst older workers by gender reveals that the lowest employment rate is amongst females. While the male employment rate is almost 50 per cent, the female employment rate is below 30 per cent.

I.23 The female employment rate amongst older workers has risen by just under 0.5 percentage points per annum over the last decade. If this rate of growth continues then by 2010 the employment rate of female older workers will barely exceed 33 per cent.

Chart I.7: Employment rate of female older workers

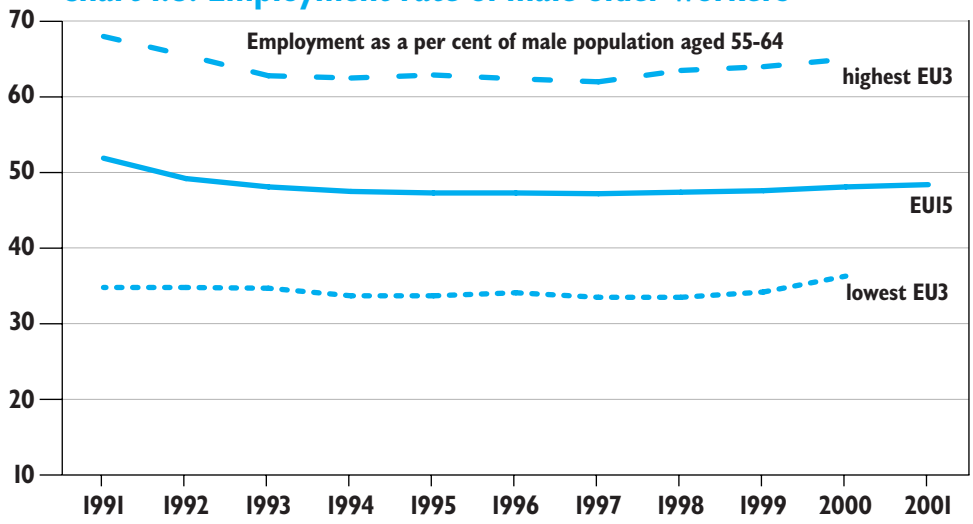


Expressed as female employees aged 55-64 as a share of total female population aged 55-64.
Source: Eurostat (Labour Force Survey).

Employment rate of male older workers

I.24 By contrast, the employment rate amongst older male workers has been falling, from 51.9 per cent in 1991 to a low of 46.8 per cent in 1995–96. It then slightly recovered to 48.4 per cent in 2001.

Chart I.8: Employment rate of male older workers



Expressed as male employees aged 55-64 as a share of total male population aged 55-64.
Source: Eurostat (Labour Force Survey).

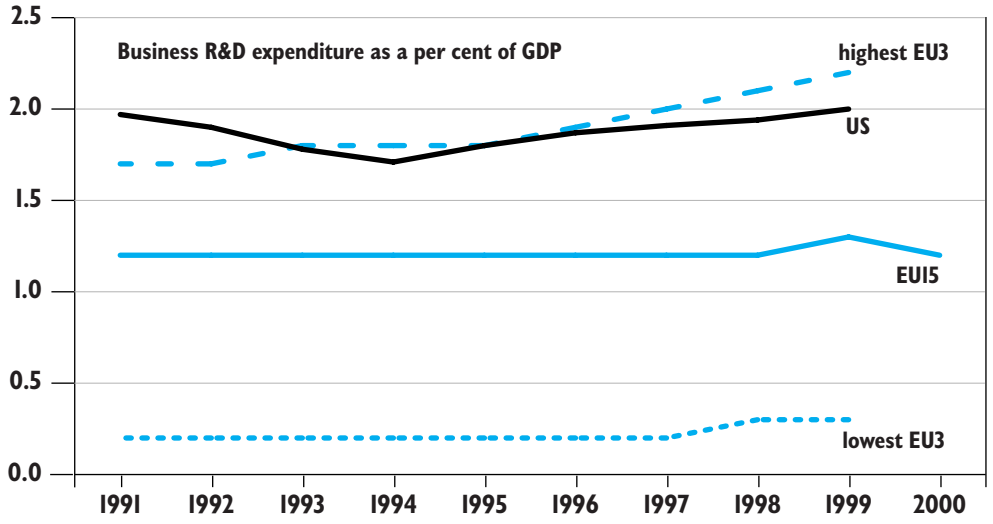
RESEARCH AND DEVELOPMENT SPENDING

I.25 At Lisbon, the European Council agreed the goal of making Europe the "most competitive and dynamic knowledge-based economy in the world" by 2010.

Business spending on R&D

I.26 In the decade to 2000, **business R&D expenditure as a share of GDP in the EU has remained at around 1.2 per cent, with little evidence of any real increase over the last few years**. EU performance is consistently below the US, which remained at around 1.9 per cent over the same period, although some Member States do exhibit business R&D performance comparable to or in excess of the US.

Chart I.9: Business R&D

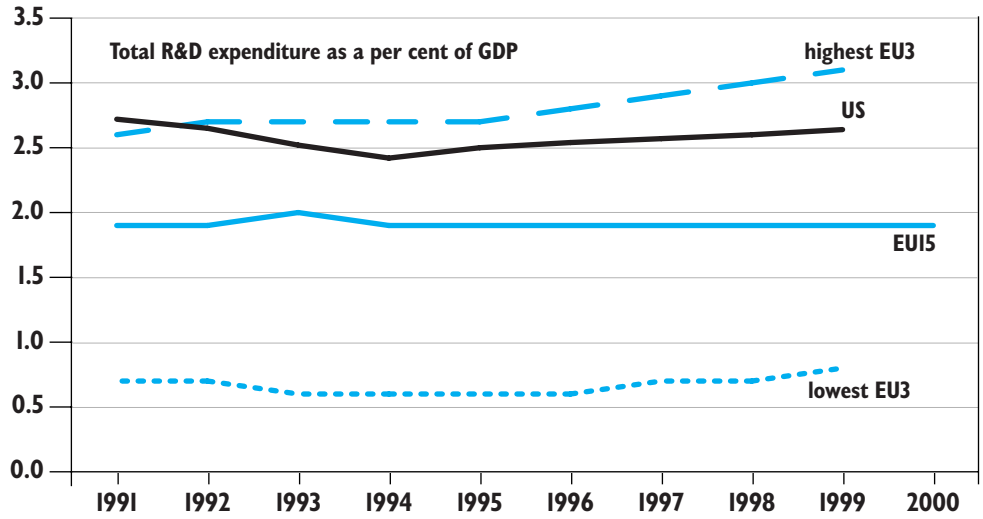


Business expenditure on R&D (BERD) as a percentage of GDP.
Source: Eurostat questionnaire compiled by the Member States

Total spending on R&D

I.27 A similar picture emerges for total spending on R&D. Spending in the EU as a whole is significantly below the US, although the total R&D spending of some Member States has outstripped that of the US. **Between 1994 and 2000 R&D spending remained virtually constant in the EU**.

Chart I.10: Total R&D



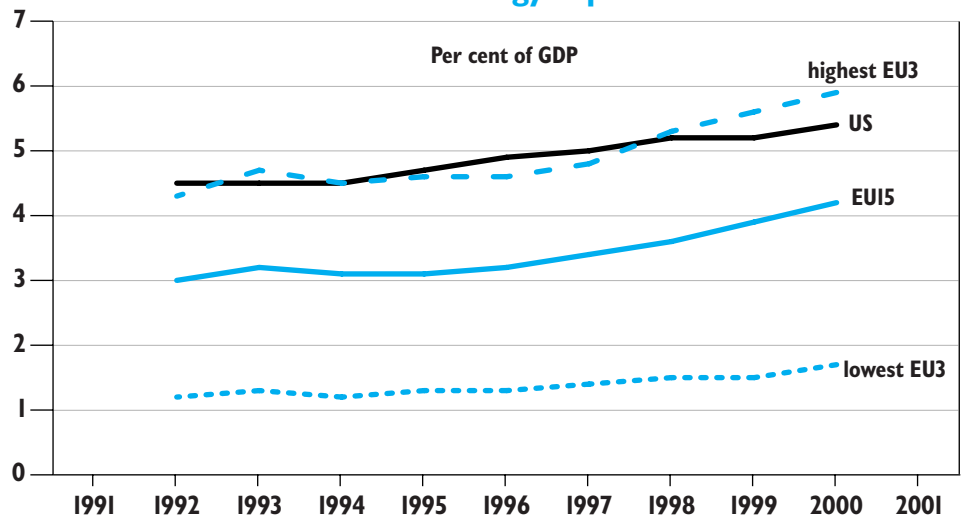
Total expenditure on R&D (BERD and GERD) as a percentage of GDP.
Source: Eurostat questionnaire compiled by the Member States.

INFORMATION AND COMMUNICATIONS TECHNOLOGY

Information technology expenditure

I.28 Overall expenditure by businesses and consumers on information technology (IT) in the EU remained significantly below that of the US throughout the 1990s. However, EU expenditure increased in the latter half of the 1990s, and some Member States recently exceeded the US.

Chart I.11: Information technology expenditure

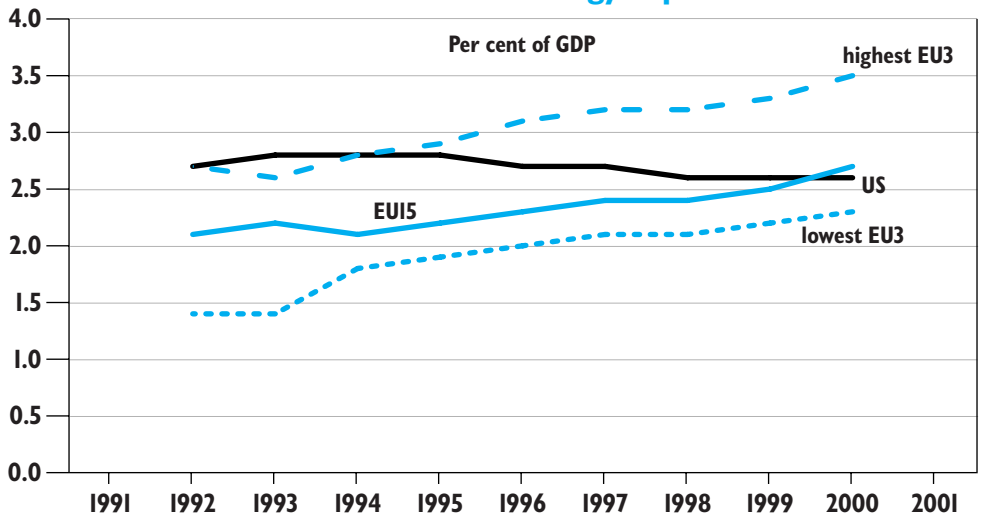


Information Technology expenditure as a percentage of GDP.
Source: OECD/Eurostat.

Communications technology expenditure

I.29 EU spending on communications technology (CT) by households and businesses as a share of GDP is much closer to the US than for IT. The gap between the EU and the US has narrowed over the 1990s, and the EU actually exceeded the US in 2000.

Chart I.12: Communication technology expenditure



Information and communication technology expenditure as a percentage of GDP.
Source: OECD/Eurostat.

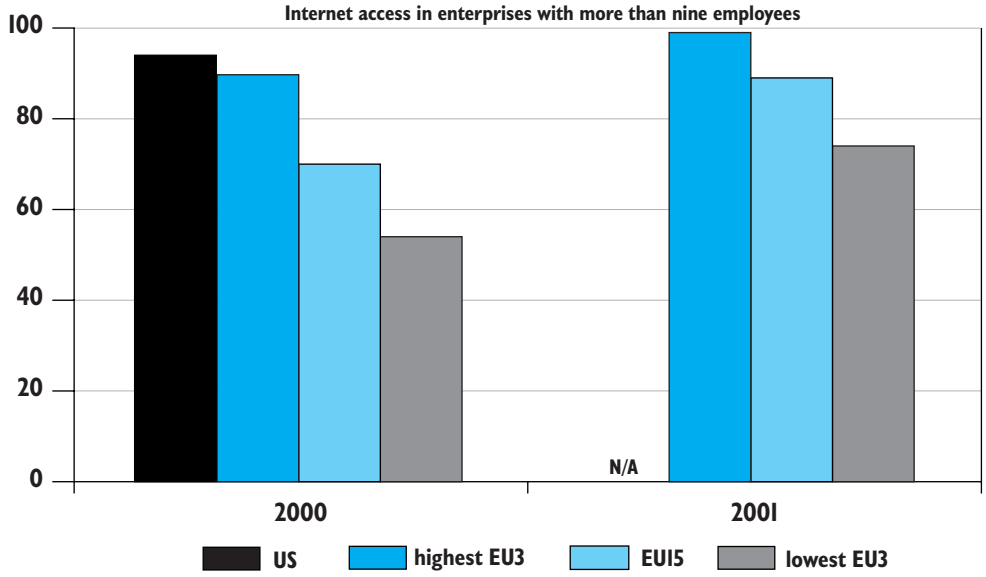
INTERNET ACCESS

I.30 At Lisbon, the Council set out a number of proposals for fostering the use of internet technology, including recognition of the need for low-cost, high-speed networks for internet access.

Internet access in enterprises

I.31 Internet access in enterprises (more than nine employees) is quite high across the EU, with access in almost all Member States exceeding 65 per cent of enterprises in 2001. The three best performing Member States in fact exceed the US, with almost 100 per cent of their enterprises having access in 2001, compared to 94 per cent in the US in 2000 (most recent data).

Chart I.13: Internet access in enterprises

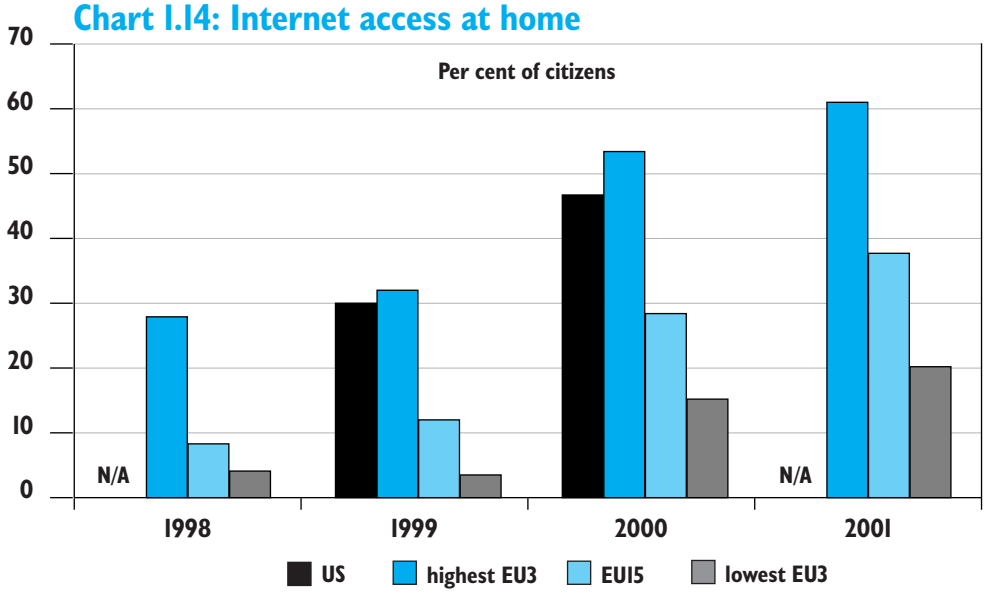


Percentage of enterprises with more than nine employees that have access to the Internet.
Source: Eurostat e-commerce survey.

Internet access at home

I.32 **In 2001, 38 per cent of EU citizens had internet access at home, a significant increase from only 28 per cent in 2000.** However, the 2001 figure for the EU is still below the most recent data for the US, which shows access at 47 per cent of US citizens in 2000. The spread within the EU is very wide, with three Member States exceeding the US in 2000. There was a large improvement amongst those Member States with the least access, with only one having access rates below 20 per cent in 2001 as compared to four in 2000 and 12 in 1998.

Chart I.14: Internet access at home



Percentage of citizens who have Internet access at home.
Source: Eurobarometer survey.

PRICES IN NETWORK INDUSTRIES

I.33 Network industries, such as gas, electricity and telecommunications face different circumstances from most other products for completing the Single Market. Network industries require a dedicated transmission mechanism and lack of open access to this network can therefore limit trade, so at Lisbon the Council made a commitment to increase the openness of network industries.

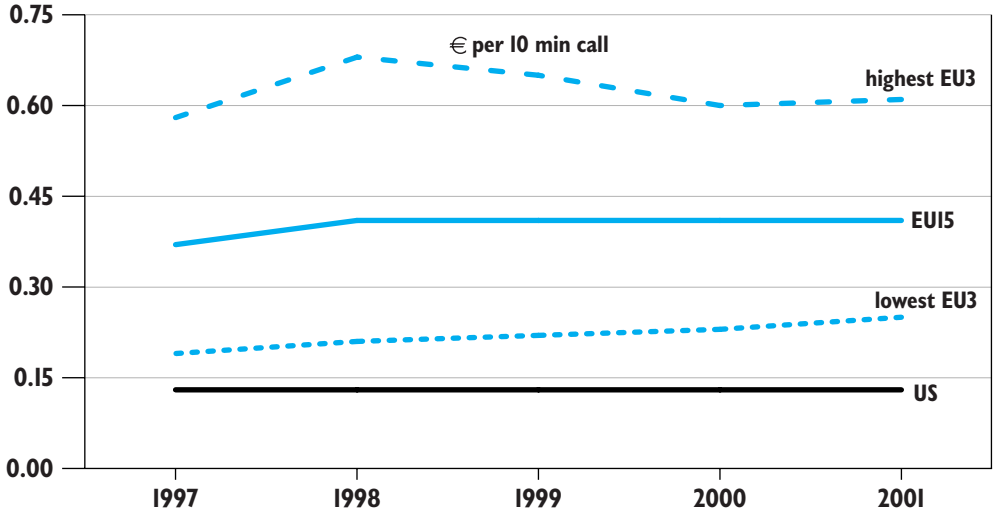
I.34 As the single market in networks is completed, it is expected that the increased competition will reduce price differentials, and so relative price levels should converge.

Telecoms

I.35 The patterns in the telecommunications industry have been mixed. For local calls, the range of prices amongst the EU Member States in 2001 was almost as wide as that in 1997. Overall prices for local calls in the EU remained constant and substantially above the US. Within the EU, national calls have shown more convergence and prices fell every year from 1998 to 2001.

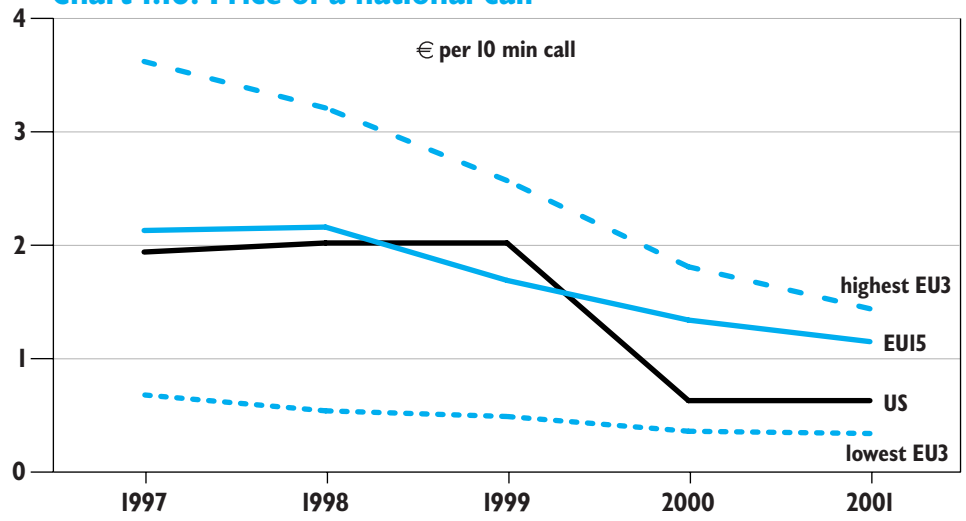
I.36 The price of calls to the US from the EU have fallen but there has not been substantial convergence.

Chart 1.15: Price of a local call



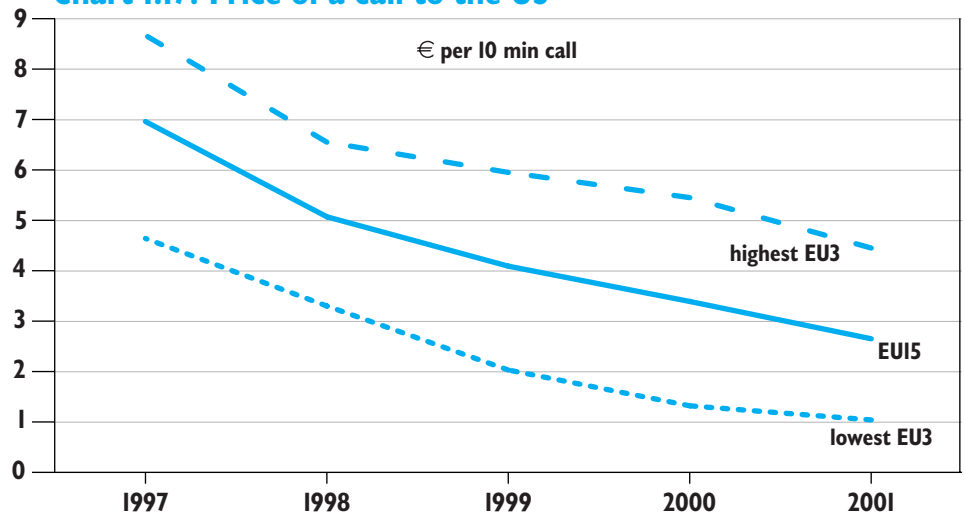
Price in euro of 10 minute call at 11 am on a weekday (including VAT) for local call (3km).
Source: Eurostat, DG INFSO.

Chart 1.16: Price of a national call



Price in euro of 10 minute call at 11 am on a weekday (including VAT) for national call (200km).
Source: Eurostat, DG INFSO

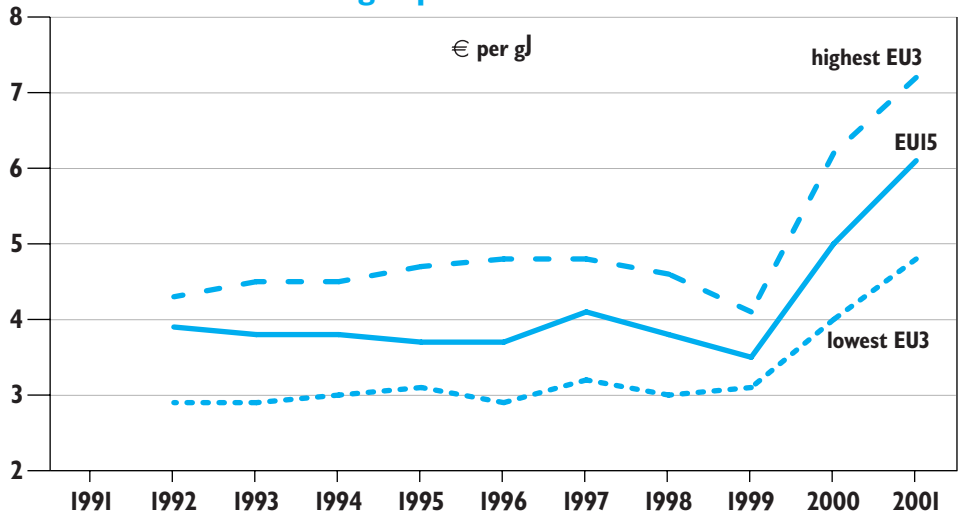
Chart 1.17: Price of a call to the US



Price in euro of 10 minute call at 11 am on a weekday (including VAT) for international call (to USA).
Source: Eurostat, DG INFSO

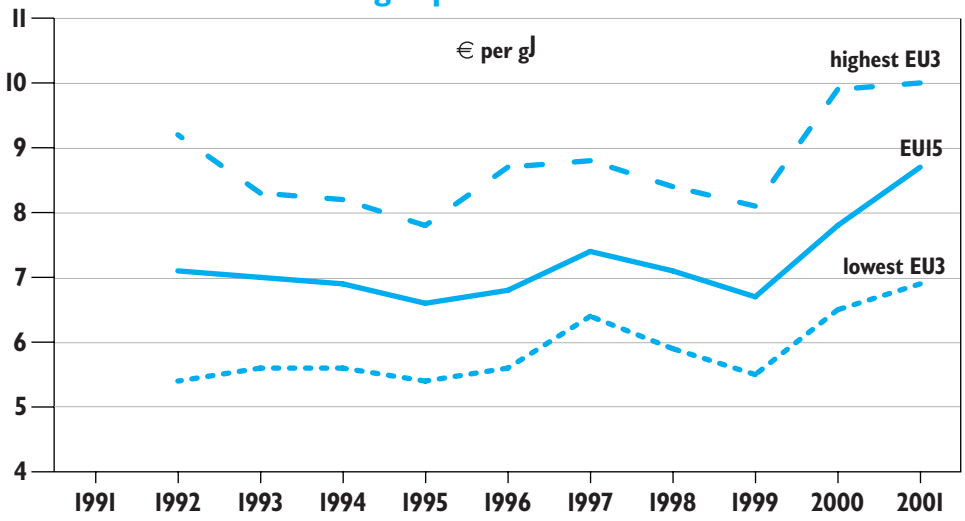
Gas **I.37** Gas prices were relatively stable over the period 1992 to 1998, but in 1999 prices across Europe rose considerably, reflecting increased oil prices. The **variation in gas prices across the EU is still quite high**, with the three most expensive Member States charging half as much again as the price of the cheapest for both industrial and household users.

Chart I.18: Industrial gas prices



Industrial gas price in euro (without taxes) per gigajoule for medium industrial user. Annual consumption 41 860 gJ; load factor: 200 days – 1 600 hours.
Source: Eurostat, Energy statistics.

Chart I.19: Household gas prices

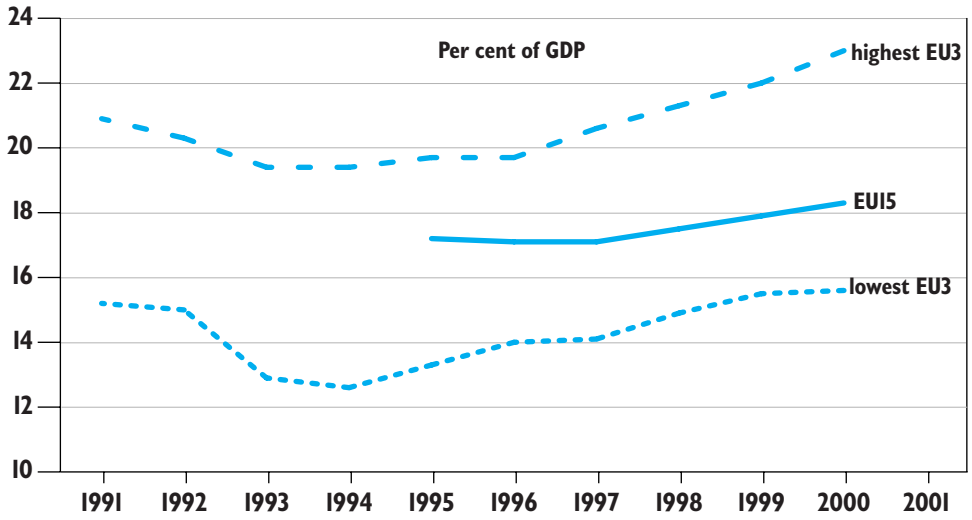


Household gas in euro per gigajoule.
Source: Eurostat, Energy statistics.

BUSINESS INVESTMENT

I.38 Investment is a key driver of growth in an economy. **Business investment in the EU has shown an upward trend between 1996 and 2000**, but this could be cyclical in nature.

Chart I.20: Business investment

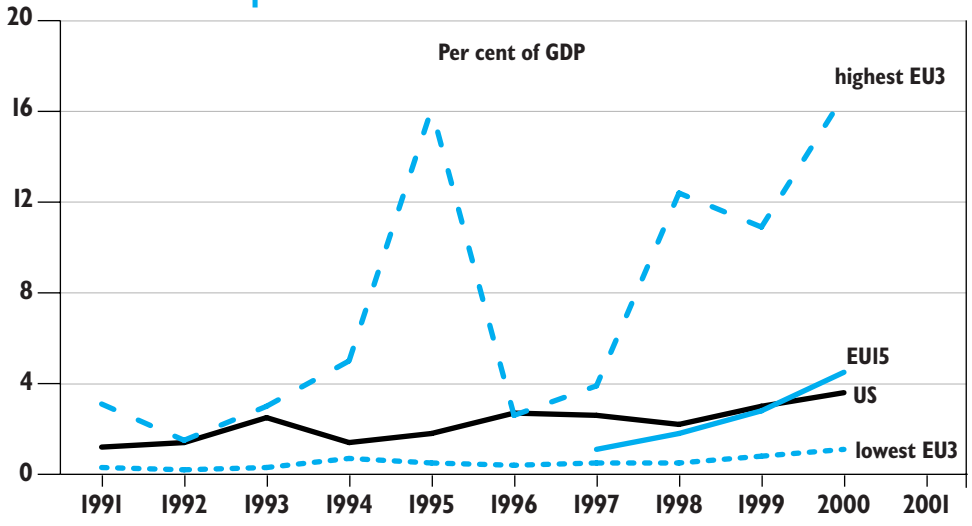


Expressed as gross fixed capital formation by the private sector as a percentage of GDP.
Source: Eurostat, National Accounts.

CAPITAL RAISED ON STOCK MARKETS

I.39 A well-functioning capital market facilitates investment in an economy. **EU capital raised in relation to GDP was similar to the US in 1998 and 1999, and in fact exceeded the US in 2000**. For some Member States, capital raised in relation to GDP has been much higher than in the US, but this could be a reflection of the size of the economies and very specific cases (which is likely to explain the very high figure in 1995).

Chart I.21: Capital raised on stock markets



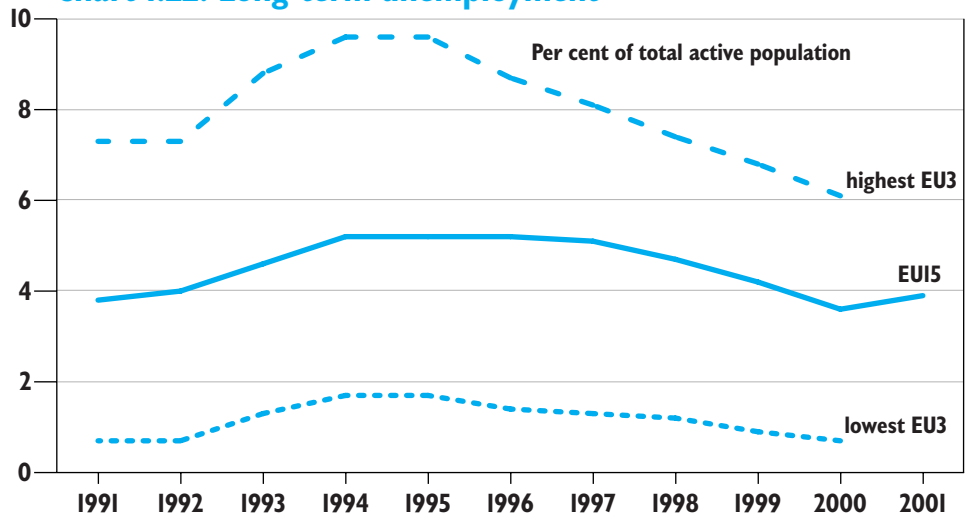
Source: FIBV Member Exchanges.

LONG-TERM UNEMPLOYMENT

I.40 **The rate of long-term unemployment in the EU has fallen since 1996**. However, between 2000 and 2001 the rate of long-term unemployment rose by 0.3 percentage points to 3.9 per cent. As with the other employment indicators it is hard to separate the cyclical and structural effects.

I.41 There have been huge improvements amongst the Member States with the highest long-term unemployment rates – which have fallen from a high of 9.6 per cent to a low of 6.1 per cent. The three best performing EU Member States by contrast have experienced very low rates of long-term unemployment – between 0.7 and 1.7 per cent.

Chart I.22: Long-term unemployment

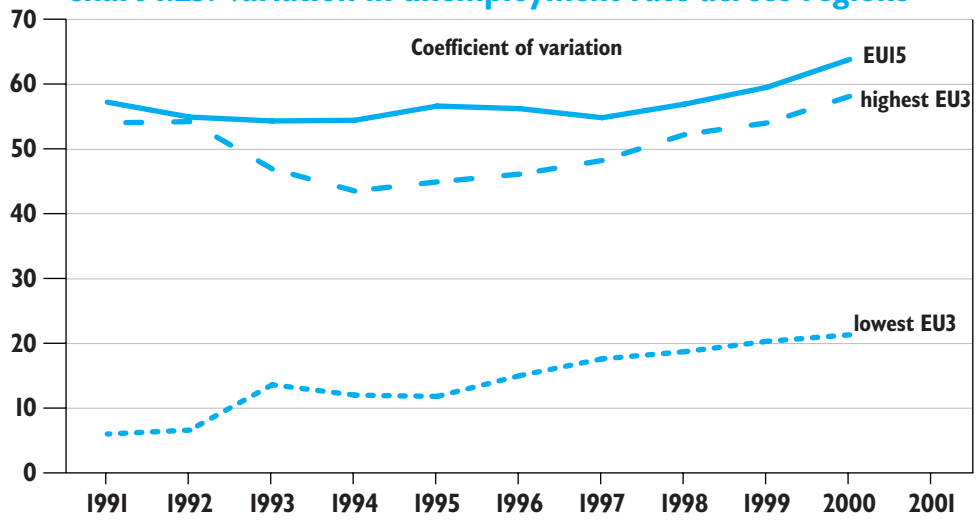


Total long-term unemployed (over 12 months) as a percentage of total active population (harmonised series).
Source: Eurostat (based on Labour Force Survey).

REGIONAL COHESION

I.42 The coefficient of variation in unemployment rates across regions is used to shed light on regional cohesion. It shows the degree to which unemployment is concentrated in some regions or spread more evenly across the Member States. Overall, the variation in unemployment rates across regions has increased. The coefficient of variation of unemployment for the EU15 is higher than for individual Member States, because it captures not only the variation between regions within a Member State but also variation between regions in different Member States.

Chart I.23: Variation in unemployment rate across regions



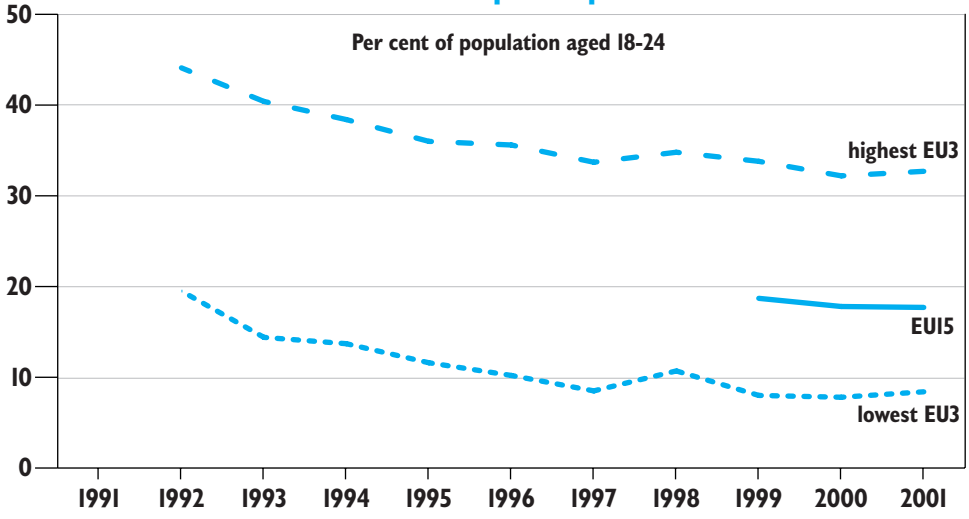
Coefficient of variation of unemployed across regions (NUTS 2 level) within countries, and within EU for EU15.
Source: Eurostat, Regional Statistics.

FURTHER EDUCATION

I.43 **The EU has a target to halve the number of 18–24 year olds with only lower-secondary level education by 2010**, as set out at Lisbon. In 2001, 17.7 per cent of school leavers aged 18–24 years old were not in further education.

I.44 EU-wide data is unavailable before 1999, but between 1999 and 2000 the rate fell by 0.9 percentage points and between 2000 and 2001 the rate fell by a further 0.1 percentage point. To halve the number by 2010 the rate would have to fall by about 1.0 percentage point each year. Again, there is a wide gap between the highest and lowest rates in the EU.

Chart I.24: Further education participation



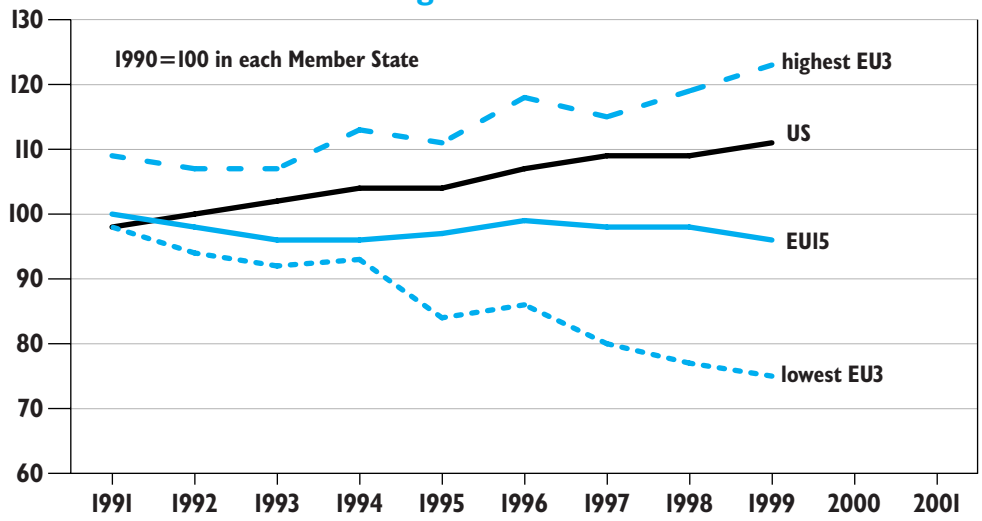
Share of the population aged 18-24 with only lower secondary education and not in education or training.
EU15 data is not available before 1999.
Source: Eurostat, Labour Force Survey.

GREENHOUSE GAS EMISSIONS

I.45 The EU has pooled its greenhouse gas emissions in the negotiation of the Kyoto Protocol to the Climate Change Framework Agreement, and within the EU some countries have been set targets to significantly reduce their emissions whilst others are permitted to increase their emissions.

I.46 Changes in EU total emissions have fallen slightly over the period. The EU lowest three and EU highest three have diverged dramatically from 1991 emissions levels.

Chart I.25: Greenhouse gas emissions



Aggregated emissions of six main greenhouse gases expressed in CO_2 equivalents. 1990=100 for each Member State.
Source: EEA/ETC ACC/UNFCCC.

2 General Economic Background

- The gap in **labour productivity per person** between the EU and the US has widened over the 1990s. The gap with the US on **labour productivity per hour worked** is smaller, but increased slightly in 2001.
- There was **employment growth** for both men and women in the late 1990s, but for both the rate of growth fell between 2000 and 2001.
- Right across the EU **inflation** has fallen through the 1990s, but there were increases in 2000 and 2001.
- The EU countries moved from a summed net deficit on **public balance** to net surplus in 2000.
- **General government debt** declined in the latter half of the 1990s.

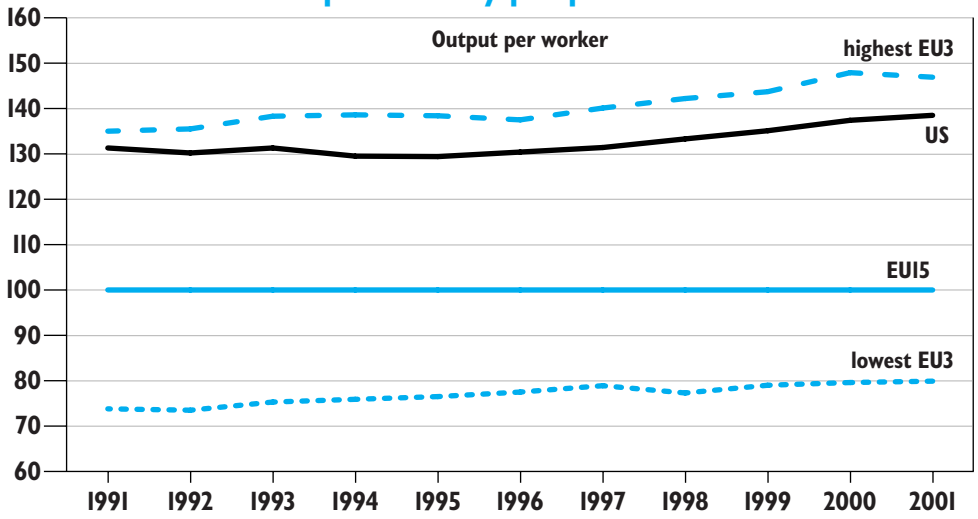
LABOUR PRODUCTIVITY

2.1 Productivity is a key driver of economic growth. There are two measures of labour productivity used in the indicators, output per person and output per hour worked.

Labour productivity per person

2.2 Average labour productivity per person in the EU is significantly lower than in the US. Output per person in the US is almost 40 per cent greater than the EU. This gap widened over the last decade: in 2001 the gap with the US increased by almost 1 per cent. Though the US has been pulling ahead of the EU average, some individual Member States in fact show higher labour productivity than the US.

Chart 2.1: Labour productivity per person



Expressed as GDP in purchasing parity standard per person engaged, indexed against the EU15. EU15=100 in each year. This data includes some estimates.
Source: Eurostat, National Accounts & OECD.

Labour productivity per hour worked

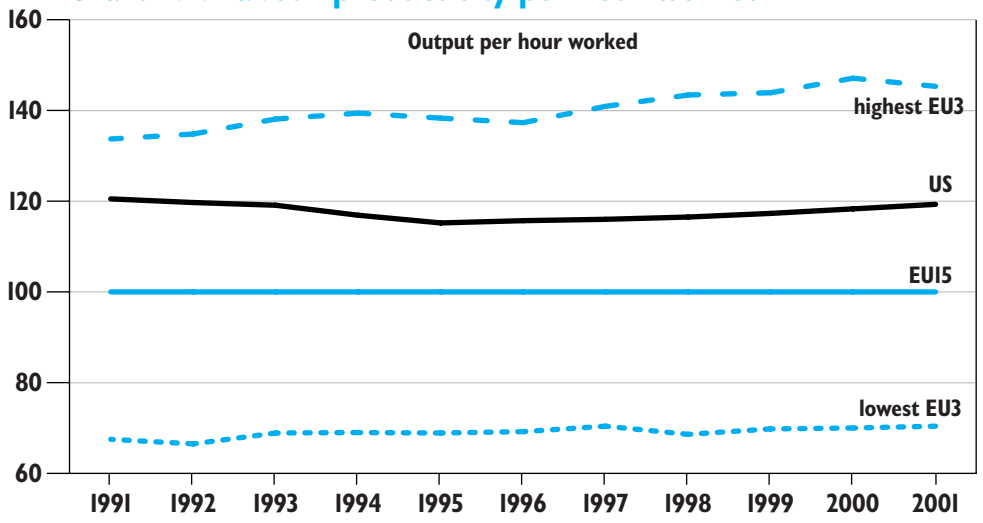
2.3 Labour productivity per hour worked in the US has been less than 20 per cent above the EU average over the 1990s, about half the differential in labour productivity per person. This suggests that EU workers work less hours, but are still less productive in those hours than US workers.

2.4 In 1991 the gap between the EU and the US was 20 per cent according to the structural indicators, but fell afterwards and has since remained below that figure. However, in 2001 the gap widened slightly by just over one percentage point to 18 per cent.

2.5 Within the EU, the distribution of labour productivity is similar whether expressed per employee or per hour worked – that is, the highest three Member States are double that of the lowest three.

2.6 An alternative estimate of productivity has been calculated by Mary O'Mahony of NIESR in the document *Productivity in the EU, 1979–99*[2], which also considers the role of capital. The figures are quite close. For 1999 O'Mahony estimates that labour productivity per person was 32 per cent higher in the US than the EU, which is close to the structural indicator figure showing the US to have been 35 per cent higher. For labour productivity per hour worked the numbers are also similar, with O'Mahony estimating output per hour worked in the US at 15 per cent higher than the EU, compared to an estimate of 17 per cent higher for the US in the structural indicators.

Chart 2.2: Labour productivity per hour worked



Expressed as GDP in purchasing parity standard per hour worked, indexed against the EU15. EU15=100 in each year. This data contains some estimates.
Source: Eurostat, National Accounts, OECD.

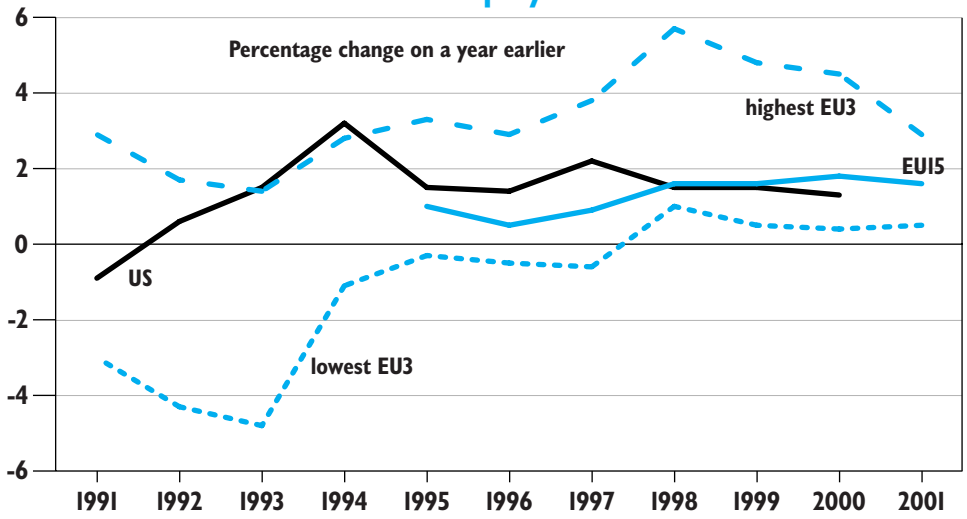
EMPLOYMENT GROWTH

Total employment growth

2.7 **The growth rate of EU employment rose during the late 1990s,** but dropped off from 1.8 per cent in 2000 to 1.6 per cent in 2001. Some EU states experienced falling total employment in the early 1990s, but since 1998 almost all have enjoyed positive employment growth.

[2] www.hm-treasury.gov.uk/Documents/International_Issues/European_Economic_Reform_White_Paper/

Chart 2.3: Growth in total employment

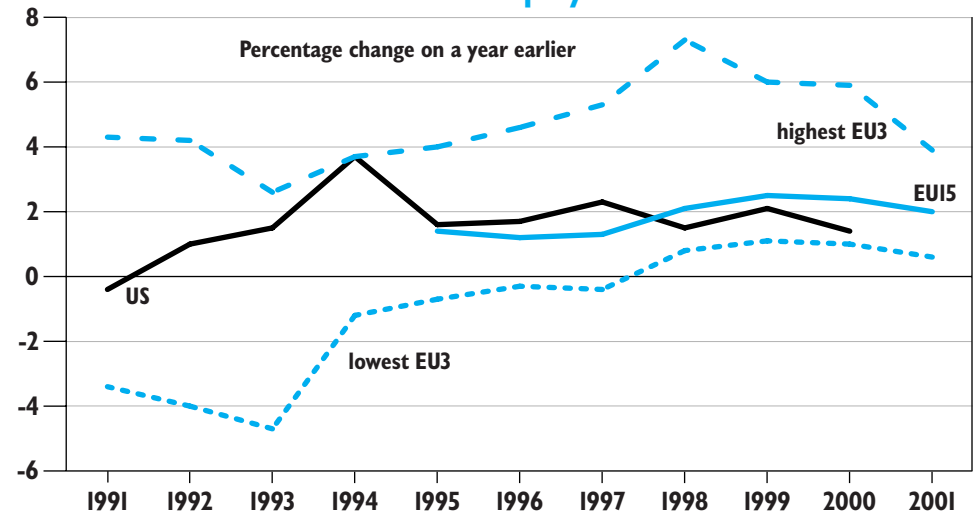


Expressed as the annual percentage change within the total employed population aged 15-64, unadjusted for changes in the labour force. This data contains some estimates.
Source: Eurostat, National Accounts.

Female employment growth

2.8 Growth rates in female employment have also been high in the late 1990s, but the growth rate fell in 2001 to 2.0 per cent from 2.4 per cent in 2000. The pattern in Member States with the slowest female employment growth rates was similar to that for total employment growth, with rising employment after 1998.

Chart 2.4: Growth in female employment

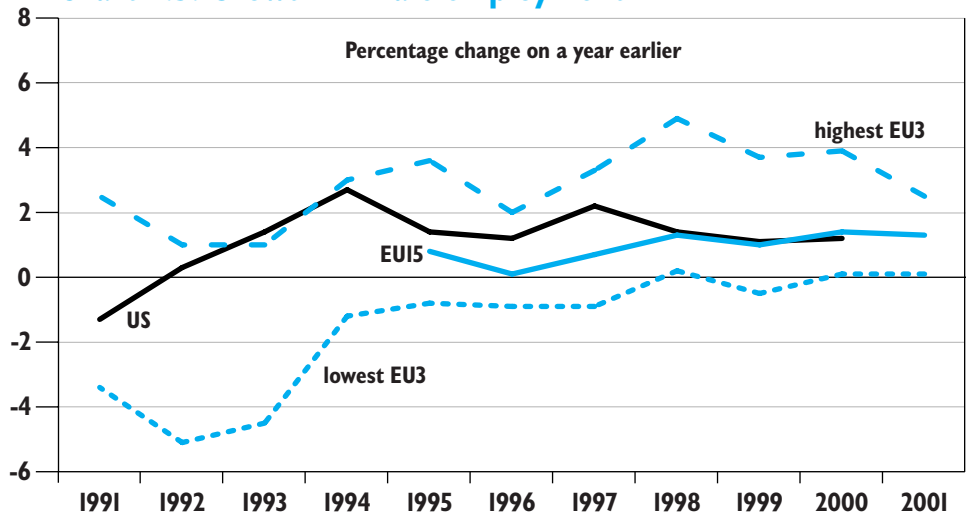


Expressed as the annual percentage change in the number of women employed within the total employed population aged 15-64, unadjusted for changes in the labour force.
Source: Eurostat, National Accounts.

Male employment growth

2.9 Growth rates in male employment have been lower in the EU than the rates for women. The Member States with the lowest employment creation rates have experienced growth rates at or below zero per cent.

Chart 2.5: Growth in male employment

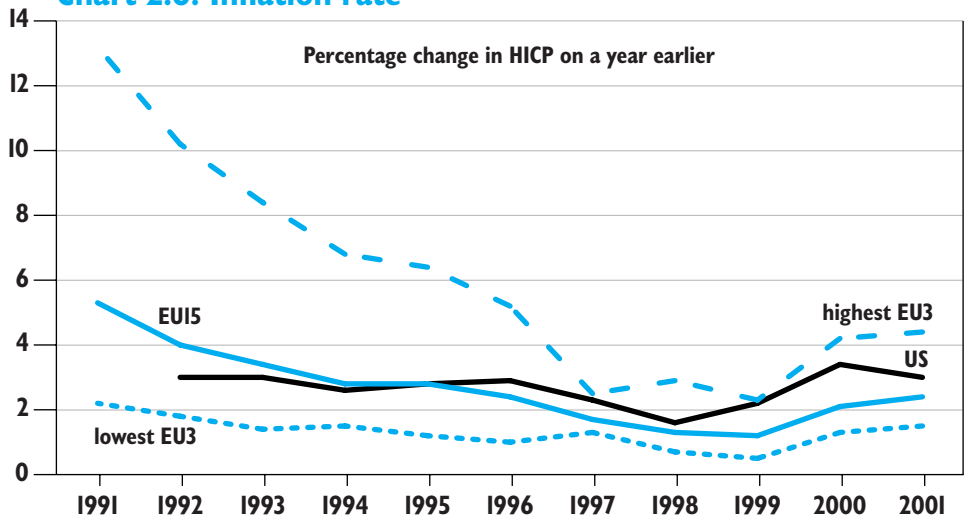


Expressed as the annual percentage change in the number of males employed within the total population aged 15-64.
Source: Eurostat, National Accounts.

INFLATION

2.10 There has been **a marked improvement in inflation performance in the EU over the 1990s,** from an average of 5.3 per cent down to 2.1 per cent. Additionally, the range of values across the EU has narrowed sharply. In 2000 inflation in most Member States showed an upturn, increasing from 1.2 per cent in 1999 to 2.1 per cent. Inflation rose again in 2001, up to 2.4 per cent.

Chart 2.6: Inflation rate



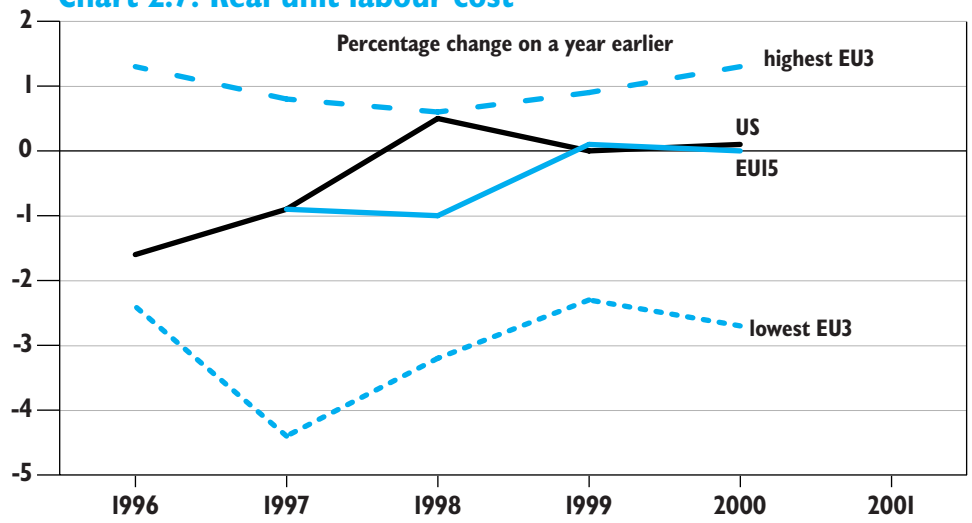
Expressed as annual percentage change in Harmonized Index of Consumer Price (HICP) (annual average). This data contains some estimates.
Source: Eurostat, Price statistics.

REAL UNIT LABOUR COST GROWTH

2.11 Real unit labour costs have broadly been falling across the EU over the late 1990s. However, in 2000 costs rose by 0.11 per cent, and then remained constant in 2001. While unit labour costs rose in the US in 1998, performance in 1999 and 2000 was very similar to the EU.

2.12 Performance varies widely across the EU. Some Member States have shown consistently increasing real unit labour costs. Other Member States have shown very significant drops in real unit labour costs, with decreases of between 2 and 4 per cent in a year.

Chart 2.7: Real unit labour cost



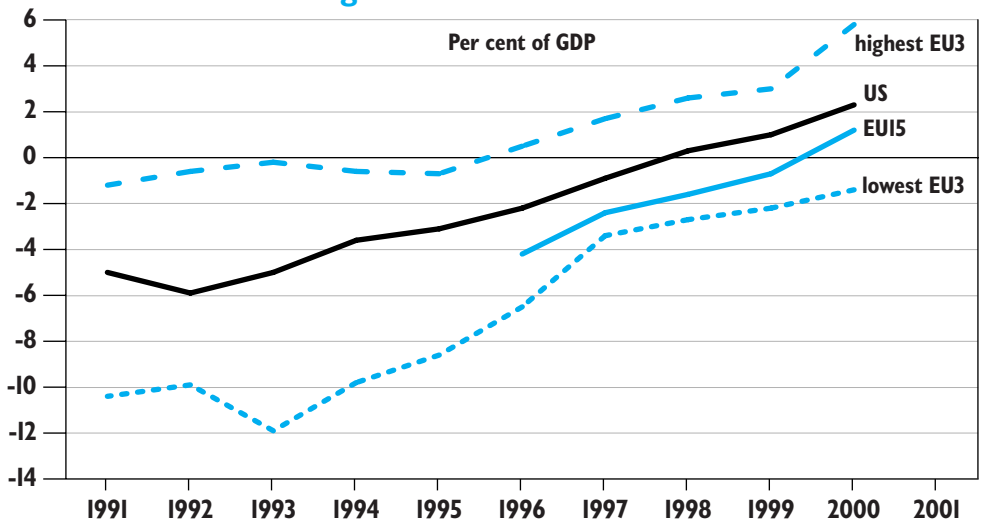
Growth expressed as the ratio of compensation per person in employment in current prices divided by GDP per person in employment in current prices. This data contains some estimates.
Source: Eurostat, National Accounts.

PUBLIC BALANCE

2.13 **There has been a clear pattern in both the EU and the US of governments moving from running net deficits to running net surpluses**. In 2000 the EU as a whole ran a net surplus.

2.14 Again, performance across the EU is varied. Some Member States have run net surpluses since 1996, and prior to that only run small deficits. On the other hand some Member States ran deficits through the entire 1990s.

Chart 2.8: General government net balance



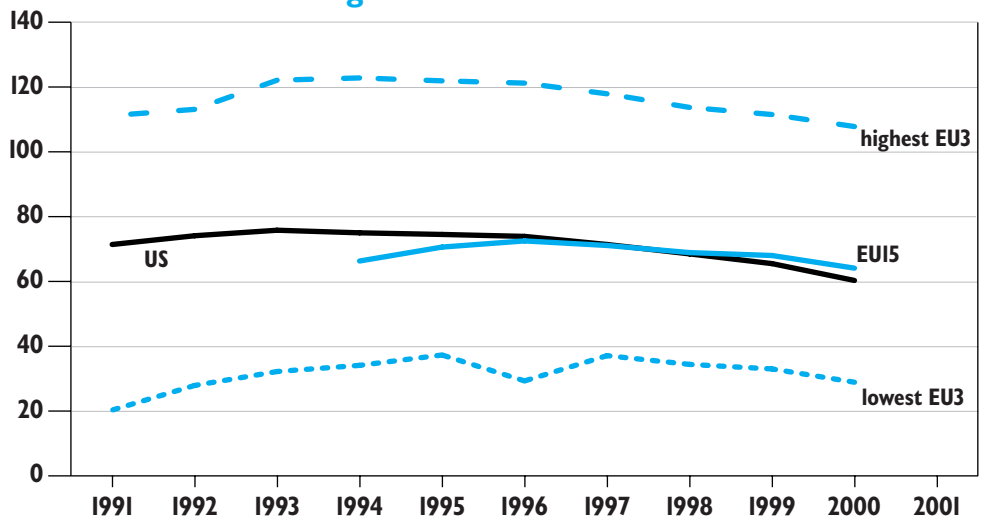
Source: Eurostat, OECD.

GENERAL GOVERNMENT DEBT

2.15 Changes in net public balance over the 1990s has translated into falling government debt. Expressed as a share of GDP, **government debt in most EU Member States has fallen since 1996.** In 2000, general government debt in the EU fell by almost 4 percentage points.

2.16 The difference in government debt between the most and least indebted Member States has remained relatively stable, with the most indebted countries having five times the debt as a share of GDP compared to the least indebted.

Chart 2.9: General government debt



General government consolidated gross debt as a percentage of GDP.
Source: Eurostat, OECD.

3 EMPLOYMENT

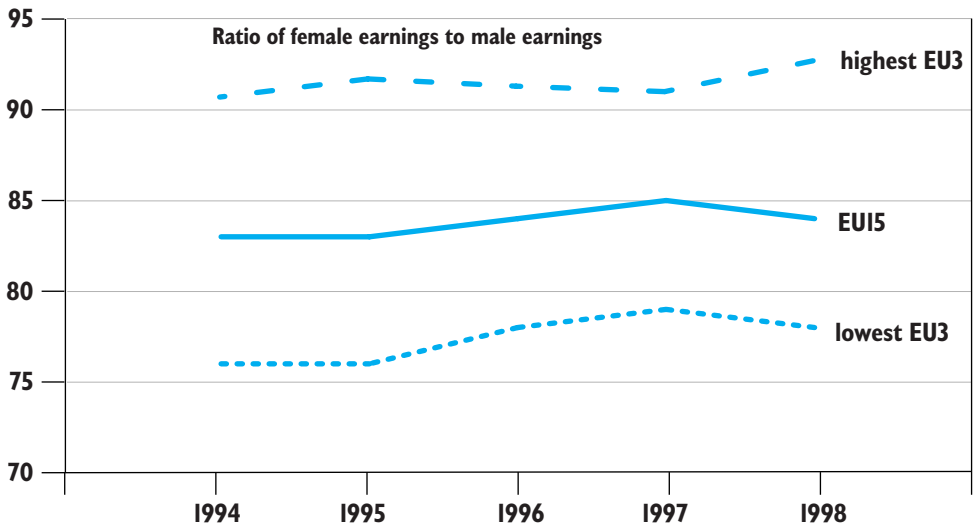
- The unadjusted **gender pay gap** in the EU narrowed slightly up to 1997 but increased again in 1998.
- The **tax rate on low wage earners** has fallen in the EU, but remains higher than the US in most Member States.
- Participation in **lifelong learning** remains low in the EU at 8.4 per cent of 25–64 year olds, and remained constant in 2001. There is a clear split in the EU between those Member States with very low rates (below EU average) and those with very high rates.
- The total rate of **accidents at work** decreased between 1994 and 1998, though serious accidents in the EU rose in 1999 while fatalities remained constant.
- Total **unemployment** in the EU decreased over the 1990s and fell by a further 0.5 percentage points in 2001, but it remains significantly above the US. Female unemployment remains considerably higher than that of males.

GENDER PAY GAP

3.1 The ratio of the average pay of females to the average pay of males in the workforce rose slightly in the EU up to 85 percentage points in 1997 but fell to 84 percentage points in 1998. Amongst the three Member States with the smallest pay gap, however, the ratio improved from about 91 per cent in 1994 up to 93 per cent in 1998.

3.2 This data does not control for experience, education or job type, so is not a valid measurement of "equal pay for equal work".

Chart 3.1: Unadjusted gender pay gap



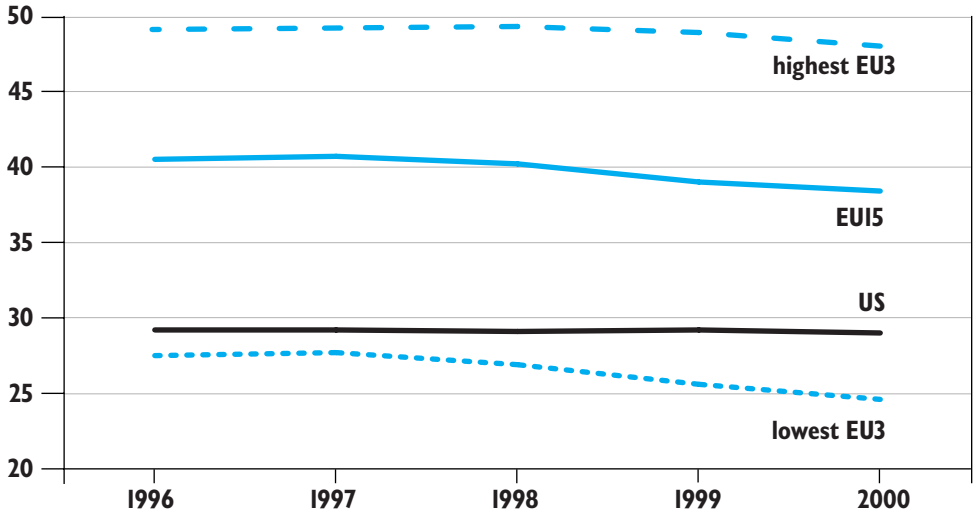
Expressed as the ratio of women's average gross hourly earnings index to men's for paid employees at work for 15 or more hours per week. Source: Eurostat – ECHP UDB/version of December 2001 (except France and Sweden); France: Labour force survey; Sweden: Structure of Earnings Survey.

TAX RATE ON LOW WAGE-EARNERS

3.3 The average tax rate on low-wage earners in the EU has fallen since 1996 with a decline of over 1.2 percentage points in 1999, and a further fall of 0.6 percentage points in 2000.

3.4 There is a marked difference between the EU average, the US and the highest and lowest within the EU. Throughout the late 1990s the EU had a tax rate on low-wage earners of more than 10 percentage points higher than the US. Some low-tax Member States show tax rates a few percentage points below the US, but the most highly taxed low-wage earners in the EU have rates almost double that of the US.

Chart 3.2: Tax rate on low-wage earners



Income tax plus employee and employer contributions less cash benefits as a percentage of labour costs for low-wage earners (representative single person without children with a wage of 67 per cent of the average production worker's wage).
Source: OECD; Fiscal Affaires Statistics (for the APW work), OECD; Taxing Wages 1999-2000, Paris, 2000 Edition, and OECD Secretariat.

LIFE-LONG LEARNING

3.5 There is a great difference between Member States in the per cent of adults participating in education and training. The lowest have only 1.1 per cent of 25–64 year olds participating in education and training, as compared to over 21 per cent in the highest. There are two clear groupings of Member States, with roughly half below 7 per cent and the remaining all exceeding 15 per cent. Aggregate EU data on life-long learning is limited, but the data does show that over 2001 there was no change.