

COMMISSION OF THE EUROPEAN COMMUNITIES

Brussels, 14.1.2003  
SEC(2003) 25

**COMMISSION STAFF WORKING PAPER**

**in support of the Report from the Commission to the Spring European Council in  
Brussels (COM (2003) 5 final) (“The Spring Report”)**

**Progress on the Lisbon strategy**

{COM(2003)5 final}

## EXECUTIVE SUMMARY

The main conclusions from Staff Paper are as follows:

- The European Union has made progress on the Lisbon strategy, but the speed and breadth of progress is generally insufficient to achieve the goals for 2010 set out in Lisbon. EU GDP per capita measured in terms of purchasing power rose from 70% of the US level in 1999 to 71% in 2002. This gain can be explained by a rise in the EU employment rate, which was largely offset by a decline in EU labour productivity relative to that in the US. There is no sign of a narrowing of the productivity gap between the Union and the US, neither in terms of labour productivity per hour worked (which stayed at 97% of the US level) nor in terms of hours worked per worker.
- The European labour market has so far proved to be quite resilient to the effects of the slow economic growth. Employment growth continued in 2001 and 2002, as did the decline in structural unemployment. The employment rate rose from 62% in 1999 to 64% in 2001, which shows good progress. The rise in the employment rate of women was satisfactory, but that of older workers rather disappointing, in particular because some Member States still showed a decline in the employment rate of older workers.
- Labour productivity per person employed in the Union declined from 86% of the US level in 1999 to 83% in 2002. The difference in productivity per person employed compared to US levels may be explained primarily by the gap between the Union and the US in the number of hours worked. However, attention also needs to be paid to the development of productivity per hour. Improving the Union's relative performance in terms of labour productivity per hour worked remains important and is necessary to offset the effects of a more rapidly ageing population on potential growth.
- In this respect, the insufficient integration and competition in product markets is a serious cause for concern. Slow investment growth in areas such as R&D and education, which are key to creating a knowledge-based economy, also endangers the Union's future growth and competitiveness. The disappointing increase in industry financed R&D in the Union between 1999 and 2001 and the stabilisation of public spending on education are also factors in the lower innovative capacity of the Union in comparison with the US. Developments in patenting rates clearly reflect the problems for European businesses and research organisations due to the non-existence of a Community patent. In spite of the current financial situation of the electronic communications sector, the Information and Communications Technology (ICT) sector has continued to grow faster than the rest of the economy, driven by telecommunications services. Broadband and 3G services are expected to drive future growth.
- The process of product market integration appears to have slowed down. Most Member States have failed to meet the target on the transposition of Internal Market directives; price convergence has come to a halt; public procurement is mostly done within national borders; energy markets remain insufficiently integrated; and in telecommunications competition at the local level is insufficient. Progress has been made in capital market integration, and Member States are making efforts to improve the business environment by easing the regulatory burden and by reducing ad hoc and sectorial State aids.
- In 1998, 18% of people in the Union were living below the poverty line, even when taking into account the important role of the welfare system in alleviating poverty. The highest

rates of poverty tended to be in the least affluent Member States and amongst the long-term unemployed as well as in single parent households. The employment gains in recent years may thus help in bringing the poverty rate down. Improvements achieved in the educational attainments of the population, as well as increasing access to life-long learning, and in the provision of child care facilities, should be a positive factor as well, but more needs to be done.

- The Göteborg European Council in June 2001 completed the Lisbon strategy by giving it an additional environmental dimension. While in the 1990s the Union made some progress in reducing greenhouse gas emissions, efforts need to be stepped up in order to meet the Kyoto commitments. On the basis of the latest data, at the time of the launch of the Lisbon Strategy (2000), the link between the GDP growth rate and the rate of growth in transport volumes had not yet been broken and road continued to be the preferred transport mode. Air quality has improved, but municipal waste volumes keep growing. Time is needed for the impact of measures since Göteborg to show up in the statistics.
- The acceding countries have already come a long way in making the transition to market economies. They are already relatively well integrated with the Union in terms of international trade and have generally made good progress in their efforts to improve the functioning of the economy. Nevertheless, the need for further efforts on structural reforms is apparent if an enlarged Union is to achieve the goals set by the Lisbon European Council.
- While the challenges faced by the future Member States and candidate countries do not differ fundamentally in nature from those in the current Member States, the scale of these challenges is in general greater. In particular, these countries have low employment rates and high unemployment rates and on the whole, competition is still relatively limited. They are also lagging behind in the transition to the knowledge-based economy and the upgrading of their infrastructure together with the extension of the trans-European networks will require substantial investments over the next years. The future Member States are aware of these problems and have already their own agenda of reforms. From a policy perspective, their main challenges are to improve tax and benefit systems and labour institutions, to strengthen competition rules and authorities, to make the public sector more efficient and to increase business R&D and investment in human capital.

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<sup>(\*)</sup> See document 5454/03 Addendum 2.

## 1. INTRODUCTION

This Staff Paper accompanies the 2003 Spring Report to the Spring European Council on the progress achieved in pursuing the Lisbon strategy of economic, social and environmental renewal<sup>1</sup>. It provides a snapshot of progress towards the Lisbon strategy goals, identifying where it is helpful both the good performers and those who face the biggest challenges; in this way it helps to guide the choice of political priorities set out in the Spring Report itself.

It draws on the broad set of structural indicators agreed with Council to measure progress towards the Lisbon goals, as well as the analysis and assessment of progress prepared by the Commission services. That analysis benefits from the wealth of information now emerging through the sectorial benchmarking of performance in specific areas of the Lisbon strategy, often in the context of the open method of co-ordination.

This is one of the major strengths of the Lisbon strategy. By developing a common picture of progress across an enlarged Union, the European Council is able to provide policy orientations based on the situation on the ground. At the same time, further efforts are needed to reinforce the quality and timeliness of this statistical base, particularly in areas such as social cohesion and the environment, where reference data sometimes still predates the launch of the Lisbon strategy.

This report follows the grouping of the structural indicators (annexed to this report). It covers six areas:

- Economic performance
- Employment
- Education, research and innovation
- Economic reforms
- Social cohesion
- The environment.

For the first time the Spring Report and the structural indicators include coverage of the future Member States and candidate countries. This Paper therefore includes a separate Chapter analysing the challenges and opportunities they face in integrating themselves within the policies and objectives of the Lisbon strategy.

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<sup>1</sup> Choosing to grow: Knowledge, innovation and jobs in a cohesive society, COM(2003) 5, 14.1.2003.

## 2. ECONOMIC PERFORMANCE

### **Lisbon Strategy Targets / Objectives**

The Lisbon strategy does not set particular targets for economic performance. However, a sound economy is a precondition for achieving the objectives of the strategy. That is why particular emphasis has been placed on the Stability and Growth Pact and on structural reforms intended to raise the growth and employment potential of the Union.

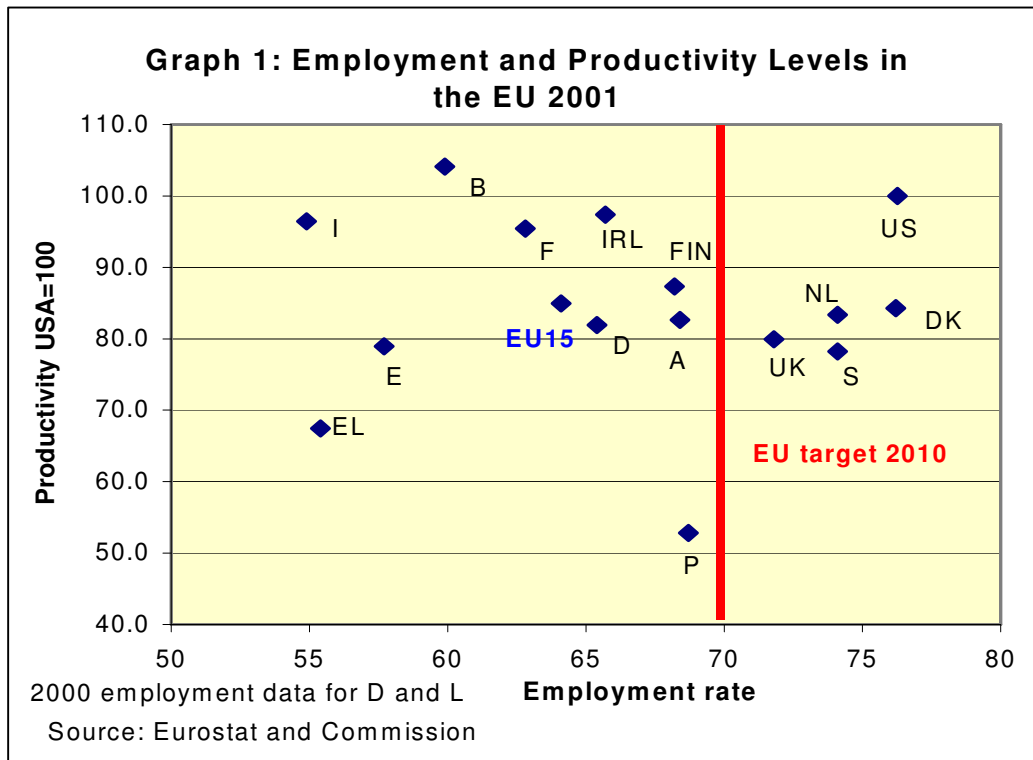
The Lisbon approach implies:

- That if the Lisbon measures are implemented against a sound macroeconomic background an average growth rate of around 3% per year should be a realistic prospect
- Member States' budgets close to balance or in surplus over the medium term, ensuring the long-term sustainability of public finances
- Redirecting public expenditure towards increasing the relative importance of capital accumulation (physical and human) and supporting R&D, innovation and IT

Economic reforms under the Lisbon strategy are aimed at raising the level of potential growth while ensuring its long-term economic, social and environmental sustainability. An increase in potential growth needs improvements at the same time in employment and productivity, requiring amongst other things a sound macroeconomic environment. This translates into increases in productive inputs (capital stock and employment) and technological progress. The twin Lisbon objectives of achieving full employment (by raising overall employment rates to 70%, to 60% for women and to 50% for older workers) and matching the productivity levels of the world's best performers are quite a challenge for most if not all Member States (see graph 1). For the Union as a whole, the employment rate went up from 62.4% in 1999 to 64.1% in 2001, while relative labour productivity per person employed (in PPP) declined from 86% of the US level in 1999 to 83% in 2002.

In terms of output per worker, productivity growth depends on the rate of technological progress, the accumulation of capital per worker and the number of hours worked. Improvements that raise workers ability to produce more with time-saving technologies may increase the level of hourly productivity.

A significant portion of the labour productivity gap with the US is due to the fewer number of hours worked per worker in the Union. Long-term sustainability is ensured by appropriate social and environmental policies, prudent budgetary policies and due account of developments in the world as a whole.



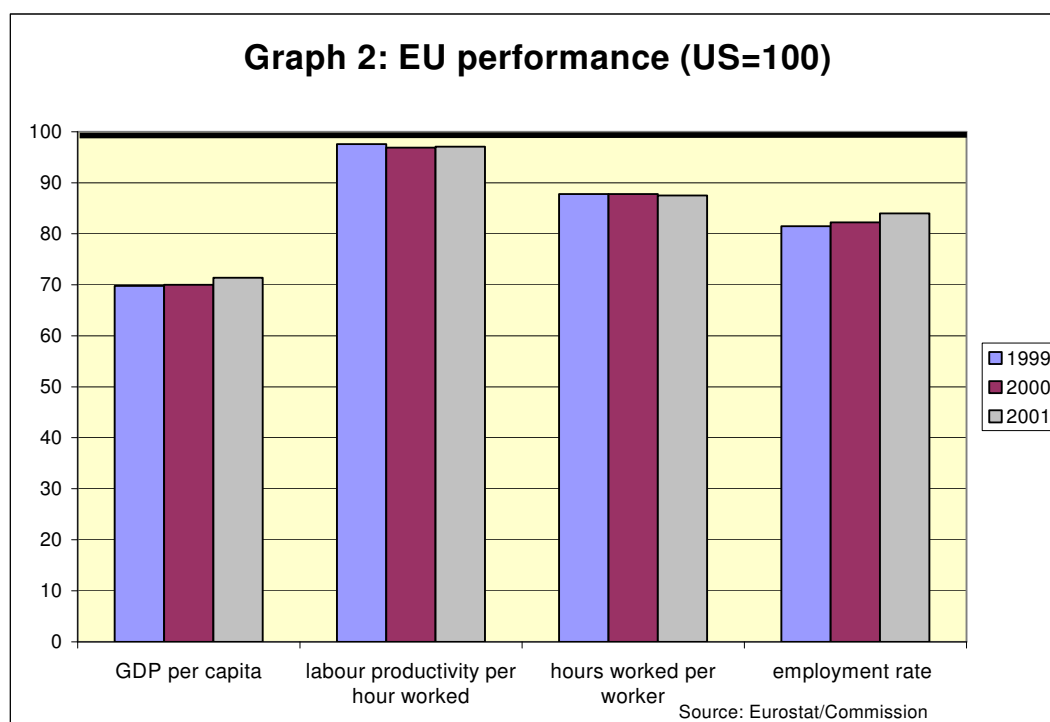
*The gap between the Union and the US in terms of GDP per capita has narrowed somewhat since Lisbon*

Hourly productivity, the employment rate and the hours worked determine, with the demographic component of the population the level and the dynamics of GDP per capita. The fewer numbers of hours worked per worker in Europe contributes to a per capita GDP that is lower than in the US. Nevertheless, this difference working hours reflects in part a positive choice by European citizens for more free time, in particular through longer holidays. Moreover developments of working hours may also be influenced by efforts to increase the participation rates of older people and to balance work and family life, as well as care responsibilities. On the other hand there are workers - in particular some part timers - who would like to work longer hours and better services, such as the provision of childcare, would help them to do so.

In the second half of the 1990s, high GDP growth, underpinned by strong employment creation, allowed EU living standards, as measured by per capita GDP, to improve markedly. GDP growth rates gradually rose from 1.6% in 1996 to 3.4% in 2000. US growth rates were even higher, fluctuating around 4%. However, in the face of external shocks and more recently a higher geopolitical uncertainty, this period of buoyant growth unexpectedly gave way to a period of sluggish growth, with growth rates averaging only 1¼ per cent in both the Union and the US over the years 2001 and 2002.

In spite of the lower GDP growth rates in the Union over the second half of the 1990s, the gap between the Union and the US in terms of GDP per capita in Purchasing Power Parity narrowed due to relatively lower population growth and lower inflation in the Union. While in 1996, EU GDP per capita in PPP was equivalent to 69% that in the US, in 1999 this ratio had risen to 70% (data available at the Lisbon summit) and in 2002 it was a little over 71%. The 1½ % gain since Lisbon can be fully attributed to a rise in the EU employment rate relative to that of the US (see graph 2). There is no sign of a narrowing of the productivity gap between

the Union and the US, neither in terms of labour productivity per hour worked nor in terms of hours worked per worker.



*The labour market proved resilient*

Despite the much more-sluggish-than-anticipated economic recovery, the EU labour market exhibited a certain resilience. In 2001 employment growth continued at 1.3% close to the average rate of the 1996-2000 period. In 2002, employment is estimated to have increased by some 500,000, which is equivalent to a 0.4% growth rate, and the deterioration of the unemployment rate has been quite moderate.

A side effect of the positive employment growth in the environment of slow economic growth has been a largely cyclical, reduction in labour productivity growth. Such behaviour by enterprises may make sense in terms of preserving employability. The slowdown in the rate of labour productivity growth to less than ½ per cent on average in 2001 and 2002 is likely to be reversed when growth recovers. Belgium, France, Luxembourg, Austria and Sweden experienced a particularly steep drop in the rate of labour productivity growth between 2000 and 2002. Meanwhile, the rate of labour productivity growth climbed to almost 3 per cent in 2002 in the US, as companies restored profit margins by cutting costs with large lay-offs. As a consequence, labour productivity per worker in the Union has fallen relative to the US to around 16.6% below the US level. This is a reflection largely of a difference in the number of hours worked, as the difference between the Union and the US in terms of labour productivity per hour worked has been less than 5% in recent years.

*However, strains have started to be exerted on the macro-economic stability of the European economies*

Three elements point in this direction:

- First, the steady decline in real unit labour costs has now come to a halt and continued moderate increases in nominal wages put upward pressure on real unit labour costs. In



2000, real unit labour costs increased for the first time since 1992. The increase accelerated to 0.6% in 2001, before dropping to 0.2% in 2002.

- Second, inflationary pressures have remained stubborn in a slow-growth environment. In the euro area, headline inflation has been above the European Central Bank's medium term reference value of 2% since 2000 and core inflation has remained at around 2.5%, after having risen gradually from below 1 per cent in 1999.
- Third, fiscal consolidation has levelled off and now requires renewed efforts. After 1999, several Member States have reduced their consolidation efforts. Initially, high growth, leading to strong cyclical increases in revenue, masked the fiscal adjustment fatigue in the large Member States. However, reflecting the deterioration of the economic environment, the average budget deficit in the Union (excluding receipts from the licensing of third general mobile communications systems) deteriorated from 0.2 per cent in 2000 to 1.9 per cent in 2002, the first increase in the deficit since 1993. As a result of the deterioration of budget balances and slow economic growth, the steady decline of general government debt to GDP ratio since 1996 came to a halt in 2002.

*There is little evidence of a significant redirection of public spending towards the Lisbon goals*

Public investment (as a percentage of GDP) remained constant between 2001 and 2002 in Union (2.3% of GDP). However, those countries with sound budgetary positions increased their level of investment while countries with some unbalances tended to reduce investment. In terms of composition of public expenditure at the EU level, there is little evidence of redirection of public expenditure towards productive investment. It is therefore important to improve the composition of the whole expenditure, while at the same time continuing to increase the efficiency of public investment in infrastructure, R&D and education.

### 3. EMPLOYMENT (MORE AND BETTER JOBS)

#### **Lisbon Strategy Targets / Objectives**

Lisbon has set an overall target of bringing the Union back towards full employment. This means for the Union:

- An overall employment rate of 70% in 2010 (67% in 2005)
- A female employment rate of 60% in 2010 (57% in 2005)
- An employment rate for older workers (55-64) in 2010 of 50%
- An increase by 2010 of five years in the average age at which people stop working
- Availability of childcare by 2010 for 90% of children (3 years +) and 33% of children under 3

As well as action at EU level to:

- Remove barriers to mobility between and within Member States (e.g. recognition of qualifications, pension portability, better provision of information, etc.)
- Improve quality in work, in particular the working environment and health and safety

For Member States:

- Reduction of tax burden on low-wage earners
- Make work pay within tax and benefit systems
- National labour institutions and collective bargaining to take account of relationship between wage developments and labour market conditions in order to bring wage developments in line with productivity
- Review employment contract regulations in order to strike a proper balance between flexibility and security
- Remove disincentives for female participation in workforce, promote active ageing and reduce early retirement incentives for individuals and companies
- Reduce the informal economy

Economic reforms under the Lisbon strategy are aimed at increasing the Union's growth potential and at regaining the conditions for full employment. The underlying policies focus in line with the Employment Policy Guidelines in the framework of the European Employment Strategy on creating more and better jobs by improving the adaptability of companies and workers, by increasing investment in human capital and enhancing quality in work and removing bottlenecks and disincentives. This will improve not only the sustainability of higher growth in the medium term, but also, through increased participation, the long-term sustainability of the social system.

*Employment rates have increased since Lisbon, in particular for women...*

Compared to 1999, the year before the start of the Lisbon strategy, the total employment rate in the Union increased by 1.7 percentage points, to 64.1% in 2001. For women, this increase in the employment rate over the period 1999-2001 was more pronounced (2.1%), leading to a female employment rate of 55% in 2001. In that year, four Member States (Denmark, the Netherlands, Sweden and the United Kingdom) had total employment rates already above the EU target of 70% set for 2010, and three additional Member States (Austria, Portugal and Finland) had already reached the intermediate target of 67% set for 2005. Some convergence between Member States can be observed as the improvement of (total and female) employment rates was generally stronger in those Member States with less favourable starting points. Differences among Member States are relatively small for male workers (11 percentage points between the best performing three and the lowest three in 2000), but far more pronounced for women (28 percentage points) and older workers (32 percentage points).

*...but employment rates of older workers are still declining in some Member States*

The employment rate of older workers in the Union as a whole increased from 37.1% in 1999 to 38.8% in 2001. However, Belgium, Greece, Austria and Portugal recorded a decline in the employment rate of older workers in 2001. In the light of this disappointing performance, reaching the target of 50% by 2010 represents a formidable challenge. The additional target set at Barcelona last year indicates the way forward (see below), namely through policies that will increase the average age at which people effectively leave the labour market.

### *Promoting active ageing*

Member States have given increased attention to implementing a range of policies to raise the employment rates of older workers and extend working life but few have developed national **active ageing** strategies. Most Member States concentrate on benefit reforms, and give less attention to working capacity (for example, there is limited access to training) or to incentives for employers to retain or recruit older workers. Efforts are being made to discourage early exit or to provide financial and other incentives for staying longer in the labour market. However, little attention is given to promoting flexible forms of employment combining gradual retirement with part-time work. The tendency is to cover a broader age group than those aged 55-64 and to focus on older workers in employment rather than those in unemployment. Social partners are playing an important role in changing the attitude among their members to overcome the tradition of early withdrawal from the labour market.

### *Most Member States are encouraging an increase in the average age of exiting the labour force*

The Barcelona European Council established the target of seeking “*a progressive increase of about 5 years in the effective age at which people stop working in the European Union*”. The preliminary assessment of progress towards this new target shows that the average age at which people stopped working in 2001 was just below the age of 60. To meet the EU target, this means that most people should leave the workforce at around 65, implying an increase in the average of about 6 months per year until 2010. Men tend to exit the workforce later than women. The countries needing to make the greatest efforts are Belgium, Germany, Italy, France, Luxembourg and Austria. Reforms are underway to reduce incentives for early retirement, for example, by permitting gradual retirement via part-time work and for older workers to earn more without losing benefit entitlements. Some have reduced pension rights for those retiring earlier, while others have added incentives for those working beyond the statutory retirement age.

### *Limited increase in the unemployment rate...*

Following the slowdown, unemployment began to pick up in the second half of 2001 in most Member States. However, the increase has been limited so far, and the annual average unemployment rate of the Union in 2002 is, at 7.6%, expected to be no more than 0.2 percentage points above the 2001 average. The differential between the highest unemployment rate (11.4% in Spain) and the lowest (2.3% in Luxembourg) remains rather substantial, but the dispersion of unemployment rates across Member States has slightly declined over the past year.

### *...but continued decline in structural unemployment*

Structural reforms have contributed to the decline of unemployment since the second half of the 1990s and also to the labour market's relative resilience in the slowdown. Structural unemployment is estimated to have decreased by just over a percentage point between 1996 and 2001, and it continued to fall slightly in 2002. Despite of structural improvements in the EU labour market there remains a major structural component in EU unemployment as witnessed by the long-term unemployment rate of 3.1% (i.e. more than two fifths of total unemployment) down from 4.9 in 1997

### *Gender gaps persist*

Female unemployment continues to be higher than overall unemployment; in 2001, the female unemployment rate of 8.5% exceeded the total unemployment rate by 1.1 percentage points. Data for 1998 indicate that gross hourly earnings of women were, on average, 16.2% lower than male earnings. The gender pay gap is highest in the UK, the Netherlands, Ireland, and Austria, amounting to 20% or more. The gender pay gap is particularly high among older workers (30%), the high-skilled (23%), those in the private sector in general (24%) and financial services (28%) and manufacturing (25%) in particular, and among craft workers (31%) and plant and machine operators (25%). These data are not adjusted for differences in labour market characteristics (i.e. differences between men and women in terms of skills, working experience and the sectorial composition of employment).

Women have supervisory responsibilities much less frequently than men: 16% of men in paid employment in the Union had supervisory responsibilities and additional 19% intermediate responsibilities in 1998 compared to less than 9% and 16%, respectively, of women. Men were overall twice as likely to occupy such supervisory functions. This is a general feature in all Member States, with women least likely to be in supervisory functions relative to men in Italy, Greece and the Netherlands.

Women are further more often in non-standard employment such as fixed-term and part-time work. Compared to 6.2% of all employed men, for instance, 33.4% of all women work in part-time. Men are thus not only more concentrated in higher paid sectors and occupations, but within these sectors and occupations they are also more likely than women to hold supervisory responsibilities and if they do so their earnings are relatively higher.

### *Creating better jobs with fewer accidents at work*

Relevant indicators to measure and monitor developments in quality at work include gender pay gaps, participation in lifelong learning, employment rates for older workers and labour productivity.

Research shows that improvements in the quality in work - the creation of "better jobs" - are positively correlated with all three elements: Labour market participation and employment rates are generally higher in Member States with relatively higher levels of quality in work. This applies in particular to women and older people. Labour productivity seems to be higher in sectors with higher shares of good quality jobs. In particular, access to training at the workplace contributes to fostering productivity and sustaining employment.

Therefore, to reach its full employment potential the Union needs to pursue the twofold Lisbon objectives of more and better jobs. People working in jobs without contractual security or without access to training are at significantly higher risk of unemployment and labour market exclusion. While for higher skilled and the young temporary contracts often functions as a stepping stone to more stable employment low skilled people and older workers are often forced into cycles of low productivity jobs and unemployment.

Accidents at work are measured by two indicators, namely the indices for fatal accidents and for serious accidents at work. Here the picture is mixed. Fatal accidents decreased substantially, by 21% in 2000 as compared to the base year 1998, while serious accidents decreased by 1%. However, these two indicators can only give a partial picture of quality at work.

### *Childcare places have increased, but still insufficient to meet the demand*

Progress in Member States towards attaining the targets on childcare provision set at the Barcelona Council to cover at least 90% of children between 3 years old and the mandatory school age and at least 33% of children under 3 years old by 2010 is difficult to measure due to lack of complete and comparable data. According to the information available from the National Action Plans on employment in 2002, there has been a small increase since last year in the provision of childcare facilities, but it is still insufficient to meet the demand. However, there are now ten countries setting national targets for increasing childcare provision, compared to six last year. The targets are ambitious and are in line with the Barcelona objectives, but it is essential to improve national data to monitor the progress of childcare facilities.

### *Implementing lifelong learning strategies*

In 2001, Member States have reinforced lifelong learning policies and all have now laid the groundwork for comprehensive strategies. However, further development and concretisation of the strategies are required, especially to improve coherence of policies and to ensure that adequate attention is given to disadvantaged persons. The school drop out rate is only decreasing slowly, which calls into question the feasibility of meeting the common target of cutting the rate in half by 2010. Attention has continued to focus on basic skills, developing continuing education and training for adults and improving the responsiveness of systems to the labour market. The common e-learning targets have not yet been fully met in all Member States but generally strong progress has been made, although more attention needs to be devoted to ICT training of teachers.

### *Combating undeclared work*

The size of the informal economy is by its very nature difficult to measure, and so is the effect of the efforts undertaken to fight undeclared work. Member States are addressing undeclared work through general labour market reforms. Their efforts concentrate on: simplifying procedures for the declaration of new jobs, increased inspection and control campaigns, combining job incentives with sanctions, including measures to combat tax and social insurance fraud, reduction of the VAT rate in labour-intensive services enabling more equal competition with the same services provided through the informal economy, and developing legislation to control the undeclared work of immigrants. Most Member States have implemented or announced new initiatives in these areas, thus giving reasons to conclude that some progress have been made in taking measures to combat undeclared work and reduce the size of the informal economy, even though the effects of the measures are so far difficult to establish.

#### 4. EDUCATION, INNOVATION AND RESEARCH (EUROPEAN KNOWLEDGE AREA)

##### Lisbon Strategy Targets / Objectives

Under the umbrella of a European knowledge area, a key element of the Lisbon strategy has been to speed up the transition towards a knowledge-driven economy. Action has been shaped around a range of initiatives from eEurope and the creation of a European Research Area to promoting innovation and establishing common objectives at EU level for national education policies. This has been translated into targets such as:

- Increase R&D spending with the aim of approaching 3% of GDP by 2010. The proportion financed by business should rise to two thirds of that total (target set at Barcelona)
- 100% of schools to be connected to the internet by 2002 (target set at Lisbon)

##### Research

- Network national and joint research programmes on a voluntary basis around freely chosen objectives
- Improve the environment for private research investment, R&D partnerships and high-technology start ups
- Develop an open method of co-ordination for national research policies
- Roll out a world class research communications infrastructure
- Remove obstacles to the mobility of researchers, attract and retain high-quality research talent in Europe
- Introduce a cost-effective Community Patent
- Harness new and frontier technologies, notably biotechnology and environmental technologies (Stockholm)

##### Information Society

- All teachers to have training in digital skills by 2003
- Ensure access to widespread, world class communications infrastructure and ensure significant reduction in the cost of using the Internet (local loop unbundling)
- Create conditions for e-commerce to flourish
- Prevent info exclusion
- Stimulate eGovernment
- Support take up of 3G mobile communications and introduction of Internet Protocol version 6

##### Education

- Achieve a substantial increase in per capita spending on human resources
- Promoting lifelong learning
- Adapt skills base better to needs of knowledge society
- Better recognition of qualifications
- Promote learning of EU languages and introduce a European dimension to education
- Promote school twinning via Internet

Productivity gains are highly dependent on technological progress and improvements in the quality of labour and capital inputs into the production process. It is not surprising therefore that the transition to the knowledge-based economy is at the centre of the Lisbon Strategy. The Union has taken some steps forward and reaffirmed its political commitment at Barcelona, but the Union as a whole is still lagging behind the US in terms of both investment and performance in this area. Faster progress is needed to achieve the Lisbon and Barcelona goals. Policy action thus far has focused on improving the educational achievements of the population, spurring R&D and innovation, and encouraging ICT usage. Ensuring more effective target of education spending is an important element in achieving this.

*Progress in building up the skills base in the Union is central to the Lisbon goals...*

Education contributes to growth even more than investment in equipment or capital. Investment in human capital was responsible for an additional point of growth in several Member States during the 1990's. For individuals, their school attainment is the main factor in determining their job and standard of living. On average an additional year of schooling increases wages by 6.5% across the Union.

However, public expenditure on education in the Union as a percentage of GDP increased only marginally between 1999 and 2000 from 5.0% to 5.1%, a level similar to that in the US. Differences between Member States remain significant. There is a clear gap between private sector investment in skills and training in the Union. The level is half that of what business

spends in Japan and third of what is spent in the US. This led the Commission in November 2002 to invite Member States<sup>2</sup> to set national benchmarks for increasing overall investment in human resources<sup>2</sup>. Investment should focus on the areas with greatest returns in terms of quality, efficiency and relevance. The necessary incentives to bring this about should be put in place.

*...and access to lifelong learning remains a problem*

Access to lifelong learning in the Union is clearly insufficient. The EU average is 8.4% and variations between countries are significant (in the best three performers participation in lifelong learning averages 19.6% and in the three worst only 2%).

*Slow progress in reducing the number of early school leavers*

Some Member States have made an effort to increase the efficiency of education and training systems. Nevertheless, wide differences in outputs remain, e.g. in terms of the share of 18-24 year-olds with only lower secondary education and not in further education and training, and in terms of educational attainment of the population. There has been little progress to date in moving towards the objective of halving the number of early school drop-outs. The current rate of completion of secondary education has been increasing steadily over the last decades to reach 66% in 2000. The average of the three best European performers is 82.7%, which is lower than the corresponding US figure (87%).

Marked variations can also be seen in the number of science and technology graduates. This supply of newly skilled researchers is important to improve a country's future research potential. Women are particularly under-represented in these fields. Another problem is the relatively low proportion of researchers in the Union compared. Here there are five for every thousand in the working population, compared to eight in the US and nine in Japan. Research careers therefore need to be made more attractive to build up the Union's research base.

*Barcelona established a goal of boosting language performance in the Union*

Over half the population of the Union is able to speak another language in addition to their mother tongue and a quarter can speak two languages. These skills are increasingly important to do business within an internal market, as well as for fostering integration. There are wide variations between Member States, social groups, and age groups. Although more than half of European citizens would be willing to learn another European language, the lack of lifelong language learning often prevents them from doing so. Finally, following the call from the Barcelona European Council, the Commission is working with national experts to devise a European Indicator of Language Competence to compare performance among Member States.

*...and improving recognition of qualifications.*

In order for European citizens to move freely within the Union for study, training or work purposes, the Lisbon strategy has promoted improvements in the recognition and transparency of qualifications. A key factor is ensuring that people are aware of the systems that exist. For example, transparency tools such as the common format for certificates and the common format for Curriculum Vitae, which have been promoted at EU level, are now being introduced nationally. However, further political commitment is needed to make a real

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<sup>2</sup> Communication on European benchmarks on education and training, COM(2002) 629, 20.11.2002.

difference on the ground, including progress on the pending proposal on updated rules on the mutual recognition of professional qualifications.

In this context, Member States, together with the EEA, the future Member States and the candidate countries, and the European social partners, have committed themselves to improving recognition of vocational qualifications and competences. This will include the development of a single instrument to facilitate recognition, the development of a credit transfer system for vocational education and training, and the development of common criteria for quality assurance.

*The gap in business investment in R&D makes the Barcelona target particularly challenging.*

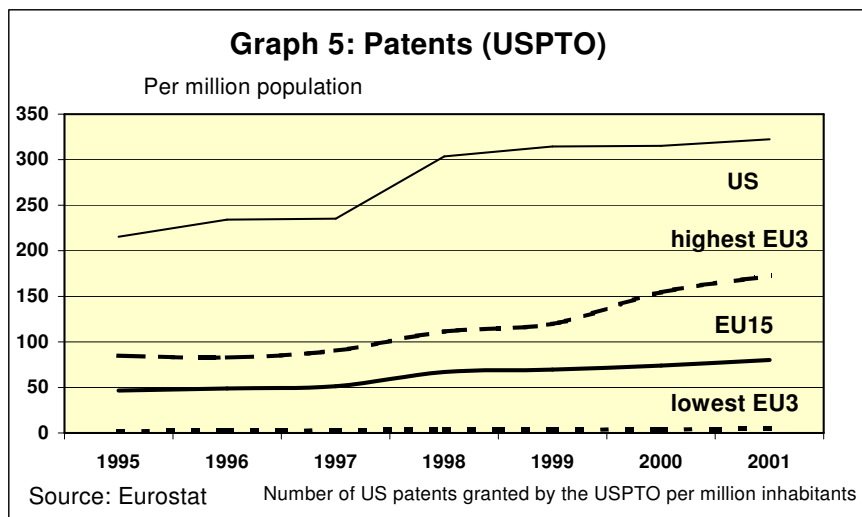
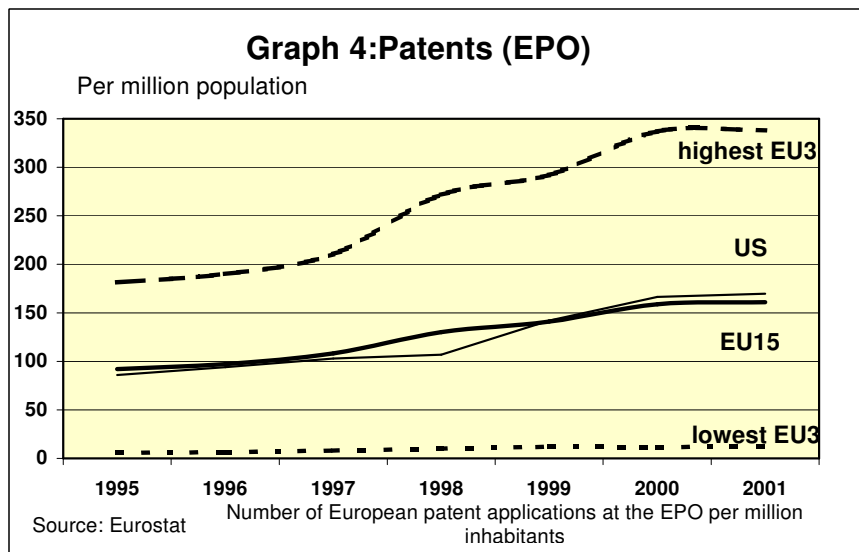
In 2001, average expenditure on R&D in 2001 for the Union was less than 2% of GDP, with only 55% being financed by industry. This illustrates the large gap between the current situation and the Barcelona target of reaching a level of the 3% of GDP level by 2010, with two thirds funded by industry. Between 1998 and 2001, there was a small increase in industry financed R&D, but this increase was not sufficient to stop the EU average from falling further behind the US. Clearly, a break in current trends will be necessary to reach the Barcelona target. While measures have been taken to improve the framework conditions for R&D and innovation, it is doubtful that these measures will be sufficient. Differences in R&D spending between Member States are substantial and widening. Countries such as Sweden and Finland are already at the spending levels identified in the Barcelona target and have recorded the biggest improvements. However, there were also positive signs in Greece and Portugal, which trailed the leaders by far, but drew slightly closer to the EU average.

*Venture capital investments fell sharply...*

The availability of venture capital facilitates investment in R&D and innovation, particularly for start-ups and young companies. In 2001, the venture capital market across the Union has contracted, largely because of the continuing deflation of the bubble in ICT investment. The contraction was especially strong in early-stage financing, except in the Nordic countries, with a significant increase of investments in Denmark, and stable levels in Finland and Sweden (where early-stage investments are rather high), countries that performed best in terms of business R&D as well.



... while patenting remains well below US levels



The patenting rate is a rough measure of the output of national innovation systems. In 2000, the number of US patent applications with the European Patent Office increased faster than that of the Union. The number of patents granted by the USPTO to EU organisations and companies, on the other hand, is rising even if the Union continues to trail far behind the US. This partly reflects the greater efficiency of the US innovation system, but also the weakness of the European patenting system, since the single Community patent has not yet been agreed. Also, since Lisbon there has been a substantial and widening gap between Member States as patenting rates in three countries with the highest rates (Sweden, Finland and Germany) have risen faster than in the three countries with the lowest rates (Portugal, Greece and Spain).

*There has been real progress in pursuing a range of eEurope objectives that support the knowledge economy...*

There has been a strong take-up of ICT in most Member States, with household Internet penetration rising above 40% on average in 2002. The percentage of households that have Internet access at home increased to above 60% in the Netherlands, Denmark and Sweden, but it remained below 30% in Greece and Spain. Internet penetration in the Union continues to be less than that in the US, in part because access prices are still higher in the Union. More

than 90% of EU schools have Internet connections, and the number of computers per pupil is also increasing. The Commission's newly proposed programme for eLearning will support action promoting digital literacy, the setting up of virtual campuses and Internet school-twinning activities. The latter was one of the actions promoted by the European Council in Barcelona as an effective way of combining cultural exchange with the fun use of computers.

The eEurope 2002 Action Plan is now coming to an end and has been successful in accelerating this entry into the digital age, focusing on connectivity as the driving element. The shift on line signalled above has connected up homes, businesses and administrations and should lead to improvements in productivity and growth. However, the Union has yet to feel the same improvements from ICT investment as those experienced during the 1990s by the US and despite increased spending, the level continues to lag behind the US, even if it is slightly ahead of Japan. The level of spending varies across Member States.

New services and the Internet have opened new opportunities for society as a whole. This has been helped by the creation of a comprehensive legal framework for e-commerce and will be further underpinned from next summer by the new regulatory framework adopted for electronic communications, which should give a further boost to competition, investment and choice.

There have been significant advances across the board. The number of homes with Internet access increased from 28% in October 2000 to 40% in June 2002 when more than 90% of EU schools had an Internet connection, as well as 90% of EU businesses with more than 90 employees. The Géant network has been running since 1 November 2001, offering a capacity of 120 Gbit/second. It connects together 32 national research networks across Europe. There has been substantial progress in getting an increasing number of government services on line as part of a move towards eGovernment. Benchmarking progress has focused on 20 basic services for citizens and businesses varying from getting information to be able to complete forms or tax returns and file them on line with progress being seen in all Member States.

Currently, technological developments of broadband and multi-platform access (the possibility to connect to the Internet via other means than the PC, such as digital TV and 3G mobile communications) are opening up significant economic and social opportunities. The new eEurope 2005 Action Plan (launched in the summer of 2002) focuses on the exploitation of these technologies to modernise public services, making them more productive and more accessible, to complete a favourable environment for e-business, and to secure a broadband information infrastructure, as networks have become the lifeblood of today's economy. On the demand side, actions on e-government, e-health, e-learning and e-business are designed to foster the development of new services, also providing a crucial pull for investment in new networks. On the supply side, actions on broadband and security should advance the roll-out of infrastructure, stimulating further the development of new applications, services, and content.

## 5. ECONOMIC REFORM

### **Lisbon Strategy Targets / Objectives**

The Lisbon strategy has identified a wide range of structural economic reforms, often translated into requests for the adoption of specific legislative proposals by a given deadline. The following specific targets have been set:

- Ensure full implementation of the Risk Capital Action Plan by 2003 and the Financial Services Action Plan by 2005 (target set at Lisbon)
- Increase the percentage of Internal Market directives transposed into national law to 98.5% (target set at Stockholm)
- Increase the percentage of Internal Market directives, which are more than two years overdue, transposed into national law to 100% (target set at Barcelona)
- Ensure the opening of energy markets for business customers in 2004 and subsequently for domestic users (target set at Barcelona)
- Ensure cross-border energy transmission capacity equivalent to at least 10% of installed production capacity by 2005 (target set at Barcelona)
- Achieve a single European sky by 2004 (target set at Barcelona)

In addition, the Lisbon strategy calls for economic reforms to:

- Increase the supply of venture capital (including via EIB/EIF support)
- Further opening of market for postal services, railway and port services, and agreement on rules for public service contracts in transport
- Increase the openness of public procurement
- Complete the internal market for services
- Lower the costs of doing business and reduce red tape
- Introduce an improved impact assessment system for Community proposals
- Continue downward trend in state aid as a percentage of GDP and redirect aid towards horizontal objectives
- Promote a competitive business environment by eliminating harmful tax competition for businesses
- Promote quality public services

Economic reform is essential to make European markets function more effectively. Well functioning and competitive markets lead to productivity gains and thus raise the economy's potential growth rate. Better functioning markets can also help the economy to respond more flexibly to economic changes. Companies and people can thus adapt more quickly, delivering the benefits of economic change while reducing the transition costs sometimes accompanying this change.

*Product markets are increasingly integrated, but the process may be slowing down*

During the 1990s the creation of the Internal Market increased economic integration between the Member States. This was demonstrated by a convergence in Member States' price levels from a coefficient of variation of 18.9% in 1992 to 14.5% in 1998. Since 1998 price convergence has come to a halt, even though considerable price differences remain for many products. In 2001, the degree of price dispersion between Member States equalled 14.8%. Price dispersion within the euro area, however, was less at 12%. This picture of slowing integration is supported by a decline in the intra-EU trade-to-GDP ratios for the Union as a whole in 2001, the first decline since the achievement of the internal market in 1992. Cross-border foreign direct investment also experienced its first year of decline since the mid-1990s in 2001.

*Insufficient progress in transposition of internal market directives and public procurement*

The apparent slowdown in economic integration may reflect the insufficient progress over the past couple of years in terms of economic reform. For example, the rate of transposition of internal market directives rose from 97% in November 2000 to 97.9% in November 2002, but for most Member States remained below the target of 98.5% set in Stockholm. Similarly, the value of public procurement calls for tender published in the Official Journal as a share of the total value of public procurement was unchanged at 15% between 2000 and 2001. Also, the

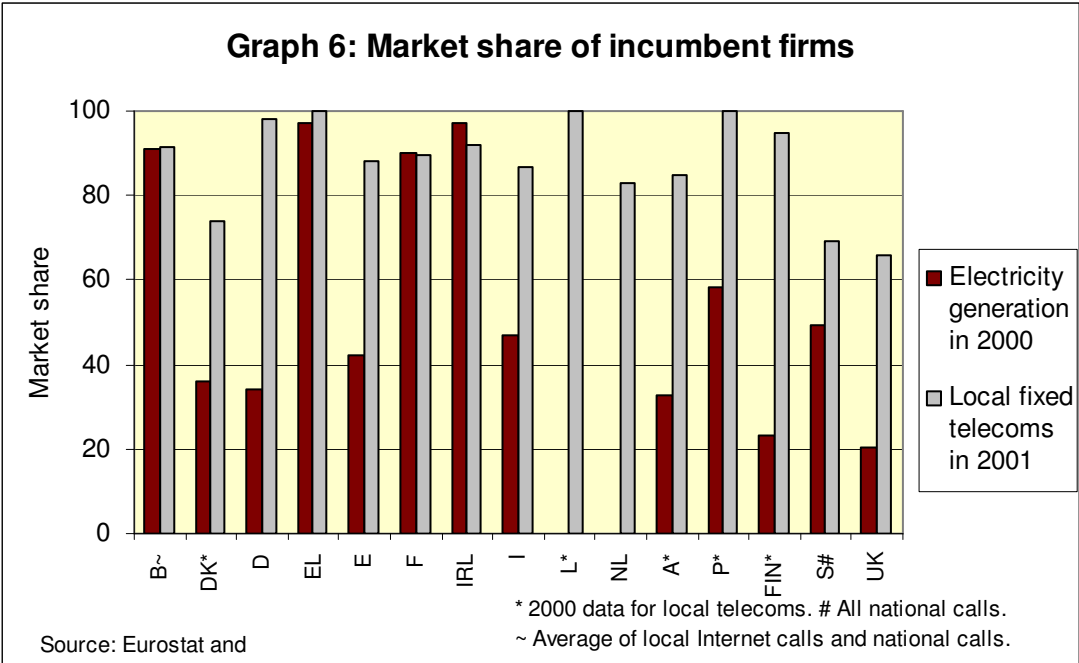
number of cross-border award notices remained very low, accounting for just 1.3% of total award notices.

*Capital market integration is progressing*

Thanks to the Maastricht convergence process, which has led to more similar inflation and budgetary behaviour across the Union, and to the single monetary policy which has allowed for the integration of the inter-bank market, there has been a considerable convergence of interest rates on bank loans since the late-1990s. For instance, the standard deviation between the interest rates charged on short-term loans across the Member States fell from 5.1% in 1995 to 1.6% in 2001. Convergence in retail interest rates seems to have come to a halt in 2001, suggesting the presence of still considerable barriers to the integration of retail financial markets. On the other hand, good progress has been made so far in implementing the Financial Services Action Plan (as of November 2002, 30 out of the 42 measures have been completed).

*Liberalisation of the network industries continues, but incumbents retain high market shares and markets remain insufficiently integrated*

The liberalisation of the network industries continued in 2002 but at varying speeds in different sectors and in different Member States. The price of long-distance and international phone calls (to the US) both fell by over 45% during 1998-2002. However local phone call prices fell only marginally over the same period. This difference in price trends in part reflects need to rebalance the line rentals and local call tariffs of incumbent firms. The incumbent firm had a market share of over 80% in the local telecommunications market in 12 Member States in 2000 / 2001.



In 2002, the gradual legal opening of gas and electricity markets to competition continued. Nevertheless, competition in the energy sector remains limited. According to the latest data available (2000) the market share of the largest electricity generator was above 80% in Belgium, Greece, France and Ireland. As regards electricity prices, over the past five years (1997-2002) prices for industrial users have fallen by 9%. In the less competitive market for household users electricity prices still fell by 5% in absolute terms over the same period. Gas

prices, for both industrial and domestic users, have increased in recent years reflecting the increase in the oil price.

*Efforts continue to improve the business environment, promote effective competition and reduce State aid*

Efforts to ensure a level playing field in the internal market continue. The modernisation of the enforcement mechanisms of Articles 81 and 82 EC, which seeks to encourage effective competition through increased involvement of Member States authorities, has advanced well. The Council adopted on 16 December the new regulation on enforcement procedures. In December, the Commission also presented its proposal for a revised Merger Regulation as well as guidelines on the assessment of dominance in horizontal mergers. The review is aimed at ensuring for mergers that fulfil certain turnover thresholds a "one-stop shop" and uniform procedural and substantive rules. This exercise aims also at ensuring that the EU merger control remains in step with economic realities, in particular globalisation and the enlargement of the Union.

For the Union as a whole, State aid (including horizontal, sectorial and ad hoc state aid) declined from 1.3% of GDP in 1996-98 to 1.1% of GDP in 1998-2000. This decline in total State aid could be fully attributed to the 0.2 percentage point decline in sectorial and ad hoc State aid as a percentage of GDP. Aid levels declined in all Member States except Denmark, Ireland, Luxembourg and the Netherlands. In this context, it is worth recalling the commitments made by Member States at Stockholm and Barcelona to demonstrate a reduction in aid levels by 2003. For its part the Commission, is continuing its efforts to simplify the EU rules on State aid, to modernise them and clarify their application in order to make them more effective.

In relation to the regulatory environment, most Member States have been pursuing reforms aimed at improving the business environment. Many took measures to reduce the time and costs required for setting up new enterprises. The Commission has been playing its part too, launching two major Better Regulation packages during 2002.

**Box 1: Improving the regulatory environment**

The Commission's **better regulation** package launched last summer pursues four goals.

- An **improved integrated system of impact assessment** of key proposals at EU level (and the request that Council and the European Parliament also assess the impact of changes they propose to legislation). This system is now up and running and will be applied to forty major initiatives during 2003. This will help to improve the quality of what is finally proposed and, should facilitate the process of adoption by Council and the European Parliament.
- **Wider and more open consultations** before measures are proposed by the Commission so that the views of stakeholders and user needs are better taken into account.
- Using **alternatives to legislation** where that is the most appropriate way of ensuring policy objectives can be quickly and effectively achieved.
- A major **simplification of existing EC rules** by 2005. The aim is to make rules easier to understand and compliance correspondingly less expensive.

The challenge is to find the right balance between protecting the public interest, while avoiding ineffective or unnecessarily burdensome regulation that can hold back business' contribution to competitiveness, job creation and sustainable growth.

*Economic reform may be having an effect on business investment*

The progress made to date in economic reform may be having an effect on business investment. Business investment had been increasing from 17.1% of GDP in 1996 to 18.3% of GDP in 2000. However, in 2001 it fell to 17.8% of GDP, which may indicate that the increase in business investment was due at least in part to the cyclical upswing in European economies during the late 1990s.

## 6. SOCIAL COHESION (SOCIAL POLICY AGENDA)

### **Lisbon Strategy Targets / Objectives**

The approach to improving cohesion, particularly social cohesion, is strongly focused on implementing the European Social Policy Agenda launched in Nice, but it also recognises the importance of basic education and training as a stepping stone to the labour markets. Targets for the Union include:

- Halving by 2010 the number of early school leavers who do not continue with further education
- Efforts to reduce by 2010 the numbers living at risk of poverty
- Stimulating the take up of lifelong learning

In addition, other policies should contribute to:

- Strengthening equal opportunities for the disabled,
- Promoting gender equality, a good working environment and involve of the social partners in managing change
- Promote corporate social responsibility
- Adapting pension and healthcare / long-term care systems to an ageing population with twin objectives of ensuring quality and financial sustainability

Many of the structural reforms undertaken as part of the Lisbon strategy will contribute to increasing the growth potential of the European economy thus leading to improvements in living standards. Nevertheless, in order for these improvements in living standards to be shared by all it will be necessary to tackle the existing problems of poverty, exclusion, unemployment and low educational attainment existing in the EU.

*The highest rates of poverty continue to be in the least affluent Member States...*

Unfortunately, it is not possible to analyse the most recent developments in the social situation in the European Union. This is because the latest data on poverty and income inequality are for the year 1999. In this year, 18% of the population or 60 million people in the Union were living below the poverty line, while 11% had also had income below this level for two of the three previous years. The highest rates of poverty tend to be among the least affluent Member States. This is particularly the case for the persistent risk of poverty rate, which is the highest in Portugal and Greece. The inequality of income indicator reveals that in 1998 (compared with 1997) the income of the highest income 20% of the population increased less than that of the lowest income 20% of the population. As there was a relatively strong cyclical upswing in 1998, this evidence could be a sign that the wealthiest in fact benefited less from good times than the least affluent. This is consistent with the observation that the risk of poverty rate was down slightly in 1998 from its value in 1997.

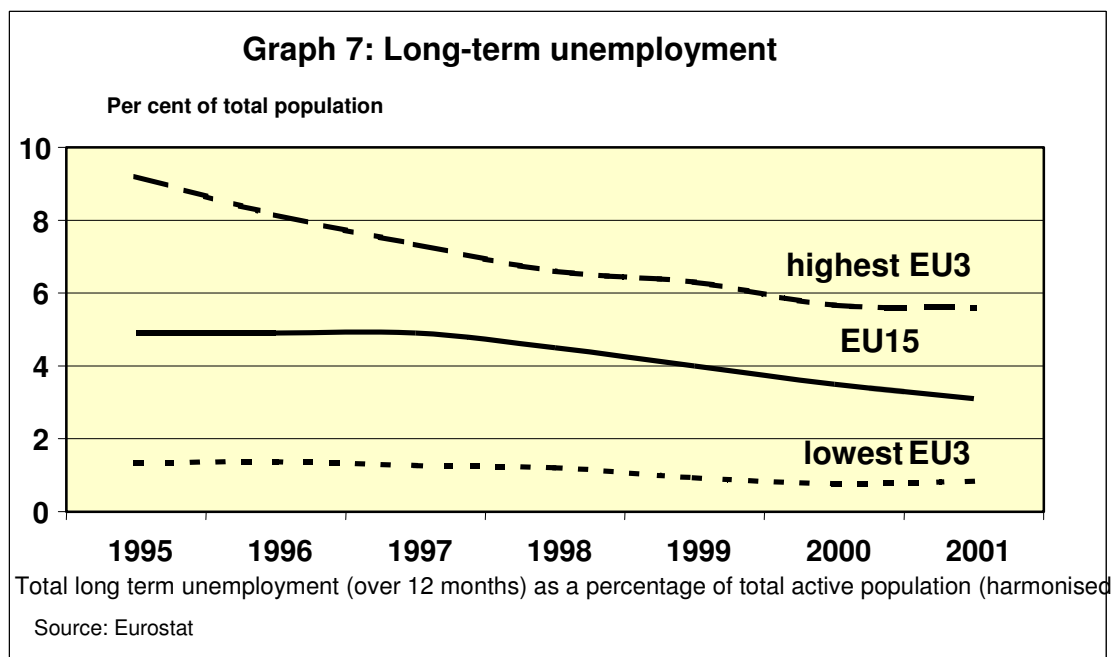
*... but the welfare system continues to work to significantly reduce the risk of poverty*

Moreover, welfare systems in the Union continue to play an important role in alleviating the effects of poverty – the risk of poverty rate in the Union in 1998 fell from 24% to 15% as a result of social transfers.

*However, the improvement in employment since the mid 1990s gives some grounds for optimism...*

While, as noted above, poverty and income distribution data provide a mixed and somewhat out-of-date picture, there are grounds for optimism regarding improvements in the social situation more recently. This is because in recent years, particularly up to and including the year 2000, job creation has been strong. In terms of social indicators, the positive impact of job creation for 1998 through a fall in the percentage of persons in jobless households in the Union, which continued until very recently.

Moreover, this improvement in the employment situation manifested itself in a continued notable decline in long-term unemployment in recent years. Long-term unemployment is a key indicator for social exclusion as long spells in unemployment are an important risk factor for poverty and social exclusion. The marked decline in long-term unemployment reflects to some extent the cyclical upswing, but it is also the result of an increased emphasis on active labour market programmes in Member States, partly due to the implementation of the European Employment Strategy since 1997. Placement in an active labour market programme often interrupts an unemployment spell, thus reducing open long-term unemployment. Long-term unemployment fell from 4.9% in the Union to 3.5% in 2000, and continued to fall substantially in 2001 to 3.1%, despite the slowdown in job creation in line with the slowdown in economic growth.



*... although employment prospects continue to be less favourable for some groups*

An important element of tackling social exclusion is to improve the prospects of all groups of workers, including older workers, women and young people (see above). While the situation for women was improving, both in terms of employment and unemployment, the situation for older workers improved less rapidly. Youth unemployment, while still high, has fallen in recent years and more rapidly than overall unemployment.

*Inclusion in the knowledge-based society will also require better educational attainment and broader access to lifelong learning...*

The development of the knowledge-based society also creates further challenges for the European social model. One challenge is to ensure higher educational attainment in the basic education system as well as sufficient investment in adults through lifelong learning and active labour market measures. Only if people have an adequate level of education and training and if they are able to upgrade and update their skills throughout their lives will they be in a position to take full advantage of the opportunities created by the knowledge-based society, and avoid social exclusion. In this regard, there continues to be some progress in the European Union. The rate of early school-leavers not in further education or training declined from 19.7% in 2000 to 18.9% in 2002, but remains high particularly in Portugal, Spain, Ireland and Italy.



*The picture is also mixed on regional cohesion...*

An important element of cohesion in the European Union is the regional dimension. The dispersion of regional employment rates increased slightly in 2001 compared with 2000. However, this overall EU average masks varying trends within Member States. In terms of the convergence of living standards in the less prosperous Member States, it should be noted that these Member States have generally experienced higher national rates of economic growth than the EU average thus reflecting overall income convergence.

## 7. ENVIRONMENT / SUSTAINABLE DEVELOPMENT

### Lisbon Strategy Targets / Objectives

The Göteborg European Council agreed on a sustainable development strategy that underpins the whole of the Lisbon strategy and adds to it an environmental strand. Importance is attached to how decisions are taken and prepared, and to “getting prices right” in order to provide consumers and producers with better incentives to make the right choices for their activities. Four specific priorities were identified in Göteborg which translate in targets such as:

#### Climate change

- Reduction in greenhouse gas emissions (i.e. Kyoto targets) with visible progress by 2005
- Progress towards an indicative target for 2010 of 22% for electricity generated from renewable sources

#### Sustainable transport

- Decoupling GDP and transport growth, in particular by a shift from road to other modes of transport
- Tackling rising traffic volumes and congestion, noise and pollution
- Encourage use of environmentally friendly transport (shift from road) and give priority to investing in environmentally friendly infrastructure

#### Public health

- Respond to citizen's concerns about safety and quality of food, use of chemicals, infectious diseases and antibiotic resistance

#### Resource management

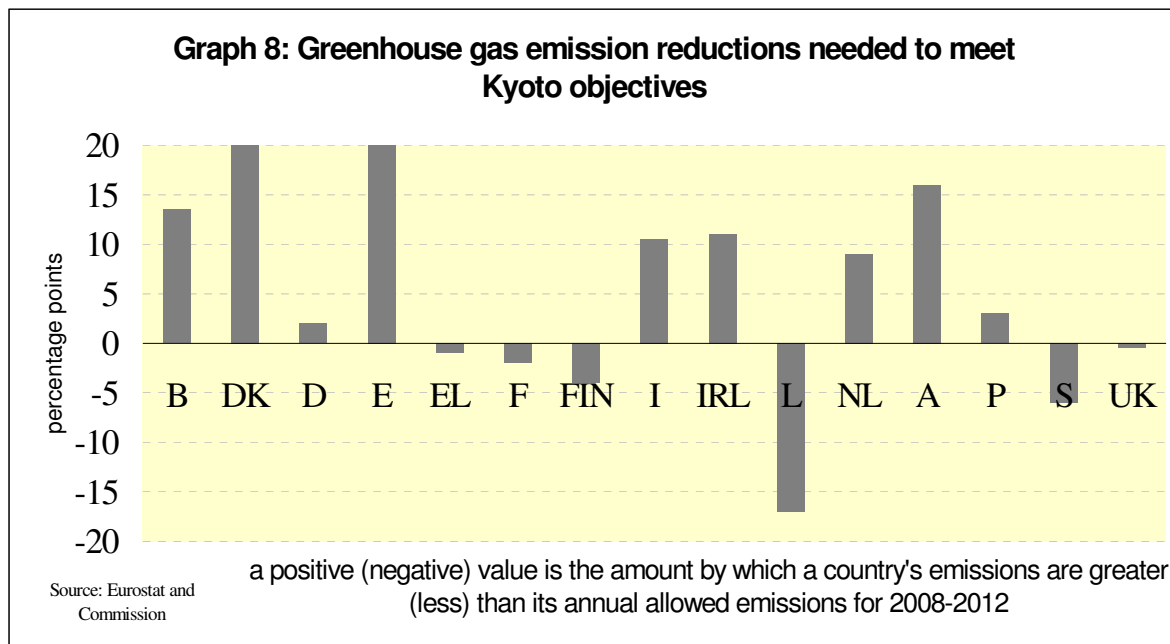
- Decoupling resource use and generation of waste from growth

The Göteborg European Council agreed on a sustainable development strategy that underpins the whole of the Lisbon strategy and adds an environmental strand to it. In addition to the importance attached to how decisions are taken and prepared, and to “getting prices right” in order to provide consumers and producers with better incentives to make the right choices for their activities, four specific priority areas were singled out: climate change, transport, public health and natural resources.

*Climate change: Progress in reducing greenhouse gas emissions...*

Greenhouse gas emissions for the Union fell by 4% from 1990 to 2000 half the amount needed to meet the commitments under the Kyoto Protocol. In the US, on the other hand, greenhouse gas emissions went up by 11%.

... needs to be stepped up to meet the Kyoto commitments . . .



The Union is much closer to meeting its Kyoto commitment than Japan (the US announced in 2001 it would not ratify the Kyoto protocol). Nevertheless, several Member States need to make large reductions in their emissions from current levels (that is, before allowing for any increases due to economic growth in the next decade) if they are to meet their commitments under the Burden Sharing Agreement.

Moreover, the progress made during the 1990s is largely due to the impact of significant reductions through one off measures in Germany and the UK. In contrast nine Member States in 2000 remained well above their Kyoto target paths. This only serves to highlight the importance of making progress on the pending proposals on emission trading. Emission trends in the transport sector remain of particular concern, mainly due to the increase in road transport volumes, although there are clear signs that the energy efficiency of new vehicles is starting to have an impact.

... and energy intensity changes in some Member States show this will not be easy

The Community economy has recorded steady but slow improvements in its energy intensity during the past decade. This is true for all Member States except Portugal, and to a lesser extent Greece and Spain. The US achieved somewhat greater improvements in energy intensity than the Union, this, however, should not hide the fact that the US is relatively heavy energy user: energy consumption per unit of GDP is 70% higher in the US than in the Union and that energy consumption in absolute terms is growing faster in the US than in the Union. Japan, on the other hand, consumes only about 60% as much energy per unit of GDP as the Union.

Already in the 1996 Green Paper on renewable energy<sup>3</sup> proposed a target of doubling the share of renewables in sources of energy from 6% to 12% by 2010. In order to help reach this target, Göteborg established an indicative target of raising their share in electricity production

<sup>3</sup> Energy for the future: renewable sources of energy. Green Paper for a Community Strategy, COM(1996) 576, [x].11.1996.

from 14% to 22% by 2010. Moreover, important measures have been agreed at European level:

- The Directive<sup>4</sup> on the promotion of green electricity is intended to raise their share in electricity production from 14% to 22% by 2010.
- The proposal for a Directive on the promotion of bio fuels for transport, when adopted, will lead to a share of bio fuels of 5.75% by 2010.
- The Directive on the energy performances of buildings will make a substantial contribution to achieving a reduction in demand of up to 20% in buildings in the medium term.

Initiatives in these fields will moreover be financially supported by the “Intelligent Energy for Europe” Community programme. Unless the Member States implement effectively the Community measures recently approved the share of renewables is unlikely to grow beyond 7% in the coming ten years. To complement and support the further development of the energy markets by improving the security of energy supplies, amid rising geopolitical uncertainty, the Commission has also proposed two directives concerning the joint management of oil and gas stocks.

*In the area of transport, there is no sign in the Union of decoupling of freight from GDP...*

The most recent data available show that EU freight volumes have risen about 1% faster than GDP in the years up to 1999. Sizeable decoupling has occurred in the US: from 1995 to 1998, the ratio of freight to GDP fell by almost 10% coinciding with strong economic growth. EU passenger transport volumes, on the other hand, have grown a little slower than GDP. A failure to achieve decoupling will have a negative effect on the achievement of Kyoto unless rapid progress is made to cut on the emission levels of road vehicles.

*...and road continues to be the preferred transport mode.*

Road is the dominant form of transport for freight in the Union, accounting for over 40% of tonne-kilometres. Over time, this share has tended to increase. The US moves a smaller percentage of goods by road, but the share is growing faster. Road transport also dominates personal travel within the Union, accounting for 84% of passenger-kilometres. This share has been more or less constant for several years. The same is true for the US. Road transport continues to take a heavy toll on the environment, and even though road transport fatalities dropped by 27 % since 1980 they still numbered over 41 000 in 1998. Road accidents represent the first cause of death for persons under 40.

*Public health and natural resources: Air quality has improved, but urban “hot spots” persist...*

Total emissions of ambient air pollutants have been declining for several years and will continue to decline in coming years thanks to improvements in vehicle emissions, contributing to improved air quality. However, data for urban air quality are incomplete at EU level, so it is not possible to give a detailed picture of developments. Analysis is further complicated by the fact that there has been a substantial increase in the number of sites across

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<sup>4</sup> Directive 2001/77/EC on the promotion of electricity produced from renewable energy sources in the internal electricity market.

the Union at which air quality is monitored. Subject to these qualifications, exposure to high concentrations of ozone appears to be most acute – and worsening – in the urban areas of Greece and Italy.

*...and municipal waste volumes keep on growing.*

Volumes of municipal waste are increasing throughout the Union, though data are not available for all countries and years. There is a general trend for waste to increase faster than growth, with this being quite marked in Spain, Austria, and Portugal.

## 8. THE CHALLENGE OF ENLARGEMENT

The Lisbon strategy will assist the ten countries that will join the European Union in 2004 in their efforts to sustain a healthy economic outlook and favourable growth prospects, to improve employment and social cohesion and to prepare the transition to a knowledge-based economy. In spite of the progress made in recent years, the ten future Member States face a real challenge in contributing to the achievement of the Lisbon targets. All acceding countries will have to further intensify their efforts in order to contribute to the realisation of the Lisbon strategic goal.

*The future Member States and the candidates are included for the first time in the Spring Report data...*

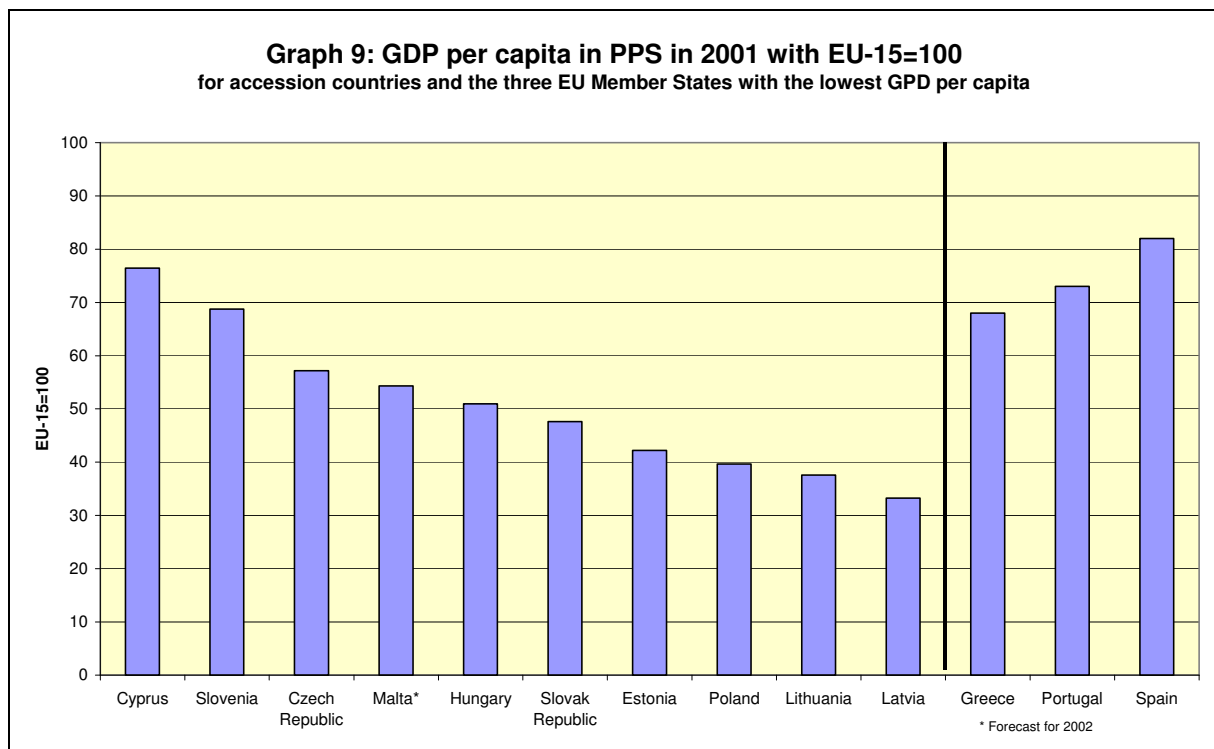
At the European Council in Stockholm in March 2001 it was concluded that the candidate countries should be actively involved in the goals and procedures of the Lisbon strategy. Already now, the acceding countries are participating as observers or associated members in some EU processes and programmes with relevance for the Lisbon strategy. This ongoing integration should continue.

At the Göteborg European Council in June 2001 it was decided that starting from 2003 the Spring Report should also cover the candidate countries. To that end, the future Member States and candidate countries have for the first time been included in the work on structural indicators. A good effort has been made, but there are some gaps in the data on certain structural indicators. This lack of data prevents a full comparison between the future and existing Member States this year. This section focuses on where the acceding countries stand in relation to the Lisbon strategy.

*Embracing the Lisbon strategy should enhance the catching up process and speed up structural reform.*

In many acceding countries, the Lisbon strategy has acted as a catalyst for comprehensive structural reforms already underway. Progress has, however, been uneven and is notably lagging in a number of priority areas. For most acceding countries, achieving income levels close to the EU average will be a longer-term process, which will depend on progress of reforms. In 2001, the future Member States had on average a GDP per capita of 45% (in PPS) of the EU average, despite economic growth figures for most of them over the last year that exceeded the EU average. However, some of these countries are rapidly closing the gap vis-à-vis the least prosperous Member States.

As regards catching up in terms of labour productivity, it has improved for all acceding countries since 1995, although sometimes interrupted by temporary cyclical downturns in the countries concerned. Levels of labour productivity are still very divergent, varying between 83% of the EU average in Cyprus and 33% in Latvia.



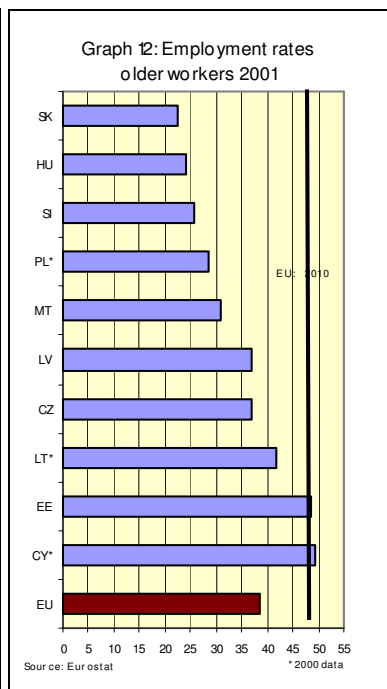
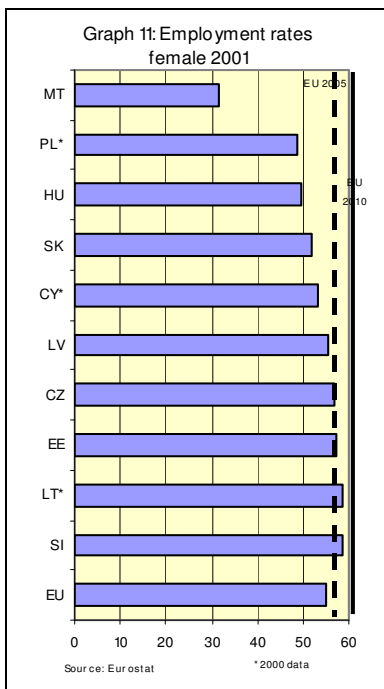
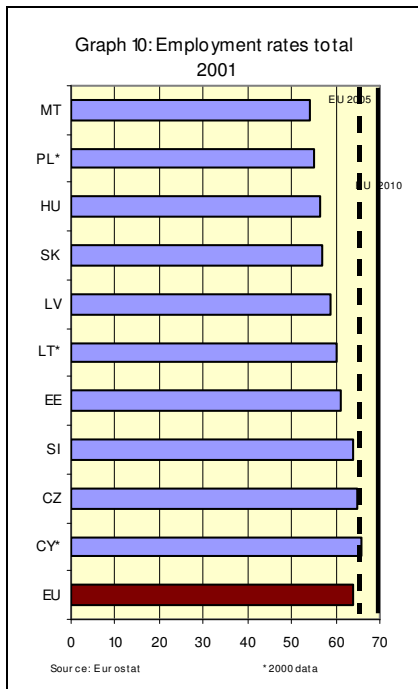
### *Challenges of different magnitude, but shared goal*

The acceding and candidate countries and the current Member states alike share several challenges. These include: the need to improve incentives embedded in tax and benefit systems and labour market institutions so as to increase employment rates, the strengthening of competition rules and competition authorities, further efforts to make the public sector more efficient, reform of network industries to increase competitiveness, and the need to build up their skills base and their knowledge infrastructure. This will help them adapt to the knowledge economy. Even though recent developments have been impressive, the magnitude of the shared challenges is still substantially greater in the acceding countries than for the current Member States. However, the future Member States are aware of these challenges and in the Pre-Accession Economic Programmes, they have already defined their own agenda of reforms.

### **A. Employment and social cohesion**

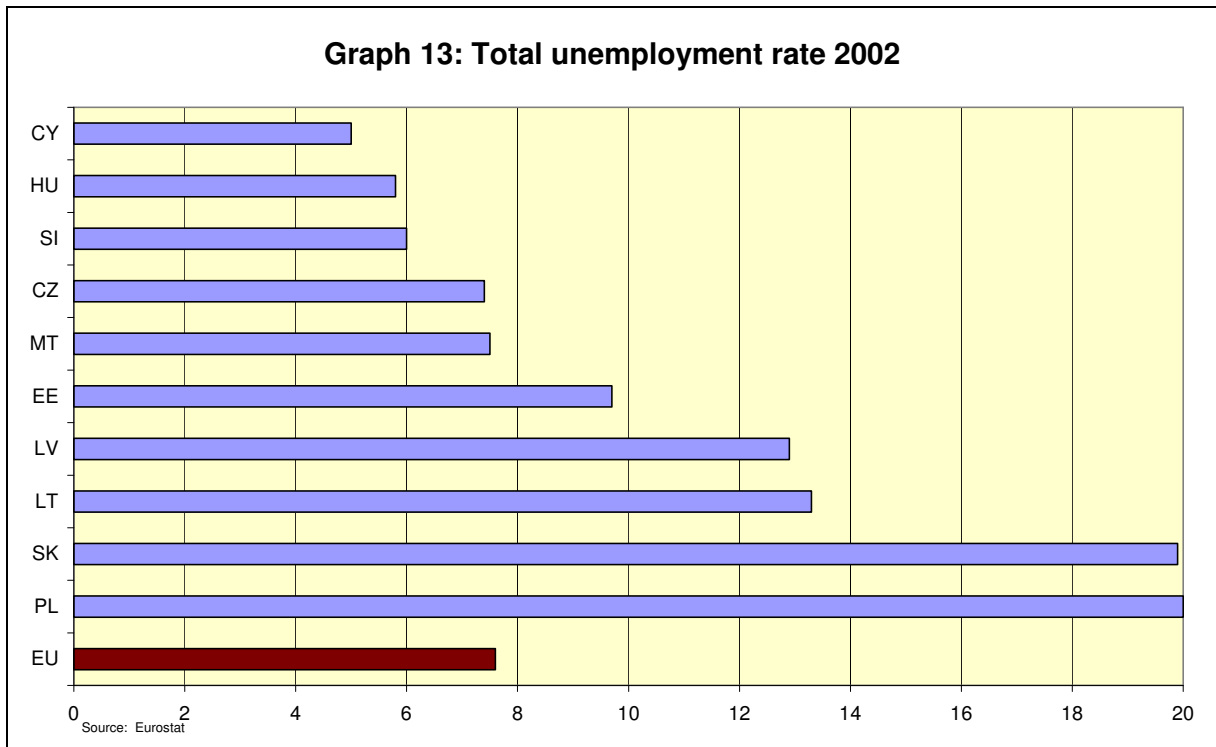
*The magnitude of the challenge is illustrated by low employment rates...*

The future Member States have still a long way to go to meet the Lisbon and Stockholm targets for employment rates. They had an overall employment rate of 56.8% in 2001, clearly below the EU average and the Stockholm and Lisbon goals. Concerning older workers, only 30% were employed in the future Member States, which was approximately one quarter lower than in the Union, and none of them in 2001 exceeded the Stockholm goal of 50% for older workers. The female employment rate amounted to 51.1% in 2001, compared to 55% in the Union and about one third of the countries met the intermediate goal of 57% for the female employment rate.



The need for greater efforts must also be seen in the light of the fact that the average employment rate across the future Member States fell in 2001. And among those countries with positive growth rates, only Latvia and Slovenia recorded higher growth rates than the Union.

*...and high unemployment rates*





Although unemployment has improved over recent years, there is still a need for further improvements. Unemployment presents a very diverse picture in the future Member States, with rates ranging between 5% and 20% in 2002. Differences in unemployment between women and men persist, with about two thirds of the countries showing higher male than female unemployment rates, which is the opposite of the EU situation. Long-term unemployment seems to be a more severe problem than in the Union: in all except two acceding countries, the long-term unemployment rate exceeded the rate for EU as a whole in 2001.

*Room for manoeuvre to address these challenges is indicated by...*

The pace of labour market reform is rather divergent among the future Member States. They are, however, following a similar mix of employment policies to the range of approaches observed in existing Member States.

*...the relatively high tax burden on low wage earners...*

The relatively high tax burden on labour is a shared problem between future and current Member States. Nevertheless, between 2000 and 2001, only about half of the acceding countries reduced the tax rate on low wage earners, as a measure to encourage job creation. There were, however, pronounced differences in this tax burden, ranging from a tax rate of 49.7% in Hungary to 17% in Cyprus in 2001. Only in three countries was the tax rate on low wage earners lower than the EU average. As is the case in current Member States, there is some room for manoeuvre in the combined effects of the tax-benefit systems.

*... and the skills mismatch*

Human capital formation is an important challenge for the future Member States, since there is a general gap in terms of qualifications of the adult population, both in quantity and quality terms. Participation is very high in upper secondary education but sharply drops after 17 years of age, thereby limiting the throughput into the qualified work force. Educational systems in their previously centrally planned economies also focused more on narrow job requirements and did not prepare people for lifelong adaptability of their skills. Therefore, the introduction of lifelong learning as a general concept of educational and employment policy is crucial. Adult participation in lifelong learning in 2002 ranged from 3.3% in Hungary and Lithuania to 9% in the Slovak Republic compared with the EU average of 8.4%. The direction of change was, however, not uniform, with some countries showing an increase and others a decrease in 2002.

*There is room for improvement in social cohesion...*

Data on social cohesion are particularly scarce. The trends in employment rates and employment growth, already described above, illustrate the scope of improving social inclusion through increasing employment rates. The high long-term unemployment is also a cause of concern, since long periods of unemployment are an important risk factor for poverty and social exclusion. Experience in Member States has shown that a significant improvement of the situation could be achieved by active labour market policies targeted at specific groups who have a higher risk of exclusion.

Those leaving the educational system without sufficient skills for the workplace are also at risk. In 2002, the development of the share of early school leavers was very divergent in the

future Member States. In general there were more male early drop-outs than female. Compared to the Union, however, they perform reasonably well.

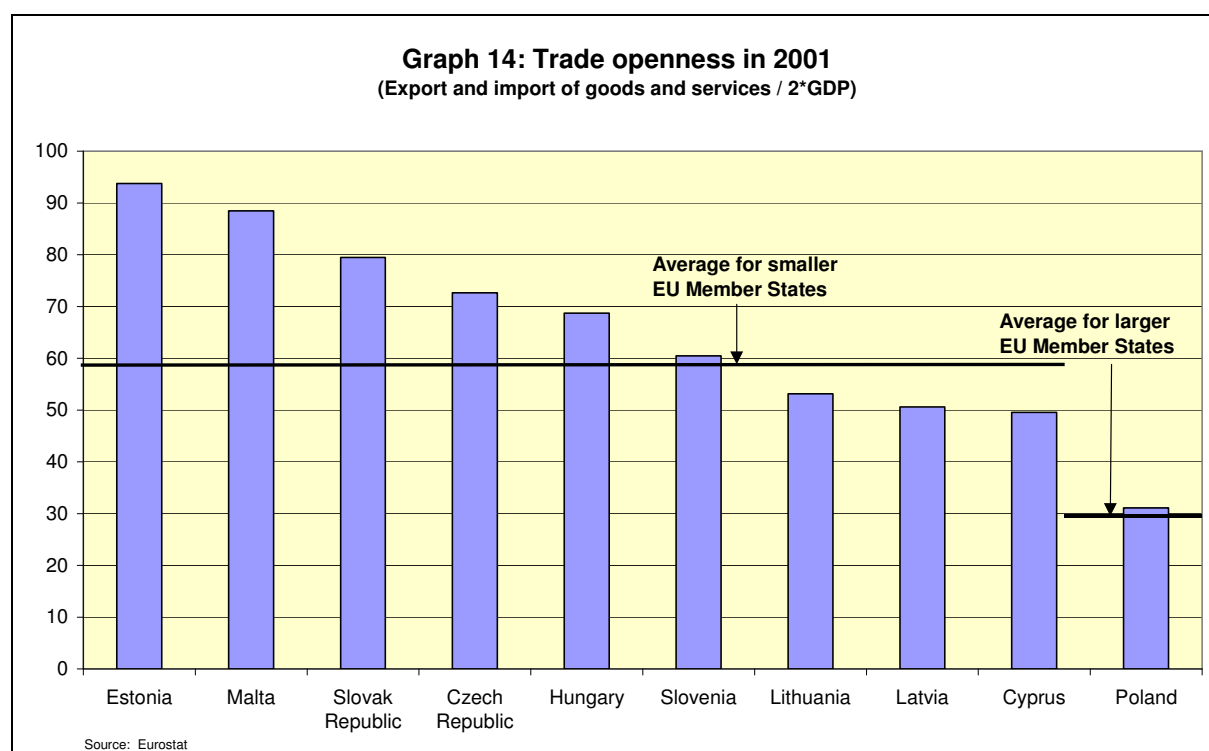
*...although the share of the population in jobless households is relatively low.*

The share of the population in jobless households in 2002 varied between 15.6% in Hungary and 6% in Cyprus (for the age group of 0 to 65). Only two of the future Member States, Hungary and the Slovak Republic exceed the EU share of 12.1% of the population in jobless households.

## B. Economic reform

*Product markets in acceding countries are already well integrated with those in the Union...*

The future Member States are highly open economies. For about half of them the total trade-to-GDP ratio in 2001 was higher than the EU average trade-to-GDP ratio for smaller Member States and all had a trade-to-GDP ratio above the EU average for larger Member States. Their economies are also well integrated with the Union. A large share of the acceding countries' exports goes to the Union: more than 50% of total exports in all countries except Cyprus, Malta and Lithuania. Seven of them have a higher export share to the EU than average intra-EU trade for current Member States, although they are not yet part of the internal market. Thus, in trade terms these countries seem to be as integrated in the Union as current Member States.



*...and price levels are relatively low*

Price levels in most acceding countries are low when compared with EU price levels, which may be partly due to their relatively low levels of GDP per capita as well as the still common use of administered prices. In four acceding countries the price level in 2001 was less than half the EU average. All of the future Central or Eastern European Member States had a price level below the current Member State with the lowest price level.

*Progress has been made in tackling distortions to product market competition, but much remains to be done*

The future Member States are characterised by a large agricultural and manufacturing sector while the service sector is poorly developed. Therefore, further restructuring and a shift in human and capital resources is likely with accession. On the whole, competition in these countries is still limited and a large number of enterprises are still subsidised. This could deter new entrants and prevent the reallocation of resources to more competitive businesses. However, progress is being made in reducing State aid, even if State aid control still needs to be improved in certain sectors. In 2000, State aid granted by the candidate countries represented on average 1.3% of GDP compared with an EU average of 0.8%. However, this average masks considerable differences between the countries ranging from around 0.5% or less in Estonia and the Slovak Republic up to 1.7% in Hungary. The acceding countries face important challenges in terms of strengthening of competition rules and competition authorities, reducing the regulatory burden on business, and encouraging entrepreneurship.

*Network industries are starting to be opened up to competition.*

Most of the future Member States have taken the first steps on the way to opening energy and telecommunications markets. However, further reforms in network industries must still be undertaken in several of them. The prospects for future price reductions in electricity markets are likely to be affected by the continued high market shares of some of the incumbents in these sectors. In 2000 the largest electricity generator still had a significant market share in all acceding countries, with the exception of Hungary and Poland where the share was lower than 50%. Clearly, price reductions, where they occur must be consistent with other policy goals such as sustainable development.]

*Structural change has had positive environmental side-effects*

Largely due to the major structural changes in their economies since the break up of the Soviet Union, the future Member States from Central and Eastern Europe<sup>5</sup> have recorded steep falls in their greenhouse gas emissions compared with 1990. Slovenia is a notable exception: its greenhouse gas emissions are estimated to be 30% higher than in 1990.

### **C. Education, innovation and research**

*The acceding countries substantially lag behind the current Member States in the transition to the knowledge-based economy*

The future Member States take an active part in the Union work to promote the knowledge-based society. All of them will participate in the Sixth Research Framework Programme, covering the period 2003 to 2007, which focuses on promoting the European Research Area. They already participate extensively in EU initiatives in the field of education and lifelong learning. The eEurope+ Action Plan was launched specifically by them to allow them to pursue the Union's eEurope objectives. It will be followed up by progress reports. To promote eLearning activities they will participate in eSchola 2002 as well.

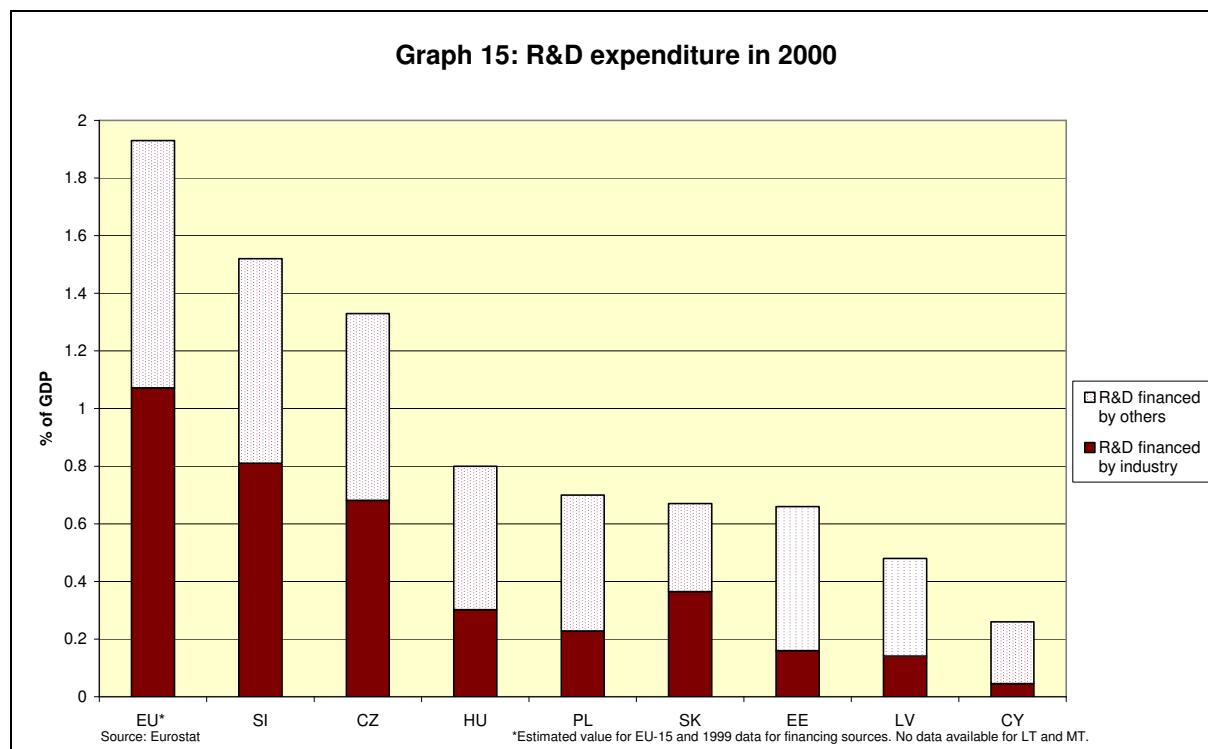
Still, they substantially lag behind the current Member States in the transition to the knowledge-based economy. Low levels of spending on R&D and ICT may hamper them in their effort to catch-up with the EU mainstream.

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<sup>5</sup> Malta & Cyprus do not have commitments under the Kyoto Protocol

### *A large and widening R&D gap...*

The future Member States have a poor record for both total and business R&D as share of GDP. In 2000 the average total R&D spending was below 1% of GDP, compared with almost 2% of GDP for the EU average. This poor record was matched by weak industry financed R&D in most of these countries, not reaching even a third of the EU average. Moreover, the share of R&D financed by industry decreased between 1998 and 2000, while it increased in several EU Member States. There is therefore no sign that this large gap in R&D financed by industry between those and the Union is about to disappear. The low R&D expenditure is reflected by low patenting activities (8 EPO patents per million inhabitants compared with 161 in the Union in 2001).



*...a varying performance in terms of education, and...*

A crucial factor for a successful transition to the knowledge-based economy is a highly qualified and adaptable population. Average public expenditures on education as a percentage of GDP remained above 5% (in 1999) compared with 5% in the Union. Countries such as Estonia, Latvia and Lithuania performed better, while education expenditure was lower in the Czech Republic.

Investment in human capital brings many advantages. The continuous participation of adults in education and training, for example, creates a more adaptable labour force, which permits the introduction of a more flexible organisation of work and the use of innovative technologies. High education expenditures are also reflected in countries' output of university graduates. In this respect the acceding countries average is below most current Member States in terms of science and technology graduates per 1000 of the population aged 20-29 in the year 2000. Some of the future Member States, notably Lithuania and Slovenia score well in comparison to certain current Member States.

*...low ICT investment and ICT take up may hamper the catching-up process,*

In 2001, expenditures on IT as a percentage of GDP varied substantially in the future Member States. While the Czech Republic and Hungary invested around 9% of GDP in ICT others invested considerably less. Moreover, the growth rate of IT spending for the period 1995-2000 was below that in the Union. This trend points to a further widening of the gap in ICT maturity between the Member States and the acceding countries. The low level of the ICT take up is reflected in the low Internet household penetration in acceding countries which in 2001 ranged from 2% in Latvia to 24% in Slovenia compared with 36% in the Union.

*...but high-tech production and exports are increasing in some future Member States*

Despite the gloomy general picture regarding R&D and ICT in the future Member States there are some indications that a high-tech industry is developing in some of them. Even though most acceding countries have considerably less high-technology exports than the EU average, Malta, Estonia and Hungary exceed the EU average high-tech export share of 20% of total exports of manufactured goods. Moreover, export structures have in all of them have seen a substantial shift towards capital- or technology-intensive production over the past several years. In Estonia and Hungary there have been dramatic increases in the share of high technology export during the period 1995 to 2000, with an average increase of more than 3 percentage points per year. This development may give some hope for the future.