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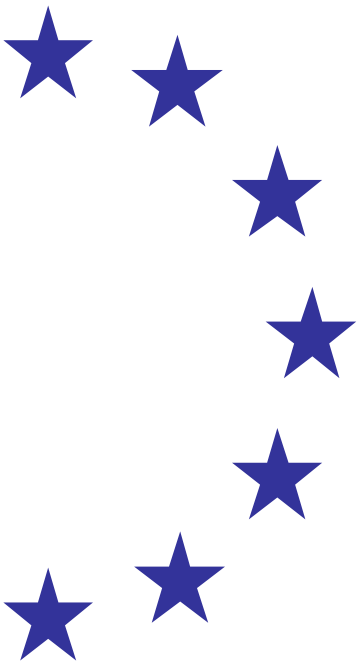

EMU after 5 years

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EMU, a unique and ambitious project

The launch of the euro on 1 January 1999, and the introduction of euro notes and coins on 1 January 2002, means that the EU has achieved a long-standing ambition to cement closer economic integration with a single currency. Economic and Monetary Union (EMU) is now a tangible reality in twelve countries with a combined population of some 310 million people and accounting for around one-sixth of global output. As a monetary integration scheme, EMU is without precedent in terms of its scale and complexity, and it is unique in that it combines centralised conduct of monetary policy by the European Central Bank (ECB) with national sovereignty over fiscal and other economic policies. EMU also represents the most important change in the global economic system since the collapse of the Bretton Woods system of fixed exchange rates in the early 1970s.

Five and a half years on, the European Commission's Directorate General for Economic and Financial Affairs has carried out an overall assessment of EMU. This report examines whether economic developments, institutions and the behaviour of economic agents have evolved in line with the expectations and conventional wisdom of policy makers and academics prior to the launch of the euro. The report adopts a broad definition of EMU. While the most immediate and visible effect was the elimination of intra-area nominal exchange rate variability and the subsequent switchover to euro notes and coins, EMU is in fact a much larger project and includes the establishment of a common stability-oriented macroeconomic policy framework and reinforced co-operation in a wide range of economic policy fields. It is viewed here as an ongoing dynamic process and not as a one-off institutional change. From the outset, EMU has been a learning-by-doing project. Hence, a major part of this assessment consists of looking at how institutions and policy makers have developed and implemented policies over time and reacted to changing economic conditions.

Assessing EMU is by no means an easy task. It is difficult to disentangle its impact from the effects of other important developments such as globalisation, technological change or the single market programme. In addition, economic agents may have anticipated the launch of EMU and adapted their behaviour accordingly, making it potentially difficult to take the launch date as a marker of a structural break. On the other hand, some of the effects of EMU, such as its role as a catalyst for structural reforms may not be fully apparent at this stage. Notwithstanding these caveats, five and half years should provide a long enough time horizon to observe many of its effects.

This assessment of EMU by the European Commission services comes at a timely moment with the recent accession of ten countries to the EU marking a new chapter in the European integration process. A retrospective assessment of EMU may also help the incoming European Commission and European Parliament to shape their medium-term economic strategies for the 2005-2010 period.

The rationale for EMU and expectations prior to its launch

A single currency was seen by many as an essential means of tackling the underlying causes of Europe's poor economic performance over the past three decades. During the 1970s and 1980s, most EU countries learned a salutary lesson about the costs in terms of lost output and high unemployment of an unstable macroeconomic environment (characterised by high inflation, high interest rates and unsustainable public finances) and overly regulated and fragmented markets. EMU, it was argued, would address these weaknesses by:

- *Providing greater macroeconomic stability*. Not only would EMU eliminate the risk intra-area exchange rate tensions, many commentators also thought that it would also enhance the credibility of the policy regime and provide a better institutional assignment at the macroeconomic level. It was, moreover, argued that improved policy co-ordination would reduce the frequency and scale of policy shocks, and that over time economic integration could further reduce the likelihood of asymmetric shocks or at least make adjustment to them easier. For Member States which had experienced macroeconomic instability, EMU offered the prospect of enhancing the credibility of the policy regime;

- *Improving economic efficiency in the euro area.* Many commentators saw the elimination of exchange rate transaction costs and associated currency risk, together with the positive effects of improved price transparency on competition and the enhanced financial integration that would be brought about by EMU, as

a means of allowing the full potential of the EU's single market to be realised. This could lead to a more efficient allocation of resources and enable the exploitation of economies of scale.

Whilst there was a broad consensus on EMU at the political level, there was less agreement amongst economists, many of whom expressed doubts about the economic merits of a single currency and were critical of the macroeconomic policy framework that would be put in place from 1 January 1999. Some commentators were opposed to EMU *per se*, whilst others had misgivings about its timing or the suitability of some of the participating countries. Two of the main themes in this debate were:

- *The potential economic costs of EMU.* Many economists pointed to the risks of eliminating national monetary and exchange rate instruments for a group of countries with very different economic structures and amongst which there was still incomplete synchronisation of economic cycles. In particular, it was argued that the potential benefits of EMU outlined above would be more than outweighed by the costs implied by a one-size-fits-all monetary policy that would inevitably be sub-optimal for many euro-area countries. Many economists also pointed to a lack of adjustment capacity in several EU countries, linked to rigid labour markets, low cross-border mobility of labour and the absence of a central fiscal authority. It was feared that this could lead to the emergence of large and persistent macroeconomic imbalances, which could result in protracted periods of slow growth and/or high levels of unemployment in particular countries or regions. Indeed, both sides of the debate acknowledged that a critical factor in the success or failure of EMU would be whether the advent of a single currency would provide an impetus for further structural reform. With the adjustment mechanisms of national monetary policy and exchange rates no longer available in EMU, some commentators stressed that governments would have greater incentives to adopt reforms that would lead to more efficient and flexible goods, service and labour markets. On the other hand, other commentators argued that because EMU would lead to increased transparency and competition in markets, this might induce a greater demand for protection in sheltered sectors and could thus hinder the reform process.

- *The macroeconomic policy framework of EMU.* Many economists doubted whether the macroeconomic policy framework and associated institutional set-up would be able to manage the technical and policy challenges of introducing and managing the euro. For example, the argument was frequently made that, in the early years of EMU, the ECB would follow an overly restrictive monetary policy in order to build credibility. On the fiscal side, some commentators suggested that the projected monetary developments would be exacerbated by the overly restrictive and rigid fiscal rules set down in the Stability and Growth Pact, whereas others argued that a looser fiscal stance would be adopted in EMU as a result, *inter alia*, of fiscal adjustment fatigue or weaker incentives compared with the pre-EMU period.

The remaining part of this overview considers whether EMU has evolved in line with general expectations. Three broad headings are considered – (i) whether EMU has achieved its economic goals in term of improving macroeconomic stability as a basis for achieving sustained levels of economic growth, (ii) the performance of the macroeconomic policy framework, and (iii) the impact of EMU on economic integration, in particular on financial markets.

Economic developments in the early years of EMU: stability but not sustained growth

Measured against the goal of securing macroeconomic stability, the first five years of EMU can be considered a success. Building upon the remarkable convergence among euro-area Member States that took place over the 1990s, price stability has prevailed since the beginning of EMU. The rate of inflation increased temporarily in 2000/01 owing to the combined effects of oil price hikes and a depreciating euro exchange rate, but subsequently returned to a level consistent with the ECB's definition of price stability. It is true that budgetary developments have been disappointing in terms of achieving additional improvements in the underlying budget position. However, the deterioration in nominal balances in recent years is in part due to the economic downturn and deficit levels remain low for this stage of the economic cycle, especially when compared with previous economic downturns and with other industrialised regions. The fiscal stance has been broadly supportive of the goal of monetary stability and the automatic fiscal stabilisers have, for the most part, been able to cushion some of the reduction in private demand. Short-term interest rates headed downwards from the end of 2000 onwards, and, while the absolute size of the interest rate reduction in EMU appears modest at first sight, in 2003/04 nominal interest rates were at their lowest level for some 50 years, and real long-term interest rates at their lowest level since the late 1970s. Finally, in broad terms, the economies of the euro area appear to have secured a reasonable degree of nominal convergence.

This broadly positive assessment as regards macroeconomic stability is especially noteworthy when one considers the scale of the negative economic shocks that have hit EMU so early after its launch. At the start of EMU, the euro area was expected to be more immune to external economic developments than previously, given that about half of all its member countries' trade is with other euro-area countries. But the Asian crisis of late 1998, the oil price shocks of 2000, the bursting of the equity price bubble, and, perhaps most importantly, the abrupt slowdown in the growth of world trade in 2001, all demonstrate that the euro area is still very much affected by developments in the global economy. Prior to the launch of the euro, many commentators had argued that EMU lacked the appropriate adjustment tools needed to respond to shocks, particularly if Member States were hit asymmetrically. However, whilst adjustment to shocks remains a difficult issue, the worst fears have not materialised. Although the euro area is not immune to adverse global developments, the damaging effects of intra-European exchange-rate tensions – which often accompanied shocks in the past – have been eliminated.

Despite these achievements, the growth performance of the euro area has been disappointing in recent years. Although real GDP growth in the euro area accelerated in the second half of the 1990s, peaking in 2000 at 3.5%, the highest rate seen for a decade, the euro area subsequently experienced a protracted slowdown in economic activity despite a continuously stable macroeconomic environment. The prolonged nature of the slowdown is explained by growth in domestic demand being less robust than expected. The latter seems to be due to a combination of the need for corporate balance sheet adjustment, which acted as a drag on capital expenditure, and higher savings by households, which is possibly due to factors such as less favourable employment prospects, the stickiness of inflation, uncertainty over reforms announced by governments, and a growing awareness of the potential unsustainability of public finances in the context of ageing populations. In some other industrialised economies, the buoyancy of the housing market has helped to stimulate private consumption, but at the cost of higher levels of personal debt; however, this short-term stimulus has not been available in all euro area countries, including some larger countries. In any event, the protracted weakness of domestic demand over this period remains a disappointment for those who argued that the launch of the euro would help European economies to achieve higher levels of growth. Overall, although the worst fears about the euro area's capacity to adjust to shocks have not been justified, the euro does not in itself appear to have improved Europe's capacity to emerge quickly from economic downturns.

The failure to translate improved macroeconomic stability into sustained, internally driven, economic growth has prompted considerable concern amongst policy makers about the source of the growth problem and the policy measures that are required to rejuvenate economic activity. Productivity trends are of particular concern. The recent performance of the euro area stands in sharp contrast to developments in the US, where growth in labour productivity accelerated during the second half of the 1990s. This reflects two main developments. Firstly, the rate of capital deepening has decelerated sharply since the mid-1990s in Europe, but has increased in the US. Secondly, for the first time in a generation, the US has a trend rate of total-factor-productivity (TFP) growth which is higher than that of the euro area. The latter may be explained in part by differences in the production and diffusion of information and communications technology (ICT).

Overall, a main lesson of the first five years of EMU is that, although the pursuit of macroeconomic stability is a precondition for sustainable growth, there is no automatic mechanism for raising the economy's growth potential. Throughout this period, a slow and steady pace of structural and labour market reforms has continued, and over time these reforms should yield positive economic benefits. However, the expectations of some commentators that EMU, in and of itself, would lead to a significant acceleration of reforms, have not been realised. Tackling the root causes of slow growth via the implementation of reforms identified as part of the Lisbon strategy is perhaps the most important economic policy challenge now facing the euro area.

The macroeconomic policy framework: a positive, albeit mixed, performance

As regards monetary policy, the task facing the ECB at the start of EMU should not be underestimated. It needed to quickly establish its anti-inflation credibility, but without pursuing an overly restrictive monetary policy. There were also considerable technical challenges associated with the design and implementation of a monetary policy strategy in an environment characterised by a high degree of uncertainty and applied to a group of countries with apparently strong differences in terms of monetary transmission as well as the economic cycle. There are two main considerations that arise when looking at monetary policy in the first five years of EMU:

- *Whether the ECB rose to the challenge of defining and implementing an effective monetary policy for the euro area as a whole.* The assessment here is positive: in spite of the difficulty of the task the ECB faced at the start of EMU, given the myriad uncertainties surrounding it. The ECB succeeded in developing a monetary policy strategy reflecting the experiences of the most successful central banks in

Europe and incorporating the latest economic thinking. Although the ECB encountered difficulties early on in communicating its strategy, the recent review of that strategy should lead to a better understanding by economic agents of how the ECB operates.

- *Whether the primary objective of price stability was successfully achieved, and whether monetary policy was adjusted in an appropriate manner in line with economic conditions.* Again, a fairly positive picture emerges. Although inflation has been above the ECB's definition of price stability over most of the past five years, this reflects the series of one-off price shocks that the euro area was subjected to in this period. The ECB has remained focused on achieving price stability over the medium-term, and has therefore resisted the temptation to raise rates in response to one-off shocks when there is no risk of second-round effects. Despite adverse short-term price developments, inflation expectations have remained both stable and close to the ECB's price-stability definition. Some commentators have criticised the ECB for not cutting interest rates more aggressively in response to the slowdown in the global economy that set in from 2001 onwards. The policy actions of the ECB in this respect were often compared to those of the Federal Reserve, which cut its own interest rates earlier and by more than did the ECB. But this ignores the fact that the euro area was not growing as fast as the US economy before the slowdown, and that the US downturn was much steeper. Some observers considered that the ECB displayed excessive caution in the face of rapidly changing economic circumstances. Others point to the fact that the ECB has a good track record in terms of price stability, and that some degree of caution may be warranted in a more uncertain environment. Furthermore, it can be argued that the low and stable level of long-term inflation expectations, which has helped to maintain low levels of interest rates across the yield curve, reflects well on the ECB's credibility.

Overall on monetary policy, despite some teething problems associated with the communication of its strategy, the ECB, through its strong commitment to price stability has helped to create the kind of stable macroeconomic environment which was seen by the designers of EMU as an essential precondition for improved economic performance over the longer term.

As regards fiscal policy**,** concerns about the risk of negative spillovers from unsustainable budgetary positions in one country, coupled with a recognition that fiscal policy in EMU had an important role to play in supporting a stability-oriented monetary policy, led to Treaty requirements on Member States to keep deficit and debt levels below agreed reference values of 3% and 60% of GDP, respectively. These were supplemented by the Stability and Growth Pact (SGP), which required countries to achieve budget positions of 'close to balance or in surplus' and which reinforced multilateral surveillance and enforcement mechanisms. This framework sparked considerable controversy prior to the launch of the euro. Some commentators pointed to the risk of looser fiscal policies in EMU due to fiscal adjustment fatigue and the weakening of interest-rate crowding-out effects. More generally, there was a concern about pro-cyclical bias during the transition period before countries reached budget positions of 'close to balance or in surplus'. The performance of fiscal policy in EMU can be judged against three questions:

- *Did Member States meet the agreed budgetary targets for deficits and debt?* Here, the picture is mixed. While several euro area countries, mostly small Member States, did achieve budget positions of 'close to balance or in surplus' by 2003, overall deficits levels, both in nominal and cyclically-adjusted terms, have risen since 2000, and nominal deficits are above the 3% of GDP reference value in four euro area countries. It is striking that the three largest euro area countries have all failed to respect their budgetary commitments. In most cases, the budgetary problems facing Member States today can be traced back to the failure to run sound fiscal policies in the early years of EMU when growth conditions were favourable, and deficit levels are not especially high at this juncture of the economic cycle. While disappointing, the institutional problems associated with Member States running deficit levels above the agreed reference values should not necessarily be interpreted as signalling a return to the profligate fiscal policies of previous decades, nor do they constitute an imminent threat to the sustainability of public finances. Nonetheless, the failure to improve underlying budget deficits over the past five years means that the euro area continues to grapple with the same budgetary challenge they faced at the outset of EMU, namely allowing the full operation of automatic stabilisers during economic downturns while respecting EU budgetary requirements. The situation also indicates that past weaknesses in the fiscal policy behaviour of several Member States are still prevalent: instead of taking the opportunity in periods of strong growth to pursue reform and budgetary consolidation, these countries continue to take corrective actions only when circumstances force them to do so against a background of poor economic growth.

- *Did the framework provide a useful basis for addressing fiscal policy challenges as they emerged?* In answering this, the framework for budgetary surveillance needs to be considered in a dynamic context: did it facilitate continuous improvements in budgetary surveillance and in the analytical basis for the conduct of decentralised fiscal policies? In addition, did the framework facilitate constructive dialogue and consensus-building on complex and challenging fiscal policy issues in EMU? Again, the assessment is mixed. On the positive side, some progress has been made in strengthening the analytical basis for measuring the impact of the economic cycle on budgetary developments. A useful debate has also taken place on the merits and feasibility of automatic stabilisers versus discretionary fiscal policies for cyclical stabilisation purposes. Additionally, the budgetary framework has helped shift attention towards the long-term sustainability of public finances and the challenge posed by population ageing. Despite these important developments, some shortcomings are evident in translating this progress into the policy-setting arena. At times, the policies of some Member States have not been fully consistent with the medium-term framework for the conduct of fiscal policy in EMU. Furthermore, the debate on the implementation of the framework has perhaps overly focused on relatively minor changes in nominal deficits, and this may have detracted attention from the underlying causes of budgetary imbalances and from other substantive economic policy challenges. Lastly, the discussion on the implementation of the SGP has proved divisive, with damaging repercussions for the institutional set-up of EMU as a whole.

- *Were the peer-pressure and enforcement mechanisms effective in ensuring that Member States tackle budgetary imbalances?* Overall, the institutional arrangements have been found wanting in this regard. The decision of the ECOFIN Council in November 2003 not to endorse a Recommendation of the Commission against Germany and France in the context of the Excessive Deficit Procedure (EDP) has called into question the viability of the existing rules-based framework. However, a more nuanced assessment would involve examining whether the framework for budgetary surveillance led to countries addressing the underlying causes behind deteriorating budgetary situations sooner than they otherwise would have. This reveals that peer pressure may have helped several smaller euro area countries tackle growing budgetary imbalances. However, in large countries especially, peer pressure and enforcement mechanisms have proved less effective. This is matter of considerable concern. Notwithstanding the arguments above that current deficits do not pose an imminent threat to the sustainability of public finances, this risk could easily materialise unless countries achieve significant improvements in underlying budget positions over the coming years. Moreover, it raises doubts about whether the budgetary framework can in fact ensure its primary objective, i.e. avoiding unsustainable public finance positions which impose negative spillovers on participating countries.

Overall, the assessment of fiscal policy in EMU is mixed. The rise in deficit levels in recent years is disappointing and falls well short of the goal of achieving balanced budget positions over the economic cycle, although this is largely due to the failure to pursue budgetary consolidation in the early years of EMU. Re-establishing a consensus on the EU fiscal framework is a matter of priority. The debate needs to consider why large countries, in particular, have failed to meet their budgetary commitments, and how to establish positive incentives to pursue budgetary consolidation, especially when growth conditions are favourable, and to regard sound fiscal policies as a common good. While such incentives were clearly present in the run-up to EMU, they may have been diluted somewhat by the launch of the euro.

EMU has accelerated economic integration, especially in financial markets

One of the anticipated benefits of EMU was that it would complement the effects of the Single Market Programme, thereby increasing competition in product markets, changing the behaviour of firms and altering the structure of industry. EMU appears to have already had a sizeable impact on intra-euro-area trade flows, and this effect is likely to increase further in the coming years. Recent evidence on FDI flows suggests that the single currency has raised the attractiveness of the euro area as a destination for foreign investment. However, caution is required in interpreting the results, as a large number of factors have affected FDI in recent years and the empirical literature on the issue remains limited.

By contrast, one of the most visible aspects of the impact of EMU is the progress that has been made in accelerating the integration of financial markets in Europe. Indeed, the euro is probably the most important factor driving this ongoing integration. By eliminating currency risk in financial flows throughout much of the EU, the euro has increased investor demand for cross-border activity, increased the size and liquidity of financial markets, enhanced transparency and competition in the provision of financial services, and offered scale and scope economies to financial intermediaries. Thus, the euro has accentuated the more fundamental effects of

globalisation, which itself has been fostered by the liberalisation of international capital movements, financial deregulation and advances in technology. Clearly, financial integration is not an objective in itself, but rather a means of raising Europe's growth potential through a more efficient allocation of resources, increased investment and higher productivity. Quantitative analyses recently undertaken on behalf of the European Commission indicate that the economic benefits of financial integration are substantial and durable.

Deeper financial integration since the introduction of the euro has been reflected in more homogeneous markets, consolidation among intermediaries and market infrastructures and the emergence of new and innovative products and techniques. The major advances in wholesale markets have meant greater access to capital for financial companies and greater scope to spread risk across the system, reducing the cost of financing for borrowers and improving the resilience of financial institutions from a stability viewpoint. However, the degree of integration has been uneven across segments of the financial system and business lines. Remaining barriers hamper integration of some securities markets, such as those for repos, equities and most traditional retail activities. The reasons for such unevenness are complex. Different types of barriers (natural, cultural, regulatory, technical, legal) affect the various markets and business lines.

The euro has also had a favourable impact on efforts to create a common regulatory framework across the EU and on other national reforms, by highlighting the opportunity costs of the remaining barriers to a fully integrated EU financial system. The EU policy agenda in respect of financial integration is relatively wide, but relevant initiatives are focusing on regulatory reform, upgrading of cross-border supervisory arrangements, enhanced cross-border tax arrangements and improved corporate governance. Clearly, the euro continues to contribute significantly to the process of financial integration, just as a fully integrated EU financial system will contribute to making the euro a more stable currency and one that is more widely traded internationally.

A positive start but difficult challenges ahead

EMU represents a remarkable political, institutional and economic achievement for the EU. The introduction of a single currency for twelve diverse sovereign countries, including the complete switchover to euro notes and coins, has been achieved smoothly, and the doomsday predictions of some commentators have proved to be groundless. Macroeconomic stability, the principal channel through which EMU was expected to contribute to growth has in broad terms been secured, which is a notable achievement especially when one considers the numerous external shocks that have hit the euro area since 1999. The ECB has successfully defined and implemented a single monetary policy that has delivered price stability and responded to changing economic circumstances. The conduct of fiscal policy, has in broad terms been adequate (especially at this stage of the economic cycle), although a sustained improvement in underlying budget positions would clearly have been desirable. The disappointing feature of the first years of EMU has been the prolonged period of slow growth since 2001, and the failure to convert macroeconomic stability into a dynamic economy that meets the aspirations of the EU set down in the goal of the Lisbon Strategy, namely to become the most competitive and dynamic knowledge-based economy in the world by 2010.

A longer time period, perhaps even a generation, will be required before definitive conclusions on the EMU project can be reached. While this report concludes that a positive start has been made, it is evident that the euro area countries face a considerable number of challenges in coming years, five of which warrant particular attention:

- *Tackling the causes of slow growth.* The macroeconomic framework of EMU has performed reasonably over the past five year. However, while macroeconomic policies have a role to play in supporting and sustaining a recovery in growth, they cannot act as a substitute for essential structural reforms in goods, service and labour markets which are necessary in order to raise potential growth rates and improve the capacity of the euro area to emerge more rapidly from future downturns. Whilst there is a consensus about the need for reform at the European level, national policy makers have not been able to fully implement the necessary measures once they return to their national capitals. A single currency was seen as necessary to fully exploit Europe's single market. Similarly structural reforms to raise potential growth rates and improve market flexibility are necessary to maximise the possible gains of the single currency. A lesson from the past five years, however, is that EMU by itself is not sufficient to generate these reforms, and that a radical shift in attitudes leading to concrete action is indispensable. The challenge now is to reinforce "E" in EMU through economic reform.

- *Preparing for the economic and budgetary implications of ageing populations.* The EU will undergo significant demographic changes in coming decades, which will lead to fewer people of working age and significant pressures for increased public spending, especially on pensions and health care. There is a narrow, but rapidly closing window of opportunity available to prepare for the inevitably serious economic and budgetary repercussions of these developments. Member States need to implement the agreed three-pronged approach, consisting of a much faster pace of debt reduction (requiring governments to achieve and sustain balanced budget positions over the economic cycle), measures to raise employment rates, and appropriate reforms of pension and health care systems.

- *Making a success of the enlarged EU.* The accession of ten new Member States means that instead of having just three countries outside the euro area, there are now thirteen non-participating countries. The new Member States face major challenges if they are to successfully integrate their economies into the EU. The key challenge is to put in place policy frameworks, at both a macroeconomic and microeconomic level, that can deliver a sustained convergence in living standards, and, when the entry conditions are fulfilled, to successfully integrate into the euro area. Enlargement also represents a considerable challenge for the existing euro-area countries and the institutions of EMU. In the shorter run, the challenge will be to devise a framework for the new Member States which supports macroeconomic stability and facilitates the path to euro area membership. In the longer term, the challenge for the EU will be to establish institutional frameworks that can better cope with a more diverse group of economies and the possibility of several Member States remaining outside the euro area for some time.

- *Strengthening the framework for the co-ordination of economic and budgetary policies.* Perhaps the most pressing issue to is to re-establish a credible and effective framework for the surveillance and co-ordination of budgetary policies, which combines the need for sustainable fiscal policies with flexibility to cater for changing economic conditions and country-specific circumstances. The challenge is not only to rejuvenate fiscal rules. It also encompasses the need for enhanced surveillance of Member State economies based on improved statistics and a more pre-emptive approach to identifying economic policy challenges that are relevant for the euro area. Above all, it requires willingness on the part of all Member States to acknowledge the implications of their policy actions at national level for the euro area and, conversely, to actually implement policy commitments given at EU level.

- *The international role of the euro area.* The future use of the euro as a currency by private and official actors outside the euro will to a large extent be determined by the success in meeting the above mentioned challenges. As regards institutional issues related to the international role of the euro area, it was expected that the launch of the euro would mean that Europe would assume a role in the international financial and monetary system commensurate with its economic weight. However, this has not yet been achieved and the external representation of the euro area remains fragmented and incomplete. Ad-hoc arrangements governing Community representation in different bodies have proven to be useful, but only partially meet the expectations for a unified and strong European presence on international matters. Addressing this issue is an important challenge for EU policy makers in order to ensure that the EU is an effective actor in the pursuit of its own interests on the international stage.

Part I

ECONOMIC DEVELOPMENTS IN THE EARLY YEARS OF EMU

Summary

Even on the eve of the launch of the euro, some commentators had deep misgivings about the EMU project. They argued that the introduction of euro notes and coins and the replacement of the twelve legacy currencies would be chaotic. Some economists pointed to the risks of eliminating national monetary and exchange rate instruments for a group of countries with different economic structures, economic cycles that lacked synchronisation, and limited adjustment capacity linked to rigid labour markets, low cross-border mobility of labour and the absence of a central fiscal authority. They also harboured doubts as to whether the macroeconomic policy framework would be able to manage the technical and policy challenge of introducing and managing the euro.

Measured against the goal of securing macroeconomic stability, the first five years of EMU can be considered a success. Building upon the remarkable convergence among euro-area Member States that took place over the 1990s, price stability has prevailed since the beginning of EMU. The rate of inflation increased temporarily in 2000/01 due to the combined effects of oil price hikes and a depreciating euro exchange rate, but subsequently returned to a level consistent with the ECB's definition of price stability. It is true that budgetary developments have been disappointing in terms of securing improvements in the underlying budget position; however, in most countries, the deterioration in nominal balances in recent years is largely due to the economic downturn and overall deficit levels remain relatively low for this stage of the economic cycle, especially when compared with previous economic downturns. The fiscal stance has been broadly supportive of the goal of monetary stability and the automatic fiscal stabilisers have, for the most part, been able to cushion some of the reduction in private demand. Short-term interest rates headed downwards from the end of 2000 onwards, and, while the absolute size of the interest rate reduction in EMU appears modest at first sight, in 2003/04 nominal interest rates were at their lowest rate for some 50 years, and real long-term interest rates at their lowest level since the late 1970s.

This assessment as regards macroeconomic stability is especially noteworthy when one considers the number and scale of negative economic shocks that have hit EMU so early after its launch. At the start of EMU, the euro area was expected to be more immune to external economic developments than previously, given that about half of all trade of its member countries is with other euro-area countries. However, the Asian crisis of late 1998, the oil price shocks of 2000 and 2004, the bursting of the equity price bubble, and, perhaps most importantly, the abrupt slowdown in the growth of world trade in 2001, all demonstrate that the euro area is still very much affected by developments in the global economy. Prior to the launch of the euro, many commentators had argued that EMU lacked the appropriate adjustment tools needed to respond to demand shocks, particularly if Member States were hit asymmetrically. However, whilst adjustment to shocks remains a difficult issue, the worst fears have not materialised. Although the euro area is not immune to adverse global developments, the damaging effects of intra-European exchange-rate tensions – which often accompanied external shocks in the past – have been eliminated

A critical issue in assessing macroeconomic performance in EMU is the extent to which EMU contributed to nominal convergence amongst participating countries and greater adjustment capacity in the face of changing economic conditions. The picture here is mixed. A remarkable degree of convergence in the behaviour of consumer price inflation among euro-area Member States took place over the 1990s. It is difficult to assess to what extent the current degree of remaining inflation differences in the euro area is natural for an economic and monetary union, but the data suggest that although inflation differences within the euro area have increased somewhat since 1999, the level of inflation dispersion has been low by historical standards, and the differences have narrowed since the beginning of 2003. Inflation diversity, as such, is not necessarily a matter of concern as it allows for real exchange rates to adjust and, thus, are part of the economic adjustment mechanism within EMU. However, the existence of persistent differentials relative to the euro-area average in some Member States could indicate that structural rigidities are impeding a smoother adjustment.

The first years of EMU have witnessed some signs of cyclical divergence, with the dispersion of Member States' output gaps increasing in the late 1990s before falling back again after 2001. Generally, however, there has been quite a high degree of synchronisation since the late 1990s. Indeed, this is the case for all EU countries, whether part of the euro area or not. This reflects several factors, including increased trade and financial integration as well as the occurrence of common shocks. Overall, the evidence suggests that EMU itself has also had a positive impact on cyclical convergence, and that this has been facilitated through the convergence of macroeconomic policies based on a framework which embeds a culture of macroeconomic stability. Enhanced market integration via increased trade and foreign direct investment flows may also play a role. The observed external shocks undoubtedly had an asymmetric impact as Member States differed in terms of their exposure to energy price changes, size of ICT sector and trade openness. Nevertheless, cyclical differences are far less

prominent a topic of debate after five years of EMU than they were in 2000/2001, when overheating in some Member States and its possible consequences were considered more of a cause for concern than nowadays.

Despite the good record in terms of macroeconomic stability, the growth performance of the euro area has been disappointing in recent years. Real GDP growth in the euro area accelerated in the second half of the 1990s, peaking in 2000 at 3.5% – the highest rate seen for a decade. However, the euro area subsequently experienced a protracted slowdown in economic activity. The prolonged nature of the slowdown is explained by growth in domestic demand being less robust than expected. This seems to be due to a combination of the need for corporate balance sheet adjustment, which acted as a drag on capital expenditure, and higher savings by households which is possibly due to factors such as less favourable employment prospects, the stickiness of inflation, uncertainty surrounding structural reforms announced by governments and a growing awareness of the potential unsustainability of public finances in the context of ageing populations. In some other industrialised economies, the buoyancy of the housing market has helped to stimulate private consumption, but at the cost of higher levels of personal debt. This short-term stimulus has not been available in the euro-area, at least for the larger countries. In any event, the protracted weakness of domestic demand over this period remains a disappointment for those who argued that the launch of the euro would help European economies to achieve higher levels of growth. Overall, although the worst fears about the euro area's limited capacity to adjust to shocks have not been justified, by itself the euro does not appear to have improved Europe's ability to emerge quickly from economic downturns.

The failure to translate improved macroeconomic stability into sustained, internally-driven, increases in economic growth has prompted considerable concern amongst policy-makers about the source of the problem and the euro area's relative economic performance compared with the US. Over the period 1990-2003, GDP grew by almost 1% faster per year in the US than in the euro area, and the level of GDP per capita in the euro area is still only around 70% of that in the US. This faster growth stems in large part from the much more rapid expansion in the US population (about 1% per annum) than in the euro area (less than ½% per annum) and the differential growth performance between the US and euro-area economies almost disappears when viewed in per capita terms. As the effects of an ageing population in Europe come to be felt more clearly in the years ahead, it will be increasingly difficult for the euro-area economy to match US growth rates. Whilst the differential growth performance between the US and euro-area economies almost disappears when viewed in per capita terms, the level of GDP per capita in the euro area is still only around 70% of that in the USA.

Productivity developments have also featured prominently in the debate. The recent disappointing productivity performance of the euro area stands in sharp contrast to developments in the USA, where growth in labour productivity accelerated during the second half of the 1990s. For the first time in decades, productivity growth in the euro area is now lower than in the USA. This reflects two main developments. Firstly, the rate of capital deepening has, since the mid-1990s, slowed sharply in Europe but increased in the USA. Secondly, for the first time in a generation, the US has a trend rate of total-factor-productivity (TFP) growth which is higher than that of the euro area. This may in part be due to differences in the production and diffusion of information and communications technology (ICT). For example, while there are no dramatic differences in productivity growth rates in ICT-producing industries between the euro area and the US, the smaller size of the euro-area ICT-producing sector means that it contributes less to overall productivity growth.

1. The assignment of economic policies in EMU: expectations and challenges

The economic success or failure of EMU will be judged on growth and employment in the participating countries. In practice, however, EMU only indirectly contributes to achieving these primary policy objectives by providing the basis for a more stable macroeconomic environment and enabling the competitive forces of the single market to operate fully. A number of channels have been identified through which the launch of EMU could be expected to spur growth and employment.

- The most important channel relates to the creation of a macroeconomic policy framework conducive to stability. A key motivation for the creation of the single currency, and an overriding consideration in the design of the macroeconomic policy framework of EMU, was the assessment that policy failures during the 1980s and early 1990s had contributed to high inflation, high interest rates and unsustainable public finances, and had resulted in huge welfare losses in terms of lost output and high unemployment. The EMU policy framework, supported by economic analyses, is built on the premise that macroeconomic stability is conducive to economic growth.[1]. The EMU policy framework is also based on the premise that well-designed economic policy requires an institutional design that reduces policy conflicts among different players and allows policy players to commit to objectives in their respective area of competence.[2] It is now widely accepted that institutional design, particularly concerning central-bank independence and accountability, has been an important determinant of improved inflation performance.

- A second channel concerns the variability of intra-area exchange rates, which was eliminated with the arrival of the euro, is thought to have amplified cyclical tensions in the early 1990s when the ERM crisis coincided with the last deep recession witnessed in the EU. The creation of a large single market where prices are denominated in the single currency should more effectively shelter economic activity from external developments.

- A third channel related to the observation that domestic demand had proven to be strongly receptive to external shocks and domestic imbalances. A stable macroeconomic environment in combination with a decline in exposure to external shocks and new business opportunities due to increasing economic integration should contribute to steady expansion of domestic demand in the euro area.

The key features of the macroeconomic policy framework, which in many respects are innovative and unique, can be summarised as follows.

- The EU Treaty provides constitutional safeguards that ensure the independence of the European System of Central Banks (ESCB). The ESCB's independence, accountability and transparency are clearly established in the Treaty, and there is also a provision that forbids any central bank financing of public deficits.[3]

- As a general principle, Member States are required to treat their economic policies as a matter of common concern. The EU Treaty introduces the procedure of the Broad Economic Policy Guidelines (BEPGs) as the central instrument for co-ordination, and, more generally, a framework for multilateral surveillance that aims at evaluating the consistency of economic policies with the BEPGs and the smooth functioning of EMU.

- Greater co-ordination of budgetary policies was introduced in the Treaty and Stability and Growth Pact (SGP). The Treaty instructs Member States to avoid excessive deficits and requires the European Commission to monitor budgetary developments with a view to identifying misbehaviour. AS part of the SGP, Member States should aim for a medium-term budget close to balance or in surplus and accept peer review of their budget plans, and clarifies the conditions that could lead to sanctions.

Not surprisingly, there were, and remain, wide differences of opinion amongst economists on the merits of EMU, and it was widely recognised that the conduct of macroeconomic policies would be particularly challenged in the first years for several reasons.[4] Incomplete statistical reporting on the euro-area economy and a possible break in economic relationships would expose policymakers to substantial uncertainty. Opponents of monetary union focussed on the risk of re-introducing macroeconomic instability because the ECB as a newly created institution could not rely on an established track record that would ensure that its policy measures were credible and well-understood by market participants.

[1] In-depth empirical research on how macroeconomic variables affect economic growth was conducted by the OECD in the framework of its growth project. For a presentation of the main results, see Bassanini *et al.* (2001).

[2] Economic analysis stresses the need to avoid incentives to pursue time inconsistent policies as well as the need for fiscal constraints, see Barro and Gordon (1983a, 1983b) and Sargent and Wallace (1981). Also see Rogoff (2003).

[3] The euro exchange rate is flexible vis-à-vis other major currencies. The Council may conclude formal agreements on exchange rate systems or formulate general orientations for exchange-rate policy on the basis of a recommendation from the ECB or the Commission.

[4] An exhaustive exposition of the arguments surrounding EMU prior to its launch is beyond the remit of this chapter. For the pre-EMU discussion, see for instance European Commission (1990), Wyplosz (1997), Eichengreen (1998), Buti and Sapir (1998).

The framework for fiscal policy was also criticised, It was argued the fiscal policy stance could also be biased towards restrictiveness because Member States had to continue fiscal consolidation in order to accomplish a budgetary position of close to balance. This could result in a pro-cyclical tightening of fiscal policy during periods of slow growth. It was also argued that there were insufficient adjustment mechanisms to cope with the rigours of a one-size-fits-all monetary policy, which could lead to sub-optimal monetary conditions for many euro-area countries. Rigid labour markets and low cross-border mobility of labour on the one hand, and the absence of a central fiscal authority and national fiscal policies constrained by the requirements of the Treaty and the SGP, on the other hand, were seen as likely to lead to large macroeconomic imbalances and ultimately to protracted periods of slow growth and/or high levels of unemployment.

Even amongst those who supported EMU in principle, there were wide differences of views on timing. Some argued that it was too soon to proceed to a monetary union given the divergence of living standards and the lack of synchronisation of economic cycles. Others argued that EMU, in and of itself, would promote real convergence and lead to a high degree of correlation in the economic cycles, for example by diminishing the likelihood of asymmetric shocks stemming from national policy errors.

Box I.1: **Measures to strengthen economic governance in the euro area**

During the first five years of EMU, progress towards strengthening economic governance in the euro area have been made in the following five areas.

1. *Intensified informal cooperation between euro area Finance Ministers through the Eurogroup*. The launch of the euro provided a catalyst for closer co-ordination between the Finance Ministers of euro-area Member States. At the European Council Meeting in Luxembourg in 1997 the Heads of State or Government (HOSG) agreed that EU Economic Affairs and Finance Ministers could 'meet informally among themselves to discuss issues connected with their shared specific responsibilities for the single currency'. As Puetter (2001) argues, the Eurogroup can be understood as 'a generator of informal resources within the economic pillar of EMU…[which facilitates]…informal negotiations and…the construction of new positions and preferences towards economic policy-making in the euro-zone through arguing, deliberation and learning'.

2. *Linking macroeconomic stability with microeconomic reform through the Lisbon Strategy*. Over the first five years of EMU the focus of economy policy co-ordination has widened to cover macroeconomic and microeconomic policies. On the macroeconomic front, the Broad Economic Policy Guidelines target a mix of policies which are 'appropriate' to sustain a healthy economic outlook and favourable growth prospects. On the microeconomic front, the Lisbon Strategy calls for reforms in factor and product markets to promote, *inter alia*, higher productivity, competitiveness, the transition to the knowledge-based economy and the modernisation of the European social model. This microeconomic element is critical for economic policy co-ordination since it marks a step away from traditional concerns about the monetary and fiscal policy mix and towards a broader consideration of the EU's economic performance in a competitive global environment.

3. *Statistics for the euro area*. There has been a concerted effort since the launch of EMU to improve the quality of general economic statistics in the euro area. The EMU Action Plan on Statistical Requirements has led to more complete, comparable and timely economic statistics. Notable improvements in this regard include the development of an advanced estimate for the growth in the total Harmonised Index of Consumer Prices for the euro area and the release of a timelier and richer estimate of industrial production. Despite progress in this area, the quality of economic statistics in the euro area still needs to be improved.

4. *External representation for the euro area.* Although the external representation of the Eurogroup remains in its infancy, some progress has been made since the launch of EMU. A concerted effort has been made to prepare common positions between Eurogroup members in advance of international meetings such as the G7. A number of steps have also been taken to establish joint positions in advance of IMF meetings and to improve co-ordination between Executive Directors of euro-area Member States, the Eurogroup and the EU Delegation in Washington (see Part VI for a more detailed discussion of these issues).

5. *The fit between domestic and EU policy making*. A number of Member States have taken steps over the last five years to increase their capacity for compliance with EMU's economic goals. Belgium, for example, has employed primary expenditure growth targets and multi-annual budgetary planning since the launch of EMU, while Austria has introduced borrowing constraints for provincial and local governments. More recently, Spain adopted a General Law on Budgetary Stability which imposes deficit targets on regional budgetary authorities in an effort to maintain compliance with the Stability and Growth Pact.

2. Assessing economic performance in the early years of EMU

2.1. Macroeconomic stability

In terms of macroeconomic stability, the run-up to EMU marked a clear break with the past. Consumer price inflation came down from rates above 4% in the early 1990s to 1.5% in 1998. Public finances returned to sounder positions from an aggregate euro-area budget deficit of close to 5% of GDP in the early 1990s to 2.3% in 1998. Most of the consolidation efforts had taken place in the run-up to EMU in 1996-97 in the early phase of the economic upswing.

In concert with the move towards more stability-oriented macroeconomic policies, real GDP growth in the euro area accelerated in the second half of the 1990s, peaking in 2000 at 3.5%, the highest rate seen for a decade. However the euro area subsequently experienced a protracted slowdown in economic activity despite a continuously stable macroeconomic environment.

Price stability has prevailed since the beginning of EMU. One-off price shocks since the beginning of EMU had only a marginal impact on inflation expectations and nominal wage claims, thereby helping to avoid the second-round effects of inflation surprises that had led to aggressive tightening of monetary policy in the past. The rate of inflation increased only temporarily in 2000-01, when the combined effects of oil price hikes and a depreciating euro exchange rate drove energy prices up. Despite this episode, consumer price inflation has exceeded the 2% benchmark, which the ECB uses to define price stability in the euro area, for most of the time since 1999 with a maximum of 3.1% in May 2001. Inflation expectations have, however, remained contained. The consequences of the inflation overshoot are analysed below.

Table I.1: **Macroeconomic stability indicators, euro area**

	Consumer price inflation[1)]	Short-term interest rate[2)]	Long-term interest rate[2)]	Budget deficit (% of GDP)[3)]
1981-1990[4)]	6.7	6.7	7.6	-4.6
1991-1998	2.7	5.7	6.6	-4.4
1999-2003	2.0	3.5	4.7	-1.8
2003	2.1	2.3	4.1	-2.8

1) National CPI for 1980s, harmonised CPI for 1991-2003, 2) Nominal German rates as a benchmark for the euro area, 3) data according to ESA 95 for 1991-2003, 1981-90 excluding Luxembourg and 1991-98 excluding Spain, excluding UMTS proceeds in 1999-2003. 4) including West-Germany

Budgetary discipline seemed to be firmly established in the early years of EMU, and, in particular, in 2000 when a small budgetary surplus was recorded in the euro area. This, however, turned out to be a transitory situation caused by both high tax revenues driven by buoyant economic growth and extra revenues from the selling of mobile phone licenses. In the following years, when economic growth slowed down, budgetary deficits re-emerged and some Member States struggled with the 3% excessive deficit ceiling. Compared to historical precedents the increase in budgetary deficits was nevertheless relatively well contained and automatic fiscal stabilisers cushioned part of the reduction in private demand.[5]

In line with theoretical predictions, interest rates declined in nominal as well as in real terms (see Table I.1). Short-term interest rates headed downwards from the end of 2000 onwards, anticipating the ECB's interest rate cuts in response to slower economic growth and improved inflation prospects. Yields on 10-year government bonds declined by 1.2 percentage points on average between 2000 and 2003, independently of whether nominal or real rates are looked at. While the absolute size of the interest rate reduction appears modest at first sight, the resulting level of interest rates is very low by historical standards. In 2003, nominal interest rates were the lowest they had been for some 50 years and real long-term interest rates at their lowest since the late 1970s.[6]

[5] Given the larger share of the government sector in the euro area than in the USA, automatic stabilisers are calculated to be twice as effective as in the USA.

[6] The data refers to benchmark 10 year government bonds. It is no clear to what extent the downward trend in capital market interest rates is due to euro area or to global influences, in particular the reallocation of risks in view of the collapse in global equity prices, corporate scandals and political uncertainty.

2.2. *Economic growth*

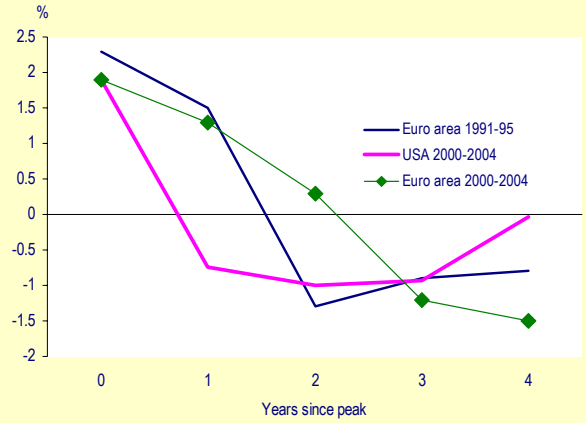
In terms of economic growth, the euro area witnessed mixed fortunes in its first five years of existence. Economic growth evolved markedly differently from what was assumed by policymakers and economists prior to EMU. On the one hand, economic activity was unexpectedly buoyant in 1999 and 2000. On the other hand, hardly any observers had predicted the subsequent growth slowdown to be as pronounced as it was in 2001-2003.

Strong growth in the first two years of EMU was at least partly caused by the run-up to the single currency. Interest rates converged at a low level, which implies a substantial drop in capital costs in those Member States where high interest rates used to be a drag on investment. Moreover, some Member States reaped benefits from the implementation of structural reforms on product and labour markets, privatisation and deregulation that led to a more business-friendly environment and job creation. Employment growth, which had traditionally been low in most Member States, ratcheted up to 1.8% on average in 1998-2001 in the euro area, bringing the rate of unemployment down from 10.8% in 1997 to 8.0% in 2001, and exerting a favourable impulse on consumer spending. Other important forces were the gradual penetration of the economy with information and communication technologies as well as the accompanying strong rise in equity valuations, which created financial wealth and a general optimistic investment climate.

The cyclical upswing did not last, however. Real GDP growth slowed down from mid-2000 onwards and real GDP even contracted from the third to the fourth quarter in 2001. Expectations that growth would quickly resume to potential did not materialise. Following the trough, real GDP expanded again, but growth remained slow and instead of accelerating, it stagnated again in 2003.[7] A turn-around took place in summer 2003 and forecasts are for a modest recovery in the course of 2004.

The defining feature of the 2001-2003 slowdown was its duration rather than its sharpness. Whereas the output gap fell by 3.4% of potential GDP in the four years from 2000 to 2004, it took only two years for a comparable fall between 1991 and 1993. A similar view emerges from the comparison of developments in the output gap in the euro area and the USA. While the euro-area output gap is calculated to have fallen gradually over four years from 2000 to 2004, the US gap deteriorated for two years only and improved thereafter. The fact that the slowdown has persisted for three years in the euro area suggests that supply-side factors have played an important role.

Graph I.1: **Output gap**



Source: Commission services.

The next two sections take a closer look at the reasons behind the disappointing euro-area growth performance, trying to disentangle the impact of two forces. First, what was the impact of external shocks on euro-area economic activity? Second, why did domestic demand contribute so little to support growth and recovery?

2.3. *External developments*

Being a large and ostensibly relatively closed economy, it was assumed that the euro area would become less exposed to external developments. Moreover, the introduction of the single currency meant that intra-area nominal exchange rate variability, which was considered to have crucially amplified the impact of economic imbalances in the early 1990s, was eliminated. Since about half of the trade of the euro-area Member States is within the area, it has a degree of external openness only slightly higher than that of the USA. This supported the notion that the euro area's exposure to external events has considerably declined with the creation of EMU.

In contrast to expectations, actual developments suggest that external factors have been a more important driving force in EMU than in the years prior to EMU. Economic developments prior to EMU suggested that domestic factors were the main drivers of economic activity, with only a limited impact from external shocks. The preparations for EMU took place in the 1990s against the background of a cyclical de-coupling from the USA.

Economic performance was determined mainly by factors internal to the EU, for instance, the large spending boost following German re-unification and the exposure of activity to the variability of intra-area exchange rates during the ERM crises of 1992/93. The acceleration of growth in 1996-98 was mainly attributed to the introduction of stable macroeconomic conditions in combination with the downward convergence of interest and inflation rates in the more peripheral euro-

[7] Taking a frequently used definition of a recession at face value, the euro area was in recession in the first half of 2003 because it recorded two subsequent quarters of negative real GDP growth (0.01 and 0.09%).

area Member States. International factors, such as the dynamic growth of world trade and favourable economic developments in the USA, were considered to be less relevant for domestic economic performance.

EMU started in the aftermath of the Asian crisis and the first test was whether it would be resilient towards transitory external demand shocks. This outcome was not a foregone conclusion. In particular, industrial confidence fell markedly in late 1998. However, economic performance remained almost unaffected by the Asian crisis, as feeble industrial activity was cushioned by buoyant activity in the services sector. Moreover, continuous employment growth boosted private consumption and new communication technologies penetrated the economy, setting the stage for strong economic growth in 1999 and 2000.

Table I.2: **Main trade partners of the euro area**

	Goods (2002)		Services (2001)	
	Exports	Imports	Exports	Imports
Total extra-EU12 trade in bn euro	1080	983	316	314
	Main partners (share in %)			
EU excluding euro area	24.7	21.1	31.0	26.1
Other Europe	25.4	26.3	19.0	20.0
USA	16.9	12.8	25.8	28.9
America excl. USA	6.1	5.5	5.5	5.6
Japan	3.0	5.4	3.8	2.6
Asia excl. Japan	15.8	20.8	7.7	9.5
Africa	5.5	7.0	4.5	5.2

Source: Commission services.

However, the assessment that EMU would enhance resilience towards external events was called into question when growth decelerated in the second half of 2000. Three major external shocks, which will be briefly analysed below, have been identified as having significantly dented economic activity in the euro area since then. They relate to an oil price hike in 2000, the pronounced correction of stock market prices starting in the spring of 2000, and the slump in world trade growth in 2001.

The oil price hike in 2000. A first, albeit temporary, external shock was felt in 2000 when higher oil prices, still augmented by the devaluation of the euro, reduced households' purchasing power. The terms-of-trade shock shaved about 1 percentage point off consumers' real income in 2000 through a direct increase of household energy bills. It also led to further rounds of price increases as producers endeavoured to restore their margins which had been depressed by higher input costs. This pass-through effect remained limited in 2000 but was more pronounced in 2001.[8] Simulations with the Commission's Quest model indicate that a USD 12 increase in oil prices would *ceteris paribus* entail a loss in output of 0.8 percentage points over three years and an acceleration of inflation of 1.3 points over the same period (see Table I.3)

Table I.3: **Impact of a USD 12 increase in oil prices, euro area**

	2000	2001	2002
GDP growth	-0.2	-0.4	-0.2
Inflation	0.7	0.4	0.2

Percentage change from baseline, annual growth rates

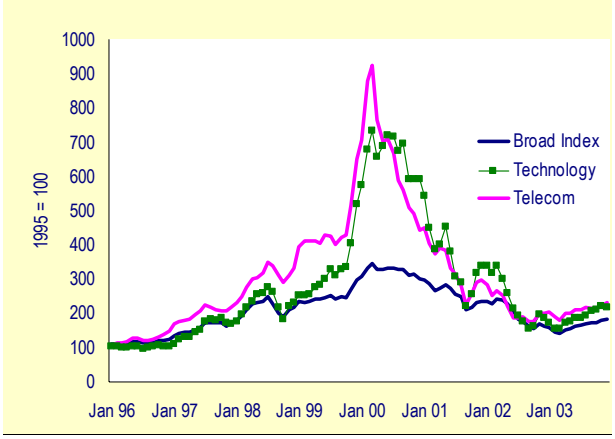
With hindsight, the surge in oil prices from the very low level of about USD 12 per barrel in January 1999 to above USD 30 in mid-2000 marked only the beginning of a period of relatively high oil prices. Following the spike in 2000, they fell before staging a come-back due to the conflict in Iraq in spring 2003 and surpassed the USD 30 level again in autumn 2003 with a considerable direct impact on headline inflation and, through the pass-through mechanism, on core inflation in the euro area.

The correction of stock market prices since spring 2000. Over 2000-2002, financial market developments were dominated by a sharp plunge of international equity prices, which is now largely considered as a correction of the asset-price bubble in the technology and telecom sector market segment that had been built up in the late 1990s. Technology and telecommunication stock price indices dropped by 80% between spring 2000 and spring 2003. The bursting of the equity price bubble appears to be related to previous

[8] In spring 2001, crises in the agricultural sector (BSE, foot-and-mouth disease) led to an increase of food prices that curbed households' purchasing power by at least half a percentage point in 2001. Overall, the two price shocks caused a reduction in households' purchasing power of about 1 percentage point in 2000 and 0.5-1.0 percentage point in 2001, which translated into lower growth in real spending.

overinvestment in information and communications technology at the global level. In the euro area, IT hardware production shrank between 2001 and early 2003 and turnover in computer-related services stopped growing from the end of 2001 until mid-2003.

Graph I.2: **Stock market prices**



Source: Commission services.

Two main channels have been identified through which a decline in stock prices affects economic growth. First, reduced financial wealth weighs on household spending. Second, the increase in capital costs resulting from lower stock valuations has a negative impact on corporate investment. Most existing empirical studies have found evidence that the first effect is relatively substantial in the USA where consumption is estimated to change by 3 to 7% per dollar of equity price change. Estimates for European countries suggest a much smaller impact of equity wealth on private consumption, amounting to a third or half of the US value. These estimates measure only the direct wealth effect on private consumption. The final impact on GDP will be compounded by multiplier effects and the response of investment to weaker activity and changes in interest rates. It will also depend on the reaction of monetary policy to lower inflation pressures. To measure these indirect effects, macroeconomic simulations were conducted with DG ECFIN's Quest model. The simulations are presented in the table below.

Table I.4: **The impact of a 20% drop in equity prices on real GDP growth, EU**

	Year 1
Shock to household wealth without direct impact on investment	-0.4
Shock to household wealth (as above) with monetary policy response	-0.3
Shock to equity price premium, affecting investment and consumption	-1.7

Note: As a technical assumption of the third simulation, monetary policy remains unchanged.

Only a few empirical studies have explored the impact of stock price movements on corporate investment. This impact has been difficult to identify empirically in most euro-area countries and is therefore generally estimated to be small. Nevertheless, it may be argued that the equity price correction was somehow atypical and was associated with a stronger drop in investment than during previous stock market corrections. To try to assess the effect on the economy of this kind of confidence crisis, the impact of a positive shock to the equity risk premium was simulated using the Quest model. The results, which are presented in the third row of Table I.4, suggest that under this scenario, the combined impact of the wealth effect on households and a higher risk premium on investment results in a much bigger GDP loss than that produced by the simple wealth effect presented in the first two simulations. These shocks have only a short-term effect in the Quest model. In all three cases, growth resumes in Year 2, though the level of real GDP still remains somewhat lower than the baseline scenario.

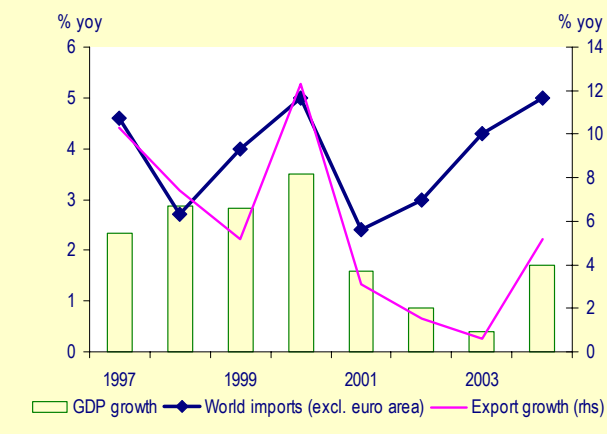
The slump in world trade growth. The third, and, for the euro area, probably most important, external event was the fall in world-trade growth. In 2001, growth in real world trade came to a virtual standstill, after growing by about 8% on average between 1996 and 2000. Since then, neither world trade nor the euro-area's export performance have returned to their previous dynamism. The slowdown in world trade was initially thought to be caused by plummeting economic activity in the USA. Since exports to the USA account for only 15% of the euro area's external trade in goods and services and with the share of extra-euro-area exports of goods and services being about a fifth of GDP, trade models predicted that there would only be a minor effect on foreign trade. While a mere 3% of euro-area GDP was directly affected via the trade channel, actual real export growth declined from double digit annual rates in 2000 to negative rates in the first half of 2001. This suggests that either third country effects have been more powerful than initially assumed or that the shock did not originate in the USA but was driven by an adverse common shock on a global scale.

Despite the euro area's economic size, growth has traditionally been closely linked to changes in the rate of expansion of world import markets. Graph I.3 demonstrates that GDP growth has been strong in the euro area when export growth has also been strong, as was the case in the past when world import demand was buoyant. Changes in price competitiveness brought about by the devaluation of the euro exchange rate in 1999-2000 and the subsequent appreciation have had only a minor impact on export growth compared to the trends in global trade.

The relationship between external impulse and euro-area growth was also important in 2002, when an initial expansion of world import demand first spurred recovery in the euro area but faded before domestic

demand had acquired sufficient dynamism. This factor has been seen as responsible for the interrupted recovery in 2002. Thus, the creation of the euro area has not changed the structural pattern that had been prevalent prior to EMU even in Germany, the euro area's largest economy, whereby external forces are important for kicking off economic recovery.

Graph I.3: **World import demand and euro-area growth performance**



Source: Commission services.

These three external shocks, which affected both the demand and the supply side of the economy and had some asymmetric impact on Member States, clearly affected the euro-area's economic performance. However, the negative effects were very much less severe in EMU than witnessed in the early 1990s. At that time, nominal exchange rate variability among the euro-area Member States caused substantial real divergence and policy frictions to arise. Real GDP growth bottomed out at -0.8% in 1993, but the lowest annual rate recorded since the beginning of EMU was 0.4% in 2003.

It is likely that increasing global integration may have offset the impact of European integration on external exposure. This may be because cross-border transmission channels have become more potent for the following reasons.[9]

- Rising trade integration means that third-country effects have a greater potential to augment the impact of bilateral trade effects. Calculations suggest that indirect trade effects may magnify the effect of a change in US imports on euro-area exports by a factor of two to three.[10]
- Declining information and transaction costs have strengthened financial and corporate linkages. Security prices and economic sentiment are closely linked across borders, suggesting that they exert a comparable impact on economic activity and quickly transmit economic impulses to other regions.
- Many euro-area firms are active on a global scale, with production units abroad. Buoyant FDI activity in the late 1990s implied an increase in foreign ownership, which should lead to greater international interdependence of production.

2.4. Lack of robustness of domestic demand

While external demand continues to strongly determine the ups and downs of euro-area GDP growth, its contribution to GDP growth over the medium term has been close to nil. The pace of growth over the medium term is consequently strongly driven by domestic demand, and, while external demand is important for short-term volatility, it is the strength of growth in domestic demand that essentially determines whether external shocks have tangible or negligible effects on economic growth.

EMU started in a period of buoyant growth with vigorous domestic demand helping to overcome the impact of financial turbulence in South-East Asia and later in Russia on external demand. Strong employment growth and a rapid expansion of business activity in the service sector mitigated the impact of fading activity in manufacturing in 1998/99. The fact that domestic demand proved sufficiently robust in the face of this external shock underpinned the belief in the resilience of economic activity in the euro area. With hindsight, it turned out that domestic demand in 2001-2003 weakened considerably. In order to shed some light on this somewhat unexpected change in the robustness of domestic demand, this section analyses developments in its key components, namely private investment and households' consumption.

At the outset, it should be stressed that is has not yet been possible to establish evidence that the weakness of domestic demand was due to political factors that increased uncertainty among consumers and investors. The terrorist attacks of 11 September 2001, military conflict in Afghanistan and Iraq plus further terrorist strikes, including those in Madrid on 11 March 2004 have certainly impacted on economic welfare and the perception of security, outlinking them with the development of demand over time or confidence indicators has not been possible except for short time periods. For instance, domestic demand had already weakened before 11 September and while economic activity deteriorated immediately after the event, demand picked up again at the beginning of 2002. The terrorist attack in Madrid coincided with a deterioration of confidence in several Member States in the euro area in March/April 2004, but not in Spain.

9 It still remains uncertain whether transmission channels have intensified or whether global shocks have simply become bigger since the late 1990s.

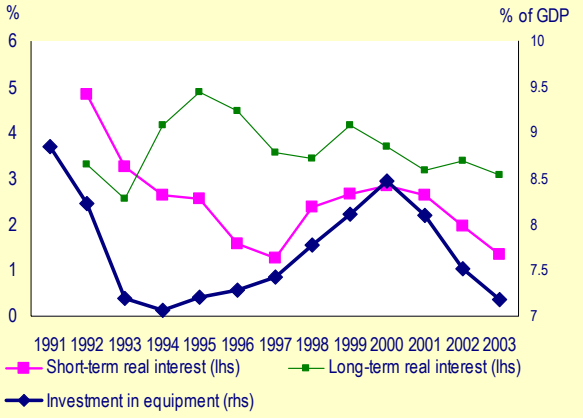
10 See INSEE (2001).

Overall, while there is not yet a full explanation for the weakness of domestic demand in the euro area since 2000, evidence points to factors that are not directly related to EMU. Unsustainable trends in corporations' financing during the previous economic boom forced an adjustment, which was largely undertaken by trimming down capital expenditure, which explains the slowdown in investment. As regards private consumption, there is some evidence of a structural downward shift around 2001, which, if it was due to the introduction of euro notes and coins in 2002, will have been temporary. A growing awareness of the risk of unsustainable public finances against the background of ageing populations and the uncertainty generated by a slow structural reform process are frequently mentioned as factors that may have initiated a more persistent shift in consumer behaviour.

Investment: the downturn in investment since 2001 followed the fall in global stock market prices with a lag. The causal connection between the two events, however, is nevertheless unclear. The decline in stock market prices may have increased the costs of capital, thereby providing an explanation for the investment shake-out throughout 2001-02. But alternatively, it may be that both events had been caused by a common factor. The deterioration in corporate profits and investment prospects, which pushed down both equity prices and investment spending, may reflect the adjustment from over-investment during the previous boom period. Real investment in the euro area grew at an annual rate of 4% between 1996 and 2000. In the USA, investment grew at more than 8% over the same period. Such a high rate in the USA may explain a subsequent adjustment through a period of dis-investment. But the rate for euro-area total investment does not seem high enough to make this adjustment argument. A slightly different twist emerges when investment is broken down into its main components, namely equipment and construction. It emerges that a sizeable increase in equipment investment in the second half of the 1990s was masked by a drop in investment in construction. As regards investment in equipment, its share in GDP increased between 1996 and 2000 by a substantial 1.2 percentage points, i.e. 0.2 more than in the USA.

The decline in investment in equipment despite falling interest rates, visible in Graph I.4, indicates that other forces must have played an important role. Since equity issuance had not been an important source of corporate financing, the collapse in equity prices after 2000 is likely to have had only a limited impact on investment activity. An important role has been attributed to corporations' balance sheets, where high debt-ratios had been built up during the long boom period 1996-2000. Liabilities in the non-financial corporate sector increased from 150% of GDP in 1995 to 250% in 2000 and net financial assets (assets minus liabilities) increased from minus 67% in 1995 to minus 112% in 2000.[11]

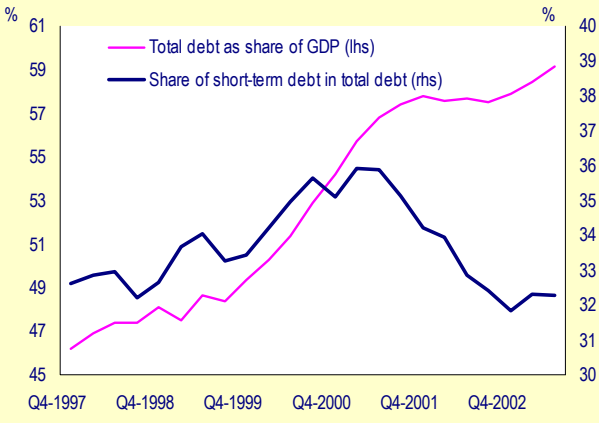
Graph I.4: **Investment and interest rates, euro area**



Source: Commission services.

The growth slowdown of 2001-03 revealed, in particular, the vulnerability of corporate balance sheets.[12] In retrospect, weaker demand reduced available cash flows and lower stock market prices compressed the value of collateral available for external financing. Many companies underwent credit rating downgrades, which directly increased their financing costs. The number of bankruptcies increased in a number of euro-area Member States, most notably in Germany. Many firms cut back investment plans in order to reduce debt.

Graph I.5: **Non-financial corporate sector debt, euro area (share in %)**



Source: Commission services.

Consequently, year-on-year investment growth was negative in 8 out of 12 quarters between 2001 and end-2003, exceeding a growth rate of 0.5 quarter-on-quarter

[11] See Jäger (2003a).

[12] It was not possible to assess this source of weakness in investment in-depth at an earlier stage, in part because up-to-date macroeconomic data were not available and empirical research on the phenomenon for the euro area was lacking.

in only one of the remaining four quarters with positive growth. Encouragingly, this was in the final quarter of 2003, when lower costs of financing and the increased availability of bank loans underpinned the expectations of continued recovery in investment.

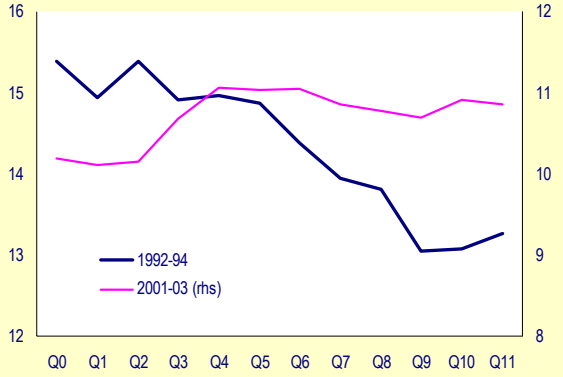
While the financial system acted as a shock-absorber, this came at the cost of slow aggregate credit growth exposure during the downturn. The scaling down of profit expectations certainly played a role here, as did the deteriorating balance sheets of loan takers and banks. Their shift towards a more risk-averse lending policy seems to have made it difficult for enterprises to obtain short-term credits in particular, even if they were prepared to pay higher interest rates.

It is very likely that the increase in risk selectiveness among banks is directly related to the difficult economic and financial situation, which has raised concerns about the health of the banking sector. Several signs of stress were registered. First, corporate insolvencies in the non-financial corporate sector had a negative impact on banks' balance sheets. Loan loss provisions have increased substantially in 2001. Second, the profitability of banks fell due to the increased loan loss provisions, reduced activity in financial markets and lower valuations of security holdings. Third, the creditworthiness of some banks fell. Credit rating agencies lowered or put under review the ratings of several major banks. However, despite some concerns about the health of financial institutions, the euro-area financial sector weathered the slowdown relatively well, without any major institutions failing. Nevertheless, there was a weakening in credit availability, in particular for short-term credit.

Private consumption: in the early phase of the slowdown, analytical attention focused on the possible reasons for subdued investment but, over time, the muted contribution from private consumption to growth shifted more and more into the limelight. From mid-2000, growth in private consumption was generally considered somewhat disappointing, particularly considering that at the same time in the USA private consumption was providing substantial support to economic activity. Initially, however, the weakening of consumption was related to the decline in disposable income and deteriorating employment prospects. When data on disposable income became available and employment continued to grow, it was evident that higher savings acted as a brake on consumption.

Economic theory suggests the saving ratio should decline when growth slows down because households try to smooth their consumption over time. This is what happened in the USA, whereas in the euro area private consumption in 2001-03 was weaker than growth in disposable income, implying a rising saving ratio. Graph I.6 compares the behaviour of the euro-area saving ratio in two similar cyclical downturns. In the recession of the early 1990s, households partly offset adverse developments in disposable income by curbing their saving rate. In contrast, they have displayed a much more cautious saving behaviour since 2000. To give an idea of the order of magnitude involved, a saving pattern similar to the one observed in the early 1990s would have boosted consumption growth by half a percentage point per year in the 2001-03 downturn.

Graph I.6: **Household saving rate in cyclical downturns, euro area** (in % of disposable income)



Q0 corresponds to the peak preceding the beginning of the downturn (92 Q1 for the 1992-93 recession and 2000 Q4 for the 2001-03 downturn)
Source: Fagan *et al.* (2003) and Commission services.

A number of explanations have been put forward. It may be that the euro-area financial system offers less financial flexibility to consume out of future income by increasing private debt than the US financial system does. However, this is not consistent with the observation that consumption-smoothing happened in the euro area in the early 1990s. Other reasons for why consumption has not been more resilient include the stickiness of inflation, a worsening of unemployment prospects and a growing awareness of the risk embedded in the path of public finances against the background of the challenges posed by ageing populations and the uncertainty generated by a slow structural reform process.[13]

While the economic growth performance failed to meet expectations in 2001-2003, the impact of the slowdown on employment was a positive surprise. Due to the usual lag with which employment responds to changes in economic activity, the rate of unemployment continued falling until mid-2001 and employment growth remained positive until 2002, falling marginally in the course of 2002 before picking up again in 2003. Overall and despite the subdued economic conditions, about 1 million jobs were created between summer 2001, the trough of the rate of unemployment and autumn 2003. This performance contrasts starkly with the substantial job losses recorded in the euro-area countries in previous downturns.

[13] For a more detailed analysis see Quarterly Report on the Euro Area, I/2004.

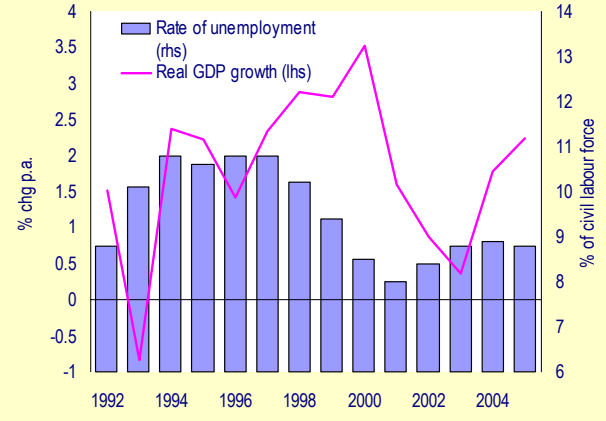
While stronger resilience in the labour market may be due to a number of factors, labour market reforms implemented in the second half of the 1990s seem to have played a key role.[14]

Table I.5: **Contributions to annual growth in private consumption 2000-03, euro-area** (as predicted by the consumption equation)

	Disposable income	Stock prices	Inflation	Long-term real interest rate	Short-term real interest rate	Unempl. rate	Total consumption growth	
							As explained by equation	Actual
2000	2.3	0.5	-0.2	-0.4	0.2	-0.1	2.5	2.7
2001	2.3	0.2	-0.3	0.1	-0.1	-0.2	2.2	1.7
2002	1.3	-0.3	-0.2	0.0	0.2	0.0	1.0	0.1
2003	0.9	-0.6	0.0	0.0	0.2	0.2	0.7	1.0

Source: Commission services.

Graph I.7: **Unemployment rate vs. real GDP growth, euro area**

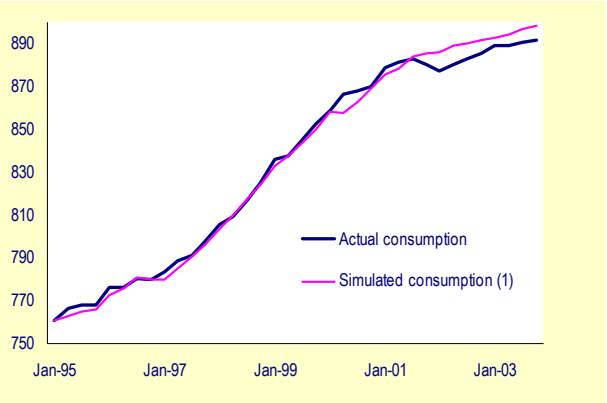


Source: 2003-2005 Commission Autumn 2003 forecast.

In order to better understand developments in household spending in the euro-area, Graph I.8 shows actual consumption compared to hypothetical consumption derived from an estimated consumption function.[15] This function relates quarterly private consumption in the euro area to a number of traditional macroeconomic determinants, including disposable income, equity wealth, inflation, interest rates and the unemployment rate (see Table I.5 for the contribution of the individual determinants to consumption growth). The estimated function explains actual developments in consumption over the 1990s quite well, including the 1992-93 recession.

Household spending has remained below what is predicted by the equation since 2001. The gap was established essentially during the second half of 2001 and the first half of 2002. Subsequently, it narrowed somewhat before widening slightly again in the second half of 2003. Overall, the consumption function suggests that the level of private consumption is currently somewhat weaker – by about 0.7% – than what would be expected given the prevailing macroeconomic conditions.

Graph I.8: **Household actual and simulated consumption, euro area** (in billion of 1995 euro)



(1) As simulated with the consumption function over 1995-2003.
Source: Commission services.

[14] For a list of alternative factors, see European Commission (2003a). Chapter 3.1 in this volume contains a more in-depth assessment of labour market performance and reforms.

[15] For more details, see Quarterly Report on the Euro-Area I/2004.

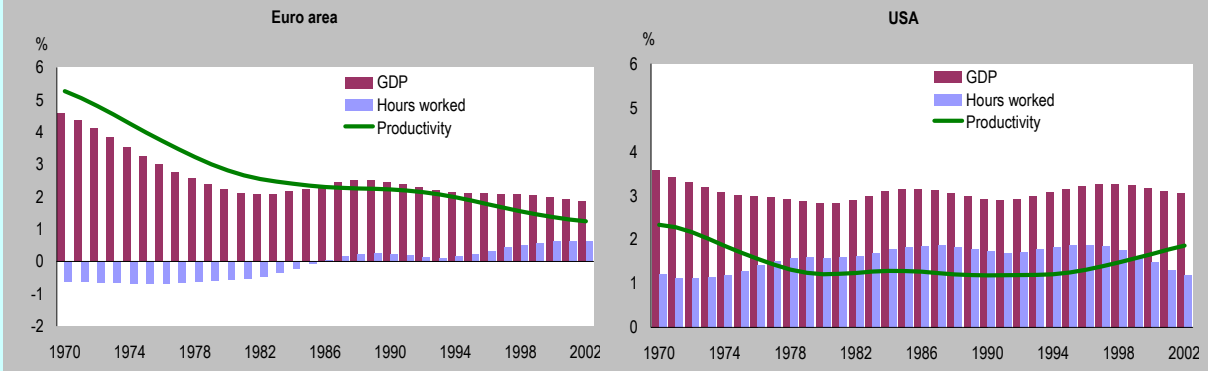
Box I.2: **GDP and productivity performance in the euro area and the USA**

There is a widespread perception that the US economic performance is much stronger than that of the euro area.[16] Taking national accounts data at face value, it is evident that over the last decade GDP growth has been higher in the USA than in the euro area for every single year, except for 2001. On average over the period 1990-2003 GDP in the US grew almost 1% faster per year than in the EU. This faster growth stems in large part from the much more rapid expansion in the US population (about 1% per annum) compared to the euro area (less than ½% per annum). The difference in labour force growth is expected to increase over the coming years as the effects of ageing in the euro area come to be felt more clearly. It may therefore be increasingly difficult for the euro-area economy to match headline US growth rates in the years ahead.

Table I.6: **GDP and employment average annual growth rates 1990-2003**

	USA	Euro area
Real GDP	2.9	2.0
Real GDP per capita	1.7	1.6
Population	1.1	0.4
Working-age population (15-64)	1.0	0.3

Graph I.9: **Trend growth and its components,** (annual growth in %)



Source: Commission services, GGDC.

The recent productivity performance in the euro area stands in sharp contrast with developments in the USA where growth in labour productivity accelerated during the second half of the 1990s. For the first time in decades, productivity growth in the euro area is now lower than in the USA. The table below presents the results of a growth accounting analysis for the euro area and for the USA. Looking into the components of labour productivity, significant changes took place in the 1990s in terms of both capital deepening and total factor productivity.

[16] To some extent, the perception is due to differences in statistical reporting. For instance, quarterly GDP growth figures are reported in the USA in annualised figures whereas they are published as non-annualised quarter-on-quarter rates in the euro area. Moreover, differences in accounting of some special items (military expenditure, financial intermediation services, software investment, chain-weighting versus base year) have a significant impact on real GDP levels, albeit a smaller one on rates of growth (Ahmad *et al.* 2003). Significant differences also exist in geographical and social structures, such as preferences for leisure or the variety of products, extra spending due to geographical distances, prisons, air conditioning and heating, which drive a wedge between GDP as a measure of economic performance and actual economic well-being (Gordon 2002).

Table I.7: **Decomposition of GDP growth rates, euro area and USA (1980-02)**

	1981-90	1991-95	1996-00	1996-02
		Euro area		
GDP	2.4	1.6	2.6	2.2
Labour in hours worked	0.1	-0.8	1.0	0.9
Employment	0.7	-0.2	1.4	1.3
Hours worked	-0.6	-0.6	-0.4	-0.4
Hourly productivity	2.3	2.4	1.5	1.3
Capital deepening	0.8	1.1	0.4	0.4
Total factor productivity	1.5	1.3	1.1	0.9
		USA		
GDP	3.2	2.4	4.1	3.3
Labour in hours worked	1.8	1.3	2.4	1.6
Employment	1.8	1.1	2.0	1.3
Hours worked	-0.1	0.2	0.4	0.3
Hourly productivity	1.4	1.1	1.6	1.7
Capital deepening	0.2	0.3	0.3	0.6
Total factor productivity	1.2	0.8	1.3	1.1

Source: Commission Services and Groningen Growth & Development Centre.

The rate of capital deepening has decelerated sharply since the mid-1990s in the euro area but has increased in the USA. This wedge mirrors developments in investment in the two regions. While the investment performance in the USA in the late 1990s had some bubble features and has not proved to be sustainable, the comparatively lacklustre euro-area performance over that period is puzzling in the light of rising profitability and declining costs of capital. There is some evidence that structural factors have contributed to dampening investment spending in the euro area and have weighed on the attractiveness of the euro area relative to other investment locations. These factors include adverse demographic trends, insufficient flexibility in product and labour markets, and underdeveloped financial markets.[17]

Potentially the most worrying aspect of the analysis presented in the table is the evolution of TFP. For the first time in a generation, the USA has a trend rate of TFP growth which is now higher than the euro area's. This significant turning point results from a combination of a sharp downturn in the euro-area trend and a pick-up in the USA. Differences in the production and diffusion of information and communication technology may explain this development.[18]

- Euro-area productivity growth rates in ICT-producing industries are not dramatically different from those in the USA and picked up markedly in the second half of the 1990s as they did in the USA. However, the size of the euro-area ICT-producing sector is much smaller than the equivalent sector in the USA, and the contribution to overall productivity growth is correspondingly smaller.
- Services are the main source of the US productivity advantage over the euro area. Interestingly, the bulk of the contribution to productivity growth from ICT-intensive services in the USA is concentrated in three sectors, wholesale trade, retail trade, and financial services. These three sectors account for about three quarters of the acceleration in productivity observed in the USA during the second half of the 1990s. Except to some extent for financial services, the euro area has clearly failed to raise productivity growth in the sectors by using ICT intensively. The picture is quite different for ICT-producing services (i.e. mainly telecommunications) where the euro area is largely outperforming the USA in terms of productivity gains and has even increased its advantage in recent years. However, due to their smaller weight in total employment, the contribution of these sectors to total productivity growth remains small relative to ICT-using services. The US has benefited from significant productivity gains from the use of ICT by so-called 'big-box' retailers (Walmart, Kmart). These superstores are less apparent in the European retailing model.
- Regarding the non-ICT part of the economy, the slowdown of the euro-area's productivity growth rate in the manufacturing and service sectors which are using ICT less intensively (for instance textiles, hotels and restaurants) has been quite pronounced in recent years. These industries collectively still represent about 40% of euro-area GDP and account for most of the overall slowdown in productivity in the euro area in the second half of the 1990s.

17 For a discussion of the determinants of investment, see European Commission (2001a), Chapter 3.

18 For a more comprehensive discussion, see European Commission (2003a), Chapter 2.

3. The policy mix

3.1 Expectations at the start of EMU

In the early years of EMU, macroeconomic policies were conducted in an environment characterised by a high degree of uncertainty. The uncertainty stemmed on the one hand from difficulties in understanding the behaviour of the newly generated economic entity, and, on the other hand, from the incentives and restrictions encountered by policymakers within the new institutional framework. In the first case, difficulties arose as statistics for the euro area as an aggregate were limited. The fact that the available economic data were not complete or up-to-date hindered understanding of the current situation. Equally important was the fact that the introduction of EMU might have caused a structural break in economic behaviour; this exposed the interpretation of economic data to a high degree of uncertainty. In the second case, it was widely expected that the first policy steps by the ECB would be strongly influenced by the need to gain credibility through its own track record in addition to that stemming from the institutional framework. Some market participants suspected that the ECB might therefore conduct a tighter monetary policy stance than otherwise necessary. Also, fiscal policy was assumed to be tight in the euro area as a whole because at the start of EMU most Member States had not yet accomplished a budgetary position of close to balance, which would have allowed automatic stabilisers to operate freely without the deficit coming close to the 3% criterion.

There was also a concern that the euro-area monetary policy stance would not be appropriate for all Member States, potentially reinforcing diverging trends across the monetary union. Opponents of EMU had argued that it would lack appropriate adjustment tools to deal with demand shocks, in particular if Member States were hit asymmetrically. Cross-border labour mobility was low and labour markets were too inflexible to cope with large-scale shocks. Moreover, it was felt that the absence of a central fiscal authority would mean that co-ordination of Member States' fiscal policies, which was in any case restricted by the provisions of the Stability and Growth Pact, would be cumbersome.

The new policy consensus, built on the experience of stagflation in the 1970s and 1980s, shifted the focus of the policy-mix debate from issues of growth stimulus to issues of inflation control. It led to an assessment of the policy mix largely in terms of its consistency with price stability. The role of fiscal policy and wage-setting behaviour, which is highly centralised in some Member States, is to support monetary policy in maintaining or achieving price stability as a prerequisite for sustainable economic growth and employment creation. That is, fiscal policy should not be pro-cyclical and nominal wage growth should be consistent with low inflation. According to this view, stimulating economic growth is not an explicit task of macroeconomic policies but of supply-side policies. Consequently, structural reforms became an increasingly important item on the euro-area policy agenda.[19]

The following sections report on the actual stance of monetary and fiscal policy, respectively, against the background of the macroeconomic developments sketched above. For a more detailed exploration of the policy framework and changes in policy strategy and determinants, the reader is referred to Part II of this volume.

3.2 Developments in monetary policy

The introduction of the euro represented a regime change for EU financial and foreign exchange markets. In the eleven Member States that initially joined EMU, markets operated in the context of a single monetary policy and exchange rate. The transition to the new euro-area monetary policy regime was generally smooth. In the months preceding the introduction of the euro, official interest rates in the eleven Member States had converged to 3%. On 22 December 1998, the ECB decided that the main refinancing rate to apply at the beginning of the euro-area monetary policy regime would be fixed at this level. The launch of the euro coincided, however, with growing concerns about the short-term growth and employment outlook following the pronounced global slowdown in the wake of the 1997-98 financial crises. The ECB maintained official interest rates unchanged until April 1999 when it decided to reduce the main refinancing rate by 50 basis points to 2.5%. The ECB explained the decision to lower interest rates as a response to the reduced inflation risk implied by deteriorating growth prospects in the euro-area economy.

Official rates did not change until November 1999, when the ECB restored them to the level that applied before the reduction in April. This 50-basis point increase was explained as countering an upward trend in the balance of inflation risks, amid signs of a strengthening in the euro-area economy since the middle of the year. From then onwards, the ECB gradually moved its official interest rate up to 4.75% in October 2000. The successive hikes aimed at counteracting emerging upside risks to price stability. The inflationary impact of higher oil prices and the depreciation of the exchange rate emerged as the main sources of concern. Moreover, monetary growth remained above the 4.5% reference value and credit to the private sector grew at a fast pace.

[19] In 2000, the EU adopted the Lisbon agenda, which is aimed at strengthening growth potential. (See Part III).

Between October 2000 and May 2001, the ECB left interest rates on hold at 4.75% against the background of weakening economic growth and accelerating rates of consumer price inflation. In summer 2000, HICP inflation started to exceed the 2% margin, rising to 2.5% by autumn and peaking at 3.1% in May 2001. At the same time, core inflation (HICP excluding unprocessed food and energy) increased from 1% to slightly above 2%.

Starting in early 2001, the deteriorating economic outlook in the world economy triggered a series of interest rate cuts in major economies. The ECB started cutting interest rates in May 2001, i.e. the peak of consumer price inflation in the euro area, by a cumulative 275 basis points.[20] From summer 2003 onwards, the key official interest rate has been kept at 2.0%. When assessed against a Taylor rule, which may be considered a representation of a mechanistic central bank that responds equally to the deviation of inflation from target and the output gap, short-tem interest rates have been accommodative to economic activity during the slowdown, in particular since the second half of 2001.

During the growth slowdown, monetary policy turned more accommodative despite persistently high rates of consumer price inflation. Euro-area headline inflation came down only slowly from its peak at 3.1% to a level of just below 2%. This was partly due to a number of one-off price shocks affecting mainly food and oil prices. Nevertheless, core inflation, which excludes more volatile components, was equally slow to decline, in part due to persistently high service inflation and the slow pass-through of past import price hikes. Two factors seem to have attenuated the impact of the ECB's interest rate cuts on economic activity. First, the increase in risk premiums prevented capital costs for enterprises from declining by a comparable amount. Second, the euro's appreciation on foreign exchange markets had a tightening effect on monetary conditions.

3.3 Developments in fiscal policy

Considerable progress was achieved in consolidating government finances in the course of the 1990s. Deficits were reduced visibly and a number of Member States achieved budgetary surpluses. Since 1999, however, progress with consolidation has been less pronounced.

The improvement in deficits from 2.3% of GDP in 1998 for the euro-area aggregate to 0.9% in 2000[21], however, owes much to strong rates of growth, which boosted tax revenues, and declining rates of interest. This is attested to by the fact that the cyclically adjusted primary surplus, i.e. deficit excluding interest payments, improved by a meagre 0.2 percentage points from 1998 to 2000. A tighter budgetary stance would have been warranted in some countries in view of high growth and emerging capacity constraints. In retrospect, this period also provided the opportunity to reach the medium-term target more quickly or to increase budgetary safety margins. Instead, several Member States adopted measures to ease the tax burden over the forthcoming years. The basic aim of such reforms was to simplify the systems, while at the same time widening the tax base and reducing marginal rates. They also included a substantial amount of tax relief.

Slower growth took its toll on public finances in subsequent years. The aggregate euro-area budget deficit grew from its low point 0.9% in 2000 to an estimated 2.7% in 2003. The area-wide slippage of almost 2% of GDP over three years was the result of weaker growth, partially offset by declining interest payments. Slightly less than 1% of the deterioration was due to discretionary factors, implying an easier policy stance than had initially been envisaged. This impulse, however, was spread out over three years, yielding a marginally expansionary fiscal policy. [22]

Table I.8: **Budget deficits in 2000-2003, euro area**

	2000	2003	Change
(1) Budget deficit	-0.9	-2.7	-1.8
(2) Cyclically-adjusted deficit	-1.8	-2.1	-0.3
(3) C.A. primary balance	2.3	1.4	-0.9
Change in budget deficit (1) due to			
	Growth (1)-(2)	Interest (2)-(3)	Policy discretion (3)
2000-2003	-1.5	0.6	-0.9

% of GDP, excluding UMTS proceeds

Whereas budgetary policy in the euro area has been slightly expansionary during the slowdown, its impact on the economy has been rather muted, if not adverse. For instance, there is a strong co-movement of the household' saving ratio with the budgetary deficit, suggesting that the increase in aggregate demand due to larger public deficits was attenuated by a reduction in spending by private households (see Graph I.10). This gives reason to believe that the slowdown in the pursuit of budgetary consolidation may have dented private

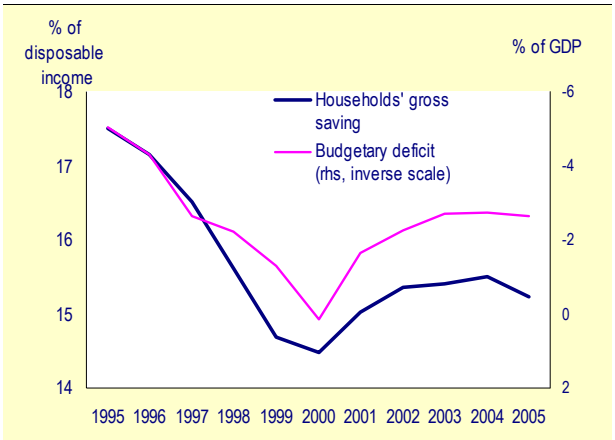
[20] The actual easing of the monetary stance seems to have started earlier because short-term interest rates had already peaked six months earlier. Between November 2000 and the first cut in official interest rates in May 2001, the three-month money market interest rate already fell by a significant 50 basis points.

[21] Excluding the one-off proceeds from the allocation of UMTS licences, which generated windfall gains of about 1.1% of GDP in 2000 and 0.1 in 2001.

[22] Usually, annual changes of up to 0.5% of GDP are considered as broadly neutral.

consumption, i.e. the impact of Keynesian multiplier effects was overridden by Ricardian wealth effects.[23] The evidence so far available on the impact of tax reforms enacted in several EU Member States (in Germany, France, Italy, Netherlands and Austria) has been that they have not produced the increase or resilience in private consumption that was hoped for. The increase in savings can probably be explained by the fact that these reforms were not considered credible, as the strategies to finance them were not well defined or were simply unrealistic, and therefore could not be perceived as permanent, which is the necessary condition to induce consumers to believe that their permanent income would be improved by such reforms.

Graph I.10: **Household saving and fiscal deficit, euro area**



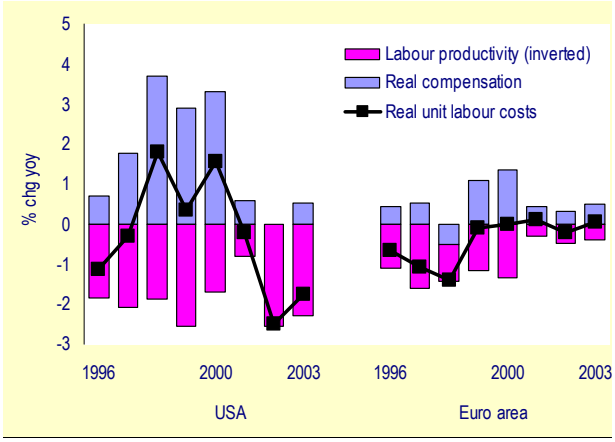
Source: Commission services

3.4 Developments in other policy areas

The economic theory of optimum currency areas suggests that independent monetary policy and a flexible exchange rate are substitutes for flexible markets. Since these two tools no longer exist in the euro area, incentives have strengthened to pursue structural reforms in order to improve the economy's adaptability to shocks and to strengthen its growth potential. In line with this, the EU has launched an ambitious reform programme, as evidenced by the increasing weight given to structural issues in the BEPGs as well as the Lisbon strategy in 2000. Despite progress with structural reforms in the second half of the 1990s, the pace of reform has not been stepped up since,[24] and inflexible markets are often claimed to be still at the root of the euro-area's disappointing growth performance.[25] Subsequent chapters in this paper give a detailed account of the reforms in different areas.

Although wage rigidities in the euro area appear to be on par with the USA,[26] wage growth has exerted an unwarranted cyclical impact on economic activity in the euro area since the beginning of the downturn, when it remained broadly stable in both nominal and real terms. Because employment adjusted to cyclical conditions only with a lag, labour productivity became strongly pro-cyclical. With constant wage growth, as a consequence, growth in nominal unit labour costs actually accelerated at a time when demand was weakening. The lack of cyclical adjustment is even more apparent if the trends in real unit labour costs in the USA and the euro area are compared. Adjustments in real unit labour costs since 2001 have been fairly limited in the euro area but quite significant in the USA (see Graph I.11). In principle, stable wage growth in combination with a small decline in employment should imply rising labour income. But actual consumption growth fell short of disposable income, thus failing to support aggregate demand during the slowdown.

Graph I.11: **Real unit labour costs and its components**



Source: Commission services.

3.5 Overall assessment of the policy mix

It is sometimes reasoned that the pronounced growth slowdown witnessed in the euro area between 2001 and 2003 is attributable to the macroeconomic policy framework in EMU, which prevented a more aggressive easing of the policy stance. Critics point to the more favourable growth performance recorded in the USA, which took place against the background of a considerable easing of both monetary and fiscal policies

[23] For case studies on fiscal consolidations and their effect on consumer confidence, see European Commission (2003b).

[24] The European Commission evaluates Member States' efforts in the Implementation Report on the Broad Economic Policy Guidelines. The Economic Policy Committee publishes an Annual Report on Structural Reforms.

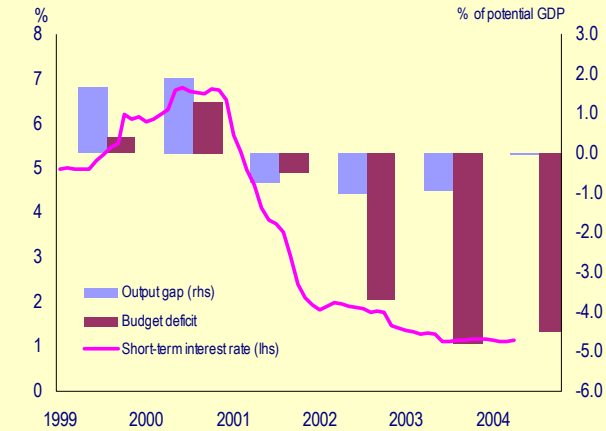
[25] For instance, Greenspan (2000) relates the slower adoption of new technologies in the Europe and Japan to less flexible markets. Bayoumi *et al.* (2003) calculate that an increase in the degree of competition in the euro area to the US level would raise output by more than 12% in the long-term.

[26] See Part II.3 of this volume.

over the last years. The US central bank cut interest rates by a cumulative 550 basis points from the beginning of 2001, while the US federal budget balance deteriorated by 6.5 percentage points from a surplus of 1.5% of GDP in 2000 to an estimated deficit of 5% in 2003. In comparison, the cut in ECB interest rates by a cumulative 275 basis points and the widening of the aggregate euro-area budget balance by less than 2 percentage points from 0.9 percent of GDP in 2000 to an estimated deficit of 2.7% of GDP in 2003 seems at first glance to be very muted. However, there are important differences between the two areas.

A first difference resides in the scope and room for manoeuvre for monetary and fiscal policy. A larger policy impulse in the USA seems to be partly explained by the fact that the deterioration in the US output gap was larger than that of the euro area, in particular in 2001 and 2002. The US economy was far more affected by the impact of the common shocks hitting both the US and the euro-area economy. As regards the available room for manœuvre for monetary policy, the rapid fall in consumer price inflation from 2.5% in 2000 to 1.2% in 2002 created considerable leeway for the US central bank to cut interest rates. In contrast, the room for monetary policy action in the euro area was constrained by the persisting inflationary pressures that caused inflation to come down only slowly.

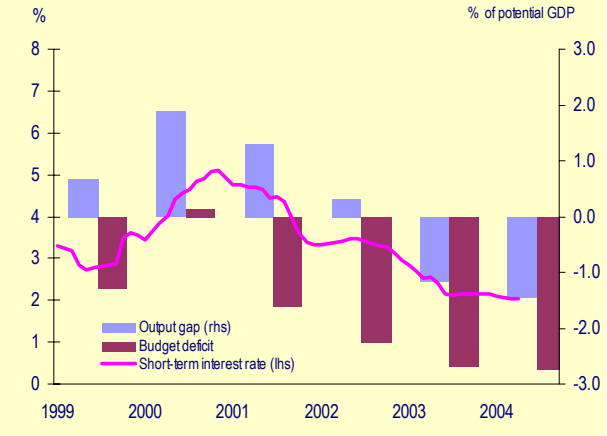
Graph I.12: **US macroeconomic policies**



Source: Commission services.

On the fiscal policy side, account should be taken of the fact that budget balances in the euro area were generally much less sound than in the USA at the onset of the slowdown, thereby limiting the scope for easing without compromising long-run sustainability. On the latter point, it should be noted that the euro area has much more of an ageing problem than the USA and that because of this it should steer a more prudent budgetary course. Furthermore, important differences exist between the euro area and the USA that explain why the latter has greater recourse to more visible and discretionary fiscal policy action. Reflecting the larger size of governments and the progressiveness of the tax system, automatic stabilisers are roughly twice as large in the euro area and therefore lessen the need for discretionary policy action compared to the USA. In addition to automatic stabilisers, some euro-area Member States also cut taxes during the slowdown. However, as consumers responded by increasing saving rates rather than by increasing spending, this failed to stimulate the economy.

Graph I.13: **Euro area macroeconomic policies**



Source: Commission services.

Finally, the conduct of macroeconomic policies seems to be driven by different policy philosophies. Negative experiences in the 1970s and 1980s with accumulating public debt and persistent wage-price spirals discredited the use of short-term discretionary measures for stabilisation purposes in the euro area. Therefore, the macroeconomic policy framework in the euro area is, short-term pressures notwithstanding, driven more by the need to preserve medium-term stability. While the USA has been successful in orchestrating a stabilisation of demand in the slowdown phase, this has resulted in an accumulation of government and household debt, as well as in a widening US current account deficit. These can be expected to lead to a correction at some point in the future at the expense of domestic demand, and it will be a key challenge for US macroeconomic authorities to reverse the massive policy impulse given in the recent past.

4. The contribution of EMU to nominal convergence and real convergence

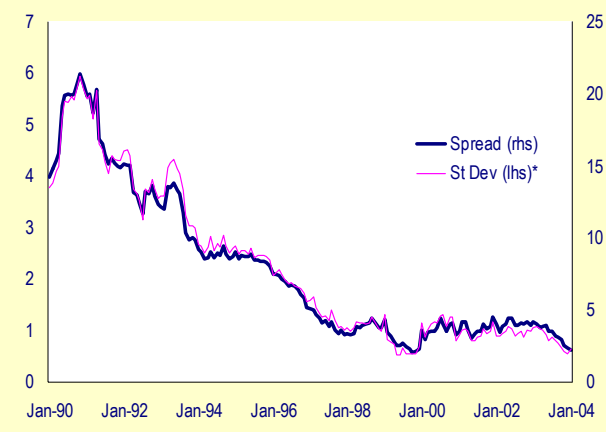
4.1 Expectations at the start of EMU

A high degree of sustainable real and nominal convergence between Member States is essential for the smooth functioning of EMU. The impact of country-specific shocks or de-synchronised business cycles in combination with a uniform monetary policy had been a major pre-occupation in academic research prior to EMU. Its starting point was that divergence in

economic growth could undermine Member States' willingness to refrain from beggar-thy-neighbour policies in times of crisis.[27] Inflation divergence, meanwhile, could lead to painful adjustments in price competitiveness in Member States and complicate the task of the ECB to decide on the appropriate stance of monetary policy for the euro-area aggregate. Convergence facilitates macroeconomic policy management and helps to strengthen economic and social cohesion. The present section reviews recent developments in nominal convergence between euro-area Member States and discusses the role played by the single currency in the convergence process in EMU.

In an economic and monetary union, the degree of cyclical convergence between participating countries is not established once for and all, but is shaped by the evolving macroeconomic and structural setup. Due to Member States' different starting positions when the single currency was introduced, in particular in relation to industrial and financial structures, cyclical positions and scope for catch-up growth, cyclical and inflation convergence was expected to emerge only in the medium to long run.

Graph I.14: **Inflation dispersion in the euro area**
(percentage points)



*Unweighted.
Source: Commission services.

It is worth stressing that although EMU can be seen as an overall source of cyclical convergence between Member States, a single currency may also contain some sources of cyclical divergence which require careful monitoring. First, the inception of EMU may in itself have constituted an asymmetric shock in some Member States, due either to an initial exchange rate misalignment in the convergence of national currencies to the euro or to a sharp drop in interest rates during the nominal convergence process in the run-up to Stage Three of EMU, or to both factors. Second, with a single monetary policy, differences in countries' inflation rates translate into differences in real interest rates that may exacerbate cyclical fluctuations and divergences. Because of the existence of a number of adjustment mechanisms, amongst which competitiveness effects are prevalent, such sources of divergence can only be temporary. Nevertheless, due to prevailing price and wage rigidities, adjustment can be slow and involve some costly over- or undershooting. On the other hand, it should be borne in mind that, in a currency union, ex ante real interest rates are arguably more relevant for economic decisions than ex post real national interest rates. The former tend to be more closely aligned across countries, since longer-term inflation expectations do not differ substantially across countries. Measures of ex post real interest rates may contain only limited information about the true financing conditions in a country which forms part of a monetary union. Secondly, the consequences of different ex post real interest rates within a monetary union are likely to depend on the factors causing differences in inflation developments (e.g. indirect taxes, energy prices, wages, profits, etc.).

In assessing this issue below, consideration is given to three factors:

- inflation rates and their convergence across Member States;
- the convergence of economic cycles across Member States;
- policy convergence, and whether governments and economic agents have responded to the new macroeconomic policy framework of EMU.

[27] To some extent, this problem became visible when some Member States introduced different forms of subsidies in response to oil price hikes in autumn 2000, which distorted competition on the single market. Learning from this experience, avoidance of regional spill-over became an important policy co-ordination issue at the EU level in the wake of the 9/11 terrorist attacks and around the conflict in Iraq.

Box I.3: **Shocks and adjustment**

Prior to EMU, discussions among economists about the feasibility of a monetary union were predominantly based on the concept of an optimum currency area (OCA), which looks at whether it is appropriate for two or more economies to have a fixed or flexible exchange rate regime. Two of the central concerns of OCA theory are, firstly, the extent to which groups of countries within a currency union, or considering forming one, tend to experience common shocks, and, secondly, the adjustment mechanisms that are available to such countries once the option of changing the nominal exchange rate has been lost. These concerns are, in turn, related to a third issue in OCA theory, namely, the correlation of business cycles, since differential shocks can contribute to a lack of synchronicity and may require a different macroeconomic policy response across countries. This box reviews the main arguments put forward in the economic literature.

The nature of shocks. In the economic literature, a broad classification of shocks has emerged along the following lines:

• demand shocks versus supply shocks;

• symmetric shocks versus asymmetric shocks;

• temporary shocks versus permanent shocks; and

• policy-induced shocks versus exogenous shocks.

Demand shocks move output and inflation in the same direction and should not ordinarily imply any policy dilemmas as far as stabilisation is concerned. Buti and Sapir (2002) nevertheless do not dismiss the likelihood that demand shocks can be problematic in the early years of EMU, given the fact that the ECB still needs to establish its anti-inflation track record and given the lack of room for manoeuvre on the fiscal side. Supply shocks imply a trade-off between inflation and output stabilisation, and are therefore potentially more problematic. In addition, as Buti and Sapir (2002) point out, supply shocks are more likely to lead to policy conflicts between the ECB and multiple fiscal authorities acting non-cooperatively. Bayoumi and Eichengreen (1993) found that both demand and supply shocks were more closely correlated across US regions than across European countries. However, they also distinguished between 'core' countries (such as Germany, France, Belgium and the Netherlands) and more 'peripheral' European countries (such as Italy and the UK). Supply shocks, in particular, tended to be smaller and more correlated across neighbouring countries in the EMU core, while peripheral countries tend to experience larger shocks. They concluded from this that participation in EMU may be more costly for some countries than for others.

Both the traditional OCA literature and *One Market, One Money* (European Commission, 1990) consider that *asymmetric shocks* are more problematic for countries sharing a common currency than *symmetric shocks*, since there is no longer the possibility of changing the nominal exchange rate. EMU's capacity to cope with asymmetric shocks has been the subject of some debate. In the presence of nominal rigidities in wage and price-setting, changing the nominal exchange rate may provide a useful means of adjusting the real exchange rate in response to a shock. Driver and Wren-Lewis (1999), however, challenge the idea that, with relatively little nominal inertia in wage-setting in Europe, the costs associated with asymmetric shocks in EMU will be small. Instead, they argue that the combination of nominal inertia in price-setting with real-wage rigidity in EMU could make the adjustment to asymmetric shocks particularly costly. More recently there has been increased emphasis on the fact that even common shocks may have asymmetric effects. This has led to an increased emphasis on different transmission channels, and on asymmetric effects, situations or behaviour as opposed to asymmetric shocks as such. Mundell (2002) has suggested that "all shocks are asymmetric in that they affect countries differently". Similarly, Buti and Sapir (2002) argue that even truly symmetric shocks can be problematic if they give rise to uncoordinated responses, strategic behaviour or free-riding. They consider that, in the early years of EMU, both symmetric and asymmetric shocks are potentially problematic, since adjustment mechanisms are not yet fully mature. Furthermore, they emphasise that self-reinforcing divergence between high-growth and low-growth economies (asymmetric situations) may be as important as asymmetric shocks. In support of this point, they note that an interest rate set for the euro area as a whole would have been too low for Germany in the first half of the 1990s and too high after 1997, which suggests that Germany experienced different real exchange rate dynamics than the rest of the euro area following the reunification shock.

Hughes Hallett (2002) reports modelling results which suggest that asymmetric transmissions are potentially very important in EMU and may cause more damage than asymmetric shocks. He found that the main asymmetries were caused by differing income elasticities of the demand for money, and by differing asset effects on consumption and aggregate expenditures. Nominal rigidities (wage contracting) did not matter too much if they were broadly similar, but could have serious adverse implications if their incidence varied widely across countries. Structural rigidities, such as in the Philips Curve, were also found to be important, but asymmetric transmissions only affected short-run variations around the long-run Philips Curve. Buti and Sapir (2002) point out that EMU has been subject to three truly symmetric shocks in its initial years: the Asian crisis of 1998-99, the oil price hike in 2000, and the global slowdown of 2001 onwards. The oil price hike was a supply shock, while the other two were demand shocks. They note that the Asian crisis did not trigger a general move towards expansionary fiscal policies. As a result, the ECB was able to ease monetary policy so as to support growth without compromising price stability. While the Asian crisis can be characterised as a symmetric shock, there is evidence that it gave rise to asymmetric reactions in different European countries due to their different export specialisations. Italy, for example, had an export structure that was more comparable to that of East Asian countries, and, therefore, may have been more severely affected by East Asian devaluations (European Commission, 1999).

Whereas cyclical stabilisation, including the possibility of changing the nominal exchange rate, may be the appropriate policy response to *temporary shocks*, stabilisation policy may not be called for in response to *permanent shocks*, where structural adjustment is more likely to be required. While some degree of stabilisation may be helpful in the transitory phase after a permanent shock, Buti and Sapir (2002) point out that there is a risk that 'too much' stabilisation may hamper structural change. Automatic stabilisers, by preventing output from moving to its new potential level, may be destabilising in the case of a

permanent (supply) shock. Traditionally, it has been thought that temporary shocks are more likely to be problematic for currency unions (Cohen and Wyplosz, 1989). For example, a temporary, asymmetric shock may create an incentive for one country to run a current account deficit, which may not be in the interests of another country. However, this may not necessarily be true of the early years of EMU, when countries differ in both their stabilisation and adjustment capacities.

It is also traditional to expect that EMU will make *policy-induced shocks* less prevalent (European Commission, 1990). However, as Buti and Sapir (2002) note, the very act of forming a monetary union is itself a policy-induced shock. They consider that, for Germany, the changeover from the Bundesbank to the ECB translated into a shock because of a mismatch between the common monetary stance and Germany's stabilisation needs. Similarly, they argue that 'peripheral' countries underwent an 'EMU shock' due to the significant reductions in interest rates they experienced when the ECB assumed responsibility for the common monetary policy. Buti and Sapir (2002) also argue that smaller euro-area countries, especially those that are 'catching up', are more vulnerable to exogenous shocks at the start of EMU, since they tend to be more industrially-specialised and also have little influence on the euro-area-wide situation.

Adjustment to shocks. Following Buti and Sapir (2002), it can be argued that EMU is in a transitional phase in which countries within the euro area have given up the possibility of using the nominal exchange rate as an intra-area shock absorber, but in which the capacity of the system to respond to shocks and the adjustment mechanisms are not yet fully mature. However, although some countries are still in a weak position to deal with shocks, the core EMU economies (those of the former Deutschemark zone) can benefit from their high correlation with the euro-area average, which will tend to reduce the likelihood that the common monetary stance will be inappropriate.

This still leaves the issue of whether the loss of the nominal exchange rate at the country level represents a genuine cost for euro-area members. While some studies suggest that the exchange rate has a useful role to play, there is also a recognition that the exchange-rate instrument has its limitations. These may be summarised as follows:

- nominal exchange rate flexibility does not provide adjustment to imbalances caused by long-term real rigidities in the economy;
- over the short and medium term the exchange rate may fail to play a stabilising role, and may even be a source of shocks to the economy; and
- whilst there may indeed be costs associated with fixing the nominal exchange rate, *One Market, One Money* made the point that these costs may have already been borne before the launch of EMU by core EMU countries (those countries which were original members of the EMS, or whose currencies had been closely linked with the Deutschmark for some years before EMU began).

The idea that adjusting the nominal exchange rate is not really a solution to long-term real rigidities should come as no surprise. It is fully consistent with the earlier finding that exchange rate adjustment may be an appropriate policy response to a temporary shock, but is unlikely to be appropriate in the case of permanent shocks. Indeed, the option of adjusting the nominal exchange rate may be welfare-reducing if it encourages countries to delay needed structural reforms. Thus, Buiter (2000) argues that nominal exchange rate changes cannot be expected to address underlying structural problems such as excessive non-wage labour costs, rigid industrial structures or weak corporate governance.

Secondly, the usefulness of the exchange rate instrument derives from the assumption that nominal exchange rate changes can usefully translate into real exchange rate changes. For this assumption to hold there must be some degree of nominal rigidity in price and wage-setting. Furthermore, the size of the economy and its exposure to international trade are also important, because exchange rate changes will alter the price of imported goods. Thus, the loss of the exchange rate instrument is less of a cost for small, open economies, since they have less scope to use the nominal exchange rate as a means of obtaining changes in the real exchange rate. In addition, the pressures that are causing the exchange rate to move are also important. If an economy is already operating at full capacity, domestic prices will tend to rise in response to a nominal devaluation, thus offsetting the impact of the devaluation on the real exchange rate.

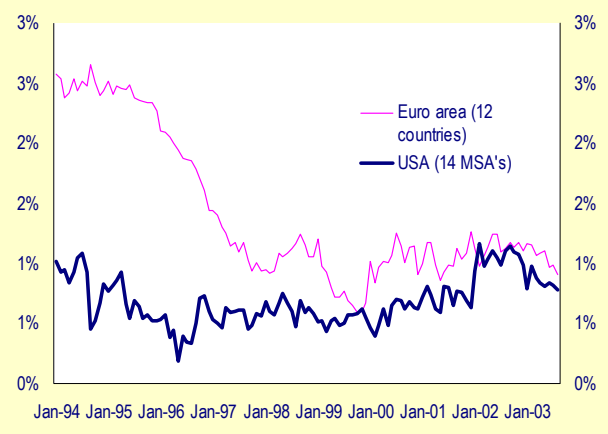
One Market, One Money concluded that nominal exchange rate changes may have an impact on real exchange rates over a period of two to five years, but that there is no long run impact. Changing the nominal exchange rate may allow a country to 'front-load' the real exchange rate adjustment needed when faced with a shock. This reduces the initial output loss, but while output fluctuations may be dampened, the variability of inflation may increase. Thus, the nominal exchange rate instrument is not a substitute for real wage adjustment. Delayed adjustment of real wages, coupled with higher inflation expectations that may be implied by the devaluation, can be detrimental to the economy. Over a longer period, nominal exchange rates tend at best to accommodate inflation differentials without having a lasting impact on real exchange rates. Taking long-run trends, *One Market, One Money* concluded that real exchange rates do not contribute much in sustaining growth differentials between European countries. Finally, as emphasised by Buiter (2000) and Layard *et. al.* (2002), there is a risk that, far from acting as a stabilising mechanism, the exchange rate may itself be a source of shocks to the economy. This is likely to be the case if exchange rate movements are driven by factors (e.g. asset market developments, geopolitical considerations) which are not ultimately related to product market developments.

One Market, One Money also concluded that the costs of fixing the exchange rate have already been borne by core EMU countries, for whom relative fixity of the nominal exchange rate with respect to the Deutschmark was achieved some time before the start of Stage Three of EMU. Moreover, it is still possible for a currency union to change its exchange rate with respect to third countries. Thus, the exchange rate instrument is not abandoned completely, only in respect to internal adjustment. Finally, as far as internal adjustment is concerned, real exchange rate changes can still take place within EMU through inflation differences. As Blanchard (2001) notes, inflation differentials are not necessarily problematic in a common currency area. Indeed, having higher inflation than the average may be the proper way for adjustment to take place. In his view, governments should not demonise inflation, since temporary inflation differentials can lead to higher real income and proper macroeconomic adjustment.

4.2 *Developments in nominal convergence*

The ECB has in broad terms managed to fulfil its main objective of price stability according to its own definition. While in aggregate, the inflation performance on the euro area has been reasonable, a key issue highlighted in the debate prior to the launch of EMU, concerned inflation developments at Member State level and whether convergence was likely in EMU, and indeed whether it is necessary to ensure its smooth functioning (see Box I.4).

Graph I.15: **Inflation dispersion in the euro area and the US**
(Unweighted standard deviations of annual percentage changes)



Source: BLS and Commission services calculations.

A remarkable degree of convergence in consumer price inflation among euro-area Member States took place over the 1990s.[28] The spread between the Member States with the highest and lowest headline inflation rates fell from close to 20 percentage points in the early 1990s to less than 2 percentage points in the period 1997-1999. The standard deviation of national inflation rates followed a similar path, falling from over 5 percentage points in the early 1990s to historical lows of less than one percentage point in 1999, the year the euro area came into being. In contrast, inflation dispersion increased in the euro area from 1999 to 2000. The absolute spread rose to above 4 percentage points in 2000 and during the following two years it oscillated around 3.5 percentage points (see Graph I.14). Since the beginning of 2003, it has narrowed again, to reach 2.3 percentage points in January 2004. Changes in the standard deviation have followed a similar path, increasing to above 1 percentage point in 2000 before falling again steadily in 2003.

It is difficult to assess to what extent the current degree of inflation differences in the euro area is natural for an economic and monetary union, but the data presented above suggest two observations. Firstly, whereas inflation differences within the euro area have increased somewhat since 1999, the current level of inflation dispersion is nonetheless low by historical standards. Secondly, since the beginning of 2003 a certain narrowing of inflation differences can be noted.

4.3 *Cyclical convergence in EMU*

Experiences in the early years of EMU

Against the backdrop of a rather high level of cyclical synchronisation between Member States, the first years of EMU have witnessed some signs of cyclical divergence. The dispersion of Member States' output gaps, which captures the extent to which Member States are at a different stage of the business cycle at any point in time, suggests a phase of substantial cyclical divergence in the euro area in the late 1990s followed by renewed convergence in the 2001-03 downturn. Nevertheless, the two phases largely reflect the overheating and the subsequent cooling off of the Irish and Luxembourg economies. Excluding these two countries, the divergence and convergence phases appear much more muted, with an overall level of dispersion of output gaps that remains quite low by historical standards. Hence, although several smaller countries such as the Netherlands, Finland and Portugal have experienced stronger cyclical swings than the euro-area average since the late 1990s, the resulting cyclical divergence for the euro area as a whole has been temporary and relatively low.

[28] The USA has been frequently used in empirical studies as a benchmark against which the degree of price differences in the euro area can be assessed. CPI data are not available at the state level in the USA and studies usually rely on data for "Metropolitan Statistical Areas" (MSAs). Data for the 14 MSAs for which CPI statistics are available shows that inflation dispersion in the US, as measured by the unweighted standard deviation, has been fairly stable and mostly below 1 percentage point since 1994. It also shows that the high degree of inflation convergence achieved by Member States in the run-up to Stage Three of EMU has brought inflation dispersion in the euro-area to a similar level to that prevailing in the USA. In turn, this might indicate that a natural level of differences in inflation has been reached in the euro area.

Box I.4: **Sources of inflation differences in EMU and policy implications**

Inflation differences between Member States can be explained by a number of factors which can be grouped into five broad categories.[29]

Price shocks. The euro area has experienced several price shocks in the past years, including large swings in oil prices, surges in some food prices and large fluctuations in the external value of the euro. Due to differences in Member States' consumption patterns and in their exposure to extra-euro-area trade, these price shocks may have led to temporary divergence in inflation rates.

Cyclical differences. Despite a broad trend towards increased cyclical synchronisation in the euro area, some cyclical differences between Member States persist. In general, a more advanced position in the cycle tends to be accompanied by higher inflation rates.

The Balassa-Samuelson effect. The Balassa-Samuelson effect states that differences in productivity gains between the tradable and the non-tradable sectors can be an important source of inflation pressures. This effect is generally used to explain the tendency of low-income countries to display higher inflation rates than high income countries. It can also explain stronger inflation pressures in high-income countries when technological change or structural reforms bring on a widening of the productivity gap between tradables and non-tradables. It is worth stressing that inflation differentials due to this effect take place entirely in the non-tradable sector and do not affect competitiveness.

Structural adjustment. Inflation differences can be the result of economic adjustment processes to inappropriate competitive positions within the euro area. With locked nominal exchange rates, changes in real exchange rates can only be achieved via changes in prices. In EMU, changes in competitive positions are one of the key adjustment mechanisms to cope with asymmetric shocks. For instance, differences in the pace of structural reforms or in the ageing of the population may call for real exchange rate adjustments. Other examples of potential sources of asymmetries include supply or demand shocks which affect some Member States and not others.

Policy-induced price changes. Decisions about indirect taxes and administrative prices are taken at the level of the Member States and can affect measured HICP inflation significantly. Also, differences in the pace of deregulation of national telecommunication or energy markets could explain some of the inflation differences registered in the euro area in recent years.

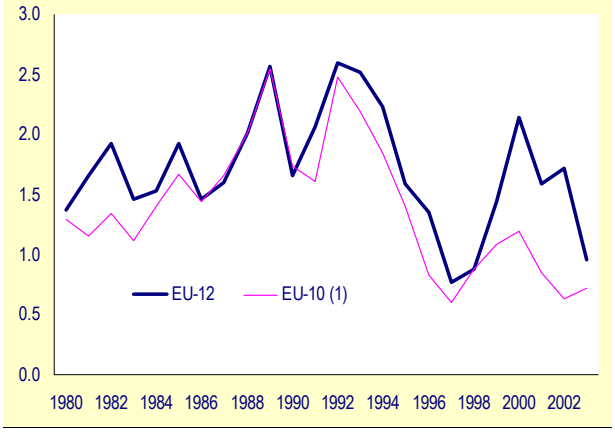
Looking into developments in inflation differences in the first years of EMU, the relative importance of these factors is difficult to disentangle. The high level of dispersion of inflation rates in the non-core components of inflation (unprocessed food and energy) suggests that temporary price shocks have been an important source of inflation differentials in the euro-area in the past few years. There is also some empirical evidence that the degree to which a common exchange rate movement is transmitted to domestic prices can vary significantly across Member States.

Since 1999, some Member States have registered persistent inflation differentials in the main sectors that constitute core inflation. Among those core inflation sectors dispersion was largest in services, which lends support to the relevance of the Balassa-Samuelson effect as a source of inflation dispersion in the euro area. However, observed inflation differences appear to be larger than suggested by studies on the Balassa-Samuelson effect. Differences in cyclical positions also appear to have played an important role. As already mentioned, cyclical differences may have been accentuated by the asymmetric shocks in terms of interest rates or exchange rates resulting from the inception of EMU.

Overall, inflation diversity as such is not necessarily a matter of concern. An optimal currency area is characterised not so much by complete convergence as by the capacity to deal with adjustment needs. Inflation differences are part of the economic adjustment mechanism in EMU. However, the existence of persistent differentials relative to the euro-area average in some Member States could indicate that structural rigidities are impeding a smoother adjustment. From a policy perspective, the fact that the single monetary policy cannot address country-specific inflation differentials also underscores the importance of continuing with structural reforms. Structural reforms that raise growth potential and safeguard long-tem competitiveness at the national level will also increase the flexibility of national economies and ease the adjustment process to common or country-specific shocks, thereby reducing the scope for protracted inflation differentials. However, it should also be recognised that in the short-term, differences in the speed of implementation of structural reforms may temporarily accentuate inflation dispersion among Member States.

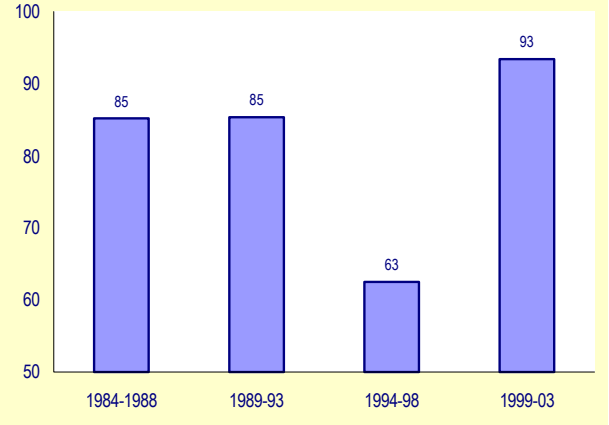
[29] See also European Central Bank (2003a) and Honohan and Lane (2003).

Graph I.16: **Cyclical convergence in the euro area** (standard deviation of trend output gaps)



(1) Excluding LU + IE
Source: Commission services.

Graph I.17: **Cyclical convergence in the euro area** (average correlation of Member States' business cycles (2) with the euro cycle – in %)



(1) Cycles are extracted from quarterly GDP data with a Baxter-King filter. Owing to data unavailability , EL, LU, IE and PT are excluded.
Source: Commission services.

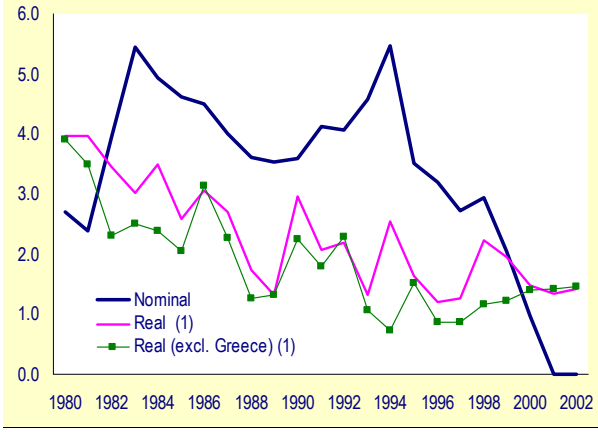
A similar, positive conclusion can be drawn from the analysis of an alternative measure of cyclical convergence, namely the correlation of Member States' business cycles. This captures the extent to which national cycles are moving in tandem. Looking at the average correlation of individual country cycles with the euro-area cycle for selected periods, euro-area Member States have displayed quite a high degree of cyclical co-movement since the launch of EMU, with a slight increase in cyclical convergence relative to the 1980s and a much sharper increase relative to the first half of the 1990s. Some prudence is warranted when interpreting these results in terms of the link between EMU and cyclical convergence. For data-availability reasons, the analysis is restricted to 8 Member States and several countries with potentially diverging cycles are missing. Furthermore, cyclical synchronisation has tended to be high since the late 1990s between all European countries, whether they belong to EMU or not. This reflects several factors, including increased trade and financial integration as well the occurrence of common shocks. Nevertheless, the available evidence is in line with a positive impact of EMU on cyclical convergence, at least when excluding some smaller Member States.

Determinants of cyclical convergence

Among the forces that contributed to strengthening the synchronisation between euro-area Member States' business cycles and inflation performance, convergence in macroeconomic policies and product and financial market integration feature prominently.

As regards macroeconomic policies, the macroeconomic stability culture of the EMU framework has probably been an important source of cyclical convergence in the euro area compared with the 1980s and early 1990s when there was a tendency to run pro-cyclical policies. The single monetary policy has brought about a fair degree of convergence in real interest rates. Reflecting a moderate pick-up in inflation differences between Member States, a moderate upward drift in the dispersion of real interest rates is noticeable since the launch of EMU, but the overall level of dispersion has remained low by historical standards in the past years. Furthermore, there is some evidence that EMU has been conducive to a more homogeneous transmission of monetary policy across Member States.[30] By the same token, a trend towards increased convergence in fiscal policies can be observed between the late 1980s and the late 1990s. The dispersion of fiscal policies increased again in 2001-2002 but has remained low by historical standards.

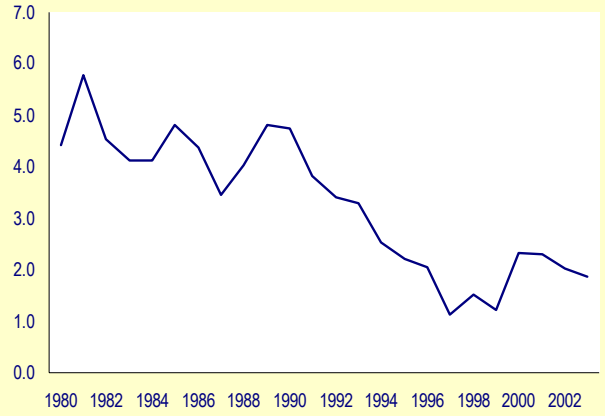
Graph I.18: **Convergence in short-term interest rates, euro area** (standard deviation of Members States' interest rates in %)



(1) Based on GDP deflator.
Source: Commission services.

[30] See Angeloni and Ehrmann (2003a).

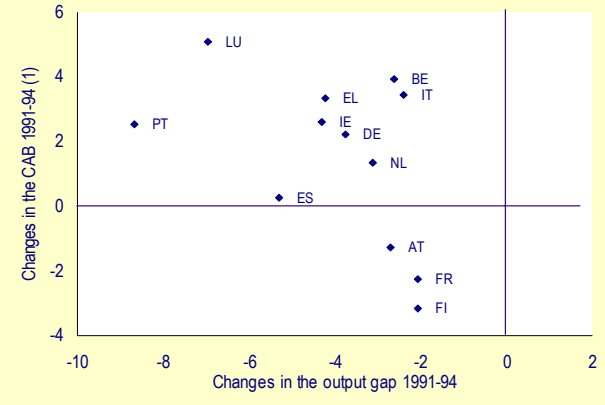
Graph I.19: **Convergence in fiscal policy, euro area**
(standard deviation of Members States' cyclically adjusted government balances in %)



Source: Commission services.

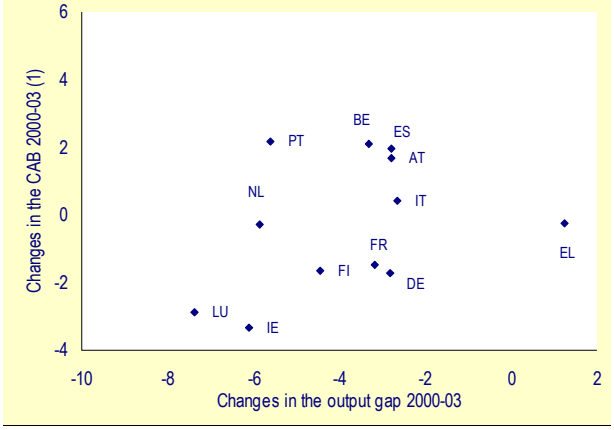
It is difficult to determine to what extent convergence in macroeconomic policies is a source or a mere reflection of increased cyclical synchronisation. In the case of budgetary policies, there is some evidence that the co-ordination set-up of EMU has helped contain the pro-cyclical tendencies of the past. This change has brought more coherence in Member States' responses to the latest cyclical downturn. Most Member States ran a pro-cyclical fiscal tightening during 1992-94 period. The three countries which managed to loosen their fiscal stance in the early 1990s were also those which enjoyed a comparatively modest cyclical downswing. These differences in budgetary policies have exacerbated cyclical differences between Member States. In contrast, a majority of Member States (7 out of 12) were able to run counter-cyclical fiscal policies in the 2001-03 downturn. In the Member States running pro-cyclical policies, the fiscal tightening was clearly more muted than in 1992-94.

Graph I.20: **Fiscal policy in the 1992-94 downturn, euro area**
(in % of GDP)



(1) Changes in the cyclically adjusted balance. A negative sign indicates a fiscal loosening.
Source: Commission services.

Graph I.21: **Fiscal policy in the 2001-03 downturn, euro area**
(in % of GDP)



(1) Changes in the cyclically adjusted balance. A negative sign indicates a fiscal loosening.
Source: Commission services.

A crucial feature of EMU is that it represents a fundamental change in the policy regime that is likely to affect both the way economic agents react and the structure of the economy. In particular, enhanced market integration, via increased trade and foreign direct investment, featured prominently among the expected benefits of EMU when it was launched. There is now increasing evidence that these expectations are being fulfilled.

Firstly, there is now evidence that the single currency has fostered intra-euro-area trade. In theory, the impact of trade integration on cyclical convergence is ambiguous. On the one hand, increased bilateral trade flows facilitate the transmission of economic fluctuations from one country to another. On the other hand, trade integration can fuel industrial specialisation and therefore raise the probability of asymmetric shocks. In practice, the empirical literature has generally identified trade integration as an important source of business cycle synchronisation, suggesting that the specialisation effect is small.[31]

Secondly, the advent of the common currency has stimulated the integration of financial markets in the euro area. Although globalisation has generally entailed closer integration of Western financial markets in the past decade, there has been a distinct and additional impact of the euro on financial integration within EMU countries. For instance, government bond prices have become nearly perfectly correlated in the euro area. There is also evidence of faster integration of stock markets in the euro area than elsewhere.[32] To the extent that it encourages the cross-border diversification of portfolios and closer co-movements of the prices of financial assets, financial integration facilitates the international synchronisation of wealth effects and

31 See, for instance, Frankel and Rose (1998).
32 Brooks and Del Negro (2002).

private consumption. Closer co-movements of asset prices also stimulate convergence in capital costs and investment. Finally, financial integration also facilitates cross-border merger and acquisition activity and thereby cross-border corporate linkages. In recent years, large flows of foreign direct investment between euro-area Member States have exemplified this intensification of corporate linkages.

In addition to the trade and financial market channels described above, the cross-border transmission of economic fluctuations may also take the form of confidence contagion. Co-movements in confidence across borders may reflect cyclical linkages via trade or financial channels. However, it may also be argued that, in a world of imperfect information, imitation behaviour may play an important role. In this context, confidence spillovers may form a transmission channel of their own. From an empirical perspective, such a transmission channel is difficult to disentangle from trade and financial linkages.

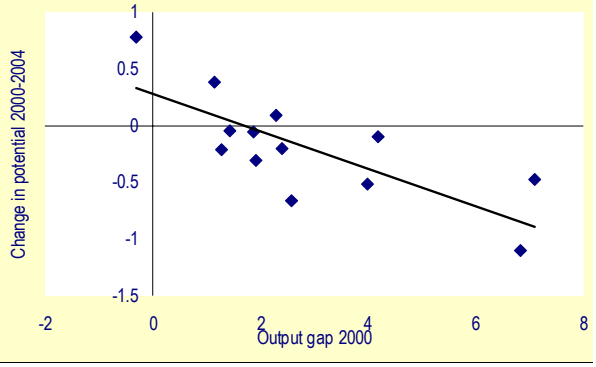
Adjustment to changing cyclical conditions

The outcome of progressive cyclical convergence contrasts with many expectations held prior to EMU according to which cyclical differences would widen in EMU. The reason was seen in remaining structural differences that would imply differences in responses to economic shocks across Member States and the virtual absence of efficient cross-country adjustment mechanisms. The observed external shocks undoubtedly had an asymmetric impact as Member States differed in energy-intensity, size of the ICT sector and trade-openness. Nevertheless, cyclical differences are much less a topic of debate after 5 years of EMU than they were in 2000/2001, when overheating in some Member States and its possible consequences were considered more a cause of a concern than nowadays.[33]

The more benign view on growth differences is to some extent motivated by the observation that Member States with higher positive output gaps at the cyclical peak in 2000 recorded a stronger decline in the output gap in 2000 to 2004 (see Graph I.22). This holds in particular for Ireland and Luxembourg, whose special position in growth convergence has already been highlighted above. But also Netherlands, Portugal and Finland, where signs of overheating had been discussed, experienced a stronger deterioration in the output gap than those Member States close to the euro-area average. Spain, on the other hand, despite above average inflation witnessed neither a large output gap in 2000 nor a marked drop of it since then.

The relatively close relationship between the size of the cyclical peak and subsequent change in the output gap suggests that internal adjustment mechanisms within Member States worked effectively, even in the absence of monetary policy and nominal exchange rate changes. It appears that the reasons for high growth in the late 1990s are very similar to the reasons for the slowdown since 2000.

Graph I.22: **Cyclical peak and subsequent change in the output gap, euro-area Member States**
(% and %-pt of potential GDP)



Source: Commission services.

For instance, all the countries in which signs of overheating emerged are small open economies. They were disproportionately affected by the slump in world trade. Growth in Ireland and Finland, in particular, was high in the late 1990s also because of the strong world demand for ICT capital. Part of the normalisation in their output gap is certainly attributable to the correction of activity in the ICT sector.

Evidence of the extent to which cross-country adjustment mechanisms within the euro area contributed to increased cyclical synchronisation is still scarce. Countries with high growth and wage inflation saw a deterioration in external price competitiveness. This channel appeared to have been at work in the Netherlands, Luxembourg and to some extent in Finland, and, in reverse, in Germany. In Portugal and Ireland, domestic demand also had an important role in the adjustment process, suggesting that the external price competitiveness channel is not the only factor at work. In Portugal, fiscal consolidation may have had a contractive impact on domestic demand in 2001-03, bringing the country's cycle more in line with the euro-area aggregate. Ireland witnessed a considerable slump in equipment investment, which is likely to have been related to the end of the ICT boom. Other factors, such as the positive feed-back mechanism of higher inflation on real-interest rates and hence on asset prices and investment, seem not to have hampered adjustment.[34]

Finally, it is worth stressing that, with the notable exception of Finland, all countries which were posting large positive output gaps at the peak of the cycle in 2000 have also experienced a substantial deceleration of trend growth in the last years. This suggests that

[33] See European Commission (2001a) Chapter 1, and Hoeller *et al*. (2002).

[34] For an elaboration of the interplay of different adjustment channels in EMU, see Deroose *et al.* (2004).

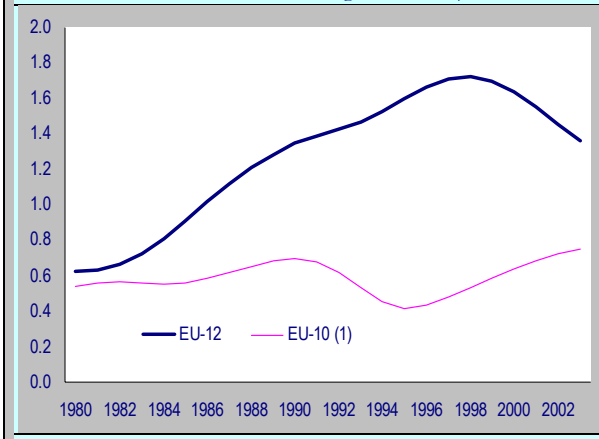
adjustment to periods of overheating in the euro area tends to be slow and to affect medium to long-term growth. It might therefore be an indication that cyclical divergence in an economic and monetary union can be costly.

Box I.5: **Developments in long-term growth convergence**

The positive conclusion on the degree of cyclical convergence may differ from an analysis of convergence of GDP growth rates. Indeed, Member States seem to be endowed with different rates of potential growth, stemming for instance from differences in their scope to benefit from catch-up growth or in labour force growth. This box briefly elaborates on convergence/divergence in long-term growth.

The picture is heavily influenced by Ireland and Luxembourg. After nearly two decades of steady increase, the average dispersion of Member States' trend growth rates in the euro area began to ebb in the late 1990s. However, this convergence trend was the result of a downward shift in the growth patterns of Luxembourg and Ireland. Excluding these two countries, a movement of divergence is noticeable after the mid-1990s. Against the background of slowing trend growth in the euro area as a whole, some countries such as Greece, Finland, Spain and, to a lesser degree, France have managed to maintain or even lift their long-term growth performance. In contrast, a few other countries such as the Netherlands, Portugal and Germany have registered a significant slowdown in trend growth. Rising differences in Member States long-term growth performances are only weakly related to demographic developments; rather they are mostly rooted in diverging productivity performances.

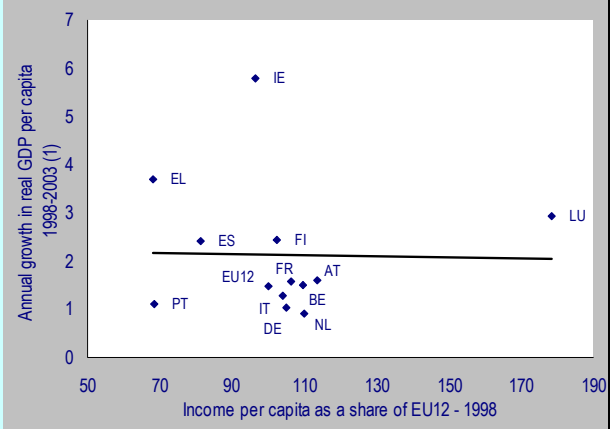
Graph I.23: **Real convergence in the euro area (**standard deviation of trend growth in %)



(2) Excluding LU + IE.

Source: Commission services.

Graph I.24: **Growth and catching up in the euro area** (in %)



Source: Commission services.

In themselves, differences in long-term growth may not be a source of concern if they reflect the catching-up of low-income countries. In that case, divergence in growth rates is accompanied with convergence in income levels and increased cohesion. Unfortunately, this catching-up process, although noticeable, has remained slow in the recent past, except for the cases of Ireland and, to a lesser degree, Greece. Growth in real GDP per capita between 1998 and 2003 is only very weakly related to Member States' positions in terms of income levels. Among the four countries which posted below euro-area average-income levels in the late 1990s (Ireland, Greece, Spain and Portugal), only three have experienced above euro-area growth in terms of GDP per capita since the beginning of Stage 3 of EMU (Ireland, Greece, and Spain) and catching up has been substantial only in the first two of these.

Part II

THE MACROECONOMIC POLICY FRAMEWORK

Summary

EMU was expected to contribute to macroeconomic stability in Europe by creating a sound macroeconomic policy framework. Monetary policy was to be centrally determined by an independent central bank with an overriding commitment to price stability. The absence of such a commitment in several European countries in previous decades was seen by many as a contributory factor to their disappointing economic performance, and a consensus had emerged that the monetary authorities could best contribute to high and sustainable levels of growth over the medium term by guaranteeing price stability. While responsibility for fiscal policy in EMU, on the other hand, was to remain decentralised under Member State control, it was agreed that some coordination was needed to ensure that countries achieved and sustained sound public finance positions. Unsustainable budgetary positions in a Member State were seen as a threat to overall monetary stability, as ultimately they could lead to either default or debt monetisation. There was also a recognition that fiscal policy in EMU had an important role to play in supporting a stability-oriented monetary policy, and that there was a need to create room to allow the automatic fiscal stabilisers to operate fully and cushion the effects of cyclical developments given the loss of the monetary and exchange rate instruments. These considerations led to Treaty requirements on Member States to keep deficit and debt levels below agreed reference values of 3% and 60% of GDP, respectively. In 1997 this was supplemented by the Stability and Growth Pact (SGP) which called on countries to achieve budget positions of 'close to balance or in surplus' and reinforced multilateral surveillance and enforcement mechanisms. In addition to monetary and fiscal policy, sound wage developments were also seen as necessary to create a culture of macroeconomic stability, since it was thought that greater wage flexibility was needed to support price stability and to help economies to respond to changing economic circumstances.

*In looking at the first of these three broad areas, **monetary policy**, two main considerations arise.*

- *The first consideration is whether the ECB rose to the challenge of defining and implementing an effective monetary policy for the euro area as a whole.*

  A favourable verdict seems justified, as the ECB developed a monetary policy strategy reflecting the experiences of the most successful central banks in Europe and incorporating the latest economic thinking. There are two main elements in the ECB's strategy: the definition of price stability and an analysis of the risks to price stability based on both economic and monetary factors.

  The definition of price stability favoured by the ECB has also been the subject of debate, with some commentators calling for a more precise definition, and perhaps the adoption of a point inflation target. At least as far as the first few years of EMU are concerned, there may have been some uncertainty concerning the precise range and mid-point of the inflation rate that the ECB was targeting. In practice, however, the lack of precision in the definition does not appear to have adversely affected inflation expectations, which have been more or less stable and very close to the ECB's definition of price stability over most of the past five years. In addition, while there are certainly good arguments in favour of a point inflation target, none of the central banks of the world's three largest currency areas has adopted one. Furthermore, following the review of its strategy, the ECB has now clarified that, within its definition of price stability, it aims to keep inflation rates in the euro area "below but close to 2%" over the medium term. It should also be noted that the definition of price stability followed on from, and is fully consistent with, definitions adopted by national central banks in the euro area prior to Stage Three of EMU.

  The ECB was criticised in some quarters for assigning too much importance to the evolution of its monetary growth variable, M3. Without denying the long-run relationship between monetary growth and inflation, many economists argued that over the medium-term – the time horizon that is relevant for monetary policy decision-making – information obtained from monetary aggregates was not particularly relevant for understanding developments in inflation and the real economy. In practice, however, the ECB's record reveals that it was able to implement significant cuts in interest rates even when M3 was growing in excess of its reference value. In any event, following the recent review of its strategy, the ECB has now clarified the role of monetary analysis in its overall assessment of economic developments: it serves as a means for cross-checking the conclusions drawn from developments in other economic variables, but from a longer-term perspective.

- *The second consideration is whether the primary objective of price stability, as set out in the Treaty, was successfully achieved, and what the implications for the economy of the ECB's pursuit of this objective were.*

As regards price stability, it is true that inflation has been above the ECB's definition of price stability for much of the past five years. Since the ECB's primary objective is to maintain price stability, does this mean that it has failed? Although some critics have indeed drawn this conclusion, this higher inflation was mainly the result of a series of one-off adverse price shocks that affected the euro area in its first few years. In principle, monetary policy should not respond to such shocks unless there is a risk of second-round effects. As has already been pointed out, however, inflation expectations remained broadly stable and very close to the ECB's definition of price stability. While it is disappointing that inflation remained stubbornly high over much of the first five years of EMU, it is difficult to argue that this was due to inappropriate monetary policy. Rather, the stubbornness of inflation could signal the fact that there are still rigidities in product and labour markets that need to be tackled. Accelerating the progress of structural reform will certainly make the ECB's job easier in this respect.

However, comparing the inflation record of the ECB with the situation in the late 1980s and early 1990s, i.e. before the run-up to EMU, there is no doubt that the euro has contributed to a more stable macroeconomic environment in Europe. Some commentators have criticised the ECB for not cutting interest rates more aggressively in response to the slowdown in the global economy that set in from 2001 onwards. The policy actions of the ECB in this respect were often compared to those of the Federal Reserve, which cut its own interest rates earlier and by more than did the ECB. But this ignores the fact that the euro area was not growing as fast as the US economy before the slowdown, and that the US downturn was much steeper. Some observers did feel that the ECB displayed excessive caution in the face of rapidly changing economic circumstances. Others pointed to the fact that the ECB has a good track record in terms of price stability, and that some degree of caution may be warranted in a more uncertain environment. Furthermore, the low and stable level of long-term inflation expectations, which has helped to maintain low levels of interest rates across the yield curve, reflects well on the ECB's credibility.

Overall and despite some teething problems associated with the communication of its strategy, the ECB, through its strong commitment to price stability, has helped to create the kind of stable macroeconomic environment which was seen by the designers of EMU as an essential precondition for an improved economic performance over the longer term.

As regards the assessment of ***fiscal policies****, expectations at the start of EMU about budgetary prospects were mixed. Some commentators pointed to the risk of a loosening of fiscal policies, partly on the grounds of fiscal 'adjustment fatigue', but also due to the perceived weakening of incentives to run sound policies (as the carrot of euro-area membership would no longer exist and interest-rate crowding-out effects would be diluted). More generally, there were concerns related to the fact that most Member States joined EMU with deficit levels close to the 3%-of-GDP reference value and/or with debt levels above 60% of GDP – indeed in some cases over 100% of GDP. It was argued that this could lead to a deflationary bias, given the need to achieve further budgetary consolidation at the same time that the newly created ECB was seeking to establish its credibility. It was also widely considered that there would be a pro-cyclical bias during the transition period prior to countries reaching budget positions of 'close to balance or in surplus' as there might be insufficient room for the automatic stabilisers to operate fully without breaching the 3%-of-GDP reference value during periods of slow growth.*

There are three main questions that arise in the assessment of fiscal policy:

- *Firstly, did Member States meet the agreed budgetary targets for deficits and debt set down in the Treaty and the SGP, thus ensuring that public finances are put on a more sustainable footing and support the single monetary policy?*

The underlying budget balance in 2003 for the euro area was -2.2%, very similar to the -2.3% in 1998 before the start of EMU. While several euro area countries, mostly small Member States, did achieve budget positions of 'close to balance or in surplus' by 2003, overall deficit levels, both in nominal and cyclically-adjusted terms, have risen since 2000, and in 2003 nominal deficits were above the 3% of GDP reference value in four euro-area countries (Germany, France, Greece and the Netherlands). It is striking that the three largest euro-area countries have all failed to respect their budgetary commitments. Although much of the deterioration in nominal budget balances in recent years is due to slow growth, it is also in part due to discretionary policy measures such as unfunded tax cuts and expenditure overruns. In most cases, the budgetary problems facing Member

States today can be traced back to the failure to run sound fiscal policies in the early years of EMU when growth conditions were favourable, and deficit levels are not especially high at this juncture of the economic cycle. While disappointing, the problems associated with Member States running deficit levels above the agreed reference values should not necessarily be interpreted as signalling a return to the profligate fiscal policies of previous decades, nor do they constitute an imminent threat to the sustainability of public finances. Nonetheless, the failure to improve underlying budget deficits over the past five years means that the euro area continues to grapple with the same budgetary challenge they faced at the outset of EMU, namely allowing the full operation of automatic stabilisers during economic downturns while respecting EU budgetary requirements. The situation also indicates that past weaknesses in the fiscal policy behaviour of several Member States are still prevalent: instead of taking the opportunity in periods of strong growth to pursue reform and budgetary consolidation, these countries continue to take corrective actions only when circumstances force them to do so against a background of poor economic growth.

- *Secondly, did the framework provide a useful basis for addressing fiscal policy challenges as they emerged?*

In answering this, the framework for budgetary surveillance needs to be considered in a dynamic context: did it facilitate continuous improvements in budgetary surveillance and in the analytical basis for the conduct of decentralised fiscal policies? In addition, did the framework facilitate constructive dialogue and consensus-building on complex and challenging fiscal policy issues in EMU? Again, the assessment is mixed. On the positive side, some progress has been made in strengthening the analytical basis for measuring the impact of the economic cycle on budgetary developments. A useful debate has also taken place on the merits and feasibility of automatic stabilisers versus discretionary fiscal policies for cyclical stabilisation purposes. Additionally, the budgetary framework has helped shift attention towards the long-term sustainability of public finances and the challenge posed by population ageing. Despite these important developments, some shortcomings are evident in translating this progress into the policy-setting arena. At times, the policies of some Member States have not been fully consistent with the medium-term framework for the conduct of fiscal policy in EMU. Furthermore, the debate on the implementation of the framework has perhaps overly focused on relatively minor changes in nominal deficits, and this may have detracted attention from the underlying causes of budgetary imbalances and from other substantive economic policy challenges. Lastly, the discussion on the implementation of the SGP has proved divisive, with damaging repercussions for the institutional set-up of EMU as a whole.

- *Thirdly, were the peer pressure and enforcement mechanisms effective in ensuring that Member States undertook the necessary corrective measures to meet their budgetary commitments?*

Overall, the institutional arrangements have been found wanting in this regard. The decision of the ECOFIN Council in November 2003 not to endorse a Recommendation of the Commission against Germany and France in the context of the Excessive Deficit Procedure (EDP) has called into question the viability of the existing rules-based framework. However, a more nuanced assessment would involve examining whether the framework for budgetary surveillance led to countries addressing the underlying causes behind deteriorating budgetary situations sooner than they otherwise would have. This reveals that peer pressure may have helped several smaller euro area countries tackle growing budgetary imbalances. However, in large countries especially, peer pressure and enforcement mechanisms have proved less effective. This is matter of considerable concern. Notwithstanding the arguments above that current deficits do not pose an imminent threat to the sustainability of public finances, this risk could easily materialise unless countries achieve significant improvements in underlying budget positions over the coming years. Moreover, it raises doubts about whether the budgetary framework can in fact ensure its primary objective, i.e. avoiding unsustainable public finance positions which impose negative spillovers on participating countries.

Overall, the assessment of fiscal policy in EMU is mixed. The rise in deficit levels in recent years is disappointing and falls well short of the goal of achieving balanced budget positions over the economic cycle, although this is largely due to the failure to pursue budgetary consolidation in the early years of EMU. Re-establishing a consensus on the EU fiscal framework is a matter of priority. The debate needs to consider why large countries, in particular, have failed to meet their budgetary commitments, and how to establish positive incentives to pursue budgetary consolidation, especially when growth conditions are favourable, and to regard sound fiscal policies as a common good. While such incentives were clearly present in the run-up to EMU, they may have been diluted somewhat by the launch of the euro.

*Finally, in relation to the assessment of **wage developments**, Europe was thought to suffer from a high degree of wage rigidity and slow adjustment to shocks which could seriously impair the efficient working of EMU. The expectation was that greater wage flexibility was needed to support price stability and to help economies respond to changing cyclical conditions while avoiding real exchange rate misalignments.*

However, there is evidence that the persistence of wage inflation is not necessarily higher in the euro area than in the US. Taken at face value, this implies that the stickier inflation developments in the euro area in recent years cannot be ascribed to a higher degree of nominal wage rigidities. Nominal inertia is found to be broadly similar across different euro-area countries, as well as between the euro area and the US, making it difficult to point to institutional labour market characteristics as the major determinants of nominal rigidities.

The observed stability in overall wage developments at the euro-area level masks different nominal unit labour cost developments across countries. Over the past five years, Germany and Austria have significantly improved their relative position in the euro area, as did Greece during the run-up period to its entry into EMU. In Spain, Ireland, Italy, and particularly in the Netherlands and Portugal, on the other hand, nominal unit labour costs increased considerably faster than in the euro area as a whole. While the resulting realignment of intra-area labour cost competitiveness may reflect equilibrating market forces in most cases, in some others, such as in Portugal, corrections may not necessarily occur until competitive pressures have built up over some time, making the inevitable adjustment more painful when it does come.

The evolution of wage bargaining systems in the early years of EMU has been characterised, on the one hand, by a continued trend of de-unionisation and the decentralisation of wage bargaining, and, on the other hand, by a renaissance of social pacts, although these are mostly informal and possibly unsustainable, since experience suggests that a number of other conditions also have to be met to uphold these kinds of bargaining arrangements. Whilst the debate has emphasised the relationship between tax cuts and wage restraint, measures to increase the availability of labour and some degree of in-built flexibility in wage differentiation appear to be crucial as well.

In the early years of EMU, common macroeconomic shocks and country-specific developments have subjected the flexibility of wage-setting mechanisms in the euro area to a stress test. But overall wage discipline appears to have been preserved, and concerns that inflationary shocks would lead to extended second-round wage effects have thus far proved unfounded. However, nominal wage growth has been quite invariant to the cycle, and the slowdown in labour productivity growth has translated into higher nominal unit labour costs. Thus, wage flexibility appears to have provided little support for a recovery from the current cyclical downturn. Rather, wage rigidities could be considered as having hampered the smooth adjustment to the macroeconomic shocks that have hit the euro area in recent years.

Overall, the macroeconomic policy framework can be said to have contributed to the achievement of macroeconomic stability in the euro area, as the designers of EMU had envisioned. Nevertheless, it is likely to evolve further over time. An improved framework for economic policy coordination coupled with greater wage flexibility is necessary to ensure that the euro area can cope with the challenges that lie ahead.

1. Monetary policy

1.1 The monetary policy framework in EMU

The single monetary policy under the aegis of an independent central bank constitutes one of the key defining characteristics of EMU. The centralised nature of monetary policy in EMU is often contrasted with the decentralised way in which fiscal and structural policies are conducted. In order to assess the monetary policy framework in EMU it is helpful to begin by briefly describing its key elements and underlying rationale. The key elements can be summarised as follows:

- The central bank has an overriding commitment to price stability;
- It enjoys a high degree of independence;
- Under the EMU policy assignment, monetary policy should deal with common shocks, while other policies (primarily fiscal and structural policies) are left to deal with disturbances at a national level. It follows that monetary policy takes an *area-wide* rather than a national perspective;
- Monetary policy *decision-making* is centralised. The body collectively responsible for monetary policy decisions is the ECB Governing Council, consisting of the six-member Executive Board and the governors of the national central banks (NCBs) of those Member States which have adopted the euro (sitting in a personal capacity). Monetary policy *operations* are, in practice, mostly carried out in a decentralised manner by the NCBs, on the instructions of the Executive Board.

The design of the monetary policy framework in EMU reflects the dominance of what some commentators have called the *German model* of central banking, in which price stability is the central bank's primary objective.[1] This is often contrasted with what is sometimes called the *Anglo-French model*, in which the central bank can pursue multiple objectives without necessarily privileging price stability.[2] The more recent debate about central-banking models has seen attention focus on inflation-targeting regimes. At the time that the Maastricht Treaty was being drafted, however, this model did not enjoy the prominence that it does today (in any event, there are a number of similarities between inflation-targeting and the German model).

The emphasis on price stability has both theoretical and practical underpinnings. From a theoretical point of view, inflation is widely accepted as leading to a variety of welfare-reducing distortions. While low inflation is by no means the only objective of macroeconomic policy, a growing literature has emphasised that the monetary authorities can best contribute to achieving high and sustainable levels of growth over the longer term by guaranteeing price stability. From a practical perspective, the relatively favourable inflation record of the Bundesbank was contrasted with that of other central banks which did not have as strong a commitment to price stability, or did not enjoy the same degree of independence. Underlying the choice of model is, of course, a wider debate about what monetary policy can and cannot do. It is beyond the scope of the present study to examine the analytical foundations of the particular model that was chosen. Nevertheless, from a practical point of view, the international experience in the post-war period does not provide strong support for using monetary policy to achieve short-term output stabilisation. In many countries, the end result of such policies was merely higher inflation.[3]

Many commentators saw distinct differences between the monetary policy frameworks before and after the start of Stage Three. Dornbusch *et al.* (1998) contrast the situation under the EMS – when Germany set its own monetary policy on the basis of German conditions and "the rest [of Europe] tagged along as well as they could"[4] – with policy-setting under EMU, involving joint decision-making in relation to European-wide averages. To illustrate this, they show how monetary policy would respond differently to the same shock before and after the start of Stage Three. The shock that is used is a German fiscal expansion, which raises demand in Germany. Under the EMS, the Bundesbank would raise interest rates, having in mind only the domestic objective of maintaining output stabilisation. The rise in French interest rates needed to maintain the exchange-rate peg to the Deutschmark would imply a fall in output in that country. Under EMU, on the other hand, the ECB would raise interest rates by less than the Bundesbank would have done, since the ECB would internalise the cost of higher interest rates on French output. Consequently, German output would remain above its equilibrium level after the expansionary shock, but French output would fall by less than in the EMS regime. The authors drew two specific lessons from this example. Firstly, that the ECB would need to be aware of the characteristics of the transmission mechanism in different euro-area countries. The

[1] It "was clear from the start that the union's central bank would be like the Bundesbank, with a strong commitment to price stability" (Buti and Sapir, 2002, p. 3).

[2] See De Grauwe (2000a).

[3] See Issing *et al.* (2001) for a discussion. For a critique of this point of view see, for example, Tobin (1998).

[4] Dornbusch *et al.* (1998), p. 52. The implications for Germany of the change in the monetary policy regime from the move to EMU are also explored in Buti and Sapir (2002).

evidence from large, country-specific econometric models seemed to indicate that differences in monetary transmission across European countries were significant (although the findings from studies based on small models called this into question). Secondly, the distribution of output losses across the euro area would depend on the origin of shocks, the relative weights of national economies and the extent to which interest rate changes affect output.

At the start of Stage Three, the newly created ECB faced a number of challenges:

- *to establish its credibility* – the new central bank would have to quickly establish its anti-inflation credibility but do so without pursuing a monetary policy that was overly restrictive.[5] In the literature on EMU, this challenge was considered to be extremely important. Buti and Sapir (2002) argue that EMU cannot be considered to have reached its 'steady state' until the authorities (monetary and fiscal) have built up a high degree of policy credibility.
- *to pursue a European agenda* – in the view of Dornbusch *et al.* this would entail shifting the discussion from national to European averages and working credibly with the latter. At the start of Stage Three, some commentators were concerned that monetary policy decision-making would still be dominated by the concerns of large countries. This raises the issue of whether the institutional set-up for monetary policy was appropriate.
- *to cope with technical challenges* – in view of perceived differences in monetary transmission across countries, as well as possible differences in the way economic agents would react to the new regime, some commentators believed that the ECB would face considerable technical challenges at the start of Stage Three.[6] If, as a result of these and other difficulties, the euro-area money demand function was not stable, this would pose an enormous problem for the monetary authorities.[7] In addition, it was thought that there might be technical difficulties associated with the ECB's conduct of monetary policy through the new euro-area money market.[8]

[5] Begg *et al.* (2002a) argue that a young central bank eager to establish credibility might be reluctant to cut rates in circumstances where it would otherwise be appropriate to do so.

[6] Despite concerns about differences in monetary transmission between countries in EMU (Buti and Sapir, eds., 1998), a general conclusion from studies that have been conducted since EMU was launched is that it is difficult to find significant asymmetries between euro-area countries. See Suardi (2002) and Angeloni and Ehrmann (2003a, 2003b).

[7] See Bruggeman *et al.* (2003) for a recent discussion.

[8] This is discussed in Bartolini and Prati (2003).

1.2 A monetary policy strategy for an uncertain environment

1.2.1 The ECB's monetary policy strategy

In October 1998, the ECB Governing Council announced its monetary policy strategy, consisting of a definition of price stability coupled with an analysis of the risks to price stability – sometimes called the two-pillar approach (ECB, 1999a, 2000). This is a way of organising the information and analysis underlying monetary policy decision-making. As laid down by the ECB in October 1998, the first pillar accorded a prominent role to money (signalled by the reference value for M3 growth), whilst the second consisted of a wider analysis based on a broad range of economic and financial indicators. A key feature of the ECB's strategy is its medium-term focus.

When the ECB announced its strategy, it had not yet assumed responsibility for the conduct of euro-area monetary policy. Its choice of strategy appears to have been strongly motivated by the particular features of the euro-area economy at that time. The uncertainties that inevitably cloud monetary policy decision-making – uncertainties about economic relationships and even about the structure of the economy – were deemed to be especially relevant for the new and diverse economic entity that was the euro area. Gaspar *et al.* (2002) characterise the ECB's monetary policy strategy as an attempt to contain strategic uncertainty, i.e. the uncertainty stemming from the interdependence of forward-looking economic decisions taken by both the monetary authorities and economic agents. Gaspar (2003) expands on this to discuss several aspects of uncertainty and economic change associated with the launch of the euro and the creation of the ECB. To begin with, there is *data uncertainty*, which stems from the discontinuity in statistical time series implied by the creation of the euro area as a new entity (and also from the fact that the ECB did not benefit from as large a pool of statistical information as is available to the central banks of other industrialised countries. In addition, the creation of the euro has given rise to both *model uncertainty* and *parameter uncertainty*. These stem from the fact that the launch of the euro implied a regime change (in the sense of the Lucas Critique) as well as from the role of the euro as a catalyst for structural change. Finally, he emphasises the fact that the ECB, as a new institution, did not have a track record and thus had to build credibility. Credibility, by anchoring inflation expectations, helps to reduce uncertainty about future developments, and so contributes to re-balancing the economy.

Begg *et al.* (2002a) discuss several implications of uncertainty for monetary policy. They note the argument put forward by Brainard (1969) that, when there is less certainty about the structure of the economy, policy should optimally be more cautious

since its transmission mechanism is less certain. The relevance of this is that, whereas the ECB is still learning about the economic structure of the euro area economy, the Federal Reserve already has a good understanding of the US economy. This could give rise to the perception that the ECB is more cautious than the Federal Reserve. Begg *et al.* note, however, that when quantified in a theoretical model, the effects of differential uncertainty tend to be small. Furthermore, some types of uncertainty may make it optimal to act more aggressively. In any event, differential uncertainty is likely to diminish as the ECB's understanding of the euro area improves over time.

This background may help to explain why the ECB decided to adopt neither pure inflation-targeting nor pure monetary-aggregate targeting, but rather a strategy incorporating elements of both approaches. It may also explain the evolution of this strategy over time. Of particular importance, in this respect, is the review of the strategy announced by the ECB in December 2002 (European Central Bank, 2003h, 2003i, 2004a). As a result of the review, the Governing Council confirmed its quantitative definition of price stability and added a clarification that it would aim to keep inflation rates below, but close to, 2% over the medium term, thus recognising the need for the ECB to be seen to be providing a sufficient safety margin against deflationary risks. As for the analysis of the risks to price stability, the Governing Council emphasised that the monetary analysis would mainly be used as a means of cross-checking, from a medium- to long-term perspective, the short- to medium-term indications coming from the economic analysis. This provided confirmation – if such confirmation were needed – that the rate of growth of M3 was used as a *reference value* by the ECB and not as a target to be achieved in the short to medium term.

1.2.2 The ECB's definition of price stability

The Treaty (Article 105) specifies that the primary objective of the ECB is to maintain price stability. However, it does not specify a definition of price stability or a time horizon over which this objective should be attained. It may be noted that this situation has similarities with the position of other major central banks. For example, the objectives of the Federal Reserve – "maximum employment, stable prices, and moderate long-term interest rates" – are laid down in the Federal Reserve Act, but are not given precise content. In October 1998, the ECB proposed its own definition of price stability as "a year-on-year increase in the Harmonised Index of Consumer Prices (HICP) for the euro area of below 2%". It also specified that price stability is to be attained "over the medium term". The ECB's definition of price stability has been the subject of some debate. Svensson (2002a, 2002b) argues that the definition is both ambiguous and asymmetric, and therefore does not function particularly well as an anchor for inflation expectations. He regards the definition as *ambiguous* because it is imprecise about the lower bound of the inflation range; he argues that it is *asymmetric* because the upper and lower bounds are not defined with the same degree of precision. In his view, if uncertain measurement bias were the reason for the ambiguity, this should affect both the upper and lower bounds. Issing *et al.* (2001), on the other hand, argue that the definition is symmetric in that it excludes both inflation and deflation (the latter is excluded because the definition refers to an *increase* in prices). The measurement bias issue, meanwhile, continues to be debated. Cecchetti and Wynne (2003) suggest that measurement bias in the HICP may be in the order of 1%. This would, in their opinion, make a 2% inflation target too low. Issing *et al.* (2001), on the other hand, suggest that measurement bias is likely to be small.

Kieler (2003) reviews the main justifications given by the ECB for not adopting a more precise definition of price stability. Firstly, there is no agreement among economists about the optimal rate of inflation. Issing *et al.* (2001) note that there are arguments in favour of both a zero inflation target and a small, but positive figure for inflation. Secondly, given that inflation is imperfectly measured and that there are problems inherent in constructing price indices, a precise target for price stability may not, in practice, be attainable by the monetary authorities. Thirdly, a price-stability definition may not be flexible enough to incorporate all considerations, including those of a tactical or strategic nature, that the monetary authorities may wish to incorporate into policy decisions (e.g. the monetary authorities may wish to take measures to prevent the build-up of an asset-price bubble or to avoid financial crises). Finally, it is difficult to give a precise definition of the policy horizon over which price stability should hold. The return to price stability after a shock should be gradual and depend on the circumstances.

One of the key questions that arises from this debate is whether the ECB should opt for a point target for inflation. It should be noted that the ECB is by no means the only central bank to operate without a point target. The US Federal Reserve similarly has no precise definition of price stability. Indeed, Issing *et al.* (2001) argue that the famous definition proposed by Greenspan – *price levels sufficiently stable so that expectations of change do not become major factors in key economic decisions* – adequately conveys the anti-inflationary resolve of the Federal Reserve without the need to specify a figure.

Nevertheless, Kieler (2003) notes that proponents of the inflation-targeting approach to monetary policy have identified three potential costs associated with the lack of precision in the ECB's definition of price stability. These relate to policy-setting, communication and inflation expectations:

- *policy-setting* – does the lack of a point target in the ECB's definition of price stability imply that the definition has not functioned well as a guide for policy-setting? Kieler notes that, due to large and unforeseen shocks, actual inflation has exceeded the 2% ceiling almost continuously since mid-2000. In view of this, it is difficult to argue that the ECB has been overly aggressive in pursuing price stability. Indeed, it can be argued that allowing inflation to overshoot its target in the short run was the appropriate response to the series of one-off shocks. With respect to the ECB's uncertain lower bound and midpoint, Kieler also notes that the year-ahead consensus forecast for inflation on dates that the ECB cut rates varied in a narrow band from 1.6 to 1.8%. He concludes that the interest-rate cuts in early 1999 and in 2001-03 demonstrated that the ECB was concerned about not letting the economy languish with inflation in the lower half of the price-stability band, and that the ECB acted "much as one would have expected of an inflation-targeting central bank with a target of 1½ -1¾ percent". Allsopp and Artis (2003) also confirm that the ECB's actions have been "reasonably symmetric". This suggests that the ECB was not overly concerned with establishing its anti-inflationary credibility at the start of its mandate, as some had feared.

- *communication* – has the lack of precision in the ECB's definition of price stability hampered communication and the public's understanding of the ECB's policies? Research suggests that the ability of financial markets to predict ECB policy decisions is good, and broadly comparable to that of the Bank of England and the Federal Reserve.[9] Whilst Kieler notes that outside observers have experienced occasional difficulties in linking ECB policy decisions to the two-pillar monetary strategy, it is not obvious that this is due to weaknesses in the price-stability definition. It may instead be the result of unclear signals from the monetary pillar (see below), or the ECB's consensual approach to decision-making (i.e. the difficulties associated with interpreting the comments of different Board Members). Kieler also suggests that outside observers have had difficulties in knowing just how far below 2% medium-term inflation prospects would have to fall for rates to be cut, or how the emphasis might shift to output stabilisation when price stability was secured. However, it can be argued that the uncertainties associated with monetary policy decision-making apply regardless of the monetary policy strategy pursued. Inflation is not a perfectly controllable variable, and even small deviations from a point target may be interpreted as a policy failure, which could have a negative impact on the credibility of the monetary authorities. By not specifying a precise figure for its price-stability definition, the ECB avoids this sort of problem.

- *inflation expectations* – has the lack of a point target in the ECB's definition had a noticeable cost in terms of inflation expectations? Kieler reports evidence from the ECB Survey of Professional Forecasters that inflation expectations at the 5-year time horizon have remained stable at 1.8-1.9% since the inception of EMU. This is confirmed by information extrapolated from index-linked bonds. He concludes that "inflation expectations have been at least as stable and well anchored in the euro area as in other countries, including ones with point inflation targets."

Following the review of the ECB's monetary policy strategy that was concluded in 2003, the Governing Council confirmed the explicit quantitative decision announced in October 1998. However, it also issued a clarification that, in the pursuit of price stability, the ECB will aim to maintain inflation rates *below but close to 2%* over the medium term. This clarification, which was very much consistent with the public statements of senior ECB officials, was presented as emphasising the bank's recognition of the need for a sufficient safety margin against deflation as well as the implications of inflation differentials within the euro area. Whatever conclusions one draws from the debate about the adequacy of the ECB's price-stability definition in its first few years, the ECB has now indicated more precisely where, within its definition of price stability, it aims to keep inflation rates over the medium term. The ECB's definition is arguably more precise than those used by other major central banks, such as the US Federal Reserve and the Bank of Japan. Indeed, Cecchetti and O'Sullivan (2003) have called for the latter to follow the ECB's example and adopt a more precise price-stability definition.

Galí *et. al.* (2004) suggest that the revised monetary policy strategy of the ECB represents an exercise in gradualism. They argue that the ECB has made small but significant changes to its strategy that serve to bring its rhetoric more into line with its actual behaviour during its first five years. They regard the ECB as behaving as if its actual inflation target were in the range of 1 to 3%, in contrast to the common interpretation that the ECB targeted a 0 to 2% range. In other words, the ECB has been behaving as if it were trying to stabilise inflation around a 2% target, with an allowed margin for deviations (similar to that adopted by the Bank of England).

1.2.3 Analysis of the risks to price stability

The other major aspect of the ECB's monetary policy strategy that was the focus of public debate concerned its analysis of the risks to price stability (sometimes called the two-pillar framework), particularly the "prominent role" accorded to money under the first

[9] Pérez-Quirós and Sicilia (2002), Ross (2002).

pillar. Issing *et al.* (2001) review the theoretical evidence and conclude that the strong and robust long-term relationship between money and prices "cannot be ignored by a central bank that has price stability as its primary goal".[10] They acknowledge, however, that in the short term the link between money and prices can be influenced by a multiplicity of factors. This leads them to emphasise that the link between monetary developments and monetary policy decisions should not be automatic, and that all available information should be used to ascertain whether monetary developments entail risks to price stability.

Galí (2002) argues that the theoretical and empirical underpinnings of the monetary pillar are very weak. He also argues that the existence of a long-run relationship between nominal variables does not, in itself, provide a rationale for using one variable over another as a nominal anchor or paying special attention to one of them. Jaeger (2003b) suggests that most outside observers take the view that the role of monetary analysis in guiding policy has been opaque. He also argues that at times it has been difficult to square policy decisions with the way in which the ECB has communicated its strategy. Begg *et al.* (2002a) criticise the fact that the ECB has been "driven repeatedly to justify the role of its monetary pillar [which] detracts from the Bank's successes".[11] Of particular concern, not least from the point of view of communication, is that M3 growth has consistently exceeded its reference value of 4.5% annual growth. According to the ECB, this was partly due to the fact that non-resident holdings of liquid financial instruments were included in the measure of M3. However, revisions to the calculation of the M3 measure did not resolve the problem. For Begg *et al.* (2002a) the revised measure of M3 continues to have no bearing on ECB decision-making and is unhelpful as a predictor of future inflation. Galí *et al.* (2004), consider the monetary pillar to be merely a rhetorical means of borrowing the reputation of the Bundesbank as the guarantor of a stable European monetary policy. It should be noted that critics of the monetary pillar do not have to rely on denying the long-run relationship between money and prices. Instead, their argument is usually based on the reasoning that, *over the time horizon that is relevant for monetary policy decision-making*, this relationship does not provide useful information for policymakers. Perhaps the situation has not been helped by the fact that uncertainty increased over the past five years (e.g. after the September 11th terrorist attacks, and in the run-up to the war in Iraq), and this increased preferences for liquid assets, especially in the context of lower interest rates.

The general consensus seems to be that the ECB encountered communications difficulties as a result of the uncertain role that the first pillar played in monetary policy decision-making in its early years. Begg *et al.* (2002a) go as far as to describe it as a "communications catastrophe", whilst Jaeger (2003b) suggest that the two-pillar strategy has proved a "taxing framework for communicating policy decisions."[12] Nevertheless, the clarification of the role of the monetary pillar following the ECB's review of its strategy goes a long way to satisfying the ECB's critics. The monetary pillar is now used as a means of cross-checking, from a medium- to long-run perspective, the indications derived from the second pillar, which relate more to the short to medium run. In reality, the ECB's strategy has much in common with inflation targeting as practised by the central banks of some other industrialised countries, but also has certain unique characteristics. Uncertainties about the economic structure of the euro area are likely to be resolved only gradually, with enlargement possibly adding fresh uncertainties. This suggests that the ECB's monetary policy strategy is likely to evolve further over time.

1.3 The independence and accountability of the ECB

The relationship between central bank independence and inflation has been extensively explored from both a theoretical and empirical perspective.

Various authors have constructed measures of central bank independence and average inflation or measures of real economic performance. The general conclusion is that "central bank independence among the industrial countries is negatively correlated with average inflation; greater independence is associated with lower average inflation."[13]

In the theoretical literature, the starting point is the well-known Barro-Gordon model, which suggests that there is less risk of an inflationary bias in monetary policy under an independent central bank.[14] One interpretation of this is that the central bank's *objective function* differs from that of the government. For governments, the short-term political costs of output volatility may outweigh the long-term economic benefits from low and stable inflation. A central bank which is "conservative", on the other hand, would assign a greater weight to maintaining low and stable inflation, and will be less likely to give up price stability for the sake of temporarily buffering output shocks.[15] However, while this interpretation has theoretical appeal, it implies that independent central banks are associated with greater output variance, but the empirical evidence does not support this.

[10] Issing *et al.* (2001) p.79.
[11] Begg *et al.* (2002a), p. 18.
[12] Jäger (2003b), p. 24.
[13] Walsh (1998), p. 376.
[14] Barro and Gordon (1983b). See also Kydland and Prescott (1977).
[15] Rogoff (1985).

Alternatively, independence may enhance a central bank's *reputation* in a way that reduces inflationary bias, or may result in a *lower target* for inflation rather than a greater weight on inflation objectives, or may reduce *direct political pressures* on the central bank.

Debelle and Fischer (1994) distinguish between *instrument independence* (sometimes called operational independence) and *goal independence*. Instrument independence refers to the ability of the central bank to change its policy instruments without interference in the pursuit of its policy goals. Goal independence refers to the ability of the central bank to change its policy goals. It is sometimes asserted that some central banks (the ECB and the Federal Reserve) enjoy both instrument and goal independence, while others (the Bank of England, the Reserve Bank of New Zealand) enjoy only the former. In fact, this is something of an over-simplification. On the one hand, Treaty Article 108 (ex Article 107) clearly establishes the independence of the ECB from political interference. [16]

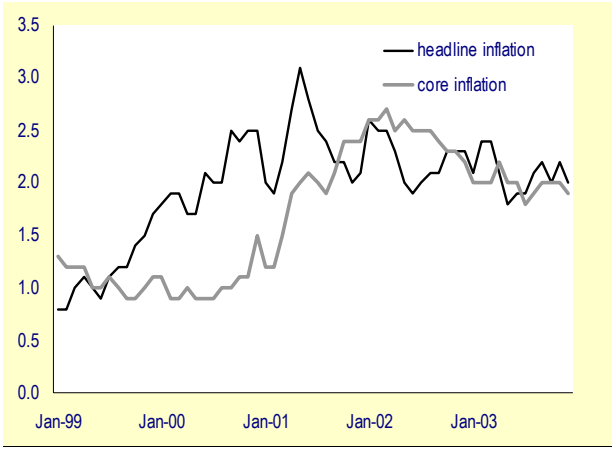
On the other hand, the ECB's policy objectives are established in Treaty Article 105. According to the Treaty, the primary objective of the ECB is "to maintain price stability". The ECB shall also, without prejudice to the objective of price stability, "support the general economic policies in the Community with a view to contributing to the achievement of the objectives of the Community". These objectives are laid down in Article 2, and include the maintenance of a high level of employment. From this, it should be clear that the ECB enjoys instrument independence, but does not enjoy full goal independence in the commonly understood sense of the term. The ECB has partial goal independence in the sense that it is in command of the definition of what is meant by price stability and the time horizon over which it should be achieved. But it is not fully goal independent, because it does not set the ultimate objectives of policy.[17] Debelle and Fischer report evidence that the presence of a formal price-stability objective (i.e. the lack of full goal independence) coupled with instrument independence is associated with low inflation outcomes.

It is widely accepted that the ECB is one of the most independent central banks in the world, but some commentators have questioned whether it is sufficiently accountable. In fact, however, Treaty Article 113 (ex Article 109b) establishes a high degree of accountability of the ECB to the other institutions, notably the European Parliament. The ECB is involved in a comprehensive dialogue with other bodies, not just the European Parliament. Although the ECB has chosen not to publish the meetings of its decision-making body, the extended statements and press conferences given by the ECB President in the immediate aftermath of Governing Council meetings allows the ECB to convey its message to markets, the media and the public in real time, as opposed to providing a justification of its decision several weeks after the event without any possibility of asking questions. The ECB also publishes its economic forecasts.

1.4 How successful has monetary policy been?

1.4.1 Price stability

Graph II.1: **Euro area - headline and core inflation (EUR-11 up to 31.12.2000/EUR-12 from 01.01.2001)**



Source New Cronos.

Headline HICP inflation has been above the ECB's definition of price stability for much of the past five years. From an annual average rate of barely 1% in early 1999, headline HICP inflation in the euro area accelerated to just over 3% in May 2001. Most of the increase was due to one-off effects, notably higher food prices resulting from bad weather, higher energy prices, the impact on imported inflation of the depreciation of the euro and increases in indirect taxes in some Member States. Headline HICP inflation was slow to recede from its high point in the spring of 2001. Since the summer of 2003, however, it has been fluctuating at around 2%. The trend in core HICP inflation (which excludes volatile unprocessed food and energy prices) has been somewhat different from that of headline inflation. Core inflation rose from around 1% in mid-2000 to a peak of 2.7% in the spring of 2002. From that point, it began a downward trend to around 2% in the spring of 2004. Thus, HICP inflation has been above the ECB's definition of price stability for much of the

[16] "When exercising the powers and carrying out the tasks and duties conferred upon them by this Treaty and the Statute of the ESCB, neither the ECB, nor a national central bank, nor any member of their decision-making bodies shall seek or take instructions from Community institutions or bodies, from any government of a Member State or from any other body. The Community institutions and bodies and the governments of the Member States undertake to respect this principle and not to seek to influence the members of the decision-making bodies of the ECB or of the national central banks in the performance of their tasks."

[17] See also Issing *et al.* (2001) p. 131.

period since the introduction of the euro. Nevertheless, as has been pointed out, this was mainly due to a series of one-off price shocks. It should also be stressed that there were no significant second-round effects on inflation from these price shocks.

The changeover to euro notes and coins (discussed in the Annex) gave rise to concerns among consumers about the impact on inflation. In 2002 consumers did experience significant price increases for some types of goods and services, such as some services and frequently purchased items. However, the changeover to the euro was not one of the main factors driving inflation in 2002. The average annual inflation rate in 2002 was 2.3%, but Eurostat (the Commission's statistical office) estimates that the changeover to the euro contributed only between 0.1% and 0.3%. Instead, the largest part of price increases in that year can be explained by normal inflation patterns and a combination of some non-euro factors, such as bad weather, rises in energy prices and some significant tax increases on tobacco. These factors provide a good basis for understanding the difference between *actual* and *perceived* inflation in 2002 (see Box II.1).

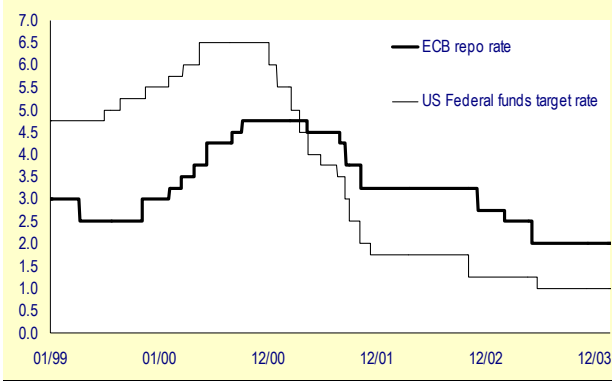
Overall, the euro area has benefited from a period of low inflation over the past several years, particularly when compared to the period preceding the run-up to EMU. When the Maastricht Treaty was ratified in 1991, the euro-area average inflation rate was around 4%.

Moreover, the monetary authorities have managed to successfully anchor inflationary expectations, as shown by data from index-linked bonds, which have been mostly below 2% since the launch of the euro. The fact that HICP inflation has been above the ECB's definition of price stability over much of the recent past mainly reflects the sequence of one-off price shocks mentioned earlier. Nevertheless, the persistence of inflation above the 2% ceiling over much of the past five years, and particularly in the context of a slowing economy, has been disappointing. Indeed, Galí *et al.* (2004) conclude from this that the ECB has failed in its stated objective, even if the failure has been a small one. However, an earlier assessment by Galí (2002) was more positive, praising the ECB for showing good judgement in most of its actions and noting that the factors which caused inflation to exceed its target were largely outside the ECB's control. There are two points which should be made here. The first is that inflation persistence may also suggest that, despite progress in structural reforms in recent years, structural rigidities are still important in Europe and can constrain policymakers' ability to deal with shocks. When comparing the ECB with the Federal Reserve, it is helpful to recall that the two institutions operate in somewhat different structural environments, especially as inflation has not exhibited the same degree of stickiness in the United States. The second relates to the implications of inflation persistence for the credibility of the monetary authorities. The ECB is a relatively young institution and, as such, may have felt the need to invest in its anti-inflation credibility during its early years. As discussed earlier, some authors have argued that this may generate a bias towards more restrictive policies (Begg *et al.*, 2002a). This will be examined below.

1.4.2 The monetary policy response to the slowdown

The main focus of debate concerning the ECB's conduct of monetary policy has been the appropriateness of policy interest rates following the slowdown that affected the global and European economies from 2001 onwards. Some market commentary has criticised the ECB for being too conservative in the face of the deteriorating growth outlook, and the contrast is often drawn with the more aggressive policy measures taken by the Federal Reserve. Between January 2001 and June 2003, the Federal Reserve reduced policy interest rates in thirteen steps and by a cumulative 550 basis points. The ECB, on the other hand, was more measured in its policy response. Over the same period, the ECB reduced rates in seven steps and by a cumulative 275 basis points. The key issue is whether the ECB was "behind the curve" in reacting to the slowdown, or whether its policy was justified by the different economic situation in the euro area.

Graph II.2: **Policy Interest Rates in the Euro Area and United States (%)**

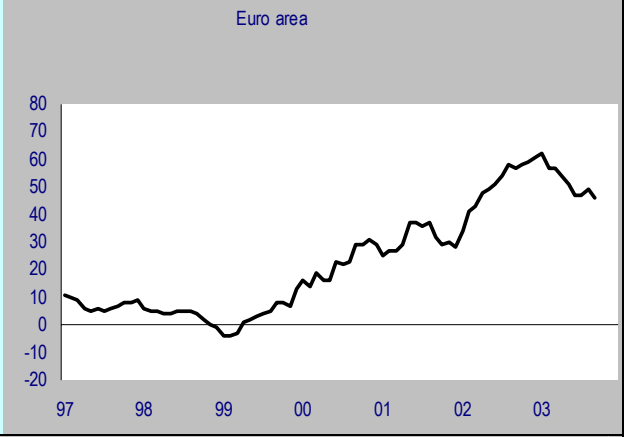


Source: Commission services.

Box II.1: **On the disconnect between perceived and actual inflation**

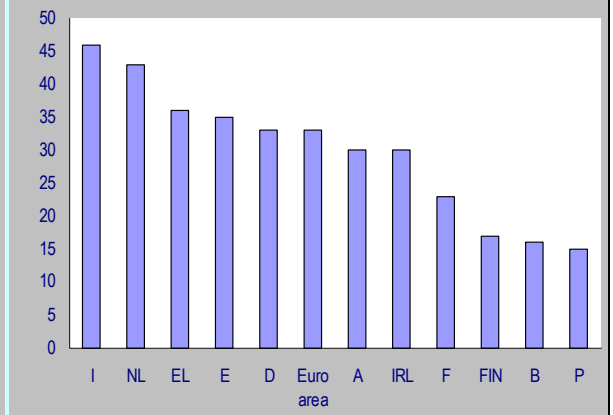
In June 2003, Eurostat published a final estimate of the impact of the euro cash changeover on euro-area HICP inflation. The estimate indicated a likely effect in the range of 0.1 to 0.3 percentage points, in other words a limited impact on the 2.3% annual average inflation observed in 2002. Yet, in many Member States the public perception has been one of much higher price increases, which on some occasions have led to protests by consumer associations and attempts by public authorities to address the issue.

Graph II.3: **Euro-area inflation perception (Consumer Survey Balances)**



Source: Commission services.

Graph II.4: **Changes in perceived and actual inflation across Member States - 2002**
(Change in the survey balance. December 2001 – December 2002)



Source: Commission services.

One way to gauge the public's perceptions on inflation is through the replies to the question that asks for an assessment of price developments over the last 12 months, published by the Commission services in the EU Harmonised Consumer Surveys. Prior to 2002, this indicator tracked actual inflation fairly well, but since the introduction of euro notes and coins the relationship appears to have broken down (Graph II.3). Perceived inflation, which is expressed as a balance statistic, rose to unprecedented levels, reaching a historical peak in January 2003, at 62. Perceived inflation reached a level half as high in the early 1990s, when inflation was around 5%. This suggests that consumers in the euro area perceived inflation in 2002 to be at least twice as high as measured inflation. [18]

The sharp increases in perceived inflation after the euro cash changeover in 2002 were a common feature in all Member States. As illustrated in Graph II.4, a striking result is that in a country such as Germany, where measured inflation was among the lowest in the euro area, perceived inflation was relatively high. Other countries that had relatively large increases in perceived inflation in 2002 were Spain, the Netherlands, Greece and Italy.

In 2003 perceived inflation fell in most Member States, but the decline was not as sharp as the increases observed in 2002. This implies that perceived inflation is still high by historical standards. The exceptions are Germany, where perceived inflation fell to a level comparable to that observed at the beginning of 2002, and, to a lesser extent, the Netherlands.

An explanation for the discrepancy between measured and perceived inflation is that consumers tend to form their perception about general inflation on the basis of price developments of frequently bought goods and services. In contrast, a comprehensive price measure such as a consumer price index attempts to measure price movements of all goods and services consumed by households. It so happened that precisely those goods and services consumed frequently registered unusually large price increases following the changeover (e.g. cafés and restaurants, repairs, haircuts, newspapers and periodicals, etc.). However, the prices of other goods and services consumed less frequently registered more subdued increases or, for goods such as computers or photographic and audio recording equipment, continued declining. Using an index of frequently purchased items, Eurostat found that higher-than-average price increases for such items may explain up to half of the drift between measured and perceived inflation.[1] The significant price increases in alcohol and tobacco in 2002 were also a contributory factor.

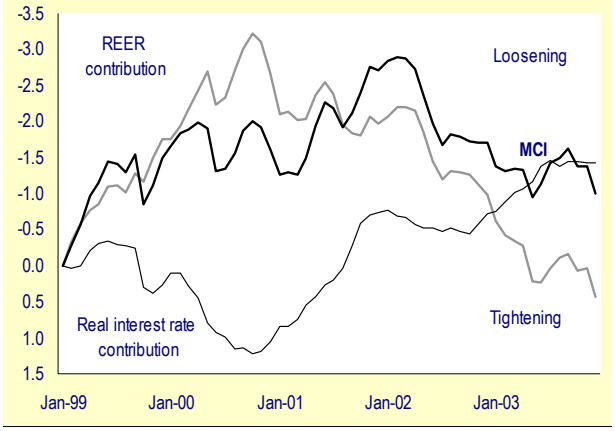
An additional element of the explanation is that for an important event such as the changeover, it is likely that consumers were more attentive than usual to price increases because of the particular attention focused on them by the media, which may have amplified their impact on perceived inflation.

[18] In its October 2003 Monthly Bulletin, the ECB used an index of "out-of-pocket" expenditures to show that the increase in inflation perceptions at the beginning of 2002 could be partly explained by large increases in such an index, though there were other explanatory factors.

In approaching this issue, it is possible to take either a wide or a narrow perspective. The former involves assuming that central banks can be considered to operate according to a given objective function, and then asking whether the ECB's objective function was, in some sense, "correct". This is the perspective taken by those commentators who criticise the ECB for placing too much emphasis on price stability to the detriment of other macroeconomic variables, such as output and employment, in setting monetary policy. However, since the Treaty specifies that the primary objective of the ECB is to maintain price stability, it may not be appropriate to think of the ECB as operating with an objective function in mind. This debate also touches on the issue of what monetary policy can and cannot do. It would be beyond the scope of the present study to go into this issue in great detail.[19] Nevertheless, the mandate of the Treaty that the ECB place primary emphasis on price stability is entirely consistent with macroeconomic theory, and has not been seriously challenged by other EMU policy actors. Whilst the Treaty does require the ECB to support the general economic policies of the Community (which include a high level of employment and balanced growth), it also makes it very clear that price stability is the ECB's *primary* objective. In clarifying its approach to monetary policy, the ECB takes the view that "a central bank which maintains price stability makes a substantial contribution to the achievement of broader economic goals, such as higher standards of living, high levels of economic activity and better employment prospects."[20] It underlines the importance of the price-stability objective by stressing that "only through [its pursuit] can monetary policy have positive effects on economic growth in the long run. It is the task of fiscal and structural policies – but also of those involved in the wage-bargaining process – to enhance the growth potential of the economy."[21] It is also important to bear in mind that the ECB adopts a medium-term orientation when implementing its Treaty mandate. This helps to avoid introducing excessive volatility in output and employment, while acting to maintain price stability.

This leaves the narrower perspective of evaluating the appropriateness of ECB policy decisions given that the objectives of the ECB are as stated (and not as some would want them to be). In their evaluation of how the ECB has reacted to the slowdown, Begg *et al.* (2002a) stress the consistency in the ECB interest-rate decisions with the evolution of the euro-area economy over the period 1999-2001.

Graph II.5: **Euro Area MCI**
Index Jan 1999=0 (inverted scale)



Source: Commission services.

They note that, if the Federal Reserve and the ECB followed similar policy rules, interest rate changes by the latter should normally lag corresponding changes by the former. This leads them to conclude that "the general timing of ECB interest rate changes seems appropriate: interest rates move in the euro zone after they have moved in the United States because the cycle in the euro zone lags that in the United States. The fact that the Fed changes first does not necessarily mean that the ECB is systematically slow in reacting to news."[22] They argue that, although the ECB was initially slow to react to deteriorating economic conditions by cutting rates in the first half of 2001, by October it had largely made up lost ground. They suggest that any temporary discrepancy may be explained by the ECB's desire to wait until HICP inflation had peaked and was seen to be falling before cutting rates. However, in Begg *et al.* (2002b), the same authors renew their criticism of the ECB for not cutting rates sooner in response to the slowdown. "Despite a worsening in the economic outlook", they note, "interest rates have not changed. There have been recent signals that a cut might come in the coming month [which it did], but even if it does it will be late relative to what economic conditions would have suggested."[23]

An analysis of the evolution of euro-area monetary conditions over this period may help to shed some light on this debate. There are, of course, many conceptual caveats to be borne in mind when interpreting indicators of monetary conditions (as well as Taylor Rules) (ECB, 2001b, 2002). Nevertheless, such indicators are commonly used in the debate, and it may therefore be helpful to discuss them. For a short period at the beginning of 2001 monetary conditions remained broadly unchanged. However, from the spring of that year until the spring of the following year, monetary conditions eased considerably. This was due, initially,

[19] See, however, Issing *et al.* (2001) for a discussion. For an opposing point of view, see De Grauwe (2003b) and Galí *et al.* (2004).
[20] European Central Bank (2001a), p. 38.
[21] European Central Bank (2001a), p. 41.
[22] Begg *et al.* (2002a), pp. 41-42.
[23] Begg *et al.* (2002b), p. 4.

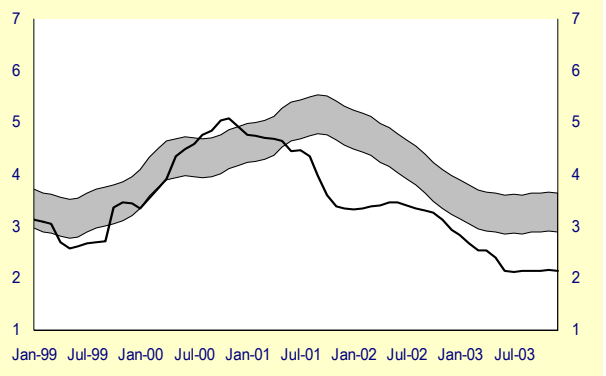
to a depreciation of the real effective exchange rate (REER), and, more importantly, to the evolution of real interest rates. The ECB maintained policy rates at 4.75% until May 2001, but euro-area inflation rose sharply in the first half of that year. HICP headline inflation rose from 2% in January 2001 to 3.1% in May, while core inflation rose from 1.2% to 2% over the same period. As a consequence, real interest rates declined despite nominal interest rates remaining on hold. This trend in lower real interest rates in 2001 was reinforced from May onwards, as the ECB cut nominal (policy) rates by a cumulative 150 basis points. Thus, there was a significant loosening in monetary conditions over the course of 2001, mainly due to lower real interest rates (but also to a somewhat weaker euro). As far as 2002 is concerned, monetary conditions did become tighter throughout the year due to an appreciating real exchange rate. This process continued into 2003, offsetting the impact of lower real interest rates. Does this necessarily mean that the ECB was wrong to delay cutting rates in 2002-03, given the information available to it at the time? It should be remembered that there was a widespread expectation that the euro-area economy would recover more rapidly than turned out to be the case. Furthermore, both headline and core inflation remained stubbornly above 2% for almost all of 2003, further justifying caution on the part of the monetary authorities. As Begg *et al.* (2002a) point out, a young central bank keen to invest in its inflation-fighting credibility would find it difficult to cut rates against such a background: "The ECB would have had plenty of critics if it had cut interest rates while inflation was over 3% and still rising".[24] Against this, it can be argued that when inflation is low, nominal rigidities may become more important, such that the rate of inflation becomes relatively unresponsive to the output gap and, therefore, less informative about the state of the real economy.[25] This, of course, raises the issue of what exactly is meant by "low", since inflation was stubbornly above the ECB's definition of price stability over much of this period.

An alternative means of assessing the stance of monetary policy in the euro area is to compare the evolution of actual short-term (three-month) interest rates with what would be implied by the Taylor Rule (assuming feedback parameters of 1.5 on inflation and 0.5 on the output gap). As with the construction of monetary conditions indices, the Taylor Rule approach to assessing monetary policy has its limitations. Nevertheless, it can be seen that, since January 2001, the actual evolution of short-term euro-area interest rates has been consistently below that which would be implied by the Taylor Rule. This does not lend support to the argument that the ECB has been too restrictive in setting monetary policy.

[24] Begg *et al.* (2002a), p.36.
[25] See Begg *et al.* (2002a) and Artis and Allsopp (2003).

Finally, in assessing the appropriateness of monetary policy in the euro area compared to the US, one may examine the evolution of the output gap in the two regions. This is obviously complicated by the fact that the output gap is not directly observed, and one must rely on estimates. In the case of the euro area, this situation is made even more difficult by the fact that there are significant differences between the estimates produced by the European Commission and the IMF (see Table II.1). Using the IMF estimates for both regions, the ECB appears to have done a better job than the Federal Reserve in maintaining output close to potential over most of the period since 2001. Turning to the Commission's estimates, these indicate that the euro area experienced a large positive output gap in 2000, comparable to that in the United States. It should be noted, of course, that the ECB's task is not to target the output gap as such, but rather to maintain price stability.

Graph II.6: **Euro area. Short-term interest rate**
Actual and implied by the Taylor Rule.
Taylor Rule based on median inflation, monthly figures



Source: Commission services.

Table II.1: **Estimates of output gaps in the euro area and the US (%)**

	Euro area		**United States**
	European Commission	IMF	IMF
1999	0.7	0.1	1.2
2000	2.0	1.2	1.8
2001	1.4	0.5	-1.0
2002	0.3	-0.7	-1.6
2003	-1.2	-2.2	-2.1

Source: Commission services, IMF

However, whilst the US shifted into negative territory in 2001 (according to the IMF), the evolution was much less dramatic in the euro area and a non-negligible positive output gap was still in place. Admittedly, the IMF figures for the euro area show a significant fall in the euro-area's (still positive) output gap between 2000 and 2001, but the deterioration was by no means as large as in the US, where a positive output gap of 1.8%

in 2000 turned into a negative output gap of 1% in 2001. This lends support to the view that it would have been appropriate for the ECB to be more cautious in cutting rates than the Federal Reserve, as the slowdown in Europe was not as severe as in the United States, at least initially.

1.4.3 The euro exchange rate

Gaspar and Issing (2002) note that, as far as monetary policy is concerned, the euro exchange rate is neither an intermediate target nor a policy objective, but that the ECB takes exchange rate developments into account when looking at the current economic situation and assessing prospects for the euro area. The exchange rate plays a potentially important role in monetary transmission, but the strength of exchange-rate effects depends on the degree of openness of the economy. At the time of the launch of the euro, there were those who believed that, given the relatively closed nature of the economy, the exchange rate of the euro would not play an important role in shaping monetary conditions and monetary policy decision-making. The synchronised slowdown experienced by the major industrialised economies after 2001, and the increased emphasis on financial interdependence, has, however, cast doubt on this simplistic closed-economy view of the euro area. Issing *et al.* (2001) show that "in spite of the relatively closed economy character of the euro area, the exchange rate has a non-negligible role in explaining developments in the HICP".[26] They report simulations which show that a temporary nominal depreciation in the euro in effective terms over two years increases inflation in the euro area by 0.3 percentage points in the first quarter after the shock, and then by approximately 0.6% in both the first and second years after the shock. More recent analysis suggests that these figures may overstate the responsiveness of output to exchange-rate changes (see Box II.2).

The euro underwent a strong depreciation against the dollar after its launch, which seemed to partly reflect the general strength of the dollar against the other major currencies from the mid-1990s onwards. It reached a low of $0.85 (monthly average) in June 2001. From the spring of 2002 onwards, however, the euro experienced a progressive appreciation which took the single currency to a level significantly above that of the day of its launch. In February 2004 the euro peaked at a level above $1.26, before falling back to around $1.20 in May. In real effective terms, the appreciation of the euro was less dramatic (see Table II.3).

Explaining movements in the euro exchange rate over the past five years in terms of economic fundamentals is by no means straightforward. Interest rate differentials are important because they drive portfolio flows in fixed income securities. Higher interest rates in the US than in the euro area were associated with a depreciation of the euro against the dollar in the early years of the euro. When the differential turned positive (in favour of the euro) in the course of 2001, the euro started to strengthen. The market perception also changed, with analysts initially blaming the weaker dollar on lower returns on dollar-denominated fixed-income securities, and that investors are increasingly seeking higher yields elsewhere (particularly in the context of increased concerns about the sustainability of the US current account deficit). For a period, markets also seemed to focus on the expected GDP growth differential between the US and the euro area. The higher cyclical position of the US was associated with higher returns on fixed-income securities and expectations of higher returns on equities. Moreover, upward revisions to the US economy's relative growth potential in the early years of the euro's life may have supported the expectation that future returns on US assets would outperform those of the euro area. However, while the correlation between the bilateral euro-dollar rate and the expected growth differential was significant for some sub-periods, the link between expected relative GDP growth rates and the USD-EUR exchange rate has more recently become less apparent.

The euro began appreciating against the dollar even while relative growth expectations continued to move in favour of the US.

[26] Issing *et al.* (2001), p. 63.

Box II.2: **The impact on inflation of exchange-rate changes**

The impact on inflation stemming from exchange rate changes can be derived from large-scale macro-econometric models. Table II.2 shows the results of a simulation using the Commission's QUEST model that illustrates the economic impact of a sharp correction in the value of the US dollar. It is assumed that initially higher productivity growth in the US economy leads to a shift in investors' preferences in favour of US financial assets. This leads to an appreciation of the dollar against the euro. However, after three years there is a sudden revision in investors' perceptions of the relative attractiveness of international assets and preferences move rapidly back to pre-shock levels. A sharp correction in the exchange rate follows and the euro appreciates by approximately 15%. [27]

The sudden appreciation of the euro brings about two offsetting effects on euro area inflation. On the one hand, import prices fall as the euro appreciates, which lowers inflation in the euro area (i.e. this is the direct, almost definitional impact of the exchange rate appreciation). On the other hand, the reversal of capital flows increases domestic demand and this creates additional domestic inflationary pressures, which partly offset the effects from the fall in import prices (this captures the indirect effects of the appreciation). The net effect on consumer prices is relatively muted, inflation is reduced by 0.1–0.2 percentage points compared to the baseline, while GDP growth is cut by 0.2–0.3 pp.

Table II.2: **Macroeconomic effects on the euro area of a sudden and strong euro appreciation against the US dollar**

	1	**2**	**3**	**4**	**5**	**6**	**7**	**12**
GDP growth (% points)	-0.10	-0.03	0.19	0.09	-0.24	0.01	0.01	0.01
Inflation (consumer price)	0.04	0.21	0.29	-0.13	-0.05	0.01	0.02	0.02
Euro-dollar exchange rate	5.51	13.23	18.68	4.15	1.75	0.32	-0.54	-1.52

Source: Commission services.

Two aspects of these results should be emphasised. Firstly, the limited impact on inflation in this scenario stems from the assumption that exchange rate developments are driven by capital flows, which in turn are determined by investors' preferences (in particular their perceptions of US productivity growth). If the source of the appreciation were different, for instance a monetary contraction due to a lower inflation target of the euro-area monetary authorities, then the impact on inflation would likely be much higher. Secondly, and importantly, while the scenario just described is similar to what has been observed recently between the dollar and the euro, in the absence of a full explanation of exchange rate movements, it is not possible to predict accurately what the macroeconomic consequences of a currency appreciation will be. These will depend on the underlying shock causing the exchange rate correction.

It is possible that the above results overestimate the impact of the appreciation, since the model assumes nearly complete pass-through. Other elements that have been stressed in the literature as possibly important determinants of the pass-through, such as the credibility of monetary policy and the degree of competition in the country of destination are not explicitly taken into account in the model. These considerations add some uncertainty to the impact on inflation suggested by the simulation. Accordingly, as usual, these simulation results should best be viewed as a basis for further assessment.

[27] The monetary policy assumption in this scenario is that central banks in all countries follow a Taylor-type rule by targeting expected future inflation and the output gap.

Table II.3. **Euro-area real effective exchange rate (+ = appreciation) to May 2004**

Deflator used	GDP at market prices	Nominal unit labour costs	Private consumption	Nominal unit wage costs in manufacturing	Exports of goods and services
Since Nov-03	1.2%	1.0%	1.1%	0.8%	1.0%
Since Jan-03	5.6%	5.8%	5.7%	7.4%	4.9%
Since Jan-02	17.3%	18.7%	17.0%	18.7%	16.1%
Since Jan-99	3.1%	2.0%	1.2%	2.1%	3.6%
Avg. 1980-03	6.6%	2.5%	6.6%	5.4%	12.1%

Source: Commission services

A commonly held view is that the perceived or actual productivity performance of the US in recent years may help to explain the evolution of capital inflows into the US, and, consequently, of the exchange rate of the dollar.[28] According to this view, a positive productivity shock will induce consumers to expect that their future income will be higher, and this will encourage them to borrow in order to smooth their consumption profiles between the present and the future. In addition, such a shock will induce investors to expect higher future profits, which will tend to raise equity prices and encourage investment. Domestic investors would want to take advantage of investment opportunities that would raise future output without foregoing current consumption. Foreign investors also observe this shock and are willing to take advantage of higher rates of return. This, together with the low level of private saving, implies that at least some part of the increase in investment demand in the US will be financed by capital inflows.

While the new economy paradigm, based on substantially higher increases in productivity, was high on the list of factors cited by market participants in the years that the stock market and the dollar exchange rate surged, expectations of permanently higher returns on investment have subsided over the last two and a half years. To the extent that the productivity increase was there, investors have realised that it may lead to higher wages rather than higher profits. Indeed, between 1996 and 2000, the growth of labour costs outpaced the growth of productivity and profit growth fell back. Productivity increases were also translated into lower prices for end-users, as illustrated by the continued fall in prices in the ICT sector. Irrespective of this, it is still unclear whether expectations of substantially and permanently higher productivity increases have been too optimistic.

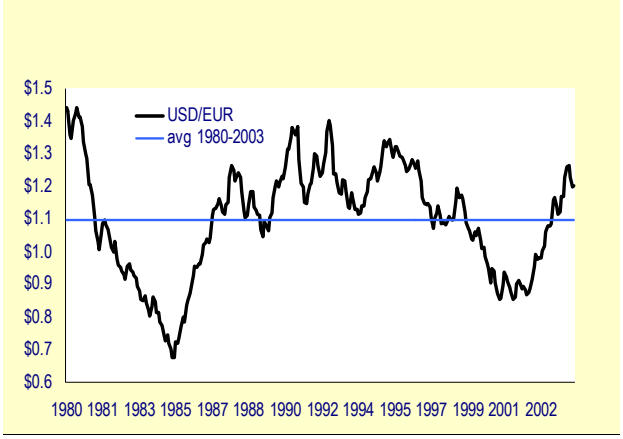
A different perspective is provided by those who argue that the behaviour of major exchange rates since the launch of the euro has been mostly unrelated to news about the underlying fundamentals (De Grauwe, 2000b). This may be due to the particular speculative dynamics of foreign exchange markets. Since agents in these markets are so uncertain about the underlying fundamentals and their impact, it is argued, exchange rate movements themselves can 'anchor' the market's beliefs and can lead to a search for those fundamental variables that can provide an ex post justification for the particular exchange rate movement. Analysts selectively assess the evidence to find the most 'appropriate' fundamentals, leading to a self-reinforcing process. Thus, when at the start of 1999 the dollar began to appreciate against the euro this set in motion a search for good news about the US and led to an excessive focus on favourable aspects of the US economy, even though this view was not always supported by observable news about the fundamentals taken as a whole.

This view of speculative dynamics in foreign exchange markets is consistent with previous episodes in which markets appear to have accentuated exchange rate movements by extrapolating short-term movements in the absence of well-formed views about the underlying fundamentals (e.g. the dollar in the mid-1980s, the yen in parts of the 1990s). Moreover, whilst the correlation between the bilateral euro-dollar rate and the expected growth differential between the US and the euro-area economies has been quite strong over certain sub-periods it is less evident over other sub-periods (or, indeed, when applied to other bilateral exchange rates). This finding may be rationalised within the framework presented by De Grauwe by noting that the correlation is generally much stronger when the exchange rate is compared with the consensus forecast of growth in the US alone rather than the growth differential with the euro area. Finally, the euro was widely expected to be a strong currency before its launch. Its weakness since 1999 has therefore triggered a search for factors that might provide an ex post rationalisation for what has happened. This is entirely consistent with the view that exchange rates themselves anchor market beliefs.

[28] See, for example, Bailey *et al.* (2001).

This, of course, raises the issue of whether and when it is appropriate for the ECB to intervene in foreign exchange markets. Following a sustained depreciation of the euro against the dollar (and other major currencies) after its launch, the ECB intervened jointly with other major central banks in support of the euro in September 2000, and again unilaterally in November 2000. The euro depreciation of this period was widely perceived to be a misalignment, i.e. a movement that was not justified by underlying economic fundamentals. From this perspective, Begg *et al.* (2002a) qualify the interventions to support the currency as "quite successful". The strength of the euro in the more recent period has lead to some concerns about the potential impact on euro-area growth in the early stages of the recovery. The ECB has not yet seen the need to intervene on foreign exchange markets, but it has expressed a preference for stability and for exchange rates to reflect underlying fundamentals. Part VI discusses the implications of exchange rate interventions for the international role of the euro.

Graph II.7: **Bilateral exchange rate USD/EUR (monthly averages)**



Source: Commission services.

1.5 Enlargement and the future of ECB governance

The design of monetary policy framework in EMU combines *centralised* decision-making with *decentralised* operational conduct. It can be argued that this set-up has enabled the ECB to gain a high degree of credibility in a short space of time, while also drawing on the expertise located in the national central banks (NCBs).[29] In the light of enlargement, however, the reform of ECB governance, particularly the voting rules in the Governing Council, has become an important issue in the policy debate. The inter-governmental conference preparing the Nice Treaty recognised the need for reform, but could not agree on a specific approach. It decided to introduce an "enabling clause" in the EC Treaty, allowing the Council (at the level of Heads of State or Government) to decide at a later stage on the content of the reform, on the basis of a recommendation from the Commission or the ECB.

The ECB Governing Council is composed of the six members of the Executive Board, together with the governors of the NCBs of the Member States belonging to the euro area (twelve at present). In the absence of reform, each successive enlargement of the euro area would result in an increase in the number of members of the Governing Council with a voting right. Berger *et al.* (2003) argue that there are two problems with this situation.

Firstly, over time it is likely to result in a significant weakening in the *efficiency of decision-making* within the ECB. With successive enlargements of the euro area, membership of the Eurosystem might increase from the current twelve to twenty-seven Member States, which would mean that the size of the Governing Council would increase from the current eighteen to thirty-three. This would make the Governing Council by far the largest monetary policy decision-making body among the OECD countries. Discussions and voting procedures would be likely to become more lengthy and complicated, especially given the ECB's tradition of consensus-based policy-making.

Secondly, despite the fact that NCB governors sit on the Governing Council in a personal and independent capacity rather than as representatives of their respective countries, Berger *et al.* argue that enlargement without reform is likely to affect the *wedge between the economic and political weights* of euro-area countries within the ECB decision-making structure. They note that since almost all new Member States are small in relative economic terms, enlargement within the given institutional set-up would significantly increase the degree to which governors from smaller Member States are present around the table. With a euro area of twenty-seven members, the current ECB statute would imply that the NCB governors of the smallest seventeen Member States would have a disproportionate weight in determining monetary policy decision-making in the Governing Council. In the view of these authors, this could introduce an unwelcome bias into the ECB's decision-making if NCB governors put at least some weight on economic developments in their own countries and these deviated substantially from the behaviour of euro-area aggregates.

A number of proposals for reform of ECB voting rights have been put forward in the literature, including the creation of a Monetary Policy Board of limited membership which would operate under the guidance of the Governing Council, introducing constituencies (as in the case of the Bretton Woods institutions), increasing the vote share of the Executive Board members or

[29] See Gaspar *et al.* (2002).

increasing the correspondence between voting rights and economic size of individual NCB governors.

On 3 February 2003, the ECB Governing Council adopted its own proposal to change the decision-making rules, which was set out in the form of a Recommendation for a Council (of Ministers) Decision. It was adopted by the European Council on 21 March 2003, and was subsequently ratified by the fifteen Member States. Under this *three-group rotation model*, once the number of euro-area NCB governors exceeds a certain number, there will be a ceiling on the total number of voting rights in the Governing Council, but each member of the Executive Board will retain a permanent voting right. The ceiling will be twenty-one (six Executive Board members plus fifteen NCB governors), possibly increasing to twenty-four (six plus eighteen) during a transitional period. The rotation system is designed to ensure that the NCB governors with the right to vote are from Member States which, taken together, are representative of the euro-area economy as a whole. Consequently, the NCB governors will exercise a voting right with different frequencies depending on indicators of the relative size of their economies within the euro area. Based on these indicators, NCB governors will be allocated to different groups, with the allocation determining how often they can exercise a voting right. Initially there will be two groups, but this will increase to three once the number of euro-area Member States increases to twenty-two.

In its opinion on the ECB proposal[30], the Commission stressed the importance of the following four principles for the reform of ECB governance:

- Decisions should continue to be taken in a swift and efficient manner;
- The decision-making bodies should act with the interests of the whole euro area in mind;
- The system must be considered as neutral and unbiased by both existing and future Member States; and

Markets and the general public should be able to understand the logic and functioning of the new voting system.

[30] Commission Opinion on the "ECB recommendation ECB/2003/1 of 3 February 2003 for a Council Decision on an amendment to Article 10.2 of the Statute of the ESCB/ECB (based on Article 10.6 of the Statute)", Brussels 19 February 2003, COM(2003) 81 final.

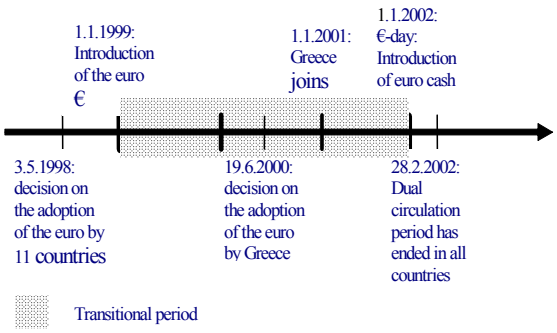
ANNEX

The changeover to euro notes and coins

The Madrid scenario

In December 1995 the Madrid European Council chose the name of the single currency and decided on the key elements of the changeover scenario. It was decided to introduce a three-year transitional period between the introduction of the euro as a single currency and the introduction of euro banknotes and coins. During this period the principle of 'no compulsion, no prohibition' was applied: economic actors had the possibility to carry out transactions in the euro unit, but were under no obligation to do so. The transitional period was followed by a dual circulation period, during which both euro cash and national currency banknotes and coins had legal tender status.

Graph II.A1: **Euro changeover scenario**



Source: Commission services.

The transitional period (1999-2001)

On the eve of 31 December 1998 the conversion rates between the euro and the currencies of the eleven countries which had qualified for the adoption of the single currency were irrevocably fixed. On 1 January 1999, the euro was introduced as the single currency in all these countries and, from this moment onwards, their national currencies ceased to exist except as subdivisions of the euro.

During the transitional period, the euro could not be used for cash payments. Consumers and companies had the possibility to open accounts denominated in the euro unit, and to write cheques or to make credit transfers in the euro unit. However, at the beginning of the transitional period this option was only used to a limited extent. By the end of the first quarter of 2000 only 2.4 per cent of the payments were carried out in the euro. Very few accounts (less than 1 per cent) had been converted into the euro at this point, even though banks usually offered the possibility of carrying out certain transactions (e.g. transfers) either in national currency unit or euro. In addition, banks were obliged to automatically convert incoming payments into the proper unit. By comparison, the dual display of prices was more widely used. In the first quarter of 2000 between 30 per cent and 80 per cent of the retail sector in the different countries were applying dual pricing. The euro was also visible as a unit of account in euro-area financial markets since prices of stocks and bonds were exclusively quoted in euro.

The use of the euro unit gained momentum towards the end of the transitional period. In the second quarter of 2001, the share of euro payments rose to 7.8 per cent while 7.9 per cent of businesses' accounts were kept in euro. Moreover, 73 per cent of the euro-area banks opted for an early conversion of bank accounts in the course of the second semester of 2001.

The euro cash changeover

The single currency became much more tangible on 1 January 2002, when euro banknotes and coins were brought into circulation. This event marked the beginning of a new era for 305 million people. Ten years after the signing of the Maastricht Treaty euro-area citizens were eager to hold the single currency in their hands. From 31 December at midnight onwards, many citizens started queuing in front of ATMs (automated teller machines or cash dispensers) in order to be among the first to handle the new currency.

Frontloading and sub-frontloading of cash: Euro banknotes and coins had been supplied to banks and retailers prior to 1 January 2002 with a view to facilitating the changeover, under the strict condition that they could not be brought in circulation before 2002. In some countries, this frontloading (delivery to banks) and sub-frontloading (delivery from banks to retailers and other companies) started as early as September 2001 according to national changeover plans. The packaging of banknotes and coins was chosen with a view to meeting the needs of banks and retailers, and rules providing for delayed debiting of the delivered cash were applied in order to encourage early ordering of cash. A total of 6 billion banknotes (40 per cent of total production) and 37.5 billion coins (73.5 per cent of total production) had been distributed to banks, retailers and cash-in-transit companies in advance of €-day. The citizens had the opportunity to familiarise themselves with the euro coins from mid-December onwards, when Member States started selling 150 million starter kits containing a total of 4.2 billion euro coins, corresponding to 14 coins per capita on average.

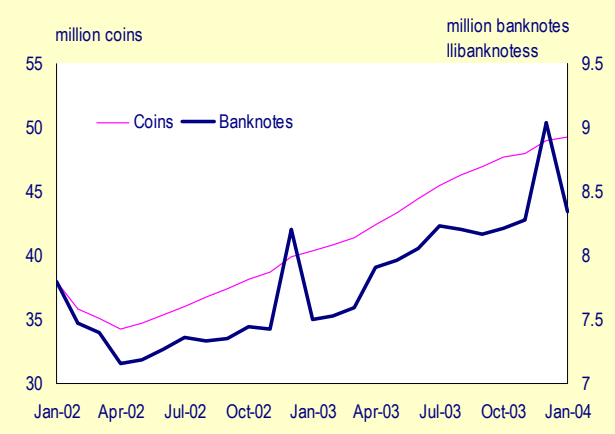
Euro cash enters into circulation: Approximately 7.8 billion banknotes (24 per capita) and 38 billion coins (134 per capita) were in circulation on 1 January 2002 and distributed mainly via three channels: ATMs, withdrawals from banks and post offices and change given in shops. The distribution via ATMs also proved

to be an extremely efficient distribution channel, because ATMs were adapted very swiftly and were used much more frequently for cash withdrawals than normal during the first two weeks of January. On average 80 per cent of the ATMs had been fully converted to the euro by 1 January and by 4 January all ATMs in the euro area were exclusively dispensing euro banknotes. The retail sector also played an important role since many customers spent their remaining legacy notes in shops while retailers had committed themselves to giving change exclusively in euro.

The banknotes distributed in the euro-area countries all have the same technical characteristics and bear the same designs. In contrast, the euro coins bear a common European design on one side and a distinct national face on the other. The different national sides have been a source of interest from the very beginning. As all euro coins have legal tender status throughout the euro area, coins started to move across national borders immediately.

In most countries, the national currency banknotes and coins remained legal tender until the end of February 2002, although some opted for an even shorter dual-circulation period. The bulk of legacy banknotes was returned to the central banks within a few weeks, mostly via banks and retailers. By 21 January more than 50 per cent of the national banknote circulation (in value) had been returned, and by mid-February, only six weeks after the changeover, almost 80 per cent of national banknotes had been sent back.

Graph II.A2 **Euro banknotes and coins in circulation**

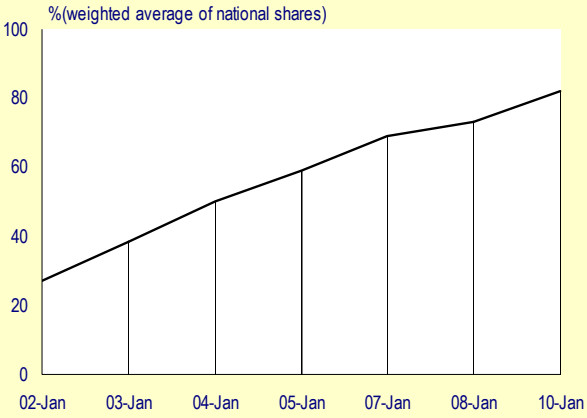


Source: ECB.

The circulation for both banknotes and coins subsequently decreased up until April 2002. This demonstrates the quality and extent of the frontloading and sub-frontloading operations, since some cash started to flow back because initial volumes frontloaded or put into circulation had exceeded initial demand in certain instances. The December figures for 2002 and 2003 indicate a steeper increase, which is typically linked to the Christmas shopping period.

The speed of the changeover is further illustrated by the evolution of the share of euro cash payments, which increased in a spectacular manner. On average the euro-area share of cash payments (defined as both payments and change given in euro) stood at approximately 27 per cent on the evening of 2nd January as many consumers first spent national currency that they had left over. By 4th January half the cash payments were already executed in euro. On 10 January some 82 per cent of the cash transactions were made in euro. This share subsequently rose further, and after three weeks virtually all cash payments in the euro area were carried out in euro.

Graph II.A3: **Euro cash payments as a share of total cash payments in early January 2002**



Source Finance Ministries, supermarkets, (Commission calculations).

Vending machines were also adapted quickly to the euro. By 10 January approximately 75 per cent of vending machines were accepting euro cash. By the end of January the share of adapted machines stood at more than 90 per cent.

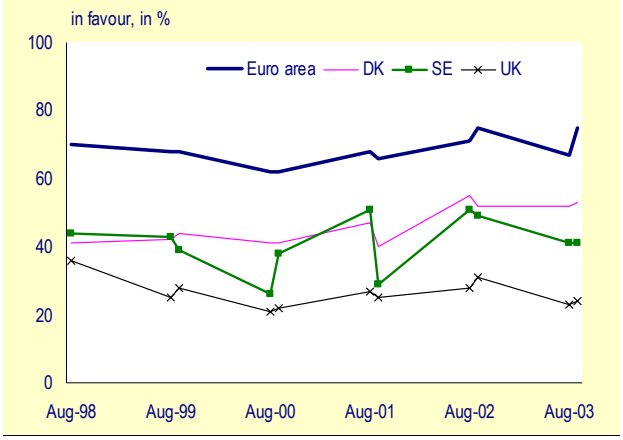
Public perception of the euro two years after the introduction of banknotes and coins

Two-thirds of euro-area citizens support the euro: The public's support for the euro has been examined twice a year since the autumn of 1998. The analysis for the entire survey period shows that the rate of approval has remained broadly stable over the last five years. In spring and autumn 2000 the euro-area saw the lowest support for the euro (62 per cent), while the highest result (75 per cent) was reached after the introduction of the euro cash.

The approval rates in the three pre-in countries have always been significantly lower than in the euro area. Only in Denmark a slight majority (52 per cent) of the respondents in November 2003 supported the single currency, while in Sweden (41 per cent) and in the

United Kingdom (23 per cent) only minorities favour the introduction of the euro. The long-term analysis also exhibits differences among the pre-in countries. In Denmark, support for the euro has been more stable, especially in comparison with Sweden.

Graph II.A4: **Support for the euro**



Source: Standard Eurobarometer 60, published in December 2003.

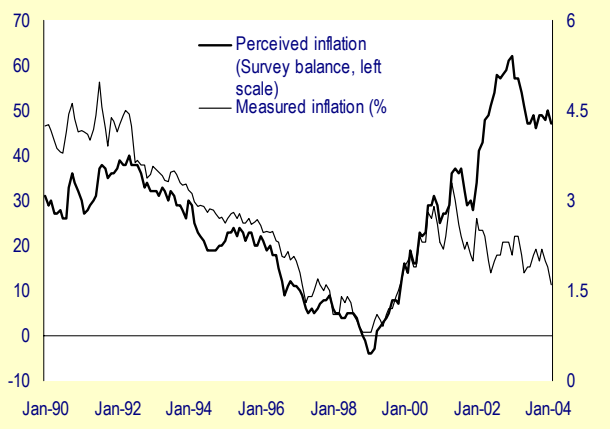
Many consumers still think in national currency: Two years after the introduction of euro banknotes and coins, many consumers still think in their former national currency. The share of those calculating in euro when purchasing goods is rising, but the mental conversion of euro area citizens is far from complete.

In November 2003, 46 per cent of the respondents indicated counting most often in euro when doing day-to-day shopping, while 30 per cent still think most often in national currency. Compared to the year before, this represents a moderate rise of the share of those that have psychologically switched to the euro. With respect to large value purchases (e.g. a house or a car) the picture is different. The majority (54 per cent) of euro-area citizens still counts mentally most often in national currency, while only 16 per cent indicated thinking most often in euro. This figure points to a low degree of adaptation, but nevertheless represents a rise compared to the year before (12.5 per cent).

The limited degree of adaptation is also reflected by findings on citizens' preference for keeping dual displays of prices in shops. By November 2003, 46 per cent of the euro-area interviewees indicated that they would prefer shopkeepers to continue with the dual display of prices. This rate varies widely from country to country. In most euro-area countries a majority of respondents no longer see the need for keeping dual displays of prices, while public opinion in the other countries shows just the opposite picture.

The impact of the changeover on inflation (and on citizens' perception thereof): Public perception of price increases triggered by the introduction of the euro constitutes a continuing source of concern in certain countries. Some consumers thus continue to associate the changeover with price increases. In November 2003, on average 89 per cent of euro-area respondents believed that prices had been converted to the detriment of consumers. This perception is at odds with the results of statistical analysis, which indicates that the likely contribution of the euro cash changeover to the 2.3 per cent annual average euro-area inflation rate registered in 2002 was in the range of 0.12 per cent-0.29 per cent. Above-average price rises in the service sector (cafés, restaurants, hairdressers) are most frequently mentioned. However, the lack of experience with judging euro prices may have contributed to the large gap between actual and perceived inflation.

Graph II.A5: **The perception of inflation in the euro area**



Source: Commission services.

2. Fiscal Policy

2.1 The EU's fiscal framework

2.1.1 The rationale for a rules-based fiscal framework in EMU and its main features

A unique feature of EMU is that monetary policy is centralised under the auspices of the ECB whereas fiscal policies, both in terms of the level and composition of revenues and expenditures, remain decentralised under the responsibility of national authorities. However the management of national fiscal policies is subject to common rules defined at the EU level. This reflects considerations made when the EMU project was launched that financial markets alone could not ensure the appropriate conduct of decentralised fiscal policies, and some co-ordination of fiscal policies was viewed as a critical factor for success.[1] The perceived need for establishing a rules-based framework for fiscal policies in EMU was based on several arguments:

- first, the need for sustainable fiscal positions. Unsustainable budgetary positions in a Member State, ultimately leading to either default or debt monetisation, were seen as a major threat to the overall monetary stability.[2]
- second, the need for the conduct of budgetary policies at national level to be broadly consistent with the cyclical stance taken by the other euro-area countries and with the stance of the single monetary policy.[3]

At the same time, it was also perceived that monetary unification would increase the need of an autonomous fiscal policy to deal with macroeconomic stabilisation given the loss of the monetary and exchange rate instrument for individual countries.

The challenge that had to be faced in the design of the fiscal regime of EMU was therefore to provide an adequate mix of autonomy, discipline and coordination. The above considerations were translated into the EMU chapter of the Maastricht Treaty, which was supplemented by the Stability and Growth Pact (SGP).[4] This framework allows Member States to retain full responsibility for the conduct of their fiscal policies subject to upper limits on deficit and debt levels, and although it consists of both preventive and dissuasive instruments, the emphasis is placed on the former. The main elements of the framework can be summarised as follows:

- Banning practices which facilitate recourse to deficit financing. Among them, the Treaty expressly bans the possibility for a government to have privileged access to the financial sector or for the Central Bank to finance deficits directly.
- Entry conditions for countries wishing to join the euro zone in the form of so-called convergence criteria which *inter alia* encompass the soundness of public finances.
- A strengthened process of budgetary surveillance based on planning in a medium-term perspective through improved and regular reporting of budgetary data (in accordance with the European System of National Accounts ESA79 and subsequently ESA 95), the yearly submission and assessment of 'stability programmes and ongoing surveillance by the Commission and Member States'. [5]
- A Treaty obligation on countries participating in the euro to avoid gross errors in the field of public finances, and in particular to avoid excessive deficit positions measured against reference values for deficits (3% of GDP) and debt (60% of GDP). These were subsequently bolstered by the Stability and Growth Pact which established a medium-term objective for budget positions of 'close-to-balance or in surplus'.
- Enforcement mechanisms to deal with countries that fail to respect the budgetary requirements of the Treaty and SGP. In particular, a country which beaches the reference values for deficits or debt can be placed in an 'excessive deficit position' and may receive a recommendation adopted by the Council to correct the imbalances. Should the

[1] See European Commission (1990).

[2] The desirability of rules aimed at fiscal discipline at the national level can be justified on the ground of a pro-deficit bias by governments rooted in political explanations (see, Drazen (2000) or Persson and Tabellini (2000) for a review of the main arguments). Fiscal rules become desirable at the super-national level whenever there are strong spillovers of fiscal policies on other countries. Such spillovers may be related either to stronger demand spillovers due to the loss of the exchange rate, or to a perceived possibility of bail-out of insolvent countries by the common monetary authority of other member states, or to externalities associate with the reaction of common monetary policy to fiscal expansions in single countries. For a review of these arguments see, Wyplosz (1997) and Beetsma (2001).

[3] See, Beetsma, Debrun and Klassen (2001) and Buti (2001) for a review of the arguments in favour of fiscal co-ordination in EMU.

[4] See Costello (2001) for a description of the major steps leading the SGP. For a description of the main elements of the SGP see Cabral (2001) and European Commission, Public Finances in EMU, European Economy Reports and Studies, various issues.

[5] A Code of Conduct on the format and content of the stability and convergence programmes has been endorsed by the ECOFIN Council in 2001 and is available at http://europa.eu.int/comm/economy_finance/about/activities/sgp/codeofconduct_en.pdf. See also Fischer and Giudice (2001) on the format and content of the stability and convergence programmes.

country fail to take corrective measures within the deadlines set, and if it participates in the euro area, the Council can apply sanctions, which can include making a non-interest-bearing deposit with the EU, or ultimately paying a fine.

2.1.2 Expectations at the start of EMU

Prior to the launch of the euro in 1999, views on the prospects for the conduct of fiscal policies in EMU, and on the viability of the co-ordination framework, were mixed. Some commentators took the view that after having secured participation in the euro area, some Member States would loosen fiscal policies in EMU.[6] This could arise in part as a consequence of the 'fiscal consolidation fatigue', given that several Member States had to achieve substantial budgetary consolidation at mid-'90s so as to meet the convergence criteria. Moreover, it was argued that the incentives to preserve fiscal discipline would be weaker after the goal of euro-area membership had been achieved and indeed that the incentives to run looser fiscal policy could increase in EMU due to the expectation that interest-rate increases associated with expansionary fiscal policies in single countries would have partly spilled-over to other euro-area countries.

It was also recognised that while the SGP 'philosophy' of allowing the automatic stabilisers to operate in economic slowdowns around a balanced budget could work in a 'steady-state' situation, problems could have arise during the transition process towards budget positions of 'close to balance or in surplus'. This potential problem arose as many Member States were admitted into the euro area with deficit levels only barely respecting the 3% of GDP reference value and thus far from the safe position of 'close to balance or in surplus'. Moreover, it was argued that the transition process to achieve balanced budget positions in underlying terms could take a long time to achieve given that the SGP enforcement mechanisms is asymmetric, in that it responds to deteriorating budget positions but does not deal with failures to run 'appropriate' policies during upturns.

The debate on fiscal policy also reflected more general concerns about the adequacy of adjustment mechanisms in Member State economies to cope with asymmetric shocks in EMU. On this issue, there was considerable uncertainty, and certainly no formal consensus, on what would constitute the appropriate conduct of fiscal policy in the face of different types of economic shock (symmetric or asymmetric, demand or supply, temporary or permanent). The EU fiscal framework provided little or no guidance on this matter, other than embodying a cautious or even sceptical disposition towards the merits of discretionary fiscal policy and its the feasibility.

[6] See, among others, Eichengreen and Wyplosz (1998).

The remainder of this chapter assesses the experience with the EMU fiscal framework five years after the introduction of the single currency. This comes at a time when the framework is under strain due to difficulties encountered in the implementation of the Stability and Growth Pact, and many commentators have argued in favour of redesigning the framework for budgetary surveillance at EU level.[7] This chapter does not contain a presentation on possible future changes to the fiscal framework, but instead provides a retrospective examination with respect to three questions:

- Did Member States meet agreed targets for deficits and debt?
- Did the framework provide a useful basis for addressing fiscal policy challenges as they emerged? In answering this, the framework for budgetary surveillance needs to be considered in a dynamic context: did it facilitate continuous improvements in budgetary surveillance and in the analytical basis for the conduct of decentralised fiscal policies? In addition, did the framework facilitate constructive dialogue and consensus-building on complex and challenging fiscal policy issues in EMU?
- Was the framework for fiscal surveillance, and in particular the peer pressure and enforcement mechanisms of the Stability and Growth Pact (early warning recommendations, the excessive deficit procedure), robust enough to ensure that countries tackled emerging budgetary balances?

2.2 Were the deficit and debt objectives met?

2.2.1 Budgetary outcomes

Consolidation in the run up to EMU

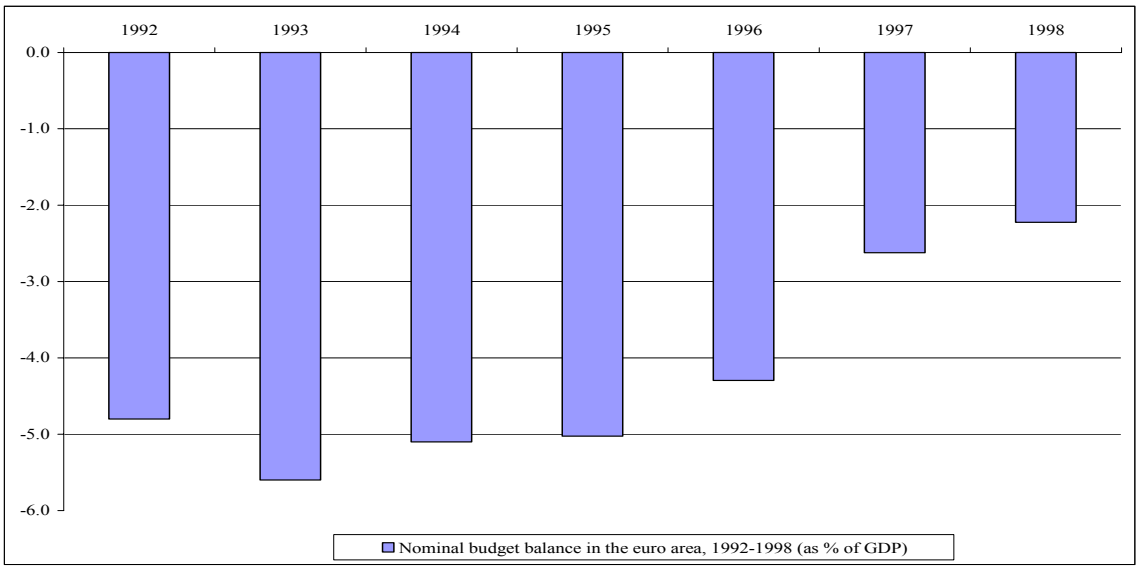
Most Member States enacted strong fiscal consolidation efforts in the mid 1990s as a result of pressure to respect Maastricht convergence criteria. The nominal budget deficit of the euro area decreased by almost 3 percentage points of GDP between 1992 and 1998 (see Graph II.8). The improvement in nominal budget balances reflected an effective fall in cyclically adjusted budgetary deficits over the period, which moved for the euro-area as a whole from above 5% of GDP to about 2%. In the run-up to EMU, improvements in budgetary positions were recorded in almost all Member States, consolidation efforts which were especially impressive in countries that had run double-digit deficits in the early 1990s.

A notable feature of the consolidation undertaken by Member States in this period is that is took place during

[7] Among recent critiques and proposals on the EMU fiscal framework see, for instance, Blanchard and Giavazzi (2004), Buiter and Grafe (2002a), Buti *et al.* (2003), Calmfors and Corsetti (2003), Fatas *et al.* (2003), Sapir *et al.* (2003).

a weak economic juncture. Graph II.9 reports changes in the average euro-area primary cyclically-adjusted budge balance (CAPB) and the euro-area output gap in the 1992-2003 period. It is evident that the major improvement recorded in the euro-area CAPB during the mid 1990s took place during a phase of negative output gaps. Despite this considerable budgetary effort, the need for fiscal consolidation at the start of EMU was far from over, as several Member States joined EMU with deficit levels just below the 3% of GDP, and were thus far from the objective of 'close to balance or in surplus'. Also, although debt ratios were finally on a downward path in all Member States, government debt levels remained high in historical terms (more than double the 1980 level) for the euro area as a whole, with three Member States still having debt ratios close to or above 100% of GDP (see Table II.5).

Graph II.8: **Nominal budget balance in the euro area, 1992-1998 (% of GDP)**



Source: AMECO database

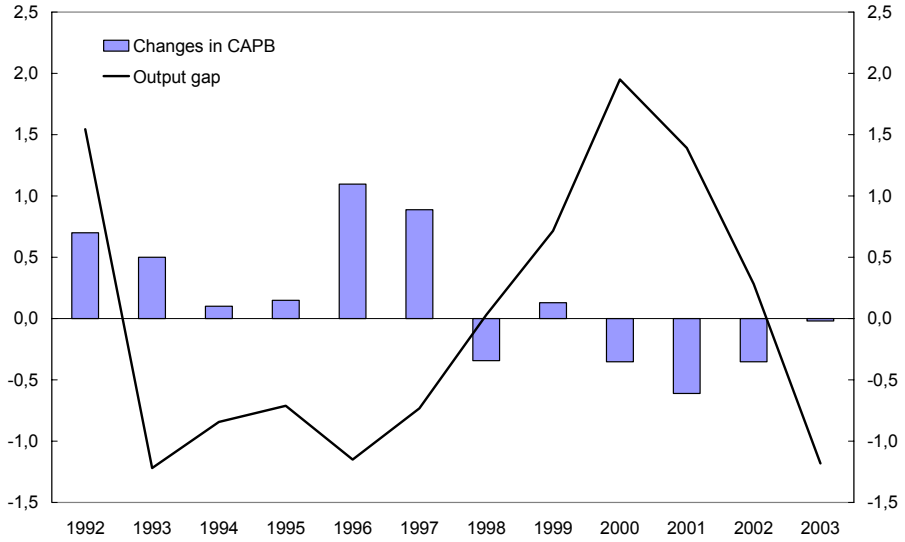
Budgetary developments since 1999[8]

While fears of a significant loosening of the fiscal stance in EMU have proved to be unfounded, there is some evidence that the commitment to pursue budgetary consolidation has waned. Despite the favourable economic climate in the early years of EMU, Member States failed to continue the process of budgetary consolidation that was evident in the run up to the launch of the euro. The overall stance of fiscal policy in the euro area (measured by the change in the CAPB) became somewhat expansionary. Nominal budget balances, however, generally improved due to buoyant cyclical conditions in the early years of EMU. A cursory look at the figures shows in fact that all Member States recorded remarkable improvements in nominal balances in 1999 and 2000 (see Table II.4). These developments mainly reflect the unexpected acceleration in economic growth and in financial assets prices - which substantially increased revenues - and, concerning 2000, the additional and exceptional receipts arising from the auctions of UMTS licences.

However, this phase characterised by rising revenues and improving budget balances in spite of widespread fiscal loosening, proved to be transitory and short-lived. The marked deterioration in the economy starting in 2001 quickly reversed the rosy picture of 1999 and 2000, and nominal deficits grew rapidly. This meant that, after having achieved a surplus in 2000, the euro-area nominal deficit at 2.7% of GDP in 2003 was almost ½ percentage points of GDP higher than in 1998. While the economic slowdown is the main factor responsible for the deterioration in public finances in recent years, some of the deterioration also stems from discretionary measures. The cyclically-adjusted budget balance for the euro area in fact decreased from -1.7% in 1999 to -2.3% in 2003.

[8] A detailed description of budgetary developments in the EU can be found in the annual report Public Finances in EMU

Graph II.9: **Fiscal stance and cyclical conditions in the euro area, 1992-2003**



Source: Elaborations by the Commission services on the AMECO database. Note: The changes in the cyclically-adjusted primary balance are used as a proxy of the fiscal stance, while the size of the output gap proxies cyclical developments. A positive value for the fiscal stance represents a tightening of discretionary fiscal policies.

By the end of 2003, seven EU countries, including five euro-area countries, maintained budget positions close to balance or in surplus. Other countries, while close to balance in cyclically-adjusted terms, had small nominal deficits, indicating that in these countries the automatic stabilisers were left to work fully. In contrast, the two major euro-area countries accounting for half of the euro-area output had nominal deficits around 4% of GDP, resulting from already high cyclically-adjusted deficits before the slowdown and from the impact of the poor growth. Also Portugal moved to very high deficits during this period, peaking at 4.4% of GDP in 2001, subsequently reduced to just below 3% in 2003 thanks to large one-off measures. Large deficits remain in Italy and they have re-emerged in countries that had reached balanced budget positions, notably Austria and the Netherlands.

Table II.4: **Nominal budget balance (as % of GDP)**

	Average 1993-98	**1998**	**1999**	**2000**	**2001**	**2002**	**2003**	**2004**	**2005**
BE	-3.8	-0.7	-0.4	0.1	0.5	0.0	0.2	-0.5	-0.8
DE	-3.0	-2.2	-1.5	1.3	-2.8	-3.5	-3.9	-3.6	-2.8
EL	-7.9	-2.5	-1.8	-2.0	-1.4	-1.5	-3.0	-3.2	-2.8
ES	-5.1	-3.0	-1.2	-0.9	-0.4	-0.1	0.3	0.5	0.6
FR	-4.4	-2.7	-1.8	-1.4	-1.5	-3.1	-4.1	-3.7	-3.6
IE	-0.4	2.3	2.3	4.4	1.1	-0.1	0.2	-0.8	-1.0
IT	-6.5	-3.1	-1.8	-0.7	-2.7	-2.4	-2.5	-3.2	-4.0
LU	2.4	3.2	3.7	6.3	6.3	2.7	-0.1	-2.0	-2.3
NL	-2.4	-0.8	0.7	2.2	0.0	-1.6	-3.2	-3.6	-3.3
AT	-3.8	-2.5	-2.4	-1.6	0.1	-0.4	-1.3	-1.3	-2.1
PT	-4.8	-3.2	-2.9	-2.9	-4.4	-2.7	-2.9	-3.5	-3.9
FI	-3.4	1.6	2.2	7.1	5.2	4.3	2.1	1.8	2.0
EUR-12	-4.2	-2.3	-1.3	0.1	-1.6	-2.3	-2.7	-2.8	-2.6

Note: ESA 79 up to 1994, ESA 95 from 1995 onwards.
***Source*: AMECO database. Commission forecasts for 2004 and 2005

Debt levels in some Member States have not declined as fast as expected. In some instances, this reflects a number of operations which did affect the deficit to GDP ratio but which did not affect debt. In addition, the poor growth performance has made the contribution of the 'snow-ball' effect (arising from being the debt expressed as a share of GDP) very modest in some countries.

Overall, while some smaller Member States did in fact complete the transition to budget positions of 'close to balance or in surplus', most large countries in the euro area have failed to improve underlying budget positions. The failure to improve underlying budget deficits over the past five years means that the euro area continues to grapple with the same budgetary challenge they faced at the outset of EMU, namely allowing the full operation of automatic stabilisers during economic downturns while respecting EU budgetary requirements.

The failure to achieve the stated goal of broadly balanced budget positions over the economic cycle, may reflect some weakening in the political commitment towards the budgetary goals set down in the SGP. However, it does not imply that there has been a return to the profligate fiscal policies of previous decades. For most countries, the problem can be traced back to the failure to run sound fiscal policies in the 'good times' of 1999 and 2000 when growth conditions were buoyant. Part of this may stem from governments paying less attention to the goal of budgetary consolidation than in the mid-'90s, and instead concentrating on other budgetary objectives such tax reform and redirecting government spending towards programmes considered more favourable to growth and employment creation.[9] In some cases these measures were not matched by savings elsewhere but instead relied on rather optimistic assumption on future growth prospects. Indeed, a general tendency has emerged in several Member States in recent years to base budgetary projections on overly optimistic growth assumptions, which inevitably leads ex post to budgetary targets being repeatedly missed.[10]

It would be inappropriate to conclude that the current levels of nominal deficits, against a background of slow growth, poses an imminent threat to the sustainability of public finances in the short or medium-term. The fact that risk premia on government debt do not appear to have changed despite breaches of the SGP requirements illustrates that markets retain confidence in the capacity of governments to address budgetary problems and to ensure that unsustainable positions will not emerge. However, this apparent confidence of financial markets should not lead to complacency as market sentiment can shift quickly. A risk to the sustainability of public finances could emerge in the future unless countries achieve significant improvements in underlying budget positions over the coming years.

2.2.2 Did the fiscal framework play in influencing national budgetary choices?

The focus on actual budgetary developments in the previous section does not specifically address the crucial question on to the extent to which the existence of EU fiscal rules actually altered the behaviour of fiscal authorities. To answer this question, empirical analysis has focused on understanding whether the reaction of budget balances to the output gap (associated with an output stabilisation motive by fiscal authorities) and debt levels (associated with the purpose of stabilising debt) has changed significantly across Member States after the introduction of the EU's fiscal framework.[11]

Analyses show in general that after the introduction of the fiscal framework, budget balances became more sensitive to debt levels, i.e., fiscal authorities became more concerned about the need to run low budget deficits.[12] This points to an impact of the EU fiscal framework in affecting the choices of fiscal authorities. Hughes-Hallet *et al.* (2004) have investigated empirically the determinants of the probability of running deficits in excess of 3% of GDP in EU countries. Their results indicate that the introduction of the SGP reduced the probability of a breach of the 3% deficit limit. However, they also identify a statistically significant upward trend in the probability of a breach of the 3% limit after 1998.

Analysis has also been carried out by the Commission services on this question involving the econometric estimation of counterfactual budget deficits that would have prevailed in the euro area in the absence of the EMU fiscal framework.[13] Such counterfactual budget balances have in turn been inputed as shocks to the Commission QUEST macro model, to simulate the economic impact of such an 'absence of fiscal discipline'.[14]

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9 Such developments in the conduct of fiscal policies are described in European Commission (2001c)

10 The tendency for most EU countries to base budget plans on over-optimistic growth scenarios is documented for instance in Larch and Salto (2002) and Forni and Momigliano (2004).

11 Early analysis on the behaviour of fiscal authorities in EU countries by means of the estimation of fiscal rules is found in Melitz (2002) and von Hagen *et al.* (2001). Subsequent work includes Ballabriga and Martinez-Mongay (2002, 2004), Gali and Perotti (2003), European Commission (2004) Turrini and in't Veld (2004) and Forni and Momigliano (2004).

12 Ballabriga and Martinez-Mongay (2004) analyse systematically the robustness of the debt parameter in estimated fiscal rules with respect to sample split and show that in most Member States the increase in the debt stabilisation objective occurred in the middle of the nineties.

13 See European Commission (2004).

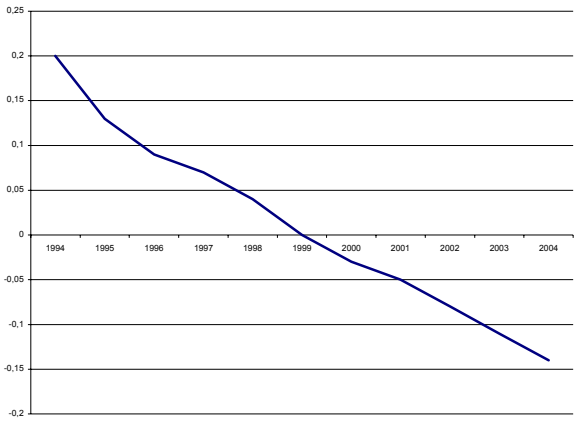
14 The estimates show that on average, over the 1994-2004 period, the euro-area primary balance would have been higher by 0.88 GDP points in absence of the EMU fiscal framework (see European Commission (2004)). A description of the Commission QUEST model is contained in Röger and in't Veld (1997).

Table II.5: **General government gross debt (as % of GDP)**

	Average 1993-98	1998	1999	2000	2001	2002	2003	2004	2005
BE	130.4	119.6	114.8	109.1	108.1	105.8	100.5	97.4	94.3
DE	55.8	60.9	61.2	60.2	59.4	60.8	64.2	65.6	66.1
EL (1)	108.7	105.8	105.2	106.2	106.9	104.7	103.0	102.8	101.7
ES	63.8	64.6	63.1	61.2	57.5	54.6	50.8	48.0	45.1
FR	54.0	59.5	58.5	57.2	56.8	58.6	63.0	64.6	65.6
IE	76.3	53.8	48.6	38.4	36.1	32.3	32.0	32.4	32.6
IT	121.4	116.7	115.5	111.2	110.6	108.0	106.2	106.0	106.0
LU	6.7	6.3	6.0	5.5	5.5	5.7	4.9	4.5	3.8
NL	74.1	66.8	63.1	55.9	52.9	52.6	54.8	56.3	58.6
AT	65.5	63.7	67.5	67.0	67.1	66.6	65.0	65.5	65.3
PT	60.4	55.0	54.3	53.3	55.6	58.1	59.4	60.7	62.0
FI	55.1	48.6	47.0	44.6	43.9	42.6	45.3	44.5	44.3
EUR-12 (2)	72.2	74.1	72.8	70.4	69.4	69.2	70.4	70.9	70.9

1) Figures 2000-2003 are based on a revised EDP notification not yet validated by Eurostat; hence, they are to be considered subject to revision.
Source: AMECO database.

Graph II.10 **Euro-area GDP in absence of fiscal discipline, simulation with the Commission QUEST model (% change of GDP compared with baseline)**



Note: simulated GDP in response to an increase in the average euro-area primary budget deficit of 0.88 GDP points over the 1994-210 period.
Source: European Commission, Public Finance in EMU-2004, European Economy, Reports and Studies,

Graph II.10 shows the results of such simulation on euro-area GDP.[15] In absence of the EMU fiscal framework, the simulations project that the GDP of the euro area would have been higher in the early years of EMU due to higher aggregate demand associated with the implied fiscal expansion. However, such positive impact on output appears rather low and turns negative after some years, due to private investment crowding-out. This analysis supports the idea that the EMU fiscal framework, by changing the behaviour of fiscal authorities, may have prevented growth in the euro area being even lower compared with actual figures.

An additional question is whether the introduction of the EU fiscal framework has led to a less counter-cyclical, or more pro-cyclical, conduct of fiscal policy, as expected by many commentators. Among the most recent and exhaustive analyses there is the one provided in Gali and Perotti (2003). In this analysis, fiscal rules (i.e., the behavioural rules that are implicitly followed by fiscal authorities when setting budget balances) are estimated for euro-area countries and it is shown that after 1992 fiscal policy in the euro-area become on average more counter-cyclical, i.e., there was a bigger negative response of the primary cyclically-adjusted budget balance to the output gap. This result is consistent with the view that in the pre-EMU period, counter-cyclical fiscal policies in Member States were the exception rather than the rule.[16]

2.3 Did the fiscal framework evolve effectively to deal with emerging budgetary challenges?

As outlined in the introductory section of this chapter, the Treaty and Stability and Growth Pact only provide a broad framework for the conduct of fiscal policies in EMU. Any assessment of the EU's budgetary framework therefore needs to consider how policy makers tackled the detailed implementation issues that were left open at the start of EMU and whether they effectively reacted to changing economic conditions and emerging budgetary challenges. Two types of open-

[15] In the simulations it is assumed that each additional GDP point of debt increases interest risk premia by 2 basis points.

[16] See, e.g., Buti and Sapir (1998).

issues had to be tackled in the early years of EMU. Section 2.3.1 summarises work undertaken to improve the process of budgetary surveillance, focusing on the efforts to clarify the definition of an appropriate medium-term budget position for Member States, the techniques for adjusting budget balances for the impact of the economic cycle, and the assessment of long-term sustainability of public finances. Section 2.3.2 summarises analyses on key issues in the debate on the appropriate conduct of fiscal policy in EMU (within the Treaty and GSGP framework). Particular attention has been paid to the role of fiscal policy as an adjustment instrument, i.e. whether there are certain circumstances when discretionary fiscal policies for demand management purposes is warranted, and what is the role and effectiveness of the automatic fiscal stabilisers in EMU.

2.3.1 Efforts to improve the framework for budgetary surveillance

The appropriate medium-term budget target

One of the major issues in the debate on fiscal policy in EMU has been to clarify the concept of budget positions of "close to balance or in surplus" set down in the SGP. In particular, a debate has taken place as to what in practice constitutes an appropriate medium-term budget target for participating countries, and secondly questions have been raised as to whether it is appropriate for Member States to try to make progress towards this goal during periods of slow growth.

As regards the appropriate medium-term target, calculations made in the early years of EMU suggested that the medium-term targets of most Member States should include a safety margin of about 2% (i.e., to run cyclically adjusted budget balances not higher than 1%) to guard against the effect of severe cyclical downturns and the associated risk of breaching the 3% limit.[17] Subsequently, an additional safety margin, estimated to be in the order of between 0.5% and 1% of GDP, was also deemed necessary to deal with unforeseen budgetary developments, such as unexpected tax shortfalls or spending overruns not due to cyclical fluctuations.[18] In aggregate, these estimates imply that broadly balanced budgets are an appropriate medium-term budget target for most Member States, and that a surplus would be advisable for some others. Adherence to such ambitious medium-term targets would lower the stock of government debt and reduce interest payments, thereby partially offsetting the future pressure on public finances arising from ageing populations.

As regards the timing of budgetary consolidation efforts, concern was expressed as to whether Member States should pursue budgetary consolidation during periods of slow growth as the tightening of the fiscal stance could have a negative effect on output in the short run. This issue is still relevant given the need for several Member States to reduce large cyclically-adjusted budget deficits against the background of slow economic growth. In standard macroeconomic thinking, budgetary consolidation entail a short run cost in term of lost output. However, recent research looking at the value of fiscal multipliers indicates that the impact is probably small.[19] Moreover, research points to the possibility of negative rather than positive fiscal multipliers, whereby the reduction in budget deficits may actually expand output even in the short-run.[20] These findings appear to be consistent with theories that identify a positive impact on consumer expectations of lower taxes in the future implied by the current budgetary consolidation inducing them to raise their consumption plans, and/or on business expectations of higher profitability enabling them to raise investment. In addition, confidence factors may play a more prominent role in the future in light of large unfunded pension liabilities, and therefore reduce further the costs of credible consolidations.[21]

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17 More precisely, the Commission made reference to countries reaching so-called 'minimal benchmarks', with the minimal benchmark defined as the cyclically-adjusted deficit that would allow automatic stabilizers to play fully while respecting the 3% limit even in the case of particularly unfavourable, but still possible, cyclical conditions. The minimal benchmark is obtained as the difference between 3% and the 'cyclical safety margin', which is in turn given by the product of the country's budget sensitivity times a value for the output gap that reflects the observed average amplitude and frequency of strongly unfavourable cyclical conditions (see European Commission (2002e)). Countries' safety margins so obtained differ, depending in particular upon the sensitivity of the budget, but values resulted around 2% fo0r most countries. The Code adopted in 2001 states that "the Commission may continue using, where relevant, these 'minimal benchmarks' as an additional working instrument, but not as a target per se according to the Stability and Growth Pact." On the issue of the safety margin required to respect the 3% deficit ceiling in the case of severe recessions see also Buti *et al.* (1997) and Artis and Buti (2000).

18 See European Commission (2000).

19 According to recent structural VAR estimates by Perotti (2004), the cumulated, cyclically-adjusted fiscal multiplier of public spending after 2 years is below 0.5 in all countries investigated (US, Germany, UK, Canada, Australia), meaning that a 1% GDP increase in public spending cut reduces GDP by less than half a point after 2 years. Moreover, spending multipliers turns out to be negative in the UK and Canada.

20 See Giavazzi and Pagano (1990, 2000) and Alesina *et al.* (2002). Empirical analysis of the experiences of EU Member States (European Commission (2003b), Giudice, Turrini, and in't Veld (2004)) shows that roughly half of the episodes of fiscal consolidation undertaken in the past three decades have been accompanied by an acceleration in economic growth.

21 Consistently, simulations using the Commission QUEST model confirm that budgetary consolidation based on expenditure cuts that reduce permanently deficits and debt

Taking account of the economic cycle

One of the most heavily criticised features of the EU's fiscal framework is that the budget targets (and in particular the reference value for deficits) underpinning EU surveillance are set in nominal terms. As such, they do not take account of the impact of economic conditions on budget balances. Since 1999, however, considerable progress has been made to formally introduce the impact of the economic cycle into the assessment of Member States' budget positions, and also to develop more comparable indicators across Member States on the output gap and cyclically-adjusted budget deficits.

An important development as regards the assessment of Member States' budget positions in the SGP came with the adoption in 2001 of a revised Code of Conduct on stability and convergence programmes (see footnote 5). The Code of Conduct clarified the role which cyclically-adjusted budget balances are to play when the Commission and Council assess whether Member States meet the budgetary targets set down in their stability and convergence programmes. The Code stated that when assessing compliance with the medium-term budget target, account should be taken of cyclically adjusted positions. These clarifications helped improve the assessment of Member States' budgetary positions under the SGP, an ensures that they go well beyond the simple verification of compliance with nominal targets.

Although there is a broad consensus in academic and policy circles on the importance of considering underlying budgetary positions when reaching policy conclusions, opinions diverge on how in practice they should be calculated. In an ideal world with sufficient information on all budgetary developments and policy measures, it would be possible to adjust each budget item directly to reflect their 'true' structural position. However, information of such quality is usually not available. Consequently, indirect methods are used whereby the cyclical budgetary component is inferred from the co-variation of government revenues and expenditures with output fluctuations.[22]

Among the measurement issues on which the debate has focused there is the approach for estimating potential output and output gaps. Until 2001, the Commission has used the so-called Hodrick-Prescott (HP) filter to estimate trend GDP and the output gap.[23] Given the limitations of the HP method, Member States and the Commission agreed that it would be preferable to move to a so-called production function (PF) approach to calculate output gaps, which is simple, transparent and replicable, and which relies on a similar set of assumptions for different Member States although taking account of specific national features. The production function approach was endorsed by the ECOFIN Council of 6 November 2001 and constitutes now the reference method when assessing cyclically-adjusted budgetary position expressed in the stability and convergence programmes.[24] However, for a transition period, HP-filter based figures are used as a backup method.

The sustainability of public finances

In the coming years, the size and age-profile of the EU's population will change substantially as the post-war baby-boom generation reaches retirement age, fertility rates remain low and life expectancy continues to increase. This will lead to pressure for increased spending on public pensions and health care. Since 1999, there has been an increasing focus on the need to consider long term issues related to population ageing, and more generally for budgetary surveillance to take a longer-term perspective going beyond the three/four year time horizon of stability and convergence programmes.[25] The European Council in Stockholm

may raise output and employment in the medium-term both via increased consumption and investment demand. See European Commission (2003b).

[22] The CAB is computed as the actual budget balance (B) adjusted by the cyclical budget component. The latter is estimated as the GDP output gap (G), i.e., the percentage difference between actual and potential output, times the budget sensitivity to the output gap (α). Hence, CAB = B - α*G. The values of the budget sensitivities used by the Commission are based on budget elasticities (i.e., the percentage change in budget items associated with a percentage change in GDP) estimated by the OECD (see van den Noord (2000)).

[23] See European Commission (2000). The HP statistical filter has a number of practical advantages. Firstly, only limited inputs are required, i.e. real GDP figures, and is therefore easy to apply in an equal fashion across Member States. It is also a transparent method in the sense that it is easy for other users to replicate the results. However, the HP-filter lacks a clear link to economic theory, making it difficult understand the driving forces behind the results: this complicates its usage for economic analysis in a broader setting e.g. to assess the policy-mix, wage-setting, unemployment and inflationary pressures. There are some other well-known methodological problems with the HP filter. Often mentioned is the sensitivity of results to the (somewhat ad-hoc) choice of the de-trending parameter (usually referred to as □). Output gap estimates from the HP filter are also affected by end-sample biases, as the estimates of trend output tend to rely excessively on the latest developments in actual output. Estimates of trend output can thus be biased when recent developments are dominated by demand shocks. The Commission had partially remedied the end-point bias by using medium-term growth projections.

[24] The methodology for estimating potential output through the production function approach followed by the Commission is illustrated in Denis, McMorrow and Roeger (2002).

[25] For a review of analysis by the Directorate General for Economic and Financial Affairs on issues related to ageing populations see Regling K. and D. Costello (2003).

(March 2001) agreed that "the Council should regularly review the long-term sustainability of public finances, including the expected strains caused by the demographic changes ahead.

Together with the national authorities in the Economic Policy Committee, the Commission has worked to produce more comparable long-run budgetary projections covering public spending on pensions, health care, long-term care, education and unemployment transfers. Table II.6 summarises the latest available long term budgetary projections for age-related expenditures. In a no-policy change scenario, age-related expenditure is projected to increase by more than 4 percentage points of GDP in at least 9 out of 15 countries by 2050.

In addition to making common projections, progress has also been made in systematically incorporating issues related sustainability into the budgetary surveillance process. Since 2001, the Commission monitors long term budgetary trends by including an analysis of the sustainability of public finances as part of the overall assessment of the stability and convergence programmes. A pragmatic definition of what constitutes a sustainable public finance position is used, namely whether on the basis of current policies and projected trends for revenues/expenditures, Member States will continue to comply with the budgetary requirements of EMU, and in particular the Treaty requirement to keep debt levels below the 60% of GDP reference value.[26] The Commission and the Council use quantitative as well as qualitative indications to draw policy conclusions.

The quantitative part of the assessment is carried out as follows. Debt development is extrapolated up to 2050 under two different scenarios. Under a so-called "programme" scenario, the starting position in terms of the cyclical-adjusted budget balance, the level of the debt to GDP ratio, the primary spending and the tax revenues are the figures reported by the Member State for the final year of their latest updated stability or convergence programme. Future extrapolations take on board the latest available estimates of age-related expenditures and the agreed macroeconomic assumptions on nominal interest rates, real growth and inflation (see EPC, 2003a and 2003b). The "programme" scenario assumes that Member States actually achieve the budget targets set down in their programmes. However, such an outcome is by no means assured.

In order to assess the relevance of the consolidation processes in the medium-term to achieve long term sustainability, an alternative scenario (called this year "2003 position" scenario) is run in the same way as the "programme" scenario, except that debt levels are extrapolated from assuming that no budgetary consolidation is achieved, i.e. the cyclically adjusted primary balance do not change in the programme period and no stock-flows operations take place. Quantitative indicators are complemented by qualitative features[27]. The main qualitative features shaped into the assessment are: the current debt to GDP ratio, the impact of special factors as one-off measures or contribution to pension reserve funds on the budget balance, the current level of tax ratios and the robustness of long term budgetary projections.

Table II.7 summarises the main results of the analysis for long term sustainability of public finances. The emerging U-shape of the debt to GDP ratio in most countries under the "programme" scenario indicates that there is a window of opportunity during the next years to run down the debt to GDP ratio. In the coming twenty or twenty-five years, debt levels are projected to decrease due to the effect of maintaining balanced budget positions: however, this trend would start to reverse once the budgetary impact of ageing starts to take hold, with the largest increase in most countries expected between 2030 and 2050.

The risk of unsustainable public finances increases considerably if the Member States do not achieve the SGP goal of budget positions of 'close to balance or in surplus'. An indication of this can be seen by comparing the projected debt levels under the "programme scenario" with the "2003 budgetary position" scenario. This issue is especially relevant for the six euro-area countries with highest cyclically adjusted deficits in 2003, i.e. Germany, Greece, France, Italy, Netherlands and Portugal.

Once this results are complemented with qualitative features, it results that overall, nine countries still present risks of long term sustainability and five of them (Belgium, Greece, Italy, Germany and France) have more serious problems. While the quantitative indicators show that Italy and Belgium are relatively well placed to meet the cost of an ageing society, the high level of the current debt and the need for high primary surplus over the next 10 to 15 years raise concerns on the depicted path. For Germany and France, it is the medium term budgetary profile that raises concerns. The other four countries (Portugal, Spain, Netherlands and the UK) face some risks due to the medium-term budgetary development or, as it is the case for Spain and Portugal, for the uncertainties over the long term projections of pension expenditures. Finally, six countries (Ireland, Denmark, Finland, Austria, Luxembourg and Sweden) seem relatively well placed to meet the cost of an ageing society.

[26] See, e.g., Blanchard *et al.* (1990) and Buiter and Grafe (2002a) for alternative definitions of public finance sustainability.

[27] See the Report "The impact of ageing populations on public finances: overview of analysis carried out at EU level and proposals for a future work programme" (October 2003), available at http://europa.eu.int/comm/economy_finance/epc/documents/2003/pensionmaster_en.pdf

Public investment and the EU's budgetary framework

A further question that has been analysed recently is whether the EU's fiscal rules has contributed to the decline in government investment in euro-area countries. It has been documented that during phases of fiscal consolidation, capital expenditures are likely to be cut more heavily than current expenditures.[28] The reason is that it is politically less costly to reduce total expenditure in a given year by postponing the realisation of public investment projects rather than by cutting government consumption.

Empirical work aimed at assessing the impact of the fiscal rules on government investment does not fully support these concerns. During the budgetary consolidation period of the mid-1990s, government investment was cut relatively more than current expenditure. However, since the launch of the euro, government investment has stopped falling and increases took place especially in countries having reached a 'close-to-balance' position.[29] The available evidence seems to suggest that the impact of the fiscal framework on government investment is not clear-cut.

2.3.2 The debate on the conduct of fiscal policy in EMU

Active use of fiscal policy

Some observers called for a more active use of fiscal policy in monetary union on the grounds that having lost control over monetary policy and the nominal exchange rate, governments may need to take action to correct country-specific macroeconomic imbalances. It was also be argued that fiscal policy at national level may be more efficient in the EMU framework than in the past, thanks to lower crowding-out effects and the disappearance of risk premia linked to possible currency depreciation. Finally, better stabilisation at national level, by limiting inflationary or deflationary pressures, could have positive spillover effects at EMU level by facilitating the task of the ECB of guaranteeing price stability, as euro-area inflation would be less volatile.

However, even within a basic Keynesian framework, a number of arguments weigh in favour of avoiding the active use of fiscal policy.[30] First, political economy and institutional constraints tend to limit considerably the scope for active fiscal management. In particular, discretionary fiscal management has a major pitfall related to implementation lags. This may result in counter-cyclical measures having pro-cyclical effects as policymakers do not have perfect foresight of future (and even ongoing) economic developments. Second, trade in the single currency area may increase, which may reduce the effectiveness of domestic fiscal policy. Third, the possibility of free-riding at national level may induce an excessive use of discretionary loosening (expansionary bias), with a resulting pro-deficit bias. Finally, if carried out simultaneously by several countries simultaneously, inappropriate fiscal policies could increase uncertainty as to its overall effect on the policy mix, and could trigger countervailing action by the ECB.

Recent empirical research aimed at assessing the impact of fiscal policy on output shows that the value of fiscal multipliers is rather low in most advanced economies, and that it has been falling.[31] This analysis confirms that a sceptical approach to discretionary policy is warranted, and that fiscal policy should be limited to enabling the full working of automatic stabilisers.[32] Counter-cyclical fiscal policy to supplement the operation of the automatic stabilisers should only be envisaged in the event of large, country-specific and domestically-driven demand shocks. Even in these circumstances, active fiscal policies may not be appropriate given the inherent difficulties in identifying the nature of the economic shocks in a timely manner and the existence of implementation lags with fiscal packages.

The effectiveness of automatic stabilisation

While discretionary policy should be used in limited cases and with caution, the question remains about whether automatic stabilisers are always helpful in stabilising the economy and whether they are on their own sufficient in the face of strong asymmetric shocks.

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[28] See, e.g., Oxley and Martin (1991) for an analysis referred to OECD countries. As a result of concerns, there have been several calls to amend the fiscal framework of EMU with a 'golden rule' whereby government investment should be deducted from the deficit figures to be used in budgetary surveillance. See Blanchard and Giavazzi (2004).

[29] Recent analysis on the evolution and determinants of government investment is contained in Gali and Perotti (2003), European Commission (2003b) and Turrini (2004).

[30] See, for instance, Auerbach (2002) for a recent assessment of the effectiveness of discretionary fiscal policy. See also Buti and van den Noord (2003) for evidence analysing the relation between elections and discretionary fiscal policy action in EU countries.

[31] Evidence for OECD countries using the estimate of structural VAR models is reported in Blanchard and Perotti (2002) and Perotti (2004). Estimates of the impact of fiscal policy obtained from most applied calibrated macro models also indicate values for fiscal multipliers smaller than those predicted by standard Keynesian models. For a survey of econometric evidence and model-based estimates of fiscal policy effectiveness see, e.g., Hemming *et al.* (2002).

[32] In the past years, the European debate on the desirability of discretionary fiscal action was also enriched by analysis by the Commission. See for example European Commission (2000 and 2001c).

Table II.6: **Age-related expenditure long term trends in EU-15 countries (% GDP).**

		Age-related expenditure								
		Pensions		Health care		Education		Others		Total change
	Source	2008	2050	2008	2050	2008	2050	2008	2050	
BE	2003 update	8,8	12,6	7,1	9,9	4,1	3,7	6,7	5	4,5
DK	2003 update	5,5	6,9	8	10,4	8,7	8,4	9,3	11,2	5,4
DE	2003 update	11	14,9	5,9	7,1	5,3	5,5	0,9	0,7	5,1
EL	2002 update/EPC	12,3	22,6	5,1	6,6	3,3	3,2	0,4	0,2	11,5
ES	2003 update/EPC	8	13	5,7	7,2	4	3,7	0,6	0,4	6
FR	2002/2003 updates	12,7	14,5	6,4	7,4	5,9	5,5	1	0,7	2,1
IE	EPC	4	7,7	6,1	7,8	4	3,2	1	1	4,6
IT	2003 update	14	14,1	6,4	8,1	4,6	4,2	0,4	0,3	1,3
LU	2002 update/EPC	7,4	9,3	n.a.	n.a.	n.a.	n.a.	0,3	0,2	1,8
NL	2003 update	5,2	8,7	7,5	10,5	5	4,9	6,6	6,9	6,7
AT	2003 update	14,6	15	5,2	6,4	5,6	5	1,5	2	1,5
PT	2003 update/EPC	11,3	12,1	5,3	6,1	5,4	5,1	0,5	0,5	1,3
FI	2003 update	11,6	14,5	4,8	5,8	5,8	5,4	3,3	4,8	5
SE	2003 update	9	9,9	11	13,4	8,2	8,7	6,8	9,7	6,7
UK	2003 update	5,1	5,3	7,7	9,7	5,4	5,4	1,4	1,5	2,3

Source: European Commission, Public Finances in EMU - 2004.

Source: European Commission, Public Finances in EMU - 2004

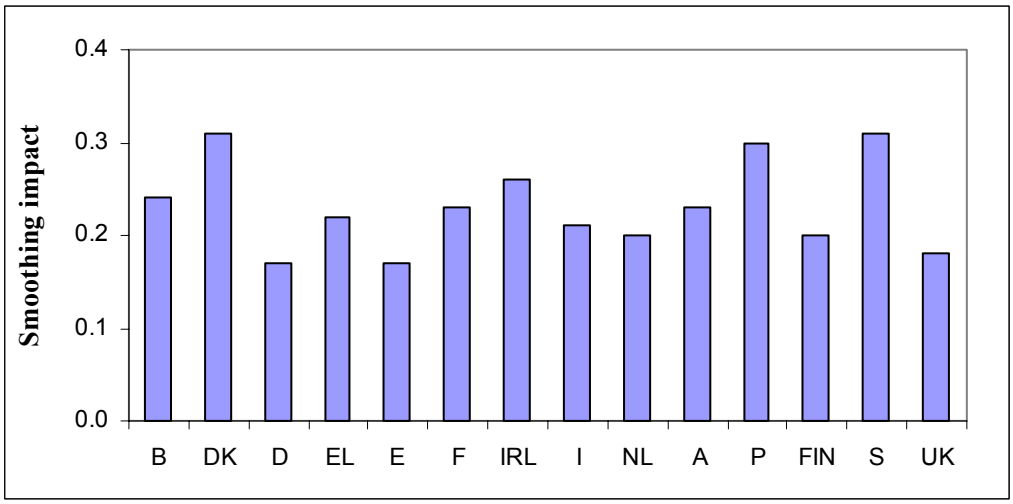
Table II.7 – **Long term debt to GDP ratio in EU-15 countries.**

	2003	Programme scenario			2003 budget scenario		
		2010	2030	2050	2010	2030	2050
BE	102.3	74.8	11.5	-5.0	67.2	-35.7	-114.0
DK	42.7	24.6	-19.5	-34.8	6.9	-65.5	-131.9
DE	64.0	62.2	86.5	175.7	74.3	156.5	336.6
EL	101.7	75.1	42.2	151.0	72.2	52.4	181.0
ES	51.8	36.3	-1.6	36.6	31.6	-21.4	-12.4
FR	61.4	56.0	52.2	72.0	71.8	142.1	288.0
IE	33.1	26.7	36.4	105.0	27.0	50.1	138.4
IT	106.0	86.6	28.9	-27.8	92.0	82.7	107.8
LU	4.9	-0.9	-9.4	1.2	-3.9	-35.7	-47.8
NL	54.0	49.1	67.6	140.0	53.8	88.7	185.9
AT	66.4	53.9	24.4	15.9	55.1	26.1	18.4
PT	59.5	48.0	5.3	-42.4	60.9	72.1	127.6
FI*	-14.6	-33.4	-30.1	6.0	-52.8	-79.5	-88.6
SE*	33.0	16.4	-0.4	46.7	15.2	19.8	97.6
UK	39.3	42.5	71.6	138.7	45.3	89.5	177.5

* Adjusted gross debt, netting off the accumulated liquid financial assets.

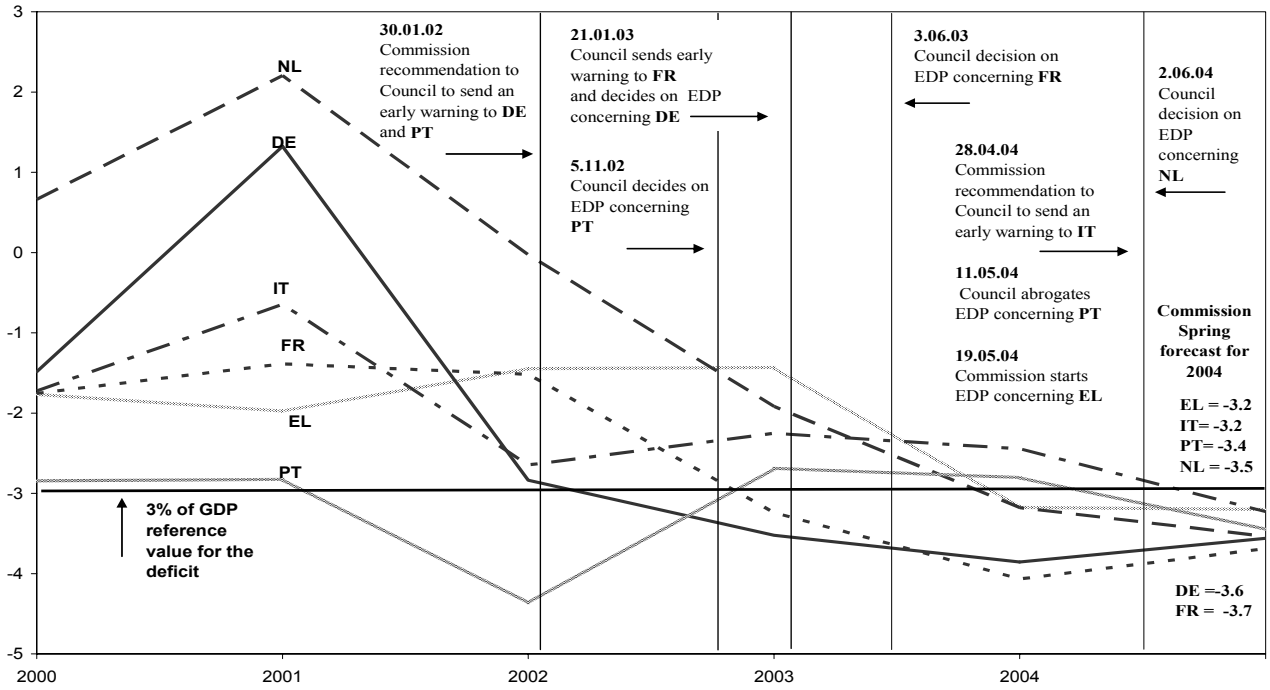
Source: elaborations by the Commission services

Graph II.11: **Stabilisation effect provided by the budget in response to a consumption shock amounting to 1% of GDP (simulations with the Commission QUEST model)**



Source: European Commission, Public Finance in EMU-2002, European Economy, Reports and Studies, 3.

Graph II.12: **Budget deficits and procedures launched by the Commission and the Council concerning 6 euro area countries (2000 – 2004)**



The effect of automatic stabilisers largely depends on the type of shocks hitting the economy.[33] In the event of demand shocks such as an acceleration of private consumption or a sudden fall in exports, automatic fiscal stabilisers can play a useful role as they cushion the impact both on output and prices, which move in the same direction after the shock.

In contrast, supply shocks typically send output and inflation in opposite directions: for example, in the case of a short-term surge in oil prices, the output gap could turn negative and at the same time there is higher

[33] A formal treatment of the effects of automatic stabilisers on output and inflation under different types of shocks is presented in European Commission (2001c). For evidence on the effectiveness of automatic stabilisers in OECD countries see van den Noord (2000).

inflation. If the supply side shock is only a temporary phenomenon, automatic stabilisers do help smooth output, but at the cost of higher inflation.

However, if the supply-side shock is permanent (i.e. it affects the level of potential activity), automatic stabilisers may delay the necessary adjustment towards the 'new' level of potential output. Empirical evidence shows that automatic stabilisers are quite effective in the case of shocks to private consumption, whilst they are less effective in the case of shocks to investment or external demand. Graph II.11 reports estimates of the smoothing impact of automatic stabilisers obtained via simulations with the Commission QUEST model in case of a consumption shock.

2.4 Was the budgetary framework effective in helping countries correct budgetary imbalances?

2.4.1 Experiences in the initial years of EMU

The EU fiscal framework foresees several mechanisms for exerting peer pressure on countries to achieve and maintain fiscal discipline, and includes enforcement mechanisms in the event of countries approaching or breaching the reference values for deficits and debt. Should significant slippage from the targets set down in stability/convergence programmes be identified, the Council can issue an "early warning", i.e. a recommendation urging the Member State concerned to take adjustment measures If deficit levels go above the 3% of GDP reference value (and unless there are exceptional circumstances to justify such an occurrence), a country is placed in an excessive deficit position. The SGP clarifies a tight timetable for the application of Excessive Deficit Procedure, and also spells out the type and scale of sanctions that can be applied in the event of persistent failure to take corrective measures.[34] So far the implementation of the Pact has never arrived at the sanctions stage.

Graph II.12 above presents the various early warnings and recommendations on excessive deficit position that have been issued since the launch of EMU in 1999.

In February 2002, early warnings were prepared by the Commission to be addressed to Germany and Portugal. However, they were not adopted by the Council, which accepted commitment of these countries to avoid breaching the deficit ceiling. This stance on the part of the Council proved to be overly optimistic and deficits in both countries quickly rose above 3% of GDP, which led to them being placed in excessive deficit positions in early 2003.[35]

France, despite having received an early-warning recommendation in early 203, was placed in an excessive deficit in mid-2003.

In November 2003, it became evident that both France and Germany, which had deficits above 3% of GDP already since 2002, would not be able to bring them below 3% of GDP in 2004. The Commission therefore prepared new recommendations addressed to these two countries calling upon them to take corrective measures and at the same time postponed by one year the deadline for bringing the deficit levels below the reference value. The Council did not endorse the steps taken by the Commission on account of new commitments taken by France and Germany, - the Council reached non-binding conclusions which *de facto* suspended the excessive deficit procedure.

In 2004, new excessive deficit procedures have been launched concerning Greece and the Netherlands, while the one concerning Portugal has been abrogated. The Commission also tabled a recommendation for the Council to send an early warning to Italy, given its forecast for 2004.[36]

Two main lessons can be drawn as regards the experiences with the peer pressure and enforcement mechanisms of the EU's fiscal framework in the early years of EMU.[37] Firstly, the EU fiscal framework has struggled to develop into an effective co-ordination framework. In particular, the 'preventive' elements of the SGP, for example the early-warning system, have not been implemented in a timely manner that would give Member States adequate time to take corrective

[34] In the first year of application of the sanctions, the country in question is required to make a non-interest bearing deposit composed of a fixed component equal to 0.2% of GDP and a variable component equal to one tenth of the difference between the deficit and the 3% of GDP reference value. A ceiling of 0.5% of GDP is set. The fixed component aims at providing an incentive not to incur an excessive deficit, while the variable component represents an incentive to limit the excess over the 3% of GDP threshold. In each subsequent year, until the excessive deficit decision is abrogated, only the variable component will be applied. As a rule, a deposit is to be converted into a fine after two years if the excessive deficit persists.

[35] For documents concerning these procedures, see the section on Fiscal Surveillance on the website of the DG ECFIN: http://europa.eu.int/comm/economy_finance/about/activities/sgp/procedures_en.htm. See also Part II of European Commission (2003e and 2004).

[36] This chapter only covers euro area countries. In July 2004, following their accession, the Council also placed six new Member States into an excessive deficit position. However, countries outside the euro area are only expected to endeavour to bring excessive deficit positions to an end and there is no possibility of making recourse to sanctions.

[37] For a review of problems and challenges concerning the SGP see also Buti and Giudice (2002) and Giudice and Montanino (2003).

budgetary measures before deficit levels approach the 3% of GDP reference value.

Secondly, political ownership of the SGP by Member States has diminished with a divergence between budgetary commitments and concrete actions to achieve stated targets, and unwillingness to acknowledge the implication of EMU on the conduct of fiscal policy at national level. More generally, Member States failed to play their role in exerting peer pressure on countries that miss budgetary targets by a wide margin via the enforcement mechanisms of the SGP.

2.4.2 Recent efforts to strengthen the framework for budgetary surveillance

The need for further and more decisive progress in the EU framework for economic governance has been highlighted by the difficulties in maintaining budgetary discipline and by the persistently low growth. At the beginning of 2004, therefore, the Commission adopted the following three-pronged strategy to clarify and improve economic policy coordination and surveillance:

- The Commission announced that it would continue the conduct of economic and budgetary surveillance for all Member States in the framework of the Treaty and the Stability and Growth Pact, including the monitoring of developments for countries in excessive deficit.

- Consistent with its role as the guardian of the Treaties, the Commission sought to establish legal clarity and predictability regarding EMU related provisions of the Treaty. The Commission therefore decided to challenge the Council conclusions in the European Court of Justice concentring on procedural elements only and did not touch on the country-specific economic surveillance aspects of the Council conclusions. The ECJ clarified the legal situation in its judgement dated 13 July 2004.[38]

- The Commission, based on the experience of the five first years of EMU, announced new proposals for the strengthening of economic governance in the future. Improvements in the implementation of the Stability and Growth Pact would form part of this initiative.

More recently, the European Council of June 2004, adopted the new Constitution which to some extent strengthens the framework for multilateral economic surveillance, notably by reinforcing somewhat the Commission's powers. The European Council while reaffirming, in a Declaration, its commitment to the SGP as the framework for the coordination of budgetary policies, looked forward to possible proposals of the Commission as well as further contributions of Member States with regard to strengthening and clarifying the implementation of the SGP.

Subsequently, the Commission Communication and various parts of the report *Public Finances in EMU – 2004*[39] dealt with ideas which could usefully be considered in order to further strengthen the EU fiscal framework, without being either conclusive or exhaustive.

First, economic arguments show that, by fostering discipline and quality in public finances, the Treaty – with its numerical and procedural rules, does make an important contribution to growth while allowing room for a proper implementation of the Lisbon strategy.

Second, the BEPGs could assume a more prominent role in economic policy coordination by providing better fiscal guidance to Member States, therefore supporting the conduct of national policies and the definition of budgets. One possibility could be to bring the national budgetary policy coordination calendars more into line with the general policy coordination cycle, for example by having an EU six-month period in which policy guidance would be formulated and issued followed by a national six-month period during which Member States would follow up. This would also make it possible to set fiscal policy in the broader context of increasing growth potential and addressing the quality and sustainability of public finances.

Third, in its Communication of November 2002, the Commission already expressed the importance of improving the interpretation of the fiscal rules, in order to take debt developments and country-specific circumstances more into account. European Commission (2004) examines several options such as taking more account of growth developments - in particular of protracted slowdowns - in the implementation of the procedures, including in the application of the deficit criterion and in setting the deadlines for correcting the excessive deficit, and increasing the focus on debt in the surveillance of budgetary developments. European Commission (2004) also elaborates on the concept put forward in the earlier reports (European Commission, 2001c) of reworking the definition of the medium-term objective for fiscal policy to cater for other (country-specific) circumstances and consider debt levels and the overall sustainability of public finances while ensuring that deficits remain below 3% of GDP in normal

[38] Judgement of the Court of Justice in Case C-27/04. See Press release N°57/04, http://curia.eu.int/en/actu/communiques/cp04/aff/cp040057en.pdf

[39] European Commission (2004).

circumstances. It reviews other options to improve the functioning of the SGP such as strengthening the incentives to conduct prudent and symmetric-over-the-cycle policies and achieve surpluses in good times, or ensuring early action to correct inadequate developments. European Commission (2004) indicates that improving the knowledge of government budgetary positions – through the analysis of all elements which underlie borrowing requirements and balance sheets and through a reinforcement of the statistical framework – also appears to be important. For the credibility and smooth operation of the fiscal framework, the reliability of fiscal statistics is crucial. To this end, it highlights the importance of strong monitoring of the quality of reported fiscal data and of consistency between the status and prerogatives of national statistical authorities and their task of ensuring the reliability and timeliness of statistics. To this end the Council Conclusions of 2 June 2004 lay down minimum European standards for the institutional set-up of statistical authorities. Full transparency will allow the financial markets to better assess the creditworthiness of the different Member States.

Finally, European Commission (2004) addresses issues of enforcement at both Community and national level. At Community level, it recalls the advantages of clarifying the authority and the instruments entrusted respectively to the Commission and to the Council. The Commission's role in assessing developments and determining policy recommendations contributes to efficiency. A better articulation and differentiation of roles in the application of the SGP resulting from changes agreed in the European Constitution (such as the capacity of the Commission to issue formal "early warning" directly and to adopt proposals for the Council decisions launching the excessive deficit procedure) is an important first step. It recalls the merits of the Community's, and in particular the Commission's, power to effectively monitor the application of the fiscal rules by Member States, especially concerning the preventive element of the framework. At national level, it underlines the importance that Member States ensure that institutions are appropriate to the task of ensuring sustainable public finances. This involves both improving budgetary procedures and favouring the dialogue among all actors concerned. In this context the role played in some Member States by national counterparts for the monitoring function fulfilled by the Commission at EU level appears relevant.

Some proposals advanced by some Member States in the course of 2004 seem complementary to the ideas recently considered by the Commission or put forward in previous years. It has for example been suggested to reinforce the role of the Eurogroup, also in the context of the project of Constitution, also by introducing a stable presidency over 2 ½ years in place of the current rotating mechanism. At the same time, new calls have been made to foster information among Ministers before actual decisions are taken at national level, and to reinforce discussions and coordination within the Eurogroup.

Further discussions between the Commission and Member States appear necessary before formal proposals are advanced. However, the willingness to tackle seriously the various issues at stake appears clear, which gives some optimism as to the capacity of the EU to move forward to strengthen economic governance.

Box II.3: **Efforts to improve the co-ordination of budgetary policies in EMU**

The Treaty reflects a sceptical disposition on the merits and feasibility of discretionary fiscal policy *per se* and also on the need for co-ordinated discretionary budgetary policy measures on the part of several/all budgetary authorities. Even if there is consensus that there is no need for fine-tuning fiscal policies in a concerted way in EMU, some degree of co-operation has proved necessary, as the Commission and ECOFIN Council have had to consider whether various fiscal policy plans/actions on the part of some Member States are compatible with the requirement to achieve to sound and sustainable public finances.[40] For example, ECOFIN Ministers had discussed the appropriate use of the large one-offs revenues resulting from the sale of UMTS licences. The also had to consider whether planned and announced tax cuts were in line with Member States' commitments under the SGP. Perhaps the most controversial issue on the conduct of fiscal polices in EMU related to Ireland. In 2001, the Council issued a recommendation to Ireland for failing to respect a recommendation contained in the Broad Economic Policy Guidelines to use fiscal policy in an appropriate manner to contain inflationary pressure.[41] This was the first time that such a recommendation was issued, and illustrated the importance of clarifying the interaction between the procedures of the SGP and the BEPGs.

In practice, the debate on the conduct of fiscal policy in EMU, and in particular whether Member States take adequate account of the implications for the euro area in the design and implementation of national adequate

[40] See Deroose, Langedijk and Roeger (2004) for a recent analysis of fiscal policy as a stabilisation tool in EMU in response to demand and supply shocks.

[41] Council Recommendation 2001/191/EC of 12 February 2001, JO L 69/22 10.3.2001.

account, has proved to be challenging. One reason for this is the lack of consensus in the economic literature on key issues, e.g. the appropriate measure to identify sustainable public finance positions or the impact of discretionary fiscal measures on the real economy. However, it was also recognised that there is scope to improve the framework for co-operation on fiscal issues at EU level. Several efforts were made in the early years of EMU to improve coordination in the field of budget policy.

In ***February 2001***, the Commission adopted a Communication on economic policy coordination.[42] The Communication led to several positive developments including better and more timely statistics covering the euro area, a quarterly report on the euro area prepared by the Commission, the establishment of a Eurogroup working party attached to the Economic and Financial Committee (EFC) to help prepare debates, and regular communiqués (so-called Terms of Reference) from the Eurogroup on important policy issues.

The Barcelona European Council of ***March 2002*** concluded that the euro area needed to make further progress with policy co-ordination and invited the Commission to present proposals to reinforce economic policy co-ordination in time for the 2003 Spring European Council. The initial response of the Commission to this mandate was to suggest that all euro-area countries adhere to common standards for the conduct of economic policies in the euro area. The intended objective of common standards would be to clarify the respective role of economic policies in three domains - (1) preserving macroeconomic stability, (2) enhancing the economic growth potential of the euro area and (3) responding to economic shocks that affect individual Member states or the euro area as a whole. Concerning their format and status, the intention was for common standards to complement the existing Treaty provisions and Stability and Growth Pact regulations with non-binding guidelines on the policy stance expected of authorities in various circumstances, i.e. a so-called 'reaction function'. The aim was to facilitate discussions amongst Ministers on policy challenges as they emerged, and thereby contribute to a more consistent policy stance over time and across Member States.

The discussions on common standards, however, became overshadowed by the deterioration in budget balances and the difficulties in implementing the Stability and Growth Pact. In ***November 2002***, the Commission adopted a Communication to strengthen coordination in the field of budgetary policy.[43] This Communication focuses potential improvements that could be made to the implementation of the SGP and did not deal with wider issues related to the conduct of fiscal policy in EMU which had been addressed in the debate on common standards. *Inter alia,* the Communication argued in favour of more account being taken of underlying economic conditions when assessing budgetary positions, an interpretation of compliance with SGP requirements that would (depending on country specific circumstances) cater for the budgetary impact of reforms that enhance growth and employment, increasing the emphasis placed on the sustainability of public finances and outstanding debt positions, and improving the implementation of the SGP including stricter and more timely recourse to the existing enforcement instruments. At the same time the Commission adopted proposals to improve the governance of budgetary statistics. The Spring European Council of March 2003, endorsed a report of the (ECOFIN) Council which shared many of the Commission's proposals on strengthening the co-ordination of budgetary policies.

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42 Commission Communication on "Strengthening economic policy coordination within the euro area", COM(2001) 82 final of 7.2.2001.

43 Communication on "strengthening the co-ordination of budgetary policies", November 2002. This followed a statement issued on 24 September 2002 by Commissioner Solbes, with the agreement of President Prodi, SEC(2003)1009/6 of 25 September 2002.

3. Wage developments

3.1 Expectations regarding wage developments and wage formation in EMU

3.1.1 The approach to assessing wage developments and wage formation in EMU

Wages are the crucial factor in equilibrating demand and supply on the labour market. Wage-setting mechanisms strongly contribute to determining the level of equilibrium unemployment in an economy; they are decisive for an efficient allocation of labour resources across economic activities and a flexible wage formation process is required to help absorb macroeconomic shocks and cyclical disturbances in a smooth way. In the run-up to EMU, there was widespread concern amongst policymakers that European wage formation systems suffered from significant shortcomings which could seriously impair the efficient working of EMU.

Indeed, and as argued in Part IV.2 on labour markets, it was generally considered that in EMU it was even more important than in the past for wage developments to be in line with both the macroeconomic framework set at the Community level and the individual country-specific requirements for several reasons:

- overall nominal wage developments must be consistent with the goal of price stability. Excessive nominal wage increases triggering inflationary risks for the euro-zone as a whole – particularly where they occur in larger countries – would inevitably provoke a tightening of monetary conditions with adverse effects on growth and employment in the entire monetary union.

- with the bailout option of nominal exchange rate devaluation no longer existing, any substantial error in wage setting would ultimately translate into deteriorating labour market conditions and painful adjustment thereafter. In other words, while inflationary wage pressure might not significantly affect overall euro-area inflation when confined to a smaller country or region, it was nonetheless a matter of concern as, sooner or later, it would depress competitiveness and employment in that country or region via its effect on relative unit labour costs.

In brief, it was widely recognised that EMU and its associated impact on wage bargaining behaviour could affect both the level of (un)employment and the flexibility by which wages adjust to shocks. It was also widely held that EMU should, in general, provide improved framework conditions for employment-compatible wage bargaining; indeed, with all the elements of the Marshall-Hicks rule of labour demand likely to operate[1], the link between wage and employment trends becomes tighter and more evident. However, it has also been argued that inherent in the integration process are forces which tend to make wages less flexible, which implies that more protracted output adjustment may follow, even though the equilibrium level of employment may increase and structural unemployment be lower.

Against this general background, this chapter provides a brief assessment of aggregate wage and labour cost developments in the early years of EMU against the key concerns/expectations of policymakers at the outset of EMU, i.e. would wage development support price stability, would wage developments be sufficiently responsive to cyclical economic conditions, and would EMU in and of itself be conducive to more efficient wage setting and formation. Before an assessment is made, Section 3.2 presents some recent empirical results regarding the degree of nominal wage rigidities in the euro area in comparison with the US based on formal econometric analysis of Phillips-curve-type wage equations. Section 3.3 then assesses wage developments in EMU by considering the three issues:

- wage and unit labour cost developments in the euro area as a whole (using stylised facts);

- relative unit labour cost developments across euro-area countries and the associated realignment of intra-area labour cost competitiveness;

- recent trends in the evolution of wage bargaining systems.

3.1.2 Some recent evidence on nominal wage rigidity in Europe

Conventional wisdom has it that wage formation mechanisms in Europe are characterised by a high

[1] The Marshall-Hicks rule says that the higher (i) the price elasticity of product demand, (ii) the elasticity of substitution with other factors of production, (iii) the supply elasticity of competing factors of production, and (iv) the cost share of labour in total cost, the higher the uncompensated elasticity of labour demand will be.

degree of rigidity and slow adjustment to shocks. In order to evaluate the degree of cyclical nominal wage (in-) flexibility more formally and rigorously, the Commission services have recently produced new econometric estimates of Phillips-curve-type wage equations, the usual economists' workhorse for this type of analysis.[2]

The empirical estimates show, strikingly, that the degree of nominal rigidity found for euro-area countries does not differ greatly from that of the US. Taken at face value, these results would imply that the stickier inflation developments in the euro area in recent years cannot be ascribed to a higher degree of nominal wage rigidities. Still, the estimates suggest that only about 65% of the wage adjustment to an inflationary shock is completed within the first year. Using the output response to a price shock as an indicator for the overall nominal inertia in the economy, the aggregate response appears to be surprisingly similar in the EU and the USA, in terms of both the magnitude and the dynamics of the adjustment. However, this result is not entirely new and has been confirmed by other studies. For example, testing for a common OECD Phillips curve, Turner and Seghezza (1999) found it possible to impose the restriction of a common sacrifice ratio for almost all countries examined, thus suggesting a similar inflation response by individual countries to the output gap. More recently, use of the backward- and forward-looking Phillips curve specifications presented by Galí et al. (2001), also reveals very similar responses of output to inflationary shocks for the euro area and the USA. With the backward-looking model, the output response of a 1 per cent negative money shock is 0.8 per cent in both economies. In the forward looking specification the response to the same shock is -0.5 per cent in the euro area and -0.4 per cent in the US. Last, but not least, a recent IMF study (2003) concludes that, historically, both price and output shocks appeared to have longer-lasting and more significant impacts on prices in the euro area than in the USA; however, following the hardening of most euro-area countries' commitment to stable exchange rates in the ERM after the mid- to late-1980s, impulse responses look broadly similar between the USA and the euro area.

There is also considerable variation across EU countries, with respect to both the size of the output effect and the duration of the adjustment process. Relatively low costs of disinflation can be found for Portugal, Austria and the UK, with similar adjustment patterns despite very different labour market institutions. The estimate for Italy also shows a fairly small impact response, though the negative effect tends to be much more persistent. The highest output cost of a disinflation shock occurs in the Netherlands, where we find a low response of wages to the unemployment gap. Belgium, Germany, Denmark, Spain and Sweden also show negative output responses which are slightly above average. Moreover, the estimated duration of the adjustment period is also different across countries. Higher degrees of persistence can be found for Spain, France, Italy, Sweden and Finland.

The finding of broadly similar degrees of nominal inertia across several different countries in the euro area, and in the euro area and the USA, makes it difficult to point to institutional labour market characteristics as the major determinants of nominal rigidities. Thus, while institutional and structural factors are probably key to an understanding of what determines the mark-up of effective wages over competitive wages and, in consequence, the level of equilibrium unemployment over the medium term, they appear to be of less importance for the degree of nominal inertia in the economy.

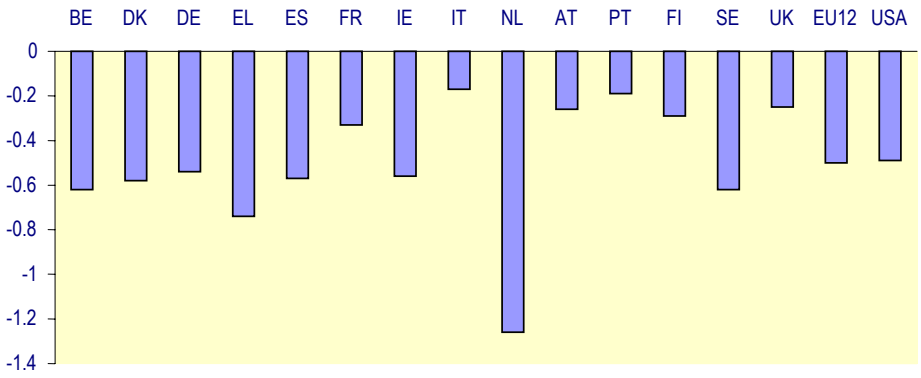
3.2 An assessment of wage developments in the early years of EMU

3.2.1 Wage and unit labour cost developments

With price stability and a high degree of sustainable convergence being key requirements for adopting the euro, the run-up to EMU saw impressive progress regarding nominal stabilisation in the euro area in terms of both prices and wages. In the 1990s, a remarkable disinflation process developed and the inflation rate fell below the 2% mark by 1997. In the aggregate of countries that were to form the euro area, nominal wage growth per employee declined almost in parallel with price stabilisation, with the rate of increase of the nominal compensation per worker even falling to below 1 per cent in 1997 and 1998. While the lacklustre overall economic performance over that period certainly contributed to a reduction in price and wage pressures, there can be little doubt that the high degree of nominal stability achieved was primarily the result of the systemic changes associated with the run-up to EMU.

[2] The estimate is carried out using a bi-variate Unobserved Components Model, where the Phillips-curve equation is used to identify the cyclical component in unemployment. A formal exposition of the model as used by DG ECFIN for the present analysis can be found in European Commission (2003a).

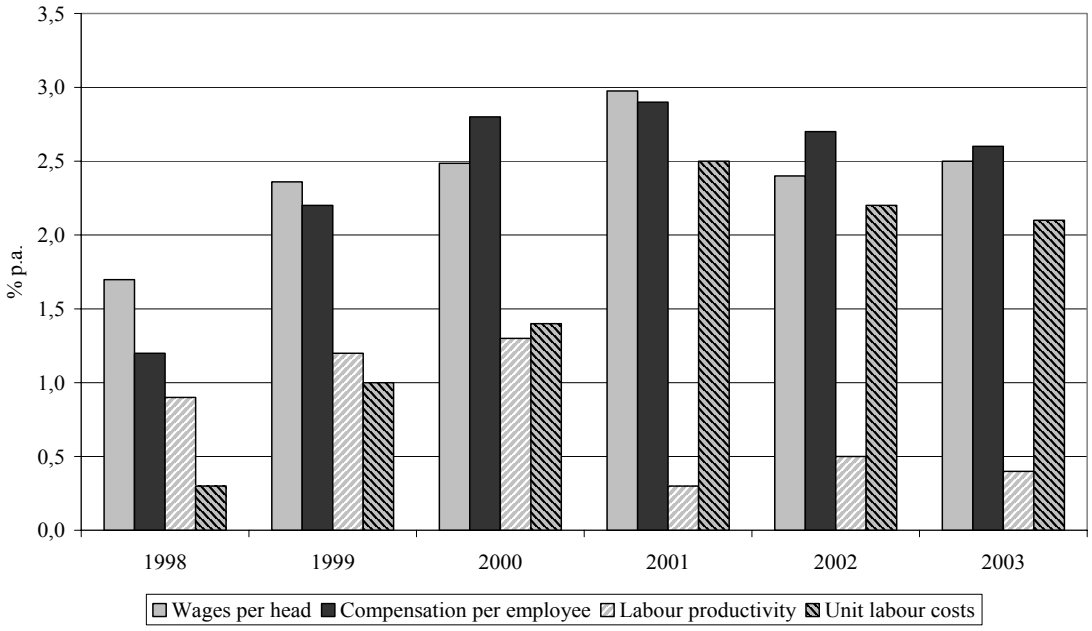
Graph II.13: **First year output response to a 1% disinflationary shock**



Source: Commission services

In recent years, both common macroeconomic shocks and country-specific developments have subjected the flexibility of wage-setting mechanisms in the euro area to a stress test. From a bird's eye perspective, overall wage discipline appears to have been preserved, and concerns that the inflation overshoot would lead to extended second-round wage effects appear to have been misplaced. For the euro area as a whole, nominal wage growth per worker has been remarkably stable since the beginning of EMU. While accelerating slightly around the turn of the decade, annual growth of nominal compensation since then has hovered around the 2 ½ - 3 per cent bracket and is forecast to remain at the lower end of that range well into 2004. Thus, the actors in the wage bargaining process appear, in general, to have taken on board the price stability objective set by the ECB.

Graph II.14: **Nominal wage and unit labour cost developments**

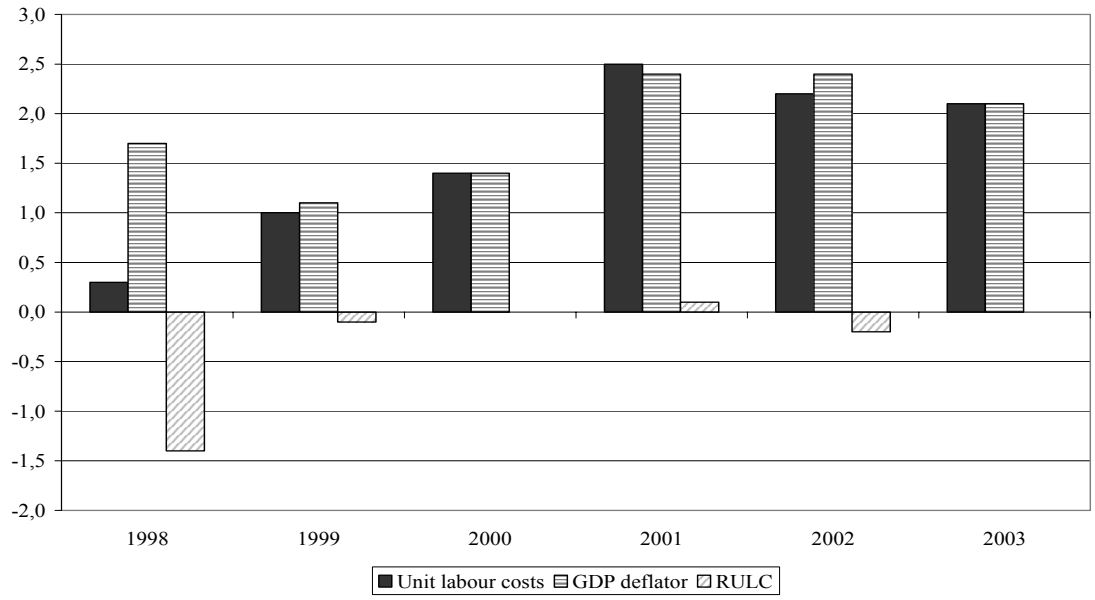


Source: Commission services

However, with nominal wage growth rather invariant to the cyclical situation, the slowdown in labour productivity growth translated into greater increases of nominal unit labour costs in 2001 and 2002, clearly exceeding the benchmark value consistent with the monetary policy goal to keep inflation close-to-but-below 2 per cent. Still, with labour productivity growth expected to pick up again at the present conjuncture, nominal unit labour cost growth in the euro area is forecast to return to well below 2 per cent next year.

Corroborative evidence for overall wage discipline is to be found in the evolution of real product wages adjusted for productivity. Obviously, in its simplest form, this boils down to the analysis of real unit labour cost developments, mirroring changes in the share of labour in total income. Indeed, for the euro area has a whole, the labour income share has remained broadly constant in the early years of EMU, after having fallen continuously in the preceding five years. With real unit labour costs growth essentially flat over the past five years, the development has been much smoother than in the beginning of the 1990s, when a marked acceleration of real unit labour cost growth was followed by a sharp downward correction, largely reflecting strong labour-shedding.

Graph II.15: **Real unit labour cost developments**



***Source*:** Commission services

In a nutshell, while overall wage discipline has been preserved, real wage moderation has not continued in recent years. However, indications are that real unit labour cost growth has re-entered negative terrain at the present conjuncture. Obviously, the wage share cannot and will not fall forever. However, real wage moderation, in the sense of reducing the mark-up of effective wages over competitive wages, helps to increase employment and reduce structural unemployment over the medium term, without necessarily compromising domestic demand in the economy. This assertion is not only solidly backed by standard economic theory, but also by the factual experience of many euro-area countries, in particular in the second half of the 1990s. It should also be noted in this context, though, that aggregate real wage moderation is a fairly poor substitute for wage differentiation when it comes to helping to price the low-skilled back into jobs.

Box II.4: **A real wage gap indicator for the euro area**

This box presents a simple indicator for shifts in the aggregate wage-setting curve in the euro area, basically by comparing real wage developments to productivity growth. However, following the lines of Blanchard (1997, 1998), apparent labour productivity is replaced by a measure of labour efficiency based on Harrod-neutral technical progress, thus computing a measure of real wages in efficiency units. Furthermore, to construct a somewhat refined real wage gap indicator, real product wages are augmented by a factor representing the wage dampening effect of a positive unemployment gap.

Put more formally, the wage gap indicator is derived from a simple wage-setting equation relating the *real product wage in efficiency units* (*w/e*) to the unemployment rate *UR* and a shift parameter *Z* that captures other relevant labour market conditions affecting wage pressure in a log-linear manner:

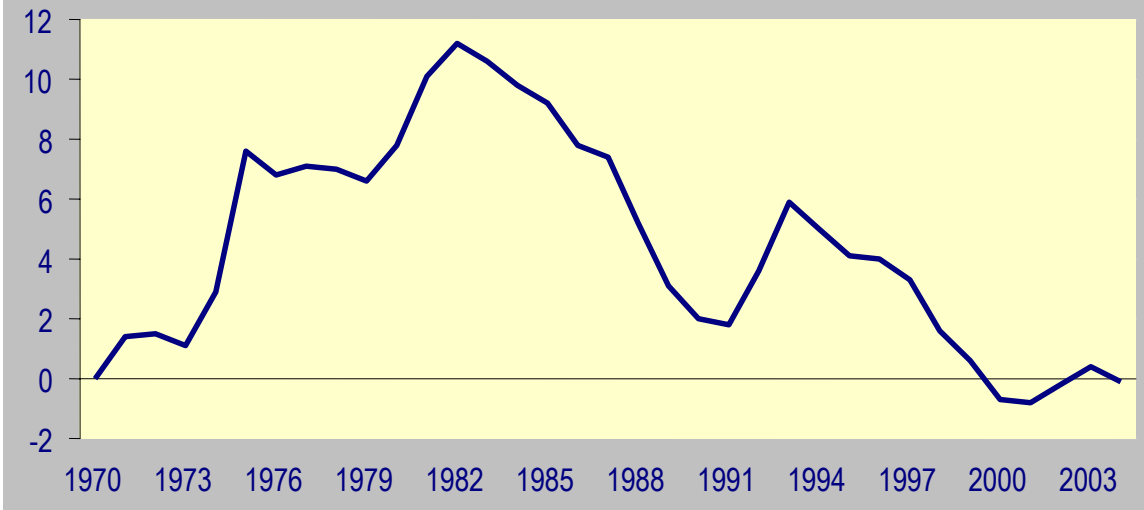
$log\ (w/e) = - b\ UR + Z$

with b denoting the elasticity of real efficiency wages with respect to unemployment. The real product wage (*w*) is the gross nominal wage (including employers' contributions to social security) divided by the GDP deflator. The series for labour efficiency (*e*) is derived under the assumption of Harrod-neutral technical progress as the Solow residual divided by the labour share, reflecting the condition for labour productivity growth along the balanced growth path. A *real wage gap indicator* can the be constructed using $Z = log\ (w/e) + b\ UR$, with *b* set to 1 and, finally, normalising the series to equal zero in 1970.

The chart below gives the results for the evolution of the refined wage gap indicator for the EUR-12, assuming a value of one for the unemployment elasticity of real wages. Overall the series shows a large increase in the wage gap indicator variable over the 1970s, with a peak of more than 10 per cent in the early 1980s; thereafter, wage pressure gradually abated, with the exception of the 1991-1994 period, when the wage gap started to widen again despite unemployment still hovering around the 8 percent range.

The second half of the 1990s was characterised by a continued process of wage moderation resulting in a monotonic decline of the wage gap indicator. At present the real wage in efficiency units for the area as a whole appears to have even fallen below its level at the beginning of the 1970s. Taking the increase of unemployment into account, the real wage gap indicator has approximately returned to its value of thirty years ago.

Graph II.16: **Real wage gap indicator (1970 = 100)**



Source: Commission services.

3.2.2 Intra-area realignments of labour cost competitiveness

The fairly benign picture of aggregate wage developments in the euro area as a whole masks fairly divergent – and in some cases certainly quite problematic – trends at the individual country level. In general, though, inter-country differences in wage and labour cost developments need not be a particular cause for concern, but may simply reflect the efficient working of market forces and warranted intra-area adjustment between countries. Overheating countries need to adjust via higher nominal wages, worsening their competitiveness enough to quell tendencies to excess demand, while overcooling countries need to react by lowering their wage costs or by improving productivity.

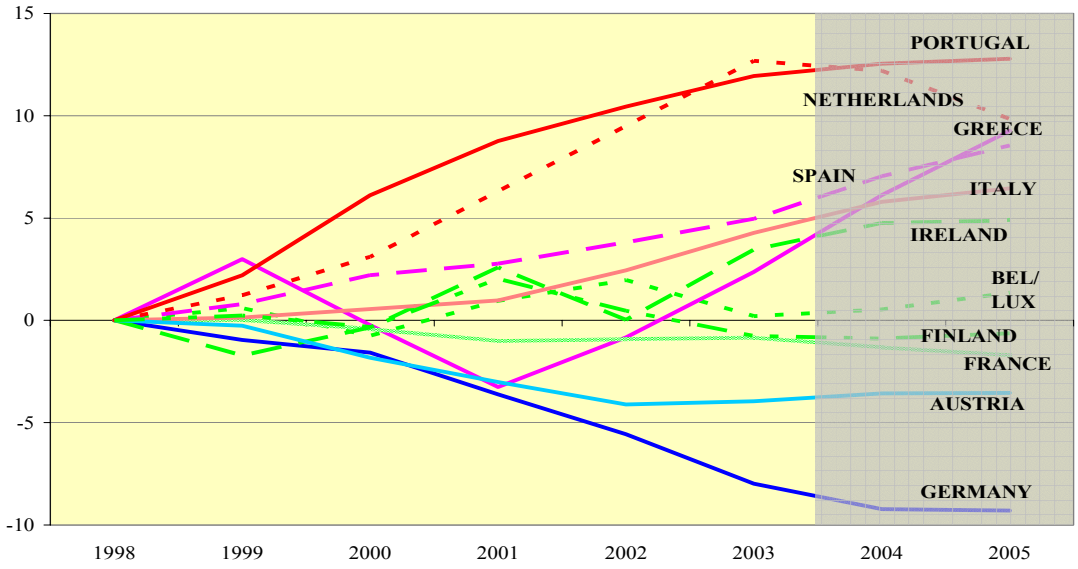
Looking at changes in relative labour cost competitiveness between euro area countries since 1998, we can cluster them into four groups:

- *Intra-euro-area labour cost competitiveness has considerably increased in Germany and Austria.* Germany has been identified as a laggard with regard to economic growth in the euro area. Its labour market performance has been sombre and, thus, the increase in labour cost competitiveness is a welcome working of the adjustment mechanism sketched above. Austria has enjoyed a somewhat better growth performance and, in particular, much lower unemployment, but wage developments have historically been closely linked to those in Germany. Improvements in relative labour cost competitiveness have been even more marked in the Austrian manufacturing sector. In contrast, the recovery in Germany's intra-area competitiveness looks considerably less impressive, in fact more or less disappears, when evaluated for the manufacturing sector only. In manufacturing, German relative unit labour costs continued to deteriorate slightly in the early years of EMU, before reverting to their entry level more recently.
- *Three countries have developed close to the euro-area average*. In France, nominal unit labour cost developments for the economy as whole were marginally below the euro-area average between 1999 and 2003, and are forecast to remain close to average in 2004 and 2005. In manufacturing, the improvement in France's relative labour cost position has been somewhat more pronounced, arguably more a result of wage moderation than accelerated productivity increases. Finland and Belgium/Luxembourg have seen a marginal deterioration in intra-area competitiveness when economic growth weakened. There is, however, an interesting difference. In the course of the growth slowdown, the gap with the euro-area average was closed faster and even turned slightly negative in the case of Finland, which, moreover, has seen a further significant improvement in its relative labour cost competitiveness in manufacturing. This has not been the case in Belgium/Luxembourg.
- *In Greece, Ireland, Italy and Spain, nominal unit labour costs in the total economy have grown significantly faster than in the euro area as a whole.* Greece may be considered a special case insofar as the country joined the euro area only in 2001. The temporary improvement in Greece's relative nominal unit labour cost position appears to be related to the country's efforts to qualify for the euro. Since the euro introduction in 2001, Greece has witnessed a significant trend deterioration in relative labour cost competitiveness when measured by unit labour cost developments in the whole economy; by contrast, relative unit labour costs in the Greek manufacturing sector have remained relatively stable since the adoption of the euro. Spain and Ireland witnessed higher-than-average output growth and a considerable decline in unemployment in the late 1990s. Thus, the deterioration in these countries' overall labour cost competitiveness relative to the euro area appears to be broadly consistent with their growth and employment performance. Nonetheless, the fact that Spain's manufacturing sector has witnessed a fairly similar deterioration in its relative labour cost position to that of the economy as a whole warrants a more cautious assessment. Relative unit labour cost developments in Ireland's manufacturing sector have been remarkable, with intra-area labour cost competitiveness further improving by some 20 per cent since the start of EMU; however, the extraordinarily strong apparent productivity gains in Irish manufacturing may to a large extent be an artefact of transfer pricing mechanisms. Italy's labour cost competitiveness temporarily improved somewhat in the run-up to EMU, but gradually returned to the euro-area average afterwards, with all the temporary gains exhausted by 2003. With all the appropriate caveats, this development does not appear to be fully warranted by the country's growth and employment performance, which has been worse than the euro-area average. Moreover, with a trend increase in relative unit labour costs extending to the manufacturing sector as well, Italy's competitive position in the euro area probably deserves to be closely monitored.
- *In Portugal and the Netherlands, nominal unit labour costs have grown much faster than in the euro area as a whole.* Developments in the Netherlands have long been characterised by moderate wage developments, but there are clear indications that the Dutch economy had been overheating in recent years, which has resulted in a fast deterioration of labour cost competitiveness, measured both at the economy-wide level and for the manufacturing sector alone. However, with

contractual wage increases close to zero in current agreements, the expectation built into the forecast is that a strong correction should set in in 2004 and 2005. In Portugal, with labour market conditions relatively tight up until 2002, significant wage pressures have built up, eroding competitiveness and badly damaging employment prospects. It may be interesting to note that this deterioration does not show up at all in the manufacturing sector, where relative unit labour costs have remained more or less unchanged. Basically, this reflects the strong wage push in recent years in the public sector and other sheltered sectors in the Portuguese economy, i.e. non-tradable service sectors and construction; and while there has certainly been some spill-over into manufacturing, wage pressures were more limited and compensating productivity increases have been stronger in the manufacturing sector. While the current outlook is for a significant slowdown in overall nominal unit labour cost growth in Portugal, the gap relative to the euro area is not expected to diminish this year or next.

Overall, the observed patterns of labour cost developments across countries suggest that the aforementioned adjustment mechanism, although slow and often costly in terms of output and employment, is at work in the euro area. The evidence from some of the smaller countries participating in EMU such as Portugal also indicates that wage growth out of line with productivity may not be quickly self-correcting. Rather, the ensuing loss of competitiveness may build up over quite some time, before the inevitable, yet then even more painful, adjustment processes will kick in.

Graph II.17: **Intra-euro area real effective exchange rates 1998-2005**
(ULC Total economy, Index 1998=100)



Source: Commission services

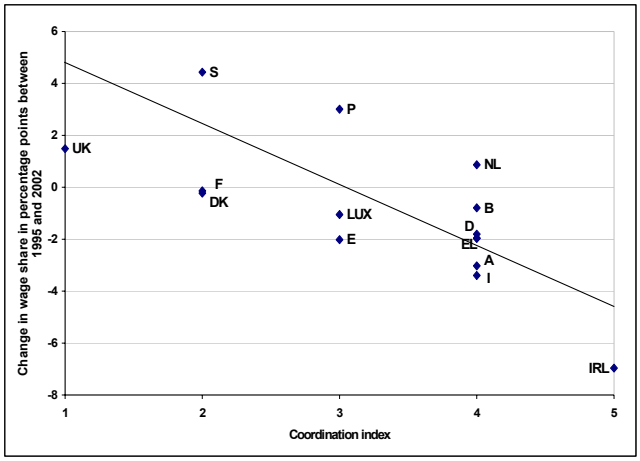
3.2.3 Evolution of wage bargaining systems

The evolution of wage bargaining systems in the early years of EMU has been characterised by two general, and at first sight somewhat contradictory, tendencies. Firstly, the trend towards de-unionisation has continued, with wage bargaining being gradually decentralised to the firm level, but often these changes have occurred through opening clauses in sector-specific agreements rather than through the complete abandonment of such structures. Notwithstanding this trend towards decentralisation, there was also an increase in national-level bargaining in the 1990s with the renaissance of social pacts, particularly in the run-up to the launch of economic and monetary union. While such incomes policies are not structural reforms per se, they can have an important role to play in encouraging wage restraint. Moreover, trade unions have made efforts to co-ordinate wage agreements across countries, in order to avoid "races to the bottom" in wage bargaining in the context of the monetary union, but these have been mostly informal and seem to have only had a limited impact.

In EMU, there are some clear incentives for co-ordinated bargaining, since substituting nominal wage flexibility for monetary policy autonomy, which may be required to smoothly absorb asymmetric shocks, may be easier under such conditions. However, experience suggests that a number of other conditions also have to be met to uphold such bargaining arrangements; among these, trading tax cuts for wage restraint has figured prominently, but flanking policy measures to increase labour supply availability and

some degree of in-built flexibility in wage differentiation appear to be crucial as well. [3]

Graph II.18: **Wage share 1995-2002 and the degree of bargaining co-ordination**



Source: Commission services

On balance, reforms to wage bargaining systems of recent years are likely to have contributed to some wage restraint, and wage co-ordination mechanisms may also have been an important contributory factor. As discussed earlier, real unit labour costs in the euro area declined for much of the 1990s, indicating that real wages grew more slowly than productivity over this period. The chart below tentatively relates the development of wage shares since the mid-1990s to the degree of co-ordination of wage bargaining. This chart appears to indicate that the co-ordination of bargaining, which was established or reinforced in a number of countries in the run-up to monetary union, appears to have contributed to wage restraint.

It is worth noting that co-ordinated bargaining did not necessarily run counter to delivering fairly differentiated wage outcomes across sectors, regions and qualifications.

Moreover, recent years have seen a move towards "organised decentralisation" in wage bargaining in several countries, for example in the form of so-called opening clauses allowing for some degree of firm-level differentiation.

With labour market policies geared to mobilise the labour force potential, overall wage pressures may indeed remain subdued and, thus, EMU's first few years may well see sustained wage moderation supported by co-ordinated wage bargaining at national level.

However, such arrangements face a fundamental problem of time consistency, making it difficult to lock in the bargain. Moreover, governments may find it increasingly difficult to design supportive policies deemed acceptable by the main actors in wage bargaining. Thus, given the inherent fragility of social pacts over the medium- to long-term, and against the background of strong trends towards more decentralisation of bargaining to firm and local levels, wage bargaining co-ordination efforts may ultimately fail. Unfortunately, it cannot be ruled out that such a failure may result, at least temporarily, in wage bargaining outcomes that tend to be less employment-friendly. In consequence, EMU could probably see more wage turbulence in the years to come.

[3] In the past few years formal or informal agreements on wage policy have (again) been reached in several euro-area countries, typically committing the actors in collective bargaining to some form of wage discipline in order to meet EMU stability goals and to improve competitiveness. Governments' involvement may take various forms, for example trading tax cuts and/or specific labour market policy measures against wage restraint, as has recently been the case in Finland and Ireland. For an overview see EIROonline (2000) and the chapter by Pichelmann in Fagan et al. (2003).

Part III

EMU AND THE PROCESS OF FINANCIAL INTEGRATION

Summary

EMU has provided a major impetus to financial integration in the EU. By eliminating exchange risk in cross-border financial activities throughout much of the EU, the euro has created the potential for large and liquid financial markets and offers scale and scope economies to financial intermediaries. Financial integration is not an objective in itself but rather a means of raising the growth potential of the EU/euro-area economy via a more efficient allocation of resources, increased investment and higher capital productivity. Quantitative analysis recently undertaken on behalf of the European Commission indicates that the economic benefits of financial integration are substantial and durable.

The impact of the euro on financial integration in the EU cannot be isolated from other major influences such as globalisation, advances in technology and regulatory reform. On the other hand, concrete evidence that the introduction of the euro has made a specific contribution to integration can be found in more homogeneous markets, a wave of consolidation among intermediaries and exchanges and the emergence of new and innovative products and techniques since 1999. Accordingly, this chapter assesses the extent to which the euro has fostered financial integration by focusing on observed changes in the structure of the EU financial system.

While the EU financial system remains predominantly bank-based, the euro has promoted a process of structural change which is evident among financial intermediaries and in financial markets. The main financial intermediaries in the EU are banks, with the category of asset managers, insurance companies and pension funds a smaller but growing category.

A long-term trend of consolidation in the EU banking sector has accelerated since the introduction of the euro, although consolidation has been evident mainly at the national level rather than at the EU level. The preference for consolidation within national markets reflects a range of factors including the ability to exploit scale and scope economies more cheaply, shortcomings in the area of regulatory and supervisory arrangements, taxation, language, culture, etc. The limited cross-border dimension in EU banking is reflected in the dispersion of national interest rates, national differences in profitability and the limited internationalisation of bank lending. The introduction of the euro has had a strong impact on the asset management industry, with three of the global top ten asset management firms now located in the euro area. Various studies find evidence that EU asset managers have restructured their portfolios to give priority to sectoral allocation in preference to a country-based approach. The portfolio allocation of euro-area insurance companies and pension funds has also become more international since the introduction of the euro.

The integration of euro-area money and financial markets has accelerated markedly since the introduction of the euro, although progress has been uneven across different markets and market segments. The degree of integration in the euro-area money markets varies, with the unsecured segments very much in the lead. The secured money market segments (e.g. private repurchase agreements, Treasury bills, commercial paper and certificates of deposit, which involve the exchange of liquidity for collateral) remain considerably less integrated. Like the unsecured money market, the euro-area derivatives market is also highly integrated. The creation of a euro-denominated bond market has resulted in higher issuance volumes – both net and gross – for the market as a whole, when compared to the combined issuance in legacy currencies over time. The euro-denominated sovereign debt market is now a rival to the US Treasury market for both issuers and investors. The introduction of the euro has also fostered a widening and deepening of the euro-area market for bonds issued by the private sector. The euro has facilitated the integration of the European equity markets, mainly via changes in the behaviour of investors, whose portfolio allocation is now determined more on a sectoral basis than on a country basis. In contrast, there is no firm evidence that the euro has had an impact on the behaviour of equity issuers.

The integration of financial markets – and equity markets in particular – has been particularly hampered by the fact that, while the integration of payments is relatively advanced, the current EU clearing and settlement infrastructure is still fragmented, with a wide variation in national procedures and requirements associated with the provision of these services. The creation of more efficient and integrated clearing and settlement arrangements within the EU has been identified as a priority by market participants and public policymakers.

Many of the remaining obstacles to financial integration in the EU are to be found in national differences in market regulation, which have persisted from an era of more isolated national markets. The Financial Services Action Plan of legislative and non-legislative measures at EU level was adopted in 1999 as the blueprint for creating an internal

market for financial services. The FSAP is near completion but it is unlikely to deliver financial integration without consistent implementation and enforcement of EU legislation across Member States. With this in mind, EU policymakers are already turning their attention to the next phase of financial integration, which will focus on issues of implementation and enforcement, while trying to address any remaining sources of fragmentation.

As EU financial integration progresses, there will be important implications for stability – as linkages across borders and sectors increase the risk of contagion. The need to strengthen cross-border and cross-sector supervision has long been recognised, but received renewed attention from policymakers following the introduction of the euro, with the result that efforts to intensify co-operation among national and sectoral supervisors are now well advanced. In addition, a series of high-profile corporate financing scandals in the United States and in Europe has put the spotlight on the need for improvements in corporate governance. The EU Action Plan on Corporate Governance is a wide-ranging response to recent problems in the field and mirrors similar action taken in the United States.

In conclusion, the euro is the probably the most important factor behind the acceleration in EU financial integration in the past five years. Deeper financial integration since the introduction of the euro has been reflected in more homogeneous markets, consolidation among intermediaries and market infrastructures and the emergence of new and innovative products and techniques. While the degree of integration has been uneven across segments of the financial system and business lines, EU policy action will eliminate many of the remaining sources of fragmentation in the coming years.

1. Expectations regarding the impact of EMU on financial markets

EMU was expected to provide a major impetus to financial integration in the EU, by creating the potential for large and liquid financial markets and scale and scope economies among financial intermediaries. Before the introduction of the euro, the need for market participants to operate in many national currencies was a major obstacle to an integrated financial system. The presence of currency risk limited the attractiveness of cross-border financial activity, thereby reducing the incentive to create a pan-EU regulatory framework and restricting competition between the domestic markets of the Member States. The euro has transformed this situation. By eliminating currency risk within the euro area, the euro was expected to stimulate demand for cross-border financial services more generally in the EU and bring into sharper focus the opportunity costs of remaining sources of fragmentation in the financial system.

Financial integration is not an objective in itself, but is a means to raise the growth potential of the EU/euro-area economy. An integrated financial system would be expected to improve the allocation of capital, to increase the efficiency of financial intermediation and to widen the opportunities for risk-diversification – all of which would result in a lower cost and higher productivity of capital. The complex conceptual issues raised in the definition and operational measurement of financial integration mean that relatively few quantitative estimates of the potential economic benefits are available. However, those that do exist suggest that these benefits are substantial (see Box III.1). It is clear that the economic benefits are not independent of the model of integration adopted but, irrespective of the chosen model, the full benefits cannot be reaped unless the efficiency gains implied by scale/scope economies and diversification opportunities are accompanied by competitive market structures and adequate safeguards of stability.

EMU was not only expected to have an important impact on financial market through market forces, but was also expected to accelerate efforts by policymakers to complete the internal market for financial services, which was identified as an urgent priority in 1999.

This chapter will in turn examine whether both of the above expectations (more integrated financial markets and acceleration in policy initiatives to complete the internal market) have in fact been fulfilled since 1999. Section 2 begins with a short overview of changes in the euro-area financial structure, and then considers developments since 1999 of various elements of the euro-area financial system (intermediaries, markets, and infrastructure) in an effort to assess progress in integration and the impact on the three key dimensions of efficiency, competition and stability. Section 3 provides a concise review of major policy issues and initiatives in the field of EU financial integration.

As with other topics covered in this report, it is difficult to analyse the impact of the euro in isolation from other developments in the EU and elsewhere in the world. These other factors influencing financial integration would include the progressive globalisation of the international financial system, which has in turn been fostered by the liberalisation of international capital movements, financial deregulation and advances in technology. At the EU-level, the progress in creating a common regulatory framework (as part of the effort to complete the internal market in financial services) and the financial reforms undertaken within Member States – which have coincided with the introduction of the euro – have also been crucial.

Box III.1: **Financial Integration and Growth**

In 2002, the European Commission financed two studies on the implications of financial integration for the performance of the EU economy. The studies were entitled "Quantification of the Macroeconomic Impact of Integration of EU Financial Markets"[1] and "Financial market Integration, Corporate Financing and Growth"[2] respectively. The contents of the two studies are summarised below.

Quantification of the Macroeconomic Impact of Integration of EU Financial Markets

This is the larger of the two studies and adopts a macroeconomic approach to quantifying the economic effect of financial integration in the EU. The study focuses on the benefits of integrating the set of fragmented national systems into a pan-EU system by estimating the static efficiency gains from deeper and more liquid equity and bond markets – as supplemented by improvements in the functioning of market infrastructure and greater competition between sources of direct and indirect financing. Efficiency gains are expressed in terms of reduced transaction costs and then translated into reductions in the user cost of capital (UCC). A macroeconomic model is used to estimate the

[1] London Economics (2002).

[2] Giannetti *et al.* (2002).

impact of lower UCC on economic growth, investment, private consumption and employment. The study also presents the results of a survey of market participants, which is used to confirm the assumptions underlying the empirical analysis.

In assessing the implications of equity market integration, the analysis follows a two-step approach. First, the impact of equity market integration on secondary market trading costs is estimated, with trading costs defined as a function of turnover, volatility of stock price, market depth and specific characteristics of the stock. The data set for the trading cost equation covers all stocks that are actively traded on the OECD markets (21 exchanges in 20 countries) in 2000-2001, i.e. a total of 13,149 stocks. Second, the impact of lower trading costs on UCC is estimated, where UCC is modelled as a function of trading costs, volatility, firm size and return risk. The data set for the cost of capital covers 2,596 stocks from companies whose ordinary stocks are actively traded on the major EU stock markets. The results of the analysis yield reduction in the average UCC for EU Member States of 42.57 bps, to which 10 bps are added from improvements in clearing and settlement. Thus, the UCC is estimated to decline by about 50 basis points overall in the context of an integrated equity market.

In assessing the implications of bond market integration, the study concentrates on primary markets (rather than the small and illiquid secondary markets) and adopts a somewhat different approach to that used for equity markets. Four key determinants of corporate bond financing costs are identified as (i) the risk-free reference yield; (ii) the corporate (credit risk) spread; (iii) issuance costs; and (iv) trading costs in secondary markets. A detailed analysis of the effect of market integration on each of these determinants is provided, with the only change found to be in the credit risk spread for corporates, which is estimated to have declined as the euro-denominated bond market has expanded. This decline is attributed not so much to scale economies as to increased familiarity with euro corporate issuance. The effect on the cost of bond financing is about 40 basis points (on the assumption of a 25% closing in the gap between the levels of euro and USD outstanding stock of debt).

The study uses the Oxford Economic Forecasting (multi-country) model for macro simulations. An important adjustment is made to the basic model insofar as the real interest rate is replaced by a more sophisticated proxy for the real user cost of capital – which is expressed as the inflation-adjusted weighted average of the cost of bank financing, corporate bond financing and equity financing. Using various assumptions on the relative weights (and also assuming a fall in intermediation costs because of increased competition for banks), a range of possible effects on macroeconomic variables is produced. The central scenario assumes a reduction in the cost of equity; a reduction in the cost of bond financing; a reduction in the cost of bank financing (20 bps) and an increase in the share of corporate bond financing relative to bank financing (in line with changes in relative costs). The key result of the analysis is a rise in the level of GDP of 1.1% in the long run, reflecting a 6% increase in the level of investment, a 0.8% increase in the level of private consumption, and a rise of 0.5% in the level of employment.

Financial Market Integration, Corporate Financing and Growth

This study adopts a more microeconomic approach and focuses on the relationship between financial market integration and corporate growth. A three-stage approach is used, involving (i) identification of appropriate measures of financial development; (ii) assessment of the implications of financial integration for these measures of financial development; and (iii) an econometric estimation of the corporate growth effects of greater financial development due to integration.

The study uses size and efficiency as the measures of financial development. Size is determined on the basis of the ratio of currency and demand/interest-bearing liabilities of banks and non-bank financials to GDP, the ratio of stock market capitalisation to GDP, and the ratio of bond market capitalisation to GDP. Efficiency is determined on the basis of the net interest margin (ratio of interest revenue to total assets of banks), the ratio of overhead costs to total assets, and stock market turnover (ratio of value of traded shares to total capitalisation). However, the study concentrates on size factors because of concerns that efficiency measures could have ambiguous effects on growth, e.g. concentration in banks would yield efficiency gains in terms of scale economies but losses because of a lack of competition. In focusing on size factors, the study contends that financial integration should result in access to larger financial systems relative to GDP at the national level. Access would involve both a larger domestic financial system and increased availability of foreign sources of financing. So, it need not be the case that financial integration would result in a convergence in the size of national financial systems.
The study relies on the methodology of Rajan and Zingales (1998) to estimate the relation between financial integration/development in terms of changes in the size variable and economic growth. This methodology focuses on the dependence of firms on external financing and relates growth in value-added, output and number of firms to financial development. The key element of this methodology is an estimate of dependence on external finance (by sector or by firm), which the study imports directly from the work of Rajan and Zingales. The use of the Rajan and

Zingales estimates, which relate to the United States, implies that there is no variation between countries in the sectoral dependence on external financing. This assumption is tested in the study – by comparing results for developed and developing countries, which have very different technology and factor endowments. Data on financial development are again taken from the literature. The most important of these are the ratio of stock market capitalisation to GDP, the ratio of private credit to GDP and the sum of the two ratios. A proxy for quality of accounting standards is also used, together with institutional variables to measure the quality of investor protection, legal certainty etc. The dependent variable is defined alternately as value added, output and number of firms. The data set comes from United Nations Statistics (Industrial Statistics Database) and consists of a panel of 36 industries in 61 countries and a total of 2,196 observations per year in 1981 and 1991.

Using the above methodology, two basic scenarios are elaborated. The first scenario considers what would happen to the dependent variable if all EU countries had access to a financial market the size of the United States. The second scenario considers what would happen to the dependent variable if the "quality" of their financial system rose to the highest level in the EU (in this case the Netherlands). Regressions are run at both industry sector and firm level and results suggest potentially large economic benefits from financial integration. Value-added growth in EU manufacturing is estimated to increase by 0.75-0.94% on a durable basis although the effect varies among Member States depending on their initial level of financial development. Notably, the major source of additional growth from financial development comes via higher accounting standards and the effect of financial development on growth varies inversely with the size of the firm, reflecting the fact that larger firms already have a capacity to access international capital markets.

The study concludes by noting that there will be winners and losers from financial integration, which creates incentives to promote and inhibit the integration process among relevant actors. In financially developed Member States, the domestic financial sector stands to gain from wider access to foreign clients within an integrated system, but the domestic industrial sector will lose its relatively favourable access to finance relative to foreign competitors. In financially less developed Member States, the domestic financial sector stands to lose out to competition from more developed financial sectors elsewhere, but the domestic industrial sector stands to gain relative to foreign competitors.

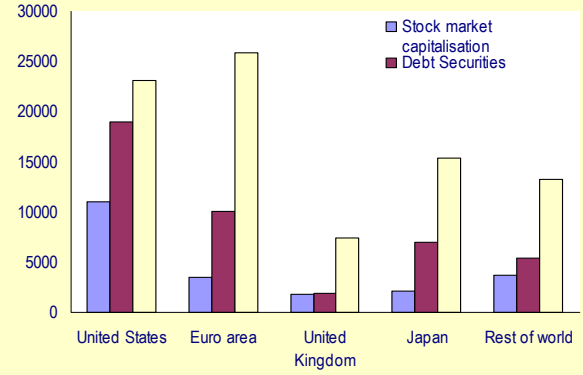
The terms of reference set for both of these studies were highly demanding. The economic impact of financial integration is a relatively new area of research, requiring the study teams to make important assumptions in developing their analysis. In the end, the results can only be indicative but are important as available references in the discussion of the economic benefits of financial integration.

2. Structure of the euro-area financial system

2.1 Overview

The characterisation of the euro-area financial system as predominantly bank-based, as opposed to more market-based, systems remains valid. In particular, bank financing is still the principal means of business financing in the euro area, with direct issuance of securities quantitatively less important than in the United States or the United Kingdom (see Graph III.1). There is no theoretical or empirical evidence to suggest that relatively securitised financial systems are superior to bank-oriented systems. However the expectation has been that the euro will result in a gradual expansion in direct financing relative to indirect financing, offering a more diversified range of investment and borrowing opportunities to economic agents within the euro area. While this is seen a positive development in itself, it should be noted that other aspects of financial integration – for example, completeness, adaptability and innovation – have come to be regarded as more relevant for the overall efficiency of a financial system.

Graph III.1: **Comparison of financial structures: size of world capital markets and bank assets in 2002 (in USD bn)**



Source: IMF Global Financial Stability Report September 2003.

Table III.1: **Share of corporate loans in financial liabilities 1997-2002**

	1990	1997	2001
Germany	73.7	58.9	32.1
Italy	74.8	70.9	53.1
France	37.3	31.4	31.2
Benelux	48.7	47.3	23.5
Scandinavia	43.5	46.4	36
Switzerland	44.3	42	26.5
United Kingdom	42.4	29.6	27.3
United States	10	9.3	9.4
Japan	44.7	50.2	56

Note: Share of corporate loans in financial liabilities* 1997 - 2002 (in % of total)
* *274 world's largest manufacturing firms

Source: Mediobanca, Ricerche e Studi, www.mbres.it. Found in Bottazzi and Giavazzi (2004).

Evidence suggests that the euro-area financial structure is changing in line with expectations, as the relative share of direct financing is gradually rising. More specifically, the share of corporate loans in financial liabilities has been declining to a level closer to that in the United States and is now of the same order of magnitude as in the United Kingdom (see Table III.1). The following sections will confirm the growing importance of capital market financing in the euro area, particularly when considered in terms of flows rather than stocks. Nevertheless, given their continued central role, it is appropriate to begin a more detailed review of changes in the euro-area financial structures by examining the performance of the banking sector and other intermediaries in recent years – and in particular how they have been affected by the introduction of the euro and by market integration more generally.

2.2 *Banking sector and other financial intermediaries*

The banking sector remains dominant within the euro-area financial system, although there has been a significant consolidation in the number of credit institutions. A process of deregulation, which began in the 1970s, has supported a sustained expansion in banking activity within the euro area (and the EU more generally) over the past few decades. Since 1980, euro-area bank assets have more than doubled, while employment has remained broadly constant (2.75 million employees in 2001)[3], despite the progressive extension of technology-based services within the sector. Underlying these developments has been a long-term consolidation trend in the number of credit institutions, which has accelerated under the influence of greater competitive pressure linked to the introduction of the euro. Indeed, the number of credit institutions in the euro area has declined by 15%, from 9,077 in 1997 to 7,756 in 2002. The consolidation process, having taken place mainly at national level, has resulted in high levels of concentration in some of the smaller EU economies, where oligopoly limits have probably been reached. Nevertheless, on the basis of the available evidence, in general the degree of competition does not appear to have decreased (see Table III.2). For instance, interest margins are narrowed and banks seem to be more fiercely competing for customers.

Table III.2: **Share of the 5 largest credit institutions in total assets (2002)**

BE	82
DK	68
DE	20
GR	67
ES	53
FR	45
IE	46
IT	31
LU	30
NL	83
AT	46
PT	60
FI	79
SE	63
UK	30

Source: ECB (2003d).

Consolidation has so far failed to produce any truly "European" banks. Only one of every four mergers and acquisitions (i.e. 131 out of 521 deals) over the period 1997-2002 has involved institutions from another EEA country. The market share of foreign branches and subsidiaries in euro-area Member States remains generally low, except in the case of some smaller Member States (see Table III.3). Several reasons have been put forward to explain the preference for domestic over international expansion among credit institutions. Among these would be included the availability of desired scale and scope economies from domestic mergers and acquisitions and the need for credit institutions to acquire size domestically before engaging in international expansions. Domestic mergers and acquisitions offer the prospect of increased market power without the need to blend different business cultures, languages, etc. and can be more cost-effective because of the greater synergies in operations.[4] International expansion can take place via green-field investment, but this tends to be a relatively costly route to internationalisation and is made an even less attractive option by the fact that the euro-area banking sector is already densely branched.

[3] European Central Bank (2003c).

[4] In this context, the greater scope to expand branch networks in domestic mergers and acquisitions, as opposed to creating subsidiaries in the case of most cross-border deals, is also seen as an important advantage.

Table III. 3: **Market share of branches and subsidiaries of foreign credit institutions as a percentage of the total assets of domestic credit institutions, end-2002**

	Branches	Subsidiaries
BE	3.4	18.2
DK	4.2	6.8
DE	1.3	3.6
GR	5.6	11.9
ES	4.6	4.1
FR	3.1	7.5
IE	12.7	24.6
IT	3.7	0
LU	16.4	77.8
NL	2	6.9
AT	0.8	20.3
PT	4.4	19.9
FI	8.5	0
SE	40.1	0.6
UK	23.8	1.4
MU12	3.5	8.9
EU15	9.1	6.1

Note: DK and UK figures are for 2001, SE and EU15 figures for 2000.

Source: ECB (2003d).

The limited cross-border dimension of euro-area bank business is further reflected in the dispersion of national interest rates. While the convergence in overnight rates to Euribor implies that the euro-area market for interbank lending is fully integrated, the dispersion in other lending rates (on loans to corporations and households) suggests that other markets are much less so.[5] Despite the remaining substantial divergence, the level of dispersion in national interest rates has trended downwards (i.e. towards more convergence) over time – with the exception of consumer loans – and this trend has accelerated since the introduction of the euro.

National differences in bank profitability tend to confirm the slow progress in integration. Profitability in euro-area banking has benefited from a substantial rise in non-interest income, which can be partly attributed to the effect of the euro on securities issuance (see below), although also to the spate of mergers and acquisitions toward the end of the 1990s and early 2000. The proportion of non-interest income to income coming from traditional lending activities has risen steadily from 28.3% of gross income in 1992 to 42.5% in 2001**.** Euro-area credit institutions have also expanded the range of services offered to customers, such as composite products, own-brand UCITs and increasingly high-risk investment alternatives. It is notable, however, that US banks have exploited their superior experience and know-how of large and complex capital markets to make significant inroads into the euro-area markets and so increase competitive pressures in this type of business (see Table III.4).

[5] The ECB publishes national series of retail interest rates.

On the cost side, increased competition and the spread of new technologies have led to an improvement in cost-efficiency (as reflected in declining cost-to-income ratios) within the euro-area banking sector and sometimes to lower employment levels. As a result of these changes in income and costs, the profitability of EU banks – measured by return on assets (ROA) or return on equity (ROE) – has been on a rising trend in the last decade, albeit persistently below levels in the United States. However, rates of return vary significantly between euro-area Member States[6]. This variability in the profitability of banks may be a reflection of a lack of integration in the euro-area banking sector and the extent to which the performance of individual institutions reflects primarily national rather than international cost structures.

Table III.4: **Matching of firm-intermediary nationality**

	1995	2000
Bank of same nationality as issuing firm	100	60
Other EU-based bank	20	25
US bank	5	80

Source: ECB, Bottazzi and Giavazzi (2004).

While internationalisation of bank lending within the euro area is evident in the composition of balance sheets, progress in this respect is also limited. A recent review of the aggregate balance sheet of the euro-area banking sector for the period 1997-Q1/2002 has revealed an increase in the relative weight of business with entities in other euro-area Member States relative to business with domestic (and rest-of-the-world) entities.[7] Other evidence suggests that direct cross-border provision of traditional banking services has expanded in recent years, but remains small in absolute terms and is relevant only for large customers. At the retail level, Internet banking has gained only limited acceptance, and cross-border activity for traditional lending/deposit products remains marginal.[8] It would seem that, in practice, bricks-and-mortar establishments continue to instil confidence among banking customers and so remain the most effective means to attract and retain clients. Consistent with this view, cross-border lending to non-banks within the euro area remains low (3.6% of total lending to non-banks in March 2002).

The development of financial markets, as well as demographic factors, has stimulated the asset management industry and resulted in changes in the strategic behaviour of these investors. The introduction of the euro has also had a strong impact on the industry.

[6] Germany, in particular, has been under-performing relative to other euro-area Member States in recent years.

[7] Cabral *et al.* (2002).

[8] This was confirmed by the results of a recent Eurobarometer survey.

In 2002, there were three euro-area asset management firms among the top ten globally, compared with only one in 1997. Moreover, various studies find evidence that euro-area institutional investors have restructured their portfolios since the introduction of the euro, giving priority to sectoral allocation in preference to a country-based approach[9]. This change in strategic behaviour reflects the elimination of currency risk, which has diminished the importance of the national component in securities markets and encouraged institutional investors to adopt a more international view in their investment decisions. The reduction in home bias is illustrated by the fact that half of equity mutual funds assets operating in (future) euro-area countries were invested domestically in 1997 but this share had fallen to 28% by 2002 (see Table III.5). The effect of the introduction of the euro is particularly striking as, on average, the share of non-European foreign equities only slightly increased, while the share of European non-domestic equities almost tripled (with nevertheless some major differences among countries).

Table III.5: **Breakdown of the assets of the equity mutual funds operating in the euro area countries (% of total funds)**

	Domestic		European		Non-European	
	1997	2002	1997	2002	1997	2002
BE	41	**10**	32	**47**	27	**43**
DE	50	**23**	17	**27**	33	**50**
ES	77	**31**	NA	**20**	23	**48**
FR	59	**50**	NA	**16**	41	**34**
IT	49	**16**	15	**34**	36	**51**
NL	22	**14**	NA	**17**	78	**68**
AT	6	**2**	75	**34**	19	**64**
PT	80	**33**	NA	**41**	20	**26**
FI	44	**18**	36	**41**	20	**41**
Total euro area (1)	***49***	***28***	***10***	***26***	***41***	***46***

(1) weighted average for the countries for which data is available.
Source: European Federation of Investment Funds and Companies (FEFSI).

The portfolio allocation of euro-area insurance companies and pension funds has also become more international since the introduction of the euro. Cross-border activity in the insurance sector is quite substantial in several of the euro-area Member States, with the market share of foreign companies in domestic business (on a gross premium basis) above 30% for life insurance and above 20% for non-life insurance in Austria, Luxembourg, Spain, and the UK at the end of 2001[10].

With some exceptions, the share of foreign assets held by euro-area pension funds has similarly increased – albeit unevenly – since 1999. Over the last decade, pension funds and insurance companies have grown substantially, with an average growth rate of 7-8% in their holdings of financial assets. However, their importance relative to GDP still varies considerably among the Member States, especially with respect to pension funds. In the meantime, EU insurers have invested an increasing share of their assets in bonds and equity to boost returns. The advent of the euro has had a further impact on portfolio allocation of insurance companies and pension funds since it automatically lifted currency-matching rules on institutions within the euro area, which had led to a strong home bias in portfolio allocations prior to 1999. Since 2001, European insurance and pension funds have been particularly affected by the negative valuation effects of the fall in equity and corporate bond prices.

2.3 Money and financial markets

2.3.1 Money markets and markets for derivatives

The degree of integration in the euro-area money markets varies, with the unsecured segments very much in the lead. Since 1 January 1999, ECB monetary policy operations have been implemented in euro on the basis of the area-wide demand for liquidity, without discrimination between the individual liquidity needs of national banking systems.[11] In the market for *unsecured inter-bank deposits*, therefore, integration is virtually complete and there is practically full convergence in very short-term interest rates across the euro area. Such convergence in interest rates is also reflected in the full acceptance by market operators of EONIA (Euro Overnight Index Average) and EURIBOR (Euro-Inter-Bank Offered Rate) as uniform price references. Interest rate convergence has also been helped by the efficient distribution of liquidity area-wide. Cross-border transactions account for a large part (about 60%) of total inter-bank activity of the largest market participants. There are indications that the inter-bank market has developed a two-tier structure in distributing liquidity, with relatively large banks dominating cross-border transactions and smaller banks relying on domestic transactions with larger banks for their funding. Interest-rate convergence is also evident at somewhat longer maturities in the money market. Analysis undertaken by the BIS has pointed to a decline of 40% in bid-ask spreads on 3-month euro-currency deposit rates in 2000

9 Hartmann *et al.* (2003); Adam *et al.* (2002); Adjaouté *et al.* (2003).

10 However, the data do not make a distinction between euro-area and non-euro area foreign ownership, nor show a substantial evolution of cross-border activity after 1999. Source: OECD "Insurance statistics yearbook, 1994-2001"; no data is available for Belgium, France, Greece, Ireland, Italy, the Netherlands, Portugal or Sweden.

11 Some problems with the ECB's liquidity allotment procedures in the initial period were effectively addressed by the move to floating rate tenders in June 2000.

relative to 1996 as further evidence of integration in the euro unsecured money market.

Like the unsecured money market, the euro-area *derivatives* market is also highly integrated. The cross-border market for euro interest rate swaps has expanded sharply since the introduction of the euro and the high degree of market integration is reflected in very narrow bid-ask spreads and relatively large outstanding amounts. At the end of 2003, some 50% of interest rate swaps in the world were denominated in euro. Activity in other derivatives markets has also increased, with, for instance, EURIBOR-based futures contracts displacing all futures contracts in legacy currencies that existed before EMU. Another major development has been the rise of pan-European equity index trading.

The *secured* money market segments (e.g. private repurchase agreements, Treasury bills, commercial paper and certificates of deposit, which involve the exchange of liquidity for collateral) remain considerably less integrated. This state of affairs reflects difficulties in the cross-border use of collateral, mainly due to national differences in market practices, regulations and the tax/legal treatments that apply to the securities used as collateral. These national differences are reflected in segmented national-based market infrastructures and can create important practical difficulties in cross-border clearing and settlement.[12] The collateral directive, which is to be fully implemented by 2003, will address present difficulties in the cross-border use of collateral and help to integrate EU financial markets further, e.g. by determining which law governs cross-border collateral arrangements.

2.3.2 Fixed income markets

The impact of the euro is also evident in the euro-area fixed income markets, where there is evidence of rapid and profound changes in structure**.** Even ahead of its introduction, the euro had already transformed the national bond markets of the participating Member States in several ways. In particular, there had been a significant convergence in sovereign yields from the mid-1990s, as markets increasingly discounted the elimination of exchange risk and a process of fiscal consolidation ahead of EMU. For some Member States, sovereign yield spreads of several hundred basis points relative to Germany had narrowed to less than 50 basis points on adoption of the euro (See Graph III.2). Furthermore, sovereign bond market conventions were harmonised among the participating Member States in preparation for re-denomination from national currency into euro. All of these factors combined to provide the basis for a relatively homogeneous euro-denominated bond market, which would be much larger and more liquid than the national markets of the participating Member States – and thus potentially enhance the attraction of these bonds as a financing and investment vehicle in and outside the euro area.

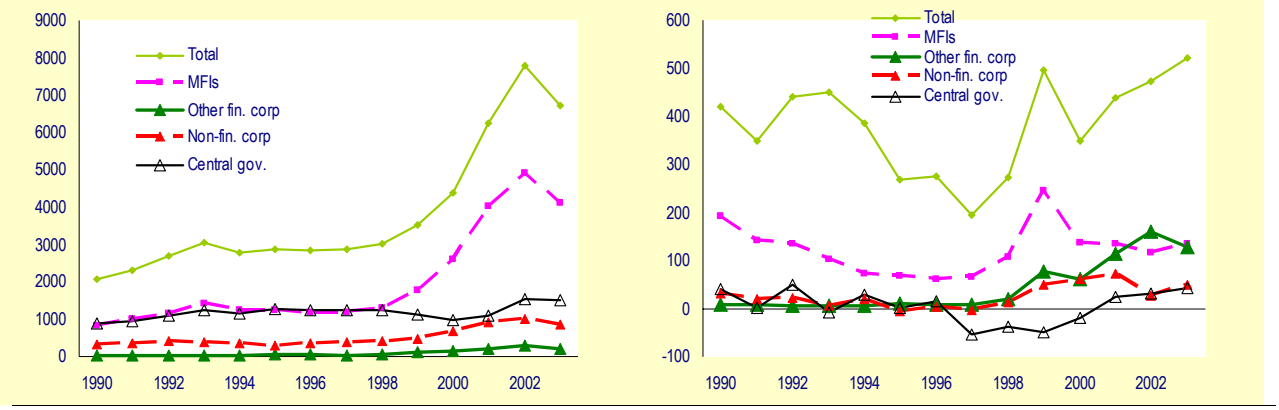
The creation of a euro-denominated bond market has resulted in higher issuance volumes – both net and gross – for the market as a whole, when compared to the combined issuance in legacy currencies over time (See Graph III.3). Total gross issuance has been rising at an annual rate of 26% since 1999 (See Graph III.4) and the euro-denominated debt market is now worth about 100% of euro-area GDP, compared with about 160% in the United States. Increased liquidity has also promoted the development of new products (e.g. euro-denominated ABS, and the emergence of a pan-European pfandbriefe/covered bond market) as well as an increase in issuance size. Corporate bond issues above EUR 1 billion are also relatively commonplace, with a share of about 50% of total issues. Nonetheless, the main characteristics of issuance have changed little over the past five years, comprising essentially high credit quality (only 5% of triple-B or lower rated bonds) and fixed coupon bonds, of which about 90% originate from the euro area.

Graph III.2: **Dispersion in euro area sovereign debt yields**

Note:: Standard deviation in euro area 10-year benchmark yields (excluding LUX, including GR from 1.1.2002)
Source: Bloomberg.

[12] More detailed analysis of problems in the euro-area private repo market and with clearing and settlement arrangements more generally can be found in reports by the Giovannini Group (1999, 2001 and 2003).

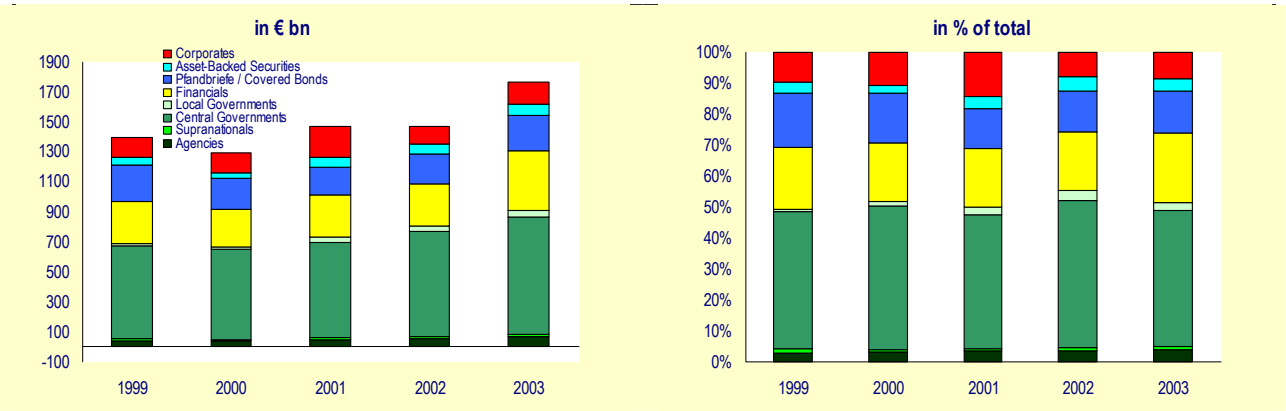
Graph III.3: **Gross and net issuance volumes in euro area bond markets**[1]



(1) These graphs are based on the euro-area securities issues statistics published by the Commission and the ECB.
Note: Issuance of euro-denominated debt securities by euro-area residents, in €bn.
Source: Commission.

A part of the rise in total euro-denominated issuance is accounted for by the public sector, reflecting increases in supply and demand for sovereign debt. While the pre-EMU period was characterised by budgetary consolidation among all of the euro-area Member States, a subsequent deterioration in budgetary performance mainly in the larger Member States, (i.e. Germany, France, and Italy) has been mirrored in an expansion of sovereign issuance volumes. A relatively high rate of redemption has also supported gross issuance in recent years. This increase in the supply of sovereign debt has been matched by growing demand for high quality debt, as the equity market correction, the September 11 attacks and a series of corporate financing scandals in 2000 and 2001 combined to make investors more risk averse. The result has been a decline in sovereign yields, to record (nominal) lows from mid-2000 until mid-2003, providing euro-area governments with an incentive for new and refinancing issuance.

Graph III.4: **Gross issuance of euro-denominated bonds (1999-2003)**[1]



(1) Figures quoted are from the DG ECFIN database which records all euro-denominated issues of an amount of €50mn or more and a maturity of 1 year or more. Monthly and quarterly notes on the euro-denominated bond markets as well as statistical annexes can be downloaded from the DG ECFIN website: http://europa.eu.int/comm/economy_finance/publications/bondmarkets_en.htm
For a more detailed analysis of issuance trends in the euro-denominated bond market in the five years since the launch of EMU see the special feature of the quarterly note N°63: October-December 2003
Source: Commission.

There are also signs that the euro sovereign debt market is beginning to rival the US Treasury market for both issuers and investors. High quality euro-area sovereigns are now competing with (and complementing) US Treasuries in their function as basic investment products for institutional investors or central bank reserves. Notably, there has been evidence of rising interest among Asian investors in euro-denominated sovereign debt (and also for other high-quality euro-denominated investment products such as supranational bonds,

agency bonds, local-government bonds and pfandbriefe/covered bonds). Moreover, a number of non-euro-area sovereigns – notably among the acceding countries – have decided to issue in euros, and are redeeming US dollar debt. However, the market is still lacking benchmarks with liquidity comparable to that of the US and Japanese markets. Despite the increasing substitutability of euro-area sovereign debt – as illustrated by low intra-area yield spreads – market liquidity is constrained by differences in issuance practices and procedures among the many national debt offices.

Demand for bonds from the smaller public borrowers has also expanded, amid improved liquidity since the introduction of the euro. Issuance by agencies has increased in both absolute and relative terms, with the segment dominated by the benchmark programmes of KfW and Freddie Mac, while the European Investment Bank (EIB) has dominated the supranational segment with its benchmark programme. Starting from a low level, issuance of local government bonds has experienced dynamic growth over the past five years, driven mainly by issuance from the German Länder, which have shifted part of their financing away from the bank sector to the capital market.

The introduction of the euro has fostered a widening and deepening of the euro-area market for bonds issued by the private sector. While other factors (e.g. the wave of mergers and acquisitions at the end of the 1990s and 2000) may also have played a role, recent analysis indicates that the euro has had a positive and statistically significant effect on the amount of net corporate debt issues.[13] Relative to non-euro-area economies, corporate debt issuance picked up sharply after the introduction of the euro (see Graph III.4). The rising trend in corporate bond issuance has been interrupted on several occasions as a number of shocks have impacted on relative supply and demand in the market. Among these shocks are included the economic downturn between 2000 and 2003, the bursting of the TMT equity market bubble in spring 2000, corporate financing scandals and heightened political tensions from Autumn 2001 until the beginning of 2003. Moreover, the depth of the corporate euro bond market remains uneven. Issuance is still almost exclusively limited to investment grade issuers and issuance is dominated by a relatively tight range of large players from the telecommunication, automobile and utility sectors. Issuance from high-yield borrowers increased to €14bn in 2003, which, however, represented only about 10% of the respective US volumes. Euro-denominated issuance from the financial sector has picked up more recently, mainly as a result of a sharp expansion in investment in debt securities by the banking sector (i.e. mainly government debt but also other bonds).

The development or emergence of other segments of the private bond market, e.g. covered bonds and asset-backed securities – have also benefited from the introduction of the euro. However, fundamental differences in national legal systems and taxation regimes pose barriers to the integration of many of these segments. Progress in the integration of the trading, clearing and settlement infrastructure, by the removal of remaining technical, legal and tax barriers is also required (see below).

2.3.3 Equity markets

By eliminating exchange risk, the euro was expected to stimulate demand for cross-border equity investment and facilitate the integration of the European equity markets. In fact, equity market integration had begun well before the launch of the euro, amid the bubble of the 1990s. Nevertheless, the introduction of the euro accelerated the process and there is evidence that the importance of the local components in equity trading has diminished.

The euro was expected to affect the behaviour of issuers by lowering barriers for cross-border listing, the behaviour of markets by facilitating integration and the behaviour investors of investors by changing desired portfolio allocations.

- The impact of the euro has so far been strongest at the level of the investor. As mentioned above, the home bias in the allocation of equity assets of mutual funds has largely disappeared, and euro-based equity allocation has been significantly boosted. Unfortunately, evidence is scarce as regards the portfolio of individual investors but it seems reasonable to assume that the behaviour of asset management funds is an accurate reflection of the aggregated behaviour of individual fund holders as households' shareholding is mainly, and increasingly, done through institutional investors, and increasingly so. The development of euro indices and the sharp growth of futures and options on euro indices provide additional evidence of a growing euro-area perspective among investors.
- In contrast, there is no evidence of a euro impact on the behaviour of issuers. Anecdotal evidence of increased cross-border listings in the late 1990s was more a reflection of the global TMT bubble than of the introduction of the euro. Several of the most innovative companies, which had chosen to list on a foreign high-growth stock market, de-listed after the burst of the bubble. The decision to de-list reflected the costs of double listings and the fact that their national markets seemed to offer greater liquidity[14].

[13] See Rajan and Zingales (2003).

[14] An indication that some home bias remains in investors' investment practices.

2.3.4 Market infrastructure

Consolidation of Europe's stock exchanges has accelerated since the introduction of the euro, but more global factors have also played a role. Notable examples of consolidation are the merger of the exchanges in Amsterdam, Brussels, Paris, and Lisbon in Euronext, and several cooperation agreements across other European markets. However, this consolidation trend is also part of a more general trend, which has extended to exchanges outside the euro area. An example in this respect is the integrated Nordic-Baltic market, which was created by the merger of the Stockholm and Helsinki stock exchanges, with the merged entity maintaining a strategic co-operation with the Copenhagen, Oslo and Iceland stock exchanges within NOREX. In addition, Euronext comprises the UK-based Liffe derivatives market and expanded further in 2003 via an agreement with the Warsaw stock exchange. Consolidation of Europe's equity market seems set to continue, with the next stage likely to be increased specialisation of markets with the development of a small number of international markets and several smaller local markets, some possibly specialised (e.g. in high tech companies or small caps).

Integration – chiefly in the equity markets but also in other securities markets – has been particularly hampered by the still fragmented clearing and settlement industry. An efficient clearing and settlement infrastructure is essential to a smoothly functioning securities market. The current EU clearing and settlement infrastructure is the product of a fragmented financial system. Historically, the pattern of European securities trading has followed national lines, a pattern of segmentation reinforced by the existence of many different currencies (for a long time accompanied by exchange controls) and rather basic tools of communication. The result was the emergence of efficient structures for securities transactions at the national level, most often comprising the vertical integration of the trading, clearing, settlement and depository functionalities. These nationally based structures – offering only very limited scope for cross-border trading – have remained the architecture of choice for EU investors until very recently.

The vertical integration of national trading, clearing and settlement infrastructures has resulted in a wide variation in the procedures and requirements associated with the provision of these services across the Union. This variation reflects not only specific market practices in the Member States but also more fundamental differences in national frameworks for the regulatory, legal and fiscal treatment of securities. The additional cost – both direct in the form of higher prices for the services provided and indirect in the form of inefficiencies in the functioning of the financial system – together with the fragmented clearing and settlement infrastructure represents a major limitation on the scope for cross-border securities trading in the European Union. Deficiencies in the arrangements for cross-border clearing and settlement within the EU have been highlighted as a policy priority (see below) by market participants and public policymakers.

Greater progress has been made in the integration of payment systems. Before the introduction of the euro, cross-border payments were largely handled via corresponding-banking arrangements, and small-value payment transfers were costly. The main EU-wide system for large-value euro payments is TARGET (i.e. the Trans-European Automated Real-time Gross settlement Express Transfer system), which was created by the European Monetary Institute (the ECB's predecessor) to support monetary policy operations and financial market integration. TARGET has a decentralised structure, whereby payments are made and processed through national systems based on different platforms. Although TARGET meets its objectives, cost efficiency considerations and new challenges arising from EU enlargement have prompted the ECB to propose a further development of the TARGET system. The new system, TARGET2, which is likely to reduce the array of national payment systems by allowing for "platform sharing", will be operational before the end of the decade. After having urged banks repeatedly to bring down the cost of small-value payments for cross-border operations, the EU adopted legislation in 2001, which – subject to certain conditions – stipulates that charges for cross-border payments in euro cannot be higher than those levied for a corresponding domestic transfer. In response, a number of banks went ahead with the construction of European architecture for retail and commercial payments, beginning with a Pan-European Automated Clearing House (PE-ACH).

3. Policy initiatives

While the euro has provided a major impetus to financial integration, further efforts are required to create an EU financial system that is cost efficient, competitive and safe – both systemically and from the perspective of the individual investor. The elimination of currency risk in financial flows throughout much of the EU has stimulated demand for cross-border financial services but, at the same time, has highlighted the existence of remaining obstacles to integration. These obstacles originate in national differences in a range of areas including regulation and market practice, taxation, legal certainty, institutional arrangements, language, culture etc. The EU policy response to these remaining obstacles has been to put the completion of the internal market for financial services at the centre of the Lisbon economic reform agenda. The EU policy agenda in respect of financial integration is relatively wide and comprises a large number of specific legislative and non-legislative initiatives. However, these initiatives can be grouped together under several broad headings – regulatory reform, upgrading of cross-border

supervisory arrangements, enhanced cross-border tax arrangements and improved corporate governance.

3.1 Reforming EU financial regulation

Many of the remaining obstacles to financial integration in the EU are to be found in national differences in market regulation, which have persisted from an era of more isolated Member State markets. In 1999, the Council and the European Parliament endorsed the Financial Service Action Plan (FSAP), with the goal of completing the internal market for financial services. In 2000, the Lisbon Council reinforced the political commitment to financial integration by setting a deadline of 2005 for the full implementation of the FSAP. Implementation is on track, with 39 of the original 42 legislative and non-legislative measures in the FSAP now completed, leaving considerable time for the transposition of legislative measures into national laws in the Member States. A final effort will be made to complete the remaining measures – the most significant of which are legislative measures on financial transparency and cross-border provision of investment services respectively – ahead of the deadline.

While the FSAP is an essential step in creating an integrated financial market, it is unlikely to deliver an integrated EU financial sector without consistent implementation and enforcement across Member States. Indeed, inconsistency in implementation and a lack of enforcement played a major role in the disappointing efforts at financial integration prior to the introduction of the euro. More generally, consistent implementation and enforcement will be complicated by the need to ensure that regulation remains efficient in the context of rapid change in increasingly complex financial markets. Such considerations were the motive for establishing a Committee of Wise Men (i.e. the so-called Lamfalussy Committee) to review the regulation of securities markets at EU level. The resulting four-level "Lamfalussy framework" for the formulation, implementation, and enforcement of EU legislation in securities markets aims at allowing legislation to be implemented more flexibly by improving the law-making process and by providing for enhanced convergence in supervisory practices across the Member States. The Lamfalussy framework has now been extended – to varying degrees – to the other main financial sectors of banking, insurance, pensions and asset management. Details of the Lamfalussy framework are provided in Box III.3.

With the FSAP near completion, the focus of EU policymakers is already turning to the next phase of financial integration. The Commission has launched a comprehensive assessment of the state of integration of EU financial markets – not as a prelude to a comprehensive new legislative programme but as an attempt to identify successes and failures of the evolving EU legislative framework and to draw lessons from the FSAP experience. As a first step, four expert groups in the fields of banking, insurance, asset management, and securities will assess the extent to which the EU legislative framework enables financial institutions to organise their business on a pan-European basis. The output from these groups will be submitted to public scrutiny and high-level public debate before being consolidated in late 2004. Elsewhere, a sub-group of the newly created Financial Services Committee has been tasked with establishing a shared assessment of Member States of remaining priorities for financial integration. They will report to European Finance Ministers in mid-2004.

Box III.2: **The Lamfalussy approach to EU financial regulation**

The process of implementing the legislative measures contained in the FSAP has tended to be slow and lacking in flexibility. The average period between the adoption of a proposal by the Commission and its transposition into national law is about three years. During this period – which has been as long as 14 years (for the Directive on Takeovers) and even 30 years (for the EU Company Statute) – the Commission proposals are typically subjected to intense scrutiny by the Council and Parliament. Apart from the delay involved, the current process frequently results in compromise legal texts that are inconsistent, ambiguous and often unevenly transposed into national law. Moreover, this legislative procedure significantly constrains the ability of EU legislation to respond to the rapid changes in the financial environment within the EU and more globally. It was in response to these problems that the a Committee on the regulation of EU securities markets (the Lamfalussy Committee) was established in mid-2000. The mandate of the Committee was to:

- assess the current conditions for the implementation of the regulation of the securities market in the European Union;
- assess how the mechanism for regulating the securities markets in the European Union can best respond to developments under way on the securities markets, including the creation of markets resulting from either the alliance of European (and non-European) stock exchanges or from technical innovation (ATS), while still guaranteeing the effective and dynamic operation of markets throughout the European Union to achieve a level playing field.

- in order to eliminate barriers and obstacles, propose as a result scenarios for adapting current practices in order to ensure greater convergence and co-operation in day-to-day implementation and to take into account new developments on the markets.

In response, the Committee proposed a new approach to EU regulation of securities markets. The proposed new approach reflected the consensus view that the current system is unable to respond adequately to the challenges posed by rapidly changing financial markets. The adoption of legislation at European level is seen as too slow, with each legislative measure requiring an average of three years from proposal to implementation. Moreover, there was a view that the drafting of EU legislation is too detailed, which ultimately results in the need for ambiguous compromises. Member States or regulatory authorities then exploit this ambiguity to the maximum when it comes to implementation. The new approach proposed has four levels:

- Level 1: the adoption of framework principles using the normal legislative procedures (i.e. proposal by the Commission to the Council and European Parliament for co-decision);
- Level 2: the adoption of implementing legislation, as prepared by the Commission with the assistance of a new EU Securities Committee (with a regulatory function) and a Committee of EU Regulators (with an advisory function);
- Level 3: the consistent transposition of Level 1 and Level 2 legislation into national law on the basis of enhanced co-operation among national securities regulators;
- Level 4: strengthened enforcement of legislation by the Commission in co-operation with Member State governments, national regulators and the private sector.

The Committee also emphasised the need for transparency at all stages of the legislative process, extensive consultation, and strict deadlines. The focus on an open and accountable approach was a response to concerns, notably on the part of the European Parliament, that the legislative process should remain subject to public scrutiny. The Stockholm European Council (2001) endorsed the new approach, which has since been extended to the banking and insurance sectors

3.2 Upgrading cross-border supervision

The greater inter-linkages across borders and sectors implied by EU financial integration increase the risk of financial contagion. As pan-European institutions emerge, cross-border holdings of assets and liabilities by financial intermediaries increase and financial conglomerates develop, financial integration must be accompanied by appropriate procedures and institutional arrangements for prudential supervision. Supervisory structures vary considerably among the Member States, with various numbers and types of supervisory authorities. Moreover, in the euro area, there is a separation in the geographical domain of monetary policy – which is the ECB's responsibility and is conducted at the area level – and prudential supervision, which has remained the responsibility of national authorities. These considerations highlight the importance of efficient cross-border and cross-sector cooperation among national supervisors.

The need to strengthen cross-border and cross-sector co-operation among national supervisors has long been recognised, but received added attention from policymakers following the introduction of the euro. Two reports on financial stability and crisis management (April 2000 and April 2001, respectively) prepared by the Economic and Financial Committee concluded that the existing institutional arrangements are appropriate, but that further enhancement of their functioning is needed. Progress has been made in this respect. A Memorandum of Understanding on co-operation in crisis situations has been signed between banking supervisors and central banks, and co-operation procedures among supervisors are being enhanced. Meanwhile, the extension of the Lamfalussy arrangements from securities markets to other financial sectors should further encourage cross-border co-operation in financial supervision and crisis management, as well as facilitating convergence in supervisory practices between the Member States. Finally, the Financial Conglomerates Directive, by requiring one single authority to be designated responsible for the overview of each financial conglomerate and coordination between the different supervisors involved in the supervision of a financial conglomerate's component parts to be ensured, will improve the supervision of complex financial conglomerates.

3.3 Improved corporate governance

A series of high-profile corporate financing scandals in the United States and in Europe have put the spotlight on the need for improvements in corporate governance. The economic literature highlights the relevance of corporate governance for efficient resource allocation, corporate investment and financial market development. In light of recent scandals, EU policymakers have proposed a series of

reforms in corporate governance, building on measures to reinforce financial stability and market integrity that are included in the FSAP (e.g. legislation on market manipulation and insider dealing and legislation on transparency in financial reporting). More specifically, the Commission has formulated an Action Plan on Corporate Governance and further proposals to improve statutory audits.

The Action Plan on Corporate Governance is a wide-ranging response to recent problems in the field and mirrors similar actions taken in the United States. The main elements of the Action Plan aim (i) to strengthen shareholder rights by enabling an easier access to company information and by encouraging shareholder control – through facilitating voting in absentia and cross-border voting; (ii) to put an emphasis on independent non-executive Directors by strengthening their responsibilities in the areas of directors' remuneration and audit supervision; and (iii) to make the company board collective responsible for financial statements.

In the area of audit reform, the proposals aim to enhance the quality and increase the level of harmonisation for statutory audits. The Commission issued a Communication on statutory audits in 2003, focusing on audit oversight issues and opening a discussion on the possibility of co-ordination in oversight (along the lines of the newly created US Public Company Accounting Oversight Board). Another aim of the Communication is to address auditor independence and quality assurance, highlighting the need for full group auditor responsibility for consolidated accounts of a group of companies, stricter auditor rotation requirements and strengthened sanctions. In this context, the EU has placed considerable importance on the need for high quality accounting standards by requiring International Accountancy Standards (IAS) to be used by all listed companies from 2005 onwards.

Part IV

MARKET INTEGRATION AND STRUCTURAL REFORM IN EMU

Summary

Together with the positive effects of improved price transparency on competition and the enhanced financial integration, EMU was also expected to enable the full potential of the EU's single market to be realised by eliminating exchange rate transaction costs and associated currency risk. In addition to a more efficient allocation of resources and perhaps the exploitation of economies of scale, some commentators also argued that by reinforcing the integration of product and labour markets, EMU could reduce the likelihood of asymmetric shocks inside the monetary union and strengthen adjustment capacity in the face of such shocks. There was a debate as to whether the single currency would act as a catalyst for structural reform. Some felt that, with the adjustment mechanisms of national monetary policy and independent exchange rates no longer available in EMU, governments would have greater incentives to adopt reforms aimed at enhancing market flexibility. Others were more sceptical, suggesting that increased transparency and competition in markets would increase demands for protection in sheltered sectors.

*Analysing the impact of the euro on **product markets** is far from straightforward. It is difficult to disentangle the effects of EMU from those of the single market programme and other processes that advance economic integration. It was nevertheless widely expected EMU, like the single market programme, would affect competitive conditions in product markets through its impact on trade and FDI flows in the short term. Empirical evidence to date suggests that EMU has already had a sizeable impact on intra-euro-area trade flows and that this effect may increase further in the coming years. While caution is needed in interpreting data, recent evidence on FDI flows suggests that the single currency may have raised the attractiveness of the euro area as a destination for foreign investment, although other factors also come into play.*

Over time, by stimulating trade and FDI flows, economic integration should help to raise the level of competition in European product markets and thereby have effects on the behaviour of firms and on the structure of industry. Companies are likely to react by adapting their strategies to restore their market power – for example, by focusing on their core business, entering into tacit agreements or re-segmenting markets by selling differentiated products in the different countries – efficiency gains from integration are unlikely to be completely negated by such strategies. As regards changes in companies' strategic behaviour, there has been a noticeable trend towards increased 'multi-nationality' of firms and also a 'return to core business', in other words a reduction in their industrial diversification. Thus far, there have been only modest changes in the pattern of industrial specialisation and geographical concentration within the euro area. Moreover, analysis of past trends reveals that production specialisation has gradually increased since the 1970s, while export specialisation has decreased. This divergence can be explained by two factors: firstly, the adjustment of production is slower than that of trade, and, secondly, intra-industry trade is growing, which appears to support the argument that the industrial structures of EU economies are converging.

*EMU also raises the stakes for European **labour markets**. Before 1999, it was broadly expected that the smooth operation of EMU would require more flexible labour markets, so that they would play a greater role in adjusting to short-term shocks. As with other areas covered by the single market programme, opinion was divided about whether the competitive pressures unleashed by EMU would lead to an acceleration in the pace of labour market reforms which had been ongoing for some years in many Member States and reflected in the Broad Economic Policy Guidelines and the European Employment Strategy.*

It is true that labour market performance in EMU began on a promising note under favourable macroeconomic conditions and with some Member States reaping the benefits of earlier reforms on labour and other markets. Employment growth, traditionally low in most Member States, rose to 1.8% on average in 1998-2001 in the euro area, bringing the rate of unemployment down from 10.8% in 1997 to 8.0% in 2001. Although part of the improvement was no doubt cyclical, there was also a small reduction in structural unemployment, which is also reflected in the decline of long-term unemployment and youth unemployment.

The impact of the economic slowdown on employment started to be felt as of 2002, when net job creation in the EU came to a standstill; in 2003, employment contracted slightly. But the failure to meet the intermediate Lisbon employment rate targets for 2005 and the growing prospect of missing the 2010 targets cannot be put down entirely to cyclical factors. Many Member States still exhibit the symptoms of severe structural problems in their labour markets, including low labour-force participation in certain groups, especially women and older working-age people, and unemployment rates approaching or exceeding 9% in all of the large euro-area economies as well as in some of the smaller ones. The structural nature of the problem is reflected in the fact that over 40% of unemployed people have been out of work for one year or more, compared to under 20% in the best-performing countries, though the proportion has fallen significantly in recent years. Furthermore, the youth unemployment rate still

exceeds 20% in half of the euro-area countries, even though efforts to improve employability have been focused on this group.

A critical question when considering the impact of EMU on market integration is whether the euro has provided a catalyst to increase the pace and ambition of structural reforms five years on. Five years on, it is clear that the slow and steady pace of reform evident before the launch of the euro has continued, but that the advent of euro has not led to any noticeable acceleration in the pace of reforms, and they fall well short of what is required if the EU is to achieve the strategic goal of the Lisbon strategy. As regards reforms in product markets, it remains unclear whether initiatives such as the Cardiff process and the Lisbon strategy have effectively induced Member States to enact reforms that they would not otherwise have chosen to undertake. Effective and timely implementation of the agreed reforms will be the real test of whether the EU is serious about transforming itself into a more competitive and dynamic knowledge-based economy.

In labour markets, one area where reforms may be starting to have an impact is the employment of older workers. This has risen significantly in a number of Member States over the last few years, partly thanks to reforms that raise the effective retirement age. In addition, there has been sustained progress in the modernisation of work organisation in the broad sense (including the facilitation of part-time work and improved childcare facilities). Both of these developments will contribute to the efficient functioning of labour markets. However, in general, reforms have tended to be concentrated in what could be considered as relatively 'easy' areas such as active labour market policies, education and training measures and reductions in the tax burden on labour. While this is helpful, the potential benefits are greater in other, more politically difficult areas, such as reforms of wage bargaining, benefit systems and employment protection laws. During 2003 and 2004, there were some signs of emerging political will in a number of euro-area countries to tackle some of these areas, although actual progress thus far has not been as great as some had expected. A key challenge will be to implement the reform identified in the recent report of the European Employment Taskforce.

Overall, even after five years it may still be too early to draw firm conclusions about the impact of EMU on product and labour markets. It may take many years for some of the expected effects – such as increased labour mobility, greater competition and changes in industrial specialisation – to materialise. To conclude, while the effects of EMU on market integration are likely to become more apparent over time, the launch of the euro has not been the catalyst for structural reform that proponents of EMU had hoped for.

1. Product market integration

1.1 Expectations as regards the impact of EMU on market integration[1]

EMU and the single market programme

One of the main objectives of EMU was to contribute to economic integration by reinforcing the EU Internal Market. In particular, it was supposed to modify the economic policy conditions and the way to do business on this market. The greater price transparency, the elimination of exchange rate risk within the euro area and the reduced costs of doing business across the borders had been expected to raise the level of competition with positive effects on the competitiveness of the euro area.

These basic arguments were first brought forward in the Commission's 1990 study, One Market, One Money, which concluded that economic and monetary union is a necessary complement to the Single Market Programme (SMP). Right from the start, it was expected that EMU would reinforce the gains from the SMP, and thus lead to increased efficiency and higher growth over the longer term. According to the study, this should lead to the following benefits as far as product market integration is concerned:

- direct benefits arising from savings on transactions and hedging costs, conservatively estimated to be around ½ percent of GDP;
- indirect benefits due to the impact on trade, cross-border investment and capital flows of the disappearance of exchange rate barriers;
- further dynamic benefits due to the impact on domestic investment decisions of an overall reduction in uncertainty under EMU (conditional on the stability gains brought about by ECB policy).

This chapter considers whether the euro has brought about the anticipated benefits and contributed towards improving the functioning of product markets. In practice, however, there are several reasons why it is difficult to answer this question. For a start, the short lifespan of the euro, and data limitations, do not provide enough information from which to draw robust conclusions. This limits the scope for analysis as some effects of the establishment of EMU, such as changes in the structure of the European industry, are only expected to materialise in the longer-run.

Moreover, it is very difficult to isolate the effects of the introduction of the euro from other factors affecting EU markets for goods and services – such as globalisation and the SMP which preceded the EMU project. In addition, while the timing of the key policy initiatives may appear to coincide between EU Member States, in practice it can be quite different. Some Member States, for instance, have received temporary derogations on key elements of the Single Market Programme and others have experienced serious delays in implementing all its provisions. All of this implies that the impact of European integration might differ between Member States.

Channels via which the euro affects product markets

The effects of the introduction of the euro on product markets can be expected to materialise through three main channels: lower transaction costs, exchange-rate stability and greater price transparency. Table IV.1 attempts to classify the effects which can be associated with these three channels and to identify the potential impact of EMU and the SMP on product markets. The table distinguishes between the expected effects on competitive conditions in product markets, including the FDI effects (viewed as short-term effects), on the behaviour of firms (medium-term effects), and on the organisation of industry (long-term effects).[2]

In short-run, the lower transaction costs, the exchange rate stability and the greater transparency of prices are expected to have a positive effect on trade:

- *Lower transaction costs.* A single currency allows exporters or customers to save on the transaction costs associated with the management of multiple currencies. Transaction costs include conversion charges on the spot exchange rate market, the cost of hedging against currency fluctuations, in-house costs associated with the management of multiple currencies and banking charges on cross-border payments.

[1] This section is based on Dierx, A., F. Ilzkovitz and K. Sekkat (2004a and 2004b)

[2] It is for example very difficult to fully separate the impact of the lowering of non-tariff trade barriers from that of greater price transparency. Similarly, it is not evident that changes in market conditions, firm conduct and industrial organisation necessarily occur in sequential order. Rather, these different elements are in a continuous and dynamic interaction. Moreover, the analysis does not consider the impact of changes in labour and capital markets and their interactions with those in product markets. Finally, the more dynamic effects of market integration and reform on business investment in R&D and innovation are not analysed as such.

- *Exchange rate stability*. Exchange rate volatility can hamper trade despite the existence of well-developed markets for currency hedging. In practice, exporters cannot insure themselves adequately against all forms of exchange rate risks. In particular, hedging can be more costly for currencies which are not traded intensively on world financial markets. In addition, available hedging instruments are essentially of a short-term nature. Trade is also affected by medium to long-term fluctuations in real exchange rates against which hedging is difficult.
- *Price transparency*. A single currency facilitates cross-border comparisons of prices, thereby enhancing cross-border competition and increasing trade flows. In this context, EMU may be considered as a crucial complement to the SMP.

In contrast to trade, economic theory is less clear-cut as to the impact of a single currency on foreign direct investment. When EMU was launched, it was generally believed that the single currency would bolster FDI flows into the euro area. This expectation was underpinned by the idea that the suppression of exchange-rate uncertainty would support cross-border investment by enhancing the positive effects of the creation of a truly internal market (leading to economies of scale and a larger home market). Nevertheless, FDI can take different forms and be influenced by a large number of determinants. As a result, the link between FDI and a single currency could, theoretically, also be negative. For instance, if cross-border investment and trade are mutual substitutes, any change in the institutional setting that bolsters trade will tend to hamper FDI.

Table IV.1**: The effects of the SMP and EMU on EU product markets**

	Reduction of barriers to cross-border activities inside the EU (due to the SMP and EMU)	**Increased price transparency (due to EMU mostly)**
Short-term effects: Level of competition in product markets rises	**Trade ↗ FDI ↗ or ↘Market entry ↗** **Inter-brand competition ↗** **Allocative efficiency ↗** **Profit margins ↘**	**Intra-brand competition ↗** **Market segmentation ↘** **Allocative efficiency ↗** **Profit margins ↘**
Medium-term effects: **Firms change production strategy**	**Sectoral diversification ↘** **Multinationality ↗** **Productive efficiency ↗** **Profit margins ↗**	**Product differentiation ↗** **Sectoral diversification ↘** **Market power ↗** **Profit margins ↗** **Vertical linkages ↗**
Long-term effects: **Changes in the structure of industry**	**Industrial concentration (at Member State level) ↘** **Spatial concentration ↗↘** **Inter-industry trade ↘** **Intra-industry trade ↗**	**Intra-industry trade ↗**

Source: Commission services.

Impact on market competition and the strategic behaviour of firms

These effects on trade and FDI will lead to a change in competitive conditions. Thus, by eliminating exchange-rate fluctuations and non-tariff barriers to intra-EU trade, EMU and the SMP facilitate market entry by new firms and the introduction of new brands into the different national markets. Therefore, inter-brand competition is expected to rise. Profit margins should decline, in particular for producers that fail to adapt. A second effect of EMU is the increased transparency of price differences between the countries in the euro area, especially since 2002 when the euro notes and coins were put into circulation. This increased transparency makes it more difficult for multinational enterprises to segment national markets geographically and maintain profit margins, as higher price transparency reduces information costs and increases the ability of consumers or distributors to engage in cross-border arbitrage. Hence by reducing the ability of manufacturers to price discriminate between Member States, EMU will increase intra-brand competition. By changing competitive conditions, product market integration should thus lead to an increase in allocative efficiency**,** i.e. prices should move closer to marginal costs.

Increased competition and the subsequent decline in profit margins may cause firms to make greater efforts to reduce production costs or implement strategies to regain market power and, in the short to medium run, this will have an impact on the range and characteristics of products that they sell, the geographical spread of their sales territory and the location of their production facilities.

In order to reduce production costs, a European firm may choose to concentrate production in sectors where

it has a leading position in the market ('return to core business'), implying a decline in the sectoral diversification of its production. Another option is to exploit economies of scale by expanding into new geographical markets. This will inevitably imply a strengthening of the multinational character of the firm.

Such changes should be reflected in average cost reductions, i.e. gains in productive efficiency, and thus should contribute to the restoration of profit margins.

In order to regain market power, one option, facilitated by the increased price transparency, is for producers and distributors to come to a tacit agreement to set high prices. The increased price transparency for producers under EMU could facilitate collusive practices but this risk can be contained by an effective application of competition policy which forbids collusion. Another option is to increase product differentiation. If a firm's product can be clearly distinguished from that of competitors or from its own product marketed in other countries, the firm's ability to set prices at the desired level can be increased. However, product differentiation requires investments in R&D and advertising. To avoid spreading their limited investment resources, firms may be forced to focus on their core business and to abandon nonessential activities. This is another explanation for the decline in sectoral diversification. Finally, intra-brand competition may give rise to a strengthening of vertical linkages. Sellers may attempt to establish contractual or ownership arrangements with distributors in order to protect profits currently achieved through price discrimination.

Longer-term impact on growth and industrial specialisation

Due to offsetting developments, the longer-run implications of changes in company behaviour for industrial concentration are not immediately evident. At the level of individual Member States, a decline in industrial concentration is likely to occur mainly because of market entry by foreign firms. This would probably be a more important factor than the failure or take-over of national firms. At the level of the EU as a whole, market integration may lead to an increase in industrial concentration because mutual entry does not imply an increase in the total number of firms. While failures or take-overs will increase industrial concentration at the European level, the smaller number of firms is expected to compete more intensely across borders. It is difficult to decide a priori what the net impact of the changes in the strategic behaviour of firms will be.

With firms expanding their markets beyond national borders and adjusting strategies, it is natural for them to reconsider the location of production facilities, raising the question of whether and how closer European integration affects the degree of industrial specialisation of the EU Member States. These questions are highly relevant in the context of EMU which entails the centralisation of the competencies in the field of monetary policy in the hands of the ECB and thus implies a loss of one adjustment mechanism in the case of asymmetric shocks (or symmetric shocks which are transmitted in an asymmetric way). Should EMU lead an over-specialisation of individual countries in narrow product groups, the vulnerability to asymmetric shocks and potential costs of adjustment could increase.

The impact of integration on industrial specialisation depends on two forces working in opposite directions. On the one hand, the removal of trade barriers should lead to a reduction in transport and transaction costs and thus allow a better exploitation of scale economies. This should facilitate increased inter-industry specialisation of the EU Member States, making them vulnerable to asymmetric shocks. On the other hand, European integration has contributed to a convergence of factor endowments and the removal of exchange rate variability. This should strengthen intra-industry trade linkages between participating countries and make their economic structures more similar. The first view is defended by Krugman (1991a and 1991b) and the new economic geography approach, while the second is expressed by Frankel and Rose (1997), Fontagné and Freudenberg (1999) and the European Commission (1996 and 1997a). The choice between these two views is not easily made as both arguments have found some empirical support (see section 1.2).

EMU can therefore be thought of as a means of enhancing the integration of markets, which are already increasingly integrated as a result of the customs union and the SMP. However, the impact of the progress in monetary integration on long-term growth is difficult to quantify. An important problem is that traditional growth theory is based on the assumptions of constant returns to scale and perfect competition. This implies that economic integration (dismantling of trade barriers, increasing the size of markets) cannot affect growth in the long run. Instead, countries become richer because of exogenous technological progress. The Cecchini Report, which tried to estimate the expected gains from the completion of the SMP, was based on traditional growth theory (Emerson *et al.* 1988).

The Cecchini estimates were based on the idea that economic integration would alter the level of output but not its rate of growth. From this perspective, economic integration improves the allocation of resources and this allows the same resources to yield a higher level of output.

Baldwin (1989) suggests that the gains from economic integration are likely to be much larger than suggested by Cecchini. There are two aspects to this claim. The first is based on the argument that the static efficiency gains considered by Cecchini that tend to raise output and the rate of return on investment will have a further dynamic effect by stimulating savings and capital formation. This can be referred to as a 'medium-term

growth bonus'. The medium-term effect will materialise only gradually over time. In the long-run the growth rate remains unchanged however.

The second part of Baldwin's claim that the Cecchini Report may underestimate the gains from economic integration is that the medium-term growth bonus could be complemented by a 'long-term growth bonus', which would take the form of a permanent increase in the rate of growth. His reasoning here is based on newer growth theories which incorporate increasing returns to scale, and in which growth can be explained endogenously. He analyses two such new growth models. The first relies on a specific value for the elasticity of output with respect to capital. In the second model, any increase in the profitability of innovations permanently increases the growth rate.

The subsequent theoretical literature has shown that economic integration does not necessarily need to generate a medium-term growth bonus. For example, Willenbockel (1998) shows that a major integration programme such as the SMP or EMU may actually lead to an initial drop in investment and output due to inter-temporal optimising by economic agents. An announcement of a future integration programme will raise households' expected future income. The economic agents, engaging in consumption-smoothing, would immediately increase their consumption in anticipation of this, implying that the period between the announcement and implementation of an integration programme would witness a decline in both saving and investment.

As regards the long-term growth bonus, Willenbockel (1998) identifies four basic mechanisms through which economic integration can affect long-run growth rates. These are:

- Knowledge-diffusion effects – closer economic integration fosters the transmission of knowledge about product and process innovation. This broadens a country's knowledge base and raises the productivity of its R&D sector.

- R&D redundancy effects – integration discourages the wasteful duplication of R&D efforts.

- Market-scale effects – integration has two opposing implications for the profitability of innovation activity: On the one hand, an integrated market will imply higher profits for a given market share. On the other hand, the presence of a larger number of rival firms producing similar varieties will tend to reduce each firm's market share.

- Re-allocation effects – integration between countries with different factor endowments will lead to a Stolper-Samuelson effect (integration raises the real income of the abundant factor and lowers the real income of the scarce factor) which will induce a resource re-allocation between R&D and other productive activities in different countries. This implies that the rate of innovation and output growth in the human-capital-rich country would fall, while the opposite would occur in the labour-rich country.

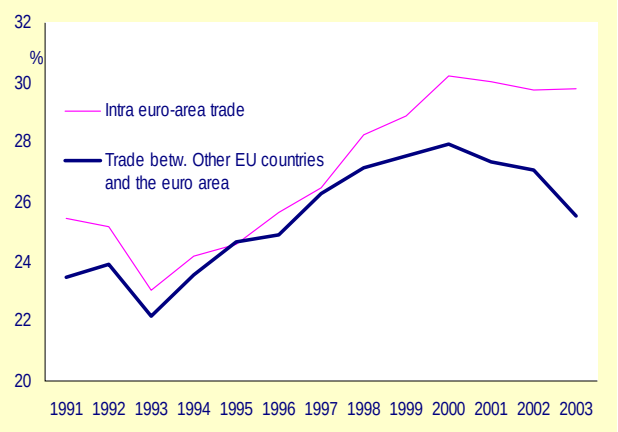
Product market integration is thus expected to deliver important gains in terms of increased production and reduced unemployment. It is not, however, clear whether the boost to economic activity comes through a level shift of output due to better utilisation of resources or whether the EU might benefit permanent increase in growth rates.

1.2 Five years of experience with the euro

1.2.1 Trade and FDI effects

A crucial facet of EMU is that it represents a fundamental change in the policy regime that is likely to affect both the way economic agents react and the structures of the economy. In particular, enhanced market integration, via increased trade and foreign direct investment, featured prominently among the expected benefits of EMU when it was launched.

Graph IV.1: **Real trade in goods with the euro area and other EU countries (1)** (as a share of GDP)



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

If economic theory clearly predicts a positive impact of EMU on trade flows within the euro area, the size of this effect is essentially an empirical matter. There are now good reasons to believe that the potential impact on trade of currency unions in general, and EMU in particular, is sizeable. In the case of EMU, this is best illustrated by comparing developments in trade between euro-area Member States and trade between the euro area and the three EU countries that are not participating in the euro. Since the late 1990s, foreign trade within the euro area has clearly expanded more rapidly than trade

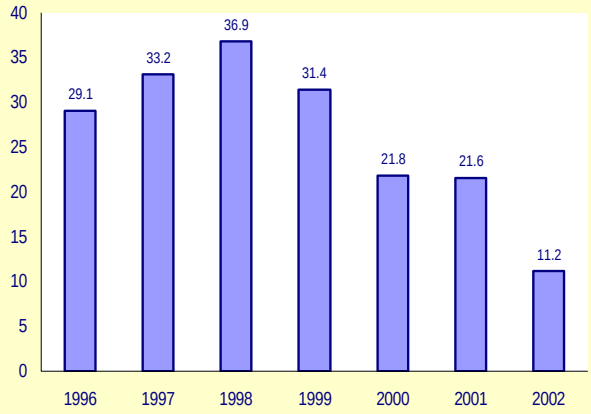
between EMU Member States and the other three EU countries.

According to a simple trade model, the estimated effect of EMU on intra-euro-area trade ranges between 7 and 18%, depending on the estimation strategy adopted[3]. No impact is observed for the EU countries which have not adopted the euro. The 7-18% range can be considered as conservative to the extent that it only captures the impact of EMU that is already visible in the data up to 2002 and that the full effect may not yet have been reached.

These positive results have been broadly confirmed by several recent studies based on more complex trade models. For instance, Barr *et al.* (2003)[4] report that EMU has led to a 30% increase in intra-euro-area trade. In Micco *et al.* (2003)[5], the estimated impact is somewhat lower at 5-20%. Bun and Klaassen (2002)[6] estimate a dynamic model of exports and estimate that the euro has increased trade by 10% after three years with a long-term potential impact of 40%. In its recent review of the five economic tests related to EMU entry, the UK government concluded that EMU membership could entail a boost to trade between the UK and the euro area of up to 50% over 30 years.[7] Overall, the main conclusion that emerges from recent empirical studies is that EMU has already had a sizeable impact on intra-euro-area trade flows and that this effect is likely to increase further in the coming years.

Given the indeterminacy of economic theory in this area, the assessment of both the sign and the magnitude of the impact of EMU on FDI is an empirical matter. In recent years, FDI to and from the euro area has been affected by a number of specific factors such as an equity bubble, large swings in exchange rates and rapid globalisation. Recent FDI inflows into the euro area have probably also been partly fostered by EU-wide factors such as progress with the Internal Market. As a result, it is difficult to isolate a pure EMU effect from other more global effects. However, a comparison of recent developments in EU countries not belonging to EMU with developments in the euro area points to a potentially significant impact of the single currency on foreign investment. As shown in the graph above, the share of non-EMU countries in total inward investment into the EU15 has decreased sharply since the launch of the euro, falling from 37% to 11% between 1998 and 2002.

Graph IV.2: **Inward foreign direct investment share of non-EMU countries into EU15 total (1) (in %)**



(1) EU data include both intra-EU and extra-EU data.
Source: Commission services.

Overall, recent evidence on FDI flows suggests that the single currency has raised the attractiveness of the euro area as a destination for foreign investment. Given the large number of factors which may have affected FDI in recent years, the conclusion would need to be backed by in-depth econometric studies. Unfortunately, the empirical literature on the issue remains extremely sparse although some indirect evidence of a positive impact of EMU is provided in Barr *et al.* (2003). The authors analyse the fall of FDI into the UK in the recent years and conclude that it cannot solely be explained by exchange rate effects and that it may also be a consequence of not adopting the euro.

1.2.2 The pro-competitive effects of the single market programme

Empirical work analysing the pro-competitive effects of EMU is relatively rare. Therefore, it is useful to take recourse to empirical studies that have been made to assess the pro-competitive effects of the SMP and which can provide some indication of potential effects of further economic integration.

Building on the pioneering work of Smith and Venables (1988) that developed a theoretical model allowing the measurement of the welfare effects of the reinforcement of competition, Allen *et al.* (1998) showed that on average, price-cost margins have fallen by 3.9% in the sectors more sensitive to the SMP. By comparing the competition effects across manufacturing industries, they concluded that the pro-competitive effects of the Single Market were stronger in the more concentrated sectors and in the sectors previously protected from international competition by non-tariff barriers. This conclusion was confirmed by empirical work made by Bottasso and Sembenelli (2001) on Italian firms, by

[3] For more details on the model see Quarterly Report on the Euro Area, No. III, September 2003, p 24.

[4] Barr, D., F. Breedon and D. Miles (2003).

[5] Micco, A., E. Stein and G. Ordoñez (2003).

[6] Bun, M. and F. Klaassen (2002).

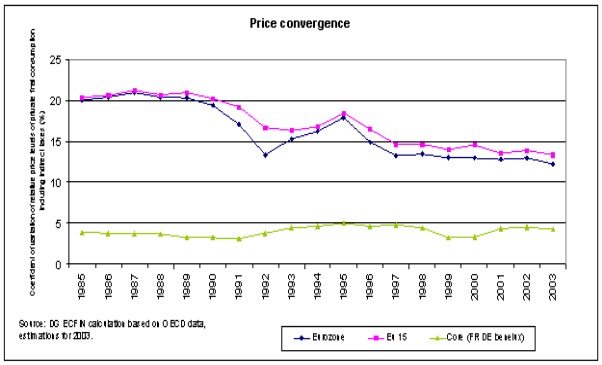
[7] HM Treasury (2003a).

Griffith (2001) on UK firms and by Notaro (2002) on 8 European countries. Sauner-Leroy (2003) explored the effects of the SMP on price-cost margins in manufacturing industry. He analysed the respective contributions of price and cost developments in the variation of price-cost margins over the period 1987-1999. Over the period 1989-1992, the fall in price-cost margins was mainly due to a decrease in prices greater than that in costs while subsequently, price-cost margins recovered mainly thanks to efficiency gains. These results indicate that European companies anticipated the consequences of the full implementation of the SMP, which led to a strong increase in competition and a decline in price levels as firms had not yet fully adapted their strategies. Subsequently, some firms succeeded in reducing their costs while others were forced to exit the market.

As regards the analysis of the impact of EMU, Gasiorek *et al.* (2004) explored the effects of increased price transparency following the introduction of the euro. They assumed that the impact of higher price transparency would mainly be felt by consumers, because large European producers had already good information on price levels in the different national markets. The increased awareness by consumers of price differences between Member States encourages prices arbitrage and makes it more difficult for suppliers to segment the EU market. Consequently, simulations carried out with a CGE-model show that EMU should lead to increased output and lower mark-ups in a large majority of manufacturing sectors. The analysis also shows that the pro-competitive impact of the greater consumer price transparency should be higher in less competitive industries, i.e. those which are more differentiated and concentrated. Finally, this work confirms the conclusions of Allen *et al.* (1998): if the Single Market and EMU not only increase the intensity of competition (by encouraging entry and arbitrage) but also lead to the elimination of market segmentation (i.e. producers treat the EU market as a single market and adopt a unified pricing strategy), the pro-competitive effects should be much greater.

Finally, some reduction in price dispersion is expected to arise from the greater integration and exchange rate stability resulting from EMU. While there has been significant progress towards price convergence in the EU 15 since 1985, significant differences remain in the patterns of price convergence in individual euro-area countries and across various groups of products. These differences need to be explained by other factors (even after allowing for the effect of exchange rate movements) then different living standards[8] (European Commission, 2001b).

Graph IV.3: **Price Convergence**



Source: Commission Services – DG ECFIN : calculation based on OECD data, estimations for 2003.

Nevertheless, it seems that the establishment of the Internal Market has been successful on the whole in narrowing the quite substantial price differences that existed across countries in the second half of the 1980s.[9] However, the pace of convergence has slowed down since 1997. The example of the euro-area core countries (Benelux countries, France and Germany) shows that there is still considerable scope for a further decline in price dispersion within both the euro area and the European Union as a whole. The data for November 2003 show a slight decrease in price dispersion within the euro zone. It is too early though to attribute this progress to the introduction of the euro notes and coins in 2002.

From the consumers' point of view it is encouraging that over the period 1992-2001 many consumption goods converged to low price levels. These goods represented approximately 25% of the consumption basket. On the other hand, there are still many areas, in particular in services, where integration and competition could produce increased price convergence to the benefit of consumers (European Commission, 2002b).

Progress in economic integration has indeed induced changes in the strategic behaviour of companies. Rondi *et al.* (2004) explored the changing industrial and geographical diversification strategies of leading firms over the decade 1987-1997. They provided empirical evidence suggesting that EU firms reduced their industrial diversification and became more multinational in character. This latter conclusion is based on information on the presence of production facilities

[8] The empirical literature finds several reasons why price levels diverge even when taking account of differences in indirect taxation and income levels. These include the existence of branded goods which command price premia that vary across Member States; pricing policies which reflect local competition conditions rather than international prices and exchange rates; low levels of competition in a sector; and a lack of consumer price transparency.

[9] The sharp fluctuations in price dispersion between 1992 and 1995 may be associated with the high exchange rate variability between European currencies at the time.

outside the home country and is confirmed by data on trade, FDI and cross-border mergers and acquisitions. It also appears that the competitive rise of R&D and advertising expenditures in the more integrated market has encouraged firms to divest secondary activities.

1.2.3 Changes in the industrial structure

The short lifespan of EMU to date does not provide enough evidence to draw strong conclusions about the impact of the euro on the structure of the European economy. However, we can observe longer-term trends which reflect the impact of progressing integration on the pattern of industrial concentration and specialisation within the EU.

Veugelers (2004) examines the impact of changes in firms' strategic reactions on industrial concentration over the period 1987-2000. The results show that average production concentration did not change very much over the period 1987-2000 but increased slightly in the period 1997-2000. However, this average hides a rich diversity of developments within different industries. Highly concentrated sectors, for example, have witnessed a relatively sharp decline in concentration. There also was considerable turbulence in market leadership in EU manufacturing industries: over the period 1987-2000, the top 5 companies lost more than half of their market share position.

This instability of market shares indicates that there was a lot of rivalry between European companies and that competitive pressures even affected the position of the main players. This empirical evidence supports the thesis that the defensive reactions of firms – aimed at increasing their market power - are unlikely to offset the positive effect of integration on competitive conditions. On the contrary, the SMP and EMU have had a pro-competitive effect and this effect has been stronger in sectors which were highly concentrated and previously more protected.

Different empirical studies have been carried out to evaluate the changes in the production and trade specialisation of the EU Member States over the last thirty years (see for example, CEPII (1997), Amiti (1999), Aiginger *et al.* (1999) and Midelfart-Knarvick *et al.* (2000)). These studies find that the changes in production and trade specialisation are relatively modest in a majority of EU Member States and go in opposite directions (see table IV.2). The specialisation of production has gradually increased since the 1970s while export specialisation has decreased.

Two reasons can be given to explain these diverging trends in production and trade specialisation. First, the adjustment of production is slower than that of trade. Second, there is an increased importance in intra-industry trade. This is confirmed by the rising Grubel-Lloyd index in the different Member States over the last two decades (see table IV.3) and appears to support the argument that the industrial structures of the EU economies are converging.

Table IV.2**: Evolution of the production and trade specialisation of the EU Member States (1970-1997)**

Krugman specialisation index	**70/73**	**80/83**	**88/91**	**94/97**
Production	0.43	0.40	0.44	0.47
Exports	0.67	0.62	0.63	0.63

Source: Commission services.

This increase in intra-industry trade is consistent with the catching up of lagging EU Member States and the resulting convergence of factor endowments and technology. Given the evidence that exchange rate variability weakens intra-industry trade (see Fontagné and Freudenberg (1999)), the establishment of EMU should help to strengthen intra-industry trade. The argument that in EMU there will be a larger risk of exposure to asymmetric shocks as a result of a greater industrial specialisation is not supported by this finding.

1.2.4 Macroeconomic effects of product market integration

Given the problems with identifying the direct impact of monetary integration on macroeconomic aggregates (above all macroeconomic growth) it is again useful to look at the effects of the product market integration in general.

Dierx *et al.* (2004c) look at the macroeconomic impact of the product market reforms since the early 1990s. Product market reforms (including in particular efforts to create a better integrated Internal Market) are considered as strengthening competition, increasing efficiency, stimulating technological innovation and reinforcing the capacity of the economy to respond to adverse shocks. The authors use macro-model simulation analysis: shocks to price mark-ups and total factor productivity are fed into the European Commission's macro-econometric QUEST II model to assess the effects of product market reforms on macroeconomic performance.

Table IV.3: **Evolution of intra-industry trade inside the EU (1980-2001)**

	1980	1985	1990	1995	2001	Change 1980-2001	Change 1995-2001
Austria	0.34	0.36	0.41	0.42	0.46	0,12	0,04
Belgium – Lux	0.45	0.44	0.51	0.55	0.57*	0,12	0,02
Germany	0.51	0.51	0.58	0.60	0.59	0,08	-0,01
Denmark	0.35	0.36	0.42	0.42	0.46	0,11	0,04
Spain	0.28	0.32	0.43	0.50	0.57	0,29	0,07
Greece	0.08	0.09	0.11	0.14	0.11	0,03	-0,03
France	0.58	0.56	0.62	0.64	0.68	0,1	0,04
Finland	0.20	0.22	0.26	0.25	0.25	0,05	0
Italy	0.38	0.40	0.44	0.44	0.45	0,07	0,01
Ireland	0.33	0.32	0.32	0.28	0.37	0,04	0,09
Netherlands	0.45	0.44	0.56	0.57	0.48	0,03	-0,09
Portugal	0.09	0.13	0.23	0.26	0.32	0,23	0,06
Sweden	0.33	0.34	0.41	0.43	0.43	0,1	0
UK	0.48	0.45	0.54	0.55	0.52	0,04	-0,03

Source: Commission services.

In order to quantify the size of the shocks, the authors use the results of Notaro (2002) and Allen *et al.* (1998) which point to a consistent positive (negative) impact of the SMP on productivity (mark-up) in the high and medium sensitive industries. To get an estimate of the impact of the SMP on mark-up and productivity at the EU economy as a whole, the authors weight the estimates by the share of the high and medium sensitive industries in the EU GDP (around 25%). This implies an average decrease of mark-up by around 0.9 percentage points and an increase of productivity by around 0.5%. The evidence on services is not clear yet and there is no study yet which provides a quantitative assessment of the Internal Market effect on services. There are, however some results from network industries (telecom, electricity and transportation) which have been used for our macro assessment. Nevertheless, the results presented below should be considered as a "lower bound" to the overall impact of the SMP on the EU economy.

The simulation results suggest a medium-term increase in GDP relative to its baseline level of about 2%. In terms of growth rates, this translates into an acceleration of output growth by almost a quarter of a percentage point annually over a period of 7 to 8 years.

Without the product market integration there would be around 2.5 million jobs less in the EU in 2002. Simulations also show that a macroeconomic policy framework providing medium-term stability allows to better exploit the positive effects of structural reforms and that coherence and comprehensiveness of reforms is essential.

The progress in economic integration has thus generated tangible gains at the macroeconomic level. The simulation results give some support to the existence of the medium-term growth bonus. However, there is no evidence available of an increase in the long-term growth potential. While there is evidence concerning the level shift of labour productivity and a decrease in mark-ups the long-run increase in productivity growth rates which is essential for rising the growth potential is not borne in the data. Indeed, since the mid-90s the EU has experienced a slowdown in labour productivity growth whilst the US has enjoyed significant acceleration.

The Lisbon strategy adopted in 2000 and aiming at improving EU's competitiveness and social cohesion while preserving environmental sustainability takes these findings into account. While many foreseen measures are directed towards perfectioning of the Internal Market and improving business environment, high attention is paid to supporting R&D and innovation and improving the diffusion of knowledge.

* Data for Belgium

1.3 Institutional aspects: policy coordination in product markets

It is difficult to discuss the impact of EMU on the functioning of product markets without taking into account the efforts made to improve product market surveillance, in particular via the Cardiff process and the Lisbon strategy. The establishment of EMU has been a catalyst for an improved coordination of economic policies in the EU. In the light of ongoing structural changes and potential demand-side disturbances, flexible markets are essential to ensure a swift reallocation of resources without high fluctuations in unemployment or aggravating price pressures. Therefore, a framework for the coordination of structural reforms in product markets was established and became a part of the overall system of coordination of economic policies underpinning the functioning of EMU.

The Cardiff European Council of June 1998 decided to "to establish a light procedure under which Member States and the Commission will produce short year-end reports on the functioning of product and capital markets …"[10] The Cardiff process can be considered as a frontrunner of the Lisbon strategy, as it aimed at enhancing the growth potential of the EU through a comprehensive and coordinated strategy of product and capital market reforms. Unlike in the case of fiscal policies, the Cardiff process relies on the 'soft' form of coordination including peer pressure and extensive reporting, monitoring and evaluation. The Cardiff process feeds into the Broad Economic Policy Guidelines (BEPGs), which provide the overall framework for economic policy coordination in the EU and ensure coherence between macroeconomic policy and structural reforms (including labour market reforms), between the different policy areas of structural reforms and between economic policy measures taken in the different Member States. The Cardiff process itself does not specify any guidelines since it is the aim of the BEPGs to present jointly recommendations on macroeconomic and structural policies and to provide a yardstick for the ex-post assessment of such policies.

The responsibility for product market reforms in the EU rests to a large extent with the Member States. Nevertheless, the European Community also plays an important role in many areas. A fundamental pillar of the economic policy framework in EMU is a well-functioning Internal Market. In order to ensure a proper functioning of the Internal Market and create a level playing field for companies competing within that Market, the Community has enacted a substantial body of legislation. These Community regulations and directives derive their binding force from the existence of functioning enforcement mechanisms (competition policy, rulings of Community courts) and cover many aspects of economic life as they include the implementation of Internal Market directives, the control of State aids, the legal provisions for opening-up the telecommunications, energy and transport sectors, etc.

Since Lisbon European Council of March 2000, product market reforms are part of a more general ten-year strategy to promote growth and employment and to create a modern, knowledge-based economy while maintaining social cohesion and environmental protection. As the Luxembourg process in the area of labour markets, the Cardiff process provides a useful input for the Lisbon strategy in the area of product and capital market reform. The Lisbon strategy has also led to initiatives aimed at promoting economic reforms in other areas such as R&D and innovation.

First, it was decided to devote the annual Spring European Council to structural reform and to the progress made in this area. The decisions taken at these annual European Council meetings, which deal with economic, social and environmental issues, are reflected in the BEPGs priority areas for structural reforms and should give a political impetus to the reform agenda.

Second, systematic evaluation of the progress on structural reforms should be facilitated by the set of structural indicators which were agreed upon by the Commission and the Council. The indicators are an essential tool used in a report – the so-called "Spring report" – prepared by the Commission for the Spring European Council. This report presents an assessment of progress made in achieving the goals defined in Lisbon and the new targets set in Stockholm (for example, in the area of social cohesion) and in Barcelona (for example, in the area of R&D). It highlights the main areas where progress is too slow and where additional impetus is required from the Spring European Council.

Third, the Member States also adopted a new "open method of coordination" in order to support the propagation of best practices in economic policy and to make further progress towards achieving the objectives chosen. This method includes (i) agreements on policy guidelines and targets together with specific timetables for their implementation; (ii) translation of these guidelines and targets into national and regional policies; (iii) use of indicators and benchmarks to measure progress; and (iv) periodic monitoring and evaluation of progress made. This method of economic governance combines the benefits of partial centralisation through agreements on targets, timetables, benchmarks and indicators with the degree of decentralisation that is required by the differing economic structures and preferences of the Member States. However, the decisions taken are not binding.

[10] Conclusions of the Cardiff European Council, June 1998.

Both the Cardiff process and the Lisbon strategy rely mainly on peer pressure and benchmarking to achieve their goals. The open method of coordination puts pressure on Member States to explain what they are doing in terms of the implementation of structural reforms and why certain goals have not been reached. By relying exclusively on "peer pressure", persuasion and the issuing of policy recommendations, these processes lack the disciplining instruments that may be needed to guarantee that the policy measures considered necessary or desirable are actually implemented. Therefore, the question should be considered whether these coordination processes are effective: do they really influence Member States' policy choices; do they induce Member States to initiate reforms that they would not have chosen to undertake anyway? Clearly, the non-binding character of the open method of coordination means that the Member States are not going to be forced, say, to cut State aid or to reduce the administrative burden on business if they do not wish to do so.

It is too early to assess whether the open method of coordination is effective in stimulating structural reforms. Nevertheless, some positive signs can be discerned. First, the simple exchange of information and best practice drawing on the experience of 15 national governments may have contributed to the implementation of reforms, if only by convincing policymakers of the usefulness of these reforms. Open discussions about the merits and drawbacks of policy measures can also contribute to creating a consensus on a common approach. Second, comparison of 15 different national experiences may have helped in showing which policies work and which policies are ineffective. Third, the element of peer pressure may have helped Member States to overcome vested interests at the national level. In this respect, the outcome of the reform effort should be better communicated to the public at large in order to increase public acceptability and political support. This is also very important because policy-makers are sometimes tempted to avoid politically sensitive reforms which have medium-term benefits but short-term costs.

2. EMU and the labour market

2.1 Introduction

2.1.1 Expectations on the impact of EMU on labour markets

The impact of EMU on labour markets and vice versa has been a much-discussed subject in the academic economic literature ever since the plans for EMU crystallised in the late 1980s. Improved labour market performance would very likely smooth the functioning of EMU in practice, simply because the operation of fiscal and monetary policy would be easier with lower levels of unemployment. Prior to the introduction of the euro, there were two main additional considerations.

Firstly, the textbook line (e.g. De Grauwe, 1992) was that *EMU might require a higher degree of labour market flexibility (where 'flexibility' means wage flexibility and geographical labour mobility) so as to facilitate the burden of adjustment to economic shocks*. In particular, the role of labour markets in adjusting to country- or region-specific shocks has been underlined.[1] The idea is that, if a country or region is hit by an asymmetric shock, wages may fall and/or labour may move to other regions, so that adjustment costs are lower than in the case where adjustment takes the form of recession and unemployment. The view that labour market adjustment takes on added importance under EMU rests on one or both of two arguments: that exchange rates and national monetary policies were effective in smoothing or substituting for real adjustment, at least to some extent, and/or that the frequency of shocks was likely to increase as a result of EMU. Some doubts were expressed on the first point, while there were diverging views as to whether the frequency and scale of shocks (and consequently the demand for adjustment capacity within Member States), would increase or diminish.[2] Nevertheless, there was widespread consensus amongst economists that increased labour market flexibility would be needed in most euro-area countries in order to strengthen adjustment capacity in EMU.

Secondly, *it was broadly expected that EMU would encourage structural reforms of labour markets to promote flexibility and efficiency*. The above arguments strengthened the normative case for reform. In addition, EMU, along with economic integration in general, was expected to intensify the degree of competition faced by firms. Increased competition in product markets tends to squeeze labour market rents (Nickell, 1999), which may add to pressures for reform. Bertola and Boeri (2002) model this as an increase in the elasticity of labour demand, which raises the efficiency cost of labour market distortions that are motivated by distributional concerns (such as tax wedges, minimum wages and wage compression due to collective bargaining). Pressure for labour market reform could also stem from the greater mobility of capital and labour which would in effect bring workers and welfare systems in different Member States more directly into competition with each other. In some respects, EMU was expected to facilitate improvements in the functioning of labour markets directly through greater price (and wage) transparency and lower exchange-rate risk, and also by facilitating cross-border labour mobility.

Some partial objections to this view were raised:

- a closer look at labour market 'flexibility' and its role in adjustment (see section 2.3.1 below) shows that there are different elements of flexibility that may influence, and be influenced by, EMU in slightly different ways;
- as Bertola and Boeri (2002) note, 'more dynamic and elastic microeconomic interactions' also increase risks for market participants, leading to demands for greater protection, even if this is now more costly in efficiency terms;
- in EMU, reforms in a single country can no longer be accommodated to the same extent as before by the single monetary authority, while the response of fiscal authorities may be also constrained owing to budgetary requirements (especially in the early years

[1] EMU might also be expected to lead to some convergence in labour market policies and institutions among Member States in order to limit the scope for asymmetric transmission of symmetric shocks.

[2] It may be argued that national monetary policies and exchange rates are of limited effectiveness except in the case of temporary shocks affecting the whole national territory. In the case of regional or sectoral shocks, they are blunt instruments, while in the case of permanent shocks they can at best slow or delay adjustment, not prevent it. Some argued that the frequency of asymmetric shocks would diminish in EMU as economic integration led to a convergence in the sectoral composition of activity across Member States, and also due to policy convergence as national policy errors have been a major source of asymmetric shocks in the past. In contrast, others have argued that EMU and the process of economic integration in general are likely to lead to greater regional specialisation in production, which might leave sub-national regions more vulnerable to sector-specific shocks (e.g. Krugman, 1993).

of EMU when countries were expected to reduce underlying budget deficits). Consequently, there may be less incentive for politicians and social partners to engage in reforms. This is one justification for the coordination of structural reforms through the Broad Economic Policy Guidelines and the Lisbon strategy.

2.1.2 The approach to assessing the impact of EMU on labour markets

Most discussions of the impact of EMU on labour markets have tended to focus on wage bargaining, which is covered in detail in Part II.3. This chapter looks at the impact of EMU on labour market outcomes (employment, unemployment and labour market dynamics) and at the role of other labour market policies and institutions, including tax and benefit systems, employment protection legislation, active labour market policies and policies that may help or hinder labour mobility, both geographical and occupational.

Section 2.2 reviews labour market performance since 1999, including progress towards the employment targets established as part of the Lisbon strategy. Section 2.3 turns to the response of labour market institutions and economic agents, and asks in particular whether the pace of labour market reforms has quickened since 1999. To this end, section 2.3.1 looks in more detail at the concept of labour market flexibility and considers the possible impact of the move to EMU on specific labour market institutions. Section 2.3.2 reviews the reform measures that have been undertaken since the start of EMU.

As with other policy areas examined in this report, it is hard to reach definitive conclusions on the impact of EMU on labour markets (and *vice versa*) for several reasons:

- it is difficult to disentangle the implications of EMU on labour markets from other driving forces such as globalisation and technological change, which are clearly having a major impact on work organisation and the structure of economies;

- concern about the EU's poor labour market performance is long-standing and many reform initiatives predate the establishment of EMU. This is reflected, for example, in the 1993 White Paper on Growth, Competitiveness and Employment adopted by the Commission, in the 1994 OECD Jobs Strategy and in the European Employment Strategy, which began in 1997. While these responses may have been partly in anticipation of EMU, the fact remains that EMU is only one of several factors driving the policy debate on labour markets in the EU;

Box IV.1: **The European Employment Strategy**[3]

The European Employment Strategy was launched in November 1997 at a special Jobs Summit in Luxembourg. Its aim was to improve the functioning of labour markets by enhancing employability, entrepreneurship, adaptability of businesses and their employees, and equal opportunities for men and women. Its launch sent a strong signal that EU leaders considered employment to be a top priority.

The EES combines the following policy instruments to ensure effective coordination at EU level and transparent decision-making and implementation of employment policies at national level.

- *Employment Guidelines:* following a proposal from the Commission, the European Council shall agree every year on a series of guidelines setting out common priorities for Member States' employment policies.

- *National Action Plans:* every Member State shall draw up an annual National Action Plan which describes how these Guidelines are put into practice nationally.

- *Joint Employment Report:* The Commission and the Council shall jointly examine each National Action Plan and present a Joint Employment Report. The Commission shall present a new proposal to revise the Employment Guidelines accordingly for the following year.

- *Recommendations*: The Council may decide, by qualified majority, to issue country-specific Recommendations upon a proposal by the Commission

It is an open process, allowing for the mobilisation of all stakeholders (e.g. social partners) at EU and national level, which stresses the principle of "good governance and partnership"; the commitment of the Member States remains crucial to its success. The EES was revised in 2003 to address these challenges and was confirmed by the Employment Taskforce report as the policy framework for further action. The policy priorities are well identified, including for the new Member States, and the focus should now be put on better implementation, through strengthened follow-up of recommendations; increased mutual learning and dissemination of good practice at national and regional level; and closer links with the EU budget

The 2004 Employment Guidelines mark a further important step forwards, firstly in establishing a policy framework that takes account of increased diversity in the enlarged EU. It also responds to findings of the European Employment Taskforce chaired by Wim Kok (see Box IV.4). The focus

[3] All relevant documents on the European Employment Strategy can be found on the web-site of the Directorate General for Employment and Social Affairs, http://europa.eu.int/comm/employment_social/employment_strategy/index_en.htm

should now be put on implementation, in particular through better governance. Member States must vigorously pursue the full range of policies defined in the Employment Guidelines and the Union must give more attention to the follow-up and increase peer pressure. The Employment Taskforce has confirmed the need to put emphasis on an intensive monitoring of reforms undertaken by the Member States, rather than engaging in a process of further change of the guidelines.

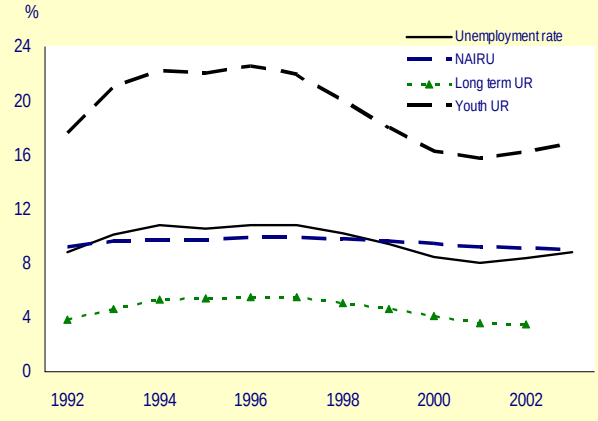
- it is not always easy to judge the 'appropriateness' of labour market reforms. While there is fairly broad agreement among economists and policymakers on the main problems with European labour markets, there is not a complete consensus on the exact policy measures required to improve performance. Those who question whether increased 'flexibility' (however defined) is the solution may even perceive a degree of tension between the aim of improving performance and the aim of improving adjustment capacity under EMU. On the other hand, while flexibility is not an end in itself, the labour economics literature has in recent years highlighted the importance of the interaction between shocks and institutions (see Nunziata, 2002, for a useful overview). This literature suggests that institutions should be conducive to adjustment, or else the negative consequences of shocks may persist for a long time – a point which the European experience of recent decades seems to corroborate. In this light, improving adjustment capacity appears perfectly consistent with the goal of improved labour market performance, certainly in the case of most euro-area economies;

- the impact of policy reforms on labour market performance usually only occurs with a significant delay. In many cases, it may take several years before the benefits begin to show through. In addition, much depends upon the interaction of a wide range of labour market policies and institutions, not to mention policy developments in other fields such as product and capital markets.[4]

2.2 *Labour market outcomes in EMU*

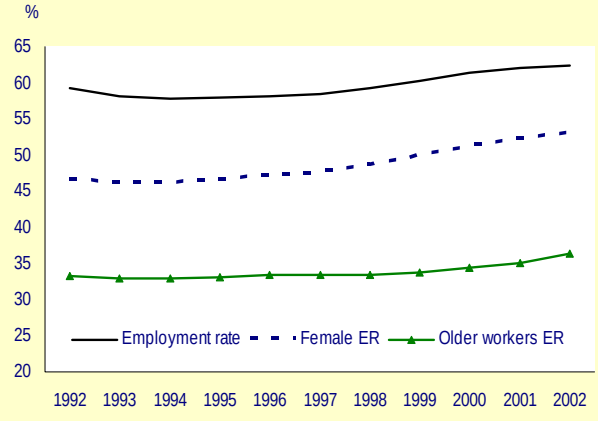
Labour market performance in the euro area remains poor, though it has improved somewhat in recent years. The decline in overall unemployment during the second half of the 1990s appears to have been more than just a cyclical phenomenon (Graph IV.4). Commission services' estimates of the NAIRU suggest a small reduction in structural unemployment, which is reflected in the decline of long-term unemployment (over 12 months) and youth unemployment (under-25s). The rise in the employment rate – due to rising labour force participation as well as falling unemployment – is more marked, with the contribution of female employment particularly apparent in Graph IV.5.

Graph IV.4: **Unemployment in the euro area, 1992-2003**



Source: Eurostat, Commission services for NAIRU estimates.

Graph IV.5: **Employment in the euro area, 1992-2003**



Source: Eurostat..

In 2002, the assessment of the Commission services was that progress on structural reforms of product and labour markets and wage moderation over the previous 7 to 8 years could explain up to 5-6 million additional jobs, a fall in unemployment of 2 million, and an average GDP growth rate of 2.6% instead of 2.2% (European Commission, 2002). The assessment underlined, however, that the growth stimulus of past reforms tends to fade away over time, and so continued progress would be required in order to sustain this level of performance.

[4] See European Commission (2002c) for an overview of the transmission from structural reforms in product and labour markets to macroeconomic performance.

Clearly, performance over the past two years has been disappointing, partly on account of macroeconomic developments.[5] Nevertheless, the fact that the EU's employment rate targets now seem likely to be missed cannot be ascribed entirely to the cyclical downturn (see Box IV.2). Tables IV.4 and IV.5 show that, while some EU Member States (including the three outside the euro zone) already meet the main Lisbon employment objective, others still exhibit the symptoms of chronic structural problems in their labour markets.

These include low labour force participation among certain groups, including women and especially older working-age people. Unemployment too remains a serious concern, with rates approaching or exceeding 9% in all of the large euro-area economies as well as some of the smaller ones. The structural nature of the problem is reflected in the fact that over 40% of unemployed people have been out of work for one year or more, compared to under 20% in the best-performing countries. The proportion has fallen significantly in recent years, which may reflect efforts to activate long-term unemployed people. Nevertheless, since efforts to improve employability have been particularly focused on the under-25s, it is striking that the youth unemployment rate still exceeds 20% in half of the euro-area countries. There is a distinct geographical dimension to the problem in several countries, with severe disparities (in terms of both employment and unemployment) between leading and lagging regions. These, if anything, appear to have widened slightly over the past few years (Table IV.5, final column).

Box IV.2: **The Lisbon employment targets**

At the Lisbon summit in March 2000, as part of their strategy to make the EU 'the most competitive and dynamic knowledge-based economy in the world' by 2010, EU leaders set targets for the overall and female employment rates, and a year later in Stockholm they added intermediate targets and a further target for the employment rate of overall workers:

- an overall employment rate of as close as possible to 70% by 2010 and 67% by 2005;
- a female employment rate of more than 60% by 2010 and 57% by 2005;
- an employment rate for older workers of 50% by 2010.

In spring 2000, with annual employment growth running at 1.9%, the overall target of 70% seemed within easy reach to many. In 2004, it appears rather more challenging.

With an employment rate of 64.3% in 2003, and weak employment growth expected in 2004 and 2005 (0.3% and 0.8% respectively according to the Commission's spring 2004 forecasts), the EU-15 employment rate would stand at around 65% in 2005 (given a constant working-age population). With five years to go until the end of 2010, the required annual rate of employment growth to hit the 70% target would then be 1.5%. While that is still below the rates achieved in the last few years of the 1990s, it is well above the historical average of just over 0.5% since 1970. Moreover, breaking the labour force down by age and gender, it is clear that the lion's share of the increase would have to come from younger people (who at the same time are encouraged to stay longer in education), women (who have already made a substantial contribution) and older workers (who are still encouraged to retire early in some countries).

The disappointing progress towards the Lisbon targets will be put down partly to the macroeconomic downturn. However, as graph IV.4 shows, unemployment still remains below its estimated structural or equilibrium level. This suggests that, had employment continued to grow at a rate of 1.9%, then a continued structural improvement in labour market performance would have been required in order to avoid inflationary pressures. Thus, with or without the macroeconomic downturn, the key question remains whether EU leaders have taken the action necessary to bring about this structural improvement. In other words, have they enacted the kinds of reforms needed to reduce youth and long-term unemployment, raise the labour market participation of young people and women and dramatically increase the participation of older working-age people, all by 2010?

Table IV.4**: Employment in the EU Member States**

	Employment rate					
	All		Female		Older workers	
	1999	**2003**	**1999**	**2003**	**1999**	**2003**
BE	59.3	59.6	50.4	51.8	24.6	28.1
DK	76.0	75.1	71.1	70.5	54.5	60.2
DE	65.2	64.8	57.4	58.8	37.8	39.3
EL	55.3	57.9	40.6	43.9	39.1	42.3
ES	53.7	59.7	38.4	46.0	35.0	40.8
FR	60.9	62.8	54.0	56.7	28.8	36.8
IE	63.3	65.4	52.0	55.8	43.7	49.0
IT	52.7	56.1	38.3	42.7	27.6	30.3
LU	61.7	61.0	48.6	47.3	26.4	38.4
NL	71.7	73.5	62.3	65.8	36.4	44.8
AT	68.6	69.2	59.6	62.8	29.7	30.4
PT	67.5	67.2	59.6	60.6	50.3	51.1
FI	66.4	67.7	63.4	65.7	39.0	49.6
SE	71.7	72.9	69.4	71.5	63.9	68.6
UK	71.0	71.8	64.2	65.3	49.6	55.5
EU	62.5	64.3	52.9	56.0	37.1	41.7
Euro area	60.3	62.4	50.0	53.5	33.8	37.8

[5] Although the relatively muted response of unemployment and employment to the downturn, in comparison with previous cycles, provides further support for the view that part of the improvement in labour market performance has been structural.

Table IV.5**: Unemployment in EU Member States**

	Unemployment rate							
	All		Youth		Long-term		Regional disparities*	
	1999	**2003**	**1999**	**2003**	**1999**	**2003**	**1999**	**2002**
BE	8,6	8.1	22,7	21.5	4,9	3,7	0.52	0.48
DK	4,8	5.6	8,8	10.3	1,0	1.1	:	:
DE	8,4	9.6	8,8	11.1	4,3	4,6	0.51	0.63
EL	11,8	9.3	31,9	26.3	6,4	5,1	0.14	0.16
ES	12,8	11,3	25,6	22,7	5,9	3,9	0.36	0.38
FR	10,7	9.4	23,3	20.2	4,2	3.4	0.24	0.22
IE	5,6	4,6	8,4	8,3	2,6	1,5	:	:
IT	11,3	8.6	32,3	27,0	6,8	4.9	0.66	0.78
LU	2,4	3.7	6,9	10.4	0,7	0,8	:	:
NL	3,2	3.8	6,8	6.8	1,2	1.0	0.32	0.16
AT	3,9	4,4	5,4	7.2	1,2	1.1	0.29	0.43
PT	4,5	6.4	8,9	14.6	1,8	2.2	0.28	0.27
FI	10,2	9,0	21,4	21,8	3,0	2,3	0.30	0.31
SE	6,7	5.6	12,3	13.4	1,9	1,0	0.30	0.17
UK	5,9	5,0	12,8	12,3	1,7	1,1	0.33	0.30
EU	8,7	8.0	16,9	15,8	4,0	3,3	0.59	0.63
Euro area	9,3	8,9	18,0	17.1	4,5	3,9	:	:

*) Coefficient of variation = Standard deviation of NUTS 2 regional unemployment rates/National average unemployment rate

Source: Eurostat.

The dynamics of the labour market are also of particular interest in the context of EMU. Table IV.6 provides the latest data on job tenure. The share of employees with very long tenure (over 10 years) is relatively high in the euro area (though it is interesting to note that the share in the 2-5 year bracket is significantly higher in the UK and US). In most euro-area countries, the share of employees with short tenure is relatively low, though in some (particularly Spain and Finland) the role of liberalised temporary contracts is evident.

On the whole, the evidence on movement of employees suggests that there is less reallocation of labour in the euro area compared to most other OECD countries. However, the available data on creation and destruction of *jobs* (i.e. not including movements between continuing positions) suggest that this is almost as intense in the euro area as elsewhere, at least when viewed at relatively low frequency (e.g. annual). Burda and Wyplosz (1994) suggest that labour market rigidities in Europe may impede transitory variations in employment but perhaps not the permanent reallocation of labour. However, since the available data is not easily comparable across countries, it is hard to draw firm conclusions on this (Davis and Haltiwanger, 1999).[6]

Higher-than-expected labour turnover in Europe may be partly due to the failure of wages to adjust rapidly to changing economic conditions at firm level. The evidence on this is mixed. While wage fluctuations are clearly far from unrestrained, the recent microeconometric evidence tends to suggest that nominal wages in euro-area countries are also perhaps less rigid than expected, compared to other countries thought to enjoy more flexible bargaining systems (see European Commission, 2003c). Indeed, wage adjustments appear to play a greater role in adjustment in many of the euro-area countries than they do in the UK or US. However, this adjustment process is slow, taking up to several years in some euro-area Member States (see European Commission, 1997b).

Table IV.6: **Job tenure of employees, 2002 (per cent of total employees)**

	< 12 mths	1 to <2 yrs	2 to <5 yrs	5 to <10 yrs	10+ yrs
BE	13.2	10.0	16.8	15.4	44.6
DK	22.3	13.3	18.4	16.6	29.4
DE	15.0	10.8	16.2	17.1	40.8
EL	13.4	8.6	18.9	17.7	41.4
ES	22.3	11.3	16.7	14.8	34.8
FR	16.3	10.7	14.2	16.0	42.7
IE	18.5	13.0	21.9	16.9	29.6
IT	12.5	8.7	15.0	17.1	46.8
LU	10.2	10.0	17.6	17.7	44.5
NL	12.8	13.1	19.8	16.7	37.6
AT	n.a.	n.a.	n.a.	n.a.	n.a.
PT	16.1	10.5	17.5	16.7	39.2
FI	21.6	10.6	14.9	15.1	37.9
SE	15.0	11.4	19.9	14.4	39.3
UK	20.1	13.2	18.4	18.2	30.1
EU-15	**16.4**	**10.9**	**16.6**	**16.8**	**39.4**
US*	24.5	8.4	23.1	17.7	26.2

Source: Eurostat, Bureau of Labor Statistics.

Notes: Job tenure is the time spent with the current employer. *Graphs for the US are for: 12 months or less; 13 months to 23 months; 2 to 4 years; 5 to 9 years; and 10 years or more.

[6] For recent comparable data on job creation and destruction in 13 European countries at annual frequency, see Gómez-Salvador *et al.* (2004). This suggests that there are indeed significant differences which, moreover, can be explained by different labour market institutions.

Table IV.7: **Employment and unemployment in the accessing countries, 2003**

	Employment rate			Unemployment			
	All	Female	Older workers	All	Youth	Long term	Regional disparities *) 1)
CY	69.2	60.4	50.4	4.4	10.6	1.1	:
CZ	64.7	56.3	42.3	7.8	18.6	3.8	0.44
EE	62.9	59.0	52.3	10.1	22.9	4.6	:
HU	57.0	50.9	28.9	5.8	13.1	2.4	0.32
LT	61.1	58.4	44.7	12.7	27.2	6.1	:
LV	61.8	57.9	44.1	10.5	17.6	4.3	:
MT	1)54.5	1)33.6	1)30.3	8.2	19.8	1)3.2	:
PL	51.2	46.0	26.9	19.2	41.1	10.7	0.17
SI	62.6	57.6	23.5	6.5	15.9	3.4	:
SK	57.7	52.2	24.6	17.1	32.9	11.1	0.23

*) Coefficient of variation = Standard deviation of NUTS 2 regional unemployment rates/National average unemployment rate
1) year 2002
Source: Commission services.

2.3 Assessing the impact of EMU on labour markets and vice versa

2.3.1 Flexibility in EMU and labour market policies/institutions

To summarise the arguments in section 1, the stylised view before 1999 was that (i) the smooth operation of EMU would require more flexible labour markets, since these might bear a greater share of the shorter-term burden of adjusting to shocks, and (ii) that competitive forces unleashed by EMU might well increase the pressure for reforms. Before examining the pace and nature of labour market reforms, it is helpful to clarify the concept of labour market 'flexibility' and to look at the role of labour market institutions and policies in providing adjustment capacity.

The term labour market 'flexibility' seems to have almost as many meanings as it does proponents and detractors. In the context of EMU, it may refer to the degree of decentralisation of wage bargaining or even the slope of the Phillips curve, perhaps with a reference also to geographical labour mobility. Sometimes it is used to mean only the freedom of employers to hire and fire. One might attempt a general definition related to adjustment capacity, but even then the term is often used to refer to anything that might influence structural unemployment – including for example payroll taxation, which may influence the level of employment and unemployment but is not generally seen as a major determinant of labour market dynamics.

Table IV.8 presents a very broad overview of the main types of flexibility that allow the labour market to react to shocks in different ways.

Table IV.8: **Main types of labour market flexibility**

Type of flexibility	***Brief definition***	***Policy and institutional influences***
overall wage flexibility	responsiveness of the total wage bill to macroeconomic conditions	nature of collective bargaining, including degree of coordination between countries
wage differentiation and relative wage flexibility	differentiation according to productivity and local labour market conditions	degree of centralisation and coordination (sectoral and geographical) in wage bargaining, minimum wages
geographical mobility	capacity/willingness of individuals to move to a different region	benefit systems, degree of regional wage differentiation, housing markets, family structure, mobility incentives
occupational mobility	capacity/willingness of individuals to change economic activity	benefit systems, degree of relative wage flexibility, level and adaptability of education and training, active labour market policies
job-search in general	willingness of unemployed or inactive individuals to seek employment	benefit systems, including early retirement schemes, interaction of taxes and benefits, labour market regulations
numerical flexibility	capacity of employers to adjust overall staffing levels	employment protection legislation, availability of temporary contracts, temporary unemployment schemes, collective bargaining environment
functional flexibility and flexible working conditions	capacity/willingness to tailor work organisation to suit preferences	flexible working arrangements, collective bargaining environment, availability of part-time employment
entry and exit of firms	exit of firms from the market (involving collective dismissals); entry of new firms (job creation in new areas)	exit more likely in presence of inflexibility in other areas; entry influenced by regulatory environment, conditions for entrepreneurs, etc.

Source: Commission services.

It would be difficult to specify an optimal adjustment pattern, and this in any event depends on the nature of shocks. What might be proposed is that all of these types of flexibility should operate, at least to some extent. If one channel of adjustment is blocked, pressure is liable to build up in other areas, possibly resulting in inefficient resource allocation. For example, a firm that is hit by a negative demand shock but has no flexibility to adjust real wages, staff levels or working conditions, is more likely to go out of business entirely (or at least be forced to maintain production at unproductive levels). Similarly, a lack of geographical or occupational mobility will contribute to unemployment and perhaps put excessive downward pressure on wages (or increase demands on benefit systems).

On the other hand, adjustment, whatever form it takes, involves costs. This means, first, that in order for

adjustment to be efficient the expected benefits must exceed the costs, which in turn implies that the need for adjustment should be significant and sufficiently long-lasting. Secondly, since those who make decisions on adjustment may not take into account all of the costs, there may be an efficiency case for labour market institutions partly designed to restrict some forms of flexibility. Thirdly, since adjustment costs are distributed unevenly, there may be distributional arguments for compensation (in principle) or for further restrictions that serve to insure against or otherwise restrict flexibility (more likely in practice).

These points will be elaborated in the following discussion, which looks briefly at the possible influence of the main labour market policies and institutions on the operation of the monetary union.

While *wage bargaining* is covered extensively in Part II.3, some comments here are warranted for the sake of completeness. Wage flexibility plays an important role in the textbook view of EMU. Though it might be hard to imagine a shock that affects all sectors in one country but not in neighbouring countries, there remains the possibility of policy errors, for example in fiscal policy, or indeed policy successes, for example where one Member State progresses rapidly with product market reforms. In these cases, real wages that are responsive (whether at the aggregate or firm level) to changes in demand will help to avoid unemployment or labour shortages. Where it is a question of sectoral shocks, wage flexibility can only substitute to a limited extent for the need to reallocate some human resources towards other sectors. The case where a sector is hit by a shock and then undergoes a long decline with relatively stable employment levels but gradually falling real wages is probably not a model of efficient adjustment.

The lack of wage differentiation across sub-national regions with widely varying productivity is a leading explanation for persistently wide regional unemployment disparities in some countries. Some feared that this situation might be replicated at EU level under EMU. However, though EMU may yet lead to increased coordination of wage bargaining, nobody expects it to lead to wage equalisation across Member States with widely varying productivity, or indeed to fiscal transfers on a scale that would allow the resulting 'regional' unemployment to persist indefinitely.

It is important to mention the *collective bargaining environment* more generally with respect to flexibility on working conditions, job descriptions and working time arrangements. Where relations between the social partners are relatively constructive, this may be an important source of adjustment capacity.

Much has been made of the fact that *geographical labour mobility* between euro-area Member States seems to be much lower than between groups of US states – and, given language and cultural differences, it is likely to remain so. However, it is also the case that geographical mobility *within* the large Member States appears to be significantly lower than in the US.[7] Reasons for this may include wage equalisation across regions (meaning employees have incentives to remain in relatively unproductive areas), benefit systems (meaning the jobless may not have strong incentives to seek work elsewhere), housing market rigidities and the role of the local family in providing social security. Some of these reasons suggest that the degree of mobility may be sub-optimal, though it must also be kept in mind that moving and re-establishing in a new region is hardly free of adjustment costs. In addition, geographical mobility alone may do little to offset sector-specific shocks that affect all regions in which the sector in question is present.

Of course, national monetary unions have survived for a long time without a high degree of inter-regional migration, though their functioning could be improved by lowering obstacles to mobility. Similarly, mobility between euro-area Member States would help to smooth the functioning of EMU, substituting partly for wage adjustments and rising unemployment or overheating, but should perhaps not be expected to play a decisive role.

Occupational mobility involves a shift of human resources from one economic activity to another. In general, the role of occupational mobility has probably grown in importance in recent years and decades, along with the observed increase in economic 'turbulence' (see e.g. Heckman, 2002). In an ideal world, a region that had a highly adaptable labour force or could provide effective retraining for workers adversely affected by shocks would be able to avoid painful real wage cuts, migration from the region or rising unemployment. In practice, much human capital is sector-specific, and retraining is costly and/or of limited effectiveness. In some cases it may not be possible to retrain people to the same level of productivity, and the demand for newly acquired skills may be in a different geographical area. Once again, therefore, occupational mobility is a key facet of flexibility, but cannot substitute entirely for the rest.

Benefit systems are an important aspect of labour market flexibility since they are a key influence on job-search behaviour. Here is a clear example of where market failures suggest an efficiency case for limiting flexibility. Problems of asymmetric information make it difficult to insure privately against unemployment or to

[7] See OECD (2000, p. 53) for data on gross and net migration flows.

borrow in order to finance a job-search. In the absence of a public unemployment insurance system, an individual who becomes unemployed might be forced to take almost the first job available, which might be far from the most productive match. In a sense, this would be the most flexible solution, but there are efficiency arguments for providing a degree of public unemployment insurance and thus, in effect, limiting flexibility. However, unemployment benefits that remain relatively generous for long periods of time reduce job-search incentives and are likely to contribute to the depreciation of human capital rather than its efficient reallocation.

Of course, benefit systems go far beyond this insurance role in pursuit of redistributional, as well as efficiency, objectives. For instance, a particularly European form of labour market 'flexibility' in recent decades (and not only in the euro area) has been to encourage the transition from employment or unemployment to inactivity, by means of incentives to take early retirement and a large rise in the number of people claiming sickness and disability benefits. The distributional benefits of this would have to be significant to justify the substantial loss of human capital involved. As argued in section 1.1 of this chapter, to the extent that EMU intensifies competition, the additional tax (and social security contribution) wedges required to finance the resulting additional pensions and social security expenditure (which, since these schemes are being reformed, offer little in the way of future benefits for most of the current labour force) are likely to come under increased pressure.

Labour market regulation is of direct relevance to adjustment capacity, in terms of both staff levels and working arrangements. Employment protection legislation, like unemployment benefits, serves to provide a degree of insurance against job loss that it would be difficult to obtain privately or to write into employment contracts. It is designed partly to avoid transitory adjustments in staffing levels, although in practice it goes far beyond this role in a number of euro-area countries (see Young, 2003). In many of these, the liberalisation of temporary contracts has served as a safety-valve for 'numerical flexibility', though there are concerns that this may result in inefficiency due to excessive reallocation of temporary staff (see Box IV.3).

The availability of part-time work and flexible working-time arrangements in general also depends on labour market regulations. The general trend towards liberalisation in recent years and decades has clearly had an impact in facilitating the labour supply of some groups, especially women. Part-time work in particular is associated with employment growth, at least in terms of persons.[8] Whether this might also increase the responsiveness of labour supply to wages and labour market tightness remains an open question.

Box IV.3: **Reforms of employment protection legislation**

Employment protection legislation (EPL) is perhaps the labour market institution with the most direct implications for adjustment capacity. It is also an area where the available indicators suggest that significant reforms have taken place. The OECD's (1999, 2004) overall index of EPL stringency is often cited in support of the view that labour market regulations were significantly loosened between the late 1980s and late 1990s. However, closer inspection of the constituent indices reveals that, in essence, this involved liberalising temporary contracts while EPL for regular contracts remained as stringent as ever (except in Spain and, to some extent, Finland).

While temporary contracts undoubtedly play a useful economic role in some respects, a number of concerns have been raised about this strategy of 'liberalisation at the margin'. For instance, a buffer of easy-to-fire temporary workers may strengthen 'insiders' in wage bargaining (Bentolila and Dolado, 1994). Also, since the regulations allow only limited renewal of temporary contracts, firms may prefer to hire another temporary worker rather than convert an existing temporary contract into a permanent one. This may lead to excessive turnover of temporary staff and higher frictional unemployment (Blanchard and Landier, 2002; Cahuc and Postel-Vinay, 2002).

The problem here is not temporary contracts *per se*, but rather the large discontinuity between conditions for temporary workers and those for permanent staff (Young, 2003). This is an example of where the assessment of apparently flexibility-enhancing reforms is not entirely straightforward. However, it seems clear that such reforms would be more beneficial if they were complemented by reforms of the more restrictive elements of EPL for regular contracts.

2.3.2 Reform efforts in EMU

In the light of the previous section, Table IV.9 gives a synopsis of reform efforts in the different areas since the introduction of the euro. This is based on the more detailed assessments that can be found in the Commission's annual reports on the implementation of the Broad Economic Policy Guidelines.[9]

[8] Though not in terms of hours, except in the Netherlands (Garibaldi and Mauro, 2002).

[9] See 'The report on the implementation of the 2003–2005 Broad Economic Policy Guidelines', Communication from the Commission, COM(2004) 20 final. Available soon as European Economy No 1, 2004, Office for Official Publications of the EC, Luxembourg. Available on-line at: http://europa.eu.int/comm/economy_finance/publications/european_economy/implement2003_en.htm

Table IV.9: **Euro area labour market reforms in response to the BEPGs, 1999-2003**

Policy area	*Main developments in the euro area as a whole*
collective bargaining	- almost no attempts to foster greater differentiation of wages to reflect productivity and local labour market conditions - industrial relations on issues like working time and flexible work organisation continue to improve, and work organisation is becoming more adaptable, in part thanks to improved social dialogue
tax and benefit systems	- some progress on reducing the tax burden on labour, including tax credit schemes to encourage people to take low-paid jobs - not much progress on reforms of benefits (unemployment insurance, social assistance, sickness and disability benefits, pensions and early retirement schemes), including duration, eligibility criteria and enforcement of job-search, as well as benefit levels
labour market regulation	- clear progress in the modernisation of work organisation, including the facilitation of part-time work, flexible working-time arrangements and child care facilities, which are recognised as a priority in most Member States - almost no action to address stringent employment protection for permanent contracts - broad trend towards liberalisation of temporary work, but with introduction of firing costs and/or equal treatment requirements - security strengthened in some respects, particularly health and safety aspects
geographical mobility	- a few measures to encourage geographical mobility, including better dissemination of information on vacancies (using ICTs) and fiscal incentives
occupational mobility	- emphasis on lifelong learning (adult education and training, also basic education conducive to adaptability in working life), reforms of vocational training, increased recognition of informal skills - significant expenditure on active labour market policies to improve employability (e.g. through training or subsidised work), though concerns about efficiency remain

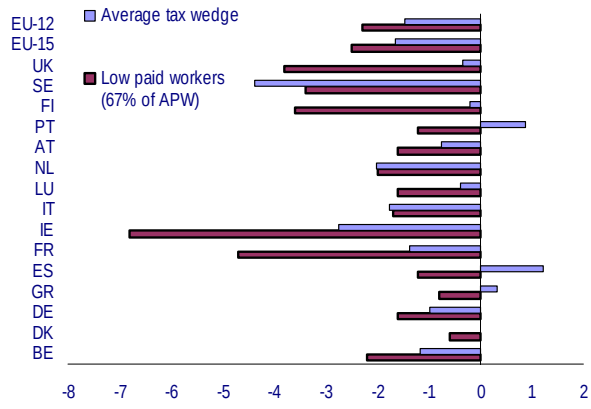
Source: Commission services, based on the annual reports on the implementation of the Broad Economic Policy Guidelines, 1999 to 2003.

Such a broad overview of course conceals many country-specific details, such as the recent reform packages in Spain, or the tightening of eligibility criteria for benefits in the Netherlands. For the euro area as a whole, though, there is no doubt that progress over the five years since 1999 has been disappointing. Where progress has continued, it has tended to be in somewhat 'easier' areas, such as tax cuts, active labour market policies and strategies for lifelong learning. But in the politically more difficult areas highlighted in most empirical studies of labour market institutions as key influences on unemployment and employment – especially wage bargaining and benefit systems – there has been very little advance. So far, therefore, it must be concluded that EMU has had no noticeable impact on the pace or ambition of labour market reforms.

These conclusions are also supported by a look at available policy indicators, in the (few) cases where these are sufficiently up to date. Carefully interpreted, such indicators can provide a useful backdrop to country-specific analysis of policy priorities and reforms. They do not of course provide the full picture. Moreover, one should not assume that all countries need to move in the same direction in a given policy area – this will depend on the mix of policies and institutions at national level. For instance, though many would argue that net replacement rates are too high in the euro area as a whole (see Graph IV.7 below), this may not be the case in Italy. This in turn means that movements in EU or euro-area averages must also be interpreted with particular care.

Graph IV.6 illustrates the continued progress in reducing the tax burden on labour, with particular emphasis on relatively low-paid workers (the darker bars in the graph show the fall in the tax wedge for those earning 67% of the average production worker's wage).

Graph IV.6: **Changes in the tax wedge, 1998-2002**



Source: Commission services and OECD.

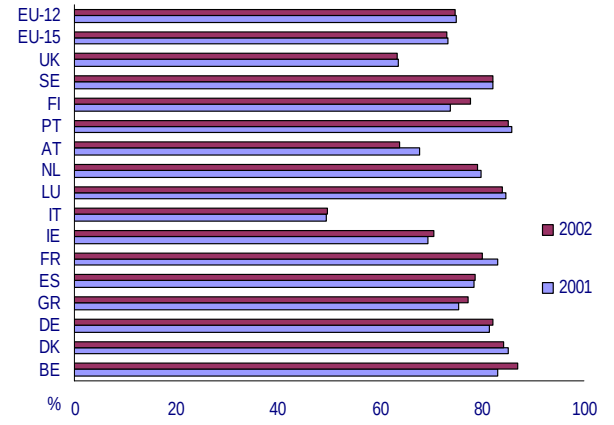
Graph IV.7 provides the latest data on net replacement rates (i.e. the ratio of net out-of-work income to net in-work income). These are derived from a new joint Commission and OECD project, and so graphs are unfortunately not available for earlier years.[10] The data show little change between 2001 and 2002. Of course, net replacement rates are by no means the only relevant aspect of benefit systems – eligibility criteria, the duration of benefits and the enforcement of job-search requirements are also crucial, although, as noted in Table IV.9 above, there has not been much progress in these areas either.

Table IV.10 shows the OECD's (2004) latest update of the summary indicator of the stringency of employment protection legislation. This measure suggests a marginal loosening in the euro area as a whole. However, in several cases reforms have gone in the 'wrong' direction

[10] The Graphs are similar to those published in OECD (2002a). The latter are not reproduced here, however, since the coverage of taxes and benefits is slightly different in some cases, meaning the results for individual countries may not be fully comparable. See Carone *et al.* (2003) for further details.

of tightening EPL for regular employment or collective dismissals, while liberalising temporary contracts or agency work (see Box IV.3 above).

Graph IV.7: **Net replacement rates for a single person on a low wage, 2001-2002**



Source: Joint European Commission-OECD project, using OECD Tax-Benefit models.

Table IV.10: **Reforms of EPL and temporary contracts, late 1990s-2003**

	OECD indicator of EPL stringency (version 2)			
	Late 1990s	2003	relaxed	tightened
BE	2,5	2,5		
DK	1,8	1,8		
DE	2,6	2,5	temp	collective
EL	3,5	2,9	temp	regular
ES	3,0	3,1		temp
FR	2,8	2,9		regular
IE	1,2	1,3		temp
IT	3,1	2,4	temp	
LU	:	:		
NL	2,3	2,3		
AT	2,5	2,3	regular	
PT	3,7	3,7		
FI	2,2	2,1	regular	
SE	2,6	2,6		
UK	1,0	1,0	collective	temp, reg.
EU	2,5	2,3		
Euro area	2,8	2,7		

Note: EU and euro-area averages are weighted by employment.
Source: OECD.

One should not be too pessimistic: the trend towards more flexible work organisation and the recognition of the need for education and training systems to foster adaptability are positive signs. As noted earlier, there is evidence of moderate structural improvements throughout the second half of the 1990s, in particular due to wage moderation, perhaps partly in anticipation of EMU. Furthermore, the latest Implementation Report on the Broad Economic Policy Guidelines, for the year 2003, noted signs of a more serious intent to undertake labour market reforms – including in some of the politically more difficult areas such as benefit systems, wage differentiation and employment protection legislation. Indeed, reform packages (albeit watered down compared to initial proposals) have been agreed in Germany and Italy, two of the countries usually seen as lagging behind in this area. The reform of the labour code in Portugal was also a significant step.

Box IV.4: **The European Employment Taskforce chaired by Wim Kok**

The European Employment Taskforce (EETF) was mandated by the Brussels Spring European Council to "*carry out an independent in-depth examination of key employment-related policy challenges and to identify practical reform measures that can have the most direct and immediate impact on the ability of Member States to implement the revised European Employment Strategy and to achieve its objectives and targets*". It has started its work in April 2003 under the chairmanship of Mr. Wim Kok. The EETF released its report on 26 November 2003.

The Taskforce concluded that unless the Member States step up their efforts, it is looking increasingly unlikely that the overarching goals of the Lisbon strategy for 2010, and the employment objectives, will be attainable. By acting decisively *now*, Europe can raise its economic potential, with sustainable employment and productivity growth in the medium- and longer-term. Success will depend on four key requirements which were subsequently confirmed by the European Council:

- increasing adaptability of workers and enterprises;
- attracting more people to the labour market and making work a real option for all;
- investing more and more effectively in human capital;
- ensuring effective implementation of reforms through better governance, including at EU level.

Recommendation included in the 2004 'guidelines package' (BEPGs and the Employment Guidelines) respond to the findings of the European Employment Taskforce.

Of course, it is extremely difficult to identify any causal impact of EMU on the reform process. Perhaps recent developments merely reflect the paradox that periods of slow growth or even recessions often seem necessary to prompt reforms in the right direction, even though in theory these should be easier to undertake in an upturn.[11] On the other hand, it might be argued that it is precisely in a downturn that the implications of EMU for labour market functioning will be clearest to policymakers, and so reforms in 2003 may be due to a combination of these factors.

[11] See Boeri (2001) who, using the Fondazione Rodolfo Debenedetti database of reforms, shows that slow growth does not prevent reforms and, moreover, in periods of slow growth it is more common to reduce generosity of pensions and unemployment benefits and to relax employment protection, whereas in periods of faster growth there seems to be more pressure to increase generosity and to tighten protection. The few radical reforms between 1986 and 1997, however, occurred mostly in periods of faster growth.

Part V

THE EURO IN THE INTERNATIONAL ECONOMY

Summary

The introduction of the euro has created the second largest currency area in the world behind the US dollar. The euro is widely used by private and official actors beyond the borders of the jurisdiction that is responsible for its emission.

In international financial markets, the euro accounts not only for a substantial and increasing part of the international debt markets (30% versus 43.7% for the US dollar by the end of June 2003), but also for a large part of international bank liabilities and foreign exchange transactions (respectively about 24% versus 52% for US dollar by end-2002 and 19% versus 45% for the US dollar in April 2001). It is also largely used to quote, invoice and settle external trade transactions between the euro area and third countries and, in some cases, between third countries.

The euro is also used internationally by the official sector. The euro area, the euro is used as an official currency in the territories of Kosovo and Montenegro. In addition, a number of countries, mainly in central Europe and the western Balkans, are using the euro as a de facto parallel currency. The euro also plays a role as an anchor or reference currency, notably in the exchange rate regimes of the new Member States and candidates countries. Those countries that are using the euro as an anchor currency in their exchange rate regimes are most likely to use the euro as an intervention currency. Finally, the share of the euro in official foreign exchange reserves held by central banks around the world is gradually increasing since the beginning of the third stage of the EMU (standing by end-2002 at 18.7% versus 64.5% for the US dollar), and significantly exceeds positions held by the previous aggregate of the euro's predecessor currencies.

Given the relative weight of the euro area and the evolving use of the euro in the global economy, the euro area is increasingly perceived as a unique economic entity in the world. It is now the aggregate policy mix of the euro area that matters for the rest of the world when international macro-economic issues are discussed. The international monetary and financial system is, however, only slowly adapting to these realities and the full implications of the new framework have not yet fully materialised. In view of the importance of monitoring the aggregate policy mix of the euro area for its potential spillovers on the rest of the world, the major international economic and finance organisations, including the International Monetary Fund (IMF) and the Organisation for Economic Co-operation and Development (OECD), have extended their multilateral surveillance to the euro-area's economic situation and policy mix. G7 Finance Ministers' statements also regularly refer to the macroeconomic stance of the overall euro area. These changes, acknowledged by the international monetary and financial community, highlight the importance for euro area policy-makers to present a single view when participating in international meetings. This requires enhanced internal co-ordination on positions held externally, including on exchange rate policy, and stresses the need to make further progress towards a unified representation of the euro area in relevant international organisations and fora.

Since the launch of the euro, considerable progress has been made with regard to the internal co-ordination of common positions in international issues of particular relevance for the EMU. A list of IMF issues that could be subject to informal coordination has been identified by the ECOFIN. The Eurogroup/Ecofin are now regularly elaborating common positions and understandings in preparation for international meetings, which contribute to improve the convergence of European interventions in the IMF board or at international meetings. These Brussels-based co-ordination efforts are complemented by efforts from EU representatives in the IMF. They have stepped up the frequency of their meetings to enhance the co-ordination of positions taken in the IMF Executive Board. In light of this model, the EU Executive Directors at the World Bank have also started to meet on a regular basis in order to strengthen EU co-ordination.

Notwithstanding the above mentioned developments, the external representation of the euro area/Community remains fragmented and incomplete. The representation of the euro area in the various international economic, financial and monetary organisations and fora, such as the IMF, the OECD and meetings of the G7 and G20 Finance Ministers, is divided among the Council (EU Presidency as well as the Chairman of the Eurogroup), the Commission and the ECB. Also, on exchange rate issues, the importance of speaking with one voice was highlighted among episodes of strong appreciation/depreciation of the euro. In those cases, a principle of shared responsibility has been followed, with the ECB de facto managing the exchange rate interventions in line with the Eurogroup's statements on exchange-rate developments.

These ad-hoc arrangements have proven to be useful, but only partially meet the expectations for a unified and strong European presence in international matters. Because of the informal nature of these arrangements, their lack of legal basis, their temporary character and the constraints inherent to co-ordination, they often result in limiting the Community impact on the discussions at international level. A proper representation of the euro area in international organisations could significantly improve multilateral co-operation against the background of a

financial world that seems to be moving towards a tri-- or even-- bi-polar currency system. An example could be taken from the trade area where the Commission is responsible for representing the EU to the WTO, which ensures an effective EU representation in trade policy matters. The challenge related to the appropriate representation and participation of the euro area in international decision making procedures is a significant issue for non-Europeans as well. This is apparent in the pressure from other industrial and emerging market economies to streamline EU representation. Addressing this issue is a crucial challenge for EU policymakers in order to ensure that the EU is an effective actor in the pursuit of its own interests on the international stage.

1. Expectations at the start of EMU

The euro area accounts for about 16 per cent of global output and almost one fifth of global trade. The euro area is also one of the biggest source and recipient of global foreign direct investment flows, see Table V.1.

Against this background, the euro has swiftly attained the status of the second international currency behind the US dollar. Moreover, given the relative weight of the euro area and the evolving use of the euro in the global economy, the attention of international actors, both private and government, has shifted from the performance of individual Member State economies to the euro area economy as a whole. It is the aggregate policy stance of the euro area that matters for the outside world. Thus, the governance of the euro area economy requires not only a co-ordinated approach to balancing the single monetary and exchange rate policy and the decentralised fiscal and structural policies. It is equally important to ensure that the positions held externally by euro-area policy actors are properly co-ordinated and effectively communicated.

Table V.1: **The euro area in the world economy**

	Population[a]	Share of world GDP[b]	Share of world trade[c]	Openness[d]
Euro area	308	16 %	18.2 %	14.6 %
USA	290	21 %	17.4 %	8.8 %
Japan	127	7 %	6.7 %	9.0 %

Note: a) in million, 2003 (estimates); b) purchasing power parities, 2003; c) Merchandise export plus import divided by 2 as percent of world total, excluding intra-euro area trading, 2002 figures (*provisional*); d) calculated as export plus import divided by 2 over nominal GDP of 2002 (*provisional*).
Source: EC Commission; IMF

This chapter sheds light on the evolving use of the euro beyond the borders of the euro area by both private and official actors, and reviews the progress made in terms of the internal co-ordination of external positions, including on exchange rates, and regarding a unified representation of the euro area in the various international economic, finance and monetary policy organisations and fora, such as the Bretton Woods Institutions and the G7 and G20 Finance Ministers' processes.

Since the launch of the third stage of EMU on 1 January 1999, the euro has emerged as the second most important international currency behind the US dollar. This is not surprising, given the relative weight of the euro area in the global economy.
A currency is referred to as an international currency if it is widely used by private and official actors beyond the borders of the jurisdiction that is responsible for its emission. Similar to the general functions of money, the euro is used internationally as a means of payment, a unit of account and as a store of value.

Table V.2: **The euro as an international currency**

	Private use	Official use
Means of payment	Payment and vehicle currency (1) In exchange of goods and services (2) in currency exchange	Intervention currency Legal tender
Unit of account	Pricing/quotation currency	Anchor currency
Store of value	Investment and financing	Reserve currency

Source: *ECB Monthly Bulletin August 1999*

There are a number of fundamental conditions underpinning the euro's evolution as an international currency over time:

- *Free convertibility* is a pre-condition for the euro to assume the status of an international currency. Essentially it means that there are no restrictions on international purchases and sales of the euro. Article 56 of the Treaty guarantees the free movement of capital and unrestricted payments between Member States and between Member States and third countries.
- Progress towards deeper *European financial market integration* increases the attractiveness of the euro for borrowers and investors around the world.

Today, for instance, the euro area capital market (bonds and equities) is the second largest in the world after the US with a high proportion of non-euro area market participants. It is expected to grow further, as European financial and capital markets become more integrated.

- The euro area is underpinned by a *sound economic policy framework* ensuring internal and external economic stability and encouraging sustainable economic growth. The European Central Bank is one of the most independent central banks in the world. Enshrined in the Maastricht Treaty, its primary objective is to maintain price stability. Price stability is a prerequisite for sustainable growth, investment and the creation of employment. It anchors expectations, reduces financing costs and facilitates an efficient allocation of resources. The absence of major imbalances on the external side reflects the euro area's sound and sustainable position in the global economy.

In addition, there are underlying economic factors that establish a trade off between the benefits associated with the establishment of a single standard international currency and the use of two or more international currencies. On the one hand, *network effects* tend to increase the benefits of using a single currency for international operations. The handling of multiple currencies increases the costs of international economic transactions. Thus, in order to reduce transaction costs, market participants have an incentive to use only a limited number of currencies, ideally one single currency. The larger the number of market participants that use one and the same currency, the greater the benefits for the individual. This network effect creates some inertia in the monetary system and tends to stabilise the position of the incumbent currency. For instance, by tradition and convention, the US dollar has established itself as the standard currency for quotation, invoicing and settlement in important global market segments, including oil and other commodities. On the other hand, the needs of investors and borrowers to balance risks calls for the use of multiple currencies.

The above mentioned factors are structural determinants underlying the euro's potential to evolve as an international currency. In the short run, other factors, such as actual and expected interest rate differentials and exchange rate constellations, also play a role in influencing the relative attractiveness of one currency over the other.

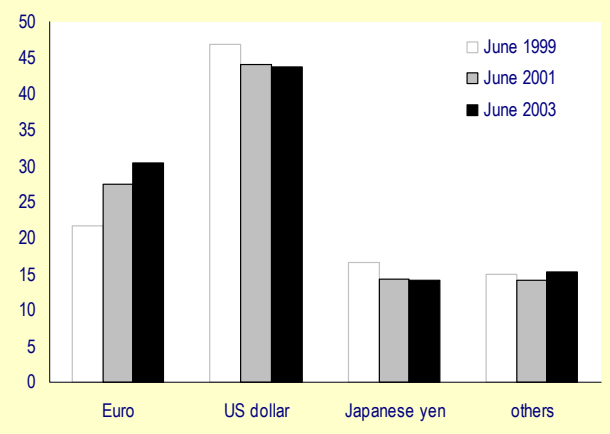
2. The international use of the euro by the private sector

The euro has firmly established its status as the second international currency on international financial markets.

International debt markets

By the end of June 2003, the euro accounted for more than 30 per cent of the debt securities (bonds, notes and money market instruments) issued in a currency different from that of the borrowers' country of residence (amounts outstanding), see Graph V.1.

Graph V.1: **International debt markets by currency, in %**



Source: Commission services.

This compares to a share of 21.7 per cent in 1999, reflecting a marked increase of the euro's share in this market segment since the launch of the third stage of EMU. The share of the constructed aggregate of the euro's predecessor currencies was relatively stable below 20 per cent in the years prior to the introduction of the euro.[1] The share of the US dollar declined moderately since 1999 from 46.8 per cent to 43.7 per cent.

Foreign exchange markets

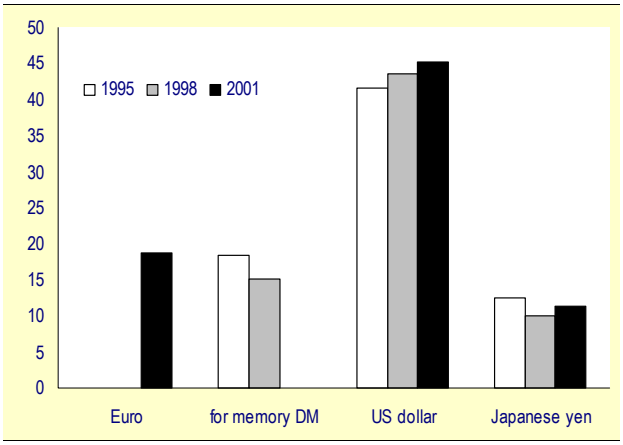
In April 2001, see Graph V.2, the euro accounted for about 19 per cent of all foreign exchange transactions (spot; outright forwards; swaps) according to the latest Triennial Survey of the Bank for International Settlements (BIS)[2]. This compares to 45 per cent for the US dollar, 11.4 per cent for the Japanese yen and 8 per cent for the Pound sterling. The 2001 euro share is higher than the share held by the Deutsche mark in 1998 (15 per cent), but somewhat lower than the share of the synthetic euro composed of the aggregate of its predecessor currencies. The latter is mainly due to the fact that the introduction of the euro has reduced overall turnover, notably through the elimination of currency

1 European Central Bank (2003f).

2 For interpretation of the results see chapter 5 of European Commission (2002h). The next BIS Triennial Survey is expected to be conducted in 2004.

trading within the European Monetary System (EMS).[3] The dollar/euro pair was by far the most traded currency pair in 2001, accounting for 30 per cent of global turnover, followed by the dollar/yen (20 per cent) and the dollar/sterling pairs (11 per cent). According to the ECB[4], the City of London (46 per cent) and the US (22 per cent) account for the lion's share of daily foreign exchange trading in euro outside the euro area.

Graph V.2: **Foreign exchange turnover by currency, in %**



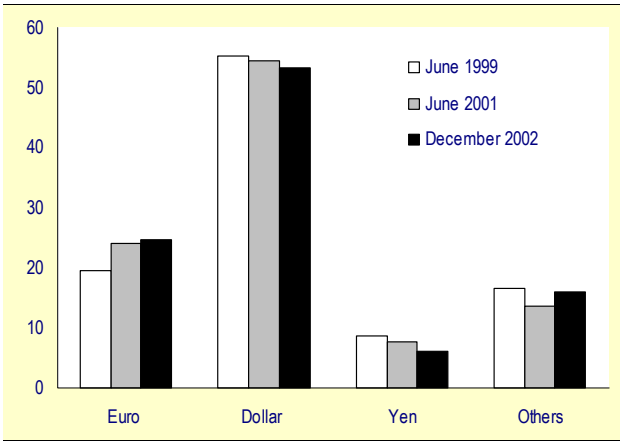
Source: BIS 2001.

International bank liabilities

By end-2002, the euro accounted for about one quarter of international cross-border liabilities of international banks, i.e. outstanding cross-border liabilities of credit institutions and their domestic liabilities in foreign currencies.[5], see Graph V.3.

The importance of the euro varies with respect to different segments of the international loan market. Since 1999, the euro has been the second currency of denomination of loans by euro area banks to non-bank borrowers outside the euro area, with the share above 37 per cent in the first quarter of 2003, against 46 per cent for the US dollar. The euro was the main currency of denomination of loans made by euro area banks to non-bank borrowers in developing countries and emerging market economies in Europe, Asia and the Pacific, Africa and the Middle East. Loans by non-euro area banks to non-bank borrowers in the euro area are predominantly denominated in euro, with a share of about 50 per cent against 20 per cent for the US dollar of the total amount of loans outstanding. However, the euro remains the third currency of denomination in the cross-border loans by non-euro area banks to non-bank borrowers outside the euro area, with its respective market share below 10 per cent, behind the US dollar (63 per cent) and the Japanese yen (12 per cent).[6]

Graph V.3: **International bank liabilities by currency, in %**



Source: ECB.

The use of the euro in international trade

The euro is used to quote, invoice and settle external trade transactions between the euro area and third countries and, in some cases, also between third countries, see Table V.1. In 2002, in most euro area countries for which data are available, the share of euro denominated exports and imports was above 50 per cent, for both goods and services. For most acceding countries. this share was even higher (e.g. Slovenia 87 per cent, Slovakia 74 per cent, Romania 64 per cent, and Poland 60 per cent), see Table V.2. Interestingly, more than half of Japan's exports to the European Union were invoiced or settled in euro.[7]

Table V.3: **The share of the euro as a settlement/invoicing currency**
(of selected euro area countries in their extra-euro area trade in goods in 2002, in %)

	Exports	Imports
Belgium	53.4	53.3
France	55.3	46.8
Germany	49.0	48.0
Greece	39.3	35.8
Italy	54.1	44.2
Luxembourg	51.6	35.3
Portugal	48.5	57.6
Spain	57.6	55.8

Source: ECB 2003 compilation by the Secretariat of the Committee on Economic and Monetary affairs of the European Parliament (2003)

[3] In total, in April 2001, average daily turnover was US$ 1,200bn , down from US$ 1,490bn in 1998.

[4] See European Central Bank (2003g).

[5] European Central Bank (2003f). At constant 1994 Q 4 exchange rates.

[6] See European Central Bank (2003g).

[7] Most data refer to the use of the euro as a settlement currency. For details see European Central Bank (2003f and 2003g).

Table V.4: **Share of the euro in international trade of acceding countries**

	Share of exports		Share of imports	
	Invoiced/settle in euro	**To the EU**	**Invoiced/settle in euro**	**From the EU**
Cyprus	21.8	50.7	45.5	53.0
Czech Republic	70.4	68.4	67.7	60.2
Estonia	70.4	68.0	61.7	57.9
Hungary	83.1	75.1	73.1	56.2
Latvia	40.1	60.4	51.5	53.0
Lithuania	n.a.	49.6	n.a.	45.2
Malta	n.a.	46.1	34.7	67.4
Poland	60.2	68.8	59.6	61.7
Slovakia	73.9	60.6	60.5	50.3
Slovenia	86.9	59.4	82.8	68.0

Source: *ECB (2003g)*

3. The international use of the euro by the official sector

Outside the euro area, the euro is used as an official currency only in the territories of Kosovo and Montenegro. However, a number of countries are using the euro as a *de facto* parallel currency (i.e. deposits and cash for daily transactions). Approximately, 10 per cent of the euro cash is estimated to circulate outside the euro area, mainly in some countries of central Europe and the western Balkans. The amount of euro bank notes shipped outside the euro area has increased from € 28 billion at the end of 2002 to around €38 billion by July 2003. Moreover, in around thirty emerging market economies in the wider European region, euro-denominated deposits rose above € 50 billion in the wake of the introduction of euro notes and coins. Overall, the share of the euro as a parallel currency in EU neighbouring countries has remained fairly stable since 2002 and in line with the levels held by the euro's predecessor currencies, suggesting that the significant increase in euro-denominated deposits in a number of countries was mainly related to the euro cash change over.[8]

The use of the euro as an anchor or reference currency in exchange rate regimes and its use as an intervention and reserve currency are interlinked. Out of some 150 countries that practice some sort of exchange rate management or peg,[9] about 30 countries are using the euro as the main *anchor currency* in their exchange rate regime. Ten more countries are managing their exchange rates with respect to a currency basket or Special Drawing Rights (SDR)[10], involving the euro. The euro is mainly used in the exchange rate regimes of countries in the European region, notably acceding and accession countries, countries of the western Balkans, as well as northern Africa and the CFA Franc-Zone in western and central Africa. Bosnia-Herzegovina, Bulgaria, Estonia and Lithuania operate euro-based currency arrangements. In the rest of the world, the euro plays only a limited role as an anchor currency.

Countries that are using the euro as an anchor currency in their exchange rate regimes are most likely to also use the euro as an *intervention currency*. However, data on the currency composition of official interventions is rather limited. Most industrialised economies, including the euro area, operate free floating exchange rate regimes and - with the exception of Japan[11] - intervene rarely in foreign exchange markets. Market interventions are more frequent by developing countries and emerging market economies that try to manage their exchange rate

8 European Central Bank (2003f).

9 As classified by the International Monetary Fund.

10 The euro's share in the SDR increased with its exchange rate and stood around 32% in mid-2003. The SDR is an international reserve asset, created by the IMF in 1969, to support the Bretton Woods exchange rate system. Today it is used mainly as a unit of account, and a number of countries are using the SDR as an anchor or reference unit in their exchange rate regime. Its value is based on a basket of international currencies, including the US dollar, the euro, the Japanese yen and the Pound Sterling. Effective from 1 January, the following weights were attached to these currencies: US dollar 45%, euro 29%, the Japanese yen 15% and the Pound Sterling 11%.

11 Japan, in the course of 2003, intervened repeatedly in foreign exchange markets to stem up-ward pressures on the yen, particularly against the US dollar. Accordingly, the bulk of interventions were purchases of US dollars and only small fractions of euros.

in the context of the exchange rate regimes adopted by these countries.

The share of the euro in *official foreign exchange reserves* held by central banks around the world is gradually increasing and stood at about 19 per cent at end-2002, significantly exceeding positions held by the previous aggregate of the euro's predecessor currencies, see Table V.5. Between 1999 and 2002, the amount of euros held in foreign exchange reserves almost doubled from SDR 155 billion to SDR 307 billion. This compares to an increase in US dollar amounts of 28 per cent. More than one fifth of the official exchange reserves held by industrial countries were denominated in euro and 17 per cent by developing countries. The share of the US dollar remained largely unchanged at 65 per cent.[12]

The IMF revised its data on official foreign exchange reserves in November 2003 because some euro holdings had previously been reported erroneously as "other currencies". The revision revealed that since the beginning of the third stage of the EMU, the share of the euro had been higher and increased faster than previously thought. Only part of the rise is explained by exchange rate developments. The increase of the euro share over the review period is remarkable, given the simultaneous accumulation of significant US-dollar reserves in a number of emerging market economies. Changes in central bank official reserve portfolios tend to evolve gradually over time and a sudden increase in official euro holdings is not expected. Should it happen, however, it could exert upward pressure on the euro exchange rate.

4. The euro area's contribution to global policy co-ordination

4.1 Background

The introduction of the euro has marked the biggest change in the international monetary and financial system since the Bretton Woods breakdown in the 1970s. The euro area is increasingly perceived as a unique economic entity in the world. With its single monetary and exchange rate policies, accompanied by increased co-ordination of policies on the fiscal and structural fronts, policy decisions by the euro area authorities have significant implications for the economic relationship between the euro area and the rest of the world. The aggregate policy mix of the euro area is what matters for the rest of the world when international macro-economic issues are discussed. The international monetary and financial system is only slowly adapting to these realities, and the implications of the new framework have not yet fully materialised.

The major international economic and finance organisations, including the International Monetary Fund (IMF) and the Organisation for Economic Co-operation and Development (OECD), have extended their multilateral surveillance activity to include the euro area. Since it is now the aggregate policy mix of the euro area that needs to be monitored for its potential spillovers on the rest of the world, these institutions assess on a regular basis the overall macro-economic stance of the euro area.

The IMF, in the context of its so-called Article IV procedure, conducts bi-annual consultations with the supra-national economic policy authorities of the euro area, essentially the European Commission and the ECB. The IMF staff report and the summary of the Board discussion of this report are, with the consent of EU Member States, published once a year. The results of this exercise serve as an important input for updating the World Economic Outlook, the bi-annual forecasting exercise of the IMF.

The OECD has also included the euro area in its regular review of the economic developments in Member economies through an annual review by the Economic Development Review Committee. The change can also be seen in G7 Finance Ministers' statements that now regularly refer to the macro-economic stance of the overall euro area. Furthermore, to strengthen their relations with the Community institutions, the World Bank in 1999 and the IMF in 2003 have opened resident representative offices in Brussels.

These changes, acknowledged by the international monetary and financial community, also highlight the importance for euro area policy-makers of presenting a single view when participating in international meetings. This requires enhanced internal co-ordination on positions held externally, including on exchange rate policy, and stresses the need to make further progress towards a unified representation of the euro area in relevant international organisations and fora.

[12] Comprehensive data about international official holdings of foreign exchange reserves by currencies is reported by the IMF in its Annual Report.

Table V.5: **Official Holdings of Foreign Exchange by Currencies (year-end-values; in %)**

Currencies	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002
Euro	--	--	--	--	--	--	12.7	15.9	16.4	18.7
U.S. dollar	56.6	56.5	56.9	60.2	62.2	65.7	67.9	67.5	67.5	64.5
Japanese yen	7.7	7.9	6.8	6.0	5.2	5.4	5.5	5.2	4.8	4.5
Pound sterling	3.0	3.3	3.2	3.4	3.6	3.9	4.0	3.8	4.0	4.4
Swiss franc	1.1	0.9	0.8	0.8	0.7	0.7	0.6	0.7	0.6	0.7
For memory: Deutsche mark	*13.7*	*14.2*	*13.7*	*13.0*	*12.8*	*12.2*	--	--	--	--
Unspecified currencies[4]	6.8	6.6	9.2	8.6	8.7	9.3	9.3	6.9	6.6	7.3

Source: IMF 2003.

4.2 Internal co-ordination on external positions and exchange rate policy

The Treaty arrangements

In a rather condensed form and in an attempt to reconcile different viewpoints in the run-up to EMU, the Treaty establishes procedures for the Community to respond to the various institutional challenges related to the international dimension of EMU. Most of them are found in Article 111. This article essentially covers exchange rate policy (paragraphs 1 to 3), position taking and external representation (paragraph 4). More specifically, it addresses:[14]

- the conclusion of formal agreements on an exchange-rate system with central rates (Art. 111, 1);
- the formulation of general orientations for exchange rate policy (Art. 111, 2);
- the negotiation of agreements concerning monetary and exchange-rate regime matters with third countries or international organisations (Art. 111,3);
- the position-taking of the Community at international level on issues of particular relevance to EMU and its representation (Art; 111, 4);
- the negotiation of international agreements by Member States without prejudice to Community competence or agreements (Art. 111, 5).

The Council is identified as the main policy actor, who "may conclude formal agreements on an exchange-rate system" or "formulate general orientations for exchange-rate policy". It "shall decide the arrangements for the negotiation and the conclusion of […] agreements concerning monetary and foreign exchange regime matters" with third parties, and "shall decide on the position of the Community at international level" and "on its representation". The Commission is granted the right of initiative, which it shares with the ECB on exchange rate related matters. The ESCB has, as one of its basic tasks, to conduct foreign exchange operations consistent with the provisions of Article 111, whereby its primary objective to maintain price stability must not be jeopardised (Article 105, 2). Article 122, 4 stipulates that only the "ins", i.e. Member States that participate in Stage Three of EMU without a derogation, are to vote in the ECOFIN on these issues.

Internal co-ordination on external positions

Since the launch of Stage Three of EMU, considerable progress has been made with regard to the internal co-ordination of common positions in international issues of particular relevance for EMU. At their informal ECOFIN Meeting in Oviedo on 13 April 2002, Ministers and Governors asked the EFC to strengthen the existing informal coordination system[15], in particular by enhancing the flow of information, and to work on a *list of possible topics* on which ECOFIN could ask the EFC to strive to achieve *common views* that would be jointly presented at the IMF Board. At their informal ECOFIN Meeting in Copenhagen on 6-7 September 2002, Ministers and Governors agreed on a list of IMF issues that could be subject to informal coordination. This list includes: Article IV discussions on major countries; strategic country Article IV and programs; the use of IMF resources; IMF policy issues; Private Sector Involvement and the Sovereign Debt Restructuring Mechanism (SDRM); IMF governance; and the role of the Fund in poor countries.

The EFC and the Eurogroup/Ecofin have regularly elaborated common positions and understandings in

[14] See also Baras *et al.* (2001).

[15] The current "informal coordination" system means that EU countries try to coordinate their positions in the Board on ad-hoc issues where "common understandings" can be achieved. But there is no obligation to such a common understanding.

preparation for international meetings. They have covered a whole range of issues, including the euro exchange rate, international financial architecture, financing for development and the economic situation in the world and in various key countries. These common positions serve a twin objective. They provide a basis for the interventions of the European Executive Directors in the IMF Board. They also guide the Presidency, and other European representatives, during international meetings such as the International Monetary and Financial Committee (IMFC) and G7 and G20 meetings and in their dealings with officials from non-EU countries. In addition, the Presidency's Finance Minister delivers a statement on behalf of the Community at the IMFC twice a year, which is jointly drafted and agreed by the EFC and by the ECOFIN. The Commission services are closely associated with the drafting of the Presidency representative statement on the occasion of the IMF Board meetings on the Article IV consultations with the euro area and the EU Member States. Euro area authorities speak increasingly with one voice. For instance, the President of the Eurogroup, the ECB President and the Commissioner for Economic and Financial Affairs regularly hold joint press conferences following G7 Finance Ministers' meetings.

In particular, the preparation and coordination of EU Executive Directors' position-taking in the IMF Board is guided by the EFC, in particular its Sub Committee (formerly Working Group) on IMF and related issues (SCIMF), created in October 2000. Since then, coordination work has substantially increased, aimed at developing common lines on issues of particular relevance, and better synchronised with the IMF Board's calendar of events. The Commission and the ECB provide input through their members in both the EFC and the SCIMF.

These Brussels-based co-ordination efforts are complemented by efforts from EU representatives in the IMF. They have stepped up the frequency of their meetings to enhance the co-ordination of positions taken in the IMF Executive Board. These representatives now meet on at least a weekly basis. The ECB Observer and a Commission official from the Washington delegation attend these meetings. Coordination takes place on most policy issues and on EU Member States and euro area Article IV consultations. The objective of this coordination is to propose, as often as possible, a common position that will be presented to the Board by the Executive Director representing the Presidency. Other European Executive Directors are expected to support the Presidency statement, if there is an agreement at the coordination meeting.

In light of this model, the EU Executive Directors at the World Bank have also started to meet on a regular basis, with a Commission official from the Washington delegation attending these meetings in order to strengthen EU co-ordination.

Exchange rate policy

Episodes of depreciation and appreciation of the external value of the euro since 1999 have drawn special attention to the procedures set out by the Treaty on exchange rate policy. The conclusion of formal agreements on an exchange-rate system, as covered by Article 111, 1, could be compared to a Bretton Woods' type of system and would appear to be less operational in the current state of globalisation and highly developed international capital markets. General orientations would constitute a legal, although non-binding, instrument formulating guidelines for the ECB on exchange rate policy. The Luxembourg European Council in December 1997 clarified, however, that general orientations should only be formulated in exceptional circumstances while always respecting the independence of the ESCB and be consistent with the primary objective of price stability[16]. The Luxembourg resolution also underlines that the Council should monitor the development of the exchange rate of the euro in the light of a wide range of economic data. The Commission should provide analyses to the Council and the Economic and Financial Committee should prepare the Council's reviews. The Council has refrained from adopting any general orientations up to date.

Where the Council has not adopted any general orientations on exchange rate policy, the Treaty leaves some room for interpretation. Drawing upon the experience of the two episodes of depreciation and appreciation of the euro exchange rate (described below), respectively, a principle of shared responsibility has been followed. The Eurogroup (in which the President of the ECB usually participates) has - on a number of occasions - issued statements on how they view the situation as regards exchange rates. These statements have been a way of communicating a co-ordinated, if not single, view to the external world, often in an attempt either to talk up or down the value of the euro. In line with the Eurogroup's position, the ECB managed the exchange rate interventions in the autumn of 2000.

Two episodes illustrate the inter-play of the various actors with regard to exchange rate policy, see Graph V.4.

[16] Resolution of the European Council's meeting in Luxembourg on 13 December 1997.

Graph V.4: **The exchange rate of the euro versus the US dollar and the yen**

Source: Datastream.

The weakening of the euro in 1999-2000. After its launch on 1 January 1999, the euro exchange rate started off on a depreciating trend against the other major currencies, mainly linked to growth differentials to the US. In November 1999 and January 2000, agreed Eurogroup language on the euro was included in the ECOFIN Council's press releases. The text emphasised the euro's potential for appreciation, based on good fundamentals and sound policies. As the euro continued to slide, the Eurogroup issued a new statement in May 2000. The statement noted that Ministers, Commissioners and the ECB President agreed on the sound prospects for the euro-area economy and that the strong economic fundamentals were not reflected in the exchange rate of the euro. The euro continued to weaken and reached new lows after the summer. At this point in time, policy-makers had become increasingly concerned and the Eurogroup issued another statement on 8 September in Versailles, reiterating the Eurogroup's and the ECB's common concern about the level of the euro. In the weeks following the Versailles meeting, Finance Ministers of the euro area, ESCB representatives and Commission members were actively involved in trying to talk up the currency, also hinting at the possibility of interventions.

On 22 September 2000, on the initiative of the ECB, the central banks of the G7 jointly intervened in the foreign exchange markets to try to put a floor to the euro's slide. The accompanying statements cited the G7 authorities' "shared concern about the potential implications of recent movements in the euro for the world economy". In the three weeks that followed, the interventions appeared to have been successful in stopping the slide, but thereafter the euro started to fall again and reached an all-time-low at the end of October. On 3, 6 and 9 November, the ECB intervened again, this time on its own, while citing its concern about the repercussions of the exchange rate of the euro, including its impact on price stability. The interventions were in line with the position on the euro exchange rate that had previously been communicated by the Eurogroup.

The strengthening of the euro in 2002-2004. After remaining relatively stable for more than a year, in spring 2002, as market participants started to be concerned about the persistent and rising US twin deficits, the euro set off on an appreciating trend against the US dollar. As major countries in East Asia intervened massively in the foreign exchange markets in order to either keep the peg of their currency versus the US-dollar or to try to limit the speed and the scope of a strengthening of their currency, a large part of the burden of the falling dollar has been borne by the euro. Again, with a view to signalling concerns about over-shooting, this time about a further appreciation of the euro, the Eurogroup released terms of reference in May 2003, emphasising the need for a strong and stable euro and for exchange rates to reflect economic fundamentals. After temporary relief during the summer, the euro started to climb again. At a meeting in Dubai on 20 September 2003, without mentioning any particular currency, the G7 stated that exchange rates should reflect economic fundamentals and that "more flexibility in exchange rates is desirable for major countries or economic areas". This message, meant to call for more flexible exchange rate policies by some major Asian economies, was broadly interpreted as the end of the strong dollar policy. In the middle of January 2004, the euro had appreciated by 43 per cent against the USD since the beginning of 2002. Once again, the Eurogroup issued a statement on 19 January 2004 stressing that "the euro must keep its value over the medium- and long run, in line with economic fundamentals" and also emphasizing concerns about excessive exchange rate moves.

4.3 External representation of the euro area

It was expected that, with Stage Three of EMU, Europe would assume a role in the international financial and monetary system that was commensurate with its economic weight. At present, the external representation of the euro area/Community is still fragmented and incomplete. Ad hoc arrangements prevail with regard to the different institutions, making it difficult for the euro area to be seen to speak with one voice at the international level.

According to Article 111(4) of the Treaty, "…*the Council shall, on a proposal from the Commission and after consulting the ECB, acting* […] *unanimously, decide its representation* [at international level]." While progress has been made in terms of the co-ordination of common positions on important themes, attempts to formalise the external representation of the EU have made little progress. At the end of 1998, in Vienna, Member States did not endorse a Commission proposal, which argued that the Community, as a principle, should be represented by the three relevant Community bodies, notably the euro area Presidency, the Commission and the ECB.

Rather, for the IMF, the Vienna Presidency conclusions of 1998 stated that *"The ECB, as the Community body competent for monetary policy, should be granted an observer status at the IMF board. The views of the European Community/EMU on other issues of particular relevance to the EMU would be presented at the IMF board by the relevant member of the Executive Director's office of the Member State holding the euro Presidency, assisted by a representative of the Commission."*

For the G7, the Vienna conclusions stated that *"The European Council endorses the report of the Council on the external representation of the Community, which foresees that the President of the ECOFIN Council, or if the President is from a non-euro area Member State, the President of the Euro 11, assisted by the Commission, shall participate in meetings of the G7 (Finance)".*

De facto, the Vienna European Council conclusions have only partially been implemented. The ECB has been granted an observer status for selected IMF board discussions related to monetary and exchange rate matters. As mentioned earlier, attempts are being made to have the Executive Director representing the Presidency present a common position on some issues. But this is not always successful and no Commission representative assists the Executive Director representing the Presidency in these IMF Board meetings. So far, the euro area dimension has yielded rather pragmatic changes in the G7. The Eurogroup President and the ECB President attend parts of the G7 Finance meetings related to the global economic outlook. Moreover, the country holding the EU Presidency - except if a G-7 member – and the ECB are not fully involved in the preparation of G7 Finance meetings which does not allow for their full participation. The participation of the Commission is equally limited, as it only attends parts of the ministerial discussions and is not fully involved in the preparatory process. Its assistance to the Presidency has not been made fully operational.

Progress towards adequate European representation in international fora is hampered by several factors. On the one hand, there are the peculiarities of the European construction, including the rather short rotation period of the Council Presidency, the incomplete participation in Stage Three, the distribution of competencies within the EU and the enlargement process. On the other hand, there is the weight of history, including the grouping of European countries in IMF constituencies with non-EU countries and even the inclusion of some EU countries in a constituency led by a non-EU country. These mixed grouping arrangements can, depending on the subject, complicate the desire to speak with a single voice. Also, membership of the IMF is based upon the concept of "country". Reconciling the interpretation of this concept with the nature of the creation of EMU is particularly complex in light of the IMF monetary character.

With a view to ensuring the euro's place in the international monetary system, the Draft Treaty Establishing a Constitution for Europe as adopted by the European Convention in summer 2003 proposes a slightly revised legal basis for future decision making on the euro area's external representation. Art. III-90 (3) stipulates that "*the Council of Ministers, on a proposal from the Commission, may adopt appropriate measures to ensure unified representation with the international financial institutions and conferences*."

The EU's representation in the World Trade Organisation is often seen as a model of unified Community representation in international organisations. In contrast to EU and euro area representation in the Bretton Woods Institutions (BWIs), the Commission is responsible for representing the EU to the WTO. With the establishment of the WTO in 1995 as a fully-fledged international organisation, the European Communities became an official member of the WTO in its own right, alongside all individual EU Member States which each have their own seat in the WTO. Unlike the situation in the BWIs, the WTO allows for the possibility of members being "customs territories", i.e. membership is not exclusive to "member countries". In the WTO domain, therefore, the EC is defined as a customs territory.

While trade remains largely peripheral to core IMF business, the IMF has a remit in trade matters, stemming from Article I(ii) of its Articles of Agreement, "*to facilitate the expansion and balanced growth of international trade*". In the context of the Doha Development Agenda, trade issues have attracted renewed interest, reflected by a growing number of publications and statements. In addition to IMF Board and Working papers, trade issues arise in a range of contexts, including the IMF bi-annual World Economic Outlook, the IMF bi-annual Article IV consultations on the euro area, the Spring and Annual Meetings of the IMF and World Bank, and in programme conditionality. In the context of the euro area Article IV consultations, the Commission has the opportunity to present the EU trade policy stance directly to IMF staff. However, despite the Community's competence for representing the EU to the WTO, the Community's lack of direct representation in the BWIs has limited its ability to ensure effective EU representation on trade policy matters.

Thus, in the BWIs, trade-related issues currently face the same constraints as EU representation as euro-area representation on economic and monetary issues. When trade issues are discussed by the IMF Executive Board, there is the same ad hoc and informal process of co-ordination between the Commission and EU Executive Directors at the IMF. On trade issues, it is usual for the Executive Director representing the EU Council Presidency to speak, and when an issue requiring guidance arises, input is provided by the Commission services to this Executive Director.

In conclusion, five years after the launch of its third stage, the EMU project is still in the making as far as the external side is concerned. On important international issues, the Community is sometimes able to speak with one voice and has started to play a global role commensurate with its financial and economic weight. This needs to be complemented by further progress on representation. The representation of the euro area in the various international economic, financial and monetary organisations and fora, such as the IMF, the OECD and meetings of the G7 and G20 Finance Ministers, is divided among the Council (EU Presidency as well as the Chairman of the Eurogroup), the Commission and the ECB. These ad-hoc arrangements that were made at the start of Stage III have proven to be useful, but have only partially met the expectations for a strong and unified European presence in international matters. Because of the informal nature of these arrangements, their lack of legal basis, their temporary character and the constraints inherent in co-ordination, they often result in a limited Community impact on international discussions.

A proper representation of the euro area in international organisations could significantly improve multilateral co-operation against the background of a financial world that seems to be moving towards a tri-, or even bi-polar currency system. The challenge related to the appropriate representation and participation of the euro area in international decision making procedures is thus a significant issue for non-Europeans as well. This is apparent in the pressure from other industrial and emerging market economies to streamline EU representation. Addressing this issue is a crucial challenge for EU policymakers in order to ensure that the EU is an effective actor in the pursuit of its own interests on the international stage.

Part VI

MEMBER STATES THAT HAVE NOT YET ADOPTED THE EURO

Summary

Following the accession to the EU of the ten new Member States, there are now more Member States outside than inside the euro area, though the euro area dominates and makes up nearly ¾ of the enlarged EU's economy. The new Member States are now in the group of 'pre-ins', together with the three Member States that have not yet adopted the euro – Denmark, Sweden and the United Kingdom.

In terms of the Treaty, the new Member States have since accession participated in Economic and Monetary Union with the status of 'Member States with a derogation', which is also Sweden's current status. This means that they are committed to joining the euro area at a later stage. Their status differs slightly from that of Denmark and the UK, which negotiated Protocols attached to the Treaty enabling them to opt out of the third stage of EMU – the adoption of the euro.

The old 'pre-ins' and the new Member States have marked differences in their economic characteristics in relation to the euro area which reflect their very different economic history. However, notwithstanding these differences, the conditions required for successful participation in the euro area are the same for all countries, essentially consisting of strengthening adjustment mechanisms for absorbing asymmetric shocks in the absence of an independent monetary policy, made easier if capital, product and labour markets can respond flexibly. Common to all countries is the requirement of having achieved a high degree of sustainable convergence, by reference to criteria laid down in the Treaty

The other major difference between the two groups is of a political nature. The old 'pre-ins' have indicated that any decision to join the euro will be put before the people in a referendum. Of the three, public support for the euro appears to be strongest in Denmark and lower in Sweden and the UK. By contrast, most of the new Member States have already announced their target dates for joining the euro area and some of them have already tabled concrete strategies for adopting the euro.

The old 'pre-ins' have during the last five years had a relatively stable macro-economic environment, supported by the policy frameworks in place. The frameworks are different, with Denmark participating in ERM II while Sweden and the UK have fairly similar forward-looking monetary regimes targeting inflation. All three countries have ambitious medium-term fiscal frameworks constructed by revenue, expenditure or budget balance rules.

Of the three, Sweden and the UK have shown stronger GDP growth than the euro area average whereas Denmark's performance has been close to that of the euro area. Against the background of the cyclical downturn since 2001, inflationary pressures have been subdued and monetary policy has generally been accommodative in the 'pre-ins', as well as the euro area, with generally low rates prevailing in particular since 2001 in a historical perspective. Unemployment has remained low and well below the euro area average.

On the fiscal side, Denmark, Sweden and the UK all generated fiscal surpluses in the years of high growth up to 2001, using the cyclical upswing to consolidate the government's budgetary position. This enabled a fiscal easing in the following downturn, being most significant in Sweden and the UK. This, however, resulted in a deterioration of the public finances such that the UK's deficit breached 3% of GDP in 2003. The debt-to-GDP ratio is well below 60% of GDP in all three countries.

So far, referenda held in Denmark (September 2000) and Sweden (September 2003) have not supported membership, while the United Kingdom has yet to hold a referendum on the issue. Neither Denmark nor Sweden has indicated when another referendum is likely, although following the latest vote, the Swedish government indicated that the euro issue would not be revisited in this nor the next term of parliament.

That public opinion in favour of membership appears strongest in Denmark may, to some degree, reflect the fact that Denmark is closest to de facto membership of the euro area in its macroeconomic policy framework. Perhaps reflecting the greater change in policy needed if they were to join the euro, the governments of the UK and Sweden have placed economic issues at the heart of any decision, and both have carried out extensive work to assess the economic impact of membership on their respective economies. In Sweden, conditions set by the government for synchronisation of business cycles and similar wage developments in Sweden and the euro area were assessed in autumn 2002 as having been met. In the UK, the government has set out a number of tests to determine whether circumstances favour membership; in the most recent analysis, in June 2003, it found clear evidence of potential benefits to the UK from adopting the euro, but also that it was not possible to conclude that business cycle convergence between the UK and the euro area was sustainable in the long term.

The accession of the ten new Member States has markedly increased the diversity of the EU economy, with the new Member States displaying some fundamental economic differences from the countries currently participating in the euro area. These differences reflect their economic history since, with the exception of Cyprus and Malta, they have been undergoing a transformation process from centrally planned to market economies over the past fifteen years. Overall, they are converging towards the EU-15 Member States in a number of economic indicators. However, while remaining a diverse group in terms of economic performance, these countries still display distinct economic characteristics that will influence their policy path towards full monetary integration.

The new Member States have made great strides in macroeconomic stabilisation. In particular, they have made remarkable progress in bringing high and volatile inflation rates down to low levels. However, they record high government deficits. For the group as a whole, and notwithstanding significant differences among them, the general government deficit reached 5.7% of GDP in 2003. By contrast, debt levels are relatively low, with Cyprus and Malta being the only ones with a general government debt ratio above 60% of GDP in 2003. Also, the new Member States run large current account deficits compared to the euro area.

Since the mid-1990s, the new Member States have experienced stronger real GDP growth, and somewhat wider output fluctuations, than the euro area. Gradual integration with the EU has contributed to increased synchronisation of the business cycles between these countries and the euro area. However, the situation differs widely across countries, with Hungary, Poland, Slovenia and Estonia displaying a higher degree of correlation of their cyclical movements with the euro area than the other countries of the group. All these countries have a greater degree of trade openness than the EU-15 average, though the degree of trade integration with the EU-15 differs from one country to another.

The transition process in the new central and eastern European Member States has brought their economic structures closer to those of the old Member States. However, substantial sectoral differences vis-à-vis the EU-15 countries persist. Agriculture and industry still account for a larger share of total value added and employment in the new EU countries than in the EU-15. The labour market situation in these countries is a source of concern. They have on average a lower employment rate and a higher unemployment rate than in the euro area. The persistence of high levels of unemployment in most of these countries suggests that structural rigidities hamper the smooth functioning of the labour market. Another issue of concern is the low productivity levels in these countries relative to the EU-15. Finally, their financial sectors are still underdeveloped despite the progress made since the beginning of the transition.

The specific characteristics of their economies will inevitably have a bearing on the strategies of the new Member States for adopting the euro and their subsequent experience within the euro area. In the run-up to euro adoption, they are confronted with three main challenges: first, achieving a high degree of sustainable nominal convergence; second, establishing properly functioning adjustment mechanisms that will ensure successful participation in the euro area; and, third, following responsible economic policies supporting economic growth in order to close the income-per-capita gap with the EU-15.

1. The old Member Stares outside the euro area and the question of euro membership

1.1 Introduction

Of the fifteen old Member States, three – Denmark, Sweden and the United Kingdom – have not yet adopted the euro. The legal situation facing each of these countries differs somewhat. In the case of the UK, a Protocol attached to the Maastricht Treaty specifies that the UK is not obliged or committed to move to the third stage of Economic and Monetary Union (the adoption of the euro) without a decision to do so by its government and Parliament. Denmark also has an opt-out on participation in the third stage of EMU in accordance with the decision at the European Council in Edinburgh in December 1992. Sweden, on the other hand, has the status of a Member State with a derogation. In other words, Sweden is legally obliged to adopt the euro but does not yet fulfil the necessary conditions, by reference to criteria laid down in the Treaty[1].

On the institutional side, the euro area Member States have set up an informal structure for exchanging views that is called the 'Eurogroup'. The Eurogroup brings together the Ministers from the ECOFIN-Council that represent Member States from the euro area. It provides them with a forum for policy debate on matters that relate specifically to the challenges of being part of the euro area. The Eurogroup can act as a stimulus to further integration by showing that common action by euro area Member States can bring widespread benefits to all those who take part. The countries that have not adopted the euro are obviously not members of the Eurogroup, and thus to a certain extent miss out on the political integration, common identity and shared values the Eurogroup can engender.

The debate about the economic consequences of being 'out' is a lively one[2]. Adopting the euro brings with it a number of benefits. Apart from the practical benefits for citizens travelling with the euro, the single currency facilitates reaping the full benefits of the EU's single market, by eliminating exchange rate instability, for example. This provides a more stable environment for trade within the euro area by reducing risks and uncertainties for both importers and exporters, who previously had to factor currency movements into their costs. Independent research suggests that the euro has already fostered significant growth in trade within the euro area. Reduced uncertainties also help businesses to better plan their investment decisions, a feature that also facilitates foreign direct investment flows. Price transparency across the currency union is improved, fostering competition and thus leading to lower prices in the short to medium run. Also, the single currency creates a single financial market, creating a larger, deeper and more liquid financial market, with resulting benefits for savers and borrowers. It also enhances Europe's international role. The countries that do not adopt the euro risk missing out on these benefits.

This section describes the macroeconomic performance of the old Member States that have not yet adopted the euro in relation to the euro area and reviews the discussion on the euro. In section 1.2 the macroeconomic policy frameworks prevailing in Denmark, Sweden and the UK are described. Section 1.3 discusses their macroeconomic performance vis-à-vis the euro area. Finally, section 1.4 reviews the discussion on the euro in these countries, all of which have indicated that any decision to join the euro, subject the fulfilment of the necessary Treaty conditions, will be put before the people in a referendum.

1.2 Macroeconomic policy frameworks

Denmark participates in ERM II while Sweden and the UK have fairly similar forward-looking monetary regimes targeting inflation. All three countries have ambitious medium-term fiscal frameworks based on revenue, expenditure or budget balance rules.

Denmark: participates in the ERM II with a narrower fluctuation band than the standard band of 15% on either side of the central rate.

Under normal circumstances, the fixed-exchange-rate policy in the framework of ERM II means that Denmark's National Bank adjusts its interest rates in line with the ECB's adjustments. When there is pressure on the krone or a sustained inflow or outflow of foreign exchange, the National Bank may independently make adjustments to its interest rates in order to stabilise the krone.

The Danish medium-term fiscal strategy aims at maintaining surpluses on the general government finances of 1½%-2½ % of GDP, with the objective of substantially lowering the government debt ratio by 2010 as a preparation for the impact of ageing on public finances. To this end, the targeted growth of public consumption in real terms is lowered, from 1% per year

[1] On 22 May 2002, the European Commission adopted the 2002 Convergence Report, in which convergence progress made by Sweden is examined in accordance with Article 122(2) of the Treaty. The report concluded that Sweden fulfilled three of the convergence criteria (on price stability, the government budgetary position and convergence of interest rates) but did not fulfil the exchange rate criterion. Moreover, central bank legislation in Sweden was assessed not to be compatible with the Treaty and the Statute of the ESCB. In the light of this assessment the Commission concluded that there should be no change in the status of Sweden as a Member State with a derogation.

[2] See for example, Begg, D. *et al.* (2003a), Calmfors, L. *et al.*, (1997) or the government-appointed studies on EMU mentioned in section 1.4.

on average in 2002 and 2003 to ½% in 2005. An important purpose of the general tax freeze in force in Denmark is to serve as a mechanism to control the growth of public expenditure, in particular at local government level.

Sweden: during the 1990s Sweden put into place a stability-oriented macroeconomic policy framework based on sound public finances and an inflation targeting regime. This overhaul of the macro-economic policy framework followed the deep recession in Sweden in the early 1990s[3]. The continuation of this policy framework was confirmed by the government following the result of 14 September 2003 referendum on the euro.

The basis for monetary policy is an inflation target of 2% ± one percentage point and the Swedish exchange rate is freely floating[4]. With inflation expectations generally centred around 2% in recent years, inflation has for most of the time been within this target range. This forward-looking inflation targeting policy framework is broadly similar but not identical to the European Central Bank's concept of price stability.

Maintaining sound public finances on average over the cycle is a key fiscal policy objective. The main instruments for achieving these are: i) expenditure ceilings for central government, introduced with the reformed Budget Law in 1997 and ii) a balanced budget constraint for local governments, introduced in 2000. These instruments are supplemented by a surplus target for the public finances on average over the cycle, which encompasses the Stability and Growth Pact's medium-term objective of achieving a fiscal position close to balance or in surplus.

United Kingdom: during the course of the 1990s, the UK developed a macroeconomic policy framework based on inflation targeting and firmer control of the public finances. In 1997, the UK authorities strengthened this framework. It is characterised by two main features:

- an inflation-targeting regime carried out by an independent central bank[5]. The current symmetric inflation target is based on the HICP measure[6], called the Consumer Price Index (CPI) in the UK, and is set by the Government at 2%. If the rate of inflation deviates by more than one percentage point either side of target, the Governor of the Bank of England must write a letter to the Chancellor of the Exchequer (the UK finance minister) explaining the reasons for failing to meet the target, and detailing the measures the Bank intends to carry out to bring inflation back to target;

- a medium-term fiscal policy framework based on two rules – the 'golden rule' and the 'sustainable investment rule'. The golden rule requires that, over the economic cycle, the public sector will only borrow to invest and not to fund current spending. In other words, on average over the cycle as a whole, the public sector current budget must be in balance or in surplus. The sustainable investment rule requires that public sector net debt as a proportion of GDP be held, over the economic cycle, at a stable and prudent level[7].

1.3 The economic performance of Denmark, Sweden and the UK

A comparative analysis of the growth and stability performance between the three old "pre-ins" and the euro area in the five years to 2003 reveals interesting differences in terms of both growth and stability performance. The overall result registered is of clearly higher growth in Sweden and the United Kingdom compared with the euro area. However, within the euro area there is a wide variation in growth performance and several countries, such as Finland and Ireland have experienced very high growth during this period, exceeding that of the United Kingdom and Sweden.

In terms of average annual growth in real GDP since 1999, the difference approaches a percentage point for Sweden and three-quarters of a percentage point for the UK; taking account of population changes in GDP per head, the difference becomes a full point for Sweden but drops to just over a half-point for the UK. Denmark appears also in this respect as a quasi-euro-area member and has registered growth close to and actually slightly below that in the euro area proper, both in terms of total GDP or GDP per head (see table VI.1).

[3] In response to the recession and the sharp deterioration in the public finances in the early 1990s, a forceful fiscal consolidation programme was initiated in 1994. Swedish EU membership and the Maastricht criteria also played a role in the Swedish consolidation efforts.

[4] This regime replaced the former fixed exchange rate regime (the ECU peg), which was abandoned following the float of the *krona* on 19 November 1992.

[5] Sterling left the Exchange Rate Mechanism (ERM), and abandoned its peg vis-à-vis the Deutschmark, on 16 September 1992.

[6] In December 2003, the Chancellor announced the current HICP-based target. Before that, the target was 2½% on the RPIX measure – retail prices excluding mortgage interest payments.

[7] According to the UK authorities, public sector net debt will be maintained below 40% of GDP over the economic cycle, other things being equal.

Table VI.1: **Growth and stability performance compared**

Real GDP growth, % change							
	1999	**2000**	**2001**	**2002**	**2003**	**1999-2003**	**Standard deviation (euro area=100)**
Euro area	2.8	3.5	1.6	0.9	0.4	1.8	100
DK	2.6	2.8	1.6	1.0	0.4	1.7	79
S	4.6	4.3	0.9	2.1	1.6	2.7	128
UK	2.8	3.8	2.1	1.6	2.2	2.5	65
Real GDP per head, growth, % change							
	1999	**2000**	**2001**	**2002**	**2003**	**1999-2003**	
Euro area	2.5	3.1	1.2	0.5	0.2	1.5	
DK	2.3	2.5	1.2	0.7	0.2	1.4	
S	4.5	4.2	0.7	1.8	1.2	2.5	
UK	2.5	3.5	1.5	1.3	1.9	2.1	
Real GDP per head in PPS, level (euro area=100)							
	1998	**1999**	**2000**	**2001**	**2002**	**2003**	**Change 2003/1998**
Euro area	100.0	100.0	100.0	100.0	100.0	100.0	
DK	113.8	113.4	112.7	112.7	112.8	112.8	-1.0
S	108.3	110.3	111.4	110.8	112.1	113.3	5.0
UK	102.6	102.5	102.9	103.1	103.9	105.6	3.0

***Source**:* Commission Services (AMECO).

Output growth in Sweden has been higher than in the euro area on average and it has also varied more, partly due to the openness of the economy and the impact of the developments in the ICT sector. Reflecting the impact of the global boom, average growth during the period 1998-2000, of 4.2%, was the strongest since the 1960s[8]. While growth was lower than in the euro area in 2001, an easing of the fiscal stance in recent years is likely to have contributed to slightly better growth performance in 2002-2003. Sweden has also benefited from the performance of the stability-oriented macro-economic framework.

In the UK, growth has exceeded that of the euro area, building on a decade of sustained output growth. The UK weathered the global slowdown of the early 2000's relatively well, with domestic demand supported by stimulatory monetary and fiscal policies – the latter provided by a sustained increase in government consumption aimed at improving public services. Strong growth in house price inflation also helped offset the impact of equity market losses on household wealth, helping maintain consumer confidence. More generally, the performance of the UK's macroeconomic framework is widely credited with having contributed positively to the UK's recent macroeconomic performance.

Danish growth performance since the introduction of the euro has been slightly more muted, with average GDP growth and output gaps similar to that of the euro area. GDP growth has mainly been driven by net exports and investments, while private consumption has been subdued. At present, private consumption is expanding strongly, boosted by a fiscal expansion, including tax cuts and a partial reversal of earlier restrictive fiscal policy measures.

Turning to relative income levels in PPS terms, both Denmark and Sweden were very high income countries at the start of the period, with income per head in Denmark over 13% above the euro-area average and Sweden only a little less; the UK recorded a lower income level although still some two points higher than the euro-area average. As a consequence of the relative growth performance during the period since the euro's introduction, Denmark has roughly maintained its income differential vis-à-vis the euro area, while Sweden and the United Kingdom have pulled clearly ahead. In consequence, by 2003 income levels in Sweden had slightly overtaken those in Denmark while the UK occupied an intermediate position.

[8] The relatively strong growth since the mid-1990s may also have been influenced by the fact that Sweden emerged from a deep recession in the early 1990s, with real GDP falling by more than 4% between 1990 and 1993. Subsequent high growth was facilitated by a large negative output gap, though most estimates suggest that the output gap had closed at the end of the 1990s. Sweden has also experienced a sustained period of very strong export performance, as has been the case in Finland. For a further analysis of the performance of Sweden and Finland since the recession in the early 1990s, see Hagberg *et al.* (2004).

The position becomes further nuanced when account is taken of relative stability performance, measuring this in terms of standard deviations of output growth (measured here is total GDP, though results are little different for output per head). The most stable economy in this sense has been the United Kingdom, with a standard deviation under two-thirds of that in the euro area during this period. Output growth in Sweden, while higher, has been more volatile, with its standard deviation over a quarter higher than in the euro area. Finally, Denmark, with slightly slower growth than in the euro area, has nevertheless enjoyed slightly greater growth stability.

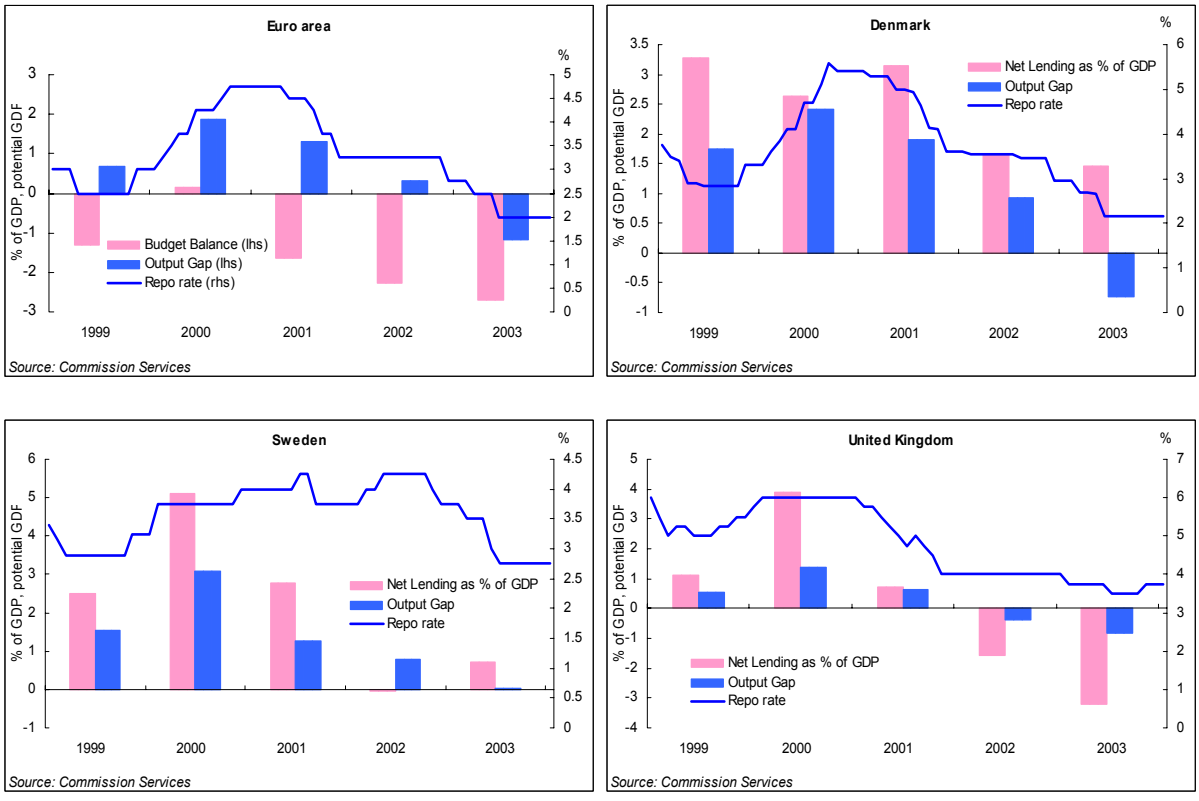
Is the growth differential due to a difference in the macroeconomic policy framework…

The establishment of credible and predictable macroeconomic policy frameworks in the EU has provided a sound and stability-oriented environment which is conducive to growth and employment. A successful implementation of these frameworks is a necessary condition for high and stable levels of growth. Above all, the achievement and maintenance of a sound budgetary position over the cycle provides for the full working of the automatic stabilisers in the downturn, and it provides leeway for discretionary policy, if considered desirable.

… or due to the implementation of the framework…

Denmark, Sweden and the UK all generated fiscal surpluses in the years of high growth up to 2001, using the cyclical upswing to consolidate the government's budgetary position (see graph VI.1). This consolidation was most marked in Denmark, where the average general government balance between 1999 and 2003 was a surplus of 2¼% of GDP. In the subsequent downturn, each country was left with a comfortable margin for the automatic fiscal stabilisers to operate in full. The earlier consolidation also left room for additional discretionary spending.

Graph VI.1: **Monetary and fiscal policies in Denmark, Sweden, UK and the euro area**



Note: the budget balances include UMTS proceeds.

The fiscal stance has recently been expansive in each of these three countries in the downturn since 2001, although to varying degrees, with the fiscal easing most significant in Sweden and the UK. In Denmark, the 2004 budget was moderately expansive, with the easing accelerated by the March 2004 fiscal package, which fully implemented tax reforms in 2004, instead of 2007 as initially foreseen. In Sweden, the considerable fiscal easing came in, basically, two steps in 2001 and 2002 and resulted in an elimination of the very high surplus achieved in 2000, of 5.1% of GDP. In 2003 a surplus of 0.7% of GDP was noted.

In the UK, the easing since 2001 was largely the result of a sustained increase in public spending, addressing a perceived legacy of under-investment in public services, both in terms of capital and current spending – the UK's fiscal framework essentially allows the authorities to

offset surpluses earned in one part of the economic cycle against deficits at other points in the cycle, as long as public sector current spending is not in deficit over the cycle as a whole, and public sector debt is kept at a prudent level. As a result, the general government deficit breached the 3% of GDP reference value in 2003. The increase in borrowing has focused attention on the government's 'golden rule', with some analysts arguing that a more forward-looking approach is required if, given current policies, the rule is to be met beyond the current economic cycle (estimated by the Government to have begun in financial year 1999/00 and to end in 2005/06[9]).

Against this background, economic growth has held up well in all 3 countries. On the one hand, the experience of these countries highlights the advantages of pursuing a stability-oriented macroeconomic policy framework, as the euro area has, and in particular a firm and credible target for the government finances. But on the other hand, it demonstrates the importance of using the cyclical upswing to rebuild the public finances, to allow room for manoeuvre in any downturn.

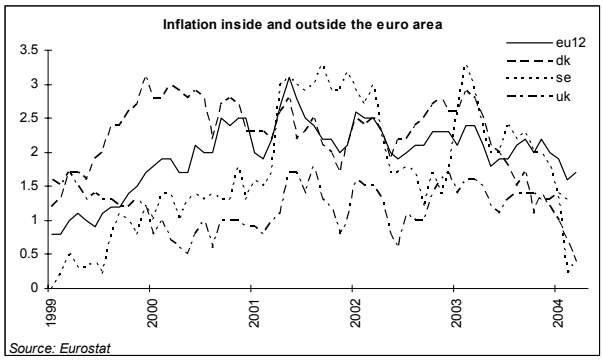
Debt in all three countries is below the 60% of GDP reference value. As a result of successive surpluses, the Danish gross debt ratio has been reduced from 53% of GDP in 1999 to 43% of GDP in 2003, while in Sweden, a forceful consolidation programme initiated in 1994, relying both on expenditure cuts and revenue increases, has left the debt to GDP ratio on a declining path and below 60% of GDP in each year since 2000. In the UK the ratio has been well below the reference value throughout the past decade, and a focus on long-term sustainability of public finances is a key commitment of UK fiscal policy.

Against the background of the cyclical downturn since 2001, VI.1.2). In recent years, inflation has been higher in Denmark than in the euro area as the resources of the economy were more stretched. However, in the course of 2003, inflation in Denmark decelerated sharply. In early 2004 HICP inflation was lower than in the euro area, despite wages which have been rising faster than in the euro area; due to a relatively high productivity growth, effects on inflation and competitiveness have been limited.

In Sweden, with inflation expectations generally centred around 2% for a number of years, inflation has for most of the time remained close to the Riksbank's target. On an HICP measure, inflation has followed the trend in the euro area over the last five years, though the variation has been larger. A surge in inflation in the beginning of 2003 was due to temporary factors and underlying inflationary pressures have been more subdued, influenced by the cyclical weakness. As a result, inflation has therefore been very low in the beginning of 2004, influenced also by the base effects. As in Denmark, higher wage rises than in the euro area have had a limited impact on inflation, as productivity growth has been relatively high.

In the UK, HICP inflation has been well below the euro-area average in the past few years, while since 1997, there has been a remarkable stabilisation in 10-year inflation expectations around the inflation target. This suggests that the credibility of monetary policy has improved, brought about by the new monetary policy framework. Despite a tightening labour market, wage pressures have been remarkably subdued in the UK, with headline average earnings growth quite low in historical perspective.

Graph VI.2: **HICP inflation (annual % change)**



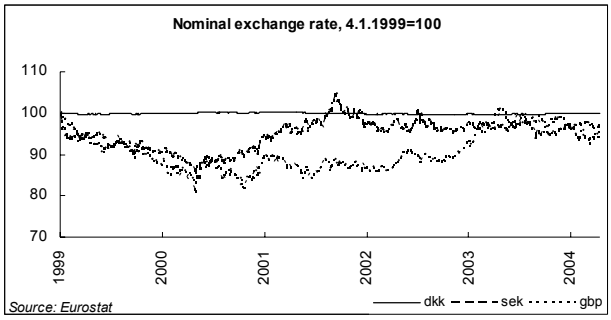
Monetary policy has generally been accommodative in Denmark, Sweden, the UK, as well as the euro area, with generally low rates prevailing in particular since 2001 (see graph VI.1). Nonetheless, the economies are in different cyclical positions. The UK is presently more advanced into the cyclical upswing, and the Bank of England, in anticipation of growing inflationary pressures within its two-year forecasting horizon, has begun the tightening cycle (by raising its repo rate in November 2003 and subsequently) with a view to achieving its 2% inflation target on the HICP measure. Denmark is in effect facing the ECB's refi rate, as a result of its ERM II peg. With the latest 50 b.p. repo rate cut by the Riksbank in April, the Swedish short rate coincides with the ECBs at 2%.

In terms of exchange rates, developments clearly vary among the three countries, reflecting the different policy goals of the macroeconomic frameworks in place (see graph VI.3). As noted previously, Denmark participates in the Exchange Rate Mechanism (ERM II) with a fluctuation band of ± 2.25% to the euro, a narrower band than the standard fluctuation band of 15% on either side of the central rate. Since the inception of the mechanism on 1 January 1999, there have not been any severe tensions affecting the exchange rate of the *krone*. Deviations in the exchange rate from the central parity have been much smaller than the official band width and the short-term interest rate differential to the euro area has been low. These developments reflect the

[9] The UK financial year runs from April to March.

confidence in the fixed exchange rate policy, which remains a central element in Danish economic policy.

Graph VI.3: **Euro exchange rates**



Neither Sweden nor the UK is a member of the ERM II. In Sweden, the *krona* has exhibited some volatility against the euro since its inception in 1999. This is, in part, a consequence of the monetary policy framework with a freely floating exchange rate and an inflation targeting regime. The *krona* appreciated vis-à-vis the euro until June 2000 and it subsequently depreciated, by more than 20%, until the trough observed in September 2001. After having strengthened in the end of 2001, the *krona* has been relatively stable in 2002 and 2003 compared to developments in previous years. In the UK, sterling depreciated vis-à-vis the euro during 2003 as the euro strengthened in value, following three years of broad stability.

Some measure of confidence in the overall macroeconomic policy frameworks can perhaps be found in financial markets. In Denmark, long-term bond yields remain low, and developments in yields have been in line with trends in international bond markets. However, the remaining interest rate differential between Danish and German long-term government bonds could be perceived as a cost Denmark incurs by not having joined the euro area. Similarly, the interest rate differential between Swedish and German long-term government bonds, mainly as a consequence of exchange rate uncertainty, is a cost Sweden incurs by not having joined the euro area. The yield spread vis-à-vis German 10-year government bonds has fluctuated around 50 basis points over the past two years. The 10-year interest rate in the UK has also tended to be higher than in the euro area, although the differential in long-term rates has remained small. In general, UK rates have moved closely with movements in the euro-area rates since 1999.

Overall, the evidence suggests that the stability-oriented macroeconomic policy frameworks already in place in these countries, while different, are very important ingredients in a strategy conducive to healthy developments of growth and employment.

The experiences of Denmark, Sweden and the UK suggest that the full implementation of such a framework is key in order to reap its full benefits. However, while the performance of the macroeconomic framework can do much to stabilise growth and employment, other structural factors are likely to play an important role in explaining differences in growth performance between these three countries and the euro area.

… or due to other, structural factors?

Denmark's potential output growth rate has been close to that of the euro area for a long time and has, just as in the euro area, actually fallen in the most recent period. By contrast, Sweden and in particular the UK exhibit a higher potential output growth rate than the euro area. The reasons for the difference in growth potential in these countries are however quite different (see Table VI.2).

Following a growth decomposition approach, the contribution from labour[10] has in the UK been close to that of the euro area, whereas in Denmark and Sweden the labour content of potential output growth has been rather low since the 1990s (see table VI.2). The trend decline in the participation rate in Sweden and Denmark contributes to this development. The fact that the participation rate and the employment rate in these countries became very high already several decades ago, heavily influenced by the increase in the female participation ratio, makes it difficult to raise participation rates significantly. Reversing this trend is indeed a major challenge that Swedish and Danish policymakers are facing, not least in view of the expected budgetary pressures stemming from the impact of ageing populations.

The UK has for many years lagged behind most of its economic partners in the area of investment, so the UK's stock of physical capital is relatively low. Research has shown that the UK's total physical investment as a proportion of GDP has been consistently among the lowest in the OECD for the past forty years. At least some of this is ascribed to the UK's earlier problems of relatively high macroeconomic instability. However, capital accumulation during the 1990s has increasingly been contributing to the UK's potential output growth rate, to close to that of the euro area.

[10] Labour input is measured here in persons. Hours worked have developed less strongly. For example, in the period 1999-2003 employment in persons rose on average by 0.1% in Denmark, by 1.3% in Sweden, and by 0.9% in the UK. During the same period, hours worked fell by 0.2% in Denmark, rose by 0.3% in Sweden and by 0.7% in the UK. *Source*: Groningen Growth and Development Centre and The Conference Board, Total Economy Database, January 2004, and Statistics Sweden. Preliminary estimations suggest that if total hours worked is used instead of persons employed as a proxy for labour input, the contribution to potential output growth from TFP would be higher and the contribution from labour would be lower than reported in Table VI.2.

Table VI.2: **Potential output growth and its determinants**

	1981-90	1991-95	1996-00	*1999-03*
Potential GDP growth, euro area	**2.3**	**2.2**	**2.1**	***2.0***
- of which, labour	0.3	0.4	0.6	*0.7*
- of which, capital accumulation	0.8	0.8	0.8	*0.7*
- of which, total factor productivity	1.1	1.0	0.7	*0.6*
Potential GDP growth, Denmark	**1.6**	**1.8**	**2.2**	***2.0***
- of which, labour	0.5	0.1	0.1	*0.1*
- of which, capital accumulation	0.5	0.2	0.5	*0.6*
- of which, total factor productivity	0.6	1.4	1.5	*1.3*
Potential GDP growth, Sweden	**1.9**	**1.5**	**2.4**	***2.6***
- of which, labour	0.1	-0.5	0.0	*0.4*
- of which, capital accumulation	0.8	0.5	0.5	*0.5*
- of which, total factor productivity	0.9	1.6	1.9	*1.7*
Potential GDP growth, UK	**2.4**	**2.0**	**2.8**	***2.8***
- of which, labour	0.3	0.2	0.6	*0.7*
- of which, capital accumulation	0.6	0.5	0.8	*0.8*
- of which, total factor productivity	1.4	1.3	1.3	*1.3*
Potential GDP growth, USA	**3.0**	**2.9**	**3.5**	***3.2***
- of which, labour	1.1	0.9	1.0	*0.8*
- of which, capital accumulation	0.9	0.8	1.2	*1.1*
- of which, total factor productivity	1.0	1.2	1.3	*1.2*

***Source**:* Commission Services. These calculations have been made using the Commission Services' Production Function model, described in Denis *et al*. (2002)

The UK, along with Sweden, has invested heavily in information and communications technology (ICT)[11]. The stronger growth of total investment in the UK helps explain the greater contribution from capital to its potential output growth, particularly since the mid-1990s.

Total factor productivity (TFP) has contributed substantially to potential output growth in particular in Sweden but also in Denmark and in the UK. TFP growth has in fact been stronger in Sweden and Denmark than in the USA since the 1990s, whereas the UK has just 'kept pace' with the USA. In Sweden, the contribution from TFP growth to potential output growth has been very strong, in particular since the 1990s. Sweden's success in this regard can to a large degree be attributed to the rapid expansion of the ICT sector during the 1990s[12]. For example, real output from the manufacturing sub-sector 'Radio, TV and telecommunications' rose on average by 67% per year in the period 1993-2000, thus contributing very significantly to total output. However, following the ICT boom, output from this sector has fallen (by 35% in 2001).

As described above, growth performance in Sweden and the UK holds up well in relation to the euro area. This is nonetheless true also for several euro-area economies, which have experienced relatively strong growth in recent years. This points in the direction of structural factors playing an important role[13].

In particular, flexible markets are a substitute for an autonomous monetary policy and a floating exchange rate, according to optimal currency area theory. Key concerns here are to what extent wages are sufficiently flexible and whether the economy concerned is, broadly,

[11] See OECD (2002b).

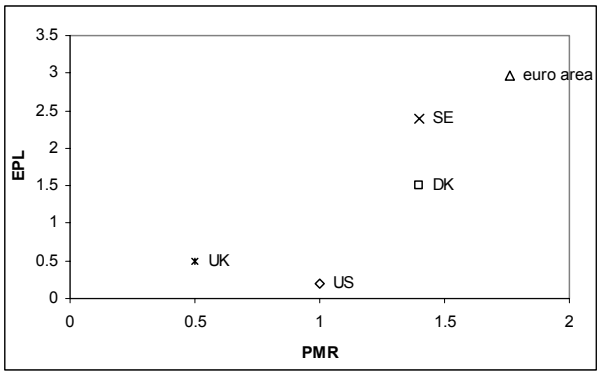
[12] However, TFP is also affected by other channels, such as developments in the ICT-using sector. For a thorough discussion on productivity growth, see "Drivers of Productivity Growth: An Economy-wide and Industry Level Perspective", European Commission (2003d).

[13] There are also many other factors that affect a country's growth performance, e.g. the catching-up potential. This is probably an important factor behind the strong growth in recent years recorded in Ireland, Greece and Spain and also in the new Member States. For a further discussion on structural reform progress, see e.g. the Commission's Implementation Report of the Broad Economic Policy Guidelines, European Commission (2004) or the 2004 report on structural reforms in the EU, Economic Policy Committee (2004).

sufficiently flexible. This is an issue particularly for Denmark, as far as macro-economic disturbances are concerned, given their fixed exchange rate regime. The hiring and firing rules in Denmark are relatively easy (see graph VI.4), implying that employment can adjust to shocks faster than in many other countries. Overall, wage rigidities in these three countries are in general not considered to be significantly different compared with the euro area.

With regard to flexibility of the economy, structural reform in the EU is high on the policy agenda, as evident from the Broad Economic Policy Guidelines (BEPGs) and the Lisbon strategy. In graph VI.4, it is shown that Employment Protection Legislation (EPL) is less stringent in particular in the UK, but also in Denmark and in Sweden, compared with the euro-area average. In addition, Product Market Regulation (PMR) is less stringent in Sweden, Denmark and particularly the UK, than in the euro area as a whole[14].

Graph VI.4: **Employment Protection Legislation (EPL) and Product Market Regulation (PMR)**

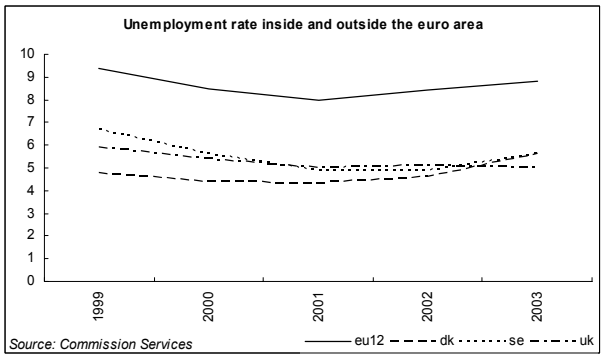


***Source**:* Nicoletti *et al.* (2000).

However, the euro area includes a wide variation in regulation and legislation between individual countries, some of which also exhibit relatively light levels of regulation, and greater flexibility in product, labour and capital markets. Nonetheless, Denmark, Sweden and the UK may be considered to be among the more flexible economies in an EU perspective, on the basis of these two indicators alone[15].

Reflecting the relative flexibility in labour markets, labour market performance in all three countries compares favourably with the euro area (see graph VI.5). The employment ratio remains high and above that of the euro area and the unemployment rate has remained low and below that of the euro area. The cyclical downturn has however had an adverse impact on the labour market in Denmark since 2002 and also in Sweden since 2003 whereas the labour market in the UK has been more resilient.

Graph VI.5: **Unemployment rate (in % of the labour force)**



In sum, sustaining the stability-oriented macroeconomic policy frameworks already put into place is a crucial ingredient in a strategy conducive to growth and employment. Moreover, pursuing structural reform will contribute positively to potential output growth, which in turn should provide for higher economic growth. Against this background, the positive growth differential of Sweden and the UK vis-à-vis the euro area may suggest that the full implementation of such a framework in these countries, in combination with a higher degree of market flexibility achieved through structural reform, may have contributed to reaping the full benefits of the platform of macro-economic stability. There remain however several country-specific areas where there is more to be done in terms of structural reform in these countries, as highlighted in the BEPGs. Moreover, the positive impact of euro membership, particularly in terms of boosting trade and investment, could further enhance the growth potential of both Sweden and the UK.

1.4 Attitudes towards euro entry

Denmark: the decision not to adopt the euro was confirmed in a second referendum on the issue held in September 2000. The result of the referendum was 53% of the votes against, 47% in favour. At present, both the government and the main opposition parties are in favour of Denmark's joining the euro. Opinion polls are also showing popular support for adopting the euro, the most recent Eurobarometer poll (November 2003) showed 52% in favour and 43% against. In this context, the introduction of euro notes and coins in 2002 seems to have had a favourable impact. The close link to the euro in the framework of ERM II and the ensuing monetary and exchange-rate policy makes Denmark a de facto member of the euro area. Against this background, the EMU debate in Denmark has been more focused on the political aspects of EMU than on the economic consequences of adopting the euro. There is a consensus among Danish politicians that an adoption of the euro by Denmark needs to be approved by the Danish people in a referendum. No firm indications have been given by

[14] The indicators used here are from Nicoletti *et al.* (2000).

[15] These synthetic indicators do not capture all aspects of the degree of market flexibility. For a further discussion on recent structural reform progress and the implementation of the BEPGs, see European Commission (2004).

the government as to the when a new referendum could be held.

Sweden: the advantages and disadvantages of EMU have been extensively discussed and analysed in Sweden. Two major reports have been released, in 1996 and in 2002. In 1996 the Swedish government Commission on EMU (led by Professor Lars Calmfors) presented its report (SOU 1996). Three main aspects of EMU were identified: i) social efficiency effects; ii) stabilisation policy effects; and, iii) political consequences.

With regard to the efficiency arguments Sweden would benefit from participation. Concerning stabilisation policy, the Calmfors study considered that the stabilisation policy cost was greater than the gain. Nominal wage flexibility was identified as insufficient to compensate for the loss of monetary policy independence. The political effects mainly concern potential influence. Participating countries are likely to be in a better position to influence EU policies and affairs.

The overall assessment of the Calmfors Commission was that the arguments against Swedish participation in 1999 were stronger than the arguments in favour of it. However, once certain hurdles such as a reduction of the high unemployment rate and reduction of the deficit in the public finances have been overcome, the Calmfors Commission took a positive view on Swedish participation in the monetary union. The Swedish Parliament adopted a Bill in December 1997 according to which Sweden should not adopt the euro at the start of the third stage of EMU on 1 January 1999, and any later decision to participate would have to be submitted to a referendum.

Further to the Calmfors Commission, the Committee on Stabilisation Policy for full Employment if Sweden joins the Monetary Union, appointed by the government in October 2000, presented its report in the spring of 2002 (SOU 2002). It addressed two main issues. Firstly, whether there would be a change in the need for stabilisation policy as a result of EMU membership. Secondly, what can be done to make the remaining stabilisation policy instrument (i.e. fiscal policy) as effective as possible. In the event of euro adoption, the Committee proposed that the framework for fiscal policies should be used to stabilise output close to its potential level. Discretionary policy should only be used in the event of major economic shocks, and the surplus in the public finances should be raised to 2.5 or 3% of GDP on average over the cycle to allow for the automatic stabilisers and discretionary policy. Moreover, a fiscal policy council should be set up with a mandate of providing fiscal policy advice, a small number of fiscal policy instruments should be chosen to be used as stabilisation policy tools and it was proposed to reduce the pro-cyclical effect on revenue in the local government sector.

The Social Democratic Party congress decided that they were in favour of Swedish euro adoption in 2001. At the same time, two conditions were set for when adoption of the euro could take place – synchronicity in business cycles between Sweden and the euro area, and wage developments in Sweden that were in line with those in the euro area. In the autumn of 2002, the government concluded that these conditions were fulfilled, an assessment broadly supported by most analysts. On 29 November 2002, the party leaders represented in the parliament decided that a referendum should be held on 14 September 2003. There was a noticeable rise in Swedish public support for the euro in the run-up to the introduction of euro notes and coins, to close to 50%.

The Swedish people voted no to the introduction of the euro on 14 September 2003 (55.9% against, 42.0% in favour). The government said that this result would be respected and that the euro issue would not be revisited during the present or the next term of parliament, putting the issue off until 2010. Public support for the euro in Sweden is more or less the same at present as it was five years ago, with about 40% of the Swedes in favour of the euro, according to the Eurobarometer polls. Other recent polls confirm a level of support for the euro broadly similar to the 14 September 2003 referendum result.

United Kingdom: UK government policy is in favour of UK membership of the euro in principle, if the economics are right. The UK government has set out its five economic tests to identify whether an economic case can be made for UK entry to EMU. These tests are as follows:

- Convergence: Are business cycles and economic structures compatible so that the UK and others could live comfortably with euro interest rates on a permanent basis?

- Flexibility: If problems emerge is there sufficient flexibility to deal with them?

- Investment: Would joining EMU create better conditions for firms making long-term decisions to invest in Britain?

- Financial Services: What impact would entry into EMU have on the competitive position of the UK's financial services industry, particularly the City's wholesale markets?

- Employment and Growth: In summary, will joining EMU promote higher growth, stability and a lasting increase in jobs?

A first (negative) assessment of these five tests was conducted in 1997 (HM Treasury 1997). In the second assessment published on 9 June 2003 (HM Treasury 2003a), the UK government again decided that the tests, overall, had not been passed, but concluding that real progress had been made towards meeting them and that the financial services test had been passed. On balance, however, despite the potential benefits of increased investment, trade, a boost to financial services, growth and jobs, it could not conclude that there was sustainable and durable convergence or sufficient flexibility to cope with any potential difficulties within the euro area.

The assessment suggested that structural differences with the euro area may mean that convergence may not be sustainable in the longer-term. In particular, the assessment noted differences between the UK housing market and that of the euro area, arguing that: UK household incomes are more sensitive to interest rate changes because of high mortgage debt financed at predominantly variable rates. Also, the link between (more volatile) house prices and consumer spending is stronger than in other EU countries[16]. However, considerable differences in housing market characteristics between other European countries have not led to great difficulties within the existing euro area. Other, though less significant, structural differences were identified in investment linkages, financial structures and trade patterns.

Reflecting these structural differences, the assessment places a high value on flexibility in labour, product and capital markets to respond to shocks. It was also concluded that there was not yet sufficient flexibility in these markets to sustain convergence in the face of shocks, despite the progress that has been made in the reform of labour, product and capital markets in both the UK and euro area, and a more favourable institutional labour market environment in the UK than elsewhere.

The potential benefits of EMU membership were recognised. The assessment noted: that EMU is promoting a deeper, broader and more integrated capital market across the euro area; that it is likely to boost FDI in the long-term; and, that EMU has already boosted intra-euro-area trade, and should encourage greater competition. The assessment also concluded that the UK's large financial services sector was likely to prosper regardless of whether or not the UK adopts the euro, but that entry might strengthen the City's competitive position. Summarising, the assessment indicated confidence that UK membership of EMU would promote higher growth, stability and a lasting increase in jobs "once sustainable and durable convergence has been achieved" [17].

Any economic assessment of the case for membership is likely to rest on a weighting of the longer-term benefits of membership relative to any costs of joining – particularly any short-term costs associated with the transition to EMU. There is evidence to suggest that EMU membership will, in itself, encourage greater convergence and more similar structural characteristics over time. The UK's assessment is, however, that "a clear and unambiguous case for UK membership of EMU has not at the present time been made" [18].

The Chancellor nevertheless set out the next steps in his 9 June 2003 statement accompanying the five tests assessment. The government has also commissioned independent reports on the UK housing market, examining factors affecting the supply of housing in the UK and the demand for fixed rate mortgage lending, believed to be key determinants of relatively greater volatility in the UK housing market. Alongside the assessment, the UK also issued a discussion paper[19] examining the potential for fiscal stabilisation, both through changes to the UK institutional framework that might allow effective, discretionary fiscal stabilisation policy, and through a strengthening of the automatic stabilisers. The UK authorities are committed to further analysis of these issues.

Meanwhile, UK policy has been to incorporate euro compatibility into all new or upgraded systems under the government's policy of 'prepare and decide'. In June 2003, the UK presented the third outline National Changeover Plan (HM Treasury 2003d), which provides an update on the preparation work undertaken and is a comprehensive statement of how the government would manage a UK changeover.

Presently, public support for the euro is low, and may even have diminished in recent years. Over recent years, there has been a trend rise in the proportion of the population against the euro, while there has been simultaneous declines in the proportion in favour and in those who are undecided.

[16] For a more thorough discussion, see HM Treasury (2003b)
[17] HM Treasury (2003a), P6
[18] ibid.
[19] HM Treasury (2003c)

2. The euro and the new Member States

2.1 Introduction

On 1 May 2004, ten new countries – Cyprus, the Czech Republic, Estonia, Hungary, Latvia, Lithuania, Malta, Poland, the Slovak Republic, and Slovenia – joined the European Union (EU). This represented the biggest ever enlargement in terms of scope and diversity in the history of the EU. Since that date, the new Member States have participated in Economic and Monetary Union with the status of "Member States with a derogation", which is also the current status of Sweden. This means that they are committed to joining the euro area at a later stage. However, in order to be able to adopt the euro, they will have to comply with the convergence criteria laid down in the Treaty. Respecting these criteria and securing the conditions for a successful participation in the euro area will undoubtedly be a significant challenge to policymakers.

At present, the new Member States display some fundamental economic differences from the countries currently participating in the euro area. These differences reflect their economic history. These countries, with the exception of Cyprus and Malta, have been engaged in a transformation process from centrally planned to market economies over the past fifteen years. They have made great strides in macroeconomic stabilisation. The transition process has brought their economic structures closer to those of the old Member States. They have become more integrated with the EU, with the major part of their trade now occurring with the EU-15. Overall, they are converging towards the old Member States in a number of economic indicators. However, while remaining a diverse group in terms of economic performance, these countries still display distinct economic characteristics that will influence their policy path towards full monetary integration. In particular, their income-per-capita and productivity levels are still low relative to the EU-15, they are running high current account deficits and their financial sectors are relatively underdeveloped.

This chapter reviews the main economic characteristics of the new Member States and examines the principal challenges confronting them on the road to the adoption of the euro. Section 2.2 discusses the macroeconomic performance of the new Member States and their differences relative to the euro area, in particular in terms of economic dynamics and fiscal performance. Section 2.3 reviews some salient structural characteristics of these economies. In particular, the differences in economic structures compared to the euro area, labour market performance, productivity and competitiveness developments, the degree of trade integration with the EU and the efficiency of financial sectors are issues relevant for the convergence process and future participation in the euro area. Finally, section 2.4 examines the key challenges confronting these countries in the run-up to euro adoption.

2.2. Macroeconomic performance of the new Member States

The accession of the ten new Member States has not changed significantly the aggregate economic features of the EU (ECB (2004c)). The population of the EU has increased by close to 20% (Table VI.3). However, the economic weight of the enlarged EU has increased by only 5%, reflecting the lower level of GDP in the new Member States. EU GDP measured in purchasing power

Table VI.3: **New Member States: Population, GDP per capita and GDP levels**

	Population[1)]	**GDP per capita**[2)]	**GDP per capita**	**GDP level**[3)]	
	(millions)	PPS	(thousand euros)	(billion euros)	(billion PPS)
Cyprus	0.7	76	14.8	10.8	13.1
Czech Republic	10.2	62	7.7	78.2	151.8
Estonia	1.4	40	5.1	6.9	13.1
Hungary	10.1	53	6.8	68.9	130.5
Latvia	2.3	35	3.9	8.9	19.6
Lithuania	3.4	39	4.3	14.7	32.7
Malta	0.4	69	10.3	4.1	6.1
Poland	38.2	41	5.3	202.3	383.1
Slovak Republic	5.4	47	4.8	25.7	60.9
Slovenia	2.0	69	11.7	23.4	33.1
New MS	74.1	47	6.0	443.8	844.1
EU-15	380.8	100	24.1	9168.0	9168.0
Euro area	306.9	:	23.0	7071.0	7269.0

1) First estimates for 2003.

2) Preliminary results for 2002. Volume index of GDP per capita in relation to the EU-15.

3) In 2002.

Source: Commission services.

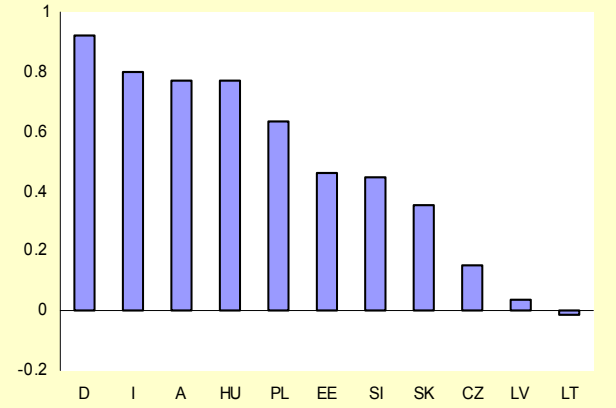
standards (PPS) has increased slightly more, by some 9%. One of the major differences between the new Member States and the countries in the euro area is their income levels. Despite progress in recent years, the gap in income-per-capita between the new Member States and the EU-15 average remains considerable. In purchasing power standards, the average GDP per capita in the new Member States is less than half of that of the EU-15. This figure masks large differences between countries (Table VI.3). In 2002, GDP per capita ranged from 76% of the EU average in Cyprus to 35% in Latvia. While Cyprus and Slovenia are as prosperous as some of the old, less affluent, Member States, Poland and the Baltic States have a GDP per capita below 45% of the EU-15 average.

Economic growth

Since the mid-1990s, the new Member States have experienced stronger real GDP growth than the euro area. In particular, the central and eastern European countries have followed a path of almost uninterrupted and fast economic growth after the initial output collapse due to the transition. The new Member States as a whole posted an average real GDP growth rate of 3.8% in the period 1995-2003, compared to 2.0% in the euro area (Table VI.4). Among these countries, the Czech Republic is an exception, with a real GDP growth of only 2.2% over this period, reflecting the stabilisation crisis in 1997-99. In 2003, the region as a whole grew by 3.6%, compared to 2.4% a year earlier. This is a remarkable performance in the context of weak growth in the EU-15. Higher growth rates in the new Member States compared to the euro area reflect the catching-up process and will likely remain a feature of these economies throughout the convergence process which will undoubtedly be long.

In addition to faster economic growth, most of the new Member States have also experienced somewhat wider output fluctuations than the euro area. For the period 1995-2003, the average standard deviation of real GDP growth was 2.2 percentage points in these countries, compared to an unweighted average of 1.6 in the euro area. Wide output fluctuations in the new Member States represent a potential challenge for stabilisation policies. Both fiscal and monetary policy will need to play an enhanced role in stabilising income and more so for fiscal policy once these countries have joined the euro area.

Graph VI.6: **Correlation of industrial output cycles with the euro area**
(correlation coefficients based on monthly growth rates from 1993 to 2002)



Source: European Forecasting Network (2003).

Inevitably, gradual integration with the EU has contributed to increased synchronisation of the business cycles between the new Member States and the euro area. However, in this respect, the situation differs widely across countries. Using industrial production data as a proxy for business cycles, the correlation with the

Table VI.4: **New Member States: selected economic indicators**

	Real GDP growth[1]		Inflation[1]		Current account balance[2]		Government balance[2]		Government debt[2]	
	1995-03	2003	2002	2003	2002	2003	2002	2003	2002	2003
CY	3.7	2.0	2.8	4.0	-5.4	-4.4	-4.6	-6.3	67.1	72.2
CZ	2.2	2.9	1.4	-0.1	-5.8	-6.5	-6.4	-12.9	28.9	37.6
EE	5.2	4.8	3.6	1.4	-12.2	-13.7	1.8	2.6	5.7	5.8
HU	3.5	2.9	5.2	4.7	-4.0	-5.7	-9.3	-5.9	57.1	59.0
LV	5.1	7.5	2.0	2.9	-7.6	-9.1	-2.7	-1.8	15.5	15.6
LT	5.5	8.9	0.4	-1.1	-5.4	-6.1	-1.4	-1.7	22.8	21.9
MT	3.4	0.4	:	1.3	-2.1	-3.4	-5.7	-9.7	61.7	72.0
PL	4.3	3.7	1.9	0.8	-2.6	-2.0	-3.6	-4.1	41.2	45.4
SK	4.1	4.2	3.5	8.5	-8.2	-0.9	-5.6	-3.6	43.3	42.8
SI	3.8	2.3	7.5	5.7	1.7	0.2	-1.9	-1.8	27.8	27.1
New MS	3.8	3.6	2.7	2.1	-3.9	-3.7	-4.9	-5.7	39.4	42.2
EU-15	2.1	0.8	2.1	2.0	0.6	0.5	-2.0	-2.6	62.5	64.0
Euro area	2.0	0.4	2.3	2.1	0.9	0.4	-2.3	-2.7	69.2	70.4

1/ Annual percentage change.
2/ As a percentage of GDP. For 2003, general government debt and deficit data based on the fiscal notifications of March 04.

Source: Commission services.

euro area is the highest for Hungary with a coefficient of 77% (Graph VI.6). Also, Poland, Slovenia and Estonia have a high degree of correlation of their cyclical movements with the euro area. By contrast, cycle correlation with the euro area is low for Latvia and even negative for Lithuania. The differences between the new Member States can be explained by their respective degree of trade integration with the euro area and differences in economic structures. In addition, recent empirical evidence suggests that correlations of growth rates of economic activity between the new Member States and the euro area are rising. This probably reflects the diminution of transition-related shocks and the increased degree of economic integration with the euro area through trade and capital flows. In this context, the trend towards increased synchronisation of business cycles is likely to continue in the coming years[20].

Inflation

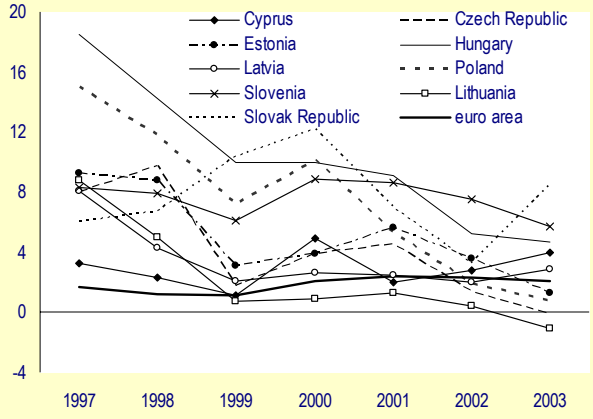
All the new Member States have made remarkable progress in bringing high and volatile inflation rates down to low levels. On average consumer price inflation in these countries is estimated to have reached 2.1% in 2003, which corresponds to the euro-area average (Table VI.4). Overall, the fall in inflation has to a large extent been due to exchange rate and monetary policy frameworks, which have taken a clear anti-inflation stance, while short-term factors, such as cyclical developments, exchange rate appreciation, and declining energy and food prices have also played an important role.

However, the pace of disinflation has varied across countries, and inflation has picked up recently in some of them (Graph VI.7). In 2003, inflation rates ranged from -1.1% in Lithuania to 8.5% in Slovakia. While Estonia, Malta and Poland have inflation rates below the euro-area average, Lithuania and the Czech Republic have experienced deflation. In the other countries, higher inflation rates reflect rapid wage growth (Hungary, Slovenia), exchange rate depreciation (Slovenia) and increases in indirect tax and administered prices (Slovakia). Inflationary pressures may increase in the short term, as a result of wage pressures, as well as the completion of price liberalisation and factors related to EU accession (indirect tax increases and adjustment of agricultural prices).

Inflationary pressures are likely to increase in the short term, as a result of the catching-up process, associated with the Balassa-Samuelson effect[21] and wage pressures, as well as the completion of price liberalisation and factors related to EU accession (indirect tax increases and adjustment of agricultural prices).

In parallel with progress in disinflation, convergence of interest rates has been impressive in the region as a whole in recent years. The fall in long-term interest rates has been fostered by positive market sentiment and the decline in risk premiums triggered by the prospect of EU accession.

Graph VI.7: **Harmonised consumer price index, 1997-2003**
(percent change)



Source: Commission services.

The behaviour of inflation in the new Member States has been a particular focus of attention for policymakers and academics, with a debate emerging as to why these countries tend to experience higher inflation rates than most euro area countries.

The Balassa-Samuelson hypothesis is probably the most frequently cited explanation for why catching-up countries should tend to experience higher inflation than advanced economies. In its simple form, the Balassa-Samuelson hypothesis postulates that catching-up countries will be subject to higher overall inflation than more mature economies due to higher productivity growth differentials between tradables and non-tradables sectors than in the euro area. In a two-sector economy – tradables and non-tradables (typically services) – prices in the tradables sector will be equalised to those of the partner country at the present exchange rate. Due to catching-up, productivity growth in the tradables sector is expected to be higher than in the more mature trading partner. As a result, there is room for wage increases in the tradables sector without loss of competitiveness. However, wage increases are likely to spill over to the non-tradables sector where productivity increases are smaller. Consequently, prices in the non-tradables sector are likely to increase resulting in an increase in the overall price index, an increase that is likely to be higher than the one in the more mature trading partner.

A number of authors have attempted to estimate the size of the Balassa-Samuelson effects in the new Member States. Results from these studies are summarised in Buiter and Grafe (2002b), Kovács (2003), von Hagen

[20] See Frankel (2004).

[21] Estimates of the size of this effect vary widely (see Box VI.1). See also European Commission (2002d).

and Zhou (2003) and Mihaljek and Klau (2003). Comparing estimates across studies is, however, not straightforward. The results can depend importantly on whether a particular study examines countries individually or as a group, on the similarity of data and measurement techniques across studies, and on the price indices used. In addition, several authors report on 'gross' Balassa-Samuelson effects on domestic inflation while others focus on the differential with the euro area.

The bulk of the estimates in Kovács' study suggest that Balassa-Samuelson inflation in the new Member States is in the order of 2 percent per year, similar to the effects reported for Spain and smaller countries in the euro zone prior to EMU. Mihajlek and Klau (2003) differentiate between domestic inflation caused by the relative sectoral productivity within the country and the inflation differential of the new Member States vis-à-vis the euro area. They estimate that in the second half of the 90s, the sectoral productivity growth differential within the country would explain 0.3-0.6 percentage points of domestic inflation in the Czech Republic, Slovakia and Slovenia and 1.5 p.p. in Poland and Hungary, while the relative sectoral productivity growth differential compared with the euro area would only explain 0.1-0.2 p.p. of the inflation differential vis-à-vis the euro area for Poland and Slovakia, about 0.5 p.p. for Hungary, 1 p.p. for the Czech Republic and 1.8 p.p. for Slovenia.

There are reasons to believe that the earlier stages of the transformation process have been characterised by rapid productivity increases in some sectors of the economy. Mihajlek and Klau (2003) think that the large productivity gains realised in central Europe in the second half of the 90s are not likely to be sustained until 2007-08 or even later. In their view, past increases in labour productivity have been due to both capital deepening and labour quality increases, the pace of which will diminish as the convergence to the euro-area proceeds.

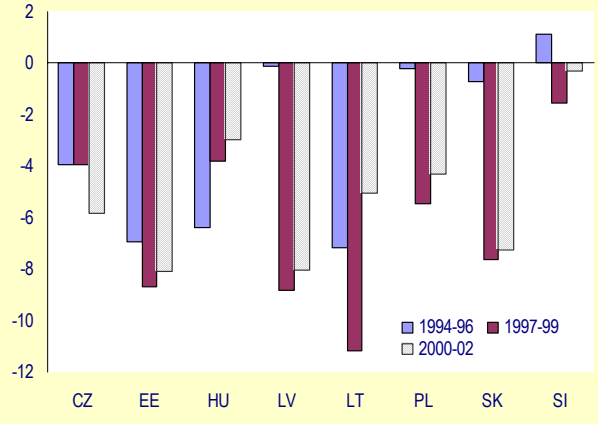
In addition to the Balassa-Samuelson effect, other factors – more related to the demand side of the economy – have been advanced in the literature to explain higher inflation performance in a number of new Member States relative to the euro area. While these factors are considered to be of a less permanent nature, their impact may have been important. One set is related to private consumption which has grown more rapidly than under central planning. The composition of consumption may also have changed, with an increase in spending on non-tradable goods, e.g. services, which may have been previously under-supplied. If productivity growth in the non-tradables sectors were unable to meet the increased demand, this overall increase and change in the composition of consumption may have given rise to an increase in the overall price level. Also, general government deficits may have risen for a period. It is likely that government consumption is weighted more towards non-tradable goods and thus may also have given rise to a jump increase in the domestic price level.

For transition economies, there may also be evidence that high rates of inflation experienced in the early years of transition was due to fiscal imbalances (Desai 1998). Again, this is likely to be a temporary phenomenon. Indeed, it can be argued that, since fiscal imbalances are expected to decline in many countries, this can lead to a tendency for the real exchange rate to depreciate, which may help to dampen the Balassa-Samuelson effect (Coricelli and Jazbec 2001). Lastly, price liberalisation may still contribute to inflationary pressures. While prices of most tradables are likely to have been liberalised earlier in the transformation process, some non-tradable goods may still be sold below market prices and deregulation of these administered prices may lead to a jump increase in the price index. Also, fundamental changes in tax systems, such as a shift towards indirect taxes, and alignment of some prices (such as of agricultural products) related to accession may have a temporary impact on price levels.

External accounts

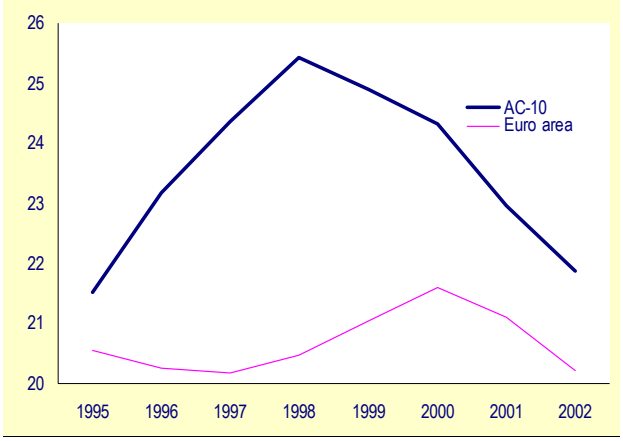
With the exception of Slovenia, the new central and eastern European Member States have run large current account deficits since the mid-1990s (Graph VI.8). Their deficits reflect high investment opportunities relative to their savings, as would be expected from catching-up economies (Graph VI.9). In some countries, large general government deficits have also contributed to creating wide external imbalances, especially in Slovakia.

Graph VI.8: **Current account balance, 1995-2002**
(as a percentage of GDP)



Source: Commission services.

Graph VI.9: **Investment ratios,** 1995-2002
(as a percentage of GDP)



Source: Commission services.

The new Member States as a whole had a current account deficit of 3.9% of GDP in 2002, with particularly high deficits in Estonia, Latvia and Slovakia, compared to a surplus of 0.8% in the euro area. In 2003, the average deficit in these countries is estimated to have decreased slightly to 3.7% of GDP. While an improvement took place in Cyprus, Poland and Slovakia following strong export performance, the deficits widened significantly in Estonia and Latvia, reaching levels close to or above 10% of GDP. The deficits increased also in the Czech Republic, Hungary and Lithuania, where they are close to 6% of GDP.

While relatively large, the current account deficits in the new Member States are not a source of immediate concern as regards their sustainability[22]. So far these deficits have been largely financed without much difficulty, mainly through FDI inflows. However, privatisation-related FDI inflows are already declining and will continue to do so in the coming years. In this context, it is essential that these countries maintain sound fiscal policies in order to limit future current account deficits. This will also contribute to ensuring a higher degree of macroeconomic stability and hence, enhancing the capacity of these countries to attract foreign capital[23].

Public finances

For the new Member States as a whole, the general government deficit reached 4.9% of GDP in 2002, well above the average for the euro area (Table VI.5). However, there are major differences between countries. Estonia posted a surplus of 1.8% of GDP, while the other countries had a general government deficit ranging from 1.4% of GDP in Lithuania to 9.3% of GDP in Hungary. Due to the loosening of fiscal policy (Poland), slippages (Czech Republic, Hungary), and the inclusion of state guarantees (Czech Republic, Malta), the average government deficit of the ten countries is estimated to have remained high, at 5.7% of GDP, in 2003 despite stronger growth. In most new Member States, the deficits seem to be mainly of structural nature.

Debt levels are relatively low in the new Member States. The aggregate government debt ratio for the ten countries amounted to 39.4% of GDP in 2002, well below the average of 69.2% for the euro area (Table VI.5). Cyprus and Malta were the only countries with a general government debt ratio above 60% of GDP. In 2003, the debt ratio for the ten countries as a whole is estimated to have increased slightly to 42.2% of GDP. Although debt levels are low, some countries, especially the Czech Republic, Malta and Poland, are experiencing developments in debt dynamics that may constitute a threat for the sustainability of public finances.

The overall level of expenditure in the new Member States is on average somewhat lower than in the EU-15 countries. Only in the Czech Republic, Hungary and Malta, the ratio of government expenditure to GDP was above 48% in 2002 (Table VI.5). A large share of government expenditure in these countries is mandatory or quasi-mandatory expenditure, i.e. expenditure determined by rules outside the budgetary process. The resulting fiscal rigidity is often compounded by indexation clauses for pensions and public-sector wages. Looking ahead, the new Member States will be confronted with increased expenditure pressures, arising from the completion of transition reforms, compliance with the Community *acquis* and the need for extensive investments in transport and environmental infrastructure.

Total government revenue in the new Member States averaged 41.1% of GDP in 2002, compared to 46.1% in the euro area (Table VI.5). In particular, the level of tax revenue is on average lower in the new Member States than in the EU-15 countries, in part reflecting the narrow tax base, generous tax exemptions as well as tax evasion. The tax burden on labour is also high which has an adverse effect on the labour market in several new EU countries (see below).

As in the EU-15 Member States, ageing populations raise concerns for the sustainability of public finances in the new EU countries. In most of them, the demographic trends are expected to be broadly similar to those in the EU-15 (Graph VI.10). In the Czech Republic and Slovenia, the old-age dependency ratio is expected to exceed the EU average in 2050, while Cyprus, Malta and Estonia face more moderate ageing pressures. Ageing populations could exert significant fiscal pressures in some new Member States (Table VI.6).

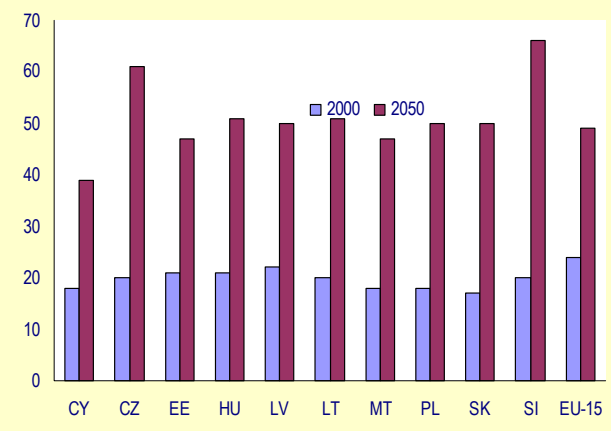
[22] See Zanghieri (2004).
[23] See European Commission (2003d).

Table VI.5: **New Member States: Public finances in 2002** (in percent of GDP)

	Government balance	Government revenue	Government expenditure	Government debt
Cyprus	-4.6	36.3	39.8	67.1
Czech Republic	-6.4	42.8	49.9	28.9
Estonia	1.8	39.5	38.5	5.7
Hungary	-9.3	44.5	53.7	57.1
Latvia	-2.7	41.9	44.9	15.5
Lithuania	-1.4	35.2	36.9	22.8
Malta	-5.7	42.6	48.8	61.7
Poland	-3.6	40.4	44.3	41.2
Slovak Republic	-5.7	36.5	43.7	43.3
Slovenia	-1.9	41.7	44.0	27.8
New MS	-4.9	41.1	46.3	39.4
EU-15	-2.0	45.5	47.4	62.5
euro area	-2.3	46.1	48.3	69.2

***Source**:* Commission services.

Graph VI.10: **Old-age dependency ratio, 2000 and 2050**



Source: Commission services, UN Population Forecasts (2002).

Several new EU countries, with low debt levels and having already introduced three-pillar pension systems, appear in a generally good position to cope with the budgetary impact of ageing populations. However, this is not the case for the countries that have made little progress in reforming the first pillar of their pension schemes (Czech Republic, Malta) or have a relatively high debt level (Malta).

Table VI.6: **New Member States: Public pension expenditures in 2000-50** (in percent of GDP)

	2000	2030	2050
Cyprus	8.0	11.9	14.8
Czech Republic	7.8	:	14.6
Estonia	6.9	:	:
Hungary	6.0	:	7.2
Latvia	9.8	:	:
Lithuania	5.3	6.0	7.0
Malta	5.4	:	:
Poland	10.8	9.6	9.7
Slovak Republic	7.9	:	:
Slovenia	13.2	19.7	18.1
EU-15	10.4	13.0	13.3

***Source**:* Economic Policy Committee (2003).

2.3. *Structural characteristics of the new Member States*

Structure of the economies

The transition process in the new central and eastern European Member States has led to a substantial increase in the size of the private sector as well as to large shifts in the sectoral composition of GDP and employment. In the 1990s, the general trend was towards a shift of the labour force from agriculture and industry to services. The structural changes were less pronounced in Malta and Cyprus which did not undergo the same economic transformation as the transition economies. All in all, these changes have brought the overall economic structures of the new Member States closer to those in the EU-15.

Agriculture still accounts for a larger share of total value added and employment in the new EU countries than in the EU-15 (Tables VI.7 and VI.8). The share of employment in agriculture is on average more than three times higher in this group of countries than in the EU-15. The difference between the new and the old Member States is more significant in terms of the share of employment in agriculture than in terms of GDP shares, which reflects the low average labour productivity in agriculture in the new Member States. In most of these countries, productivity growth would be increased by a further shift of the workforce from agriculture towards higher value-added sectors.

Table VI.7: **New Member States: Sectoral value added in 2001** (percent share)

	Agriculture	Industry	Services
Cyprus	4.0	20.0	76.0
Czech Republic	4.3	39.4	56.3
Estonia	5.7	28.8	65.5
Hungary	4.3	31.3	64.4
Latvia	4.8	24.7	70.5
Lithuania	7.2	31.5	61.3
Malta	2.6	27.3	70.1
Poland	3.8	31.3	64.9
Slovak Republic	4.5	31.8	63.7
Slovenia	3.3	36.1	60.6
New MS	3.9	33.5	62.6
EU-15	2.4	27.5	70.1
Euro area	2.1	27.7	70.2

Source: Commission services.

In most new Member States, the share of industry in value added remains higher than in the EU-15 (Table VI.7). As an employer, industry continues to have a larger role than in the EU-15, especially in the Czech Republic, Slovenia, and Slovak Republic (Table VI.8). In the new central and eastern European Member States, with the exception of Latvia, services still account for a lower share of total value added and employment than in the EU-15. In Latvia, the transition process has led to the collapse of the industrial sector and the parallel, rapid, development of the service sector which accounts now for a share of total value added close to the EU-15 average. In Cyprus and Malta, where tourism is of key importance for the economy, employment in the service sector is traditionally high.

Table VI.8: **New Member States: Sectoral breakdown of employment in 2001** (percent share)

	Agriculture	Industry	Services
Cyprus	4.9	24.0	71.1
Czech Republic	4.9	40.5	54.6
Estonia	7.1	34.2	58.7
Hungary	6.1	34.5	59.4
Latvia	15.1	25.3	59.6
Lithuania	16.5	27.2	56.3
Malta	2.2	31.8	66.0
Poland	19.2	30.7	50.1
Slovak Republic	6.3	37.1	56.7
Slovenia	9.9	38.6	51.4
New MS	13.3	33.2	53.6
EU-15	4.3	26.4	69.3
Euro area	:	:	:

Source: Commission services.

Labour market performance

With the transition to a market economy, most new Member States have experienced sharp declines in employment and a rapid increase in unemployment. The employment rate in these countries as a whole is lower than in the euro area, at about 56% of the working age population. Only Cyprus and the Czech Republic have an employment rate above the euro-area average (Table VI.9). In particular, the employment rates of older workers and women are low compared to the euro area.

Table VI.9: **New Member States: Labour market characteristics in 2002** (in percent)

	Unemployment rate	Employment rate	Employment rate of older workers	Long-term unemployment	Tax wedge on labour cost [1/]	EPL strictness index[2/]
Cyprus	3.9	68.6	49.4	0.8	17.5	:
Czech Republic	7.3	65.4	40.8	3.7	41.8	2.1
Estonia	9.5	62.0	51.6	4.8	37.4	2.6
Hungary	5.6	59.9	26.6	2.4	42.0	1.7
Latvia	12.6	60.4	41.7	5.8	41.3	:
Lithuania	13.6	59.9	41.6	7.0	41.4	:
Malta	7.4	54.5	30.3	3.2	18.1	:
Poland	19.8	51.5	26.1	10.9	41.4	2.0
Slovak Republic	18.7	56.8	22.8	12.1	40.3	2.4
Slovenia	6.1	63.4	24.5	3.3	39.8	3.5
New MS	14.8	55.9	30.4	8.1	41.1	:
EU-15	7.7	64.3	40.1	3.0	37.8	2.4
euro area	8.4	62.4	36.4	3.5	40.3	:

1/ For low wage earners, sum of the income tax on gross earnings and the employee's and employer's social security contributions expressed as a percentage of the total labour cost for this low wage earner.

2/ Employment protection legislation index. The index takes values between 1 and 6 and increases with the strictness of employment protection.

Source: Eurostat, European Commission (2003e) for EPL strictness index.

The unemployment rate in the new Member States is on average almost twice as high as that of the euro area. However, unemployment rates differ widely across countries. They range from 3.9% in Cyprus to almost 20% in Poland, reflecting to varying degrees labour shedding resulting from restructuring, cyclical influences and structural rigidities (Table VI.9). The new Member States display high rates of long-term and youth unemployment compared to the euro area and high unemployment among low-skilled workers. In addition, regional discrepancies in employment and unemployment are rather high in most new EU countries.

The persistence of high levels of unemployment and/or its concentration among certain groups or regions in most of these countries suggest that the problem results not only from cyclical factors and transition-related industrial shocks. Structural rigidities have also played a role and continue to hamper the smooth functioning of the labour market in the Czech Republic, Estonia, Hungary, Latvia, and Lithuania. The high tax burden on labour, especially at the lower end of the wage scale, is a particular problem in some new Member States (Table VI.9). In addition to the high tax wedge, generous social benefits, especially easy access to early retirement and disability schemes, may make working or returning to work a costly decision, and hence discourage labour market participation. Moreover, in some countries, the imperfect adjustment of wages to differences in productivity across skills, firms and regions may contribute to the persistence of high unemployment. High unemployment may also be the result from skills mismatches between the labour demand and supply linked to privatisation and business restructuring (see below), while regional disparities can be explained in part by low labour mobility. Finally, with the exception of Slovenia, the new Member States compare favourably with the euro area in terms of labour market flexibility, as measured by the strictness of employment protection legislation (Table VI.9).

Labour productivity and labour costs

In order to close the income-per-capita gap with the EU-15, it will be important for the new Member States to further increase labour productivity and total factor productivity as well as employment. The average labour productivity of the new Member States is just above half of that of the EU-15. The differences in labour productivity among the new EU countries mirror to a large extent their per capita income differences relative to the EU-15. Only Malta, Cyprus and Slovenia have a

labour productivity level above the lowest productivity level among the old Member States (Graph VI.11).

Labour costs in the new central and eastern European Member States are significantly below those in the EU-15. When converted into euros using current exchange rates, average monthly labour costs in manufacturing industry vary between 7.2% and 34% of the EU-15 level (Table VI.10).

Table VI.10: **Monthly labour costs per employee and unit labour costs in manufacturing**

	Monthly labour costs in 2000[1)]	Unit labour costs in 2001[1)]	Unit labour costs in 1995-2001[2)]
Czech Republic	17.7	30	3.9
Estonia	9.3	31	2.5
Hungary	20.5	29	-1.2
Latvia	8.0	33	3.9
Lithuania	7.2	25	14.1
Poland	22.2	46	2.6
Slovak Republic	13.6	22	0.8
Slovenia	34.0	72	1.9

1) Percentage of EU-15 level using current exchange rates.

2) Average growth in 1995-2001, percentage change.

Source: European Commission (2003g).

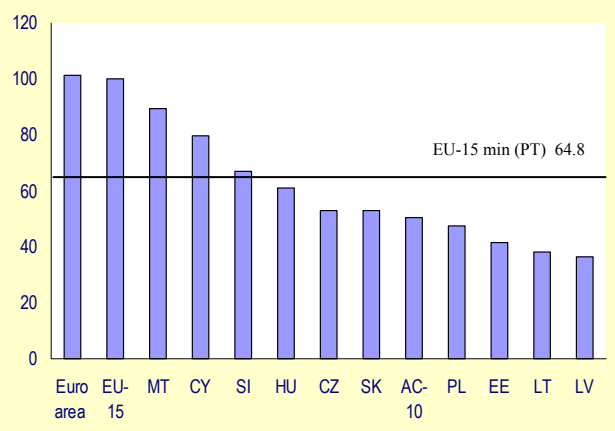
Average productivity in manufacturing in the new central and eastern European Member States is lower than in the EU-15. However, their lower wages more than compensate for the competitive disadvantage on the productivity side. Unit labour costs in manufacturing range from 25% of the EU-15 level in Lithuania to 72% in Slovenia (Table VI.10). Slovenia has the second highest labour productivity among the new central and eastern European Member States, while labour costs, albeit far below those in the EU-15, are higher than in the other countries, which reduces the relative cost competitiveness of Slovenia. In all the other central and eastern European countries, unit labour costs are less than half of those in the EU-15. The cost competitiveness of Hungary, the Slovak Republic, the Czech Republic and Poland is based mainly on their relatively high labour productivity, while the competitive advantage of the Baltic States lies essentially in the low level of labour costs.

Over the period 1995-2001, unit labour costs in manufacturing increased in all countries except Hungary (Table VI.10). Unit labour costs being a key determinant of competitiveness, a major challenge for the new Member States will be to ensure that real wage growth does not exceed productivity gains.

Human capital and transition towards the knowledge-based economy

The persistence of high levels of unemployment in the new Member States is often attributed to the existence of skills mismatches between labour supply and demand. This in turn points to deficiencies of the education and training systems that do not meet the needs of the labour market in terms of the production of knowledge and the adaptability of the labour force. Indicators of education are used as proxies for the level of human capital and in particular, provide information on the availability of workers with the skills needed for the development of a knowledge-based economy.

Graph VI.11: **Labour productivity per person employed in 2001**
(GDP in PPS per person employed relative to EU-15)



Source: Commission services.

Educational attainment of the population in the new Member States is higher than in the EU-15 when measured as a proportion of the adult population that has completed at least secondary education (Table VI.11). However, the situation is different as regards tertiary education. On the basis of the information available, only Poland, Latvia and Lithuania have a proportion of tertiary graduates per 1 000 persons in the age group 20-29 above the EU-15 average. As for the share of tertiary graduates in science and technology, only Lithuania has a ratio above the EU-15 average.

Table VI.11: **New Member States: Knowledge-based economy**

	Total R&D expenditure	Educational attainment [1)]	Total tertiary graduates [2)]	Graduates in science and technology [3)]
Cyprus	0.3	85.3	:	3.7
Czech Republic	1.3	91.7	25.4	5.5
Estonia	0.8	80.4	40.1	7.0
Hungary	1.0	85.7	:	4.5
Latvia	0.4	73.2	62.6	7.5
Lithuania	0.7	79.3	58.1	12.1
Malta	:	39.0	35.0	3.8
Poland	0.7	88.1	71.1	6.6
Slovak Republic	0.6	94.0	28.9	5.3
Slovenia	1.6	90.0	40.2	8.9
New MS	0.8	87.9	:	6.3
EU-15	2.0	73.8	40 [e]	9.5 [e]
euro area	1.9	72.8	:	:

1/ Percentage of the population aged 20 to 24 having completed at least upper secondary education in 2001.
2/ Total tertiary graduates (ISCED 5 and 6) per 1000 persons aged 20-29, in 2001.
3/ Number of graduates in science and technology per 1000 persons aged 20-29, in 2000.
e=estimated value
***Source**:* Commission services.

Overall spending on R&D in the new Member States is particularly low. In 2001, these countries spent 0.8% of GDP on R&D, compared to 1.9% in the euro area (Table VI.11). Moreover, the level of business investment in R&D is less than a third of the EU average. Investment in information and communication technologies (ICT) is also low on average in the new Member States. Poland, Lithuania and Slovenia invested less in ICT in 2002 than the EU-15 average. In general, the new EU countries lag significantly behind the existing Member States in the transition to the knowledge-based economy.

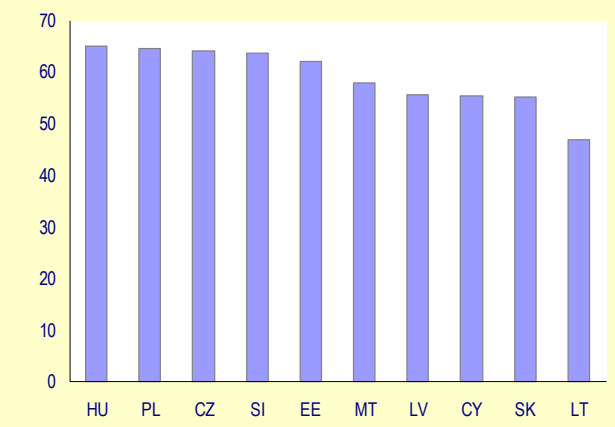
Efficiency of product markets

The new Member States have very open economies. All of them have a greater degree of trade openness than the EU-15 average. Only Poland and Cyprus have an integration rate below 50%. They also have close trade relations with the EU-15. However, large differences exist across countries, with some new EU countries being somewhat less integrated with the EU-15 (Cyprus, Latvia, Lithuania and Slovakia) (see Graph VI.12).

The product markets have experienced profound changes since the beginning of the transition process, notably through enterprise restructuring and privatisation. In most countries, the privatisation process is virtually completed. In others, the public sector remains large and privatisation is far from complete (Poland, Slovenia). In some countries, restructuring the agricultural sector remains a considerable challenge. In most countries, the structural changes in the economy have been stimulated by large FDI inflows.

In many new Member States, competition in product and service markets is still relatively weak. In most countries, competition policy is broadly in line with the EU *acquis* but further progress is needed to ensure that it is effectively enforced. All countries have started to liberalise their network industries but progress has been uneven. Too little information is available but it appears that in many countries, the level of competition in these industries is still insufficient. The liberalisation of the electricity and telecommunication markets is relatively advanced in many countries, but the liberalisation of the gas sector is proceeding at a much slower pace.

Graph VI.12: **Trade integration with the EU-15 in 2002**
(imports and exports to the EU-15 as a percentage of total trade)



Source: Commission services.

Table VI.12: **New Member States: Product market reforms**

	Comparative price levels[1/]	Total trade to GDP ratio [2/]	Total FDI inflows [3/]	Total State aid [4/]	Business investment [5/]	Market share electricity [6/]
Cyprus	83.1	49.6	4.6	1.0	:	99.6
Czech Republic	53.1	72.6	12.7	1.4	21.5	69.9
Estonia	56.1	93.8	4.4	0.5	:	90.0
Hungary	54.9	68.7	1.3	1.7	:	39.5
Latvia	50.4	50.6	4.8	0.7	23.1	95.0
Lithuania	51.1	53.1	5.3	0.6	17.8	77.1
Malta	71.9	88.5	-10.6	:	:	100.0
Poland	57.4	31.1	2.1	1.1	15.7	19.8
Slovak Republic	43.5	79.5	16.3	0.4	27.5	84.5
Slovenia	72.6	60.4	8.4	1.1	:	:
New MS	56.1	50.4	:	:	:	:
EU-15	100.0	14.4	4.4	0.8	17.2	45.0
euro area	97.2	:	:	:	17.8	:

1/ Ratio between the purchasing power parities and market exchange rate in relation to the EU-15, in 2002.
2/ In percent, average value of imports and exports of goods and services divided by GDP, multiplied by 100, in 2001.
3/ As a percentage of GDP, in 2002.
4/ Excluding aid to agriculture and fisheries, as a percentage of GDP, in 2000.
5/ Gross fixed capital formation by the private sector as a percentage of GDP, in 2002.
6/ Market share of the largest generator (% of total net generation), in 2001.

Source: Commission services.

A major issue in the new Member States is the high level of ad hoc and sectoral state aid which can have a significant distorting effect on the economy. Total state aid in the new Member States, excluding aid to agriculture and fisheries, ranged from 0.4% of GDP in Slovakia to 1.7% in Hungary in 2000, compared to 0.8% in the EU-15 (Table VI.12). Although the level of State aid has been declining in recent years, it is still above the EU-15 average in Cyprus, the Czech Republic, Hungary, Poland and Slovenia.

Financial sector development

Although the financial sector of the new central and eastern European Member States has undergone major changes since the beginning of the transition, these countries still lag behind the EU-15 in terms of stock market capitalisation, the level of financial intermediation, and the degree of liquidity. Only Cyprus and Malta have a financial sector that, in size, broadly resembles that of the old Members States. With the exception of Slovenia, all transition countries have completed or substantially advanced the restructuring and privatisation of their financial sector. Banks are generally sound and well-capitalised. Capital ratios exceed the Basle recommendation of 8% in all countries. The high degree of foreign ownership contributes to the stability of the banking sectors.

Despite considerable progress, the financial sector of the new Member States is still characterised by the dominance of banks and little-developed capital markets. Bond market capitalisation is about 30% of GDP, compared to 130% of GDP in the euro area, and equity markets are still small. Another feature of these sectors is the low level of financial intermediation. As of mid-2003, bank credit to the private sector was only about a third of the euro-area average. While access to finance for SMEs remains inadequate, bank lending to households has started to rise fast in many countries, although starting from low levels. In most countries, risks to financial stability stemming from rapid credit growth need to be carefully monitored.

2.4. Challenges facing the new Member States on the road to euro adoption

A majority of the new Member States have declared their intention to pursue an early adoption of the euro, and have tabled concrete strategies towards full monetary integration. Decisions on the timing of euro adoption need to take into account several economic factors and should be consistent with the institutional path foreseen by the EU Treaty including full compliance with Maastricht convergence criteria (see Box VI.1). On the road to joining the euro area, the new Member States are confronted with the key challenge of advancing real convergence. In order to close the income-per-capita gap with the old Member States, they need to: (i) increase employment rates, and (ii) raise their productivity.

First, to improve the *functioning of labour markets*, policy efforts need to focus on four issues: ensuring that real wage developments reflect productivity growth, improving the financial incentives to work by reforming the tax and benefit systems, improving human capital

formation, and undertaking appropriate reforms of labour market regulations.

Second, to improve their *productivity performance*, the new Member States need to concentrate policy efforts on speeding the restructuring of the agricultural sector, improving access of firms to finance, promoting competition in the economy, and increasing investment in physical infrastructure, ICT and R&D. Foreign direct investment can also play an important role to boost productivity growth, as FDI is a source for acquiring both technological and managerial knowledge, which is subsequently diffused throughout the economy. In this regard, measures to improve the business environment, the quality of the labour force and infrastructure contribute to increasing the attractiveness of these countries as a destination for both domestic and foreign investment.

In general, ensuring a successful participation in the euro area requires, among other things, reducing the susceptibility of the country to asymmetric shocks and enhancing the efficiency of adjustment mechanisms for absorbing such shocks in the absence of an independent monetary policy. Four elements are often quoted as being particularly important in this respect:

- *Synchronisation of business cycles with the euro area* should be strong. Empirical evidence suggests that the GDP growth rates of the new Member States are becoming increasingly correlated with those of euro-area members.
- *Fiscal policy* will be called upon to play an enhanced role in stabilising the economy in the run-up to the adoption of the euro and beyond. The key task will be to create sufficient budgetary room to manoeuvre in the event of unforeseen shocks. Given the higher cyclical volatility of the new Member States compared to the EU-15, ambitious fiscal consolidation targets and tax and expenditure reforms are required to create the necessary budgetary room for manoeuvre and also to avoid that high cyclical deficits give rise to adverse market reactions (e.g. downgrading of credit ratings). Moreover, fiscal policy will have to play a supportive role to contain current account pressures, as the private sector savings-investment balance might deteriorate.
- *Wage and price flexibility* must be pursued. While most new Member States compare well with the euro area as regards wage flexibility, there is substantial scope for increasing price flexibility. In this respect, it will be crucial to strengthen competition in product markets. This in turn requires more rapid progress with privatisation, better enforcement of competition rules, cutbacks in the use of administered prices, a reduction in the regulatory burden on business and greater support for entrepreneurship. Overall, improving the adaptability to unpredictable shocks will require fundamental structural reforms that will strengthen the resilience of the economies,
- *An appropriate level of competitiveness* needs to be maintained. After joining the euro area, the new Member States could experience a loss of competitiveness as a consequence of wage and price pressures in a context of buoyant domestic demand spurred by low real interest rates. These considerations underscore the need for the new EU countries to maintain wage growth consistent with productivity developments.

The economic strategies of the new Member States will inevitably have to take into account the potential vulnerabilities stemming from the characteristics of their economies. Several factors, such high rates of return on investment and improved economic fundamentals, will be at play that are likely to maintain or even increase the attractiveness of these countries for capital inflows. Large short-term capital inflows are volatile and hence could have disruptive effects on the economies of the new Member States. In addition, low current levels of bank credit to the private sector and high investment opportunities point to the likelihood of rapid credit growth that could produce overheating, high current account deficits and asset price bubbles. To contain any excesses in bank credit, it will be necessary for the new Member States to further strengthen financial regulation and supervision. In view of the large presence of foreign banks in these countries, cross border cooperation in financial supervision and financial crisis management will be important.

Box VI.1: **The new Member States and their transition to the euro area**

A majority of the new EU countries have declared their intention to adopt the euro as soon as possible after EU entry, and some of them have tabled concrete strategies towards full monetary integration. For a new Member State perspective on the benefits of euro adoption see National Bank of Poland (2004) and National Bank of Hungary (2002). A key issue is what would be the optimal timing for a successful entry in the euro area for these countries?

There is support among academics and within the new Member States for an adoption of the euro as soon as possible after accession. Buiter and Grafe (2002b) recommend the fastest possible transition to full EMU membership, possibly through a unilateral or consensual adoption of the euro prior to accession or upon accession, referred to as euroisation. One reason for this is that the catching-up process is likely to lead to upward price pressures, resulting in a trend real exchange rate appreciation which will make it difficult to achieve simultaneously nominal exchange rate stability and low inflation. Also, Begg *et al.* (2003b) consider that there is a strong economic case for euroisation. They view the time of ERM II membership as a delicate period of increased vulnerability to capital inflows and likely exposure to currency crises. However, the European institutions have stressed that euroisation is not compatible with the EU Treaty requirements. It would run counter to the logic of the EU Treaty which foresees the adoption of the euro as the end-point of a structured convergence process within a multilateral framework (European Commission, 2001c, and ECB, 2003e).

Another frequently cited reason for favouring a rapid adoption of the euro is an early achievement of the expected benefits from full EMU membership. Postponing adoption would defer the positive effects on economic growth (National Bank of Poland, 2004). Also, Balcerowicz (2003) views an early entry to the euro area and the associated requirement to fulfil the Maastricht criteria as a stimulus for fast and effective implementation of structural reforms and for introducing changes in macroeconomic policy that are conducive to long-term economic growth. Postponement increases uncertainty about the path of economic policy and about the commitment to carry out the necessary reforms in time.

However, there are also risks associated with a premature adoption of the euro by the new Member States. Most of them still have to complete their transition process, have made insufficient progress with public finance consolidation and are in the midst of a long-term catching-up process (Solbes, 2003). As a result, the European Commission and the ECB have called for prudence in setting target dates for euro adoption. In this regard, the ECB has stressed that it might be appropriate for some of these countries to consider applying for ERM II membership only after further progress in convergence has been achieved (ECB, 2003e). This would reduce the risk of currency crises and of choosing an inappropriate parity for the exchange rate (Issing, 2003).

Clearly, the appropriate time of entry into ERM II and subsequent euro adoption depends on the specific features of each individual country, including on the type of exchange rate regime in place. No single path towards full monetary integration with the EU can be identified and recommended (ECB, 2003e). Country strategies and situations will have to be assessed on a case-by-case basis.

An important consideration for decisions on the timing of full EMU membership is the need for fiscal consolidation. In the run-up to the adoption of the euro and beyond, fiscal policy will be called upon to play an enhanced role in stabilising the economy in an environment marked by substantial current account deficits and significant pressures on budgets. Some countries, especially those that currently record high fiscal imbalances, may need time to consolidate. A rush into the euro could therefore imply transitional output losses that would lead to a slowdown in real convergence. For example, in light of its large fiscal deficit, the Czech Republic has announced its intention to join the euro area only around 2009-2010 (Czech Government, 2003).

The present exchange rate regime will also condition the new Member States' transition to full monetary integration. For countries with floating exchange rates (Czech Republic, Poland, Slovakia, and Slovenia), adopting the euro will represent a policy regime change. In order to minimise the risks of increased volatility during the transition period, these countries need to formulate clear strategies towards the euro, aiming at sound public finances, low inflation, and strong financial sector supervision to ensure against the risk of credit booms (IMF, forthcoming). Also, economists argue that the presence of large capital flows may make it more difficult for small open economies to operate an exchange rate regime such as ERM II with an intermediate degree of flexibility (Begg *et al.*, 2003b, and Gros, 2002). In this context, some recommend that the countries delay their entry into ERM II until they are confident that they can satisfy all the Maastricht criteria within two years, so as to minimise the period during which they will participate in ERM II (IMF, forthcoming).

By contrast, the European Commission has stressed that ERM II should not be seen as a mere waiting room for the adoption of the euro but as a useful regime in its own right (European Commission, 2003h). Participation in ERM II should foster real and nominal convergence and help participating Member States in orienting their policies towards stability. The mechanism also helps to protect them and the other Member States from unwarranted pressures in the foreign-exchange markets (European Commission, 2003h).

Participation in ERM II is voluntary but Member States with a derogation are expected to join the mechanism at some point. Decisions on participation, central rates and fluctuation bands are taken by mutual agreement between euro area members, ERM II participants and the ECB. Following the common procedure, three countries (Estonia, Lithuania and Slovenia) joined ERM II on 27 June 2004. Estonia and Lithuania have joined the exchange rate mechanism while maintaining their currency board arrangement in place as a unilateral commitment, thus placing no additional obligations on the ECB. The agreements on participation into the exchange rate mechanism are based on a firm commitment on the part of these three countries to implement the right policies, including sound fiscal policy and the necessary measures to contain domestic credit growth, in order to ensure a successful participation.

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