OECD Economic Surveys

Euro area

OECD

Volume 2004/5 – September 2004

OECD ECONOMIC SURVEYS

2004

Euro area

ORGANISATION FOR ECONOMIC CO-OPERATION AND DEVELOPMENT

ORGANISATION FOR ECONOMIC CO-OPERATION AND DEVELOPMENT

Pursuant to Article 1 of the Convention signed in Paris on 14th December 1960, and which came into force on 30th September 1961, the Organisation for Economic Co-operation and Development (OECD) shall promote policies designed:

- to achieve the highest sustainable economic growth and employment and a rising standard of living in member countries, while maintaining financial stability, and thus to contribute to the development of the world economy;
- to contribute to sound economic expansion in member as well as non-member countries in the process of economic development; and
- to contribute to the expansion of world trade on a multilateral, non-discriminatory basis in accordance with international obligations.

The original member countries of the OECD are Austria, Belgium, Canada, Denmark, France, Germany, Greece, Iceland, Ireland, Italy, Luxembourg, the Netherlands, Norway, Portugal, Spain, Sweden, Switzerland, Turkey, the United Kingdom and the United States. The following countries became members subsequently through accession at the dates indicated hereafter: Japan (28th April 1964), Finland (28th January 1969), Australia (7th June 1971), New Zealand (29th May 1973), Mexico (18th May 1994), the Czech Republic (21st December 1995), Hungary (7th May 1996), Poland (22nd November 1996), Korea (12th December 1996) and the Slovak Republic (14th December 2000). The Commission of the European Communities takes part in the work of the OECD (Article 13 of the OECD Convention).

Publié également en français.

© OECD 2004
Permission to reproduce a portion of this work for non-commercial purposes or classroom use should be obtained through the Centre français d'exploitation du droit de copie (CFC), 20, rue des Grands-Augustins, 75006 Paris, France, tel. (33-1) 44 07 47 70, fax (33-1) 46 34 67 19, for every country except the United States. In the United States permission should be obtained through the Copyright Clearance Center, Customer Service, (508)750-8400, 222 Rosewood Drive, Danvers, MA 01923 USA, or CCC Online: *www.copyright.com*. All other applications for permission to reproduce or translate all or part of this book should be made to OECD Publications, 2, rue André-Pascal, 75775 Paris Cedex 16, France.

Table of contents

© OECD 2004

●●●●●

Boxes

Tables

© OECD 2004

Figures

© OECD 2004

© OECD 2004

BASIC STATISTICS

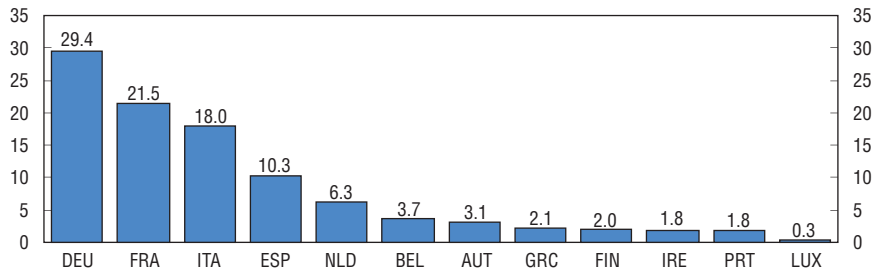
2003

	Euro area	United States	Japan
LAND AND PEOPLE			
Area (thousand km^2)	2 456	9 167	395
Population (million, in 2002)	304.9	288.6	127.4
Number of inhabitants per km^2	124	31	323
Population growth (1995-2002, annual average % rate)	0.3	1.3	0.2
Labour force (million)	142.6	146.5	66.7
Unemployment rate (%)	8.8	6.0	5.3
ACTIVITY			
GDP (billion USD, current prices and exchange rates)	8 183.4	10 857.2	4 300.9
Per capita GDP (USD, current prices and PPPs, in 2002)	25 566	36 121	26 852
In per cent of GDP:			
Gross fixed capital formation	19.8	18.4	23.9
Exports of goods and services	18.8	9.5	11.8
Imports of goods and services	17.1	14.1	10.2
PUBLIC FINANCES (per cent of GDP)			
General government: Revenue	45.3	30.7	29.2
Expenditure	49.0	35.7	37.7
Balance	–2.7	–4.8	–8.0
Gross public debt (end-year)	76.2	62.8	157.3
EXCHANGE RATE (national currency per euro)			
Year average		1.13	131.0
January		1.06	126.1
December		1.23	132.4

EURO AREA – EXTERNAL TRADE IN GOODS (main partners, % of total flows, in 2002)

	Exports	Imports
Denmark, Sweden, United Kingdom	23.8	19.4
New European Union member countries	10.3	9.4
Other Europe	15.2	15.3
OECD America	19.6	14.9
OECD Asia/Pacific	5.6	8.6
Non-OECD dynamic Asian[1] and China	7.1	11.9

SHARE IN EURO AREA GDP (current market prices)



1. Chinese Taipei; Hong Kong, China; Indonesia; Malaysia; Philippines; Singapore and Thailand.

Executive summary

The adoption of the euro represented a major step forward towards deeper economic integration. However, developments in the first five years of the single currency have been challenging. The global slowdown has affected the euro area more strongly than had been expected, with below potential growth continuing for four years. Growth has been recovering more slowly than elsewhere, with domestic demand staying particularly weak as consumer confidence failed to rebound. The OECD is projecting the recovery to gather steam in 2005, with growth of 2½ per cent. Unemployment is projected to stay stubbornly high, while inflation is expected to ease to below 1½ per cent in 2005.

The closer integration that monetary union was seen as bringing has not yet translated into any visible strengthening of trend growth or increased dynamism. While monetary policy has done relatively well and established its credibility, fiscal policies have fared less well. Many euro area governments failed to take advantage of the last upturn to establish better budgetary positions. Fiscal policy was not made consistent with the longer-term requirements stemming from ageing populations, thus contributing to the uncertainty among households and removing the room for fiscal action. Structural reforms, required to move the euro area economy towards the ambitious targets set by the Lisbon summit in 2000, have been hesitant and piecemeal.

Against this backdrop, the *Survey* puts forward a number of policy recommendations that seek to heighten the area's resilience against adverse shocks, to reap the benefits from deeper integration and to reverse the persistent underutilisation of labour and weak productivity in lagging regions and countries. Specifically:

- Countries should avoid past fiscal mistakes by rooting their budgets in medium-term frameworks. More ambition in consolidating budgets is needed, independent of the fiscal rules enshrined in the Maastricht Treaty and the Stability and Growth Pact, which in many countries are the minimum required to underpin the sustainability of the public finances in the face of ageing populations.
- Given the common exchange rate and interest rate, a swift inter-country adjustment of wages and prices to slack is crucial for the area's resilience

© OECD 2004

and the effectiveness of monetary policy. Therefore the exposure of countries to product market competition should be enhanced, wage flexibility raised and a smooth functioning of housing and mortgage markets should be ensured.

- In order to boost employment and productivity growth in the area as a whole, product, labour and financial market policies in the least-performing countries and regions need to be aligned with the best performers in the area. Importantly, a single market for services should be achieved, financial markets better integrated and the conditions for innovation and diffusion improved. This would bring overall performance closer to the Lisbon targets and would help to move towards sustainable fiscal positions.

© OECD 2004

This survey is published on the responsibility of the Economic and Development Review Committee of the OECD, which is charged with the examination of the economic situation of member countries.

•

The economic situation and policies of the euro area were reviewed by the Committee on 8 June 2004. The draft report was then revised in light of the discussions and given final approval as the agreed report of the whole Committee on 20 July 2004.

•

The Secretariat's draft report was prepared by Paul van den Noord, Laurence Boone and Line Vogt under the supervision of Peter Hoeller.

•

The previous Survey of the euro area was issued in July 2003.

Assessment and recommendations

The key challenges for economic policy are:

The adoption of the euro by 12 European Union (EU) countries represented a major step forward in the pursuit of economic integration: financial markets have deepened and competition has been stimulated. Business cycles have become more synchronised and structural unemployment has declined. However, the protracted period of sub-potential growth since 2001 has exposed major policy challenges. Policy should focus on boosting non-inflationary growth and strengthening resilience to shocks, fostering cohesion and putting the public finances on a sustainable basis:

• Raising economic growth and resilience to shocks

- *Growth and resilience against shocks.* Income per capita is lower in the euro area than in the best performing OECD countries and the gap is widening. Moreover, although the epicentre of many of the adverse shocks that prompted the global downturn since 2001 was in the United States, slack has been more persistent in the euro area. Key challenges are to reduce the persistent underutilisation of labour resources, to boost productivity growth and to bolster the area's resilience against shocks.

• Fostering cohesion among countries and regions

- *Cohesion.* Differences in economic performance across euro area countries and regions have remained large. With labour mobility in the euro area low, a key challenge is to reap the benefits of further economic integration amid concerns that the resulting gains in activity may not spread evenly across countries and regions. The policies that influence convergence in living standards across the area are largely the same that shape the economic performance of the area as a whole.

• Ensuring sustainable public finances

- *Public finances.* Ensuring the sustainability of public finances in the face of ageing populations is another

© OECD 2004

key challenge, not least because it also impinges on growth, resilience and cohesion. Bringing fiscal policies on to a sound footing, while avoiding a rise in the already high tax burden, is vital for confidence and economic efficiency.

These challenges have become even more pertinent with the accession of ten new EU members on 1 May 2004. Although the economic weight of the new members is relatively small, their entry into the Union has substantially raised its diversity. Rapid nominal and real convergence must be secured in the run-up towards their entry into the euro area.

A recovery is underway

In the past three years the world economy has been hit by an unusual series of negative shocks – the bursting of the bubble in the information and communication technology sector, accounting scandals, epidemics, terrorist attacks and geopolitical stress. While it is not surprising that the euro area went into a downturn following the 1995-2000 upswing, it is striking that growth has been recovering much more hesitantly than in many other OECD countries. Domestic demand has remained particularly weak, which is to some extent due to subdued consumer confidence, but has started to recover recently. Looking forward, the OECD projects a shallow recovery in 2004, which should gather steam in 2005 with growth of 2½ per cent. In these projections, the output gap would remain large and start to close only slowly in 2005. Helped also by the strong exchange rate, inflation is expected by the OECD to decline to 1½ per cent in 2005. However, there are upside risks to the inflation projections mainly due to high oil prices and uncertainties concerning further increases in indirect taxes and administered prices.

Monetary policy should remain accommodative as long as the medium-term inflation outlook remains favourable

In the May 2003 review of its policy strategy, the European Central Bank (ECB) reiterated its definition of price stability, but clarified that in the pursuit of price stability it aims to maintain inflation rates close to but below 2 per cent over the medium term in line with its past conduct of policy. At this juncture, policy-determined interest rates are likely to remain on hold as long as the medium-term inflation outlook remains favourable. If evidence of weakening of economic

© OECD 2004

activity surfaces, moderating inflationary pressures, the ECB should stand ready to reduce its interest rates. At the same time, the ECB should continue to be vigilant to upside risks.

Fiscal co-ordination is under stress

The most acute macroeconomic policy challenge relates to fiscal consolidation and co-ordination, which is vital for the single currency, but currently under stress. The Stability and Growth Pact (SGP), which is the backbone of the co-ordination framework, commits governments to reduce budget deficits to close to balance or move to surplus and then let automatic stabilisers play unfettered while respecting the 3 per cent of gross domestic product (GDP) ceiling for the budget deficit stipulated in the Treaty. The experience with this framework is mixed, at best. In part reflecting the unexpected depth and duration of the downturn, balancing the overall budget has been put off by about five years compared with the "stability programmes" submitted by the governments to the Commission and the Council of Ministers at the eve of the downturn. At present six euro area countries (France, Germany, Italy, Greece, the Netherlands and Portugal) are, or are projected to be, experiencing deficits above 3 per cent of GDP. Several countries were already subject to an Excessive Deficit Procedure under the Treaty rules. In November 2003, the Council decided to "hold in abeyance" the procedure in two cases, which resulted in uncertainty regarding the implementation of budgetary surveillance.

Support for the fiscal framework has been diluted

The proximate cause of the successive breaches of the fiscal rules lies in the underestimation of the depth and duration of the economic downturn. However, the deeper cause lies somewhere else. Most countries that are likely to experience deficits above the 3 per cent threshold eased fiscal policy in the economic upswing of 1999-2000 and then found it hard to reverse this in the downswing. In particular, some member states implemented tax cuts that were based on the then prevailing strong growth assumptions. At that time they were considered to be in line with the requirements of the SGP but in an *ex-post* perspective they added to the deterioration in the fiscal balances. The impressive fiscal consolidation in the run-up to the single currency to meet the Maastricht Treaty convergence criteria apparently

© OECD 2004

stalled as soon as the currency was created. The support for the SGP has been diluted, and the credibility of enforcement has suffered. This is of concern because the fiscal rules are essential for the macroeconomic management of the euro area. They are necessary to avoid lack of fiscal discipline in one or several member countries spilling over into the financial conditions facing the others. The rules had also established a medium-term anchor for fiscal policy, thereby creating room for the automatic stabilisers to smooth country-specific cyclical swings following the loss of national monetary policy instruments. More fundamentally, and even on an optimistic assessment of the fiscal impact of population ageing, the close-to-balance or in surplus rule is the minimum required in the next two decades to underpin fiscal sustainability beyond this horizon. Work should continue to assess the impact of ageing on longer-term fiscal sustainability on a comparable basis across countries.

A repeat of past fiscal policy mistakes must be avoided

With ageing-related fiscal pressures building up, a repeat of past policy errors – a weakening or reversal of consolidation efforts amid buoyant cyclical conditions – would be even more costly than they recently have been. Against this backdrop, it would be wise to strengthen the surveillance and enforcement of the rules during cyclical upswings and to take into account more explicitly countries' indebtedness. Specifically:

- *Countries should ensure that their budgetary procedures stem the inherent dynamics towards spending rising faster than* GDP, *in line with the* OECD Best Practices for Budget Transparency. *Fiscal policy should be rooted in medium-term frameworks that act as a hard budget constraint, based on prudent macroeconomic projections. Budgeting should be top-down, with new expenditure funded, a fortiori, by reallocation within or across spending ministries.*

- *The adoption of such* Best Practices *is needed irrespective of the* Union's *fiscal rules, but the rules could act as a catalyst for change if fiscal surveillance and enforcement could be strengthened, including during cyclical upswings. The Commission should dispose of the resources needed to see to it that the stability programmes are implemented. The* Early Warning Procedure *should become an effective preventive instrument in the hands of*

© OECD 2004

the Commission – rather than in the hands of the Council who is party and judge.

- *Stronger surveillance and enforcement may create room for building more flexibility into the Pact. It could help to raise the countries' ownership of, and commitment to, the rules. Already in 2002, the Council endorsed the principle that the close-to-balance or in surplus rule should apply in cyclically-adjusted rather than in nominal terms. For instance, increased flexibility could be considered for countries that have achieved sound public finance and low levels of debt, to allow for financing possible upfront costs of pension reform (e.g. a move towards funded private pension schemes, while desirable for efficiency reasons, may lead to deficits in public pension schemes) or other structural reforms.*

Swift inter-country adjustment is crucial for the area's resilience

The efficiency gains stemming from the single currency in terms of lowering transaction costs and deepening the internal market are large. But for individual member countries the loss of monetary policy instruments carries a potential cost in terms of larger swings in economic activity, depending on the degree to which business cycles and the shocks that shape them still differ. In the absence of monetary policy instruments, and with the leeway for fiscal policy also limited, adjustment will have to rely on changes in external competitiveness operating through wages and prices. In the first five years of the euro area's existence, economic performance across the individual economies has differed considerably, with activity in Germany and Italy subdued, but strong in some smaller countries. Equilibrating forces coming through external competitiveness have been at work to some extent, but not uniformly so; where they were at work, the competitiveness gains were in some cases too small to pull the economy out of stagnation. Moreover, as inflation differentials between some of the more dynamic and the more sluggish economies widened, real interest rates reinforced cyclical differences, with soaring house prices in the dynamic economies producing wealth effects on consumption. Since country-specific shocks (and country-specific responses to global shocks) will remain a feature of the euro area, swift inter-country adjustment is crucial for the area's resilience – not least because it would allow a more effective monetary policy response.

© OECD 2004

Structural policies could help to generate faster adjustment

A number of priorities for policy in the pursuit of more rapid inter-country adjustment emerge:

- *The effectiveness of the competitiveness channel should be enhanced. In particular the integration of services sectors should be stepped up to raise intra-area competition so as to reduce price inertia.*
- *Wage flexibility should be raised. Nominal wage rigidities, which may become more prevalent in a low inflation environment, must be tackled to shorten the adjustment period after an adverse shock.*
- *Cross-country differences in housing market institutions are striking. Policies in the pursuit of well-functioning housing markets, while aiming to avoid excessive price volatility may help to smooth the cycle and stem country-specific shocks.*
- *The social security and tax systems that underpin the automatic fiscal stabilisers should be designed so as to ensure that the incentives to which they give rise strengthen the flexibility of labour and product markets.*

The convergence of living standards across the area has been slow

The convergence in economic development is a prime policy goal of the European Union. Various regions were hard hit by industrial restructuring and the successive waves of enlargement involved countries and regions whose per capita income was far below the average. Per capita GDP has tended to converge between countries, but evidence of convergence across regions is mixed. This slow pace of convergence may partly reflect the timid pace of integration, while the evolution of human and physical capital endowments was uneven across countries and regions, with a north-south divide in skills and technology diffusion being prominent. Moreover, ill-devised labour market policies tend to trap labour in lagging regions. Many of the obstacles to stronger convergence can be overcome. However, trade offs can arise if agglomeration gains are large as some regions will win and some will lose, although there is little evidence for increased specialisation so far. Therefore, to maximise the welfare gains from economic integration, while keeping a diversified industrial base, regional policies should seek to raise the attractiveness of lagging regions in a cost-effective way.

© OECD 2004

A single market for services is needed

The single market strategy is the Community's core instrument for product market policies, and it has largely achieved the creation of an integrated market for goods. However, there are numerous barriers to the integration of service markets, including impediments to cross-border establishment, posting of workers and service provision. Commission initiatives to cut red tape and enforce the mutual recognition principle are welcome, but the implementation will take considerable time and some sectors are excluded. Therefore:

- *The removal of cross-border barriers for services should be speeded up and the risk that the proposed measures will be watered down in the negotiations between the Commission and the member countries needs to be contained.*

- *Sectors for which the Commission's proposals foresee derogations or that are already covered by* EU *legislation should be included as far as possible in the liberalisation efforts. The coverage of the proposed services* Directive *should cast its net as wide as possible, taking into account the fact that certain sectors, among which financial and transport services, are already covered by* EU *legislation. For some other services, derogations may be foreseen as more analysis is needed before issuing a proposal.*

Financial services should be better integrated

By eliminating exchange risk on the bulk of financial flows within the EU, the advent of the euro has been an important factor in fostering the integration of financial markets, although the degree of integration varies from market to market. The interbank market is now fully unified, while bond markets are substantially integrated. However, cross-border equity investment is still relatively costly and retail markets, including mortgage markets, have remained segmented. While cross-border mergers of financial institutions are not widespread, there have been examples of regional consolidation *e.g.* in the Benelux and Nordic countries, and several significant pan-EU financial conglomerates have emerged. The bulk of the Financial Services Action Plan (FSAP) – the Community's central tool to foster integration of financial markets – has been largely completed at the EU level, with a deadline of end-2005 for transposition of the various legislative measures into national law. While it is too early to assess overall progress in transposition, the Commission

© OECD 2004

has opened several infringement procedures against member states. Political agreement has not yet been reached on three proposed Directives relating to cross-border mergers, aspects of company law and capital adequacy. Looking forward, the Commission has launched a process to take stock of progress in financial integration, to address the need for effective implementation and enforcement of the measures agreed in the FSAP and to identify remaining barriers to further integration.

- At this juncture, the key issue is to achieve fast and consistent implementation of the Directives at national level so as to reap the gains from integration.
- The Takeover Bid Directive, which was finally passed by the European Parliament last December, risks favouring national champions. It allows countries to opt out and fails to address issues that allow a minority of (national) shareholders to keep control over a company. This is unfortunate.
- The European Union has adopted the Regulation on International Accounting Standards (IAS) in 2002. Accordingly, all European securities issuers will have to respect IAS standards as from 2005 (with a few exceptions as from 2007). Another measure of the FSAP – the Transparency Directive which was agreed at political level in spring 2004 – covers inter alia third country securities issuers, which will have to prepare financial statements either under IAS or under third country generally accepted accounting principles provided the Commission recognises the latter as equivalent in the meantime. That directive will not be applicable before autumn 2006. On the IAS-Regulation, member states should also facilitate timely change to IAS for EU companies. On the future Transparency Directive, the Commission is invited to ensure legal certainty for third country issuers on the equivalence issue at the earliest possible stage.

The conditions for innovation and diffusion should be improved

A broad range of indicators measuring innovation and the diffusion of new technology reveal a considerable gap for the area and the best performing OECD countries. In addition, within the area there appears to be a "north-south" divide – with the southern European countries lagging. In any event, the aim of policy should not be to ensure that all regions can contribute equally to innovation, but rather to ensure that all regions can take full advantage of

© OECD 2004

innovation by encouraging them to implement ambitious innovation strategies. There are three levers for policy: improving (tertiary) education, raising research and development (R&D) investment and fostering business creation. Community action – aside from serving as a platform for mutual learning and exchange – concentrates among others on enhancing supply and mobility of researchers and mobility of students, fostering cross-border research projects and co-ordination of national and regional research programmes, as well as implementing mutual recognition of diplomas and the Community Patent. There is scope for improved settings for each of the three policy levers:

- *Investment in higher education should be raised by seeking a more balanced mix between public and private funding to facilitate the development of first grade institutions.*
- *Bankruptcy laws should be streamlined and restrictions on individual debtors of a pecuniary or criminal nature should be eased to encourage business creation. Early insolvency procedures should be developed and rescue and restructuring proceedings simplified.*
- *Private funding of R&D, which is well below that in the United States, should be encouraged by improving framework conditions, including pursuing the Community Patent, applying the provisions for cross-border public procurement to research as well and establishing a single market for research that favours the emergence of centres of excellence.*

Labour markets should become more integrated and flexible

With the exception of certain areas where economic integration is already high, labour mobility in the euro area is low. Several peripheral regions have a high proportion of the least mobile low-skilled workers with unemployment staying stubbornly high. Regional differences in employment and unemployment persist partly because of low interregional and (*a fortiori*) cross-country mobility of workers, while wages are often not in line with local labour market conditions. The fact that local wage costs are usually bound by a national wage floor deters capital flows within countries, making it difficult for lagging regions to take off. While the Community has only limited competence on labour market policies, the 2000 Lisbon European Council and the 2001 Stockholm European Council set ambitious targets for the

© OECD 2004

Union as a whole. Making progress towards achieving the targets depends to a large extent on progress in creating more flexible labour markets at the regional level. Specifically:

- *Wages should be made more responsive to local conditions.*
- *Overly strict employment protection legislation, which tends to limit the geographic mobility of insiders while unduly raising their bargaining power, should be reformed.*
- *Tax and benefit systems that simultaneously hamper labour mobility and trap workers in inactivity should be recalibrated to strengthen incentives to search for a job.*
- *The portability of occupational pensions should be promoted, in particular regarding the acquisition and preservation of pension rights in a fund and the transferability of pension capital between funds. Wherever there is scope to improve the cross-border portability of other benefit entitlements, this should also be facilitated.*
- *To foster mobility, tax incentives for owner-occupation that squeeze the rental market should be reduced, high transaction costs for property lowered and re-queuing requirements to qualify for access to social housing in another region eased.*
- *Finally, once the transaction cost of mobility has been reduced, unemployment benefits should be administered on the basis of a mutual obligation whereby beneficiaries receive benefits and job search services while showing readiness to accept a job in other locations.*

Regional policy could be better focused

The Community's cohesion policy aims to speed up regional convergence and competitiveness, with structural and cohesion funds topping up national or regional development programmes. Regions mainly become eligible to EU funds if their level of per capita income falls short of the EU average by a certain margin or if they face problems with economic restructuring. There appears to be considerable scope to raise the effectiveness of this policy. A number of changes could be instrumental in this regard:

- *Given the limited financial scope within the EU budget and the need to raise efficiency, it might be better to allocate the structural funds and the cohesion fund to those countries and regions that most need them. This better focus appears especially pertinent with the enlargement of the European Union and the wider*

© OECD 2004

disparities it entails along with the persistent backwardness in other regions of the Union.

- *It is important that regional development orientations and programmes be focused on real convergence in line with the EU priorities for sustainable growth and be consistent with the EU economic policy framework and the Broad Economic Policy Guidelines. The Commission has proposed to base regional policy on three major goals: cohesion, competitiveness and co-operation.*
- *EU spending on regional development should be conditional on the capacity of the region or country to properly channel and absorb the funds and there should be more adequate evaluation of the costs and benefits for the region and beyond – capacity building is important in this context. Sunset clauses, making the funds' availability limited in time should be introduced.*
- *The Common Agricultural Policy (CAP) has a regional dimension. An important reform of the CAP was agreed by the Council in June 2003 involving a significant further step towards decoupling support from production decisions. Support will remain linked to farms' historical entitlements and significant levels of price support will remain in some sectors, although for some products which were not included in the reform measures were agreed in April 2004 (tobacco, cotton, hop and olive oil) while the revision in the sugar sector is still ongoing. The continued pursuit of the ambitious goal set with the 1992 reform of the CAP, namely to increasingly expose agriculture to foreign competition, would heighten efficiency and lower prices.*

Summing up

The euro area has shown disappointing resilience to shocks and its income gap against the best performing countries remains large and is widening. The differences between individual euro area countries are even more striking and the forces that influence convergence in economic performance across the area are largely the same as those that shape the economic performance of the area:

- *Structural policies need to focus on speeding up price and real wage adjustment and raising labour mobility so as to enhance resilience against shocks and to avoid inter-regional and inter-country differences becoming entrenched.*
- *Goods, services and financial market integration must be deepened with a view to raising the area's growth potential. The take-*

© OECD 2004

up of new technologies and human capital investment must be encouraged.

- *Fiscal policy must become more forward looking to improve the sustainability of public finances and, by increasing consolidation in good times, avoid pro-cyclical biases and create room for greater short-run flexibility. This requires both national budget institutions and the surveillance and enforcement at the* EU *level becoming more effective.*

If product and labour market policies in the least-performing areas were to be aligned with the euro-area average, employment and economic growth would rise substantially in the area as a whole. Importantly, this would bring performance closer to the Lisbon targets and would help to move towards sustainable fiscal positions and meet the requirements of the SGP. These challenges have become even more pertinent with the accession of ten new EU-members on 1 May 2004.

© OECD 2004

I. Outlook and challenges

The adoption of the euro by 12 of the then 15 members of the European Union[1] represented a major step forward in the pursuit of economic integration, building upon and enhancing the achievements of the single market strategy. With the exchange risk disappearing, financial markets have deepened. Funding costs for European corporations have declined and corporate bond issues have soared. Mergers and acquisitions surged, strengthening the corporate sector. Price comparisons have become easier, which stimulates competition. Asymmetric policy shocks within the area have become less frequent and national business cycles seem to be more synchronised.

Still, developments during the first five years of the single currency have been more challenging than expected. The global slowdown has affected the euro area more strongly than had been expected, with below potential growth continuing for four years. The closer integration that monetary union was seen as bringing has not yet translated into any visible strengthening of trend growth. While monetary policy has done relatively well and established its credibility, fiscal policies have fared less well. Several countries failed to move toward the medium-run fiscal goals set by the Stability and Growth Pact (SGP) at the cyclical peak in 1999-2000 and as a result went beyond the Treaty limits in the downturn, resulting in unpleasant tradeoffs between long- and short-run goals. The co-ordination of fiscal policies – seen as essential as monetary policy is centralised – is under stress. Finally, progress in implementing the structural reforms required to meet the ambitious targets on issues such as competitiveness, innovation and labour participation set by the Lisbon summit in 2000 have been hesitant and piecemeal.

Against this backdrop this chapter highlights challenges that euro area policy makers are facing at the current juncture:

- How to raise non inflationary economic growth, reduce the persistent underutilisation of labour resources, boost productivity and strengthen the resilience against shocks?
- How to reap the benefits of further economic integration amid concerns that the resulting gains in activity may not spread evenly across countries and regions?

© OECD 2004

- How to ensure the sustainability of public finances in the face of ageing populations while avoiding a rise in the already high tax burden?

This is preceded by a discussion of the macroeconomic developments since the euro area was reviewed a year ago.

Recent trends and projections

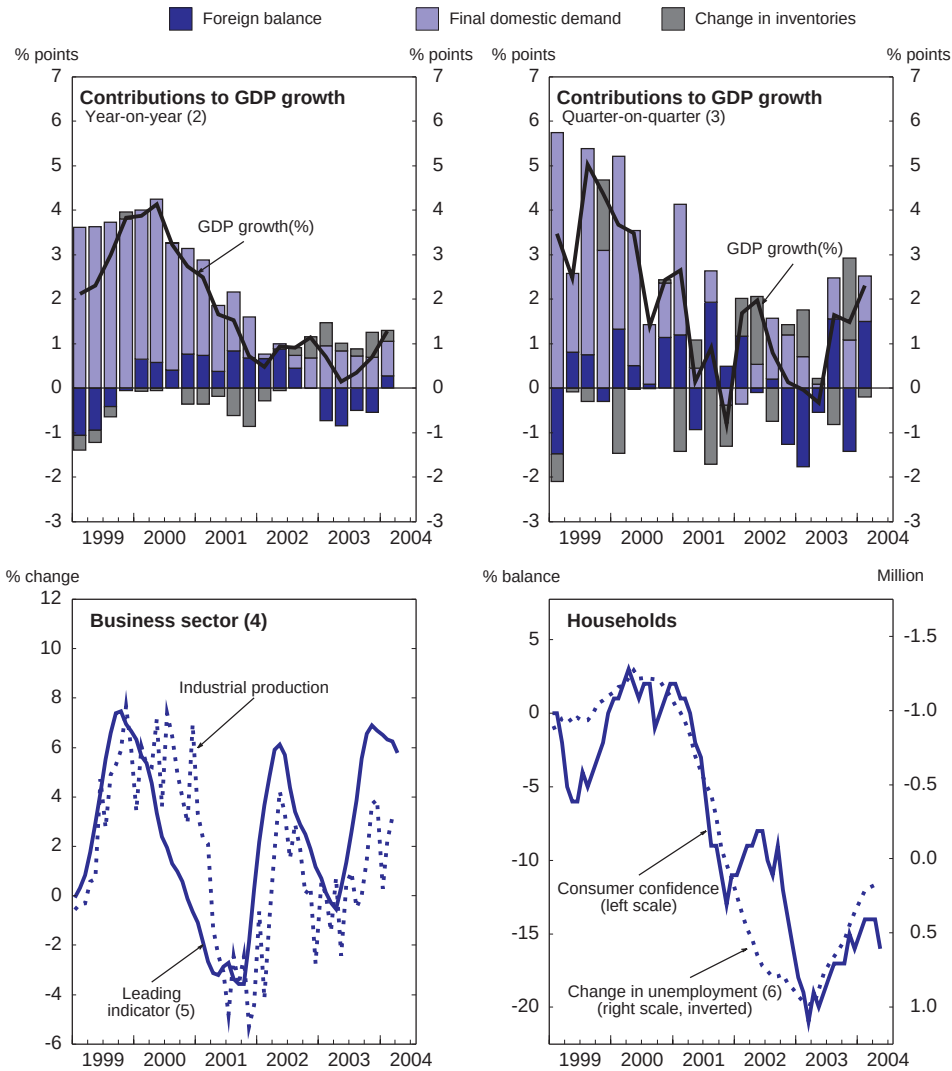
In retrospect, the downturn that started in 2001 was W-shaped, with a first dip in late 2001 and a second one in the first half of 2003 (Figure 1.1, upper two panels). Concerning the first dip, the main culprit was a sharp deceleration in domestic demand growth, with some offset from net exports. The second dip was partly attributable to a fall in net exports, due to the appreciation of the euro – by 18 per cent in real effective terms since the start of 2002 – compounded by some weakening in growth in world trade. The rebound in final domestic demand growth (excluding stock formation) from its late 2001 low was too weak to pick up the slack.

The economy is past the turning point, but the strong euro and downbeat consumer sentiment are likely to weigh on the strength of the recovery. Following a slight contraction in the first half of 2003, gross domestic product (GDP) expanded at annual rates of close to 1½ per cent in the two final quarters, with growth averaging ½ per cent for the year as a whole (Table 1.1). The pick up was driven by a positive contribution from net foreign trade, helped by a strong recovery in world markets, followed by a sharp turn-around in fixed investment and stock formation. However, even if world trade was buoyant, the foreign trade contribution turned negative again in the final quarter. Final domestic demand remained sluggish all along. After an upward blip in the first quarter of 2003, private consumption was flat throughout the remainder of the year. GDP growth accelerated in the first quarter of 2004 to around 2¼ per cent, driven by renewed buoyancy in net foreign demand. Domestic demand stayed sluggish, though, with a pick up in private consumption largely offset by a decline in investment and public consumption.

The slack that has been building up since 2001 has not been reflected in major labour shedding, possibly because the downturn was initially expected to be short-lived amid high costs of firing and hiring (Table 1.2). As a result, the unemployment rate has levelled off at 8¾ per cent – ¾ percentage point above its 8 per cent low in 2001 – at the expense of virtually stagnant labour productivity. Unit labour costs remained subdued though as hourly wage growth has been moderating and with the effective appreciation of the euro feeding through, core inflation has remained subdued. However, soaring energy prices have pushed inflation above the 2 per cent mark consistent with the price stability objective of the European Central Bank since April 2004.

© OECD 2004

Figure 1.1. **GDP and short-term indicators**[1]



1. Seasonally adjusted data.
2. GDP in constant 1995 prices.
3. GDP in constant 1995 prices, annualised percentage rate.
4. Percentage change over six months, annual rate.
5. OECD composite leading indicator.
6. Change relative to previous year.

Source: European Commission/Eurostat; OECD, *Main Economic Indicators*.

© OECD 2004

Table 1.1. **Demand and production**
Percentage changes, volume (1999 prices)

	1999	2000	2001	2002	2003	Projections 2004	Projections 2005
Private consumption	3.5	2.9	1.8	0.6	1.0	1.3	2.5
Government consumption	1.8	2.2	2.6	3.0	2.1	1.2	1.0
Gross fixed investment	5.9	5.3	0.0	–2.4	–0.8	2.0	4.1
Public	6.1	2.8	2.1	1.1	1.3	1.2	2.2
Residential	3.8	1.2	–2.5	–0.9	1.1	1.8	2.5
Non-residential	6.9	7.7	0.7	–3.7	–2.0	2.3	5.1
Final domestic demand	3.7	3.2	1.6	0.5	0.9	1.5	2.5
Stock building[1]	–0.2	–0.1	–0.5	0.1	0.3	0.3	0.0
Total domestic demand	3.4	3.1	1.1	0.5	1.2	1.8	2.5
Net exports[1]	–0.6	0.6	0.6	0.4	–0.7	–0.1	0.0
GDP at market prices	2.8	3.7	1.7	0.9	0.5	1.6	2.4

1. Contributions to changes in real GDP.
Source: OECD.

Table 1.2. **Employment, income and inflation**
Percentage changes from previous period

	1999	2000	2001	2002	2003	Projections 2004	Projections 2005
Employment	2.0	2.3	1.5	0.5	0.1	0.4	1.1
Unemployment rate[1]	9.4	8.4	8.0	8.4	8.8	8.8	8.5
Compensation per employee[2]	1.3	2.4	2.5	2.3	2.3	2.2	2.2
Labour productivity[2]	0.8	1.4	0.1	0.5	0.4	1.2	1.4
Unit labour cost[2]	0.5	0.9	2.4	1.8	1.8	1.0	0.8
Household disposable income	3.4	4.9	4.9	3.2	2.6	3.0	4.1
GDP deflator	1.1	1.4	2.4	2.6	2.0	1.7	1.7
Harmonised index of consumer prices	1.2	2.1	2.4	2.3	2.1	1.7	1.4
Private consumption deflator	1.1	2.1	2.3	2.2	1.9	1.7	1.5

1. As a percentage of labour force.
2. In the business sector.
Source: OECD.

The forces shaping the recovery are rather uneven:

- The surge in world trade, rising profitability and easier lending conditions lifted business sentiment in the course of 2003; corporate balance sheets have generally improved even if the level of corporate

© OECD 2004

indebtedness remains high. The latest indicators suggest a hesitant recovery in business confidence (Figure 1.1, lower left panel).

- Reflecting continued concerns over job prospects and the outlook for pensions and health care in several countries, consumer confidence has picked up only little to date (Figure 1.1, lower right panel). Low interest rates and easy lending conditions in mortgage markets have contributed to soaring house prices in some euro area countries (Ireland, the Netherlands and Spain), but price increases and the ensuing wealth gains have been more moderate in countries where the withdrawal of housing equity is less common. Overall, household saving remains high. The shocks that prompted the downturn since 2001, including the stock market slump, accounting scandals and terrorist attacks might still weigh on consumer sentiment. Along with the uncertainty with respect to future pension payments, the lack of fiscal consolidation may be having a negative impact as well.
- On the basis of currently adopted policies, progress in fiscal consolidation is set to be small, with six countries (Germany, France, Italy, Greece, the Netherlands and Portugal) likely to breach the 3 per cent limit in 2004 (see Chapter 3). After a small tightening of around ¼ per cent of GDP in 2003, the fiscal stance, as gauged by the area-average change in the cyclically-adjusted balance, is estimated to be broadly neutral in 2004.
- While being focussed on the maintenance of price stability, monetary policy has remained supportive of economic activity, with the minimum bid rate in the Eurosystem's main refinancing operations maintained at 2 per cent since it was cut by 50 basis points in June 2003 (Table 1.3). Since then, the appreciation of the currency has reduced external price pressures (see

Table 1.3. **Financial indicators**

	1999	2000	2001	2002	2003	Projections	
						2004	2005
Household saving ratio[1]	10.8	10.8	11.5	11.7	11.6	11.7	11.8
General government financial balance[2]	–1.3	0.1	–1.7	–2.3	–2.7	–2.8	–2.7
Current account balance[2]	0.4	–0.5	0.2	0.9	0.4	0.5	0.6
Short-term interest rate[3]	3.0	4.4	4.3	3.3	2.3	1.7	1.8
Long-term interest rate[4]	4.6	5.4	5.0	4.9	4.1	4.1	4.7

1. As a percentage of disposable income.
2. As a percentage of GDP.
3. 3-month interbank rate.
4. 10-year government bonds.

Source: OECD.

© OECD 2004

Chapter 2). The OECD projections assumed the main policy rate to be cut by another 50 basis points last spring, and to be maintained at 1½ per cent until the recovery is firm and inflationary pressures start rebuilding.

Against this backdrop, the OECD *Economic Outlook* No. 75 projects real GDP growth to recover from ½ per cent in 2003 to a modest 1½ per cent in 2004, with a further pick-up to 2½ per cent in 2005, which is slightly above the estimated growth of potential output (Table 1.1). Exports are being spurred by the rebound in world trade, even though the area is projected to lose further market shares in view of the strong currency. Accelerator mechanisms and restored profitability are projected to sustain the recent pick up in investment, while consumption is set to recover modestly. The unemployment rate is projected to stay at around 8¾ per cent in 2004 before easing slightly in 2005. With the output gap widening further in 2004 and the impact of euro appreciation feeding through, inflation is projected to fall to 1¾ per cent in 2004 and 1½ per cent in 2005.

Risks surrounding the projection cut both ways and remain large. Global current-account imbalances may prompt further appreciation of the euro in effective terms. On the other hand, the recovery in world trade may be somewhat stronger than projected. Oil prices have risen strongly recently and could stay high or rise further. Pent-up demand for consumer durables could provide a stronger boost to consumption growth than factored into the projection, but weak job prospects, persistent ageing-related concerns and the possibility of unwinding housing bubbles in some countries may counteract these forces. Fiscal consolidation may be stronger than currently projected and, although fiscal policy must be rooted in longer term objectives and insufficient adjustment in the past must be rectified, this may weaken domestic demand to some extent in the short term. On the other hand, sustained and credible fiscal consolidation should underpin confidence. While the baseline scenario remains one of gradual recovery and monetary policy may provide some offsets to these risks, model simulations (Box 1.1) suggest that a combination of new adverse shocks would be challenging for policy makers.

Looking further ahead, the medium-term scenario presented in the OECD *Economic Outlook* No. 75 suggests that, on unchanged policies, a growth gap between the United States and the euro area will persist, even before the impact of ageing kicks in (Table 1.5). Labour productivity growth averages 1½ per cent per annum in the period 2004-09 as compared to 2¼ per cent for the United States. With structural unemployment declining rather little and remaining at 7½ per cent, 2½ percentage points above the US rate, trend GDP growth would be 2¼ per cent for the euro area (1¾ per cent in per capita terms – the same as in the 1992-2003 period), as compared with 3¼ per cent (2¼ per cent per capita) for the United States.

© OECD 2004

Box 1.1. Risks surrounding the projections

While the recovery is underway, there are still risks arising from the external environment, confidence and the future course of fiscal and monetary policy. These are illustrated by simulations with the OECD's Interlink model. The results, which are summarized in Table 1.4, suggest the following:

- While exchange rates are fixed in the OECD's projection by assumption, global current account imbalances could lead to a further appreciation of the euro. According to the simulation a sustained 10 per cent appreciation of the euro in nominal effective terms would reduce output by almost 1 per cent and inflation by ¾ percentage point from their baseline levels in both the first and the second year.
- On the other hand, there are indications that world trade may pick up more strongly than projected. The simulations show that if world trade were 1 percentage point higher in 2004 and 2005, output in the euro area would be little affected in the first year, but increase by ½ a per cent from baseline in the second year.
- As the world economy picked up oil prices have risen from a low of around USD 27 per barrel in September 2003 to around USD 32 in April 2004. The projection assumes oil prices to be maintained at this level until the end of 2005. However, by mid-May oil prices stood at USD 38 and further increases cannot be ruled out. The simulation of a 20 per cent rise in the annual average oil price suggests that this could reduce euro area GDP by about ¼ per cent from baseline in the first year and by about half that amount in the second year. Inflation would be one or two-tenths of a per cent higher.
- Consumer confidence is still at a historical low and may fail to pick up if short-run labour market developments disappoint. The simulation assumes that *ex ante* employment growth is ½ percentage point lower in 2004 than projected, but rebounds more quickly in 2005 with the total job creation roughly the same over the projection period as a whole. It is also assumed that persistence of low confidence leads to a higher saving ratio by ½ a percentage point in 2004. In this scenario, output would be ¾ per cent lower compared to baseline in 2004 and return to baseline in 2005.
- Countries that are currently subject to an "excessive deficit procedure" under the Treaty rules (Chapter 3) have committed to implement fiscal tightening packages, but these are only partly incorporated in the baseline projection (*i.e.* to the extent these packages have been enacted). The simulations suggest that a reduction in government consumption by 1 per cent of GDP in Germany and France would reduce area output by ½ per cent from baseline in both the first and second year. However, this does not take into account a possibly important positive impact of fiscal consolidation on confidence in financial markets and among households and businesses. When this occurs, the positive impact on private spending could diminish or even reverse the negative demand effects from fiscal consolidation. Such confidence effects are not incorporated in Interlink and, therefore, not reflected in the results reported in Table 1.4.

© OECD 2004

Box 1.1. **Risks surrounding the projections** (*cont.*)

- A simulation incorporating a 100 basis point reduction in interest rates all along the maturity spectrum – assuming a constant exchange rate – would raise output by around ½ per cent from baseline in the first and second year. Inflation would increase by only 0.1 percentage point in both years.

Table 1.4. **Risks and uncertainties surrounding the projections**
Simulation results

		Year 1	Year 2
Temporary reduction in euro-area internal demand via a ½ per cent lower employment growth and a ½ percentage point higher saving ratio in 2004.	GDP[1]	–0.7	–0.0
	Inflation[2]	–0.1	–0.5
	Current account[3]	0.2	0.0
	Government lending[3]	–0.4	–0.1
Direct demand impulse resulting from a tightening of government budgets via a ½ per cent of GDP decrease in government consumption (excluding positive confidence effects).[4]	GDP[1]	–0.6	–0.5
	Inflation[2]	–0.1	–0.3
	Current account[3]	0.2	0.2
	Government lending[3]	0.3	0.4
10 per cent appreciation of the euro in nominal effective terms.	GDP[1]	–0.8	–0.9
	Inflation[2]	–0.7	–0.7
	Current account[3]	–0.3	–0.5
	Government lending[3]	0.1	0.0
Stronger growth in the euro area export markets by 1 percentage point in 2004 and 2005.	GDP[1]	0.2	0.4
	Inflation[2]	0.0	0.1
	Current account[3]	0.1	0.2
	Government lending[3]	0.1	0.1
20 per cent higher oil price.	GDP[1]	–0.2	–0.1
	Inflation[2]	0.2	0.1
	Current account[3]	–0.1	–0.1
	Government lending[3]	–0.1	–0.1
Lower short and long interest rates (by 100 basis points) in the euro area.	GDP[1]	0.4	0.6
	Inflation[2]	0.1	0.1
	Current account[3]	–0.1	–0.2
	Government lending[3]	0.4	0.6

1. Deviation from baseline level in per cent.
2. Deviation from baseline rate in percentage points.
3. Deviation from baseline ratio to GDP in percentage points.
4. The impact of consolidation on confidence in financial markets and among households and businesses depends on the nature of the fiscal consolidation and is difficult to model.

Source: OECD.

© OECD 2004

Table 1.5. **Medium-term baseline scenario**
Per cent growth, average 2004-09

	EURO	DNK	SWE	GBR	AUS	CAN	JPN	USA
Gross domestic product	2¼	2¼	2½	2½	3½	3	1½	3½
Per capita[1]	2¼	2	2¼	2¼	2½	2¼	1½	2½
Potential output per capita[1]	1¾	1¾	2¼	2	2¾	2¼	1¼	2¼
Employment	½	¼	¼	½	1¼	1	¼	1¼
Employment rate (%)[2]	65	76	72	73	72	74	75	63[3]
Labour force	½	0	¼	½	1¼	1	0	1¼
Unemployment rate (% of labour force)	8¼	5¼	5¼	5	5½	7¼	4¼	5
Private consumption deflator	1½	1¾	1¾	2	2¼	1¾	¼	1½
Net lending (% of GDP)	–2¼	1¼	½	–2¾	½	1¼	–6½	–4

1. Calculated using mid-year, medium variant population projections.
2. In per cent of working age population.
3. Based on a wider definition of the working age population.

Source: OECD; United Nations, "World Population Prospects 1950-2050 (The 2002 Revision)".

Challenges ahead

Growth and resilience to shocks

In 2000 in Lisbon the European Union pledged "to become the most competitive and dynamic knowledge based economy in the world, capable of sustainable economic growth with more and better jobs and greater social cohesion" by 2010. At the Lisbon Council 70 per cent of those at working age were seen to be employed by 2010 – almost 10 percentage points more than currently (Table 1.6). Economic growth would attain a sustainable 3 per cent rate.[2] The European Council of Barcelona (2002) envisaged that one out of two older workers should work in 2010, compared to only a third now. According to the Barcelona

Table 1.6. **Key EU targets for 2010**

	1997	2001	2010	European Council
Employment rate				
Total	60.5	63.9	70	Lisbon, March 2000
Age 55-64	36.3	38.5	50	Stockholm, March 2001
Female	50.6	54.9	60	Lisbon, March 2000
Effective retirement age	n.a.	59.9	Plus 5	Barcelona, March 2002
R&D as a per cent of GDP				
Total	1.8	1.9	3	Barcelona, March 2002
Private	1.1	1.2	2	Barcelona, March 2002

Source: OECD and European Commission, *Employment in Europe* 2003.

© OECD 2004

Council, research and development (R&D) would surge from 2 per cent of GDP to 3 per cent by 2010.

The OECD's medium-term baseline scenario presented above suggests that these targets will not be met on current policy settings. Looking further ahead, with ageing eventually leading to a decline in the working age population, growth can only be sustained by:

- boosting labour market participation,
- by reversing the trend decline in hours worked, and
- by reforms that raise productivity growth.

Simulations discussed in Chapter 5 suggest a strong impact on overall economic outcomes of better structural policy settings. They would bring performance close to the aspirations of the Lisbon strategy. Budget balances would improve as a result, so that the fiscal commitments enshrined in the Treaty and SGP would be met and the tax burden could be reduced. This, in turn, will further enhance the growth potential. For such a favourable scenario to unfold, however, major efforts are needed.

Resilience against adverse shocks and the further convergence of cyclical developments impinge on the longer-term macroeconomic performance of the euro area. As noted, the euro area economy has been exposed to a series of global shocks. The epicentre of these shocks was mostly in the United States. It is not surprising that their initial impact there has been larger than in the euro area. As shown in Figure 1.2, the US output gap fell from around 2 per cent in 2000 to –2 per cent in 2002, while in the euro area it fell from about 1 per cent to –1 per cent over the same period. However, whereas in the United States the gap will be virtually closed in 2004, it has continued to widen in the euro area. Moreover, the other English-speaking countries – which were exposed to many of the same shocks as the euro area – experienced a much milder slowdown, and the same holds true for the Nordic EU-countries outside the euro area.

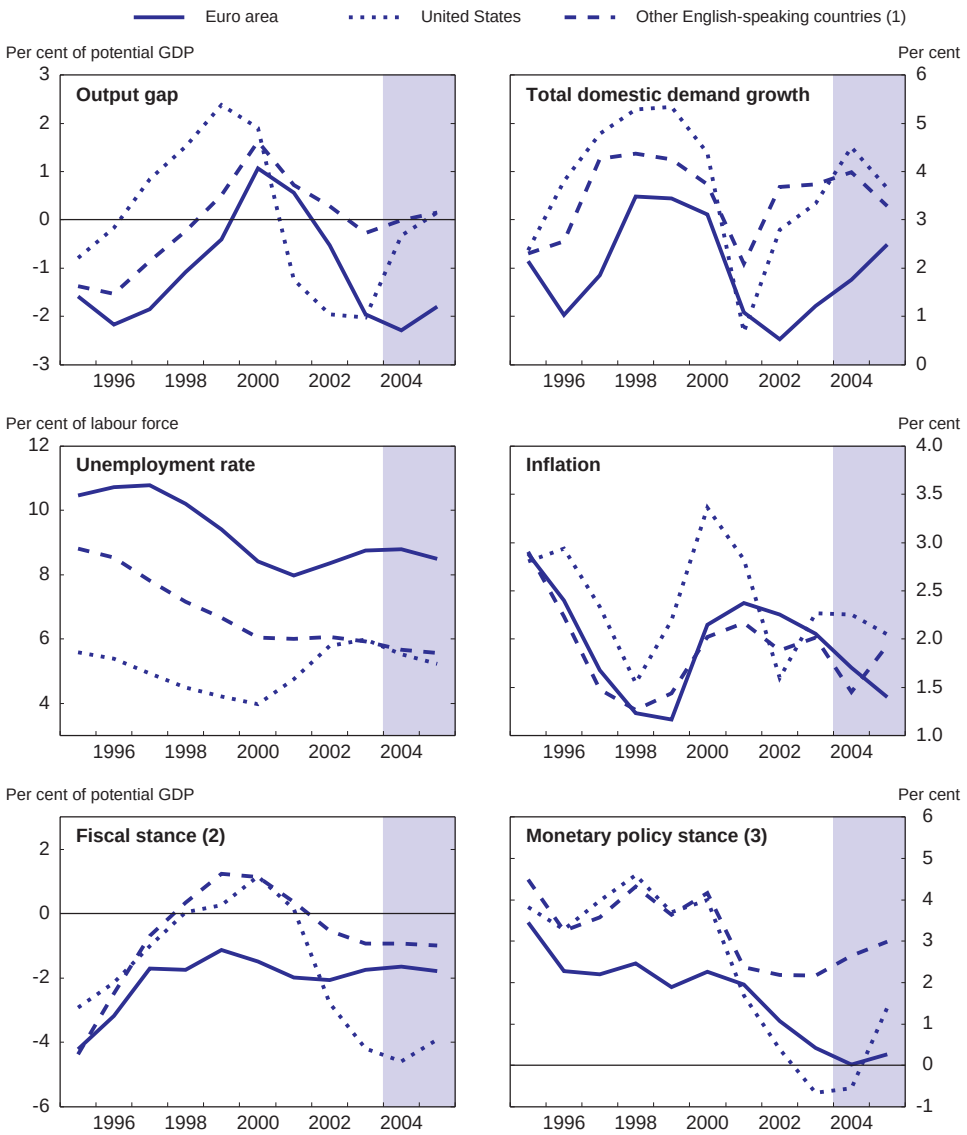
The slowdown in the euro area has been largely accounted for by the sharp and sustained weakening of domestic demand. As shown in the upper-right panel of Figure 1.2, domestic demand sharply weakened in the United States as well, but it recovered swiftly while in the euro area it remained weak all along. The other English-speaking countries portrayed a V-shaped profile similar to that in the United States, although the V was considerably flatter. Apparently, the resilience of the English-speaking countries owes much to their capacity to engineer a quick rebound of domestic demand after a major adverse shock.

The lack of resilience in the euro area remains somewhat of a puzzle, but elements of a possible explanation have been surfacing:

- Labour markets are more rigid. High and long-lasting unemployment benefits and strict employment protection legislation reduce the pressure on

© OECD 2004

Figure 1.2. **Indicators of resilience**



1. Australia, Canada, New Zealand and United Kingdom.
2. Cyclically-adjusted balance.
3. Real short-term interest rate.

Source: OECD.

© OECD 2004

those already employed to moderate their wage claims in a downturn. This reduces the scope for wage adjustment, and weighs on employment. Low labour mobility in the euro area is an additional source of rigidity.

- Product markets (notably services markets) in the euro area are less flexible and less exposed to vigorous competition and prices fail to respond swiftly to slack. The strength of competition in product markets also influences the flexibility of labour costs and adjustment, the protected environment in many services sectors spilling over to labour markets.
- Uncertainties linked to the future of the welfare state and the sustainability of public finances in the face of ageing might have led to more precautionary savings by households and to a persistent weakness of private consumption.
- The room for manoeuvre of monetary policy has been limited by wage and price rigidities. Where monetary policy makers can be confident that a cyclical downturn with rising unemployment will put swift and strong downward pressure on inflation they may find it easier to pursue an aggressive easing.
- Where public finances are fundamentally sound and budget procedures ensure that fiscal policy action will be symmetric, fiscal policy makers are likely to be more at ease with rising budget deficits in a downturn. These conditions are not met in (especially the larger) euro area countries, despite the fiscal rules in place. Fiscal co-ordination will therefore remain at the forefront of the debate (see Chapter 3).

An important additional resilience factor concerns the issue of asymmetries within the euro area (Chapter 4). Reflecting varying exposures to external developments, dissimilar institutional features and very different degrees of trade integration, global shocks play out differently across countries in the area. In the absence of monetary policy instruments, and with the leeway for fiscal policy also limited, adjustment will have to rely on changes in external competitiveness operating through wages and prices. Economic performance across the individual economies has differed considerably. Many of the smaller countries have grown strongly and some have been overheating and have subsequently entered a period of painful adjustment (the Netherlands and Portugal). Meanwhile, activity in Germany and Italy has been subdued. Whereas Germany has been gaining some competitiveness, Italy failed in this respect. France has adjusted more smoothly, with low inflation allowing it to gain significant competitiveness. Equilibrating forces coming through external competitiveness have thus been at work to some extent, but not sufficiently to pull two of the three major economies in the euro area out of stagnation. Apparently the sluggish countries have to go through a

© OECD 2004

long period of slow growth to bring about lower wages and prices relative to other countries.

The ongoing integration of product and financial markets and the co-ordination of fiscal policies in the euro area will help to progressively reduce long-lasting cyclical divergence, as predicted by the "endogenous optimal currency area" theory. But country-specific shocks (and country-specific responses to global shocks) will remain a feature of the euro area. Hence the capacity of countries to adjust swiftly in a downturn will remain crucial for the area's resilience – not least because the resulting more favourable terms of the inflation-output trade-off would allow a more effective monetary policy response. Policymakers need to remain vigilant and capture any policy opportunities to eliminate the structural sources of cyclical divergence. Chapter 4 makes a number of suggestions in this regard.

Heightened resilience would reduce the recurrent underutilisation of labour resources and the erosion of human capital it entails. Greater resilience to shocks would facilitate the conduct of monetary policy and ease the terms of the output-inflation trade-off. Ultimately, the economic growth potential of the euro area would be strengthened.

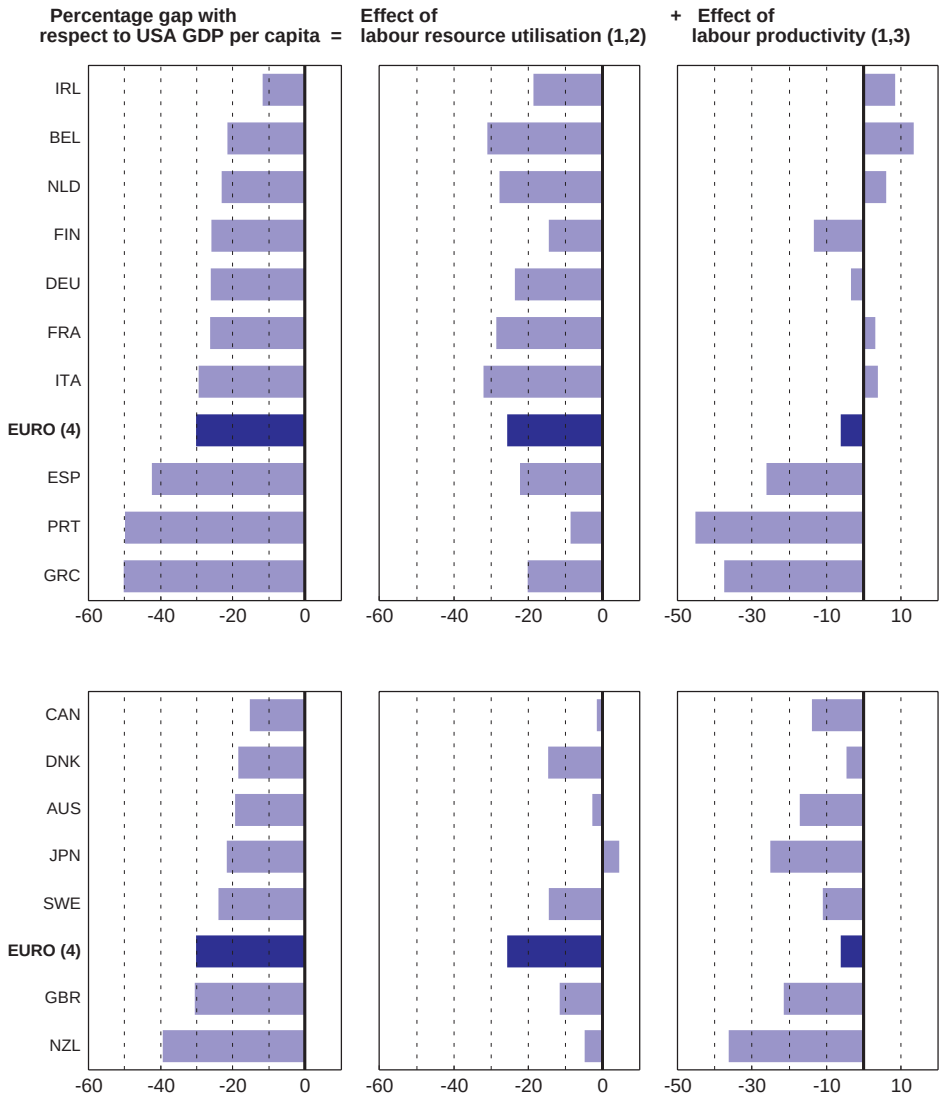
Cohesion and integration

The OECD's medium-term baseline scenario suggests that a growth gap with the United States will persist. However, while the per capita income gap between the euro area and the United States is sizeable, the differences between the individual euro area countries are even more striking (Figure 1.3). The northern European countries portray a comparatively small income gap against the United States; Ireland, which in the 1980s was still one of the least prosperous countries in the European Union, has nearly caught up with the United States. By contrast, the countries which lag the euro area average mostly have a comparatively low level of labour productivity. At lower levels of regional aggregation income dispersion is even larger (Chapter 5) and there is little convergence. These large differences in economic performance between countries and regions within the euro area continue to call for a dual perspective, with a focus simultaneously on the whole and on its constituent parts.

The comparison with the United States is illuminating. In aggregate, the euro area is of comparable size as measured by GDP. The degree of openness to foreign trade is also similar. However, the euro area and the United States differ in important respects. Whereas the US labour market is usually looked at as an entity, in the euro area labour markets are segmented, country by country. In the United States labour mobility between regions or states is high compared with the euro area. Moreover, wage-bargaining systems in euro-area countries are in many cases centralised at the sectoral level. As a result, intra-area real exchange rate

© OECD 2004

Figure 1.3. **Explaining the income gap**
2002, 1995 PPPs



1. Percentage gap with respect to the United States level.
2. Labour resource utilisation is measured as trend total number of hours worked divided by population.
3. Labour productivity is measured as trend GDP per hour worked.
4. Except Austria and Luxembourg.

Source: OECD.

© OECD 2004

changes via wage adjustments do eventually occur, but wages within countries are not very responsive to the local dispersion in unemployment or productivity, which tends to perpetuate regional dispersion – eastern Germany, southern Spain and the Mezzogiorno being prominent examples. These problems have become even more challenging with the enlargement of the European Union on 1 May 2004.

Greater integration would be associated with a better allocation of capital and labour resources across countries and regions in line with their comparative advantages, while a more rapid adoption of new technologies would raise productivity. However, the euro area is not as well integrated as mature federations, with market segmentation still prevailing in services markets and some network industries. Also innovative capacity and the ability to adopt new technologies is well below that in the best performing countries and within the euro area there is a distinct north-south divide. Many obstacles to a faster catch up of lagging regions can be overcome. Integration forces may, however, not always lead to structural convergence because of a tendency towards regional specialisation and a polarisation between strong and weak regions. As a result there may be a potential conflict between the stated goals of economic integration and cohesion. These challenges are addressed extensively in Chapter 5 of this *Survey*.

The ageing challenge

Over the next half-century, countries in the euro area are set to experience a significant ageing of their population, more so than for example the United States, although less severe than Japan. Long-term projections reported in Chapter 3 suggest that this will result in a sharp increase in the ratio of ageing-related expenditure (pensions, health care, elderly care, etc.) to GDP from a current level which is on average already considerably higher than in many other OECD countries. The projections show that sound public finances during this period of rapid ageing are a prerequisite for success to cope with this problem; higher public savings, along with pension and labour market reform, are needed to reduce public indebtedness. The upshot is that most countries in the euro area would need to keep budgets balanced or in surplus over the business cycle in the coming two decades, irrespective of the requirements stemming from the fiscal rules enshrined in the Treaty and the SGP.

With ageing-related fiscal pressures building up, a repeat of past policy errors – a weakening or reversal of consolidation efforts amid buoyant cyclical conditions – would be even more costly than they recently have been. Ensuring the sustainability of public finances in the face of ageing populations also impinges on growth, resilience and cohesion. Hence bringing fiscal policies on to a sound footing, while avoiding a rise in the already high tax burden, is vital for confidence and economic efficiency.

© OECD 2004

Notes

1. The euro area was established on 1 January 1999 by eleven EU-countries: Austria, Belgium, Finland, France, Germany, Ireland, Italy, Luxembourg, the Netherlands, Portugal and Spain. The 12th country, Greece, joined in 2001.
2. The 3 per cent growth target, while extensively publicised, was not included in the official communiqué.

© OECD 2004

II. Managing the single currency

The European Central Bank's (ECB) operational definition of price stability – a year-on-year increase in the Harmonised Index of Consumer Prices (HICP) below 2 per cent over the medium term – has in practice provided room to accommodate temporary adverse price shocks. In the May 2003 review of its monetary policy strategy, the ECB reiterated its definition of price stability, and clarified that it aims to maintain inflation below, but close to, 2 per cent over the medium term in line with its past conduct of policy. This clarification was made to underline, *inter alia*, the need to provide a sufficient safety margin against the risk of deflation, which was a prominent concern at the time. The ECB's policy conduct is symmetric – *i.e.* entailing policy responses that seek to counter both upward and downward deviations from its medium-term aim. In addition, the May 2003 review clarified the two-pillar framework, emphasising the role of monetary analysis as a means of cross-checking from a medium to long-term perspective the indications of risks to price stability in the short and medium term.

While the framework is solid overall, the conduct of monetary policy has not been devoid of challenges. Although the economy has undergone a protracted downturn, inflation has been persistent. This is partly explained by sharp increases in indirect taxes and administrative prices amid difficulties for governments to consolidate their budgets as well as some specific price shocks related to food and energy. But in addition wages and service prices have hardly responded to the downturn. An apparently high inertia may have been compounded by temporary price shocks affecting expectations. This poses a dilemma for monetary policy: on the one hand monetary policy should take out insurance against the risk of longer-lasting stagnation, but on the other hand the ECB may feel uncomfortable with a further easing of monetary policy in an environment of inflation inertia. However, the appreciation of the euro and a possibly large output gap should dampen inflationary pressures.

Against this backdrop, the first section of this chapter briefly examines the area's recent inflation performance. This is followed by an assessment of the stance of monetary policy in view of the development of interest rates, the exchange rate and money and credit aggregates. The chapter ends with a short

© OECD 2004

assessment of progress made by the European Union's (EU) new member countries in their run-up to adopting the single currency.

Inflation performance

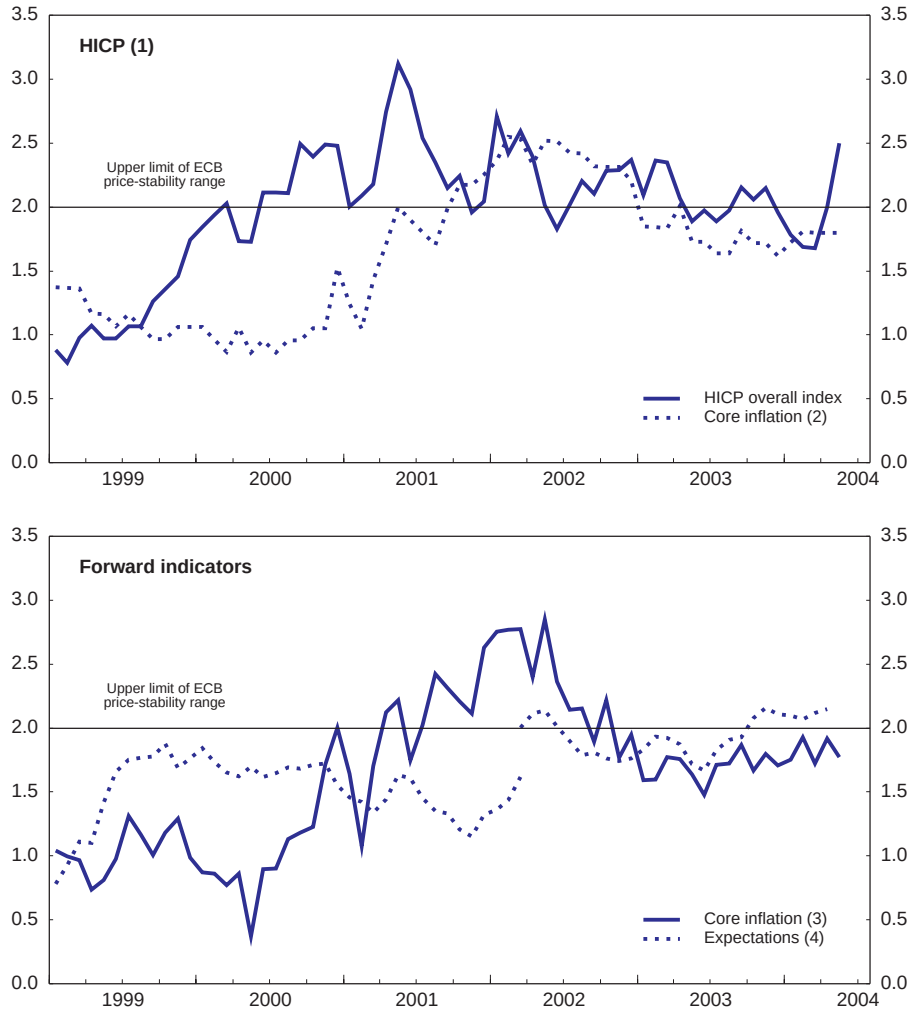
The HICP inflation rate has been on a slight downward trend since 2001, but has nevertheless exceeded the 2 per cent mark for four out of the five years of the euro area's existence (Figure 2.1, upper panel). It fell to 1.6 per cent in February 2004 and 1.7 per cent in March, but rebounded to 2 per cent in April and 2.4 per cent in June due to oil price increases and unfavourable base effects. Core inflation, as measured by HICP inflation excluding energy, food, alcoholic beverages and tobacco, has been below the 2 per cent mark since mid-2002, hovering in the 1½-2 per cent range, with higher frequency measures suggesting that it is likely to stay in this range in the immediate future. Meanwhile, long-term inflation expectations derived from surveys seem to be firmly anchored at slightly below 2 per cent. In contrast, the recent increase in inflation expectations as gauged by the implicit yields on indexed bonds give rise to concern (Figure 2.1, lower panel) – even though this measure should be interpreted with caution as it may be distorted by various *premia* embodied in bond yields.

Looking at the contributions of separate price indices suggests that in 2000 and 2001 inflation was mainly driven by sharp increases in energy and food prices (Figure 2.2). But from mid-2001 onwards inflation was fuelled mostly by price increases in core goods (non-energy and non-food) and services. While food and energy prices again posted sharper increases in 2003 and early-2004, these were much smaller than the food and energy price hikes of 2000 and 2001. The inertia in core inflation can thus largely be explained by persistent inflation in services, including public services that are comprised in household consumption. Apparently the adverse price shocks in 2000 and 2001 were partly built into wage demands. While labour productivity growth slowed down with the onset of the economic downturn, nominal compensation rates edged up.

Inflation persistence has been stronger in the euro area than in other countries, although the initial shocks to food and energy prices were also larger as they were amplified by the depreciation of the currency in the first two years of the monetary union (Table 2.1 and Box 2.1). Inflation picked up from an average of 1.7 per cent for the period 1999-2000 to an average of 2.2 in the period 2001-03, despite the fact that the output gap became more negative – indicating substantial slack in the euro area economy – and a significantly more favourable development of import prices due to the appreciation of the euro. In many countries outside the euro area, inflation is close to that of the euro area or lower, while output gaps are much smaller. It should be noted though that output gaps, which are unobservable variables that need to be constructed, may be rather imperfect measures of slack.

© OECD 2004

Figure 2.1. **Inflation performance since the advent of the euro**
Per cent rate of change

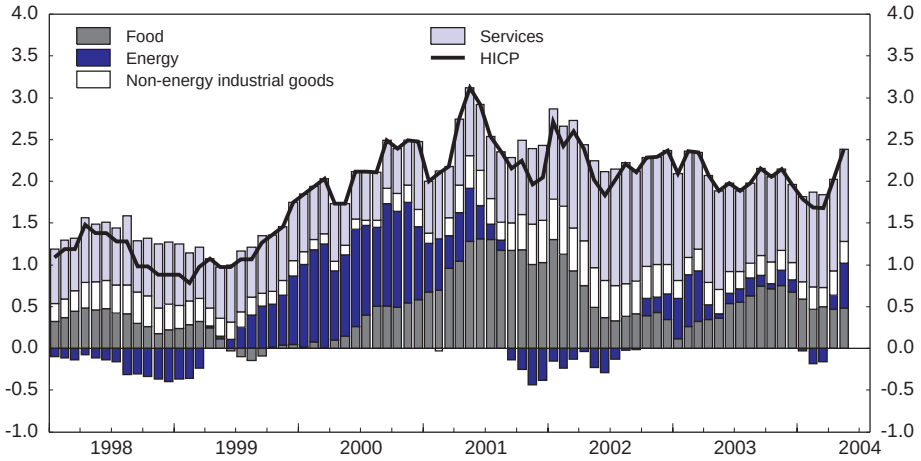


1. Harmonised index of consumer prices (HICP). Percentage change over same period of previous year.
2. Core HICP is the overall index excluding energy, food, alcohol and tobacco.
3. Change over 6 months earlier (seasonally adjusted annual rate).
4. Break-even inflation rate between the nominal yield of French government bonds and the real yield of French index-linked bonds. Up to March 2002, government bonds linked to the French consumer price index with a maturity up to 2009; from March 2002, government bonds linked to the euro area HICP with a maturity up to 2012.

Source: European Commission/Eurostat; Agence France Trésor.

© OECD 2004

Figure 2.2. **Contributions to euro area overall HICP inflation**
Year-on-year percentage change



Source: European Commission/Eurostat.

Table 2.1. **Inflation performance in international comparison**
Annual average, per cent

	1999-2000			2001-03		
	Average output gap	Import prices of goods	Inflation[1]	Average output gap	Import prices of goods[2]	Inflation[1]
Euro area[3]	0.3	12.4	1.7	–0.7	–1.8	2.2
United States	2.1	2.4	2.8	–1.7	–0.6	2.2
United Kingdom	0.6	1.2	1.1	–0.1	–1.4	1.3
Denmark	1.9	4.0	2.4	0.2	–1.0	2.2
Sweden	1.5	3.0	0.9	0.1	0.6	2.3
Canada	1.5	0.3	2.2	0.5	–1.8	2.5
Australia	2.0	3.3	3.0	0.9	–2.5	3.4
New Zealand	–0.2	9.2	1.3	0.9	–5.5	2.4

1. Harmonised consumer price for European countries. Consumer price index for other countries.
2. Import price for goods and services for New Zealand and Sweden.
3. Extra euro area for import price.

Source: OECD; Eurostat.

If the euro stays strong, renewed downward pressure on prices may be expected. The negative output gap in the euro area combined with high unemployment should create downward pressure on producer prices as well as wages

© OECD 2004

Box 2.1. Evidence of inflation persistence

Inflation persistence in the euro area has been investigated in several studies. A study by the ECB analysed euro area wide inflation since 1970 and found that there is relatively little instability in the parameters of the estimated inflation equations throughout the estimation period, despite the introduction of the euro and the ECB's clear anti-inflation mandate (ECB, 2004a). Another study by the ECB investigated twelve industrial countries over the period 1984-2003, and found that high inflation persistence is not an inherent characteristic of industrial economies (ECB, 2004b). The evidence for a decline in persistence in the lower inflation environment in recent years is mixed, but may suggest that inflation is somewhat more persistent in the euro area than in other large economies. This is similar to findings in the IMF country report on the euro area 2003, that the inflation process in the euro area is only moderately more persistent or inertial than in the United States, if at all (IMF, 2003). The IMF found that inflation persistence has been high on both sides of the Atlantic during the period of high inflation, but that it has come down. Moreover, the response to price and output shocks is broadly similar in the United States and the euro area. Inflation expectations in the United States do, however, appear to react more strongly to changes in the output gap, presumably reflecting more flexible product and labour markets. All in all, the studies suggest that in recent years the adverse price and cost shocks have kept inflation high, rather than a degree of inflation persistence, that is higher than in other economies.

and, with some lag, the overall inflation rate. This suggests that the inflation rate could fall back to below the 2 per cent mark as soon as base effects unwind. According to the OECD projections embodied in the OECD *Economic Outlook* No. 75 inflation would average less than 1½ per cent in 2005.

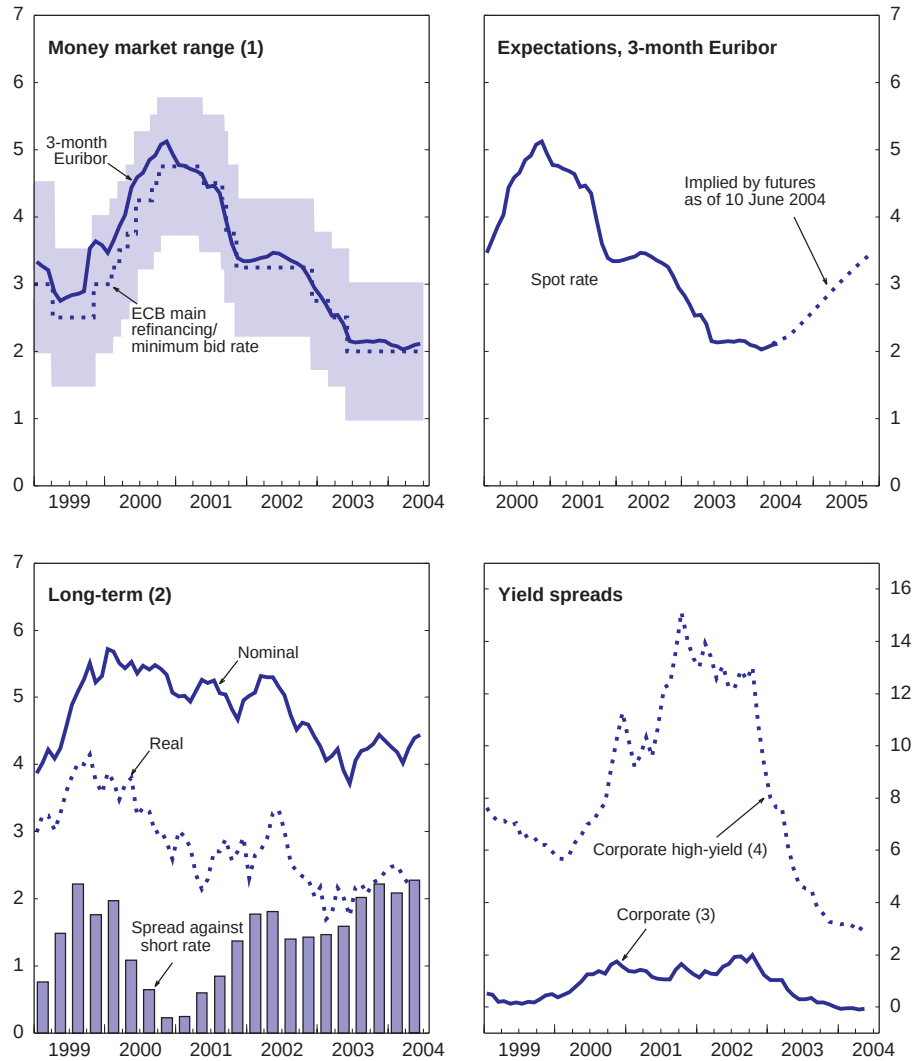
The policy stance

Interest and exchange rate developments

Since the euro area economy began to slow down in early 2001, the Governing Council of the ECB has lowered its main policy rate, the minimum bid rate of the refinancing operations, by 275 basis points in total from its 4¾ per cent peak (Figure 2.3). The reductions took place in two rounds, first in 2001 at the early stage of the downturn when rates were cut by a cumulated 150 basis points and then from late-2002 to June 2003 by another cumulated 125 basis points. Since then the ECB has maintained its main policy rate at the historical low of 2 per cent. On the basis of its economic and monetary analysis, the ECB has not seen any need to change its key interest rates since June 2003.

© OECD 2004

Figure 2.3. **Interest rate developments**
Per cent



1. The boundaries of the shaded "corridor" correspond to the ECB's standing lending and deposit facility rates.
2. 10-year government bond rates. The real interest rate is deflated by HICP inflation over the last 12 months.
3. Lehman euro Baa and 10-year government benchmark bond yield.
4. Spreads of high yield bonds (Merrill Lynch indices) over 10-year government benchmark bond yield.

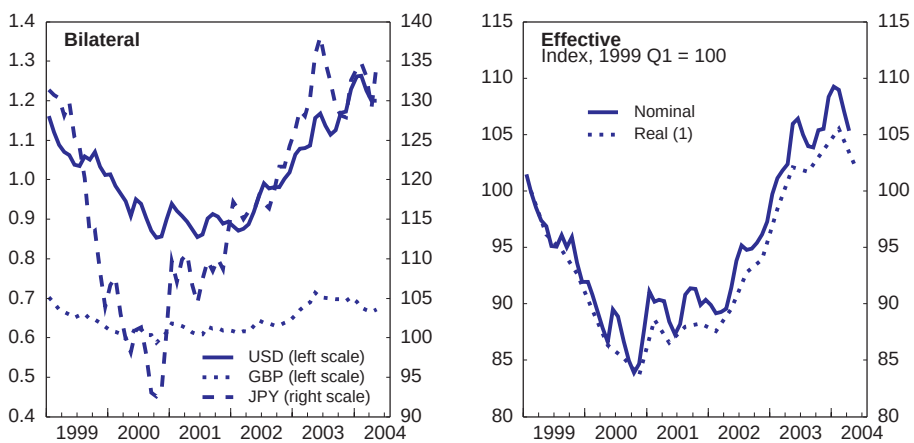
Source: ECB, Datastream; Euronext/Liffe; OECD.

© OECD 2004

The sharp rebound in long rates in the United States in April 2004 has so far not spilled over to the euro area, where yields have stayed in line with the comparatively weak fundamentals. Real long-term interest rates, as measured by the benchmark government bond yield deflated by the HICP inflation rate, have nevertheless increased from the first quarter of 2003 as inflation tapered off. Meanwhile the sharp decline in corporate yield gaps over this period has probably undershot the fundamentals. Notwithstanding the recurrent accounting scandals, credit risks are priced at historically low levels, probably because alternative opportunities for financial investment are rare at present. The easing of financial conditions for businesses on that count thus seems to have largely run its course.

The exchange rate has appreciated in effective terms by around 20 per cent since early 2002 (19 per cent in real effective terms), despite some downward corrections on the way (Figure 2.4). A first correction was observed in the summer of 2003, when the euro exchange rate fell against the US dollar due to expectations of a pick-up in economic activity in the United States. This correction was, however, quickly reversed. The subsequent appreciation of the euro continued until the end of the year, followed by another small correction in early 2004, first against the Japanese yen which experienced a broad-based strengthening against all major currencies, and next against the US dollar in response to buoyant short-term indicators. In nominal terms, the euro exchange rate against the US dollar is presently

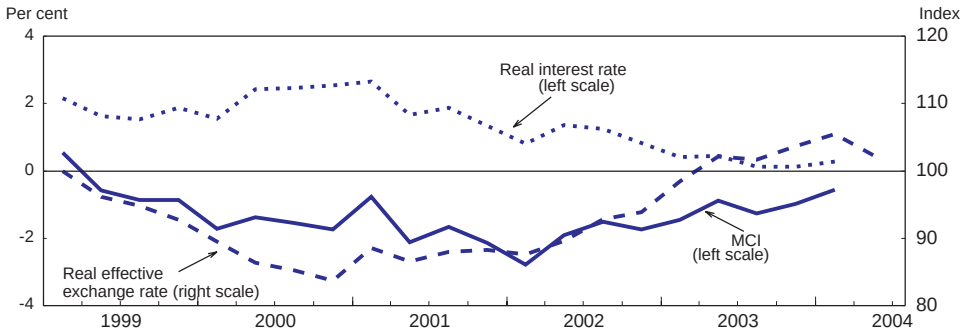
Figure 2.4. **Exchange rate developments**
Units of foreign currency per euro



1. Nominal effective rates corrected for cross-country differences in consumer prices.
Source: OECD.

© OECD 2004

Figure 2.5. **Monetary conditions index**[1]



1. Weights used in calculation are 1 for the real interest rate and 0.15 for the real effective exchange rate.
Source: OECD.

close to its historical average since 1980 and the estimated equilibrium rate put forward in several studies (see *i.e.* Wren-Lewis and Driver, 1998; Borowski and Couharde, 2000; Goldman Sachs, 2000). But the persistently high US current account deficit underscores the risk of a further appreciation of the euro against the dollar going forward.

The monetary conditions index, which combines information on the real short-term interest and effective exchange rates, has been on an upward trend since the start of 2002, although it is still below the level at the advent of the single currency (Figure 2.5). It needs to be stressed though that the index is a rather crude measure.[1]

Money and credit growth

After showing a strong expansion of around 7½ per cent per year in the 2001-03 period, the broad money aggregate M3 has been growing at a more moderate pace of around 6¼ per cent year on year in the first quarter of 2004 (Table 2.2). The downward trend began in the summer of 2003 and reflects a shift in portfolios towards longer-term and riskier financial assets outside M3, following the pick-up in stock markets since the spring of 2003. However, the slowdown in M3 growth has been modest so far, with the annual rate of growth still exceeding the ECB's "reference value" of 4½ per cent. Apparently, many investors are still biased towards safe and liquid financial assets after having burnt their fingers in the stock market, not least since the low level of interest rates at the short end implies that the opportunity cost of holding money is low. The latter is reflected in the breakdown of M3 into its main components; unlike the broader money aggre-

© OECD 2004

Table 2.2. **Monetary aggregates and their counterparts**
End of period, percentage growth[1]

	Level January 1999 (billion EUR)	1999	2000	2001	2002	2003	2004 Q1
M1[2]	1 809.1	10.6	5.4	6.0	9.7	10.6	11.4
M2[3]	3 929.5	5.5	3.7	6.5	6.6	7.6	6.9
M3[4]	4 447.1	5.7	4.2	8.0	6.9	7.1	6.3
Contributions to M3 *growth from*:							
Credit to the private sector	5 700.1	13.6	14.2	9.5	6.4	7.8	7.9
Credit to general government	2 039.0	0.7	–2.8	0.0	0.7	2.3	2.4
Net external assets	332.9	–4.3	–2.9	–0.2	3.0	1.7	1.6
Longer-term financial liabilities	–3 300.5	–5.5	–3.4	–3.5	–3.4	–4.0	–4.6
Other net liabilities	–324.4	1.3	–0.7	2.2	0.2	–0.6	–1.0

1. Seasonally adjusted data.
2. Currency in circulation and overnight deposits.
3. M1 and other short-term deposits.
4. M2 and marketable instruments (repurchase agreements, money market fund shares and units of euro area residents, debt securities with an original maturity of up to two years).

Source: ECB, *Monthly Bulletin*.

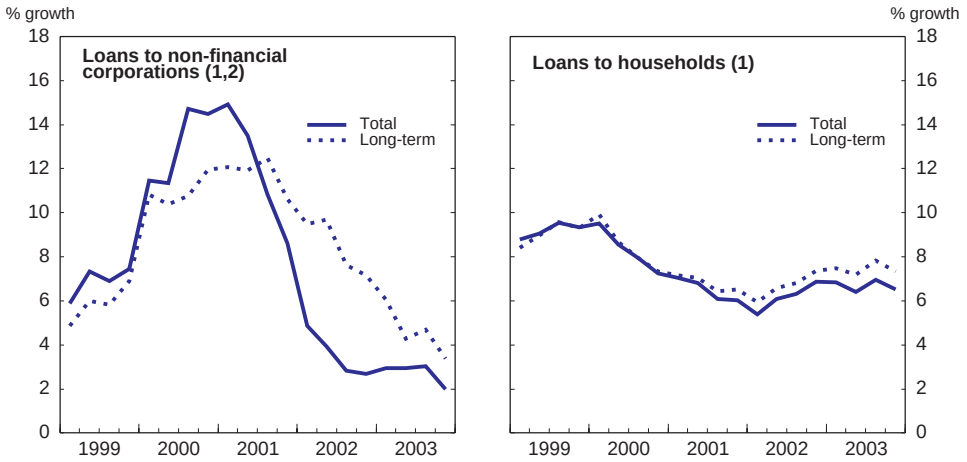
gates the narrowest money aggregate M1 (currency in circulation and overnight deposits) accelerated sharply in 2003 and early 2004.

The increased risk appetite of investors in the euro area is reflected in the counterparts of M3. Owing to the global recovery, euro area investors have become net buyers of foreign equity in the course of 2003. There remains a net inflow of foreign capital invested in euro bonds which generally carry a higher yield than foreign bonds and may offer a capital gain if the euro appreciates further. On balance, however, the positive foreign contribution of money growth declined since summer 2003. By contrast, the domestic sources of money growth have been accelerating since the start of 2003. Credit growth to the private sector has strengthened with loans to households for house purchases showing a particularly strong upward trend, reflecting historically low mortgage interest rates combined with sharp increases in house prices in a number of euro area countries (Figure 2.6). Consumer credit also accelerated recently, in line with somewhat stronger consumption in the first quarter of 2004. Meanwhile, growth of credit to the non-financial corporate sector remained subdued despite a pick-up in investment, partly because businesses reverted to other sources of financing (mostly retained profits).[2]

Although M3 growth has been trending down recently, the liquidity overhang has remained high when gauged against cumulative deviations of M3 from the ECB's reference value of 4½ per cent growth *per annum*. Whether or not this will eventually translate into inflation pressure depends largely on the extent to, and speed at which, euro area investors continue to adjust their portfolios along with

© OECD 2004

Figure 2.6. **Credit growth**



1. Amounts outstanding, percentage growth over same period of previous year.
2. Including non-profit institutions serving households.

Source: ECB, *Monthly Bulletin*.

the strength of the economic recovery. Portfolio shifts back into risk-bearing or non-financial assets may occur once uncertainty abates. This may bid up asset prices and the associated wealth effects could spark excess demand and inflation. On the other hand, it cannot be ruled out that money velocity has decreased permanently. In that case, the impact of "excess liquidity" on effective demand and inflation in the future will be small.

Interest rates are at historical lows

Interest rates in the euro area are currently at a historical low and continue to support the economic recovery. The OECD projections embodied in the Spring 2004 *Economic Outlook* No. 75 assumed a further ½ percentage point cut in policy interest rates this spring. However, signs have emerged that the recovery has gathered more momentum than expected and there are also stronger inflationary pressures in the short term. Accordingly, key ECB interest rates have been left unchanged at their level prevailing since June 2003. Looking ahead, the ECB has pointed to a number of upside risks to recent inflation projections. Concerns relate in particular to oil price developments. Moreover, not enough is known at present about future changes in indirect taxes and administered prices; information on these items typically becomes available only towards the end of the year when budgets are finalised. Against this background, the potential risk

© OECD 2004

for second-round effects via wages needs to be monitored closely. Moreover, the rise in long-term inflation expectations as gauged by financial market indicators calls for particular vigilance. Finally, low interest rates continue to fuel monetary growth and excess liquidity remains high in the euro area. In an economic upswing, this could lead to inflationary pressures over the medium term. All these factors require vigilance with regard to the materialisation of risks to price stability. On the other hand, if evidence of weakening of economic activity surfaces, moderating inflationary pressures, the ECB should stand ready to reduce its interest rates.

When will the new EU-members be ready to join the euro area?

Ten countries – Cyprus, the Czech Republic, Estonia, Hungary, Latvia, Lithuania, Malta, Poland, the Slovak Republic and Slovenia – joined the European Union on 1 May 2004 and are expected to adopt the euro once they meet the criteria set by the Maastricht Treaty. In economic terms, the new EU-members are small compared with the euro area with around 6 per cent of the euro area's gross domestic product (GDP). However, with a total of 75 million inhabitants, they will increase the euro area's current population by approximately 25 per cent. Unlike Denmark and the United Kingdom, the new EU-members do not have an opt-out clause from joining the single currency, but have all joined the Union as member states with a derogation.[3] This means that, while not yet adopting the euro, they will be committed to striving towards the eventual adoption of the euro upon fulfilment of the convergence criteria laid down in the Treaty, namely, a high degree of price stability, a sound fiscal situation, a stable exchange rate and low long-term interest rates:

- Inflation should not exceed by more than 1½ percentage points that of, at most, the three best performing member states in terms of price stability.
- The budget must not be in an excessive deficit position, *i.e.* the deficit must be below 3 per cent of GDP and gross debt below 60 per cent of GDP or converging towards this threshold at a satisfactory rate.
- Long-term interest rates must not exceed that of, at most, the three best performing EU countries in terms of price stability by more than 2 percentage points.
- Before adopting the euro, member states are required to have participated for at least two years in the Exchange Rate Mechanism II (ERM II) before the convergence assessment without severe tensions in the foreign exchange market. ERM II links the currencies of EU member states outside the euro area to the euro, allowing for fluctuation within a symmetric band of 15 per cent of the central parity (standard fluctuation band). The assessment of exchange rate stability against the euro will focus on the exchange rate being close to the central rate while also

© OECD 2004

taking into account factors that may have led to an appreciation, which is in line with what was done in the past. There are no formal criteria for joining ERM II and procedures to join ERM II can be initiated at any time by an EU member state. As a result, euro adoption could be envisaged at the earliest in early 2007.

Some of the new EU-member states already comply with several of the convergence criteria (Table 2.3). A comparison between new member countries in 2002, five years before their intended adoption of the euro, and the old member states five years before they qualified for Economic and Monetary Union (EMU) shows that the new member countries have come much closer to nominal convergence. HICP inflation in 2002 was in most new member states far lower than in Greece, Portugal and Spain five years before entering EMU and interest rates in Greece, Italy, Portugal and Spain were also much higher at that time than the new member countries have today (ECB, 2004c). Nevertheless, most of the new member states still need to pursue a credible adjustment path to achieve compliance with the deficit and debt criterion, in particular given the deterioration of the budgetary position in recent years.

Real (as opposed to nominal) convergence is essential for the degree to which new member countries can be considered as a part of an optimum currency area (OCA), both with regard to the symmetry of external shocks and the capacity of a country to absorb shocks. Real convergence refers to the similarity of economic

Table 2.3. **Nominal convergence of the new EU-member states**
2003

	HICP inflation[1]	Fiscal balance Percentage of GDP	Public debt Percentage of GDP	Long-term yields[2]
Cyprus	4.0	–6.3	72.2	4.7
Czech Republic	–0.1	–12.9	37.6	4.1
Estonia	1.4	2.6	5.8	5.0
Hungary	4.7	–5.9	59.0	6.8
Latvia	2.9	–1.8	15.6	4.9
Lithuania	–1.1	–1.7	21.9	5.3
Malta	2.6	–9.7	72.0	5.0
Poland	0.7	–4.1	45.4	5.8
Slovak Republic	8.5	–3.6	42.8	5.0
Slovenia	5.7	–1.8	27.1	6.4
AC-10[3]	2.1	–5.6	43.8	5.6
Reference value[4]	2.6	–3	60	6.1

1. Annual average. The EU countries with the lowest inflation rate in 2003 were Austria, Finland and Germany.
2. Annual average. For Estonia an interest rate indicator is used.
3. Weighted by nominal GDP in 2003.
4. The reference value for inflation and the interest rate is based on 2003 weighted average for the three best performing member states in terms of price stability, plus 1.5 for inflation and 2 for long-term yields.

Source: ECB; Eurostat; OECD.

© OECD 2004

structures, business cycle synchronisation, the degree of trade and financial integration, the flexibility of goods prices and wages as well as factor mobility. According to the OCA literature, if these criteria are fulfilled a country can abandon the exchange rate as an adjustment tool. However, some (*e.g.* Frankel and Rose, 1998) have highlighted the endogenous character of the OCA criteria. Since the new member countries are mostly transition economies, it is reasonable to assume that if they joined the euro area too soon, the area would be less integrated than the current area and that it would face more and different shocks than the current one. Therefore, a cautious and well-prepared entry strategy is essential.

Adoption of the euro has many advantages for the new member countries. The most tangible advantage is that they would benefit from the credibility of a low inflation target as several new member countries have a history of high inflation. Such credibility gains will contribute to macroeconomic stability. Adoption of the single currency will eliminate the exchange rate risk between these countries and the euro area and thereby further lower interest rates. Entering EMU will allow the countries to participate fully in a deep, liquid and integrated capital market. Trade with other EU member countries is also likely to increase since transaction costs are reduced. However, since the new member countries differ greatly in their economic structure, exchange rate and monetary regimes (Tables 2.3 and 2.4), the benefits are unlikely to be the same for all countries.

The fact that the new member countries differ in their degree of nominal and real convergence is reflected in their views on the appropriate timetable towards adoption of the euro. Most countries have stated that they are aiming for a relatively short period of participation in ERM II, but subsequently some countries have pushed their preferred adoption dates back by one or two years (Box 2.2).

As a result of the fast process of liberalisation over the last years, capital mobility has risen for all new member countries. This raises concerns as fiscal and financial institutions have only recently started to operate in such an environment and, even if financial integration with the European Union is already high, the new member countries' financial sectors are still underdeveloped. For example, several indicators show a lack of funding for small and medium-sized firms, especially in the initial stages of their development (European Commission, 2003). The combination of an underdeveloped financial sector with high capital mobility could make the new member countries vulnerable to crises resulting from shocks and speculation. In this situation, joining the ERM II can in itself be problematic. Emerging markets can experience a large capital inflow due to high rates of return. When a country commits to peg the exchange rate, it will be especially attractive for foreign short-term investors, since they expect a stable or appreciating exchange rate. Such inflows can be problematic since they can lead to an overheating of the economy and they give strong incentives for an unhealthy development in financial

© OECD 2004

Table 2.4. **Selected characteristics of the new EU member states**
2003

	Population (million)	GDP (EUR billion)	GDP per capita (EUR, PPP)[1]	Unemployment rate	Share of agricultural employment (per cent)	Old age dependency ratio[2] (per cent)
Cyprus	0.7	11.3	17 980	4.7	9.1	17.8
Czech Republic	10.2	75.7	14 720	8.2	4.5	19.8
Estonia	1.3	8.0	10 890	9.5	6.1	23.5
Hungary	10.1	73.2	12 760	5.9	5.8	22.5
Latvia	2.3	9.9	9 640	10.6	13.3	23.3
Lithuania	3.5	16.1	10 170	11.7	17.8	22.0
Malta	0.4	4.3	15 930	8.8	1.9	18.1
Poland	38.2	185.2	9 880	19.1	18.4	18.9
Slovak Republic	5.4	28.8	11 210	16.6	4.5	16.6
Slovenia	2.0	24.5	16 420	6.4	10.7	21.0
New member countries						
Minimum	0.4	4.3	9 640	4.7	1.9	16.6
Average[3]	7.4	43.7	11 350	14.3	12.5	19.8
Maximum	38.2	185.2	17 980	19.1	18.4	23.5
Euro area						
Minimum	0.4	23.5	15 960	3.9	1.3	16.4
Average[3]	25.4	604.9	22 730	8.9	4.8	25.7
Maximum	81.6	2 129.2	44 270	11.1	16.0	34.8
New member countries in per cent of the euro area average						
Per cent	29.2	7.2	49.9	160.7	262.6	76.9
Memorandum:						
Denmark	5.4	187.8	26 070	6.0	3.3	23.2
Sweden	9.0	267.3	24 270	6.0	2.3	26.2
United Kingdom	59.4	1 588.7	25 260	4.7	0.9	22.8

1. 2000 for Cyprus and Malta.
2. Population aged 65 and older in per cent of the population aged 15-64. 2002 for Malta.
3. Weighted where applicable.

Source: European Commission; OECD.

markets. Moreover, too supportive financing conditions leading to excess demand may also entail a further deterioration of the external imbalances of these countries.

While an early adoption of the euro would reduce the new member countries' vulnerability against speculative attacks and shocks, it would raise other concerns. The financial sector would remain rather immature for some time which could contribute to large fluctuations in the economy. Experience from other emerging economies has shown that there is no easy way to fix a country's vulnerability to financial shocks. A sound fiscal situation is essential, as are well-functioning markets. Reducing vulnerability requires enhanced financial regulation and supervision, which in turn involves the development of strong and effective institutions.

© OECD 2004

Box 2.2. Exchange rate regimes

The exchange rate regimes in the new member countries are shown in Table 2.5. There tends to be a positive correlation between the size of a country and the flexibility of the exchange rate regime. Smaller countries have a tendency to peg their currency. For example, Cyprus pegs its currency to the euro, Malta pegs it to a basket of currencies with a 70 per cent share of the euro, Latvia pegs it to a basket of international currencies within a very narrow band while Estonia and Lithuania have currency boards with a peg to the euro. The strategy based on pegs has supported the small countries in significantly advancing convergence in recent years with inflation and interest rates close to those in the euro area. The larger countries generally have adopted more flexible regimes. Poland has a freely floating currency with inflation targeting, the Czech Republic and Slovak Republic have managed floats. Hungary is pegged to the euro with a large fluctuation band combined with an inflation target. In the larger countries, the exchange rate plays a greater macroeconomic role as a stabilisation tool.

Regarding the future, the small countries with hard pegs or currency boards (Cyprus, Estonia, Latvia and Lithuania) had signalled that they aim to join ERM II soon after accession. Two of these countries, Estonia and Lithuania, along with Slovenia, joined the ERM II from 27 June 2004. As regards the compatibility of currency board arrangements with ERM II, the Ecofin Council, in its report to the Nice European Council in December 2000, stressed that they could, in principle, constitute an appropriate unilateral commitment within ERM II but decisions would be taken on the basis of an assessment of the appropriateness and sustainability of the currency board in question. The decision on ERM II participation of 27 June 2004 accepted that Estonia and Lithuania are joining the exchange rate mechanism with the existing currency board in place. For the countries with inflation targeting regimes with flexible exchange rates the way towards EMU will not be so straightforward. Entering EMU will contain a double regime switch, first from their current regimes to ERM II and then to EMU. Some of these countries, the Czech Republic, Poland and Slovak Republic have expressed a preference for delaying participation in ERM II for some time in order to first develop the domestic financial sector and improve the fiscal position before changing their monetary policy regime (Calmfors *et al.*, 2004).

It has further been argued that the inflation criterion, if viewed together with the exchange rate stability criterion, can represent a problem for the new member countries (Baldwin *et al.*, 2001) since the catching-up process can be expected to lead to higher inflation rates for the new member countries if they peg their exchange rate to the euro. However, to the extent that higher inflation would result from Balassa-Samuelson effects, estimates show that for the new member states, these effects are rather limited and well below the Maastricht threshold. To the extent that inflation has other, less benign causes, such as

© OECD 2004

Table 2.5. **Exchange rate strategies currently followed by the new member countries**

	Exchange rate strategy[1]	Currency	Features
Cyprus	Peg to the euro, with ± 15% fluctuation bands	Cyprus pound	The Cyprus pound has *de facto* fluctuated within a narrow range
Czech Republic	Managed float	Czech koruna	Inflation targeting: 2-4% by end-2005, thereafter 3% ± 1 p.p.
Estonia	Since 27 June 2004, participation in ERM II with currency board arrangement as a unilateral commitment	Estonian kroon	ERM II with a standard fluctuation band ± 15% with previously existing currency board remaining in place
Hungary	Peg to the euro, with ± 15% fluctuation bands	Hungarian forint	Exchange rate peg combined with inflation targeting: max. 4.5% by end-2003, 5.5% by end-2004 and 4% by end-2005
Latvia	Peg to the SDR (euro weight currently 35%)	Latvian lat	Fluctuation band ± 1%
Lithuania	Since 27 June 2004, participation in ERM II with currency board arrangement as a unilateral commitment	Lithuanian litas	ERM II with a standard fluctuation band ± 15% with previously existing currency board remaining in place
Malta	Peg to basket	Maltese lira	Currency basket (EUR, USD, GBP)
Poland	Free float	Polish zloty	Inflation targeting: 2-4% until end-2003; 2.5% ± 1 p.p. from 2004 onwards
Slovakia	Managed float	Slovak koruna	Hybrid strategy, combined with implicit inflation targeting
Slovenia	Since 27 June 2004, participation in ERM II	Slovenian tolar	ERM II with a standard fluctuation band ±15%

1. Based on the IMF *De Facto Exchange Rate Arrangements and Anchors of Monetary Policy* as of 30 June 2003 and ECB.
Source: IMF; ECB.

inappropriate fiscal or wage policies, it should be tackled by addressing the root causes.

Since the new EU member states differ both in size, exchange rate systems and fiscal, monetary and financial development, there is no single strategy to achieve macroeconomic stabilisation in a way that can be recommended for all of the countries. Joining the ERM II soon after accession could lead to a reduction of financial risks, convergence in interest rates and increased credibility of monetary policy. Participation in ERM II is not limited to a certain time period. A longer stay in ERM II and hence a slower pace towards adoption of the euro would give more time to improve the financial sector. It would also give more time to make fiscal and financial policy sustainable and compatible with a fixed exchange rate. Small countries that have signalled that they wish to join ERM II as soon as possible and

© OECD 2004

that are able to sustain hard pegs should be best placed to achieve a smooth and fast transition to EMU. For countries that have large domestic imbalances and unstable financial sectors, a delay in participation in ERM II should be the preferred option to allow them to get their domestic situation in order first.

The enlargement of the ECB's Governing Council has raised institutional issues. Currently, all member states have equal voting power within the Council and policy decisions are based on a simple-majority rule. In March 2003, the European Council adopted a decision to amend the central bank's Statute, following a proposal by the ECB's Governing Council (ECB, 2003). Even after enlargement, the number of governors of the national central banks with a voting right will not exceed 15 and governors will exercise their voting rights with different frequencies. The frequencies are determined by an indicator of the relative size of the economy and financial sector in the euro area. Rotation of voting rights does not apply to the members of the Executive Board. The new system is similar to the one used by the Federal Open Market Committee in the United States, where the Presidents of the Federal Reserve Bank also exercise their voting right with different frequencies. Another issue following enlargement concerns the definition of the price stability objective. If Balassa-Samuelson effects turned out to be strong, inflation in the new member countries could be considerably above the rates in the countries currently in the euro area. However, how large such effects would be is difficult to determine and the weight of these countries in the HICP is relatively small.

© OECD 2004

Notes

1. The monetary conditions index (MCI) attempts to provide an aggregate measure of changes in short-term interest rates and exchange rates weighted by their relative impact on economic activity. Aside from potential technical pitfalls associated with the MCI, it is particularly important to note that its information content may be blurred as it depends on the shock that produces a movement in the MCI. If for example an appreciation of the currency results from a favourable demand shock, the MCI would suggest a "tightening" of monetary conditions which might be used as an argument to cut interest rates, which would work out pro-cyclically (ECB, 2002).
2. Credit to general government has also been expanding rapidly since the start of 2003 as fiscal deficits widened (Chapter 3). The negative contribution to M3 growth from longer-term liabilities of the financial institutions has remained large, as investors have been shifting portfolios towards longer-term deposits and bank bonds to take advantage of the upward sloping yield curve.
3. The derogation implies that several Treaty articles do not apply, including the application of sanctions in case of an excessive deficit, that voting rights in the Council in these matters are suspended and that rights and obligations within the European System of Central Banks are limited. Currently, Sweden has a derogation as it does not fulfil the criteria for joining the single currency area, in particular as it did not join the ERM II, but also with a view to requirements concerning central bank independence.

© OECD 2004

Bibliography

Baldwin, R.E. *et al.* (2001), "Nice Try: Should the Treaty of Nice be Ratified?", *Monitoring European Integration* 11, CEPR (Centre for Economic Policy Research), London.

Berger, H. (2002), "The ECB and Euro-Area Enlargement", IMF *Working Paper*, No. 02/175.

Borowski, D. and C. Couharde (2000), "Euro, dollar, yen: pour une approche multilatérale des taux de change d'équilibre", *Revue Économique*, Vol. 51, No. 3.

Calmfors, L. *et al.* (2004), "The Road to the Euro", *Report on the European Economy* 2004, Chapter 6, European Economic Advisory Group at CESifo, Munich.

ECB (European Central Bank) (2002), "Issues Related to Monetary Conditions Indices", Box 3, *Monthly Bulletin*, June.

ECB (2003), *Monthly Bulletin*, May.

ECB (2004a), "Has Euro Area Inflation Persistence Changed Over Time?", ECB *Working Paper*, No. 335, April.

ECB (2004b), "Is Inflation Persistence Intrinsic in Industrial Economies?", ECB *Working Paper*, No. 334, April.

ECB (2004c), "The Acceding Countries' Strategies towards ERM II and the Adoption of the Euro: an Analytical Review", *Occasional Paper*, No. 10.

European Commission (2003), "Key Structural Challenges in the Acceding Countries: the Integration of the Acceding Countries into the Community's Economic Policy Co-ordination Process", *Occasional Paper*, Directorate-General for Economic and Financial Affairs, Brussels.

Frankel, J. and A. Rose (1998), "The Endogeneity of the Optimum Currency Area Criterium", *The Economic Journal*, Vol. 108, No. 449.

Goldman Sachs (2000), *The Global Currency Analyst*, June.

IMF (International Monetary Fund) (2003), Euro Area Policies: Selected Issues, *Country Report*, No. 03/298.

Wren-Lewis, S. and R. Driver (1998), *Real Exchange Rates for the Year* 2000, Institute for International Economics, Washington DC.

© OECD 2004

III. Fiscal coordination at the crossroads

A key feature of the fiscal framework in Economic and Monetary Union (EMU) is that fiscal policies have remained decentralised, but are subject to rules and co-ordination. This commits member countries to fiscal discipline while allowing them to respond, within certain bounds, flexibly and effectively to the cycle. The Treaty is the backbone of this set-up. Its provisions are detailed in the Stability and Growth Pact (SGP) which is predicated on the basis that governments achieve and maintain budgetary positions close to balance or in surplus over the medium term. The observance of this rule allows the automatic stabilisers to play freely while respecting the 3 per cent of gross domestic product (GDP) deficit ceiling stipulated in the Treaty. The annual updates of the stability programmes submitted by the governments to the European Commission take stock as to how far they have progressed in moving towards close-to-balance or in surplus and provide a policy trajectory in the pursuit of this goal over the medium term.

The experience with the framework to date has been mixed, at best. While several smaller euro area countries continued fiscal consolidation, even moving into surplus, the three largest member countries – Germany, France and Italy – as well as Greece, the Netherlands and Portugal have breached or risk breaching the 3 per cent limit. Germany and France even posted an excessive deficit for several years in a row. Notably the large economies are finding it hard to meet the fiscal objectives of the SGP, while the rules are not binding for most of the smaller, dynamic, economies. It is fair to assume that fiscal consolidation in the euro area would have progressed less well had there not been the SGP, given that it raised transparency, awareness of longer-term fiscal issues and peer pressure. But recurrent disagreements between the European Commission and a qualified majority of the Council of Ministers over the appropriate measures to correct deficits in excess of the 3 per cent threshold have raised questions on the implementation of the Pact.

Against this backdrop, proposals are being discussed to strengthen fiscal discipline during cyclical upswings and to take countries' indebtedness – including their contingent liabilities such as public pension promises – into account more explicitly. With ageing-related fiscal pressures now more imminent, a repeat of the policy errors of the last economic upswing – when buoyant cyclical conditions

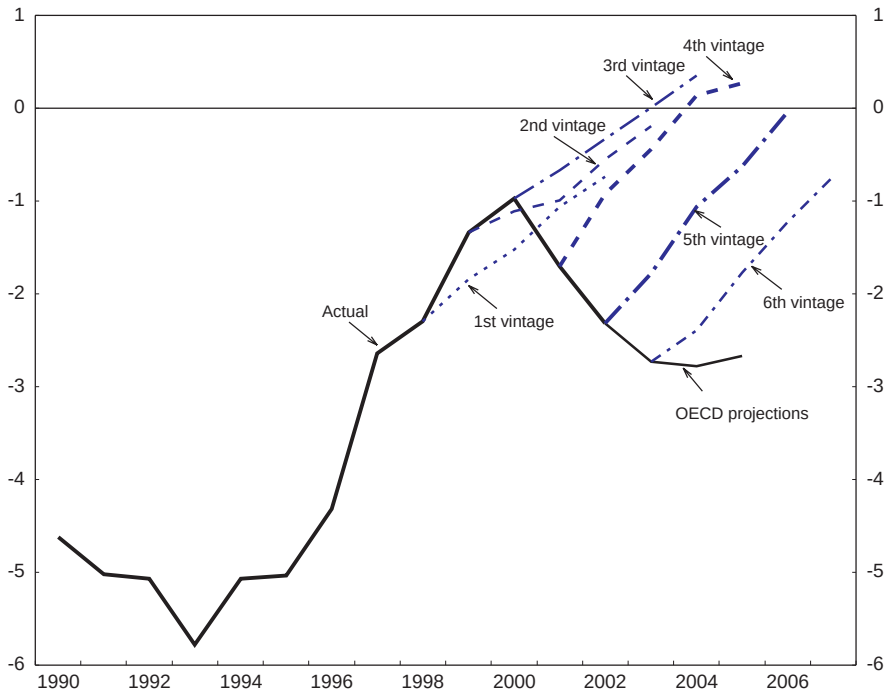
© OECD 2004

led to a weakening or even a reversal of consolidation efforts – would be even more costly than they have recently been. The first section of this chapter takes stock of the current fiscal situation and the next then briefly examines the underlying causes of the lack of fiscal ambition. The chapter ends with suggestions on how to move forward.

The state of play

The third vintage of stability programmes presented by the euro area member countries on the eve of the 2001-03 downturn foresaw the general government deficit for the area as a whole disappearing by 2003 (Figure 3.1). The outcome

Figure 3.1. **Moving targets**[1]
General government balance in the euro area as a per cent of GDP[2]



1. The various vintages of the Stability Programmes were released over the following periods: 1st 1998/99, 2nd 1999/2000, 3rd 2000/01, 4th 2001/02, 5th 2002/03, 6th 2003/04.
2. Excluding Universal Mobile Telephone System (UMTS) licence proceeds.

Source: European Commission/Eurostat; OECD.

© OECD 2004

was instead a deficit of 2.7 per cent of GDP. The latest vintage of stability programmes, presented in the winter of 2003/04, foresees a gradual reduction in the deficit to ¾ per cent of GDP by 2007. For 2004 and 2005 the programmes project an improvement in deficit positions to 2.4 and 1.8 per cent of GDP, respectively. But the out-turn is likely to be worse as the programmes are built on economic projections that err on the optimistic side. The latest projections in the OECD *Economic Outlook* No. 75 indicate that in the absence of corrective measures no reduction of the fiscal deficit in the years 2004 and 2005 may be expected (Table 3.1).

Table 3.1. **Euro area fiscal indicators**
In per cent of GDP (or potential GDP)

	1999	2000	2001	2002	2003	Projections[1] 2004	Projections[1] 2005
Financial balances[2]							
Net lending	–1.3	–1.0	–1.7	–2.3	–2.7	–2.8	–2.7
Net primary balance	2.5	2.7	1.8	0.9	0.3	0.3	0.5
Cyclically-adjusted balance[3]	–1.1	–1.5	–2.0	–2.1	–1.7	–1.6	–1.8
Primary cyclically-adjusted balance[3]	2.7	2.2	1.5	1.2	1.3	1.3	1.3
Gross saving	0.3	0.6	0.1	–0.8	–1.5	–1.5	–1.2
Government gross debt[4]	72.9	70.4	69.4	69.2	70.4	71.5	72.0
Spending and revenue							
Total primary expenditure[2]	45.1	44.5	44.7	45.1	45.9	45.3	44.7
Debt interest payments	3.9	3.6	3.5	3.2	3.1	3.0	3.2
UMTS licence proceeds	0.0	1.1	0.0	0.0	0.0	0.0	0.0
Total revenue	47.0	46.7	46.0	45.5	45.3	44.9	44.7

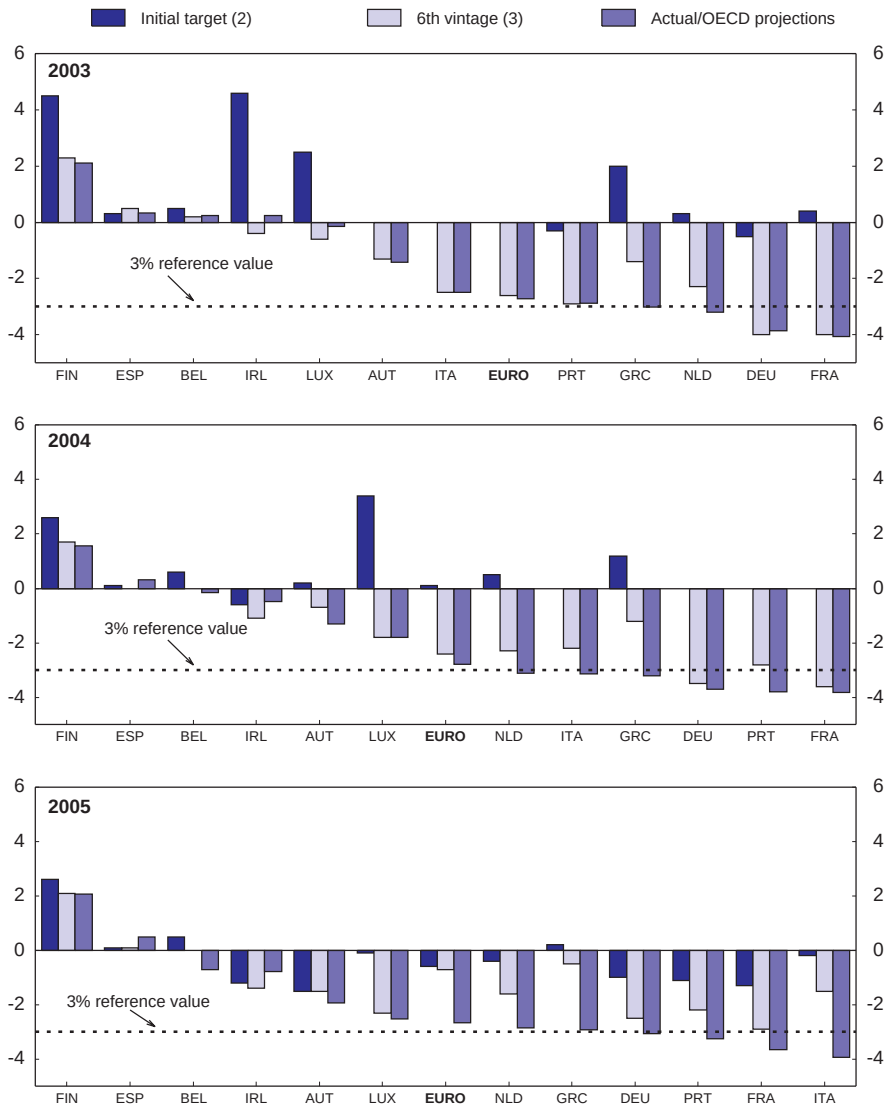
1. OECD projections.
2. Excluding UMTS license proceeds.
3. The cyclically-adjusted primary balance excludes debt interest payments. The change in this balance over time aims to gauge the impact of discretionary action on fiscal positions, but covers a broader set of factors, including the impact of erratic movements of specific taxes, variations in take-up of social benefits other than unemployment insurance and unintentional over or underspending.
4. Maastricht definition.

Source: OECD.

This aggregate development masks major differences in fiscal outcomes across the euro area countries (Figure 3.2). Comparatively large deficits were recorded in Germany and France, which both breached the 3 per cent threshold enshrined in the Maastricht Treaty for the second consecutive year in 2003. Portugal posted a deficit of 4.1 per cent of GDP already in 2001. It has corrected its fiscal position since, but relied to a large extent on one-off measures. The Netherlands and Greece breached the 3 per cent mark for the first time in 2003. The other smaller countries stayed below the 3 per cent limit in 2003, even if some of them have shown major downward revisions of initially projected surpluses (Finland, Ireland and Luxembourg).

© OECD 2004

Figure 3.2. **Fiscal balances**
General government, per cent of GDP[1]



1. Excluding UMTS licence proceeds.
2. The initial targets correspond to the targets set in the 3rd, 4th and 5th vintages in respectively 2003, 2004, 2005.
3. The sixth vintage of the Stability Programme was released in the winter of 2003/04.

Source: European Commission/Eurostat; OECD.

© OECD 2004

At the time of writing, four countries in the euro area were subject to an Excessive Deficit Procedure (EDP) consistent with the relevant provisions in the Maastricht Treaty. It is instructive to follow in detail the various steps in the procedure:

- When in January 2003 the German 2002 budget deficit turned out to be above 3 per cent of GDP, the Council launched the EDP, recommending to put an end to the excessive deficit by 2004 at the latest. The Council recommended Germany to reduce its deficit to 2¾ per cent in 2003, conditional on economic growth attaining 1½ per cent, and to adopt measures amounting to 1 percentage point of GDP by May 2003 at the latest. However, according to the Commission's 2003 autumn forecast the German fiscal deficit was expected to reach 3.6 per cent of GDP in 2003, and would remain above 3 per cent also in 2004, in part reflecting the protracted slowdown. This prompted the Commission to recommend the Council to establish that no effective action had been taken and to give notice to Germany. The Commission recommended that Germany cut its deficit to below 3 per cent of GDP by 2005 at the latest. On 25 November 2003, the Council rejected the Commission's recommendations and decided to "hold in abeyance" the EDP (Box 3.1), but recommended that Germany cut its cyclically-adjusted budget deficit by 0.6 and 0.5 per cent of GDP in 2004 and 2005, respectively, so as to ensure that the government deficit is brought down to below 3 per cent of GDP in 2005. However, in its opinion on the German stability programme in March 2004, the Council expressed doubts that this would suffice to correct the excessive deficit by 2005 and notes that a budget position close to balance or in surplus will not be reached by 2007 (Table 3.2). According to the projections embodied in the OECD *Economic Outlook* No. 75, Germany will remain in breach of the 3 per cent threshold in 2004 and 2005 in the absence of further corrective measures.
- In January 2003 the Council issued an "Early Warning" against France as its deficit was estimated to have reached 2.8 per cent of GDP in 2002 and there were clear risks that it would go above 3 per cent in 2003. However, final budget numbers in March showed that the deficit had reached 3.1 per cent of GDP, prompting the Commission to launch an EDP against France in April 2003. This was followed in June by a Council recommendation to France to end the excessive deficit by 2004 at the latest and to reduce the cyclically-adjusted deficit by the amount necessary to achieve this objective. But the fiscal outlook deteriorated over the summer and the Commission's 2003 autumn forecast projected the French deficit at 4.2 per cent of GDP in 2003 and a deficit still above 3 per cent in 2004. The Commission accordingly recommended to the Council to establish that no effective action had been taken and to give notice to

© OECD 2004

Box 3.1. The fiscal provisions in EMU and the Council decisions of 25 November 2003

It is not widely appreciated that the Council decisions of 25 November 2003, did not exclusively relate to the implementation of various provisions of the SGP but primarily concerned the application of Articles 104(8) and (9) of the Treaty. It is also often overlooked that the recourse to these Articles does not automatically imply sanctions because this ultimate enforcement mechanism comes in only later, in Art. 104(11). A quick reminder of the relevant provision and the Council decisions may therefore be useful.

The T*reaty* stipulates in Art. 104 that the member states are required to avoid "excessive government deficits" [Art. 104(1)].The European Commission monitors the maintenance of budgetary discipline against reference values for the ratios of the general government balance and gross debt to GDP [Art. 104(2)]. The reference values are set in the "Protocol on the Excessive Deficit Procedure" annexed to the Treaty, at 3 and 60 per cent of GDP, respectively. Once the reference values are exceeded or risk being so, the Commission prepares a report [Art. 104(3)] and the Council of Ministers (E*cofin*) decides whether an excessive deficit exists [Art. 104 (6)]. It does so by voting by qualified majority on a recommendation by the Commission, after consultation of the Economic and Financial Committee (composed of representatives of the member states, the Commission and the ECB [Art. 104 (3-5)]. If an excessive deficit is established, the Council will issue a recommendation to the country concerned to correct the deficit within a given period [Art. 104(7)]. If a country of the euro area does not comply, the Council can establish that no effective action has been taken [Art. 104(8)] and give notice with new specific recommendations to the country concerned [Art. 104(9)]. If the member state also fails to comply with those recommendations, the Council can take special measures [Art. 104(11)] such as inviting the European Investment Bank to reconsider its loans policy with respect to that state, require the country to deposit funds into an interest free account with the European Union and impose fines.

The SGP was adopted in 1997 by the European Council of Amsterdam and came into force on 1 January 1999. The Pact consists of a Resolution of the European Council and two Regulations of the Council of Ministers (1466/97 and 1467/97). The Resolution stipulates that member states are committed to achieve and maintain a budget position which is close-to-balance or in surplus over the medium run. It regulates the role of each institution involved in the conduct and surveillance of budgetary policies (the member states, the Council and the Commission) and urges the Council to apply the rules forcefully and to the letter. However, unlike the two Regulations the Resolution does not have the power of law. Regulation 1466/97 establishes the surveillance of the fiscal situation. It stipulates that every member state shall compile a stability programme which allows the monitoring of fiscal discipline. Non-EMU countries compile a convergence programme. The annual update of the programme indicates the adjustment path and the measures to this end over a period of four years. In case of a significant divergence from the adjustment path the Council issues an "Early Warning" recommendation.

© OECD 2004

Box 3.1. The fiscal provisions in EMU and the Council decisions of 25 November 2003 (*cont.*)

Regulation 1467/97 of the Pact provides further detail on the implementation of the EDP covered by Art. 104(3-11) of the Treaty. It stipulates that as a rule a deficit above 3 per cent is not excessive if real GDP has fallen by 2 per cent or more. The Ecofin Council, may also grant a waiver if GDP has fallen by less than 2 per cent in view of the abruptness of the downturn or the accumulated loss of output relative to past trends, but member states have committed themselves not to invoke this possibility if the drop in GDP is less than 0.75 per cent. The excessive deficit should be corrected in the year following its identification unless there are special circumstances. If, in the opinion of the Ecofin Council, a state fails to take sufficient measures to correct an excessive deficit, and after giving a further notice (Art. 104.9) it may impose measures, including the obligation of a deposit with the Commission. The SGP specifies that this deposit initially consists of a fixed amount equivalent to 0.2 per cent of GDP and a variable amount equal to one-tenth of the difference between the actual deficit and the reference value, with an upper limit of 0.5 per cent of GDP. If the subsequent year shows again an excessive deficit, another deposit according to the same formula for the variable amount can be required. If after two years the excessive deficit is still found to exist, the deposit will "as a rule" be converted into a fine. The fine and the interest on the deposit will be distributed among the other member states according to their share in area-wide gross national product (not GDP).

Consequent to Council Decisions and Recommendations in January and June 2003 Germany and France were found to be in excessive deficit as defined in Art. 104(2) and were asked to correct this by 2004 at the latest. The Commission put two new sets of Recommendations to a vote by the Ecofin Council on 25 November 2003, to put France and Germany under enhanced budgetary surveillance, while postponing by one year the deadline for the correction of the deficit. The first set stipulated that no effective action had been taken by Germany and France in response to the January and June recommendations, in line with Article 104(8). All EU countries voted, except the country concerned, but the Recommendation failed to obtain the required qualified majority. The next vote was on two Recommendations under Article 104(9), giving notice to take measures of a given amount in 2004 and 2005 with a view to ending the excessive deficit situation in 2005 at the latest. In this case only the euro area countries voted, again except the country concerned, but once more no qualified majority was obtained. Subsequently the Council adopted Conclusions stating that it had agreed "to 'hold in abeyance' the Excessive Deficit Procedure for the time being" and recommending to bring the deficits back to below 3 per cent of GDP by 2005. The Commission challenged these Council decisions before the European Court of Justice.

France. The Commission recommended that France take further measures in 2004 and 2005 in order to cut the deficit to below 3 per cent of GDP by 2005 at the latest, the deadline being extended in view of the economic circumstances. However, in its 25th November meeting, the

© OECD 2004

Council also rejected these Commission recommendations and decided to "hold in abeyance" the EDP, while recommending that France cut its cyclically-adjusted budget deficit by 0.8 and 0.6 per cent of GDP in 2004 and 2005, respectively, so as to ensure that the government deficit is brought down to below 3 per cent of GDP in 2005. In its opinion on the French stability programme in February 2004, the Council noted that the deficit is unlikely to fall below 3 per cent of GDP by 2005 and to be eliminated altogether by 2007 (Table 3.2). The projections in the OECD *Economic Outlook* No. 75 also indicate that France is likely to stay in breach of the 3 per cent mark until 2005 in the absence of further action.

- In April 2004 the European Commission launched an EDP for the Netherlands after its budget deficit was found to have reached 3.2 per cent of GDP in 2003. The Council endorsed it in its June meeting, recommending the Netherlands to take measures so as to cut its deficit to below 3 per cent of GDP by 2005. In May 2004 the Commission also initiated an EDP for Greece after its budget deficit was found to have reached 3.2 per cent of GDP in 2003.[1] On 5 July, the Council decided that an excessive deficit exists in Greece and recommended it to take action to put an end to the excessive deficit by 2005 at the latest.

The budget estimates incorporated in the Italian stability programme are based on growth projections that, according to the Council's assessment, appear high. The deficit is likely to be above the 3 per cent mark this year and also next year when a number of temporary effects will cease to operate. These findings prompted the Commission to initiate an "Early Warning Procedure" for Italy in April. In light of the commitments made subsequently by the Italian government to contain the deficit below 3 per cent of GDP, the Council in its July meeting decided not to issue recommendations to that end. Portugal has been under an EDP since October 2002 after its deficit was found to have reached 4.1 per cent of GDP in 2001. Portugal took measures that allowed the deficit to fall just below 3 per cent of GDP in 2002 and 2003 and therefore the EDP was formally closed. However, projections in the OECD *Economic Outlook* suggest that Portugal will again breach the 3 per cent threshold in 2004.

How we got there

The 25th November Council decisions have prompted a flurry of calls to reform the SGP. A reason why the public focus has been on the SGP rather than the Treaty may be that the former has not received as much public acceptance as the Treaty, a problem which will be discussed in more detail below.

The alleged cause of the successive breaches of the 3 per cent Treaty rule lies in the 2001-03 economic downturn. The impact, depth and duration of the downturn were indeed grossly underestimated by the third, fourth and fifth vintages

© OECD 2004

© OECD 2004

Table 3.2. **Council assessments of the latest batch of stability programmes**[1]

	Deficit in excess of 3%	Close to balance	Macroeconomic assumptions	Complies with BEPGs and Eurogroup agreement	Risk of deficits exceeding 3% in 2004 or later	Long-term budgetary risks
Belgium	No	Yes, all years	Seem realistic, although possibly optimistic in 2005	Partly consistent with BEPGs	No, with normal cyclical fluctuations	Some risk of long-term imbalances
Germany	Target to correct it in 2005, within the deadline set by Council conclusions of 25 November 2003	Not until 2007	Appear realistic in 2004; optimistic afterwards	Consolidation rather less than ½ percentage point per annum in 2006 and 2007	Adjustment path may be insufficient to correct excessive deficit in 2005, under less favourable macroeconomic and budgetary assumptions	Risks of long-term imbalances cannot be ruled out
Greece	No	Not until 2006 (last projection year)	Seem optimistic	Not fully consistent with the request to improve the cyclically adjusted balance by at least 0.5% of GDP each year	No, with normal cyclical fluctuations	Yes, risk of severe budget imbalances
Spain	No	Yes, all years	Seem realistic	Largely consistent with BEPGs	No	Current policies need to be supplemented by measures to prevent the emergence of unsustainable trends
France	Target to correct it in 2005, within the deadline set by Council conclusions of 25 November 2003	Not until 2007	2004 and the "cautious" scenario 2005-07 appear plausible	Partly consistent with BEPGs	Adjustment seems insufficient to eliminate the excessive deficit in 2005 under plausible macroeconomic and budgetary assumptions	Yes, risks cannot be ruled out

Table 3.2. **Council assessments of the latest batch of stability programmes**[1] (*cont.*)

	Deficit in excess of 3%	Close to balance	Macroeconomic assumptions	Complies with BEPGs and Eurogroup agreement	Risk of deficits exceeding 3% in 2004 or later	Long-term budgetary risks
Ireland	No	Yes, targeted in 2006 (last projection year)	Seem realistic	Broadly consistent with BEPGs	No, with normal cyclical fluctuations	On the basis of current policies, some risks may emerge
Italy	No	Yes, in 2006 and 2007	Appear to be on the high side of the current forecasting range	Partly consistent with the request to improve the cyclically adjusted balance by at least 0.5% of GDP each year	Safety margins do not seem sufficient with normal macroeconomic fluctuations	Yes. On the basis of current policies risks cannot be ruled out
Luxembourg	No	Yes, all years	Plausible in 2004 and 2005. May be on the high side in 2006	Broadly consistent with BEPGs	Under adverse economic circumstances, particularly in 2005	No
Netherlands	No	Yes, from 2005	Some downside risks to projection in 2004	Broadly consistent with BEPGs	Risk of breaching 3% under more adverse economic circumstances	Some risk of future budgetary imbalances cannot be ruled out
Austria	No	Yes, in 2004 and 2007	Appear realistic	Not fully consistent with BEPGs	No	Reduced, but to be confirmed by actual developments
Portugal	No	Not until 2007	Seem realistic	Broadly consistent with BEPGs, but less than ½ per cent GDP annual adjustment in 2006 and 2007	Budgetary targets subject to major risks	On the basis of current policies, risks of long-term imbalances cannot be ruled out
Finland	No	Yes, all years	Cautious in later years of the programme	Broadly consistent with the BEPGs	No, with normal cyclical fluctuations	No

1. Opinions delivered by the Ecofin Council on 20 January, 10 February and 9 March 2004 on programmes submitted by countries at the end of 2003 and in early 2004. This table gives a synoptic overview, and may not always fully reflect the Council opinions.

Source: ECB; OECD.

© OECD 2004

of the stability programmes. Major fiscal shortfalls in some cases surfaced only a few months after the programmes had been issued. These recurrent shortfalls have compromised the process of fiscal surveillance. It prompted some observers to call for a substantial increase of the Commission's resources devoted to fiscal surveillance and to strengthen its mandate in this regard (*e.g.* Gros *et al.*, 2003).

The fiscal shortfalls are indeed impressive (Table 3.3, first two columns). In the period 2001-03 fiscal positions turned out on average each year more than 1 per cent of GDP worse than those projected in the stability programmes. Analytical work by the OECD annexed to this chapter (Annex 3.A1) suggests that these shortfalls are largely attributable to bad surprises for economic growth. Growth projections were undershot by as much as 1½ percentage points on average each year in this period (Table 3.3, third and fourth columns). This raises suspicion that the programmes were subject to forecasting inertia, although the downturn and the extent of its impact on fiscal outcomes contained a genuine element of surprise. Shortfalls associated with the turnaround in stock markets may have been particularly large, which suggests governments had misjudged the true structural fiscal position as revenues had been boosted by the stock market boom in the late 1990s.[2] The analysis in Annex 3.1 suggests that the unusually busy election calendar in 2002 may have exacerbated the ensuing slippage.

Table 3.3. **Short-term forecasting errors in the stability programmes**
Per cent, annual average over the period

	A. Fiscal balance[1]		B. Real GDP growth[2]		Ratio A/B	
	1999-00	2000-03	1999-00	2000-03	1999-00	2000-03
Austria	–0.4	0.2	0.2	–0.9	–1.5	–0.2
Belgium	1.0	0.1	1.0	–1.3	1.0	–0.1
Finland	1.1	0.7	0.3	–1.4	3.7	–0.5
France	0.4	–1.3	0.9	–1.6	0.4	0.8
Germany	0.2	–1.4	0.2	–1.4	0.8	1.0
Greece	–0.2	–1.8	0.2	–0.3	–1.3	7.3
Ireland	1.9	–1.6	3.6	–0.4	0.5	3.5
Italy	–0.1	–1.7	0.1	–1.6	–0.5	1.0
Netherlands	2.1	–1.4	1.0	–1.7	2.1	0.8
Portugal	–1.3	–1.5	0.2	–1.9	–7.1	0.8
Spain	0.0	0.0	0.5	–0.6	0.1	0.1
Non-weighted average	0.4	–0.9	0.8	–1.2	0.6	0.7
Weighted average	0.3	–1.1	0.5	–1.4	0.6	0.8

1. Difference between the realised and projected fiscal balance as a per cent of GDP. Projections as included in the stability programme issued at the start of the current year or the end of the previous year.
2. Difference between the realised and projected real GDP growth rate. Projections as included in the stability programme issued at the start of the current year or the end of the previous year.

Source: European Commission; OECD.

© OECD 2004

Given these developments there was significant fiscal stimulus in the area over the 2000-02 period, along with the impact of the automatic stabilisers (Table 3.4). After correction for interest payments, which fell in most euro area countries – owing to the convergence of interest rates across the whole maturity spectrum to the low levels prevailing in Germany – the discretionary easing over 2000-02 totalled almost 1¼ per cent of potential GDP. It reflected cuts in taxation, amounting to around 1½ per cent of GDP, with a limited offset by cuts in primary expenditure (excluding debt interest payments), averaging ¼ per cent of potential GDP. As shown in Table 3.5, the bulk of the fiscal stimulus stemmed from the three major economies. In 2003 the fiscal stance finally turned neutral (slight tightening in the major three), as minor cuts in expenditure and revenues were broadly offsetting. However, some countries strongly relied on temporary measures to control budgetary imbalances.

Short-term forecasting errors are unavoidable to some extent, which reinforces the need to observe prudent safety margins in national budgets and in the stability programmes that draw on them if breaches of the 3 per cent threshold are to be prevented. However, inspection of the cyclically-adjusted fiscal positions since the launch of the single currency in 1999 reveals that this has hardly happened (Figure 3.3, Table 3.5). In fact, four out of six countries (France, Germany, Italy and Portugal) that are now having deficits close to or above 3 per cent, pursued expansionary fiscal policies in 2000 and 2001 (France also in 2002) – even though their budgets were in cyclically-adjusted deficit – and then found it hard to reverse this further down the road. Greece experienced major expenditure overruns in 2003 in part related to the 2004 Olympic Games. Only the Netherlands can justifiably claim to have been hit by a severe and unexpected recession that explains the bulk of its deficit overrun.

The upshot is that a lack of progress in fiscal consolidation in "good times" has been at the core of the problem. This raises the question to what extent the observed behaviour can be traced to a flaw in the fiscal framework itself. The Maastricht Treaty adopted in 1992 succeeded very well in encouraging fiscal consolidation. This changed when the SGP came into force on 1 January 1999. Apparently there has been a profound regime switch. It has several dimensions (see Fatás and Mihov, 2003; Buti and Giudice, 2002; Buti and van den Noord, 2004):

- The Maastricht convergence criteria were strongly supported by Germany, which regarded macroeconomic stability as an essential pre-condition to accept dilution of its monetary sovereignty. France was keen to satisfy the German demands, as it had *de facto* given up monetary sovereignty by pegging its currency to the Deutschemark and expected to recover some of this loss via its voice in the common monetary policy. The Treaty set clear deadlines for moving to the final stage of EMU which together with the simplicity of the criteria facilitated the surveillance by the European Commission. Countries that were willing to join the euro area in the first wave had no choice but to make the required consolidation effort to meet the Maastricht

© OECD 2004

Table 3.4. **Decomposing the fiscal stance**
Change in percentage points of potential GDP[1]

	1999	2000	2001	2002	2003	Projections[2] 2004	Projections[2] 2005
Cyclically-adjusted current revenues	0.6	–0.3	–0.7	–0.6	–0.3	–0.4	–0.2
of which:							
Direct taxes on business	0.2	0.1	–0.2	–0.2	–0.2	0.1	0.1
Direct taxes on households	0.1	0.1	–0.2	–0.2	–0.2	–0.2	–0.2
Indirect taxes	0.3	–0.2	–0.3	0.1	0.1	0.0	0.0
Social security contributions	0.0	–0.2	–0.2	–0.1	0.1	–0.1	–0.2
Cyclically-adjusted current expenditures	–0.2	0.1	–0.4	–0.2	–0.3	–0.6	–0.2
Net capital outlays	0.2	–1.1	1.2	–0.3	–0.3	0.1	0.2
of which: UMTS licence proceeds	0.0	–1.1	1.1	0.0	0.0	0.0	0.0
Cyclically-adjusted balance	0.6	–0.4	–0.5	–0.1	0.3	0.1	–0.1
Net debt interest payments	–0.5	–0.2	–0.2	–0.3	–0.2	0.0	0.1
Cyclically-adjusted primary balance[3]	0.1	–0.5	–0.7	–0.4	0.1	0.1	0.0

1. Weighted euro area aggregate excluding Luxembourg.
2. OECD projections.
3. See note 3 in Table 3.1.

Source: OECD.

Table 3.5. **The fiscal stance across countries**
Change in the cyclically-adjusted primary general government balance, in per cent of potential GDP[1]

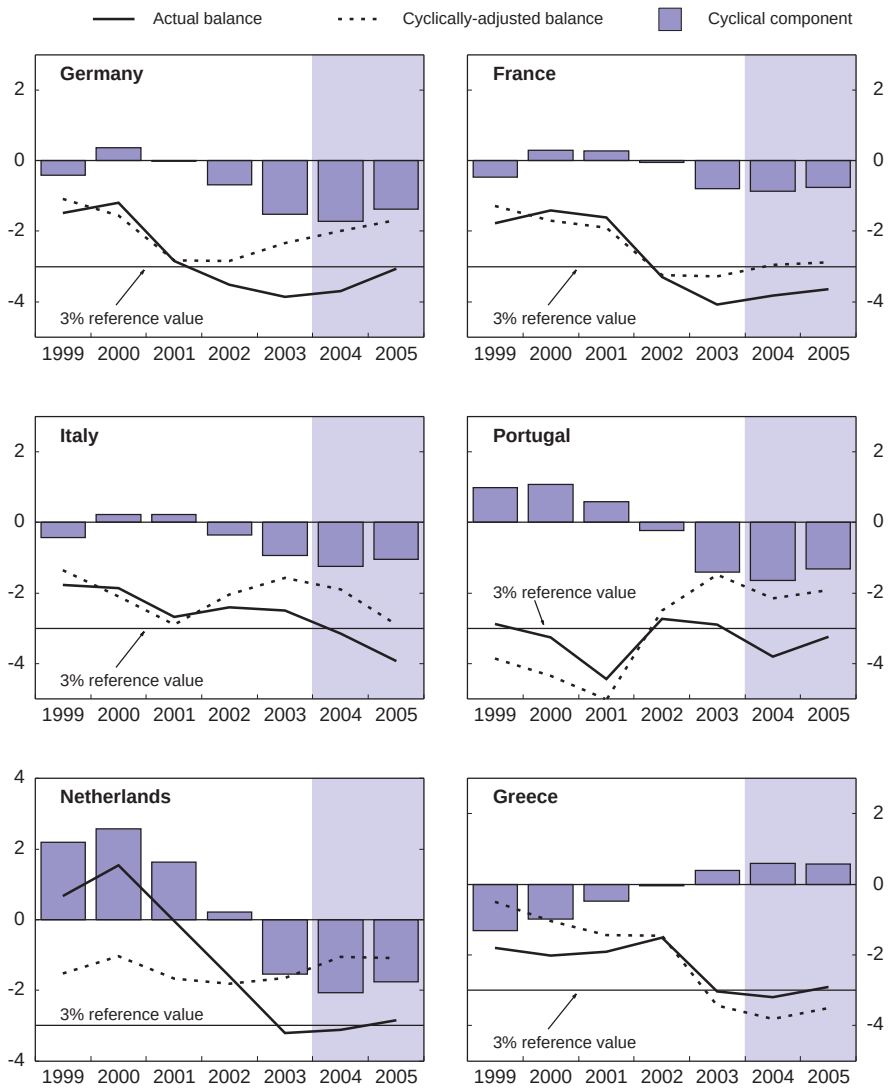
	1999	2000	2001	2002	2003	Projections[2] 2004	Projections[2] 2005
France	0.3	–0.5	–0.2	–1.4	–0.1	0.4	0.3
Germany	0.4	–0.6	–1.4	–0.2	0.5	0.3	0.3
Italy	–0.3	–0.8	–0.9	0.2	–0.1	–0.5	–0.8
Major EMU countries[3]	0.2	–0.6	–0.9	–0.4	0.1	0.1	0.0
Austria	–0.1	0.1	2.5	–0.4	–0.8	0.3	–0.7
Belgium	–1.0	–0.5	0.7	0.0	0.2	–0.9	–0.9
Finland	0.1	2.9	–1.2	–1.2	–1.9	–0.9	–0.6
Greece	–0.1	–0.7	–1.0	–0.8	–2.4	–0.4	0.3
Ireland	–1.9	0.7	–4.0	–1.5	1.9	–0.3	–0.3
Netherlands	0.3	–0.2	–1.3	–0.4	0.0	0.4	0.0
Portugal	–0.2	–0.4	–0.8	2.3	0.8	–0.7	0.3
Spain	0.7	–0.7	0.6	0.3	0.2	–0.1	0.2
Smaller EMU countries[3]	0.1	–0.2	0.0	0.0	–0.2	–0.2	–0.1
Euro area[3]	0.1	–0.5	–0.7	–0.4	0.1	0.1	0.0
Memorandum item							
Cyclically-adjusted total balance[4]	0.6	–0.4	–0.5	–0.1	0.3	0.1	–0.1

1. Excluding UMTS licence proceeds. See note 3 of Table 3.1.
2. OECD projections.
3. Weighted averages, excluding Luxembourg.
4. Including net interest payments.

Source: OECD.

© OECD 2004

Figure 3.3. **Fiscal policy indicators**
Per cent of actual/potential GDP[1]



1. Actual balance excludes UMTS licence proceeds and is in per cent of GDP, cyclically-adjusted balance is in per cent of potential GDP and the cyclical component is the difference between the two.

Source: OECD.

© OECD 2004

convergence criteria in accordance with the timetable. The convergence criteria became the centrepiece of government strategies in most EU countries, with the 3 per cent of GDP deficit criterion providing a visible benchmark for success, especially in countries which entered the 1990s with high deficits and debt.

- The incentive structure crucially changed with the move to the single currency. The political ownership of the rules shifted towards the smaller countries whose fiscal positions are sound in most cases but have less weight in the surveillance process. Financial market constraints on government borrowing eased as interest rates converged and the threat of exclusion disappeared. The only "stick" left to the EU authorities was the less tangible risk of uncertain and delayed pecuniary sanctions and loss of reputation. Since the SGP stipulated that fiscal positions have to be close to balance or in surplus "over the medium run", there was no clear timetable for compliance. This provision also left plenty of scope for countries to sketch too rosy a picture of their structural budget situation.[3] The Council remedied this shortcoming by a decision in March 2003 to encourage countries to meet the close-to-balance or surplus rule in cyclically-adjusted terms each year, with the cyclical adjustment underpinned by independent Commission estimates of potential GDP (European Commission, 2002a and 2002b). However, the refusal by the Council to endorse an "early warning" recommendation to Germany and Portugal in early 2002 as well as the decision of the Council in November 2003 to "hold in abeyance" the EDP for Germany and France indicate that there is so far no final consensus on how to apply the Pact.

Where to go from here

The fiscal framework in EMU has been built on the notion that co-ordination of fiscal policy is vital to underpin a strong and stable single currency. The framework was designed to address three main concerns, whose relative weights have, however, evolved over time:

- Once exchange rates within the area had ceased to exist, financial markets would no longer act as a discipline on fiscal policy. Growing deficits in one country, rather than being reflected in wider yield spreads, would spill over into area-wide interest rates and crowd out economic activity in other member countries. Worse, moral hazard could heighten the risk of occasional financial crises, which could expose the ECB to pressure to bail out the country concerned, even though bailouts are prohibited by the Treaty. This line of argument has been subject to a rather inconclusive debate, although it remained popular in academic circles. Still, the situation is different from that in the United States (see Box 3.2), where

© OECD 2004

Box 3.2. Some lessons from the US states

It is tempting to draw a comparison between the experiences of coordinated rules-based fiscal policy in the euro area and states' finances in the United States. The US state sector has generally shown significant deficit restraint. A number of studies have examined how institutional factors shape this result (*e.g.* Bohn and Inman, 1996; Knight and Levinson, 1999).

All but one US state operate under a balanced budget requirement. However, the balanced budget rules apply to the general fund accounts of the state budgets only. In addition to the general fund accounts, states have *inter alia* capital budget accounts to receive and allocate capital borrowings and "rainy day" fund accounts to save surpluses and to cushion deficits on the general fund account. Each of these accounts is legally entitled to receive funds from and allocate funds to the general fund.

It is relevant to distinguish different degrees of stringency of the balanced budget constraints as these are found to have a different impact on states' savings. There are four set-ups:

- Requirement for the governor to submit a balanced budget at the start of the budget deliberations.
- Requirement for the state legislature to pass a balanced budget.
- Permission to run a deficit at the end of the year but with an obligation to budget for repayment of the debt in the next fiscal year. States with this "may carry-over" constraint can in theory roll their deficits into the next fiscal years indefinitely.
- An effective end of the year balance requirement, without the possibility to carry over a deficit from one budget period to the next.*

The more stringent the balance rules are the stronger is their impact on budget deficits. Specifically, tight end-of-year statutory and constitutional balanced budget requirements act as a significant constraint on state general fund deficits. "Soft" limitations – those that require only prospective or beginning-of-year balance – are not effective constraints on state deficit behaviour. How the constraints and budget rules are enforced also matters. Statutory constraints demanding only a simple majority to overrule have a weaker effect on government saving than constitutional constraints requiring a qualified majority of voter approval to overturn. Constraints enforced by a popularly elected state supreme court are associated with larger savings than those enforced by governor-appointed or legislatively elected state supreme courts. Popularly elected supreme courts are free of direct legislative influences and therefore likely to be tougher in monitoring.

Virtually all of the states in the United States have adopted rainy day funds, and are found to save more than they did before they adopted the funds. The funds themselves may not have caused the extra savings (they may be merely a by-product of the stringent balanced budget rules) but in fact the enactment of rainy day funds does appear to have changed states' fiscal policies. States with rainy day funds experience less volatile fiscal cycles because the funds allow

© OECD 2004

Box 3.2. **Some lessons from the US states** (*cont.*)

expenditure smoothing. Capital investment is also increased. At the same time, however, the constraints may diminish the flexibility of state officials to set budget policies for the purpose of short-run economic stabilisation. Stringent balance requirements indeed are found to reduce the cyclical sensitivity of state general fund surpluses somewhat, but evidence is mixed. The mixed results may be related to the finding that states with stringent balance requirements maintain higher rainy day funds than other states.

It is not easy to draw strong conclusions from the US states' experience for euro area fiscal policies. In the United States the cross-state mobility of tax bases is typically higher than the cross border mobility of tax bases in the euro area. This implies that financial markets are more inclined to "penalise" US states that fail to keep their fiscal house in order. This may explain why US states show greater fiscal discipline, and the balanced budget rules may be a reflection, rather than a cause, of this. Another fundamental difference between the US states and euro area countries is that the balanced budget rules in the former apply to a well-defined general fund budget, which explicitly excludes capital spending and revenues as well as employee retirement spending and revenues. Some lessons may nevertheless be drawn. First, establishing separate accounts for capital spending, social insurance and employee retirement enhances fiscal transparency and facilitates actuarially based accounting and monitoring, provided that such funds have their own prudent budget rules and enforcement mechanisms. Second, for audits to be effective there must be a mechanism for enforcement by an independent judiciary if the balanced budget rule is violated. Third, a balanced budget rule must allow for reserve funds to reduce concerns that fiscal policy will be too inflexible over the business cycle.

* Fiscal gimmicks (for example, collecting next year's taxes or grants early or postponing payment for services into the next fiscal year), may be used but their aggregate amount appears to be limited.

financial markets do act as a disciplining factor for states' public finances, probably because states in the United States are faced with greater mobility (hence less ownership) of their tax bases than the countries that constitute the euro area.

- With the adoption of the single currency, the member states of the euro area delegated their monetary sovereignty to a single monetary authority, the ECB. Since the ECB must focus on price stability in the area as a whole, monetary policy will seldom fit the requirements of any individual member country. Realignments in a country's real exchange rate, to

© OECD 2004

absorb a country-specific (asymmetric) shock, henceforth need to take place via an adjustment in its overall wage and/or price level (see Chapter 4 for a detailed discussion). But in a world of downwardly rigid wages and prices the adjustment to adverse shocks may be protracted and fiscal policy – with the emphasis on the automatic stabilisers to avoid policy volatility and pro-cyclicality – was seen as an additional channel for adjustment, provided that the public finances are structurally sound (see Box 3.3).

- Several countries participating in the euro area required a "stick" to encourage fiscal consolidation, *i.e.* to "externalise the internality" of fiscal sustainability (as opposed to "internalising the externality" of crowding out). For example, the stability programmes were deemed to play a useful role, by providing an anchor for annual budget appropriations and obliging governments to recognise the implications of current budget decisions for government finances in the future. They also oblige governments to take account of changes in structural and demographic factors as well as the evolving cyclical situation. Over time, this consideration has gained prominence over the concerns regarding spill-over effects and fiscal stabilisation policy, and is now seen as the primary motivation for fiscal co-ordination in the euro area.

Having entered the sixth year of the single currency, it is possible to provide a first assessment as to how the framework has worked. The record is mixed. The fact that the successive breaches of the 3 per cent threshold failed to have any noticeable impact on the overall level of euro-area interest rates may be taken as evidence that the framework has acquired some credibility, but the counterfactual is difficult to establish. Fiscal consolidation stalled as soon as the single currency was adopted, with the stability programme commitments having been akin to moving targets rather than anchoring fiscal policy in medium-term goals. Since 2001, automatic stabilisers have played a significant role as economic growth slowed down. But in some countries there was not sufficient room for the full operation of automatic stabilisers without incurring excessive deficits because these countries (notably the larger ones) did not create enough leeway in the upturn. The correction of excessive deficits has not been a smooth ride, although the affected countries have undertaken some consolidation efforts. A number of proposals have been around for some time and new ones popped up in the wake of the 25th of November Council decisions. They can be categorised under three main headings: *i*) strengthening the institutional arrangements for budgeting at the national level; *ii*) heightening the political commitment to fiscal discipline by tailoring the SGP to countries' needs and *iii*) improving the surveillance and enforcement at the EU level.

© OECD 2004

Box 3.3. The role of automatic stabilisers

The Pact is built on the notion that the effectiveness of fiscal policy as an instrument for macroeconomic stabilisation is subject to three important caveats. First, fiscal stabilisation policy cannot be expected to change the economy's potential output, although it can attenuate cyclical fluctuations around this potential. The latter is important because the welfare cost of volatility in economic activity may be considerable, but fiscal policy is ineffective if potential output is lower than actual output. Second, there is reason for scepticism over the use of discretionary fiscal policy to fine tune the economy because recognition, decision and implementation lags may result in a *de facto* pro-cyclical policy stance. Political economy arguments also militate against using active fiscal policy for stabilisation purposes, as the incentives to do so are stronger in downswings than in upswings, which contributes to deficit bias. Third, fiscal policy stimulus will be ineffective or even counterproductive if there are concerns over its credibility, for example because the initial fiscal position looks unsustainable.[1] Past experience suggests that private agents tend to offset part of the additional public dissaving, especially where public debt levels are already high or where fiscal rules require corrective action.[2]

These concerns are reflected in the call for reliance on the working of automatic stabilisers (*i.e.* the cyclically induced changes in taxes and spending) as the main tool for fiscal stabilisation, provided member countries have achieved cyclically-adjusted fiscal positions of "close to balance or in surplus" as stipulated in the SGP. Adhering to the latter rule was deemed to allow enough breathing space for the automatic stabilisers to work freely without breaching the 3 per cent of GDP deficit threshold. This rules-based approach should, at least in principle, guarantee that the behaviour of the actual budget balance is always counter-cyclical and hence, contributes to economic stability.[3]

However, although automatic stabilisers should be considered more effective than discretionary stabilisation policy in smoothing the business cycle, the policy prescription "let stabilisers play freely" is not wholly devoid of risks and should be accompanied by a number of health warnings. For example, automatic stabilisers are generally less effective in response to an adverse supply shock (such as an oil price hike) because they tend to accentuate its inflationary impact. The net effect may be destabilisation rather than stabilisation of the cycle (Buti and van den Noord, 2003b and Chapter 4). In the case of long-lasting supply shocks, structural adjustment rather than cyclical stabilisation (be it automatic or discretionary) is called for and automatic stabilisers may even be harmful to the extent they trap workers in inactivity and slow down structural change. Moreover, as financial liberalisation advances, liquidity constraints may become less binding and the effectiveness of automatic stabilisers would diminish even in the case of demand shocks (Landais, 2003).

1. On the other hand, in extreme cases of very high public indebtedness fiscal easing may prompt lower private savings and hence be strongly expansionary in the short term because consumers anticipate higher inflation.
2. The impact of automatic stabilisers on output variability is estimated to be of the order of 10-30 per cent (Barrell and Pina, 2003; van den Noord, 2002).
3. This offset is in addition to the effect exerted via interest rates. See de Mello (2004).

© OECD 2004

Strengthening the institutional arrangements for budgeting

Countries that have been experiencing fiscal surpluses in the recent upswing are generally the same countries that have been the most active in reforming and modernising their budget processes (von Hagen *et al.*, 2002). These reforms aim to address a fundamental flaw in budgeting: government expenditure is commonly targeted at specific groups in society but financed from general taxation which is spread over current tax payers or via a run-up in debt which affects future generations of tax payers. As a result, the political incentives to keep expenditure in check are weak and tax and debt burdens trend up. Expenditure control is key in view of the heavy tax burdens in most euro area countries. The following institutional features are necessary for effective expenditure control (Blondal, 2003):

- *Medium-term budgetary frameworks*. Budgets are enacted for one year and are notorious for their short-term focus. Medium-term budgetary frameworks serve to clearly state the government's targets – such as the level of revenue, expenditure and the balance for several years – beyond the fiscal year. These should result in hard budget constraints for individual ministries and programmes. Obviously changes could be made on the way, but it is imperative that such changes be clearly identified and explained.
- *Prudent macroeconomic projections*. Deviations of key macroeconomic variables underlying the budget from the projection pose a key fiscal risk. Great care must be taken in making these projections and disclosing them. The establishment of an independent body to do the economic projections to be used in the budget may be considered.
- *Top-down budgeting*. The traditional bottom-up principle of budgeting means that agencies and spending ministries submit requests for funding to the Finance Ministry which are negotiated until some common ground is found. This process has an inherent bias for increasing spending because new programmes or expansion of existing programmes are funded by new requests rather than by reallocation within the spending ministries. This manner of budgeting is being abandoned progressively and replaced with a top-down approach, but it does involve considerable time to establish because the entrenched traditions work against it.[4]

Other requirements for effective expenditure control include: *i*) to relax micro-management at the top to encourage efficiency gains; *ii*) result-based management to hold managers accountable and *iii*) enhanced budget transparency. According to the OECD's *Best Practices for Budget Transparency* (Box 3.4) governments should be encouraged to outline fiscal projections in a pre-budget statement several months prior to the release of the government's budget proposal, provide explicit detail on contingent liabilities, and use the annual financial statements as

© OECD 2004

Box 3.4. The OECD Best Practices for Budget Transparency

The OECD *Best Practices for Budget Transparency*, issued in November 2001, include the following items:

- Governments should publish a pre-budget statement outlining the aggregate levels of revenues, expenditure, surplus or deficit and debt several months prior to the release of the government's budget proposal. The objective is to cast budget policy in a macroeconomic and medium-term setting, thereby establishing a top down fiscal policy anchor.
- The budget should contain explicit detail on the economic assumptions used and statements of tax expenditures, financial liabilities and financial assets, non-financial assets, employee pension obligations and contingent liabilities. Several tracking and update reports should be available. These could include monthly out-turn reports and mid-year updates.
- The annual financial statements (or government accounts) serve as a compliance report for parliamentary and wider accountability purposes and should be certified by the auditor. Transparent financial statements should include information on the budgetary out turn, debt structure and borrowing, commitments, contingent liabilities, trust moneys held by the government and accounting policies.

The *Best Practices* can be consulted on-line, see *www.oecd.org*.

a compliance report for accountability purposes to be certified by a national auditor. Governments can make progress in all these respects and the EU authorities should play an activating role in this regard.

Improving surveillance and enforcement

One fundamental lesson from the recent episode is that when cyclical conditions are favourable the incentives for fiscal consolidation are weak. Hence the need to focus the SGP on the prevention of fiscal slippage in upturns while ensuring that fiscal policy remains anchored in medium and long-term objectives. The excessive deficit provisions in the Treaty in principle offer the necessary "stick" to induce fiscal discipline, provided that these are credibly enforced in a pre-emptive fashion. This requires that enforcement is impartial and that the surveillance capacity of the competent authority is sufficiently strong. However, the rules are enforced in the first instance by the Commission, which has competence but no legal power, and in the final instance by the Ecofin Council which has the legal power but, being party and judge, is not impartial. As a result, the threat of fines is not credible and the only potentially effective instruments currently available are moral suasion, peer pressure and negative publicity.

© OECD 2004

Against this backdrop, some observers have suggested to put the surveillance process in the hands of a high-level group of fiscal experts, nominated by the European Parliament to underpin their independence and legitimacy (Buiter, 2003; de Haan *et al.*, 2003; Fatás *et al.*, 2003). The experts group would have the right to make its judgment public and declare a member state in excessive deficit. National independent budget agencies could be set up to perform independent audits and to report to the experts group. However, such proposals are unlikely to be accepted and it is not obvious that creating a new institution side by side with the Commission would make a fundamental difference. By contrast, Gros *et al.* (2003) suggest that the Commission should remain in charge of the surveillance process, although its resources would need to be increased. They propose to revive the "early warning" procedure, which was discredited when the Ecofin Council voted against launching it for Germany and Portugal in 2002. Following Buti *et al.* (2003) they propose to use the early warning procedure not only when the deficit approaches the 3 per cent ceiling but also in good times when a significant divergence from cyclically-adjusted targets is detected.

One way to formalise this principle is to mandate the Commission to issue the "early warning" as a Proposal to the Council rather than (as has been the practice so far) as a Recommendation to the Council. This would give a larger weight to the Commission's judgment and reduce the risk of partisan enforcement.[5] Alternatively, the Commission could issue the "early warning" on its own account. In order to ensure countries' "ownership" of the Commission's decisions the European Parliament could be involved to a greater extent. This could be achieved by covering fiscal policy more extensively in the Broad Economic Policy Guidelines (BEPG), which are submitted to and discussed by the Parliament. The new Constitution may offer a window to implement these changes.

Making the Pact *more flexible?*

From the outset the SGP has been criticised for: *i*) not taking sufficient account of a country's cyclical position when assessing its budget situation; *ii*) the prohibition to run structural deficits even if a country's longer-term fiscal position is sound and *iii*) the failure to encourage structural policies which pay dividends over the longer haul at the expense of upfront fiscal costs, provided the budget situation is sound overall. A number of proposals have been aired to remedy this lack of flexibility, but obviously a relaxation of the Pact along these lines can only be successful if accompanied by stronger institutional arrangements for budgeting at the national level and more credible enforcement at the EU level.

The European Council has acknowledged the need to take a country's cyclical position into account when judging whether the country complies with the close-to-balance or in surplus rule. As noted, at the Spring meeting on 20-21 March 2003, the Council endorsed the principle that, rather than interpreting the close-to-balance

© OECD 2004

or in surplus rule as an end point for the Stability Programmes (which consistently shifts out in time with every new vintage of Programmes), the rule should apply in cyclically-adjusted terms each year. Countries that did not yet comply with this requirement were committed to at least a ½ per cent of GDP decline in the cyclically-adjusted deficit per year. This provision is welcome but, since it did not fully remove the incentives for a country to present a too favourable picture of its potential growth rate and structural fiscal position, close surveillance by the European Commission is necessary. To this end the Commission has adopted its own methodology for estimating potential output, based on a production function approach (European Commission, 2002a).

Since long-run sustainability of public finances is a growing concern of member countries, reflecting this concern in the SGP would in principle enhance its legitimacy. A key question is to what extent the current fiscal rules are already consistent with the requirement of long-term sustainability of public finances in view of the increase in ageing-related public spending. Analytical work reported in Annex 3.A2, suggests that the fiscal policy rule prescribed in the SGP – *i.e.* balanced budgets or small surpluses of about ½ per cent of GDP – is the minimum needed during the transition period to the new demographic steady state until around 2020.[6] In fact this rule may be far too lenient for some countries (Finland, Germany, the Netherlands and Portugal) and perhaps too tight for others (Italy). The upshot is that for the close-to-balance or in surplus rule to be consistent with the sustainability criterion for all countries, it will have to be converted into a set of country-specific rules. This has prompted for example Fatás *et al.* (2003) to propose to abolish the close-to-balance or in surplus rule altogether and to set up a EU "Sustainability Council" which monitors and advises national governments on ways to achieve fiscal sustainability.

Some observers have argued in favour of the "golden rule" (see Box 3.5). The golden rule splits the government appropriation account into a general account and a capital account, and obliges the government to maintain at least a balanced general account, while allowing it to borrow for net investment. One rationale put forward is that such a rule would better fit the new EU member countries, who need to recover an infrastructure backlog and are also likely to grow fast – indeed grow faster if the infrastructure gap is filled. Another rationale for the golden rule is that it would be fair in an inter-generational sense – future generations pay for the infrastructure they inherit. However, there are various pros and cons attached to the golden rule, which are briefly discussed in Box 3.5. For example, a salient feature of the golden rule is that it will only result in sustainable public finances if simultaneously some prudent rule for the development of net debt is satisfied. This is how the golden rule is applied in the United Kingdom: the public sector is allowed to borrow for net investment provided that the ratio of net debt to GDP stays below 40 per cent.[7] However, most euro area countries would probably fail to satisfy the net debt criterion. Hence, if adopted as a general

© OECD 2004

Box 3.5. The golden rule

Article 104(3) of the Maastricht Treaty stipulates that: "If a Member State does not fulfil the requirements under one or both of these [debt and deficit] criteria, the Commission shall prepare a report. The report of the Commission shall also take into account whether the government deficit exceeds government investment expenditure and take into account all other relevant factors, including the medium-term economic and budgetary position of the member State." According to some interpretations (*viz.* Blanchard and Giavazzi, 2003), this leaves open the possibility of adopting a golden rule.[1]

The golden rule stipulates that the government shall borrow only to fund net fixed investment and not to fund current spending. It aims to avoid investment outlays being crowded out by increases in current expenditure or declines in tax revenues in downturns. It also contributes to the intergenerational equity of the public finances by ensuring that government borrowing is at least matched by a rise in the public capital stock. Importantly, the golden rule does not ensure by itself sustainable public finances. It needs to be accompanied by a rule concerning the sustainable overall fiscal deficit and the implied evolution of the debt/GDP ratio over time.[2] The combination of both rules provides a floor for the ratio of net investment to GDP (*i.e.* the sustainable deficit), but imposes no ceiling and therefore removes a potential impediment to public capital formation.

However, the golden rule may induce countries to embark on "creative accounting", with current expenditure unduly labelled as capital expenditure. It also entails some risks for allocational efficiency:

- While the golden rule aims to stimulate capital formation, the distinction between current and capital outlays is not always relevant from an economic point of view. For example, education spending, while largely labelled as current expenditure, adds to the stock of human capital and thus may be considered as investment. Since the golden rule favours fixed over human capital formation care must be taken that it does not result in a misallocation of resources.
- The implicit assumption behind the golden rule is that the marginal benefits from public investment exceed those of private investment, possibly due to externalities and scale economies. However, the marginal benefits from public investment may fall quickly as they increase, hence care must be taken that the level of investment is consistent with an optimal allocation of public and private provision.
- The golden rule generally does not extend to public-private partnerships whose investment is classified as private sector spending, with only the services purchased by the government from these partnerships recorded as current expenditure by the general government. Since only the current expenditure counts against the golden rule, care must be taken that the choice between partnerships and direct investment by the government is not distorted.

1. A new Regulation could be issued by the European Council specifying that the existing rules shall apply to the budget net of capital formation.
2. The United Kingdom, for example, has adopted the golden rule in combination with a fiscal sustainability rule, dubbed the "sustainable investment rule", which stipulates that public sector net debt shall not exceed 40 per cent of GDP; see van den Noord (2002b).

© OECD 2004

principle in the (enlarged) European Union, the golden rule would remain a dead letter in the euro area. In addition the golden rule may give rise to distortions and induce creative accounting.

Other (better founded) rationales for governments to be allowed to run temporary deficits – conditional on long-term sustainability – have also been put forward:

- First, structural reform may yield long-term economic gains but entail up-front costs. The estimates of the benefits from structural reform are often uncertain whereas the immediate political and budgetary costs – such as compensation schemes to offset redistributive effects – are perceived with greater precision. This information asymmetry may hamper structural reforms, especially with regard to labour market reforms which entail the highest up-front costs. Allowing governments to run temporary deficits to finance structural reform may therefore be welfare enhancing (see for example Beetsma and Debrun, 2003; von Hagen, 2003).

- Second, a move (in itself commendable) towards privately funded pension schemes would lead to deficits in the public scheme but initial surpluses in the private schemes as contributors transfer to the private schemes. Pre-funding public schemes is a more "SGP-friendly" option as it would generate surpluses in the public scheme. However, such a pre-funding strategy for public pensions has several disadvantages (IMF, 2003). Most prominently, it does not directly address the adverse efficiency and distribution problems inherent in large-sized public pension schemes and it also raises governance issues. The upshot is that the momentum for efficiency-enhancing pension reforms is not necessarily helped by the close-to-balance or in surplus rule. More flexibility in interpreting this rule would yield a less distorted incentive structure.

Such arguments have not fallen on deaf ears at the European Commission. In the autumn of 2002 it proposed that countries should be allowed to temporarily deviate from the close-to-balance or in surplus rule (in cyclically-adjusted terms) if that facilitates structural reform, provided that public finances are on a sound footing and that the 3 per cent deficit ceiling is not breached (European Commission, 2002b). However, while underpinned by a strong economic rationale, such a provision raises the stakes for surveillance and enforcement. This is probably the reason why the Council has been reluctant to endorse this recommendation so far.

In sum, there is plenty of scope to build in more flexibility in the Pact, but obviously this is predicated on the creation of stronger surveillance and enforcement arrangements and better budgetary procedures at the national level.

© OECD 2004

Notes

1. EDPs were also launched for six new member countries of the European Union.
2. Girouard and Price (2004); Jaeger and Schuknecht (2004).
3. See Larch and Salto (2003) for empirical evidence that potential growth rates have been systematically overpredicted.
4. The Finance Ministry may be suspicious and have a tendency to micro-budget the detailed allocations within spending ministries while the spending ministries fear that any cuts in programmes will be accepted by the Finance Ministry but not the corresponding reallocations for new initiatives.
5. The Council can reject a Commission Proposal only on the basis of unanimity whereas it can reject a Recommendation by a qualified majority.
6. These calculations are based on the assumption that policies announced in the stability programmes are actually implemented and that countries reach the medium-term fiscal targets set in the programmes.
7. A sophisticated variant of this combined rule is the "permanent balance rule" which targets government net worth (the net present value of future revenues less expenditure) rather than the year to year fiscal balance (Buiter and Grafe, 2003).

© OECD 2004

Annex 3.A1

Short-term forecasting accuracy of the stability programmes

This Annex examines the short-term forecasting performance of the stability programmes submitted by the member states to the European Commission.

Table 3.A1.1 presents the difference between the realised fiscal balance as a per cent of GDP[1] and the projected fiscal balance as a per cent of GDP in the stability programmes for the first year of the period covered by the Programme.[2] It shows that in 1999-2000 outcomes were on average more favourable than projected and the reverse in the period 2001-03. On balance over the whole period out-turns were worse than projected in the three major countries Germany, France and Italy and also in Greece and Ireland. The other countries recorded on balance more favourable out-turns than projected.

Table 3.A1.1. **Budget forecasting errors**

Net lending, per cent of GDP, difference between actual and projected in latest stability programmes[1]

	1999	2000	2001	2002	2003
Austria	–0.4	–0.3	0.9	–0.4	0.0
Belgium	0.9	1.1	0.1	0.0	0.2
Finland	–0.2	2.4	0.5	1.6	–0.1
France	0.5	0.3	–0.6	–1.8	–1.4
Germany	0.5	–0.2	–1.3	–1.5	–1.3
Greece	0.3	–0.8	–2.4	–2.3	–0.7
Ireland	0.6	3.2	–3.4	–1.0	–0.3
Italy	0.2	–0.4	–1.9	–2.0	–1.2
Netherlands	2.0	2.1	–0.7	–2.0	–1.4
Portugal	–0.9	–1.8	–3.2	–0.9	–0.5
Spain	0.4	–0.3	–0.3	0.1	0.1
Average	0.4	0.5	–1.1	–0.9	–0.6

1. Excluding UMTS licence receipts.
Source: OECD.

A *priori* it seems likely that the bulk of the forecasting errors can be traced to forecasting errors for economic growth, although there may occasionally also be major forecasting errors that are unrelated to underlying economic activity (for example after a major tax reform with uncertain implications for tax revenues). Table 3.A1.2 shows the projection for real GDP growth embodied in the stability programmes, again for the first year covered by the programmes. The same pattern emerges: under-prediction in 1999 and 2000 and over-prediction in 2001-03. However, all countries except Ireland over-predicted economic growth on balance

© OECD 2004

Table 3.A1.2. **Output forecasting errors**
GDP growth, in per cent, difference between actual and projected in latest stability programmes

	1999	2000	2001	2002	2003	Average
Austria	–0.1	0.6	–2.1	0.1	–0.6	–0.4
Belgium	0.8	1.2	–1.8	–0.6	–1.4	–0.4
Finland	–0.6	1.2	–3.0	0.6	–1.8	–0.7
France	0.7	1.2	–1.2	–1.2	–2.4	–0.6
Germany	0.1	0.4	–1.9	–0.6	–1.5	–0.7
Greece	–0.3	0.6	–1.0	0.0	0.2	–0.1
Ireland	4.6	2.7	–2.6	3.0	–1.7	1.2
Italy	–0.8	1.1	–1.2	–1.9	–1.8	–0.9
Netherlands	1.0	1.0	–2.8	–1.0	–1.2	–0.6
Portugal	0.3	0.1	–1.6	–1.4	–2.6	–1.0
Spain	0.4	0.5	–0.8	–0.4	–0.7	–0.2
Average	0.5	1.0	–1.8	–0.3	–1.4	–0.4

Source: OECD.

over the whole period. The over-predictions in the period 2001-03 have been substantially larger than the under-predictions in the period 1999-2000.

In order to measure the impact of errors in growth projections on the errors in fiscal projections one needs to control for discretionary changes in the fiscal stance in the course of the budget year. A standard finding in the empirical literature is that the fiscal stance will be eased in election years and in the preceding year. Table 3.A1.3 presents the election calendar for the euro area countries over the period under review. It shows that the election calendar has been particularly busy in 2002. This is a year in which the under-prediction for the fiscal balance was relatively large despite a largely accurate projection of economic growth. The busy election calendar in that year may be part of the explanation.

Table 3.A1.3. **The election calendar**

	1999	2000	2001	2002	2003
Austria	General elections	–	–	Early general elections	–
Belgium	General elections	–	–	Pre-election year	General elections
Finland	General elections	–	–	Pre-election year	General elections
France	–	–	Pre-election year	General elections	–
Germany	–	–	–	General elections	–
Greece	Pre-election year	General elections	–	–	Pre-election year
Ireland	–	Pre-election year	Pre-election year	General elections	–
Italy	–	–	General elections	–	–
Netherlands	–	–	Pre-election year	General elections	Early general elections
Portugal	General elections	–	–	Early general elections	–
Spain	Pre-election year	General elections	–	–	Pre-election year

Source: OECD.

© OECD 2004

The following pooled time-series regression model has been estimated for the 11 countries and five years covered in the above Tables (t-statistics in brackets):

$$NLGQE_{it} \underset{(0.68)}{0.147} \underset{(3.09)}{0.37}\, NLGQE_{it-1} \underset{(4.02)}{0.47}\, YE_{it} \underset{(-1.00)}{-0.38}\, PEE_{it} \underset{(-1.94)}{-0.84}\, FBE_{it}$$

$$R^2 \quad 0.43$$

$$F \quad 7.35$$

The mnemonics have the following meaning: NLGQE is the forecasting error for the fiscal balance as a per cent of GDP, YE is the forecasting error for economic growth and PEE and FBE are two dummy variables, with $PEE_t = 1$ in a pre- or early election year and zero otherwise and $FBE_t = 1$ in a full-blown election year and zero otherwise. From this result the following can be inferred:

- The impact of the forecasting error in output growth on the forecasting error for the fiscal position is about 0.5. This is broadly consistent with the estimated fiscal impact of automatic stabilisers as reported in van den Noord (2002a).
- The autoregressive term is positive and significant, pointing to inertia in forecasting errors (forecasting errors in the fiscal position carry over into subsequent years).
- The negative coefficients for the dummy variables indicate that a country in a (pre- or early-) election year is likely to undershoot its fiscal target in the course of the year (in addition to any impact of forecasting errors for output growth).

Since the coefficient for PEE is insignificant (but with the expected sign), the equation was re-estimated to control for possible interaction between PEE and the fiscal surprise in the previous year. The rationale is that if a country experienced a favourable surprise with regard to its fiscal position last year, this is likely to be spent in the current budget year if there are elections upcoming next year. The regression result indeed improves and reads:

$$NLGQE_{it} \underset{(1.36)}{0.26} \underset{(4.77)}{0.59}\, NLGQE_{it-1} \underset{(3.46)}{0.37}\, YE_{it} \underset{(-3.53)}{-0.55}\, \max(NLGQE_{it-1} \quad PEE_{it}, 0) \underset{(-2.15)}{-0.78}\, FBE_{it}$$

$$R^2 \quad 0.56$$

$$F \quad 12.26$$

This suggests that the predicted interaction between forecasting errors and the election cycle is indeed significant in pre- or early election years.

Notes

1. According to OECD *Economic Outlook* No. 74.
2. The stability programmes are typically submitted around the turn of the year, hence the first year of the programme is normally based on the official budget.

© OECD 2004

Annex 3.A2

Population ageing, fiscal sustainability and the close-to-balance or in surplus rule

The combination of the baby boom in the early post-war period, the subsequent fall in fertility rates from the end of the 1960s and increasing life expectancy is leading to a progressive ageing of the population in all euro area countries. The impact of these developments on public finances is an issue of concern. However, while fiscal sustainability issues enter the assessment of the annual stability programmes by the European Commission, the fiscal rules in EMU are not explicitly anchored in a consistent analysis of the impact of population ageing on public finances. The purpose of this annex is to fill this gap. The main finding is that, whereas the "close-to-balance or in surplus" rule stipulated in the SGP is broadly appropriate for the euro area as a whole, it is clearly to lenient for some member countries.

Methodology and assumptions

The methodology draws on earlier OECD work (Blanchard *et al.*, 1990) that outlined a summary "index of sustainability", also known as the "tax gap". The tax gap is the difference between the sustainable tax to GDP ratio which – *ceteris paribus* – satisfies the government's inter-temporal budget constraint for a given projection of primary expenditure and the current tax ratio. The budget constraint is given by the following dynamic equations:[1]

$$(1) \quad \frac{db}{dt} \quad g \qquad (r \quad)b \quad p \quad (r \quad)b$$

$$(2) \quad b_T = b_0 e^{(r-\gamma)T} + \int_0^T p(t) e^{(r-\gamma)(T-t)} dt$$

where b, g, τ and p are the ratios to GDP of, respectively, net debt, expenditure, tax revenues and the primary deficit, r is the real interest rate and γ is the growth rate of real GDP. b_0 is the initial ratio of debt to GDP at $t = 0$ and b_T is the target for the debt ratio at $t = T$. The sustainable tax ratio is defined as the value τ, which would achieve a given target for b_T. At what level b_T should be fixed is a normative question. Three alternative criteria are considered:

- A strict sustainability criterion posits that the appropriate target is $b_T = 0$. This implies that the present value of all future primary surpluses exactly offset the initial net debt.[2]
- A somewhat weaker criterion requires that the *gross* debt ratio at the end of the planning period T equals a given level, for example the Maastricht reference value of 60 per cent. In terms of the above equations this requires that the target for net debt is fixed at 60 per cent of GDP (or less)[3] minus the value of any financial assets the government has on its balance sheet as a per cent of GDP.

© OECD 2004

The second criterion penalises countries that have large financial assets on their balance sheet and hence maintain a higher level of gross debt for any given level of net debt. In fact, these countries may intend to sell these financial assets as ageing kicks in and it would be appropriate to take this into account. Therefore:

- A third criterion requires that the *net* debt ratio at the end of the planning period T equals 60 per cent of GDP. This is equivalent to a target for the gross debt ratio of 60 per cent with the financial assets sold by the end of the planning period.

The fiscal implications of each of these three criteria are examined for different assumptions with respect to the discount rate $r - \gamma$. The end point of the analysis T is the year 2050 and the jumping-off point is 2005, the last year of the projection embodied in OECD E*conomic* O*utlook* No. 75.

Baseline results

The projection of ageing-related spending is based on the projections included in the latest batch of stability programmes (except for the Netherlands, which is based on Dang *et al.*, 2001). Ageing-related spending is projected to increase on average by around 4 percentage points of GDP in the nine euro area countries for which projections are available (Table 3.A2.1). However, the disparities are quite large in terms of the time profile. While the expenditure ratios to GDP generally peak around 2040, the sharpest increases are

Table 3.A2.1. **Ageing-related spending**
Per cent of GDP

	2005	2010	2020	2030	2040	2050
Austria	20.4	20.6	21.5	22.9	23.4	22.9
Belgium	21.5	22.4	24.1	26.0	26.9	26.6
Finland	17.7	18.6	20.7	23.0	23.6	23.6
France	12.2	13.0	14.3	15.1	14.8	14.8
Germany	23.1	23.3	24.5	26.7	27.7	28.2
Italy	25.5	25.4	26.3	27.7	28.0	26.8
Netherlands	19.3	20.5	23.0	26.7	29.2	29.0
Portugal	16.6	17.8	20.4	22.1	22.2	20.0
Spain	7.9	8.0	8.5	9.9	12.0	13.0

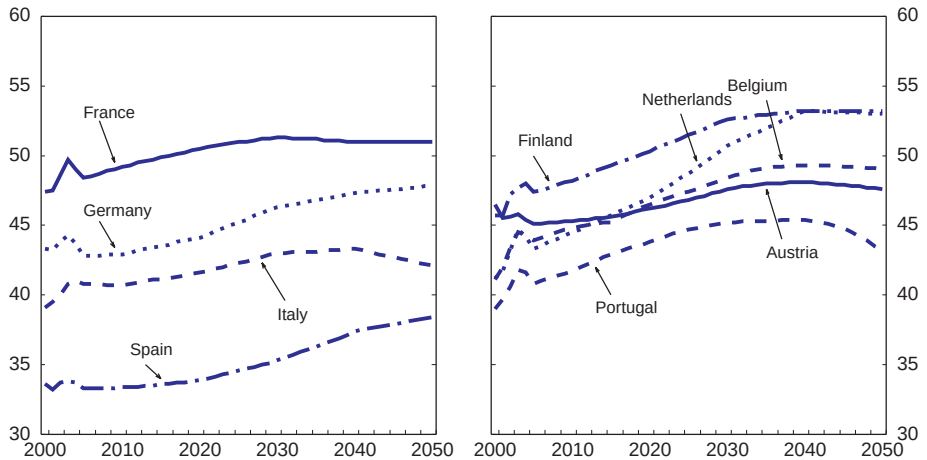
Note: The projections are based on the stability programmes except for the Netherlands which does not report long-term expenditure projections. The coverage of age-related expenditure projected in the stability programmes differs substantially across countries, hence the numbers are not comparable across countries.
The following expenditure items are included:
Austria – Pensions, health care and other care.
Belgium – Pensions, health care, family allowances, unemployment, early retirement, industrial accidents, occupational diseases.
Finland – Pensions, health care.
France – Pensions.
Germany – Pensions, health care, education, unemployment benefits.
Italy – Pensions, health care, education, unemployment benefits.
Netherlands – Pensions, health care, child and family care, education.
Portugal – Pensions, health care, child and family care, education.
Spain – Pensions.
Source: Stability programmes, 2003/04, except for the Netherlands, Dang *et al.* (2001). In the case of Portugal and France the impact of recent reforms reported in the stability programmes is superimposed on the projections in Dang *et al.* (2001).

© OECD 2004

projected for Finland, despite a recent reform, and the Netherlands, Portugal and Spain. Unfortunately, due to differences in coverage, the levels of age-related expenditure are not comparable across countries.

The implications of these projections for the evolution of total primary expenditure (ageing and non ageing-related), is shown in Figure 3.A2.1. These projections are based on the assumption that primary revenues and primary expenditure other than those for which long-term projections are available (see Table 3.A2.1) remain fixed as a share of GDP. Relatively sharp increases are projected for the Netherlands and Spain, although from a low base in the latter. Aside from Spain, primary current spending ratios are currently within or very close to the 40-45 per cent range, but by 2050 the range is as wide as 40 to 55 per cent. The weighted average spending ratio rises from 43 per cent in 2000 to 47 per cent in 2050.

Figure 3.A2.1. **Baseline projection: primary current expenditure**
Per cent of GDP

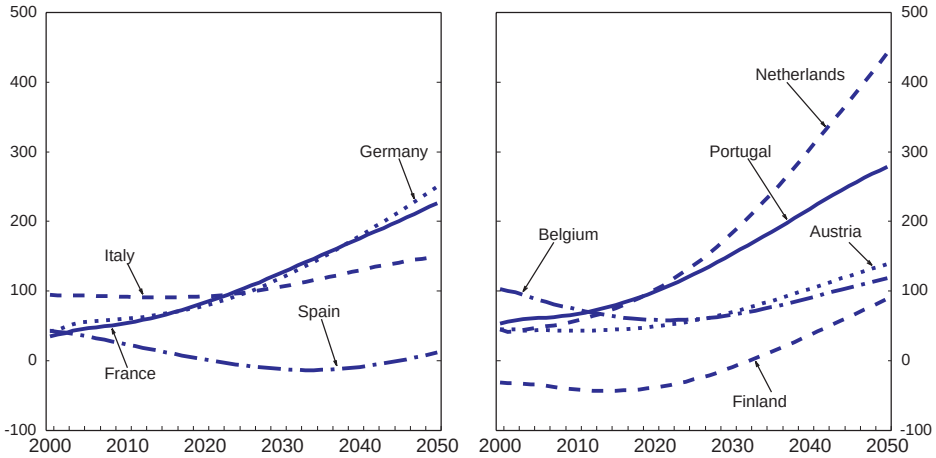


Source: OECD.

Assuming a discount rate *r*-γ of ½ a per cent and assuming that gross fixed investment remains constant as a share of GDP from 2005 onwards, the evolution of the net debt ratio is explosive in most countries (Figure 3.A2.2). Obviously, at higher discount rates the debt snowball would run faster and debt ratios would look even more unfavourable. For Germany, France, the Netherlands and Portugal the rise in the net debt ratio is above the weighted average for the nine countries.

© OECD 2004

Figure 3.A2.2. **Baseline projection: net debt**
Per cent of GDP



Source: OECD.

Making public finances sustainable

Table 3.A2.2 shows the tax gaps under the various assumptions with respect to the targeted debt ratio at the end point (2050) and the discount rate. Under the strict sustainability criterion (net debt is nil in 2050), the tax gap amounts to around 2½ per cent of GDP on average for the countries concerned, with minor variation dependent on the assumed discount rate. The tax gap drops to around 2 per cent if the 60 per cent target for gross debt is adopted and to 1½-2 per cent based on a 60 per cent target for net debt. Again the variation across countries is large, with tax gaps exceeding 4 per cent for Germany, France, the Netherlands and Portugal.[4] These results are roughly comparable to calculations of the tax gap carried out by the European Commission (2003) on the basis of the 2002-03 batch of stability programmes, which suggested tax gaps of the same orders of magnitude, including for the latter four countries.

Obviously these results should not be interpreted as implying that taxes should be increased to achieve long-term sustainability. A wide range of alternative options is available, including cutting non-ageing related expenditure, enhancing the cost efficiency of public spending programmes, reducing the build-up of entitlements to ageing-related benefits or progressively converting public programmes into private programmes. However, whatever option is chosen, in order to achieve fiscal sustainability they must result in improvements in fiscal positions equivalent to those implied by the computed tax gaps.

Table 3.A2.3 shows the implied fiscal balances under the various assumptions with respect to the debt target and the discount rate. The upshot is that on average countries should aim for a fiscal surplus between 0 to 1 per cent of GDP over the coming 15 years or so.

© OECD 2004

Table 3.A2.2. **Tax gaps at alternative end-point criteria and discount rates**
Per cent of GDP

	Net debt = 0			Gross debt = 60%			Net debt = 60%		
Interest rate-growth differential	0.5%	1%	2%	0.5%	1%	2%	0.5%	1%	2%
Austria	2.8	2.8	2.9	2.0	2.1	2.4	1.6	1.7	2.1
Belgium	2.4	2.5	2.8	1.4	1.6	2.1	1.2	1.4	1.9
Finland	1.8	1.5	1.0	2.3	2.0	1.5	0.6	0.5	0.2
France	4.5	4.6	4.8	3.9	4.1	4.3	3.3	3.5	3.9
Germany	5.0	5.0	5.1	4.0	4.1	4.4	3.8	3.9	4.3
Italy	3.0	3.2	3.7	2.2	2.5	3.1	1.8	2.1	2.8
Netherlands	8.8	8.7	8.5	7.8	7.8	7.9	7.6	7.6	7.7
Portugal	5.6	5.6	5.8	4.4	4.6	5.0	4.4	4.6	5.0
Spain	0.2	0.2	0.2	–0.3	–0.3	–0.3	–0.7	–0.7	–0.7
Average of above	2.5	2.5	2.6	2.0	2.1	2.3	1.7	1.8	2.0

Source: OECD.

Table 3.A2.3. **Fiscal balance at alternative end-point criteria and discount rates**
Average for period 2006-20, per cent of GDP

	Net debt = 0			Gross debt = 60%			Net debt = 60%		
Interest rate growth differential	0.5%	1%	2%	0.5%	1%	2%	0.5%	1%	2%
Austria	1.6	1.5	1.2	0.6	0.5	0.4	0.0	0.0	0.0
Belgium	2.3	2.1	1.7	1.1	0.9	0.7	0.8	0.7	0.5
Finland	4.2	4.2	4.2	4.9	4.9	4.8	2.6	2.8	3.0
France	1.2	1.1	0.9	0.4	0.4	0.3	–0.4	–0.4	–0.3
Germany	2.5	2.4	2.0	1.3	1.2	1.0	1.0	0.9	0.8
Italy	0.5	0.3	–0.1	–0.5	–0.6	–0.9	–1.1	–1.2	–1.3
Netherlands	5.4	5.2	4.8	4.1	4.0	3.8	3.8	3.8	3.6
Portugal	1.9	1.8	1.5	0.3	0.3	0.3	0.3	0.3	0.3
Spain	1.7	1.7	1.7	1.0	1.0	1.0	0.5	0.5	0.5
Average of above	1.1	1.0	0.9	0.5	0.5	0.4	0.1	0.1	0.0

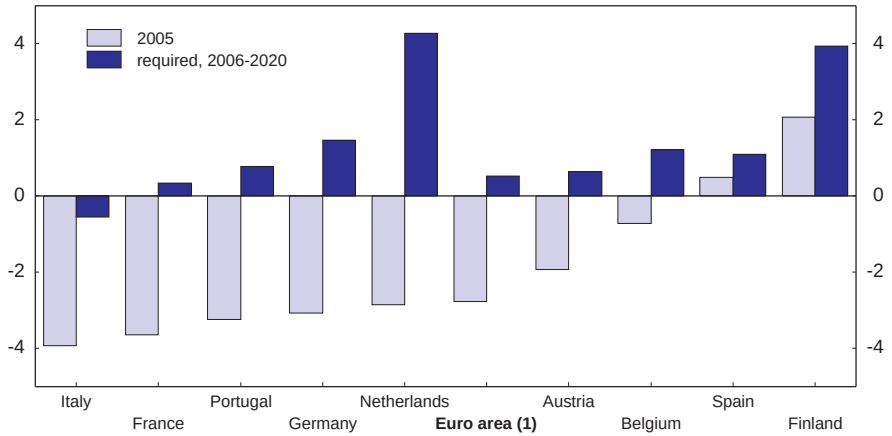
Source: OECD.

This is broadly in line with the "close-to-balance or in surplus" rule stipulated in the SGP. However, the cross-country variation is large. While Italy could sustain a small deficit in the range of 0 to 1 per cent of GDP, most other countries would need to maintain a surplus of around 1 per cent of GDP. The Netherlands and Finland should aim for a surplus of (well) over 3 per cent of GDP. The "close-to balance or in surplus" rule is clearly too lenient for the latter group of countries.

Figure 3.A2.3, finally, compares the required fiscal balances for the 2006-20 period (averaged across the three sustainability criteria and discount rate assumptions) with the projected balances for 2005 in OECD *Economic Outlook* No. 75. It shows that all countries

© OECD 2004

Figure 3.A2.3. **Actual and required fiscal position**
Per cent of GDP



1. Average of countries shown.
Source: OECD.

have still some way to go before they achieve sustainable public finances on the basis of the ageing-related expenditure projections put forward in their own stability programmes. While none of the countries is near a situation of sustainable public finances, the biggest consolidation efforts are needed in France, Germany, Italy, the Netherlands and Portugal.

© OECD 2004

Notes

1. Only net debt – *i.e.* the difference between gross debt and financial assets on the government balance sheet – matters for sustainability to the extent it is possible for the government to exchange financial assets in its portfolio for outstanding bonds and to the extent it is reasonable to assume that the rate of return on the government's financial assets equals the yield on government bonds.
2. Note that for $T \longrightarrow \infty$ this criterion must always be satisfied.
3. In all countries the 60 per cent limit is binding in 2050.
4. In some cases a higher discount rate yields a lower tax gap. In those cases net debt becomes negative for some period and as a result the debt "snowball" is slowed down for higher discount rates.

© OECD 2004

Bibliography

Barrell, R. and A. M. Pina (2003), "How Important are Automatic Stabilisers in Europe? A Stochastic Simulation Assessment", *Economic Modelling*, Vol. 21.

Beetsma, R. and X. Debrun (2003), "Reconciling Stability and Growth: Smart Pacts and Structural Reforms", Paper presented at the Pierre Werner Chair Programme on European Monetary Union Workshop on Fiscal Aspects of the EMU, European University Institute, Florence, 4/5 April.

Blanchard, O. *et al.* (1990), "The Sustainability of Fiscal Policy: New Answers to an Old Question", OECD *Economic Studies*, No. 15.

Blanchard, O. and F. Giavazzi (2003), "Improving the SGP through a Proper Accounting of Public Investment", paper presented at seminars on the Stability and Growth Pact organised by the Bundesbank and DIW-Berlin, revised version, February.

Blondal, J.R. (2003), "Budget Reform in OECD Member Countries: Common Trends", OECD *Journal on Budgeting*, Vol. 2, No. 4.

Bohn, H. and R. B. Inman (1996), "Balanced Budget Rules and Public Deficits: Evidence from the United States", NBER *Working Paper Series*, No. 5533, National Bureau of Economic Research.

Buiter, W.H. (2003), "Ten Commandments for a Fiscal Policy Rule in the EMU", *Oxford Review of Economic Policy*, Vol. 19, No. 1.

Buiter, W.H. and C. Grafe (2003), "Reforming EMU's Fiscal Policy Rules". In M. Buti (ed.) *Monetary and Fiscal Policies in* EMU, Cambridge University Press.

Buti, M., S. Eijfinger and D. Franco (2003), "Revisiting EMU's Stability Pact: a Pragmatic Way Forward", *Oxford Review of Economic Policy*, Vol. 19, No. 1.

Buti, M. and G. Giudice (2002), "Maastricht Fiscal Rules at Ten: An Assessment", *Journal of Common Market Studies*, Vol. 40.

Buti, M. and P. van den Noord (2003a), "Discretionary Fiscal Policy and Elections: The Experience of the Early Years of EMU", OECD *Economics Department Working Papers*, No. 351.

Buti, M. and P. van den Noord (2003b), "What is the Impact of Tax and Welfare Reforms on Fiscal Stabilisers? A Simple Model and an Application to EMU", *European Economy – Economic Papers*, No. 187, European Commission, Brussels.

Buti, M. and P. van den Noord (2004), "Fiscal Policy in EMU: Rules, Discretion and Political Incentives", *Moneda y Crédito*, No. 218.

Dang, T.T., P. Antolin and H. Oxley (2001), "Fiscal Implications of Ageing: Projections of Age Related Spending", OECD *Economics Department Working Papers*, No. 305.

European Commission (2002a), "Production Function Derived Output Gains", Information Note to the Members of EPC, ECFIN/528/02, Brussels.

© OECD 2004

European Commission (2002b), "Strengthening the Coordination of Budgetary Policies", COM(2002)668, Brussels.

European Commission (2003), "Public Finances in EMU 2003", European Economy, No. 3/2003, COM(2003) 283 final, Directorate General for Economic and Financial Affairs, Brussels.

Fatás, A. and I. Mihov (2003), "On Constraining Fiscal Policy Discretion in EMU", *Oxford Review of Economic Policy*, Vol. 19, No. 1.

Fatás, A. *et al.* (2003), Stability and Growth in Europe: Towards a Better Pact, CEPR *Series on Monitoring European Integration*, No. 13, Centre for Economic Policy Research.

Girouard, N. and R. Price (2004), "Asset Price Cycles, 'One-off' Factors and Structural Budget Balances", OECD *Economics Department Working Papers*, No. 391.

Gros, D., T. Mayer and A. Ubide (2003), *The Nine Lives of the Stability Pact: Rapid Reaction Report of the* CEPS *Macroeconomic Policy Group*, Brussels, December, *www.ceps.be*.

de Haan, J., H. Berger and D. J. Jansen (2003), "The End of the Stability and Growth Pact?", CES*ifo Working Papers*, No. 1093, Munich, December.

von Hagen, J., A. Hughes Hallett and R. Strauch (2002), "Budgetary Institutions for Sustainable Public Finances", in M. Buti, J. von Hagen and C. Martinez-Mongay (eds), *The Behaviour of Fiscal Authorities – Stabilisation, Growth and Institutions*, Palgrave, Basingstoke.

von Hagen, J. (2003), "Fiscal Discipline and Growth in Euroland; Experiences with the SGP", ZEI *Working Paper*, No. B06 2003, Bonn.

IMF (International Monetary Fund) (2003), "Ageing and the SGP", in: *Euro Area Policies: Selected Issues*, IMF *Country Report*, No. 03/298, September.

Jaeger, A. and L. Schuknecht (2004), "Boom-Bust Phases in Asset Prices and Fiscal Policy Behavior", IMF *Working Papers*, No. WP/04/54.

Knight, B. and A. Levinson (1999), "Rainy Day Funds and State Government Savings", *National Tax Journal*, Vol. 52, No. 3.

Larch, L. and M. Salto (2003), "Fiscal Rules, Inertia and Discretionary Fiscal Policy", *European Economy – Economic Papers*, No. 194, European Commission, Brussels.

Landais, B. (2003), "Différences d'Efficacité de la Politique Budgétaire dans les Pays de l'Union Européenne ?", *Économie Appliquée*, Vol. 71.

de Mello, L. (2004), "Saving Behaviour and the Effectiveness of Fiscal Policy", OECD *Economics Department Working Papers* (forthcoming).

van den Noord, P. (2002a), "Automatic Stabilizers in the 1990s and Beyond", in M. Buti, J. von Hagen and C. Martinez-Mongay (eds), *The Behaviour of Fiscal Authorities – Stabilisation, Growth and Institutions*, Palgrave, Basingstoke.

van den Noord, P. (2002b), "Managing Public Expenditure: The UK Approach", OECD *Economics Department Working Papers*, No. 341.

van den Noord, P. (2003), "Tax Incentives and House Price Volatility in the Euro Area: Theory and Evidence", OECD *Economics Department Working Papers*, No. 356.

© OECD 2004

IV. One money, one cycle?

As discussed in Chapter I of this S*urvey*, the euro area has shown less resilience to the negative and largely OECD-wide shocks than a group of mostly English-speaking countries (Australia, Canada, New Zealand and the United Kingdom) that were hit by the same shocks. In these countries economic activity has remained closer to trend than in the euro area, with the average absolute output gap remaining small. Inflation in these countries remained close to target, allowing a strong reaction of monetary policy to the international downturn. In the euro area, inflation has remained slightly above target despite weak activity, limiting the European Central Bank's (ECB) room to cut interest rates more aggressively. The question examined in this chapter is to what extent diverging responses to common shocks within the euro area help explain this lack of resilience.

A number of stylised facts stand out. On the one hand, the growth performance of small countries in the euro area has been above average; some of these countries have been overheating and entered a period of sharp adjustment (the Netherlands and Portugal). On the other hand, protracted weakness has been evident among the three largest euro area countries, with Germany and Italy being particularly sluggish and France faring better. Equilibrating forces coming through adjustments in competitiveness have been at work to some extent, but in Germany the competitiveness gains were too small to pull the economy out of stagnation while Italy even lost competitiveness. The performance of the large countries seems to be at odds with optimum currency area theory which suggests that in monetary union "core" countries should suffer less from cyclical divergence.

The main finding in this chapter is that the capacity of the larger countries to adjust swiftly is crucial for the area's resilience as a whole – not least because it would allow a more effective monetary policy response. This might imply a greater divergence in wage and price developments between countries to restore relative competitive positions. The first section examines the stylised facts of cyclical divergence and its sources. This is followed by a review of the key policy issues.

© OECD 2004

Sources and evidence of cyclical divergence

The efficiency gains stemming from the single currency in terms of lowering transaction costs and enhancing the internal market are considerable, but for individual countries, membership in the euro area also implies the loss of sovereign interest rate and exchange rate instruments in the pursuit of stabilisation goals. How big this potential cost is depends *inter alia* on:

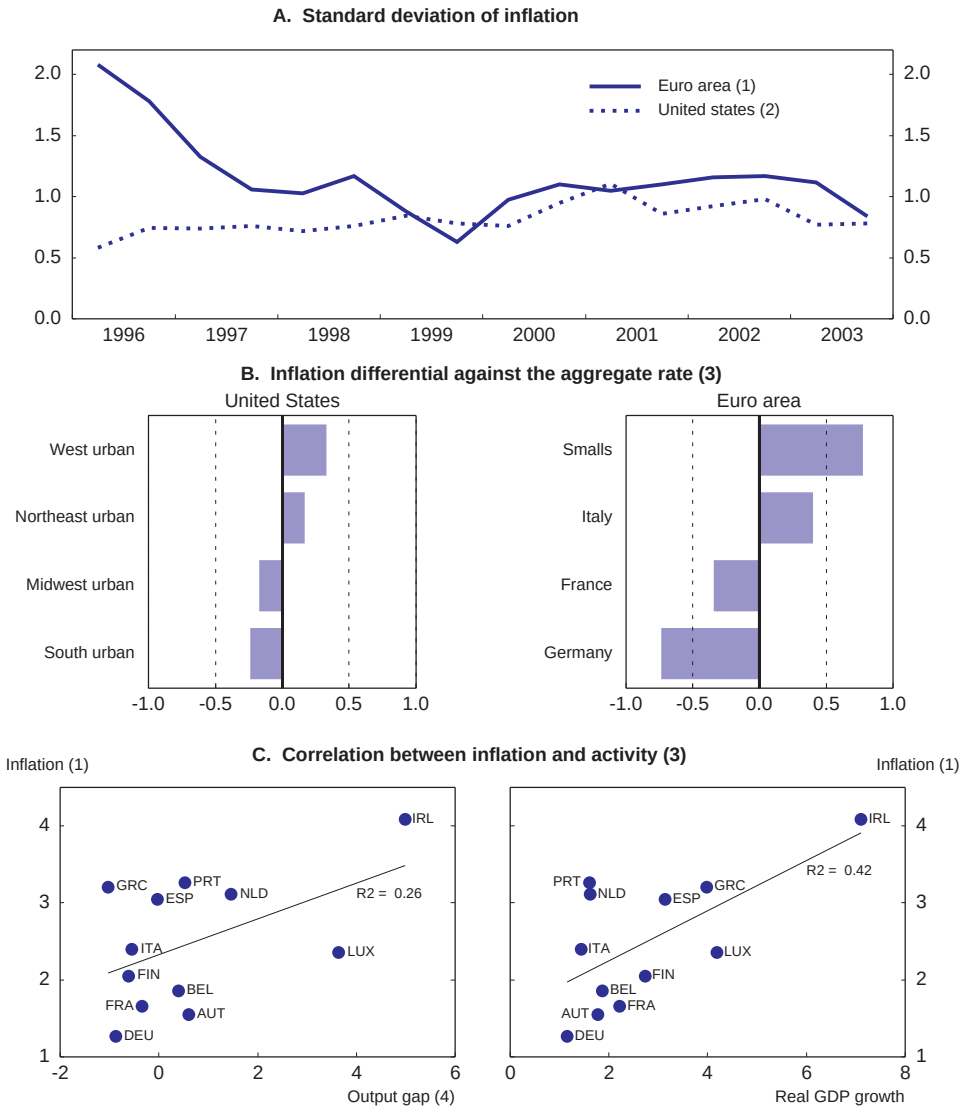
- The nature and frequency of the shocks that hit individual countries.
- Asymmetries in the transmission of common shocks including differences in the monetary transmission mechanism.
- The effectiveness of market mechanisms (flexibility of prices and wages) and automatic fiscal stabilisers.
- The ability of national institutions to effectively deal with both common and country-specific shocks.

In monetary union, inflation differentials are beneficial to the extent they reflect differences in demand pressure across countries, as they will help to avoid protracted differences in output developments. Before entering monetary union, however, large differences in inflation were seen to be damaging as countries with high inflation would have had to undergo a considerable adjustment to adapt to the low-inflation environment. Hence, the Maastricht convergence criteria prescribed that to qualify for entry into the single currency area countries' inflation rates should not exceed by more then 1½ percentage points the average of the three lowest-inflation countries in the European Union. Inflation dispersion indeed diminished considerably in the run-up to the launch of the euro – moving towards the dispersion recorded in the United States (Figure 4.1). Inflation dispersion picked up after 1999, reflecting high inflation in some of the overheating smaller economies (notably Ireland and the Netherlands), but it diminished again in 2003 as inflation in these countries moderated. Inflation dispersion has been somewhat larger than in the United States, but the difference is small considering that the US economy is more integrated and of course has a much longer history as a monetary union than the euro area.

Since the launch of the single currency the dispersion of economic growth has been somewhat larger than the dispersion of inflation, although the two are correlated (Figure 4.1, bottom panel). Between 1999 and 2003, the smaller economies expanded at an annual rate of 3 per cent as compared with 1½ per cent for the three major economies, although more recently the growth difference between the smaller and larger countries has narrowed considerably, with growth coming down quickly in Finland, Ireland, the Netherlands and Portugal. Growth differences across countries may stem from different cyclical positions, but may also reflect differences in trend output growth. In either case this may contribute to inflation dispersion; and countries that are growing fast as they catch up with

© OECD 2004

Figure 4.1. **Inflation and output dispersion**



1. Harmonised index of consumer prices.
2. Consumer Price Index – All Urban Consumers for 27 areas.
3. Average for 1999-2003.
4. Per cent of potential GDP.

Source: OECD, US Bureau of Labour Statistics.

© OECD 2004

the rest of the area may post higher inflation on account of the "Balassa-Samuelson" effect.[1]

When assessing the sources of cyclical divergence it is essential to bear in mind that the adoption of the single currency itself resulted in major shocks to which individual countries are still adjusting. This may mask any underlying tendency towards a convergence of business cycles. A number of these "start-up" shocks can be identified, including interest rate shocks (monetary union has meant sharply lower real interest rates for some with histories of higher inflation and conversely for others with histories of lower inflation) and rising capital mobility (with foreign direct investment benefiting also the "periphery" of the area which became less prone to exchange rate shocks). The decline in real interest rates seems to have a strong impact in some of the small economies, with the housing channel being prominent. Recent work by the OECD reported in Box 4.1 highlights the key mechanisms that may have been at work.

Another "start-up shock" that may have contributed to diverging inflation and growth developments in the euro area stems from a possible misalignment of real exchange rates when the conversion rates between the euro and the old currencies were fixed. In the early-1990s the euro area was hit by a series of exchange rate shocks and the subsequent correction may have been incomplete when the euro was launched. Countries whose exchange rate was overvalued when the conversion rates were fixed would see their pricing power in world markets adversely affected, putting downward pressure on inflation and economic activity. This may have been the case in Germany, which had experienced an appreciation in its real effective exchange rate in the aftermath of reunification (Figure 4.2). Its comparatively low inflation may thus be of an equilibrating character as the initial imbalances called for a decline in German relative prices against the rest of the euro area. However, the adjustment of relative prices may be costly in terms of lost growth due to rigidities and inflation inertia. This points to a need for structural reforms to heighten wage and price flexibility.[2]

Importantly, the single currency has shielded countries from a repeat of such asymmetric exchange rate and interest rate shocks. This is a valuable asset. Nevertheless, with the single currency in place, monetary conditions in the individual countries during the recent downturn could not be attuned to domestic needs. For illustrative purposes it may be of interest to compare actual interest rates with those resulting from a standard Taylor rule. While such rules should not be used for normative purposes, they may help facilitate cross-country comparisons of cyclical situations *ex post*. From Figure 4.3 it can be inferred that countries like Ireland, Greece, the Netherlands, Portugal and Spain in principle had needed, for domestic purposes, higher interest rates than Germany, France, Italy, Austria, Belgium and Finland.[3] Equilibrating forces coming through external competitiveness have been offsetting to some extent. The majority of smaller countries

© OECD 2004

Box 4.1. Cyclical divergence in the euro area: the housing channel

A recent study for the United States (Arnold and Kool, 2003) has shown that, following an increase in a state's inflation rate, in the short run the pro-cyclical effect through the real interest rate and housing wealth channel dominates the counter-cyclical effect through the worsening of competitiveness. Only after a period of three to four years the competitiveness effect outweighs the real interest rate and wealth effect. The fact that house prices and the associated wealth are positively correlated not only with private consumption but also with residential activity adds to this mechanism (Davis and Heathcote, 2003). The OECD has recently developed a stylised econometric model replicating the model of Arnold and Kool for the euro area economy.[1] Unlike Arnold and Kool's model, which treats all US states as if they were identical, the OECD model makes a distinction between small and large countries in terms of the estimated parameters.

After the launch of the single currency the euro exchange rate fell and interest rates had converged towards the (low) German level. These shocks have worked out differently for the small and large countries. Housing markets may have acted as an important vehicle of transmission of these shocks onto economic activity and inflation. The main mechanisms involved are as follows: Falls in the nominal interest rate or in the nominal exchange rate – via imported inflation – both lead to an initial decline in the real interest rate.[2] This, in turn, boosts activity and the demand for housing. House prices increase and the associated wealth effects reinforce activity and produce subsequent rounds of housing and overall inflation.[3] The impact on inflation and activity eventually peters out as the real effective exchange rate appreciates. Moreover, the rate of increase in house prices is choked off as real interest rates rebound and the level of house prices approaches equilibrium. The competitiveness effect affects the smaller euro area countries most because of their greater exposure to foreign trade. At the same time, the impact of the wealth effect on some of the smaller economies may also be larger as their financial and housing market institutions are more conducive to the withdrawal of housing equity while their typically more generous tax incentives for owner-occupied housing render housing demand less sensitive to price fluctuations.

Simulations with the model illustrate these mechanisms (Table 4.1):

- The first simulation is a one-off sustained depreciation of the nominal effective exchange rate by 4½ per cent. This is the order of magnitude of the exchange rate shock when the euro was launched, although it was more drawn out than simulated here. It is roughly equivalent to a drop in the nominal effective exchange rate for the area as a whole by 10 per cent, reflecting that on average the share of extra-area trade in total foreign trade is around 45 per cent. The differences between the country groups are striking, with the rise in overall inflation, the fall in real interest rates and the boost to house prices much larger in the small countries than in the large ones.
- The second simulation is a one-off sustained cut in the nominal interest rate by 1 per cent for both groups of countries. In reality, as noted, only some of the small countries have been exposed to a (favourable) interest rate shock

© OECD 2004

Box 4.1. **Cyclical divergence in the euro area: the housing channel** (*cont.*)

when the euro was launched, but for the sake of comparability the same shock has been simulated for both groups. In this simulation the differences between the two country groups are less pronounced, but they go in the same direction.

1. See van den Noord (2004).
2. This mechanism is relevant to the extent economic agents respond to *ex post* real interest rates. See also the notes added to Figures 4.2 and 4.3.
3. On theoretical grounds a house price increase is expected to have a wealth effect on consumption only if: *i*) there are asymmetries in the behaviour of existing and future home owners and *ii*) households' access to liquidity is affected.

Table 4.1. **The housing channel: impact of exchange rate and interest rate shocks**
Deviations from baseline, per cent

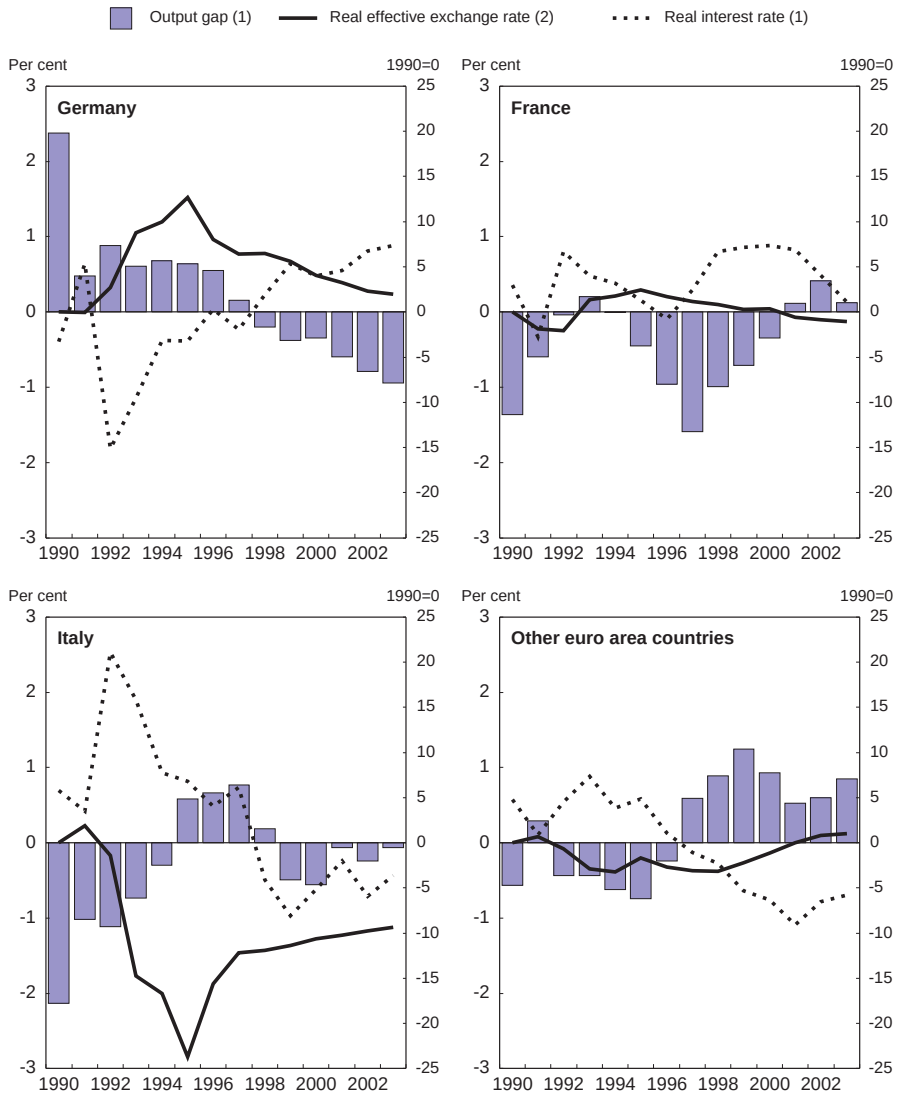
	Quarters after shock					
	1	2	3	4	8	12
	A. Permanent 4.5 per cent decline in the nominal effective exchange rate					
Big countries						
Output gap	0.1	0.1	0.1	0.2	0.3	0.3
Overall inflation[1]	0.7	0.5	0.4	0.4	0.4	0.4
House price inflation[1]	0.7	0.9	1.1	1.3	1.5	1.4
Small countries						
Output gap	0.1	0.0	0.0	0.1	0.3	0.4
Overall inflation[1]	1.5	1.1	1.0	0.9	0.7	0.6
House price inflation[1]	1.5	2.4	3.0	3.4	3.8	2.7
	B. Permanent 1 percentage point fall in the interest rate					
Big countries						
Output gap	0.1	0.1	0.2	0.2	0.4	0.4
Overall inflation[1]	0.0	0.0	0.0	0.0	0.1	0.1
House price inflation[1]	0.7	1.2	1.6	2.0	2.6	2.6
Small countries						
Output gap	0.0	0.1	0.2	0.3	0.5	0.7
Overall inflation[1]	0.0	0.0	0.0	0.0	0.1	0.1
House price inflation[1]	0.8	1.5	2.1	2.7	3.7	3.4

1. Annualised rate.

Source: Van den Noord, P. (2004), "Modelling Cyclical Divergence in the Euro Area: The Housing Channel", OECD *Economics Department Working Papers*, Paris (forthcoming).

© OECD 2004

Figure 4.2. **Crowding out and crowding in**



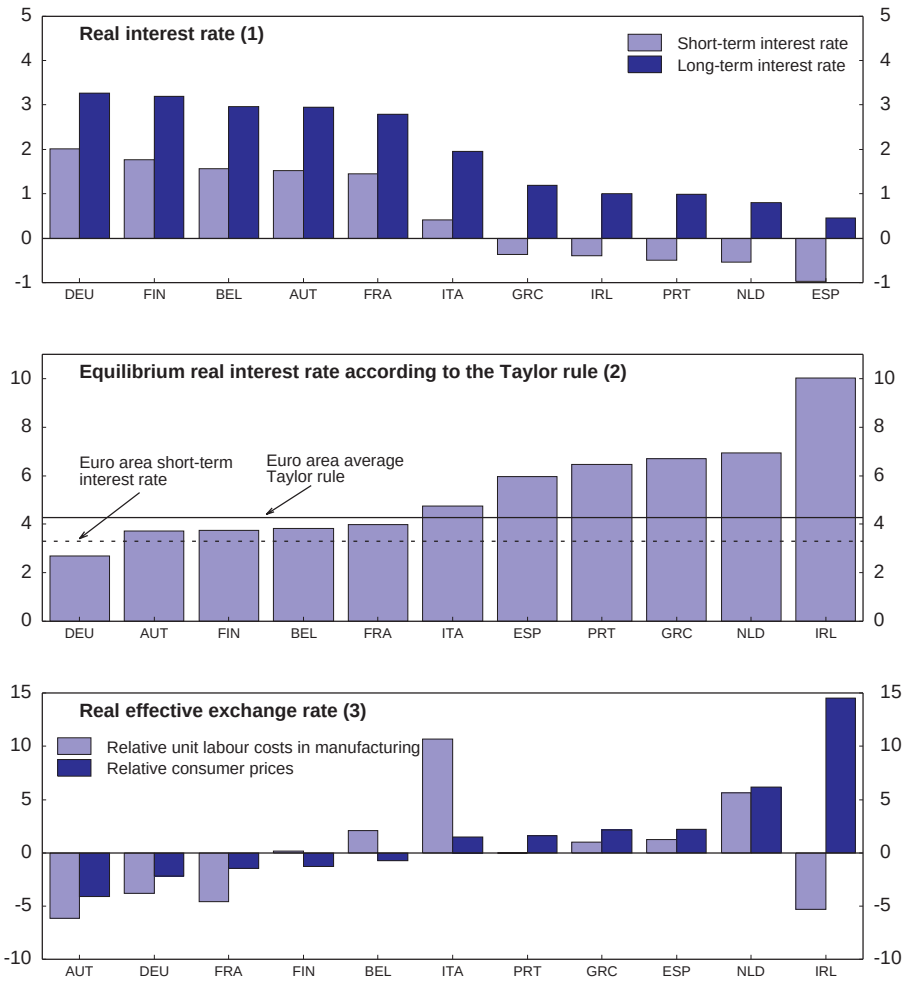
Note: The real interest rates shown in the figure refer to *ex post* real interest rates. In a currency union, *ex ante* real interest rates should be much more closely aligned across countries than *ex post* real rates since longer-term inflation expectations should not differ significantly across countries. As a consequence, national measures of *ex post* real interest rates contain only limited information about the true financing conditions in a country in a monetary union.

1. Differential against the euro area average (left scale).
2. Per cent difference from the euro area average, measured with relative consumer prices (right scale).

Source: OECD.

© OECD 2004

Figure 4.3. **Monetary conditions in the downturn**
Averages for the period 2001-2003



Note: The real interest rates shown in the figure refer to *ex post* real interest rates. In a currency union, *ex ante* real interest rates should be much more closely aligned across countries than *ex post* real rates since longer-term inflation expectations should not differ significantly across countries. As a consequence, national measures of *ex post* real interest rates contain only limited information about the true financing conditions in a country in a monetary union.

1. Deflated by the GDP deflator.
2. The Taylor rule computes the amount whereby interest rates should be raised above (reduced below) their equilibrium level if either inflation rises above (falls below) its target or the output gap turns positive (negative) in order to maintain a neutral policy stance. The weights attached to inflation and the gap are 1.5 and 0.5, respectively. The price stability target is inflation of 1.5 per cent and the assumed equilibrium interest rate is 3.5 per cent.
3. Cumulated deviation of real effective exchange rate minus euro area average.

Source: OECD.

© OECD 2004

have been prone to cost increases, although this was not true for Ireland and Finland, because of sizeable productivity gains.[4] Among the larger countries, Germany and France posted gains in competitiveness, but in the case of Germany this has not sufficed to boost the economy out of stagnation while Italy actually lost competitiveness.

Deepening integration will help smooth adjustment by strengthening the impact of changes in competitiveness on activity. In addition, demand shocks will be absorbed to a greater extent by imports.[5] Wage and price flexibility are also important in strengthening the competitiveness channel. Flexibility is likely to be influenced by deeply-rooted social norms and institutional factors, but may also be closely linked to structural policy settings.[6] When wages are tightly linked to past inflation or they hit a nominal floor, this will lead to inertia. If, in contrast, wages react strongly to the cycle, adjustment will be faster, although this will result in greater inflation variability. Greater labour mobility would also help: inter-country adjustment would be smoother with little inflation variability.[7] The integration of financial markets will eventually contribute to making the interest rate channel stronger in countries where this is currently weak, thus removing a potential source of cyclical divergence. As highlighted in the next section, the scope for further progress in all these areas is significant.

The policy agenda

Most small countries seem to be well placed to adjust swiftly to asymmetric shocks, largely because they are very open *vis-à-vis* the rest of the area. A counter-cyclical fiscal policy is probably not powerful enough to smooth the cycle given import leakages and a low multiplier. However, possible asset price bubbles are a cause of concern in their case as their limited overall weight means that the monetary stance is more likely to be out of line with their cyclical position. The experience shows that large countries are less well placed to cope with asymmetric shocks and sluggish adjustment can be expected. Reforms should therefore focus on raising trade linkages via the completion of the single market and on raising wage and price flexibility. In principle, fiscal policy could help in the large countries, but the institutional framework has so far not ensured a counter-cyclical stance over the cycle. The sections below discuss these issues in more detail.

Boosting trade integration

Deeper integration, by completing the single market, would boost trade linkages and especially help the big countries by raising the effectiveness of the competitiveness channel. Simulations with the OECD's Interlink model suggest that a negative demand shock entails competitiveness gains in small countries that are strong enough to close the ensuing output gap already after three years (Hoeller *et al.*, 2004).[8] Market based adjustment, relying on endogenous equilibrating forces, appears to be much less powerful in big countries. To the extent that slow adjustment

© OECD 2004

depresses business investment for a prolonged period, also potential output would be weakened.[9]

The scope for deeper trade integration in the European Union is large. According to the UK Treasury's Economic and Monetary Union study (HMT, 2003), the major eight US regions distinguished by the Bureau of Economic Analysis are significantly more integrated than the euro area. As a share of gross state product, manufacturing exports alone varied from around 30 per cent in the Mid-East region to 70 per cent in the Great Lakes region. In comparison, total exports of goods and services are close to 30 per cent of gross domestic product (GDP) for Germany and 25 per cent of GDP for France and Italy. Indirect evidence also suggests that mature federations show strong trade integration. McCallum (1995), for instance, found that Canadian provinces traded around twenty times more among each other as compared with their trade with US states of similar size and after controlling for distance.[10]

The European Union has, of course, aimed at deep integration via the single market, thus boosting trade linkages within the Union. So far, it has been fairly successful in implementing the single market for goods. Integration in other sectors has, on the other hand, still quite some way to go:

- The service sectors are not yet well integrated and substantial barriers remain. The Commission has recently put forward a proposal for a Directive on Services in the Internal Market that establishes a framework for eliminating the obstacles to the freedom of establishment for service providers and the free movement of services between member states.
- Concerning financial services, which were further liberalised by the Financial Services Action Plan in recent years, progress towards better integration has been uneven across market segments.
- Network industries, while having been largely liberalised, still suffer from market segmentation.

In sum, a hard push towards lowering market segmentation would especially benefit the large euro area countries, both by reducing cyclical divergence, as it would raise the effectiveness of the competitiveness channel, and by improving economic performance. Stronger competition in service industries would lead to higher productivity growth, lowering the gap with productivity developments in the manufacturing sector. Thus, fast-growing economies might show less inflation than otherwise. The policy issues surrounding the single market agenda are discussed in more detail in Chapter 5.

Fostering wage and price flexibility

The strength of competitiveness effects would also be enhanced if wage and price flexibility were to be raised. Simulations with Interlink suggest that flexibility

© OECD 2004

would need to be raised way beyond what is currently observed in large countries to arrive at a competitiveness effect that is as strong as in the small countries (Hoeller *et al.*, 2004). Both integration and wage and price flexibility are thus important.

Rigid wage setting hinders market-clearing as it prevents wages from reflecting differences in qualifications or in labour market conditions across occupations, regions or sectors. The concentration of problems in certain regions (see Chapter 5) and for some groups of workers suggests that such adverse mechanisms are at work in the euro area. Two problems stand out:

- There is evidence that unions reduce wage inequality and that wage compression is strongest in countries where union membership and bargaining coverage are high, and bargaining is centralised and/or co-ordinated. This is typically the case in the euro area countries and contrasts with the decentralised bargaining structure typical in English-speaking countries that show higher skill differentials and a greater responsiveness of relative wages to local conditions (OECD, 2004a). In addition, implicit mechanisms of wage indexation are still important in the euro area and a significant proportion of total employees is covered by backward indexation to national inflation or include catch-up clauses if inflation surpasses a threshold (Table 4.2). This leads to wage cost inertia and is one of the reasons why inflation remained above the 2 per cent upper limit consistent with the ECB's definition of price stability for some years (see Chapter 2).

Table 4.2. **Wage indexation and minimum wages**

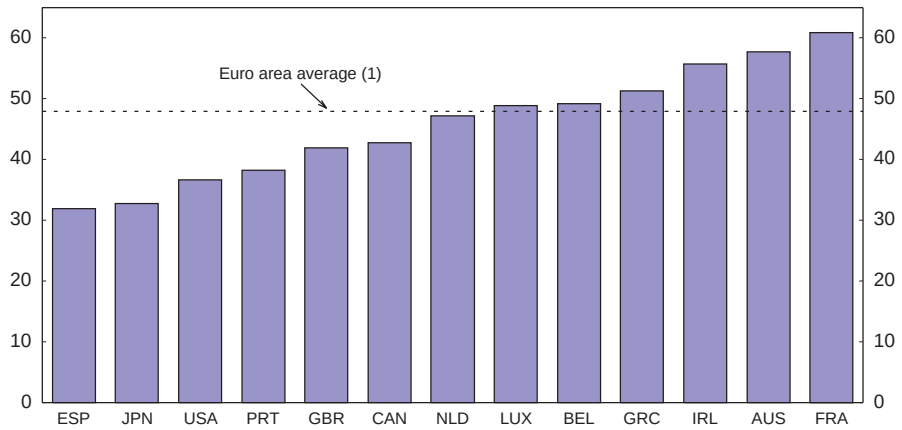
Wage indexation		Minimum wages	
Systematic	Belgium, Luxembourg	Statutory	Belgium, Spain, France, Portugal, Ireland, Netherlands, Luxembourg, Greece
Conditional indexation (adjustment possible when inflation exceeds a threshold)	Greece, Finland	Set in collective agreements	Germany, Italy, Finland, Austria
Indexation clauses common in collective agreements	Spain, Netherlands		
Other	France (indexation of minimum wage) Portugal (*ex-post* adjustment to surprise inflation in 2000) Italy (*ex-post* adjustment to surprise inflation)		

Source: European Commission; OECD.

© OECD 2004

- Eight euro area countries have a legal minimum wage, which – with a few exceptions – are high by international comparison (Figure 4.4). Minimum wages have significantly increased over the last decade in real terms, but relative to the median wage they have declined in most small euro area countries and risen somewhat in France. Few countries have a differentiation for young workers, but some have implemented targeted measures to reduce labour cost for those earning the minimum wage. Countries with no legal minimum wage tend to have bargaining systems that set a wage floor for less productive workers.

Figure 4.4. **Ratio of minimum wage to full-time median earnings**
Per cent, 2000



1. Unweighted average of countries shown.
Source: OECD.

A non-linear relationship between inflation and the output gap could worsen the short-term trade-off between inflation and output. Non-linearity implies that inflationary pressures generated by excess demand in one country will not be fully compensated by a equivalent disinflation in a country with a negative output gap. As a result, a high dispersion of excess demand and supply gaps across countries will lead to inflationary pressures even if the gap dispersion itself is perfectly symmetric. Historically, the macroeconomic impact of non-linear Phillips curves appears to be small, but it may be more pronounced in a low-inflation environment.[11] A limiting case would be a considerable flattening of the Phillips curve in

© OECD 2004

countries with very low inflation. A literature review by Camba-Mendez *et al.* (2003) suggests that there is evidence for downward rigidities in the European Union countries, but also in the United States and Canada.

Increasing nominal wage rigidities at low inflation imply that cyclical divergence would dissipate more quickly if policy would aim at a higher inflation target. The ECB has indeed stated in its May 2003 review of its monetary policy strategy that price stability implies inflation of close to 2 per cent over the medium term, whereas before price stability was defined as inflation between 0 and 2 per cent. One reason for this change was to address the implications of inflation differentials within the euro area. While a welcome move, it remains to be seen whether it will really help. Wage inflation has been close to 2 per cent in Germany and 2½ per cent in Italy during the recent downswing, without any deceleration. On the other hand, it has decelerated in most small countries.

Product market reforms should also help in overcoming rigidities. If inflation reacts little to differences in demand pressures across countries, then the crowding in of foreign demand via competitiveness gains will be slow. There is fairly general agreement that demand effects on prices tend to be weaker if firms operate in a less competitive environment.[12] This is supported by empirical evidence that profit margins react less strongly in the euro area to changes in activity. For example, the price equations embedded in the OECD's Interlink model show a considerably higher estimated effect of the output gap on prices for the United States than for the large continental European countries (Turner *et al.*, 1996).

E*nsuring a smooth functioning of housing and mortgage markets*

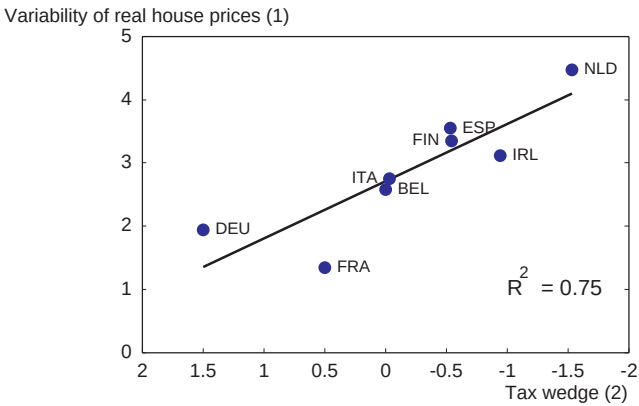
Effective financial markets are an important shock absorber and bolster the resilience of economies in the face of adverse circumstances – such as the shocks that have hit the world economy over the past 3-4 years. Not only is the recovery quicker and stronger in the United States than in the euro area, but a number of OECD countries outside the United States and the euro area hardly experienced any downturn at all. While a number of real side structural features are behind this outcome, well diversified financial markets, characteristic of many of these countries, are also likely to have contributed to this result. There is considerable scope to integrate further financial markets in the euro area, which will increase liquidity and reduce transaction costs. Better financial integration within the euro area may benefit their mortgage markets. The experience in the United Kingdom has shown that wealth effects stemming from house price increases may be substantial (OECD, 2004b). It has one of the most liberalised mortgage markets. Loan-to-value ratios are typically lower in the larger euro area countries and transactions costs are higher. These features usually imply less mortgage equity withdrawal and fewer opportunities for consumption smoothing for liquidity constrained households.

© OECD 2004

Cycles in owner-occupied housing markets in some of the smaller euro area countries have produced swings in household wealth that in turn exacerbated the cross-country variation in economic activity. This phenomenon largely relates to a combination of features that appear to be common to most of the smaller euro area countries. In many cases mortgage markets are relatively liberal and hence house price increases have strong effects on consumption. They ease liquidity constraints by providing collateral for additional borrowing. Meanwhile tax incentives to stimulate house ownership are an additional factor that can raise volatility in house prices. A tax system that contains generous incentives for house ownership not only results in a higher steady-state level of house prices, but may also result in larger swings in house prices in response to demand shocks (van den Noord, 2003). Price variability of owner-occupied homes is indeed largest in countries where the tax breaks for owner-occupied housing are largest (Figure 4.5). This is striking in the Netherlands, which combines the largest tax breaks with the largest price variability. There is a middle range containing Finland, Ireland and Spain, and then the least prone to price variability with the smallest tax breaks are Belgium, France, Germany and Italy.

The upshot is that monetary transmission through the housing channel may be stronger in the smaller countries than in the larger ones. Structural reform (including tax reform) concerning the housing market should be undertaken primarily

Figure 4.5. **Correlation between the tax wedge and variability of house prices**
Per cent



1. Root mean square deviation of real house price from trend, 1970-2001.
2. Difference between after-tax and pre-tax real interest rate on mortgage loans; 1999 tax codes, includes personal income tax and property tax.

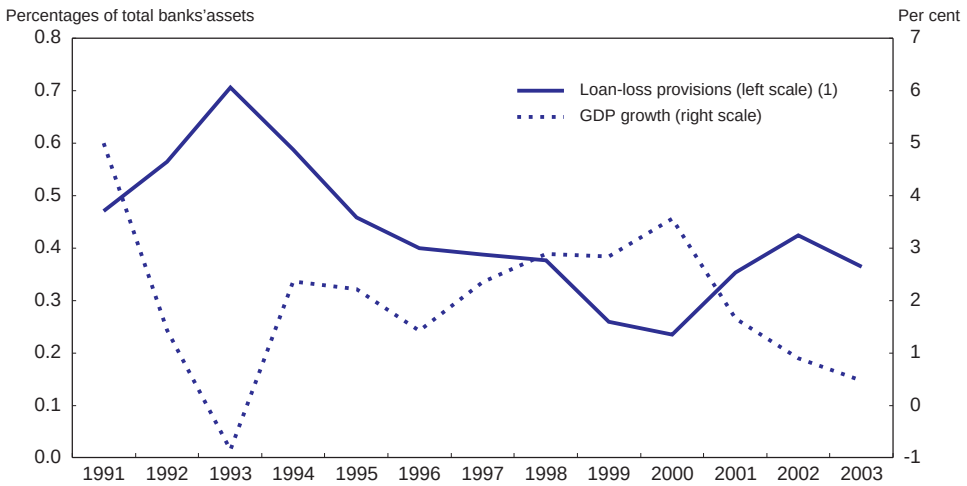
Source: Van den Noord, P. (2004), "Tax Incentives and House Price Volatility in the Euro Area: Theory and Evidence", *Économie Internationale* (forthcoming).

© OECD 2004

for the sake of economic efficiency, but it may also enhance the resilience of the euro area. However, for such reform to be successful it is crucial that a financial system is in place that is robust in the face of asset bubbles. The bursting of asset bubbles, including in housing markets, had large effects on the banking sector and public finances and overall economic performance in the past, for instance, in Finland and Sweden (Eschenbach and Schuknecht, 2002). If banks misjudge risks during the business cycle, underestimating them in good times and overestimating them in bad times, the potential for credit and asset booms and busts are increased, thereby destabilising the economy.

In this context, the pro-cyclicality of bank provisioning is a concern. Risks to financial stability may be a potential source of asymmetric shocks. Figure 4.6, which shows GDP growth and bank provisioning, highlights a pronounced pro-cyclical pattern. Dobson and Hufbauer (2001) observe the following on forward loss provisioning: "Banks are often reluctant to make adequate provision for their loan losses, and bank regulators are often hesitant about pushing banks to recognize losses before it becomes plain that borrowers are in trouble. No bank loan officer wants to admit she made a mistake, and few supervisors want to cry 'fire' when there is only smoke. As a consequence, published loan-loss provisions usually lag the eruption of a financial crisis. Hence, when the crisis strikes, banks typically have inadequate cushions of equity plus reserves to absorb the loss."

Figure 4.6. **Loan-loss provisions and GDP growth**



1. Loan-loss provisions data for 2003 have been inferred from data of the largest 50 banks for the first half of 2003.
Source: Bankscope; Eurostat; OECD; ECB calculations.

© OECD 2004

They also observe that forward provisioning will require a change in tax laws so that loan-loss deductions can be taken in excess of historical experience. Current practice tends to permit deductions only for recognised problem loans. In this respect, Spain has adopted a novel approach, by issuing a new loan loss regulation in 2000. It obliges all deposit institutions to determine provisions based on default rates over the business cycle, rather than at a point in time. This forces banks to provide for bad loans during economic expansions by more than in the past, and thus avoids increased provisioning during recessions. There are also drawbacks, however, as the new rule makes risk assessment more complex and hence costly (Fernández de Lis *et al.*, 2001).

Raising the effectiveness of automatic fiscal stabilisers

Fiscal policy can help in smoothing the cycle. The automatic stabilisers reduce the amplitude of the cycle to some extent, and more so in big than small economies, where import leakage is stronger. Given their high degree of openness, strong swings in the fiscal balance would be needed to reduce the amplitude of the cycle to a considerable extent. Fiscal policy is, in general, more powerful in the big countries, the fiscal impact being greater and more persistent. However, their track record so far in managing fiscal policy in a manner that would allow them to act to reduce the amplitude of the cycle is not encouraging.

While fiscal policy is not well suited to respond to permanent supply shocks, it can help to reduce cyclical divergence, whether it results from asymmetric demand shocks or differences in monetary policy transmission (see Chapter 3). Indeed the Stability and Growth Pact (SGP) foresees an important role for the automatic fiscal stabilisers to smooth adjustment. The most important factors that determine the cyclical sensitivity of the fiscal position are the size of government, the tax structure, the progressivity of taxes and the generosity of the unemployment benefit system (van den Noord, 2002). Not surprisingly, they are typically higher in Europe than in the United States and Japan, as the government sector is larger, the progressivity of taxes is often steep and the unemployment benefit system generous.

While the SGP puts considerable weight on the automatic stabilisers in smoothing the cycle, it does not put much faith in discretionary action. The "close-to-balance or surplus" rule is now applying in cyclically-adjusted terms each year, even though the conformity of the Stability and Convergence programmes with the "close-to-balance or surplus" requirement will be assessed taking into account the long-term sustainability of public finances, safety margins *vis-à-vis* the 3 per cent threshold, and the quality of public finances. This implies some room for discretionary policy, at least for countries in surplus, but the emphasis will remain on automatic stabilisation.

© OECD 2004

Meanwhile there is scope to heighten the efficacy of the automatic stabilisers. Automatic stabilisation is often created by mechanisms that allow people and businesses affected by changing economic circumstances to delay their adjustment to change. Such mechanisms include the functioning of social security systems, labour market institutions and many parts of tax systems whose effects have been analysed in detail in the various OECD *Jobs Strategy* publications. The net effect of stabilisation of demand and a delayed response of supply can be destabilisation rather than stabilisation in certain cases (Buti and van den Noord, 2003). These mechanisms therefore need to be designed to ensure that the incentives to which they give rise are consistent with flexible labour and product markets that heighten the economy's ability to adapt well to change. Whenever a shock requires a major reallocation of resources, the role of automatic stabilisers should be one of temporarily easing the pain to allow time for the necessary adjustment to take place – not to postpone these adjustments indefinitely.

© OECD 2004

Notes

1. The Balassa-Samuelson effect refers to the transmission of productivity gains in the exposed industries to the rest of the economy through wage and price increases in the sheltered industries. Research by the European Commission (2002 and 2003) and ECB (2003) suggests that about half of the observed inflation dispersion in recent years in the euro area is due to differences in cyclical positions and the Balassa-Samuelson effect, with the remainder due to differences in the pass-through of the string of adverse price shocks. Honohan and Lane (2003) attach a large weight to the impact of the initial euro deprecation on inflation divergence, and expect inflation dispersion to come down in the wake of the recent appreciation of the euro.
2. See for illustrative model simulations Deroose *et al.* (2004).
3. This Taylor rule calculation assumes the same neutral rate across euro area countries. If the neutral rate were higher in the fast growing countries, and lower in the more sluggish ones, the dispersion in the required rate would be even more pronounced.
4. The unit-labour cost measure may overstate the competitiveness gains in the case of Ireland whose strong productivity performance stemmed mostly from the foreign-owned sector (Cerra *et al.*, 2003).
5. See Hoeller *et al.* (2002), which follows closely a two country-model exposition by van Aarle and Garretsen (2000). Also Deroose *et al.* (2004) use a similar framework to simulate discretionary budgetary policy, greater labour and product market flexibility and stronger trade integration.
6. Drew *et al.* (2004) have highlighted various channels through which alternative structural policy settings may affect macroeconomic adjustment around a given long-run growth path for stylised OECD economies.
7. A fairly flat supply curve implies that supply changes will match changes in demand. Luxembourg is a case in point, with a large pool of cross-border workers and ample opportunities for cross-border shopping. An inelastic supply curve, on the other hand, would imply a rapid build-up of inflationary pressures following a demand shock.
8. However, simulations carried out with other models suggest that this result is sensitive to the assumed degree of price and wage rigidity. With stronger rigidity, the adjustment may be slower (Deroose *et al.*, 2004).
9. A sustained decline in business investment by 3 per cent would reduce the level of potential output by ½ per cent after 10 years.
10. Later studies have refined McCalllum's approach and estimates of this so-called border effect have shrunk (see for instance Anderson and Wincoop, 2003), but they are still surprisingly high.

© OECD 2004

11. Following a methodology developed by Turner (1995), Hoeller *et al.* (2004) find a non-linear effect, with the positive gap effect on inflation being 0.89 and the negative 0.40, but it does not appear to have a strong effect on average inflation, pushing it up by about 0.2 percentage points on average between 1980 and 2003.
12. There is some controversy as to the direction in which profit margins respond to an upturn. Oliveira Martins and Scarpetta (1999), for instance, find strong support for the hypotheses of counter-cyclical variations in price margins in most US manufacturing industries and, to a lesser extent in the other countries studied (France, Germany, Japan and United Kingdom).

© OECD 2004

Bibliography

van Aarle, B. and H. Garretsen (2000), "Fiscal Stabilisation in EMU", *Review of International Economics*, No. 8(4).

Anderson, J.E. and E. van Wincoop (2003), "Gravity with Gravitas: A Solution to the Border Puzzle", *American Economic Review*, Vol. 93, No. 1.

Arnold, I.J.M. and C.J.M. Kool (2003), *The Role of Inflation Differentials in Regional Adjustment: Evidence from the United States*, mimeo.

Buti, M. and P. van den Noord (2003), "What is the Impact of Tax and Welfare Reforms on Fiscal Stabilisers? A Simple Model and an Application to EMU", *European Economy – Economic Papers*, No. 187, European Commission, Brussels.

Camba-Mendez, G., J.A. García and D.R. Palenzuela (2003), "Relevant Economic Issues Concerning the Optimal Rate of Inflation", in: ECB, *Background Studies for the ECB's Evaluation of its Monetary Policy Strategy*, Frankfurt.

Cerra, V., J. Soikkeli and S.C. Saxena (2003), "How Competitive is Irish Manufacturing?", *The Economic and Social Review*, Vol. 3.

Davis, M. and J. Heathcote (2003), "Housing and the Business Cycle", *Federal Reserve Board Finance and Economic Discussion Papers*, No. 2004-11.

Deroose, S., S. Langedijk and W. Roeger (2004), "Reviewing Adjustment Dynamics in EMU: from Overheating to Overcooling", *European Economy, Economic Papers*, No. 198.

Dobson, W. and G.C. Hufbauer (2001), *World Capital Markets. Challenges for the G-10*, Institute for International Economics, Washington.

Drew, A., M. Kennedy and T. Sløk (2004), "Differences in Resilience between the Euro-Area and the US Economies", OECD *Economics Department Working Papers*, No. 382.

Eschenbach F. and L. Schuknecht (2002), "The Fiscal Costs of Financial Instability Revisited", ECB *Working Papers*, No. 191.

ECB (European Central Bank) (2003), "Inflation Differentials in the Euro Area: Potential Causes and Policy Implications", September.

European Commission (2002), "Quarterly Report of the Euro Area, IV", December, ECFIN/624/02-EN.

European Commission (2003), "Inflation Report", November, ECFIN/444/03-EN.

Fernández de Lis, S., J. Martinez Pagés and S. Saurina (2001), "Credit Growth, Problem Loans and Credit Risk Provisioning in Spain", in: "Marrying the Macro- and Microprudential Dimensions of Financial Stability", BIS *Papers*, No. 1, Basel.

Honohan, P. and P. Lane (2003), "Inflation Divergence", *Economic Policy*, October, CEPR, CES, MSH.

© OECD 2004

HMT (Her Majesty's Treasury) (2003), EMU *Study. The United States as a Monetary Union*, London.

Hoeller, P., C. Giorno and C. de la Maisonneuve (2002), "Overheating in Small Euro Area Economies: Should Fiscal Policy React?", OECD *Economics Department Working Papers*, No. 323, OECD, Paris.

Hoeller, P., C. Giorno and C. de la Maisonneuve (2004), "One Money, One Cycle? Making Monetary Union a Smoother Ride", OECD *Economics Department Working Papers*, (forthcoming).

McCallum, J. (1995), "National Borders Matter: Canada-US Regional Trade Patterns", *American Economic Review*, 85, No. 3.

van den Noord, P. (2002), "Automatic Stabilisers in the 1990s and Beyond", in: M. Buti, J. van Hagen and C. Martinez-Mongay (eds), *The Behaviour of Fiscal Authorities – Stabilisation, Growth and Institutions*, Palgrave.

van den Noord, P. (2003), "Tax incentives and House Price Volatility in the Euro Area: Theory and Evidence", OECD *Economics Department Working Papers*, No. 356 (Revised version forthcoming in *Économie Internationale*).

van den Noord, P. (2004), "Modelling Cyclical Divergence in the Euro Area: The Housing Channel", OECD *Economics Department Working Papers*, No. 400.

OECD (2004a), "Wage Setting Institutions and Outcomes", OECD *Employment Outlook*, Paris.

OECD (2004b), *Economic Survey: United Kingdom*, Vol. 2004/3, OECD, Paris.

Oliveira Martins, J. and S. Scarpetta (1999), "The Levels and Cyclical Behaviour of Mark-ups across Countries and Market Structures", OECD *Economics Department Working Papers*, No. 213.

Turner, D. (1995), "Speed Limit and Asymmetric Inflation Effects from the Output Gap in the Major Seven Economies", OECD *Economic Studies*, No. 24, 1995/I.

Turner, D., P. Richardson and S. Rauffet (1996), "Modelling the Supply Side of the Seven Major Economies", OECD *Economics Department Working Papers*, No. 167.

© OECD 2004

V. Regions at work

Convergence in living standards across regions and countries was not a policy goal at the early stages of the Union's existence as the six founding countries had a similar level of economic development. However, convergence became a policy goal for two reasons. First, the benefits of economic integration may be unevenly distributed across countries and/or regions (Box 5.1). Second, the successive waves of enlargement involved countries and regions whose per-capita income was far below the average. The swift catch-up in living standards became a prominent policy goal. And it will remain one, with the recent accession of 10 new countries, whose incomes are often way below the current European Union (EU) average.[1]

The goal of reducing income disparities is enshrined in the Treaty (Art. 158): "In order to promote its overall harmonious development, the Community shall develop and pursue its actions leading to the strengthening of its economic and social cohesion. In particular, the Community shall aim at reducing disparities between the levels of development of the various regions and the backwardness of the least favoured regions or islands, including rural areas." The goal found its most visible expression in the setting up of a Directorate General (currently named DG Regio) at the European Commission and in the introduction of structural funds.[2] The funds aim at fostering economic development of the poorer regions. The structural funds have mainly co-financed infrastructure projects in regions with a per-capita income below 75 per cent of the EU average.

There are several striking differences between the euro area and the United States, both in terms of overall performance and convergence of living standards across regions: *i*) the US income per capita is 30 per cent above the euro area's and the gap is widening; *ii*) the geographic concentration of economic activity is much higher in the United States than in the euro area; and *iii*) regional income dispersion is much smaller in the United States than in the euro area.

A further important feature is that the evidence concerning convergence in gross domestic product (GDP) per capita across the euro area regions remains inconclusive. Against this background, this chapter assesses policies that foster convergence and at the same time raise overall performance. It also looks at the

© OECD 2004

Box 5.1. Forces shaping convergence

Standard neoclassical growth theory predicts that deep integration will reduce disparities in living standards across regions or countries. More trade, knowledge spillovers and capital and labour mobility lead to factor price equalisation and a convergence in the endowment with physical and human capital (Annex 5.A1). But endowments are unlikely to converge completely, while adjustment and trade costs will undermine factor price equalisation and hamper capital and labour flows. Integration may also unleash forces that push for greater divergence. The neoclassical growth model assumes constant returns to scale and diminishing returns to capital inputs. However some industries are characterized by increasing returns to scale and integration may result in geographic specialisation and concentration. In this case, some regions win and others loose. The ultimate outcome in terms of the geographic distribution of economic activity and living standards across regions will then depend on a number of features: the slope of the returns to capital, the mobility of factors, transport costs and trade barriers and the costs and benefits of agglomeration. Several outcomes are possible (Braunerhjelm *et al.*, 2000):

Concentration will take place if there are strong gains from agglomeration and labour is highly mobile. Agglomeration gains stem from technological spillovers and the proximity of suppliers or consumers. Mobility of labour implies that workers follow firms to attractive regions, while competition ensures factor price equalisation. The process of concentration lasts as long as the benefits from agglomeration outweigh transportation and rising congestion and labour costs. As benefits from integration and specialisation are reaped, the area's growth rate is enhanced. But a potentially undesirable feature is that economic activity could become geographically concentrated.

Dispersion will prevail if agglomeration forces are weak, market segmentation prevails and labour mobility is low. Integration leads to geographic specialisation based on comparative advantage and all regions retain a diversified industrial base (Puga and Venables, 1996 and 1999). The low mobility of labour reduces agglomeration forces and weakens demand links, while wage determination is dominated by local conditions. In equilibrium, activity will be more dispersed, overall efficiency suffers and differences in living standards will perpetuate.

Polarisation occurs when low-skilled labour is immobile and agglomeration forces are strong. Agglomeration forces push firms to relocate, to benefit from demand linkages, cost advantages and economies of scale. Highly qualified labour is mobile and moves where it is required (European Commission, 2002a). Less-skilled labour stays in less-developed regions. Wage flexibility can partially offset the lack of labour mobility, by allowing labour costs to match productivity. Otherwise, pockets of unemployment persist in some regions. Polarisation may accelerate when trade barriers and transportation costs decline, as it makes it easy for firms to relocate (Martin and Ottaviano, 1999; Puga, 2001). In this case, the long-term outcome could be divergence rather than convergence.

Economic policies that focus on reducing gaps in endowments (such as education levels) and ensure that pro-growth institutions are in place will help to mitigate

© OECD 2004

Box 5.1. **Forces shaping convergence** (*cont.*)

polarisation forces. Labour mobility and wage flexibility are also essential, as well as policies that reduce transport costs and trade barriers, as these will speed up convergence. Trapping labour in lagging regions via ill-devised labour market policies and market segmentation in services markets and network industries – all of which are features that can be found in the euro area – will hamper convergence. Convergence is important for overall performance because rapid catch-up by the lagging regions will raise growth of the whole area. There are also trade-offs: if gains from agglomeration are large, there will be regions that will lose out and regions that will win. Policies that aim at keeping the industrial base diversified could succeed in their aim, but could also result in less overall growth and a larger dispersion in incomes. In the worst case, such a policy will trap idle resources in regions with convergence happening only very slowly, if at all.

trade-offs that arise if some regions gain while others lose due to deeper integration. The chapter first sketches out the factors shaping convergence and takes stock of the factors affecting convergence. It then reviews the policy issues, which mainly concern the slow convergence in endowments, such as human capital, the timid pace of integration, especially in service and some network industries, a north-south divide in the take-up of new technologies and a lack of labour mobility and wage flexibility that tends to trap idle resources in some regions. It also assesses the EU's regional policy and concludes with some simulations that illustrate the gains from an improved policy setting.

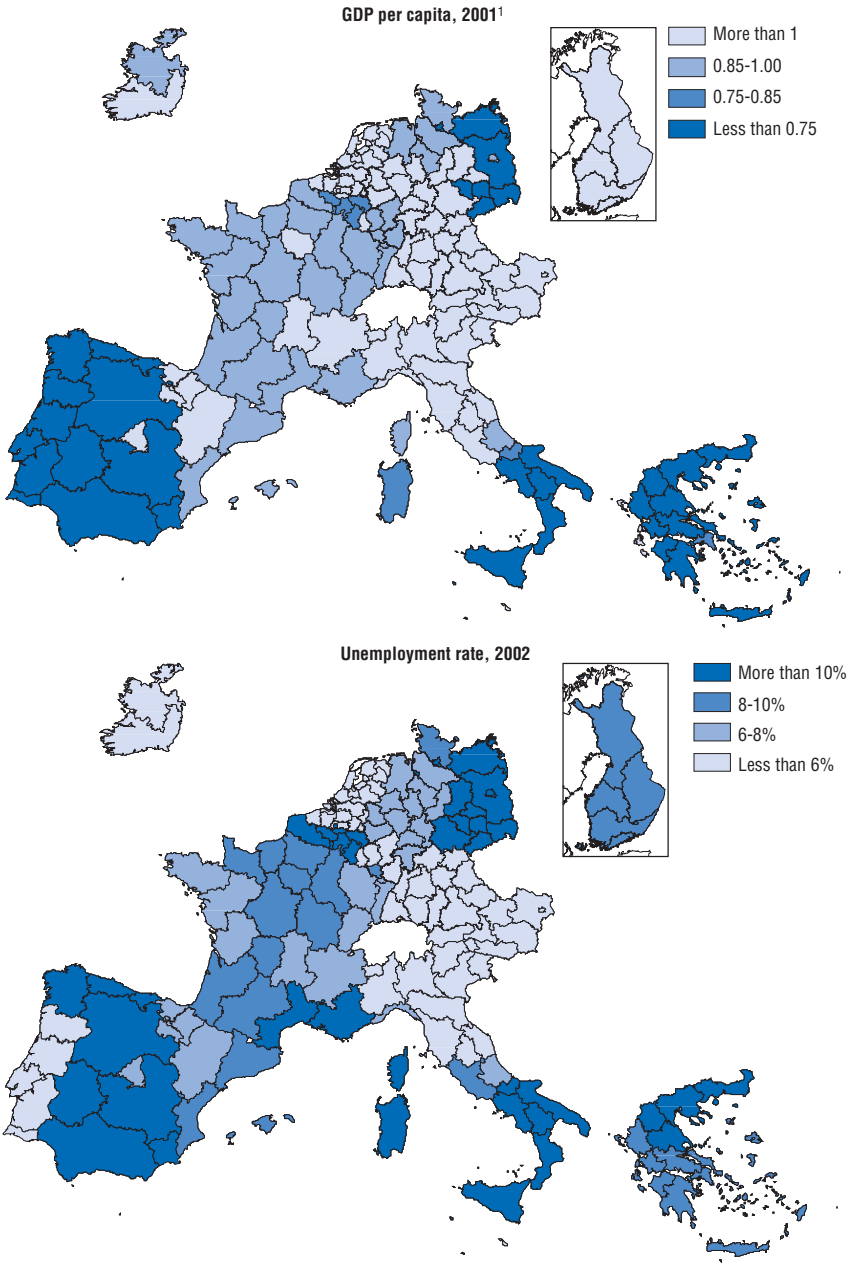
The links between convergence and integration

Taking stock of convergence

Living conditions differ considerably across the euro area (Figure 5.1). Real GDP per capita at the country level varies from around two-thirds of the euro area average to about 25 per cent above and is still considerably wider at the regional level. Unemployment also varies a lot, the unemployment rate ranging from 2 to 11 per cent in 2002. By comparison, the variation in the United States is considerably smaller, unemployment rates across the 51 states lying between 3 and 8 per cent, whilst GDP per capita ranges from a quarter below the national average to a quarter above the national average (Figure 5.A3.1).[3] Only two states in the United States, accounting for 2 per cent of the population, would be eligible for structural funds, while in Europe regions encompassing 25 per cent of the population are eligible.

© OECD 2004

Figure 5.1. **Current regional dispersion in the euro area**

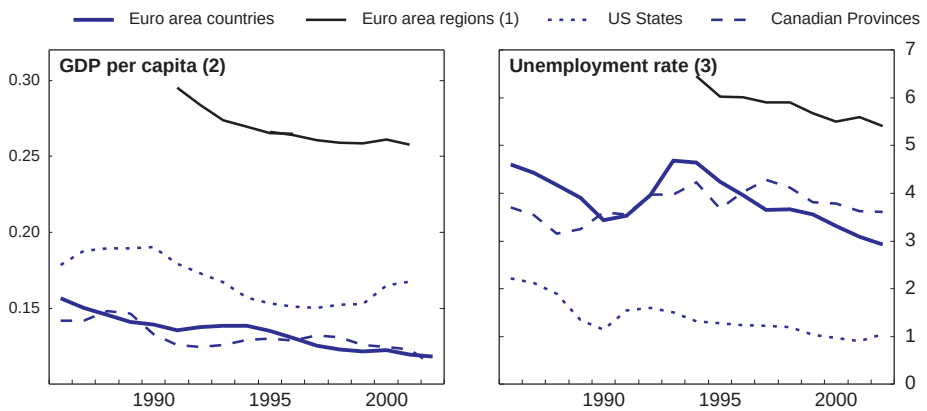


1. NUTS 1 as a ratio of the euro area average, except for Italy, NUTS 2.
Source: European Commission/Eurostat.

© OECD 2004

The disparities in living standards have been persistent at the regional level (Figure 5.2) and have been much wider than in the United States over the last twenty years (Figure 5.A3.2 and Figure 5.A3.3). At the country level, some convergence has occurred and the dispersion is much smaller. It is much smaller because of the high weight of the big three euro area countries, which all have a GDP per capita close to the average. Labour market indicators point towards some convergence in labour market conditions in the euro area, also at the regional level. Again the differences with the United States are very large. The Canadian indicators, on the other hand, are very close to the dispersion observed in the euro area.

Figure 5.2. **Convergence in the euro area, the United States and Canada**



1. NUTS I regions.
2. Ratio of the standard deviation to the average. In 1995 prices, converted to common currency by 1995 OECD PPP.
3. Standard deviation. In per cent of the labour force. For euro area regions, break in 1999.

Source: European Commission/Eurostat, US Bureau of Labour Statistics, Statistics Canada and OECD.

Looking at performance in more detail qualifies this picture somewhat. In the 1980s, living standards in Ireland, Spain, Portugal and Greece were far below the euro area average, while unemployment was well above. The situation has changed, however. Ireland is now performing considerably better than the euro area average, after a long history of poor performance. Greece, Portugal and Spain have also been catching up, but at a much slower pace, so that the GDP gap remains substantial. At the regional level, changes are limited to a few regions catching up swiftly, mostly the Dublin area, though the rest of the country is also converging to the EU average, and more moderately some Spanish regions.[4] The

© OECD 2004

south of Italy represents another extreme, with low income and high unemployment. Eastern Germany, while converging rapidly for some time after unification, also contributes to the persistence of divergence, with high unemployment and low output.

The empirical work surveyed in Annex 5.A2 suggests that some catch-up has occurred at the national level, but there is little evidence for a reduction of income disparities across the regions. Assuming differences in growth performance of 1 or 3 percentage points it will take from 30 to 10 years respectively for a country with an initial 25 per cent gap in GDP per capita to reach the euro area average.[5] However, the Irish example shows that if there is confluence of good policies and favourable factors, convergence can be rapid; having been one-third behind the euro average in 1990, Ireland closed the gap by 1999 with a growth rate over that period which averaged 5 per cent more than that of the euro area.

More integration, but not more specialisation

The slow pace of convergence is largely related to the slow pace of integration and the persistent differences in endowments. Deepening integration is typically reflected in rising trade and investment flows, price convergence and diminishing market shares for incumbents. Intra area trade and foreign direct investment (FDI) have increased, although the previous *Survey* (OECD, 2003a) suggested that integration forces had been stronger in the 1980s. The situation varies considerably across countries, though. Rapid rises in intra-euro area trade have been concentrated in the countries that joined the European Union at a later stage, with the notable exception of Greece. FDI has been sharply boosted by the single market, and since 1995 intra-euro area flows have been predominant, except for Ireland (Nicoletti *et al.*, 2003). On the other hand, cross-border public procurement appears to increase only slowly, although more contracts are allocated to local branches of foreign suppliers and are therefore not recorded as cross-border procurement (European Commission, 2004a). Overall, goods markets have become fairly well integrated, while services markets and parts of the network industries remain highly segmented. And labour markets remain largely national. Integration, while advancing, has still a long way to go.

Integration did not lead to a clear pattern of specialisation. The Grubel-Lloyd index shows that integration has boosted intra-industry trade (Table 5.A3.1). On the other hand, the Krugman specialisation index, which measures the degree of specialisation in a geographic area by computing differences in the sectoral specialisation across countries, shows little change over time, both for sectoral employment and value added (Figure 5.A3.4, Table 5.1 and Table 5.A3.2).[6] Specialisation is much stronger in the smaller countries, but only in the manufacturing sector, whilst the structure of the service sector is similar across countries. Regional specialisation and industrial concentration are higher in the United States than in

© OECD 2004

Table 5.1. **Evolution of specialisation by sector across countries**[1]

	Per cent share in total value added, 2000[2]	1995	2000[3]	Rank in 2000
Manufacturing				
Austria	20.8	0.295	0.264	8
Belgium	19.3	0.321	0.337	6
Finland	25.9	0.582	0.691	3
France	18.1	0.187	0.178	11
Germany	22.4	0.238	0.243	10
Greece	11.3	0.712	0.702	2
Ireland	33.3	0.802	0.954	1
Italy	20.4	0.258	0.296	7
Netherlands	16.3	0.492	0.478	5
Portugal	18.7	0.641	0.633	4
Spain	18.1	0.261	0.247	9
Euro area, average	20.2	0.435	0.457	
United States	15.4[4]	0.668	0.669	
Services				
Austria	66.5	0.213	0.253	3
Belgium	71.5	0.116	0.112	9
Finland	62.8	0.238	0.228	4
France	72.5	0.106	0.106	10
Germany	69.0	0.119	0.113	8
Greece	71.7	0.262	0.294	1
Ireland	53.7	0.192	0.189	5
Italy	69.4	0.198	0.164	6
Netherlands	71.2	0.172	0.156	7
Spain	67.1	0.231	0.254	2
Euro area, average	69.5	0.185	0.187	
United States	65.6[4]	0.263	0.284	

1. The specialisation index compares the share of value added in 27 sectors for manufacturing and 19 sectors for services for each euro area NUTS 1 region with the average of the euro area and sums up the absolute differences across the sectors.

$$\sum_i \left| VA_{ij} / \sum_i VA_{ij} - \sum_j VA_{ij} / \sum_i \sum_j VA_{ij} \right|$$

Where *i* represents the sectors and *j* the countries.
See Krugman (1991) for more details on the index.
For United States: 22 sectors for manufacturing and 32 sectors for services.
2. 1999 for Portugal.
3. 1999 for Ireland and Portugal.
4. Gross State Product (millions of current dollars).

Source: European Commission/Eurostat; OECD Stan Database; US Bureau of Economic Analysis.

the euro area, for both manufacturing and services, an important factor being the higher degree of labour mobility (Traistaru *et al.*, 2002; Combes and Overman, 2003).

The combination of comparative advantage and sectoral features in terms of returns to capital and labour content explains a large part of the geographic

© OECD 2004

specialisation. The high-technology sector is the most footloose, tending to locate in areas rich in human capital. High returns to scale industries typically agglomerate, thus perpetuating historical patterns. Less-skilled labour-intensive industries relocate in economies abundant in low-skilled labour. Other factors affect the speed at which relocation takes place: resources in physical and human capital and infrastructure, the presence of consumers and the capacity to attract more population. All these factors vary substantially across the euro area (Table 5.2, Table 5.A3.3). Nevertheless, a certain pattern emerges, whereby southern countries differ from the rest of the euro area. They are characterised by a lower endowment in human capital and researchers and scientists, as well as a low market potential, a measure of potential product demand. On the other hand, France and Germany and to a lesser extent the Netherlands, Finland, Belgium and Austria, are typically more endowed in human capital and have larger market potential and supplier access. Ireland is atypical, with low market potential and supplier access being counter-balanced by a large proportion of highly educated workers in the labour force.

In addition to the differences in endowments with human and physical capital in the late 1980s, the evolution since then has been uneven across countries. In the early nineties, Greece, Ireland, Portugal and Spain were lagging significantly behind the euro area average. Italy was also lagging behind the euro average in terms of human capital. A decade later, these countries have progressed on all these accounts, except Portugal for secondary and higher education, while Ireland has progressed most (Table 5.2).

The policy issues

The forces influencing convergence are typically the same ones that also shape overall performance. Integration boosts convergence of living standards if labour is mobile and also lifts allocational efficiency. This requires labour market policies to have the right orientation. The rapid diffusion of technology enhances overall performance and also spurs catch up of poorer regions. At the same time, regional policies should help ensure, rather than hinder the convergence of labour and capital endowments. This section sketches a policy strategy in the pursuit of these aims. The policy issues facing the new members of the Union are similar to those facing the "old" members (Box 5.2).

Making headway with the single market

Goods markets have become well integrated. Remaining barriers mainly concern complex products or products where risks to health are a major concern. Product conformity requirements top the list of companies' major regulatory concerns (European Commission, 2001a).[7] For example, there remain technical barriers, mainly at the national level, to intra-EU trade for goods as heterogeneous as

© OECD 2004

© OECD 2004

Table 5.2. **Factor endowments**

	Market potential[1]	Supplier access[2]	Gross value-added of agriculture Percentage of GDP[3]		Secondary & higher education Percentage of population		Researchers Per 10 000 people in the labour force		Gross capital stock per head EUR million (1999 prices)	
	1990	1990	1990	2002	1992	2001	1990[4]	2001[5]	1989	1999
Austria	12 303	8.7	3.3	2.2	69	77	34	48	81 468	120 591
Belgium	13 264	8.9	2.1	1.1	50	59	43	73	54 005	75 489
Finland	3 642	8.2	5.8	3.0	67	74	55	140	138 791	112 567
France	12 380	10.6	3.4	2.4	56	64	50	66	68 635	87 724
Germany	13 073	11.0	1.6	1.0	80	83	61	67	80 902	114 197
Greece	2 336	7.6	9.8	6.4	37	51	16	33	32 224	43 518
Ireland	3 791	7.5	8.3	3.1	42	58	35	49	41 134	54 018
Italy	8 715	10.6	3.2	2.4	33	43	32	28	72 655	84 597
Netherlands	12 840	9.0	4.1	2.3	63	65	45	56	68 366	86 329
Portugal	3 194	7.9	7.6	3.2	20	20	12	33	22 838	40 322
Spain	4 993	9.8	5.2	3.0	24	40	24	45	43 298	57 196
Denmark	6 628	8.2	3.8	2.1	74	80	40	68	107 130	139 688
Sweden	5 811	8.9	3.0	1.6	74	81	58	103	107 553	102 891
United Kingdom	12 226	10.4	1.7	0.9	49	63	46	55	67 763	80 568
United States	. .	. .	1.9	1.5	86	88	76	90	. .	. .

1. The market potential indicator is an indicator of industries' sales, weighted by the distance between the industry and the buyers as measured by transports costs. This figure will be high in countries that have or are close to large markets.
2. The supplier access indicator is an indicator of intermediate product demand by an industry for its final output, taking into account the transport costs of these intermediate products from the supplier to the producer. The figure will be high in countries that have or are close to a large hub of suppliers.
3. 2001 for Finland, Ireland and United States.
4. 1991 for Belgium, Finland, Germany, Greece, Sweden and the United States; 1993 for Austria and the Netherlands.
5. 1998 for the United Kingdom and Austria; 1999 for Greece; 2000 for Ireland and Italy.

Source: Midelfart-Knarvik, K. H., G. Overman and A. J. Venables, "Comparative Advantage and Economic Geography: Estimating the Location of Production in the EU", CEPR Discussion Paper Series, No. 2618; OECD, *Main Economic Indicators*; OECD, *Education at a Glance*; OECD, *Main Science and Technology Indicators*.

Box 5.2. The new member countries: welcome to the Union

The enlargement of the Union will provide additional growth opportunities, both for the EU15 and new member countries. Indeed, per-capita income has been catching up in recent years in the new member countries, reflecting their rapid integration in international trade and capital flows and the implementation of the *acquis communautaire*. Yet, the income gaps between EU15 and new members are very wide. This box focuses on the central European countries that are members of the OECD (the Czech Republic, Hungary, Poland and the Slovak Republic) and draws largely on a chapter in the OECD *Economic Outlook* No. 75

While these countries, except the Czech Republic, have grown robustly in recent years, the current pace of growth is too slow to close the income gap within a generation. While considerable benefits have already been reaped from moving to market-based economies and opening their economies to international trade and capital flows, additional sources of growth will need to be tapped:

- Labour market conditions have been adverse to job creation. Minimum wages and non-wage labour costs are high, reducing the demand for unskilled workers, while withdrawal from the labour force is encouraged by early retirement and invalidity schemes. Nearly half of the working age population is not employed in Hungary, Poland and the Slovak Republic. On the other hand, the employment rate is high in the Czech Republic, which suggests that low employment is not inevitable in such post-transition economies.
- Large investments will be necessary to replace the capital inherited from the central-planning system. Product market regulation tends to be stringent in these countries and social security contributions high, leading to an unfriendly business climate. Recent reforms in the Slovak Republic and the associated surge in foreign investment show that the situation can be reversed in a relatively short period.
- The shift from low-productivity to high-productivity sectors is slow, the large agricultural sector in Poland being a case in point.
- Innovation activity and R&D spending are low, while university teachers are underpaid and insufficient investment in tertiary education is being undertaken.

Regional disparities are also large in the new member countries. In terms of GDP per capita and unemployment, the Czech Republic, Hungary and the Slovak Republic exhibit the largest regional disparities. This is because they have large and rich capital areas. For example, in the Czech Republic, GDP per head in the Prague region amounted to nearly 150 per cent of EU25 GDP per head in 2002 (in purchasing power standard) with an unemployment rate of 3.6 per cent, whilst the poorest regions of the Czech Republic are barely above 50 per cent of the EU25 average and display unemployment rates above 10 per cent. In addition, disparities do not seem to recede. The European Commission's Third Cohesion Report identifies administrative capacity as the key factor to make efficient use of the structural funds.

The policy issues to be tackled are thus similar in the "new" and "old" Europe. And there are other issues: all euro area member countries have decided to keep their borders closed or heavily restricted for workers from these countries for a significant period, which cannot be good for convergence given that labour mobility is an important vehicle for integration. Moreover, there is currently a fierce battle over the size of the regional funds after the current budgetary framework expires in 2006. The Commission proposed a sizeable increase, while many member countries want to freeze the size of the overall budget.

© OECD 2004

construction material, bicycles, beer and to a lesser extent telecom equipment (European Commission, 2002b). Services markets remain largely fragmented, even though there has been progress in financial markets with the implementation of the Financial Services Action Plan (FSAP). Market fragmentation and a low level of cross-border competition also persist in some network industries.

Integrating services markets

Barriers to the integration of services are numerous. As services represent nearly 70 per cent of activity, fragmentation leads to large economic costs for producers and consumers.[8] Major barriers that affect cross-border establishment include nationality requirements and lengthy and multiple licensing procedures. Other barriers affect services provided on a temporary or occasional basis across borders. Examples include requirements for service providers to be established in the member state where the services are provided and subjecting the posting of workers to burdensome procedures (such as, in the case of third country nationals, temporary residence permits).

The Commission presented a proposal for a Directive on Services in the Internal Market in January 2004. The main aims are to:[9]

- Cut red tape: in the context of authorisation procedures, member states will have to accept relevant documents from other member states. A service provider will be able to fulfil all the formalities through a single access point using electronic means.
- Abolish a number of provisions, including economic needs tests and discriminatory measures such as nationality or residence requirements.
- Reinforce the country of origin principle. For example, service providers will not have to obtain an authorisation before providing a service temporarily in another member state, if it is already established and operating legally in another member state.
- Make illegal measures such as authorisation for the buying of services from another member state or tax discrimination. The proposal also clarifies the conditions for granting reimbursement for medical care in another member state.[10]
- Facilitate the posting of workers: prior declaration each time a worker is posted and, for third country nationals, formalities such as temporary work permits will be suppressed. No representation, such as an office in the member state where the worker is posted, will be needed.
- Harmonise quality requirements by designing a set of minimum rules at the EU level, for example on the information for clients, or defining a frame for commercial communication by members of regulated professions. For example, a European Commission study reports that an

© OECD 2004

electronic hardware and service company had to spend EUR 100 000 on legal advice to understand the applicable advertising rules in five member states (European Commission, 2004b).

This initiative is welcome as it will raise integration of service markets. It was accompanied by an impact assessment showing the need for further action to boost integration, and for the designing of indicators that will be used for the evaluation of the different measures throughout implementation. Implementation of legislation is foreseen for 2007, while temporary derogations should end in early 2010. There is the risk that the proposed measures will be watered down in the negotiations. Moreover, several sectors are excluded, among which the financial and transport services, since they are already covered by EU legislation. For some other services, the Commission's proposal provides for derogations from the country of origin principle (*i.e.* where these services are provided on a temporary basis in another member state they must comply with the national law there; the other provisions of the Directive still apply to these services). For example, statutory audit and registration of vehicles leased in another member state are permanently excluded from the country of origin principle. Others, such as cash-in-transit services, gambling activities including lotteries and the judicial recovery of debts are temporarily excluded from the country of origin principle; harmonisation is needed in these areas but more analysis has to be undertaken before proposals can be brought forward.

Remaining barriers to financial market integration

By eliminating exchange risk on the bulk of financial flows within the Union, the advent of the euro has been an important factor in fostering integration of financial markets across the area (European Commission, 2004c, Baele *et al.*, 2004). Integration has progressed most in the market for interbank deposits and in the markets for government and corporate bonds (Galati and Tsatsaronis, 2003; Santos and Tsatsaronis, 2003). Markets for equity securities remain somewhat fragmented, and cross-border equity investment is still relatively costly (McAndrews and Stefanadis, 2002). Retail markets also remain fragmented, to a large extent reflecting local competition advantages (Berger and Smith, 2003) and inertia. The number of bank mergers within borders has increased over recent years, leading to significant concentration in home markets. While cross-border mergers have not been wide spread, regional consolidation has occurred in the Benelux and Nordic countries (not all of which are in the euro area) and several pan-EU financial conglomerates have emerged. Mortgage markets remain segmented, even though there is evidence that mortgage conditions have converged (Taffin and Hardt, 2003).

The FSAP is the Community's central tool to foster integration (see the Chapter on financial market integration in the 2002 *Survey*). On the FSAP measures, 93 per cent have been completed since the adoption of the Plan in 1999. However,

© OECD 2004

as many of the measures have been adopted within the last year, they have not been implemented at the national level. The FSAP is to be fully implemented by end-2005, with April 2004 set as final date for adoption of measures by the Council so as to allow 18 months for transposition into national law. Political agreement at EU level has yet to be reached on three proposed Directives relating to cross-border mergers, aspects of company law (including the transfer of headquarters to another EU member state) and capital adequacy. Against this background, barriers to achieving the objectives of the FSAP remain and highlight the very real difficulties in harmonising national legislation and legal concepts. Two examples are important.

- The Directive on Takeover Bids was intended to harmonise rules governing the bid procedure and the use of takeover defences, and to protect minority shareholders. While some minimum standards have been set, the directive agreed by the Council in November 2003 and passed by the European Parliament the following month went some distance in the opposite direction by allowing member states to opt out of the articles with regard to takeover defences. The general rules require mandatory authorisation of takeover defences by shareholders and the suspension of special defensive rights such as multiple voting shares. However, governments reserve the right not to require companies to apply the new provisions. In that case, a company may opt for an investor friendly regime but can also opt out. Critics also argue that the Directive focuses too much on multiple voting rights as a barrier to takeovers but is rather silent on other barriers which are practiced widely in Europe, such as voting caps, golden shares or double voting. Such provisions preserve national champions.
- The European Union has adopted the Regulation on International Accounting Standards (IAS) in 2002. Accordingly, all European securities issuers will have to respect IAS as from 2005, with a few exceptions as from 2007. As a complement, the Transparency Directive, on which a political agreement was reached in spring 2004, will amongst others have the effect that third country issuers whose securities are admitted to trading on a European capital market will have either to apply the IAS, or third country Generally Accepted Accounting Principles (GAAP) if such GAAP are considered to be equivalent to IAS. On the equivalence issue, the European Commission will have to take a decision based on the advice from member states' securities regulators. At this stage, the Commission envisages taking such a decision at the end of 2005 or at the beginning of 2006, and focussing on US, Japanese and Canadian GAAP. The Commission should proceed swiftly on this equivalence issue. In addition, member states should facilitate timely changes to IAS for EU companies.

© OECD 2004

To ensure an efficient implementation of the FSAP at the national level, a package of measures to establish a coherent structure of sectoral supervisors and regulators has been adopted. In 2001, the Commission established two committees for the securities sector. The European Securities Committee (committee of regulators) acts in an advisory capacity to the European Commission on securities issues relating to the adoption of proposed Directives or Regulations under the "co-decision" procedure (so called "level 1" measures). It also acts as a regulatory committee by assisting the Commission in the exercise of implementing powers conferred on it by legislative acts adopted under co-decision. The Committee of European Securities Regulators (committee of supervisors) is an independent advisory group to assist the Commission, particularly, though not exclusively, in the preparation of technical implementing measures (level 2). By bringing together supervisors from all the member states, this committee also plays an important role in ensuring more effective co-operation between the member states' public authorities so as to ensure more consistent day-to-day implementation of Community legislation (level 3).

Drawing on the experience from the securities sector, a broad consensus emerged among industry and regulators that the extension of this approach to banking, insurance and Undertakings for the Collective Investment of Transferable Securities (UCITS) sectors was needed. In May 2004, the Council and the European Parliament agreed to a Commission proposal to extend this approach to the other sectors, resulting in a structure of committees for the financial services sector, as detailed in Table 5.3.

Table 5.3. **The financial services committee structure**

	Securities including UCITS	Banking	Insurance and occupational pensions
Level 2	European Securities Committee	European Banking Committee	European Insurance & Occupational Pensions Committee
Chair	Commission	Commission	Commission
Location	Brussels	Brussels	Brussels
Level 3	Committee of European Securities Regulators	Committee of European Banking Supervisors	Committee of European Insurance & Occupational Pensions Supervisors
Chair	Arthur Docteurs van Leeuwen	Jose-Maria Roldán	Henrik Bjerre-Nielsen
Location	Paris	London	Frankfurt

Source: European Commission, Directorate General for Internal Market.

The Commission has launched a process to take stock of the state of integration of Europe's financial markets and the main concerns regarding the implementation and enforcement of the FSAP (European Commission, 2004c). So far, four high-level expert groups – in banking, insurance, securities and asset

© OECD 2004

management – have delivered their assessment. In addition, the Commission services have assessed the state of financial integration within the European Union based on economic indicators. The overall objective of this work is to ensure effective implementation and enforcement of the measures agreed in the FSAP and to identify remaining barriers to integration, with a view to promoting an efficient financial market. The Financial Services Committee's Report on Financial Integration, submitted to the Council of Economic and Finance Ministers in June 2004, identifies areas where further progress should be made: these concern supervisory arrangements, corporate governance and market integrity, auditing, inefficient clearing and settlement to name just a few (European Commission, 2004d). The proposal also suggests a policy strategy based on the identification and consequent tackling of priorities.

Completing rail liberalisation

In the previous *Survey* it was argued that the Union has made commendable efforts in liberalising network industries. But it also pointed out that the scope for efficiency gains has not yet been fully exploited, because incumbents often retain market power and deter entry. Moreover, it suggested to focus on establishing common markets rather than national ones. There have been no major initiatives since last year concerning the network industries, except for the rail sector.

The opening up of the rail industry started in 2001 with the "Rail Infrastructure Package" and continued in 2003 with the "Second Railway Package". Both packages aim at speeding up the opening of rail freight markets and improving inter-operability. The date for complete opening of the rail freight markets, including domestic cabotage, is now set for January 2007. The agreement also concerns minimum safety standards. However, regarding inter-operability, there is only an agreement on a proposal for a Regulation establishing a European Railway Agency to provide technical support. In addition, the Commission has issued a proposal for the opening of international passenger services in 2010.[11] Liberalisation will only be effective if entrants are ensured a level playing field in terms of access to key resources of rolling stock and infrastructure and through ticketing (Gleave, 2004). In this respect particular attention should be devoted to the setting of access charges.

Boosting innovation and diffusion

Innovation often takes place where universities, laboratories and firms work closely together. In many cases, this also implies geographic proximity. Agglomeration forces thus contribute to concentration and could therefore lead to divergence. However, the take-up of innovations, which is important for productivity gains, is a convergence factor. It requires a rapid transmission of knowledge

© OECD 2004

and innovations, which depends on the adaptability of labour and management to new technologies. Hence, while the aim of policy should not be to ensure that all regions can contribute equally to advances in new technologies, policy should ensure that all regions can take advantage of those advances.

The north-south divide

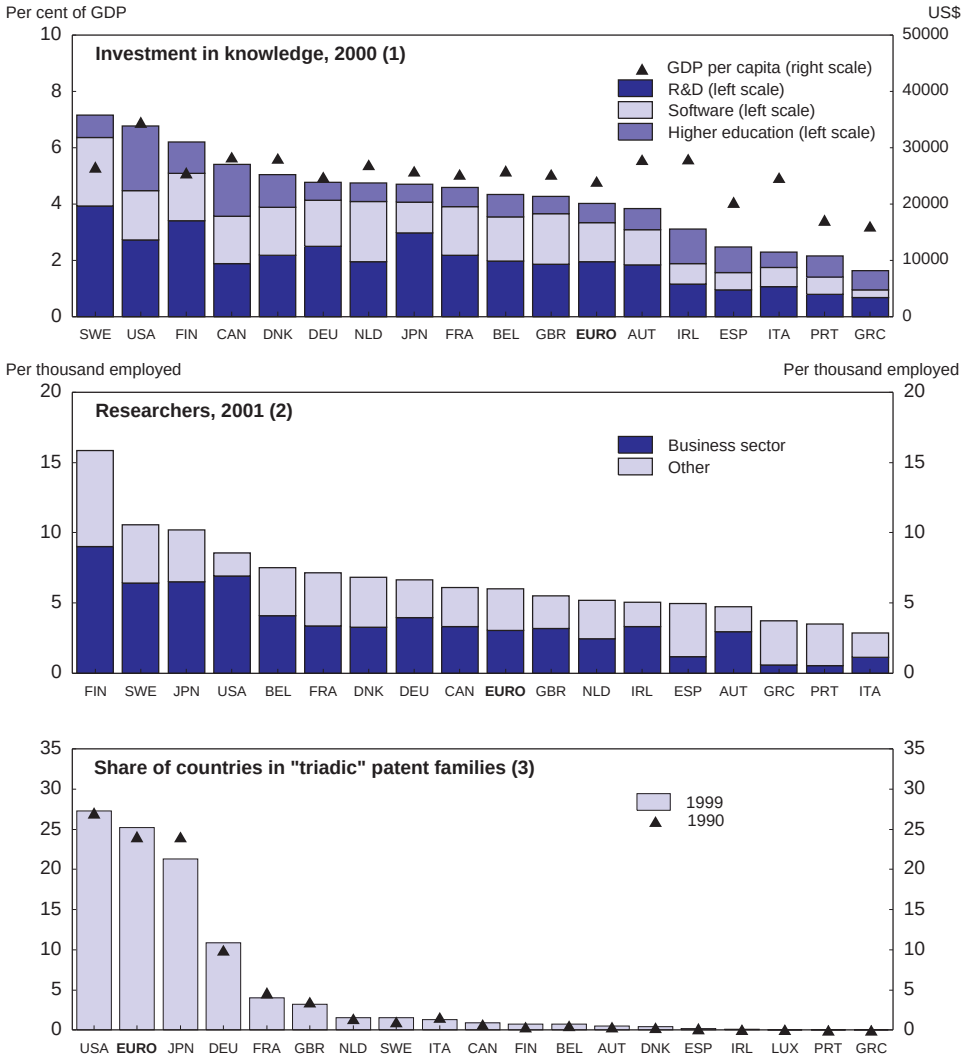
A broad range of indicators measuring the importance of innovation reveals a considerable gap for the area with the best performing countries and a north-south divide within the euro area (Figure 5.3):

- Investment in information and communication technology (ICT) equipment is below the euro area average in the southern countries, while the broadband penetration rate is also weaker (OECD, 2003b). About two-thirds of the EU population is getting closer to US levels of ICT diffusion, measured by business investment in ICT equipment; but the remaining third of the EU cluster together in a group of "slow ICT adopters". This group includes the southern countries, whose distance in ICT diffusion from the United States and other euro area countries has not decreased over time, but also Ireland possibly because catch-up is still recent (Daveri, 2002).
- The Innovation Scoreboard published by the European Commission (European Commission, 2003a), highlights, amongst other things, the issue of technology diffusion by including population with tertiary education, lifelong learning, small and medium-sized engterprises involved in innovation co-operation, innovation expenditure in the business sector, sales of new products, internet access/use, ICT spending and the volatility of ICT spending. This indicator points to a divide between the north and the south of the EU15.
- The southern countries lag in terms of research investment. They spend less than 3 per cent of GDP on research and development (R&D), higher education and software, whilst the EU15-average is 4 per cent, and the average of the best performers in the OECD is above 6 per cent.[12] Patents in the "triadic" patent families (which covers patents under the United States, European and Japanese offices) per million population are low in the southern part of the euro area and also in Ireland. The number of researchers, especially in enterprises, relative to total employment is well below the euro area average, as well as the number of publications.

There are three main levers for policy: improving education, especially tertiary education, raising R&D investment and diffusion and fostering business creation.[13] Under the subsidiarity principle most of these policies remain in the national remit, so that progress largely depends on action at the national level.

© OECD 2004

Figure 5.3. **Innovation indicators**



1. For Canada and the United States post-secondary non tertiary education is included in the data for higher education. For Belgium, data for higher education only include direct public expenditure. 1999 for Belgium, Denmark and Greece.
2. 1998 for Austria and United Kingdom. 1999 for Belgium, Canada, Denmark, Greece and United States. 2000 for the euro area, France, Ireland, Italy and the Netherlands.
3. Patents filed at the European Patent Office (EPO), the US Patent and Trademark Office (USPTO) and the Japanese Patent Office (JPO).

Source: OECD, *Main Science and Technology Indicators*, June 2003, Patent database.

© OECD 2004

Through the Lisbon[14] and the Bologna processes, the European Community plays a structuring and integrating role through the development of the European Research Area[15] and the European Higher Education Area.[16] For example, for education, the Community's role includes fostering mobility of students and researchers and mutual recognition of diplomas, the latter working quite well (OECD, 2003a). Regarding R&D and policies to spur business creation, the Community can act at two levels; first, through the broad economic policy guidelines, national progress towards best practice in product market policies is assessed on an annual basis; and second, the Community has a role in structuring and integrating the European scientific community, through trans-national actions that can complement national R&D programmes.

Improving tertiary education

The gap in innovation within the euro area is partly explained by differences in human capital. Creation and diffusion of innovation requires a well-educated workforce, especially at the tertiary level. The share of the population with at least an upper-secondary qualification is much lower in the southern countries for all age groups, although the gap is narrowing for the younger generation (OECD, 2001a) and also tertiary education is less well developed (OECD, 2003b).

But also most other countries perform poorly as compared with the best performing countries. One reason is that spending on tertiary education is much lower, with real spending per student only about half the level in the United States or Canada. Part of the difference is due to the source of the funding, which remains mostly public in the euro area, while in most countries outside Europe, private funding provides a large part of the total funding of tertiary education.

Improving tertiary education will thus require a significant investment. A large part could be funded by the private sector. As returns to tertiary education are high, there are reasons to believe that students would be ready to pay more for education, and there should be scope for raising fees (Table 5.4).[17] The United Kingdom, for instance, is introducing a graduate contribution scheme, that resolves the credit constraints facing students from poor backgrounds by giving a loan to fund increased tuition fees which have to be repaid after graduation unless the person's income falls below a minimum threshold. Portugal also introduced a reform allowing universities to charge fees, within a certain range. And in Germany, a discussion has started about the charging of fees and the establishment of elite universities. The private sector could also be more directly involved in university funding, through grants or research projects.

At the Community level, the Bologna process aims at reducing the segmentation of tertiary education. Countries have agreed to implement a two cycle system as part of their national qualifications framework (bachelors and masters degree). Other aims include a "Quality Assurance" with guidelines for degree

© OECD 2004

© OECD 2004

Table 5.4. **Private returns to tertiary education**

Per cent, 1999-2000

	USA	JPN	CAN	DEU	FRA	ITA[1]	ESP[2]	GBR	DNK	NLD[3]	SWE	Unweighted average[4]
						A. Men						
Tertiary education												
Return based on pre-tax earnings and the length of studies (narrow rate)	18.9	8.0	8.4	7.1	13.3	8.0[5]	11.7	18.1	7.9	11.7	9.4	11.4
Impact of (in percentage points):												
Taxes	–2.3	–0.3	–0.5	–1.5	–1.6	..	–2.6	–2.1	–2.1	–2.0	–1.5	–1.5
Unemployment risk	0.9	0.9	1.3	1.1	2.4	0.3	3.1	1.6	1.0	0.0	1.2	1.1
Tuition fees and public student support	–2.6	–0.7	–0.5	2.4	0.2	–0.8	–1.4	0.9	4.7	2.3	2.3	0.9
Comprehensive rate	14.9	7.9	8.7	9.1	14.3	7.5	10.8	18.5	11.5	12.1	11.4	11.6
						B. Women						
Tertiary education												
Return based on pre-tax earnings and the length of studies (narrow rate)	18.8	8.0	10.6	7.0	12.1	..	13.2	16.4	6.0	9.4	7.4	10.6
Impact of (in percentage points):												
Taxes	–2.0	–0.2	–1.3	–1.6	–1.7	..	–3.4	–2.3	–1.1	–1.0	–0.7	–1.3
Unemployment risk	1.4	0.5	1.2	0.6	4.8	..	3.9	1.3	0.7	0.7	1.6	1.4
Tuition fees and public student support	–3.3	–1.1	–0.5	2.4	0.2	..	–2.3	0.7	5.5	3.4	2.5	1.1
Comprehensive rate	14.7	7.2	9.9	8.4	15.4	..	11.4	16.1	11.1	12.5	10.8	11.8

Note: The rates of return to tertiary education are calculated by comparing the benefits and costs with those of upper-secondary education. In the case of rates of return to upper-secondary education, the calculation compares the benefits and costs with those of lower-secondary education. In Sweden, the theoretical length of standard tertiary courses is used in the calculations rather than the average theoretical length of different programmes. Moreover, earnings differentials for women between upper- and lower-secondary levels are not large enough to permit a positive rate-of-return calculation. In the United Kingdom, data on earnings of women up to age 30 with lower-secondary education were not available. In Italy, reliable data on earnings for women were not available. Overall, it should be noted that these measures are estimates, subject to some uncertainty, and therefore to be interpreted with caution.

1. 1998.
2. For Spain, data on earnings are taken from the *Encuesta de presupuestos familiares*, for 1998. Unemployment rates by age and education level are taken from the Labour Force Survey. Tuition fees are calculated as the proportion of private expenditure on education times total expenditure on education by education level, and come from OECD *Economic Surveys: Spain*, Vol. 2003/7, OECD, Paris.
3. 1997.
4. The unweighted average excludes Spain.
5. Post-tax earnings.

Source: OECD.

awards and standards for mutual recognition of diplomas. A set of indicators will help to monitor progress. The initiative will lead to a more unified area-wide system of universities, which is likely to increase students' mobility, thus spurring competition among institutions.

Fostering business creation

Business creation, which is an important source of innovation, is hampered by red-tape and a lack of venture capital funds. As noted in the previous *Survey*, some efforts to reduce the costs of business creation are underway, but much remains to be done.[18] In addition, venture capital for early stage development and expansion is far below the OECD average,[19] except in Belgium, Finland and the Netherlands, although even there investment falls short of the US performance (European Commission, 2002c). The absence of an efficient secondary financial market explains part of the euro area's lag in venture capital and business creation *vis-à-vis* the United States. The lack of a deep secondary market deprives investors from cashing in the capital gains on their investments (European Commission, 2003b). In addition, the loss in efficiency stemming from the small market size may provide a partial explanation as to why profits on venture capital are lower in the euro area than in the United States (Box 5.3).

Box 5.3. Update on the Risk Capital Action Plan

The Risk Capital Action Plan (RCAP) was launched at the Cardiff Summit (June 1998) with the objective of eliminating regulatory and administrative barriers at the national and community level that impede the creation of a single market in risk capital. The RCAP focused on six areas: market fragmentation, institutional and regulatory barriers, taxation, the lack of high-tech small businesses, human resources and cultural factors. It was completed at the end of 2003 and the last implementation report published in November 2003 (European Commission, 2003c).

The European risk capital industry has developed, but is still much smaller than in the United States. There are also wide disparities across the euro area countries and the risk capital market remains fragmented. Many relatively small and illiquid national secondary stock markets co-exist, which impedes exit opportunities. In the United States only two large markets, the NYSE and NASDAQ, exist.

The European Commission, on request from the March 2003 Brussels European Council, intends to follow up on risk capital related issues. It will focus on the obstacles faced by institutional investors to invest in venture capital. The final implementation report of the RCAP (European Commission, 2003c) is still under examination by the Council.

© OECD 2004

An obstacle to business creation, which was covered by the Risk Capital Action Plan (RCAP), is related to the complexity of bankruptcy laws and the stigma following a bankruptcy. The Eurobarometer survey (European Commission, 2002d) indicates that the risk of failure is seen as a major hindrance to the development of an entrepreneurial spirit in Europe.[20] Broader legal constraints on business creation relate to the implementation of civil law, while taxation issues and differences in administrative culture across member states may also weigh on business creation. As regards specifically the stigma from bankruptcy, two main factors stand out: the lack of an early insolvency procedure and the financial and professional consequences of bankruptcy for the entrepreneur.

Effective insolvency procedures are seldom used and often come too late. Reasons vary across member states, but often this is due to late recognition, opaque legal procedures, the excessive degree of protection of certain groups of creditors, high costs of insolvency proceedings and varying degrees of expertise and administrative efficiency of the relevant courts (European Commission, 2003d). For example, in a number of countries, insolvency proceedings are conditional upon guaranteeing the creditors immediate payment. In France, where insolvency is prevented via out-of-court settlement or a M*andataire*, which is commendable, there are no restrictions of the M*andataire's* fee, which is to be paid by the debtor. This runs the risk of being too expensive for small firms. By contrast, in the United States, the Chapter 11 procedure is transparent and gives priority to creditors, which are essential to the firm's recovery.

In addition, unlike the United States, bankruptcy codes lead to a stigma from business failure, thus forming important barriers to a fresh start. In Europe, most bankruptcy procedures do not discharge the entrepreneur from the remaining debt of the failed business, and impose restrictions on the individual debtor or director. All the property of an entrepreneur, including future income, must be used to repay debts. In addition, most EU member states impose restrictions, of a pecuniary or criminal nature, on individual debtors or directors, or prohibitions to perform certain activities or be appointed in certain functions. By contrast, in general, the US Bankruptcy Code does not place any restrictions on the directors or individual entrepreneur subsequent to the discharge of the debt, which allows them to enter freely in business ventures thereafter.

An expert group set up by the European Commission has argued that early insolvency procedures should be developed, rescue and restructuring proceedings should be simplified and thus cost less, specialised insolvency sections of courts should be created, and a clear distinction between secured and non-secured creditors should apply to the liquidation procedure only. It recommended that outdated and harmful restrictions, disqualifications and prohibitions should be removed from bankruptcy codes.[21] Wider involvement of business angels in helping firms recover from insolvency might also help (OECD, 2003a).

© OECD 2004

Stimulating research and development

The Barcelona European Council (2002) set the goal of raising R&D spending to 3 per cent of GDP, with two-thirds financed by the private sector. It is currently close to 2 per cent and considerably below the level of the countries that spend most. While public spending is close to that in other countries, the difference is largely due to lower business spending.[22] And Europe is perceived to be a less attractive place for doing research than other areas, with many researchers moving to the United States because of better pay and better funding of laboratories. As well, European businesses appear to have a tendency to move research activities elsewhere. The relative market segmentation, weaknesses in tertiary education and in public research and less developed links between industry and science are at the origin of these developments.

Market segmentation comes in many guises:

- Patenting is still national in Europe and thus expensive. The Council has come to a political agreement on the Community Patent. It will reduce compliance costs by 20 per cent, mostly by lowering translation costs and by registering only with a central authority, but overall costs will remain significantly higher than in the United States. Legislation is still not in place because there are still different positions on translation issues.
- National research grant competitions escape the Community provisions on cross-border public procurement and grants to foreign researchers are the exception. As national research grants still represent over 90 per cent of EU total public research funds, opening national research tenders to competition as is already the case for other public procurements would result in better quality and competitiveness of European research.
- Legislation on intellectual property rights has only recently converged. Several countries have abolished their "professor's privilege", according to which professors could personally own their innovations, in favour of a regime of "institutional ownership", which is close to the US 1980 Bayh-Dole Act.
- More generally, market segmentation implies that national markets for small innovative firms remain small, thus hampering research efforts. Mobile telephony is an exception, since the Europeans created a common standard early in the development process, thus establishing a large market.

Through the 6th Framework Programme, the Community devotes around 4 per cent of the EU-15 budget (less than 10 per cent of overall public research spending in the EU-15) to developing the European Research Area (and thus also overcoming fragmentation of the European research community). In this the Community supports, amongst others, cross-border research projects, development of

© OECD 2004

human resources and mobility of researchers, programme coordination at the national or regional level, and the emergence of European technology platforms.[23] As with previous Framework Programmes, the 6th Framework Programme concentrates funds on specific priority research fields and the method for selecting projects is commendable by international standards.[24] The current seven priority themes of the 6th Framework Programme were first drafted by the Commission, in extensive consultation with members of the academic and private sectors, then proposed by the Commission for approval by the Council and the European Parliament. While considering the potential for industrial applications, they also reflect broader objectives. When defining sub-priorities, the academic and private sector is further involved through Expert Advisory Boards.

The current approach is a second best solution to overcoming market segmentation. And other issues need to be resolved. Public support for research at the national and regional level often funds institutions, rather than projects, with researchers being public officials, with rigid and relatively low remuneration and life-time tenure (HMT, 2003). The reallocation of resources is thus difficult and mobility is low, while some researchers move to greener pastures. Moreover, there is a considerable duplication of research effort, as the large countries in particular want to be leading in every research area, with the effect that Europe is leading in only very few.

Countries that are performing better in terms of innovation and diffusion are those where industry-science relationships are well developed. The intensity and quality of these play an increasing role in determining returns on investment in research, job creation and growth. They also determine the ability of countries to attract and retain an increasingly mobile qualified labour force. Intellectual property rights legislation, research evaluation systems, and institutional arrangements for public research exert a direct influence on such relationships. Although hard evidence is difficult to assemble, the available data point towards a gap between the major European countries and the United States, while the northern European countries perform much better.

Improving the functioning of the labour market

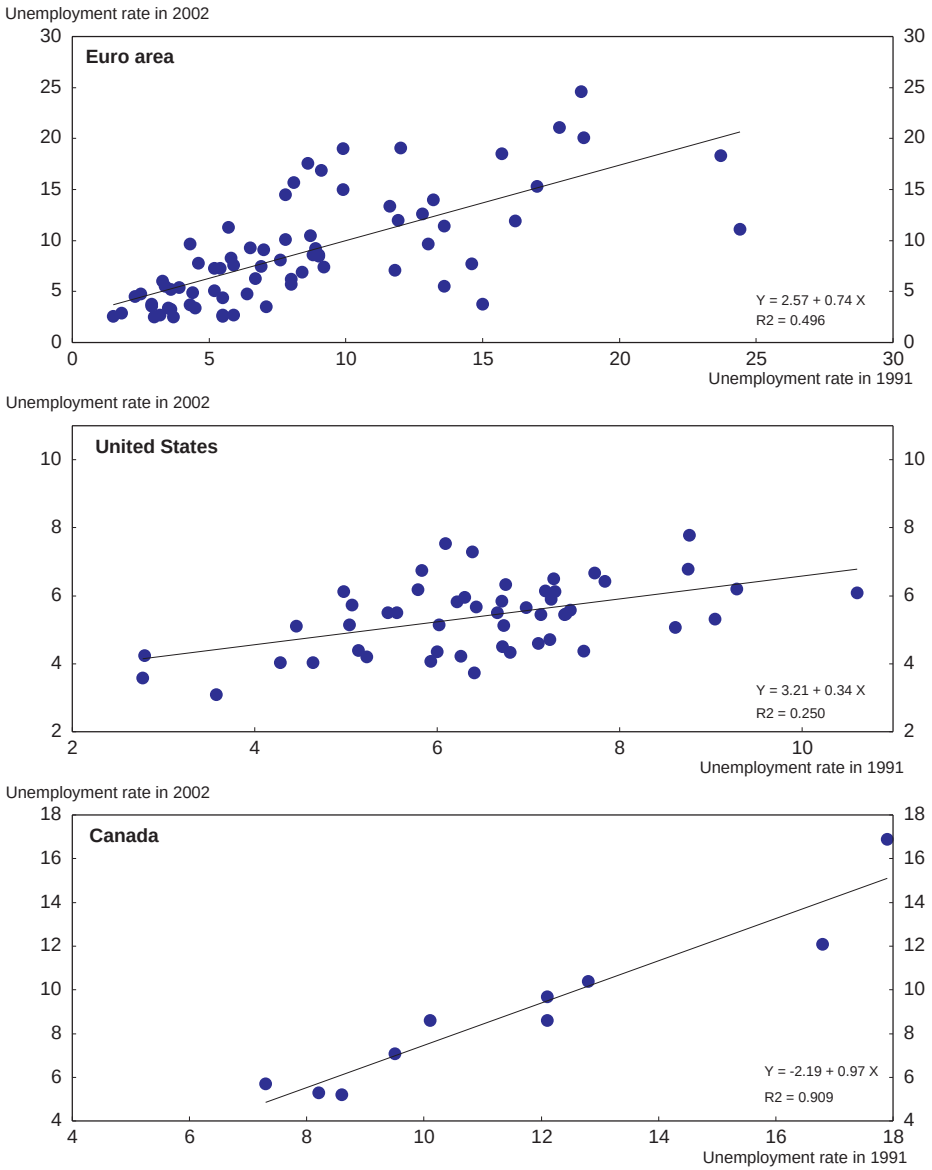
Disparities in labour market performance are persistent

Labour market performance varies considerably across the euro area countries and regions, with only the Spanish and Irish labour market improving markedly. By contrast, most other countries or regions have seen only little progress, even though in some of the smaller countries, unemployment has traditionally been low:

- Most of the regions that performed poorly in terms of unemployment twelve years ago perform poorly today, except for Ireland and some Spanish regions.[25] This situation resembles the Canadian one, but contrasts with the United States where persistence is much lower (Figure 5.4).

© OECD 2004

Figure 5.4. **Persistence in regional unemployment rates**[1]
In per cent of the labour force



1. NUTS 1 for the euro area except for Italy NUTS 2.
Source: European Commission/Eurostat.

© OECD 2004

- Structural indicators point towards persistence of matching problems. While structural unemployment declined somewhat in aggregate, it did so markedly only in Spain and Ireland (Table 5.5). In addition, apart from the Netherlands and Portugal, there has been scarcely any improvement of the Beveridge curve in any euro area country (Figure 5.A3.5).

- Employment growth has been significant in the euro area in recent years, and was strongest in Ireland, Spain and the Netherlands (Figure 5.A3.6). However, none of the euro area countries currently matches the Lisbon targets (Table 5.A3.4), and only Austria and Portugal approach them, so that meeting them in 2010 seems out of reach for most euro area member states (Boeri *et al.*, 2003).

- Labour mobility has remained very low. Empirical studies show that in the United States labour demand shocks are mostly offset by labour mobility and to a much lesser extent by regional wage flexibility, so that regional unemployment does not persist (Bayoumi and Prasad, 1997; Davis *et al.*, 1997). Across the euro area, most comparable studies show that neither labour mobility nor wage flexibility plays an equivalent role, resulting in very high unemployment in some regions, although recent

Table 5.5. **Structural unemployment in selected OECD countries**
OECD estimates of the structural rate of unemployment[1] in selected countries

	1991	1996	2003	1991-2003 change	1996-2003 change
Austria	4.8	5.2	5.0	0.2	–0.2
Belgium	8.8	8.0	6.9	–1.9	–1.1
Canada	8.8	8.5	7.1	–1.7	–1.4
Denmark	7.3	6.6	4.9	–2.4	–1.7
Finland	6.8	10.8	8.3	1.5	–2.4
France	9.7	10.1	9.1	–0.6	–1.0
Germany	6.7	7.0	7.3	0.6	0.3
Greece	8.3	9.4	9.6	1.3	0.2
Ireland	14.3	11.1	5.7	–8.7	–5.4
Italy	9.3	10.2	8.9	–0.4	–1.3
Japan	2.4	3.1	3.9	1.5	0.8
Netherlands	7.1	5.8	3.6	–3.5	–2.2
Portugal	4.7	4.1	3.8	–0.9	–0.3
Spain	13.4	12.4	11.0	–2.4	–1.3
United Kingdom	8.2	6.4	5.2	–3.0	–1.2
United States	5.4	5.4	5.1	–0.2	–0.3
Euro area[2]	8.6	8.8	8.1	–0.5	–0.7

1. The structural rate of unemployment is the OECD's estimate of the non-accelerating inflation rate of unemployment (NAIRU), which is estimated using a Kalman-filtering approach that embodies a reduced-form Phillips curve, as described in Richardson, P. *et al.* (2000), "The Concept, Policy Use and Measurement of Structural Unemployment: Estimating a Time-varying NAIRU Across 21 OECD Countries", OECD *Economics Department Working Papers*, No. 250.
2. Labour-force weighted average of euro area countries.

Source: OECD.

© OECD 2004

evidence points towards rising mobility, even though it is still considerably below mobility in the United States (Table 5.A3.5).

While the Community has only limited competence on labour market policies, progress in raising labour market flexibility is key to the success of the Lisbon strategy and the associated convergence of economic outcomes towards the best performers in the area. The following sections identify factors at the origin of labour market rigidities and discuss how policy should address them.

Labour mobility is low in most regions

Data reporting changes of residence or commuting within the European Union and data reporting cross-border movements in the member countries of the European Free Trade Association (EFTA) suggest that about 1.4 per cent of the working-age population changed residence in 1999, and about the same amount commuted (within the EU and the EFTA), which is low by US standards where 5.9 per cent of the working age population changed residence between counties in 1999 (European Commission, 2001b).

Mobility is concentrated in areas which are already rich in economic activity, requiring highly-skilled people and are innovation intensive, contributing to polarisation:[26]

- Geographic mobility is concentrated in the area covered by the Benelux countries, the Rhine valley (Germany-France), and Switzerland, where economic activity is high (OECD, 2003c). Workers appear the most mobile in France and Austria, closely followed by Belgium and Luxembourg where the commuting rate is high (Table 5.6). Workers are the least mobile in southern Europe, especially in Spain and Greece when the mobility measure is residence changes, but also in Italy and Portugal when the measure is the share of commuting between EU regions (European Commission, 2001b; MKW-GmbH, 2001).[27]

- Some peripheral regions, the south of Italy, the south of Spain, and, to a lesser extent, eastern Germany (Box 5.4), are also those where unemployment has remained stubbornly high. They also have a higher proportion of low-skilled workers, who are apparently less mobile (Boldrin and Canova, 2001; European Commission, 2001c).

This creates conditions for polarisation, where regions initially rich in high-tech, skill-intensive industries attract industrial activities and highly-skilled workers, who are mobile, whilst at the same time other regions, endowed with more labour intensive, less skilled and a lower paid labour force, see less improvement in living standards (Table 5.A3.6).

© OECD 2004

Table 5.6. **Geographic mobility in the euro area**
1999

	Per cent of employed people (15-64 years) that moved in one year to another region within a member state or to another member state	Percentage of cross-border commuters[1]			Percentage of people commuting between regions
		Total	In a non-EU country	In other EU countries	In another EU region
AUT	n.a.	1.1	0.3	0.8	13.1
BEL	1.08	1.8	0.1	1.7	19.5
DEU	1.45	0.2	0.1	0.1	8.2
DNK	0.40	0.1	0.1	0.1	n.a.
ESP	0.48	0.2	0.1	0.1	1.2
FIN	1.35	0.2	0.0	0.1	3.2
FRA	2.03	1.2	0.7	0.5	4.3
GBR	2.36	0.2	0.2	0.1	n.a.
GRC	0.24	n.a.	n.a.	n.a.	0.2
IRL	n.a.	n.a.	n.a.	n.a.	n.a.
ITA	0.71	n.a.	n.a.	n.a.	2.9
LUX	0.90	1.0	0.0	0.9	n.a.
NLD	n.a.	0.2	0.0	0.2	n.a.
PRT	1.35	0.5	0.0	0.5	2.3
SWE	2.15	n.a.	n.a.	n.a.	n.a.
EU-15	1.50	0.4	0.2	0.2	4.9

1. Data for Ireland are from 1997.
Source: Eurostat, Labour Force Survey, European Commission (2001), *Employment in Europe*; MKW GmbH (2001).

A strategy to increase geographic labour mobility

Cultural and language barriers are often considered as an important impediment to labour mobility, although their importance varies with the job requirements.[28] Labour flows between countries that speak the same language are typically higher than labour flows within countries which have more than one national language (*e.g.* Belgium). There is scope to improve language proficiency (Figure 5.5). Many languages are spoken in the euro area, but barely half of the EU-population speaks an EU-language other than their own. The foreign language most taught in schools is English (41 per cent of primary pupils and 93 per cent of secondary pupils), but only 33 per cent of pupils learn French and 15 per cent German in secondary schools. Other languages are being taught to an even lesser degree (European Commission, 2001c).

The general sluggishness of labour markets in Europe during the past three decades has been another important barrier to labour mobility. However, in the 1950s and 1960s the European countries where labour markets were tight were recruiting many workers from Italy, Spain and Portugal (European Commission,

© OECD 2004

Box 5.4. Eastern Germany and the Mezzogiorno

Both eastern Germany and the Mezzogiorno catch up more slowly towards the euro area average than other Objective 1 regions. This box summarizes briefly similarities and differences in national regional policies. Table 5.7 provides a snapshot of main indicators for the two regions.

Income differences are persistent. The main feature of the period 1995-2001 for both the Mezzogiorno and East Germany is the slow pace of catch-up towards the euro area average, although there is evidence that regional disparities within the countries are diminishing. Whereas GDP per inhabitant in the south of Italy represented 67 per cent of the Italian average in 1995, it has edged up to 69.5 per cent in 2001, thanks partly to higher total factor productivity growth (IMF, 2003a). At the same time, GDP per inhabitant in East Germany, as a proportion of the German average, stood at 66.1 per cent and only attained 68.5 per cent in 2001. This is in sharp contrast with the first half of the 1990s, when eastern Germany's income rose rapidly.

Wage differentials are not sufficiently large. Because of regional differences in market access and factor endowments, labour productivity is much lower in the Mezzogiorno and eastern Germany than in northern Italy and western Germany (Wurzel, 2001; Davies and Hallett, 2001). Yet, wage bargaining at the national level, the existence of implicit or explicit wage floors, and high replacement rates have pushed wages up faster than productivity. Moreover, wages in eastern Germany were pushed up towards western levels: between 1991 and 2000 compensation per employee rose by 91 per cent, bringing the relative wage from 49 to 77 per cent, whilst unemployment remained much higher in the east (more than 20 per cent in 2002, as against less than 10 per cent in the west). At the same time, the productivity ratio between eastern and western Germany only rose from about one-third in 1991 to 72 per cent in 2003. Eastern German wages have in some cases nearly caught up with the west and wage differentiation is small in Italy. Nevertheless, in eastern Germany clauses to open collective wage agreements are strongly used. Results of wage negotiations are very much productivity oriented. Moreover, for eastern Germany the existence of wage differentials is currently becoming an advantage in competition. Price levels differences on the other hand, are likely to be considerable, but no official data exist.

Public transfers have contributed to low labour mobility. In both areas, there is a major gap between production and income, which arises from transfers. The disparity between regional income and production amounted to 46 per cent of regional GDP in eastern Germany and 12 per cent in the Mezzogiorno in 1999 (Davies and Hallet, 2001). The high transfers to eastern Germany have partly been the consequence of fully taking over the western German institutional and legal framework, including the social security system, and are apt to contribute to low labour mobility – although this effect is contrasted by the sustained strong migration from eastern to western Germany. In addition, in southern Italy, the share of public sector consumption in GDP is larger than in the north, although public sector consumption in the Mezzogiorno is proportional to its population. Large transfers undermine labour mobility and raise reservation wages. Moreover, the composition of social spending also undermines mobility. A sizeable chunk of transfers is devoted to invalidity benefits in southern Italy and child benefits in eastern Germany (Wurzel, 2001).

© OECD 2004

Box 5.4. **Eastern Germany and the Mezzogiorno** (*cont.*)

State aids for regional development have not been very effective. State aids for regional development are different between the two regions. In east Germany, state aid in the form of subsidies and depreciation allowances has aimed at boosting investment, to modernize the capital stock and reduce the gap with the west. However, there is evidence that this support biased resource allocation in favour of capital-intensive industries and the construction sector. This diversion is likely to have reduced productivity growth. Moreover, infrastructure investment was not focussed enough on projects that are conducive to economic growth (Wurzel, 2001). In southern Italy, public infrastructure such as water supply and local public transport is weak. Yet, most aid to investment used to be given to public enterprises until the early 1990s, thereby subsidising declining activities. Policy has changed in the meantime: first, the privatization and restructuring of public enterprises, which took place in the 1990s; and second, the Italian authorities reformed regional policy, with a shift from sectoral to regional projects and more emphasis on transparency and accountability, which were formalized in the Mezzogiorno Development Plan in 2000. The measures introduced since 2000 by the central government to provide regions with incentives for using funds more effectively are already improving regional administrative capacity to spend, although there is scope for improving the quality of spending further (OECD Economic Survey of Italy, 2003). Meanwhile, results seem encouraging as the performance of southern Italy has improved in recent years (IMF, 2003b).

Table 5.7. **Key figures on eastern Germany and the Mezzogiorno**
In per cent

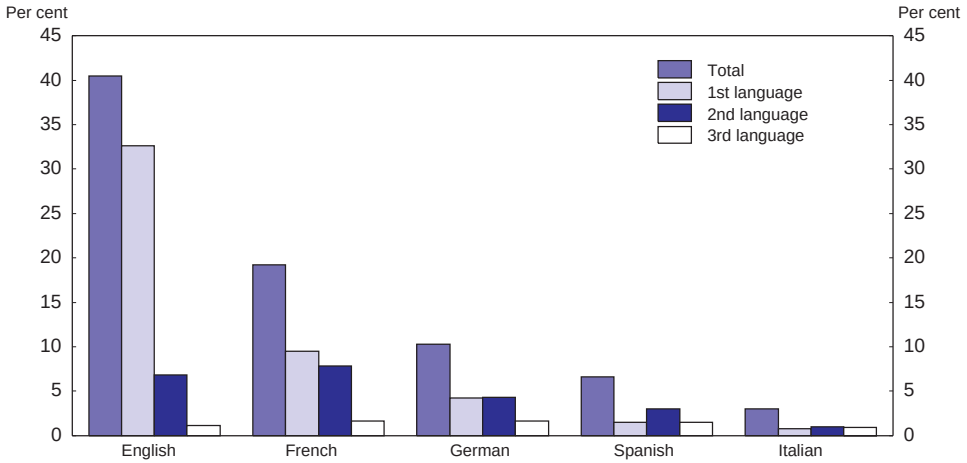
	Eastern Germany	Mezzogiorno[1]
Unification date	1991	1859
GDP growth (1994-2001)[2]		
Total	1.7	1.9
GDP/employed	2.0	1.6
GDP/per capita	2.2	1.9
Labour market characteristics (2002)		
Unemployment rate	21.2	19.3
Employment rate	60.9	43.2
Share of inward **FDI** (1998-2000)[3]	Less than 2 per cent	Less than 4 per cent
Human capital[4]		
Low	6.8	60.8
Medium	65.5	30.1
High	27.8	9.1

1. Data for the Mezzogiorno concern only Objective 1 regions.
2. Figures for all the Objectives 1 regions are, respectively, 3.0 per cent, 1.6 per cent and 2.8 per cent.
3. Figures for Italy refer to the number of employees in foreign-owned manufacturing subsidiaries. Employment is attributed to regions according to the location of headquarters.
4. Educational attainment of persons aged 25-64 (percentage of total) in 2002.

Source: European Commission (2004), *Third Report on Economic and Social Cohesion*, February, Brussels, *http://europa.eu.int/comm/regional_policy/sources/docoffic/official/reports/cohesion3/cohesion3_en.htm*.

© OECD 2004

Figure 5.5. **Language proficiency in Europe**[1]
2000



1. Percentage of Europeans saying that they can speak the indicated foreign language.
Source: European Commission (2001), *Europeans and Languages*, Special EuroBarometer Report 54, *http://europa.eu.int/comm/education/policies/lang/languages/barolang_en.pdf*.

2004e). Apparently, notwithstanding cultural and language differences, people will migrate if they expect an increase in purchasing power, taking into account the costs of moving, and differences in taxation and social transfers. A number of policies impinge on the propensity to move, including housing policies, employment protection legislation (EPL) and tax and benefit systems.

H*ousing policy* affects geographic mobility through various channels:

- A number of countries in the euro area provide tax incentives to buy houses, most prominently Spain, Ireland, Finland and the Netherlands (van den Noord, 2003). Whilst this favours upward mobility in the housing market, thus liberating cheaper housing for lower income households, it tends to squeeze the private rental market. There is some evidence of a negative correlation between owner occupation and mobility (Elhorst, 2003; Nickell *et al.*, 2002), especially if the private rented sector is strongly regulated (Box 5.5).[29]

- Mobility is also discouraged by high transaction costs of buying a home: van Ommeren and van Leuvensteijn (2003) show for the Netherlands that a 1 percentage point increase in transaction costs reduces the residential mobility rate by 8 per cent.

© OECD 2004

Box 5.5. The housing market in three euro area countries

Stringent regulation of the private rental housing sector tends to reduce supply. At the same time, overinvestment contributes to depress prices in lagging regions, making moving to a more buoyant region more expensive. Restrictions of this type are often found in regions affected by high unemployment rates.

Rents in eastern Germany are on average about 10 per cent lower than in western Germany (Davies and Hallet, 2001), although the difference depends on the year of construction. At the same time, house prices in eastern Germany are low partly because of the tax breaks for investment in housing in the first half of the 1990s, which have contributed to over-capacity. As a result, looking for a job in the west entails a considerable increase in living costs, which may be too large to be fully compensated by the increase in wages, given the low degree of wage differentiation. Supportive measures for housing programmes in the new Länder are currently reduced.

The rental housing market is underdeveloped in Spain because of the minimum length of renting contracts of five years and generous tax preferences for owner occupied housing. House prices are high because of restrictions on urban land supply, which municipalities have an interest to carry forward, as a large share of their revenues originates from taxes on land and real estate. In addition, taxes and other fees contribute to transaction costs as high as 10 per cent of house prices.

The Italian housing market suffers from similar problems as the Spanish one. The 1978 Fair Rent Act (*Equo Canone*) introduced rent controls, establishing a formula for rent setting and stipulating a rental contract length of at least 4 years. This led to lower rents, but also to a reduction in the supply of rented accommodation. Options for opt-outs, which were introduced in 1992, did not fully reverse the situation. Another effect of the Act was to induce a shift towards owner-occupied accommodation, even though house purchases are subject to significant transaction costs, with stamp duty of 8 per cent on all purchases.

- Public housing can undermine mobility by requiring re-queuing to qualify for access to public housing in another region. Moreover, means testing of housing support contributes to trap workers in unemployment.

Policy action should take several directions. One is to induce a better balance between the market for owner-occupied homes and the rental market. This requires reductions in tax incentives in favour of buying a house, which should lead to a larger and more affordable rental market. Also transaction taxes should be reduced to favour home-owners' mobility. There is also a need to better balance the generosity of housing benefits against their costs in terms of undermining mobility and to provide income support in a different way.

Partial reforms of *employment protection legislation* (EPL) have tended to increase polarisation. Deregulation of EPL in the euro area has often taken the

© OECD 2004

form of facilitating the use of temporary contracts, whilst preserving the existing protection of workers on permanent contracts. Temporary contracts provide an entry into the labour market. However, by protecting the insiders at the expense of outsiders, partial liberalisation contributed to create a two-tier labour market, generating a buffer of temporary workers. The existence of a buffer of temporary workers may strengthen the bargaining power of insiders. It thus may contribute to the low mobility of labour as insiders do not have an incentive to move. Overall, productivity gains are hampered, and insiders preserve their rents (OECD, 2003d).

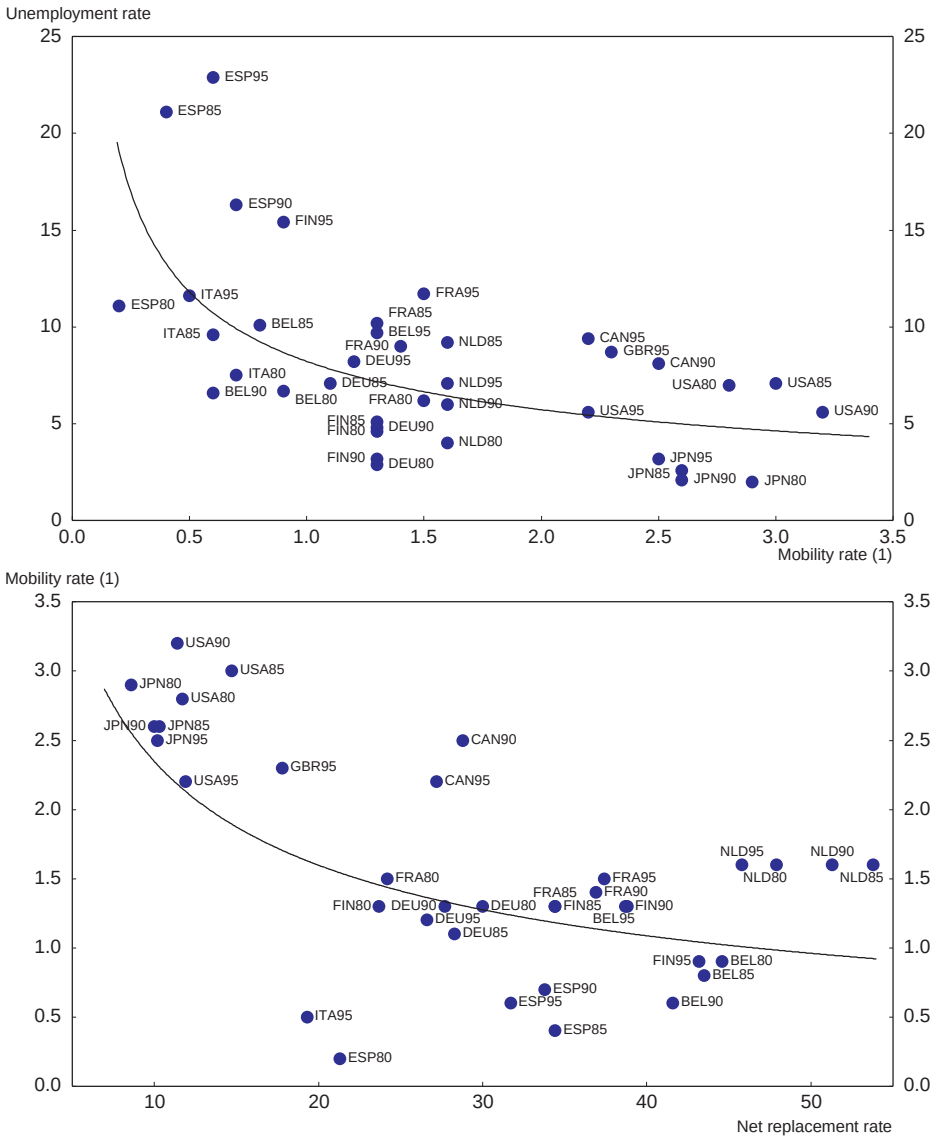
Tax and benefit systems affect geographical mobility in a number of ways:

- There is evidence that generous unemployment insurance and social assistance impinge on local unemployment and mobility simultaneously (Figure 5.6). The simultaneous rise in unemployment and social benefit levels between the beginning of the 1980s and 1990s, suggests the two are related (Blanchard and Wolfers, 2000). Tax and benefit systems contribute to hamper labour mobility by trapping unemployed in inactivity. A number of countries are now pursuing social assistance programmes and providing tax credits to unemployed who take up a job, which reduces marginal effective tax rates at the lower end of the pay scale (for example France, Luxembourg, Portugal). But low-pay and inactivity traps still persist across the area, especially for households with one or two children due to means-tested family benefits (Carone *et al.*, 2003).
- Many benefits are linked to residency. For example, child benefits are linked to residency in almost all euro area countries. Moreover, in some countries, unemployment benefits are topped up by family benefits (Austria, Finland, Germany, Ireland, Luxembourg, Netherlands, Portugal and Spain) or housing benefits (Italy), which are also conditional on residency in many cases. On the other hand, the receipt of unemployment benefits usually does not require the beneficiary to take up a job in a distant location: in most countries, there is a ceiling for distance or travel time to allow workers to stay in the region (MISSOC, 2003).[30]
- The lack of cross-border portability of benefit entitlements also affects mobility. Most benefits are conditioned on contribution periods to the national system, with benefits rising over time, reducing incentives to move cross-border.

There has been little change in benefit systems across the area in the 1990s. In general, they are high compared with OECD countries outside continental Europe. Replacement rates and benefit duration have only seldom been cut (OECD, 2003e; Nickell *et al.*, 2002). As a result, average benefit replacement rates were stable over this period, maintaining the increases during the 1980s. Unemployment benefits actually rose in Germany to peak by 2000 and 2001. They also rose in Greece, Italy and Portugal, but from a low level (OECD, 2003e). In 1999

© OECD 2004

Figure 5.6. **Geographic mobility, unemployment rates and unemployment insurance in selected OECD countries**



1. Ratio of the total number of persons who changed region of residence to the total population over one year.
Source: OECD (2002), *Employment Outlook*; OECD (2002), *Benefits and Wages*.

© OECD 2004

net unemployment benefit replacement ratios stood at 32 per cent for the United States, while ranging between 50 and 70 per cent in the euro area except for Greece (OECD, 2002a).[31] In addition there was often an upward trend in the take-up of disability benefits, partly reflecting a substitution effect between benefit schemes.[32]

The Community has long sought to improve benefit portability, but much remains to be done. So far, the Community has focused on pension, health insurance and unemployment benefit portability, but results have been uneven, often due to a lack of national implementation (European Commission, 2002e). A major cost when moving across border is the possibility of losing pension entitlements, seeing pension entitlement reduced or being taxed more heavily, either when making cross-border provisions for contributions or when transferring accumulated pension rights. A Directive regarding occupational retirement provision, adopted in June 2003, guarantees the free provision of occupational pension services across Europe, as well as the free movement of capital in this sector, and will allow pan-European groups of companies to set up pan-European pension funds.[33] But little progress has been made regarding the portability of supplementary pensions, and the Commission intends to put forward legislation in the course of 2004. Regarding tax obstacles on cross-border provision of occupational pensions, several member states are under infringement procedures (Belgium, Spain, France, Ireland, Italy and Portugal). The Commission claims that these countries have tax rules which unduly discriminate against pension institutions established in other EU countries.[34]

Progress on raising the portability of other benefits is also uneven. The European Health Insurance Card is an achievement allowing any European citizen to obtain health care in another EU country during a temporary stay. For unemployment benefits, the current situation is that benefits are paid to an unemployed person looking for a job in another country for three months, leaving it to the member state to decide whether this should be extended to six months. Afterwards the person has to go back or loses all benefit entitlements.[35] In addition, these provisions do not cover child benefits or family benefits, which may be important in topping up unemployment benefits in some countries. Benefits guaranteeing sufficient resources are also excluded, whilst they are all subject to residency conditions, and even regional or municipal conditions in Italy (MISSOC, 2003). Overall, most benefits remain conditional upon residency and are barely portable; combined with a generous level, they are thus a disincentive to labour mobility in the euro area.

Making wages more responsive to local conditions

Regional differences in unemployment persist because wages are not always in line with labour market conditions prevailing at the regional, local and firm level. In regions where productivity is below the national average, but unit labour costs within a sector are bound by a national wage floor, returns to investment may be too low compared to other regions, thereby deterring capital inflows. Combined with low

© OECD 2004

labour mobility, this contributes to divide regions, with some being more dynamic with high employment and others being less dynamic, with high unemployment.

All countries have an institutional wage floor in the form of either a national minimum wage or collective agreements. Wage floors depend critically upon wage bargaining, but also minimum wages and indexation agreements are important. Although pay setting systems vary a lot across Europe, a common feature is the wide coverage of collective agreements (Table 5.8). In addition, to the extent that there is decentralisation, the most important bargaining level is usually sectoral (Austria, Germany, Greece, Italy, the Netherlands, Portugal and Spain) rather than regional. There is an increasing tendency across the area to permit two-tier collective bargaining where the implementation of sectoral agreements is complemented by bargaining at the enterprise level (CESIFO, 2004), and in some countries, such as Germany, opt-out options exist. As a result, wage differentiation and cost differentials could become larger (Figure 5.7).[36]

Allowing wages to respond more to local conditions would contribute to prevent polarisation. Adjustment to a labour demand shock can take two forms: labour mobility or wage flexibility. In the absence of labour mobility, wage flexibility becomes crucial to avoid polarisation that would arise from an entrenched gap between productivity and labour costs. In view of the evidence of wide productivity differences across sectors and regions, these provide strong arguments in favour of limiting the coverage of bargaining, allowing wages to be negotiated at the local level. This would raise the responsiveness of wages to labour demand shocks, and bring wages more in line with local conditions.

Focusing regional policy better

The objective of EU "cohesion policy" is to foster convergence, by speeding up the catch-up of lagging regions. EU cohesion policy is funded by structural and cohesion funds. These funds top up national or regional investment in lagging regions in physical or human capital. Additionality aims at avoiding eviction effects whereby the Community assistance would replace national public structural expenditure in the regions concerned. Another goal of the funds is to ease the restructuring that can arise from integration and relocation of activity. The selection of the benefiting regions is based on the regional level of income (Annex 5.A2). Regional policy also exists in OECD countries outside the Union (Box 5.6) and there are similarities in policy settings.

It is difficult to assess empirically the impact of the EU regional funds, and the evidence that the Union's regional policy succeeds in its aims is mixed. Based on counter-factual simulations the potential impact of the funds appears to be large, but econometric evidence is more mixed. Bradley *et al.* (2003) using a variety of counterfactual simulations with the European Commission's HERMIN model, report gains in GDP level varying from 1½ per cent in Spain to 4½ per cent

© OECD 2004

Table 5.8. **Summary characteristics of national wage formation systems in international comparison**

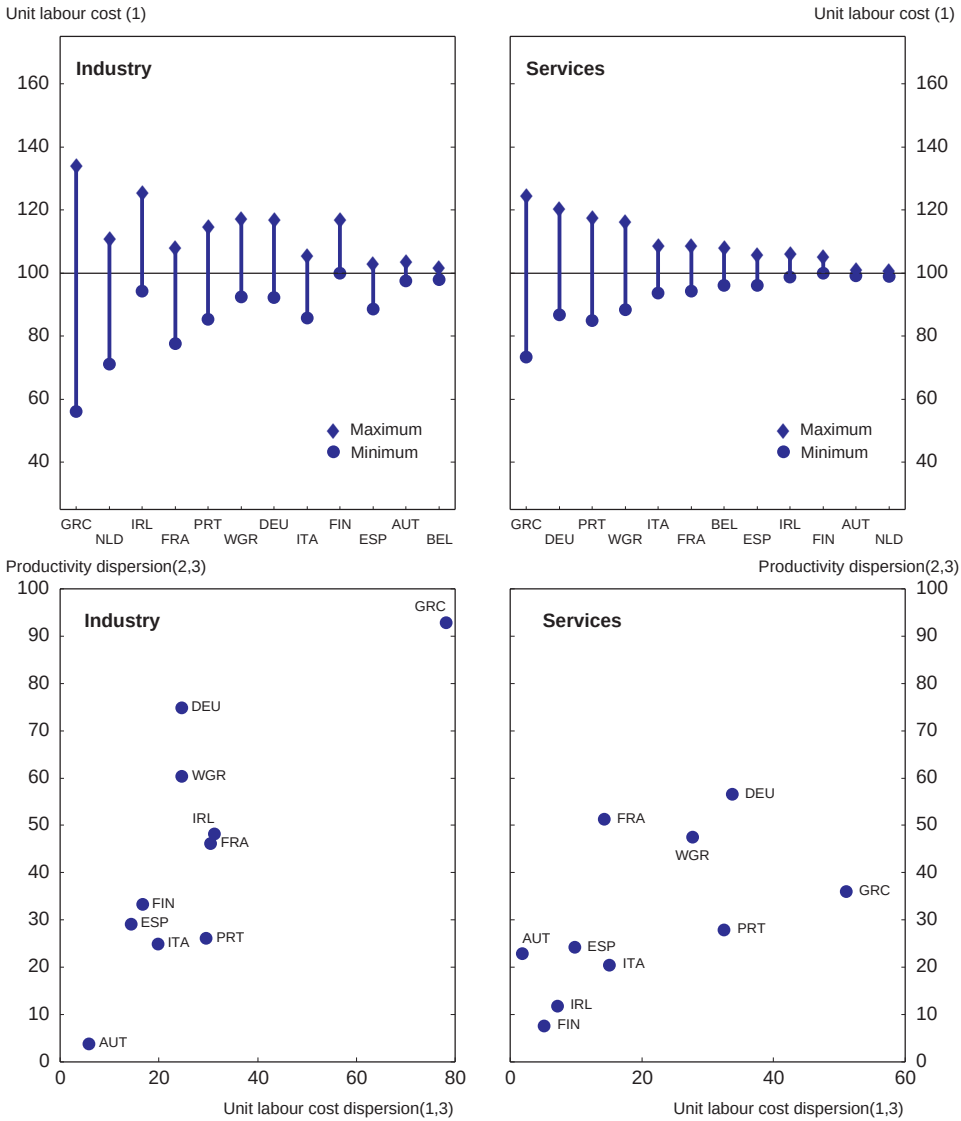
	Trade union density 2000	Collective bargaining coverage 2000	Predominant duration of agreements	Bargaining level[1]	Bargaining co-ordination[2]	Extension practice	Low pay regulation mechanism[3] 2000
AUT	37	95+	1 year	3	4	n.a.	Collective agreements
BEL	56	90+	2 years	3	4.5	High	National minimum wage ≈ 50 MW
DEU	25	68	2 years	3	4	High	Collective agreements
FIN	76	90+	2 years	5	5	High	Collective agreements
GRC	27	. .	2 years	. .	. .	High	National minimum wage ≈ 50 MW
ESP	15	80+	3 years	3	3	High	National minimum wage ≈ 40 MW
FRA	10	90+	1 year	2	2	High	National minimum wage ≈ 60 MW
IRL	38	. .	2 years	4	4	Low	National minimum wage ≈ 60 MW
ITA	35	80+	varying	2	4	High	Collective agreements
LUX	34	60+	varying	. .	. .	None	National minimum wage ≈ 50 MW
NLD	23	80+	varying	3	4	Moderate	National minimum wage ≈ 50 MW
PRT	24	80+	1 year	4	4	High	National minimum wage ≈ 35 MW
DNK	74	80+	4 years	2	4	None	Collective agreements
SWE	81	90+	3 years	3	3	None	Collective agreements
GBR	31	30+	varying	1	1	None	National minimum wage ≈ 40 MW
USA	13	14	n.a.	1	1	None	National minimum wage ≈ 35 MW

1. Centralisation:
   1 = Company and plant level predominant.
   2 = Combination of industry and company/plant level, with an important share of employees covered by bargains.
   3 = Industry-level predominant.
   4 = Predominantly industrial bargaining, but also recurrent central-level agreements.
   5 = Central-level agreements of overriding importance.
2. Co-ordination:
   1 = Fragmented company/plant bargaining, little or no co-ordination by upper-level associations.
   2 = Fragmented industry and company-level bargaining, with little or no pattern-setting.
   3 = Industry-level bargaining with irregular pattern-setting and moderate co-ordination among major bargaining actors.
   4 = *a*) Informal co-ordination of industry and firm-level bargaining by (multiple) peak associations.
   b) Co-ordinated bargaining by peak confederations, including government-sponsored negotiations (tripartitie agreements, social pacts), or government imposition of wage schedules.
   c) Regular pattern-setting coupled with high union concentration and/or bargaining co-ordination by large firms.
   d) Government wage arbitration.
   5 = *a*) Informal co-ordination of industry-level bargaining by an encompassing union confederation.
   b) Co-ordinated bargaining by peak confederation or government imposition of a wage schedule/freeze, with a peace obligation.
3. MW = median wage.

Source: OECD (2004) *Employment Outlook*; CESIFO (2004), *Report on the European Economy*, Ifo Institute for Economic Research, Munich, Germany.

© OECD 2004

Figure 5.7. **Regional unit labour cost differentiation in industry and services**
In per cent of country-specific average, 2000



1. Ratio of compensation of employees to gross value added at basic prices at NUTS 1.
2. Ratio of gross value added at basic prices to employment at NUTS 1.
3. Dispersion is the distance between the highest and the lowest value.

Source: OECD; European Commission (2003), *Employment in Europe*, *http://europa.eu.int/comm/employment_social/employment_analysis/employ_2003_en.htm*.

© OECD 2004

Box 5.6. Regional policies in other OECD countries

In a number of OECD countries regional policy provides support for lagging regions. Initially designed to address the lagging position of industrial, rural, peripheral or mountainous areas, regional policies have shifted emphasis over the last 15 to 20 years, to address regional restructuring (OECD, 2002b). However, equity goals of regional policy are still prominent. For example, the main aim of Norway's regional policy is to "maintain the existing settlement pattern and to ensure equality in living conditions in all parts of the country". In Sweden, regional policy aims at creating regions that are "economically, ecologically, industrially and socially equal". In Japan, regional policy is oriented towards a harmonious territorial development, while in Canada the objective is to "help rural communities cope with chronic disadvantages or deal with acute economic shocks".

The criteria for defining the spatial coverage of regional assistance varies considerably across countries. The United Kingdom and the Nordic countries place considerable importance on unemployment. Switzerland, the Nordic countries, Japan and Korea emphasise geographic location in relation to markets and topography. Japan and Korea also focus on geographic characteristics such as islands and mountains, as well as demographic and economic indicators.

Other policies may have similar effects. For example, in the United States, local economic development policies, financed by the federal and state governments are akin to the Union's regional policy (Bartik, 2002). They fall into two main categories. First, they provide customized assistance for individual businesses that are thought to provide greater economic development and benefits. Second, tax, spending and regulatory policies promote local development. According to the 1999 International City/County Management Association survey of local governments, instruments used by local governments are tax incentives, job training programmes, community development loan funds for businesses, community development corporations and micro-enterprise programmes. It is estimated that USD 20-30 billion in state and local government spending or tax expenditure is devoted to economic development programmes annually, with another estimated USD 6 billion of support from the federal government. Most resources are provided by tax incentives (Bartik, 2002).

Sectoral policies, such as transport and agricultural policy, also have an impact on regional development. An example is Japan, where reducing regional income dispersion has long been a major factor in decisions on public investment (Kamada *et al.*, 1998).* Another example is Switzerland where transport and agricultural payments are two major sectoral transfers, accounting for 21.1 per cent and 12.5 per cent of the total transfers of the federal budget to the cantons and municipalities. In the United States, agricultural spending amounted to about 1 per cent of total federal spending in fiscal year 2003.

Finally, fiscal equalization schemes redistribute revenues between richer and poorer regions in federal countries. Outside the Union, such schemes are significant in Australia, Canada, Japan and Switzerland. Progressive federal income taxes also lead to redistribution across jurisdictions, by raising more revenue in jurisdictions with wealthier inhabitants (Joumard and Kongsrud, 2003). In a number of

© OECD 2004

Box 5.6. **Regional policies in other OECD countries** (*cont.*)

other countries, other fiscal channels provide a similar mechanism. For example, in the United States, the extended benefit provision of the federal-state unemployment insurance system provides an additional 13 weeks of benefits to unemployed workers in states that have recently experienced a sharp increase in unemployment. In Canada, the national unemployment insurance programme discriminates in favour of high unemployment regions by making it easier to qualify for benefits.

* Some observers argue that these regional transfers have resulted in poor areas becoming highly dependent on public works and construction companies in rural areas capturing most of the rent (Yoshino and Sakakibara, 2002).

in Portugal after six years of the Structural Fund programme, assuming that plans submitted for the 1994-99 Structural Fund programme are fully realised. These GDP gains are accompanied by sizeable unemployment reductions. Evidence based on econometric testing in standard growth regression is less clear cut, however. Whereas structural funds generally have a significant positive impact on the growth of lower income countries (see for example Beugelsdijk and Eijffinger, 2003; Crespo-Cuaresma *et al.*, 2002), the link at the sub-national level is more nuanced with some studies finding no effect (Cappelen *et al.*, 2003), while others find a sizeable impact (de la Fuente, 2002).

Comparing the experience of the four cohesion countries (Greece, Ireland, Spain and Portugal) provides indications regarding their success. Various empirical studies have highlighted four important factors. First, the stability of the macroeconomic environment matters (European Commission, 2000a; Barry, 2003; Sapir *et al.*, 2003). Second, an environment favourable to business, with low red tape and taxation, and an efficient public administration, is important, not only to attract investment, but also to take up the European funds and use them speedily and efficiently. For instance, whereas Ireland has a high take-up rate of the funds and invested them rapidly in infrastructure and human capital, Greece's low take-up rate of funds contributes to explaining the slow speed of catch-up (Sapir *et al.*, 2003). Third, the consistency between structural policy and the use of the funds is an important element (Midelfart-Knarvik and Overman, 2002). Finally, in the absence of labour mobility, education becomes an important factor in attracting firms.

No single type of indicator is by itself sufficient to explain why Ireland has caught up faster than the other countries (Table 5.A3.7). Indeed, Ireland combines

© OECD 2004

a good macro setting, with healthy public finances, and a good microeconomic environment together with good initial endowments. FDI in high-technology, biotechnology and the chemical sector was attracted by sustained investment into a qualified workforce, whose specialization in science expanded. Corporate taxes were maintained at a low level. At the same time, wages were competitive. The result has been high growth in the high-tech and chemical sectors. Important contributions of the structural and cohesion funds were infrastructure investment, especially in transport, that eased congestion and bottlenecks, investment in industrial R&D related to the high-tech and biotechnology sector, and Employment Support Funds contributing to a major national training effort, which coincided with a rapid expansion of the labour force (see the 2003 OECD *Economic Survey for Ireland*; Fitzpatrick Associates Economic Consultants, 2003). Moreover, as an English-speaking country, Ireland became a "hub" for multinationals.

The other structural and cohesion fund beneficiaries all differ in some respect from Ireland. For example, in all these countries the macroeconomic environment was much less favourable until the introduction of the euro, but has improved markedly since then. The entrepreneurial environment is not as favourable, as reflected by much higher effective average tax rates on cross-border investment (Yoo, 2003), and a generally higher degree of product market regulation and heavier administrative burdens (Nicoletti *et al.*, 2003).

Looking ahead, some lessons can be drawn about the effectiveness of the regional policy funds. Most importantly, regional policy should enhance the attractiveness of a region and this is one of the three key priorities for the next regional policy package that will be implemented starting in 2007, the two others being convergence and territorial cooperation. Infrastructure investment should only be supported by the funds if it cannot be fully carried out by the private sector and externalities are strong, while project evaluation and monitoring, though improving from one package to another, should be enhanced. In particular:

- Given the limited size of this budget, and the need to raise efficiency it might be better to allocate funds to those countries and regions that most need them. Especially against the background of subsidiarity, the question arises how to better target the structural funds to the countries and regions most in need.
- To ensure an effective regional policy, funds are earmarked. However, earmarking will only be efficient when local administrations are efficient (Buti and Nava, 2003). A better use of the funds could be achieved if they were conditioned on results, for example by introducing sunset clauses or by providing funds only for a limited amount of time.
- Raising competitiveness is a main objective of the Lisbon agenda, and the Commission proposed that priorities for regional policy funding should match the Lisbon and Gothenburg agenda. This should be

© OECD 2004

formalised to enhance enforcement. Strategic orientations for regional development defined and monitored at Community level, for instance, could improve synergies with the EU priorities for sustainable growth. They could also ensure that the cohesion policy and programmes be consistent with the EU economic policy framework and the Broad Economic Policy Guidelines. And spending on the regions should be conditional on improving framework conditions and administrative capacity.

- There should be more adequate evaluation of the costs and benefits of the spending and of the positive externalities generated by investment.
- Currently regional GDP is computed by taking into account the country-wide differences in purchasing power parities (PPP), but not those of the regions. As noted above, these could be sizeable and would typically raise regional income levels. The calculation of regional PPPs was discussed, but member countries judged such an exercise to be too expensive.

Apart from the Structural funds and the Cohesion fund, the Common Agricultural Policy (CAP) influences the development of rural areas and has redistributive consequences: financial support per head has been slightly higher for regions having lower per capita GDP (European Commission, 2001d). Moreover, the highest degree of subsidisation is recorded for Greece, Alentejo, Ireland, Valle d'Aosta, Wales and the Limousin. Thus the CAP might have helped to maintain inefficient production units and slowed down productivity growth in lagging regions. A reform of the CAP has been agreed by the Council in June 2003, which decouples part of Community support from production and recently measures were announced for sectors not covered by this reform (olive oil, tobacco, hop and cotton) (Box 5.7).

To summarise: it is a whole range of policies that affect the speed of convergence, including most prominently labour and product market policies. Many obstacles to a more rapid convergence can be overcome as the example of Ireland has highlighted. However, deeper integration could contribute to raise agglomeration forces, with some regions gaining in dynamism, while others lose out, although there is little evidence for increased specialisation so far. Policy faces a trade-off between reaping the gains from agglomeration, which would probably maximise overall income, and keeping activity geographically dispersed, which probably leads to a lower overall income, but is part of the welfare function. In the European setting it is thus important that regional policy is able to raise the attractiveness of lagging regions at a low cost to minimise the effects on overall income.

How much would the euro area gain from convergence?

The Community has limited competence in shaping labour market policy but can influence reforms by means of peer pressure through the European Employment Strategy, by formulating annual guidelines which feed into the

© OECD 2004

Box 5.7. Reform of the CAP: small steps in the right direction

Total support as measured by the OECD Total Support Estimate indicator to the agricultural sector is large. It amounted to 1.3 per cent of EU GDP in 2003. Currently part of these transfers boost production and make it necessary to shelter production from foreign competition and to subsidise exports of the food surplus. As it links transfers to production, it has the twofold effect of supporting small less competitive farm units, but also benefiting large and productive farms.

In June 2003, the Council of Agriculture Ministers reached agreement on a reform of the CAP. This reform entails several features: the most important is the introduction of a Single Farm Payment (SFP) as of 2005 (with an option for member states to start with an up to two year transitional period), which will replace most of the existing commodity-specific payments under Common Market Organisations. With the SFP, farmers will receive payments based on historical reference amounts during 2000-02, but de-coupled from production. Countries have the option to keep a given small share of payments linked to current area and animal number. Payment will be conditional on cross-compliance, meaning that the full granting of the SFP and other direct payments will require the respect of criteria on environmental conditions, food safety, animal and plant health, animal welfare standards and the maintenance of land in good agricultural and environmental conditions. More money will be devoted to measures under the Rural Development Regulation (RDR), and the scope of the related instruments will be widened somewhat. Member states can progressively redirect payments under the SFP towards the RDR, but in a limited way.

Overall the recent CAP reform will certainly improve the performance of the EU's agricultural policies. The reform goes in the direction advocated by the OECD reform principles (OECD, 1998). According to OECD (2004), de-coupling should lead to an allocation of resources according to market forces. Expected impacts of the reform include:

- A clear movement from crop land to pasture land with a significant extensification.
- An initial decline in the producer price for cereals.
- A decrease in beef inventories, which leads to lower production at the end of the period and increasing beef prices.
- Limited changes in dairy markets because the production quota remains binding. However, the impact on the type of support and on the welfare for those working in the sector are significant compared to 2002 because they incorporate Agenda 2000 measures as well as those of the 2003 reform.
- Small increases in world prices for crops, except for rice because of lower EU imports as domestic prices decrease.

As a welcome positive effect of this reform, distortions to international trade are reduced. Improvements in income transfer efficiency should also contribute to actually increasing farm incomes. In order to benefit from these positive effects of decoupling, EU member countries would gain most from making maximum use of the scope for converting commodity-linked payments into the new single farm

© OECD 2004

Box 5.7. **Reform of the CAP: small steps in the right direction** (*cont.*)

payment. To achieve this current trade negotiations under the Doha Development Agenda need to be concluded successfully and bring about significant results on all three pillars (export competition, market access and domestic support).

The impact of the reform is limited by a number of features. Support will remain linked to historical entitlements and significant levels of price support will remain in some sectors, although for some products which were not included in the reform package, reform was agreed in April 2004 (tobacco, cotton, hop and olive oil) while the revision in the sugar sector is still ongoing. The rate at which modulation can take place remains small: 5 per cent per annum of direct payments whilst RDR measures currently account for only about 10 per cent of CAP expenditure. In addition, the effectiveness of cross-compliance will depend on how stringent the requirements will be, how well they will be targeted to local requirements and how strictly they are enforced. Finally, the SFP remains linked to farm historical entitlements, including size. Thus most support will continue to benefit larger farms.

To understand the implications of the CAP reform better, the OECD's Directorate for Agriculture and Fisheries undertook simulations (OECD, 2004) to assess the impact of policy changes on land allocation and to evaluate the impact of policy changes on the evolution of regional and international commodity markets. As the reform leaves a large number of options regarding take-up by member states open, two scenarios were designed. There is a "maximum decoupling" scenario, in which all 15 EU countries (the 10 new members of the Union were not considered) select the option that maximizes the amount of the SFP, and a "minimum decoupling" scenario, in which it is assumed that to the extent possible, existing *premia* will be preserved. These two extreme scenarios provide a range that circumscribes the likely impact of the reform. Overall the impact on production and trade should be modest. The largest changes take place in the composition of support to producers as a significant part of expenditure becomes less coupled to production, and less commodity specific (Table 5.A3.8). Positive environmental effects should be significant, through more extensive farming and a movement from crop to pasture land. Welfare also increases, as consumers gain from lower prices.

The overall impact for convergence is yet difficult to assess. The objective is to switch from supporting inefficient production units without desertification of these areas. This is why support is also directed at rural development, such as "green" tourism, but the amount spent on rural development will remain relatively small. Lowering support for production via price support yields consumer gains. At the same time, support towards other rural activities might contribute to maintain economic activity, but it is difficult to evaluate how it will impact on income in these areas. The outcome will also crucially depend on the mobility of labour.

© OECD 2004

National Employment Plans, and are in turn assessed annually by the Council and the Commission in the "Implementation Package". The guidelines cover labour market reforms, including EPL and wage bargaining frameworks – though not explicitly the issue of minimum wages. On the other hand, the Community has wide competencies to influence product markets, particularly through the single market agenda.

The employment gains that could be realised for the whole area if countries' policies converged to the average practice or aligned it to best practice are illustrated in Table 5.9. The policy gap is weighted by the employment share of each country. Thus each cell establishes the contribution of changing policy to the change in the euro area wide employment rate. This exercise suggests that the gains from converging towards best practice would be large.

The OECD has published numerous documents presenting estimates of the impact of structural reforms on aggregate performance. In the following simulations with the OECD's Interlink model it is assumed that policy settings improve and that this leads to convergence of employment rates and productivity performance:

- The first exercise assumes that labour market reforms boost employment in the lagging regions. In particular it is assumed that the eastern German employment rate converges to the western level, the southern Italian converges to the northern rate, while Greece and Spain converge to the euro area average. This would increase employment in the euro area by about 3 percentage points. In the simulation it is assumed that about half of this gain can be achieved by 2010. It is also assumed that the increased labour supply does not only come from higher participation, but that also structural unemployment declines. GDP growth would be 1/3 percentage point higher on average than in the baseline scenario (Figure 5.8. Even assuming supportive monetary policy, with a 100 basis

Table 5.9. **Employment gains from better regulation**[1]

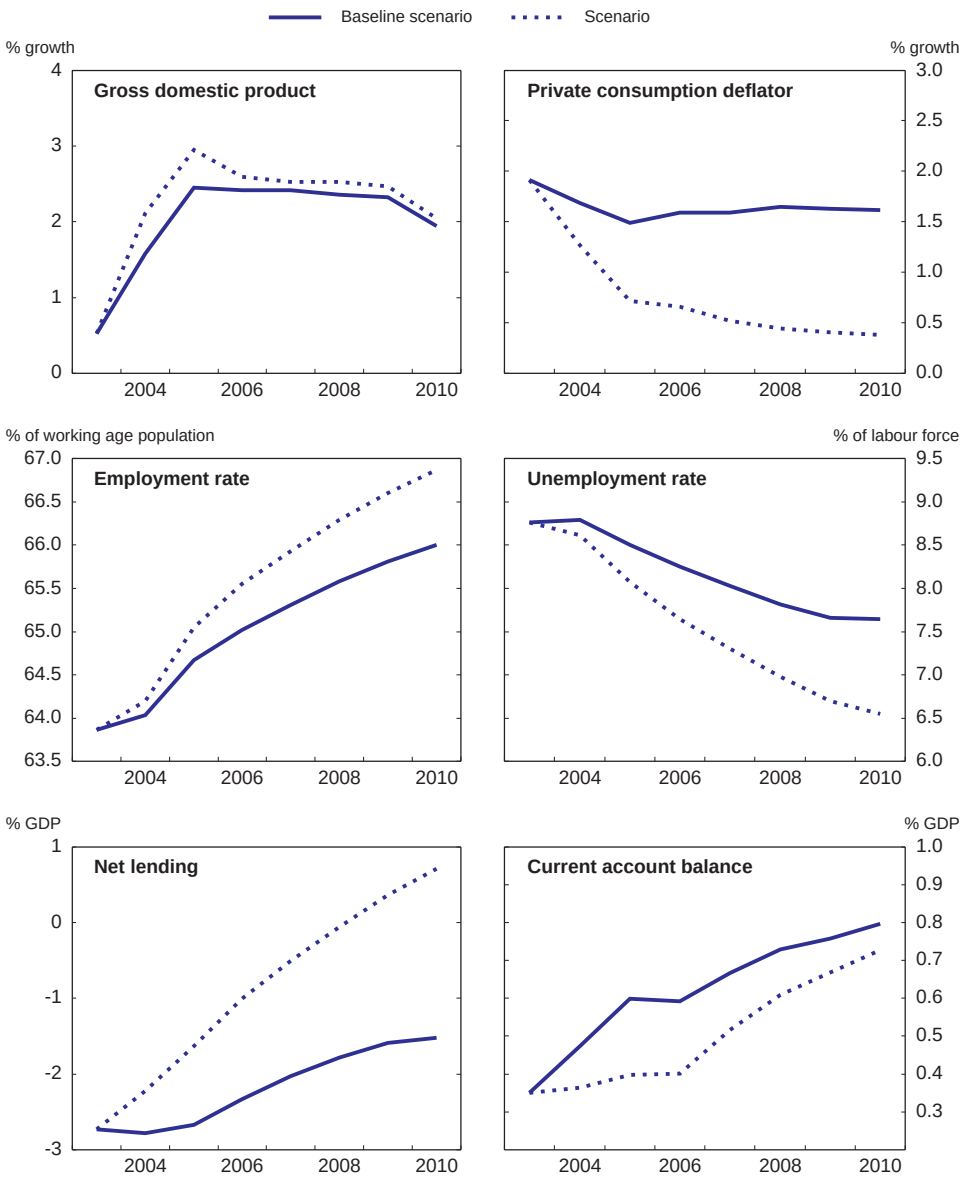
	Public employment rate	Tax wedge	Union density	Unemployment benefits	Employment protection legislation	Product market regulation	Total[2]
To the euro area average	–1.03	–0.21	+2.19	+0.12	+0.75	–0.14	+1.68
To the 3 best euro area performers	–3.69	+0.98	+5.24	+0.64	+4.61	+0.55	+8.32

1. This table uses the results of an equation (presented in Table 13 of Nicoletti *et al.*, 2001) explaining employment rates by indicators of labour and product market regulation. In these calculations, it is assumed that countries' policies converge to the average practice or to the best practice, in terms of regulation, in the euro area. The country-specific outcomes are aggregated using the employment share of each country as weight. Thus each cell presents the contribution of better regulation to the resulting change in the euro area wide employment rate.
2. The Lisbon target for the total employment rate is 70 per cent, whilst the corresponding figure in 2003 was 64.3 per cent.

Source: OECD; Nicoletti *et al.* (2001).

© OECD 2004

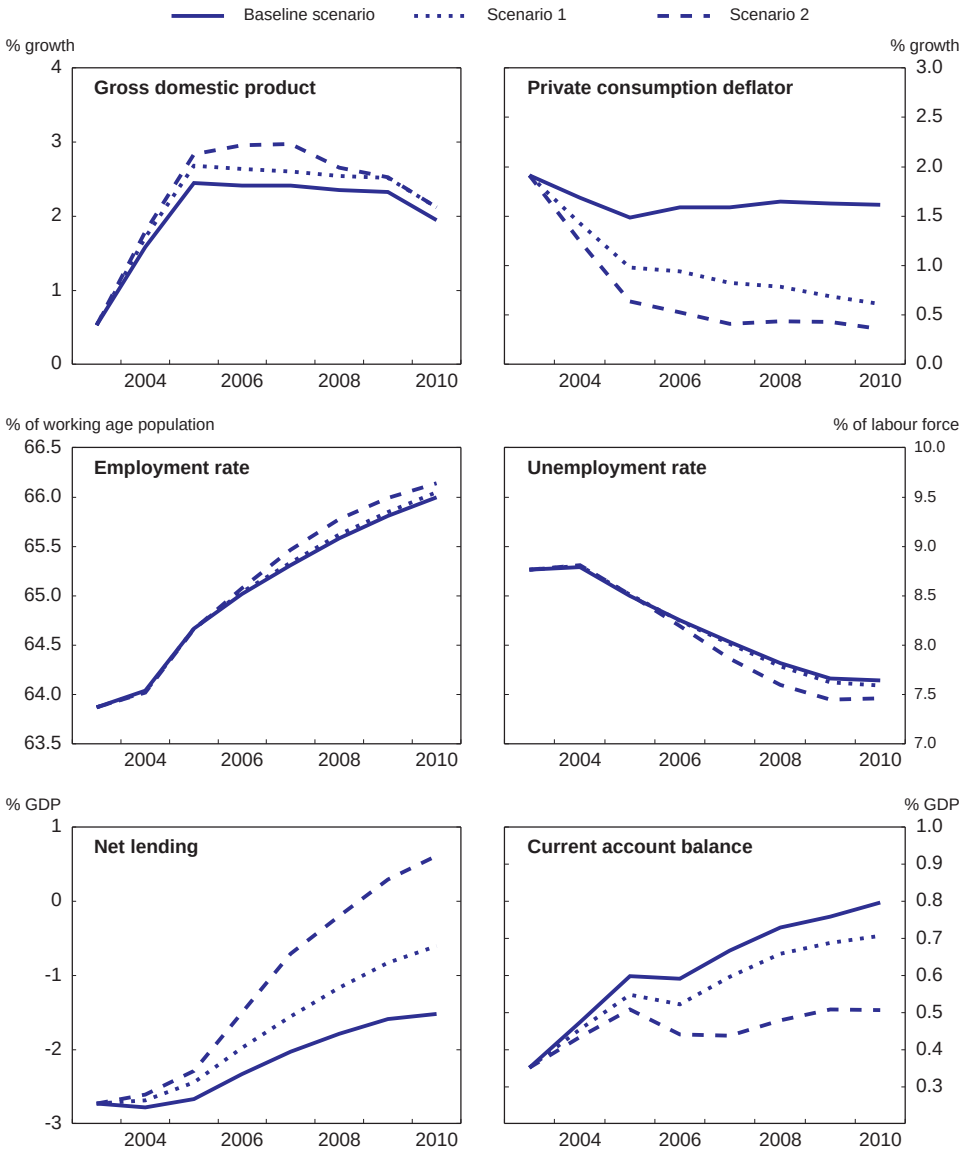
Figure 5.8. **Medium-term effects of converging employment**



Source: OECD.

© OECD 2004

Figure 5.9. **Medium-term effects of converging productivity**[1]



1. Scenario 1: effect of a 1.5 percentage point rise in productivity level with no change in monetary policy; Scenario 2: effect of a 2.5 percentage point rise in productivity level with 120 basis point reduction in real interest rates.

Source: OECD.

© OECD 2004

point reduction in real interest rates, inflation is considerably lower, because of the decline in structural unemployment. In addition, government balances would move into surplus after some years.

- The second exercise evaluates the gains for the area arising from lagging countries catching-up in terms of multifactor productivity (MFP). Such gains would flow from product and labour market reforms entailing deeper integration, better framework conditions allowing to fully reap the benefits from innovation and better education. Two scenarios are simulated. In the first one, only those countries that benefit from cohesion funds and lag behind in terms of MFP converge to the area's average, raising the whole area's MFP level by 1.5 percentage points. In the second scenario, a bigger boost is given, assuming that also the other countries would start to perform better, but still not as well as the best performers (Ireland and Finland). A boost to the area's MFP level by 2.5 percentage points is simulated. In the simulations, stronger productivity growth improves activity, whilst triggering lower inflation (Figure 5.9). Unemployment decreases, but this is accompanied by lower inflation, which allows a more accommodative monetary stance. At the same time, the budget deficit would shrink. Stronger growth and lower interest payments help to swing the budget into balance for the whole area.

The simulations thus suggest a strong impact of convergence on overall economic performance (Table 5.10). This exercise shows that reforms which enhance productivity and employment would allow an overall performance that comes close to the aspirations of the Lisbon strategy. At the same time, fiscal balances would improve a lot, so that the Stability and Growth Pact commitments would be met and the tax burden could be reduced.

Table 5.10. **Summary results of the medium-term effects of structural reforms**
Deviations from baseline, percentage points, average 2003-10

	Unit	Rise in productivity level		1.7 percentage point decline in the NAIRU
		1.5 rise with unchanged monetary policy	2.5 rise with 120 basis point reduction in real interest rates	100 basis point reduction in real interest rates
Gross domestic product	Percentage growth	0.2	0.3	0.3
Private consumption deflator	Percentage growth	–0.7	–1.0	–1.0
Unemployment rate	Percentage	0.0	–0.1	–0.7
Employment rate	Percentage	0.0	0.1	0.6
Government net lending	Percentage of GDP	0.5	1.2	1.5
Current account balance	Percentage of GDP	–0.1	–0.2	–0.1

Source: OECD.

© OECD 2004

Notes

1. This chapter will not touch upon the new EU member countries, because the Survey's focus is on the performance of the euro area economy. However, Box 5.2 will provide a brief overview of the major policy issues.
2. Prior to 1989, EU cohesion policy was limited in financial terms (Annex 5.A2).
3. These comparisons exclude Luxembourg for the euro area, and the district of Columbia for the United States, as they are both "outliers". Their GDP per capita is more than double the corresponding area average.
4. Indeed, the region of Dublin has moved from about half the area's average income per head to nearly 40 per cent above, and the unemployment rate has fallen dramatically to 3.4 per cent in 2001, while it stood at more than 16 per cent in 1988.
5. This calculation assumes that the euro average grows at 2 per cent per annum. For a country which has an initial gap of 25 per cent with respect to the euro area average, growth is assumed to be 3 or 5 per cent.
6. These results should be interpreted with caution, as they depend on the level of disaggregation.
7. Other often reported barriers concern the wide differences in tax and excise duties (European Commission, 2000b).
8. For example, the European Commission estimates that the productivity of EU service providers grew at 0.6 per cent between 1996 and 2000, compared with productivity gains in the United States of 1.5 per cent over the same period (European Commission, 2004f).
9. European Commission, (2003), Proposal for a Directive on Services in the Internal Market, *http://europa.eu.int/eur-lex/en/com/pdf/*2004/*com*2004_0002*en*03.*pdf*.
10. For non-hospital services, patients must be reimbursed by their home member state for health care elsewhere in the Union at the tariff that the services concerned would normally be reimbursed in the home member state. Prior authorisation is not required. For hospital care in another member state, prior authorisation may be required but cannot be refused if the treatment required would be reimbursable in the patient's home member state but cannot be obtained there within a time limit which is medically justifiable.
11. This includes a proposal for a Directive on the certification of locomotive and train drivers carrying passengers and goods in the Community, a proposal for a Directive on opening up the market for international rail passenger transport services by January 2010, a proposal for a Regulation on international rail passengers' rights and a proposal for a Regulation on the quality of rail freight services (European Commission, 2004g).

© OECD 2004

12. Ireland's level is not very high, but displays the fastest growth rate of all OECD countries since 1992.
13. Of course primary and secondary education are also key for improving economic performance, by providing a sound general human capital base (OECD, 2001b).
14. *http://europa.eu.int/comm/lisbon_strategy/reports/index_en.html*.
15. *http://europa.eu.int/comm/research/era/index_en.html* and *www.cordis.lu/era/concept.htm*.
16. *http://europa.eu.int/comm/education/policies/educ/higher/higher_en.html*.
17. Portugal is not included in this table as estimates are available for men and women together only. These estimates, which show very high private returns to education, can be found in Box 9 of the OECD Survey of Portugal (OECD, 2003f).
18. Thus, the "Doing Business" database published by the World Bank shows that the costs of starting a business are still much higher among euro area countries than in the United Kingdom or the United States for example. *http://rru.worldbank.org/DoingBusiness/*.
19. A survey realised by Eurostat shows that "innovation costs too high" and "lack of appropriate sources of finance" are the two main barriers to innovation in the European Union (Eurostat, 2004).
20. 46 per cent of the population does not intend to launch a business because of the risk of failure, while the share of the population only amounts to 25 per cent in the United States.
21. Portugal has made significant progress in these directions with the new bankruptcy law approved in December 2003.
22. Depending on national circumstances, R&D tax incentives can be an effective instrument for inducing a certain degree of private sector research.
23. One example is the European Hydrogen and Fuel Cell Technology Platform which was formally launched in January 2004. Its goal is to facilitate and accelerate the development and deployment of European hydrogen and fuel cell based energy systems.
24. The Commission does the first screening for eligibility of the proposal, and then usually each proposal is examined by three evaluators, selected from academia, industry, other research organisations and the research user community; the final selection of projects is done by the Commission, following accept/reject consultations of the Programme Committees (composed of member state representatives). Community research is evaluated through three separate mechanisms. Its implementation is examined through an annual monitoring exercise carried out by independent experts. Second a five-year assessment is carried out by independent experts on the implementation and achievements of Community research during the five preceding years and before the submission of a proposal for a new Framework programme. Third, evaluations are implemented by the programme management services involved. In addition, impact studies are conducted at national level.
25. Regions that perform badly (well) perform marginally worse (better) today. Moreover, regions in between tend to move towards one or the other club (Puga and Overman, 1999). Hence the euro area labour market appears characterised by increasing polarisation.
26. A recent study (Grossen, 2000) focusing on Switzerland that controls for cultural and linguistic links with the neighbouring countries shows that three cross-border workers out of five were employed in an industry characterised as "structurally strong" and where the level of wages was relatively high.

© OECD 2004

27. By comparison, although these data are not strictly comparable, in the United States, in 2000, about 8.4 per cent of the population (aged 5 and over) was living in a different state than in 1995 (OECD Territorial Database, 2004).
28. In a survey conducted by Pricewaterhouse Coopers, businesses identified the lack of an integrated system of employment protection legislation, differing tax and benefit systems, language skills and the need to provide employment for the spouse as the top barriers to mobility.
29. Spain and Italy have the highest share of owner-occupiers, at 86 and 78 per cent respectively. In Germany, privately-owned houses account for 47 per cent of all accommodation (Euroconstruct, 2001).
30. For example, there are generally no sanctions for refusing work on the ground that it involves long commuting. Exceptions are that work is considered suitable in Germany when it involves up to three hours per day of travel-to-work time, and up to four hours in Belgium. In France and Germany, relocation can be refused if family life would be disturbed, in Spain if no suitable accommodation can be found. In Finland, a job involving relocation can be suitable for such a placement only if it cannot be filled locally (OECD, 2000a).
31. These figures refer to an average over 60 months of unemployment net replacement ratios for four family types at two earnings levels: 100 per cent of the APW and 2/3 of the APW earnings levels.
32. The OECD *Employment Outlook* (OECD, 2003e) suggests that the substitution effect is far from negligible. For example, in Australia, declining access to alternative survivor's benefits explains recent increases in disability benefit recipiency. On the other hand, tighter eligibility criteria for disability benefits seem to results in somewhat higher unemployment levels.
33. Directive of the European Parliament and of the Council on the activities and supervision of institutions for occupational retirement provision, 2003/41/EC of 3 June 2003.
34. See press release IP/03/179 of 5 February 2003, IP/03/965 of 9 July 2003 and IP/03/1756 of 17 December 2003 on *http://europa.eu.int/rapid/start/cgi/guesten.ksh*.
35. There is an exception regarding Luxembourg. As the share of migrant, cross-border and seasonal workers is extremely high, Luxembourg was granted a two year transitional period. It can also negotiate separate bilateral deals with Germany, France and Belgium.
36. Estimates by the European Commission for the period 1995-2000 suggest that regional wages decrease by up to half a percentage point when local unemployment rises by 1 percentage point.

© OECD 2004

Bibliography

Baele, A. *et al.* (2004), "Measuring Financial Integration in the Euro Area", *European Central Bank Occasional Paper*, No. 14.

Barry, F. (2003), "Economic Integration and Convergence Processes in the EU Cohesion Countries", *Journal of Common Market Studies*, Vol. 41, No. 5.

Bartik, T.J. (2002), "Evaluating the Impacts of Local Economic Development Policies on Local Economic Outcomes: What Has Been Done and What is Doable?", *Upjohn Institute Staff Working Paper*, No. 03-89.

Bayoumi, T. and E. Prasad (1997), "Currency Unions, Economic Fluctuations and Adjustment: Some New Empirical Evidence", IMF *Staff Papers*, 44.

Berger, A. and D. Smith (2003), "Global Integration in the Banking Industry", *Federal Reserve Bulletin*, 89 (November), *www.federalreserve.gov/pubs/bulletin/*2003/03*bulletin.htm#nov*.

Beugelsdijk, M. and S.C.W. Eijffinger (2003), "The Effectiveness of Structural Policy in the European Union: An Empirical Analysis for the EU-15 during the Period 1995-2001,"CEPR *Discussion Papers*, No. 3879, *http://ideas.repec.org/s/cpr/ceprdp.html*.

Blanchard, O. and J. Wolfers (2000), "Shocks and Institutions and the Rise of European Unemployment", MIT, September 2003, *mimeo*.

Boeri, T. *et al.* (2003), "Adaptability of Labour Markets: a Tentative Definition and a Synthetic Indicator", Fondazione Rodolfo Debenedetti, Milan, June, *www.frdb.org/~pietrogaribaldi/policy/ada*2002*.pdf*.

Boldrin, M. and F. Canova (2001), "Inequality and Convergence in Europe's Regions: Reconsidering European Regional Policies", *Economic Policy*, No. 32.

Bradley, J., Morgenroth, E. and G. Untiedt (2003), "Macro Regional Evaluation of the Structural Funds Using the HERMIN Modelling Framework", ESRI Working Papers No. 152, Dublin, September, *http://europa.eu.int/comm/regional_policy/sources/docgener/evaluation/doc/obj*1*/macro_modelling.pdf*.

Braunerhjelm, P. *et al.* (2000), *Integration and the Regions of Europe: How the Right Policies Can Prevent Polarization*, Monitoring European Integration 10, CEPR, London, *www.cepr.org/pubs/books/cepr/booklist.asp?cvno=*P118.

Buti, M. and M. Nava (2003), "Towards a European Budgetary System", European University Institute Working Paper RSC 2003/08, *http://cadmus.iue.it/dspace/retrieve/*1641*/03_08.pdf*.

Cappelen, A. *et al.* (2003), "The Impact of EU Regional Support on Growth and Convergence in the European Union", *Journal of Common Market Studies*, Vol. 41, No. 4.

Carone, G. *et al.* (2003), "Indicators of Unemployment and Low-Wage Traps (Marginal Effective Tax Rates on Labour)", *European Economy Economic Papers*, No.197, *http://europa.eu.int/comm/economy_finance/publications/economic_papers/*2003*/ecp*197*en.pdf*.

© OECD 2004

CESIFO (Center for Economic Studies of the Ifo Institute) (2004), *Report on the European Economy*, Ifo Institute for Economic Research, Munich, Germany.

Combes, P-P. and H. Overman (2003), "The Spatial Distribution of Economic Activities in the EU", CEPR *Discussion Paper*, No. 3999. *www.cepr.org/pubs/dps/*DP3999.*asp*.

Crespo-Cuaresma, J., M.A. Dimitz and D. Ritzberger-Grünwald (2002), "Growth, Convergence and EU Membership", *Oesterreichische Nationalbank Working Paper*, No. 62, Vienna, *www*2.*oenb.at/workpaper/wp*62.*pdf*.

Daveri, F. (2002), "The New Economy in Europe", *Oxford Review of Economic Policy*, Vol. 18, No. 3.

Davis, S.J., S.P. Loungani and R. Mahidhara (1997), "Regional Labor Fluctuations: Oil Shocks, Military Spending and Other Driving Forces,"*International Finance Discussion Paper*, No. 578, Board of Governors of the Federal Reserve System, *www.federalreserve.gov/pubs/ifdp/*1997/578/*ifdp*578.*pdf*.

Davies, S. and M. Hallett, (2001), "Policy Responses to Regional Unemployment: Lessons from Germany, Spain and Italy", *European Economy Economic Papers*, No. 161, *http://europa.eu.int/comm/economy_finance/publications/economic_papers/*2001/*ecp*161*en.pdf*.

Elhorst, J.P. (2003), "The Mystery of Regional Unemployment Differentials: Theoretical and Empirical Explanations", *Journal of Economic Surveys*, 17 (5).

Euroconstruct (2001), *The Prospective Construction in Europe*, 2001-2003, The Copenhagen Institute for Future Studies, June, Copenhagen, *www.euroconstruct.org/*.

European Commission (2000a), *Public Finances in* EMU – 2000, European Economy – Reports and Studies No. 3, *http://europa.eu.int/comm/economy_finance/publications/european_economy/reportsandstudies*0300_*en.htm*.

European Commission (2000b), *Internal Market Scoreboard*, No. 7, November.

European Commission (2001a), *Internal Market Scoreboard*, November.

European Commission (2001b), *Employment in Europe. Recent Trends and Prospects*, *http://europa.eu.int/comm/employment_social/publications/*2001/*ke*3801762_*en.html*.

European Commission (2001c), *High Level Task Force on Skills and Mobility*, December, *http://europa.eu.int/comm/employment_social/news/*2001/*dec/taskforce*2001_*en.pdf*.

European Commission (2001d), "Study on the Impact of Community Agricultural Policies on Economic and Social Cohesion", In preparation of the 2nd Cohesion Report, *http://europa.eu.int/comm/regional_policy/sources/docgener/studies/pac_en.htm*.

European Commission (2002a), *Employment in Europe, Recent Trends and Prospects*, *http://europa.eu.int/comm/employment_social/news/*2002/*sep/employment_in_europe*2002.*pdf*.

European Commission (2002b), *Internal Market Scoreboard*, No. 10, May, *http://europa.eu.int/comm/internal_market/score/docs/score*10/*score*10_*en.pdf*.

European Commission (2002c), *Business Demography in Europe*, Observatory of European SMEs 2002, No. 5, *http://europa.eu.int/comm/enterprise/enterprise_policy/analysis/doc/smes_observatory_2002_report*5_*en.pdf*.

European Commission (2002d), "The Attitude towards Risk and Entrepreneurship", Flash Eurobarometer 134, *http://europa.eu.int/comm/enterprise/enterprise_policy/survey/eurobarometer*83.*htm*.

European Commission (2002e), "Free Movement of Workers – Achieving the Full Benefits and Potential", Communication from the European Commission, COM(2002) 694 final, Brussels.

© OECD 2004

European Commission (2003a), European Innovation Scoreboard 2003, *Commission Staff Working Paper*, SEC(2003) 1255, *http://trendchart.cordis.lu/Reports/Documents/SEC_2003_1255_1_EN_DOCUMENTDETRAVAIL.pdf*.

European Commission (2003b), *Investing in Research: An Action Plan for Europe*, COM(2003) 226 final/2.

European Commission (2003c), Communication from the Commission to the Council and the European Parliament on the Implementation of the Risk Capital Action Plan (RCAP), COM(2003) 654 final.

European Commission (2003d), "Best Project on Restructuring, Bankruptcy and a Fresh Start", Final Report of the Expert Group, September 2003, *http://europa.eu.int/comm/enterprise/entrepreneurship/support_measures/failure_bankruptcy/bankruptcy.htm*.

European Commission (2004a), *A Report on the Functioning of Public Procurement Markets in the EU: Benefits from the Application of EU Directives and Challenges for the Future*, *http://europa.eu.int/comm/internal_market/en/publproc/general/public-proc-market-final-report_en.pdf*.

European Commission (2004b), "Extended Impact Assessment of Proposal for a Directive on the Internal Market", *Commission Staff Working Paper*, SEC(2004)21, Brussels 2004, *http://europa.eu.int/comm/internal_market/en/services/services/docs/2004-impact-assessment_en.pdf*.

European Commission (2004c), "Financial Integration Monitor 2004", Commission Staff Working Document, SEC(2004)559.

European Commission (2004d), "Financial Services: Turning the Corner", 10th Report on the FSAP, June, *http://europa.eu.int/comm/internal_market/en/finances/actionplan/progress10_en.pdf*.

European Commission (2004e), *Report on the Implementation of the Commission's Action Plan for Skills and Mobility*, COM(2004)66 Final, *http://europa.eu.int/comm/employment_social/skills_mobility/doc/com_04_66_fin_en.pdf*.

European Commission (2004f), *Report on the Implementation of the Internal Market Strategy* (2003-2006), COM(2004)22 final, *http://europa.eu.int/smartapi/cgi/sga_doc?smartapi!celexapi!prod!CELEXnumdoc&lg=en&numdoc=52004DC0022&model=guichett*.

European Commission (2004g), "Further Integration of the European Rail System: Third Railway Package", COM(2004)140 final, *http://europa.eu.int/comm/transport/rail/package2003/doc/com140-en.pdf*.

Eurostat (2004), "Innovation Output and Barriers to Innovation", by A. Larsson in *Statistics in Focus, Science and Technology*, Theme 9-1/2004.

Fitzpatrick Associates Economic Consultants (2003), *Ex-Post Evaluation of Objective 1*, 1994-1999, National Report, Ireland, *http://europa.eu.int/comm/regional_policy/sources/docgener/evaluation/doc/obj1/ireland.pdf*.

de la Fuente (2002), "The Effect of Structural Fund Spending on the Spanish Regions: an Assessment of the 1994-99 Objective 1 CSF", CEPR Discussion Paper, No. 3673, London.

Galati, G. and K. Tsatsaronis (2003), "The Impact of the Euro on Europe's Financial Markets", *Financial Markets, Institutions and Instruments*, No. 12.

Gleave, S.D. (2004), "EU Passenger Rail Liberalisation: Extended Impact Assessment", Report.

Grossen, D. (2000), "Les leçons de l'expérience suisse dans le domaine du développement économique régional et du marché du travail frontalier ", in OECD (2003), *Report on International Migration*, Paris.

HMT (Her Majesty's Treasury) (2003), Lambert Review of Business University Collaboration, Final Report.

© OECD 2004

IMF (International Monetary Fund) (2003a), 2003 *Article* IV *Conclusions on Italy*, Staff Report, November, *www.imf.org/external/pubs/ft/scr/*2003/*cr*03351.*pdf*.

IMF (2003b), "Regional Convergence in Italy: 1960-2002", Country Report No. 03/352, Italy-Selected Issues, *www.imf.org/external/pubs/ft/scr/*2003/*cr*03352.*pdf*.

Joumard, I. and P.M. Kongsrud (2003), "Fiscal Relations across Government Levels", OECD *Economics Department Working Papers*, No. 375, *www.oecd.org*.

Kamada K., N. Okuno and R. Futagami (1998), "Decisions on Regional Allocation of Public Investment: the Case of Japan", *Applied Economic Letters*, Vol. 5.

Krugman, P. (1991), *Geography and Trade*, MIT Press, Cambridge, Massachusetts.

Martin, P. and G.I.P. Ottaviano (1999), "Growing Locations: Industry Location in a Model of Endogenous Growth", *European Economic Review*, No. 43(2).

McAndrews, J. and C. Stefanadis (2002), "The Consolidation of European Stock Exchanges", Federal Reserve Bank of New York, *Current Issues in Economics and Finance* (8), June.

Midelfart-Knarvik, K.H. and H.G. Overman (2002), "Delocation and European Integration – Is Structural Spending Justified?", *Economic Policy*, October.

MISSOC (Mutual Information System on Social Protection in the Member States of the European Union) (2003), *http://europa.eu.int/comm/employment_social/missoc/*2003, accessed March 2004.

MKW GmbH (2001), *Scientific Report on Mobility of Cross-Border Workers within the* EEA, November.

Nickell, S., L. Nunziata and W. Ochel (2002), "Unemployment in the OECD since the 1960s: What Do We Know?", Bank of England, *www.nuff.ox.ac.uk/users/nunziata/publications_files/nicknun*02.*pdf*, accessed March 2004.

Nicoletti, G. *et al.* (2001), "Product and Labour Markets Interactions in OECD Countries", OECD *Economics Department Working Paper*, No. 312, *www.oecd.org*.

Nicoletti, G. *et al.* (2003), "Policies and International Integration: Influences on Trade and Foreign Direct Investment", OECD *Economics Department Working Papers*, No. 359, *www.oecd.org*.

van den Noord, P. (2003), "Tax Incentives and House Price Volatility in the Euro Area: Theory and Evidence", OECD *Economics Department Working Papers*, No. 356. *www.oecd.org*.

OECD (1998), *Agriculture in a Changing World: Which Policies for Tomorrow*? Press Communiqué, Meeting of the OECD Committee for Agriculture at Ministerial Level, *www1.oecd.org/agr/ministerial/commune.htm*.

OECD (2000a), OECD *Employment Outlook*, OECD, Paris.

OECD (2000b), OECD *Economic Surveys*: *Italy*, Vol. 2000/10, OECD, Paris.

OECD (2001a), *Knowledge and Skills for Life*, First Results from PISA 2000, OECD, Paris.

OECD (2001b), *Cities and Regions in the New Learning Economy*, OECD, Paris.

OECD (2002a), *Benefits and Wages*: OECD *Indicators*, OECD, Paris.

OECD (2002b), *Territorial Review of Switzerland*, OECD, Paris.

OECD (2002c), OECD *Employment Outlook*, OECD, Paris.

OECD (2003a), OECD *Economic Surveys*: *Euro Area*, Vol. 2003/12, OECD, Paris.

OECD (2003b), OECD *Science Technology and Industry Scoreboard*, OECD, Paris.

OECD (2003c), *Report on International Migration*, OECD, Paris.

OECD (2003d), OECD *Economic Surveys*: *Spain*, Vol. 2003/7, OECD, Paris.

OECD (2003e), OECD *Employment Outlook*, OECD, Paris.

© OECD 2004

OECD (2003f), OECD *Economic Surveys: Portugal*, Vol. 2003/2, OECD, Paris.

OECD (2004), *Analysis of the* 2003 CAP *Reform*, OECD, Paris.

van Ommeren, J. and M. van Leuvensteijn (2003), "New Evidence of the Effect of Transaction Costs on Residential Mobility,"CPB *Discussion Paper*, No. 18, May 2003 *www.cpb.nl/eng/pub/discussie/*18*/disc*18*.pdf*.

Pricewaterhouse Coopers (2002), "Managing Mobility Matters – a European Perspective", *www.pwc.com*.

Puga, D. (2001), "European Regional Policies in Light of Recent Location Theories", CEPR-*Discussion Paper*, No. 2767, *www.cepr.org/pubs/dps/*DP2767*.asp*.

Puga, D. and H.G. Overman (1999), "Unemployment Clusters across European Regions and Countries", CEPR *Discussion Paper*, No. 2255.

Puga, D. and A.J. Venables (1996), "The Spread of Industry: Spatial Agglomeration in Economic Development", *Journal of the Japanese and International Economics*, No. 43 (3-4).

Puga D. and A.J. Venables (1999), "Agglomeration and Economic Development: Import Substitution versus Trade Liberalisation", *Economic Journal*, No. 109(455).

Santos, J. and K. Tsatsaronis (2003), "The Costs of Barriers to Entry: Evidence from the Market for Corporate Bond Underwriting", Federal Reserve Bank of New York and Bank for International Settlements, *Working Paper*, No. 134, *www.bis.org/publ/work*134*.pdf*.

Sapir, J. *et al.* (2003), "An Agenda for a Growing Europe – Making the EU Economic System Deliver", Report of an Independent High-Level Study Group established on the initiative of the President of the European Commission, Brussels, July.

Taffin, C. and J. Hardt (2003), "L'intégration financière des marchés hypothécaires européens ", *Observateur de l'immobilier*, forthcoming.

Traistaru, J., P. Nijkamp and S. Longhi (2002), "Regional Specialization and Concentration of Industrial Activity in Accession Countries", ZEI *Working Paper*, B16/2002.

Wurzel, E. (2001), "The Economic Integration of Germany's New Länder", OECD *Economics Department Working Papers*, No. 307, *www.oecd.org*.

Yoo, K-W. (2003), "Corporate Taxation of Foreign Direct Investment Income 1991-2001", OECD *Economics Department Working Papers*, No. 365, *www.oecd.org*.

Yoshino, N. and E. Sakakibara (2002), "The Current State of the Japanese Economy and Remedies", *Asian Economic Papers*, Vol. 1, No. 2.

© OECD 2004

Annex 5.A1
Growth, integration and convergence

This annex reviews the hypotheses underlying growth theory that help explain the economic forces that lead either to convergence or divergence and thus shape the economic geography of an area. Economic geography outcomes depend on the shape of the production function, the mobility of input factors, and the diffusion of technology. Theory does not predict a single outcome, but many constellations are possible.

Economists have generally approached the study of growth with a production function in mind. From this perspective, the growth of output depends on the rate of accumulation of physical and human capital, and the speed of technical progress. In the original Solow (1956) growth model, the marginal product of capital is decreasing. This ensures that it is not optimal for an economy to accumulate capital without bounds, as each additional unit of capital produces a decreasing number of output units, if the quantity of other inputs remains unchanged. Thus in the long run, this economy is growing at a growth rate which is the sum of the growth rates of technical progress and labour input.

If two economies with different income and technology levels exist the question arises on whether their per-capita income levels will converge. One economy is the "leader", being closer to the technology frontier, and the other economy is the "follower", being less advanced technologically and with lower income per head. In this framework, decreasing returns to capital, together with free movement of capital and labour imply convergence. This is because investment is realised where returns to capital are higher, which is in the country furthest from the technology frontier, which thus has a higher rate of capital accumulation and "catches up" with the leader. Assuming perfect mobility of labour and technology diffusion across borders ensures that the growth rate of the capital stock per efficiency unit converges towards the same value, and that the steady state production level is similar in equilibrium, once both economies have converged. In equilibrium, factor prices are equal to the marginal product of capital and labour respectively, and themselves equal across countries.

This convergence scenario relies on specific assumptions about factors which can be classified under three main headings: fundamentals, technology parameters and factor mobility. The fundamentals refer to the input factors which are the stock of human and physical capital, as well as land. The technology parameters reflect increasing, constant, or decreasing returns to capital and the diffusion of technologies. The assumptions underpinning the neoclassical model are strong and unlikely to hold in reality: factor mobility is not perfect and returns to capital are not necessarily decreasing (Romer, 1986; Lucas, 1988; Grossman and Helpman, 1991). In the euro area, capital mobility is high, but labour mobility is low. Returns to capital may increase when the costs of additional innovations fall with scientific or production experience, which is the case in most innovation-intensive industries. As initial factor endowments vary across the area, and the distance to the technology frontier is also different across countries, convergence is unlikely to be fully realized. The next para-

© OECD 2004

graphs review the potential implication for the economic geography of the euro area of departures from different assumptions.

Different technology parameters

There are two channels through which technology parameters may influence convergence: through the returns to capital, and the capability of countries to absorb foreign technologies and adapt them to their own needs. Under increasing returns to capital, convergence will not happen. Under the hypothesis of increasing returns to capital, each additional unit of capital allows the production of additional units at decreasing cost, so that the rate of return on investment increases with the stock of capital. The system displays "explosive" behaviour. As the follower starts with an initially lower capital stock, increasing returns to capital imply that the initial advantage of the leader country grows further over time. Hence, the two countries (regions) diverge. However, such a process will be reversed when agglomeration costs, in the form of congestion, become greater than agglomeration benefits in the leader area, acting thereafter as a centrifugal force, and inducing relocation of firms towards the follower region.

A mitigating factor is technology diffusion. Some authors have pointed to the international public goods properties of technical knowledge that tends to favour less advanced countries, provided they have the capability to absorb foreign technologies (Abramowitz, 1986 and 1989). With technology diffusion, the technological distance between the two countries may stabilize at a point at which the advantage derived from the possibility of imitation is just sufficient to offset the lower R&D investment of the follower. Hence, the divergence effect arising from increasing returns to capital is mitigated, but the gap is not closed, so that the outcome is not one of full convergence, but rather of conditional convergence.

Factor mobility

The extent of labour and capital mobility affects economic geography. When both capital and labour are immobile, each country specializes according to comparative advantage and reaches its long-term steady growth path at its own speed. Trade leads to factor price equalization, but endowments could differ.

In reality, capital is mobile, but labour rather immobile and capital flows where returns are highest. Hence, investors exploit opportunities by changing location. In the long-run, countries will show differences in human capital, which prevents full convergence as it is immobile. Thus, there is conditional convergence: the steady state growth path depends on the stock of human capital. Capital returns converge, but wages reflect the local marginal product of labour. Thus, unless the labour force is similar in the leader and follower countries, there is no factor price equalization across borders. It is therefore important that wages be flexible: if the leader and the follower are two regions of the same country, where wage setting is centralized, and the national wage level is set too high with respect to the marginal product of labour in the follower region, then adjustment will take place through unemployment.

Labour mobility is hampered by migration costs, but should be heightened by wage differentials. Labour migration is positively related to the income differential between the leader and follower country, and negatively related to the costs of migrating, which include the costs of moving, leaving families, learning a different language, understanding another culture, etc. Migration costs are uneven across workers. Thus, if the wage differential between the leader and follower country is greater than the costs of moving, the labour force from the follower country progressively migrates to the leader country. As the labour supply in the

© OECD 2004

leader country increases, and that in the follower country decreases, wages tend to converge to the point where the wage of the marginal migrant to the leader country is just equal to the wage of the next migrant from the follower country topped up by the migration costs. Then migration ceases.[1] Thus, overall, the long-run equilibrium is that of convergence, conditional on initial capital endowments, and factor price equalization up to a constant which is the cost of migrating.

Concentration, dispersion or polarisation?

Of course, European integration is shaped by a combination of all these forces. The main text shows that capital is fairly mobile, while labour is much less so especially for low skilled workers. Some industries display decreasing returns to capital, while others are characterized by increasing returns to scale. In addition, initial endowments in physical and human capital vary considerably across the area. Following Braunerhjelm *et al.* (2000), this section classifies different economic geography outcomes (Table 5.A1.1).

Table 5.A1.1. **Synoptic table on growth and integration outcomes**
Growth and integration outcome under varying assumptions

	Concentration	Dispersion	Polarisation
Returns to capital	Increasing	Increasing, decreasing or constant	Increasing, decreasing or constant
Labour mobility	High	Low	Very low; high-skilled only
Long-run equilibrium	Convergence	Conditional convergence	Divergence
Factor price equilibrium	Equalization	Segmentation, initial disparities maintained	Divergence, initial disparities worsen
Examples	Ireland	France, Spain	Northern and southern Italy

Source: OECD.

Dispersion will take place in the presence of uneven agglomeration forces, high mobility of capital and low mobility of labour. Uneven agglomeration forces arise because of the co-existence of industries with decreasing and increasing returns to scale. Depending on the relative endowments and the type of industry, there is relocation of some firms. In particular, firms with increasing returns to scale locate where innovation is already developed and a highly-skilled workforce present. This, in turn, generates migration among the higher-skilled, who are the most mobile part of the population. Industries with decreasing returns to scale locate according to comparative advantage. Less mobile medium and lower skilled workers benefit from the location dispersion of those firms. Meanwhile, wages of the highly-skilled tend to equalize, whilst wages of the less skilled will differ. When local reservation wages are higher than the local labour market conditions warrant, unemployment will be high and persistent. Overall, the distribution of income and economic activity is dispersed (Gianetti, 2002).

Concentration is the outcome when agglomeration forces dominate and labour is mobile. Strong agglomeration forces result from the dominating presence of firms with increasing returns to capital and labour mobility. As firms relocate towards industrial poles,

© OECD 2004

and the labour force follows, both the supply of those firms and demand rise, thus reinforcing the initial agglomeration forces. This process can carry on until rising congestion costs and wages start reversing the direction of those forces. Mobility leads to wage equalization. Geographically, this implies polarization of activities in a first step, with wages set at different levels due to differences in the marginal product of labour. Then congestion and equalization of wages act as dispersion forces. Hence, the ultimate outcome is convergence, with factor price equalization, but a strong geographic concentration of activity (Krugman, 1991; Venables, 1996; Puga, 1999).

Polarization occurs if labour remains immobile, especially low-skilled labour, and agglomeration forces are strong because of the dominating presence of industries with increasing returns to scale. In this case, integration pushes firms to relocate and agglomerate. As before, this process is non-monotonic and some regions (countries) concentrate in industries with increasing returns to scale. They also attract the mobile highly-skilled labour force. Other industries with constant or decreasing returns to scale locate in areas where the required labour force skills are more mixed. This could lead to a centre/periphery outcome, where high-skill intensive industries locate in the core, and peripheral regions are left with lower-skill industries which depend more on the regional endowment (*e.g.* tourism). Factor prices remain different, as the product and labour markets are segmented. Divergence in income as well as economic activity is the likely outcome.

Empirical evidence

Combes and Overman (2003) provide an extensive review of empirical results on the spatial distribution of economic activity in the European Union. The papers they review provide weak evidence in favour of slow specialization across the euro area over the past 30 years. There is some evidence that the creation of the single market had an impact on integration (European Commission, 2002). However, most papers cover samples too short to capture changes that would be induced by the introduction of the euro.

In a comprehensive analysis, Midelfart-Knarvik *et al.* (2002) conclude that overall a process of specialization and concentration is at work, albeit very slowly. Using data for 13 EU countries, 36 industries and over the period 1970-97, they identify three groups of countries: big core countries (France, Germany and the United Kingdom) with no significant increase in specialization since the 1970s, small core countries, which tend to be more specialized (Nordic countries), and the cohesion countries (except Spain) which tend to be the most specialized. Regarding industrial concentration, the pattern is mixed. Manufacturing remains highly concentrated in the four biggest EU countries. Concentration is stable in the services industry, but the data on which the work is based is much less disaggregated than for the manufacturing sectors, which may hide some dynamics at work.

There is evidence of agglomeration forces at work, but also of some dispersion. Midelfart-Knarvik *et al.* (2002) show that increasing returns to scale and high-skill intensive industries have tended to locate in the centre of the Union, but this movement of relocation is stalling. On the other hand, comparative advantage has been the main attracting force of small countries. The share of highly educated workers and researchers seem to play an increasing role in determining the location of industries (at the national level), as they tend to be more mobile than low-skilled workers, although overall labour mobility is very low as compared to the United States.

In the United States, states' living standards have converged over the last 60 years – though driving forces of this pattern are difficult to identify, and seem to have waned over the more recent past (Kim, 1995; Ellison and Glaeser, 1999). Underlying forces are probably more mobility, deeper integration and more similarity in endowments, although agglomeration

© OECD 2004

forces (*e.g.* Silicon Valley) are strongly at work. More generally, Combes and Overman (2003) underlines that empirical comparisons with the United States have so far been limited, mostly for lack of comparable data. But it is clear that European product markets are less integrated, and labour is less mobile, two key factors which imply that different forces are at work.

Note

1. Migration can also be slowed or stopped by congestion costs. As labour flows to the leader country, congestion costs (transports, housing) emerge, reducing the expected income and thereby the flow of migrants.

© OECD 2004

Bibliography

Abramowitz, M. (1986), "Catching Up, Forging Ahead and Falling Behind", *Journal of Economic History*.

Abramowitz, M. (1989), "Rapid Growth Potential and its Realization", in Abramowitz (ed.), *Thinking About Growth and Other Essays on Economic Growth and Welfare*, Cambridge University Press.

Braunerhjelm, P. *et al.* (2000), *Integration and the Regions of Europe: How the Right Policies Can Prevent Polarization*, Monitoring European Integration 10, CEPR, London.

Combes, P-P. and H. Overman (2003), "The Spatial Distribution of Economic Activities in the EU", CEPR *Discussion Paper*, No. 3999. *www.cepr.org/pubs/dps/*DP3999.*asp*.

Ellison, G. and E. Glaeser (1999), "The Geographic Concentration of Industry: Does Natural Advantage Explain Agglomeration", *American Economic Review*, Vol. 89.

European Commission (2002), *European Integration and the Functioning of Product Markets*, European Economy, Special Report, No. 2, *http://europa.eu.int/comm/economy_finance/publications/european_economy/*2002/*eesp*202*en.pdf*.

Gianetti, M. (2002), "The Effects of Integration on Regional Disparities: Convergence, Divergence or Both?", *European Economic Review*, Vol. 46(3).

Grossman, G. and E. Helpman (1991), *Innovation and Growth in the Global Economy*, MIT Press, Cambridge, Massachusetts.

Kim, S. (1995), "Expansion of Markets and the Geographic Distribution of Economic Activities: the Trends in US Regional Manufacturing Structures, 1860-1987", *Quarterly Journal of Economics*, Vol. 110.

Krugman, P. (1991), *Geography and Trade*, MIT Press, Cambridge, Massachusetts.

Lucas, R. (1988), "On the Mechanics of Economic Development", *Journal of Monetary Economics*, 22(1).

Midelfart-Knarvik, K.H. *et al.* (2002), "The Location of European Industry", in European Commission, *European Integration and the Functioning of Product Markets*, European Economy, Special Report, No. 2, *http://europa.eu.int/comm/economy_finance/publications/european_economy/*2002/*eesp*202*en.pdf*.

Puga, D. (1999), "European Regional Policies in Light of Recent Location Theories", CEPR *Discussion Paper*, No. 2767.

Romer, P. (1986), "Increasing Returns and Long-Run Growth", *Journal of Political Economy*, 94(5).

Solow, R. (1956), "A Contribution to the Theory of Economic Growth", *Quarterly Journal of Economics*, LXX(1).

Venables, A.J. (1996), "Equilibrium Locations of Vertically Linked Industries", *International Economic Review*, 37(2).

© OECD 2004

Annex 5.A2

Structural funds and regional policies

This annex reviews the aims of regional policy, the institutional set-up and summarises empirical evidence on the impact of regional policy on growth and convergence.

Economic objectives

Structural and cohesion policies aim at reducing economic and social disparities between the richer and poorer regions of the European Union (Article 158 of the Treaty):

> "In order to promote its overall harmonious development, the Community shall develop and pursue its actions leading to the strengthening of its economic and social cohesion. […] In particular, the Community shall aim at reducing disparities between the levels of development of the various regions and the backwardness of the least favoured regions or islands, including rural areas." The 1989 Delors Report explains further: "Historical experience suggests … that in the absence of countervailing policies, the overall impact of more economic integration on peripheral regions could be negative. Transport costs and economies of scale would tend to favour a shift in economic activity away from less developed regions, especially if they were at the periphery of the Community, to the highly developed areas at its centre. The economic and monetary union would have to encourage and guide structural adjustment which would help poorer regions to catch up with the wealthier ones."

Design

The European Regional Development Fund (ERDF) was established in 1975. The Greek accession in 1981 and the accession of Spain and Portugal in 1986 led to a review of the ERDF. In 1989 the EU's pluri-annual spending guidelines, the so-called Delors I package for the period 1989-93, was introduced and then followed by the Delors II package for the period 1994-99 and the Agenda 2000 for 2000-06.

In the Delors I package the structural funds had six objectives:

1. Fostering the economic adaptation of less developed regions, defined as those with a per capita GDP less than 75 per cent of the Community average. Objective 1 was about two-thirds of total structural funding.
2. Helping regions affected by industrial decline, marked by rising unemployment and declining employment. Objective 2 accounted for about 11 per cent of total structural funding.
3. Reducing long-term unemployment, slightly less than 10 per cent of total structural funds.

© OECD 2004

4. Facilitating the adaptation of workers to structural production changes.
5. Speeding up the adjustment of the agricultural sector.
6. Promoting the development of regions with low population density.

Agenda 2000, covering the period 2000-06, aimed to simplify the structural fund management by reducing the number of objectives to three:

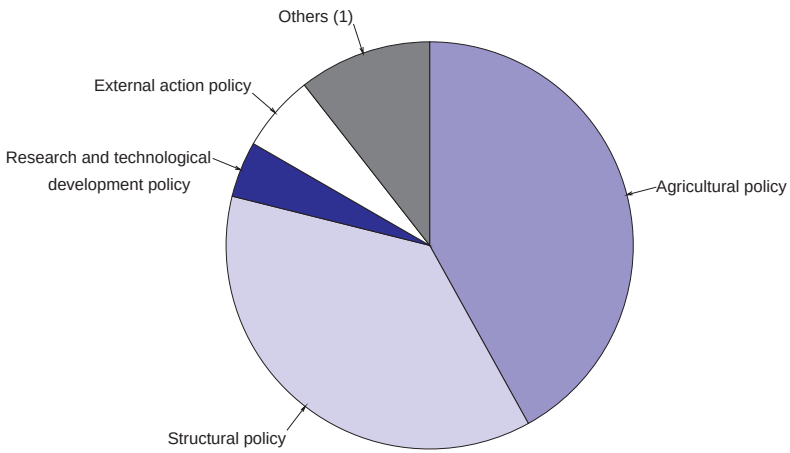
1. Development and structural adjustment of regions lagging behind (*i.e.* whose GDP per capita is less than 75 per cent of the EU); includes former objective 1 and part of 5 and 6.
2. Helping regions affected by industrial decline, marked by rising unemployment and declining employment; includes former objective 2 and part of 5.
3. All measures for human resource development outside the regions eligible for the new objective 1, former objectives 3 and 4.

The Cohesion Fund was created in 1993 to facilitate the compatibility, for the poorer countries, of the budgetary discipline required by the Treaty with the continuation of important investments in public infrastructure. Thus the focus is national rather than regional, and targets the member states (Greece, Ireland, Portugal and Spain) whose gross national income per capita is lower than 90 per cent of the EU average. Moreover, while the Structural Funds are for every sector, the Cohesion Fund only funds water treatment and transport projects and projects that improve the environment.

Budget composition

Regional policy represents the main spending post of the European budget after the agriculture related spending (Figure 5.A2.1).

Figure 5.A2.1. **Budget 2004 spending commitments by sector**



1. Including administrative expenditure.
Source: European Commission, General Budget of the European Union for the Financial Year 2004.

© OECD 2004

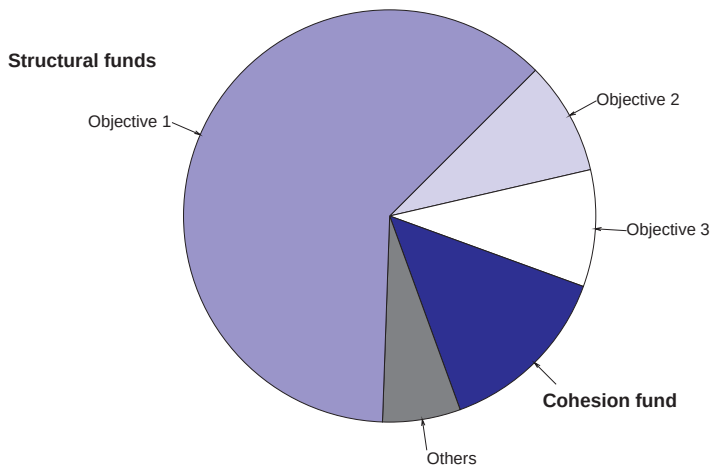
Following Sapir *et al.* (2003), three aims can be distinguished within structural and cohesion policy:

1. Objective 1 funds have a clear regional focus and target low-income regions and represent around 65 per cent of regional spending (Figure 5.A2.2).
2. Other objectives have a horizontal focus and represent around 25 per cent of structural and cohesion spending.
3. Cohesion funds have a clear national focus, target the low-income member states and represent about 10 per cent of structural and cohesion spending.

During the Berlin Summit in March 1999 the financial framework for 2000-06 was agreed (Table 5.A2.1). The aim was to free some resources for enlargement, without increasing the total budget.

During the Berlin summit, the Commission assumed that six countries (Cyprus, the Czech Republic, Estonia, Hungary, Poland and Slovenia) would join the European Union in 2002, and no other countries before 2006. However, during the Helsinki summit in December 1999, the Commission concluded that accession in 2002 was not realistic anymore, and at the Copenhagen summit in December 2002, ten countries were "cleared for accession": Cyprus, the Czech Republic, Estonia, Hungary, Latvia, Lithuania, Malta, Poland, the Slovak Republic and Slovenia. Nevertheless, the budget was not changed. According to the European Commission, the budgetary impact will be relatively small in the first years of membership, so that the EUR 44 billion provision for enlargement (including pre-accession aid) for the period 2004-06 in the Berlin agreement is sufficient to accommodate a larger number of countries. In Copenhagen, the 25 countries agreed on a EUR 40.7 billion package for the ten new member states, the balance being for pre-accession aid to Bulgaria and Romania.

Figure 5.A2.2. **Budget 2004 structural operations decomposition**



Source: European Commission, General Budget of the European Union for the Financial Year 2004.

© OECD 2004

Table 5.A2.1. **Financial framework: EU-15 and new member countries 2000-06**
Per cent of total spending

	Current prices				2004 prices		
	2000	2001	2002	2003	2004	2005	2006
Agriculture	44.5	45.8	46.3	46.4	42.7	42.9	37.2
Structural operations	34.8	33.7	33.4	33.3	35.5	35.5	39.4
Structural funds	32.0	30.9	30.6	30.5	30.6	31.1	34.0
Cohesion fund	2.8	2.8	2.8	2.8	4.9	4.4	5.4
Internal Policies	6.4	6.5	6.5	6.7	7.6	7.6	8.3
External Action	4.9	4.9	4.8	4.9	4.4	4.3	4.7
Administration	4.9	4.9	5.0	5.1	5.2	5.2	5.8
Reserves	1.0	0.9	0.7	0.4	0.4	0.4	0.4
Pre-accession strategy	3.4	3.3	3.3	3.3	3.0	2.9	3.2
Compensation	. .	. .	. .	. .	1.2	1.1	1.0
Total[1]	**93 792**	**97 189**	**100 672**	**102 145**	**115 434**	**117 526**	**108 967**
Ceiling as a percentage of GNI (ESA 95)[2]	1.07	1.08	1.11	1.09	1.08	1.06	1.06

1. EUR million, total appropriations for commitments.
2. Ceiling appropriations for payments.

Source: European Commission (2004), General Budget of the European Union for the Financial Year 2004, *http://europa.eu.int/comm/budget/pdf/budget/syntchif2004/en.pdf*.

Following enlargement, which will push some regions above the GDP threshold, negotiations for the Financial Perspectives 2007-13 are likely to be dominated by the debate on regional policy, as some of the current EU members will battle for compensation for the expected loss of a substantial part of their subsidies after 2006. Recently, the Commission proposed a large increase in regional spending (European Commission, 2004), which ran into heavy opposition by some member countries.

Who receives the money?

Structural funds target mainly regions at the NUTS 2 (N*omenclature des unités territoriales statistiques* or Nomenclature of Territorial Units for Statistics) level. The regional focus generates two important features: *i*) all member states, except Luxembourg and Denmark (and Belgium and Netherlands from 2007) have at least one region receiving financial aid under objective 1. *ii*) countries with a similar level of national GDP may receive very different shares of EU funds. For example, Sweden and Italy have comparable levels of national GDP, but since the latter suffers from much wider regional inequalities it receives considerably greater regional support. Overall, the main beneficiaries of the structural funds are Germany (receiving 15.4 per cent of the structural funds over 2000-06), Greece (11.3 per cent), Spain (23.3 per cent), Italy (15.3 per cent) and Portugal (10.2 per cent), followed by France (8.1 per cent) and the United Kingdom (8.5 per cent). Cohesion funds are still dedicated to Greece (17.2 per cent), Spain (62.6 per cent), Ireland (3.1 per cent) and Portugal (17.2 per cent).

© OECD 2004

Have regional policies contributed to growth and convergence?

The available empirical analysis not only assesses whether European regions have converged, but also estimates the effect of regional policy. Overall, the available evidence does not lead to strong conclusions (Table 5.A2.2).

Since 1980, per-capita GDP has tended to converge at the national level, but much less so at the regional level. Low-income countries grew faster, on average, than high-income countries, with the four cohesion countries growing by 2.8 per cent in real terms whilst the whole of the EU-15, on a weighted average basis, grew by 2.3 per cent between 1980 and 2002. On a more disaggregated basis, convergence can be assessed on the basis of the six macro regions that benefit most from the structural and cohesion funds: Greece, Spain, Ireland, Portugal, eastern Germany and the Mezzogiorno in Italy. They receive nearly 70 per cent of the total of these funds. Empirical work on these regions conclude in favour of both beta and sigma convergence, but results differ across regions (Box 5.A2.1). Convergence is driven by Ireland and eastern Germany, whilst the Mezzogiorno showed little sign of convergence (Sapir, *et al.* 2003). Going further to the NUTS 2 level, there is no evidence of convergence, but no evidence of divergence or polarization either (Boldrin and Canova, 2001; Midelfart-Knarvik and Overman, 2002). By comparing regional dispersion within countries and in the union as a whole, Cappelen *et al.* (2003) show that while some countries catch up, inequalities within countries persist.

It is difficult to come to firm conclusions on the link between growth and regional policy. Based on counter-factual simulations the potential impact of the funds appears to be large though it is based on assumptions which may look strong. Bradley, *et al.* (2003) using a variety of counterfactual simulations with the European Commission's HERMIN model, report gains in GDP level varying from 1½ per cent in Spain to 4½ per cent in Portugal after six years of the Structural Fund programme, assuming that plans submitted for the 1994-99 Structural Fund programme are fully realised. These GDP gains are accompanied by sizeable unemployment reductions. These gains could over-estimate the impact of these programmes, at least the 1994-99 programmes as take-up rates vary substantially, whilst the models assumed the submitted plans are completely realised. The more recent programmes, however, improved administrative procedures that should raise the take-up rates.

Studies using regressions including the structural funds as a variable in equations at the national level found a positive impact of structural funds on a growth of lower income countries (see for example Beugelsdijk and Eijffinger, 2003; Crespo-Cuaresma *et al.*, 2002), the link at the sub-national level is more nuanced with some studies finding no effect (Cappelen *et al.*, 2003) whilst others find a sizeable impact (de la Fuente, 2002a). The failure to provide consensual empirical evidence might come from econometric weaknesses, due to low-power statistical methods based on poor data sets failing to detect convergence, or evidence of convergence may appear from statistical artefacts, as summed up by Sapir *et al.* (2003): "The net result is that it is not possible to establish conclusively what the relative performance of these regions would have been in the absence of EU cohesion policy and other policies". Midelfart-Knarvik and Overman (2002) argue that EU policies have undermined the integration process or been supportive, depending on each country's endowments and strategy, without any consistent pattern across countries.

© OECD 2004

© OECD 2004

Table 5.A2.2. **Empirical literature on convergence in the European Union**

Authors	Underlying model or tested hypothesis	Empirical evidence
Beugelsdijk and Eijffinger (2003)	Test for convergence across EU-15 countries during 1995-2001, and whether structural funds have fostered convergence.	Provide evidence of β-convergence, with a significant positive impact of structural funds on the convergence process.
Boldrin and Canova (2001)	Assess the evolution of different measures of regional inequalities, with the aim of evaluating the efficiency of structural funds in reducing these inequalities. Period 1980-96.	No strong evidence of convergence in terms of income per capita or unemployment rates across regions. Mild tendency to converge for labour productivity. No evidence that regions benefiting from structural funds behave differently from others.
Braunerhjelm *et al.* (2000)	Test for β-convergence at national and regional level, and present various indicators on integration and mobility. Period covered (but to varying extent) is 1977-95.	Income inequality across member states has decreased over the last two decades, while regional inequality within member states has increased. Total cross-border flows of capital have increased substantially in recent years. EU labour mobility is limited both with respect to past levels and relative to that in the United States.
Van de Coevering (2002)	Uses a set of structural indicators to assess real convergence across EU countries over the nineties.	Provides evidence of: *i*) divergence in the production structure of euro area countries, *ii*) heterogeneity across countries in openness to trade.
Crespo-Cuaresma *et al.* (2002)	Test whether integration has boosted economic growth in the EU, and whether it has favoured convergence across countries. Period 1960-98.	Provide evidence of significant β- and σ-convergence for EU members; the rate of convergence is found to lie between 3.5 and 5.5 per cent per annum; EU integration significantly contributes to catch-up.
European Commission (2000)	Measure of the evolution of some macro economic variables across countries and regions, over time. Period 1960-2000.	Some evidence of β-convergence across countries in terms of income, but very slow across regions over the 1980s and 1990s. The efficiency of EU structural transfers is conditional on macroeconomic stability, supportive institutions, the smooth functioning of markets, openness, endowments in physical and human capital.

Table 5.A2.2. **Empirical literature on convergence in the European Union** (*cont.*)

Authors	Underlying model or tested hypothesis	Empirical evidence
De la Fuente (2000)	Literature review of recent theoretical and empirical developments on growth. Periods and regions vary (OECD, EU, Spain).	On balance, more evidence of convergence and catch-up for income levels than divergence over very long time periods, but initial endowments (especially in human capital), may explain a certain lack of catch-up in terms of growth rates.
De la Fuente (2002b)	Test β-convergence across OECD countries with a view of identifying factors responsible for convergence. Period 1970-95.	Convergence in income per capita has been driven almost exclusively by diminishing returns and technological diffusion. Diverging R&D investment and labour market performance have contributed to inequality persistence. Investment in human capital has been roughly neutral.
Geroski and Gügler (2001)	Test whether the SMP has induced a convergence in industrial structures across European countries. Period 1994-98, firms above 100 employees in 14 countries.	Little evidence of convergence. Market structures in particular industries in different European countries are retaining distinct and possibly complementary identities, suggesting that specialization across countries is occurring.
Giannetti (2002)	Test β-convergence across regions and countries, with a distinction between regions with high-tech endowments. Period 1980-92.	Growth increased and convergence occurred among regions specialized in high-tech sectors, whilst creating disparities within individual countries. But differences in income across countries diminished over the sample period because the value added of the technology rich regions is a rising share of GDP.
Görg and Ruane (1999)	Integration should lead to higher growth and catch-up of lower income economies; contrast Ireland with Greece, Portugal and Spain to identify factors favouring catch-up. Theoretical model: Krugman (1997) and economic geography, explaining that lower transportation and production costs in lagging economies will be key factors to FDI and production. Period: 1970-97.	Integration may be a necessary but not sufficient condition for catch-up. Lower transportation costs and industrial policies (low corporate taxes, wage restraint) strongly helped Ireland to grow much more quickly than the three other countries. At the same time, dispersion in terms of wage costs might have increased (with the gap between Germany and Ireland widening over the period).

© OECD 2004

© OECD 2004

Table 5.A2.2. **Empirical literature on convergence in the European Union** (*cont.*)

Authors	Underlying model or tested hypothesis	Empirical evidence
Hallet (2000)	Provide a range of indicators on: specialization, concentration, clustering, centrality in the EU. Period 1980-95.	Overall specialization has evolved very little spatially compared to the change induced by the switch from manufacturing activity towards services. Concentration follows a threefold pattern: agriculture has a low degree of concentration; traded goods exhibit a high degree of concentration dependent on initial comparative advantage; non-traded goods tend to follow the spatial pattern of income, with even more concentration for banking and financial services.
Midelfart-Knarvik and Overman (2002)	Estimate the impact of European integration and structural funds on the location of industry. Period 1970-97.	EU countries have become more specialized since the early eighties, but no evidence of a trend towards specialization at the regional level. EU policy interventions tend to attract R&D-intensive industries to locations without large endowments of highly-skilled labour, thus the structural funds are not preventing regional polarization.
Sapir *et al.* (2003)	Evaluation of cohesion policy impact on convergence. Period 1980-2000.	Tendency of per capita GDP to converge at the member state level, but within each country GDP levels and unemployment rates have tended to diverge across regions, increasing inequalities. However, the six "macro-regions"(Greece, Spain, Ireland, Portugal, the six eastern German Länder, the Mezzogiorno in Italy) that receive the bulk of structural and cohesion funds converged (both β- and σ-convergence).
Vanhoudt (1999)	Test β-convergence across EU countries. Period 1950-90.	Find growth and convergence was taking place until the first big enlargement (1973). Do not find any effect from the single market on trade flows. Find that difference in growth rates are mostly due to investment in physical capital and the growth rate of the working population.

Source: OECD.

Box 5.A2.1. Measuring convergence

Measuring convergence across countries or regions is difficult and requires the careful definition of the concept being measured. Three broad concepts may be distinguished:

- σ-convergence refers to the cross-country variability of one variable; it tackles the following question: does the dispersion of per-capita income levels across European regions decline? σ-convergence is generally measured by the standard deviation of the variable across countries.
- Unconditional β-convergence measures whether there is a negative relation between the growth rate of per capita GDP and the initial income level across countries or regions. In other words, it measures whether poorer countries grow faster and thereby catch up with high income countries. Underlying this model is the assumption that all countries converge to the same steady state level of income.
- Conditional β-convergence is a similar concept, but is conditional on initial conditions. Its premise is that countries with similar initial endowments reach similar income levels, but cross-country variations in institutional settings, production patterns etc. imply that not all converge to the same steady state income level.

The concept of β-convergence can be represented by the following equation:

$$\Delta y_{i,t} = \alpha x_i - \beta y_{i,t}$$

where $y_{i,t}$ stands for the GDP level of country i, Δ represents the growth rate, x_i the economic fundamentals, *i.e.* all the characteristics of a territory that have a permanent effect on its growth rate (investment rate, human capital, demographics, etc.), and α is a set of parameters. The parameter β measures the speed at which the economy i is moving to its own long-run equilibrium $y_i^* = \alpha x_i / \beta$. This defines conditional convergence: each country moves towards its long-run steady state, which varies across countries according to the fundamentals x_i. In other words, there is no reason, given the variables x_i, that economies converge towards the same standard of living. On the other hand, in the event that x_i is the same across countries, then long-run equilibria are the same, and if the coefficient β lies between zero and one, there will be a tendency towards absolute convergence.

The three concepts of convergence are therefore not equivalent. β-convergence is a necessary condition for sustained σ-convergence, but it is not sufficient. In the case where there is a shock increasing divergence temporarily, or if the initial point for σ-convergence is that of a dispersion below the long-run trend, there will be no σ-convergence whilst a process of β-convergence is at work. Moreover, the two types of β-convergence have very different implications. Absolute β-convergence implies a tendency towards the equalization of per capita incomes within the sample. Initially, poor economies tend to grow faster until they catch up with the richer ones. In the long-run, expected per capita income is the same for all members of the group, independently of initial values. With conditional β-convergence on the other hand, each territory converges to its own steady state but these can be very different from each other. Hence, a high degree of inequality could persist, even in the long run. However, should fundamentals, human and physical capital and technology, converge, then absolute β-convergence may take place, and the level of GDP per capita converges across countries.

© OECD 2004

Bibliography

Beugelsdijk, M. and S.C.W. Eijffinger (2003), "The Effectiveness of Structural Policy in the European Union: An Empirical Analysis for the EU-15 during the Period 1995-2001", CEPR Discussion Papers, No. 3879, *http://ideas.repec.org/p/cpr/ceprdp/3879.html*.

Boldrin, M. and F. Canova (2001), "Inequality and Convergence in Europe's Regions: Reconsidering European Regional Policies", *Economic Policy*, No. 32.

Bradley, J., E. Morgenroth and G. Untiedt, (2003), "Macro-Regional Evaluation of the Structural Funds Using the HERMIN Modelling Framework", ESRI *Working Papers*, No. 152, Dublin, *http://europa.eu.int/comm/regional_policy/sources/docgener/evaluation/doc/obj1/macro_modelling.pdf*.

Braunerhjelm, P. *et al.* (2000), *Integration and the Regions of Europe: How the Right Policies Can Prevent Polarisation*, Monitoring European Integration 10, CEPR.

Cappelen, A. *et al.* (2003), "The Impact of EU Regional Support on Growth and Convergence in the European Union", *Journal of Common Market Studies*, Vol. 41, No. 4.

van de Coevering, C. (2002), "Structural Convergence and Monetary Integration", mimeo, September.

Crespo-Cuaresma, J., Dimitz, M.A. and D. Ritzberger-Grünwald (2002), "Growth, Convergence and EU Membership", *Oesterreichische Nationalbank Working Paper*, No. 62, *www2.oenb.at/workpaper/wp62.pdf*.

European Commission (2000), *Public Finances in* EMU – 2000, European Economy, Reports and Studies, No. 3.

European Commission (2004), "Third Report on Economic and Social Cohesion", available at *http://europa.eu.int/comm/regional_policy/sources/docoffic/official/reports/cohesion3/cohesion3_en.htm*.

de la Fuente, A. (2000) "Convergence across Countries and Regions: Theory and Empirics," CEPR Discussion Papers, No. 2465, *www.cepr.org/pubs/dps/*DP2465.*asp*.

de la Fuente, A. (2002a), "The Effect of Structural Fund Spending on the Spanish Regions: an Assessment of the 1994-99 Objective 1 CSF", CEPR *Discussion Paper*, No. 3673, London.

de la Fuente, A. (2002b), "Convergence across Countries and Regions: Theory and Empirics," UFAE and IAE Working Papers, No. 555.02, Unitat de Fonaments de l'Anàlisi Econòmica (UAB) and Institut d'Anàlisi Econòmica (CSIC), *http://pareto.uab.es/wp/*2002/55502.*pdf*.

Geroski, P.A. and K. Gügler (2001), "Corporate Growth Convergence in Europe", CEPR *Discussion Paper*, No. 2838, *http://papers.ssrn.com/sol3/papers.cfm?abstract_id*=275009.

Gianetti, M. (2002), "The Effects of Integration on Regional Disparities: Convergence, Divergence or Both?", *European Economic Review*, No. 46.

Görg, H. and F. Ruane (1999), "European Integration and Peripherality: Are There Lessons from Ireland?", Trinity College Dublin Economic Papers, No. 9910, Trinity College Dublin Economics Department, *www.economics.tcd.ie/tep/tepno*10HG99.*pdf*.

© OECD 2004

Hallet, M. (2000), "Regional Specialisation and Concentration in the EU", European Commission Economic Papers, No. 141. *http://europa.eu.int/comm/economy_finance/publications/economic_papers/economicpapers*141_*en.htm*.

Midelfart-Knarvik, K.H. and H.G. Overman (2002), "Delocation and European Integration – Is Structural Spending Justified?", *Economic Policy* No. 35.

Sapir, J. *et al.* (2003), "An Agenda for a Growing Europe – Making the EU Economic System Deliver", Report of an Independent High-Level Study Group established on the initiative of the President of the European Commission.

Vanhoudt, P. (1999), "Did the European Unification Induce Economic Growth? In Search of Scale Effects and Persistent Changes", *Weltwirtschaftliches Archiv*, 135(2).

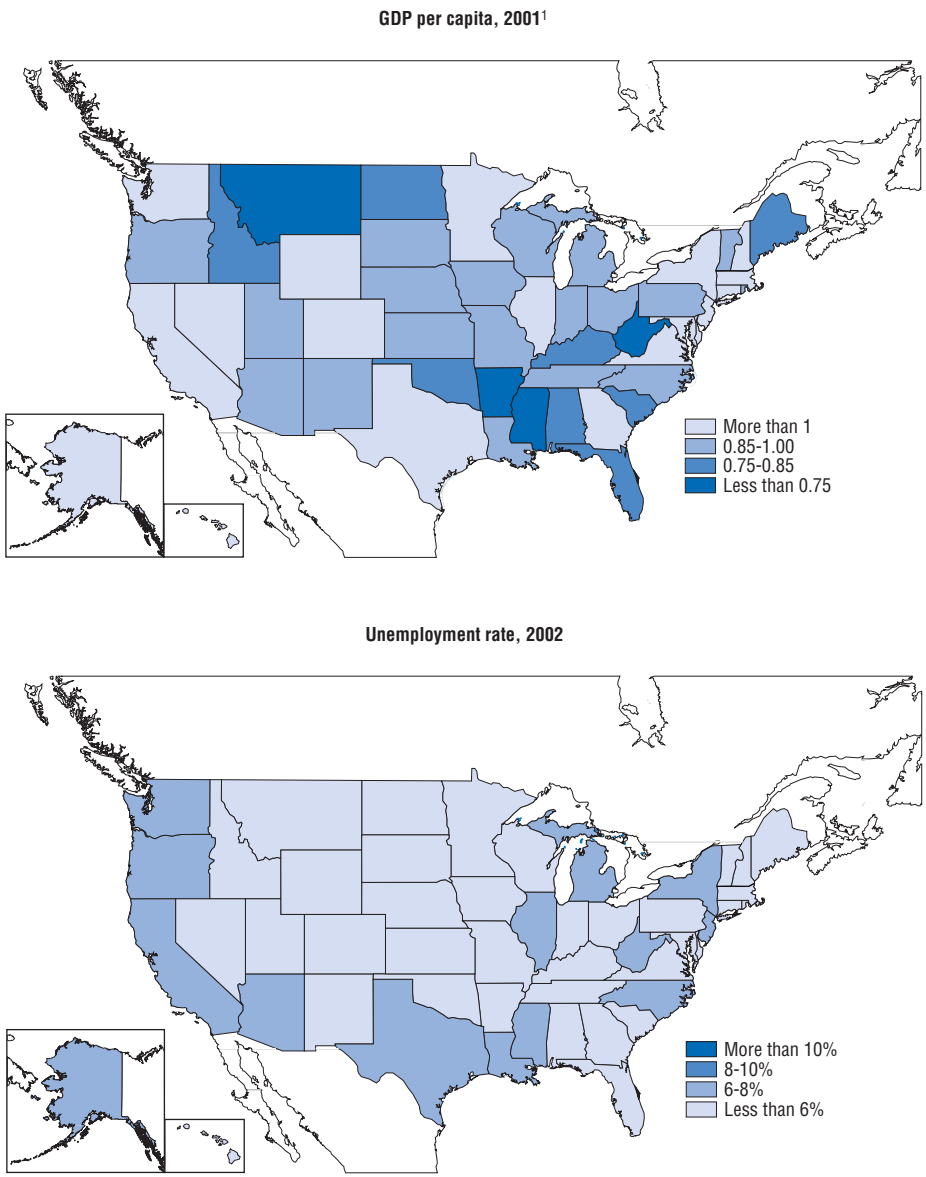
© OECD 2004

Annex 5.A3

Supporting material

© OECD 2004

Figure 5.A3.1. **Current regional dispersion in the United States**

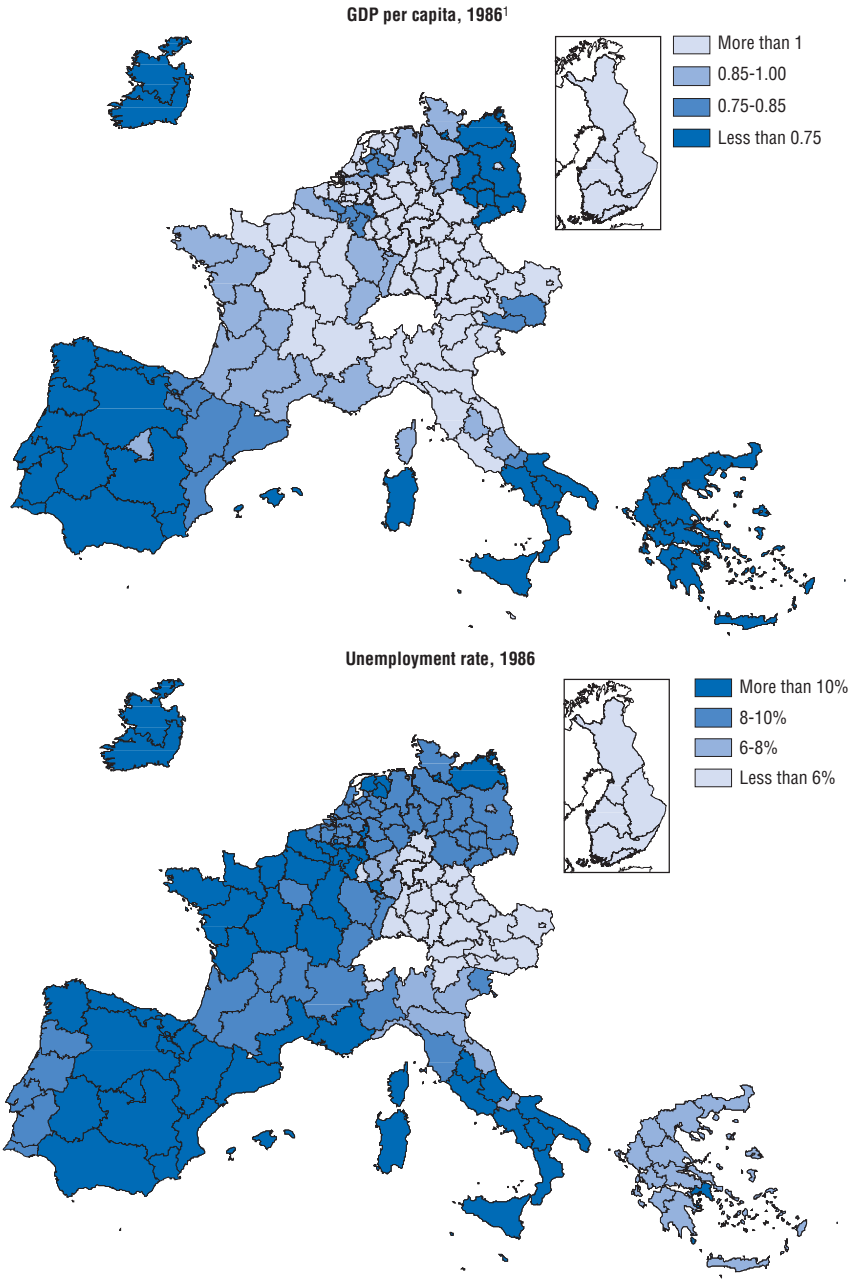


1. As a ratio of the United States average.

Source: Bureau of Economic Analysis and Bureau of Labour Statistics.

© OECD 2004

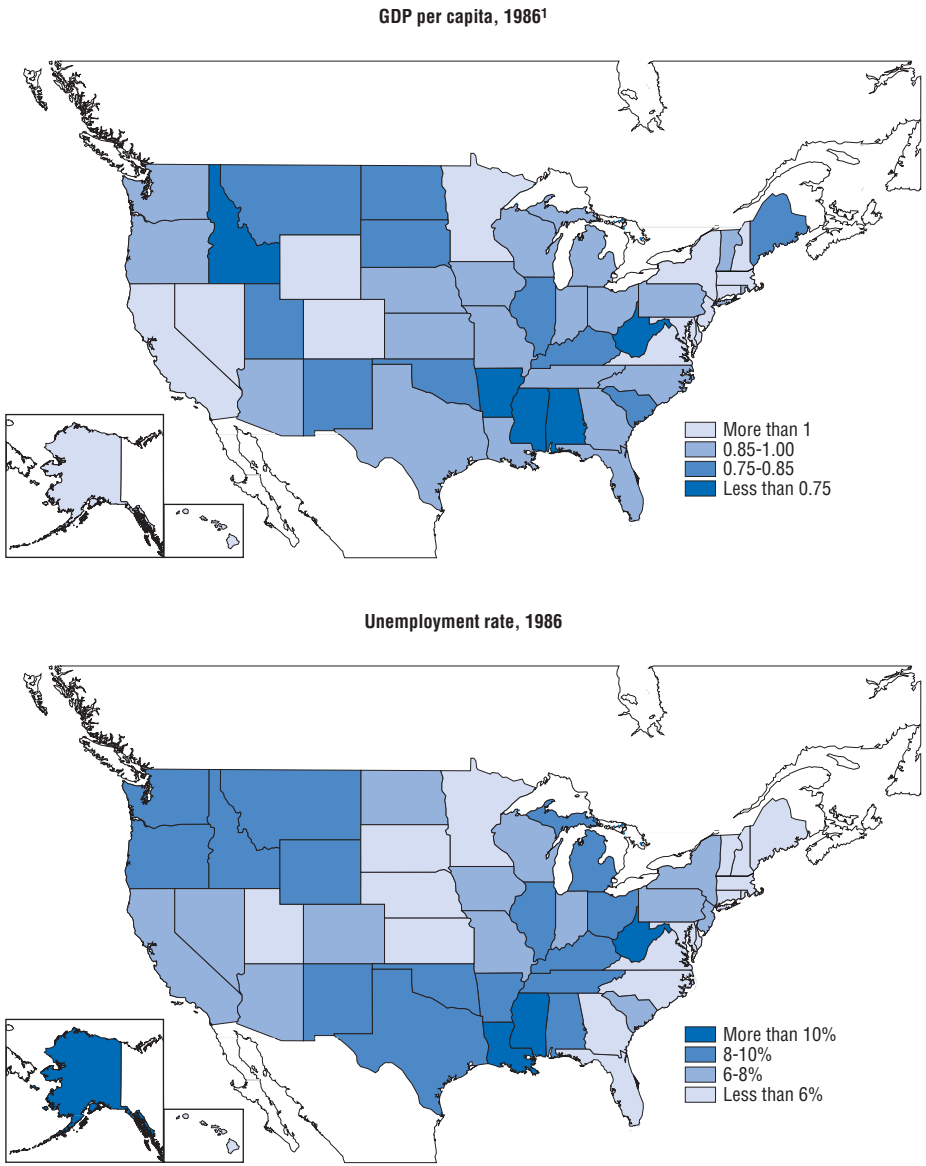
Figure 5.A3.2. **Regional dispersion in the euro area in the 1980s**



1. NUTS 1 as a ratio of the euro area average, except for Italy, NUTS 2.
Source: Eurostat.

© OECD 2004

Figure 5.A3.3. **Regional dispersion in the United States in the 1980s**

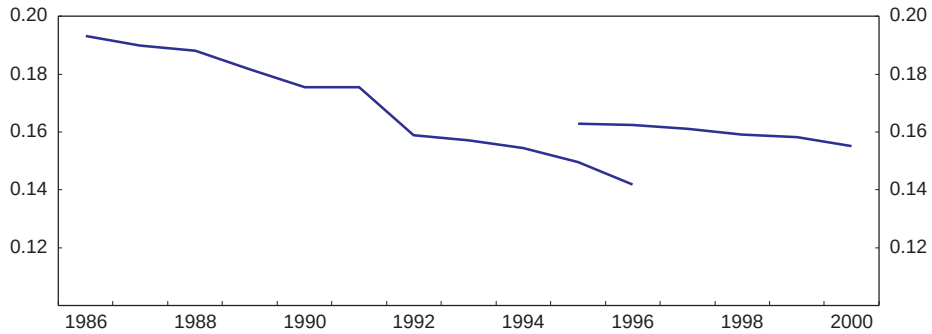


1. As a ratio of the United States average.

Source: Bureau of Economic Analysis and Bureau of Labour Statistics.

© OECD 2004

Figure 5.A3.4. **Krugman specialisation index**[1]
1986-2000



1. The Krugman index compares the share of employment in 3 sectors (agriculture, industry and services) in euro area NUTS 1 regions with the average of the euro area and sums up the absolute differences across the sectors

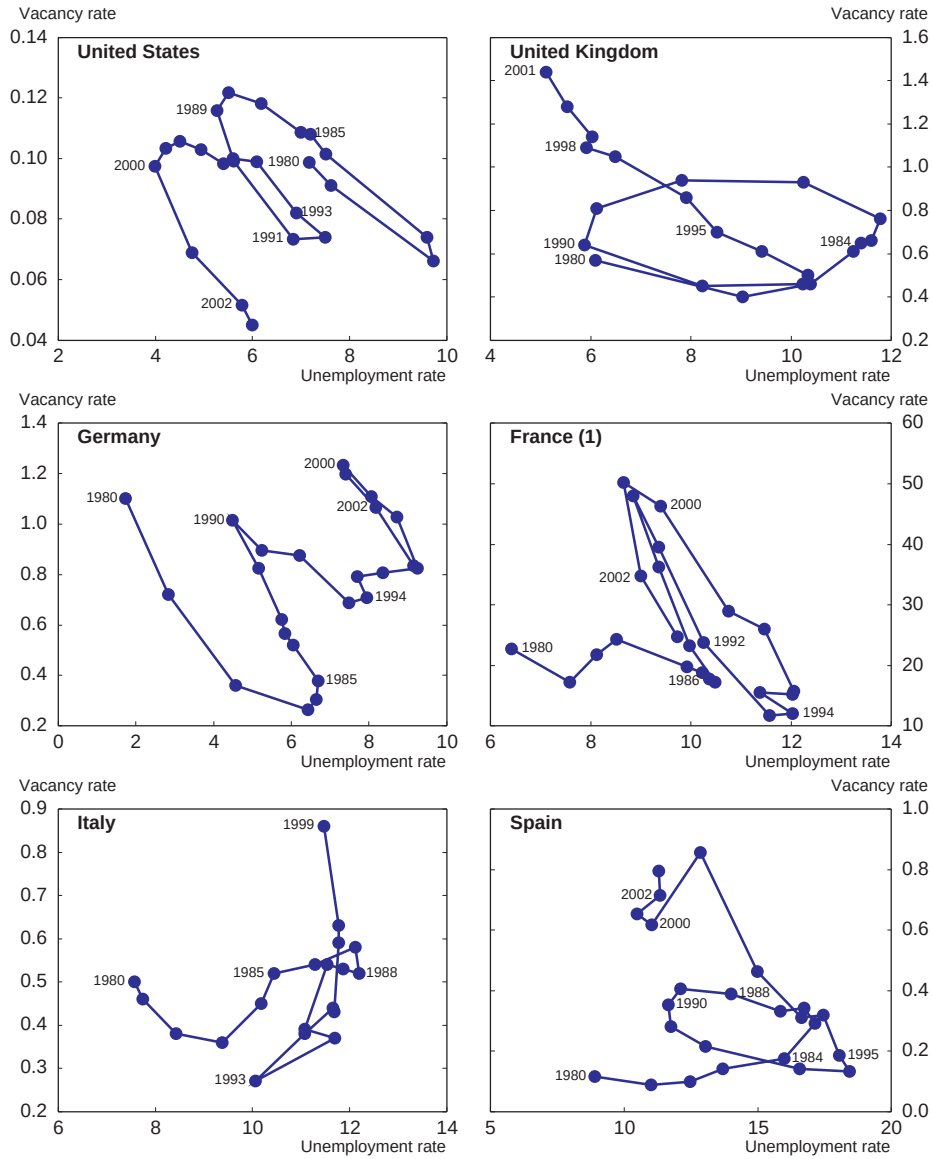
$$\frac{EMP_{i,\,j}}{\sum_i EMP_{i,\,j}} - \frac{\sum_j EMP_{i,\,j}}{\sum_i \sum_j EMP_{i,\,j}}$$

where *i* represents the sectors and *j* the countries. A decline in the index points to less specialisation. The index can vary between 0 and 1. See Krugman, P. (1991) *Geography and Trade*, MIT Press, for more details on the index.

Source: OECD.

© OECD 2004

Figure 5.A3.5. **Beveridge curves in the euro area and selected OECD countries**
Per cent of labour force

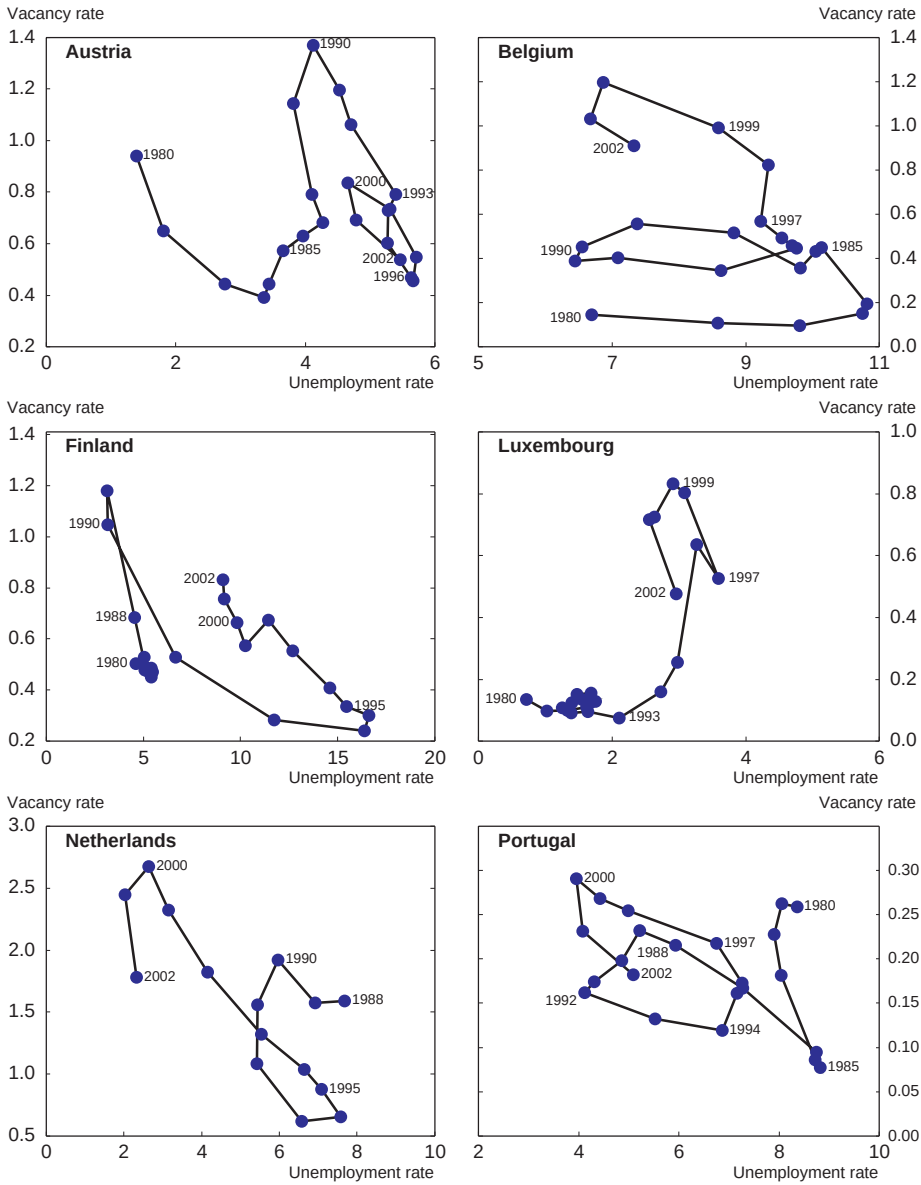


1. Per cent of employers facing difficulties to recruit in industry.
Source: OECD; INSEE.

© OECD 2004

Figure 5.A3.5. **Beveridge curves in the euro area and selected OECD countries** *(cont.)*

Per cent of the labour force

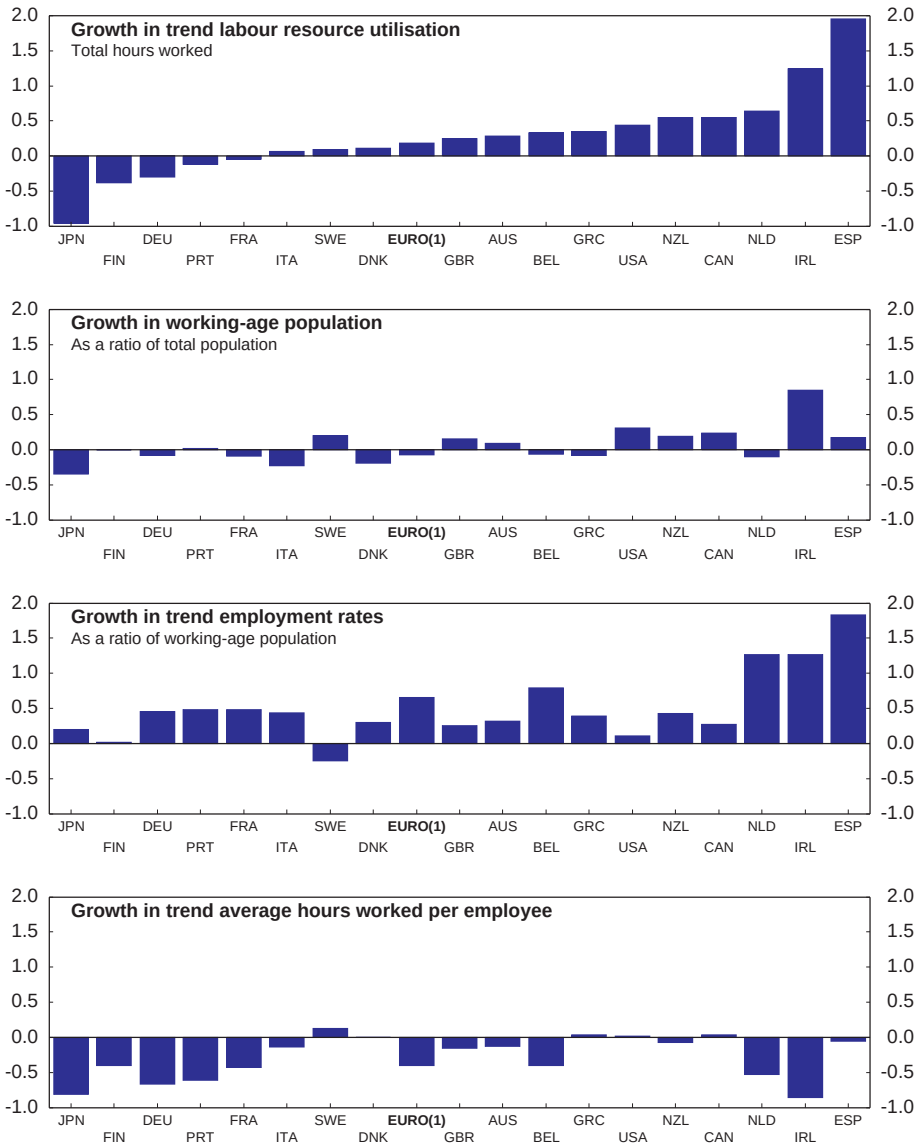


Source: OECD.

© OECD 2004

Figure 5.A3.6. **Breaking down trend labour utilisation in selected OECD countries**

Per cent, average 1995-2002



1. Except Austria and Luxembourg.

Source: OECD.

© OECD 2004

Table 5.A3.1. **Intra-industry trade**[1]
Manufactured goods

	1970	1980	1985	1990	1995	2002
Austria	53	66	74	79	78	84
Belgium	77	86	88	83	84	90[2]
Finland	21	34	36	41	52	48
France	81	84	84	85	89	89
Germany	67	73	74	77	81	79
Greece	30	28	36	42	41	28
Ireland	29	62	54	54	40	33
Italy	69	62	65	68	72	74
Netherlands	66	64	63	74	76	70[2]
Portugal	29	41	53	54	62	68
Spain	43	70	68	76	80	81
Weighted average[3]	68	72	73	76	79	79[2]
Unweighted average	51	61	63	66	69	69[2]

1. Intra-industry trade within the euro area for industry *i* is the value of trade remaining in that industry after the subtraction of the absolute value of industry *i*'s euro area net exports $|X_i - M_i|$ from the total value of trade in industry *i* $(X_i + M_i)$. For comparison across countries and industries, the measures are expressed as a percentage of the total value of trade in industry *i* $(X_i + M_i)$. Trade flows are measured at the three digit level. The sum of all industries provides an aggregate measure of intra-euro area intra-industry trade as follows:

$$\frac{\left\{\sum_i (X_i + M_i) - \sum_i |X_i - M_i|\right\} * 100}{\sum_i (X_i + M_i)}$$

   The index can rank from 0 to 100, a higher value reflecting greater intra-industry trade.
2. 2001.
3. Weighted by the sum of intra-area exports and imports.

Source: OECD, *Foreign Trade Statistics*.

© OECD 2004

Table 5.A3.2. **Evolution of relative and absolute concentration across sectors**[1]

Sectors	Relative concentration						Absolute concentration					
	1991		1995		1999		1991		1995		1999	
Leather, leather products and footwear	0.169	1	0.204	1	0.198	1	0.230	5	0.257	1	0.253	1
Textiles	0.086	2	0.126	2	0.130	2	0.196	17	0.210	7	0.213	6
Wearing apparel, dressing and dying of fur	0.082	4	0.112	3	0.120	3	0.198	14	0.207	8	0.210	8
Other transport equipment	0.057	10	0.069	6	0.093	4	0.203	12	0.200	14	0.216	5
Motor vehicles, trailers and semi-trailers	0.081	5	0.074	5	0.087	5	0.244	2	0.237	3	0.240	3
Electrical machinery and apparatus, n.e.c.	0.084	3	0.069	7	0.070	6	0.240	3	0.230	4	0.227	4
Agriculture, hunting, forestry and fishing	0.071	7	0.075	4	0.069	7	0.182	31	0.184	29	0.183	28
Radio, television and communication equipment	0.040	15	0.047	13	0.068	8	0.185	29	0.172	30	0.170	31
Medical, precision and optical instruments	0.063	9	0.055	11	0.060	9	0.250	1	0.241	2	0.241	2
Pulp, paper and paper products	0.041	13	0.062	8	0.058	10	0.188	26	0.172	31	0.172	30
Hotels and restaurants	0.043	12	0.046	14	0.056	11	0.186	28	0.186	27	0.185	27
Machinery and equipment, n.e.c.	0.070	8	0.056	10	0.055	12	0.228	6	0.218	5	0.213	7
Manufacturing n.e.c.; recycling	0.031	21	0.048	12	0.051	13	0.193	19	0.192	21	0.190	20
Wood and products of wood and cork	0.041	14	0.044	15	0.049	14	0.183	30	0.189	24	0.181	29
Pharmaceuticals	0.055	11	0.057	9	0.049	15	0.201	13	0.200	13	0.196	14
Coke, refined petroleum products and nuclear fuel	0.038	16	0.043	16	0.046	16	0.189	25	0.186	28	0.185	26
Office, accounting and computing machinery	0.075	6	0.043	17	0.041	17	0.240	4	0.210	6	0.203	10
Other non-metallic mineral products	0.032	20	0.029	19	0.039	18	0.193	20	0.197	18	0.191	19
Wholesale and retail trade; repairs	0.020	25	0.022	25	0.026	19	0.191	23	0.191	22	0.187	23
Food products, beverages and tobacco	0.021	23	0.027	20	0.024	20	0.188	27	0.186	26	0.185	25
Printing and publishing	0.019	26	0.018	28	0.024	21	0.196	16	0.194	20	0.194	17
Fabricated metal products, except machinery and equipment	0.021	24	0.022	26	0.024	22	0.206	11	0.203	11	0.199	13
Chemicals excluding pharmaceuticals	0.036	17	0.026	21	0.023	23	0.206	10	0.201	12	0.199	12
Rubber and plastics products	0.036	18	0.024	23	0.023	24	0.214	7	0.206	9	0.204	9
Real estate, renting and business activities	0.028	22	0.026	22	0.022	25	0.206	9	0.206	10	0.201	11
Basic metals	0.033	19	0.034	18	0.022	26	0.209	8	0.198	16	0.195	15
Construction	0.014	29	0.022	24	0.018	27	0.190	24	0.199	15	0.188	21
Transport and storage	0.015	27	0.019	27	0.014	28	0.192	22	0.191	23	0.188	22
Electricity, gas and water supply	0.015	28	0.015	29	0.010	29	0.193	21	0.188	25	0.187	24
Financial intermediation	0.009	30	0.005	31	0.009	30	0.198	15	0.197	17	0.195	16
Community social and personal services	0.007	31	0.012	30	0.009	31	0.193	18	0.195	19	0.192	18

© OECD 2004

© OECD 2004

Table 5.A3.2. **Evolution of relative and absolute concentration across sectors**[1] (*cont.*)

Note: n.e.c. = not elsewhere classified.

1. Across Austria, Finland, France, Germany, Italy, Netherlands, Portugal. Using value added or total employment to compute the index does not affect the results very much.

   The absolute index is given by $\sqrt{\frac{1}{c}\sum_{j}(s_{ij})^2}$

   and the relative takes into account the average concentration in the sector: $\sqrt{\frac{1}{c}\sum_{j}(s_{ij}-s_{j})^2}$

   where s_{ij} is the production in industry *i* in country *j* as a share of total production in this industry. s_j is the share of production of a country in total production. C represents the number of countries.

   The larger the index, the higher the degree of concentration.

Source: OECD, STAN database.

Table 5.A3.3. **Industry characteristics by country**[1]

	GDP growth rate 1992-2003	Returns to scale	Level of technology	Share of non-manual workers	Share of highly-skilled workers
Austria	2.0	M	M	L	M
Belgium	1.9	L	M	**H**	M
Netherlands	2.3	M	L	**H**	**H**
France	1.8	**H**	**H**	**H**	**H**
Germany	1.3	**H**	**H**	M	**H**
Spain	2.6	**H**	M	L	L
Italy	1.4	L	M	L	L
Ireland	7.1	M	**H**	**H**	**H**
Finland	2.6[2]	M	L	M	M
Greece	2.8	L	L	L	L
Portugal	2.0	L	L	L	L

1. Data other than GDP growth rates are for 1994-97.
   H = High
   M = Medium
   L = Low
2. Average for 1994-2000 is 4½ per cent.

Source: European Commission (2002), *European Integration and the Functioning of Product Markets*, European Economy Special Report, No. 2, *http://europa.eu.int/comm/economy_finance/publications/european_economy/2002/eesp202en.pdf*; OECD *Economic Outlook*, Vol. 2003/2, No. 74, OECD, Paris.

Table 5.A3.4. **Key EU labour market targets and indicators**

	EU benchmark	1997	2001	2002	2003
Targets					
Employment rate					
Total	70 (2010 – Lisbon)	60.5	63.9	64.2	64.3
Age 55-64	50 (2010 – Stockholm)	36.3	38.5	40.1	41.7
Female	60 (2010 – Lisbon)	50.6	54.9	55.6	56.0
Indicators					
Unemployment rate					
Total	2.7 (average 3 best performers)	10.1	7.4	7.7	8.0
Long-term	0.8 (average 4 best performers)	5.1	3.3	3.0	. .
Youth	3.1 (average 3 best performers)	9.2	7.1	7.2	. .
Female	3.0 (average 3 best performers)	11.7	8.7	8.7	8.9

Source: European Commission.

© OECD 2004

© OECD 2004

Table 5.A3.5. **Recent studies on EU labour mobility and wage flexibility**

Author(s)	Research topic	Area researched and method	Definition of migration	Major Findings
Nahuis and Parikh (2002)	Response of net migration to shocks in regional unemployment, wages, income disparities and labour participation.	Euro area regions. Time series regression1983-95.	Net migration = population change plus deaths minus births.	Labour mobility is low in the euro area. Female participation mitigates the adverse effects of low labour mobility. Part-time employment does not play such a role.
Tani (2003)	Role of unemployment rate, participation rate and net migration to accommodate labour demand shocks.	166 regions across 12 member states of the European union. Time series regression1988-97.	Migration = change in the working population (assuming that those are due to in and out migration rather than demographics).	Mobility accounts for half of the response to a labour demand shock in the first year after it occurs, and its weight increases thereafter, which is quite similar to research on the United States (Blanchard and Katz, 1992).
Puhani (1999)	Role of labour mobility as an adjustment to changes in unemployment and income.	Regional data for Western Germany, Italy and France. Time series regression1983-97.	Net migration = population change plus deaths minus births.	Migratory movements are little explained by fluctuations in regional unemployment and regional wage disparities.
Baddeley *et al.* (2000)	Role of regional wage flexibility in regional unemployment disparity and role of regional migration in employment variations.	Regional data for the United States, the United Kingdom, Germany, Italy, France and the Netherlands. Time series regression 1985-90.	Migration is net moves out of the region (state) as a % of total population per annum.	Regional wages do not appear to be more rigid in the European regions than in the United States, but in the United States the higher rates of labour mobility between regions provide the necessary adjustment that prevents the opening up of wide and persistent regional unemployment disparities prevailing in Europe.

Source: OECD.

Table 5.A3.6. **Effect of qualification on labour market status**

A. Unemployment rates by education level and age group in Italy, 1997

	Aged 25-34	Aged 35-64
Southern Italy		
University degree	31.4	3.0
Diploma	29.8	5.9
Professional qualification	31.6	9.5
Secondary school certificate	27.4	11.2
No qualifications	35.5	15.2
Italy		
University degree	20.4	2.1
Diploma	15.0	3.6
Professional qualification	11.0	4.9
Secondary school certificate	14.6	6.4
No qualifications	26.1	8.5

B. Qualifications of employed and unemployed in Germany
Per cent of total, 1999

	Employed	Unemployed
East Germany		
College, university, Ph.D.	15.2	6.9
Meister, technician, Technical school	16.7	10.0
Apprenticeship	57.4	71.3
No qualification	10.8	11.9
West Germany		
College, university, Ph.D.	14.6	7.5
Meister, technician, Technical school	9.4	4.5
Apprenticeship	57.1	51.2
No qualification	18.8	36.8

Source: Davies, S. and M. Hallett (2001), *Policy Responses to Regional Unemployment: Lessons from Germany, Spain and Italy*, Economic Papers, No. 161, *http://europa.eu.int/comm/economy_finance/publications/economic_papers/2001/ecp161en.pdf*.

© OECD 2004

Table 5.A3.7. **Indicators for the four cohesion countries**

	Greece		Ireland		Portugal		Spain	
	1990-99	2000-02	1990-99	2000-02	1990-99	2000-02	1990-99	2000-02
Macroeconomic indicators								
GDP growth (%)	1.9	4.1	7.1	7.7	2.8	1.9	2.6	3.0
Employment rate[1]	56.0	56.9	56.3	66.9	69.3	72.4	50.3	58.8
Unemployment rate	9.4	10.6	12.0	4.2	5.6	4.4	15.1	11.0
Real wage/productivity growth differential (%)	–1.1	–2.3	–2.5	–4.5	0.1	1.0	0.0	0.2
Public finance indicators								
Debt (% of GDP)	100.7	105.9	79.0	35.6	59.0	55.7	67.6	69.1
Public net lending (% of GDP)	–8.8	–1.6	–1.0	1.8	–5.5	–3.3	–4.5	–0.5
Microeconomic indicators								
Patents[2]	6.0	. .	31.0	. .	4.0	. .	86.0	. .
R&D expenditure (% of GDP)	0.5	0.5	1.2	1.2	0.6	0.7	0.8	0.9
High-technology manufacturing exports[3]	18.0	35.1	186.7	203.3	32.4	40.4	43.2	40.4
Population with at least an upper secondary education[4]	43.4	51.4	46.4	59.2	21.0	20.7	30.3	39.2
Corporate tax rate[5]	46.0	37.5	10.0	10.0	39.6	35.2	35.3	35.0
Quality of infrastructure[6]	55.0	83.0	65.0	96.0	48.0	81.0	58.0	86.0
Degree of product market regulation[7]	. .	0.97	. .	0.20	. .	0.70	. .	0.64
Take-up rate of structural funds	. .	0.37	. .	1.07	. .	0.85	. .	0.99

1. Ratio of total employment over population aged 15-64.
2. Triadic patents, *i.e.* number of patents file at the EPO, the USPTO and the JPO.
3. This indicator, known as revealed comparative advantage index, shows the country's exports for an industry relative to total manufacturing exports, divided by OECD exports of the same industry relative to OECD total manufacturing exports. The OECD total excludes the Czech Republic, Hungary, Korea, Luxembourg, Mexico, Poland and the Slovak Republic. A value above 100 in a industry implies that, relative to the OECD23 average, the country tends to specialise in exports in that industry.
4. Population aged 25-64 that has attained at least upper secondary education over the population of the same age group. 1992-99 average for the first column and 2000-01 for the second column.
5. Including local profit taxes and surcharges. For Ireland, these are rates applied to manufacturing industries only. Data indicated in the columns correspond respectively to 1991 and 2001.
6. This indicator is based on measures of quality and quantity of telecommunications, transport and electricity infrastructure, in physical terms. The final series is a weighted average of these three types of infrastructure, indexed to a standard base United States 1995 = 100. Data indicated in the columns correspond respectively to 1990 and 2000.
7. A high number indicates a greater degree of regulation and all indices are scaled from 0 to 1. Data correspond to late 1990s.

Source: Eurostat, Eurostat Yearbook 2003 – *The Statistical Guide to Europe*; OECD, ADB Database, STAN Database, Tax Database; OECD *Main Science and Technology Indicators*; OECD *Science, Technology and Industry Scoreboard* 2003; *Education at a Glance* – 2003 *Indicators*.

© OECD 2004

Table 5.A3.8. **Impact of the CAP reform**

	2002 base year	Maximum decoupling	Change compared to base year	Minimum decoupling	Change compared to base year
	EUR, billion	EUR, billion	Percentage	EUR, billion	Percentage
Producer support estimate	**105.5**	**106.3**	**0.8**	**106.1**	**0.6**
Market price support	61.3	57.5	–6.0	57.3	–6.3
Payment based on:					
Output	3.8	3.5	–6.3	3.5	–6.1
Area planted/animal numbers	27.7	6.4	–76.9	13.5	–51.1
Historical entitlements	0.5	27.3	4 467	19.3	3 179
Input use	7.6	7.5	–1.6	7.5	–0.9
Input constraints	4.4	3.8	–12.2	4.3	–1.3
Overall farming income	0	0	0	0	0
Miscellaneous	0.055	0.055	0	0.055	0
General service support estimate	**9.7**	**9.9**	**2.2**	**9.9**	**2.2**
Transfers to consumers from taxpayers	**3.8**	**3.8**	**1.2**	**3.8**	**1.2**
Total support estimate	**119.1**	**120.2**	**0.9**	**120.0**	**0.8**

Source: OECD (2003), *Analysis of the 2003 CAP Reform*, Paris.

© OECD 2004

Bibliography

Baddeley, M., R. Martin and P. Tyler (2000), "Regional Wage Rigidity: the European Union and United States Compared", *Journal of Regional Science*, Vol. 40, No. 1.

Nahuis, R. and A. Parikh (2002), "Factor Mobility and Regional Disparities: East, West, Home's Best?", CPB *Discussion Paper*, January, *www.cpb.nl/eng/pub/discussie/4/disc4.pdf*.

Puhani, P.A. (1999), "Labour Mobility – an Adjustment Mechanism in Euroland?", IZA *Discussion Paper*, No. 34, *www.eabcn.org/research/documents/puhani03.pdf*.

Tani, M. (2003), "Have Europeans Become More Mobile? A Note on Regional Evolutions in the EU: 1988-1997", *Economic Letters*, No. 80.

© OECD 2004

Annex A

A glossary of major EU institutions and bodies

The *European Council*. It consists of the Heads of State or Government of the EU member states. It meets at least three times a year and the President of the European Commission attends. The European Council defines the general policy objectives and guidelines.

The *Council of Ministers*. It is composed of one representative at ministerial level from each member state, who is empowered to commit his government. Council members are politically accountable to their national parliaments. Which Ministers attend each Council meeting varies according to the subject discussed. Thus, Ministers for Foreign Affairs attend the General Affairs and External Relations Council to deal with external relations and general policy questions, and so on. This is why the expression "different formations of the Council" is normally used.

The *Council of Economic and Financial Affairs* (*Ecofin*). It is composed of the Ministers for Economy and/or Finance, and functions as described above. It largely deals with economic policies and public finance issues.

The *Competitiveness Council* is composed of European Affairs Ministers, Industry Ministers or Research Ministers, depending on the agenda and it deals with internal market, industry and research related policies.

The *Employment, Social Policy, Health and Consumer Affairs Council*. It comprises the Ministers for Employment and Social Affairs, functions as described above, and largely deals with employment and social policies.

The *Eurogroup*. It is composed of the Finance Ministers of the euro area countries and assesses the economic situation and discusses the major policy issues for the euro area, in an informal setting. The Commission, and the ECB when appropriate, are invited to take part in the meetings.

The *European Parliament*. It is the assembly of the 786 representatives of the Union's citizens, elected by direct universal suffrage, and reflects the size of the member states' population. It is involved in the legislative process to different degrees depending upon the field, approves the appointment of the Commission, can question the Commission and Council, and shares budgetary powers with the Council.

The *Parliament's Committee on Economic and Monetary Affairs*. This committee is responsible for matters relating to EMU, including relations with the ECB; tax harmonisation and tax provisions relating to the free movement of goods, persons, services and capital in the internal market; and financial services and aspects related to prudential supervision and monitoring of such services.

The *European Commission*. As from 1 November 2004, it will be composed of 25 commissioners, one per country, including a President and the Vice-Presidents,

© OECD 2004

appointed by agreement among member states, subject to a vote of approval by the European Parliament. The Commissioners are assisted by an administration that consists of directorates-general and specialised departments. It is a body with powers of legislative initiative, implementation, management and control. It is the guardian of the Treaties and the embodiment of the interests of the Community. It covers virtually all standard governmental competencies.

The *European Court of Justice*. It is the top judicial institution of the Community, safeguarding the legal system of the Community. Its judges must ensure that Community law is not interpreted and applied differently in each member state, that as a shared legal system it remains a Community system and that it is always identical for everybody.

The *European System of Central Banks* (ESCB) *and the Eurosystem*. The ESCB is composed of the *European Central Bank* (ECB) and the national central banks (NCB) of all 25 EU member states. The "Eurosystem" is the term used to refer to the ECB and the NCBs of the member states which have adopted the euro. The primary objective of the Eurosystem is to maintain price stability. Without prejudice to this objective, it supports the general economic policies in the Community and acts in accordance with the principles of an open market economy. The basic tasks to be carried out by the Eurosystem are to define and implement the monetary policy of the euro area; to conduct foreign exchange operations; to hold and manage the official foreign reserves of the member states; and to promote the smooth operation of payment systems. In addition, the Eurosystem contributes to the smooth conduct of policies pursued by the competent authorities relating to the prudential supervision of credit institutions and the stability of the financial system.

The *Economic and Financial Committee*. It consists of representatives of national administrations and national central banks, the European Commission and the ECB. Its main task is to prepare (Ecofin) Council discussions and decisions with regard to economic and financial matters.

The *Economic Policy Committee*. It is a group of senior officials from finance and/or economics ministries and central banks (four from each member state plus representatives of the Commission and the ECB) whose main task is to contribute to the preparation of the work of the Council. It particularly focuses on economic reforms and the quality and sustainability of public finances.

The *Economic and Social Committee*. It consists of representatives from employers' and employees' federations and of representatives of particular types of activity (for instance, farmers, craftsmen, professions or consumers) and is consulted on issues concerning the internal market, education, consumer protection, environment, regional development, social affairs, public health and equal opportunities.

The *Employment Committee*. Formerly the Employment and Labour Market Committee was renamed by the Treaty of Amsterdam. It consists of two representatives from each member state and the Commission. Its task is to assist the Council with its responsibilities in the fields of employment and labour market policies.

The *Social Protection Committee*. It consists of two representatives from each member state and two of the Commission. Its role is to monitor the development of social protection policies, promote exchanges of information, experience and good practice and prepare reports.

The *Standing Committee on Employment*. Itensures the tripartite dialogue of the Community and the social partners (employers and workers) with a view to facilitating the co-ordination of member states' employment policies. On the Community side, representatives from the Council (or governments of the member states) and the Commission participate.

© OECD 2004

Acronyms and abbreviations

APW	Average production worker
BEPG	Broad economic policy guidelines
CAP	Common Agricultural Policy
ECB	European Central Bank
EDP	Excessive Deficit Procedure
EFTA	European Free Trade Association
EMU	Economic and Monetary Union
EPL	Employment protection legislation
EPO	European Patent Office
ERDF	European Regional Development Fund
ERM II	Exchange Rate Mechanism II
ESCB	European System of Central Banks
EU	European Union
EU15	15 members of the European Union before the May 2004 enlargement
EU25	25 member countries of the European Union
EUR	Euro
FDI	Foreign direct investment
FSAP	Financial Services Action Plan
GAAP	Generally accepted accounting principles
GBP	Pound sterling
GDP	Gross domestic product
HICP	Harmonised index of consumer prices
IAS	International Accounting Standards
ICT	Information and Communication Technology
IFRS	International Financial Reporting Standards
IMF	International Monetary Fund
JPO	Japanese Patent Office
M1	Money aggregate: Currency in circulation and overnight deposits
M2	Money aggregate: M1 and other short-term deposits
M3	Money aggregate: M2 and marketable instruments
MCI	Monetary conditions index
MFI	Monetary and financial institutions
MFP	Multifactor productivity
NAIRU	Non-accelerating inflation rate of unemployment
NASDAQ	National Association of Securities Dealers Automated Quotation System
NCB	National central bank
NUTS	N*omenclature des unités territoriales statistiques* (Nomenclature of territorial units for statistics)

© OECD 2004

NYSE	New York Stock Exchange
OCA	Optimum currency area
PPP	Purchasing power parity
PPS	Purchasing power standard
R&D	Research and development
RCAP	Risk Capital Action Plan
RDR	Rural Development Regulation
SDR	Special drawing rights
SFP	Single Farm Payment
SGP	Stability and Growth Pact
UCITS	Undertakings for the Collective Investment of Transferable Securities
UMTS	Universal Mobile Telephone Systems (third generation mobile telephone systems)
US	United States
USD	United States dollar
USPTO	United States Patent and Trademark Office

© OECD 2004

OECD PUBLICATIONS, 2, rue André-Pascal, 75775 PARIS CEDEX 16
PRINTED IN FRANCE
(10 2004 05 1 P) ISBN 92-64-10654-5 – No. 53413 2004
ISSN 0376-6438