

# REPORT ON THE EUROPEAN ECONOMY 2003

---

## ECONOMIC OUTLOOK

CHAPTER 1

---

## FISCAL POLICY

CHAPTER 2

---

## SUBSIDIARITY

CHAPTER 3

---

## FINANCIAL ARCHITECTURE

CHAPTER 4

---

## BRAIN DRAIN

---

CHAPTER 5

LARS CALMFORS  
University of Stockholm

GIANCARLO CORSETTI (Chairman)  
Università di Roma Tre

JOHN FLEMMING  
Wadham College, Oxford

SEPPONONKAPOHJA (Vice Chairman)  
University of Helsinki

JOHN KAY  
St. John's College, Oxford

WILLI LEIBFRITZ  
OECD

GILLES SAINT-PAUL  
Université des Sciences Sociales, Toulouse

HANS-WERNER SINN  
ifo Institut and Universität München

XAVIER VIVES  
Universitat Autònoma de Barcelona

# EEAG

EUROPEAN ECONOMIC  
ADVISORY GROUP AT

**CESifo**

**EEAG Report ISSN 1611-311 X**

**Publisher and distributor: Ifo Institute for Economic Research**

**Poschingerstr. 5, D-81679 Munich, Germany**

**Telephone ++49 89 9224-0, Telefax ++49 89 9224-1461, e-mail [ifo@ifo.de](mailto:ifo@ifo.de)**

**Editor: Heidemarie C. Sherman, Ph.D., e-mail [sherman@ifo.de](mailto:sherman@ifo.de)**

**Reproduction permitted only if source is stated and copy is sent to the Ifo Institute**

# EEAG Report

---

<b>Introduction</b>	2
<b>Executive Summary</b>	3
<b>Chapter 1</b>	
<b>The European Economy: Current Situation and Economic Outlook</b>	13
<b>Chapter 2</b>	
<b>Fiscal Policy and Macroeconomic Stabilisation in the Euro Area: Possible Reforms of the Stability and Growth Pact and National Decision-Making Processes</b>	46
<b>Chapter 3</b>	
<b>Rethinking Subsidiarity in the EU: Economic Principles</b>	76
<b>Chapter 4</b>	
<b>Financial Architecture</b>	98
<b>Chapter 5</b>	
<b>Should We Worry about the Brain Drain?</b>	118
<b>Authors</b>	
<b>The Members of the European Economic Advisory Group at CESifo</b>	131



## FOREWORD

This is the second report of the European Economic Advisory Group at CESifo. The group was set up in 2001 by CESifo, a joint initiative of the Ifo Institute for Economic Research and the Center for Economic Studies (CES) of the University of Munich. Its aim is to comment on the state and prospects of the European economy. With Ifo's support it provides a business forecast and discusses topical economic issues which are of general interest to policy makers, managers, academics and the European public in general.

The group consists of a team of nine economists from seven European countries. It is chaired by Giancarlo Corsetti (University of Rome III and consultant to the Bank of Italy, and chairman of the group) and includes Lars Calmfors (University of Stockholm), John Flemming (Warden of Wadham College, Oxford), Seppo Honkapohja (University of Helsinki, EEAG vice chairman), John Kay (St. John's College, Oxford, joined in November 2002), Willi Leibfritz (OECD), Gilles Saint-Paul (University of Toulouse), Xavier Vives (INSEAD), and myself. The group plans to deliver reports on an annual basis, remaining in toto responsible for the content.

I wish to thank the members of the group for investing their time in a challenging project and I also gratefully acknowledge valuable assistance provided by Doina Radulescu, Frank Westermann (assistants to the group), Wolfgang Meister and Wolfgang Nierhaus (business forecast), Paul Kremmel (editing) and Heidi Sherman as well as Elsitä Walter (statistics and graphics) and Elisabeth Will (typesetting and layout).

Hans-Werner Sinn  
President, Ifo Institute and CESifo  
Professor of Economics and Public Finance,  
University of Munich

Munich, 5 February 2003

## EXECUTIVE SUMMARY

The report includes five chapters and an executive summary. The executive summary provides a brief synopsis of the report, including both analyses and policy proposals, and presents the main conclusions of the group on the issues raised by each individual chapter.

Chapter 1 presents forecasts of growth and inflation in the European economy for the year 2003 and assesses the current macroeconomic conditions for the whole area and for some individual countries.

Chapter 2 analyses the role of fiscal policy as a tool of macroeconomic stabilisation and proposes changes in the EU fiscal rules with the aim of making them more flexible while at the same time maintaining fiscal discipline.

Chapter 3 reconsiders and assesses subsidiarity as one of the general principles to guide the political and institutional development of the European Union, and proposes a framework to assess the consistency of alternative plans.

Chapter 4 analyses the current financial architecture of the euro area, questioning whether the current institutional arrangements are adequate to reduce the risk of financial crises, and deal with them if they occur.

Chapter 5 presents evidence on the brain drain from European countries towards the US, identifying possible causes and costs for the economy, and looks at factors and policies that could reduce the net outflows of skilled people from Europe.

The macroeconomic scenario

In 2002, output in the euro area grew on average by less 0.8 percent, down from 1.4 percent in 2001. Our baseline forecast for the year 2003 is somewhat better, with a positive, but moderate, growth

rate as high as 1.4 percent. This rate is too low to reduce the gap between actual and potential output. Thus, for the third year in a row, output will remain significantly below potential (or trend) growth. Growth will also be too low to reduce the unemployment rate, which increase to 8.5 percent.

The scenario used in the above growth forecast is somewhat optimistic, and may fail to materialise. Serious concerns about both the short-term and the medium-term outlook arise from two sources: First, there is great uncertainty about the geopolitical situation. The forecast assumes that war with Iraq will be averted, or that if it occurs it will be short in duration and decisive in outcome, and that sentiment will not be substantially affected by further major terrorist attacks or threats of such attacks. Second, the legacy of the long American boom and the resulting stock market bubble have created structural imbalances in the world economy which cannot be sustained over the longer term. If adjustments were accompanied by a rapid fall in the dollar exchange rate and a sharp appreciation of the euro, Europe could lose a significant share of its external demand – any remaining hope for export-led recovery in Europe would come to an end. Any estimate of the magnitude or timing of these influences is, however, subject to considerable uncertainty.

A large part of the poor performance of the euro area in 2002 is due to developments in the world economy, reflecting fears that wars could disrupt an already unsettled world, the aftermath of the puncturing of the US market bubble, and concerns about firms' profits and profit reporting. But developments in the world economy are not sufficient to explain the weak growth performance in Europe in 2002, particularly relative to the US.

Different macroeconomic policies have played an important role. While demand in Europe has been constrained by continuing fiscal consolidation, US demand was supported by an unprecedented increase in the structural deficit, which in 2002 rose from  $\frac{1}{4}$  to  $\frac{23}{4}$  percent of GDP. General monetary conditions are easy on both sides of the Atlantic, but



the European Central Bank has cut rates cautiously. The Fed did more, and did it more aggressively.

There are arguments supporting the view that a more aggressive reduction of interest rate by the ECB could have been useful. Despite relatively low interest rates, the cost of financing investment has considerably increased in the past year due to the decline in stock prices (making equity financing more expensive) and the increase in the risk premium of industrial bonds. By reducing the capital base of the banking sector, the fall in stock prices may have made banks reluctant to lend. Falling stock prices and the consequences of the terrorist attacks on September 11, 2001 have hit the insurance sector, a traditionally important source of finance for corporations in the corporate bond market. The appreciation of the euro over the year reduced external demand. A prompter reaction by the ECB to the Fed interest cuts could have contained the appreciation.

Why then was the ECB so cautious? An important reason why the ECB did not cut rates more aggressively is that core inflation<sup>1</sup> in the euro area has remained above the two percent upper bound in the ECB definition of price stability. The ECB has pointed to a number of special factors explaining why inflation has persistently remained above the medium-term bound since 2001, such as oil price hikes, food price hikes due to bad weather conditions and animal diseases, and the increase in indirect taxes in some countries.

Yet perhaps an even more important factor is that unit labour costs in the euro area have continued to grow unabated, by almost 3 percent per year, as wage growth did not fall while labour productivity continued to stagnate. The contrast with the US is striking. There, the strong deceleration of unit labour costs (associated with unabated productivity growth) in a phase of weak demand made it easier for the Fed to provide a strong stimulus to growth, without much concern about inflationary consequences.

Consistent with its mandate the ECB is extremely wary of letting the economy stay above the 2 percent ceiling on inflation for too long. During 2002 the ECB faced a difficult trade-off between supporting growth and acting to bring the inflation rate down below 2 percent.

<sup>1</sup> Core inflation is defined as the rate of growth of the Harmonised Index of Consumer Prices excluding energy and unprocessed food.

There is little room for disagreement about the importance of sticking credibly to a clearly defined nominal anchor. But problems arise if the anchor is set at too low a level. One important and well-known reason is the fact that nominal interest rates cannot be negative. In an environment with very low inflation expectations, the central bank may simply not be able to reduce the real interest rate as much as needed to sustain recovery. Recent macroeconomic models go one step beyond this, suggesting that the equilibrium (natural) rate of unemployment may become higher at very low levels of inflation<sup>2</sup> – providing an additional reason to be on the safe side and to avoid very low inflation.

Another important reason for avoiding excessively low inflation targets is the need for relative price adjustments in the common currency area, which necessarily drive measured inflation in some regions higher than in other regions. In this case an inflation target below 2 percent for the area as a whole may mean that the rate of inflation in the group of regions that need to reduce their relative price levels could become very low, under some circumstances even dangerously close to deflation.

The 2001 EEAG report included a chapter on relative price adjustment within the euro area. One source of differential inflation dynamics in the area is the different rates of productivity growth of countries at different levels of industrial development (according to the Balassa-Samuelson hypothesis<sup>3</sup>).

<sup>2</sup> See Akerlof, G.A., W.T. Dickens, and G.L. Perry (2000), *Near-Rational Wage and Price Setting and the Long-Run Phillips Curve*, *Brookings Papers on Economic Activity* (1), 1–44 and Akerlof, G.A., W.T. Dickens, and G.L. Perry (1996), *The Macroeconomics of Low Inflation*, *Brookings Papers on Economic Activity* (1). Suppose for example that a fraction of the firms in a country are always exposed to negative shocks, such that they can stay in business only if they manage to reduce their wage costs in real terms. When inflation is very low, a real wage reduction can only be achieved by cutting nominal wages. If these are rigid downward, firms hit by a negative shock will go out of the market. Whether or not these models are supported by empirical evidence is still too early to tell.

<sup>3</sup> In a nutshell: consider two economies integrated in the world markets, with the same level of productivity in the sector producing nontradables. In the sector producing tradables, instead, productivity is higher in one economy than in the other. Now, if international markets of capital and goods are competitive, the rate of profits and the price of tradables will be the same across these countries. What will be different is the real wage – which must be higher in the economy where workers in the tradable sector are more productive. But higher wages in this economy also means that local producers need to charge a higher price for nontradables – as there is no productivity advantage in this sector. Clearly, international arbitrage can do nothing to prevent price differentials for goods that are not traded across borders. The overall price level – combining the prices of both tradables and nontradables – will therefore be higher in the economy with higher productivity. When the country with lower productivity in the tradables sector catches up, it will experience higher wage growth than the other country, but also higher price increases in the nontradables sector resulting in a higher overall rate of inflation.

In the euro area, countries that are relatively less industrialised invest more, grow faster, and experience a rapid increase in the prices of their nontradable output. While empirical estimates of inflation differentials due to this channel vary within a large range, they are by no means negligible.

A different source of short-run price dynamics is due to asymmetric demand shocks and misalignment. Germany for instance entered the euro with a currency that had not yet overcome the appreciation shock of 1992/93 resulting from German unification. As there is no option of nominal devaluation within the common currency area, adjustment may be helped through a so-called internal devaluation through fiscal policy (a reduction of employers' payroll taxes in exchange for an increase in taxes paid by employees or a reduction in government expenditure), but eventually requires lower inflation in Germany than in the rest of Europe. The lower the average inflation rate in the euro area, the lower the inflation rate in Germany required to restore equilibrium.

There are different ways in which a monetary authority could deal with the issues of creating more room for relative price adjustments, and reduce the risk of engineering near-deflation rates. In the course of the first few years of the euro, for instance, the ECB has been solicited to declare a lower bound on the medium-run rate of inflation, to complement the two percent ceiling. Recent official statements of the ECB seem to point at one percent as the inflation floor for monetary policy in the euro area.<sup>4</sup>

Among the possible options, the ECB could simply choose to set a higher target medium-term inflation rate. The change to accommodate the required dispersion in national inflation rates need not be dramatic. It could be enough to increase the medium-run average inflation target to 2.5 percent. This would be half a percentage point above the two percent ceiling, or one percentage point above the inflation rate that many observers believe is the ECB's de facto target (1.5 percent). Within the current ECB monetary strategy, the new objective would only require a modification of the definition of price stability.

Yet, while refinements in the ECB strategy can improve the macroeconomic outcome in the euro area, it is highly illusory to expect monetary policy to address and solve the region's most severe employment and output problems. This goal requires reforms removing rigidities and inefficiencies in the labour and the goods markets, and a fiscal policy that combines short-run flexibility with long-run discipline. Looking at easier monetary conditions and reforms as substitute instead as complementary policies would be very dangerous.

Consider the case of the German economy, which has grown at a comparatively low rate during the last twenty years and which has suffered from increasing unemployment for the last thirty years. German competitiveness has come under threat because its wage costs are higher than wage costs of most other competing countries. These problems may have been in part aggravated by the fact that, as previously mentioned, the conversion rate between the D-mark and the euro in 1999 was quite high. However, we should note that the trade-weighted real exchange rate of the D-mark is currently not above its value in the years around and before unification. As Germany's unemployment and wage problem is much older than only ten years, institutional factors must also have played a role in explaining the high wages. Among them the German system of industry-wide wage negotiations, repercussions from the welfare state whose wage supplements imply high reservation wages, and high labour taxes rank highest. It seems that fundamental institutional reforms centered on the labour market are necessary to solve Germany's problems. These reforms would be particularly effective if they were accompanied by a somewhat looser monetary policy by the ECB, allowing Germany to have a significantly lower inflation rate than the other euro countries and hence to change its relative prices without being exposed to the problems potentially associated with a very low inflation rate.

#### Fiscal policy

The current budgetary problems of some member states in the EU have focused attention on fiscal policy and the fiscal rules in the EU. A key issue is the need to combine long-run sustainability of fiscal policy with short-run flexibility, because fiscal policy is the only remaining stabilisation instru-

<sup>4</sup> See the discussion in Svensson, L. (2002), A Good Thing Could Happen at the ECB: An Improvement of the Eurosystem's Definition of Price Stability, mimeo, Princeton University, and references therein.



ment in the case of country-specific cyclical developments. Thus fiscal policy should play a larger role as a stabilisation tool than according to the conventional wisdom that has prevailed in recent years. The problems of using fiscal policy in this way are not due to technical ineffectiveness but to problems of political economy.

It would be most unfortunate if the failure of some EU member states to abide by the present fiscal rules would lead to their being scrapped. There is a continued need for fiscal rules at the EU level to ensure fiscal discipline. In view of the future strains on government budgets arising from ageing populations, the present “close to balance or in surplus” budget targets for the medium term should not be relaxed, although the targets should be set explicitly in cyclically adjusted terms.

It would be unwise to introduce a golden rule, according to which government investment can be financed through borrowing. The underlying rationale for a golden rule is that public projects are expected to generate a flow of tax revenues as high as the interest payment on the additional debt incurred to finance them. There is, however, no reason for this to be true: many public projects are desirable for reasons that are independent of tax-revenue considerations. Moreover, the classification of expenditure among different categories is arbitrary. Allowing budget flexibility via a golden rule is likely to cause massive re-classification to take advantage of the rule. This is not to deny that there may be sound reasons to allow for larger deficit financing of public investment – such as efficiency of the tax regime or intergenerational fairness, as also future generations will benefit from public capital. But experience shows that these good reasons are seldom primary concerns in the actual budget processes.

Recent proposals from the European Commission aim at increasing the flexibility of the EU fiscal rules through changes in the interpretation of the Stability and Growth Pact but without revisions of the Maastricht Treaty.<sup>5</sup> The proposed changes involve more discretionary decisions on the fiscal goals. The idea is to allow temporary deviations from the medium-term budget objective of “close to balance or in surplus” on a case-by-case basis if

they can be justified in terms of growth-enhancing expenditure increases or tax cuts, or as a consequence of structural reform. The proposal is also to allow countries with a lower stock of public debt more long-term deviations from the medium-term budgetary goal.

These proposals by the Commission entail significant risks. A loosening of medium-term budget objectives without doing anything about the maximum deficit ceiling of three percent of GDP increases the risk that this ceiling will be breached, which is likely to cause more conflicts among member states. Also, the more complicated the rules become and the more discretionary judgements are involved, the greater is the danger that the credibility of the fiscal rules is undermined.

Instead, there is in our view a strong case for more fundamental reforms of the fiscal rules involving Treaty changes. These changes should focus on the excessive deficit procedure and the deficit ceiling, as they form the backbone of the rules. A simple and transparent reform would be to let the deficit ceiling depend explicitly on the debt level of the country: countries with low debt (less than 55 percent of GDP according to our proposal) should be allowed to run larger budget deficits than three percent of GDP. The lower the debt-GDP ratio the higher the maximum deficit for these countries should be. This would serve both to give low-debt countries greater scope for stabilisation policy in recessions and enhance the incentives for long-run fiscal discipline, preventing pro-cyclical fiscal policies in booms.

Changes in the fiscal rules must not, however, accommodate the current budgetary problems of some countries. This would ruin the future credibility of any fiscal rules at the EU level. If France, Germany, Italy or Portugal were to breach the three percent deficit ceiling for more than a single year, sanctions must be imposed, as a natural consequence of earlier insufficient fiscal retrenchment, in the common interest of establishing credibility for the rules.

The present fiscal policy framework at the EU level suffers from the fundamental problem that the ultimate decisions on excessive deficits are political. The threat of sanctions has low credibility, as governments are likely to try to avoid political conflicts with each other. This is an argument

<sup>5</sup> European Commission (2002), Communication from the Commission to the Council and the European Parliament, European Economy 3, Brussels.

for transferring decisions on deposits and fines from the political level of the Council to the judicial level of the European Court of Justice.

Current events have shown that there are limits to how much fiscal rules at the EU level can achieve on their own. It would be impossible to uphold these rules if governments repeatedly came into conflict with them. This consideration suggests that one should rely much more on national institutions that are conducive to both long-run fiscal discipline and effective short-run stabilisation policy. One possibility would be to require the member states to adopt national laws on fiscal policy that set well-defined long-run sustainability goals, but also outline clear principles for the use of fiscal policy as a stabilisation instrument.

In this respect, economists have recently begun to discuss whether there are lessons for fiscal policy to be learnt from the recent development of monetary policy theory and institutions. A parallel could be drawn between delegation of monetary policy to independent central banks, and delegation of decisions about fiscal stabilisation policy to an independent fiscal policy committee. The underlying idea is to separate decisions aimed at stabilisation from other aspects of fiscal policy concerning distribution and social efficiency. Such separation would reduce decision lags as well as politico-economic risks of pursuing pro-cyclical policies and deficit bias. At the same time, it could help the government to define more clearly the political goals of alternative policy measures. Such a development has taken place in other areas of economic policy making in addition to monetary policy: examples include competition policy as well as market regulation and supervision.

The idea of delegation of fiscal policy stabilisation decisions may be unfamiliar to many people, and is not on the current political agenda. There is, however, a case for starting to think about the possibility of such a reform, and exploring the extent to which it would be compatible with generally accepted principles of democratic governance. Consistent with the principle of subsidiarity, national delegation could be seen as an alternative to the recent proposals of the European Commission, according to which it should be given greater discretionary powers in assessing fiscal policies of member states.

One idea would be for member states to establish an independent fiscal policy committee at the national

level. A politically realistic way to move in this direction in the next few years is to set up independent fiscal policy committees at the national level that play an advisory role. Governments could be required to seek the advice of these committees before making their budget decisions and to use the committees' estimates of cyclical conditions, government expenditures and tax revenues as a basis for budget calculations. The task of these committees could be to propose how much the actual budget balance in a given year should deviate from the cyclically adjusted budget balance and to make recommendations on specific tax or expenditure changes with the aim of stabilising the business cycle. The general goal of such reform would be to lessen many of the problems that now hamper the use of fiscal policy as an effective stabilisation tool, such as long-decision lags, deficit bias, irreversibility of decisions, and confounding of objectives.

#### Subsidiarity

A reconsideration of the EU policies and the concept of subsidiarity is timely due to the coming enlargement and the current European Convention which will propose a constitution for the enlarged EU. The challenges ahead require careful consideration of the division of responsibilities for decision making of public sector activities. Analysis of economic efficiency provides a useful guideline for assessing which public sector tasks should be delegated to the competence of the EU and which tasks should be the responsibility of national governments of the member states. While there are reasons for using subsidiarity as the basic principle, in a number of tasks there are sound economic reasons for deviations from subsidiarity. These exceptions must be analysed case by case.

Maintenance and promotion of the single market is the most basic EU-level task. It involves not only the removal of obstacles to trade and economic integration but also activities, such as the design and implementation of an active competition policy, that facilitate the functioning of the single market. The EU involvement has both an internal and an external dimension. In fact, it should not be forgotten that regional free trade areas might lead to trade diversion rather than trade creation. To be consistent with its ultimate goal of promoting the welfare of European citizens, EU-level trade policy should be geared towards global free trade.

A second reason for delegation of specific tasks to the EU level of government arises from the existence of public goods, which have geographically widely dispersed benefits. Defence, foreign policy and internal security are public goods where common EU-level decision may be appropriate, though the forms of implementation could partly be national with the EU level having a coordinating capacity. Whether other public goods qualify for centralised provision is controversial, as in most cases benefits tend to be more concentrated locally.

A third reason for delegating public intervention to the EU level arises from the need to regulate economic activities that generate important spillovers or externalities across borders. This is the case for telecommunication networks, environmental concerns, aspects of standardisation and product quality, as well as the financial system. Also, the significance of spillovers and externalities must be assessed case by case. If the externalities involve only a few neighbouring countries, the EU function could be limited to coordination.

While management of fishing rights can be an EU concern because it involves management of a common property resource, it is difficult to extend the same argument to agriculture as a whole. A country or region should decide on its own whether to subsidise agriculture for aesthetic or environmental reasons, and implement its policy at the local level. Reforms of the EU agricultural policy that rely significantly on national policies should stay clear of providing nationally administered subsidies to production or exports as a way to promote competitiveness of national producers. If agricultural support moves to national level, the EU has a potentially important role in ensuring a level playing field and in defining food-safety standards.

The current activities of the EU accord rather poorly with economic principles. Nearly half of the EU budget is devoted to agricultural subsidies and guarantees. Structural funds and operations are the second largest item in the EU budget. The remaining significant items in the EU budget consist of external action, that is policies towards non-EU countries (for example, development aid and pre-accession strategy), international operations, research and technological development, and EU administration. While the EU budget is small in comparison to the budget of central government in federal states, the EU exerts great power

through regulatory policies in different ways, including regulations, directives and decisions. The regulatory activity of the EU has grown significantly over the years. Agriculture and fishery stand out also in terms of the number of EU regulations: looking at five-year periods, about 40–50 percent of the total are in this area. In terms of EU regulations, matters concerning the single market and non-sectoral business relations (especially competition policy) are also significant. As discussed above, activities associated with agriculture are not natural EU-level tasks, with the possible exception of food safety. Agriculture and structural policies are largely redistributive in nature and as such they are not natural responsibilities of the EU-level government.

Decentralisation according to subsidiarity is likely to lead to competition between national jurisdictions, which can be good or detrimental depending on the nature of the activity. In general, beneficial effects can be expected from a yardstick competition, as countries try to imitate successful neighbours. However, in the case of factors of production that are mobile across borders, tax competition is problematic because it tends to drive tax rates down to a level that equals the marginal cost of providing public infrastructure. So, with fiscal competition, in the long run taxes on mobile factors become similar to prices or user fees for public infrastructure. But this means that the tax base for generating revenue towards the general government budget is likely to erode with the passage of time. Note that the revenue from taxes on mobile factors may not even cover the cost of providing the infrastructure. This is because tax competition equates tax rates to the marginal costs of producing the infrastructure, but in the case of public goods marginal costs are typically below average production costs. In that case, tax competition would result in a race “below the bottom”, whereby infrastructure is under-priced and the immobile factors are forced to pay for the services enjoyed by the mobile ones. Unless the distortions from tax competition offset other distortions, such as the tendency of local and national government to spend and tax excessively for political-economy reasons, there are potentially large losses of welfare.

To prevent such outcome, tax harmonisation on the EU level might be considered. However, mere tax rate harmonisation will create a strong incentive at the country level to compete with each other through the provision of infrastructure goods, pos-

sibly resulting in overprovision of such goods. This problem can be avoided if the EU ban on explicit subsidies is extended to indirect subsidies through the provision of under-priced infrastructure. In principle, the cost of infrastructure should be covered with taxes on the benefiting firms and agents alone.

With deepened integration and increased mobility of capital and people, the welfare state will come under financial pressure. In a closed system redistributive taxation and the welfare state can be seen as insurance systems as they protect citizens who happen to experience unfavourable personal circumstances. With open borders, increasing factor mobility puts limits to this insurance activity since rich net-contributors to the welfare state of a country may be inclined to move to countries with a less-redistributive system, while poor people have the opposite incentive – to migrate to countries with a relatively more redistributive welfare state. This has and will continue to create problems: The migrants from Eastern and South-eastern Europe who have come to Western Europe after the fall of the iron curtain, and will continue to come in the foreseeable future, exhibit a highly differential mobility among European countries. This differential mobility is likely to trigger off a sort of deterrence competition among these countries.

One important source of difficulties is the adoption of the “residence principle” for migrant workers and employees in the EU, as regards the eligibility to social benefits and social security contributions. While people who migrate from one EU country to another for reasons other than work are excluded from the welfare system of the host country, people who migrate in order to work are fully and immediately included. Full and immediate inclusion implies full participation in the national redistribution system. This creates an incentive to migrate above and beyond the economic incentive from wage and employment differences. Moving away from a “residence principle” towards a “home-country principle” to define benefits and responsibilities for the migrants can in principle reduce distortions. Partially delayed integration, in which migrants are immediately entitled to contribution-financed social benefits but are only gradually entitled to social benefits that are funded from general tax revenues, may provide a practical solution.

Social standards in health, work and elsewhere are another aspect of modern welfare state. The com-

ing enlargement will challenge these standards because of the differences across member states – especially between the current and future EU members. Economic analysis suggests that rapid harmonisation of work-related social standards would be detrimental in the coming EU enlargement, since it would enforce the same mix of pecuniary wages and social standards on virtually all countries, whereas a different mix may best suit local labour market conditions. Different countries are in very different stages of economic development and premature harmonisation of social standards would slow down the process of development. If instead countries are allowed to compete, these standards will rise in line with wages and living standards in the poorer EU countries. Instead of focusing on harmonisation in the coming EU enlargement it will be important to provide free access to new markets to the accession countries. This is the best way to facilitate the development process.

Redistribution among different EU countries raises difficult political issues and polarises opinions. Once again, it is important to take into account the major differences in the stages of economic development. These differences suggest that inter-jurisdictional competition could be beneficial, as in the case of social standards discussed above. Interpersonal and interregional redistribution is primarily a national responsibility. Deviating from this principle could involve huge welfare and efficiency losses in Europe. East Germany is a good example of the problems that may occur. The quick adoption of the west German welfare system in east Germany has had extremely adverse consequences, because east Germany's underdeveloped market economy turned out to be unable to generate jobs that could compete with the generous replacement incomes provided by the welfare state. Mass unemployment and a very poor growth performance were the result with little improvement in sight.

#### Financial architecture

Alternative models for reforming financial architecture in Europe will have profound implications for the degree of financial market integration, competitiveness in the financial industry, and financial and monetary stability. Reform proposals should be assessed in terms of their contributions

to the welfare of European citizens, including the price they will pay for financial and payment services, the range of opportunity for insurance and portfolio diversification, and the reliability and trust of the financial institutions in the area.

The financial architecture in Europe is clearly in a process of deep change. In its present shape, there are at least three significant problems.

First, there are areas in which the present financial architecture arrangements are not adequate for financial stability. For instance, in the event of a crisis, there is no clear chain of command among the institutions potentially involved in any intervention. How would the euro system react to the threat of a major disruption like the one ensuing from the possible bankruptcy of Long Term Capital Management (LTCM) in the US in 1998? Who in Europe would have the responsibility to organise a rescue of a large financial institution, as did the president of the Federal Reserve Bank of New York in the case of LTCM? A response based on improvised cooperation may not be enough – it may come too late. Moreover, there could be misaligned incentives for national supervisors dealing with transnational firms, leading to too little interventions, as they do not internalise cross-border spillovers from the crisis of such firms. Conversely, national authorities may have strong incentives to provide excessive help to national champions. This view is in contrast to the conclusions of Brouwer's reports<sup>6</sup>, according to which all these potential issues can be satisfactorily addressed with just a little bit more cooperation among supervisors in the various member states.

Second, to a large extent the present arrangements hinder European financial market integration. Legislation is slow, rigid, and lags behind market developments. Regulatory fragmentation prevents the emergence of liquid European markets (as arguably was the case in the failure of the London Stock Exchange and the Deutsche Börse to create iX). Protection of national champions and regulatory barriers avert the emergence of pan-European banks.

Third, the present arrangements hinder the competitiveness of EU financial markets and institutions. There is considerable uncertainty about the

normative and regulatory framework in Europe. Market fragmentation resulting from regulatory barriers slows down and distorts the emergence of cross-national firms that may be able to compete at international level.

The current "official" view is that this state of affairs is not worrisome because European banking and financial markets remain segmented. In a framework of segmented markets, all that is needed is more cooperation among different regulators and authorities. This view may clearly backfire, as it justifies a slow pace of reforms and policies that do not remove obstacles to integration. Ultimately this may just be a way to endanger stability.

Many political-economy issues are at the heart of the problem, namely, the tension between economic integration and the lack of willingness to relinquish national political control. But while these political economy issues slow down the pace of regulatory and institutional innovations, there are important sources of systemic risk to which the European markets are exposed. The recent events have stressed the threat of terrorist action, and possible financial weakness associated with the current economic slow-down. Some European banks are heavily exposed to emerging markets and to particular sectors, such as telecoms, which have recently experienced deep crises. The process of consolidation within countries has led to the creation of many "national champions", which may create incentives for national authorities to provide excessive guarantees. At the same time, the expansion of cross-border activities may increase potential spillovers and externalities across countries, while creating incentives for underprovision of supervision and liquidity support by national authorities.

The present approach to reforms is gradualist, based partially on the so-called "comitology", consisting in delegation of powers to define rules to various committees. This approach has its limits, and may yield more costs than benefits in the long-term. It may be preferable not to wait for a major crisis to strike in order to put the house in order.<sup>7</sup>

There is good reason to endorse in general the well-intentioned recommendations of the commit-

<sup>6</sup> Economic and Financial Committee (2000), Report on Financial Stability, Economic Papers No 143.

<sup>7</sup> While we see advantages in delegating operational policy making to committees (we actually propose a fiscal policy committee in chapter 2), we find it inappropriate to delegate fundamental political and constitutional decisions.



tees and groups seeking to remove the obstacles to European financial integration. Yet the question is whether a more ambitious approach would be more appropriate. In particular, what prevents the immediate setting of clear procedures for crisis lending and management with the European Central Bank at the centre? Why not put a crisis framework in place now, and confront the fiscal issues related to the possible costs of intervention?

By the same token, a debate should be opened with a view towards evaluating the benefits of more centralised supervisory arrangements in banking, insurance and securities. In addition to the current decentralized regulatory competition framework, there are other long-run models that one could follow. In the first model, the ECB and ESCB might gain a larger role in supervision of banking, with the contemporaneous creation of separate specialised European-wide supervisors in securities and insurance. The second model consists of an integrated supervisor for banking, insurance and securities, a European Financial Supervision Authority (EFSA), whereas the ECB would have access to supervisory information in order to maintain systemic stability. Different models present different trade-offs between efficiency, accountability but also suitability to specific circumstances and features that may differentiate markets and financial institutions across regions. It may be important to note here that in neither of the two models above, supervision need be completely centralised at the European level. First, national supervisors will need to be involved in day-to-day operations. Second, national institutions could still have the supervision of entities that trade mostly within one national jurisdiction (under the home-country principle).

The door should be left open in the Convention on the Future of Europe to the necessary institutional changes to implement more centralised regulation, perhaps along the lines of one of the models above. At the same time, the EU-wide competition policy in the banking sector should limit help to national champions (which are “too big to fail”), and remove obstacles to cross-border mergers. Domestic competition policy should also be reinforced, as to keep in check local market power.

Reforms of the financial architecture are admittedly quite complicated, as technical aspects are strictly interwoven with legal and institutional aspects.

Given the large interests at stake, the process of reform is the target of particularly strong lobbies, both private and public. It would be a great cost for society if the need to reconcile conflicting special interests resulted in a lower protection of European citizens against the many risks that an inefficient and vulnerable financial system entails.

#### Brain drain

Is Europe losing its most talented workers to the United States? Should brain drain be a concern of European policy makers? Chapter 5 documents brain drain and discusses potential policy responses. We find that migrants of European ascent are much more educated on average than their counterparts in both the US labour market and their home countries. Workers of exceptional ability – in various dimensions – are over-represented among European expatriates. Thus, they are much more likely to hold masters and Ph.D. degrees; they are more engaged in entrepreneurial activities; they earn more on average than US workers with similar characteristics; the density of unusually highly paid workers among them is higher; and European-born scientists in the US do better than average.

Reduced intellectual capital in Europe may be worrying for several reasons. In particular, intellectual workers are complementary to other workers. A greater scarcity of intellectual workers is likely to put downward pressure on the wages of the latter. Furthermore, the expatriates’ secondary education, and often a large share of their tertiary education has been paid by the European taxpayer, who gets a lower return on his investment in higher education.

To be sure, the cumulated size of the brain drain does not currently exceed one percent of the workforce, suggesting that it is unlikely to have a very large impact on the *aggregate* intellectual capital of Europe. However, that conclusion may be reversed if one believes that the fraction could be much higher among top entrepreneurs and top scientists, and could increase in the future. Evidence suggests that these people could be much more important than suggested by their measured ability, because they are critical to business creation and growth. Potentially, the brain drain could then have damaging long-run implications for productivity and living standards in Europe.



While it is too early to draw definite conclusions about this view, the data we present are consistent with it. Our analysis suggests that the brain drain is a symptom of a more general problem, i.e. that the European institutional climate is detrimental to highly skilled individuals. In particular wage-setting institutions as well as personal and corporate taxation penalize top earners, which in turn discourages risk taking and favours the expatriation of exceptional talent. We suggest a number of measures to alleviate that problem. These include measures to:

- (a) Increase the incentives for quality in public research institutions and favour exchanges between them and the private sector in order to foster the creation of clusters of excellence and high technology. In doing so, the government should however avoid a commitment to specific sectors and technologies in order to reduce inefficient rigidities in the allocation of funds and distortions in the allocation of talents.
- (b) Increase intra-EU mobility, in particular by enhancing pension portability. For many reasons this will particularly favour highly skilled workers, who tend to be the more mobile. Hence this measure will be particularly helpful in creating a European-wide sizeable labour market for talented workers.
- (c) Reduce top marginal tax rates, to offer attractive terms to top scientists and executives.

These recommendations can of course be desirable for reasons beyond the goal of reducing the brain drain. Brain drain just adds a motivation for implementing them.

## THE EUROPEAN ECONOMY: CURRENT SITUATION AND ECONOMIC OUTLOOK

### 1. The current situation

In 2002 output growth in the euro area increased on average by  $\frac{3}{4}$  percent (after 1.4 percent in 2001).<sup>1</sup> Thus, for the second consecutive year it was significantly below potential (or trend) growth, so that the output gap – a measure of the under-utilisation of resources – widened further. Expectations of a recovery of the European economy were revived in Spring 2002, when business confidence improved significantly and output began to increase after a period of near stagnation. But these hopes were dashed by mid-year when new uncertainties emerged. Growing fears that a war in Iraq could further disrupt an already unsettled world economy, and concerns about profits and financial reporting (see Box 1.2: Could Enron happen in Europe?, p. 23) caused stock markets in the United States and Europe to decline sharply. Business and consumer confidence weakened again in both the United States and Europe, signalling a more fragile recovery than previously expected. All this added to fears of a double-dip recession in the world economy (Figures 1.1 and 1.2) (For further details on business confidence in individual countries and regions see Appendix 1).

<sup>1</sup> This development was slightly weaker than our forecast in last year's report (1.3 percent) and much weaker than official forecasts.

### 1.1 Past differences in macro-policies between Europe and the United States

Developments in the world economy are not sufficient to explain Europe's particularly weak growth performance in 2002. Although in the first half of 2002 output growth and business confidence in Europe was helped by the recovery of the US economy, growth in Europe remained significantly lower than in the United States.

There are a number of reasons for this disappointing outcome and differences in macro-policies, as

Figure 1.1

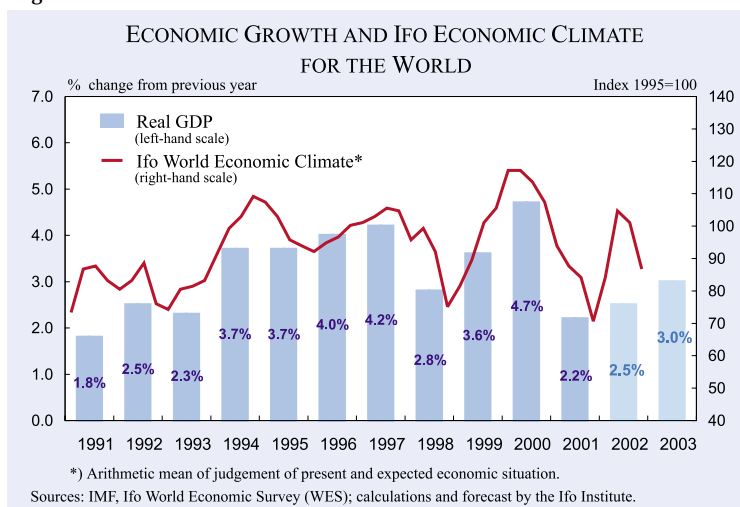
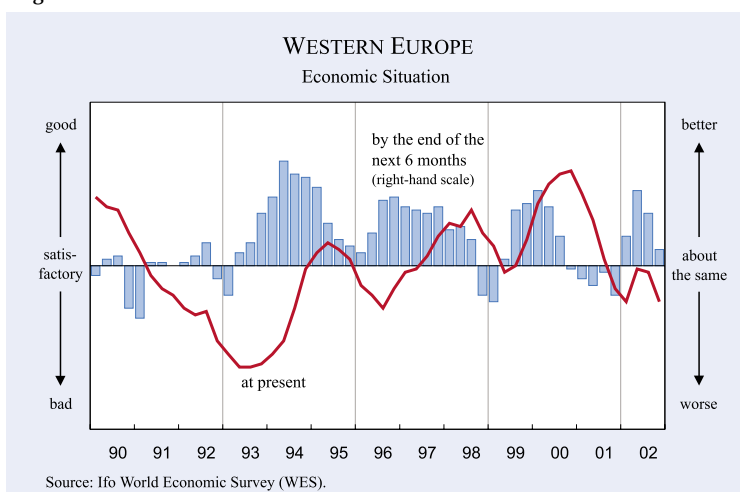


Figure 1.2



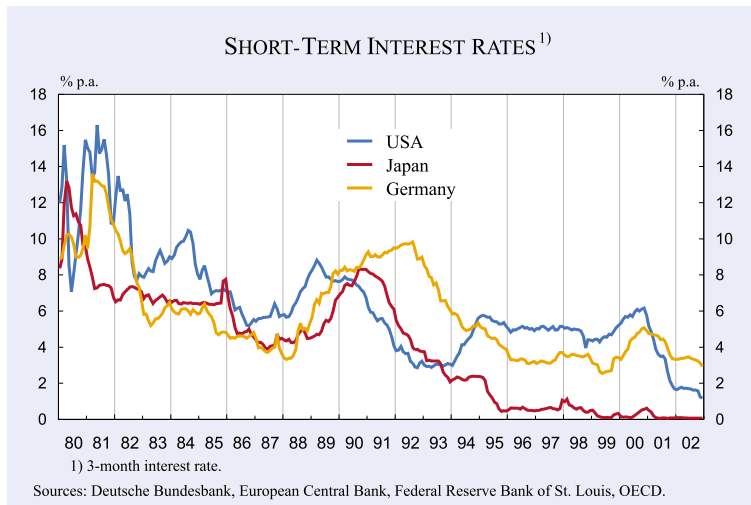
well as ongoing structural problems in the European economy (which were identified in our last report) have been at play.

With respect to *fiscal policies*, the difference between Europe and the United States was most pronounced. In the euro area, countries continued to aim at meeting their consolidation targets as laid out in their stability programmes (albeit not always successfully). The structural budget deficit of the euro area as a whole remained broadly stable at around 1½ percent of GDP.<sup>2</sup> By contrast, in the United States fiscal policy boosted demand as taxes were cut and public spending was increased sharply in the aftermath of the terrorist attacks of 11 September 2001. The structural fiscal deficit increased from ¼ percent of GDP in 2001 to 2¾ percent of GDP in 2002, or by 2½ percentage points; this was the biggest annual fiscal demand stimulus in the United States since the first half of the 1980s.

*Monetary conditions* remained generally favourable both in Europe and in the United States but could not prevent the recovery, which began in Spring 2002, from faltering again. Between 2001 and 2002 nominal short-term interest rates in the euro area declined on average by around 1 percentage point (from 4¼ percent to 3¼ percent). In the United States, the decline (from 3¾ percent in 2001 to 1¾ percent) was about twice as much (Figure 1.3). With respect to real interest rates, the difference is smaller as the inflation rate fell more in the United States. If real interest rates are calculated by deducting the increase in the consumer price deflator from the nominal interest rate, the decline in real interest rates in the United States averaged 1¼ percentage points (from 1¾ percent to ½ percent) and in the euro area it averaged ¾ percentage points (from 1¾ percent to about 1 percent).<sup>3</sup>

<sup>2</sup> The decomposition of the government budget into a cyclical and non-cyclical or structural component aims at separating cyclical influences on the budget balances resulting from the divergence between actual and potential output (the output gap), from those which are non-cyclical. Changes in the latter can be seen as a cause rather than an effect of output fluctuations and may be interpreted as a proxy for discretionary policy changes. The structural budget balance is derived by (re-)calculating government revenues and expenditure which would be obtained if output (GDP) were at its potential (or trend) level. We follow here the approach used by the OECD. See also Chapter 2.

Figure 1.3



The easing effect of lower real interest rates on monetary conditions is also reflected in the shortfall from the so-called Taylor rate<sup>4</sup>, but it was partly offset by the appreciation of the euro exchange rate, so that the overall monetary condition index for the euro area, which we calculate as a weighted average of the real short-term interest rate and the exchange rate, indicated some tightening (Figures 1.4 and 1.5).<sup>5</sup>

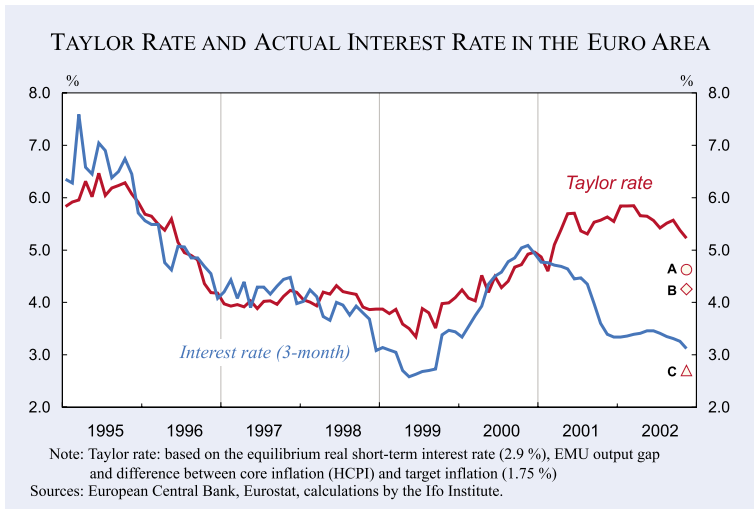
There is, however, a significant uncertainty as to how easy the monetary conditions really are. In Figure 1.4 various Taylor rates were calculated for the recent situation. The base case calculation of the Taylor rate, which is shown by a red line in the Figure, has been

<sup>3</sup> If real interest rates are calculated on the basis of the increase in the GDP deflator, the decline in real short-term interest rates was (again) ¾ percentage points in the euro area but only about ½ percentage point in the United States as the GDP deflator decelerated more.

<sup>4</sup> The Taylor rule interest rate is a benchmark interest rate. The rule is based on the idea that the central bank interest rate is managed in order to ensure price output stability. Any deviation of the inflation rate from its target and of output from its equilibrium (potential) level will prompt the Central Bank to adjust the interest rate. While controlling output has never been an explicit target of the ECB (or the Bundesbank), this indicator assumes that output stabilisation is an implicit target as it also affects actual and/or expected inflation. If the short-term interest rate is above (below) the Taylor interest rate, it indicates that monetary policy is more restrictive (expansionary) than what one would expect with the prevailing inflation rate and output gap. Under the assumption that the Central Bank is equally concerned with price stability and real output, we use an equal weighting of 0.5 for both. Furthermore, the real equilibrium interest rate has to be determined. According to estimates by the Bundesbank, the real equilibrium interest rate in Germany was 2.9% during the period from 1979 to 1998. We assume that this rate also reflects the current real equilibrium interest rate in the euro area as a whole. The Taylor rate therefore is  $TR = 2.9 + \text{expected inflation rate} + 0.5 \text{ times output gap} + 0.5 \text{ times deviation of the inflation rate from the target}$ .

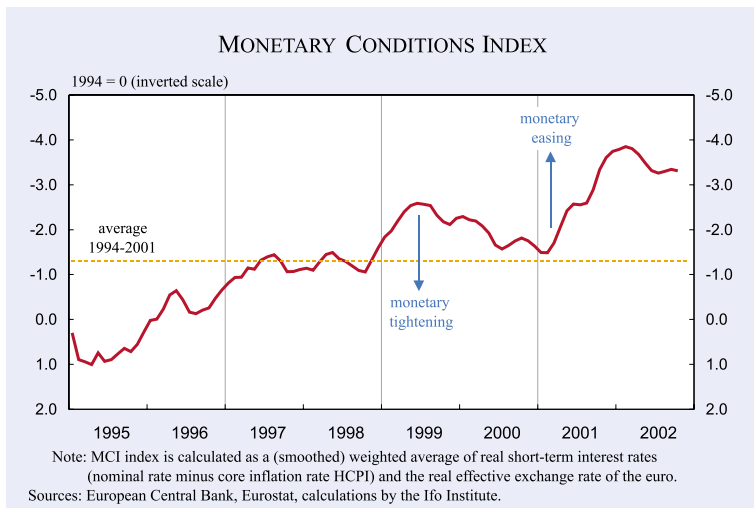
<sup>5</sup> The Monetary Conditions Index (MCI) is a weighted average of the real short-term interest rate  $i^r$  and the real effective exchange rate of the euro  $e^r$ . The objective is to obtain an estimate of the effect of movements in these two variables on aggregate demand. The weights  $w^i$  and  $w^e$  which are applied here are 0.9 for the interest rate and 0.1 for the exchange rate. These have been calculated in order to adjust for the difference in volatility of the exchange rate and the interest rate over time. The higher the MCI, the tighter is monetary policy. In the figure, the scale is inverted so that an increase indicates easier monetary conditions.

Figure 1.4



calculated by assuming that the nominal equilibrium interest rate consists of the equilibrium real rate (which is assumed to be 2.9 percent for the entire period since the mid-1990s) and of inflation expectations, which are proxied by the actual core inflation. The base case calculation further assumes that monetary authorities, when setting interest rates, compare the actual core inflation with the inflation target of below 2 percent (we assume 1<sup>3</sup>/<sub>4</sub> percent), and whenever actual core inflation is higher, the interest rate is set at above the nominal equilibrium rate. In addition, monetary authorities also consider cyclical conditions of the economy (as measured by the output gap), and whenever actual output falls below trend the interest rate is set below the nominal equilibrium rate. Under current circumstances, with core inflation overshooting the inflation target and with a negative output gap, these effects almost offset each other so that the Taylor rate in the base case is currently 5.2 percent,

Figure 1.5



which is close to the nominal equilibrium rate of 5.3 percent. If one assumes, however, that the inflation forecast for 2003 (1.9 percent) is a better proxy for inflation expectations and that monetary authorities are forward-looking and, therefore, see currently no reason to fight inflation (as this rate is similar to their target), the Taylor rate is lower as is shown by case A in the Figure. Furthermore, as we argued in last year's report, the ECB should accept a somewhat higher inflation rate for the euro area because of structural effects (the

Balassa-Samuelson effect). If, for example, the ECB were to aim at an inflation rate of 2<sup>1</sup>/<sub>2</sub> percent (rather than below 2 percent) the Taylor rate would be further reduced (case B in the Figure). With these adjustments the Taylor rate is still above the actual interest rate, which suggests that monetary conditions are relatively easy but much less expansionary than suggested by the base case calculations.

For individual countries in the euro area with lower inflation and weaker cyclical conditions than average, monetary conditions are tighter than the Taylor rate for the euro area as a whole suggests, while for those countries with higher inflation and better cyclical conditions monetary conditions are easier. In the case of Germany, for example, where the output gap is relatively large and the inflation rate is lower, the Taylor rate may currently be below the actual interest rate which suggests that

interest rates are not particularly low for Germany and that monetary conditions are not as favourable as for the euro area as a whole.<sup>6</sup>

<sup>6</sup> Here we assume inflation expectations of around <sup>3</sup>/<sub>4</sub> percent corresponding to our inflation forecast excluding the effect of indirect tax increases. We assume further that the inflation target for Germany is 1<sup>3</sup>/<sub>4</sub> percent and that the German output gap is around <sup>1</sup>/<sub>2</sub> percentage point larger than that of the euro area as a whole. We also assume that the real equilibrium interest rate in Germany is 2.9 percent which corresponds to that for the euro area as a whole and the long-term average in Germany. As potential output growth in Germany has declined over past years one can argue that the real equilibrium interest rate is now lower. The Taylor rate would then be lower than shown here.

Figure 1.6

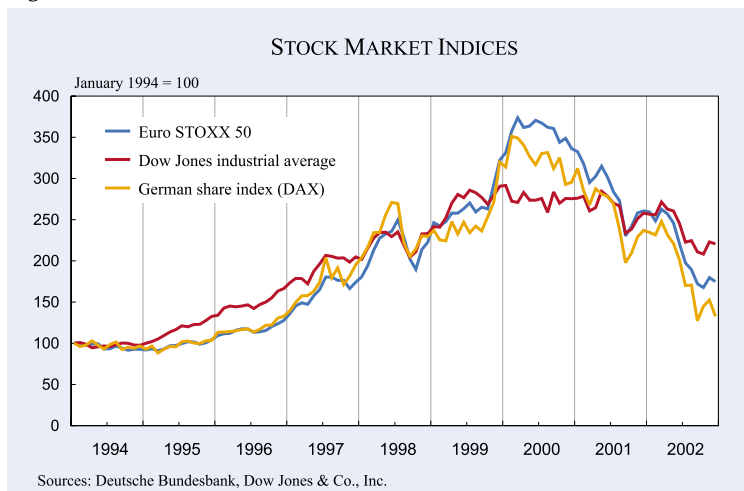


Figure 1.7

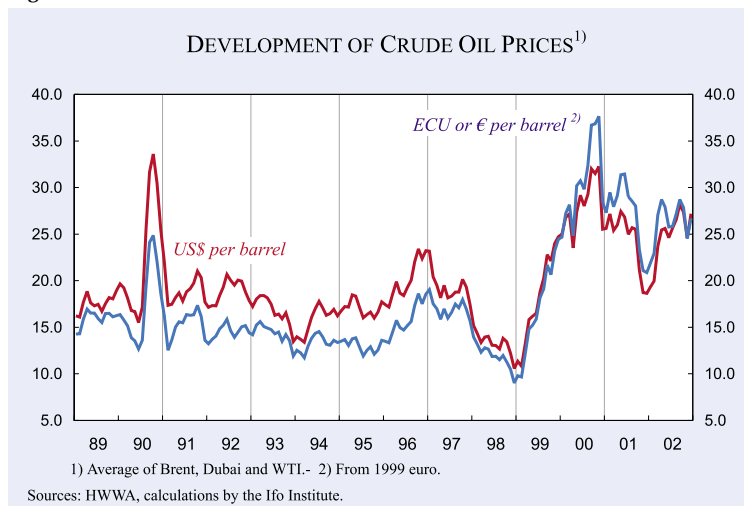
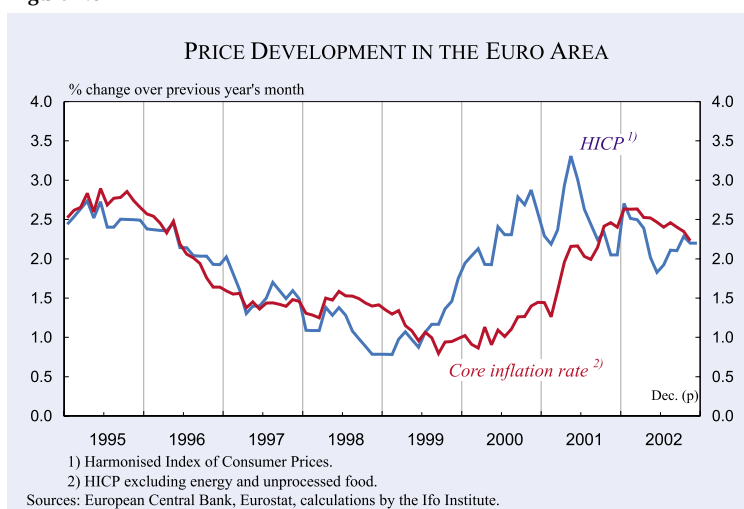


Figure 1.8



The levels of real government bond yields also remained at historically low rates in both the euro area and the United States (slightly above 3 percent), but were marginally higher than in 2001.

All these monetary indicators may, however, not fully capture the financing conditions recently faced by investors. Despite overall favourable monetary conditions, the financing of business investment has become more costly as the risk premium of industrial bonds increased and stock prices declined sharply, raising the cost of equity financing (Figure 1.6). The weakness of the stock market also reduced the capital base of the banking sector, which may have adversely affected lending behaviour. The fall in share prices also reduced the capital base of the insurance sector, which is generally also an important source of corporate investment finance. This sector was hit in the past by the high cost of insurance losses, in particular the effects of the terrorist attacks of September 11 on re-insurers. Given all these negative effects on the European economy in general, and on the European financial markets in particular, a more aggressive reduction in interest rates by the ECB even before the latest cut would have been helpful.<sup>7</sup>

The resistance of the ECB to lowering interest rates as aggressively as the Fed may be explained by the fact that in the euro area the increase in consumer prices as well as core inflation remained above 2 percent and, therefore, above the rate which the ECB would accept over the medium-term. Reasons for why the inflation rate declined so little, despite the weakness of demand and the appreciation of the euro, frequently include such special factors as higher oil prices, bad weather conditions and animal

<sup>7</sup> On 5 December the ECB reduced interest rates (minimum bid rate on the main refinancing operations) further by 0.5 percentage points from 3.25 percent to 2.75 percent.

diseases as well as increases in indirect taxes in some countries (Figures 1.7 and 1.8).<sup>8</sup>

However, another perhaps even more important factor explaining the relatively high inflation rate in the euro area is that unit labour costs continued to increase unabated (by almost 3 percent), as wage growth did not decline and labour productivity continued to stagnate.<sup>9</sup> This reflects cyclically weak productivity growth and labour hoarding, but it could to some extent also reflect ongoing structural rigidities in European labour markets. By contrast, in the United States the weakening of demand was accompanied by a deceleration of unit labour costs and inflation, which made it easier for the Fed to further reduce interest rates.<sup>10</sup>

### 1.2 Demand pattern reflects cyclical and structural weaknesses

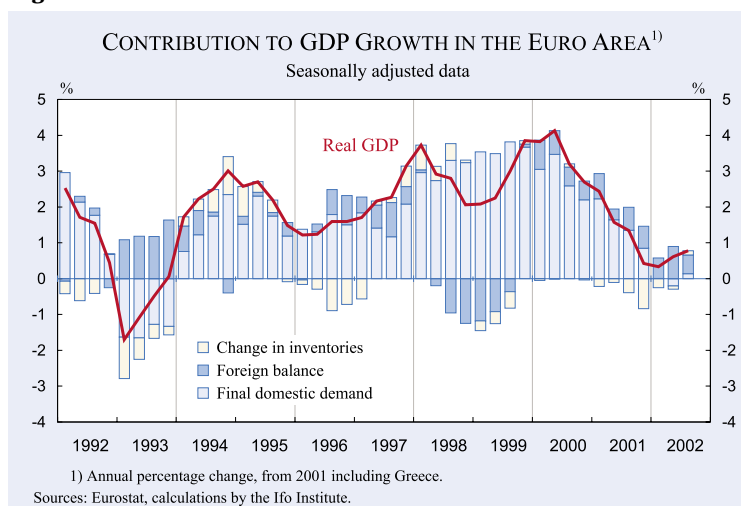
The differences in macro policies and structural problems between Europe and the United States are also reflected in the patterns of demand. While in Europe both consumption and investment remained weak, in the United States consumption was boosted by expansionary macro policies. In addition, domestic demand in the United States benefited from a greater responsiveness of the inflation rate to the cyclical weakening of the economy.

- In the euro area, real private consumption increased by only 1/2 percent in 2002, which was the weakest growth since the recession of 1993 (when real private consumption in the euro area declined by 0.9 percent). Real disposable household income was weakened by the deterioration of the labour market. Households were also affected by falling stock prices. In the euro area they increased their savings (as a percentage of disposable

income), from around 9 percent to around 10 percent. Various factors like rising unemployment, lower equity wealth, general economic uncertainties, including those related to pensions, may have contributed to this, although it is difficult to disentangle the individual effects of these factors on total household savings (see Box 1.1: Macroeconomic effects of declining equity prices).

- In the United States, private consumption benefited from large tax reductions. Furthermore, despite higher oil prices consumer prices decelerated, which also supported real disposable income. Households also responded to higher job insecurity, falling stock prices and the more uncertain economic environment by increasing their savings ratio (from 2 1/4 to 3 3/4 percent). Nonetheless, their willingness to spend was sustained until late summer, and real private consumption increased by around 3 percent (after 2 1/2 percent in 2001), which was much higher than in previous cyclical downturns.
- In the United States, public consumption (in particular for security and defence) was boosted in response to the terrorist attacks of September 11; the increase by about 4 1/2 percent in 2002 being the highest since the mid-1980s and more than twice as high as in the euro area (where it increased by around 2 percent).
- Residential construction continued to decline in the euro area (by around 1 percent, following a fall of 2 1/2 percent in 2001). By contrast, in the United States it increased by around 2 1/2 percent, reflecting the sustained willingness of private households to spend, which was stimulated by the continued increase in house prices and low mortgage rates. But the upswing lost some momentum in autumn.

Figure 1.9



<sup>8</sup> Another factor often mentioned to explain the higher inflation rate in the euro area is the effect of the euro cash changeover. Whereas some service prices increased significantly with the introduction of the euro, a significant effect cannot be identified at the aggregate level.

<sup>9</sup> Labour productivity increased by only 0.3 percent after zero growth in 2001.

<sup>10</sup> In the United States, unit labour costs fell by 0.3 percent in 2002 after an increase of 2.4 percent in 2001, and the increase in the GDP deflator declined from 2.4 percent in 2001 to 1.1 percent in 2002. In the euro area, unit labour costs increased by 2.8 percent in 2002 (after 2.9 percent in 2001) and the GDP deflator increased by 2.2 percent (after 2.4 percent in 2001).



**Box 1.1****Macroeconomic effects of declining equity prices**

The sharp decline in equity prices raises the question of how this affects the European economy. There are various channels through which equity prices affect the real economy. Private households are affected as a decline in equity prices reduces equity wealth (wealth effect). This reduces their means to consume. Households may also interpret the fall in share prices as a warning that future income growth could be lower than expected so far and revise their consumption plans accordingly. The size of the wealth effect depends on the marginal propensity to consume out of wealth and the share of stocks in total wealth. It also depends on the distribution of the various types of assets and of share holdings across income groups. If lower income groups are affected the effect is bigger as those have a high propensity to consume, but if mainly high income groups are affected the effect on consumption is smaller. Regulations in financial markets also play a role as the liquidity of asset markets determines how easily households can realize their losses (or gains), and how they can borrow in order to continue consumption spending. Households that are not liquidity-constrained may continue to spend if they perceive the fall in share prices as temporary but reduce spending if the decline is perceived as permanent. Last, but not least, the confidence effect may also affect spending. The IMF estimates the marginal propensity to consume out of equity wealth at 4 1/4 cents per dollar in the United States and the United Kingdom and 1 cent in the euro area and Japan (See Chapter II of the April 2002 World Economic Outlook). According to these estimates, if the fall in equity prices between end-March 2002 and early September 2002 (around 30 percent in the euro area and around 20 percent in the United States and the United Kingdom) were to be sustained, it would reduce private consumption in the euro

area by 1/4 percent and in the United States and the United Kingdom by 1 percent. The Fed estimates an adverse wealth effect of 1 to 1 1/2 percent on US private consumption in 2002. But other sources of private wealth should also be considered. For example, in some countries like the United States, the United Kingdom, France and the Netherlands, the increase in house prices in recent years has offset to some extent the effect of declining equity prices. But where house prices are falling, the overall negative wealth effect is larger. According to the IMF, house prices have declined in Germany, but the sources are unclear – there are no official statistics.

A fall in share prices also affects investment by making equity financing of fixed investment more expensive. The size of this effect depends on the share of equity financing in total investment financing, which is currently relatively low in most European countries.

Sharp falls in equity prices may also have a negative impact on credit markets as banks will become more cautious in providing loans to firms with a lower market value. In addition, the decline of stock prices also reduces the capital base of banks. The size of these effects is difficult to estimate, however.

Given all these uncertainties it is difficult to quantify the overall wealth effect on the real economy. Should the link between financial conditions and the real economy have strengthened in recent years, then earlier estimates based on longer-run relationships may underestimate this effect in the current circumstances, in particular, as this shock affects all major regions of the world economy at the same time.

- The reversal of the stock cycle was also less pronounced in the euro area than in the United States, which explains about one-third of the lower output growth.<sup>11</sup>
- Business investment continued to fall in Europe as well as in the United States, although the decline was less pronounced in Europe. In the United States the preceding investment boom, in particular spending on ICT equipment, had led to a larger overhang of capital stock than in Europe so that its unwinding was also sharper (for the contribution of domestic demand to quarterly GDP growth see Figure 1.9).

At the beginning of 2003 there is still much uncertainty as to if and when the European economy will achieve a sustained recovery. This will to some extent depend on external factors, in particular on the growth of the global economy, which in turn also depends on how the geopolitical situation evolves and on how macro-policies and structural policies are pursued in Europe.

## **2. Economic outlook 2003: Gradual recovery in the world economy and in Europe**

### **2.1 The global economy**

In 2003, after spring, we expect the world economy to pick up again, although growth will remain moderate. This is based on the following assumptions:

<sup>11</sup> In 2002 the contribution of stockbuilding to GDP growth was 0.1 percentage points in the euro area and 0.6 percentage points in the United States. Thus about one-third of the growth differential between the euro area and the United States can be attributed to the sharper reversal of the stock cycle.

- The uncertainties with respect to a war in Iraq will decline during the forecasting period. This assumption is in line with a scenario without a war and successful weapons inspections but also with a scenario with a relatively short military attack. With other scenarios, such as a longer war, increased geopolitical instability and possibly continued large-scale terrorist attacks, the outlook for the world economy and for Europe would be weaker than assumed here (see below).
- Oil prices are assumed to remain relatively high until Spring 2003 and then to decline somewhat thereafter as geopolitical conditions improve. (In a more pessimistic scenario with more instability in the Middle East, oil prices will remain higher).
- The recovery in the United States, which became more fragile during 2002 when the fiscal stimulus weakened and uncertainties increased, will continue at a moderate pace. While monetary conditions will continue to stimulate demand, the fiscal stimulus will wane. Relatively strong productivity growth will improve corporate profits and real wages. Real income of private households will be further boosted by a gradual improvement in employment. But part of this increase is expected to be saved as debt levels of households are high, financial wealth has fallen with declining share prices, and expected future occupational pensions have declined. Thus private consumption is likely to increase somewhat less than in 2002. Business investment is expected to recover also as capacity utilisation rises and profit expectations improve. Output growth is assumed to average 2.7 percent in 2003 after 2.3 percent in 2002.<sup>12</sup>
- While the projected recovery in the United States will remain more modest than in earlier upturns, it will nonetheless help world economic recovery. In Japan, output will – after two years of negative growth – increase gradually. The recovery in the United States will help Latin America to get out of recession and will also help emerging economies in East Asia to continue growing at a pace (of 4 to 5 percent)

<sup>12</sup> The government has announced a new plan to cut taxes. Part of the program is to speed up tax cuts which were already included in the 2001 tax package but phased in gradually over the next years. The main measures are reducing the top marginal income tax rates from the current 38.6 percent to 35 percent, excluding dividends from taxation at the individual level, increasing child-tax credits, adjusting the tax code so that married couples pay not more income tax than singles living together (with similar income), and broadening the lowest (10 percent) income tax bracket to include more people. Altogether it is estimated that these measures would amount to \$98 billion or about 1 per cent of GDP in 2003. The forecast assumes that most of the proposed measures will pass Congress but that the effect on real GDP in 2003 will be very limited (not more than 1/4 percentage point).

which is higher than in other emerging economies such as those in Eastern Europe which are expected to remain on their current (average) growth trend (of around 3 percent).

- World trade is expected to increase by around 6 percent in real terms in 2003, compared to around 3 percent in 2002.

Although the following forecast for the European economy is based on these relatively favourable assumptions, there remain important downside risks with respect to the world economy. Firstly, the US current account deficit remains high so that the foreign indebtedness of the United States increases unabated. This could trigger sharp exchange rate movements with the dollar depreciating rapidly and the euro and the yen appreciating. The effect would be to erode the price competitiveness of European exporters ending an export-led recovery in Europe. Secondly, given the high indebtedness of private households in the United States, savings could increase more than assumed so that consumption and domestic demand would rise less. Lastly, new terrorist attacks and/or military action in the Middle East could push up the oil price and reduce business and consumer confidence and equity prices. Clearly, on such negative assumptions growth in the United States, in the world economy and in Europe would be lower than projected here. Yet, given the uncertainties surrounding these assumptions we shall not attempt to draw up alternative scenarios, but rather present in the following a forecast based on a gradual recovery of the world economy and a stabilisation of oil prices and equity markets.

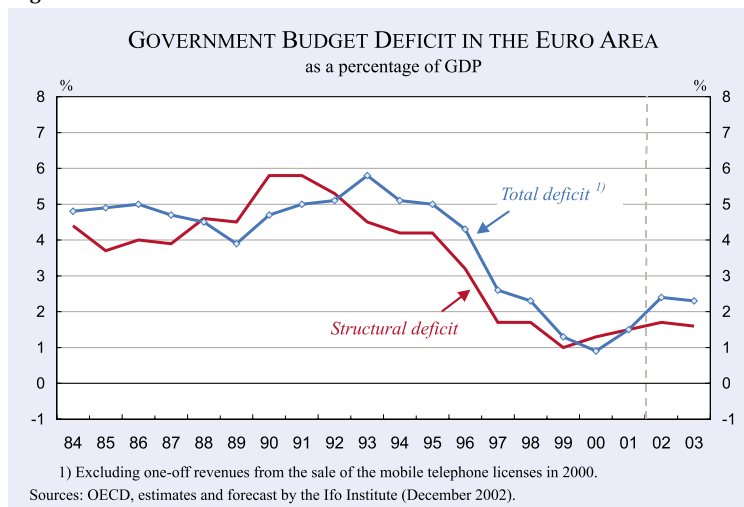
## 2.2 The European economy in 2003

### Policy assumptions

Given the continued weakness of demand and some (although small) deceleration in inflation, the ECB is assumed to keep interest rates low during 2003. We also assume no sharp appreciation of the euro against the US dollar so that monetary conditions will remain broadly unchanged.<sup>13</sup> Furthermore, we assume that equity markets will stabilise, so that the losses in equity wealth will not

<sup>13</sup> This should be interpreted as a technical assumption and lies somewhere between two alternatives. The first is that the euro will appreciate sharply, driven by higher demand for currency in circulation and the portfolio effects (which have to some extent explained the weakness of the euro before the cash changeover) and a significant weakening of the dollar as a response to the high US current account deficit. A second, opposite assumption would be that the euro weakens again against the dollar as economic growth in the United States continues to be higher than in Europe. The various effects on the euro exchange rate were examined in detail in Chapter 2 of last year's report.

Figure 1.10



increase further but will start to diminish during 2003.

The stance of fiscal policy in the euro area is assumed to be marginally restrictive as the structural deficit declines by around 0.2 percentage points of GDP (Figure 1.10). Consolidation efforts differ, however, quite substantially among countries. For example, Germany has taken measures to reduce the deficit in order to prevent sanction payments; in 2002 the deficit had exceeded the 3 percent ceiling of the Treaty of Maastricht. In Portugal, where the deficit had already exceeded 4 percent in 2001 and had decreased to 4 percent in 2002, the government is also aiming to reduce it further in order to avoid sanctions. Italy, which also has a relatively high deficit, is also assumed to make efforts to reduce it. But in France, where the deficit was just below the 3 percent ceiling in 2002, it may not decline in 2003 as the government seems to be giving a higher priority to tax reductions. Most other countries in the euro area have reached fiscal positions in line with the “close to balance or in surplus” rule but are also aiming at further improvement.

#### Supply conditions

Future economic growth is affected by the evolution of supply and demand conditions. If the factors, that are currently restraining demand, dissipate there is a natural tendency for actual output to gradually approach potential output so that actual growth would be higher than potential or (trend) growth until the output gap is eliminated. Some of the factors which currently constrain demand will continue to exist in 2003, although they may become weaker.

In the 1990s, potential output growth in the euro area averaged around 2<sup>1</sup>/<sub>2</sub> percent per year, but currently it may be only a little over 2 percent. One reason for this decline is slower growth in capital-labour ratios (that is a smaller capital deepening effect).

There is great uncertainty about the future growth of labour productivity and multi-factor productivity (MFP) which depend among other things on current and future investment activity as well as

on the spread of new technologies. While the relatively low level of real long-term interest rates should support investment, falling share prices have increased the cost of equity financing in general and in the high-tech sector in particular. Furthermore, as the capital base of banks has declined, they may have become more prudent in providing loans to firms. Although some cyclical recovery of investment is expected, it is unlikely that it will suffice to raise the growth of potential output in the near future.

As was shown in last year’s report, Europe’s lower growth in past years relative to that of the United States can, to a large extent, be attributed to lower labour utilisation in Europe. Hence, another major way to raise the output path would be to increase labour input by reducing structural employment and increasing labour market participation. Reducing obstacles to a fuller use of the potential labour force could raise Europe’s output path and thus remains an important policy challenge. While some European countries (inside and outside the euro area) have implemented major reforms in labour and product markets and have managed to increase labour utilisation, others have made less progress. More recently, additional reforms have been undertaken in some countries or will be implemented soon (as for example the so-called Hartz proposals in Germany).<sup>14</sup> We do not, however, expect these reforms to have a significant effect on the medium-term growth path in these countries or in the European economy as a whole

<sup>14</sup> In Germany, the new measures aim mainly to improve job-seeking arrangements and to tighten unemployment benefits for those who are reluctant to accept job offers (see Appendix 2).

because these reforms are incomplete and a number of disincentives to job creation continue to exist. There is even a risk that the pressure to reduce government deficits will lead to further increases in the already high tax burden on labour in some countries, making it even more difficult to raise employment.

Given these conditions on the supply side, we do not expect growth of potential output in the euro area to change significantly in the near future. Potential growth may even continue to decline in some countries.

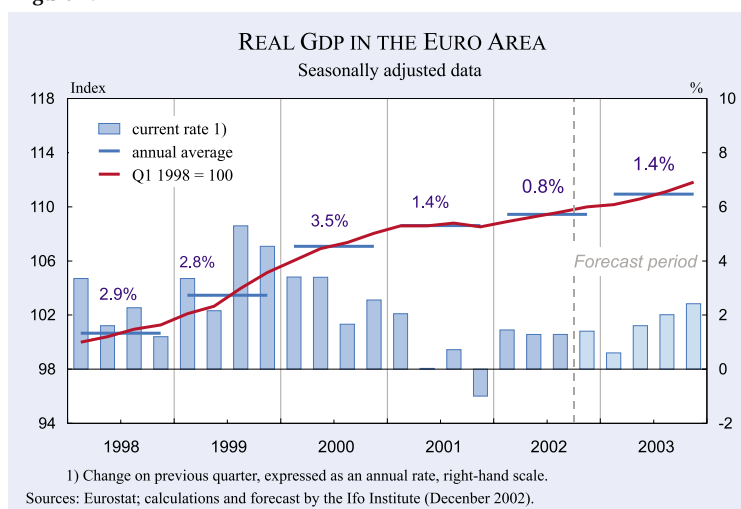
#### Development of demand components in the euro area

Given the weakness of the world economy, export markets have been depressed. Furthermore, in 2002 the effective nominal exchange rate of the euro appreciated on average by  $2\frac{3}{4}$  percent, reducing the price competitiveness of firms. During the course of 2003 the gradual recovery of the world economy should help exports to recover. Trade with Eastern European countries, which has gained in importance in recent years, will intensify further. On average, exports are expected to increase by 4.5 percent in 2003, following near stagnation in 2002 and increases of around  $2\frac{1}{2}$  percent and around 12 percent in 2001 and 2000 respectively.

Private consumption is expected to recover. But this will depend very much on our general assumptions that the geopolitical situation will improve and that stock markets will stabilise, boosting consumer confidence. Consumer spending will also be supported by somewhat higher real wage growth and improved labour market expectations. Private consumption will increase on average by 1.5 percent in 2003 after 0.6 percent in 2002.

With the improvement in export markets and the end of stock market turbulence the recent decline in investment will come to an end. With low capacity utilisation there is no need to enlarge the capital stock but, given weak investment over the past two years, there is mounting pressure to modernise the capital stock. In some countries (as in Germany) construction will get some temporary stimulus from additional spending to repair the damages caused by

Figure 1.11



the floods of August 2002.<sup>15</sup> Total investment in the euro area is expected to increase by 0.5 percent in 2003, after a decline by more than 2 percent in 2002.

#### Growth, employment and inflation

Forward-looking indicators, such as business confidence and order inflows, are not pointing to a quick economic recovery of the European economy in the near term. Nonetheless, the assumed improvements in the geopolitical situation during 2003, the recovery in the world economy and the overall favourable monetary conditions should help the European economy to recover gradually. On average, output is expected to increase by 1.4 percent in 2003, following 0.8 percent in 2002 (Figure 1.11). However, growth will remain below trend (which is currently estimated at slightly above 2 percent) for the third consecutive year, the output gap will be larger than in 2002 (Table 1.1), and growth will also remain lower than in the United States (Figure 1.12). However, during the course of the year cyclical conditions will gradually improve.

The recovery in output growth will not prevent a further increase of the unemployment rate in 2003. This is because, during the past downturn, firms in the euro area have typically followed a strategy of labour hoarding which depressed productivity.

<sup>15</sup> It was originally estimated that in Germany repairing the damages would induce additional (public and private) spending of €13.5 billion (or 0.4 percent of GDP) from the second half of 2002 until the end of 2003. This additional spending is expected to increase public construction output by 4-5 percent in 2003, compared to a decline in 2002 and 2001 (by  $3\frac{1}{2}$  percent and 6 percent respectively). More recently the estimates of total repair costs have been revised downwards to almost half of the original estimate.

**Table 1.1**  
Output gaps in the euro area

1991	0.5
1992	0.9
1993	- 1.1
1994	- 0.3
1995	0.1
1996	- 0.5
1997	- 0.5
1998	- 0.2
1999	0.1
2000	1.3
2001	0.7
2002 <sup>a)</sup>	- 0.3
2003 <sup>b)</sup>	- 0.6

a) Estimate by the Ifo Institute. – b) Forecast by the Ifo Institute.

Source: Eurostat, Calculations by the Ifo Institute.

They can, therefore, produce a good part of the higher output with the existing labour force. Thus, employment will start rising gradually in autumn and on average the unemployment rate is likely to increase

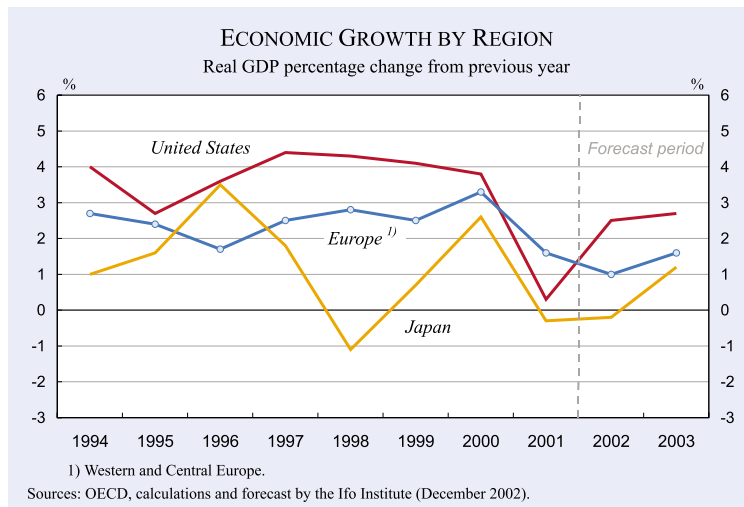
to 8½ percent. Structural reforms of the labour market will be implemented in some countries, like Germany, but are not expected to significantly change labour market conditions (Figures 1.13 and 1.14).

The inflation rate (as measured by the harmonised consumer price index) will decline from 2.2 percent in 2002 to 1.9 percent in 2003. This is based on the assumption that after spring oil prices will decline again and that wage agreements will be more modest than in 2002 as prices will rise slightly less, and income taxes will be reduced further in some countries.

#### A more pessimistic scenario

The above forecast takes a relatively sanguine view of the short-term conjuncture. But serious concerns about both the short-term and the medium-term outlook arise from two sources. There is greater uncertainty about the geopolitical situation than at any time since the end of the Cold War, and perhaps longer. The forecast assumes that war with Iraq will be averted, or that if it occurs it will be short in duration and decisive in outcome, and that sentiment will not be substantially affected by the prospect or reality of further major terrorist attacks. Almost all the risks of this scenario are on the downside. The legacy of the long American boom and the resulting stock market bubble have created structural imbalances in the world economy which cannot be sustained over the longer term. As asset prices rose, personal savings in the United States collapsed, and the trade and current account deficits widened. Believing themselves to be much richer in future, Americans borrowed from the rest of the world to finance a boom in both domestic consumption and investment. Higher investment has helped to sustain productivity growth, but investment has recently declined while consumption has re-

**Figure 1.12**



**Figure 1.13**

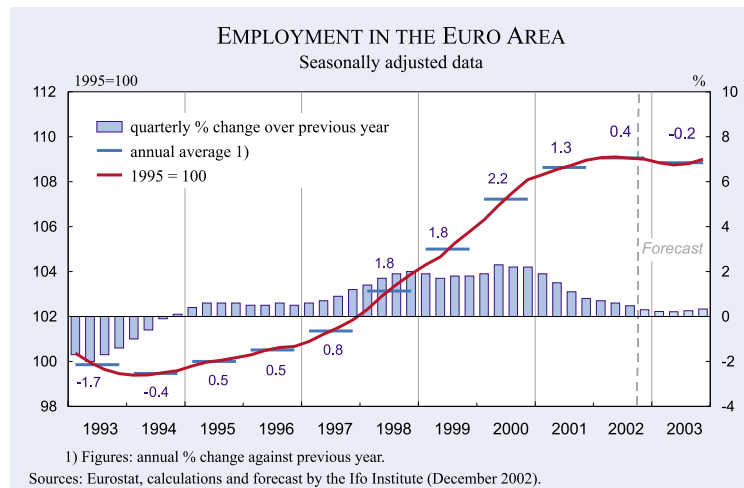
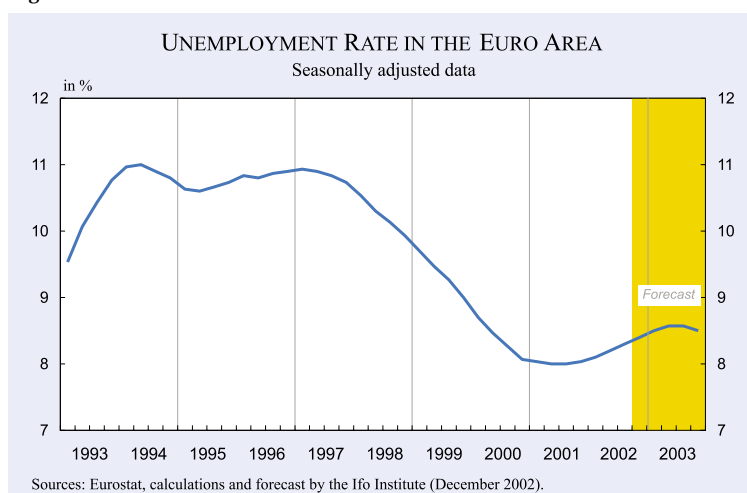




Figure 1.14

**Box 1.2****Could Enron happen in Europe?**

The collapse of Enron raises the issue of whether similar events could occur in Europe. History does not repeat itself exactly and it is unlikely that identical events will occur even in the United States. Moreover, there are some aspects of the Enron affair – the extreme personal greed of many senior US executives, the acceptance of practices involving strict adherence to the letter but not the substance of accounting standards, and the corruption of some offices of major accounting firms – which are not directly paralleled in Europe.

Still, the events at Credit Lyonnais a decade ago are a reminder that corporate arrogance and overwhelming managerial ambition, combined with disastrous consequences if these are not monitored and controlled, are not only to be found on one side of the Atlantic. And while there are many similarities between these two corporate disasters, the differences are a reminder that European institutional structures are not necessarily better adapted to these problems than those of the United States.

While the problems at Lyonnais emerged only gradually from a process of concealment and cover-up which continues to the present day, the collapse of Enron was immediately followed by judicial and congressional inquiry and action. The transparency of US markets and politics contrasts sharply with European attitudes to similar problems. The costs of the Lyonnais debacle fell almost entirely on French taxpayers, while those resulting from Enron were borne principally by investors (including Enron employees). And the fallout from Enron, including the criminal proceedings which followed, have already had a salutary effect on the behaviour of others. It is more difficult to see equivalent deterrent effects in the European corporate sector, and the rise and fall of Vivendi Universal resembles in many ways a smaller scale version of the earlier experience of other French companies.

The general difference is between informal administrative processes in Europe and judicial and legalistic ones in the United States. This difference has operated to Europe's advantage in the application of accounting standards, but is less effective in handling openly and decisively any emergent issues.

Some European companies have already encountered problems following the bursting of the telecoms and media bubble and it is likely that there is considerably more pain to come in the European financial services sector. It would be wrong to think that Europe has a monopoly of regulatory wisdom, or the United States a monopoly of corporate excess.

mained relatively strong despite the high and rising household debt and the decline in equity prices. Even after recent declines, US stock valuations are still at historically high levels. This strength of consumption, which gives grounds for optimism in the short-term forecast, implies that the required magnitude of these future adjustments will be all the larger. If such adjustments were accompanied by a sharp fall in the dollar exchange rate and a sharp appreciation of the euro, the export-led recovery in Europe, which is predicted here, could come to a sudden end.

Any estimate of the magnitude or timing of these influences is subject to considerable uncertainty. While such adjustment problems may not pose a short-term threat to the European economy, the confidence of business, consumers and financial markets over the next few quarters will depend heavily on how the geopolitical situation in the Middle East evolves. If, for example, because of a war in Iraq, confidence were to fall and oil prices to rise, and growth in the euro area in the first and the second quarters were only half of that predicted here<sup>16</sup> – while growth in the third and fourth quarters were as predicted – then growth in 2003 as a whole would be 1.1 percent rather than 1.4 percent. If, in addition, growth in the third and fourth quarters were also halved (from 2.0 percent to 1.0 percent in the third quarter and from 2.4 percent to 1.2 percent in the fourth quar-

<sup>16</sup> Growth in the first quarter would then be 0.3 percent (annual rate) rather than 0.6 percent and in the second quarter 0.8 percent rather than 1.6 percent.



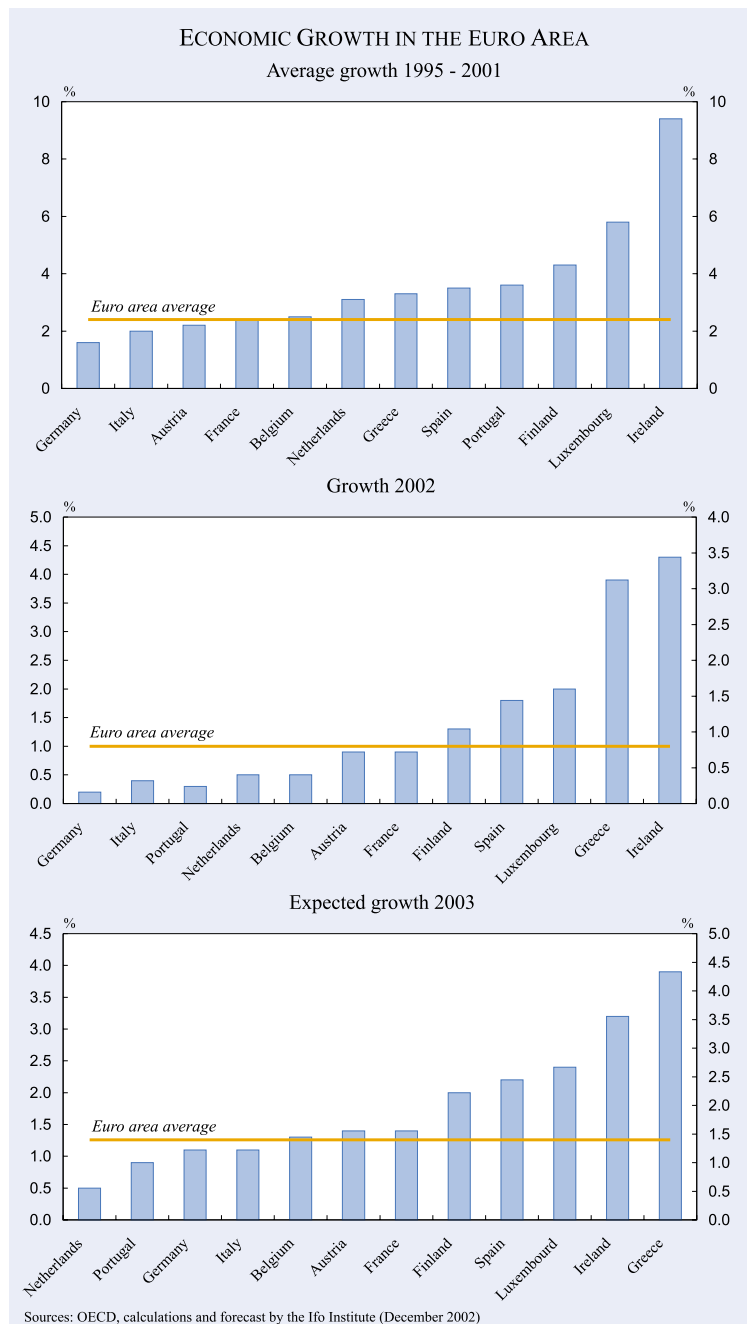
ter), then growth in 2003 as a whole would only amount to 0.9 percent.

### 2.3 Development in individual countries of the euro area

The cyclical weakness has reduced growth in all countries in the euro area (and in Europe as a whole), but significant differences in the growth performance continue to exist between countries (Figure 1.15). Many of the countries which had achieved above-average growth between 1995 and 2001 also had, and are expected to have, above-average growth in 2002 and 2003 (Ireland, Luxembourg, Greece, Finland, Spain). But there are a few countries (Netherlands, Belgium, Portugal) which had above-average growth in the past but whose growth declined (or is expected to decline) to below average in 2002 and/or 2003. Two other countries (France and Austria) achieved rates of growth similar to the euro area average both over the medium-term and in 2002, and we expect them to continue to do so in 2003. In two other countries (Germany and Italy), growth performance was below average over the medium-term and in 2002 and is expected to remain below average in 2003.

The differences in growth performance between the euro area countries are caused by a number of factors. Some of the countries (such as Ireland and Spain) continue to benefit from relatively favourable supply conditions which are to some extent related to a normal catching-up process (that is a lower starting position of GDP per capita). However, in Ireland and Spain some wage pressure has emerged more recently which could undermine export performance and growth in the medium term. In the case of Ireland domestic demand has

Figure 1.15



been stimulated by a significant easing of fiscal policy.

The Netherlands, Belgium and Portugal, which also recorded above-average growth during recent years, were more affected by the latest cyclical weakening. In these countries the increasing wage pressure has already affected competitiveness and export performance. In addition, households have increased their savings in response to a deteriorating labour market and losses in equity wealth. This effect was particularly marked in the Netherlands,

Table 1.2

Labour costs and productivity in the business sector  
Percentage changes

	Compensation per employee			Labour productivity			Unit labour costs		
	Average 1995–2000	2001	2002	Average 1995–2000	2001	2002	Average 1995–2000	2001	2002
Euro area	1.9	2.6	2.9	1.2	-0.1	0.4	0.7	2.7	2.5
Germany	1.4	1.8	2.1	1.2	0.0	0.8	0.2	1.8	1.3
France	1.4	3.3	3.9	1.2	0.2	1.5	0.2	3.1	2.3
Italy	2.9	2.4	3.0	1.4	0.1	-1.2	1.5	2.3	4.3
Austria	2.4	4.0	2.2	2.5	0.7	1.5	-0.1	3.3	0.8
Belgium	2.6	2.8	3.7	2.0	-1.0	1.3	0.6	3.9	2.3
Finland	3.4	4.9	4.0	2.9	-0.5	2.3	0.5	5.4	1.7
Greece	8.2	5.2	5.8	2.8	4.9	3.7	5.4	0.2	2.0
Ireland	4.2	7.9	6.5	4.5	3.2	3.1	-0.3	4.6	3.3
Luxembourg	2.9	5.3	3.2	2.2	-4.8	-2.4	0.7	10.6	5.7
Netherlands	2.6	5.0	4.8	1.0	-0.7	-0.3	1.6	5.8	5.2
Portugal		6.1	4.0	3.1	0.1	-0.4	5.6	5.9	4.4
Spain	3.4	4.7	4.1	0.9	0.4	0.6	2.5	4.2	3.5
United States	3.8	2.3	2.5	1.9	0.2	3.8	1.9	2.1	-1.2

Source: OECD; calculations by the Ifo Institute.

where the fall in share prices reduced the wealth of pension funds which responded by increasing contributions. Thus, private households had to allocate a greater share of income to their savings accounts, which reduced their propensity to consume. In Portugal, domestic demand is currently restrained by a tightening of fiscal policy in response to the significant overshooting of the fiscal deficit target.

The relatively poor growth performance of Germany and Italy since the mid-1990s and during the recent cyclical weakness may be explained both by weaker supply and weaker demand conditions. One reason may be the development of the real effective exchange rate of these countries as compared to the euro area average. The real effective exchange rate (as measured by relative unit labour costs) appreciated significantly in Germany

after unification and later declined again, but remained higher than it had been in the early 1990s. In Italy, the real effective exchange rate depreciated significantly in the first half of the 1990s but appreciated in the second half. In the euro area as a whole the real effective exchange rate remained relatively stable in the first half of the 1990s but declined significantly in the second half. Both Germany and Italy lost shares in export markets in the second half of the 1990s. As exporting firms did not fully pass on the higher labour costs in export prices, the losses in export market shares remained limited (Tables 1.2 and 1.3).

Another factor which restrained growth of real income in these countries in recent years were the lower growth in (trend) productivity which was caused by lower capital stock growth (that is less capital deepening) and the low utilization of labour potential. (For a more detailed analysis of structural problems in Germany see Appendix 4, and for further details on the forecasts for the large EU countries Germany, France, Italy and the United Kingdom see Appendix 2 and the forecasting Tables in Appendix 3).

Table 1.3

Shares of world exports

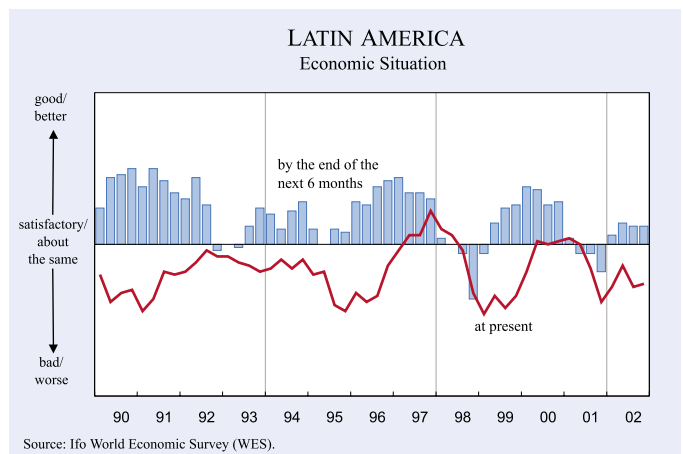
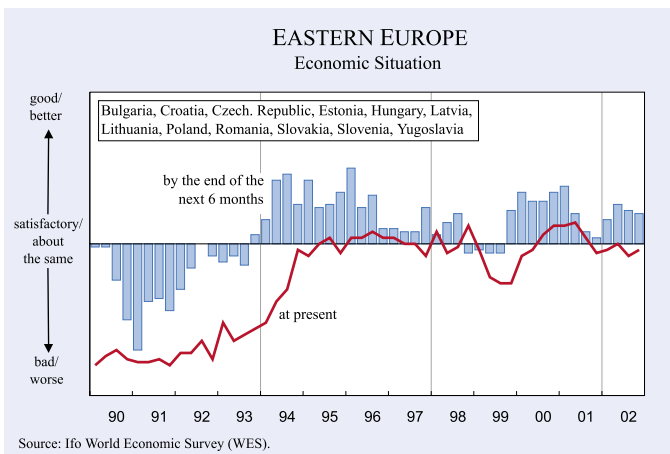
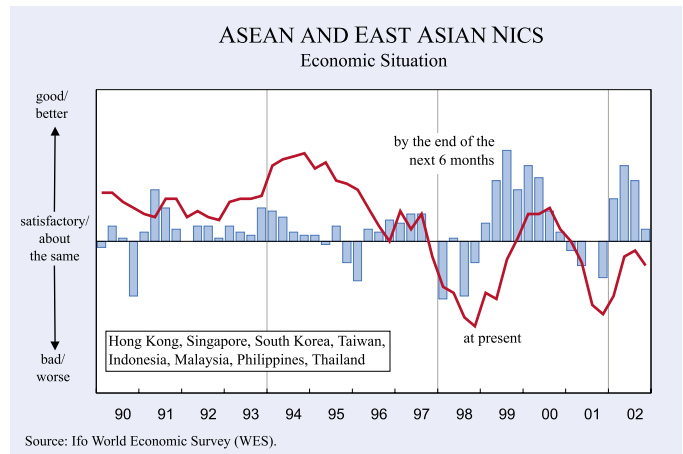
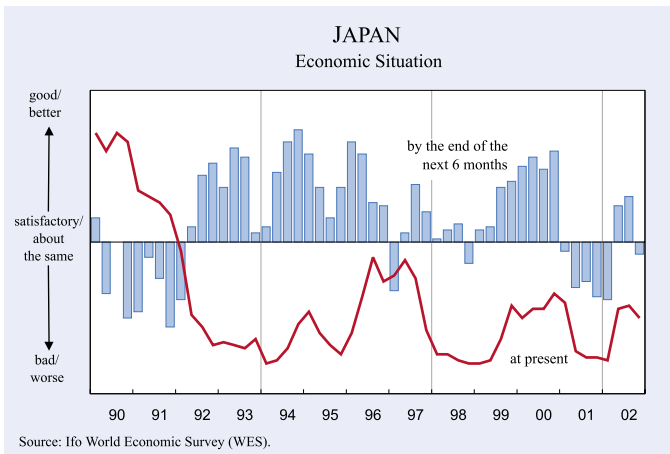
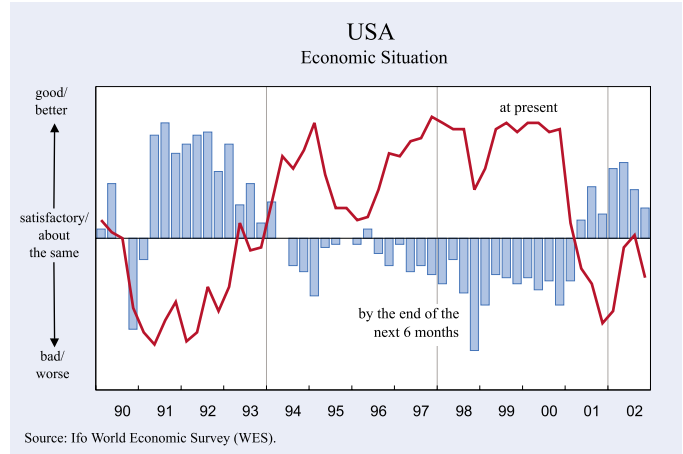
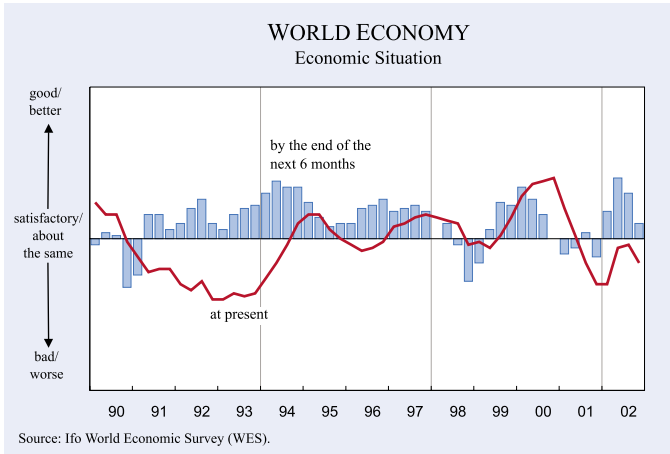
	1985	1990	1995	2000	2001
Germany	10.2	12.2	10.5	8.9	9.5
France	5.4	6.3	5.7	4.9	4.9
Italy	4.2	5.0	4.6	3.8	3.9
United Kingdom	5.4	5.4	4.8	4.5	4.5
United States	11.4	11.2	11.0	11.9	11.5
Canada	4.8	3.9	3.9	4.6	4.4
Japan	9.7	8.7	8.9	7.8	6.8
Other OECD countries	19.7	22.3	23.6	23.6	24.3
Total OECD	70.6	75.0	72.9	69.9	69.9
Non-OECD					
Asia	9.9	11.7	16.3	17.7	17.4
Latin America	4.5	3.2	2.9	3.2	3.3
Other non-OECD countries	15.0	10.1	7.9	9.2	9.4
Total of non-OECD countries	29.4	25.0	27.1	30.1	30.1

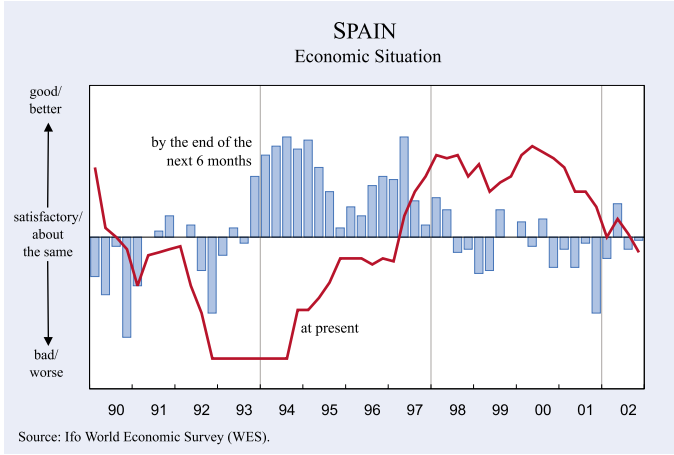
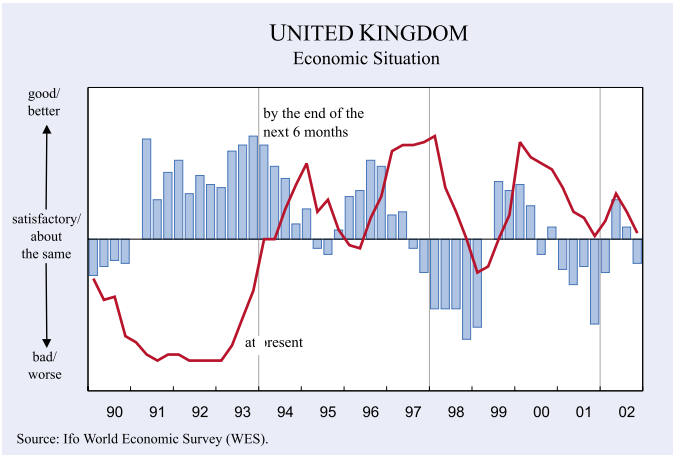
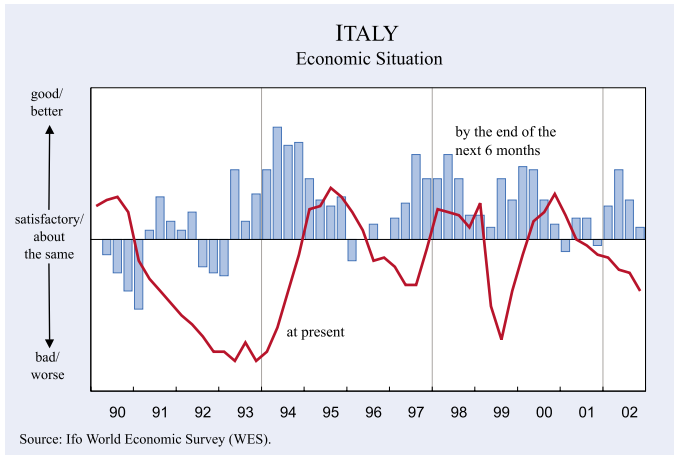
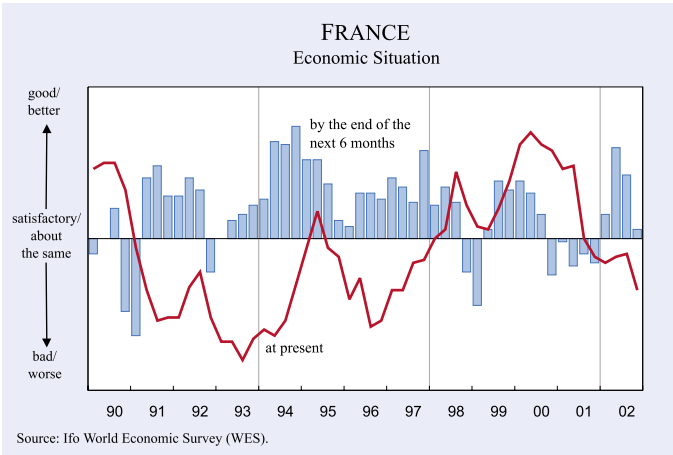
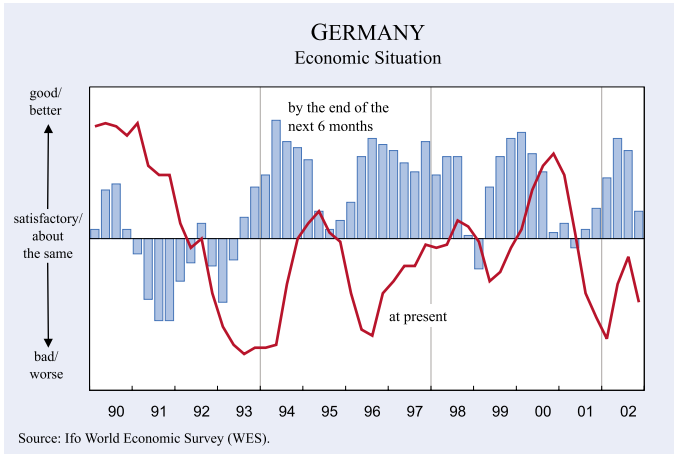
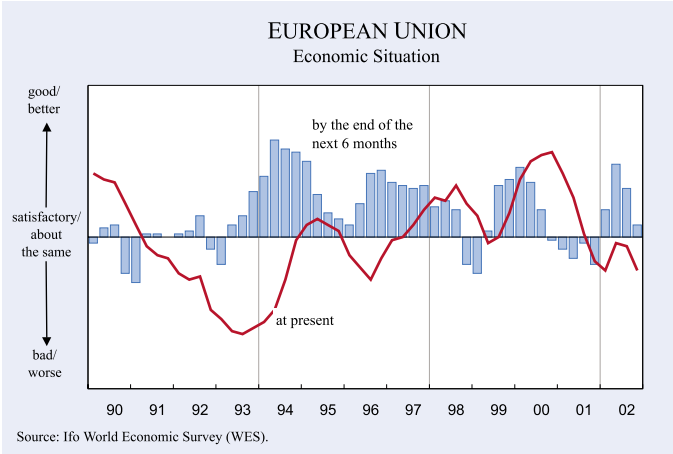
Source: OECD.

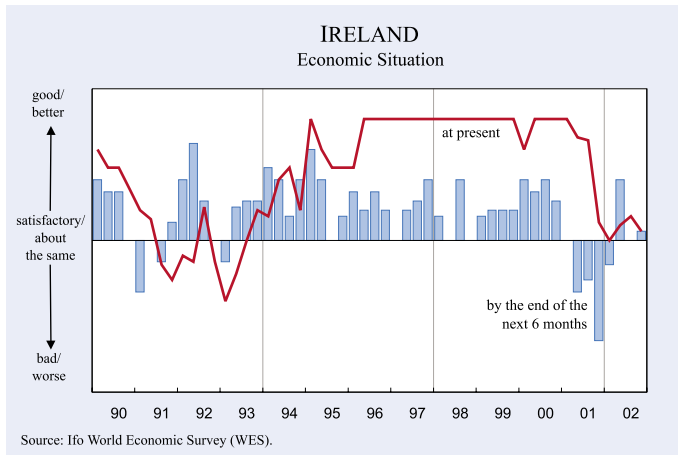
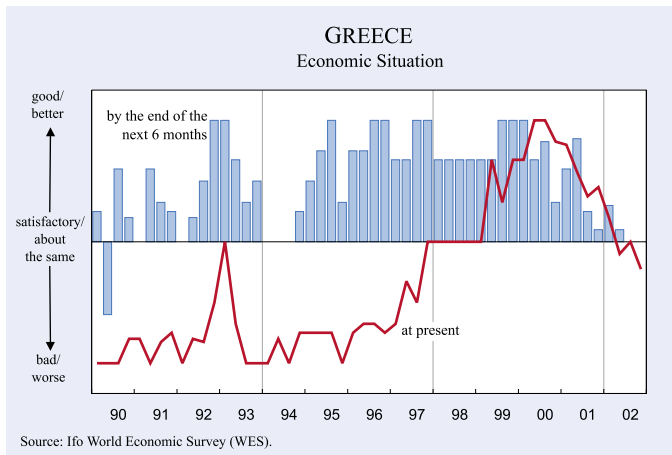
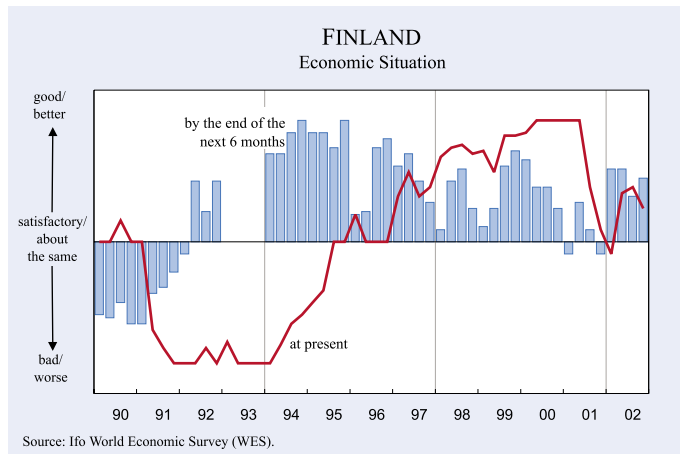
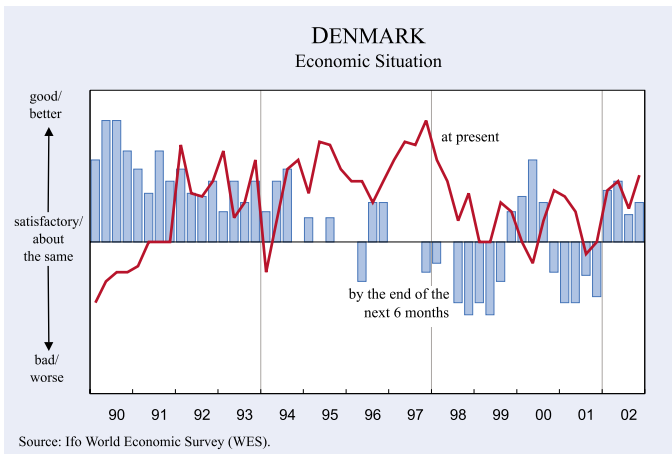
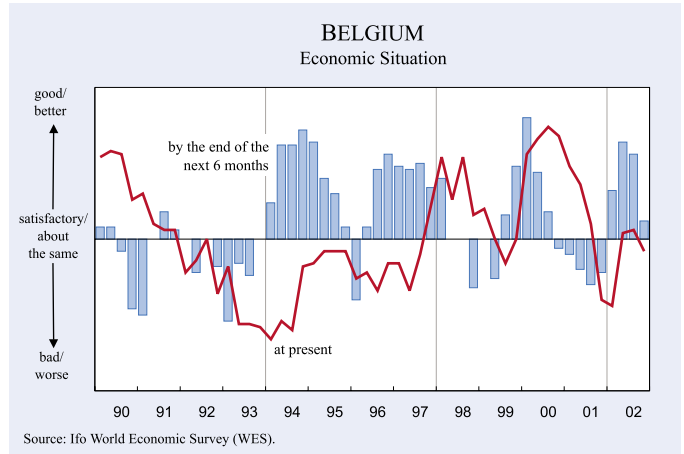
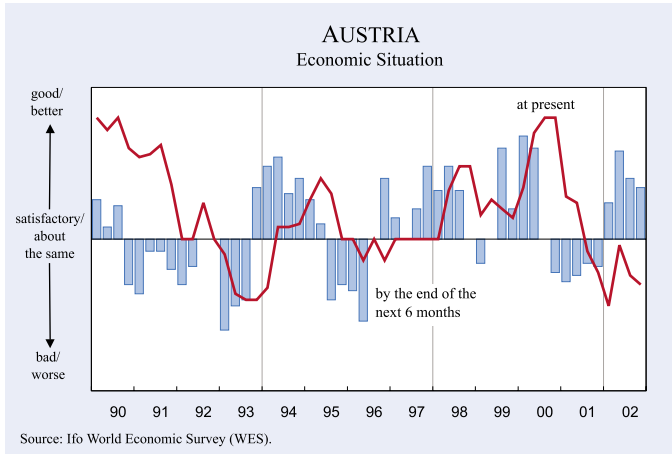
Appendix 1:

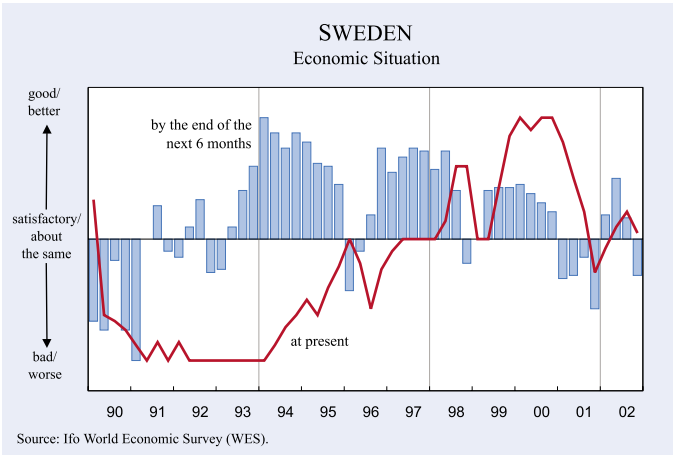
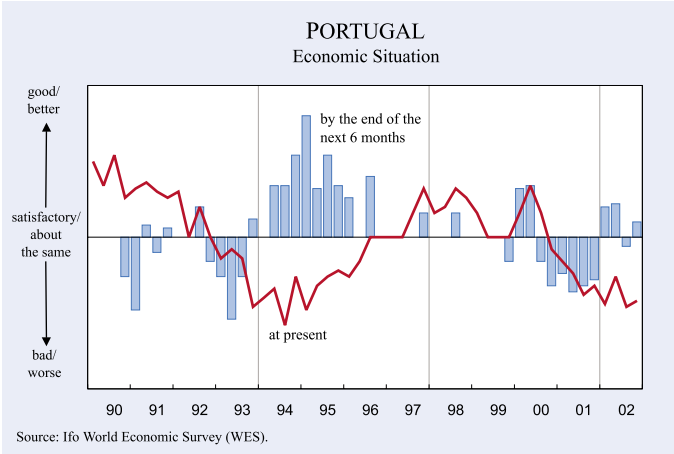
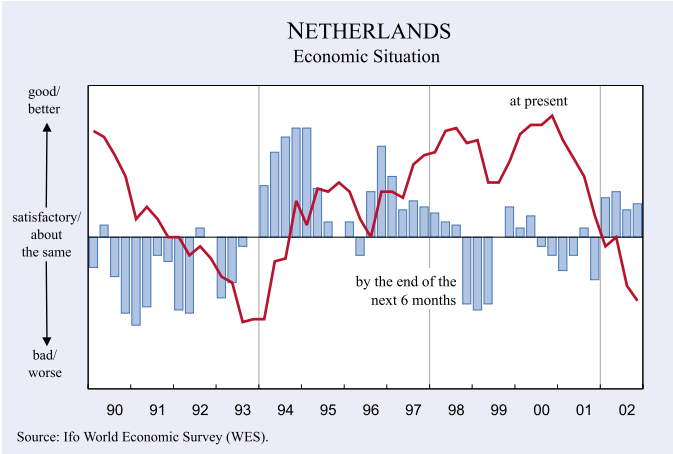
Ifo World Economic Survey (WES)

WES is a world-wide survey of the Ifo Institute for Economic Research, questioning – on a quarterly basis – more than 1,000 economists of multinational corporations in 90 countries on the present economic situation of the country of residence and its economic prospects by the end of the next six months.











## Appendix 2: Country reports

### Germany

Economic activity remained relatively weak during 2002. Following the (mild) recession in the second half of 2001, GDP increased again but growth remained significantly below trend, further widening the output gap. The sharp drop in equity prices reduced the financial wealth of households and increased the capital costs of investors. Confidence and economic activity were further reduced by the expectation of a war in Iraq and – related to this – an increase in oil prices. Exports, which had recovered at the beginning of 2002, slowed again as the US economy lost steam and the euro appreciated.

The forecast for 2003 is based on the assumption that wage agreements will – after relatively high wage growth in 2002 – become more moderate again. Fiscal policy will be restrictive as there is much pressure to reduce the deficit. The government is assumed to implement expenditure cuts of about €5 billion, tax increases of €5 billion and to raise social security contributions by €5<sup>1/2</sup> billion (together 0.7 percent of GDP).

The German economy is expected to recover gradually during 2003. The driving forces are exports, which will benefit from the recovery of world trade, although the appreciation of the euro will have a dampening effect. The assumed stabilisation of stock markets and normalisation of the geopolitical situation will also help consumer and business confidence to recover. Under such circumstances the expansionary stance of monetary policy will become more effective than hitherto. On the other hand, fiscal policy will constrain demand. Despite a relatively low increase in consumer prices (+ 1.3 percent), private consumption is expected to increase only moderately (by 0.8 percent) as taxes are increased. Construction investment is supported by the need to repair the flood damages of last August; these costs may amount to €9.2 billion.

GDP is expected to increase by 1.1 percent in 2003 after 0.2 percent in 2002. In the eastern part of Germany GDP growth will be slightly higher (1.3 percent) than in the western part (1.0 percent) because of the repair of the flood damages.

The labour market will deteriorate further, employment will continue to fall and unemployment to rise until summer, but during the second half of the year labour market conditions are expected to improve somewhat as growth accelerates.

The general government budget deficit, which amounted to 3.7 percent in 2002, is expected to decline to 2.8 percent in 2003 as significant consolidation measures are implemented both on the expenditure and on the revenue side.

#### Germany Key forecast figures

	2001	2002	2003
	Percentage change over previous year		
Real gross domestic product	0.6	0.2	1.1
Private consumption	1.5	- 0.5	0.8
Government consumption	0.8	1.5	0.6
Gross fixed capital formation	- 5.3	- 6.4	- 0.2
of which equipment	- 4.4	- 6.9	1.8
construction	- 6.0	- 5.9	- 1.8
Exports	5.0	2.9	4.7
Imports	1.0	- 1.3	4.2
Net exports of goods and services <sup>a)</sup>	1.4	1.5	0.4
Consumer prices <sup>b)</sup>	2.4	1.3	1.3
	Percentage of nominal gross domestic product		
Current account balance	0.2	2.0	2.5
Government financial balance <sup>c)</sup>	- 2.8	- 3.7	- 2.8
	Percentage of employees		
Unemployment rate <sup>d)</sup>	7.7	8.2	8.5

<sup>a)</sup> Change over the previous year in % of the real gross domestic product of the previous year. – <sup>b)</sup> Harmonised consumer price index. – <sup>c)</sup> Excluding extra income from sales of mobile phone licences. – <sup>d)</sup> Standardised.

Source: Information of national and international institutions; calculations and estimates of the Ifo Institute; 2002 and 2003: forecast by the Ifo Institute.

## Labour market reform in Germany

Following the 2002 elections, the German government has now embarked on a series of reforms in the area of labour market policies. Proposals were made by the so-called “Hartz Commission” representing social partners, chaired by Volkswagen human resource manager Peter Hartz (cf. the final report prepared by *Kommission “Moderne Dienstleistungen am Arbeitsmarkt”*, 2002). The reforms enacted so far mainly affect the way public employment services are operated but also redefine the fiscal and regulatory framework for some “non-standard” forms of employment. The main elements are:

- **Establishing Job Centres:** Building on a number of international models, all kinds of services for individuals seeking employment (administration of benefits, counselling, job placement) will now be provided by “one-stop” agencies. The new Job Centres aim at a quick re-entry into employment, making use of an early profiling of job seekers and giving them extended access to training programmes. At the same time, requirements regarding active job search, availability for work, and acceptance of working conditions in a new job are tightened.
- **Reforming benefits for job seekers:** All types of benefits open to job seekers are to be integrated in a comprehensive system encompassing insurance benefits (*Arbeitslosengeld* paid for 12 to 32 months, depending on the age of beneficiaries) plus extended welfare benefits with unlimited duration – formerly: unemployment assistance (*Arbeitslosenhilfe*) and social assistance (*Sozialhilfe*), in the future: *Arbeitslosengeld II* – for those whose contributory entitlements have expired. Introducing stricter time limits as well as reducing the level of benefits, in general or over time, has been discussed but in the end was explicitly rejected. Instead, stronger sanctions shall be imposed on those violating work requirements.
- **Stimulating low-pay employment:** Conditions for employment at low pay are modified in two ways. Jobs with wages less than 400 euro a month are subjected to a simplified scheme of raising taxes and social security contributions (with 25 percent of gross wages as the total burden, irrespective of other income earned by the job-holder; 12 percent in cases where private households act as employers). For employees earning between 400 and 800 euro a month as their total income, social security contributions are phased in gradually in order to avoid erratic tax spikes at the 400 euro threshold. Alternatively, former recipients of unemployment benefits or former participants of public employment programmes are entitled to receive subsidies (worth 50 percent of their unemployment pay for the first year, to be reduced to 0 percent over a period of three years) when entering self-employment with low income (less than 25,000 euro a year) and with no employees other than family members. In order to promote self-employment in general, the government is also considering the definition of a favourable tax treatment for all existing small businesses.
- **Reforming temporary work through Staff Leasing Agencies:** Public employment services are to be supported by (non-profit) staff leasing agencies in their attempts to place job seekers in the regular labour market. Accepting to work for these agencies can be made one of the requirements job seekers have to fulfil. Wages paid for these jobs can be subsidised (levels of subsidisation and time limits still to be defined) such that the wage costs for businesses effectively employing these individuals are substantially lower than with regular employment. A recent agreement between government and trade unions states that, unless there is a special collective wage agreement for all kinds of staff leasing agencies to be defined in 2003, the (non-subsidised) level of wages in this sector should be equal to current negotiated wages that are relevant for the branch of industry of effective employers. Chances are that this will not only make it difficult, or costly, to use temporary work as a strategy for placing job seekers in the labour market, but may also create an obstacle for the activities of existing (private, profit-oriented) agencies.
- **Improving integration of younger and older workers:** New efforts will be made to integrate young people in the labour market through special training programmes. At the same time, a number of incentives are introduced for firms hiring unemployed individuals aged 52 or older (reductions of social insurance contributions, more flexibility for making temporary contracts). Older workers accepting a new job at lower pay than with earlier positions will be compensated for part of their reduced net wages and pension benefits.

There is broad consensus among economists that the impact of the reforms enacted so far will be limited (cf., for instance, the latest consensus forecast of the leading Economic Research Institutes, or the annual report of the Council of Economic Advisors, *Sachverständigenrat*, 2002). While the introduction of Job Centres and the attempts to re-organise public employment services is generally accepted to be a step in the right direction, most other elements of the “Hartz proposals” are not expected to create incentives for both labour supply and demand suited to reduce the current level of structural unemployment significantly.

## References:

*Kommission “Moderne Dienstleistungen am Arbeitsmarkt”* (Hartz commission, 2002), *Moderne Dienstleistungen am Arbeitsmarkt* (Final report), mimeo, Berlin; “Die Lage der Weltwirtschaft und der deutschen Wirtschaft im Herbst 2002 (Joint institutes forecast, Fall 2002)”, in: ifo Schnelldienst, Vol. 55, Issue 20/2002, pp. 3–50; *Sachverständigenrat zur Begutachtung der gesamtwirtschaftlichen Entwicklung* (Council of Economic Advisors, 2002), *Jahresgutachten 2002/03: Zwanzig Punkte für Beschäftigung und Wachstum* (Annual report 2002/03), mimeo, Wiesbaden.

## France

In 2002 the economic start was rather promising. Economic activity accelerated during the first half of the year, stimulated by economic policy and rising exports. Industrial and consumer confidence improved. But after the summer the upturn lost momentum, although fiscal policy remained expansionary. Real GDP increased by roughly 1 percent in 2002 as a whole. Private consumption was the main driving force, stimulated by rising real wages; this was in contrast to the situation in Germany and Italy where private consumption declined. Export expectations, consumer confidence and the business climate in the construction sector continued to deteriorate during the year. Employment started to decline and unemployment increased. The increase in consumer prices (HCPI) remained roughly stable (slightly below 2 percent).

In 2003 economic policy will be somewhat less expansionary than in 2002. The deterioration of the public finances will be brought to a halt in the course of the year if the authorities manage to put a tighter control on expenditures in line with the recovery of the economy. But even in this case the public deficit is likely to rise from 2<sup>3</sup>/<sub>4</sub> percent to about 3 percent of GDP. Monetary policy will be less expansionary than in 2002 since the main impact of the December 2002 ECB rate cut will not be felt until Autumn 2003. The appreciation of the euro vis-à-vis the US dollar in 2002 and a further more moderate appreciation during 2003 will

dampen exports. Wage increases can be expected to slow down somewhat in nominal terms.

Real GDP is expected to increase by 1<sup>1</sup>/<sub>2</sub> percent in 2003. The recovery of the world economy in the course of the year will support business confidence, exports and investment. But given the appreciation of the euro and the ongoing consolidation of the balance sheets of highly indebted firms and the low capacity utilisation of manufacturing industry, the recovery of exports and business investment will remain moderate. The increase in public investment as well as residential construction will also remain subdued. Although employment will stagnate at the 2002 level and will only slightly increase towards the end of the year, private consumption will remain relatively buoyant. Real disposable income will be supported by increasing real wages and income tax reductions which were implemented in the last quarter of 2002 and will continue in 2003. Furthermore, the different levels of minimum wages will be harmonised towards the upper bracket of these categories. Public consumption, which increased significantly in 2002, will be dampened by fiscal consolidation measures. The unemployment rate will rise to about 9<sup>1</sup>/<sub>4</sub> percent on average also due to intense rationalisation efforts. Inflation will remain moderate with consumer prices (HCPI) increasing by 1<sup>1</sup>/<sub>2</sub> percent.

France  
Key forecast figures

	2000	2001	2002 (1)	2003 (1)
Percentage change over previous year <sup>a)</sup>				
Private consumption	2.5	2.6	1.6	1.4
Public consumption	2.7	2.5	3.3	2.3
Gross fixed capital formation	7.7	2.3	0.0	1.1
Domestic demand	4.0	1.7	1.1	1.5
Exports of goods and services	12.7	0.5	0.2	4.1
Imports of goods and services	14.3	0.1	0.3	4.7
Gross domestic product (GDP)	3.8	1.8	0.9	1.4
Unemployment rate <sup>b)</sup> (in %)	9.3	8.5	8.9	9.2
Consumer prices <sup>c)</sup> (% change on the previous year)	1.8	1.8	1.9	1.6
General government financial balance <sup>d)</sup> in % of GDP <sup>e)</sup>	-1.3	-1.5	-2.7	-3.0
(1) Forecast by the Ifo Institute. – <sup>a)</sup> At 1995 prices. – <sup>b)</sup> Unemployment as a % of labour force (employed and unemployed). – <sup>c)</sup> Price index for the cost of living of all private households. – <sup>d)</sup> On national accounts definition (ESA 1995). – <sup>e)</sup> In 2000 without revenues from the auction of UMTS licenses.				

Source: Eurostat, National Statistical Office, calculations by the Ifo Institute.

## Italy

From mid-2001 until the end of 2002 the Italian economy was close to stagnation. Real GDP increased by less than 1/2 percent in 2002. The disappointing development of private consumption contributed considerably to this meagre result, declining somewhat against 2001 although real disposable income increased by about 1 percent. Growing uncertainties about the international economy, difficulties of big firms like FIAT and losses of financial wealth by private households who – among others – had bought Argentinian bonds on a large scale, may be some of the explanations. Machinery and equipment investment declined sharply. The investment incentive “Tremonti bis” has not produced remarkable effects so far, whereas a similar programme in the mid-1990s had stimulated investment. Exports also declined. Only public consumption and (involuntary) stockbuilding contributed to aggregate demand growth. Nevertheless, employment continued to increase, mainly as the result of more part-time jobs – and the unemployment rate declined to 9 percent on average. Following a significant hike during the early months of the year, prices remained stable over a couple of months but picked up again in autumn; the CPI (HCPI) exceeded the level of 2001 by 2 1/2 percent.

Economic policy is likely to be neutral or will only marginally stimulate the economy in 2003. The impact of monetary policy remains expansionary. Fiscal policy will be broadly neutral. While the

2003 budget is aiming at consolidation, there are no large cuts in expenditure and a reduction in the income tax, although the scale of this reduction is unclear. The appreciation of the euro will be a dampening factor. Hourly wages are assumed to continue rising by about 3 percent.

Real GDP is expected to increase by somewhat more than 1 percent in 2003. The assumed gradual recovery of the world economy will stimulate exports and investment. Private consumption is assumed to recover. Despite a further spread of part-time jobs, employment is likely to grow only moderately as firms continue to rationalise and the public sector is very hesitant about hiring new staff. The unemployment rate is expected to rise a little to more than 9 percent on average. Consumer prices (HCPI) will rise by about 2 1/2 percent.

Italy  
Key forecast figures

	2000	2001	2002 (1)	2003 (1)
Percentage change over previous year <sup>a)</sup>				
Private consumption	2.7	1.1	1.0	1.1
Public consumption	1.7	2.2	1.3	1.1
Gross fixed capital formation	6.5	2.4	- 2.3	1.7
Domestic demand	2.1	1.6	0.4	1.2
Exports of goods and services	11.7	0.8	- 1.2	4.5
Imports of goods and services	4.3	1.4	- 0.5	5.0
Gross domestic product (GDP)	2.9	1.8	0.4	1.1
Unemployment rate <sup>b)</sup> (in %)	10.4	9.4	9.1	9.2
Consumer prices <sup>c)</sup> (% change on the previous year)	2.6	2.3	2.6	2.2
General government financial balance <sup>d)</sup> in % of GDP <sup>e)</sup>	- 1.7	- 2.2	- 2.7	- 2.8

(1) Forecast by the Ifo Institute. – <sup>a)</sup> At 1995 prices. – <sup>b)</sup> Unemployment as a % of labour force (employed and unemployed). – <sup>c)</sup> Price index for the cost of living of all private households. – <sup>d)</sup> On national accounts definition (ESA 1995). – <sup>e)</sup> In 2000 without revenues from the auction of UMTS licenses.

Source: Eurostat, National Statistical Office, calculations by the Ifo Institute.

## United Kingdom

With real GDP increasing by almost 1½ percent in 2002, the British economy performed better than the average of the Western European countries. Nevertheless, the upswing was very short, losing momentum in the second half of the year. Since 1996, private consumption, the main driving force of economic growth, has continued to rise almost unabated; it was stimulated by rapidly rising real disposable income and house prices which helped to compensate for stock market losses. Employment continued to rise and wage increases remained high while inflation was relatively low. The savings rate continued to decline. Public consumption picked up considerably due to a medium-term programme to improve the public infrastructure. Exports declined somewhat, reflecting the weakness in world trade and the still overvalued pound sterling. While private non-residential investment declined sharply, residential construction recovered impressively, supported by soaring house prices. Employment increased further but at decreasing rates and the unemployment rate increased slightly. Inflation remained moderate with consumer prices (HCPI) rising by only 1 percent on average.

Economic policy will continue to stimulate the economy in 2003. That goes first of all for fiscal policy, as the medium-term public infrastructure programme will continue to support aggregate demand. The Bank of England is in a fairly delicate situation. On the one hand consumer price inflation (RPIX) is at

the lower end of the 1.5 to 3.5 percent range of the inflation target, the pound sterling is clearly overvalued and manufacturing production as well as business investment is shrinking further – good reasons for lower interest rates. On the other hand soaring house prices and booming private consumption calls for higher interest rates. It is assumed here that monetary policy will follow the Fed and the ECB with monetary easing once a further cooling-off of the economy becomes evident. It is further assumed that wages will continue to rise relatively fast.

In 2003 economic growth is at risk: The bubble in house prices could burst and reduce housing construction and consumer confidence. However, assuming a soft landing of house prices, the impact on construction and private consumption will be more moderate. The economy is expected to recover during 2003, stimulated by economic policy and external demand. Real GDP is likely to grow by slightly more than 2 percent. Exports will revive, led by the upswing of the world economy. Nevertheless, given the high exchange rate of the pound sterling and rapidly rising unit labour costs, international competitiveness will weaken further so that growth of exports is expected to be considerably lower than that of world trade. Public consumption will continue to grow rapidly and gross fixed investment is expected to recover despite the housing boom cooling off. Investment in public infrastructure will grow strongly and investment in machinery and equipment, mostly driven by the service sector, should overcome the recession due to improving sales and

profit prospects and an increasing capacity utilisation in the course of the year. The expansion of private consumption will decelerate despite high wage increases. The slowdown in house price inflation will dampen the inclination to take up consumer credit. The unemployment rate might be somewhat higher on average than in 2002. Also, due to accelerating unit labour costs, consumer prices are expected to rise by 1½ percent (HCPI) which is an acceleration compared with 2002.

United Kingdom  
Key forecast figures

	2000	2001	2002 (1)	2003 (1)
Percentage change over previous year <sup>a)</sup>				
Private consumption	5.2	4.1	3.2	2.0
Public consumption	2.1	2.2	3.5	3.2
Gross fixed capital formation	1.9	0.3	-4.2	2.0
Domestic demand	2.5	2.6	1.8	2.3
Exports of goods and services	10.1	1.2	-0.3	3.4
Imports of goods and services	11.7	2.8	1.8	4.2
Gross domestic product (GDP)	3.1	2.0	1.4	2.1
Unemployment rate <sup>b)</sup> (in %)	5.4	5.0	5.1	5.4
Consumer prices <sup>c)</sup> (% change on the previous year)	0.8	1.2	1.3	1.4
General government financial balance <sup>d)</sup> in % of GDP <sup>e)</sup>	1.6	0.7	-1.3	-1.7

(1) Forecast by the Ifo Institute. – <sup>a)</sup> At 1995 prices. – <sup>b)</sup> Unemployment as a % of labour force (employed and unemployed). – <sup>c)</sup> Price index for the cost of living of all private households. – <sup>d)</sup> On national accounts definition (ESA 1995). – <sup>e)</sup> In 2000 without revenues from the auction of UMTS licenses.

Source: Eurostat, National Statistical Office, calculations by the Ifo Institute.

### Appendix 3: Forecasting Tables

**Table A1**  
Real gross domestic product, consumer prices and unemployment rates in industrialised countries

	Weighted (GDP) in %	Gross domestic product			Consumer prices <sup>a)</sup>			Unemployment rate <sup>b)</sup> in %		
		Change over the previous year in %						2001	2002	2003
		2001	2002	2003	2001	2002	2003			
Germany	7.9	0.6	0.2	1.1	2.4	1.3	1.3	7.7	8.2	8.5
France	5.6	1.8	0.9	1.4	1.8	1.9	1.6	8.5	8.9	9.2
Italy	4.7	1.8	0.4	1.1	2.3	2.6	2.2	9.4	9.1	9.2
Spain	2.5	2.7	1.8	2.2	2.8	3.6	3.1	10.6	11.3	11.2
Netherlands	1.6	1.3	0.5	0.5	5.1	3.9	3.2	2.4	3.6	3.7
Belgium	1.0	0.8	0.5	1.3	2.4	1.6	1.5	6.6	6.9	7.1
Austria	0.8	0.7	0.9	1.4	2.3	1.7	1.6	3.6	4.1	4.4
Finland	0.5	0.7	1.3	2.0	2.7	2.0	1.9	9.1	9.3	9.0
Greece	0.5	4.1	3.9	3.9	3.7	3.9	3.4	10.5	10.0	9.4
Portugal	0.5	1.6	0.3	0.9	4.4	3.7	3.0	4.1	4.6	5.5
Ireland	0.4	5.7	4.3	3.2	4.0	4.7	3.4	3.8	4.8	5.0
Luxembourg	0.1	1.0	2.0	2.4	2.4	2.1	1.6	2.0	2.4	2.7
Euro area <sup>c)</sup>	26.2	1.4	0.8	1.4	2.5	2.1	1.9	8.0	8.3	8.5
United Kingdom	6.1	2.0	1.4	2.1	1.2	1.3	1.4	5.0	5.1	5.4
Sweden	0.9	1.2	1.4	1.8	2.7	2.0	1.9	4.9	5.1	5.3
Denmark	0.7	1.0	1.5	1.4	2.3	2.4	2.0	4.3	4.2	4.3
European Union <sup>c)</sup>	33.9	1.5	0.9	1.5	2.3	2.1	1.8	7.3	7.6	7.8
Switzerland	1.1	0.9	0.6	1.0	1.0	0.6	0.6	1.9	2.8	3.7
Norway	0.7	1.4	1.4	1.9	3.0	1.2	1.6	3.6	3.7	3.9
Western Europe <sup>c)</sup>	35.7	1.6	0.9	1.5	2.3	2.0	1.8	7.1	7.4	7.6
USA	43.6	0.2	2.5	2.7	2.8	1.4	2.5	4.8	5.9	6.0
Japan	17.8	0.3	-0.2	1.0	-0.7	-0.9	-0.9	5.0	5.4	5.6
Canada	3.0	1.5	3.4	2.9	2.5	2.1	2.4	7.2	7.6	7.7
Total <sup>d)</sup>	100.0	0.7	1.5	2.0	2.0	1.2	1.6	5.9	6.6	6.7

<sup>a)</sup> Western Europe (except for Switzerland): harmonised consumer price index. – <sup>b)</sup> Standardised. – <sup>c)</sup> Sum of the listed countries. Gross domestic product and consumer prices weighted with the gross domestic product of 2001 in US dollars; unemployment rate weighted with the number of employees in 2001. – <sup>d)</sup> Sum of the listed countries. Weighted with the shares of German exports in 2001.

Source: Information of national and international institutions; 2002 and 2003: forecasts by the Ifo Institute.

**Table A2**  
Indicators of the public budgets in the euro area

	Gross debt <sup>a)</sup>					Financial balance <sup>a)</sup>				
	1999	2000	2001	2002	2003	1999	2000	2001	2002	2003
Germany	61.2	60.2	59.5	61.6	63.3	-1.5	-1.1	-2.8	-3.6	-2.8
France	58.5	57.3	57.3	58.7	59.8	-1.6	-1.3	-1.4	-2.7	-3.0
Italy	114.5	110.5	109.9	110.4	109.0	-1.8	-0.5	-2.2	-2.7	-2.8
Spain	63.1	60.5	57.1	56.0	55.0	-1.1	-0.6	-0.1	-0.8	-1.2
Netherlands	63.1	55.8	52.8	51.5	51.8	0.7	2.2	0.1	-1.0	-1.4
Belgium	114.9	109.2	107.6	106.0	103.0	-0.5	0.1	0.4	-0.2	-0.5
Austria	64.9	63.6	63.2	63.4	63.8	-2.3	-1.5	0.2	-1.8	-1.7
Finland	46.8	44.0	44.0	42.0	41.7	1.9	7.0	4.9	3.6	2.8
Greece	105.1	106.2	107.0	106.0	103.0	-1.9	-1.8	-1.2	-1.5	-1.9
Portugal	54.4	53.3	55.5	58.0	59.0	-2.4	-2.9	-4.1	-4.0	-3.5
Ireland	49.7	39.1	36.4	35.5	36.0	2.2	4.4	1.5	-1.2	-1.5
Luxembourg	6.0	5.6	5.6	4.8	4.9	3.6	5.6	6.1	0.5	-2.0
Euro area <sup>b)</sup>	72.5	70.1	69.3	70.0	70.7	-1.3	0.1	-1.5	-2.4	-2.3

<sup>a)</sup> As a % of gross domestic product; in accordance with the delimitation according to the Maastricht Treaty. Financial balance without the special revenue gains from the sale of mobile phone licences. – <sup>b)</sup> Sum of the countries: weighted with the gross domestic product of 2001 in euro.

Source: Eurostat; 2002 and 2003: forecasts by the Ifo institute.



Table A3

## Key forecast figures for the euro area

	2001	2002	2003
	Percentage change over previous year		
Real gross domestic product	1.4	0.8	1.4
Private consumption	1.8	0.6	1.5
Government consumption	1.9	2.0	1.2
Gross fixed capital formation	- 0.7	- 2.0	0.5
Exports <sup>a)</sup>	2.8	0.5	4.5
Imports <sup>a)</sup>	1.4	-0.8	4.2
Consumer prices <sup>b)</sup>	2.5	2.1	1.9
	Percentage of nominal gross domestic product		
Current account balance	0.4	0.9	1.0
Government financial balance <sup>c)</sup>	- 1.5	- 2.4	- 2.3
	Percentage of employees		
Unemployment rate <sup>d)</sup>	8.2	8.3	8.5
<sup>a)</sup> Exports and imports contain products and services including the trans-border market within the euro area. - <sup>b)</sup> Harmonised consumer price index. - <sup>c)</sup> Excluding extra income from sales of mobile phone licences. - <sup>d)</sup> Standardised.			

Source: Information of national and international institutions; 2002 and 2003: forecast by the Ifo Institute.

Appendix 4:  
The German disease

Currently, Europe's largest economy, Germany, is facing serious economic problems characterized by record levels of unemployment and insolvency rates together with low growth and declining investment. The German banking system has been hit hard by the downturn and is experiencing its most severe crisis in post-war history.

The acute German crisis is only partly due to the bad performance of the world economy. It primarily results from Germany's own idiosyncratic problems. In the past seven years, cumulated German growth has been more than seven percent below the EU average. In fact, Germany has had the lowest growth among all European countries since the middle of the 1990s, and there is no sign for a change. Whichever way the European or world

trade cycle develops, it is likely that Germany's growth rate will remain the lowest in Europe for some time to come.

The low German growth relative to other European countries is unlikely to be just an implication of "growth convergence" of countries starting at different levels of development. Germany's GDP per capita used to be one of the highest in Europe thirty years ago. It is now close to the EU average, but Germany's growth rate remains the lowest in Europe. In terms of GDP per capita Germany has been surpassed in recent years by the UK, Finland, The Netherlands, Ireland and Austria. It is possible that the country will fall further back in the years to come.

The most important factor explaining the growth decline in Germany is the relative growth of wage costs.

Figure 1.1

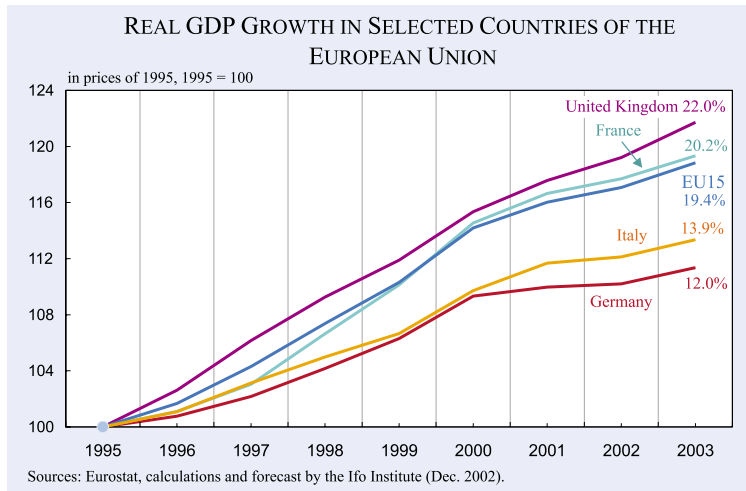
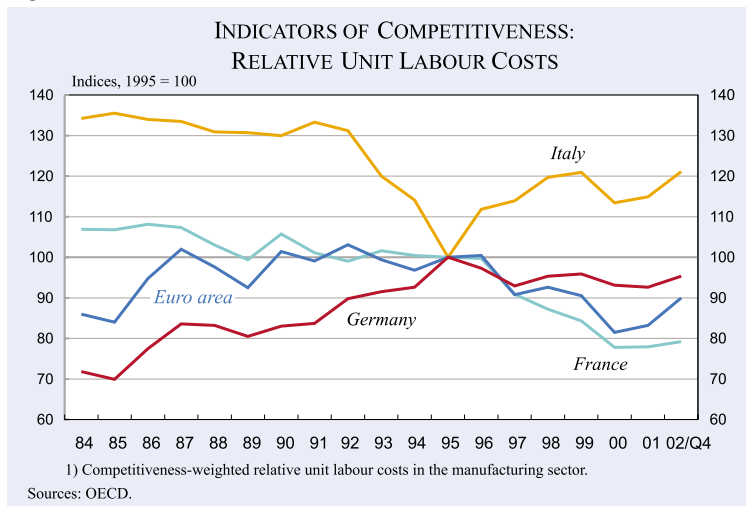


Figure 1.2 shows a trend-wise increase in unit labour cost<sup>17</sup> of Germany from 1980 to 2002, much of the increase being concentrated in the first half of the 1990s. In this respect Germany compares very unfavourably with the euro area as a whole (although it should be noted that the real increase has been even larger recently for Italy).

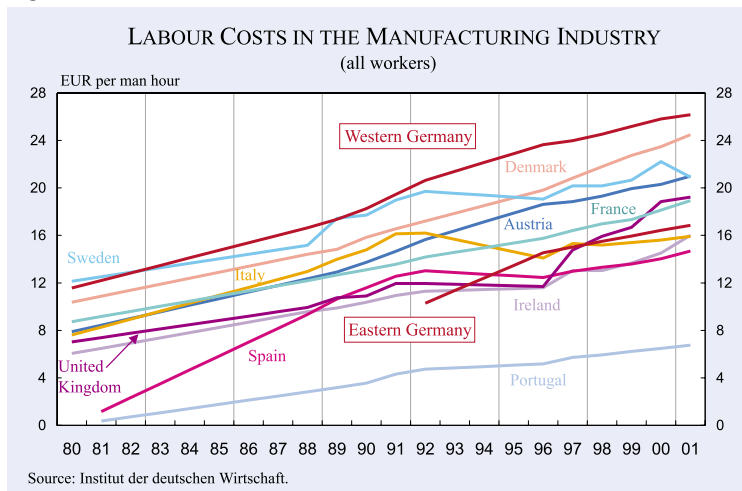
Figure 1.2



Measures of relative unit labour costs are likely to understate the deterioration of international competitiveness, as increases in relative wage costs squeeze out employment. Less productive firms are driven into bankruptcy, and as a result the average productivity of the firms remaining in the market after the wage increase is high-

<sup>17</sup> Competitiveness-weighted unit labour costs in the manufacturing sector in dollar terms. Competitiveness weights take into account the structure of competition in both export and import markets of the manufacturing sector of 41 countries. For details on the method of calculation see Durand, M., C. Madashi and F. Terribile (1998) "Trends in OECD Countries' International Competitiveness: The Influence of Emerging Market Economies," OECD Economic Department Working Papers, No. 195.

Figure 1.3



er. Moreover, the firms that survive the wage increase are likely to use more capital intensive production techniques, setting workers free and increasing labour productivity. For this reason, it is informative to compare wage costs per unit of time, as is done in figure 1.3 which plots wage costs in manufacturing per hour at going prices and exchange rates. The Figure shows that west Germany is a true outlier in the spectrum of countries, taking a leading position throughout the sample period from 1980 through 2001. Even east Germany has relatively high wages, given its short period of development as a market economy since 1990.

Sometimes it is argued that high wages are beneficial rather than detrimental to employment, alluding to Keynesian demand effects resulting from wage increases. This view is empirically unfounded, as can be demonstrated by comparing the labour market situation during the last 20 years in the US, the Netherlands and west Germany. Figure 1.4 illustrates the growth of real hourly labour costs in manufacturing. In west Germany real labour costs per hour increased by 39 percent between 1982 and 2001, in the Netherlands they increased by 23 percent and in the US they increased by only 3 percent. The employment situation mirrors this development. While the number of employee hours increased in the

US by 38 percent between 1982 and 2001 and in the Netherlands by 26 percent, they declined by around 3 percent in west Germany. In the experience of these three countries, in the long run one percentage point wage restraint generated roughly one percentage point more employment.

What is the cause of the large rise in real labour costs in Germany relative to other countries? One problem may be that Germany was locked into EMU perhaps too early

after unification. In fact, unification had led to a transitory real appreciation of the deutschmark to accompany the current account and budget deficit generated by the massive resource transfer to east Germany. The creation of the euro fixed the intra-European exchange rate before relative prices and wages could return to their normal level at the ongoing exchange rate. Germany would thus need a devaluation in order to reduce its price misalignment with the other countries in the euro area, but as Germany is member of the European Monetary Union, such an option no longer exists.

Some evidence consistent with this can be found by looking at the trade weighted real exchange rate of Germany. The idea is that the real exchange rate should have increased after unification without having been adjusted in the years that followed. As shown by Figure 1.5 after the break-down of the

Figure 1.4

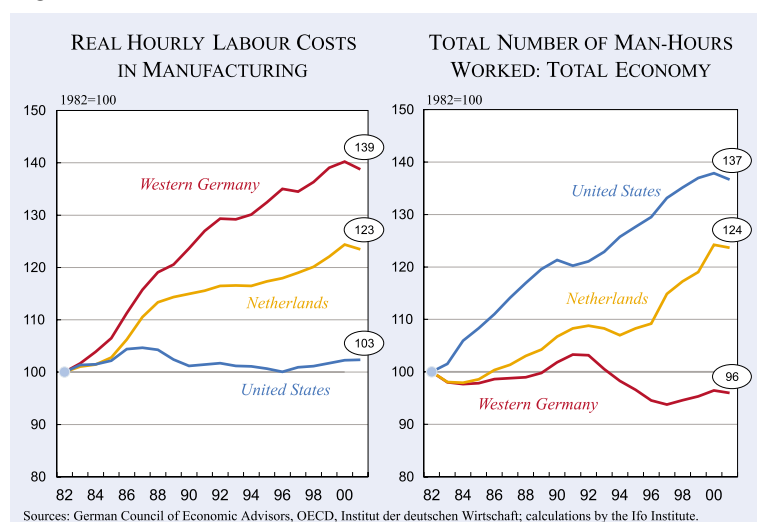
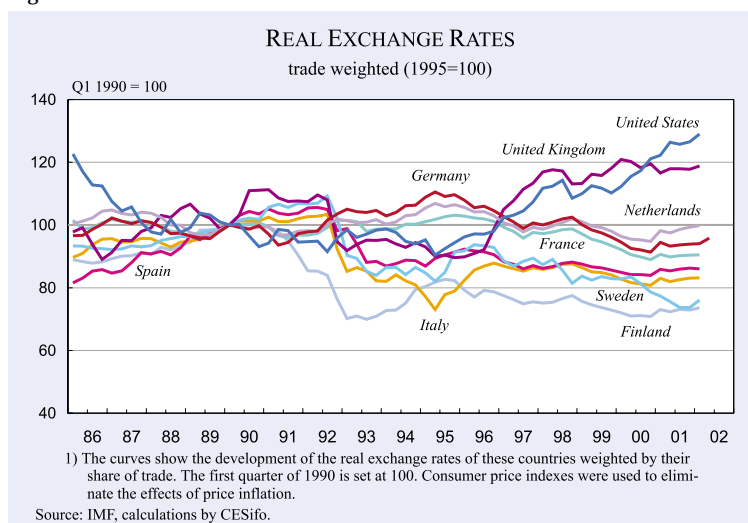


Figure 1.5



EMS in 1992, there was indeed a period where the currencies of countries such as Spain, Italy, Sweden or Finland depreciated strongly relative to Germany, and this depreciation effect has prevailed to this day. However, there is hardly any real appreciation of Germany relative to France, its most important trading partner, and there is a strong depreciation relative to countries outside Euroland such as the UK or the US, driven by the upward movement of the dollar. Overall, the figure shows no real appreciation in terms of trade between 1990 to 2002. A further appreciation of the euro against the dollar would, however, create a problem insofar as the misalignment within the euro zone would make German exporters a primary victim. Note that Germany did not appreciate relative to the Netherlands: the two curves are fully parallel in the figure. Nevertheless, Figure 1.5 clearly shows that the Netherlands had better employment and growth records. All of this suggests that the competitiveness problem underlying Germany's weakness cannot be assessed by looking at terms of trade only but rather one should concentrate on overvaluation stemming from high wage costs and other idiosyncratic problems, all of which squeeze profits and discourage investment. The reasons will be discussed below.

### 1. Labour laws

One of the causes of Germany's problems is the legal structure of the labour market in terms of tenure rules and the way wage negotiations are conducted. Germany has relatively extensive labour protection rules which practically amount to lifetime tenure

after only a few years of employment. Moreover the country has a system of centralized wage bargaining that generates uniform wages for industry sectors which are only mildly differentiated across regions. This system makes it impossible for a firm that operates on the verge of bankruptcy to settle for lower wages with its employees even if these employees accept such a solution in order to rescue their workplaces. The two elements together give trade unions great power to increase wages for the insiders of the labour market.

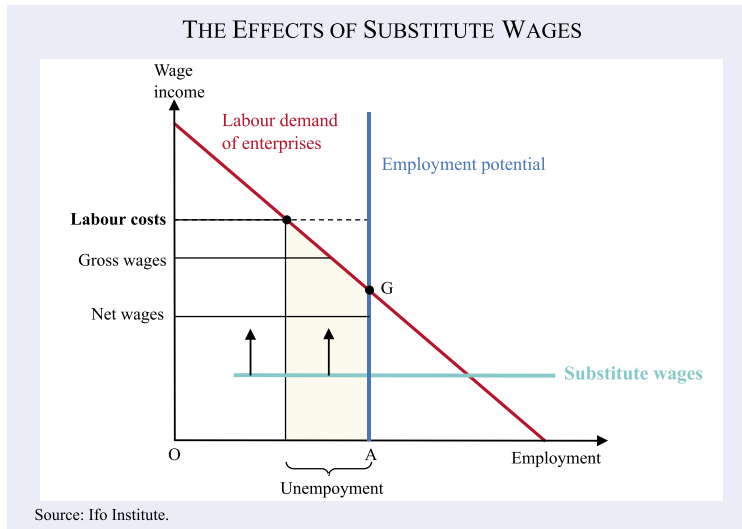
While there is certainly much nominal wage rigidity in Germany, this power in itself leads to an additional real wage rigidity, against which even a currency devaluation would be useless.

### 2. Repercussions from high social replacement incomes

Another explanation for Germany's high real wages relates to generous replacement incomes in terms of unemployment benefits, early retirement schemes and social aid. Replacement incomes are paid under the condition that people do not work and earn no income, and they are reduced, in large ranges on a one-to-one basis, if recipients do earn an income. Replacement incomes create high reservation wages (the minimum wages at which workers accept job offers). In many cases, these reservation wages are so high that it does not pay for private firms to create jobs. Unemployment results. Figure 1.6 illustrates this effect by drawing a demand-supply diagram for the labour market. An undisturbed labour market would find a wage cost that equates demand and supply such that no unemployment prevails. The replacement income, however, pushes the net-of-tax wage upward and hence the labour cost of the firms. Jobs are destroyed or they are prevented in the first place. Unemployment results.

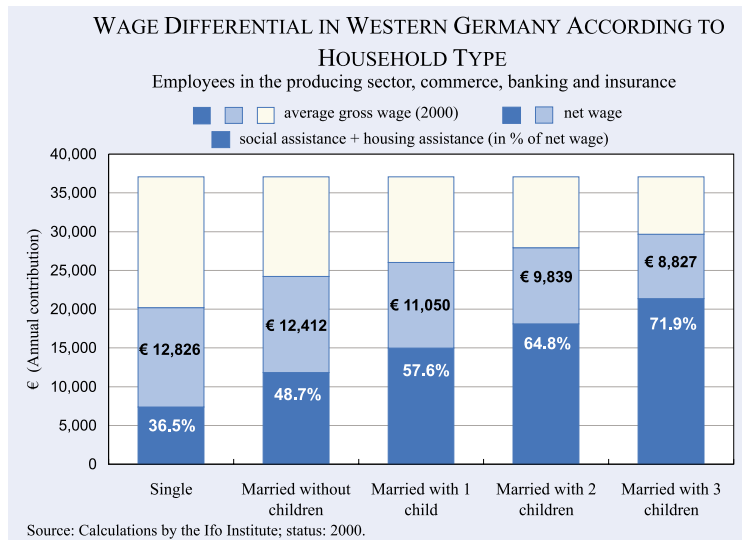
Figure 1.7 shows that this is not only a theoretical but also a practical problem for Germany. Even the average-wage incomes often offer little more net income than is available in terms of social aid to every citizen. Given the social replacement incomes, wages simply cannot fall much more with-

Figure 1.6



out making the jobs available in the market economy unattractive. The picture looks even worse when unemployment benefits are considered. Germany offers unemployment benefits (Arbeitslosenhilfe) until retirement if no job is found, and whether or not a job is found is, in practice, decided by the unemployed themselves. Perhaps the new proposals of the Hartz Commission will change this in the future, but it is too early to make a judgement on how many of these proposals will survive the legislation procedure.

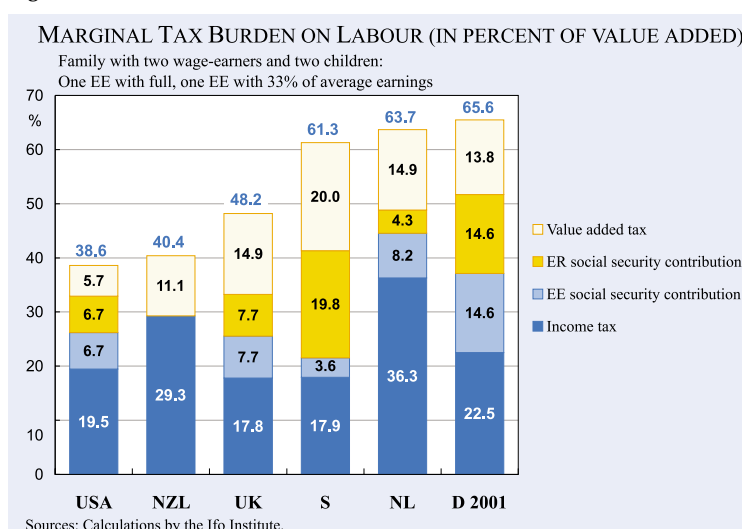
Figure 1.7



### 3. High labour tax burden

The expansion of the welfare state has contributed considerably to the rise of labour costs by imposing high taxes and social security contributions on this factor. At more than 65 percent, the marginal burden of taxation on value added that an average employee generates from a qualification measure or from an increase in work time is now the highest in the world in west Germany.

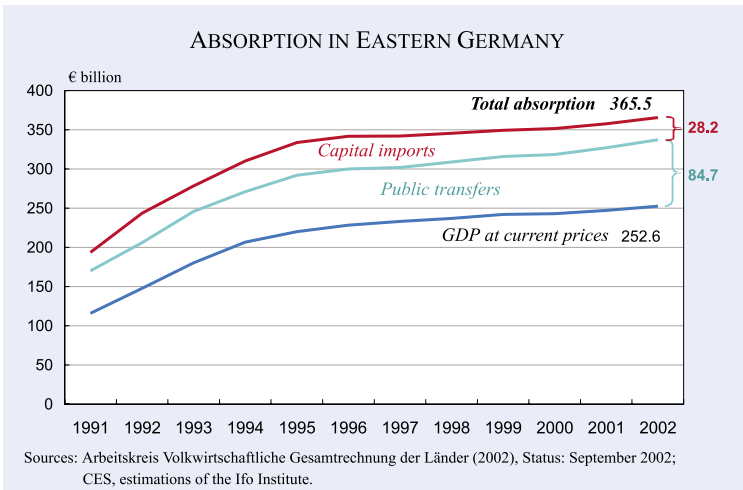
Figure 1.8



### 4. Expensive unification

German unification has also contributed to the weak growth. For reasons that we explain in Box 2, Chapter 3, "Rethinking Subsidiarity in the EU: Economic Principles", the economic unification was a failure, involving gigantic resource flows to the east without creating a self-sustained upswing. From 1997 growth in east Germany has been lower than in west Germany, and aggregate productivity per person of working age has

Figure 1.9



been stuck at a level of less than 60 percent of the west German level.

Figure 1.9 gives an overview of the development of aggregate absorption (consumption of goods and services by households, firms and government) in comparison to own production (GDP). It shows that the excess of absorption over production, the current account deficit, is about 45 percent of GDP. This is large by all standards. Countries like Portugal or Israel, which used to hold the records, have deficits of about 12 percent, and even the Italian Mezzogiorno does not have a current account deficit of more than 13 percent.

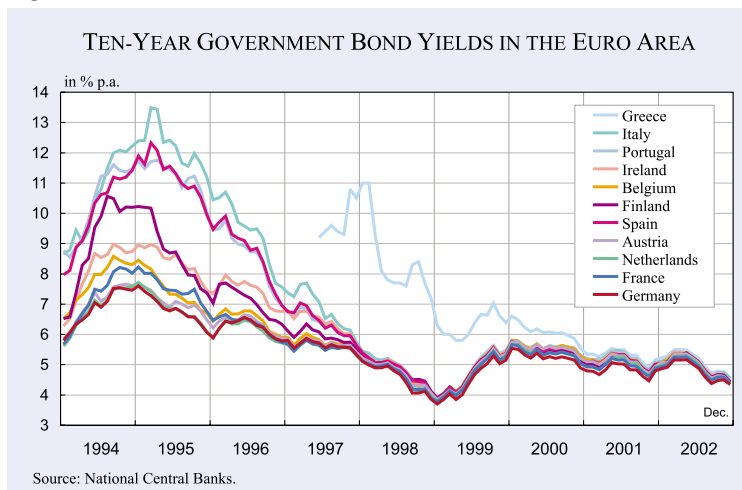
The resource transfers have, of course, beneficial effects in terms of raising the east German living standard. However, they also contribute to exacerbating Germany's problems. On the one hand, they add to the excessively high tax burden on German labour and explain Germany's difficulties in reducing the government share in GDP, which has increased to more than 48 percent. On the other hand, they come primarily in the form of paying replacement incomes, whose detrimental effects on the labour market have been explained above. In fact, the establishment of a welfare state with basically west German standards in an economy that a dozen years ago was still under communist central plan-

ning can be seen as the major obstacle to a self-sustained upswing in east Germany.

5. Lost advantage of lower interest rates

Adding to these internal factors is the external factor of the sharpening of competition in Europe, which is due to west European integration, the fall of the iron curtain and, in particular, the levelling of the playing field resulting from the introduction of the euro. The euro has not only sharpened competition in the goods markets. It has also established a European capital market in which the interest rates have converged dramatically. As we pointed out in our first report (EEAG 2002, ch. 4), the interest convergence will boost aggregate European growth as such because it favours investment and capital reallocation in poor countries with high returns such as Spain, Portugal or Greece, over investment in rich countries with low returns such as Germany. As beneficial as this process will be for Europe as a whole, it will contribute to reducing German GDP growth (although not necessarily GNP growth). The German productive system has lost the competitive advantage from low interest rates which the D-mark once provided with segmented capital markets. Note that the convergence in interest rates has occurred in a period where there were no currency alignments, and inflation rates strongly con-

Figure 1.10





verged. The interest rates have converged in both nominal and real terms.

#### The remedies

In order to speed up growth again, the market forces must be activated, especially in the labour market. If idle manpower is mobilised, the national product will also grow. Creating employment is the essential tool for creating more growth in Germany.

The reforms should primarily target the welfare state, which creates high reservation wages. The lesser qualified should receive lower replacement incomes and be given wage supplements instead, as was recommended in our first report (EEAG, 2002, ch. 6). This measure would reduce the minimum wage level implied by social welfare payments and would make it easier for the unions to accept lower wages. At lower wages, it will become profitable for entrepreneurs to create additional jobs. If properly designed, the reforms would be cheaper for the state than the present social welfare system, and nevertheless the living standard of those who are currently unemployed will increase.

The reform of the welfare state is particularly urgent in east Germany. A self-sustained growth process will not start unless the government retreats from the policy of paying people for staying absent from the labour market by providing generous schemes for early retirement, paying high unemployment benefits and offering generous social aid payments.

Germany should make active efforts to reduce the excessively high tax burden on labour incomes and to reduce the government share in GDP. The ruling coalition has recently proposed increasing the tax burden by about one percent of GDP to avoid a conflict with the Stability and Growth Pact. This proposal was a step in the wrong direction. It will exacerbate Germany's growth problems.

German labour law and the rules for wage negotiations should be fundamentally reformed. Collective agreements in future should only have the character of wage guidelines, which a company may fail to match if the majority of employees agree. The favourability principle, which says that firms can only deviate from union contracts by paying more, should

be interpreted such that job preservation by rescuing a dying firm through wage cuts is also included among the "favourable" measures. In addition, legal protection against dismissal could be loosened in order to allow new hiring. Laws that protect workers from dismissals surely safeguard jobs in the short run; in the long term they may cause unemployment and job insecurity.

None of these measures will help improve the situation of the German labour market if wages are not flexible downward. Elsewhere in this report we have argued that, in order to allow for the necessary changes of relative prices in Europe and prevent the countries with mature economies being driven into deflation, the ECB should revise its inflation target and allow a somewhat higher average inflation rate. Such a move would certainly also help Germany. It would enable a real depreciation of commodity prices to the extent it is needed, and it would allow the downward adjustment of the growth trend of real wages that we expect to result from the reforms we recommend.

Appendix 5:  
The Japanese disease

Long gone is the era of the Japanese economic miracle. During the past ten years, the Japanese economy, which used to be a model for the West, fell 20 percent below the world-wide growth trend. Whereas the Asian NIEs seem to have recovered from the 1998 crisis, Japan is just bumping along. In 2001, real GDP fell by 1.4 percent, and prices fell for the third year in a row. In 2002, a deflation of 0.2-0.5 percent is still expected, which, given the insufficient inclusion of quality improvements in the price statistics, may in fact amount to more than a 1.5 percent reduction of the price level. This makes Japan the only OECD country to record deflation.

The government of Prime Minister Koizumi hopes to solve the problem with structural reforms. However, as important as these reforms are, defla-

tion is a macroeconomic problem which can only be solved with macroeconomic means. Supply policy is no sufficient cure when demand is lacking.

This does not say that there is no need to reform the banking system. Japanese banks were overly negligent when they handed out loans to investors, and the lack of competition in the Japanese banking system has certainly contributed to continue dubious banking practices. A major reform of the banking system which establishes competition and rids the banks of the loans that have turned non-performing is necessary. However, none of this will help unless the causes of the Japanese problem are understood and appropriate treatment prescribed.

Japan's main problem is an excess of private saving over private investment, which is not absorbed by a current account surplus and the corresponding net foreign investment. Japanese households have an extraordinarily large savings rate and, paradoxically, even Japanese firms have become net savers. Unlike firms in other countries, they are not demanders of the private households' savings to finance their investment, but are themselves providers of savings to the financial markets. According to the IMF, in 2000, the private sector as a whole, that is firms and households together, had savings in excess of investment in the amount of 9.3 percent of Japanese GDP. That is a most unusual relationship. For example, in the EU as an aggregate, the private sector invests more than it saves. Only a small part of Japanese excess savings flow into capital exports, most of it, 8.2 percent of GDP, is absorbed by the government budget deficit.

The Japanese economy is apparently in a situation close to what Alvin Hansen called "secular stagnation". Large-scale investment, fed by the high savings of an ageing society making provisions for old age, have created an ample cap-

Figure 1.1

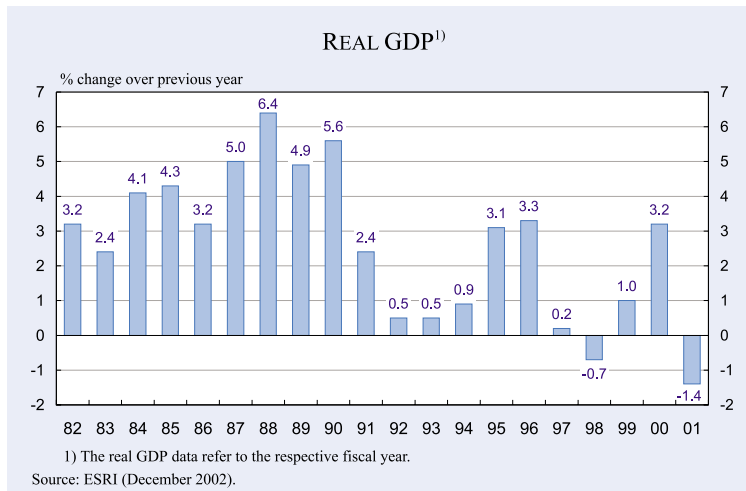
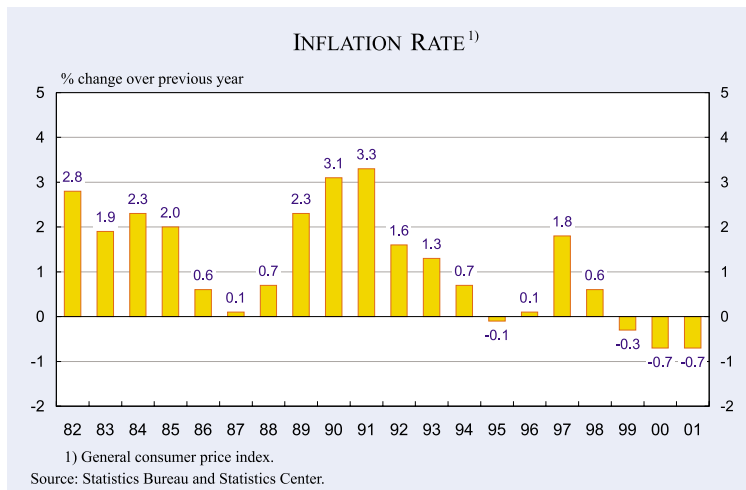


Figure 1.2



ital stock and a corresponding low marginal productivity of capital. Thus it becomes increasingly difficult to invest the permanent inflow of new savings productively in the domestic private sector, with the result that the government has either to create the corresponding investment opportunities domestically or accomplish a real exchange rate depreciation that makes it possible to run a larger current account surplus and to invest more abroad. The Japanese savers are accumulating claims against the Japanese taxpayers because domestic private investors and foreign purchasers of Japanese goods refuse to become debtors.

Hansen called the excess of planned saving over planned investment “the deflationary gap”, because it implies a lack of aggregate demand. The government can close the gap by incurring more and more debt. But the ability of continuing this policy year after year diminishes as it creates a confidence crisis of the investors with unforeseeable consequences for the state. In 1992, Japanese debt amounted to 60 percent of GDP. Only 10 years later, in 2002, it was about 150 percent, and it still continues to rise. In the whole of Europe there is no single country with a comparable debt-GDP ratio. Even Belgium and Italy with ratios of 102 percent and 105 percent in 2002, respectively, have been superseded by Japan.

Whenever deficit financing becomes difficult, an expansionary monetary policy is the obvious choice in order to lower interest rates and in this way give an incentive to firms to make the necessary investment. Unfortunately, this road is also blocked with short-term interest rates already close to zero. Japan finds itself in the Keynesian

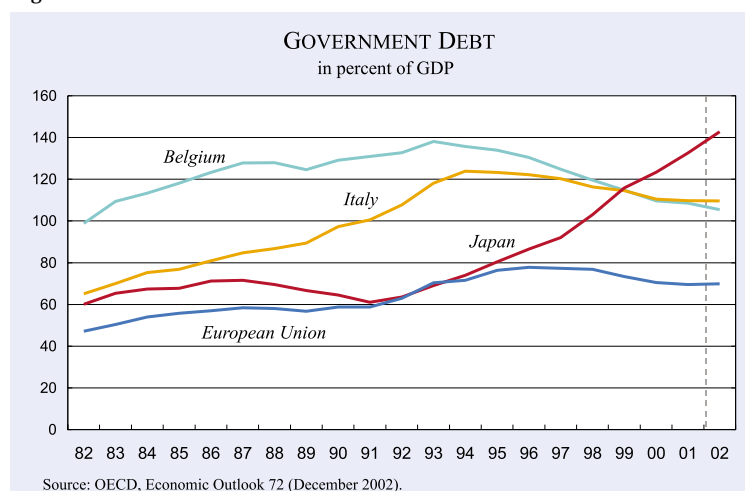
liquidity trap. For decades the liquidity trap described by Keynes remained in the textbooks without having ever been observed anywhere. Today, having been taken out of most textbooks, it shows up in the real world.

An economy in the liquidity trap cannot be revived by monetary policy, because monetary policy would have to cut interest rates; but it is impossible to make nominal interest rates negative. People prefer to hoard their money instead of lending it at negative interest rates.

There is, however, a trick to further lower real interest rates, and this is to engineer inflation. There has to be some inflation before the crisis strikes. With rising prices, monetary policy can lower real interest rates below zero, and perhaps low enough to get the economy in recession moving again. The Japanese would be better off today if they had some inflation. But once an economy finds itself in a liquidity trap, it is impossible to create inflation with interest rate cuts.

The only real option remaining open to Japan is to depreciate its currency. The Bank of Japan can produce a depreciation by printing additional yen and selling them for dollars in the foreign exchange markets. Depreciation increases net foreign demand and thus directly help the economy. The current account surplus increases, and it will be possible to place the excess of savings over investment abroad, avoiding Hansen’s deflationary gap. Indirectly it helps by contributing to price rises and thus providing the central bank, during a temporary recession, with the means of a negative real interest rate in order to revive investment.

Figure 1.3



There remains, however, the problem that even under the new government, the Japanese savers have a structural majority in parliament. The Prime Minister represents the Liberal Democrats, and the middle classes backing this party benefit from deflation as it adds to the real value of their monetary wealth. A policy of currency depreciation, which reduces the deflation rate and will even result in inflation, is technically possible, but it is difficult to

find the political support for it. This is true today and will be even more so in the future, as the rapidly ageing population tends to increase the political weight of the savers. Japan is in an economic and political trap from which it may only free itself by radical political change.

The Japanese disease must be taken seriously in Europe, especially in Germany. Germany suffers from insufficient investment and is confronted with the increasing problems of an ageing population. Although in Germany savings are lower due to the generous social security system, Germans more than any other people are still sensitive to the experience of past inflation. Furthermore, if the necessity ever occurred, devaluation of the national currency would no longer be an available policy choice in the EMU.

The Japanese example has shown that it is not only inflation that poses a risk to an economy, but also the pursuit of too rigorous a policy of price stability. The lesson for Europe stresses the importance of balancing both risks – especially in light of our analysis of the current conditions in Germany and elsewhere in the euro-area. The disadvantages of inflation are well-known, but so are the problems resulting from even mild deflation.

## FISCAL POLICY AND MACRO-ECONOMIC STABILISATION IN THE EURO AREA: POSSIBLE REFORMS OF THE STABILITY AND GROWTH PACT AND NATIONAL DECISION-MAKING PROCESSES

The recent economic-policy debate in the EU has largely focused on fiscal policy and the Stability and Growth Pact. The reason is the current budgetary problems of some member states. Portugal breached the three-percent-of-GDP deficit ceiling in 2001 and 2002. Germany breached it in 2002, and may also do so in 2003. France and Italy have abandoned their commitments to earlier agreed budget objectives and there is a clear threat that they may violate the deficit ceiling, too. These events have contributed to a revival of the debate on the fiscal policy framework in the EU. The European Commission has recently proposed a number of changes in the Stability and Growth Pact (European Commission, 2002b). There have also been calls for more fundamental revisions of the EU fiscal policy framework including proposals to scrap the Stability and Growth Pact altogether (see, for example, Financial Times, 2002a,b,c; Economist, 2002; de Grauwe, 2002; or Walton, 2002).

A key issue is the need to combine long-run sustainability of fiscal policy with short-run flexibility as a tool for macroeconomic stabilisation. The current EU fiscal rules mainly reflect a desire to enhance long-run fiscal discipline. This is explained by the earlier rapid accumulation of government debt, but also by the view that discretionary fiscal policy is unsuitable as an instrument of counter-cyclical stabilisation. At the same time, the risk of asymmetric cyclical developments in individual euro countries creates a potential need for using national fiscal policy as a stabilisation tool. This has led to a criticism that the EU fiscal rules are too rigid and hamper the use of fiscal policy for stabilisation purposes in an inappropriate way. The rules have also been criticised for being arbitrary. At the same time, the current discussion illustrates very clearly that it may be very difficult to apply the

rules in a sufficiently disciplining way when they are put to a real test.

One aim of this chapter is to analyse what role fiscal policy should play as a stabilisation tool in the euro area. In line with other recent contributions, we argue that this role should be larger than according to the conventional wisdom that has prevailed in recent years. We also argue that this requires changes in the fiscal policy framework at the EU level. Recent proposals of the European Commission seek to make the EU fiscal rules more flexible through changes in the interpretation of the Stability and Growth Pact and a greater reliance on discretionary judgements. We argue that this approach is potentially harmful and that more fundamental reforms, implying changes in the Maastricht Treaty, are required. There is a case for letting the deficit ceiling in the Treaty depend on the debt level in a transparent way. Countries with low debt should be allowed to run larger budget deficits than three percent of GDP. This would serve both to give low-debt countries greater scope for stabilisation policy and to enhance the incentives for fiscal discipline. Another recommendation is that the decisions on sanctions against EMU member states that violate the deficit ceiling should be moved from the political level of the Ecofin Council<sup>1</sup> to the judicial level of the European Court of Justice. This would make the enforcement of the fiscal rules more credible.

Changes in the EU fiscal rules involve difficult trade-offs. On the one hand, if the rules are perceived as too rigid and arbitrary by the public, their legitimacy will gradually evaporate and they will become unsustainable. On the other hand, the credibility of the fiscal policy framework must not be undermined by an impression that the rules are changed in a discretionary way as soon as they begin to bite, especially for the large EU countries. There is a continued need for fiscal rules at the EU level to enhance the incentives for fiscal discipline. The future burdens of ageing populations make large reductions of government debt highly desirable. Therefore, the medium-term budget objective of “close to balance or in surplus” should be maintained, although it should be made explicit that it is set in cyclically adjusted terms.

<sup>1</sup> The Council of Ministers of the European Union is termed the Ecofin Council when it is made up of the economics and finance ministers of the member states.

Current events have, however, illustrated that there are limits to how much fiscal rules at the EU level can achieve on their own. Governments are likely always to shun away from political conflicts about each others' fiscal policies. This is an argument for relying to a much larger extent than hitherto on national institutions that are conducive to both long-run fiscal discipline and effective short-run stabilisation policy. This can be seen as an application of the general principle of subsidiarity (see Chapter 3). One step in this direction would be to require the member states to adopt laws on fiscal policy that set well-defined long-run sustainability goals which are consistent with the common EU objectives, but also outline clear principles for the use of fiscal policy as a stabilisation tool.

Although it is clearly not on the political agenda now, one should also explore the future possibilities of reforming the national decision processes for fiscal policy along the lines of monetary policy, as has recently been suggested in a number of contributions. Notwithstanding that the idea may seem unfamiliar to many, there is a case for trying to separate fiscal policy decisions with the aim of stabilising the economy from other types of fiscal policy decisions. One possibility might be delegation to an independent national fiscal policy authority. Such delegation would be in line with developments in other areas such as competition policy as well as financial regulation and supervision, where in many countries the operational conduct of policy has been delegated to various bodies, and politicians have focused more on setting the overall objectives. Delegation of national fiscal policy decisions could also be seen as an alternative to the larger role in fiscal policy surveillance desired by the European Commission (European Commission, 2002b).

The underlying motive for delegation at the national level is a desire to mitigate the problems hampering the use of fiscal policy as a stabilisation instrument: long decision lags, irreversibility of decisions, risks of contributing to a deficit bias, "confounding" of various objectives and so on. However, it remains an open question whether one could find forms of fiscal policy delegation that would be accepted by the general public. The most realistic

possibility in the near future might be to require the government to consult with an independent fiscal policy committee before making its budget decisions and to base these on the committee's estimates of the cyclical situation and its forecasts of government revenues and expenditures.

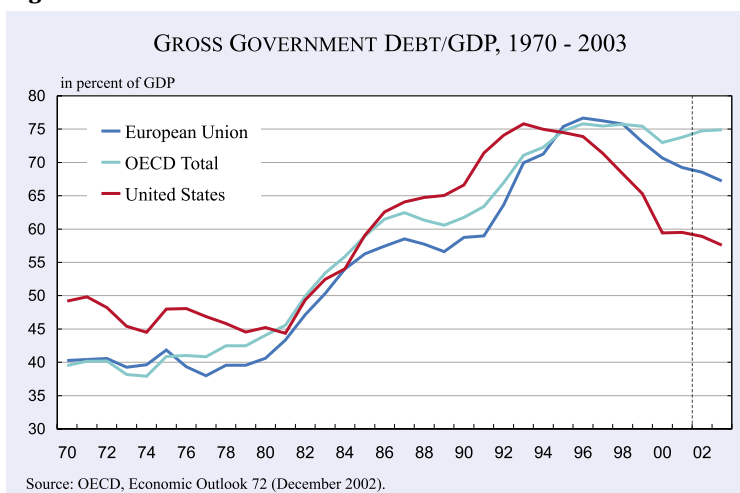
The chapter is structured as follows. Section 1 reviews the role of fiscal policy as a tool of stabilisation policy both in general and in the specific EMU context. Section 2 analyses the case for modifications of the current fiscal policy framework in the EU. Section 3 discusses the possibilities to strengthen the fiscal policy framework at the national level and the case for letting an independent fiscal authority play a larger role.

### 1. Fiscal policy as a stabilisation tool

The perception of the role of fiscal policy has changed radically over recent decades. Discretionary fiscal policy to stabilise the economy has come to be regarded with great scepticism. Instead, the conventional wisdom today is that monetary policy should be the main stabilisation tool.

One explanation of this development is, of course, the large accumulation of government debt in most OECD countries in the 1980s and early 1990s, which is unprecedented in peacetime (see Figure 2.1). As a consequence, fiscal sustainability has become the main fiscal policy issue, and major reforms of the fiscal policy framework have been undertaken in nearly all OECD countries. These reforms include both various fiscal policy rules, like the ones in the Maastricht Treaty and the

**Figure 2.1**





Stabilisation and Growth Pact, and procedural changes in the national budget processes in various countries (see, for example, Kopits and Symansky, 1997; and von Hagen et al., 2002). In terms of academic research, the problems with accumulating government debt have stimulated a large body of literature explaining why unconstrained fiscal policy may involve a permanent deficit bias (see Alesina and Perotti, 1995, for a survey).

Two major types of theoretical objections have been raised against using fiscal policy for stabilisation purposes. The first one questions the technical effectiveness of such policies. The second objection questions the ability of policy makers to use fiscal stabilisation policy in an effective way.

The discussion of the technical effectiveness of fiscal policy takes its starting point in the notion of so-called Ricardian equivalence (see Elmendorf and Mankiw, 1999, for a survey). The argument is that tax reductions or transfer increases that raise the disposable incomes of households will fail to increase private consumption if they involve larger budget deficits: households will realise that their life-cycle incomes have not increased, as they will have to pay for the deficits through higher taxes or lower transfers in the future. Another argument holds that tax reductions or government expenditure increases could even give rise to perverse negative demand effects if they are associated with credibility problems that lead to increased interest rates or to expectations of future “crisis adjustments” that will lower life-cycle incomes (see, for example, Giavazzi and Pagano, 1996; and Giavazzi et al., 2000).

There are a number of arguments why discretionary fiscal policy may be used in a less effective way as a stabilisation tool than monetary policy.

- Decision lags are longer, as tax and expenditure changes have to go through a lengthy parliamentary decision-making process, which is usually annual in contrast to the almost continuous decision-making process for monetary policy.
- The political character of fiscal policy decisions makes it much harder to reverse decisions when circumstances change than is the case for monetary policy (Taylor, 2000).
- Fiscal policy has other central goals than stabilisation, viz. income distribution and resource allocation. In addition, fiscal policy measures

are often influenced by attempts of incumbent governments to enhance their reelection chances. Hence there is the serious risk that the stabilisation aspects will carry a low weight.

- The risk of an expansionary bias is much larger for fiscal policy than for monetary policy, as the former is run by policy-makers engaged in day-to-day politics, whereas the latter has been delegated to independent central banks, which can take a more long-run view.

The conclusion has been that fiscal stabilisation policy is likely to be badly timed and procyclical, especially in booms because it is politically much more difficult then to pursue restrictive policies than it is to pursue expansionary policies in recessions.<sup>2</sup>

The current conventional wisdom is that fiscal policy should mainly be confined to letting the automatic stabilisers work, that is to let the automatic variations in the budget balance that follow from the cyclical variations in tax receipts and some government expenditures, such as unemployment benefits and costs for labour market programmes, dampen the business cycle (see, for example, Taylor, 2000; Buti and Martinot, 2000; Buti and Giudice, 2002; or European Commission, 2002a). Because of their “automatic” character, such policies do not raise the same problems of decision lags, deficit bias and problems of reversing policies in new situations as have traditionally been associated with discretionary fiscal policy. The size of the automatic stabilisers are positively related to the share of government expenditure in GDP, the degree of tax progressivity and the generosity of unemployment compensation. Recent empirical research does indeed confirm that large government sectors, and thus large automatic stabilisers, reduce output volatility to a significant degree (Gali, 1994; Fatàs and Mihov, 2001, 2002).<sup>3</sup>

### 1.1 The case for discretionary fiscal policy

Adopting a more long-term perspective, it has been noted that there have been large swings over time in the relative emphasis given to fiscal and

<sup>2</sup> This seems indeed to be vindicated by past experiences according to, for example, Leibfritz et al. (1994), Buti et al. (1997), and European Commission (2001). But these empirical conclusions have to some extent been challenged by Mélitz (2002) and Wyplosz (2002).

<sup>3</sup> According to Fatàs and Mihov (2002), an increase in the ratio of government expenditure from 40 to 50 per cent of GDP reduces the standard deviation of real GDP growth among the OECD countries by around 0.5.

monetary policy as stabilisation tools (Wyplosz, 2002a). This raises the possibility that the present downplaying of fiscal policy as a stabilisation instrument may have gone too far. Indeed, this has recently been suggested in a number of contributions, such as Ball (1997), Wren-Lewis (2000, 2002), von Hagen (2001), Seidmann (2001), Blanchard and Perotti (2002), Fatas and Mihov (2002), and Wyplosz (2002a), who all have argued for a revival of the role of fiscal policy.

There are several reasons why relying on discretionary monetary policy may not be enough in many situations.

A well-known argument is that monetary policy may be impotent in a depression when it can be caught in a liquidity trap, because it is impossible to achieve negative real interest rates in situations with falling prices. Japan is an obvious case in point (see the Box on Japan in Chapter 1 in this report). But also in more normal situations, there may be limitations to monetary policy because central banks are reluctant to change interest rates by much in the short run, as this would imply large variations in the prices of outstanding debt (interest rate smoothing).

It has also been claimed that fiscal policy can more easily be targeted in a desirable way than monetary policy. Ball (1997) and Wren-Lewis (2000, 2002) argue that fiscal policy can be designed so as to have more even effects across the economy than monetary policy, which will have a greater impact on construction and investment goods sectors than on service sectors. These more even effects may be desirable in some situations. In other situations, one may want to target measures more specifically, for example to counteract a real property price boom, which may be easier through targeted fiscal policy (such as reductions of tax relief for mortgage interest rates) than through monetary policy.

The strongest argument in favour of fiscal policy in the euro area is the risk of asymmetric cyclical developments in individual countries. In the event of such macroeconomic disturbances, national fiscal policy is the only remaining stabilisation policy tool. There is an obvious case for such stabilisation policy in recessions, as money wages, and thus also prices, tend to be rigid downwards (Calmfors, 1998; Calmfors et al., 2001). The case for stabilisation policy in booms is somewhat more complex. A relative price increase

vis-à-vis other countries (a real exchange rate appreciation) may be a proper adjustment to macroeconomic shocks that raise output growth. Whether or not this is the case depends, as was discussed in last year's EEAG report (EEAG, 2002), on the character of the shocks. In the case of permanent structural changes, such as a permanent increase in the relative demand for a country's output or a permanent increase in the relative productivity of a country, prices could just be left "to do their job". But this is not an appropriate response in the case of a temporary asymmetric demand increase. The main reason is again downward money wage rigidity: inflation in a temporary boom tends to cause "permanent" wage increases that are hard to reverse and therefore "lock in" real exchange rate appreciations. This makes it more difficult to stabilise the economy in the next recession, as the real exchange rate appreciation requires a more expansionary fiscal policy with larger budget deficits than would otherwise be the case (Swedish Government Commission on Stabilisation Policy in the EMU, 2002). The main rationale for fiscal stabilisation policy in a boom is thus intertemporal considerations relating to future stabilisation possibilities.<sup>4</sup>

A related intertemporal argument for fiscal stabilisation policy in booms in the EMU countries is the risk of strong asset price reversals, that is boom-bust cycles in asset prices where first large asset price rises reinforce the upswing and then large asset price falls exacerbate the downswing. Again, the most obvious recent example is Japan. The macroeconomic consequences of such excessive asset price volatility has recently been studied by Bordo and Jeanne (2002), who find boom-bust cycles to be much more common in real property prices than in stock prices and to be associated with large cyclical swings in output. This finding is highly relevant for stabilisation policy in the EMU countries, because cycles are much more likely to be country-specific in real property prices than in stock prices. Interestingly, Bordo and Jeanne (2002) also find boom-bust cycles in real property prices to be more common in small than in large countries, which they explain by the larger relative importance of local markets in small countries (the

<sup>4</sup> Some of the discussion on to what extent "prices should be left to do their job" has focused on whether demand shocks are internal or external. It has been argued that price adjustments are appropriate only in the latter case (Blanchard, 2001; European Commission, 2002a). In our view, these are not the relevant considerations, because a temporary increase in external demand is as problematic as a temporary increase in internal demand if it leads to a real exchange rate appreciation that is hard to reverse.

relative size of the Stockholm area in Sweden is larger than that of the Berlin area in Germany).

Why are automatic stabilisers not likely to be a sufficient fiscal policy tool in the case of large cyclical asymmetries in the euro area? There are a number of reasons.

- By their very nature automatic stabilisers can only cushion macroeconomic shocks, but not fully offset them. According to most estimates, automatic stabilisers reduce output fluctuations by around a third in the EU countries (see, for example, van den Noord, 2000; and European Commission, 2002a).
- As discussed above, the size of the automatic stabilisers is positively related to the share of government expenditure in GDP, the degree of tax progressivity and the generosity of unemployment compensation. But the decisions on such structural parameters have not been influenced much by stabilisation concerns: instead the size of automatic stabilisers is a by-product of other considerations, such as preferences over private versus public consumption or over income distribution versus allocative efficiency. There is no reason, therefore, to believe that the automatic stabilisers give an optimal degree of stabilisation. Nor should one expect that differences in the size of the automatic stabilisers among countries, for example due to differences in the share of government expenditures in GDP, as shown in Table 2.1, reflect differences in the preferences for stabilisation. Countries with small automatic stabilisers may therefore want to use discretionary fiscal policy more than others.
- Structural reforms in the European economies with the aim of raising long-run employment and growth has weakened the automatic stabilisers. This is evident from Table 2.1, which shows the reduction in the size of government in recent years (from an unweighted average in the EU of 45.0 percent of GDP in 1994 to 41.7 percent in 2002). In addition, tax progressivity and the generosity of unemployment benefits (mainly in terms of coverage but also to some extent in terms of benefit levels and duration) have – for good reasons – been reduced (see EEAG, 2002; as well as the Box on Germany in Chapter 1 in this report).
- Finally, if there are permanent supply shocks, the automatic stabilisers tend to prolong the adjustment process and cause budget effects

Table 2.1  
Government spending, excluding interest payments,  
as a percentage of GDP in the EU countries

	1994	1998	2001	2002
Austria	49.2	47.0	47.7	48.2
Belgium	41.5	40.7	40.3	40.4
Germany	43.1	42.7	42.7	43.0
Denmark	54.7	51.5	48.9	49.5
Spain	na	35.2	34.6	34.8
Finland	56.4	46.4	43.6	44.2
France	48.5	46.7	45.9	46.6
Greece	32.1	34.9	36.6	37.2
Ireland	36.6	29.9	29.9	31.4
Italy	41.7	39.8	40.5	40.8
Luxembourg	43.7	40.9	39.5	43.3
Netherlands	43.2	39.2	39.3	40.3
Portugal	36.6	36.7	38.9	38.4
Sweden	62.9	52.7	50.1	50.9
United Kingdom	40.0	34.6	36.3	37.0
Unweighted average	45.0	41.3	41.0	41.7
Standard deviation	8.2	6.4	5.4	5.4
Coefficient of variation	0.18	0.15	0.13	0.13

*Note:* The budget balance can be written  $B = tY - G$ , where  $B$  is the budget surplus,  $t$  is the tax rate,  $Y$  is real GDP and  $G$  is real government expenditure. Dividing by  $Y$ , we have  $b = B/Y = t - G/Y$ , where  $b$  is the budget balance as a ratio of GDP. Differentiation with respect to  $b$  and  $Y$  gives  $db = (G/Y) dY/Y$ . So,  $G/Y$  is the semi-elasticity of the budget surplus as a percentage of GDP with respect to real output, that is it indicates by how many percentage points of GDP the fiscal balance improves when output rises by one percent.

Source: OECD Economic Outlook 72 (December 2002).

that must ultimately be eliminated through discretionary action.

## 1.2 How effective is fiscal policy as a demand management tool?

The discussion on Ricardian equivalence has contributed to the impression that fiscal policies are not very effective (see Elmendorf and Mankiw, 1999). Much of this discussion is, however, rather superficial as it tends to lump together various fiscal policies that should theoretically be expected to have very different effects.

The ineffectiveness postulate of Ricardian equivalence applies only to tax and transfer changes that affect the real disposable income of households. The postulate holds only under very restrictive assumptions: households must have a long enough time horizon for taking into account offsetting future tax and transfer changes and they must not be credit-constrained. One would expect the former assumption to be more valid in situations of pressing government debt problems when the public debate focuses on sustainability issues (as in the 1990s) than in more normal times (like now). One would always expect those tax and transfer

changes to be effective that are targeted on low-income groups, which to a large extent are credit-constrained (Wren-Lewis, 2000, 2002). Such targeting may also be motivated from a welfare point of view, as these groups are more exposed to cyclical income volatility than groups with higher incomes (Storesletten et al., 2001).

Most empirical evidence seems to support substantial demand effects of tax changes. The evidence that automatic stabilisers, which work mainly on the tax side, reduce the volatility of output and consumption, is not consistent with Ricardian equivalence (Gali, 1994; Fatas and Mihov, 2001, 2002). Blanchard and Perotti (1998) recently found a multiplier of close to one for discretionary tax changes in the U.S., whereas other studies have found somewhat lower multipliers (Wren-Lewis, 2000, 2002; Wijkander and Roeger, 2002; Swedish Government Commission on Stabilisation Policy in the EMU, 2002; European Commission, 2002a).

Temporary changes in government consumption also have an effect on aggregate demand under Ricardian equivalence. This is obvious if an increase in current government consumption is financed through a reduction in future government consumption, as this involves no change in the taxes paid by households and hence no change in private consumption. But a similar conclusion holds also if a temporary increase in government consumption is financed through future taxes. The explanation is that the short-run direct demand effects are larger than the short-run effects on private consumption due to future tax changes: this is so because the changes in private consumption resulting from the changes in life-time incomes will be spread over the whole future, as households want to smooth consumption over time, whereas the entire change in government consumption occurs in the short run. The positive output effects of increases in government consumption have been confirmed in a number of recent empirical studies (for example, Rotemberg and Woodford, 1992; Ramey and Shapiro, 1997; Edelberg et al., 1998; Fatas and Mihov, 1999; and Blanchard and Perotti, 1999). In most cases multipliers around one are found. Some of the studies find that increases in government consumption are associated with increases in private consumption – and not decreases as implied by Ricardian equivalence (Blanchard and Perotti, 1999; Fatas and Mihov, 1999). Other work has found that the fiscal multipliers for government consumption are larger than for

income taxes (Wren-Lewis, 2000, 2002; Wijkander and Roeger, 2001; European Commission, 2002a).

In the economic-policy discussion there is a tendency to associate fiscal policy mainly with measures that affect aggregate demand either via direct expenditure changes or via tax and transfer changes that have an impact on the disposable income of households. But fiscal policy can also work by changing relative prices. One such policy, which has been used at times in Sweden, is temporary changes in VAT (see also Blinder, 2001; Wijkander and Roeger, 2002; European Commission, 2002a; Swedish Government Commission on Stabilisation Policy in the EMU, 2002; and Wren-Lewis, 2002). A temporary change in VAT affects private consumption in a similar way as a change in the real interest rate: by changing the relative price between consumption in different time periods, households are induced to reallocate consumption spending intertemporally. One could also conceive of a similar use of investment taxes or subsidies to affect the timing of private investment (Swedish Government Commission on Stabilisation Policy in the EMU, 2002; Wren-Lewis, 2002). There is some evidence that the fiscal multipliers are considerably larger for VAT than for income taxes (Wren-Lewis, 2000, 2002; Wijkander and Roeger, 2002; European Commission, 2002a).

Cross-border trade usually limits the possibilities to set VAT rates according to national priorities. But this does not apply in the same way to temporary VAT changes as a stabilisation tool in the case of asymmetric cyclical developments. On the contrary, if a temporary rise in national VAT in a boom shifts consumption purchases abroad, this, too, tends to reduce demand domestically. A potential risk of using temporary VAT increases to dampen an asymmetric boom in a euro country is, however, that they could trigger “permanent” wage increases, although the risk is much smaller than in the case of permanent VAT changes.

Another possibility, which has also been overlooked in much of the international discussion, is to use temporary variations in the payroll taxes levied on employers as a discretionary stabilisation tool. By changing wage costs, such a policy directly affects the real labour cost and the real exchange rate. It thus represents a way of letting prices do their job in the case of asymmetric cyclical developments. However, since real exchange rate changes are known to affect trade volumes with



substantial lags, such a policy would seem relevant mainly in the case of relatively drawn-out disturbances. It is not only temporary reductions in payroll taxes in downswings that may be of interest. In fact, temporary rises in employers' payroll taxes may be a very appropriate policy if an individual euro country experiences an asymmetric boom. The reason is that higher payroll taxes for employers raise domestic wage costs and output prices, but not domestic wages. On the contrary, wages are likely to fall to the extent that the demand for domestic output falls and the tax is shifted backwards on to employees because the "room for wage increases" is reduced.<sup>5</sup>

The upshot is that a temporary increase in employers' payroll taxes may be a desirable way of dampening a boom, because wage costs are temporarily raised at the same time as the risk is reduced that wages are bid up more permanently. The idea of using cyclical variations in employers' payroll taxes in this way has large similarities with the system of so-called buffer funds that was set up in Finland in connection with the entry into the EMU. According to this system, funds have been built up through a temporary increase in various employer contributions to the social security system with the intention to use the proceeds of these funds to hold down contributions in downswings (Calmfors, 1998; Holm et al., 1999; Swedish Government Commission on Stabilisation Policy in the EMU, 2002).<sup>6</sup>

Our conclusion is that discretionary fiscal stabilisation policy is potentially effective and that occasions are likely to arise in the euro countries when its use would be desirable. We are not thinking about "fine tuning", but about countercyclical stabilisation in the event of major macro-economic disturbances. This does,

<sup>5</sup> This latter tax-shifting effect has been shown to be empirically strong in the Nordic countries (see Calmfors and Nymoén, 1991; Rødseth and Nymoén, 1999; and Calmfors and Uddén Sonnégård, 2001). The effects mentioned in the text could be counteracted, because compensating wage claims are triggered by the CPI rises associated with higher output prices when payroll taxes are increased, but this effect is likely to be small compared to the other effects.

<sup>6</sup> As unemployment benefits were earlier financed on a purely "pay-as-you-go" basis in Finland, variations in employer contribution rates had a procyclical impact on the economy with rates going up in recessions and down in booms.

however, require a fiscal policy framework that prevents misuse of stabilisation measures that causes excessive debt accumulation. It also requires addressing the problems of long decision lags and irreversibility of fiscal policy measures. The problem of decision lags is perhaps most obvious in the case of temporary VAT changes: it is a serious problem if, for example, a temporary increase in VAT in a boom can be decided only in a lengthy political process, as the anticipation of the measure will lead to effects that are the reverse of those desired in the period before the measure came into force. The problem of irreversibility is most clear-cut for increases in government consumption in a recession. As we have argued, this is likely to be a more effective stabilisation tool than general cuts in personal income taxes, but there is a serious risk of political "ratchet effects" making it impossible to reduce government consumption again in the next boom (Wijkander and Roeger, 2002). We shall return to these issues in Section 3, after first having discussed the fiscal rules at the EU level and their impact on the possibilities to pursue stabilisation policies.

## 2. Possible reforms of EU fiscal rules

The "raison d'être" for the fiscal rules in the EU is the desire to ensure long-run sustainability of public finances, which came under threat in the 1980s and early 1990s because of the rapid build-up of government debt in most member countries. This is shown in Table 2.2.

Table 2.2  
Gross government debt as a percentage of GDP in the EU countries, 1980 - 2003

	1980	1990	1995	2000	2001	2002	2003
Belgium	78.6	129.2	133.9	109.2	107.6	105.6	101.7
Denmark	36.5	57.8	69.3	46.8	44.7	44.0	42.4
Germany	31.7	43.5	57.0	60.2	59.5	60.9	61.8
Greece	25.0	79.6	108.7	106.2	107.0	105.8	102.0
Spain	16.8	43.6	63.9	60.5	57.1	55.0	53.2
France	19.8	35.1	54.6	57.3	57.3	58.6	59.3
Ireland	75.2	101.5	82.6	39.1	36.4	35.3	35.0
Italy	58.2	97.2	123.2	110.6	109.9	110.3	108.0
Luxembourg	9.3	4.4	5.6	5.6	5.6	4.6	3.9
Netherlands	46.0	77.0	77.2	55.8	52.8	51.0	50.1
Austria	36.2	57.2	69.2	63.6	63.2	63.2	63.0
Portugal	32.3	58.3	64.3	53.3	55.5	57.4	58.1
Finland	11.5	14.3	57.2	44.0	43.4	42.4	41.9
Sweden	40.3	42.3	76.2	55.3	56.6	53.8	51.7
United Kingdom	53.2	34.0	51.8	42.1	39.1	38.5	38.1
Unweighted average	38.0	58.3	73.0	60.6	59.7	59.1	58.0
GDP-weighted average	38.0	54.4	70.2	64.1	63.0	63.0	62.5
Standard deviation	20.5	32.5	30.2	27.5	27.7	27.8	26.9
Coefficient of variation	0.5	0.6	0.4	0.5	0.5	0.5	0.5

Note: The 1980 and 1990 figures for Germany refer to west Germany.

Source: European Commission (2002c).

There are two main motives for fiscal rules at the EU level. The first – and in our view the most important – motive is to enhance fiscal discipline in general. The need for this has been emphasised by an extensive political-economy literature, which has pointed out how a large number of factors may cause a deficit bias (see, for example, Alesina and Perotti, 1995; or von Hagen et al., 2002). These factors include: (i) fiscal illusion on part of the general public; (ii) the fact that it is politically more popular to stimulate demand in recessions than to restrain it in booms; (iii) the use of debt by incumbent governments as a strategic variable to favour their own constituencies and constrain the policies of future governments in favour of other constituencies; (iv) distributional conflicts; (v) lobbying by local constituencies for targeted benefits, the costs of which are shared nationally; and (vi) problems of time inconsistency, according to which governments cannot resist *ex post* the temptation to abandon sound fiscal policy even if it is clear *ex ante* that this is inappropriate.

The desire to strengthen budgetary discipline in general is not related to EMU *per se*. Rather, in a situation of general fiscal profligacy, monetary unification offered a unique opportunity to establish constraints on government budget deficits and debt accumulation at the EU level. As the creation of EMU required the set-up of new institutions anyway, it appeared much easier to establish such rules at the EU level than to initiate national reform processes, which could more easily be blocked by various vested interests. In this perspective, the role of an “external enforcer” of budgetary discipline that the EU has assumed can be seen as an outcome of very specific historic circumstances.

The second motive for fiscal rules at the EU level is the moral-hazard problems that can arise in a monetary union because fiscal policies in one member state have spillover effects on the other states. A number of such spillover effects have been identified (see, for example, Buiters et al., 1993; or Beetsma, 2001). There is a potential risk that other governments could in the end feel forced to bail out a bankrupt government of an individual member country. There is a risk for pressures on the ECB of both direct (buying up the debt of a highly indebted country in the secondary market) and indirect bail-outs (setting lower interest rates than are motivated by price stability con-

siderations). Finally, the recent “fiscal theory of price determination” emphasises the risk that the ECB will be unable to control inflation if fiscal policies are not sustainable (Canzoneri and Diba, 2001). The argument starts from the observation that solvency of the government requires the discounted value of future primary surpluses (including seigniorage revenue of the central bank) to match the outstanding real value of government debt. If fiscal policy violates this constraint, and monetary authorities do not relax their policy stance, solvency can only be maintained by an upward jump of the price level, which lowers the price of nominal government debt in terms of goods and thus reduces the real value of the debt.

### 2.1. The present framework

The fiscal rules in the EU are determined mainly by the provisions in the Maastricht Treaty on the excessive deficit procedure (Article 104.3) and by the Stability and Growth Pact (SGP), which is embodied in two regulations of the Ecofin Council and two resolutions of the European Council (see, for example, Buti et al., 2001).<sup>7</sup> The Treaty sets out the basic stipulations, whereas the SGP defines their operational content. The main rules are as follows:

- The Treaty sets a deficit ceiling (a reference value) of three percent of GDP for the actual government budget balance. Larger deficits are considered “excessive” unless “the excess over the reference value is only exceptional and temporary and the ratio remains close to the reference value”. The formal wording of this escape clause must be regarded as quite stringent, as all the conditions in it must in principle be fulfilled for it to apply (Balassone and Franco, 2001; Buti and Giudice, 2002). According to the SGP, the exceptionality condition can refer either to “an unusual event outside the control of the Member State in question which has a major impact on the financial position of the general government” or to an “abrupt cyclical downturn”. The formal decision on whether or not a deficit should be considered “excessive” is taken by the Ecofin Council, acting on a recommendation from the Commission. An annual fall of real GDP of more than 2 percent should auto-

<sup>7</sup> The European Council consists of the heads of state or government of the EU countries.



matically be considered as “abrupt” and a fall of between 0.75 and 2 percent could be considered to be so after a discretionary judgement by the Council. The Council could also take into account the cumulative loss of output relative to past trends when deciding whether a member state has an “excessive deficit”. If a member state does not take corrective action to eliminate an “excessive deficit”, as recommended by the Council, it will be required to pay an annual interest-free deposit of 0.2–0.5 percent of GDP. If the “excessive deficit” persists, this deposit will be converted into a fine, which is distributed among the other member states.

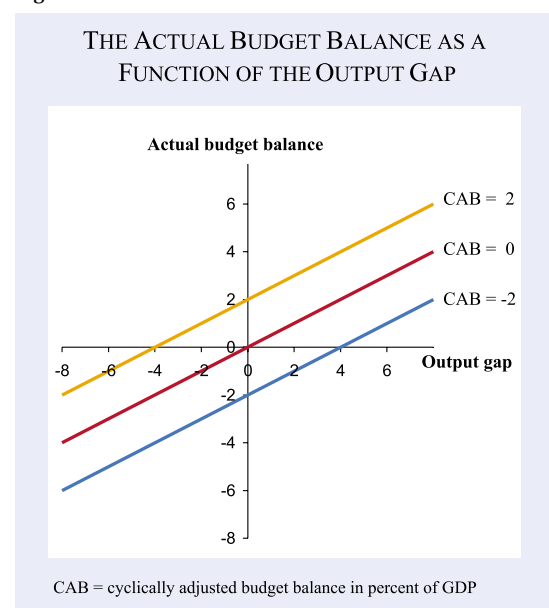
- The Treaty also stipulates that gross government debt should not exceed 60 percent of GDP. If it does, the debt ratio should be decreasing “at a satisfactory pace”. The wording must be interpreted to mean that government debt is not allowed to increase when it is above the 60 percent ceiling. Formally, no escape clause is associated with this stipulation, but there are no monetary sanctions in the case of violations.
- According to the SGP, countries should aim for a “medium-term” budgetary position of “close to balance or in surplus”. To ensure compatibility with this objective, there is a process of multilateral budgetary surveillance. EMU member states have to submit standardised stability programmes and non-EMU member states similar convergence programmes specifying budget targets. These programmes form the basis for the regular monitoring of the fiscal performance of individual countries by the Council, acting on recommendations of the Commission. In the case of a “significant divergence” of budgetary outcomes from targets, the Council can issue an early warning to a member state. According to the stated principles of the Commission, it takes both cyclical developments and the risk of breaching the three-percent deficit ceiling into account when judging whether or not there is a “significant divergence” (European Commission, 2002a). A downward deviation from the budget target due to the response of automatic stabilisers to unanticipated cyclical developments is not considered such a divergence for a country meeting the medium-term objective of “close to balance or in surplus”, whereas it is for a country that does not fulfil this criterion and approaches the deficit ceiling.

One ambiguity in the SGP has concerned the “close to balance or in surplus” budget objective.

A common interpretation has been that this is a target for the cyclically adjusted budget balance (Balassone and Franco, 2001; Buti and Giudice, 2002; European Commission, 2002a). On this interpretation, it has been argued that the medium-term budget target should be set such as to provide a safety margin for both cyclical developments and unanticipated budgetary risks. High-debt countries should, in addition, take into account the objective of reducing their government debt levels when setting their budget targets (European Commission, 2002a). But, as noted in last year’s EEAG report (EEAG, 2002), the SGP does not state explicitly that the medium-term objective refers to the cyclically adjusted balance, and the budget targets in the stability and convergence programmes have been stated in actual rather than in cyclically adjusted terms. Recently, however, the Commission proposed that the medium-term budget objective should refer explicitly to the cyclically adjusted balance (European Commission, 2002b).

An important feature of the fiscal rules is that they attach greater importance to the current government budget balance (the net flow of receipts and expenditures) than to the stock of government debt. The monetary sanctions are related to violations of the deficit ceiling only but not of the debt criterion. The medium-term objective of “close to balance or in surplus” also refers to the current budget balance. However, as the long-run debt is determined by the cumulated sum of deficits over

Figure 2.2



## Box 2.1

## The cyclically adjusted budget balance

Tax receipts in general and some government expenditures, such as unemployment benefits, vary automatically with the output and employment levels. To assess the underlying (structural) budgetary situation, one must therefore adjust the actual budget balance for the cyclical conditions. Computations of the cyclically adjusted budget balance require estimates of both the output gap, that is the extent to which actual output deviates from the equilibrium (potential) level, and of the sensitivity of the budget balance to such deviations. Technically, the cyclically adjusted budget balance as a ratio of GDP,  $b_c$ , is calculated as:

$$b_c = b - \alpha g,$$

where  $b$  is the actual budget balance as a ratio of GDP,  $g$  is the deviation of actual from equilibrium GDP as a ratio of equilibrium GDP, and  $\alpha$  is the effect on the actual budget balance of a one percentage point increase in the output gap. The lines in Figure 2.2 show how the actual budget balance depends on the output gap and the cyclically adjusted budget balance. The cyclically adjusted balances are given by the intersections of the lines with the vertical axis. In booms, when the output gap is positive, the actual budget balance is more positive (less negative) than the cyclically adjusted balance. In recessions, when the output gap is negative, the actual budget balance is less positive (more negative) than the cyclically adjusted one. Provided that cyclical deviations are symmetrically distributed around equilibrium output, a given annual cyclically adjusted budget balance implies the same given average annual actual budget balance.

The largest problem in computing the cyclically adjusted budget balance is how to estimate the output gap. There exists no universally accepted way of doing this. Instead, different methods give different results and the estimates are often subject to large *ex post* revisions. One way of estimating equilibrium GDP for a country is to use purely statistical techniques to smooth the actual GDP series. This is typically done by applying a so-called Hodrick-Prescott filter. With this measure, one tries to strike a balance between obtaining a smooth time series for equilibrium (potential) GDP on the one hand and getting a reasonable fit to the actual data on the other hand.

The main problem with applying purely statistical techniques for estimating the output gap is that the estimates of equilibrium (potential) GDP are also influenced by actual GDP developments when there are persistent deviations from equilibrium, for example because of prolonged demand disturbances. This is an argument for instead using a production function approach, according to which equilibrium output is estimated on the basis of assessments of trends in total factor productivity and of the equilibrium levels of inputs of capital and labour. The most critical factor with this approach is probably how to assess the equilibrium employment rate. This is typically done on the basis of some kind of Phillips curve approach, where one tries to estimate the equilibrium unemployment rate consistent with a constant rate of inflation (NAIRU) or a constant rate of wage increase (NAWRU) (see, for example, Calmfors and Uddén Sonnégård, 2001).

Earlier, the Commission and the Ecofin Council based their calculations of cyclically adjusted budget balances mainly on Hodrick-Prescott estimations. But the new Code of Conduct on the content and presentation of stability and convergence programmes, which was adopted by the Ecofin Council in 2001, stipulates that there should be a shift to a production function method and sets common standards for how the estimations should be made (European Commission, 2002a).

The estimates of how the actual budget balance reacts to variations in the output gap are usually based on assessments of the response of various tax receipts and government expenditures (see, for example, van den Noord, 2000). As discussed in Section 1.1, these response parameters differ among countries, but an average value for  $\alpha$  in the EU is around 0.5. This value is used in Figure 2.2. It must be acknowledged, however, that estimated budget response parameters reflect average cyclical variations, so that the actual response in a specific situation characterised by atypical shocks may differ substantially from the average pattern. This is another serious problem when estimating cyclically adjusted budget balances.

time, the budget balance objective implicitly defines a goal for long-run debt. If the “close to balance or in surplus” target is interpreted as a balanced cyclically adjusted budget, the implicit long-run target for government net debt is zero.<sup>8</sup> In addition to this, recent Council Resolutions have suggested that the future strains on public finances from ageing populations may require

even more ambitious targets (European Commission, 2002a).

Although discretionary fiscal policy in the event of major cyclical disturbances are not explicitly ruled out by the Stability and Growth Pact, the consensus seems to be that the medium-term target (the target for the cyclically adjusted balance) should provide room primarily for the automatic stabilisers to work (Buti and Giudice, 2002; European Commission, 2002a).

<sup>8</sup> See the note to Table 2.7.

## 2.2 The case for revisions of the EU fiscal policy framework

The EU fiscal rules have been the subject of intensive discussion both in academic circles and in more popular contexts. A common criticism is the arbitrariness of the chosen deficit and debt ceilings as well as of the long-run budget balance and (implicit) net debt targets (see, for example, Buiter et al., 1993; or Wyplosz, 2002). Other types of criticism have pointed to the inappropriateness of focusing on gross rather than net government debt, which also takes into account government claims on the private sector or government net worth, which also includes government real assets (Buiter et al., 1993). A related argument suggests that it should be possible to finance government capital outlays through borrowing (a so-called “golden rule” of the type presently implemented in the UK; see, for example, Blanchard and Giavazzi, 2002).

With respect to macroeconomic stabilisation, which is our main focus here, two main objections have been raised. The first objection is that the fiscal rules may hamper stabilisation efforts in downswings (see, for example, Calmfors et al., 1997; Eichengreen and Wyplosz, 1998; Canzoneri and Diba, 2001; Swedish Government Commission on Stabilisation Policy in the EMU, 2002; or Wyplosz, 2002). This has been a common argument in the recent debate on the budget deficits in France, Germany, Italy and Portugal (de Grauwe, 2002; Economist, 2002; Financial Times, 2002a,b,c). A second objection is that the fiscal rules provide insufficient incentives for fiscal restraint in booms by not rewarding such policies enough (Bean, 1998; Buti and Giudice, 2002). As discussed in last year’s EEAG report, the risk of fines if the deficit limit is violated in a recession may not influence government behaviour much in a boom, since the

next recession may then appear very far-off and may even occur under another government, which the incumbent government may have no interest in helping.<sup>9</sup> Such insufficient fiscal restraint in booms will increase output volatility (both directly and also indirectly because the scope for counter-cyclical fiscal policy in future recessions becomes smaller when the safety margin to the deficit ceiling is reduced<sup>10</sup>) and weaken the government budget balance over the cycle. Indeed, the current situation of Portugal, Germany, France and Italy pro-

<sup>9</sup> One should note the similarity between this argument and the argument that incumbent governments may choose deficit policies to constrain the possibilities of future governments of other political colours to favour their constituencies.

<sup>10</sup> See also the discussion in Section 1.1.

Table 2.3

General government actual fiscal balance (net lending) as a percentage of GDP in the EU countries

	1998	1999	2000	2001	2002	2003
Austria	-2.4	-2.3	-1.5	0.2	-1.8	-1.6
Belgium	-0.7	-0.5	0.1	0.4	-0.1	0.0
Germany	-2.2	-1.5	1.1	-2.8	-3.8	-3.1
Denmark	1.1	3.1	2.5	3.1	2.0	2.0
Spain	-2.7	-1.1	-0.6	-0.1	0.0	-0.3
Finland	1.3	1.9	7.0	4.9	3.6	3.1
France	-2.7	-1.6	-1.3	-1.4	-2.7	-2.9
Greece	-2.5	-1.9	-1.8	-1.2	-1.3	-1.1
Ireland	2.4	2.2	4.4	1.5	-1.0	-1.2
Italy	-2.8	-1.8	-0.5	-2.2	-2.4	-2.2
Luxembourg	3.1	3.6	5.6	6.1	0.5	-1.8
Netherlands	-0.8	0.7	2.2	0.1	-0.8	-1.2
Portugal	-2.6	-2.4	-2.9	-4.1	-3.4	-2.9
Sweden	1.9	1.5	3.7	4.8	1.4	1.2
United Kingdom	0.2	1.1	4.0	0.7	1.1	-1.3
GDP-weighted average	-1.6	-0.7	1.0	-0.8	-1.9	-1.8
Unweighted average	-0.6	0.1	1.5	0.7	-0.6	-0.9

Source: European Commission (2002c).

Table 2.4

General government cyclically adjusted fiscal balance as a percentage of GDP in the EU countries

	1998	1999	2000	2001	2002	2003
Belgium	-0.6	-0.9	-1.1	-0.3	0.2	0.2
Denmark	0.5	2.5	1.3	2.6	2.1	2.1
Germany	-1.9	-1.4	-1.9	-2.8	-3.3	-2.4
Greece	-1.9	-1.6	-1.8	-2.1	-1.7	-1.8
Spain	-2.6	-1.5	-1.4	-0.7	-0.1	-0.2
France	-2.6	-2.0	-2.1	-2.0	-2.7	-2.8
Ireland	1.9	0.8	2.5	0.2	-1.4	-0.8
Italy	-3.0	-1.9	-2.1	-2.4	-1.8	-1.6
Netherlands	-1.9	-1.2	-0.6	-1.2	-0.6	0.0
Austria	-2.4	-2.5	-2.5	0.0	-1.6	-1.4
Portugal	-3.0	-3.0	-4.0	-4.3	-3.0	-1.9
Finland	-0.4	0.3	3.8	3.8	3.7	3.3
Sweden	2.3	0.6	2.1	4.2	1.3	1.3
United Kingdom	-0.3	0.8	1.2	0.7	-0.6	-0.9
GDP-weighted average	-1.7	-1.0	-1.0	-1.2	-1.6	-1.4
Unweighted average	-1.1	-0.8	-0.5	-0.3	-0.7	-0.5

Source: European Commission (2002c).

vide good examples of how such insufficient fiscal restraint in the 1999–2000 upswings have created deficit problems in the subsequent recession (see Tables 2.3 and 2.4).

A very different type of critique has focused on the difficulties of applying the fiscal rules in concrete situations. The argument is that it will be difficult in practice to fine a member state that exceeds the deficit ceiling (Calmfors et al., 1997; Uhlig, 2002). Such actions are likely to arouse serious political conflicts among the member states. It may also be difficult to explain to the general public that the proper way of handling a deficit situation in a country is to incur extra expenditures in the form of fines to the European neighbours. The decision of the Council in early 2002 to avoid giving Germany and Portugal early warnings for the deviations relative to the agreed budget targets, despite a recommendation from the Commission to do so, provides a clear illustration of the difficulties of applying the rules in practice. So does the present situation, in which the budgetary problems in some member states have led to demands that the SGP should be flouted.

The objections we have summarised all raise highly relevant issues. But it is also clear that any fiscal rule has to reflect a difficult trade-off between what would be theoretically optimal and simplicity. A rule must be simple to facilitate monitoring and enforcement (Kopits and Symansky, 1997). Simplicity is also required if the rule is to be understood by the general public. Otherwise the rule will not command the legitimacy necessary for it to be respected by policy makers and be sustainable in the long run. Simplicity of the rules is probably of extra importance in the context of the EU, which has often been accused of being too technocratic. In our view, the provisions in the Maastricht Treaty and the SGP do, on the whole, represent a reasonable trade-off between conflicting demands and have played a very useful role for strengthening fiscal discipline. The rules have become common knowledge and are a useful common benchmark for fiscal policy in the member countries.

At the same time, it should be acknowledged that the fiscal rules were instituted in a specific historic situation. There was an urgent need for reversing the trend of rapidly accumulating government debt and to quickly establish credibility for the new currency in its initial phase. Once the monetary union

has been shown to work, it might be possible to refine the fiscal rules more than was possible in the 1990s.

One counter argument is that such modifications might undermine the credibility of any common EU fiscal rules by creating the impression that they can always be revised in response to the existing situation. These are crucial considerations, but it must also be recognised that if the rules are perceived as being too inflexible, they will lose their legitimacy. The likely consequence of this is either that the rules will be constantly bent or that they will at some point be abandoned altogether.

A reasonable conclusion is that one should look for possible modifications of the fiscal rules that enhance their effectiveness and legitimacy without changing their main character. As argued in last year's EEAG report (EEAG, 2002), there is an obvious case in favour of formulating the medium-term budget balance objective explicitly in cyclically adjusted terms in order to allow the automatic stabilisers to work. We therefore fully endorse the Commission's recent proposals on this (European Commission, 2002b). In addition, as discussed in Section 1, there are strong arguments for allowing discretionary fiscal policy action, that is variations in the cyclically adjusted budget balance, in some situations. These could involve large asymmetries in cyclical developments among the euro countries or large common macroeconomic disturbances where monetary policy needs to be supported by fiscal policy.

It would not be appropriate, however, to formulate the deficit ceiling in terms of the cyclically adjusted budget balance rather than in terms of the actual balance. The obvious reason is that there is no unique way of adjusting the actual budget balance for cyclical factors. Different methods of calculating the cyclically adjusted balance give different results, as discussed in Box 2.1. In addition, the calculations are frequently revised *ex post*. One cannot base sanctions on a measure that is so open to different interpretations.

As argued in Box 2.2, there is a strong case in all EU member states for trying to attain average budget outcomes of "close to balance or in surplus", or even more ambitious budget goals, over the coming decade(s), because of the future strains on government finances due to demographic develop-

## Box 2.2

## Long-run government debt

A common criticism of the Stability and Growth Pact is that the medium-term budget target of “close to balance or in surplus” is arbitrary. It is often claimed to be too ambitious as it implies that net government debt will over time converge to around zero (see, for example, de Grauwe, 2002; or Walton, 2002).

It is true that theoretical analysis does not give much guidance on what is an optimal level of long-run government debt, although it points to various important aspects (Kell, 2001; Wyplosz, 2002):

- From the point of view of minimising long-run tax distortions that reduce social efficiency, a low debt level (or a positive net financial position) for the government is desirable.
- On the other hand, to the extent that households are credit-constrained, social welfare is increased if governments can borrow on their behalf.
- Intergenerational equity is affected by the level of debt, since this influences how consumption possibilities are distributed across generations.

None of these considerations have played a major role in the choice of budget targets (and thus implicitly also of debt targets) in the SGP. Instead, as discussed in Section 2, more pragmatic considerations relating to long-run fiscal sustainability have dominated. The aim has been to lower debt to prudent levels in order to reduce the risks of inflation and high interest rates. In such a perspective, the future strains on government budgets that can be expected from ageing populations (due both to higher pension payments and higher health-related government expenditures) become of paramount importance. Table 2.5 (p. 60) presents estimates by the Economic and Financial Committee in the EU of future expenditure increases due to demographic developments. As can be seen, such projections indicate an average increase in age-related government expenditures of 6.2 percent of GDP in the EU countries between 2000 and 2040. The estimated increases are largest in Greece, the Netherlands, Spain, and Finland (7–13 percent of GDP), but much smaller in the UK, Italy, and Sweden (0–4 percent of GDP). Needless to say, the calculations are based on a number of uncertain assumptions, for example regarding labour force participation and unchanged policies (implying, for example, substantial reductions of pension replacement rates in Italy and the UK). The projections do not take into account that there is some reduction in other age-related expenditures, like for childcare. The calculations are also before tax, so that they do not measure the net effects on the government budget balance. Still, the calculations illustrate clearly that ageing populations will result in large budgetary pressures.

Further reductions of government debt, and thus also of interest payments, is one way of accommodating the tendencies to deteriorating primary budget balances (the balances excluding interest payments). Table 2.6 (p. 61) is an attempt to illustrate this in a very simplified manner. Column 1 shows the 2001 primary balances. Column 2 shows the primary surpluses necessary to service interest payments if the debt-to-GDP ratio were to stay at the 2001 level. The other columns show how much lower primary surpluses need to be from 2020 and onwards, as compared to this benchmark, under various assumptions on total budget balances (including interest payments) in the period 2001–20 if the debt-to-GDP ratio is to be held stationary after this period. The assumptions that fiscal policies can be characterised by various assumptions on the total budget balance up to 2020 and that the debt levels after that are stabilised at the 2020 level are arbitrary, but serve as a crude illustration of the extent to which the future demands on primary budget surpluses are affected by present policies.

Our calculations illustrate that the future reductions in required primary surpluses that follow from present policies (and also from more ambitious ones) are small relative to the budgetary strains imposed by ageing populations. The average reduction in required primary surpluses from the debt reduction associated with zero budget balances in 2001–20 as compared with present debt levels is only 0.7 percent of GDP (1.2–0.5). Budget deficits of 1.5 percent of GDP instead of zero balance would yield a reduction of the average required primary surplus by only 0.3 percent of GDP (1.2–0.9). A total budget surplus in 2001–20 of 3 percent of GDP implies a reduction of the average required primary balance by 1.5 percentage points, allowing a small average primary deficit after 2020. The effects are of different magnitude for different countries, the largest effects occurring for the countries with the largest initial debt levels (Italy, Belgium and Greece).

In the perspective of Table 2.6, it is difficult to claim that the present “close to balance or in surplus” target is too ambitious. The projected increase in age-related expenditures is a strong argument against relaxing the budgetary objectives, for example by adopting a “golden rule”, according to which government investment can be financed through borrowing. Rather, if anything, there appears to be a strong case for sharpening the medium-term fiscal objectives in most countries as a complement to pension reform.

ments. In this situation, it would seem very unwise to loosen the budget objectives, for example through the adoption of a so-called “golden rule”, which would allow borrowing for government

investment or other selected government expenditures believed to promote growth. The arguments against a golden rule are developed further in Box 2.3.



## Box 2.3

## The golden rule

The “golden rule” in public finance is the notion that borrowing should be allowed for public investment. Such a golden rule for both the federal government and the states is formally enshrined in the German constitution. More recently, the UK has adopted such a rule, according to which deficit financing of government net investment is allowed, provided that the overall government debt is kept at prudent levels (at present defined as a ratio of net government debt to GDP below 40 percent) (see Buiter, 2001; or Kell, 2001). In the discussion of the Stability and Growth Pact, it has been argued that the present medium-term objective of “close to balance or in surplus” should be replaced by a golden rule, which would also require a redefinition of the deficit ceiling in the Treaty (see, for example, Blanchard and Giavazzi, 2002).

The crucial issue when judging the future budgetary consequences of a public investment project is whether it generates a cash flow accruing to the general government, whose (appropriately measured) present value is at least equal to its financial costs for the government. If this is the case, deficit financing of public investment does not cause a deterioration of future budget balances and does not require any future rises in tax rates or cuts in spending. Otherwise, the structural deficit will be worsened to the extent that future additions to tax revenue fall short of interest costs of the additional debt.

In principle, the statements above could be turned into a test to discriminate among different public investment projects. According to this test, projects meeting a minimum cash-flow requirement could be excluded from the deficit figure subject to the rules of the SGP. Government borrowing would be disallowed only for the costs of those projects failing the test.

These considerations show that a “golden rule” should never be applied mechanically. Rather, it should always be made conditional on an assessment of the future financial flows from public investment. This is because nothing requires the public sector to undertake projects only if they satisfy the test specified above. The provision of public goods requiring public investment may well be motivated by their utility value, independent of whether or not it can generate a positive cash flow. Many projects may be highly desirable, yet require tax financing.

But even such a stricter and sounder golden rule would run into a number of theoretical and practical objections that strongly discourage its application. First and foremost, it is very difficult to assess future revenues accruing to the general government. Such an assessment is necessarily based on arbitrary assumptions, and these assumptions are unavoidably open to manipulation. Typically, one should take both direct and indirect public revenues into account. An example of the latter is any increase in tax revenue due to incomes that

would not be generated in the absence of public investment. However, proponents of a particular project, and groups benefiting directly from it, will have strong opportunistic motives to inflate the estimates of the indirect effects. Also, as amply documented, inadequate budgeting and implementation of public investment projects typically result in cost revisions, systematically reducing net cash flows well below the initial estimates. Moreover, the classification of public expenditures between “current expenditures” and “investment” is quite ambiguous. For example, should spending on public education be viewed as public investment in human capital? And why should tax cuts that stimulate private investment be treated differently from direct government investment? Adopting a golden rule will clearly create a strong incentive to reclassify many items in the budget, with no other purpose than to circumvent the Stability and Growth Pact.

Second, suppose that the public sector can accurately predict cash flows, and is able to commit itself to extremely disciplined control procedures. Even so, it is quite difficult to identify the correct interest costs. For instance, a large programme of public investment could change the equilibrium interest rate in the economy: using interest rates prevailing before the implementation of the program would therefore not be appropriate.

The recent revival of the debate on the golden rule may actually divert attention from a deeper issue. Fiscal retrenchment implemented by several countries in the euro area throughout the 1990s resulted in large cuts in public capital expenditure. As is well understood, the interest groups fighting cuts in public investment are not as strong and vocal as the interest groups opposing cuts in current transfers programs. Public capital investment tends to have diffuse effects and – more importantly – tends to benefit both current and future generations.

Intergenerational redistribution via public capital is a theme that is often forgotten in the political debate. An inefficiently low level of public infrastructure, and a low quality, can harm future generations at least as much as higher future taxes financing present transfers. In many areas, a reduced presence of the public sector has crowded in private investment, substituting private for public capital. But especially for infrastructure, there is a widespread feeling that development and maintenance have been falling below efficient levels.

Is this an argument to relax budget goals? What is called into question is not really budget discipline – but the political priorities in the national budget process as well as budget choices at the European level. If the investment in infrastructure is too low, which creates large welfare costs for current and future generations, governments can change spending plans or find proper ways to finance additional spending. In this respect, it should be kept in mind that deficit financing of in-



*continued Box 2.3*

vestment generates future interest payments – payments that are avoided if investment is tax-financed. So, requiring tax financing does not impose any additional burden on taxpayers in the long run. It does, however, give rise to redistribution effects in favour of future generations in the short and medium run.

In principle, the golden rule could be defended as a way to make future generations sustain the costs of infrastructure projects that will also benefit them. By the same token, it is well known that efficiency (tax-smoothing) arguments suggest the desirability of deficit financing at an early stage of development: countries starting with a low capital stock have a large need to build infrastructure, and should therefore be given the financial flexibility to do so. While all this is true, it should not be forgotten that what motivated the Stability and Growth Pact is exactly the argument according to which sound economic

principles are seldom followed in the actual budget process.

Recently, a common misinterpretation of public finance principles has been that there is a case for excluding military spending from the budget objectives according to the SGP. It is true that the tax smoothing principle implies that any temporary upsurge in military spending should be financed by borrowing, and not by increasing taxes, because this avoids welfare-decreasing variations in private consumption. But in the case of Europe, those who believe in a larger military role for the EU advocate a permanent (rather than temporary) step-up of defence spending. While the choice of increasing military spending is a political one – and there is by no means an agreement on whether and how much the EU should change its course on this matter – there is no economic argument for deficit financing.

We view the existing EU fiscal rules as a valuable institutional framework that should be exploited, because other alternatives will involve new and high set-up costs. This is an argument of history dependence. Given that the present framework is there, there is a strong case for continuing to build on it. This requires that the credibility of the fiscal rules is maintained. In particular, any changes in the fiscal rules must not be perceived as giving in to claims from member states that have current difficulties.

Recent proposals of the European Commission aim at making the fiscal rules more flexible through a reinterpretation of the Stability and Growth Pact, which would not require any Treaty changes (European Commission, 2002b). The proposals focus mainly on the medium-term budget target, but not on the deficit ceiling. In our view, this is insufficient and potentially harmful. More fundamental changes, involving a revision of the Maastricht Treaty, are desirable.

The most important stipulations on fiscal policy are those that refer to excessive deficits. The possibility of sanctions has much stronger incentive effects than other stipulations and forms the

backbone of the fiscal rules. So, we believe that more of the discussion should focus on this aspect. We see two desirable changes in the excessive deficit procedure:

- To condition the scope for stabilisation policy in downswings on the level of debt, so that low-debt countries are allowed to run larger deficits than high-debt countries.
- To depoliticise the decision-making process that establishes whether or not individual countries have violated the rules.

Table 2.5  
Projected increases in age-related public expenditures  
in the EU countries in percent of GDP, 2000 - 2040

	Pensions	Health care expenditures	Long-term care expenditures	Total
Austria	3.8	1.6	0.7	6.2
Belgium	3.7	1.3	0.7	5.7
Denmark	3.6	0.7	1.8	6.1
Finland	4.7	1.2	1.6	7.5
France	3.8	1.2	0.4	5.4
Germany	4.8	1.4	na	(6.2)
Greece	11.2	1.5	na	(12.7)
Ireland	3.6	1.9	0.1	5.6
Italy	1.9	1.4	0.3	3.6
Luxembourg	2.2	na	na	(2.2)
Netherlands	6.2	1.0	1.8	8.9
Portugal	4.0	0.6	1.6	6.3
Spain	6.6	1.5	na	(8.1)
Sweden	2.4	0.9	0.6	3.9
United Kingdom	- 0.5	0.8	0.0	0.3
Unweighted average	4.1	(1.2)	(0.9)	(6.2)

*Note:* Figures are given in parenthesis when there are missing data.

Source: Table II.7, European Commission (2002a).

**Table 2.6**  
Required primary surpluses in the EU countries to stabilise the debt ratio after 2020 under various assumptions  
(debt ratios in paranthesis)

Country	Current cyclically adjusted primary surplus (2001)	Required primary surplus at current debt level (2001)	Required primary surplus at various annual total budget balances 2001 – 2020				
			- 3	- 1.5	0	1.5	3
Austria	- 0.1	1.2 ( 61.7)	1.3 (66.0)	0.9 (46.3)	0.5 (26.6)	0.1 ( 6.9)	- 0.2 (- 12.8)
Belgium	6.2	2.1 (107.5)	1.7 (87.4)	1.3 (67.5)	0.9 (47.6)	0.5 ( 27.7)	0.2 ( 7.7)
Germany	0.7	1.2 ( 59.8)	1.2 (63.4)	0.9 (44.0)	0.5 (24.7)	0.1 ( 5.3)	- 0.3 (- 14.0)
Denmark	6.7	0.9 ( 44.5)	1.2 (62.6)	0.8 (42.0)	0.4 (21.4)	0.0 ( 0.8)	- 0.4 (- 19.8)
Spain	2.4	1.1 ( 57.2)	1.2 (59.2)	0.8 (40.4)	0.4 (21.7)	0.1 ( 3.0)	- 0.3 (- 15.7)
Finland	6.3	0.9 ( 43.6)	1.2 (60.1)	0.8 (40.0)	0.4 (19.8)	0.0 (- 0.3)	- 0.4 (- 20.4)
France	1.5	1.1 ( 57.2)	1.3 (65.0)	0.9 (45.1)	0.5 (25.2)	0.1 ( 5.3)	- 0.3 (- 14.5)
United Kingdom	3.0	0.8 ( 39.0)	1.1 (55.8)	0.7 (36.2)	0.3 (16.6)	- 0.1 (- 3.0)	- 0.4 (- 22.6)
Greece	5.5	1.9 ( 99.7)	1.7 (87.3)	1.3 (66.9)	0.9 (46.6)	0.5 ( 26.2)	0.1 ( 5.9)
Ireland	1.4	0.7 ( 36.6)	0.8 (38.4)	0.5 (23.2)	0.2 ( 8.0)	- 0.1 (- 7.2)	0.4 (- 22.5)
Italy	4.9	2.1 (109.4)	1.8 (93.0)	1.4 (72.5)	1.0 (52.0)	0.6 ( 31.5)	0.2 ( 11.0)
Luxembourg	3.8	0.1 ( 5.5)	0.6 (32.5)	0.3 (16.9)	0.0 ( 1.3)	- 0.3 (- 14.3)	- 0.6 (- 29.9)
Netherlands	3.1	1.0 ( 53.2)	1.2 (60.0)	0.8 (40.8)	0.4 (21.6)	0.0 ( 2.4)	- 0.3 (- 16.9)
Portugal	0.1	1.1 ( 55.6)	1.1 (56.9)	0.8 (38.5)	0.4 (20.1)	0.0 ( 1.7)	- 0.3 (- 16.6)
Sweden	7.6	1.1 ( 56.0)	1.3 (68.0)	0.9 (47.4)	0.5 (26.9)	0.1 ( 6.3)	- 0.3 (- 14.3)
Unweighted average	3.5	1.2 ( 59.1)	1.2 (63.7)	0.9 (44.5)	0.5 (25.3)	0.1 ( 6.2)	- 0.3 (- 13.0)

*Note:* Column 1 gives the current (2001) primary budget balance (the budget balance excluding interest payments). Column 2 gives the primary balance necessary to stabilise government debt at its current (2001) value (with the debt level in parenthesis). The subsequent columns show the primary balances necessary to stabilise government debt from 2020 and onwards under various assumptions on the total annual budget balance (including interest payments) in 2001 – 2020. The stationary debt levels are given in parenthesis. Annual real GDP growth for each country in 2001 – 2020 is assumed to be the same as the average for 1985 – 2001. Annual inflation in 2001–2020 is assumed to be 2 percent. From 2020 and onwards, nominal GDP growth in all countries have been set equal to the average real GDP growth for all EU countries in 1985 – 2001 plus 2 percent. The nominal interest rate is assumed to be 2 percentage points higher than the nominal growth rate.

Source: Columns 1 and 2: European Commission. The other columns: computations by EEAG group and José Mauricio Prado.

### 2.3. An enhanced role for the debt level as a fiscal policy criterion

As discussed in the previous section, the current EU fiscal rules assign more importance to the current budget balance than to the debt level. This can be criticised on the grounds that the amount of debt is a more relevant variable if one is concerned about long-run fiscal sustainability and price stability (Beetsma, 2001; Canzoneri and Diba, 2001). On the other hand, the current budget situation is likely to be a better predictor of future budget outcomes than the historic debt level (Perotti et al., 1998). From a more practical standpoint, the focus on the budget balance rather than on debt in the Maastricht Treaty was probably motivated to a large extent by the great dispersion in debt levels among the prospective entrants to EMU (see Table 2.2), which made it difficult to use debt as a convergence criterion if one wanted to achieve the joint objectives of giving everyone a reasonable chance of qualifying and disciplining fiscal behaviour. Another motivation was the larger ambiguities associated with measuring the debt level than the current budget balance.

We find it a reasonable argument that the present fiscal rules do not allow countries with low govern-

ment debt to reap the full benefits of this situation (Pisani-Ferry, 2002). Indeed, a main benefit of low government debt should be to enhance the room for manoeuvre in stabilisation policy by allowing larger deficits in recessions than would otherwise be possible (Swedish Government Commission on Stabilisation Policy in the EMU, 2002). This can be seen as a corollary to the common argument that a track record of low inflation for a central bank should enhance the scope for interest rate cuts in a downswing.

According to the present fiscal rules, there is an association between the debt level and the scope for stabilisation policy, but it is implicit rather than explicit. One association is the stipulation that countries with a debt ratio higher than 60 percent are not allowed to increase it, which may be a more binding constraint for these countries than the deficit ceiling, whereas there is no such stipulation for countries with lower debt ratios (Balassone and Monacelli, 2000). Table 2.7 shows the maximum deficits at various debt levels and growth rates consistent with the condition that the debt ratio must not increase. The debt change stipulation has the peculiar implication that it constrains the size of deficits more the closer the debt ratio is to the

Table 2.7  
Deficit levels consistent with a stable  
debt-to-GDP ratio

Nominal growth rate	Debt-to-GDP ratio				
	60	70	80	90	100
3%	1.7	2.0	2.3	2.6	2.9
4%	2.3	2.7	3.1	3.5	3.8
5%	2.9	3.3	3.8	4.3	4.8

*Note:* The change in the debt-to-GDP ratio,  $d$ , is given by  $\Delta d_t = -b_t - \phi/(1+\phi)d_{t-1}$ , where  $b$  is the budget balance in percent of GDP and  $\phi$  is the rate of growth of nominal GDP. The deficits in the table are obtained by setting  $\Delta d_t = 0$  and solving for  $b_t$ .

Source: Calculations by EEAG group.

60 percent reference value. For example, assuming a 3 percent nominal growth rate, the maximum deficit is 2.9 percent of GDP at a 100 percent debt ratio, whereas it is only 1.7 percent at a 60 percent debt ratio. This follows from the fact that nominal GDP growth automatically tends to reduce the debt-to-GDP ratio less the lower this ratio, requiring lower deficits if the ratio is not to increase. However, it is not clear how much emphasis is in practice likely to be put on the debt change stipulation. Against the letter of the Treaty, it was ignored as a convergence criterion for Germany, which violated it at the start of EMU. Nor has the debt change criterion received much attention in the recent discussion, although Italy is likely to have violated it in 2002 and Germany is likely to do so in 2003 (see Table 2.2).

There is also an indirect association between the scope for stabilisation policy and the debt level, as low debt implies lower interest payments. For example, assuming a 4 percent average interest rate on government debt, a reduction of the debt ratio from 50 percent to 25 percent of GDP would reduce interest payments as a ratio of GDP by 1 percentage point (from 2 to 1 percent). *Ceteris paribus* this would improve the total budget balance. This assumes, however, that the lower interest payments have not been offset by a deterioration of the primary budget balance (the budget balance excluding interest payments) through tax cuts or expenditure increases. One could also argue that there should be a positive association between low debt and strong government budget positions because low debt can only have been achieved through small deficits or through surpluses in the past, and budget situations tend to exhibit a high

degree of persistence (Perotti et al., 1998). According to this argument, a low debt level would be associated with a high probability of a strong current government budget position, which gives a large cyclical safety margin in a downswing. But on the other hand, we know from empirical studies of the determinants of the government budget balance that high debt is conducive to low deficits (high surpluses), as it creates pressure for adjustment (see, for example, von Hagen et al., 2002).

Finally, the Council is likely in practice to take into account the debt position of a country when judging whether the escape clause allowing violations of the deficit ceiling in certain situations can be invoked, even if this is not formally stated (see Section 2.1).

The recent Commission proposals on reinterpreting the SGP involve a greater emphasis on debt (European Commission, 2002b). First, it is argued that the debt change criterion should be taken seriously and that breaches of it should trigger the excessive deficit procedure. Second, the Commission has proposed that member states with debt lower than 60 percent of GDP should be given the possibility of small temporary deviations from the “close to balance or in surplus” target for the cyclically adjusted budget balance if these deviations derive from a “large structural reform” aiming at promoting growth. A third proposal is that “small deviations of a longer-term nature” from the “close to balance or in surplus” objective could also be envisaged for member states with debt ratios “well below the 60 percent reference value”.

We see two major problems with the Commission’s proposals. One is the increased complexity of the rules and the amount of discretionary judgements introduced. Another problem is that loosening the medium-term fiscal objective without changing the deficit ceiling reduces the safety margins and thus increases the risk that the ceiling is breached.

In our view, a better plan for reforming the fiscal framework should instead focus on the deficit ceiling directly. There should be a clear and transparent rule. One possibility would be to condition the deficit ceiling explicitly on the debt level, allowing low-debt countries to run larger deficits in downswings than high-debt countries. More precisely, low-debt countries could be allowed to run larger budget deficits than three percent of GDP. Such a Treaty revision would have several advantages.

1. The scope is widened for low-debt countries to pursue expansionary fiscal policy in a downswing.
2. The incentives for fiscal restraint in general are enhanced if the returns to such policies in the form of a greater scope for stabilisation policy in downswings become higher and more visible.
3. The stronger incentives for fiscal discipline imply smaller risks of procyclical policies in booms.
4. To the extent that the advantages of fiscal discipline become larger, the legitimacy of the fiscal rules and thus their credibility would be enhanced.

Technically, a link between the deficit ceiling and the debt level could be established in several ways. One could simply stipulate different deficit ceilings for different debt intervals. One proposal, which raises the deficit ceiling for low-debt countries but leaves it unchanged for high-debt countries, is given in the first column of Table 2.8 (see also Calmfors and Corsetti, 2002a,b). An alternative would be a scheme like the one in the second column, according to which the rises in the deficit ceiling for low-debt countries are matched by reductions for high-debt countries. The latter proposal may appear less politically realistic, but it could perhaps be made more attractive if it is linked to a formal abolition of the debt change criterion for the countries exceeding the 60 percent debt-to-

GDP reference value. A lower deficit ceiling for these countries would serve the same purpose as the debt change criterion, but do away with the anomaly that present rules formally require lower maximum deficits for high-debt countries the closer their debt ratio is to the 60 percent value.

A major advantage of such discontinuous “ladders” of deficit ceilings as shown in Table 2.8 is that they provide a strong incentive for fiscal discipline in normal times as well as in booms by allowing countries to move to categories with a higher “status”. Even if it is future governments that would get the advantage of a greater scope for stabilisation policy in recessions, it becomes much more visible to the general public that the incumbent government has made an investment that represents a future gain.<sup>11</sup>

An alternative set-up would be to retain the present three-percent deficit ceiling, but allow countries to use extra-budgetary stabilisation funds in downswings that are not formally included under the deficit ceiling. Such so-called “rainy-day funds” exist in many US states and Canadian provinces as a cushion against unforeseen contingencies (Kopits and Symansky, 1997; Knight and Levinson, 1999; McGranahan, 1999; Hemming and Kell, 2000) and have been discussed in the European context by Buti and Giudice (2002) and Buti et al. (2002). A system with such funds could be constructed so as to mimic

debt-deficit links of the type indicated by Rule 1 in Table 2.8. Countries with debts below given thresholds would be allowed to establish such funds and to draw maximum pre-specified amounts from them in recessions, in addition to running deficits in the normal budget up to three percent of GDP. One possibility is to let countries with government debt ratios below certain thresholds establish the stabilisation funds immediately through borrowing, which would

Table 2.8  
Possible ways of conditioning the deficit ceiling on the debt ratio

Debt ratio (percent of GDP)	Deficit ceiling (percent of GDP)		
	Rule 1	Rule 2	Countries in the debt range
> 105	3.0	0.5	Italy
95 – 105	3.0	1.0	Belgium, Greece
85 – 95	3.0	1.5	
75 – 85	3.0	2.0	
65 – 75	3.0	2.5	
55 – 65	3.0	3.0	Portugal, France, Germany, Austria, <i>Bulgaria</i>
45 – 55	3.5	3.5	Netherlands, Sweden, Spain, <i>Hungary</i>
35 – 45	4.0	4.0	Ireland, UK, Finland, Denmark, <i>Slovak Republic, Poland</i>
25 – 35	4.5	4.5	<i>Czech Republic, Slovenia</i>
< 25	5.0	5.0	Luxembourg, <i>Estonia, Latvia, Lithuania, Romania</i>

Note: Accession countries in italics. These countries have been classified above according to their debt ratios in 2002. The incumbent EU member states have been classified according to predicted debt ratios in 2003.

Source: See Tables 2.2 and 2.9.

<sup>11</sup> In addition, one can, of course, also institute a rule that a procyclical loosening of fiscal policy in a boom represents a violation of the budgetary requirements in the SGP, as proposed by the Commission (European Commission, 2002b). But one would expect our proposal to have more bite, as it does not require discretionary decision-making.

increase gross (but not net) government debt, or by transferring claims on the private sector to them. Another more demanding option is to let low-debt countries build up the funds over time by channelling government surpluses into them in good times.

A system of extra-budgetary “rainy-day-funds” could formally maintain the three-percent ceiling as the point of reference. It would “lock in” the assets put in the funds by earmarking them only for stabilisation of output and employment in recessions. Arguably, however, a system of extra-budgetary funds is less transparent than a system that explicitly conditions the deficit ceiling on the debt level.

How would the accession countries be affected by rules that explicitly condition the deficit ceiling on the debt level? The accession countries have on average much lower government debt than the present EU member states (see Table 2.9). Therefore, a rule that relates the maximum deficit to the debt level gives them more scope for stabilisation policy in downswings than the incumbent member states. This could be motivated to the extent that the accession countries are likely to be exposed to larger cyclical swings, as they are in a phase of transition to developed market economies. It is true that this could also involve risks that serious budgetary imbalances develop, as there are some tendencies to (see Table 2.9). But on the other hand the accession countries will also have a stronger tendency to reduce their debt ratios than the present EU member states because they will have higher nominal GDP growth. This is the consequence of both higher convergence-driven real

GDP growth, as they catch up with Western Europe in terms of income per capita, and higher inflation due to the Balassa-Samuelson effect (according to which higher productivity growth in the tradables sector in catching-up countries than in already rich countries leads to higher wage growth and thus to higher price rises in the non-tradable sector, as discussed in EEAG, 2002).<sup>12</sup>

We believe there is a case for revision of the fiscal rules in the EU along the lines we have proposed. We have deliberately chosen the debt intervals in Table 2.8 such that our reform proposals would not accommodate the current budget problems of France, Germany, Portugal and Italy. The former three countries will all have debt-to-GDP ratios in 2003 of close to 60 percent and Italy has a ratio of close to 110 percent. It is true that the recent deterioration of the budget balances in these countries is associated with the workings of the automatic stabilisers, which dampen the present cyclical downswing. The root cause of the current budgetary problems is insufficient fiscal retrenchment in the preceding boom. Relaxing the rules such as to accommodate the current situation would, however, completely undermine the credibility of fiscal constraints at the EU level. It is not a good strategy to try to solve short-term problems by adjusting the long-term rules. The budget developments in some member states might imply that they are in the end fined if there is a drawn-out recession. This may not be all bad. Once a member state like Germany has been exposed to such fines, there would be little doubt that the sanction procedures are credible.

The current German situation may seem particularly awkward, as there are indications of a much larger negative output gap than in other euro countries (see Chapter 1). One possibility that should be considered is whether demand could be boosted through a “tax shift”, that is through a reduction of

Table 2.9  
The fiscal position of accession countries in 2002

	Gross government debt as a percentage of GDP	General government actual fiscal balance in percent of GDP
Bulgaria	58.1	- 0.8
Czech Republic	25.6	- 6.4
Estonia	4.4	- 0.2
Hungary	52.9	- 5.7
Latvia	16.8	- 1.8
Lithuania	23.6	- 1.9
Poland	43.3	- 4.1
Romania	24.6	- 2.7
Slovak Republic	39.3	- 4.6
Slovenia	27.9	- 1.8
Unweighted average	31.7	- 3.0

Source: Tables 9 and 10 in European Commission (2002d).

<sup>12</sup> Due to the initially low debt levels and the tendency to large debt-to-GDP reductions following from high nominal GDP growth, our proposed link between debt and deficit ceiling is also likely to give the accession countries more scope for investment in public infrastructure than the incumbent EU member states, which would seem desirable.



## Box 2.4

## Different measures of the government's financial situation

The gross government debt concept used in the Maastricht Treaty is only one of several possible measures of the government's financial position. This box reviews various measures.

- Gross government debt nets out all claims and liabilities within the government sector, but claims on the private sector are not included.
- Another debt concept is net government debt, which deducts government claims on the private sector from the gross debt.
- Conventional measures of government gross and net debt do not take account of pension obligations, but only refer to explicit debt. Pension obligations can be thought of as "implicit debt". Yet another measure is thus total explicit and implicit debt.
- If one adds in the real capital assets of the government, one obtains the net worth of the government. Theoretically, net worth is the most relevant measure of the government's solvency (Buiter et al., 1993; Buiter, 2001; Balassone and Franco, 2000) Real capital assets must then be assessed according to market values and not according to historic costs, as it is the ability to generate future revenues that is of interest. However, in practice there are huge problems of evaluation. Theoretically, net debt is also a more relevant concept for government solvency than gross debt, as a government can in principle draw on claims on the private sector. But here, too, there may be problems of evaluation (although smaller than for real capital assets). For example, many government loans to the private sectors may be "soft ones" with a large ingredient of subsidisation (this is likely to be a severe problem in the transition economies in Eastern Europe) (Buiter et al., 1993; Föttinger, 2001).

It is not self-evident how implicit pension debt should be regarded, since pension obligations are less firm than ordinary debt obligations. On the one hand, pension obligations are a policy variable that is subject to possible change through reforms of pension systems. On the other hand, there is a political commitment to honour these obligations. Similarly, one could argue that there are very strong commitments also to some other government expenditures, such as health care and long-term care expenditures. By also regarding the path of such expenditures as exogenous (for example, by assuming age-related spending increases, as discussed in Box 2.2), and by assuming unchanged policies with respect to taxes and other expenditure categories, one can forecast future budget balances. Computing the discounted present value of such tax and expenditure streams yields a "broader" measure of implicit debt, albeit one that can more easily be changed through policy action. Adding "implicit debt" calculated in this way to explicit debt is one way of assessing the need for fiscal adjustment in order to

ensure fiscal sustainability. Alternatively, fiscal sustainability indicators can be expressed as the immediate and permanent change in the budget balance necessary to meet various definitions of long-run fiscal sustainability (Blanchard et al., 1990; Balassone and Franco, 2000).

It is a general rule that the more theoretically relevant the measure of the government's financial situation is, the larger are the practical evaluation and measurement problems. So, there is a trade-off between theoretical relevance and practical applicability when choosing a measure as a basis for policy.

Table 2.10 presents four different measures of the government financial situation in 2001 for the EU countries. The first column shows government gross debt according to the European Commission. The second column shows the same measure according to the OECD. Column 3 presents explicit government net debt according to the OECD. Column 4 shows "total" (explicit + implicit) net debt according to Frederiksen (2002), where the implicit debt has been calculated as the discounted value of future net expenditures "associated with current expenditure and tax policies", thus taking into account inter alia pension obligations and expected increases in health-related expenditures. The numbers in parentheses rank the countries according to the various measures. Table 2.11, finally, shows the correlations between the different measures.

Several observations may be made from the tables. The Commission and OECD measures of gross debt are highly correlated, but not identical. The average government net debt ratio is 15–20 percentage points lower than the gross ratios. There is a high correlation between the net and gross debt measures. The largest discrepancies refer to the Nordic countries (Denmark, Finland and Sweden), all of which have substantially lower net than gross debt.

"Total net government debt", including also implicit pension debt and the discounted present value of future age-related expenditure increases, is five to six times larger than explicit government net debt. There is a positive but weak correlation between explicit gross debt and "total net debt", whereas there is a weak negative correlation between explicit net debt and "total net debt". The weakness of the correlations is explained by a few countries, whose relative positions change dramatically when "implicit debt" is included. Italy, which has very low "implicit debt", then moves from being the most indebted country to being a low-debt country, whereas Finland and Ireland move from relatively low to relatively high levels of government "debt". As can be seen from Table 2.11, the correlations increase substantially if these countries are removed from the comparison.

employers' payroll taxes that is financed by increases in taxes that fall on employees, such as

employee contributions to the social security system, income taxes or VAT. Such a tax reform rep-



Table 2.10  
Different measures of government debt as percentages of GDP  
for the EU countries, 2001

	Gross government debt (EU Commission)	Gross government debt (OECD)	Explicit net government debt	"Total net government debt"
Luxembourg	5.5 ( 1)	5.5 ( 1)		
Ireland	36.6 ( 2)	36.5 ( 2)	32.0 ( 5)	302 (10)
United Kingdom	39.0 ( 3)	52.5 ( 5)	30.9 ( 4)	102 ( 1)
Finland	43.6 ( 4)	43.6 ( 3)	- 47.9 ( 1)	335 (13)
Denmark	44.5 ( 5)	46.4 ( 4)	22.9 ( 3)	165 ( 2)
Netherlands	53.2 ( 6)	53.2 ( 7)	42.1 ( 7)	287 ( 8)
Portugal	55.6 ( 7)	55.6 ( 8)	53.0 (11)	222 ( 4)
Sweden	56.0 ( 8)	52.9 ( 6)	1.0 ( 2)	297 ( 9)
France	57.2 ( 9)	64.8 (11)	42.1 ( 7)	280 ( 7)
Spain	57.2 ( 9)	69.1 (12)	39.8 ( 6)	415 (14)
Germany	59.8 (11)	60.3 ( 9)	43.5 ( 9)	222 ( 4)
Austria	61.7 (12)	61.7 (10)	47.0 (10)	253 ( 6)
Greece	99.7 (13)	99.7 (13)	100.0 (14)	329 (12)
Belgium	107.5 (14)	108.2 (14)	98.9 (13)	311 (11)
Italy	109.4 (15)	108.7 (15)	96.5 (12)	174 ( 3)
GDP-weighted average	63.0	69.1	48.8	233
Unweighted average	59.1	61.2	43.0	264
Standard deviation	26.9	26.5	37.9	78
Coefficient of variation	0.5	0.4	0.9	0.3

*Note:* Gross government debt is total government debt, where only claims and liabilities within the government sector have been netted out. Explicit net government debt deducts government claims on the private sector from gross liabilities. "Total net government debt" includes also "implicit" government debt associated with future net revenue consequences of current expenditure and tax policies (thus reflecting also inter alia future unfunded pension obligations and projected increases in other age-related government expenditures). The numbers in paranthesis give country rankings.

Source: Gross government debt: the EU Commission and the OECD. Explicit net government debt: the OECD. "Total net government debt": Frederiksen (2002).

represents a fiscal policy to stimulate the economy without incurring a larger budget deficit. The policy is often labelled an "internal devaluation", as it reduces the real labour cost and depreciates the real exchange rate in a similar way as a reduction in the external value of the currency (Calmfors et al., 1997; Calmfors, 1998). Such internal devaluations were made in Denmark in the late 1980s and in Sweden in the early 1990s.

The underlying assumption behind the proposal of a German internal devaluation is that appropriate

reductions in the real labour cost and relative wage levels vis-à-vis other euro countries are at present prevented – or take a very long time to accomplish – because of downward money wage rigidity: it is very difficult to reduce money wage increases below those of the other euro countries at a low rate of inflation. The expenditure switch in favour of German products that a real exchange rate depreciation would achieve is motivated by a weaker demand situation in Germany than in the rest of the euro area and would most likely have occurred through an ordinary exchange rate depreciation in the absence of a common currency.

#### 2.4. Depoliticising EU surveillance and excessive deficit procedures

The decision of the European Council in early 2002 not to follow the Commission's recom-

mendation to give Portugal and Germany early warnings for their failure to meet their budget targets, after heavy lobbying on the part of these countries, have seriously undermined the credibility of the fiscal rules. Not least was the suspicion reinforced that it may be much more difficult to "shame" a large country than a small one. It goes without saying that the handling of the current deficits in Portugal, Germany, France and Italy will be an "acid test" of the credibility of the EU fiscal framework.

A fundamental problem is the political character of EU decisions regarding the budget situation in individual countries. The finance ministers in the Ecofin Council have a strong incentive to act strategically as the budgetary surveillance process and the excessive deficit procedure have the character of a repeated game: by adopting a forgiving attitude towards colleagues with deficit problems, the risk of being branded oneself in similar situations in the future

Table 2.11  
Correlations between the government debt measures in Table 2.10

	Gross government debt (OECD)	Explicit net government debt	"Total net government debt"
Gross government debt (EU Commission)	0.98	0.80	0.10 (0.52)
Gross government debt (OECD)		0.83	0.09 (0.52)
Explicit net government debt			- 0.09 (0.32)

*Note:* The figures in paranthesis give the correlations when Finland, Ireland and Italy have been excluded.

Source: Calculations by EEAG group and José Mauricio Prado.

is reduced. If it is difficult to agree even on a relatively harmless early warning, it may be almost impossible to agree on harsher sanctions that involve both a financial cost and a loss of national prestige. Fines also risk triggering serious political conflicts among the member states, which goes directly against the aim that the EU should foster integration and common understanding (Uhlig, 2002).

The root of the problem is that EU monitoring of the fiscal situation in individual member states is in the end done by the politicians responsible for these very situations. This is an unsatisfactory state of affairs. Our political systems usually draw a sharp dividing line between making the laws (which is done by elected politicians) and applying them (which is done by an independent judiciary). The budgetary surveillance process and the excessive deficit procedure clearly violate this principle.

The Commission has proposed that it alone should be given the power to issue early warnings in the budgetary surveillance process. The drawback of this proposal is that the Commission has weaker political legitimacy than the Council. Still, we endorse the proposal as a better alternative than the present arrangement. But it is less clear that a similar solution would be preferable for the excessive deficit procedure. Buti et al. (2002) have proposed that the Commission should be responsible for determining the existence of an excessive deficit and for giving a first warning to the member state in question. The next step would then be that the Council gives a second warning and requires corrective action to be taken. In the final step, the Council would take the decisions on sanctions, acting on a proposal from the Commission, which would have to be followed unless there is a unanimous decision not to do so.

An alternative way of depoliticising the excessive deficit procedure would be to transfer the decisions on sanctions from the political level of the Council to the judicial level of the European Court of Justice. The natural procedure would then be for the Commission to take violations of the excessive deficit criterion to the Court, which would then make the ultimate decisions on deposits and fines, possibly after hearing a standing panel of independent economists. Specific procedures would then have to be followed to ensure a speedy process, which is necessary in order to create the proper incentives for avoiding excessive deficit situations.

Our two proposals of making the deficit rules more flexible and revising the decision process on excessive deficits may appear unrelated. In fact, they are not. The more credibly the fiscal rules are enforced, the greater the scope for changes that introduce more flexibility.

### 3. Is there a case for delegation of national fiscal policy?

Section 2 focused on possible reforms of the EU fiscal rules. There is, however, a risk that too much of the fiscal policy discussion focuses on the EU. The foundations of good fiscal policy must be laid at the national level. If incentives for well-balanced policies are too weak there, political conflicts about the fiscal stance of individual member states will arise continuously at the EU level, which will undermine the legitimacy of the common rules. The risk is all the greater, as there is some evidence that peer pressure at the EU level exerts less influence on large than on small member states (von Hagen et al., 2002).

The fiscal policy framework at the European level relies mainly on the common rules with numerical targets in the Maastricht Treaty and the SGP, whereas it has been left to the member states to decide on the national institutional frameworks to ensure compliance. Another strategy would have been to focus on common standards for the design of national fiscal institutions and decision procedures. The main reasons why the latter method was not adopted is probably that it was considered to imply much greater interference with national sovereignty and to be associated with greater monitoring problems (Beetsma, 2001; Buti and Giudice, 2002). But the recent deficit experiences of some EU states have vividly illustrated the difficulties inherent in a system based mainly on the enforcement of common numerical targets. This raises the issue of whether one should not rely to a larger extent on common standards for national fiscal institutions. A parallel would be the common regulation of the legal status of the national central banks, which applies also to non-EMU members. The argument is that it might pay to take the one-off cost of reforming national institutions according to commonly agreed principles, because this would reduce the risks of inappropriate fiscal policies in individual member countries and hence the risks of political conflicts at the EU level.

Such common principles of national fiscal policy frameworks could take the form of each member state adopting a law on fiscal policy that must meet certain minimum standards (see also Swedish Government Commission on Stabilisation Policy in the EMU, 2002; and Calmfors, 2002). The law should specify long-run goals for the path of government debt and/or the medium-term (cyclically adjusted) fiscal balance. These goals must be consistent with (but could be more ambitious than) the requirements of the Maastricht Treaty and the SGP. Such a law should also define clearly the short-run stabilisation objectives of fiscal policy. It should be clarified to what extent one intends to rely on the automatic stabilisers and in what circumstances discretionary policy action will be undertaken. Similar to the Australian Charter of Budget Honesty, the government could be obliged to indicate which tax and expenditure changes are temporary (because they are undertaken for stabilisation purposes) and “the process for their reversal” (Business Council of Australia, 1999). To shorten decision lags and reduce the risk that income distribution aspects dominate stabilisation considerations in concrete situations, a law on fiscal policy could also select in advance a small number of fiscal policy instruments to choose from if the need for discretionary measures were to arise (Swedish Government Commission on Stabilisation Policy in the EMU, 2002; Calmfors, 2002). In addition, a law on fiscal policy ought to regulate the budget policies of sub-national local governments such as to ensure compatibility with the overall national fiscal objectives.

One should also try to ensure that the stabilisation programmes submitted to the Ecofin Council by the member states do not live a life of their own in the national decision process, but are approved by the parliament as part of the normal budget process, as has been suggested by von Hagen et al. (2002). Such an integration of the fiscal processes at the European and national levels would seem necessary to ensure consistency between national budget objectives and commitments at the European level.

### 3.1 Lessons from the decision-making process for monetary policy

Section 1 discussed why monetary policy is today generally regarded as a much more effective stabilisation policy tool than fiscal policy. This is not because fiscal policy is intrinsically less effective in a technical sense, but because the decision-making

process involves much greater risks of bad timing and expansionary bias. Whereas monetary policy has been delegated to independent central banks, which have been given clear stabilisation objectives, fiscal policy is decided in drawn-out parliamentary processes where stabilisation aspects become intertwined with income distribution and social efficiency aspects. This raises the question of whether one can learn some lessons for the fiscal policy decision-making process from the institutional changes that have been adopted in the field of monetary policy. Indeed, there exists recent literature which asks precisely this question. The contributions include von Hagen and Harden (1994), Eichengreen, von Hagen and Harden (1995), Saint-Paul (1995), Calmfors (1995), Wren-Lewis (1996, 2000, 2002), Blinder (1997), Ball (1997), Business Council of Australia (1999), the Economist (1999), Eichengreen, Hausmann, and von Hagen (1999), Seidman (2001), Wyplosz (2002), and the Swedish Government Commission on Stabilisation Policy in the EMU (2002).

The main theme in this literature is whether one could improve both budget discipline and the effectiveness of fiscal policy as a stabilisation tool through delegation of some fiscal policy decisions to an independent agency that is assigned clear policy objectives by the political system, and whether this would be compatible with accepted principles of democratic governance. The fiscal agency would then be allowed to decide fiscal policy within predetermined limits without political interference in a way similar to how independent central banks pursue monetary policy. Different authors have used different terminologies for such a fiscal policy agency. We shall refer to it as a fiscal policy committee (FPC for short) to stress the parallel with monetary policy committees in central banks.

The proposals vary as to the range of decision-making powers given to the FPC. The most far-reaching proposal is that of Blinder (1997) who proposes that an FPC should be given the power to decide the tax structure but not the level and composition of government expenditures, on the basis of general objectives for income distribution and social efficiency formulated by the legislature. Blinder supports the delegation with the argument that appropriate decisions on tax policy require a long-term perspective, technical expertise, and that undue influences from particularistic interest groups are avoided.

Other far-reaching proposals are those of von Hagen and Harden (1994), Eichengreen, von Hagen and Harden (1995), and Eichengreen, Hausmann and von Hagen (1999). These contributions propose that a FPC should decide a “debt change limit”, which the government would be obliged to follow. Here, the motivation is to enhance fiscal discipline by taking the decisions on long-run debt accumulation out of the political sphere which is assumed to suffer from a deficit bias.

However, most of the proposals focus strictly on the stabilisation aspect. This means that not only decisions on the size and structure of government expenditures, but also on the basic tax structure and long-run debt accumulation (the fiscal balance over the cycle or the cyclically adjusted annual fiscal balance) should remain in the political sphere.<sup>13</sup> The FPC would only be delegated the power to decide how the budget balance should vary around the medium-term target depending on the cyclical situation or to vary certain tax rates around predetermined base levels. The underlying idea is that stabilisation of the business cycle is a commonly shared objective, which requires more technical expertise but fewer political trade-offs than other fiscal policy decisions. Another motive is to separate the stabilisation policy aspects of fiscal policy from income distribution and resource allocation aspects such that stabilisation decisions are not “contaminated” by other considerations. The idea is also to reduce the risk that fiscal policy changes undertaken for stabilisation reasons involve a deficit bias. Other motives are to shorten decision lags and to make it easier to reverse fiscal policy decisions.

### 3.2 Two models of delegation

The idea that part of fiscal policy could be delegated is no doubt unfamiliar and surprising to most people. To quote the Economist (1999), most people would probably regard “with horror” the idea that tax rates would be adjusted “by a band of unelected officials”. At the same time, there has been a general trend in many areas of economic policy making for politicians to focus more on setting the overall objectives and then delegate the

operational decision-making to various bodies. The idea is to remove the actual implementation of policy from day-to-day politics. Areas where this has happened include, in addition to monetary policy, competition policy (Majone, 1996) as well as regulation and supervision of financial markets (see Chapter 4).

Even though delegation of national fiscal policy decisions to independent national bodies is not at present on the political agenda, there is a case for initiating a discussion of this possibility. It can be viewed as a contrast to the recent proposals that the European Commission should play a larger role in evaluating and approving national fiscal policies, which also represents a delegation to a non-elected body. If one takes the subsidiarity principle (see Chapter 3) seriously, one should explore solutions at the national level as an alternative to an enhanced role for the European Commission in the area of fiscal policy.

In the literature on fiscal policy delegation, two basic models have been proposed. The first model implies that the FPC decides the annual budget balance, the second one that the FPC is allowed to vary specific tax rates or government expenditures.

#### The FPC decides the annual budget balance

According to this model, which has been proposed by Wyplosz (2002a,b), the parliament would decide a budget target over the cycle or a target for the cyclically adjusted budget balance. Given this constraint and some general guidelines on the roles of automatic stabilisers and discretionary policy (for example, specifying that discretionary fiscal policy measures should only be undertaken when output gaps are of a certain size, as proposed by the Swedish Government Commission on Stabilisation Policy in the EMU, 2002), the FPC would be given the right to decide the annual budget target. The parliament would commit itself to follow the recommendations of the FPC. The FPC would also have to monitor both budget and cyclical developments over the fiscal year and have the power of requesting amendments to the budget.

According to this model, the parliament retains the right to decide through which tax and expenditure changes the annual budget target should be met. This means that the parliament controls the income distribution and social efficiency aspects of fiscal policy.

<sup>13</sup> Note that targets for the “fiscal balance over the cycle” and “the cyclically adjusted annual fiscal balance” are not identical requirements. A target for the fiscal balance over the cycle implies, for example, that past misjudgements of the cyclically adjusted fiscal balance should be compensated for in later phases of the cycle, whereas this is not the case with the second formulation.

As the FPC would determine only the variations around the path of government debt over the cycle, but not the path itself, its decisions would have a negligible effect on intergenerational equity. The flip side of retained political decisions on all individual taxes and expenditures is that the FPC does not acquire full control over the stabilisation aspects of fiscal policy. To the extent that different taxes and expenditures have different multipliers, as discussed in Section 1.2, political decisions on tax and expenditure changes consistent with the budget target of the FPC can still affect aggregate demand to a significant degree. This may seriously complicate the task of the FPC, as it may not be possible to offset such effects without violating the long-run target for the fiscal balance.

The FPC varies individual tax rates or government expenditures

According to the second model (see for example Ball, 1997; Business Council of Australia, 1999; and Seidman, 2001), the parliament would again take the decision on the medium-term target for the fiscal balance. But in contrast to the first model, the political sphere would only decide base rates for some taxes and base levels for some government expenditures (which would have to be consistent with the medium-term target for the fiscal balance). The FPC would then be granted the right to vary these tax rates and expenditure levels around their base values within prespecified limits in order to stabilise cyclical fluctuations. This could be done in two different ways.

A first possibility is that the parliament determines in advance which fiscal instruments should be varied if the need arises. The simplest alternative is to give the FPC control over only one specific fiscal instrument. Alternatively, the parliament could prescribe *ex ante* that discretionary fiscal policy action should have a given composition (for example, 30 percent of a fiscal stimulus should be a VAT decrease, 20 percent a reduction in employers' payroll taxes, 10 percent a reduction in personal income taxes for low-income earners, and 40 percent an increase in government consumption), as proposed by Seidman (2001). This way the FPC decides only the overall size of fiscal stabilisation measures, but the political sphere retains control also over the short-run income distribution effects.

A disadvantage of predetermining the composition of fiscal stabilisation measures is that different pol-

icy responses may be called for depending on the type of macroeconomic disturbance. For example, an increase in government employment may not be an appropriate response to a reduction in export demand. So, deciding on the composition of stabilisation packages once and for all may unduly constrain policy choices in a given situation.

Predetermining the composition of discretionary stabilisation measures would also require the parliament to form an informed view of which instruments are "on average" the best. This choice would be most important if one only delegates a single fiscal instrument to the FPC. Which one should then be chosen? There seems to be a presumption in the delegation literature in favour of taxes (Ball, 1997; Blinder; 1997; Business Council of Australia, 1999). If so, one might argue that VAT changes could be a good candidate, as they affect private consumption in a similar way as interest rate changes, which are already subject to delegation (see Section 1.2). Delegation of the decision on VAT changes would shorten decision lags. This is likely to be particularly important for this instrument, because long decision lags could actually reverse the effect of policies: for example, a temporary VAT increase to cool off a boom will have an expansive demand effect in the period before it enters into force (see Section 1.2). However, variations in government consumption, for example through variations in general grants to regional and municipal authorities, might very well also be a suitable stabilisation policy parameter for an FPC. As discussed in Section 1, recent research suggests that expenditure multipliers may be larger than tax multipliers. Delegation to an FPC could mitigate the problem of irreversibility, which is usually regarded an important argument against increases in government expenditures in recessions (Wijkander and Roeger, 2002; Swedish Government Commission on Stabilisation Policy in the EMU, 2002).<sup>14</sup>

Another possibility would be that the parliament decides on a set of fiscal instruments that the FPC can vary within certain limits, but leaves the committee complete freedom to choose which of these instruments to be used in a specific situation. This

<sup>14</sup> Another proposal is that of Saint-Paul (1995), who proposed that the size and composition of active labour market programmes should be delegated to an independent labour market board. This idea has been analysed theoretically by Calmfors (1995) and Johansson (2002).



would allow the FPC to use the instrument combination it finds most appropriate at each point of time. It would also allow the FPC to adjust the use of instruments to changes over time in the way economists judge their effectiveness.<sup>15</sup> With such discretionary power over which instruments to use in specific situations, the FPC acquires a larger – but still limited – influence on income distribution (and social efficiency), as there is no longer a requirement that individual tax rates and government expenditures be changed symmetrically over the cycle.

There is one important difference between letting the FPC vary the deficit target and letting it vary specific tax rates or expenditures. According to the former arrangement, the estimates of the FPC of the cyclical situation of the economy are automatically binding for the government. With the latter arrangement, one might fear that overoptimistic judgements of potential output on the part of the government causes it to systematically overestimate the cyclically adjusted balance, which might contribute to a deficit bias. A possible way of addressing this problem is to require that the estimates of the cyclically adjusted balance be based on the judgements of the FPC in the latter arrangement, too.

### 3.3 Is there a democratic problem with delegation?

To ensure that fiscal stabilisation policy decisions are taken at arm's length from day-to-day politics, it has been suggested that the fiscal policy committee should have a similar degree of independence as a central bank. This would imply that the committee is not permitted to take instructions regarding individual decisions from the government or the parliament, and that the latter institutions are not permitted to give such instructions. Appointments should be long-term and non-renewable. Committee members should have professional competence: either earlier practical experience of economic policy making or analysis from ministries of finance, central banks, international organisations (like the IMF, the World Bank or the European Commission), private banks and so on, or academic competence in the field of stabilisation policy and macroeconomic analysis. The FPC should be granted a long-term budget, which could not be changed from year to year.

<sup>15</sup> In view of the way “fashions” change over time among economists, this might not, however, be an unmixed blessing.

The most common objection to delegation of fiscal stabilisation decisions is that it would interfere with conventional principles of democratic decision-making. How should one think about this?

In any democratic society there exists the general problem of how to allocate decisions between the political and the technocratic spheres. This is done in different ways in different societies and the allocations also change over time. Different trade-offs are made in different areas of policy-making. There are no given standards, although there is a tendency to regard the current government institutions “as if they were the natural order of things” (Blinder, 1997) and not subject to the possibility of reforms until the very moment when such reforms take place.

The most important consideration for where to draw the line between political and technocratic decisions in a given area is the relative importance of value judgements and technical expertise (Majone, 1996). The reason why most proposals on the delegation of fiscal policy exclude the size and composition of government expenditures, the tax structure and the size of long-run government debt is that value judgements on income distribution are crucial for these decisions. In contrast, macroeconomic stabilisation involves much less of value judgements and is more a question of technically finding the best ways of achieving commonly shared objectives (see Section 3.1). Indeed, it is difficult to find any fundamental difference in this respect between fiscal policy and monetary policy to stabilise the business cycle. As noted by Blinder (1997), most of the arguments against delegation of fiscal stabilisation policy decisions could also be used against the already existing delegation of monetary policy.

To ensure the legitimacy of delegation of fiscal policy, an FPC would, of course, have to be subject to democratic oversight and accountability. Even if delegation is likely to improve fiscal policy “on average”, democratic control would be needed to reduce the risk that the FPC might at times pursue idiosyncratic objectives or just make bad technical judgements. Some lessons could be learnt from monetary policy, but one could also go further in some respects.

- Appointments of the members of the FPC would be made by the government and be sub-



ject to approval by the parliament. The candidates should be subject to questioning in parliament before they are confirmed, as is the case, for example, with members of the Federal Reserve Board in the United States (in the Senate). There is a similar procedure for the members of the Executive Board of the ECB in the European Parliament, although the parliament's confirmation is not formally required.

- The objectives of the FPC should be determined by the legislature. A high degree of transparency should be required of the committee. It would have to explain all its decisions to the general public and to publish background fiscal reports (corresponding to the inflation reports of, for example, the Bank of England and Sveriges Riksbank) at regular intervals. The minutes of the FPC meetings and voting records should be published. The members of the FPC should regularly take part in public hearings in the parliament.
- The parliament should carry out ex post evaluations of the committee's performance with the help of outside expertise. If the FPC fails over a period of years to achieve its objectives by a large margin – which needs to be given a clear operational definition ex ante – the parliament should have the possibility of dismissing the whole committee or individual members of it. Preferably, such dismissal should require a qualified majority to protect the FPC against misuse of this possibility.
- One could also conceive of an escape clause, which would enable the parliament to override an individual decision by the FPC. Again, this could require a qualified majority.
- The ultimate check on a system of delegation is, of course, the possibility to abolish the system altogether if it does not work in the desired way.

In any discussion of democratic control, it is important to distinguish between the formal aspects of accountability and how the process works in practice. It has been argued that in practice there may be more accountability with the delegation of a specific “technical” task to an independent committee, with clearly defined objectives against which to measure performance, than to have it executed as one of many simultaneous tasks by the government (Majone, 1996). The argument is that the assignment of well-defined tasks to independent bodies makes it easier to “nail down” mistakes than if a government is at the same time to be

held accountable for its performance in a large number of fields through the ordinary political process.

### 3.4 Weaker forms of fiscal policy committees

It is an open question whether one could find forms for delegating the decisions on fiscal policy aiming at macroeconomic stabilisation that would be acceptable to the general public. However, there is good reason to initiate a discussion. Most people are likely to consider weaker forms of delegation politically more realistic, at least in a short-term perspective.

One such possibility would be to give an FPC control only over a well-defined “rainy-day” stabilisation fund, but leave the political sphere in full command of the rest of fiscal policy (see also Section 2.3). Such a fund could be built up to a maximum level through specific tax receipts in booms and then run down through tax rebates in recessions. Many might regard this alternative as “less controversial” than the proposals in Section 3.2, because the powers of the FPC would be more clearly delineated and would not interfere with the normal budget process. The idea has some resemblance with the buffer funds in Finland that were described in Section 1.2. These funds differ, however, from the institutions discussed here, because they are of a corporatist nature: they are controlled by the central labour market organisations and not by an independent committee of experts.<sup>16</sup> A general drawback of the stabilisation fund solution, as outlined here, is that it might introduce a “double command” to the extent that the government uses the fiscal parameters under its control to influence the cyclical situation.

Another alternative has been suggested by Blinder (1997). According to this, the ultimate decision on a fiscal policy proposal of the FPC should be taken by the legislature, but be subject to a simple up-or-down vote. The proposal would thus have to be either accepted without any changes or rejected. In the latter case, one possibility could be to freeze tax rates and nominal government expenditures at last year's level. Such an arrangement would give the political sphere more influence than with delegation of the actual decision-making, but the FPC would still have a strong hand, as automatic “fiscal

<sup>16</sup> Formally, the use of the Finnish buffer funds also requires the formal consent of the government (the minister of social affairs).

drag” would tend to strengthen the budget balance in case the committee’s proposal is rejected by the parliament.

Finally, one could give the FPC only advisory functions, but with some teeth as proposed by the Swedish Government Commission on Stabilisation Policy in the EMU (2002).<sup>17</sup> This alternative is our preferred option for the near future. The FPC could then be assigned the task of independently estimating the cyclical situation of the economy (the output gap) and various tax and expenditure elasticities on which the government must base its budget calculations. The FPC could also be required to make public recommendations to the government on the annual budget targets and on specific tax and expenditure changes. The government could be more or less free to deviate from the recommendations of the FPC. This might be allowed only under exceptional circumstances. Alternatively, the government might be free always to deviate from the recommendations, but would then be required to formally explain the reasons in a specific parliamentary session. Calmfors (2002) has proposed that the minister of finance then should be obliged to take part in a “reversed” public hearing, where he/she has to explain to the FPC why its recommendations are not being followed. The idea of these proposals is to increase the governments’ reputational costs of deviating from the judgements of the FPC.

The weakest form of an independent fiscal policy committee is just to let it take part as another voice in the public debate on the economy. This is more or less the way in which the Sachverständigenrat in Germany and the Economic Council in Denmark work. In that case the influence of the independent group of experts depends mainly on the reputation it can build up over time through its judgements and its ability to market itself. Its role can be enhanced by requiring the government to respond formally to the reports of the expert group (Swedish Government Commission on Stabilisation Policy in the EMU, 2002).

Some contributions have proposed that monetary policy committees (or executive boards) in existing

central banks could function also as fiscal policy committees (Ball, 1997; Seidman, 2001; and Wren-Lewis 2002). One motive is that there would be small set-up costs if one uses an existing institution which already has an independent status and has acquired credibility for prudent stabilisation policies. Also, it might be regarded as less controversial to build on an already accepted institution rather than to establish a new one. Another argument has been that such an arrangement would facilitate co-ordination between fiscal and monetary policy. However, this argument does not apply to EMU, where monetary policy is centralised and fiscal policy decentralised. Here, it would rather be a question of finding a new role for the boards of the national central banks.<sup>18</sup>

National fiscal institutions that enhance the incentives for fiscal discipline and effective stabilisation policies reduce the risk of conflicts between national stabilisation objectives and the common EU fiscal rules. In a longer time perspective, the common fiscal framework in the EU might allow for and even encourage delegation of national fiscal stabilisation decisions along the lines we have suggested. One can conceive of several ways of doing this. For example, one could link our proposal of more flexible deficit ceilings in Section 2.2 to the existence of independent national fiscal authorities: low-debt countries could be allowed to use their higher deficit ceilings only if this is approved by the national FPC. Or if one adopts a system of extra-budgetary “rainy-day” funds, these might be used to avoid breaches of the three-percent deficit limit only after a decision by an independent national fiscal authority. Recommendations and early warnings in the case of deviations from set budget targets could also take into account how these relate to the decisions of an independent fiscal authority.

## References

- Alesina, A. and R. Perotti (1995) “Fiscal Expansions and Adjustments in OECD Countries,” *Economic Policy* 21, 205–248.
- Balassone, F. and D. Monacelli (2000) “EMU Fiscal Rules: Is There a Gap?,” Working Paper no. 375, Rome: Banca d’Italia.
- Balassone, F. and D. Franco (2001) “EMU Fiscal Rules: a New Answer to an Old Question?,” in: *Fiscal Rules*, Rome: Banca d’Italia, 33–58.
- Balassone, F. and D. Franco (2000) “Assessing Fiscal Sustainability: a Review of Methods with a View to EMU,” in: *Fiscal Sustainability*, Rome: Banca d’Italia, 21–60.
- Ball, L. (1997) “A Proposal for the Next Macroeconomic Reform,” *Victoria Economic Commentaries*, March, 1–7.

<sup>17</sup> See also Wren-Lewis (1996) and Wyplosz (2002a) for similar proposals.

<sup>18</sup> However, a system where actual fiscal policy decisions are taken by an FPC in the form of a national central bank and where the decisions could be overridden by parliamentary decisions or the FPC be dismissed would not be desirable. It would not be consistent with the independence of the European Central Bank System, which now forms a corner stone of the monetary union.

- Bean, C. (1998) "Discussion," *Economic Policy* 26, 104–107.
- Beetsma, R. (2001) "Does EMU Need a Stability Pact?," in: A. Brunila, M. Buti, and D. Franco (eds), *The Stability and Growth Pact*, Basingstoke: Palgrave, 23–52.
- Blanchard, O. (1990) "Suggestions for a New Set of Fiscal Indicators," Organization for Economic Cooperation and Development Working Paper no. 79.
- Blanchard, O. (2001) "Country Adjustments within Euroland. Lessons after Two Years," Working Paper, MIT.
- Blanchard, O. and R. Perotti (1999) "An Empirical Characterization of the Dynamic Effects of Changes in Government Spending and Taxes on Output," NBER Working Paper no. 7269.
- Blanchard, O. and F. Giavazzi (2002) *Reforms that Can Be Done: Improving the SGP through a Proper Accounting of Public Investment*, mimeo, MIT and Bocconi University.
- Blinder, A. S. (1997) "Is Government Too Political?," *Foreign Affairs* 76 (6), 115–126.
- Blinder, A. S. (2001) "The Economic Stimulus We Need," *New York Times*, 28 September.
- Bordo, M. D. and O. Jeanne (2002) "Boom-Busts in Asset Prices, Economic Instability and Monetary Policy," CEPR Discussion Paper no. 3398.
- Brunila, A., M. Buti, and D. Franco (eds) (2001) *The Stability and Growth Pact*, Basingstoke: Palgrave.
- Buiter, W.H. (2001) "Notes on 'A Code for Fiscal Stability'," *Oxford Economic Papers* 53, 1–19.
- Buiter, W.H., G. Corsetti, and N. Roubini (1993) "Excessive Deficits: Sense and Nonsense in the Treaty of Maastricht," *Economic Policy* 8, 57–100.
- Business Council of Australia (1999) "Avoiding Boom/Bust: Macroeconomic Reform for a Globalised Economy," Discussion Paper no. 2, Melbourne: Business Council of Australia.
- Buti, M., S. Eijffinger, and D. Franco (2002) *Revisiting the Stability and Growth Pact: Grand Design or Internal Adjustment?*, mimeo, European Commission.
- Buti, M., D. Franco, and H. Ongena (1997) "Budgetary Policies during Recessions – Retrospective Application of the 'Stability and Growth Pact' to the Post-War Period," *Economic Papers* no. 121, European Commission.
- Buti, M. and G. Giudice (2002) "Maastricht's Fiscal Rules at Ten: An Assessment," Working Paper, European Commission.
- Buti, M. and B. Martinot (2000) "Open Issues on the Implementation of the Stability and Growth Pact," *National Institute Economic Review* 174, 92–104.
- Buti, M. and A. Sapir (eds) (1998) *Economic Policy in EMU: A Study by the European Commission Services*, Oxford: Oxford University Press.
- Calmfors, L. (1995) "What Can We Expect from Active Labour Market Policy," *Beihfte der Konjunkturpolitik* 43, 11–30.
- Calmfors, L. (1998) "Macroeconomic Policy, Wage Setting and Employment – What Difference Does the EMU Make?," *Oxford Review of Economic Policy* 14, 125–151.
- Calmfors, L. (2001) "Macroeconomic Policy Coordination in the EU: How Far Should It Go?," *Swedish Economic Policy Review* 8, 3–14.
- Calmfors, L. (2002) "Fiscal Policy as a Stabilisation Policy Tool in the EMU," paper to the EPRU Network Conference, 23 May, Copenhagen University.
- Calmfors, L., A. Booth, M. Burda, D. Checchi, R. Naylor, and J. Visser (2001) "The Future of Collective Bargaining in Europe," in: T. Boeri, A. Brugiavini, and L. Calmfors (eds) *The Role of Unions in the Twenty-First Century*, Oxford: Oxford University Press, 1–155.
- Calmfors, L. and G. Corsetti (2002a) "A Better Plan to Loosen the Pact," *Financial Times*, 26 November.
- Calmfors, L. and G. Corsetti (2002b) "How to Reform Europe's Fiscal Policy Framework," forthcoming in *World Economics Journal*.
- Calmfors, L., H. Flam, N. Gottfries, M. Jerneck, R. Lindahl, J. Haaland Matlary, C. Nordh Berntsson, E. Rabinowicz, and A. Vredin (1997) *EMU – A Swedish Perspective*, Dordrecht: Kluwer Academic Publishers.
- Calmfors, L. and R. Nymoer (1990) "Real Wage Adjustment and Employment Policies in the Nordic Countries," *Economic Policy* 5, 397–448.
- Calmfors, L. and E. Uddén Sonnégård (2001) "Explaining Wage Developments," *Economic Review* 4, 38–67.
- Canzoneri, M.B. and B.T. Diba (2001) "The SGP: Delicate Balance or Albatross?," in: A. Brunila, M. Buti, and D. Franco (eds) *The Stability and Growth Pact*, Basingstoke: Palgrave, 53–74.
- De Grauwe, P. (2002) "Europe's Instability Pact," *Financial Times*, 22 July.
- The Economist (1999) "Economics Focus: Fiscal Flexibility: Could Finance Ministers Learn a Few Tricks from Central Bankers?"
- The Economist (2002) "The Euro-Zone's Stability Pact: Rules Are Made to Be Bent, Aren't They?," 27 July, 27–28.
- Edelberg, W., M. Eichenbaum, and J. Fischer (1998) *Understanding the Effects of a Shock to Government Purchases*, mimeo, Northwestern University.
- EEAG (2002) *Report on the European Economy*, European Economic Advisory Group at CESifo, Munich.
- Eichengreen, B., J. von Hagen, and I. Harden (1995) "Hurdles too High: Improving Budget Procedures Is the Best Preparation for EMU," *Financial Times*, 28 November, 16.
- Eichengreen, B., J. von Hagen, and R. Hausman (1999) "Reforming Budgetary Institutions in Latin America: The Case for a National Fiscal Council," *Open Economies Review* 10, 415–442.
- Eichengreen, B. and C. Wyplosz (1998) "The Stability Pact: More than a Minor Nuisance?," in: D.K.H. Begg, J. von Hagen, C. Wyplosz, and K.F. Zimmerman (eds) *EMU: Prospects and Challenges for the Euro*, Oxford: Blackwell, 65–114.
- Elmendorf, D.W. and N.G. Mankiw (1999) "Government Debt," in: J.B. Taylor and M. Woodford (eds) *Handbook of Macroeconomics* vol. 1 C, Amsterdam: Elsevier, 1615–1669.
- European Commission (2001) "Public Finances in the EMU – 2001," *European Economy* 3.
- European Commission (2002a) "Public Finances in the EMU – 2002," *European Economy* 3.
- European Commission (2002b) *Communication from the Commission to the Council and the European Parliament: Strengthening the Co-ordination of Budgetary Policies*, Brussels, 27 November.
- European Commission (2002c) "Autumn 2002 Economic Forecasts," *European Economy* 5.
- European Commission (2002d), "The EU Economy Review," *European Economy* 6.
- Fatás, A. and I. Mihov (2000) "The Effects of Fiscal Policy on Consumption and Employment: Theory and Evidence," Working Paper, INSEAD.
- Fatás, A. and I. Mihov (2001) "Government Size and Automatic Stabilizers: International and Intranational Evidence," *Journal of International Economics* 55, 3–28.
- Fatás, A. and I. Mihov (2002) "The Case for Restricting Fiscal Policy Discretion," Working Paper, INSEAD.
- Financial Times (2002a) "Fear of more EU Deficit Breaches," 27–28 July.
- Financial Times (2002b) "Second Again," 29 July.
- Financial Times (2002c) "Commission Chief Hints that Pact Is on Last Legs," 18 October.
- Frederiksen, N.K. (2002) "Fiscal Sustainability in the OECD. December 2001," Working Paper, Ministry of Finance in Denmark.
- Föttinger, W. (2001) "Balanced Budget Versus Golden Rule: On the Remediability of Fiscal Restrictions," in: *Fiscal Rules*, Rome: Banca d'Italia, 331–366.

- Gali, J. (1994) "Government Size and Macroeconomic Stability," *European Economic Review* 38, 748–756.
- Giavazzi, F. and M. Pagano (1996) "Non-Keynesian Effects of Fiscal Policy Changes: International Evidence and the Swedish Experience," *Swedish Economic Policy Review* 3, 67–103.
- Giavazzi, F., T. Japelli, and M. Pagano (2000) "Searching for Non-Linear Effects of Fiscal Policy: Evidence from Industrial and Developing Countries," *European Economic Review* 44, 1259–1289.
- von Hagen, J. and I.J. Harden (1994) "National Budget Processes and Fiscal Performance," *European Economy Reports and Studies* 3, 311–408.
- von Hagen, J., A. Hughes, 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*, Basingstoke: Palgrave, 94–112.
- von Hagen, J. and S. Mundschek (2001) "The Political Economy of Policy Coordination in the EMU," *Swedish Economic Policy Review* 8, 107–137.
- von Hagen, J., R. Perotti, and R. Hausmann (1998) *Sustainability of Public Finances*, London: CEPR.
- Hemming, R. and M. Kell (2000) "Promoting Fiscal Responsibility: Transparency, Rules and Independent Fiscal Authorities," in: *Fiscal Rules*, Rome: Banca d'Italia, 433–459.
- Holm, P., J. Kiander, and P. Tossavainen (1999) "Social Security Funds, Payroll Tax Adjustment and Real Exchange Rate: The Finnish Model," VATT, Government Institute for Economic Research, Discussion Paper no. 198, Helsinki.
- Johansson, Å. (2002) "The Interaction Between Labor Market Policy and Monetary Policy: An Analysis of Time Inconsistency Problems," in: *Essays on Macroeconomic Fluctuations and Nominal Wage Rigidity*, Stockholm: Institute for International Economic Studies, 15–55.
- Kell, M. (2001) "An Assessment of Fiscal Rules in the United Kingdom," IMF Working Paper WP/01/91.
- Knight, B. and A. Levinson (1999) "Rainy Day Funds and State Government Savings," *National Tax Journal*, LII 3, 459–472.
- Kopits, G. and S. Symansky (1998) "Fiscal Policy Rules," IMF Occasional Paper no. 162.
- Leibfritz, W., D. Roseveare, and P. van den Noord (1994) "Fiscal Policy, Government Debt and Economic Performance", OECD Economics Department Working Paper no. 144.
- Majone, G. (1996) *Regulating Europe*, London: Routledge.
- McGranahan, L. (1999) *State Budgets and the Business Cycle: Implications for the Federal Balanced Budget Amendment Debate*, mimeo, Federal Reserve Bank of Chicago.
- Melitz, J. (2000) "Some Cross-Country Evidence about Fiscal Policy Behaviour and Consequences for EMU," *European Economy* 2, 3–21.
- van den Noord, P. (2002) "Automatic Stabilizers in the 1990s and beyond," in: M. Buti, J. von Hagen, and C. Martinez-Mongay (eds) *The Behaviour of Fiscal Authorities*, Basingstoke: Palgrave, 130–148.
- Nymoer, R. and A. Rødseth (1999) "Nordic Wage Formation and Unemployment Seven Years Later," Memorandum no. 10/99, Department of Economics, Oslo University.
- Pisani-Ferry, J. (2002) "Fiscal Discipline and Policy Coordination in the Eurozone: Assessment and Proposals," Working Paper, Université Paris-Dauphine.
- Ramey, V. and M. Shapiro (1997) "Costly Capital Reallocation and the Effects of Government Spending," *Carnegie-Rochester Conference Series on Public Policy* 48, 145–194.
- Rotemberg, J. and M. Woodford (1992) "Oligopolistic Pricing and the Effects of Aggregate Demand on Economic Activity," *Journal of Political Economy* 110, 1153–1207.
- Seidman, L. (2001) "Reviving Fiscal Policy," *Challenge* 44 (3), 17–42.
- Storesletten, K., C.I. Telmer, and A. Yaron (2001) "The Welfare Cost of Business Cycles Revisited: Finite Lives and Cyclical Variation in Idiosyncratic Risk," *European Economic Review* 45, 1311–1339.
- Swedish Government Commission on Stabilisation Policy in the EMU (2002) *Stabilisation Policy in the Monetary Union*, SOU 2002:16, Stockholm: Fritzes.
- Taylor, J.B. (2000) "Reassessing Discretionary Fiscal Policy," *Journal of Economic Perspectives* 14, 21–36.
- Uhlig, H. (2002) "One Money, but Many Fiscal Policies in Europe: What Are the Consequences?," CEPR Discussion Paper no. 3296.
- Walton, D. (2002) "Europe's Stability Pact: In Need of New Clothes," *Global Economics Paper no. 81*, Goldman Sachs.
- Wijkander, H. and W. Roeger (2002) "Fiscal Policy in EMU: The Stabilization Aspect," in: M. Buti, J. von Hagen, and C. Martinez-Mongay (eds) *The Behaviour of Fiscal Authorities*, Basingstoke: Palgrave, 149–166.
- Wren-Lewis, S. (1996) "Avoiding Fiscal Fudge," *New Economy* 3, 128–132.
- Wren-Lewis, S. (2000) "The Limits to Discretionary Fiscal Stabilization Policy," *Oxford Review of Economic Policy* 16 (4), 92–105.
- Wren-Lewis, S. (2002) "Fiscal Policy, Inflation and Stabilisation in EMU," Working Paper, University of Exeter.
- Wyplosz, C. (2002a) "Fiscal Policy: Rules or Institutions?," *Stabiliseringspolitik i valutaunionen*. SOU 2002:16 Underlagsrapporter. Stockholm: Fritzes, 291–328.
- Wyplosz, C. (2002b) "A Better Way to Balance the Budget," *Financial Times*, 4 December.



## RETHINKING SUBSIDIARITY IN THE EU: ECONOMIC PRINCIPLES

### 1. Introduction

The European Union (EU) is currently facing major challenges, since the enlargement to East Central European and some other countries necessitates considerable changes in the structure of decision making and the operation of the union. The establishment of the Economic and Monetary Union (EMU) and the introduction of the euro as the common currency in EMU countries testify to a stride towards deeper political integration. These developments suggest that a reconsideration of the principles of public decision making is timely, and they have led to the establishment of the European Convention, which will submit its proposals to the European Council sometime in 2003. The tasks of the Convention concern the division of competence between member states and the Union, better definitions of tasks for EU institutions, coherence and efficiency of EU external action and democratic legitimacy of the Union.<sup>1</sup>

The current times provide a good opportunity to reconsider the public governance and organisation of economic activities within the EU. The key question is how decision-making for public sector activities should be distributed among different levels of government. The EU is only one layer of government and there are other levels of decision-making for public sector activities, including the national and local governments in all EU member countries. Some EU countries have an explicit federalist structure, so that their governments have local, state and national levels of public decision making. The non-federalist countries, for example Finland and Sweden, have also some intermediate levels of public administration, but these bodies do not have any legislative power.

The principle of subsidiarity is one of the key concepts in political decision-making in the EU. This principle stipulates that public sector decisions and problem solutions should be kept at the lowest layer of government that is appropriate for that specific task. However, the assessment of what is

appropriate must be specified by reference to further principles developed in the theory of fiscal federalism, such as international policy spillovers and international public goods (see Oates, 1972 and Shah, 1994 for a general discussion of this theme). Subsidiarity is a widely debated and even disputed concept (see, for example, Bermann, 1994; Begg et al. 1993 and Alesina, Angeloni and Schuknecht, 2002 and the references therein).<sup>2</sup> Subsidiarity raises several questions. First, is it possible to provide more concrete and operational content or guidelines to implementation of subsidiarity for specific public sector activities? Second, if this more precise content of subsidiarity can be found, how well is the EU currently matching these guidelines? Third, what might be the directions for the EU to take in order to improve its operation?

This chapter considers these questions from the perspective provided by economic analysis. Since the EU is to a large extent an economic union, an analysis of the concept of subsidiarity from the economic viewpoint can provide useful input to the current discussion about the Constitution of the EU and the future course of the development of the EU. We will argue that here are useful economic principles for assessing the application of subsidiarity in specific governmental activities.<sup>3</sup>

### 2. Economic principles for subsidiarity

Consider a group of countries which have formed an economic and political union in which there is a union level of government besides the national (and possibly lower level) governments in each country. The formation of an economic union implies the existence of important economic activities and policies that provide important benefits to the members of the union. The single market is probably the most fundamental economic factor in an economic union (see, for example, Weingast, 1994; Tabellini, 2002). Economic theory suggests that significant benefits can accrue from free trade in goods and from free movement of economic resources among countries.

<sup>2</sup> Devolution of the tasks of the federal government is in some respects an analogous debate in the United States (see, for example, Inman and Rubinfeld, 1997 and the discussion by Musgrave, 1997; Donahue, 1997 and Qian and Weingast, 1997).

<sup>3</sup> The chapter focuses on different government tasks. We will not discuss the economic analysis of the formal structure of political. See, for example, Baldwin et al. (2000, 2001) and Leech (2002) for the latter.

<sup>1</sup> See <http://european-convention.eu.int> for further information.

An economic union yields free trade and mobility only within its jurisdiction and not necessarily globally, but regional free trade areas are usually viewed as beneficial.<sup>4</sup> Since global free trade and mobility are extremely hard to come by through negotiations, regional integration may provide a way for reaping some of the benefits and it may also lead to further global integration in the future. A strong regional union can also provide impetus to the process toward global free trade, though this need not always be the case. Regional unions are only second best solutions, since they can lead to trade diversion rather than the creation of new trade. Trade diversion is evident in agriculture as a result of the EU Common Agricultural Policy, as witnessed for example by the very high food prices in the EU (Corsetti et al. 2002, Table 7.1).

These considerations suggest that protection of the single market with internal free trade and factor mobility and the enhancement of global free trade constitute the single most important economic function of an economic union. By itself, the single market and common trade policy provide a reason for the centralisation of specific economic interventions. The protection of the single market can be in conflict with the notion of subsidiarity that, in contrast, suggests the greatest possible decentralisation of public sector economic activities. Are there economic principles that can provide justifications for the decentralisation of public sector activities?

From an economic point of view, the notion of subsidiarity is largely the question of allocating public sector tasks among the different levels of government. Centralisation versus decentralisation of public sector tasks raises many different issues and the choice is not a routine matter. Centralisation of decision making can, in principle, provide savings of administrative costs, and problems of co-ordination of decisions and activities among the different levels of government can also be minimised.

#### Box 3.1

##### Heterogeneity and inefficiency of uniform decisions

To illustrate the significance of heterogeneity consider a public good, say a cultural activity, which has the characteristic that citizens of a country or region consume it jointly. In this case we can speak of total or marginal value of the public activity. Consider the following example: Suppose that for the citizens of country A any amount  $X_A$  of a public activity has a marginal value  $6 - X_A$  to them and that the marginal cost of production is 2. The efficient level of provision  $X_A$  to citizens of country A is  $X_A = 4$ . Suppose also that, if the citizens of country B choose any amount  $X_B$  of the same activity that has a marginal value, say  $(1/2)(6 - X_B)$  to them. Note that, at each level of supply, the citizens of country B value the public activity less than those of country A. The marginal cost of production is assumed to be the same as in country A. For country B the efficient amount of supply is  $X_B = 2$ , that is half of the efficient amount for country A. Any uniform supply of the public good decided by a union level government, for example the mid-point  $X = 3$ , is inefficient. This level is too low for the citizens of country A and too high for the citizens of country B. In other words, a uniform centralised decision about the level of public activity does not respect the preferences of the citizens in the two member countries. It would be better to leave the decision about this activity to each country, as the two countries would presumably choose the efficient levels 4 and 2 of output.

However, centralisation can also lead to rigid governance that, in turn, implies inefficiency when there is significant heterogeneity between countries in terms of the preferences of the citizens and also in terms of the costs and productivity of public activities. If centralised public sector decisions are uniform across the different member countries, as they tend to be in practice, they may bring about considerable losses of efficiency because they artificially enforce homogeneity on heterogeneous countries. Box 3.1 illustrates potential inefficiencies arising from rigid centralised decisions.<sup>5</sup>

It may also be true that bureaucracy increases in line with more centralised public sector governance, leading, for example, to excessive delays in decision making. The current EU is often criticised in this respect. Centralisation of public sector decisions can also lead to problems of accountability of political decision-makers. A centralised government structure means that the citizens are further apart from the decision-makers than if public decisions are carried out in a more decentralised structure. Accountability would seem to favour decentralisation of public decision making.

The preceding considerations confirm that subsidiarity, that is decentralisation of public sector

<sup>4</sup> Baldwin and Venables (1995) review the empirical evidence on the benefits from regional integration agreements.

<sup>5</sup> With heterogeneity, efficiency requires differentiation of benefits and costs between citizens or regions and this is often difficult to achieve in practice.



decision making, should be favoured as a basic principle. However, there are economic activities in which centralised governance can bring forth benefits in terms of improved efficiency and equity among citizens. Tax systems are a case in point. Decentralised taxation in a federation of countries can lead to serious biases that, in turn, result in inefficiencies and inequities. In general, economic analysis suggests a number of reasons for centralising the governance of some public activities and decentralising others. There is no simple or uniform answer to the question of centralisation versus decentralisation of public sector decisions. The answer depends on the nature of the economic activity under scrutiny. This chapter examines a number of economic activities more closely and discusses criteria for deciding when to apply the principle of subsidiarity.

### 2.1 Public goods, externalities and spillovers

Public goods are commodities or activities in which the benefits accrue jointly to the inhabitants of an area or jurisdiction. Consumption or use of the good by one economic agent (consumer or firm) in the jurisdiction does not reduce the amount available to other economic agents in the area or jurisdiction. Public goods are goods that are jointly consumed, and the consumption of the goods by individuals is non-rival.<sup>6</sup> The costs of provision of such goods are then to be shared among the inhabitants of the area or jurisdiction. National defence, works of art in public places and the preservation of the cultural heritage are standard examples of such public goods.

The benefits from a public good are geographically limited in most cases. However, if the public good character of an activity extends beyond the nation state, then it is efficient to make decisions about its provision, including the sharing of costs, at a higher level of government. The appropriate level can even be the supra-national European (or even global) level. If the beneficiaries of the public good make the decisions about the level of provision and payment of the production costs of the good, then efficiency can be achieved. Suppose that the decisions about the provision of the public good are made in a smaller area and thus by a smaller group than the geographical distribution of

benefits would dictate. If this is the case, then some benefits from the good and some potential contributors to its costs are not taken into consideration and the outcome is usually inefficiently low provision. Generally, public goods are provided most efficiently by a jurisdiction that has control over the minimum geographic area that would internalise the benefits and costs of its provision, as suggested by Oates (1972, p. 55).

There are probably not that many goods or activities for which the public good character or non-excludability of that activity extends well beyond national jurisdictions.<sup>7</sup> Countries and political unions of countries are different as the former is likely to be the natural jurisdiction for more public goods than the latter. We will come back to this case and the examples later when we discuss the activities of the EU.

In addition to union level public goods, there are other forms of economic activity where public involvement in appropriate ways can be justified. Generally speaking, this occurs when economic activity by some economic agent generates significant externalities or spillovers on other agents in the sense that the latter get unpaid benefits or incur unaccounted costs from this activity. If these externalities or spillovers extend well beyond the national jurisdictional borders, then involvement of union level public administration can be justified from the efficiency viewpoint.

It is easy to think of examples of externalities and spillovers. An important case is communication networks. The benefits from membership in a network to any single agent typically depend on the size of the network. Any particular method of communication is not useful to somebody if he cannot contact many other relevant people through it. Establishment of a common standard is often important for networks. Competition between, say different communication technologies, can be wasteful since the establishment of a network often involves significant investments. Competing standards can lead to wasteful investments; one of the duplicate investments in related technologies is often redundant. Moreover, economies of scale in production can possibly be achieved through the adoption of a common technology or standard.

<sup>6</sup> For private goods the consumed or used amount of the good by any economic agent is not available to other agents.

<sup>7</sup> For many public goods the minimum geographic area of benefits and costs is smaller than a nation or state. In these cases, lower levels of jurisdictions should provide the goods.

Public decision making can play an important role in the setting of a common standard and, for cases of networks or standards that naturally extend beyond national boundaries, the appropriate level of governmental decisions will be the union level. Economies of scale and benefits from common standards may also exist in public sector activities. If these are obtainable by joint decisions beyond national jurisdictions, then union level decision making is potentially justifiable on the basis of efficiency considerations.

The general lesson from the preceding discussion is that the appropriate level of government intervention – global, union, national, regional or local – depends on the nature of the economic activity. This must be assessed case by case, and there are few general rules about the most appropriate level of governmental action. Moreover, in practice compromises must be made since the geographical dispersion of benefits for public goods and spillovers need not follow the geographical boundaries of the EU. It might also be impractical to have too many levels that are geared just to decisions about specific public goods or spillovers. Administrative efficiency must also be taken into consideration.

It is important to point out that, even if a particular good is a public good, its provision need not always be handled by a government agency. The forms of government intervention, be it at union, national or local level, can vary a great deal from case to case. The forms of intervention can range from common regulation to the provision of the good or activity through public funds and agencies.

It must also be emphasised that governmental decision-making covers much more than the provision of physical goods and services. For example, ensuring a stable financial system for the operation of a single market is an activity in which externalities are not very tangible but nevertheless important. As discussed in Chapter 4, financial regulation is basically a union level activity for the EU. Another example that respects subsidiarity is the establishment of national fiscal councils which is suggested in Chapter 2. The notion of a single market for the EU has many dimensions and, as a common goal, implies different types of decisions and activities. The question of subsidiarity can be raised with respect to many different types of public activity, including taxes and subsidies, redistribu-

tion and the welfare state, labour market standards, regulatory standards for industry and competition, environmental standards and so on. We will analyse subsidiarity in relation to different types of activity further in Section 4.

## 2.2 Politico-economic aspects

The above discussion about the allocation of tasks to different levels of government has been conducted from the basic viewpoint of economic efficiency. Subsidiarity can, however, also be considered from a different economic viewpoint that combines the functioning of the political and economic systems. This is the so-called political economy approach.

### Competition between jurisdictions

One strand in the political economy approach emphasises competition between national jurisdictions. It is often argued that intergovernmental or “systems” competition can involve a “race to the bottom” where, in terms of economic efficiency, too low levels of public goods or activities are provided. A well-known example is tax competition. It is suggested that, in order to attract more capital and investment, countries compete by lowering their taxes on capital to zero, since capital is internationally mobile and would move to the country with lowest taxation. Labour is also potentially mobile and can possibly move in search of the highest net social benefits.<sup>8</sup>

A counterpart to tax competition is subsidy competition for particular industries. Shipbuilding provides a current example. Various governments in the world subsidise shipyards, and even within the EU it has been very difficult to abolish these subsidies. This seems in part to be caused by subsidisation of the activity in other countries outside the EU. These subsidies run seriously counter to the key principle for the EU, the protection of the single market in which the competitive conditions for different firms should be uniform.

The creation of unequal terms for competition within the single market caused by public subsidies by national governments is a risk that is potentially present in various activities. One case is the possible reintroduction of the national subsidisation of

<sup>8</sup> A recent OECD study (1998) discusses tax competition and ways for managing its possible harms.

agriculture that has been suggested in current discussions of agricultural reform in the EU. Natural conditions for agriculture differ among countries, but this is not a cause for concern. On the contrary, this is an instance of comparative advantage, the existence of which is the key basis for benefits from free international trade.

More generally, national regulatory systems can lead to “systems competition”, in which different regulatory standards can result in important externalities between countries and/or industries. However, in some cases systems competition can lead to more efficient government decisions. Solutions to these kinds of systems competition need to be worked out case by case, as discussed by Sinn (2003). It should also be noted that the arguments about intergovernmental competition and the “race to the bottom” or “race to the top” are not easy to assess empirically. There is clear evidence that, for example, corporate taxes have fallen and labour taxes have risen in many countries during the 1990s after liberalisation of capital movements (see Sorensen, 2000; Wildasin, 2000; Sinn 2003 and Devereux, Lockwood and Redoano, 2002). Nevertheless, the evidence on the mobility of productive resources across countries and tax competition is far from systematic, and it is not currently clear what the final verdict will be, as has been recently argued for example by Oates (1999) and Bhagwati (2002). It is probable that even within the EU this mobility is less than perfect, and thus the forces driving inter-governmental competition may not always be very strong.

#### The goals of government

A different view on intergovernmental competition arises from a fundamental tension in government objectives (see Weingast, 1995). On the one hand, a sufficiently strong government is needed to enforce private contracts and to protect the economic rights of private economic agents. These government activities are important for a proper functioning of markets. On the other hand, a government may not be benevolent but instead “Leviathan”, aiming to confiscate the wealth of its citizens. Strong governments may be successful in this. Intergovernmental competition for mobile economic resources can provide limits to Leviathan governmental behaviour, though the desirability of the outcome depends on the circumstances, as has been pointed out by Edwards and

Keen (1996). Improved accountability in a more decentralised government structure can also provide limits to Leviathan behaviour.

A union of countries or a federalist structure with decentralised governmental decision making can be a vehicle for an efficient system of markets. Three dimensions are pertinent here, according to Weingast (1995) and others. First, decentralised governments should have primary responsibility to regulate the economy unless specific circumstances call for more centralised decision-making. Second, the union of countries has the task of running a common market with no barriers to trade. The good functioning of the single market is the key governmental function at the union level. Third, the low levels of government should face “hard budget constraints” whereby they cannot have access to unlimited credit or the printing of money.<sup>9</sup> These aspects suggest an important role for subsidiarity as a general guideline, from which departures should be considered only for specific activities. Different ways of facilitating the single market are then the main reason for exceptions to the principle of subsidiarity.

For macroeconomic management these three criteria are relatively well in line with the current division of responsibility between the EU and national levels of decision-making. The monetary union with centralised decision-making for monetary policy can be seen as a method both, for promoting the common market in the EU and for preventing soft budget constraints for EMU member countries. The fiscal provisions in both the Maastricht Treaty and the Stability and Growth Pact are a further means for preventing unlimited credit by EMU member countries, even if concerns are occasionally expressed about the restrictive nature of the Pact from the point of view of macroeconomic stabilisation policy (see Chapter 2).

The actual operation of the EU can vitiate the economic principles of subsidiarity versus centralisation. Political bargaining and lobbying can lead to inefficiencies in public decision-making. Decision-making at the EU level is not free from these phenomena. On the other hand, subsidiarity may be exploited by national lobbies, and moving certain decisions to the Union level can provide benefits

<sup>9</sup> State and local governments in the United States frequently borrow for long-lasting capital projects but operate in private credit markets in the funding of this debt (McKinnon, 1997).

to member states. EMU and common monetary policy illustrates this phenomenon; it enhanced the credibility of monetary policy and has ensured low interest rates for some countries (see, for example, Corsetti et al. 2002, Figure 4.1).

Overall, the political economy aspects of governmental decisions in a union of countries suggest that the implications of intergovernmental or systems competition must also be assessed for specific functions and activities of the government. These include tax competition, competition in regulatory systems and issues concerning migration and labour. A further controversial subject of subsidiarity in decision-making concerns redistribution. We will take up these topics below.

### 3. What does the European Union currently do?

The previous section considered the basic economic principles of subsidiarity. It was suggested that the important criterion is the existence of public goods or externality effects with strong geographical dispersion of benefits or costs across a number of EU countries. While we still need to consider further the specific activities in the light of the general principles, it is also important to take a look at what the EU currently does. This will provide a

basis for a further discussion of how different types of activities might be placed in the different levels of government.

Here we consider empirically the current EU activities and policies. We look at them from two different angles. First, we take up the traditional approach and consider the structure of EU-level public spending. We compare the structure to that of existing federalist countries, such as the US, Canada, and Germany. This comparison is useful even if the EU is not and is not meant to be a federation, but rather a union of independent countries. This is so because an efficient distribution of tasks among different levels of government does not require the formation of a federation from a legal point of view. Second, we consider the activities and policies of the EU from the point of view of regulation of the economy that does not often lead to significant public spending. This is important since the budget of the EU is far more limited than that of individual federalist or unitary government countries. Focusing only on public spending and revenues would give a misleading picture of EU activities and policies.

#### 3.1 Public spending

The EU budget is shown in Table 3.1. It is evident that EU budgetary spending focuses on very spe-

Table 3.1

EU expenditures by function

Function	1991	1994	1997	2000	2001	2002
Total expenditure in million EUR	55.4	70.0	82.4	89.4	92.6	95.7
EAGGF-Guarantee Section	58.7	53.5	50.1	46.4	47.3	46.5
Structural operations, structural and cohesion funds; financial mechanism, other agricultural and regional operations, transport and fisheries	25.8	30.8	32.3	35.8	34.3	33.8
Training, youth, culture, audio-visual media, information, social dimension and employment	0.7	0.8	0.9	0.8	0.8	0.9
Energy, Euratom nuclear safeguards and environment	0.4	0.2	0.2	0.2	0.2	0.2
Consumer protection, internal market, industry and trans-European networks	0.5	0.7	0.9	1.1	1.2	1.2
Research and technological development	3.2	3.6	3.8	4.0	3.9	3.9
External action	4.0	4.8	5.8	6.1	6.7	7.7
Common foreign and security policy	0.00	0.00	0.04	0.03	0.04	0.04
Guarantees and reserves	2.4	0.5	0.5	0.2	0.2	0.4
Administrative expenditure of the Commission	3.0	3.5	3.4	3.4	3.5	3.5
Administrative expenditures (of all other institutions = Parliament, Council, Court of Justice, Court of Auditors, Economic and Social Committee, Committee of the Regions, European Ombudsman, European Data Protection Supervisor)	1.7	1.7	1.8	1.8	1.8	1.9
Total	100	100	100	100	100	100

Source: Eurostat, Statistisches Jahrbuch für das Ausland, Statistisches Bundesamt 2001, Amtsblatt der Europäischen Gemeinschaften; Rechtsvorschriften, Haushaltspläne, Amt für Amtliche Veröffentlichungen der Europäischen Gemeinschaften 1991–L30; 1994–L34, 1996–L22; 1997–L44; 1998–L44; 1999–L39; 2000–L40; 2001–L56; 2002–L2.

**Table 3.2**  
Central, state and local government expenditures by function in % of total expenditure - 1996

	Germany			Spain			Australia			USA		
	central	state	local	central	state	local	central	state	local	central	state	local
1. Total Expenditure	59.6	24.1	16.2	69.0	19.3	11.7	58.8	36.9	5.1*	52.6	25.9	21.5
2. General Public Services	38.1	33.5	28.4	46.8	14.8	38.5	48.7	42.3	9.1*	68.2	12.4	19.4
3. Defense	100.0	0.0	0.0	100.0	0.0	0.0	100.0	0.0	0.0	100.0	0.0	0.0
4. Public Order & Safety	7.6	71.7	20.7	60.6	12.8	26.5	15.1	81.6	3.4*	16.6	28.1	55.3
5. Education	4.2	68.4	27.4	30.8	63.0	6.2	29.4	70.5	0.1*	5.2	43.3	51.5
6. Health	72.4	12.5	15.1	36.7	60.4	2.9	53.3	46.0	0.7*	56.7	33.0	10.3
7. Social Security & Welfare	78.6	10.9	10.5	94.3	3.7	2.0	91.2	7.4	1.4*	70.5	21.2	8.3
8. Housing & Commun. Amen.	7.4	26.4	66.2	7.6	18.3	74.1	23.9	44.2	31.9*	70.3	9.4	20.3
9. Recr., Cultr., Relig. Affrs.	4.4	32.9	62.7	21.4	26.9	51.7	26.4	37.1	36.5*	17.3	11.4	71.3
10. Econ. Affairs & Services (11-15)	46.1	35.5	18.4	49.8	29.6	20.6	38.3	47.1	14.6*	42.9	36.2	20.9
11. Fuel & Energy	36.1	52.6	11.3	91.6	7.2	1.2	66.1	33.9	0.0	97.9	2.1	0.0
12. Agric., Forestry, Fishing, Hunt	15.1	75.1	9.8	31.8	60.2	8.0	49.9	49.5	0.6*	48.3	40.8	11.0
13. Mining, Manufac. & Construc.	93.9	6.1	0.0	47.4	46.1	6.6	43.5	40.4	16.0*	100.0	0.0	0.0
14. Transportation & Comm.	43.4	33.3	23.3	49.6	19.5	31.0	17.1	58.6	24.4*	27.8	44.7	27.5
15. Oth. Econ. Affairs & Serv.	50.0	30.8	19.2	60.5	24.4	15.2	66.4	27.0	6.6*	66.4	25.1	8.6
16. Other Expenditures of which Interest Payments	63.1	31.1	5.8	84.5	6.9	8.6	77.9	19.7	2.3	62.9	18.5	18.6
	100.0	0.0	0.0	100.0	0.0	0.0	100.0	0.0	0.0	100.0	0.0	0.0

\*: From 1996 onward all government data are compiled on a year ending June 30.

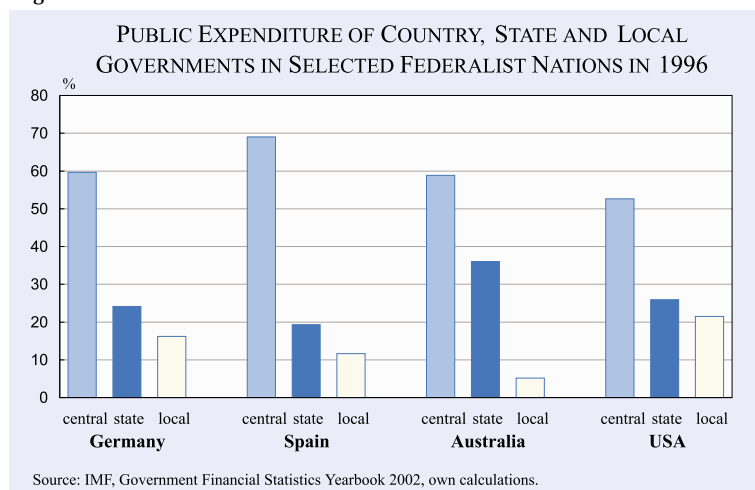
Source: Government Finance Statistics Yearbook 2002, IMF; calculations by the Ifo Institute.

cific tasks. Moreover, these tasks are quite surprising when they are compared to what economic principles would suggest. Even today, nearly half of the EU budget is devoted to agricultural subsidies and guarantees, even though the share has decreased during the 1990s. For 2002, the share is 46.5 percent, down from 58.5 percent in 1991. Structural funds and operations are the second largest item in the EU budget, with its share at approximately 34 percent in 2002. These two main items are largely redistributive in nature and, as discussed below, it is far from obvious that they should be the responsibility of the EU level of government. The remaining important items are external action, that is policies towards non-EU countries (for example development aid and pre-accession strategy) and international operations with a budget share of 7.7 percent in 2002, research and technological development with a share of 3.9 percent and administration with a budget share of 5.4 percent in 2002. EU spending on research and technological development can to an extent be viewed as a natural EU-level spending item. However, this is so only as long as the expenditure is an attempt to correct for externalities in research, as will be discussed below.

The EU budget is quite small in comparison with the government budgets of the member countries as illustrated by the following comparisons. In the period 1996–2000 the EU budget was only 2.4 percent of the total of government budgets of the EU member countries. In 2000, the EU budget was only 1.1 percent of joint EU gross domestic product whereas the share of national budgets of EU member countries in GDP was 46.8 percent.

The structure of the EU budget can be contrasted with the division of public expenditure between national, state and local government budgets. Figure 3.1 shows this division for some federalist states. Public expenditures are spread widely across different activities ranging from key public

Figure 3.1





services, education and health, social security and welfare to a number of other sectoral activities. There are notable differences in public expenditures among the different levels of government in the federalist countries, as shown in Table 3.2. For example, public safety is a federal matter in Spain whereas it is more the responsibility of the state or local government in the other countries shown. Another example is education, which is a state responsibility in Germany and a shared task in other countries. In general, for each function, the division of responsibilities between the three levels of government shows significant variability, such that federal countries do not present a unified picture in this respect. A very important observation is that the federal government accounts for a relatively high share of total public spending. This share ranges from about 52 to 69 percent in the countries shown in Figure 3.1. This is in marked contrast to the EU budget.

### 3.2 Regulatory activities and policies

The regulatory instruments of EU policies can be divided into Treaties, Secondary Legislation and Other Acts. Treaties are negotiated at Intergovernmental Conferences to be ratified by all member countries. Treaties are the ultimate source of mandate and legitimacy for all EU institutions and their legislative and judicial authority.

Treaties are sometimes very general and at other times specific, so that much of the governance by the EU is based on secondary legislation and other acts. Binding legal acts are divided into: (i) Regulations that are directly applicable without national implementation, (ii) Directives that are binding but require national implementation and (iii) Decisions that bind all the parties concerned. In addition, the EU Commission issues a number of softer non-binding documents. White Papers, signalling legislative strategies, are an example of such documents. Besides the activity that is legislative in nature, the European Court of Justice has a key role as it both

interprets EU Law and seeks its application and enforcement. Finally, international agreements negotiated by the EU are a further form of EU activity that affects its member states.<sup>10</sup>

The legislative activity of the EU has grown significantly over the years, as is indicated by Table 3.3 (see Alesina et al. 2002 and Pollack, 2000 for further discussions). The table reports the number of EU legal acts (Directives, Regulations and Decisions), EU Court Decisions, international agreements and non-binding documents for five year periods. There has been a very rapid growth in the regulatory activities of the EU, while the expenditure share has risen only very slightly (see Table 3.1). This indicates that a very significant part of EU intervention has the form of regulation rather than direct spending.

The data in Table 3.3 provide information only on the total number of activities and policies of the EU and is, of course, limited in three important respects. First, pure numbers do not indicate the importance of specific regulatory acts or public expenditures. Second, the legal acts reported are not good indicators of the acts that were actually implemented. Many directives have not been implemented in national laws and, what is worse, some countries have an extremely poor record in terms of enforcing the laws and directives. Third, the data have not been classified according to the functions that might or might not properly belong to the domain of the EU as discussed above. This limitation is difficult to overcome, but fortunately a recent study by Alesina, Angeloni and Schuknecht (2002) has considered the activities and policies of the EU from the viewpoint of economic functions.

Table 3.3

#### EU activities; 1971 - 2000

	1971-1975	1976-1980	1981-1985	1986-1990	1991-1995	1996-2000
Directives	108	264	330	537	566	532
Regulations	1,788	4,022	6,106	9,124	7,752	5,583
Decisions	716	2,122	2,591	3,251	4,242	5,299
Total "domestic" legal acts	2,612	6,408	9,027	12,912	12,560	11,414
Court decisions	693	1,155	1,760	2,127	2,027	2,487
International Agreements	454	488	517	542	852	1,223
Recommendations and Opinions	68	114	95	143	1,246	1,505
White and Green Papers	0	0	1	9	28	37

Source: Alesina, Angeloni, Schuknecht (2001).

<sup>10</sup> Another important EU activity nowadays is the European Central Bank, which is responsible for the EU activities in the sphere of monetary policy. We will not consider the ECB activities.

We will next describe the regulatory activities of the EU using this study.

Alesina, Angeloni and Schuknecht (2002) divide the functions of the EU into policy domains as follows:

- (1) International trade: the creation of the common market and external trade policy;
- (2) Common Market: free mobility of goods, services, capital and people;
- (3) Money and finance;
- (4) Education, research and culture;
- (5) Environment;
- (6) Sectoral business relationships: agriculture (and fishing), industry (including energy) and transport;
- (7) Non-sectoral business relations: laws, market competition and state subsidies;
- (8) International relations: defence and foreign policy;
- (9) Citizen and social protection: home affairs, justice, consumer protection, civil rights, health, labour relations and so on.<sup>11</sup>

This categorisation reflects only partially the basic duties of the EU as outlined in Section 2 and below in Sections 4–7. Categories (1) and (2) include pri-

mary functions of the EU and for most of them the allocation of the tasks to the EU level of governance is largely evident.<sup>12</sup> In category (3) monetary policy has been delegated to the European Central Bank, a EU level institution, but the “lender of last resort” functions have been left to national authorities. In contrast, the appropriate level of public decision-making on fiscal policy is far from obvious and is currently a hotly debated issue, as discussed in Chapter 2. In categories (4) and (5) there are clearly variations, as some particular issues can be naturally conceived to be governed at the EU level, while others are mostly national or even local. In category (6) agriculture is the oldest, most active but very controversial area of EU policy. By the criteria in this chapter it is not a clear EU level task. In contrast, some other sector policies in (6) may provide public goods or spillovers. Category (7) contains both natural EU level activities (for example competition policy), but state aids and subsidies can also be counterproductive, possibly undermining the single market programme. Finally, category (9) contains both policy domains with clear supra-national aspects (such as migration and

<sup>11</sup> The Social Cohesion chapter and attached social, structural and regional funds are included here.

<sup>12</sup> It should be noted though that (2) includes some regulatory issues, whose conclusion is not obvious.

Table 3.4

Breakdown of EU legislation by policy domain: number of regulations, directives and decisions

	1971–1975	1976–1980	1981–1985	1986–1990	1991–1995	1996–2000
1 International trade	864	2,573	2,208	3,416	2,783	2,041
2 Common market	133	251	184	268	305	529
3 Money and finance	49	69	98	65	100	249
4 Education, research, culture	15	40	73	104	180	136
5 Environment	29	61	98	131	197	255
6 Business relation, sectoral	1,155	3,051	5,685	7,281	7,130	5,437
6a Agriculture and fishery	980	2,479	5,165	6,880	6,654	4,907
6b Industry and energy	109	445	408	300	309	370
6c Transport	66	127	112	101	167	160
7 Business non sectoral (compet./subs./company law)	116	137	256	358	669	1,406
8 Intl. relations & foreign aid (excl. intl. trade)	155	100	162	768	426	501
9 Citizens and social protection	96	126	263	521	770	860
<b>Total</b>	<b>2,612</b>	<b>6,408</b>	<b>9,027</b>	<b>12,912</b>	<b>12,560</b>	<b>11,414</b>
	Shares (% of column)					
1 International trade	33.1	40.2	24.5	26.5	22.2	17.9
2 Common market	5.1	3.9	2.0	2.1	2.4	4.6
3 Money and finance	1.9	1.1	1.1	0.5	0.8	2.2
4 Education, research, culture	0.6	0.6	0.8	0.8	1.4	1.2
5 Environment	1.1	1.0	1.1	1.0	1.6	2.2
6 Business relation, sectoral	44.2	47.6	63.0	56.4	56.8	47.6
6a Agriculture and fishery	37.5	38.7	57.2	53.3	53.0	43.0
6b Industry and energy	4.2	6.9	4.5	2.3	2.5	3.2
6c Transport	2.5	2.0	1.2	0.8	1.3	1.4
7 Business non sectoral (compet./subs./company law)	4.4	2.1	2.8	2.8	5.3	12.3
8 Intl. relations & foreign aid (excl. intl. trade)	5.9	1.6	1.8	5.9	3.4	4.4
9 Citizens and social protection	3.7	2.0	2.9	4.0	6.1	7.5
<b>Total</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>

Source: Alesina, Angeloni, Schuknecht (2001).

Table 3.5

## Breakdown of EU non-binding acts by policy domain

	White Papers			Green Papers		
	1971–1980	1981–1990	1991–2000	1971–1980	1981–1990	1991–2000
1 International trade						1
2 Common market		2	1		4	11
3 Money and finance			2			1
4 Education, research, culture			1			5
5 Environment			1		1	5
6 Business relation, sectoral			4		1	8
6a Agriculture and fishery					1	
6b Industry and energy			1			4
6c Transport			3			4
7 Business non sectoral (compet./subs./company law)			1		2	7
8 Intl. relations & foreign aid (excl. intl. trade)			1			1
9 Citizens and social protection			3			12
Total	0	2	14	0	8	51
	Shares (% of column)					
1 International trade		0.0	0.0		0.0	2
2 Common market		100.0	7.1		50.0	21.6
3 Money and finance		0.0	14.3		0.0	2
4 Education, research, culture		0.0	7.1		0.0	9.8
5 Environment		0.0	7.1		12.5	9.8
6 Business relation, sectoral		0.0	28.6		12.5	15.7
6a Agriculture and fishery		0.0	0.0		12.5	0.0
6b Industry and energy		0.0	7.1		0.0	7.8
6c Transport		0.0	21.4		0.0	7.8
7 Business non sectoral (compet./subs./company law)		0.0	7.1		25.0	13.7
8 Intl. relations & foreign aid (excl. intl. trade)		0.0	7.1		0.0	2
9 Citizens and social protection		0.0	21.4		0.0	23.5
Total	0	100	100	0	100	100

Source: Alesina, Angeloni, Schuknecht (2001).

justice) and others with far less clear EU level governance requirements (such as social protection and structural and regional funds).

Looking at Tables 3.4 and 3.5, it is evident that category (6), Sectoral business relations, constitutes the most active area of EU activities and policies. Moreover, category 6 (agriculture and fishery) is by far the largest subgroup within it. These activities are not obvious areas of EU intervention and we will consider them further below. In the other domains of EU policy, categories (1) and (2) International trade and the Single Market are sizeable and quite naturally so since they concern the key EU function, the creation and protection of the single market. There is significant growth in the share of some other categories, especially in (9) Citizen and social protection and (7) Non-sectoral business relations. Taken together, the total number of EU legislative and non-binding acts has shown significant growth over the years.

### 3.3 An assessment

EU activities and policies are regularly assessed by the citizens of its member countries in the opinion survey conducted annually by the Eurobarometer .

Table 3.6 reports the average results for the EU as a whole from the latest survey.<sup>13</sup> Table 3.7 reports the country-specific results as deviations from the corresponding EU average in Table 3.6. The two columns for the EU in both tables describe, respectively, the percentages of people favouring either decision making at national government level, marked as 'Nat', or decision making as a shared responsibility of the EU and national government, marked as 'EU'.

Table 3.6 shows that citizens of the EU member countries would clearly like to give a shared role to the EU with national governments in monetary

- and fiscal matters,
- environmental issues,
- international relations (including humanitarian aid, poverty and exploitation of human beings),
- research,
- global crime protection and
- regional aid.

According to the poll, EU activities should not be focused very much on

<sup>13</sup> See Alesina, Angeloni and Schuknecht (2002) for further discussion using earlier data.

**Table 3.6**  
Eurobarometer-Policies: National or EU level decision-making - Results in % of EU average<sup>a)</sup>

	EU 15	
	NAT	EU
Defence	45	51
Environment	33	64
Currency	31	65
Humanitarian aid	24	72
Health and social welfare	59	37
Media	56	38
Poverty/social exclusion	30	67
Unemployment	44	53
Agriculture & Fishing	40	54
Regional aid	32	63
Education	61	36
Research	27	68
Information EU <sup>b)</sup>	20	74
Foreign policy	22	71
Cultural policy	49	44
Immigration	48	49
Political asylum	45	51
Organised crime	25	72
Police	63	34
Justice	58	38
Accepting refugees	43	53
Juvenile crime	51	45
Urban crime	56	40
Drugs	26	71
Exploit. Hum. Beings	16	80
Terrorism	12	85

<sup>a)</sup> Differences between "NAT" and "EU" and 100 is the percentage of don't know. - <sup>b)</sup> Information about the EU, its policies, institutions and bodies.

Source: Eurobarometer Spring 2002, p. B 43, 44,  
[http://www.gesis.org/en/data\\_service/eurobarometer/index.htm](http://www.gesis.org/en/data_service/eurobarometer/index.htm).

- education,
- agriculture and fishery,
- health and social welfare and
- unemployment.

The survey results in Table 3.7 for individual countries indicate some interesting country-specific opinions. First, citizens' opinions in some countries follow the EU average rather closely. Taking (plus or minus) 20 point deviation from the EU as a criterion, it can be seen that opinions in Belgium, Germany, Spain, France, Luxembourg and the Netherlands do not differ radically from the EU average opinion. Second, citizens in the Scandinavian countries show a strong preference for respecting subsidiarity, and this is so especially for foreign policy, humanitarian and social issues, refugee policy, justice and crime. Third, there are some areas for which country opinions do not differ radically from the EU average. These areas are media, poverty, regional aid, education, research, foreign policy, police, drugs, exploitation and terrorism.

The empirical data yield a rather clear total picture. First, in terms of public spending, the EU is

quite far from the expenditure patterns of federalist nations. The EU budget share in GDP is quite small – indeed it is much smaller than the corresponding share in federalist countries. Thus the balance of government tasks in the EU is very much geared towards national governments, which accords well with the principle of subsidiarity. The EU is not close to being a federation, even though the non-budgetary interventions of the EU run to some extent counter to this conclusion. Second, the tasks that the EU level public administration is currently undertaking do not accord that well with the opinions of its citizens. Third, the current tasks of the EU do not match very closely the economic principles for decentralisation of public sector responsibilities, which are considered further in Sections 4–6 below.

#### 4. Activities for an economic union: examples and cases

We have seen that, for a number of activities, EU level public intervention can be justifiable for efficiency reasons. We will now discuss key activities for which union level government intervention is clear-cut in our opinion. However, we will also consider some activities that are more controversial in this respect.

##### 4.1 Public goods

Section 2 argued that, for efficiency reasons, there should be Union-level decision making for public goods for which the geographical distribution of benefits extends widely across different nations within the union. The clearest example of public goods with such benefits is probably national defence and foreign policy associated with external security. Strong defence by a country can bring major benefits to friendly neighbouring countries as it enhances their security, for example, against threats against the territory of the former. Significant cost savings exist moreover in compatible weapons systems and common weapons development, exchange of military and security information and a common EU foreign policy diplomatic corps for external security.

The existence of significant public goods aspects in national defence and external security policy are evidently areas where decision-making at the EU level is justifiable from an economic viewpoint.

**Table 3.7** Eurobarometer - Policies: National or EU level decision-making - Results in % by country<sup>a)</sup>  
deviation from EU average

	B		DK		D		GR		F		FRI		I		L		NL		A		P		FIN		S		UK				
	Nat	EU	Nat	EU	Nat	EU	Nat	EU	Nat	EU	Nat	EU	Nat	EU	Nat	EU	Nat	EU	Nat	EU	Nat	EU	Nat	EU	Nat	EU	Nat	EU			
Defence	-10	10	12	-11	7	6	4	4	-7	6	3	-3	18	-21	-14	15	-8	7	-11	9	12	-12	16	-19	46	-44	33	-31	13	-13	
Environment	2	-1	11	-9	-5	5	-4	6	-7	6	2	2	10	-13	-6	6	0	-1	-3	3	14	-14	14	-17	25	-23	14	-12	12	-11	
Currency	-9	11	14	-13	-5	5	-8	10	-8	7	-4	6	-1	-2	-20	21	-15	16	-11	11	6	1	10	-12	15	-13	14	-14	35	-37	
Humanitarian and health and social welfare	-4	5	13	-13	1	-2	-2	4	-6	6	-4	5	-3	-1	-10	10	5	-5	1	-2	17	-17	9	-11	24	-23	20	-18	6	-8	
	3	-2	23	-21	0	0	-23	25	-7	8	10	-9	-1	-1	-14	13	8	-8	5	-4	0	-8	4	-6	29	-26	30	-27	4	-4	
Media	-3	5	18	-15	2	-3	-12	15	-4	3	-1	2	-7	3	-9	8	-8	9	4	-5	10	-9	10	-11	-10	11	19	-15	4	-5	
Poverty/social exclusion	3	-3	8	-7	-3	1	-5	6	-7	6	3	-2	1	-4	-9	9	4	-4	12	-13	4	-6	8	-11	17	-17	7	-5	6	-7	
Employment	0	0	18	-17	-2	1	-14	16	-4	3	1	-1	0	-3	-17	17	10	-11	12	-12	-1	0	6	-8	21	-21	8	-6	14	-15	
Agric. & Fishing	-10	12	4	0	-7	6	1	3	-7	7	3	-1	4	-6	-5	3	2	-1	0	1	16	-17	11	-11	33	-29	16	-12	12	-13	
Regional aid	-7	9	-3	5	-5	4	-6	9	-7	7	11	-10	-10	7	-1	2	-6	7	-1	0	1	-2	3	-5	7	-5	4	-1	1	-4	
Education	8	8	11	-10	-1	-2	-17	18	-7	6	2	-2	1	-4	-16	15	9	-10	12	-11	5	-5	8	-10	16	-16	7	-6	12	-13	
Research	-6	7	5	-3	6	-7	-8	10	-7	6	-5	5	-8	3	-12	13	-14	15	-1	-1	4	-3	9	-11	14	-14	11	-9	8	-8	
Information policy	-4	5	15	-13	-3	3	-2	6	-4	3	1	0	-1	-1	-6	7	-3	3	3	-2	5	-5	21	-22	8	-7	11	-8	4	-7	
Foreign policy	-8	9	16	-13	-3	3	2	2	-7	6	0	1	1	-4	-10	10	6	7	-1	2	6	-5	9	-10	10	-10	13	-11	12	-14	
Cultural policy	3	-1	21	-28	2	-2	-4	8	-12	12	2	2	10	-11	-1	15	5	-5	10	-10	14	-12	13	-13	13	-12	24	-21	3	-5	
Immigration	-10	10	17	-17	8	-9	-15	14	-4	4	10	-15	-19	18	1	4	-6	-10	9	-10	20	-20	9	-13	35	-34	18	-17	17	-17	
Political system	-9	10	18	-16	9	-8	-14	14	-15	13	-4	4	0	-13	20	18	-1	0	-7	8	21	-20	8	-11	24	-23	14	-12	16	-16	
Organised crime	-7	8	3	-1	6	-6	-4	6	-7	6	-3	3	10	-12	-3	3	-3	2	-7	7	2	-2	6	-8	2	-2	-3	5	20	-20	
Police	6	-6	8	-7	2	0	-12	13	-11	9	-1	1	0	-5	-10	9	3	-5	2	-2	10	-9	8	-10	15	-14	17	-15	13	-12	
Justice	2	0	25	-25	3	-3	-8	10	-11	10	1	0	0	-2	-12	12	4	-4	-8	8	14	-13	10	-11	16	-15	17	-16	9	-8	
Accepting refugees	0	9	35	-24	6	-5	-8	9	-11	10	-7	8	17	-20	-18	17	12	-12	-5	5	22	-21	7	-10	39	-37	25	23	16	-16	
Juvenile crime	5	2	22	-20	3	2	-22	25	-17	16	7	-6	5	-7	-14	14	1	-1	8	-6	-5	5	2	-5	13	-12	20	-17	18	-18	
Urban crime	1	1	19	-16	-2	2	-24	26	-13	12	4	-3	-1	-1	-6	6	-3	3	8	-7	-13	14	4	-7	-1	1	14	-11	15	-14	
Drugs	-1	2	1	1	-4	3	-4	6	-2	1	-4	4	2	-4	-8	8	12	-12	8	-8	2	-2	11	-13	6	-7	10	8	11	-11	
Expatriation	-4	5	1	2	3	3	0	3	-3	0	-1	2	0	-3	-5	6	-1	3	-1	4	-3	-3	10	-11	4	-3	4	3	10	-10	
Benign																															
Terrorism	-4	5	1	1	-1	-1	0	1	0	-1	-1	1	0	-5	5	-4	3	0	0	3	-2	9	-11	3	-2	3	-2	2	3	6	-7

<sup>a)</sup> Difference between 'Nat' and 'EU' and '99' is the percentage of don't know. <sup>b)</sup> Information about the EU, its policies, institutions and bodies.

Source: Eurobarometer Spring 2002, p. B.43, 44; [http://www.gesis.org/gen\\_data\\_service/eurobarometer/index.htm](http://www.gesis.org/gen_data_service/eurobarometer/index.htm)



Efficient provision of these services can nevertheless take a variety of different forms and it need not necessarily be fully centralised in an EU agency even if overall responsibility should rest with EU administrative structures. At the moment the role of the EU is quite limited in national defence and security, since NATO has in effect had this role already for many years. Some EU countries are, however, not members of NATO, and this situation makes the role of the EU fairly complex. In the Eurobarometer opinion survey, defence was not seen as a top priority for EU level action. Evidently, there is major heterogeneity in preferences across citizens of different member countries and the conclusion is less clear-cut than economic considerations suggest (see, however, Persson, Roland and Tabellini, 1998).

Other related goods and services, of which public goods aspects can be geographically widely dispersed within the EU, are internal security and border control, as discussed, for example, by Tabellini (2002). With the Schengen agreement in place, the benefits from joint decision-making about the forms of border control are apparent. Correspondingly, there are potentially large benefits from creating joint mechanisms in internal security such as Europol and close co-operation between national police in the member countries. The importance of joint action in internal security has become apparent after recent terrorist attacks.

Apart from national defence and security policy, it appears that there are relatively few public goods for which the benefits accrue to the EU members jointly. Other public goods, such as those associated with culture, are often national or even more local in character.<sup>14</sup> Provision of cultural services raises difficult conceptual issues. Some forms of culture can be provided through the market system, while other forms seem to require some form of public intervention. It appears that there is little need to have union level decision-making or intervention for local or national public goods and services.

#### 4.2 Externalities and spillovers

Cross-border externalities and spillovers are the other main category for possible governmental decision making and intervention at the EU level.

This is the case when benefits and/or costs from externalities and spillovers are widely dispersed across the member states, so that a national jurisdiction (or contracting between a limited number of countries) may not be able to internalise these benefits and costs. Financial markets with inter-bank cross-border exposures provide an example of an externality which is potentially EU wide. This case will be discussed in Chapter 4. Here we take up other economic activities in which geographically widely dispersed spillovers or externalities can also arise.

#### Networks

Trans-European networks, for example in transport and in research, are good examples of operational structures that try to reap benefits from spillovers arising as an integral part of the formation of a network. Compatibility of different national parts of a network and free or low-cost use of such networks leads to reductions in operating costs and can bring economic benefits from the existence of a larger number of nodes in the network. Free access to national networks of for example roads and railways for users from different countries is very important for reaping the full potential benefits from these networks.

If investment into and provision of a national network is limited to the country in which the network lies, then risks of under-investment are a real concern if important benefits from the network accrue to users from other countries. Freeways and rail transport network with intensive traffic across national borders by compatible equipment (for example trains) may need to be supported by inter-governmental intervention, possibly at the EU level.<sup>15</sup>

It is, however, important to distinguish clearly between network activities that benefit all EU countries and others that affect only two or a few countries. Investments in telecommunications, for example, belong to the former category, since each country will contact every other country. Road and railway networks, on the other hand, belong to the second category. The border crossing connections will typically help two countries only, and sometimes a third or a fourth country is affected, but

<sup>14</sup> However, a few cultural activities, such as preservation of key monuments of human cultural heritage can be seen as even global public goods.

<sup>15</sup> See, for example, Shah (1994) for a discussion of the principles for the design of such grants.

rarely if ever do they involve a higher number of countries. Thus the EU should not subsidise such connections. The EU could, however, have a useful role in terms of coordinating and facilitating the negotiations between the countries involved and to design common standards for inter-community networks.

Research is an activity that can involve significant externalities. For example, a specific scientific discovery can provide input to additional discoveries. The additional discoveries may well take place in different countries, which indicates that the externalities from research satisfy the requirement of geographically wide dispersion of benefits. In any case, the initial producer usually incurs all of the costs of the discovery but may not be the recipient of the benefits from the additional discoveries. Moreover, cooperation of different researchers can lead to increases in productivity, which suggests that networking by researchers can facilitate research. In these situations the research system may not operate at an efficient level with too little investment in research.

On the other hand, research often contains an element of a race to be the first to find a result which in itself implies overinvestment and unnecessary parallel activities. Moreover, very successful research is carried out by private universities in the United States, which is obviously a decentralised way of organising research. These elements diminish the rationale for EU support and centralised action through grants as a natural vehicle for internalising the benefits and costs of research activity and for achieving productive efficiency in research. This impression is strengthened if account is taken of the fact that, at the moment, the administration of these tasks in the EU is very bureaucratic, involving very long administrative lags and insufficient quality control, which can nullify the benefits from the intervention. Moreover, it seems that current EU rules for research grants imply a bias in the distribution of the available funds in favour of smaller countries, which for natural reasons have more cross-border connections than larger ones. This bias leads to a systematic redistribution at the expense of large countries.

We conclude that trans-border networks and public goods with geographically dispersed beneficiaries are important parts of EU level public infrastructure whose governance can be facilitated if

the EU helps the countries involved to coordinate their decisions. However, normally no financial implications should be involved. In some other activities, the spillover or public good aspects can be much less dispersed. If so, centralising the public intervention to the top level of government is not the right answer from the viewpoint of economic efficiency. We next take up a few other examples of spillovers or externalities, in which the EU-dimension in the governance of these activities is even less clear cut.

### Environment

Environmental concerns have an international dimension in a number of economic activities. Trans-border pollution provides examples of negative externalities that extend beyond national jurisdictions. When such externalities exist, there is a case for negotiation between the countries concerned. It appears that relatively few environmental externalities specifically have an EU wide geographical dimension. In many cases the externality is much more local and in some cases, such as global warming and climate control, the externality is instead global.

The principle of subsidiarity suggests decentralization of the regulation of environmental externalities that are local, national or a concern to only a few neighbouring countries, though there can be benefits from having the EU set up a common framework for such situations. The regulation appropriate for global warming and any other global externality is an EU level duty. The EU alone is not the sufficiently high level of public decision-making, but it is the natural party in international negotiations to control a global environmental externality.

Ecological dumping as a result of too lax regulation has been raised as a possible concern when independent countries set their own environmental standards. Opinions differ between academic researchers about the consequences of regulatory competition in environmental standards. These differences are in part due to different circumstances about possible environmental damage. If the latter occurs only within the borders of countries and if the profit from being able to freely use the environment accrues to domestic residents only, then national regulation will not lead to ecological dumping (see Long and Siebert, 1991 and Oates

and Schwab, 1988). This reinforces the previous observation that geographically limited pollution problems do not require the centralisation of public regulation.

In contrast, the outcome is not clear-cut when there are international spillovers of environmental damage and if foreigners are, to an important degree, owners of polluting firms as is shown in Sinn (2003). The outcome will then very much depend on the type of regulations that are used by the different countries. If international cooperation is required, then a suitably designed system of tradable pollution permits, which last only a limited time and are regularly sold by the governments, can in principle lead to an outcome that internalises the spillovers and externalities. The administration of such a system requires international cooperation, and the principle of subsidiarity does not imply a decentralisation of this activity.

#### Natural resources

Management of commercial fishing, where EU interventions have been attempted, provides a complicated example, in which the fishing activity by a single fishing unit can exert a negative externality on other fishing units. This is a result of missing property rights in the fish population itself. The latter are an example of a common property resource since in the water the fish migrate across national borders. Such resources can be subject to over-extraction.<sup>16</sup> Any single fishing unit does not take fully into account the effect of its fishing on the fish population since the fishing unit does not own the resource. Over-fishing results when all fishing units behave in this way. This is a clear case in which centralized action is necessary.

Fishing may be contrasted with agriculture, which is a very different type of activity exploiting a natural resource, land. In contrast to fishing, it is easy to define property rights to land and these rights were indeed defined in Europe a very long time ago. The justification for public regulation of fishing does not apply to agriculture, which is a standard form of production and business activity. Thus the common agricultural policy of the EU (CAP) cannot be defended on the basis of a spillover or externality. Traditional landscape and other similar

concerns can be seen as a public good, but if so, certainly as one whose benefits accrue primarily to local or national citizens.

Subsidies leading to increased production are not a proper way to take account of such an “aesthetic” public good produced at the national level. On the contrary, such subsidies have led to an overly extensive form of agriculture, which has created substantial environmental damage (for example pollution of ground water with nitrates) and has often contributed to a destruction rather than preservation of the landscape. Support should be geared to the preservation of the landscape itself or environmental improvement and not to agricultural production. These arguments should be kept in mind if the discussed reform of CAP is geared to the introduction of national support to agriculture. National subsidies should not be tied to production or exports but rather to the preservation of the rural way of life if a member country finds national support to be in its interest. Production or export subsidies would also work against a unified single market in which such subsidies would frustrate the forces of comparative advantage and destroy the “level playing field” of the single market. The 2002 Report of the European Economic Advisory Group discusses further a blueprint for reform of the Common Agricultural Policy.

Quotas and markets for licences for the extraction of a common property resource can provide an efficient solution to the problem of over-extraction of fish populations. The management of such schemes requires public sector intervention, and the market for fishing rights should be administered by some public agency. The level of government for the management of fishing rights seems to depend on the geographical area where the fish population resides and to which fishing fleets from different countries have access. It is not obvious that the EU administration is always the appropriate level of public intervention in all cases. Some fish populations are relatively local, though free access of other EU member countries can make management of a local fish population an EU level concern. For some other fish populations a global level would, in principle, be the right level of public intervention. In the latter, the EU can be the right type of public body for international negotiations and contracts for management of common property resources.

<sup>16</sup> See for example Dasgupta (1982), chapter 2, for a good introductory discussion of the “problem of the commons”.

To sum up, while there are environmental reasons for common EU policies to regulate fishing, there is no economic reason whatsoever for agricultural policy to be carried out by the EU. The subsidiarity principle dictates that agricultural policy be shifted to national authorities as quickly as possible.

#### Standardisation and product quality

Provision of a common standard for economic activities can be viewed as a particular type of networking. There are clear benefits from well-chosen standards, since wide usage in different countries can provide benefits to individual users or lead to lower costs of production and information to users. In many activities there is a clear international dimension to standardisation, so that its governance at the EU level can be warranted.

Harmonisation of product quality standards across the member countries can be efficient, since it lowers the cost of gathering and understanding of product information to consumers. Moreover, competition in product quality regulation can lead to too lax product standards, since individual countries can try to minimise production costs for domestic firms. When all countries engage in this race, a non-optimal outcome can result. Thus for many goods and services, common standards and the harmonisation of product quality information across the EU appears to be an efficient level of regulation.

For some commodities, in which for example the use of hazardous substances is possible, product information and safety is a major concern, while for other goods this issue is of little importance. In the former case, it can be necessary to establish Europe-wide standards in which case an EU level supervisory administrator is required. Food and drugs are a case in point.<sup>17</sup> In other cases, private provision of the evaluation activity for standardisation of products and assessment of product quality may be preferable to public provision. Michelin guides for restaurants provide a simple example of private supply of information on product quality for those who prefer the French cuisine. The wide range of cases in product standards indicates that there is no single model of regulation or level of

regulatory administration that fits all the different possibilities.

#### 5. Tax and infrastructure competition

The international mobility of some productive factors, especially capital, has widely raised concerns about tax competition and about under-provision of public goods. It is argued that independent countries have strong incentives to reduce tax rates for mobile factors and that this would lead to too low levels of some forms of taxation and too high levels for others.<sup>18</sup> An important related argument is that, in order to attract businesses, independent countries also compete for mobile factors of production by providing excessive public infrastructure for businesses.

These two arguments, low tax rates for mobile capital and excessive public infrastructure to attract businesses, raise a number of different issues and require a closer analysis (see Sinn, 2002, ch. 2 for a clear exposition). A key starting point is the nature of public goods that the public sector needs to finance. One possibility is that the public goods solely benefit wage earners or consumers. In this case tax competition prevails: a tax on the mobile factor is entirely shifted to the immobile factors, the income of the immobile factor is reduced, and the tax revenue from such a tax is insufficient to compensate for the losses of the immobile factor.

In contrast, the outcome is different when the public good is an infrastructure good that benefits the firms: tax rates will not be driven to zero and competition in taxation and infrastructure can yield productive efficiency in both, the international allocation of capital and the provision of public infrastructure. In this last case, concerns may still remain about the financing of the public sector budget, as the revenues from taxing the mobile factor need not be sufficient. A proper resolution to the financing problem is to use a coordinated requirement of full self-finance of infrastructure goods from taxes on the mobile factor by all countries. The EU could, for example, extend its subsidy ban to the case of implicit subsidisation through under-priced infrastructure provision. This would resolve the issue of financing difficulties without

<sup>17</sup> These considerations imply that the EU needs to be concerned with agricultural production, but the EU agricultural responsibilities would then be focused on food safety (see the 2002 EEAG Report for further discussion).

<sup>18</sup> As noted above, there is empirical evidence about tax competition even if the evidence is limited and may not support extreme "race to the bottom" arguments.

necessitating a co-ordination of infrastructure. A difficulty with this solution is that it needs even more extensive monitoring than the present interpretation of the subsidy prohibition.

It should be stressed that tax harmonisation is not a proper remedy for the financing problem, since it intensifies jurisdictional competition by providing strong incentives for excessive investment in public infrastructure. When the tax rates on mobile capital are fixed at the EU level, each single country has an incentive to compete for mobile capital by providing the needed infrastructure, but the amount of infrastructure investment resulting from this competition will be larger than what is efficient from an international perspective. The harmonisation of capital income taxes would require infrastructure harmonisation to prevent this over-investment effect, but in view of the prevailing economic and geographical divergences among the EU countries, the latter cannot meaningfully be achieved. Alternatively, all taxes would have to be harmonised such that there are no sources of funds for excessive infrastructure investment. All this is hard to imagine for the time being.

Are there any good methods for resolving the financing problem with little international co-ordination? One possible remedy is the residence principle of taxation whereby taxes are levied at the recipient of the income rather than at the source of income. With resident taxation it is not possible to evade taxes by simply transferring the capital to another location. It may, however, be difficult to administer residence taxation, since it requires reporting of income earned abroad. Moreover, tax competition can also ensue through investors shifting residence rather than the location of mobile capital. Another possibility is to design the corporate tax system with zero marginal taxes on new investment but with positive average taxation. Such a system attempts to tax only dividends but not retained earnings, so that investment financed at the margin from retained earnings are tax-free. However, such tax forms entail the difficulty that new investment need not always be tax-free. While retained earnings provide marginal finance for new investment for mature firms, start-ups usually require new equity and dividend taxes raise their cost of capital.

In general, the principle of subsidiarity in the design of the tax system is facing serious difficulties due to the increased mobility of productive

factors. Different degrees of mobility lead to both, low taxation and less redistribution among productive factors. With a deepening of integration it is possible that, in addition to capital, labour will also become much more mobile in the long run. If this happens, decentralised taxation by member countries will face increasing difficulties from tax competition and wide-spread erosion of tax bases. A well-functioning central government is an answer to ruinous competition when all key factors of production are fairly mobile.

#### 6. Labour markets, social standards and the welfare state

With the enlargement of the EU, questions about social standards in employment and labour markets and the future of the welfare state, that is redistributive capability of the state have become subject to active discussion. The coming enlargement is different from the earlier ones in a number of respects. First, migration to the existing EU countries has been severely constrained, first by the Iron Curtain and then by western immigration laws, such that the migration pressure will not have been relieved at the time of enlargement. Second, accession countries have, with some exceptions, quite low GDP per capita and low wages relative to the EU average. Currently, monetary wage costs per hour are one fifth to one tenth of those in the richer EU countries. Moreover, social standards in employment and redistribution and welfare benefits offered by these countries are much lower than in the current EU member countries.

These differences imply that there are tensions concerning the welfare state, social standards and the migration of productive factors. The differences in wages and social standards can be the source of potentially large migration flows of productive factors. It is likely that some capital will migrate from the current EU member countries to the accession countries, while the reverse is true for labour. It is difficult to forecast the magnitude of possible migration flows.<sup>19</sup> However, it is impor-

<sup>19</sup> According to an extensive empirical study of the Ifo Institute, 4 percent of the population of the accession countries will migrate to Germany over a period of 15 years if wages converge at an annual rate of 2 percent (Barro-Sala-i-Martin rule). This will imply an emigration of 6 percent to the total of the old EU countries if the current proportions of migration from the eastern countries to Germany and the rest of the EU (two thirds Germany, one thirds rest) remain stable. See Sinn et al. (2001).



tant to understand the nature of the tensions and discuss the appropriate policy responses.

### 6.1 The welfare state

From a personal *ex ante* viewpoint, income redistribution and the welfare state are to be seen as insurance systems. They protect those citizens who will experience unfavourable personal circumstances, such as long-term illness or unemployment. The welfare state is a response to these insurance needs<sup>20</sup>, and if there is no factor mobility we can think of citizens as contributors to the insurance system and beneficiaries when they encounter hardships.

This kind of closed system no longer works well when there is factor mobility. Mobility can provide a way to enjoy the benefits of the welfare state, while at least partly avoiding the insurance payments. When borders are open and people are mobile, differences in welfare systems can induce migration. People in need of benefits move to the country with relatively high benefit levels, while “healthy and lucky” people (who are net payers to the system) move out of the high benefit and high cost country. With such movements, the funding of an advanced welfare state runs into trouble and there are pressures to reduce both taxes and benefits of the system.

The magnitude of these pressures depends on the degree of factor mobility and is difficult to forecast. There is probably little mobility among the current EU citizens. However, the differential mobility to various western EU countries of people deciding to emigrate from eastern Europe because of the huge current income differentials could be extremely high, implying a high sensitivity of migration to even small differences in living standards among the target countries. One policy response to the pressures resulting from the mobility of people would be to change the current principles of eligibility for welfare benefits. Currently, EU welfare states practice a dichotomous approach to migrants within the EU. People who come to live in another country for reasons other than working there, are usually excluded from welfare benefits of any kind and have to rely on the benefits received from the home country. On the

other hand, people who come with the intention to work, are fully included.<sup>21</sup> Thus, a home-country principle applies to non-working migrants and a residence principle applies to working migrants under current EU law.

If the migration-induced pressures on the welfare state stem exclusively from the application of the residence principle, a potential solution could be a strengthening of the home-country principle by applying this principle to at least some of the benefits received by working migrants. Such a reform would reduce artificial migration incentives due to differences in welfare systems, though there would still be migration for normal economic reasons.

Of course, as with all measures discussed in this chapter, such a move would require a substantial reform of the existing EU laws, which might meet with resistance on equity grounds. However, it seems to us that the alternative, which currently is being envisaged by the EU Commission, that immigration will be held in check by quotas and other quantity constraints for many years to come, would be a much more severe infringement on the right of free migration granted in the Treaty of Rome. The Treaty of Rome is not, however, in conflict with a solution which permits every EU citizen who wants to migrate to migrate, but without receiving any gifts.

In practice, the home-country principle is difficult to be fully implemented. The provision of free public goods with benefits geographically accruing to only that country, is naturally funded by taxes from factors actively working in that country. However, it might be possible to try to apply the home-country principle in a limited way, whereby migrants would be immediately entitled to contribution-financed benefits, but only gradually entitled to social benefits that are funded from general tax revenues.<sup>22</sup>

The idea of gradual access to social benefits is designed to minimise the fiscal implications that arise from free mobility and differences in the welfare systems between countries. These implications are difficult to assess, as illustrated, for example, by the case of differences in the skill levels of immi-

<sup>20</sup> In practice also further re-distributive goals as a result of particular ethical viewpoints are stressed in political debates.

<sup>21</sup> Sometimes the criterion for inclusion is actual work rather than intention to work. There may also be special provisions for refugees.

<sup>22</sup> Such a system has recently been recommended by the Scientific Council of the German Ministry of Finance (2001).

grants. Highly skilled workers who have obtained their education in their home country can be a net benefit to the country of immigration. Correspondingly, they represent a cost to their home country. Such a brain drain is sometimes seen as an important policy concern (see Chapter 5 for a discussion of the question of a brain drain from Europe to the US).

## 6.2 Social standards

A related concern about the coming EU enlargement involves social standards of work, including fringe benefits, work safety, pension schemes and welfare benefits. It is often argued that poorer countries practice “social dumping” by having lower social standards and thereby gain an unfair competitive advantage by avoiding the costs of higher standards. Harmonisation of these standards is proposed in order to eliminate the seemingly unfair cost advantages of low standards.

Such arguments are problematic as they originate from a static view of the world. They ignore the fact that different countries are in very different stages of economic development and that wages are also very different. It is well known that non-wage benefits and work standards are positively related to wages. Thus it seems likely that as poorer countries become more advanced and catch up with richer countries, internal competitive and social pressures in these countries will lead to both higher wages and higher non-wage labour costs.

It is natural to ask whether harmonisation of labour standards would facilitate the process of economic development and catching-up or whether it might even have harmful effects on the development process. An answer to this question requires an analysis of the dynamic forces of development that occur when a relatively poor country joins an area of well-developed countries.<sup>23</sup>

A typical model of the development process predicts that in the short run there will be migration of part of the work force of the poor country to the richer area. This will reduce labour supply, raise wages, destroy less productive jobs and induce the (supposedly benevolent) government of the poor country to raise work standards in line with wages. The poor country will also enjoy a gradual inflow

of capital from the rich area. This will increase demand for labour leading to a further increase in wages and social standards. In due course, some of the guest workers from the poor country will gradually return to their home country. Eventually, the poor country will catch up with the rich area. When this happens there will be factor price equalisation with wages and social standards reaching the level of the rich area.

The preceding reasoning suggests that it would be a mistake to impose the social standards of the rich area on the poor accession country. The forces of development should be left to run their course. A policy of an early and quick equalisation of wages and social standards between rich and poor areas would have disastrous consequences. A large fraction of the jobs in the poor country would become unprofitable following the imposition of high wages and social standards, leading to mass unemployment and emigration out of the poor area. It is also likely that political pressures would emerge for massive transfers from the rich area to the poor country. Most likely, a policy of harmonisation would greatly slow down or even prevent the development process whereby the poor country gradually reaches higher standards of living. These events are well illustrated by the experiences of German unification, discussed in Box 3.2.

Differences in preferences of social standards and wages among different countries do not change the preceding conclusions. If one country prefers higher social standards, then wages should be correspondingly lower, other things being equal. With heterogeneity in preferences, the principle of subsidiarity should be applied, that is each country should be allowed to choose its preferred combination of wages and social standards (see Jackman, 2001).

These considerations suggest that harmonisation of social standards is an incorrect policy in EU enlargement. Instead, it is important to focus on ways to facilitate the process of development that enables the poor countries to catch up with the rich area. Free trade and the provision of new markets to the poor countries is the most important policy in support of this process. With new markets, the poor accession countries will have increased economic opportunities that will enable them to speed up economic growth and gradually raise the living standards of their citizens. The process of economic growth is necessarily slow by its very nature, but cen-

<sup>23</sup> See chapter 4 of Sinn (2003) for a detailed analysis of this process.

## Box 3.2

## German Unification and Social Dumping

From an economic perspective, German unification has failed. There was an initial catching-up until 1996, which was largely induced by massive tax incentives and investment subsidies that made the cost of capital negative for most investment projects and induced excessively capital intensive investment. However, the east German economy has stagnated and the gap between east and west Germany has widened. GDP per person of working age in the east has been falling relative to the corresponding value in the west for the last six years, and currently stands at 58 percent. However, due to massive public transfers, nominal incomes per capita are at a level of more than 80 percent of that of the west and pensions are at 110 percent of those in the west. In real terms, about 10 percentage points can be added to these numbers since the prices of non-traded goods, in particular the government-controlled rents, are substantially lower than in the west.

The east German economy absorbs much more resources than it produces, the current account deficit being about 45 percent of GDP. This is huge. Even the current account deficit of the Italian Mezzogiorno is only 13 percent of GDP. Two thirds of the east German current account deficit – which amounts to nearly 5 percent of west Germany's GDP – is financed by public transfers via the federal budget, via revenue-sharing agreements among the Laender (Finanzausgleich) and, primarily, via unemployment and pension benefits. One third is financed by private capital flows, of which, however, a substantial fraction feeds an increasing stock of east German public debt which has reached a higher per capita value than that in the west.

Unemployment in east Germany currently hovers around 17 percent, and there are regions where it is way above 20 percent, even though many unemployed have been hidden in early retirement schemes and training programs. Regular employment has been shrinking at an annual rate of nearly 2 percent since the middle of the 1990s, long after three quarters of east German industry had closed down. While the industrial sector is growing at a solid rate, albeit from a very low base, the overall prospects for the east German economy are far from satisfactory. The aggregate net public resource transfer from west to east has been about €800 billion, which is ten times more than the amount even the most pessimistic politicians had dared to forecast at the time of unification.

One reason for the economic disaster in east Germany is an excessive fear of social dumping which led to rapid wage convergence and an immediate jump in social

standards. The cost of labour increased much faster than aggregate productivity, resulting in mass unemployment. High wages combined with tax incentives induce overly capital intensive investment, and they also made east Germany an unattractive location for international investment.

Before unification, eastern wage costs stood at about 7 percent of those in the west at the then prevailing exchange rate (4.3:1). With the 1:1 currency conversion in the summer of 1990, wage costs jumped to about 30 percent. Wage negotiations that followed in late 1990 and early 1991 specified a wage adjustment path reaching the west German standard wage level in only five years. Actual wages initially followed this path, but eventually increased more slowly, since the privatised and newly founded firms decided to leave the employers' associations or not to participate in these associations in the first place. Currently, about 85 percent of east German firms with a majority of all employees are not covered by union contracts.

The wage negotiations that followed unification had been proxy negotiations. They were carried out by the newly founded east German trade unions, which were completely under western control, and the employers' associations which had come from the west. Prior to privatisation there had been no private employers in the east who could have participated. Both bargaining parties agreed that rapid wage adjustment was needed to safeguard west German jobs and prevent foreign competitors from buying up east German firms and thus entering the German market. In doing so, they were supported by a firework of superficial arguments provided by politicians who forecast "flourishing landscapes" in "three to five years" and warned of massive migration flows which otherwise would have had to be expected.

The results of the proxy wage negotiations were flanked by the social union which implied high replacement incomes and forced market wages upward. The social union was introduced in the Summer of 1990 in addition to the monetary union. East Germans were included in the western pension system, received western type unemployment benefits and were entitled to nearly the western level of social aid. Social aid was initially higher than eastern wages and has remained high. A family of four is entitled to social aid and housing grants amounting to 75 percent of the average east German wage. Social aid and similar benefits implied excessively high wage costs and a replacement income with which the market economy was unable to compete.

tralised interventions in the form of prematurely harmonised social standards, say by the current EU, can only risk a slowing down of this process. There is no miracle cure for an instantaneous closing of differences in productivity, wages and living standards that have built up in the past over many years.

### 6.3 Redistribution between people and between states

The governance of interpersonal income redistribution in the enlarged EU is a delicate matter. The conventional public finance view is that redistribution should primarily be the concern of the highest

level of government.<sup>24</sup> However, such a view implicitly assumes a certain degree of regional homogeneity, as otherwise the interpersonal redistribution becomes an interregional redistribution or one between countries. This is certainly a matter of concern for the EU, where the income disparities between rich and poor regions will differ by a factor of four or more after enlargement. Any universal redistribution scheme, say one that is based on a common progressive income tax schedule, would systematically distribute income from the richer to the poorer countries. For example, even an uneducated Swedish worker is rich relative to a Spanish government clerk. There would be redistribution of funds from Sweden to Spain. Such redistribution might also be legitimated from a deeper understanding of European solidarity, but it clearly goes beyond the insurance motive that can explain and justify interpersonal redistribution within a country.

Above, we warned against ignorance of the differences in the stages of economic development and against premature harmonisation of social standards that can bring serious harm to the process of development and catching-up of the poorer countries. These considerations also suggest that income redistribution through the tax and transfer systems should mostly be left to the national decision-making of EU member countries. Intergovernmental competition by well-meaning governments taking into consideration the productivity differences is probably the best way to achieve systems of redistribution that are in line with differences in labour productivity and also to achieve fast convergence in the growth processes of the different countries. This is particularly true if adverse migration effects are minimised by changing the welfare state as was suggested above. If there is any role for EU level public decision making, it is in providing opportunities and incentives for fast growth in the poorer countries.

Nevertheless, there is the difficult question of whether the EU should purposely redistribute resources from the richer to the poorer member countries. Much of the preceding analysis has viewed the EU primarily as an economic union with the single market as the main objective. However, it is sometimes suggested that the EU is

more than a pure economic union even if it is not a federation, namely one that effectively shifts resources so as to even out any pre-existing income differences. Of course, opinions also differ on this question. In practice, the EU carries out large redistributive schemes, which suggests that the EU is something more than a common market. Thus it is possible to think of giving at least part of the redistributive task to the EU level.

Looking at current practice, much of the common agricultural policy appears to be motivated by distributional concerns, although such redistribution can hardly be defended since rich countries like France are among the biggest beneficiaries. The various structural and cohesion funds that are the second largest item in the EU budget can more easily be justified by redistributive goals. Their purpose is to make richer countries pay for the funds flowing to the poorer countries, and it seems that this purpose has been achieved. However, the funds should be more than just income transfers in that they help the less developed countries to improve their infrastructure and to support these countries' own forces of economic growth. The evidence on whether they achieved this goal is mixed. Some schemes appear to have reduced regional disparities (see, for example, De la Fuente and Vives, 1995 for a study of Spain). Yet, on balance, it seems that the current EU regional policies have not contributed positively to the catching-up processes of economic growth for the poorer regions of the EU, as discussed in Boldrin and Canova (2000). These results suggest that a reconsideration of the current EU redistributive role would be worth while.

## References

- Alesina, A., I. Angeloni, and L. Schuknecht (2002) *What Does the European Union Do?*, mimeo, ECB.
- Baldwin, R.E. and A.J. Venables (1995) "Regional Economic Integration," in: G. Grossman and K. Rogoff (eds.) *Handbook of International Economics*, Volume III, Amsterdam: Elsevier Science, 1598–1644.
- Baldwin, R.E., E. Berglöf, F. Giavazzi, and M. Widgren (2000) "EU Reforms for Tomorrow's Europe," CEPR Discussion Paper No. 2623.
- Baldwin, R.E., E. Berglöf, F. Giavazzi, and M. Widgren (2001) *Nice Try: Should the Treaty of Nice Be Ratified*, Monitoring European Integration 10, London: CEPR.
- Begg, D., J. Crémer, J.-P. Danthine, J. Edwards, V. Grilli, D.J. Neven, P. Seabright, H.-W. Sinn, A.J. Venables, and C. Wyplosz (1993) *Making Sense of Subsidiarity: How Much Centralization for Europe?*, Monitoring European Integration 4, London: CEPR.
- Bermann, G. (1994) "Taking Subsidiarity Seriously: Federalism in the European Community and the United States," *Columbia Law Review* 94, 331–456.

<sup>24</sup> See, for example, Musgrave (1959, 1997) for the conventional view.

- Bhagwati, Y. (2002) *Taking Free Trade Seriously*, Princeton NJ: Princeton University Press.
- Boldrin, M. and F. Canova (2001) "Inequality and Convergence in Europe's Regions: Reconsidering European Regional Policies," *Economic Policy* 32, 207–253.
- Corsetti, G., J. Flemming, S. Honkapohja, W. Leibfritz, G. Saint-Paul, H.-W. Sinn, and X. Vives (2002) *Report on the European Economy 2002*, Munich: European Economic Advisory Group at CESifo.
- Dasgupta, P. (1982) *The Control of Resources*, Oxford: Basil Blackwell.
- De la Fuente, A. and X. Vives (1995) "Infrastructure and Education as Instruments of Regional Policy: Evidence from Spain," *Economic Policy* 20, 13–51.
- Devereux, M., B. Lockwood, and M. Redoano (2002) "Do Countries Compete Over Corporate Taxes?," CEPR Working Paper No. 3400.
- Donahue, J.D. (1997) "Tiebout? Or Not Tiebout? The Market Metaphor and America's Devolution Debate," *Journal of Economic Perspectives* 11, 73–82.
- Edwards, S. and M. Keen (1996) "Tax Competition and Leviathan," *European Economic Review* 40, 113–134.
- Eurobarometer,  
[http://www.gesis.org/en/data\\_service/eurobarometer/index.htm](http://www.gesis.org/en/data_service/eurobarometer/index.htm)  
(04.12.02)
- European Commission,  
<http://european-convention.eu.int> (04.12.02)
- European Commission, *Amtsblatt der Europäischen Gemeinschaften; Rechtsvorschriften, Haushaltspläne, Amt für Amtliche Veröffentlichungen der Europäischen Gemeinschaften 1991-L30; 1994-L34; 1996-L22; 1997-L44; 1998-L44; 1999-L39; 2000-L40; 2001-L56; 2002-L2*
- European Economic Advisory Group at CESifo (2002) *Report on the European Economy 2002*, Munich: CESifo.
- IMF, *Government Finance Statistics Yearbook 2002*.
- Inman, R.P. and D.L. Rubinfeld (1997) "Rethinking Federalism," *Journal of Economic Perspectives* 11, 43–64.
- Jackman, R. (2001) "The Pros and Cons of a Common European Employment Policy," *Swedish Economic Policy Review* 8, 203–234.
- Leech, D. (2002) "Designing the Voting System for the Council of the European Union," *Public Choice* forthcoming.
- Long, N.V. and H. Siebert (1991) "Institutional Competition Versus ex-ante Harmonisation: The Case of Environmental Policy," *Journal of Institutional and Theoretical Economics* 147, 296–311.
- McKinnon, R. (1997) "Market-Preserving Fiscal Federalism in the American Monetary Union," in: M. Blejer and T. Ter-Minassian (eds.) *Macroeconomic Dimensions of Public Finance: Essays in Honour of Vito Tanzi*, London: Routledge, 73–93.
- Musgrave, R.A. (1959) *The Theory of Public Finance*, New York: McGraw-Hill.
- Musgrave, R.A. (1997) "Devolution, Grants and Fiscal Competition," *Journal of Economic Perspectives* 11, 65–72.
- Oates, W.E. (1972) *Fiscal Federalism*, New York: Harcourt Brace & Jovanovich.
- Oates, W.E. (1999) "An Essay on Fiscal Federalism," *Journal of Economic Literature* 37, 1120–1149.
- Oates, W.E. and R.M. Schwab (1988) "Economic Competition among Jurisdictions: Efficiency Enhancing or Distortion Inducing?," *Journal of Public Economics* 35, 333–354.
- OECD (1998) *Harmful Tax Competition, An Emerging Global Issue*, Paris: OECD.
- Persson, T., G. Roland, and G. Tabellini (1998) "The Theory of Fiscal Federalism: What Does it Mean for Europe?," in: H. Siebert (ed.) *Quo Vadis Europe?*, Tübingen: J.C.B. Mohr.
- Pollack, M.A. (2000) "The End of Creeping Competence? EU Policy-Making Since Maastricht," *Journal of Common Market Studies* 38, 519–538.
- Qian, Y. and B.R. Weingast (1997) "Federalism as a Commitment to Preserving Market Incentives," *Journal of Economic Perspectives* 11, 83–92.
- Scientific Council of the German Ministry of Finance (2001) *Freizügigkeit und Soziale Sicherung in Europa, Wissenschaftlicher Beirat beim BMFi*, Berlin.
- Shah, A. (1994) "The Reform of Inter Governmental Fiscal Relations in Developing and Emerging Market Economies," *World Bank Policy and Research Series* no. 23.
- Sinn, H.-W. (2003) *The New Systems Competition*, Oxford: Basil Blackwell.
- Sinn, H.-W., G. Flaig, M. Werding, S. Munz, N. Düll, and H. Hofmann (2001) *EU-Erweiterung und Arbeitskräftemigration*, Ifo Institute: Munich.
- Sorensen, P. (2000) "The Case for International Coordination Reconsidered," *Economic Policy* 31, 429–472.
- Tabellini, G. (2002) "Principles of Policy Making in the European Union: An Economic Perspective," *CESifo Forum* 3 (2), 16–22.
- Weingast, B.R. (1995) "The Economic Role of Political Institutions: Market-Preserving Federalism and Economic Development," *Journal of Law, Economics and Organization* 11, 1–31.
- Wildasin, D. (2000) "Factor Mobility and Fiscal Policy in the EU: Policy Issues and Analytical Approaches," *Economic Policy* 31, 339–378.



## FINANCIAL ARCHITECTURE

### 1. Introduction

There has been much progress in the integration of European financial markets since the lifting of capital controls during the 1980s, the First and Second Banking Directives (1977 and 1989), the Single Market Programme and monetary union. However, the European banking market, especially in its retail sector, continues to be segmented, and many obstacles remain on the way. For example, most of the mergers and acquisitions (M&A) activity is domestic. Furthermore, the emergence of pan-European stock exchanges has been delayed for a variety of reasons, but especially because of regulatory barriers. Indeed, there seems to be growing disenchantment because of the resiliency of the obstacles to the integration of financial markets. Arguably, regulatory fragmentation constitutes the major obstacle to the integration of financial and banking markets in Europe. Questions have also been raised about the adequacy of present arrangements to preserve stability in the euro area.

According to the “official” view, the present decentralised supervisory arrangements of the banking and financial markets in Europe are adequate because of the existing segmentation of business by country. Despite this, several committees and groups (Brouwer, Lamfalussy, Giovannini) have been set up to study the obstacles to financial market integration and propose solutions to improve the regulatory and supervisory frameworks. By and large, those committees have recommended more co-operation among supervisors (Brouwer in particular) as well as the adoption of a “comitology” procedure (delegation of powers to define rules to a committee) to speed up the implementation of financial legislation (Lamfalussy in particular).

Many political economy issues are at the heart of the regulatory fragmentation problem, in particular the tension between economic integration and the lack of willingness to relinquish national political control. But while these political economy issues slow down the pace of regulatory and institutional innovations, there are important sources of systemic risk to which the European markets are exposed. Recent events have stressed the threat of terrorist action, and possible financial weakness associated with the current slow-down. Some

European banks are heavily exposed to emerging markets and to particular sectors, such as telecoms, which have recently experienced deep crises. The process of consolidation within countries has led to the creation of many “national champions” that may create incentives for national authorities to provide excessive guarantees. At the same time, the expansion of cross-border activities may increase potential spillovers and externalities across countries, while creating incentives for the underprovision of supervision and liquidity support by national authorities.

In this chapter we review the financial architecture of the euro area, take stock of some of the proposals for reform, and suggest ways to progress.

We argue that there are at least three open problems with the present financial architecture arrangements in the euro area.

First, these arrangements may not be adequate for financial stability. For instance, in the event of a crisis, there is no clear chain of command among the institutions potentially involved in the intervention. How would the Eurosystem react to the threat of a major disruption like LTCM? Who in Europe would have the responsibility to organise a rescue like that of the president of the New York Fed in the United States? A response based on improvised co-operation may not be enough and may come too late. Moreover, there could be misaligned incentives for national supervisors dealing with transnational firms, as they do not internalise cross-border spillovers from the crisis of such firms. Conversely, national authorities may have strong incentives to provide excessive help to national champions.

Second, to a large extent, the present arrangements hinder European financial market integration. Legislation is slow, rigid, and lags behind market developments. Regulatory fragmentation prevents the emergence of deep, liquid European markets (see for instance the failure of iX). Protection of national champions and regulatory barriers prevent the emergence of pan-European banks.

Finally, the present arrangements hinder the competitiveness of EU financial markets and institutions.

The present gradualist approach may yield more costs than benefits in the longterm and may end up

proving ineffective. It would be better not to wait for a major crisis to strike in order to put the house in order. To have a passive policy regarding the lack of financial integration of certain segments of the financial market may backfire, as it fails to remove obstacles to integration and endangers stability.

While endorsing in general the well-intentioned recommendations of the committees and groups seeking to remove the obstacles to European financial integration, we feel that a more ambitious approach is needed. This is so because alternative models for reforming the financial architecture in Europe will have profound implications for the degree of financial market integration, competitiveness in the financial industry, and financial and monetary stability.

Reform proposals should be assessed in terms of their contributions to the welfare of European citizens, including the price they will pay for financial and payment services, the range of opportunity for insurance and portfolio diversification, the reliability and trustworthiness of the financial institutions in the area. Those criteria lead us to propose some reforms in the European financial architecture, distinguishing short-run measures and calling for a debate on the basic framework with a long-run view.

In the short run, clear procedures should be established for crisis lending and crisis management with the European Central Bank at the centre. The crisis framework should be put in place now and the fiscal issue of how to provide help to a transnational institution confronted.

A debate should be opened with a view towards evaluating the benefits of more centralised supervisory arrangements in banking, insurance and securities in the medium and long run. In particular, in addition to the current decentralised regulatory competition frame, two basic long run models should be discussed:

- In the first model, the ECB, in the context of the ESCB, would be given a larger role in the supervision of banking, with the contemporaneous creation of separate specialised European-wide supervisors in securities and insurance.
- In the second model, an integrated supervisor would be constituted, a European Financial Services Authority, and the ECB would have access to supervisory information in order to maintain systemic stability.

In either of the two models supervision need not be completely centralised at the European level. First, because national supervisors will be involved in the day to day supervisory operations. Second, because European level agencies could leave entities trading mostly within one national jurisdiction to be supervised by the appropriate national regulator (under the home-country principle).

An implication of our vision is that the door should be left open in the Convention on the Future of Europe for the necessary institutional changes to implement more centralised regulation, perhaps along the lines of one of the models above.

Last but not least, the EU wide competition policy in the banking sector, which limits help to national champions that are “too big to fail”, and removes obstacles to cross-border mergers, should continue. At the same time, domestic competition policy should be reinforced to keep in check local market power in national markets.

Reforms of the financial architecture are admittedly complex, as technical aspects are strictly interwoven with legal and institutional aspects. Given the large interests at stake, the process of reform is the target of particularly strong lobbies, both private and public. It would be a great cost for society if the need to reconcile conflicting special interests resulted in lower protection of European citizens against the many risks that an inefficient and vulnerable financial system entails.

The plan of the chapter is as follows. Section 2 will look at the state of European financial integration and the impact of the euro while Section 3 will describe present arrangements in terms of financial stability, regulation and supervision, and competition policy. Section 4 will deal with problems of the present regulatory framework and Section 5 will look ahead, rethinking European financial architecture.<sup>1</sup>

## 2. European financial integration and the impact of the euro

The process of European financial integration coincides with the general trend in the financial services industry towards liberalisation, regulatory

<sup>1</sup> The reader is referred to Vives (2000, 2001) for a development of some of the arguments presented in this chapter.

reform, and globalisation (encompassing advances in information technology and communications). These changes have increased competition, as well as the weight of markets in relation to financial intermediaries (“disintermediation”), although banking is not receding in real terms. For the banking sector, the result is a move from the traditional business of taking deposits and granting loans (earning money on the financial margin) to the provision of services to investors and firms (earning money by charging fees and commissions). There is a move from investment in branches to investment in communication networks, information technology, and specialised human capital. In general, the transformation of the banking sector (in terms of development of mutual and pension funds, insurance, a corporate debt market, and venture capital) is less advanced in Europe than in the United States.

The measures undertaken to date to foster the integration of financial markets in Europe (from the Banking Directives and the Single Market Programme to the introduction of the euro) have produced mixed results.

The euro-area money market has become substantially integrated, although the degree of integration varies in the different segments. For example, integration is complete for unsecured interbank deposits, as well as for euro-derivatives. Integration is less pronounced for secured money market segments, where liquidity is exchanged for collateral (like commercial paper, CDs, Treasury bills and private repurchase agreements). National disparities in cross-border clearing and settlement are an obstacle to integration.

The euro-denominated bond market has become much more homogeneous since the introduction of the euro and has increased in depth and liquidity. Sovereign issuance remains a dominant source of supply and until 1998 was associated with the convergence of yields. However, yield convergence has virtually stopped since 1998, as differentials have been reduced to those related to the size of individual issues.<sup>2</sup> Smaller member states are not able to provide enough issuance volume in all maturities to reap the full benefits of the unified yield curve. Co-ordinated issuance could alleviate this problem.

<sup>2</sup> See Chapter 4 in European Commission (2001).

The euro seems to have stimulated cross-border equity investment and the consolidation of stock exchanges (a successful example is the merger of the Amsterdam, Brussels and Paris exchanges to form Euronext in 2000).

Despite the trend towards integration in capital markets, the European banking retail market continues to be segmented, and the degree of cross-border penetration is small.<sup>3</sup> In addition to regulatory barriers, existing branch networks and relationships with clients are important obstacles to entry in the retail sector, and there are significant switching costs for customers.<sup>4</sup> The lack of integration is most apparent in the markets for consumer credit and mortgages. Regulatory restrictions governing the composition of the portfolio of institutional investors, such as pension funds and insurance companies, are a source of market segmentation in asset management. The lack of integration of the retail market also characterises electronic banking, which remains very limited (with some exceptions in the Nordic countries and the United Kingdom). As the European Commission has stated, cross-border retail fees are high and have maintained a high degree of dispersion in the last decade. In 2001, the European Commission introduced a regulation of cross-border payments in euros because of the little progress observed in reducing price differentials. At the same time, cross-border securities trade is much more expensive than trade within the national boundaries (see Economic Financial and Committee, 2002.)

In general, important differences among countries remain in terms of the degree of competition, amount of rationalisation of the banking sector, financial strength of banks, and progress in the transformation towards a services industry.<sup>5</sup>

Consolidation among banks is taking place in Europe mostly through domestic mergers (see Table 4.1). In contrast to the United States, obstacles to cross-border mergers in Europe consist of restrictions on labour mobility, differences in cor-

<sup>3</sup> For example, the market share of subsidiaries and branches of foreign credit institutions as a percentage of the total assets of domestic credit was less than 13 percent for the euro-area average as at the end of 1997 (see ECB, 1999). The exceptions are Belgium, Ireland and Luxembourg.

<sup>4</sup> In spite of this, French and German banks have foreign assets in branches and subsidiaries amounting to about a third of domestic assets (see ECB, 1999).

<sup>5</sup> For example, some countries lag behind in the move towards services, like France, Italy, and Spain as compared to Germany or the United Kingdom.

Table 4.1

Merger and acquisition activity in the euro-area financial industry<sup>a)</sup>

	Same country		Other euro country		Other non-euro country		Total		As a percentage <sup>b)</sup>	
	Nb. <sup>c)</sup>	Value <sup>d)</sup>	Nb.	Value <sup>d)</sup>	Nb.	Value <sup>d)</sup>	Nb.	Value <sup>d)</sup>	Nb.	Value <sup>d)</sup>
<b>Banks-banks</b>										
1998	7	8,445	1	147	12	13,787	20	22,379	12.7	13.0
1999	9	41,242	4	9,465	15	7,495	28	58,202	15.9	34.2
2000 <sup>e)</sup>	3	4,528	0	0	5	11,654	8	16,182	26.7	62.0
<b>Banks-non-bank financial</b>										
1998	7	28,604	1	646	3	897	8	31,147	24.2	37.9
1999	3	20,816	1	800	12	4,130	16	25,746	20.8	56.4
2000 <sup>e)</sup>	8	4,768	1	1,631	4	653	13	7,052	48.1	39.1
<b>Non-bank financial – non-bank financial</b>										
1998	6	7,299	2	7,974	7	1,201	15	16,474	11.8	13.8
1999	11	15,508	4	378	19	21,888	34	37,774	15.7	40.7
2000 <sup>e)</sup>	4	5,071	1	9	5	454	10	5,534	23.3	18.8

<sup>a)</sup> Either acquirer or target company is resident in the euro-area. Only completed or pending deals, announcement date volumes. – <sup>b)</sup> Of mergers and acquisitions in all countries. – <sup>c)</sup> Nb. = Number. – <sup>d)</sup> In millions of US dollars. – <sup>e)</sup> 1 January to 10 April.

Source: BIS (2000, p. 134).

porate culture, and political interference (for example, promotion of national champions).<sup>6</sup> Nevertheless, international deals predominated among insurance companies in the period 1985–1997. Furthermore, in the same period, mergers and acquisitions (M&A) deals tend to be concentrated among the same type of institutions, rather than being targeted to create conglomerates (Berger, DeYoung, and Udell, 2000). An interesting feature of cross-border banking in Europe is that it often takes the form of subsidiary instead of branch. This is the case, for example, of the cross-border mergers and acquisitions involved in the formation of Nordea AB, ING Group and HypoVereinsbank (see Dermine, 2002) as holding companies with subsidiaries.

One issue with domestic mergers is that they tend to increase local concentration, which is what matters for the exercise of monopoly power in retail banking. In 1997, the C5 deposit ratio (the share of deposits of the five largest institutions) had a value which was

<sup>6</sup> In the United States, recent studies indicate that there are sizeable economies of diversification in macroeconomic risk that can be exploited by means of mergers of entities in different states (Hughes et al., 1996, 1998). In Europe these economies of international diversification are partly limited by the increasing correlation in the business cycles of different countries (and the reduction in correlation between regions belonging to the same country). However, Berger, DeYoung, and Udell (2000) report that correlations of bank earnings across European nations are low, or even negative, relative to those across states in the United States.

similar for the EU and the United States (around 12 percent).<sup>7</sup> Yet, because of the weight of interstate mergers, the current consolidation process in the United States has not generated a clear trend towards local concentration (Berger, Demsetz, and Strahan, 1999). With very limited cross-country mergers, the situation in Europe is more worrisome.

### 2.1 Has the level of risk increased?

Consistent with the international evidence (Demirgüç-Kunt and Detragiache, 1998), liberalisation in Europe has also been associated with bank failures. Table 4.2 shows the fiscal costs of

<sup>7</sup> National concentration levels in banking are much higher in European countries than in the United States at large, and they have tended to increase, particularly for smaller countries. For example, the concentration ratio C5 for deposits ranges from 30 to 80 percent in EU countries, with the exception of Germany which is less concentrated.

Table 4.2

## Fiscal costs of select banking crisis

	Period	Fiscal cost (% of GDP)	Blanket guarantee for depositors and creditors	Extensive liquidity support to financial intermediaries
Spain	1977 – 85	5.6	No	Yes
France	1994 – 95	0.7	No	No
Finland	1991 – 94	11.0	Yes	Yes
Sweden	1991 – 94	4.0	Yes	No
USA	1981 – 91	3.2	No	No
Japan	1992 present	20.0	Yes	Yes

Source: The EU Economy 2001 Review (2001) and Honohan and Klingebiel (2001).

selected banking crises in Europe, compared with Japan and the United States. The table shows that the costs of European banking crisis have been comparable to the experience of other countries.<sup>8</sup>

Because of pressure on margins due to disintermediation and the general increase in competition in local markets, European banks have increasingly looked for markets with larger margins abroad. As a result, in the second half of the 1990s, the exposure of European banks to emerging markets was several times larger than that of US banks. If we break down the income of large European banks by geographical origin (including off-balance sheet activities), we see that a substantial part is earned abroad (about 33 percent in 1998, more than half of which is earned outside the EU). The largest Spanish banks, for instance, have very high exposure in Latin America (SCH in Brazil and BBVA in Mexico). By the same token, international interbank claims of EU banks have grown substantially. In 1998 international claims by banks located in the EU on banks located outside (in) the EU represented 7 percent (12 percent) of the total balance sheet of the EU banking system (see Economic and Financial Committee, 2000.) These data point to high risk-taking, especially by large banks, leading to non-negligible systemic risk.

At the same time the wave of domestic consolidation has created banks that are large in relation to some national economies, particularly in small economies like Switzerland and the Netherlands, but also in larger ones like Spain. This means that trouble in some of these “national champions”, with its possible systemic consequences, may come at a high cost. For example, the book value of equity to national GDP ratio (2000) for UBS and Crédit Suisse in Switzerland is 12.4 percent and 10.5 percent, respectively; for ING Group in the Netherlands it is 6.6 percent and for SCH in Spain it is 4.3 percent.

In other words, while financial market integration provides opportunities for better diversification (for

<sup>8</sup> In the crises in Spain and in Scandinavia, also factors other than financial liberalisation were involved, that is the economic recession in Spain and, in Scandinavia, errors in fiscal and monetary policies which helped to inflate the speculative bubble. In all cases there was poor management, along with deficiencies in banking supervision.

<sup>9</sup> There is an argument pointing at a stronger need for diversification of credit risk in a single currency area. As a single monetary policy responds to an average of shocks hitting the different regions of the euro area, it becomes less effective (relative to national monetary policies) in stabilising local demand conditions. Hence, after the introduction of the euro, the possibility of asymmetric business cycle developments increases the credit risk in any specific region of the Union. Obviously, this effect has to be set against the smaller exchange rate risk between euro countries.

example with cross-border M&As)<sup>9</sup>, it also provides incentives for higher risk-taking, increasing the level of systemic risk and vulnerability to contagion.

### 3. The present arrangements

In addition to the development of national legislation, financial regulatory institutions in the euro area derive from the Treaty of the European Union and European Commission Directives. Competition policy also goes back to the Treaty of Rome. This section will illustrate the present regulatory situation in terms of crisis lending and management, regulation and supervision, and competition policy. We leave to boxes 4.1 to 4.3 a brief discussion of the theoretical arguments for financial

#### Box 4.1

##### The rationale for financial regulation

- *Fragility and its consequences.* Because of currency and maturity mismatch between assets and liabilities, the banking and financial system is vulnerable to sudden losses of funds resulting in the failure of fundamentally solvent intermediaries. Experience shows that panics and systemic crises compromising the banking and financial system may have a major impact on the real sector of the economy (as suggested by the examples of the Great Depression of the 1930s, the 1998 international financial crisis, or the on-going crisis in Japan).
- *Co-ordination failure of investors and runs.* In the case of a purely speculative panic, depositors withdraw their funds and force the bank to early and costly liquidation of assets. A panic can be generated by news regarding bank solvency problems. In this case, the possibility of depositors' runs may have a disciplinary effect on risk taking by financial intermediaries (see Diamond and Dybvig, 1983; Jacklin and Bhattacharya, 1988; and Postlewaite and Vives, 1987.)
- *Contagion and systemic risk.* The bankruptcy of one financial intermediary can have systemic consequences, owing to contagion effects which may give rise to strong negative externalities for both the financial sector and the real sector of the economy. The failure of one institution may jeopardise the solvency of other institutions via default on commitments assumed in the interbank market. Large variations in the price of assets such as an abrupt fall of stock prices or the failure of a major intermediary, may generate a domino effect and systemic crisis affecting the payment system.
- *Why regulation?* Regulation aims at providing the banking and financial systems with stability to elude the negative effects associated with failing institutions and systemic crises. A second aim is to protect small investors and customers of firms providing financial services.



## Box 4.2

## Financial stability facilities

*Crisis lending and the central bank:* An important discretionary activity of the central bank consists in helping banks experiencing temporary liquidity problems via the discount window or open-market operations. The central bank can create liquidity as needed, and can credibly commit to unlimited lending and fast reaction because of its control of high-powered money. Alternative arrangements to provide liquidity involving private money (lifeboats, liquidity consortia) or funds raised with taxes (via deposit insurance funds, building “war chests”, or direct recourse to the finance ministry) are costly and in general can be at best part of a solution in which the central bank is also involved.

*Crisis management:* A crisis manager helps to solve the co-ordination problem among creditors that a crisis entails. In many instances the *lender of last resort* (LLR) manages the crisis but does not put up its own funds, which may be private money (as in the rescue of Long-Term Capital Management (LTCM) co-ordinated by the Federal Reserve Bank of New York, see next paragraph), or money from the deposit insurance fund or the taxpayer (Goodhart and Shoenmaker, 1995).

*Examples of crisis management:* The stock-market crisis of 1987 provoked problems in the clearing systems of the derivative markets and was overcome thanks to an injection of liquidity by the Federal Reserve. Financial intermediaries required additional funds to meet the needs of their clients with margin calls. Indeed, intermediaries in the capital and money markets were assisted by bank credit lines in providing liquidity. In the crisis of the hedge fund LTCM, after Russia’s default in 1998, LTCM had to be recapitalised in order to meet the margin requirements in derivatives when the market spreads moved adversely to the position of the fund. The Federal Reserve Bank of New York organised a rescue operation with investment banks that were investors in the fund. According to the Fed, the hasty liquidation of the (large) fund positions could have caused a major disruption in world financial markets.

*The classic Lender of Last Resort (LLR):* The classic prescription for the LLR (associated with Bagehot, see Meltzer, 1986) is that funds should be provided only to solvent banks with liquidity problems. These banks are to be helped with loans at a penalty rate and against good collateral, evaluated in “normal” conditions. The solvency and collateral terms under which help will be given must be clearly stated and the LLR must announce its readiness to lend without limit. Goodfriend and King (1988) have disputed this “banking policy” view arguing that in developed financial systems a solvent bank cannot be illiquid and therefore only open-market operations are needed. Rochet and Vives (2002) provide a modern justification of Bagehot’s view.

*Deposit insurance:* Deposit insurance is a non-discretionary activity by means of which deposits are protected up to predetermined limits. If the limits are not very high, it meets the aim of protecting the small investor.

*Too-Big-To-Fail (TBTF) policy:* Often banks and depositors are protected above the levels required by the deposit insurance scheme. Under the TBTF policy a large insolvent bank will be rescued (and its uninsured depositors will be protected) whenever its failure is likely to affect other banks, via the inter-bank market, and the real economy.

Eurosystem), made up of the European Central Bank (ECB) and the national central banks (NCBs). The ESCB has the narrow mandate to maintain price stability, and without prejudice to this objective, it should support the general economic policies of the EU (Article 105(1) of the Treaty). The ESCB is subordinate to the national governments and to other European institutions in the area of financial supervision and the stability of the European financial and banking systems: “The ESCB shall contribute 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” (Article 105(5)).

In summary, the Treaty does not put the ESCB explicitly in charge of the stability of the financial system, although there is recognition of the ESCB’s task of promoting the harmonised operation of the payments system (Article 105(2)). However, the ECB has a consulting role in legislation regarding financial institutions in so far as they may affect stability (Article 105(4) and EU Council Decision 98/415/EC), and its role with respect to questions of supervision can be larger: “The Council may, acting unanimously on a proposal from the Commission and after consulting the ECB and after receiving the assent of the European Parliament, confer

upon the ECB specific tasks concerning policies relating to the prudential supervision of credit institutions and other financial institutions with the exception of insurance undertakings” (Article 105(6)). This means that the ECB could be assigned supervisory powers, with the exception of insurance, without the need to reform the Treaty of the EU.

regulation, the regulatory facilities in place to guarantee financial stability, and the moral hazard problem motivating the need for prudential supervision.

### 3.1 Crisis lending and management

The monetary authority under the Treaty of the EU is the European System of Central Banks (ESCB or

## Box 4.3

## Regulation, prudential supervision and moral hazard

- *Moral hazard.* Both the Too-Big-To-Fail policy and the deposit insurance system reduce the incentive of depositors and investors to monitor bank performance. Excessive risk taking may then derive from the bank's limited liability charter and the non-observability of the risk level in the bank portfolio. Moral hazard also arises because the effort of bank managers in monitoring projects is not observable.
- *Time-inconsistency.* A well-intentioned LLR will find it optimal ex post to help a bank whenever this salvages the value of projects that the bank is financing. Indeed, ex ante the central bank may want to commit to close the bank if the returns are very low (signalling a solvency problem) while helping the bank if the returns are only moderately low (signalling a liquidity problem). Such a commitment provides incentives for bank managers to monitor the projects they finance. However, ex post, costly liquidation of the projects will not be optimal, so the central bank may hesitate to carry out its threat. The commitment problem is compounded by the interest of the bank management in the continuation of the bank. Bankers, anticipating the help, will tend to exert suboptimal effort in monitoring projects and take excessive risk.
- *Alleviating the excessive bailout problem.*
  - A central bank with a "tough" reputation can alleviate the time-inconsistency problem. Credible central banks typically adopt a "constructive ambiguity" policy, not making explicit the criteria under which entities with problems will have access to help.
  - Alternatively, external discipline can be imported into a small open economy by adopting another (stable) currency ("dollarising"), entering into a credible monetary union (like EMU), and/or acquiring foreign short-term debt. In all those instances a firm commitment is acquired (with dollarisation because recourse to the LLR is drastically limited, with a monetary union because of the credibility of the central bank, and with foreign short-term debt because it cannot be inflated away, see Gale and Vives (2002) and Vives (2002)).
  - Another way to import discipline for countries which have difficulties building a reputation for the central bank, is by transferring political sovereignty, forming a monetary union and establishing an independent and credible central bank. For this to succeed, some of the participants' central banks must have already established a credible reputation.
- *Prudential supervision.* The general trend in prudential supervision is to check risk-taking with capital requirements and appropriate supervisory controls. Both risk-based deposit insurance and disclosure improvements have been proposed to limit risk-taking behaviour. However, while it is feasible to introduce disclosure requirements of the banks' market positions, it is more difficult to assess the risk level of the illiquid loan portfolio of a bank. (See Matutes and Vives, 2000, and Cordella and Yeyati, 2002.) Furthermore, more disclosure may in fact induce information-based runs of depositors generating instability.

Only relatively recently has the ECB raised its profile in crisis management. The first official statement we are aware of is Duisenberg's October 1999 declaration in the European Parliament:<sup>10</sup>

<sup>10</sup> See also Padoa-Schioppa, 1999, member of the Executive Board of the ECB in charge of prudential supervision. The quotation in the text is from the introductory statement delivered on the occasion of the Presentation of the ECB's Annual Report 1998 to the European Parliament in Strasbourg, 26 October 1999.

"The main guiding principle within the Eurosystem with reference to the provision of emergency liquidity to individual financial institutions is that the competent national central bank would be responsible for providing such assistance to those institutions operating within its jurisdiction. The ECB does, however, have to be informed of this in a timely manner. In addition, in operations of relevance to the single monetary policy, the decision-making bodies of the Eurosystem will be involved in assessing the compatibility of the envisaged operations with the pursuit of monetary stability. In the case of a general liquidity crisis resulting from a gridlock in the payment system, for instance, the direct involvement of the Eurosystem could be expected."

The central bank is the natural candidate for the lender of last resort function (LLR) in a financial system (see Box 4.2). The Federal Reserve and the Bank of England are explicitly in charge of the stability of the financial system (but the Bundesbank was not). For example, the Federal Reserve Board (FRB) determines the policy regarding supervision and last-resort lending on the part of the banks of the Federal Reserve System. The FRB determines the conditions under which discount-window loans will be granted

by the Federal Reserve banks and, in practice, the FRB is consulted regarding any major loan. Most likely, the reason behind the lack of formal responsibility of the ECB on stability matters is that there is no central European fiscal authority. Typically, a central bank turns to the finance ministry or specialised agencies, like a deposit insurance fund, when an assisted bank turns out to be insolvent.

### 3.2 Regulations and Supervision

#### The home country control principle and regulatory competition

The Single Market in financial services builds on the single banking licence, together with the principles of home country control and of mutual recognition (Second Banking Directive, effective since 1993).<sup>11</sup> If a financial institution is authorised to operate in one European country, it may offer or establish financial services anywhere else. That is, the financial institution can branch from one member country to any other member country.<sup>12</sup> The Second Banking Directive establishes the control of the home country (that is the member state in which the financial institution has been authorised) for the prudential supervision of solvency and of major risks, and a minimum harmonisation between countries in other areas, such as minimum capital requirements, concentration of risks, and protection of investors.<sup>13</sup> The Directive regarding deposit insurance proposes a minimum coverage (up to €20,000), which tends to reflect an interest more in protecting the small investor than in protecting the stability of the banking system. Deposit insurance is organised according to the home country principle: a bank granted a licence in a EU country is insured by the deposit insurance system of the home country when it operates in another EU country. However, a foreign branch may join a more favourable host country scheme.

The principles of home country control and mutual recognition lay out a regulatory competition framework. This framework may encourage information production and limit the potential opportunism of the national regulators. Country discretion ranges from legal differences in financial contracts, the organisation and conduct of banking supervision, the structure of deposit insurance

schemes, and the institutions and procedures to restructure banks. For example, the administration of deposit insurance may be in the hands of either the government or the banking sector, or both. In general, deposit insurance premia are a flat percentage of deposits but some consideration to risk is given in Italy, Portugal and Sweden. Funding is secured in some countries with ex-ante contributions and in some others with ex-post levies.

#### *Diversity of regulatory institutions*

A recent development is the establishment of universal regulators for banking, insurance and financial markets. This is the approach taken in the United Kingdom (in 1997), the Scandinavian countries (Norway in 1986, Denmark in 1998 and Sweden in 1992), and Japan. Let us describe the UK approach. The Bank of England Act (1997) sets up the Financial Services Authority (FSA) that integrates responsibility for the supervision of markets (securities), financial intermediaries and insurance. The FSA undertakes the authorisation and prudential supervision of all financial entities, the supervision of financial markets, regulatory policy, and the response to problems in institutions and markets that do not enter into conflict with the competence of the Bank of England on the stability of the financial system and systemic risk. The Bank of England and the FSA must work jointly, but each institution has a leadership role in its field of responsibility. The Bank of England, the FSA and the UK Treasury have signed a Memorandum of Understanding (MOU) that delineates their respective responsibilities. In particular, when dealing with an emergency situation: 'The Bank and the FSA would need to work very closely and they would immediately inform the Treasury, in order to give the Chancellor of the Exchequer the option of refusing support action' (MOU, par. 13).<sup>14</sup> It is specified also that the Bank and the FSA must share information and work jointly to avoid duplication in the gathering of information. The Bank of England has free and open access to supervisory records (MOU, par. 21).

In the EU, there are six countries in which the central bank is the main supervisory authority: Greece, Ireland, Italy, the Netherlands, Portugal,

<sup>11</sup> Other relevant Directives are that of investment services, (implemented in 1995), and those on own funds, solvency ratios and large exposures. The Directive on the Winding-Up of Credit Institutions was finally approved in 2001. It states that when a bank with branches in other member states goes bankrupt, the winding-up process will be governed by the bankruptcy proceedings of the home country.

<sup>12</sup> Furthermore, the legal obstacles to the setting up of subsidiaries have practically disappeared, although there are still restraints on the takeover of domestic institutions by foreign banks (need for approval by the supervisory authority and other restrictions in some countries).

<sup>13</sup> The harmonisation of minimum capital requirements may be needed to avoid the distortions induced by regulatory competition among national authorities. For example, undersupply of capital regulation may follow from the fact that national solvency regulations create a positive international policy externality on foreign lenders of domestic banks (see Sinn, 2003).

<sup>14</sup> At the same time some ambiguity about the character of the intervention is maintained: "The form of the response would depend on the nature of the event and would be determined at the time". (MOU, par. 12).

**Table 4.3**  
Supervisors of banking, securities and insurance in Europe, Japan and the United States (early 2002)

	Banking	Securities markets	Insurance
Belgium	BS	BS	I
Denmark	FSA	FSA	FSA
Germany	FSA	FSA	FSA
Greece	CB	S	I
Spain	CB	S	I
France	B/CB	S	I
Italy	CB	S	I
Ireland	CB	CB	G
Luxembourg	BS	BC	I
Netherlands	CB	S	I
Austria	FSA	FSA	FSA
Portugal	CB	S	I
Finland	BS	BS	I
Sweden	FSA	FSA	FSA
UK	FSA	FSA	FSA
Switzerland	BS	BS	I
Czech Republic	CB	SI	SI
Hungary	FSA	FSA	FSA
Norway	FSA	FSA	FSA
Poland	CB	S	I
Slovenia	CB	S	G
USA	B/CB	S	I
Japan	FSA	FSA	FSA

**Notes:** CB = central bank, BS = banking and securities supervisor, FSA = single financial supervisory authority, B = specialised banking supervisor, S = specialised securities supervisor, I = specialised insurance supervisor, SI = specialised securities and insurance supervisor, G = government department.

The supervision of the securities markets is a generalisation of the most prevalent model in a certain state; it does not take the spread of the elements of supervision over different authorities into account.

Source: Lannoo (2002).

and Spain. These are the only countries in the EU-15 that maintain different supervisors for banking, insurance and securities markets. Germany<sup>15</sup> (2002), Austria (2002), Denmark, Sweden, and the United Kingdom have embraced the FSA model. Belgium, Finland, and Luxembourg have an integrated banking and securities supervisor. However, in Belgium, as well as Ireland, the central bank will take over and integrate financial supervision. France is the only country with a specialised banking supervisor, who shares responsibility with the central bank (see Table 4.3).

Overall, many central banks have moved away from banking supervision. However, as shown in Table 4.3, disparity still exists, and there are other contending models. For example, Australia has three supervisors with horizontally assigned tasks:

systemic stability for the central bank, prudential supervision for a specialised agency, and conduct-of-business rules (disclosure, level playing field, transparency, market integrity) for another agency. In any case, it is to be noted that bank supervisors will focus on prudential supervision (control of credit and market risk), securities supervisors on investor protection and market integrity, while insurance supervisors will worry about the long-term sustainability of the insurers (and hence monitoring asset-liability management). Box 4.4 provides an analysis of the arguments in favour or against separation of regulatory institutions.

#### *The European regulatory and supervisory maze*

Supervision remains decentralised at the national level and national supervisors operate mostly within borders. The main institutional channel of the ECB for obtaining information regarding the banking and financial system is the Banking Supervision Committee of the ECB. The BSC also serves as an advisory body to the ECB when the latter forms opinions on EU and national legislation. It is in the BSC, where the national supervisors of EU countries (the central banks and other agencies) are represented, that the supervision of euro (and EU) countries must be co-ordinated via the exchange of information and co-operation of supervisors. It is worth pointing out that EU directives do not impose information sharing obligations on national supervisors in times of crisis. However, the so-called BCCI Directive of the EU has removed obstacles to the exchange of confidential information from supervisors to central banks. Moreover, there is bilateral co-operation between supervisors, who negotiate information exchange and supervisory procedures about cross-border activities in a Memorandum of Understanding (MOU). A more informal (and lower level) multilateral arrangement is the Groupe de Contact, a group of EU banking supervisors from the EEA (European Economic Area), which deals with individual bank problems. Parent to the Groupe de Contact is the EU Banking Advisory Committee (BAC) that has mainly a legislative role in advising the European Commission.

Parallel groups in insurance are the Conference of Insurance Supervisors and the Insurance Committee. In February 1999, a multilateral MOU among European security supervisors representing members of FESCO (Forum of European Securities

<sup>15</sup> However, the supervision of securities markets is in the hands of the Länder in Germany.



## Box 4.4

## Optimal regulatory design

*The central bank and supervision:*

Arguments for the central bank to have supervisory capacity. A central bank is best placed:

- to distinguish between problems of liquidity and of solvency in order to minimise the losses associated with loans granted and making possible a role as crisis manager;
- to determine the best kind of intervention (open-market or discount operations);
- to profit from economies of scope in the acquisition of information between the function of providing liquidity and that of supervising (for example, the first of these functions requires a detailed familiarity with the banks' liquidity requirements);
- to exploit synergies between the conduct of monetary policy and information collected with supervisory purposes. Indeed, banking supervisory information (early warning of problems with non-performing loans or changes in the lending pattern of banks) may improve the accuracy of macro-economic forecasts.

Arguments against the central bank having supervisory capacity:

- The combination of control of monetary policy and the role of LLR at the central bank raises an inflationary concern. However, a central bank committed to price stability will sterilise the injections of liquidity necessary for the stability of the system in the event of crisis (as the Federal Reserve did in 1987) so that there is no undesired increase in the money supply. In practice matters may not be so simple and intervention as LLR may give rise to confusion in the expectations of the private sector regarding the central bank's monetary policy stance.
- There may be a conflict of interest between the reputation of the central bank as guarantor of currency and financial stability. For example, concern for the reputation of the central bank as supervisor may encourage an excessive use of the LLR facility so that bank crises will not put its supervisory capacity in question. Underlying the conflict-of-interest concern there are incentive problems among regulators related to their career concerns, accountability and monitoring of their multiple tasks, allocation of control, incentives to produce information and potential capture (see Vives, 2000).
- Some preliminary evidence indicates that central bank involvement in supervision may increase inflation (see Bini Smaghi, 2000, and Di Noia and Di Giorgio, 1999).

*The case for an independent FSA*

Arguments for the separation of supervision from the central bank:

- Separation facilitates the optimal provision of incentives to self-interested bureaucrats so as to minimise conflicts of interest.
- The convergence between the activities of financial institutions and markets points to the need for the combined regulation of banking, insurance and securities. It is becoming increasingly difficult to separate market-derived risk from credit risk. Banking crises that involve operations with financial derivatives (such as Barings or LTCM) seem to require specialised knowledge of market regulators. At the same time banking and insurance tend to converge.
- There are also EU-related political economy considerations. In a system in which the ECB is perceived as having already too much power and faces accountability questions, the creation of an independent regulatory agency may help lessen both concerns. It is easier to hold accountable an agency with a well-defined mission.

creation of the Committee of European Securities Regulators (CESR) to replace FESCO and to strengthen co-operation among national regulators. The CESR was established in 2001. The Lamfalussy Committee also recommended the establishment of an EU Securities Committee with implementing powers to interpret and adapt legislation.

Additionally there are more committees in the EU. There is the Financial Services Policy Group (FSPG) to set strategic lines for financial services regulation, and the Economic and Financial Committee (EFC), which discusses financial stability and other issues in ad-hoc committees.

There are also some cross-sectoral committees: a Mixed Technical Group of Financial Conglomerates and a Cross-Sectoral Round Table of Regulators. The latter was set up to foster information exchange among supervisors following the recommendation of the Brouwer Report on Financial Stability by the Economic and Financial Committee.

The maze of committees is summarised in Table 4.4

### 3.3 Competition policy

European competition policy also plays an important role in shaping the European financial architecture. Two important instances are bank rescues and state aids, and cross-border mergers.

First, the European competition policy Commissioner can intervene to examine whether a bank rescue with public money is compatible with competition

Commissions) was signed. The Lamfalussy Committee of Wise Men (see Section 4.3) proposed the

policy towards state aids. Assistance to the French



Table 4.4

## The current structure of European supervisory and regulatory cooperation

Objective/ Sector	Banking	Insurance	Securities markets	Cross-sector and horizontal matters
Regulatory	Banking Advisory Committee (BAC)	Insurance Committee (IC)	Securities Committee	Financial Services Policy Group (FSPG)  Mixed Technical Group on Financial Conglo- merates
Supervisory	Groupe de Contact	Conference of Insurance Supervisors	Committee of European Securities Regulators (CESR, formerly FESCO)	Cross-Sectoral Round- table of Regulators
Financial Stability	ECB's Banking Super- vision Committee (ESCB plus EU non-central bank supervisors)			Economic and Financial Committee (EFC), ECB's BSC

Source: Lannoo (2002).

national champion *Crédit Lyonnais* was challenged exactly on this basis. Public rescue of *Banesto* (Spain) and *Crédit Lyonnais* provide additional examples of the Too-Big-To-Fail policy in Europe. European competition policy over state aids (complementing the EU Directive on reorganisation and winding-up of credit institutions 2001) allows prompt corrective actions. The intervention of the European competition policy authority may be desirable even if there are no negative cross-border externalities from the state aid. The reason is that the European competition policy authority may strengthen domestic policy makers' commitment to screen state aids according to market failure principles, away from local lobbying pressures.

Secondly, the European competition policy authority can play an important role in facilitating cross-border mergers and acquisitions by removing obstacles established by national authorities. Indeed, political obstacles to cross-border mergers have been pervasive – as suggested by the *BBVA's* failed attempt to take over *Unicredito* in Italy, or the problems of former *BSCH* (now *SCH*) in Portugal while attempting, and finally succeeding, in acquiring the *Champalimaud* group. In the latter case, the European Commission challenged the Portuguese regulator, who stated its opposition to the takeover because of “stability concerns”. Another example is provided by the attitude of the French authorities, looking for a “French” solution in the triangular battle of *BNP-SG-Paribas* that ended with the merger of *BNP* and *Paribas*.

Responsibility for the control of domestic mergers, which are so far predominant in Europe, varies

from country to country. In many countries, responsibility lies with the competition authority, sometimes shared with the regulator (United Kingdom, Switzerland, Scandinavia, France, Greece), but in practice the central bank/supervisor carries a lot of weight. In Italy, the central bank approves bank mergers and the competition authority has only a consulting role. European practice contrasts with that in the United States, where banking mergers must receive approval of the regulator (be it the Federal Reserve, the FDIC or the OCC) but the Department of Justice (DOJ) can (and does) challenge mergers that threaten to reduce competition substantially. Typically, the DOJ uses more stringent criteria.

#### 4. Plans, reports, and problems

Several reports and studies on financial market integration in Europe, by the European Commission or by committees and groups specifically formed to address this issue, have pointed at several pending problems and have produced recommendations. In this section, we take stock of these concerns and add a few more.

##### 4.1 Integration of financial markets: regulatory barriers

As we have seen in Section 2, the integration of financial retail markets is far from complete. In addition to natural barriers (like language, culture, information), there are regulatory barriers. An important one is that the legislation on consumer protection is in the hands of the host country. Financial entities

still have to design 15 different products for 15 different markets (member states). This extends to e-banking. While the e-commerce Directive calls for the supply of services based on the rules of origin, in the draft of the Directive on distance selling of financial services things are much more complicated. Differential tax treatments are another obstacle to integration (as regards, for example, pension funds and life insurance).

Regulatory barriers are still in place as pan-European institutions are confronted with multiple rules and reporting requirements. For example, a typical large financial institution has to report to more than 20 supervisors in the EU (out of the 39 existing). To this we should add the political obstacles to cross-border mergers.

In 1998, the European Council adopted the Financial Services Action Plan for 1999-2005, comprising 41 separate measures (EU Directives and Commission Communications) with the aim of completing the legislative framework for market integration in financial services. Three main objectives are

- a single EU wholesale market,
- open and secure retail markets,
- state-of-the-art prudential rules and supervision.

There has been progress in the implementation of the 41 measures, but not without important setbacks. Examples of setbacks are the failure of the Take-over Bids Directive, the standstill on pension funds, and tensions between the European Commission, the Council and the Parliament in implementing the recommendations of the Lamfalussy Report (further discussed below in Section 4.3).

#### 4.2 Crisis management and cross-border risk: What framework?

Under present arrangements, it is up to national central banks (NCB) to undertake the LLR function and provide emergency liquidity assistance to financial institutions. They are responsible for decision-making in crisis situations, and they have to bear the eventual cost of the intervention. So, if a bank develops solvency problems and ends up being rescued, the cost is paid either by the national deposit insurance fund or the national budget, or both. The responsibility for intervening falls on the “host” country central bank when a crisis hits a subsidiary

and will be likely to be shared between home and host country central banks when it affects a foreign branch. If liquidity assistance has monetary consequences for monetary policy, then the ECB and the Eurosystem will be involved. Clearly, the involvement of the Eurosystem is to be expected in the presence of a general liquidity crisis, such as a gridlock of the payment system. This policy is consistent with the principle of home country control for supervision and deposit insurance.

In response to criticisms that the present arrangements were not adequate to guarantee stability in the euro area, the Economic and Financial Committee of the EU was asked in 1999 to check “whether the existing regulatory and supervisory structures in the EU can safeguard financial stability”. An ad-hoc working group chaired by Henk Brouwer was formed. In its Report on Financial Stability (Economic and Financial Committee, 2000) this group concludes that the existing institutional arrangements provide a coherent and flexible basis for safeguarding financial stability in Europe, and make some recommendations to enhance their smooth functioning. A second report of the EFC (Economic and Financial Committee, 2001) assesses whether the current arrangements for crisis management are appropriate, and whether any progress has been made on the recommendations of the first report. The report concludes: “Substantial progress is being made by the various supervisory committees and the national authorities in the EU in implementing the recommendations of the first report on financial stability.”

The main recommendations of these reports are to enhance co-operation among different authorities (supervisors, central banks, and finance ministries), and to foster convergence of supervisory practices. Supposedly, these recommendations have been advanced with the help of a plethora of committees (see Section 3). To deal with major financial institutions (including conglomerates) domiciled in the EU, it was recommended to reach an agreement on one co-ordinating supervisor with well-defined responsibilities. Accordingly, the draft directive on financial conglomerates (April 2001) prescribes the mandatory appointment of one (or more) supervisory co-ordinator(s) of qualifying conglomerates as well as his (their) tasks.<sup>16</sup>

<sup>16</sup> Proposal for a directive on the supplementary supervision of credit institutions, insurance undertakings and investment firms in a financial conglomerate.

The key question is whether the existing co-operative framework of crisis management is up to the task of preserving financial stability in the euro area. To a large extent, the reason why present arrangements were considered adequate is that financial consolidation has so far taken place mostly at the domestic level. However, there are a number of open questions and issues regarding intervention policies in the event of the failure of some large financial entity, possibly causing systemic problems with cross-border spillovers in the euro area. A number of these questions are listed below:

- The chain of command and crisis procedures. Who is in charge of monitoring cross-border crises? Who will take the lead in a crisis with systemic consequences? What are the crisis management procedures at the ESCB? We have seen above that supervision is in the hands of NCBs. The response to a crisis is one of “improvised co-operation” anchored at the BSC of the ECB, where information should be exchanged and decisions taken. In response to concerns about the effectiveness of this arrangement, the BSC has developed a set of prudential indicators trying to capture aggregate risk exposures of EU banks. The goal of these indicators is that – should problems arise in, say, a large group, potentially leading to contagion effects in many EU countries – these problems are reported to the authorities in all the countries concerned (Economic and Financial Committee, 2001, p. 7). Similarly, the Brouwer Report II has requested national supervisors to add crisis management procedures to their bilateral MOU (as well as to remove the remaining legal obstacles to information sharing among supervisors).
- Conflict between national supervisors in a transnational crisis. Central banks and/or national supervisors may pay too little attention to problems of foreign clients of domestic banks, or to systemic international effects of a domestic crisis. For instance, in principle they could focus exclusively on the consequences of financial failure for the national economy, ignoring spillovers to other countries.<sup>17</sup> In addition, there is the possibility that the failure of a foreign bank will have systemic consequences in the

host country.<sup>18</sup> Those conflicts of interest will likely impair information exchange among national supervisors.<sup>19</sup>

- Excessive help at the country level and insufficient help at the European level? National regulators may be pressured to help ailing national champions, while they may be less willing to help transnational banks (intervening too little and perhaps also too late). The issue is who will internalise the cost of failure of a pan-European bank given that any single country would not reap the full benefits of a bailout. Under the present rules it is not clear who would pay for a failed insolvent transnational institution that has gone bankrupt after being helped; that is, how would the losses be eventually shared among the fiscal authorities? Excessive help to national banks can be partially controlled by European competition policy (state aids). A low level of help to transnational banks has two sides: on the positive side it helps to keep moral hazard problems in check (see Box 4.3); on the negative side it may dangerously increase systemic risk.<sup>20</sup>
- EU versus euro area. Some thought should be given to the co-ordination issues between the euro area and the whole EU. This will be particularly important after enlargement.

#### 4.3 Integration of securities markets: Regulatory fragmentation

Despite many obstacles, some segments of the securities markets are integrating quickly in Europe. The formation of Euronext (the joint venture of the Paris Bourse and the Amsterdam and Brussels stock exchanges) is a positive example. The failure of the merger of the London Stock Exchange and the Deutsche Börse into iX (international exchanges) is a negative one. National regulation and lack of harmonisation in settlement systems, disclosure and supervision are obstacles to the integration of stock markets. The iX project illustrates the complexity of the arrangements devised to circumvent regulatory hurdles in different countries. According to the original plan, secondary-market trading on the pan-European blue-chip market was to be regulated by the UK FSA, while trading on the pan-European high-growth market was to be regulated by the German federal equities regulator (at the time BAWE). Furthermore, existing companies could

<sup>17</sup> For example, in the case of the failure of the Bank of Credit and Commerce International (BCCI), many of the clients were not residents of the country in which the bank was authorised to operate, that is Luxembourg, and hence the costs of failure were borne to a considerable degree by foreign clients or their insurers.

<sup>18</sup> Thus, for example, some local authorities in the United Kingdom withdrew their funds from small banks that had contracted risks with the BCCI.

<sup>19</sup> See Holthausen and Ronde (2001).

<sup>20</sup> The fact that national authorities cannot discriminate against foreign creditors in a winding-up process of a bankrupt bank (according to the Directive on the Winding-Up of Credit Institutions) may contribute to the undersupply of help to an international bank by the home country.

keep their home-country listing, while newly admitted companies would have been listed through the competent authority of their choosing. How to achieve settlement consolidation and a central counterparty system was, however, left vague in the merger proposal.

As mentioned before, the Lamfalussy Committee of Wise Men was set up to diagnose the regulatory mechanisms in the EU, and to propose measures to speed up the development of European financial markets. The report (February 2001) identifies a set of obstacles to integration of securities markets in Europe related to inadequate regulation (in addition to differences in legal systems, taxation, as well as political, trade, and cultural barriers). It also lists the most important gaps in European regulation and priorities for reform (see Box 4.5).

The major problem according to the Lamfalussy Report lies in the regulatory process because

- it is too slow (the Takeover Directive has been discussed for more than a dozen years and not yet been adopted, Basel I took 4 years, how long will it take for Basel II?),
- it is too rigid,
- it is too ambiguous,
- it fails to distinguish between core principles and implementation rules.

The Lamfalussy Report proposes a four-level approach to securities market legislation:

- definition of a framework legislation (for example directives setting the general principles);
- establishment of an EU Securities Committee with implementing powers to interpret and adapt legislation;

#### Box 4.5

##### Lamfalussy diagnosis and priorities

###### *Obstacles to development of European securities markets (p. 10):*

- The absence of clear Europe-wide regulation on a large number of issues (for example prospectuses, cross-border collateral, market abuse, investment service provision) which prevents the implementation of the mutual recognition system.
- An inefficient regulatory system.
- Inconsistent implementation, in part due to lack of an agreed interpretation of the rules that do exist.
- A large number of transaction and clearing and settlement systems that fragment liquidity and increase costs, especially for cross-border clearing settlement.
- The inadequate development of funded pension schemes in most Member States.

###### *The most important gaps in European regulation (p. 12):*

- Lack of commonly agreed guiding principles covering all financial services legislation.
- Failure to make the mutual recognition principle work for the wholesale market business in the context of the Investment Services Directive (ISD); for regulated markets themselves; for the retail sector; or for a single passport prospectus working for cross-border capital raising.
- Outdated rules on listing requirements, no distinction between admission to listing and to trading, and lack of a definition of a public offer.
- Ambiguity over the scope and application of conduct of business rules (Article 11 of the ISD) as well as on the definition of who is a professional investor.
- No appropriate rules to deal with alternative trading systems.
- Potential inconsistencies between the E-commerce Directive and financial services directives.
- No comprehensive market abuse regime.
- No cross-border collateral arrangements.
- No set of common Europe-wide accepted international accounting standards.
- Outdated investment rules for UCITS and pension funds.
- Unresolved public policy issues for clearing and settlement activities.
- No agreed takeover rules.
- No high and equivalent levels of consumer protection and no efficient methods for resolving cross border consumer disputes.

###### *The main priorities for reform (p. 13):*

- A single prospectus for issuers, with a mandatory self-registration system.
- Modernisation of admission to listing requirements and introduction of a clear distinction between admission to listing and trading.
- Generalisation of the home country principle (mutual recognition) for wholesale markets, including a clear definition of the professional investor.
- Modernisation and expansion of investment rules for investment funds and pension funds.
- Adoption of International Accounting Standards.
- A single passport for recognised stock markets (on the basis of the home country control principle).

- creation of the Committee of European Securities Regulators (CESR, done in 2001), replacing FESCO, to strengthen co-operation among national regulators; and
- adoption of stricter enforcement procedures.

The creation of the EU Securities Committee was contested by the European Parliament (EP) on the

matter of the degree of implementation powers of such a committee (“institutional balance” in European parlance). But even independently of political and institutional issues, the approach envisioned by the report is not easy to apply. This is because it is not obvious how principles should be distinguished from implementation rules. For example, the draft prospectus<sup>21</sup> and market abuse<sup>22</sup> directives have gone into quite a bit of detail. The EP has proposed more than 100 amendments to the market abuse draft proposal (because the EP would not be able to amend the “implementation” decisions of the Securities Committee at a later stage). It is to be expected also that enlargement of the EU will compound this kind of problem.

The Lamfalussy Report has contributed to what is called (in European parlance) the “comitology” procedure. According to this procedure, while directives establish general principles, adopting the implementation and adaptation procedures of the general principles is left to a committee with broad interpretative powers (the “comitology powers”) – an example being the proposed EU Securities Committee. This has clearly clashed with the desire of the EP to retain control over the process, but eventually the EP settled on the proposal, in exchange for the promise that the Commission would take “utmost account” of its views. We note here that the Commission had already promised not to go against the predominant views of the Council as regards key implementation issues. The EU Securities Committee is chaired by the European Commissioner in charge, and takes decisions by qualified majority voting. Its decisions are prepared by the independent Committee of European Securities Regulators (CESR, see Table 4.3).

But as regards the implementation of the revisions of the 1988 Basel Capital Accord (see Box 4.6), an empowered Banking Advisory Committee (BAC) could end up having a similar role as the EU Securities Committee. Both will be in charge of interpreting and adapting the EU directive that establishes the framework for the application of Basel II.

The Giovannini Group was formed in 1996 to advise the Commission on financial integration.

<sup>21</sup> The draft prospectus directive requires that member states decouple listing from trading and to have the listing authority as an independent supervisory agency.

<sup>22</sup> The market abuse draft proposal requires that member states appoint one independent authority to deal with insider trading.

#### Box 4.6

##### Basel II

Basel II will reform the 1988 Basel Accord on Capital Requirements to adjust them better for risk. Capital requirements, supervision/intervention and market discipline/disclosure are the three pillars of regulatory reform. As regards capital requirements, banks have two options. The first (standard approach) consists of relying on credit rating by external agencies to set the risk weights for different types of loans (say corporate, banks and sovereign claims). The second consists of relying on internal rating: banks themselves estimate probabilities of default, and assess the loss given default in an advanced version of the method. The idea is to calibrate the capital requirement so that it covers the Value at Risk from the loan (expected and unexpected losses from the loan) under some appropriate set of assumptions. The implementation of Basel II will require a complex and technical directive (given that a lot is at stake for financial institutions).

The latest report of the group concentrates on existing problems in cross-border clearing and settlement in the markets for fixed-income securities, equities, and exchange-traded derivatives. The group has proposed that systems should be judged against criteria of cost efficiency, accessibility, and safety and soundness.

Two recent initiatives of the European Commission deserve to be mentioned. The first is a proposal concerning regulation of listed companies – the so-called single European prospectus. The second proposal is about allowing investors to by-pass stock exchanges.

The proposal for a single European prospectus, agreed in November 2002 by EU finance ministers, but still to be approved by the European Parliament, allows securities (equity and bonds) to be issued with a single prospectus approved by the home regulator. A listed company, for example, would be regulated by the authorities of the country where the stock exchange is situated. The same applies to bonds under a value threshold. This is consistent with the “home country principle” in financial supervision and is designed to help firms raise capital with a single document. Once approved by domestic regulators, the “prospectus” (or main document for listing) has to be accepted by all EU exchanges. However, Germany and the United Kingdom would prefer to let companies choose the listing authority by which to be regulated. Freedom of choice corresponds to current practice.



Very recently, in its proposal for an Investment Services Directive, the European Commission has envisaged scrapping the rules forcing investors to trade only via stock exchanges. Investment banks would be allowed to compete with stock exchanges by trading shares for their clients in-house, disclosing prices before the market.<sup>23</sup> Investment banks would also be able to operate across the EU when authorised in their home country. The idea is to allow investors to by-pass stock exchanges and trade directly via investment banks so that regulatory fragmentation of stock exchanges would not prevent cross-border trade. At present, banks are already allowed to trade in-house in some countries such as the United Kingdom and Germany, whereas in other countries such as France, Italy and Spain all major trades have to go through the organised stock market. Large investment banks and stock exchanges (like London and Frankfurt) are to benefit from these measures while smaller banks and national exchanges may suffer. The evaluation of such a proposal comes down to gauging the trade-off between more competition, enhanced by the rivalry between investment banks and exchanges, and the decrease in liquidity in stock exchanges as well as the lack of transparency of in-house trading. At first blush, the proposed measure seems to accept defeat conceding that the emergence of integrated European stock markets is difficult despite the fact that markets are superior precisely in price discovery and facilitating transactions.

## 5. European financial architecture: diagnosis and proposals for reform

### 5.1 Diagnosis

#### Potential increase in risk

The introduction of the euro implies the consolidation of deep and liquid financial markets in the euro area as well as in the EU. As financial integration advances, it is likely that the relative weights of financial intermediaries and markets in continental Europe will shift towards the latter. Deeper and more integrated markets increase diversification possibilities, but at the same time raise potential problems of contagion and liquidity crises. Indeed, as European financial markets

become integrated, cross-border externalities increase: the failure of an institution in one country may have effects on the financial system of other European countries. This may happen either because of default in interbank commitments, or via problems in the payments mechanism.

Furthermore, credit risk may increase in the national economies because the exchange rate and monetary policy buffers are no longer in place (although diversification possibilities may increase and exchange rate risk eliminated in the euro area). At the same time, stronger competition will impinge upon the restructuring of the banking sector creating difficulties for weak institutions and/or enhancing the incentives for banks to take more risk. The exposure of European banks to emerging markets may be an example of the latter. It is even questionable whether the recent wave of domestic mergers adds to stability. This is so because enhanced diversification possibilities (which are relevant given the diversity of regions inside European nations<sup>24</sup>) through consolidation might be more than compensated by the perverse incentives induced by the TBTF policy applied to national champions. Note that, to the extent that regulatory and political obstacles hinder cross-border consolidation, they end up exacerbating this problem. Overall, these considerations lead us to conclude that the fragility of the banking system may well increase in the short term.

#### The consequences of regulatory fragmentation

Regulatory fragmentation in Europe is a major obstacle to financial integration. It reduces the international competitiveness of European markets and institutions, and poses a threat to the stability of the financial sector. There is a wide consensus on the first and second issue (as clearly shown by the Lamfalussy and Giovannini reports). It could be argued that Europeans should not be too concerned with the stability of the financial sector, precisely because European financial markets remain segmented. Indeed, one may interpret the statements of the European Commission and the ESCB along this line. For example, the Brouwer Report (2000) on financial stability concluded: "The existing institutional arrangements provide a coherent and flexible basis for safeguarding financial stability in Europe. No institu-

<sup>23</sup> In a first proposal, the European Commission allowed investment banks to disclose prices after the trade was conducted.

<sup>24</sup> See Danthine et al. (1999).

tional changes are deemed necessary.” However, capital markets are integrating steadily. Although it is true that the retail business remains segmented, changes may happen relatively fast (with the expansion of electronic banking, for example).

#### The role of disclosure and market discipline

It has been argued that disclosure requirements and market discipline are a substitute for financial architecture design.<sup>25</sup> For example, in the present decentralised supervisory framework, an increase in disclosure by financial intermediaries would contribute to increase market discipline and reduce information asymmetries among European supervisors.<sup>26</sup> The LTCM crisis provides a paradigmatic example: If the banks that had lent to LTCM had declared their positions, then supervisors and market agents could have acted upon it. However, relying on transparency and market discipline alone is not without problems. First, more transparency may increase, rather than decrease instability.<sup>27</sup> Second, a problem of relying on market discipline is that agents, small investors in particular, have an incentive to free-ride on the information generated by others on financial institutions.<sup>28</sup>

#### 5.2 Thinking ahead

##### Crisis lending and crisis management in the euro area

The present system of “improvised co-operation” in a crisis situation may not be adequate and put the stability of the system in danger. The value of centralised authority with appropriate information is enhanced in crisis situations. This responsibility for stability can only be assumed by the ESCB and the ECB in particular.

The ESCB should explicitly assume the function of guarantor of the system.<sup>29</sup> This would probably only require a broad interpretation of the Treaty (Article 105(2 and 5)) on the contribution of the

ESCB to the smooth operation of the payment system and the stability of the financial system. At the same time the ESCB should establish and make public a formal framework of crisis resolution. The chain of command in a crisis situation should be clearly identified. Duisenberg’s declaration of October 1999 in the European Parliament, on the division of responsibilities between national central banks and the ECB, is a step in this direction but what is to be done with transnational institutions should be clarified.

By leaving open the resolution of the many problems raised by the presence of transnational financial institutions, the present system imposes discipline (controlling moral hazard) at too high a cost in terms of systemic stability. An explicit recognition of the role of the ECB could instead enhance the response to systemic financial stability concerns, counting on the ECB’s reputation not to create moral hazard problems (due to expectations of excessive help). The ECB should be able to develop such a reputation given its strong credentials. The formal recognition of the role of the ECB as a lender of last resort is not in contradiction with maintaining a degree of “constructive ambiguity” about the circumstances of intervention. Indeed, transparency in the procedures to follow in crisis situations provides a reference point for the markets, and minimises costly bargaining *ex post* among authorities. It also provides a decision-making framework that should guarantee fast responses, with clearly defined responsibilities for the different institutions involved.

Crisis lending cannot be separated from fiscal issues when liquidity problems end up in insolvency. When this happens to a transnational financial institution, a procedure must be devised to share the fiscal costs of the intervention. A formal mechanism of co-operation should be established between the ECB, the NCBs and/or national supervisors, and the national treasuries to clarify responsibilities, establish information sharing protocols, and elucidate who would pay for failed (insolvent) institutions that have been helped. The European Union Council of Finance Ministers (Ecofin) could have a consultative role when the ECB initiates interventions that may end up in losses to be paid with tax money. This proposal is in line with the idea launched in April 2002 by Mr. Eichel of Germany and Mr. Brown of the United Kingdom to establish a “European stability forum”.

<sup>25</sup> See Favero et al. (2000).

<sup>26</sup> This is inspired by the New Zealand experiment where quarterly disclosure of relevant bank information is mandatory and there is no deposit insurance. A system of penalties, including the possibility of unlimited civil liability of banks’ directors for losses caused to creditors, enforces the disclosure requirements. See Mayes (1997) and Mayes and Vesala (1998).

<sup>27</sup> See Rochet and Vives (2002).

<sup>28</sup> New Zealand’s reliance on market discipline to control risk has the particularity that most banks are foreign and therefore supervised abroad.

<sup>29</sup> This has been argued by Chiappori et al. (1991), Vives (1992) by Folkerts-Landau and Garber, (1994), and more recently by Prati and Schinasi (1999).

## Supervision and political economy

The review of supervisory arrangements in Sections 3 and 4 points to the need for more centralised supervision mechanisms in order to internalise cross-border effects and foster financial integration. In an integrated market the mere co-ordination of financial supervision may prove insufficient. The question then is how to devise a supervisory system for the euro area (as well as the EU at large) that promotes financial integration and the competitiveness of European institutions and markets, while at the same time guaranteeing financial stability in a long-run perspective.

There are at least two alternative models, apart from the current decentralised arrangement. In the first model prudential supervision of banks is in the hands of the ESCB with the ECB having a central role while European-wide specialised regulators in insurance and securities are constituted. In the second model, an integrated regulator of banking, insurance and markets – a European Financial Services Authority (EFSA) – is formed, while the ECB (in the ESCB) is responsible for systemic problems.

In either model it must be noted that the lender of last resort function would require the ECB to have some monitoring powers. This concerns in particular the power to access supervisory records and gather information. This seems possible without amending the Treaty of the EU. A central bank in charge of systemic stability needs access to supervisory information. For instance, suppose that facing a major threat to financial stability and lacking supervisory capacity, the ECB will have to base its actions on information provided by national authorities. Not only might national authorities be tempted to under-report problems; greater access to information for the ECB would save costs in communication and negotiation, as well as facilitating the exchange of information.

The first solution centralises supervision of banking in the ECB, but maintain the implementation in the decentralised structure of the ESCB. This solution would probably be favoured by the ECB, but disliked by the NCBs and national governments. The attempt at the Nice EU summit to enlarge the supervisory responsibilities of the ECB failed because of pressure from NCBs. (It was proposed but not accepted to extend the majority voting

decision procedure to the article in the Treaty of the EU that envisages a larger role of the ECB in banking supervision.)

As regards the establishment of a European Securities and Exchange Commission as a supervisory body for European financial markets, the EU Securities Committee proposals in the Lamfalussy Report could be seen as a first significant step in this direction. But the main message of the Lamfalussy Committee is that a lot of preliminary harmonisation work among the different national authorities remains to be done in such disparate areas as legal frameworks, surveillance of settlements systems, disclosure, and enforcement. The challenge is to develop a common framework that allows different market institutions and trading systems to compete.

The case for a European Financial Services Authority (EFSA), with authority over banking, insurance and securities, is based on the trend toward integration of intermediaries and market operations, which makes it increasingly difficult to separate credit and market risk. Such an independent agency would bring relief also to the potential conflict between monetary policy and supervision of the financial system. The EFSA could have a horizontal structure with one division in charge of prudential supervision (monitoring credit and market risk), and another in charge of investor protection and conduct-of-business rules. An alternative model could have three divisions for banks, insurance companies, and markets, but then the synergies of working with well-defined objectives might be lost.

Political-economy considerations indicate that an independent EFSA, along with the ECB itself, might better resist local pressure to assist particular institutions. In principle, an EFSA would facilitate accountability, as both the ECB and the EFSA would then have well-defined missions, and would not increase the power of the ECB, which is already perceived as very powerful. However, note that such an agency would face the same accountability problem as the ECB, namely the lack of a well-defined European political principal.

In either of the two models, supervision need not be completely centralised at the European level. First, because national supervisors will need to be involved in the day-to-day supervisory operations.

Second, because a two-tier system with some scope for regulatory competition can be envisioned because European level agencies could leave entities trading mostly within one national jurisdiction to be supervised by the appropriate national regulator (under the home-country principle).

Neither an EFSA nor centralisation of supervision at the ECB level are proposals for the immediate future. The first would require a Council decision, the second a change in the Treaty of the EU. However, an open debate about this long-term aspect of European financial architecture is needed as well as leaving the door open in the Convention on the Future of Europe for the necessary institutional changes to implement more centralised regulation.

#### List of abbreviations

BAC	Banking Advisory Committee	M&A	Mergers and Acquisitions
BAWE	Bundesaufsichtsamt für Wertpapierhandel	MOU	Memorandum of Understanding
BBVA	Banco Bilbao Vizcaya Argentaria	NCB	National Central Bank
BCCI	Bank of Credit and Commerce International	OCC	Office of the Comptroller of the Currency
BNP	Banque Nationale de Paris	SCH	Santander Central Hispano
SG	Société Générale	TBTF	Too Big to Fail
BSC	Banking Supervision Committee	UCITS	Undertakings for Collective Investments in Transferable Securities
BSCH	Banco Santander Central Hispano		
CB	Central Bank		
CD	Certificate of Deposit		
CESR	Committee of European Securities Regulators		
DOJ	Department of Justice (US)		
ECB	European Central Bank		
EEA	European Economic Area		
EFC	Economic and Financial Committee		
EFSA	European Financial Services Authority		
EP	European Parliament		
ESCB	European System of Central Banks		
EU	European Union		
FDIC	Federal Deposit Insurance Corporation		
FESCO	Forum of European Securities Commissions		
FRB	Federal Reserve Board		
FSA	Financial Services Authority		
FSPG	Financial Services Policy Group		
IC	Insurance Committee		
ISD	Investment Services Directive		
LCTM	Long-Term Capital Management		
LLR	Lender of Last Resort		

#### References

- Bank of International Settlements (2000) Annual Report 2000.
- Berger, A., R. Demsetz, and P.E. Strahan (1999) "The Consolidation of the Financial Services Industry: Causes, Consequences, and Implications for the Future," *Journal of Banking and Finance* 23, 135–194.
- Berger, A., R. DeYoung and G. Udell (2000) "Efficiency Barriers to the Consolidation of the European Services Industry," mimeo.
- Bini Smaghi, L. (2000) "Who Takes Care if Financial Stability in Europe?," forthcoming in Chapter 2 of *Open issues in European Central Banking*, McMillan.
- Cordella, T. and E. Levy Yeyati (2002) "Financial Opening, Deposit Insurance, and Risk in a Model of Banking Competition," *European Economic Review* 46 (3), 471–485.
- Chiappori, P., C. Mayer, D. Neven and X. Vives (1991) "The Microeconomics of Monetary Union," in: *Monitoring European Integration: The Making of Monetary Union*, CEPR Annual Report.
- Danthine, J-P, F. Giavazzi, E-L. von Thadden, and X. Vives (1999) *Monitoring European Integration: The Future of European Banking*, CEPR, London.
- Demirgüç-Kunt, A. and E. Detragiache (1998) *Financial Liberalization and Financial Fragility*, mimeo, The World Bank.
- Dermine, J. (2002) "European Banking: Past, Present and Future," paper prepared for the Central Banking Conference. ECB, Frankfurt am Main, October.
- Di Noia C. and G. Di Giorgio (1999) "Should Banking Supervision and Monetary Policy Tasks Be Given to Different Agencies?," *International Finance* 2, 1–18.
- Diamond, D. and P. Dybvig (1983) "Bank Runs, Deposit Insurance and Liquidity," *Journal of Political Economy* 91, 401–419.
- Economic and Financial Committee (2000) "Report on Financial Stability," (Brouwer Report), Economic Papers no. 143.
- Economic and Financial Committee (2001) "Report on Crisis Management," Economic Papers no. 156.
- Economic and Financial Committee (2002), "Report on EU financial integration," Economic Papers no. 171.
- European Commission (2001), "The EU Economy 2001 Review European Economy," Economic Papers no. 73.
- European Central Bank (1999) *Possible Effects of EMU on the EU Banking System in the Medium to Long Term*, February.
- Favero, C., X. Freixas, T. Persson, and Ch. Wyplosz (2000) "One Money, Many Countries," *CEPR Monitoring the European Central Bank* 2, January, 74.
- Folkerts-Landau, D. and P. Garber (1994) "The ECB: a Bank or a Monetary Policy Rule," in: M. Canzoneri, V. Grilli, and P. Masson (eds.), *Establishing a Central Bank: Issues in Europe and Lessons from the US*, Cambridge University Press.
- Gale, D. and X. Vives (2002) "Dollarization, Bail Outs, and the Stability of the Banking System," *Quarterly Journal of Economics* 117 (2), 467–502.
- Giovannini Group (2002) "Cross-border clearing and settlement arrangements in the European Union," Economic Papers no. 163, February.

Goodfriend, M. and R. King (1988) "Financial Deregulation Monetary Policy and Central Banking," in: W. Haraf and R.M. Kushmeider, AEI Studies, no 481, Lanham, MD: UPA.

Goodhart, C. and D. Schoemaker (1995) "Should the Functions of Monetary Policy and Banking Supervision be Separated?," Oxford Economic Papers 46, 539–560.

Holthausen, C. and T. Ronde (2001) "Cooperation in International Banking Supervision: A Political Economy Approach," mimeo, ECB, 1–43.

Honohan, P. and D. Klingebiel (2001) "Controlling the Fiscal Costs of Banking Crises," World Bank Working Paper 29.

Hughes, J., W. Lang, L. Mester and C.-G. Moon (1996) "Efficient Banking under Interstate Branching," Journal of Money, Credit, and Banking, 28, 1045–1071.

Hughes, J., W. Lang, L. Mester and C.-G. Moon (1998) "The Dollar and Sense of Bank Consolidation," Federal Reserve Bank of Philadelphia W.P. no. 98/10.

Jacklin, C. and S. Bhattacharya (1988) "Distinguishing Panics and Information-Based Bank Runs: Welfare and Policy Implications," Journal of Political Economy 96, 568–592.

Lamfalussy Report (2001) Final report of the committee of wise men on the regulation of European securities markets February 15.

Lannoo (2002) "Supervising the European Financial System," CEPS Policy Brief no. 21.

Matutes, C. and X. Vives (2000) "Imperfect Competition, Risk Taking and Regulation in Banking," European Economic Review 44, 1–34.

Mayes, D. and J. Vesala. (1998) "On the Problems of Home Country Control," Bank of Finland, Discussion Paper no. 20/98.

Mayes, D. (1997) "A Market Based Approach to Maintaining Systemic Stability: Experiences from New Zealand," Bank of Finland Discussion Paper 18/97.

Meltzer, A. (1986) "Financial Failures and Financial Policies," in: G.G. Kaufman and R.C. Kormendi (eds) Deregulating Financial Services: Public Policy in Flux, Cambridge, Massachusetts: Ballinger.

Memorandum of Understanding (MOU) between HM Treasury, the Bank of England and the Financial Serv. Authority, <http://www.bankofengland.co.uk/financialstability/mou.htm>.

Padoa-Schioppa, T. (1999) "EMU and Banking Supervision," lecture at the London School of Economics, 24th February.

Postlewaite, A. and X. Vives (1987) "Bank Runs as a Equilibrium Phenomenon," Journal of Political Economy 95, 485–491.

Pratti, A. and G. Schinasi (1999) "Financial Stability in European Economic and Monetary Union," no. 86, IFS, Department of Economics, Princeton University.

Rochet, J-C. and X. Vives (2002) "Coordination Failures and the Lender of Last Resort: Was Bagehot Right After All?," CEPR DP 3233.

Sinn, H.W. (2002) "Risk Taking, Limited Liability and the Competition of Bank Regulators," FinanzArchiv, forthcoming 2003; NBER Working Paper no. 8669, 2001; CESifo Working Paper No. 603, 2001.

Vives, X. (1992) "The Supervisory Function of the European System of Central Banks," Giornale degli Economisti e Annali di Economia 51, 523–532.

Vives, X. (2000) "Central Banks and Supervision," in: Santomero, Viotti and Vredin (eds) Challenges for Modern Central Banking, Kluwer International.

Vives, X. (2001) "Restructuring Financial Regulation in the European Monetary Union," Journal of Financial Services Research 19 (1), 57–82.

Vives, X. (2002) "External Discipline and Financial Stability," European Economic Review 46 (4–5), 821–828.



## SHOULD WE WORRY ABOUT THE BRAIN DRAIN?

### 1. Introduction

Last year's EEAG report discussed how the United States managed to increase its technological lead over Europe in the 1990s, in particular because of its greater production and use of new information technologies.

If Europe wants to catch up, a number of things must be achieved. One of them is retaining highly talented workers. Yet, there are casual reports and anecdotes suggesting that these workers are increasingly attracted by the United States. Anecdotes of European entrepreneurs having contributed to the growth of the US economy with their talent and human capital abound. One may mention Andreas Bechtolsheim, co-founder of Sun microsystems, who was born in Bavaria, as well as French-born Philippe Kahn, founder of Borland. A recent report by the French Senate shows that between 1995 and 1999 the number of French nationals registered at the consulates of Atlanta, Chicago, San Francisco, and London increased by 53 percent, 93 percent, 44 percent, and 33 percent, respectively. Similarly, between 1990 and 1996, the number of French entrants with a visa, granted because of their professional skills increased by 60 percent. In an alarming tone, the report states that as many as 12 percent of students who graduated in 1998 from the French elite "grandes ecoles" – the top schools for business and engineering – took jobs abroad in the following year.

Emigration of highly skilled Europeans to the United States is all the more paradoxical as the

U.S. is already better endowed with skills. If anything, one would expect the returns to skills to be higher in Europe, and skilled labour to move in the other direction.

A reduction of intellectual capital in Europe may be worrying for several reasons. In particular, intellectual workers are complementary to other workers. A greater scarcity of intellectual workers is likely to push the wages of other workers down and to create pressures toward greater inequality. Furthermore, the expatriates' secondary education, and often a large share of their tertiary education, was paid by the European taxpayer, who gets a lower return on his investment in higher education.

This chapter discusses the economic significance of this issue and analyses potential policy responses. Our analysis suggests that the brain drain is a symptom of a more general problem, namely institutional rigidities, that have a number of consequences. In last year's report we discussed how these rigidities affected important determinants of long-run productivity such as investment in high technology or business start-ups. In this chapter we essentially analyse one of the mechanisms by which such rigidities – in particular wage setting institutions, and the structure of taxation – act, namely the expatriation of the most talented.

### 2. How big is the brain drain?

How worrisome is European emigration of highly skilled workers? To answer that question one first needs to evaluate the quantitative importance of the phenomenon. This is not easy, but one can get an idea by looking at some statistics. Table 5.1 summarises the

Table 5.1

H-1B visas issued by country of origin: 1990 - 1999

	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999
China (mainland)	610	1,145	894	1,031	1,256	1,887	2,330	3,214	3,883	5,779
India	2,697	4,102	5,552	7,606	11,301	15,528	19,203	31,686	40,247	55,047
Japan	3,791	5,167	2,767	2,152	2,217	2,070	2,411	2,929	2,878	3,339
Philippines	7,302	7,221	7,550	7,596	8,753	10,026	4,601	2,685	2,758	3,065
France	2,293	2,413	1,686	870	1,003	1,216	1,463	1,894	2,110	2,633
Germany	1,637	1,888	1,501	1,012	1,092	1,484	1,518	2,088	2,242	2,451
United Kingdom	7,174	8,794	6,726	3,993	4,230	4,771	5,601	6,928	6,343	6,665
Russia	3,709	3,942	1,651	1,892	1,245	1,196	1,255	1,357	1,395	1,619
Mexico	3,727	3,227	2,488	1,307	1,147	1,451	1,909	2,785	2,320	2,419
Australia	827	1,102	990	863	1,050	1,042	1,123	1,438	1,666	1,651
Subtotal	33,767	39,001	31,805	28,322	33,294	40,671	41,414	57,004	65,842	84,668
Ceiling	65,000	65,000	65,000	65,000	65,000	65,000	65,000	65,000	65,000	115,000

Source: US Department of State, Visa Office.

Table 5.2  
Number of European-born

Country	Number	% of home population
Belgium	27,800	0.27
France	189,000	0.32
Germany	1,011,000	1.2
Greece	121,000	1.1
Italy	442,000	0.76
Portugal	160,000	1.6
Spain	106,000	0.26
Switzerland	34,000	0.47
United Kingdom	548,000	0.92

Source: 1990 US Census.

evolution of H1-B visas granted by the United States every year since 1990. These visas are explicitly targeted at highly skilled workers. Many of them come to work in the field of information technology.

The Table suggests that while emigration of highly skilled workers has sharply increased in the second part of the 1990s, moving from 1,216 to 2,633 visas for the French, from 1,484 to 2,451 for the Germans, and from 4,771 to 6,665 for the British, this phenomenon is largely cyclical, the mid 1990s numbers marking a clear trough. However, there are some reasons to believe that there is an upward trend, although it is not very steep.

It is possible to get data on the stock of European expatriates in the United States by using U.S. Census data, which contain detailed information about an individual's place of birth – which is what we use as a proxy for immigrant status<sup>1</sup> – and characteristics. We use this data set to get information on both the number and characteristics of European migrants.

Unfortunately, it has not been possible for us to use the results of the 2000 Census, as they are not yet available. If the phenomenon has been accelerating in recent years, as may be inferred from Table 5.1, our results may be biased.

These raw data seem to suggest that the phenomenon is of lim-

<sup>1</sup> Using place of birth as a proxy for immigrant status does not go without caveats. In particular, in the case of Germany, which was occupied by US troops for a long time after 1945, a substantial number of individuals who claim to be born in Germany are likely to be in fact of American descent. For that reason we shall also look at the characteristics of those who have been in the United States for less than 10 years.

Table 5.3  
Employment rate of French-born, German-born, and Italian-born US residents

US labour force	FR	GER	IT
67.26	69	68.14	68.04
	(60.6)	(64.8)	(55.7)

Note: Employment rate in the home country in parenthesis

Source: 1990 US Census.

ited importance. However, as we shall see below, they understate its true economic consequences.

## 2.1 The characteristics of expatriates

### Employment rates

A first aspect is that the employment rate is substantially higher for expatriates, as evidenced in Table 5.3. It is slightly higher than the employment rate of similar people among US residents and substantially higher (by 5 to 13 percentage points) than that of residents in the home country. This is not surprising: one most often migrates in order to work in the host country. But it means that one would under-estimate the impact of the brain drain by just looking at the number of migrants.

This higher employment rate could simply result from the fact that migrants are more likely to be in more active age and gender categories. If, say, prime-age males are more likely to migrate, then one should expect systematically higher employment rates for migrants; while Europeans who emigrate would then be more likely to be employed, the same would be true for non-Europeans immigrating to Europe, and little could be deduced. In order to check whether there is more to it, Table 5.4 disaggregates by age categories. For males, it implies that the

Table 5.4  
Employment rate by sex and age (population 25 - 64)

Age	Sex	US	French-born	German-born	Italian-born
25 - 64	M	82.59	87.92	86.50	82.53
	F	64.52	59.89	61.84	52.36
25 - 34	M	86.67	88.13	88.96	87.37
	F	68.9	68.24	69.81	60.28
35 - 44	M	88.75	93.10	90.11	90.06
	F	72.90	64.58	74.02	61.48
45 - 54	M	86.43	90.80	91.48	89.77
	F	68.19	63.12	65.38	56.31
55 - 64	M	63.9	79.21	75.72	70.34
	F	43.33	45.26	43.78	40.36

Source: 1990 US Census.

difference is not due to a mere composition effect, but prevails across all categories. In particular, the employment rate for older workers is 7 to 15 percentage points higher for European-born than for the average US labour force, while in home countries it is much lower than in the US, due to early retirement and similar schemes. For females, the story is more mixed, probably because cultural differences in participation rates, as well as family motives for migration, tend to offset the effects of selecting more active workers.

These data thus suggest that European expatriates are disproportionately more active.

## 2.2. Education

The next question concerns the composition of such migrants in terms of skill levels. If it were the same as that of the home population, one could not speak of a “brain drain”. Instead, one would see a uniform outflow, which, while reducing the population in the home country, has no effect on its relative skill composition. Then there would not be too much reason for worrying, unless one considers the mere size of the population as too low.

Table 5.5, which focuses on workers aged between 25 and 64 years, presents the proportion of people who have achieved tertiary education and compares it to that same number in their native country.<sup>2</sup>

Table 5.5 shows that European natives who live in the United States are much more skilled than those who live in Europe. This is true even in countries that are traditional exporters of low-

<sup>2</sup> The numbers for the home country come from the OECD for the year 2000. Given that we use the US Census for the year 1990, if educational achievement trends upwards, which is surely the case, then this Table understates the difference between migrants’ and stayers’ achievements.

Table 5.5  
Tertiary education rate among expatriates  
and in home countries

Country	US expatriates in %	Home country in %
Belgium	68	32
France	66	24
Germany	57	26
Italy	29	19
Spain	49	27
United Kingdom	62	27

Source: 1990 US Census.

Table 5.6  
Tertiary education rates by country of birth  
and age category

Country	United States, %	Prop. home country, %
Belgium: 25 – 34	68	34
35 – 44	86	28
45 – 54	67	23
55 – 64	49	15
France: 25 – 34	68	31
35 – 44	64	21
45 – 54	72	18
55 – 64	53	12
Germany: 25 – 34	59	22
35 – 44	56	26
45 – 54	48	24
55 – 64	41	20
Italy: 25 – 34	38	20
35 – 44	41	22
45 – 54	18	20
55 – 64	14	10
Spain: 25 – 34	64	33
35 – 44	44	29
45 – 54	32	19
55 – 64	35	9
United Kingdom: 25 – 34	66	25
35 – 44	68	26
45 – 54	56	24
55 – 64	43	19

Source: 1990 US Census.

skilled workers such as Italy and Spain. These migrants are also more skilled than the US labour force in which they participate. The tertiary education rate in that population is 35 percent, above that of European countries but much below that of the expatriates.

One can learn more about the recent evolution of the higher-education rate among expatriates by breaking down these numbers by age categories, which is done in Table 5.6. It suggests that the gap between expatriates and natives is not a new phenomenon, and does not seem to go away. In France and Belgium, the “brain drain” seems to have stabilised, in the sense that the last three cohorts of expatriates have similar rates of tertiary education, while achievements in the home country are improving. In Germany, the brain drain seems to be accelerating: recent cohorts of expatriates are substantially more skilled than previous ones, while there is no significant improvement in the home country. A somewhat similar pattern is found in the United Kingdom. In Spain, the quality of the workforce is sharply increasing, but so it is for expatriates. Finally, Italy has moved from being an exporter of low-skilled labour to an exporter of high-skilled labour, much like its European neigh-

hours.<sup>3</sup> Note, however, that the quality of expatriates in recent cohorts remains lower than for other European countries. This perhaps reflects the persistence of low-skill immigration networks from the south of Italy to the United States.

### 2.3 Is exceptional talent more likely to move away?

As Table 5.1 makes clear, expatriates typically represent 1 percent or less of their home population. Even if their tertiary education rate is twice higher, this means that at most 2 percent of the college-educated population is lost. This is likely to have rather small economic consequences. On the other hand, the issue can be much more serious if people of exceptional talent or rare skills are very likely to migrate. Such people may represent small numbers but have a critical economic significance. In this section, we tackle that issue from a variety of angles.

The following Table looks at expatriates who have a doctoral degree and distinguishes between recently arrived migrants (less than 10 years) and others. Among recent expatriates, the doctoral rate is quite high: from 3.6 percent among Italians to 9.1 percent among the French. This is two to four times higher than among earlier immigrants, which is partly a cohort effect but also suggests a possible sharp increase in the quality of expatriates in the second half of the 1980s.

Similarly, the next Table reports on the percentage of expatriates with any post-graduate degree, that is it includes workers who hold at least a master's degree. A similar phenomenon is found, although it is less pronounced, for the United Kingdom.

<sup>3</sup> This is confirmed by the findings of Becker et al. (2002), who, using an Italian data base of expatriates, find that the Italian brain drain accelerated in the 1990s and that about 5 percent of college graduates go abroad. However, their study is not directly comparable to this chapter, as they look at Italian emigration to any country.

**Table 5.7**  
Doctoral rates among expatriates,  
recent and earlier arrivals

	Ph.D., recent arrivals, %	Ph.D., overall, %
Belgium	8.5	5
France	9.1	3
Germany	4.2	1.4
Italy	3.6	0.9
Spain	4.9	2.4
United Kingdom	5.0	2.5

Source: 1990 US Census.

**Table 5.8**  
Post-graduate rate among expatriates,  
recent and earlier arrivals

	> Master's, recent arrivals, %	> Master's overall, %
Belgium	36.8	21.1
France	36.9	16.6
Germany	20.3	8.5
Italy	15.2	5.5
Spain	22.3	12.2
United Kingdom	14.3	10.2

Source: 1990 US Census.

So far, we have only studied the distribution of measured educational levels among expatriates. This misses a potentially important dimension of skill, that is unmeasured ability. The loss of talent would be underestimated if, at a given skill level, those who emigrate from Europe have a higher ability level than others. The problem can be most acute for entrepreneurs, whose creative and managerial skills are not necessarily well captured by the educational system, where they sometimes fail or drop out before completion of the course of study (Bill Gates being one famous example).

One way to look at that issue is to estimate the wages of expatriates compared to the average wages of American residents with similar observable characteristics. This technique says little about how many outliers there are among expatriates as compared to the home country, but it tells us how frequent they are relative to the entire US labour market.

This is what we have done, using the 1990 US Census. According to these data, controlling for individual characteristics, European-born workers earn on average 9.4 percent more than their counterparts. Thus, a “European premium” exists. This suggests that the emigration process tends to select people who fare better, given their personal characteristics, than others, that is “exceptional people”.

It is also possible to estimate different “European premia” according to the individuals’ educational level and country of origin.

Regarding education, the average premium to being European-born tends to fall with the educational level, from 23 percent for those with no education to just 3 percent for those with 17 years of education. This probably means that the unob-

Table 5.9  
Wage premium by country of birth

Country	Premium (%)
France	7.1
Germany	2.9
Italy	15.8

Source: 1990 US Census.

served ability of low-education workers who migrate to the United States is greater than that of high-education ones. One possible interpretation is that the United States disproportionately attracts talented people whose talent was not identified by the educational system in their home country.

With respect to the country of origin, one finds wide disparities in the premia, as shown in Table 5.9.

These data tell us that, on average, European-born people are more “talented” than similar US residents. One could further ask about the proportion of “exceptionally talented” European-born people compared to other participants in the US labour market. Let us define “exceptional people” as those whose earnings are unusually high compared to others with the same observed characteristics. This means those in a top percentile for “residual” earnings, i.e. that part of earnings that is not explained by observable characteristics. In the US labour market, 1 percent of the people earn more than 5 times more than people with similar characteristics; 5 percent earn more than 2.43 times the income of similar people, and 10 percent earn more than 1.95 times the income of similar people. The following Table shows the proportion of French-, Italian-, and German-born participants who are beyond these thresholds.

The results suggest, again, that there are wide variations across countries of origin. If one looks at the “very top” people, that is the top 1 percent, one finds that they are three times as numerous, in pro-

Table 5.10  
Percentage of European-born in top percentiles, adjusted for individual characteristics

Residual threshold	French, %	Italian, %	German, %
Top 10%	15.5	18.7	12.4
Top 5%	8	8.3	6.2
Very top 1%	3	1.2	1.2

Source: 1990 US Census.

portion, among the French than on average. But they do not seem to be significantly more present among Italian and German expatriates. On the other hand, “top people” (top 5 percent and top 10 percent), are substantially more frequent among the French and Italian expatriates than on average, and more so for Italian expatriates. They are only marginally more frequent among German expatriates. Interestingly, this pattern is in accordance with business surveys. The Global Competitiveness Report (World Economic Forum, 2002), a collection of competitiveness’ measures based on questions addressed to corporate executives, asks entrepreneurs to answer on a scale between 1 and 7 whether they would agree that “The most talented workers remain in the country”. On that account, the United States ranks first with a score of 6.4, Germany is 4th with a score of 5.1, the United Kingdom is 9th at 4.9, France is 18th at 4.6, and Italy is 36th at 3.6.

Another way to measure the density of “exceptional talent” among expatriates is to look at the distribution of income among them. Since such a large proportion of them has tertiary education, one would expect them to be more homogeneous than US workers or non-expatriate European employees. One would thus expect the distribution of income among expatriates to be more equal. This is, in fact, not the case. In 1990, the income share of the top 10 percent in the French labour market was 26 percent. The corresponding share in the US labour market was 30 percent, while among French expatriates in the United States it was even higher, at 35 percent. Thus, even though the average French expatriate is much more educated, he does much more poorly relative to the best 10 percent of his peer group than the average non-expatriate or the average US worker.

Further evidence on workers with tertiary education yields interesting additional insights. Thus, if one limits oneself to workers with at least tertiary education, the expatriate premium disappears: controlling for individual characteristics, a European-born who holds at least a master’s degree does not earn more than the average US resident. This somewhat confirms the above finding that the premium falls with measured education. Does that mean that outliers are more represented among expatriates with less than top education, but not among expatriates with top education? This is true on average, but it hides hetero-



generosity with respect to the nature of the higher education degree.

In the entire US labour market, relative to the benchmark of a master's degree, those who have a doctorate earn on average 5 percent less, while those who hold professional degrees (MD, LL.D) earn 13 percent more. If one only looks at French expatriates, however, PhDs earn 18 percent more, while professionals earn 3 percent more. Among Germans, PhDs earn the same, and professionals earn 8 percent more, so that the structure of rewards to higher education is similar to that in the United States. Among Italian expatriates, PhDs earn 10 percent more, and professionals earn 3 percent less. These differences suggest that the process of selecting the most talented workers still operates for people with a Ph.D. coming from France and Italy, while Italian and French professionals earn less than similar US workers, perhaps because they lack US-specific skills regarding legal and medical practices.

In addition to wages and degrees, one can measure top performers by occupation and achievement. For example, it is useful to look at the proportion of entrepreneurs among expatriates. According to the US Census, that proportion is 9.1 percent in the US labour market. Among expatriates, it is slightly higher: 13.5 percent for Italian-born, 10.5 percent for French-born, and 9.9 percent for German-born. These figures are substantially higher than in the labour markets of the home countries, where, according to the Global Entrepreneurship Monitor, cited in last year's EEAG Report, the proportion of entrepreneurs does not exceed 5 percent. As for achievements, there are studies about scientists, which tend to conclude that foreign-born scientists perform better than average in the United States. For example, Stephan and Levin (1999), cited by the OECD (2002), find that the foreign-born account for 18 percent of the most cited patents, and for 25 percent of the founders of start-up enterprises in the biotechnology sector. If they were, on average, as productive as US born scientists, they would account for just 11 percent of patents and 14 percent of start-up founders.

To summarise, European expatriates have much more human capital than the average employee in both their home country and the United States. They earn more than US workers with similar human capital, and, in the case of Italy and France at least, they are more likely to be exceptional performers.

### 3. Economic consequences of the brain drain

The preceding analysis lends support to the view that there is an outflow of high-skilled workers from Europe to the United States, and that there are reasons to believe that this phenomenon is accelerating. This raises the questions of whether it poses a problem and what policy should do about it.

#### 3.1 The optimistic views

While many observers express concern with regard to the potential damaging consequences of the brain drain for Europe, there are some arguments according to which it is positive, or at least not harmful.

One view is that Europe will benefit from it, because most expatriates are only transitorily present in the United States, and the home country will benefit from their valuable experience upon their return. The question is how important is such return migration, quantitatively, relative to the numbers of those who do not return or return only for retirement. At present we lack evidence on this, but casual evidence from the academic world suggests one should be sceptical. This is confirmed by some surveys. For example, a 1999 French study concluded that out of 1,000 young graduates established abroad, some 31 percent had no intent of returning. 80 percent of them say that their career prospects are better abroad. Furthermore, it is known by specialists of immigration that many people who intend to return actually stay abroad.

This finding is confirmed by other studies. The US National Science Foundation has studied the trajectories of foreign-born PhDs in Science and Engineering (Johnson and Regets, 1998). It found that 63 percent of graduating students intend to remain in the United States. The proportion is highest for Asians (65.5 percent), and greater than one half for Europeans (55.9 percent). The same study finds that out of those who graduated in 1990–91, 59 percent of the British and 35 percent of the Germans were working in the United States in 1995. Interestingly, there is no sign of larger return migration in the longer term; the proportion of foreign-born scientists working in the United States 25 years after their Ph.D. is the same as those working in there five years after their Ph.D. This suggests that part of the return migration is temporary – people in

fact go back to the United States after a while – and therefore should not be overstated.

Overall, these studies suggest that, on average, some 50 percent of Europeans who do doctoral studies in the United States can be expected to be lost to Europe. On the other hand, there is evidence that those who do return earn a higher income beyond what would be predicted by their observed characteristics, which suggests that international mobility is associated with the acquisition of specific additional skills.<sup>4</sup> In the case of Ireland, for example, the premium to return migration for males is estimated at 10 percent.<sup>5</sup>

Another view holds that greater migration of skilled workers is the by-product of globalisation, and that while it is true that Europe loses more of these workers than in the past, it also imports more of them than it used to. According to that view, the brain drain is just the outcome of greater labour mobility worldwide, and not of a systematic pattern of greater incentives for highly skilled workers to migrate to the United States.<sup>6</sup> There is certainly some truth in that view, since internationalisation implies greater mobility of executives. But in the field of science and engineering, it is clear that the flow from Europe to the United States is orders of magnitude higher than the reverse flow.<sup>7</sup>

This being said, there are a number of mechanisms that should convince Europe's policy-makers to be worried about a possible delocalisation of its elite.

### 3.2 Lower returns to investment in public education

First, there is a fiscal externality in education. Many European countries have a generous education system, and taxpayers invest a substantial amount of money in training the elites. Presumably, the social return to such investment is in the form of greater innovation, better managing practices and so on, when these people take on important jobs. However, when they go abroad and stay there, this return is reduced, and taxpayers are

actually subsidising the human capital and productivity growth of the United States. The greater the brain drain, the lower the return to European public investment in higher education; this may in turn lead to a reduction in that investment, for example via a lower political support from the bulk of taxpayers, which will also penalise those highly skilled workers who would have stayed in Europe.<sup>8</sup>

### 3.3 Inadequate specialisation

Second, the brain drain could affect specialisation of economic activity in Europe in an undesirable way. Basically, this means that very highly skilled workers will be in rather short supply relative to some other developed countries and that Europe would specialise away from sectors that are intensive in that factor. In last year's EEAG Report, we presented data showing that Europe is less involved in advanced technologies, tends to specialise in medium-tech goods, and is lagging the United States in terms of high-tech patents or in the intellectual balance of payments. The brain drain is one contributor to that pattern. In principle, this specialisation should not have harmful effects per se. One can perfectly achieve similar living standards and grow at the same rate, as the United States, while being specialised in cars, tourism, shoes, food, and so on. There are reasons to believe, however, that specialisation is not entirely neutral. One such reason is that different sectors have a different growth potential, essentially because they have different learning curves – the learning curve refers to the fact that costs fall, that is productivity goes up, as the cumulated output of a good increases, because people gradually learn how to improve practices. There is probably more scope for productivity improvements via learning in high technologies than in medium technologies. For example, costs in the semiconductor industry have been constantly falling at a very rapid pace. This technology, in which the United States and East Asia are leaders, was an important factor of growth.

### 3.4 Reduced rents from innovation

Another potentially important effect of the brain drain derives from the fact that if the most talented scientists and entrepreneurs go to the United

<sup>4</sup> This may be due to selection bias, though, if return migration is triggered by having found an attractive job in the home country.

<sup>5</sup> See OECD (2002).

<sup>6</sup> This would be the case, for example, if a reduction in the home bias in consumers' preferences induces an increase in the demand for imports, which would then increase the market shares of multinationals, and eventually the expatriation rate among their top scientists and executives.

<sup>7</sup> See Mahroum (1999).

<sup>8</sup> Of course, it may well be that from the point of view of global social welfare, it is efficient to subsidise education in Europe even though those who benefit from it are best employed in the United States; at a minimum, however, one should then consider compensatory transfers in favour of European taxpayers so as to give them a fair share in the global social benefits of the higher education they have funded.

States, then the United States will own more patents. This might be of little consequence, and a nice landscape, folkloric traditions, or know-how in cooking and handicrafts may be as much an asset to an economy as patents in computers, biotechnology, and aerospace. Yet, patents give monopoly rents to the firms that own them, and – provided one has to pay the high monopoly price for a given good as a consumer regardless of location – it is preferable for workers to be located where these monopoly rents are. This means higher wages and more job security, because a part of excess profits is transferred to workers via bargaining mechanisms, and monopolies are less vulnerable to volatility than firms exposed to competition. In other words, we know that the labour market consists of “good jobs” and “bad jobs”<sup>9</sup>, that the former entirely dominate the latter from the point of view of wages, working conditions, fringe benefits, and the like, and that good jobs are located in some industries and not in others. In particular, industries that earn high monopoly rents (due to patents or other factors) typically offer more good jobs. Furthermore, economic analysis has also shown that from the point of view of social welfare it is likely that there are too few “good jobs”. Lagging behind in intellectual property rights will therefore probably reduce the proportion of good jobs in the economy, all else being equal. European governments have tried to increase the number of “good jobs” by labour market regulations, and this has been successful if one defines a “good job” as a long lasting job. But this strategy has generated unemployment and reduced productivity, and may thus prove unsustainable in the long run.

### 3.5 Negative effects on entrepreneurship and business creation

The argument is magnified if one believes that entrepreneurs are particularly affected by the brain drain phenomenon. Entrepreneurs are a central ingredient of capitalism. Their activity is ultimately responsible for job creation, innovation, and growth. Absent entrepreneurs, economic activity is a mere potentiality. They are the ones who take the practical steps in order for gains from trade to be exploited, by bringing together complementary factors of production, making supply meet demand, and so on.

One may think of the economy being in one of two regimes. In one regime, entrepreneurs are not a limiting factor, and competition selects among them on the basis of luck and efficiency. The economy is “fully employed” in that factors are not idle. In the other regime, entrepreneurs are a limiting factor. Savings have a low return and people are underemployed. An excess outflow of entrepreneurs may harm the economy if it moves it from one regime to the other, although the effects could be small if it does not.

There are reasons to believe that the recent acceleration of the brain drain has been associated with a slowing down in business starts. In the French case, for example, the monthly number of new business establishments peaked at 27,000 in the late 1980s, during a strong expansion. Quite remarkably, a steady increase in business starts was experienced between 1993 and 1995, when it peaked at 26,000 despite a depressed economy. However, since then, it has never exceeded 23,000, although the French economy experienced an expansion even stronger than that of the late 1980s.<sup>10</sup> Of course, this may be due to other factors, for example the evolution of the regulatory environment, itself a potential cause of entrepreneurial emigration. But at least these numbers are compatible with the view that the drain of entrepreneurs dampens the rate of business formation.

Furthermore, business formation in high-tech areas may be further harmed by the expatriation of top scientists. The evidence discussed above suggests that exceptionally able workers are over-represented among European expatriates. The impact of such individuals on economic activity could be much larger than suggested by their wages if they exert positive spillovers on business formation in high-tech industries. Can that hypothesis be substantiated with empirical evidence? Zucker et al. (1998) study the determinants of birth rates for biotechnology enterprises. In particular, they look at the impact of intellectual capital in a given area on the birth rate in that same area. A key finding is that controlling for measures of overall intellectual capital, the number of “star scientists” (as measured by publications and citations) has a strong positive impact on business formation. In other words, losing the “stars” may look quantitatively unimportant if one measures the loss by the actual

<sup>9</sup> See Bulow and Summers (1986) and Saint-Paul (1996) for a theoretical analysis.

<sup>10</sup> See: [www.insee.fr](http://www.insee.fr).

number of people going abroad multiplied by their wage (as an estimate of their productivity); it seems, however, that these people have a critical impact on high-tech business formation and thus on the long-term growth potential of an economy.

### 3.6 Pressures towards greater inequality

The lower the number of high-skilled workers, the more unequal will be the distribution of income. High-skilled workers are typically thought of as complementary in production to low-skilled workers. Consequently, a reduction in the supply of high-skilled workers reduces the wages of low-skilled workers, while it increases the wages of high-skilled workers. Thus, if one could reduce the outflow of high-skilled workers while not touching existing systems of wage setting and redistribution, there would be a gain in terms of a more equal distribution of income. However, as we discuss below, we believe that one important factor fuelling the brain drain is rigid wages and income redistribution, and that this will have to be reconsidered if one is serious about reversing the brain drain. In other words, if income redistribution is the only concern, a certain level of brain drain is the price to be paid. But redistribution is less effective, the greater the mobility of skilled labour. Consequently, a more intensive brain drain may lead society to reconsider its redistributive policies, as it means that such policies are more costly.

## 4. Causes of the Brain Drain

In order to devise appropriate policies to deal with excess emigration of talented workers, it is necessary to have some idea of its causes. This is the subject of this section.

### 4.1 Greater income for high-skilled workers in the United States

As we have shown above, the brain drain is an outflow of human capital from countries, which have a lower human capital endowment than the destination country. If production technologies were the same across Europe and the United

States, and if wages were set competitively, then, since skills are scarcer in Europe, the return to skills would be higher in Europe than in the United States. Highly educated workers would therefore have no incentive to move from Europe to the United States. Rather, the reverse would occur.

A first reason that comes to mind to explain the brain drain is that technologies may be more productive in the United States, implying that, at any skill level, wages are higher overall. This effect does not seem to be very strong, however. Most of the difference between Europe and the United States in terms of GDP per capita is due to a lower employment rate in Europe. The productivity difference does not exceed 15–20 percent, and it is unlikely that people would move just to earn 15 percent more, at least on an hourly basis. Furthermore, mobility would then not be biased in favour of highly skilled workers, although the latter may be at an advantage in obtaining visas.

Another reason is that, despite the fact that skills are scarcer, the wage structure is more compressed in Europe than in the United States, implying that the return to skills is actually lower on this side of the Atlantic. Figure 5.1 reports the average returns to an extra year of education (in percent) in selected countries, from Psacharopoulos and Patrinos (2002). It shows the proportional impact on pre-tax wages of an extra year of education on average<sup>11</sup>

<sup>11</sup> This is the appropriate number one wants to look at if one is interested in the incentives to migrate rather than the incentives to acquire education, for which the cost of acquiring education must be taken into account.

Figure 5.1

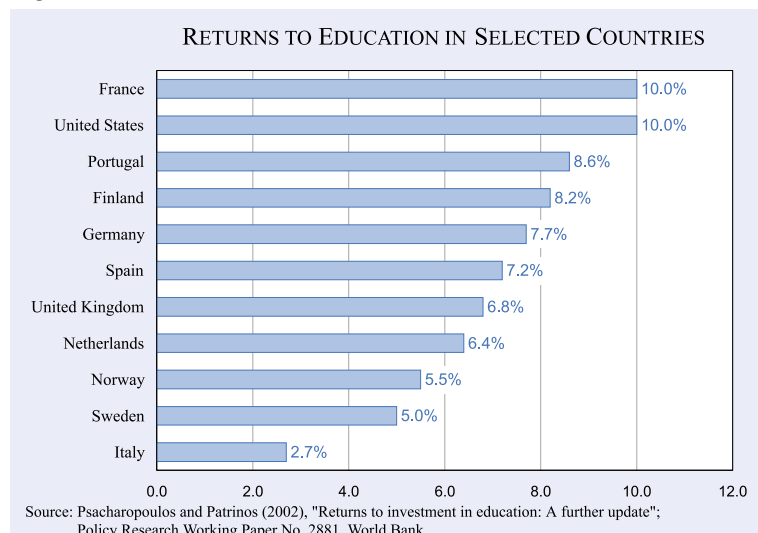
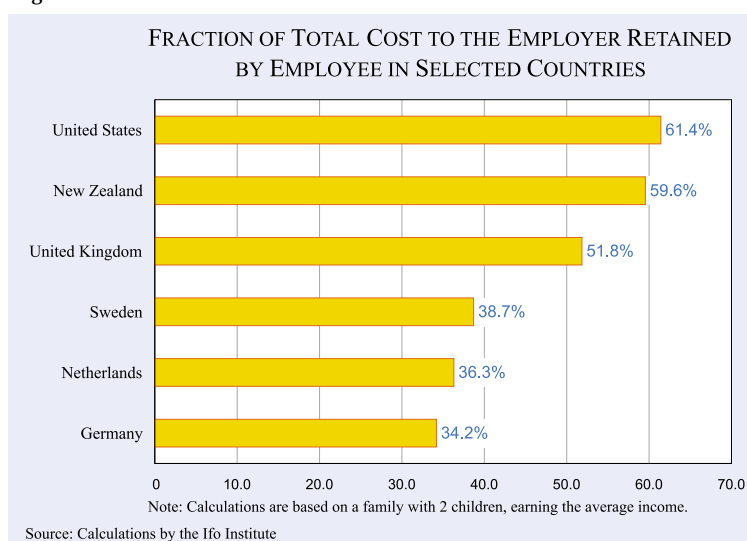


Figure 5.2



and confirms that the returns to education are on average lower in Europe. Note, however, that France has the same returns as the United States. Again, a few percentage points of extra returns to schooling does not justify emigration, but this phenomenon has to be added to that of higher US productivity.

A third phenomenon, which cumulates with the other two, is the fact that top marginal income tax rates are also typically higher in Europe than in the United States, with the notable exception of the United Kingdom.

Top marginal income tax rates are 55 percent in France and 51 percent in Germany, respectively, vs. some 40 percent in the United States and the United Kingdom. If one adds social security contributions, the difference between the total cost to the employer and the workers' income implies nearly confiscatory average tax rates for top earners in Europe. Figure 5.2 shows the fraction of the total cost to the employer accruing to the worker, after all taxes and contributions for a yearly nominal employee income of 200,000 euros.<sup>12</sup>

The figures speak for themselves: If an employer wants to give \$1 more to say a top executive, it will cost him \$3 in France vs. \$1.70 in the United States.

If anything, these differences in the distribution of income have been aggravated by recent trends.

<sup>12</sup> Wedge includes the employee's income taxes and social security contributions, and the employer's social security contributions.

While in the United States income inequality has risen over the last three decades as a result of technical change, in Europe it has remained much more stable. This is in great part due to labour market institutions, which compress the distribution of wages. Greater mobility of high-skilled workers makes it difficult to sustain such institutions if wage inequality continues to increase in the United States.

Admittedly, Europe offers better amenities in terms of public goods, social services, and the

like. But the amenities are more adequate for lower and middle class workers than for top workers. These can presumably buy high quality health and education in the United States, and have little demand for their publicly provided equivalents in Europe.

#### 4.2 An environment more friendly to entrepreneurship

The motivation for moving may not only be monetary. People may also enjoy the greater economic freedom, less restrictive social norms, and even in some cases the greater freedom of expression in the United States compared to Europe. Regarding the ease of starting a new business, for example, Harvard's Global Competitiveness Report constructs a start-up index capturing the ease with which one can start a business. The United States ranks first at 2.02, followed by Hong Kong at 1.63. The United Kingdom ranks 6th at 1.36, Germany 21st at 0.41, and France 35th at - 0.18, ahead of Portugal but behind Mauritius.

One may speculate that part of the wage premium associated with being an expatriate, especially at low and moderate education levels, reflects the greater density of people with entrepreneurial and creative skills among migrants. At this stage, however, we lack direct evidence.

#### 4.3 Agglomeration externalities and economic geography

Most of the preceding explanations are associated with the view that the institutional environment is friendlier to talented people in the United States.



If this view is correct, then institutional change is part of the solution if one wants to reverse the phenomenon. However, another potential explanation does not involve institutions, but is based on the view that, for historical reasons, high-tech sectors are located in the United States. To the extent that there are favourable scale and spill over effects associated with the location of a large number of high-tech industries in the same place, the reward to talent will be higher in these locations, and they will therefore attract more talented people. This view may be relevant to the extent that markets for highly talented people are thin, implying that it may be quite difficult or impossible to find an appropriate job in some areas. A Cameroonian specialised in artificial intelligence, for example, will virtually be unable to find adequate employment in Cameroon; and even if Cameroon's institutions were quite favourable to high technologies, it would be unlikely that a sizeable labour market for AI specialists would arise there. The problem is less severe when one is dealing with migration from Europe to the United States, but may still exist. For example, there is hardly a place in Europe where one could find a market for computer specialists comparable to Silicon Valley.

If this explanation is correct, institutional change will not go a long way toward reversing the brain drain. More active "industrial policy" may be needed, as is discussed below.

##### 5. Possible solutions?

Above we posed the fundamental question: should governments worry about the brain drain problem and if so, what are the appropriate policies? The answer to that question depends obviously on which causes and which consequences of the brain drain are most relevant. Here we discuss a certain number of measures that would alleviate the brain drain problem; most of these measures, however, tackle the more fundamental problems of lack of incentives for risk-taking and innovation, of which the brain drain is just one symptom.

Concerning the fiscal externality, for example, it seems reasonable to consider public funding of higher education as a loan to the individual rather than a gift. This loan could be repaid in money or in kind, by working in the country, which has financed the education, or in the European Union.

Such a measure is unlikely to have a large impact on the brain drain, but at least it would offset its negative consequences on the social returns of public investment in higher education.

In our view, reversal or at least reduction of the outflow of talent necessitates two key measures. First, a reconsideration of taxation of top incomes, which in some countries is nearly confiscatory, if one adds all the taxes. One has to do away with the view that a reduction in marginal income taxes at the top is "unfair". Reducing the income of the rich is not a goal in itself. The goal of redistribution should be to increase the income of the poor. Standard models of optimal income taxation for a society, which cares about inequality, predict that marginal income taxes should be falling as income rises. The reason is that one wants to give the most talented workers greater incentives to work, since their working time is most valuable to society. The tax losses induced by such changes are likely to be rather small, as top earners account for a minute share of total tax receipts. Furthermore, a reversal of the brain drain tends to compress the distribution of wages as highly skilled workers are less scarce, thus partly offsetting the adverse impact on inequality of reduced taxation at the top. Finally, talented workers exert a number of favourable effects on the rest of society that are not reflected in tax receipts.

Second, a reduction of barriers to entrepreneurship seems to play a key role in discouraging talented people from staying in the home country. These barriers mostly penalise potential entrepreneurs from a socially disadvantaged background, and those who, despite great performance, have underachieved at school (perhaps because of illness or family problems in addition to poverty). As we have seen, European expatriates tend to be above-average performers, not only overall, but at all education levels, and especially at low educational levels. This could be related to the fact that the fraction of entrepreneurs among expatriates is slightly higher than in the US labour market, that is much higher than in the source countries. There is no reason why regulation could not be adjusted so as to induce more of these people to start a business in Europe. This would not only retain a greater share of precious talent, but also enhance social mobility and the returns to effort in our societies.

In our view, these measures are necessary. But they need not be sufficient. Within countries, regulations and taxes are fairly uniform, and yet we

observe that talent is concentrated in some areas, usually around political decision centres, universities, and advanced technology firms. The location of these centres reflects political and economic events of the past. Similarly, in a global world, most intellectual talent may end up being located in the United States, just as it deserted rural and provincial areas to go to political centres and big cities one hundred years ago. This situation may be a self-sustaining equilibrium, and it can take much more than mere convergence to US regulatory and taxation standards to reverse it. This raises the question whether voluntary government investment in “centres of excellence” would work. That is, governments could act as a co-ordination device to implement some new “Silicon Valleys” in Europe. This is the old industrial policy which is now somewhat discredited, as decades of support for “technological champions” from both the EU and national governments have not prevented Europe from gradually sliding behind the United States. These policies could work in principle, however, provided the talented people on whom they rest have incentives to stay, that is provided the other changes have been made.

The real difficulty, though, lies in subsidising “talent” without targeting the wrong sectors at the same time. There are many examples of state intervention in Europe directed at a specific technology which ended up being a failure, for example because it was not adopted as a standard. Thus, restoring industrial policy with a high-tech orientation is not so easy as it looks. Rather than taking the risks of directing the nature and contents of economic activity, governments can do it in a less committed way<sup>13</sup>, invest more in higher education and public research, with an emphasis on better rewarding performance in these sectors. They can then hope that these institutions will have positive effects, at the local level, on high technology firms.

Similarly, favouring the mobility of highly skilled workers within Europe may favour the emergence of clusters of talent and put a brake on the brain drain. Increased mobility of scientists could help a lot in light of the fact that the market for these workers is thin. That is, a given individual does not have a large number of alternative job opportuni-

ties, which increases the value of establishing oneself in a more efficient labour market, such as the United States. Better integration of the labour markets for scientists and top engineers across Europe will go a long way in reducing its thinness.

In principle, the single market grants mobility as a right. In practice, however, many obstacles remain. In particular, lack of portability of pension schemes remains a major obstacle, especially because pension rights are not proportional to total cumulated contributions. Removing these obstacles would probably help, but the “talent clusters” that would emerge need not be uniformly distributed across countries; there would be winners and losers, and some countries might even lose more of their talent to other member states than they have been losing to the United States. (An example of such a phenomenon is French emigration to London.)

Respectively, one may believe that enlargement of the European Union will have some effect on migration flows of highly skilled workers. Presently there is a large flow of professionals and scientists from Eastern Europe to North America. The integration of these countries will probably divert part of that flow to Western Europe. Admittedly, the total outflow may be even larger, which is unlikely to help Eastern European countries. On the other hand, this diversion phenomenon may increase the intellectual capital of Western Europe, which may favour the emergence of high technology clusters. After a while, Eastern European countries could eventually benefit, for example if there exists some intra-EU scheme helping the repatriation of Eastern European scientists. This will not happen, obviously, until the Eastern European countries have reached a certain level of prosperity and stability.

## References

- Becker, S., A. Ichino and G. Peri (2002) “How large is the brain drain from Italy?,” Munich University working paper.
- Bulow, J. and L. Summers (1986) “A theory of dual labor markets”, *Journal of Labor Economics*.
- EEAG (2002) Report on the European Economy 2002, European Economic Advisory Group at CESifo, Munich.
- Global Entrepreneurship Monitor Consortium (2002) *Global Entrepreneurship Monitor 2002*.
- INSEE <http://www.insee.fr>.
- Johnson, J.M. and M. Regets (1998) International Mobility of Scientists and Engineers To the US - Brain Drain or Brain Circulation?, NSF Issue Brief 98-316, June 22.

<sup>13</sup> The only area where government intervention should promote specific technologies, is where there are network externalities, as in the case of setting common standards in areas such as telecommunications.

Mahroum, S. (1999) "Europe and the Challenge of the Brain Drain," IPTS Report 29.

OECD (2001) *International Mobility of the Highly Skilled*, Paris.

OECD (2002) *Revenue Statistics 1965-2001* (October).

Psacharopoulos, G. and H.A. Patrinos (2002) "Returns to investment in education: A further update," Policy Research Working Paper no. 2881, World Bank.

Saint-Paul, G. (1996) *Dual Labor Markets: A Macroeconomic Perspective*, MIT Press.

Stephan, P. and S.G. Levin (1999) "Exceptional contributions to US Science by the foreign-born and Foreign-educated," *Science*, 285.

World Economic Forum (2002) *Global Competitiveness Report*, Harvard: Center for International Development.

Zucker, L., M. Darby and M. Brewer (1996) *Intellectual Human Capital and the Birth of US Biotechnology Enterprises*, NBER Working Paper Series.

## THE MEMBERS OF THE EUROPEAN ECONOMIC ADVISORY GROUP AT CESIFO



Lars Calmfors (Ph.D. Stockholm School of Economics 1978) is Professor of International Economics at the Institute for International Economic Studies, Stockholm University. He is presently Chairman of the Scientific Council of the Centre for Business and Policy Studies in Stockholm and a member

of the Board of the Royal Swedish Academy of Sciences, the Committee for the Prize in Economic Sciences in Memory of Alfred Nobel and the Board of the Swedish Office for Evaluation of Labour Market Policies. He was the Chairman of the Economic Council of Sweden in 1993–2002 and of the Swedish Government Commission on the EMU in 1995–96, the Director of the Institute for International Economic Studies at Stockholm University in 1995–97 and a member of the Council of the European Economic Association in 1991–96 and of the Scientific Council of the Swedish National Labour Market Board in 1991–97. He has published extensively in the fields of wage bargaining and trade union behaviour, macroeconomic policy, labour market policy and the effects of working-time reductions. At present he is doing academic research on nominal wage flexibility and the role of fiscal policy in various monetary regimes, for example the EMU.

Lars Calmfors  
Institute for International Economic Studies  
Stockholm University  
Universitetsvägen 10 A  
106 91 Stockholm  
Sweden  
lars.calmfors@iies.su.se



Giancarlo Corsetti (Ph.D. Yale 1992) is professor of Economics at the University of Rome III. He has taught at the University of Rome, Columbia, Yale and Bologna. His main field of interest is international economics.

His main contributions to the field include a tractable general equilibrium model of international transmission for the analysis of optimal monetary policy; a study of the European currency turmoil in 1992–93; a theoretical inquiry in the fiscal and financial roots of exchange rate instability; a model of the role of large players in currency and financial crises; and a widely-quoted analysis of the currency and financial crises in South East Asia, as well as an analysis of empirical tests of contagion versus interdependence. On EMU-related issues, he has contributed with a critique of the Treaty of Maastricht and an analysis of the launch of the euro, disentangling market expectations of growth differentials with the US as a driving factor of the euro-dollar exchange rate. He is the editor of the euro homepage, a popular web site tracking euro-related studies and news since 1999. Among his affiliations, in addition to being a member of the CESifo European Economic Advisory Group, he is consultant to the Bank of Italy, visiting professor at Yale University and at the New York Fed, and CEPR and CESifo research fellow.

Giancarlo Corsetti  
Dipartimento di Economia  
Università di Roma Tre  
Via Ostiense 139  
00154 Rome  
Italy

corsetti@uniroma3.it

The Euro Homepage:  
[www.econ.yale.edu/~corsetti/euro](http://www.econ.yale.edu/~corsetti/euro)



**John Flemming** (M.A., F.B.A.), Warden of Wadham College, Oxford, since October 1993, was Chief Economist of the European Bank for Reconstruction and Development from March 1991 to December 1993, working on the problems

of the transition economies of Eastern Europe. Previously he had been an Executive Director of the Bank of England which he joined as Chief Economic Adviser in 1980. He had spent the previous 20 years in Oxford, as a student, and then from 1965 to 1980 as an Official Fellow in Economics at Nuffield College, where he taught macro-economics, public finance, capital theory, etc. He was involved in editing Oxford Economic Papers, the Review of Economic Studies and the Economic Journal, and has published articles in several academic economic journals as well as a book on inflation, and chapters contributed to other collections. He is Vice-President of the Royal Economic Society, Treasurer of the British Academy, a member of the Royal Commission on Environmental Pollution, chaired an enquiry into the regulatory regime for privatised public utilities in the UK and has chaired the National Institute of Economic and Social Research since 1997. He was awarded the CBE in 2001.

John Flemming  
Wadham College  
Parks Road  
Oxford OX1 3PN  
United Kingdom

[john.flemming@wadh.ox.ac.uk](mailto:john.flemming@wadh.ox.ac.uk)



**Seppo Honkapohja** (D.Soc.Sc., University of Helsinki, 1979) joined the University of Helsinki, Finland, in 1992 as professor of economics and is currently an Academy (Research) Professor. From 1987-91 he was professor of economics at the Turku School of

Economics and Business Administration. He held visiting appointments at Harvard University (1978-79), Stanford University (1982-83) and the University of Oregon (Spring 1999). Honkapohja is a member of Academia Europaea, of the Finnish Academy of Science and Letters, a fellow of the Econometric Society, a member of the Council of the European Economic Association, and a member of the Executive Committee of the International Economic Association. Major publications include *Learning and Expectations in Macroeconomics*, Princeton University Press, Princeton NJ 2001, with George W. Evans; *The Swedish Model under Stress: A View from the Stands*, SNS Publications (both in Swedish and English), Stockholm 1997, with Thorvaldur Gylfason, Torben Andersen, Arne Jon Isachsen and John Williamson; *Macroeconomic Modelling and Policy Implications*, North-Holland, Amsterdam 1993, editor with Mikael Ingberg; *The State of Macroeconomics*, Basil Blackwell, Oxford 1990, editor; *Frontiers of Economics*, Basil Blackwell, Oxford 1985, editor with Kenneth J. Arrow; as well as numerous articles in international and Finnish refereed journals and collected volumes.

Department of Economics  
University of Helsinki  
P.O.Box 54 (Unioninkatu 37)  
FIN-00014 Helsinki  
Finland

[seppo.honkapohja@helsinki.fi](mailto:seppo.honkapohja@helsinki.fi)





**John Kay**  
(M.A. University of Edinburgh, Oxford University, F.B.A.) is a Fellow of St John's College, Oxford and Visiting Professor at the London School of Economics. He has been Director of the Institute for Fiscal Studies, Chairman of London Economics, a director of several public companies, and has held chairs at the London Business School and Oxford University.

His research interests are public finance and industrial organisation. Selected articles include "Vertical Restraints in European Competition Policy", *European Economic Review* (1990), "The Deadweight Loss from a Tax System", *Journal of Public Economics* (1980), "Uncertainty, Congestion and Peak Load Pricing", *Review of Economic Studies* (1979), "A Policy in Search of a Rationale", *Economic Journal* (1986). Among his numerous book publications are *The British Tax System* (with Mervyn King, 5th edition 1990); *Foundations of Corporate Success* (1973); *The Business of Economics* (1996) and *The Truth about Markets*, to be published in May 2003. In addition he has been writing a regular column in the *Financial Times* since 1995.

Professor John Kay  
17 Shouldham Street  
London  
W1H 5FL  
UK

[johnkay@johnkay.com](mailto:johnkay@johnkay.com)



**Willi Leibfritz**  
(Dr. rer. pol., University of Tuebingen 1972) is Head of the Structural Policy Analysis Division in the Economics Department at the OECD. (He participates in this study on a personal basis; the

views expressed do not necessarily reflect those of the OECD.) He was Head of the Department for Macroeconomic Forecasting and Financial Markets and Head of the Department for Fiscal Studies at the Ifo Institute for Economic Research (1997–2001 and 1976–1993) and Head of the Public Economics Division in the Economics Department of the OECD (1993–1997). His fields of interest are macroeconomic analysis and forecasting, general economic policies, fiscal analysis and taxation. He has published widely in Ifo and OECD publications and in national and international journals. He is author and co-author of various economic studies. Recent publications include *Generational Accounting Around The World* (University of Chicago Press 1999), co-edited with Alan J. Auerbach und Laurence J. Kotlikoff.

Willi Leibfritz  
Head of the Structural Policy Analysis Division  
Economics Department  
OECD  
2, rue André Pascal  
75775 Paris Cedex 16  
France

[willi.leibfritz@oecd.org](mailto:willi.leibfritz@oecd.org)



**Gilles Saint-Paul**  
(Ph.D. Massachusetts Institute of Technology, 1990) is Professor of Economics, GREMAQ-IDEI, at the University of Toulouse. He was researcher at DELTA and CERAS, Paris, France, 1990-1997, and professor at Universitat Pompeu

Fabra, Barcelona, 1997-2000. He is a fellow of CEPR, CESifo and IZA. His research interests are Economic Growth, Income Distribution, Political Economy, Labour Markets, Unemployment, and Fiscal Policy. Selected Publications include “The political economy of employment protection”, forthcoming in *Journal of Political Economy*; “Employment protection, innovation, and international specialisation”, *European Economic Review* 2002; “The Dynamics of Exclusion and Fiscal Conservatism”, *Review of Economic Dynamics*, 4, 2001; *The Political Economy of Labour Market Institutions*, Oxford University Press, 2000; *Dual Labor Markets. A Macroeconomic Perspective*, MIT Press, 1996.

Gilles Saint-Paul  
MF 206  
GREMAQ-IDEI  
Manufacture des Tabacs  
Allée de Brienne  
31000 Toulouse  
France

[gilles.saint-paul@univ-tlse1.fr](mailto:gilles.saint-paul@univ-tlse1.fr)



**Hans-Werner Sinn**  
(Dr. rer. pol. and habilitation, University of Mannheim), is Professor of Economics and Public Finance at the University of Munich and President of the Ifo Institute for Economic Research in Munich. He is also Director of CES –

Center for Economic Studies and CEO of CESifo GmbH. Sinn has been a member of the Council of Economic Advisors to the German Ministry of Economics since 1989 and a member of the Bavarian Academy of Science since 1996. He holds an honorary doctorate from the University of Magdeburg (1999) and an honorary professorship at the University of Vienna. He taught at the University of Western Ontario and did research at the University of Bergen, the London School of Economics, Stanford University, Princeton University, Hebrew University and Oslo University. He received prizes for his dissertation and habilitation theses as well as for his research on German unification. In 1999 he gave the Yrjö-Jahnsson Lectures in Economics and in 2000 the Stevenson Lectures on citizenship. From 1997 to 2000 he was president of the German Economic Association and he currently is vice president of the International Institute of Public Finance. Besides Micro and Macroeconomics and Public Finance, his fields of interest encompass Economics of Transition, Allocation Theory, Risk & Insurance, Natural Resources, and Trade Theory. In these areas he has published about 200 articles and several books of which the latest is *The New Systems Competition*, Basil Blackwell, 2003.

Hans-Werner Sinn  
Ifo Institute for Economic Research  
Poschingerstr. 5  
81679 Munich  
Germany

[sinn@ifo.de](mailto:sinn@ifo.de)



Xavier Vives  
(Ph.D. UC Berkeley, 1983)  
is Professor of Economics  
and Finance and The Por-  
tuguese Council Chaired  
Professor of European  
Studies at INSEAD. He is  
also Research Fellow of  
the Center for Economic  
Policy Research and

served as Director of its Industrial Organisation Programme in 1991–1997. He was Director of the Institut d'Anàlisi Econòmica (CSIC) in 1991–2001 and has taught at Harvard University, Universitat Autònoma de Barcelona, Universitat Pompeu Fabra, the University of California at Berkeley, the University of Pennsylvania and New York University. He is editor of the *European Economic Review*, coeditor of the *Journal of Economics and Management Strategy* and associate editor of the *Rand Journal of Economics*. He has been a Fellow of the Econometric Society since 1992 and has received several prizes (“Premio Juan Carlos I” in 1988, for research in social science and the “Societat Catalana de Economia” Prize, in 1996). His fields of interest are industrial organisation, economics of information, and banking and financial economics. His current research interests include dynamic oligopoly pricing, banking crisis and regulation, market microstructure and competition policy. He has published in the main international journals and is the author of *Oligopoly Pricing: Old Ideas and New Tools*, MIT Press, 1999, editor of *Corporate Governance: Theoretical and Empirical Perspectives*, CUP 2000, and co-editor of *Capital Markets and Financial Intermediation*, CUP 1993.

Xavier Vives  
INSEAD  
Boulevard de Constance  
F-77305 Fontainebleau, Cedex  
France

[xavier.vives@insead.edu](mailto:xavier.vives@insead.edu)

## EUROPEAN ECONOMIC ADVISORY GROUP AT CESIFO



Hans-Werner Sinn   Lars Calmfors   Willi Leibfritz   Seppo Honkapohja  
Gilles Saint-Paul   John Kay   Xavier Vives   Giancarlo Corsetti   John Flemming



P.O.Box 86 04 60  
D-81631 Munich  
Tel.: xx49-89-92 24-16 93  
Fax: xx49-89-92 24-12 67  
www.cesifo.de/isc

**CESifo International Spring Conference:  
»Prospects for the European Economy«**

Thursday and Friday  
20-21 March 2003  
British Embassy  
Berlin

**Programme**

**March 20, 2003**

- 12:00 Cold buffet lunch
- 13:00 **Welcome**  
Paul Lever, British Ambassador, Berlin  
Norbert Bensele, Deutsche Bahn AG, Berlin  
Hans-Werner Sinn, President,  
Ifo Institute for Economic Research, Munich
- 13:30 **The World Economy with Special  
Reference to the United States**  
Flemming Larsen, IMF Europe, Paris
- 13:50 **The European Economy – Analysis and Outlook**  
Hans-Werner Sinn
- 14:10 **The Outlook for Central and Eastern Europe**  
Willem H. Buiter, EBRD, London
- 14:30 Discussion
- 15:00 Coffee break
- 15:30 **China and the Asian NIEs**  
Markus Taube, University of Duisburg
- 15:50 **The Asset Price Bubble**  
Jim O'Neill, Goldman Sachs, London
- 16:10 **Financial Stability**  
Claudio Borio  
Bank for International Settlements, Basel
- 16:30 Discussion
- 17:00 End of first day
- 19:00 Dinner (by invitation of Deutsche Bahn AG)  
British Embassy Berlin  
Dinner speech: Alfred Tacke,  
State Secretary in the Federal Ministry of  
Economics and Labour, Berlin, and  
Personal Representative of Chancellor Schröder  
for the World Economic Summit

**March 21, 2003**

- 9:00 **Welcome**  
Rainer Fehn  
Ifo Institute for Economic Research
- 9:15 **Introduction**  
Hans-Günther Vieweg  
Ifo Institute for Economic Research
- 9:45 **Prospects for the European  
Manufacturing Industries**  
Moderator: Peter Marsh  
Financial Times, London
- Steel Industry**  
Tony Cockerill  
University of Durham
- Chemicals**  
Ralf Gronych  
BASF, Ludwigshafen
- 11:00 Coffee break
- 11:15 **Capital goods**  
Paul M. van Roon  
Orgalime, Zoetermeer
- Automobiles**  
Christophe Chabert  
Renault, Paris
- ICT-Industry**  
Uwe Kühne  
IBM, Paris
- 12:45 General Discussion
- 13:15 **Concluding Remarks**  
Hans-Günther Vieweg
- 13:30 Hot buffet lunch
- 14:30 End of conference