The EEAG Report
on the European Economy
2013

Rebalancing Europe
Macroeconomic Outlook
European Imbalances
Labour Market Reforms and Youth Unemployment
US Precedents for Europe
The euro crisis has calmed down somewhat, but the real problem, the southern euro area countries’ lack of competitiveness, has not been resolved. Some euro countries simply became too expensive in the years before the crisis, as a result of the availability of cheap credit from abroad. They now need to depreciate in real terms by cutting their wages and prices relative to their euro area competitors. Whether and to what extent this process is underway is one of the topics discussed in this year’s report, the twelfth in the series. The report also provides a more general assessment of the crisis, expanding on topics that were discussed in previous issues. It places a particular focus on the quickly deteriorating labour market situation and it tries to draw lessons for the European unification process from the United States, and particularly from its problematic early years, during which most of its states went bankrupt.

As always, the report starts with an assessment of the current economic situation, providing a set of forecasts prepared by the Ifo Institute and complemented by the report’s authors, the European Economic Advisory Group at CESifo (EEAG). Chapter 2 focuses on the intra-euro area imbalances, emphasising the need for fiscal consolidation and a realignment of prices. It suggests cutting expenditures rather than raising taxes, and it advocates a fiscal devaluation by shifting the tax burden towards indirect taxes. Chapter 3 looks at long-term unemployment and the development of dual labour markets in some southern countries. At the heart of the analysis is the question of the optimal degree of labour market flexibility, in terms of trading off efficiency and social justice. The chapter opposes automatic, legally binding sector-level bargaining, and emphasises the need for improved vocational education, training and apprenticeships, as well as active labour market policies and employment protection legislation. Chapter 4 compares the European unification process with the history of the United States. It argues that the establishment of a common state is a necessary prerequisite for fiscal transfer schemes and warns against government debt mutualisation schemes. Furthermore, it calls for a US-like settlement mechanism for the Target balances that the EEAG analysed in its 2012 report.

The EEAG, which is collectively responsible for each chapter in its yearly report, consists of a team of six economists from five countries. This year, the Group is chaired by Jan-Egbert Sturm (KOF Swiss Economic Institute, ETH Zurich) and includes Giuseppe Bertola (EDHEC Business School), John Driffill (Birkbeck College), Harold James (Princeton University), Ákos Valentinyi (Cardiff Business School) and myself (Ifo Institute and University of Munich). The members participate on a personal basis and do not represent the views of the organisations they are affiliated with.
I would like to express my gratitude for the valuable assistance provided by the scholars and staff at CES and Ifo who helped to prepare the report. This year’s participants were Darko Jus and Nadjeschda Arnold (research assistants), Tim Oliver Berg, Nikolay Hristov and Johanna Plenk (economic forecast), Lisa Giani Contini and Julio Saavedra (editing), Christoph Zeiner (graphics), Elisabeth Will (typesetting) and Ines Gross (cover). I also wish to thank Swiss Re for hosting our autumn meeting.

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Europe has a serious balance-of-payments problem that has been largely ignored to date, but must be addressed to get the euro back on track. The euro area’s crisis-stricken economies urgently need to restore their competitiveness, but how will they do so? This chapter explores the two options open to the periphery countries: internal devaluation (involving wage cuts, for example); or external devaluation via an exit of the euro area.

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Fiscal federalism in the United States today is relatively robust, but the road from 1790 was rocky; and a closer analysis of the first two decades of the Federal Reserve System reveals that they were filled with monetary mistakes. This chapter explores the policy lessons that Europe can learn from the United States and analyses key features of the US system like its settlement mechanism.

Authors: The members of the European Economic Advisory Group at CESifo
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RECOMMENDATIONS FOR EUROPE

Chapter 2: EUROPEAN IMBALANCES

There is no quick-fix solution for countries that have lost their competitiveness. These countries need a realignment of prices. An internal devaluation through falling prices is usually accompanied by mass unemployment and deep recession, which can potentially stoke social unrest. An external devaluation, achieved via exiting the euro, is likely to create capital flight before the event, and uncertainty afterwards as a result of ensuing legal challenges, particularly from non-residents. An internal devaluation by inflating the core countries may generate political resistance and violate the ECB’s mandate of maintaining price stability. However, countries struggling to restore competitiveness can:

- **Try a fiscal devaluation.** Increasing VAT while cutting direct taxes might be a way to slightly improve the competitiveness of uncompetitive euro countries.

- **Cut expenditure rather than raising taxes during fiscal consolidation.** The empirical evidence shows that tax-based fiscal adjustments tend to be less successful than expenditure-based ones. The periphery countries should therefore focus more on cutting expenditure, rather than raising taxes to reduce their deficits. Ireland and Spain, for instance, relied more on cutting expenditure and seem far more on track with their internal adjustment than Greece and Portugal, which raised taxes.

- **Reduce the Greek debt overhang.** Policy-makers should deal with Greece’s debt overhang in a credible way that does not require hard-fought political renegotiation every few months. Writing-off a significant amount of Greek debt under strict conditionality and surveillance would be one way forward.

Chapter 3: LABOUR MARKET REFORMS AND YOUTH UNEMPLOYMENT

- **Two-tier labour markets** should be eliminated. They are characterised by a marked distinction between temporary and permanent jobs. The burden of adjusting to change falls heavily on those in temporary jobs, while those in permanent jobs are shielded from it. They tend to make the position of younger workers, among others, more precarious. Efforts to reduce these differences should be kept up.

- **Make dismissal costs for firms modest and predictable.** Long drawn-out legal proceedings with highly uncertain and costly outcomes must be avoided. Where they do not already exist, it may be worthwhile to establish employment tribunals or an arbitration service to resolve labour disputes quickly and cheaply. Severance payments should depend on the length of time a worker has been employed.
• **Reconsider the automatic, legally binding extension of wage bargains across sectors.** Wage bargains should not be imposed on firms where unions do not represent a large enough fraction of the labour force. There should be further moves towards firm-level bargaining. In cases where industry-wide agreements exist, firms and their workers should be able to deviate from them, as local conditions dictate.

• **Vocational education, training and apprenticeships** need to be improved in most European countries.

**Chapter 4: US PRECEDENTS FOR EUROPE**

• **Establish a common state before federalising debt.** In the United States, the federalisation or mutualisation of state debt depended on the creation of a fiscal mechanism that produced a stream of revenue to service the debt. Debt was only mutualised after the foundation of a common state.

• **Limit liabilities.** The 1790 US compromise might be seen as a precedent for limiting the liabilities of the northern European surplus countries in the case a common European bond, or Eurobond, is created.

• **Fiscal Equity.** The choice of the fiscal mechanism to service a federalised debt potentially raises deeply divisive issues about the distributive effects of the tax or tariff on the constituent states.

• **Ensure that Europe's central bank is flexible and strictly governed.** Designing a central bank for a very large area is complicated, and requires some measure of flexibility (such as differing collateral requirements) to respond to local or regional circumstances, as well as checks and balances in its governance structure.

• **Set up a US-style settlement mechanism in Europe.** Europe needs a US-style settlement mechanism that requires a securitisation of balances to keep outstanding debts small; and even creates incentives to take countervailing local policy measures to avoid the build-up of balances in the first place. A settlement system would protect the European creditor countries against losses arising from a break-up of the currency union, while making them more resistant to pressure to participate in bail-out activities.
Summary

2012 was another tough year for the world economy, and especially for the euro area. The euro crisis, which developed into more than just a sovereign debt and a banking crisis, intensified during the first half of 2012. This triggered recessions in many member countries, although tensions and fears have abated somewhat in recent months. The underlying roots of the crisis are the balance-of-payments imbalances that accumulated in the years preceding it. This year’s EEAG report addresses the resulting need for a major rebalancing within Europe.

Chapter 1 of the report discusses the immediate macroeconomic outlook for the global economy, with a particular focus on the European situation. Chapter 2 focuses on the major macroeconomic imbalances within the euro area and argues that a substantial devaluation in the crisis economies is needed to achieve a sustainable solution. Against a background of surging unemployment rates in many European countries in recent years, Chapter 3 analyses European labour markets, with a special focus on youth unemployment. Finally, Chapter 4 looks at the situation in Europe from across the pond to determine whether Europe can learn any lessons from the historical development of a fiscal union in the United States.

Chapter 1: Macroeconomic Outlook

A renewed escalation of the euro crisis pulled the world economy out of recovery mode in mid-2011. Global economic momentum has slackened since, primarily due to the huge adjustment processes that are currently taking place in the euro area. Especially the bursting of real-estate bubbles in a number of countries led to job-losses and declining income levels, resulting in very high levels of private debt that in many cases are no longer serviceable. This, in turn, created further distress in the banking sector, causing the macroeconomic conditions for finance to deteriorate significantly as the inflow of private capital from abroad dried up, or even reversed in the form of capital flight. The deleveraging of private debt and the reallocation of production factors required to improve the situation will probably take some time. Meanwhile, the problems outlined above are considerably heightened by the state of public finances in the crisis-afflicted countries (Greece, Ireland, Portugal, Spain, Cyprus and Italy).

In response to the sharp increase in perceived solvency risks, these countries have launched extensive austerity programmes and implemented a series of structural reforms in recent years. The resulting contraction in their economies not only carried over to the rest of the world via massively reduced demand for imports, but also through a heightened increase in uncertainty. This, in turn, led to a sharp decline in capital flows to the emerging economies of Asia, Latin America and Eastern Europe.

Some of the economic decisions taken in the summer and early autumn have had a somewhat calming effect on the financial markets. It was agreed in July 2012 that Spain should receive up to 100 billion euros from the ESM’s permanent rescue fund to support its beleaguered banking sector. The early election in the Netherlands also handed anti-euro parties a bitter defeat and produced a relatively stable coalition, which has agreed to continue fiscal consolidation. In addition, the German Constitutional Court gave a green light to the permanent ESM bail-out mechanism. Finally, shortly thereafter the ECB announced a new programme of unlimited purchases of government bonds. This reduced the risk of disorderly exits from the monetary union by member states and has since been reflected in lower risk premiums in the European sovereign debt markets. Macroeconomic uncertainty nevertheless remains high and is placing a huge burden on economic development in the European Union, especially in the euro area.

Unlike developed countries, most emerging economies have significantly more fiscal room to manoeuvre and stimulate their economies thanks to their relatively low public debt levels. Many emerging economies are expected to ease their fiscal policies this year,
albeit moderately. Monetary policy has already, or looks set to, become more accommodative in these countries too. Furthermore, increasing levels of disposable income should provide an additional stimulus to private consumption. Economic activity in emerging countries is therefore likely to pick up noticeably and should prevent the world economy from slipping into a recession this winter. Global economic expansion is expected to accelerate somewhat over the course of the year, but remain below its potential.

With the contractive fiscal impulse set to have a lesser impact on the euro area than in 2012, the advanced economies should also see slightly higher growth this year. The US economy is also expected to continue along a moderate growth path, i.e. after the negative fiscal shock at the beginning of the year, growth will gradually strengthen again. This will especially be driven by the improving real-estate market, as well as the slowly, but steadily improving asset positions of private households.

In the European economy, domestic demand looks set to shrink further in 2013. Tight fiscal policies, albeit less restrictive than in 2012, will dampen economic activity in almost all member states. The continued deterioration of the labour market and further efforts to reduce private debt will also put an additional strain on the willingness of private households to spend. On a brighter note, expansionary monetary policies and increased growth in exports will allow private investment to stabilise somewhat in the second half of 2013. With imports set to remain very weak, net foreign trade will provide a strong positive impulse and GDP growth in the euro area should pick up slightly over the year, albeit remaining at a low level.

The economic divide among individual member states in the euro area will continue to widen, while aggregate production in most of the crisis-afflicted countries looks set to shrink. Fiscal policy in these countries will be far more restrictive than in the rest of Europe. Although financing conditions in the crisis-afflicted countries have already started to improve, and despite a more expansionary monetary policy, they are likely to remain relatively unfavourable, at least compared to the European core countries. After a temporary period of weakness this winter, stable economies like those of Germany, Finland and Austria will benefit from relatively stronger demand from emerging markets and domestic forces during the rest of 2013.

Chapter 2: European Imbalances

Europe is in the grip of three interrelated crises: a balance-of-payments crisis, a sovereign debt crisis and a banking crisis. Although progress has been made to resolve the sovereign and banking crises in the past four years, policy-makers have paid little attention to the balance-of-payments problem. Yet a credible strategy for getting the euro back on track needs to address this key issue.

Large imbalances have emerged in the euro area since 2000 in the form of current account deficits and surpluses. The euro area periphery countries of Greece, Portugal, Spain and Ireland in particular experienced credit bubbles that led to current account deficits and corresponding capital imports. The Northern core of the euro area, on the other hand, ran persistent current account surpluses. This led to an accumulation of net foreign liabilities in the periphery and net foreign assets in the core. Prior to the crisis the current account imbalances were financed by private capital inflows. When the crisis struck, however, these private capital inflows were increasingly replaced by public flows, primarily by the ECB's Target balances, and to a lesser extent by the various aid packages of the European Union, the ECB and the IMF.

The periphery countries therefore now have to devalue to make their consumers and firms switch from imports to domestic goods, thereby reducing their imbalances. Ireland is the only country to have achieved this to date by cutting wages, contributing to a fall in its price level relative to the core of the euro area. The key policy question is whether the other periphery countries affected by the crisis will also pursue this course, i.e. the course of internal devaluation; or whether they will resort to an external devaluation by exiting the euro area. As yet, no clear answer to this question has emerged. Let us consider the basic mechanism of an external devaluation. As a country devalues, the prices of its exports and imports change, making the former more profitable and the latter more expensive. This boosts exports and reduces imports, thereby improving the current account. Under an internal devaluation, this process – due to price and wage stickiness – takes a long time to complete because it requires higher inflation in the core than in the periphery. Moreover, it is also associated with a prolonged recession and high unemployment because prices only adjust slowly. Under external devaluation this process is completed over a short period of time, since the exchange rate depreciates...
quickly. Moreover, there is theoretically no loss of output and employment.

Both external and internal devaluation inevitably raise the debt-to-income ratio, which may drive companies into bankruptcy. In addition, the prerequisite of external devaluation is an exit from the euro area, and anticipation of such an event could cause destabilising capital flight and contagion effects. Only an internal devaluation via price increases in the core countries without increasing the relative burden of external or internal debt. However, this would violate the ECB's mandate to ensure price stability and would meet with considerable resistance in the core countries, since it would deprive savers in the core of some of their wealth. In other words, the euro area appears to be trapped in a situation with no easy escape route.

Since the beginning of the crisis, the periphery countries have all been undergoing adjustment. Ireland was hit first. It started its adjustment early, introduced decisive policy measures and underwent a significant internal devaluation. The other Southern countries were not hit by the crisis until almost two years later. Given that some of them were largely financed by the ECB, they delayed the reforms required and initially made little progress along the painful road towards internal realignment. Their current accounts improved largely because of a sharp decline in imports due to the recession. In addition to Ireland, Spain was also able to improve its exports, suggesting that it is making progress. Adjustments in Portugal, on the other hand, and particularly in Greece, seem to be slow. According to the data available at the time of writing, Greece has done very little to date to improve its competitiveness.

To help the crisis-afflicted countries get back on their feet, a significant amount of debt needs to be written off. The countries themselves should, in turn, reduce government deficits. Empirical evidence shows that tax-based fiscal adjustments tend to be less successful than their expenditure-based counterparts. The periphery countries should therefore focus more on cutting expenditure than on raising taxes to reduce their deficits.

Chapter 3: Labour Market Reform and Youth Unemployment

Youth unemployment rates in Greece and Spain recently reached alarming headline figures in excess of 50 percent. At the same time, long-term and overall unemployment have grown considerably in the wake of the 2007–8 global financial crisis and the subsequent euro area public debt crisis, with its attendant austerity policies. The unemployment data focus attention on youth unemployment and labour market performance. Why has youth unemployment risen so much? What can and should be done about it? Why has overall unemployment risen so much? What can and should be done? Are labour market institutions at fault in some way? Should they be reformed?

European labour markets feature, to varying degrees, high levels of employment protection, high minimum wages, high taxes, generous unemployment benefits, generous publicly provided pay-as-you-go pensions schemes, pensions available from an early age, and strong trade unions. All of these features lead to a high structural unemployment rate. Public sector employment accounts for a large fraction of the total. The short-term need to cut deficits has led to cuts in the numbers of public employees and in public sector pay, increased retirement ages, and less generous benefits. There have also been moves to cut minimum wages in some countries.

The experiences of Germany, where the Hartz reforms of 2002–2004 lent new dynamics to a sclerotic labour market, and cooperative industrial relations delivered wage restraint from 2001 to 2008, contributing to falling unemployment since 2005, are widely seen as a model. The successes of the Danish (and to some degree Dutch) system of “flexicurity” have been trumpeted repeatedly. However, the large rise in unemployment in Denmark since 2007 casts doubt on its superiority. When demand contracted sharply in 2008, flexicurity naturally enabled Danish firms to reduce their staff numbers rapidly. The labour market policies of the British government lean towards the free-market end of the spectrum. They have delivered a low rise in unemployment, despite the UK’s prolonged fall in output. There is a contrast between those countries in which policies that encourage short-time working have spread the cost of the recession and created small increases in unemployment, and others such as Denmark, where employment cuts took the form of a rise in unemployment, rather than widespread reductions in working hours.

Pressure to reform labour market policies and institutions has been fuelled by the need to cut public borrowing. Policy changes in Spain and Italy, for example, have reduced the differences between temporary
Summary

and permanent jobs, advanced progress towards a single form of labour contract, and reduced employment protection for established workers. However, they have hardly touched upon the problems of youth unemployment and vocational training. There are good reasons why youth unemployment rates are almost always higher than those of older workers, but the current figures nevertheless give cause for concern. The scarring effects of unemployment at the start of, or early in, a working life tend to be lasting. They suggest that resources are being largely wasted, and that many young workers will suffer. The youth unemployment problem is the result of a combination of: (i) two-tier labour markets, in which well-established workers enjoy heavily protected jobs while others, including many new entrants, work in unprotected temporary jobs, and can be dismissed at low cost to the employer; (ii) unsatisfactory arrangements for apprenticeships and vocational education in many European countries; and (iii) the collapse of the house-building boom in Spain and Ireland. These problems tend to go hand-in-hand and have thrown the burden of adjusting to the recession onto young and unskilled workers.

While Germany, Austria, and Switzerland have highly successful apprenticeship and vocational education systems that have been much studied by their neighbours, few countries have been able to emulate them. The German system succeeds in Germany with the support of local firms, chambers of commerce, trade unions, colleges and public authorities: a post-apprenticeship qualification is a legal requirement for those seeking to work in many skilled trades. While the success of the system is envied, its rigidity is an obstacle to its adoption elsewhere, as it channels young workers into a particular occupation at an early stage. In the United Kingdom, by contrast, young workers typically hold a succession of jobs for short periods, interspersed with periods of unemployment, while they look for a suitable career. College training aims to impart general skills, while short apprenticeships are intended to provide on-the-job training and firm-specific skills. Many observers, however, merely regard the latter as subsidised labour for firms. Spain, Italy, and other European countries face similar problems.

While it is tempting to advocate the universal adoption of successful labour market institutions, caution is advisable. Institutions do not transplant easily and what works in one socio-economic environment may not work in another. The social pacts possible in a small, cohesive Nordic country may not be realistically applicable to a large, more diverse society like that of Spain. Besides, beyond the policy changes and reforms imposed by the need to stabilise national debt levels, longer-term changes, aimed at improving the labour market’s functioning when growth returns, may increase public spending and unemployment in the short term.

Some aspects of current labour market institutions nevertheless demand attention. Two-tier labour markets – created by introducing temporary contracts, but leaving regular employees well-protected against losing their jobs – have thrown the burden of adjustment onto a small fraction of the labour force. The distinction between regular and temporary employment needs to be narrowed. There is a case for devising procedures for resolving labour disputes, like employment tribunals, that would be able to resolve disputes arising from severance decisions without recourse to very long and costly court procedures. Moreover, the legally enforced extension of pay bargains to all firms in an industry has allowed a few workers in highly unionised firms to impose unsuitable wage settlements on a wider industry, with adverse consequences. Greater flexibility in wage bargaining is needed. Finally, massive improvements are required in the provision of education and training for young people in most European countries, both to improve their level of skills and to reduce unemployment.

Chapter 4: US Precedents for Europe

The discussion of European integration – both in the past and in the future – has largely been driven by analyses of how precedents on the other side of the Atlantic have worked. Two of the most widely debated aspects of US fiscal and financial integration are: (1) the federation’s responsibility for state-level debts and the creditworthiness of states; and (2) the working of a federal central bank. Today’s fiscal federalism in the United States is relatively robust, but the road from 1790 was rocky; and a closer analysis of the first two decades of the Federal Reserve System reveals that they were filled with monetary mistakes.

In 1790 Alexander Hamilton pushed through an assumption of state debt arising out of the War of Independence. The federalisation or mutualisation of state debt depended on the creation of a fiscal mechanism (a federally-administered customs tariff) producing a stream of revenue to service the debt. The
1790 compromise might be seen as a precedent for limiting the liabilities of the Northern European surplus countries should a common European bond or Eurobond be created. Important parts of Hamilton’s financial architecture were not realised, or only realised imperfectly. He proposed a model of joint-stock banking on a national scale, which ran into immediate opposition, and which, curiously, was much more influential in Canada than in the United States. Secondly, his proposal for a national central bank, based on the model of the Bank of England, was eventually blocked by political opposition. Moreover, the choice of the fiscal mechanism to service a federalised debt potentially raises deeply divisive issues about the distributive effects of the tax or tariff on the constituent states, and the customs tariff was at first the major cause of the growing political strains between North and South. The fiscal union was also dangerous because it allowed states to recommence their borrowing. There are strong parallels between the development of American states in the 1830s and that of modern Europe. The American states that borrowed most heavily, and then ran into problems, were the less developed states that saw borrowing as a way of financing development infrastructure, especially in transport. The borrowing states were also keen to encourage the development of domestic financial institutions in order to stimulate growth and development. When problems emerged, discussions centred on whether they were due to external circumstances (a crisis in the world’s financial centre, the United Kingdom then, the United States now), to a flawed development strategy, or to governance problems and corruption in both state governments and banks. These issues were extensively debated in the 1840s, and a contrast was made with the position of state finances in the aftermath of the War of Independence. In the case of the US state defaults of the early 1840s, as in that of contemporary Greece, the problems stemmed primarily from misguided policies, and cannot be blamed on external circumstances, war or a global crisis. The eventual solution lay in the adoption of debt restraints or balanced budget laws. A commitment not to renew the assumption of state debts was a condition for the stable financial and political development of the Union.

The question of the relationship of a central federal bank to local banking systems – and to the patronage systems built up by local elites – has always been a highly contentious issue in North American politics from the very outset. The Federal Reserve System relied on a complicated governance system that was designed to preserve checks and balances, and to ensure that the system could be neither dominated by the powerful East Coast financial community, nor by the federal government in Washington. The regional Federal Reserve Banks corresponded to what were felt to be logical economic areas, which did not necessarily overlap with state boundaries. Like national central banks in the international gold standard order, the various American Reserve Banks had their own discount policies and applied different rates – especially at moments of strain. By the late 1930s, the rate differences were disappearing, but they only vanished completely during World War II, for the simple reason that operating with federal bills (a single instrument) in open market operations, rather than with a multiplicity of differently valued private securities, became the primary tool of US monetary policy. When it came to monetary policy instruments, the ECB’s founders adopted the practice of the post-war Federal Reserve, and assumed that the debt instruments of different member states could fill the monetary policy role of a single financial instrument (federal government securities) in the case of the Federal Reserve’s open market policy. It was only in the 1930s, with the new Bank Law of 1933, that the Federal Reserve System really started to act as a modern central bank.

Interdistrict Settlement Account balances, like Target balances, expanded greatly in the aftermath of the 2008 financial crisis. These imbalances reflect the fundamentally changing market perceptions of US private financial institutions, and they do not display the permanence that has characterised their European equivalents, where banks in deficit countries are paralysed because of the ties between banks and sovereigns (with banks holding the paper of the sovereigns that bail them out). The pronounced differences between the United States and the European settlement processes stem fundamentally from the central fact that the Federal Reserve System as a whole has a sovereign as a counterpart, while the ECB does not. Moreover, only the United States has a settlement mechanism that requires a securitisation of balances. This system has kept the outstanding balances small, and has even created incentives to take countervailing local policy measures to avoid any balances in the first place. A settlement system would protect the European creditor countries against a break-up loss and make them more resistant to pressure to participate in bail-out activities.
MACROECONOMIC OUTLOOK

1.1 Introduction

The euro crisis is putting a strain on the world economy. As a result, economic activity lost momentum nearly everywhere over the course of last year and the world economy is going through a weak phase this winter. The underlying adjustment processes that have been at work in the United States and in other advanced economies ever since the real-estate bubble burst in 2007, and which have not yet been completed, also continue to curb economic activity. Economic growth will therefore remain weak for the moment, and only looks set to recover again slightly over the course of the year.

The global economy will gradually recover after these winter months, assisted by the relaxation of monetary policy in the United States and Europe, as well as stronger economic momentum in the emerging markets. In the case of China in particular, it is safe to assume that the government will continue to follow its recent course, and will upscale the expansionary character of its policy until economic activity clearly starts to pick up again. Furthermore, European financial markets are likely to become more stable as the resolutions of the EU summit in June 2012 (such as the introduction of a banking union) are implemented. This offers the perspective that the uncertainty currently crippling economic activity in the crisis countries will continue to slowly subside.

Gross domestic product (GDP) is expected to increase by 0.1 percent in the European Union this year, with foreign trade as the main driver of growth; while inflation looks set to increase modestly. The situation in the labour market will deteriorate further, with the unemployment rate rising to an average of 10.9 percent this year. The euro area will remain in a mild recession for the time being. Growth should gradually pick up in the United States after an initial decline due to partial implementation of the fiscal cliff, since the structural problems in the banking and real-estate sectors will diminish and the labour market is also expected to continue to recover.

1.2 The current situation

1.2.1 The global economy

With the further escalation of the euro area debt crisis in spring 2011 the world economy has moved out of recovery mode and into what can broadly be described as stagnation. World trade has been faltering around a historically low growth rate of below 3 percent (see Figure 1.1) for roughly two years. This has been apparent in all key economic regions, albeit to differing degrees. A look at world industrial production reveals that there were signs of recovery during summer 2011 and early 2012. There were hopes that the relatively strong growth performance of the emerging markets during the first quarter of 2012 would act as a sparking plug for the world economy. However, a further escalation of the euro area crisis together with a stronger than expected slowdown in Chinese growth caused world industrial production to basically stagnate from the second quarter of last year onwards. Whereas the emerging world has recently shown signs of recovery, industry in the advanced economies appears to have taken a downturn.

The global economic slowdown has been accompanied by a marked decline in the results of the Ifo World Economic Survey since spring 2011. The assessment of the economic situation by the participating experts has fallen for all regions overall and is now, despite the recent increase in North America and Asia below its neutral levels (see Figure 1.2). Producers and consumers in the euro area also became fare gloomier, although sentiment has stabilised somewhat in recent months. In the United States, China and several East Asian and Latin American emerging markets, a number of confidence indicators stabilised, and even improved in the winter after suffering drastic drops in the preceding months. The overall sentiment in these economies nevertheless remains at a fairly low level.

The slackening of global economic momentum since spring 2011 is primarily due to the huge adjustment processes that are currently taking place in the euro

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1. If not mentioned otherwise, all growth rates reported are annualised growth rates.
In a number of countries, especially after the bursting of real estate bubbles, workers have been released in large numbers and incomes have declined resulting in often very high levels of private debt that are no longer serviceable. This in turn brought the banking sector into further distress causing the macroeconomic conditions for finance to deteriorate significantly as the inflow of private capital from abroad dried up or even reversed in the form of capital flight. The requisite deleveraging of private debt and the reallocation of production factors will most likely take some time. The problems are considerably heightened by the state of public finances in the crisis countries (Greece, Ireland, Portugal, Spain, Cyprus and Italy) which were either already overloaded or fell into disarray as a result of the public sector having to shoulder increasingly higher burdens caused by the new economic reality. In response to the sharp increase in perceived solvency risks since the spring of 2010, these countries have undertaken extensive austerity programs and a series of structural reforms. Confidence in the sustainability of their public finances continued to erode during 2011, causing private financing conditions to deteriorate even further, and encouraging the crisis countries to step up the intensity of their reform efforts. The resulting contraction in their economies not only carried over to the rest of world via massively reduced import demand, but also through a further increase in uncertainty resulting in a sharp decline of capital flows to the emerging economies of Asia, Latin America and Eastern Europe. Circumstances like these tend to result in investors moving their assets to countries seen as “safe havens” such as the United States, Japan, Germany or Switzerland.

Moving into the second half of last year, the recession in the euro area persisted and macroeconomic uncertainty remained exceptionally high. Global
investors, producers and consumers remained unsettled by next to no easing up of concerns about the solvency of the state and the banking system in the euro area crisis countries and the risk of disorderly exits from the European Monetary Union. This has resulted in the postponement of many private investment projects and suppressed the demand for durable goods. In September 2012, the European Central Bank (ECB) announced that it was ready to undertake extensive interventions in the sovereign debt markets when needed. This has somewhat reduced the risk of disorderly exits of member states from the monetary union and has since been reflected by the lowering of risk premiums on the European sovereign debt markets.

In the United States, the recovery after the financial crisis of 2007–2008 has been steady but slow. Many private households in the United States are still engaged in reducing their debt to sustainable levels. This process has curbed consumption somewhat. Uncertainty as to the future orientation of fiscal policy has also had an adverse impact on the United States. The threat of dramatic tax increases and expenditure cuts triggered by a “fiscal cliff” at the beginning of this year caused concern for some time, and not just to US investors. Although a large part of the fiscal cliff has been dealt with earlier this year, some decisions – notably on cuts to defence and education spending – have only been delayed into March. Hence, some uncertainty still remains.

In key emerging markets, the slowdown in the rate of expansion was also in part caused by domestic concerns. In order to counter high inflation and overheating in credit markets, monetary policy became significantly more restrictive in many places by mid-2011. These measures began to show their impact in the quarters that followed. Between summer 2011 and summer 2012 inflation rates in emerging and developing countries fell considerably.

The overall slowdown of the world economy together with an overall sideward movement of energy and food prices allowed world inflation to steadily fall by in total 1.5 percentage points to a level of slightly above 3.2 percent by mid-2012 (see Figure 1.3). It more or less stabilised at that level since.

1.2.2 United States

Albeit steady, the economic recovery in the United States continues to lag behind past recoveries. Since early 2010, real GDP growth has hovered around 2 percent before temporarily dropping in the last quarter of 2012 (see Figure 1.4). The restructuring of the real estate and the deleveraging of the financial and household sectors are taking their time and will have to be followed by a prolonged period of fiscal consolidation. Private consumption and investment in
equipment and machinery continue to contribute positively to economic growth (see Figure 1.5). The drop in GDP growth in the fourth quarter of 2012 was primarily due to a negative growth impulse coming from investments in inventories. This reflected the uncertainty about the implementation and severity of then the forthcoming fiscal consolidation. At the same time, however, it brought forward substantial defence spending in the third quarter of last year.

Foreign trade also contributed positively throughout the year 2012. Although export growth fell to just 3.2 percent (following 6.7 percent in 2011) due to the weak global economy, the even weaker development of imports – up by only 2.5 percent from last year – caused by weak domestic demand for capital goods in particular was able to outweigh this.

Other impulses were provided by the private housing sector. Coming from historical lows the number of private housing construction starts and the number of building permits have both increased by well over 25 percent last year (see Figure 1.6). Housing starts were given a sustainable boost as the supply of excess unsold real estate began to drop. As compared to 2011, the sales of new homes have picked up by on average 20 percent. The average financial burden on home owners posed by payments on mortgage interest and principal dropped from 11.3 percent of their disposable income in the fall of 2007 to 9.0 percent by mid-2012. This value is significantly below the long-term average since the 1980s. At the same time, the Case-Shiller Index of real estate prices rose in the past 12 months by nearly 4 percent. This increase was supported mainly by a far-reaching reduction in the surplus of unsold residential real estate brought about by the financial crisis. Household debt also fell from its peak in the third quarter of 2008 nominally to around 1.4 trillion dollars; a drop of almost 11 percent, which when adjusted for inflation is almost twice as high. Against this background, the decline in the average savings rate of 5.5 percent during summer 2010 to 4.7 percent in the fourth quarter of 2012 reflects a progressive improvement of the asset position of households.

The labour market has resumed some momentum in the second half of last year. After a slow period in early summer, an average of 160,000 new jobs has been created since July, causing the unemployment rate to decline to 7.8 percent in December (see Figure 1.7). Yet employment growth remains below average in comparison to previous recoveries in the
Chapter 1

United States and the unemployment rate is dropping at a modest pace. A major hurdle to employment growth is the still hesitant attitude of business and consumers. A clearer upturn on the labour market can be expected no earlier than when the two major parties in Washington agree on the course of fiscal policy consolidation to be taken. Although progress has been made on this earlier this year, the necessary lifting of the debt ceiling – i.e. the amount the US government can borrow which is capped by legislation –, the automatic spending cuts still in the pipeline and the fact that the United States has been operating without a federal budget since October last year which will need to be passed by March all create uncertainties regarding the future course of fiscal policy.

After having peaked in September 2011 at 3.9 percent, the inflation rate in the United States swiftly came down again reaching a low of 1.4 percent in July last year (see Figure 1.8). As also indicated by the by then stable core inflation rate, i.e. the rate of inflation excluding energy and food costs, the subsequent increase was primarily due to higher energy prices. Overall, actual inflation has reached an average of 2.2 percent in 2012.

1.2.3 Asia

After a clear cooling over the winter of 2011/2012, the Chinese economy has been able to resume some momentum again in the course of the year. Its GDP grew by around an annualised 8 and 9 percent during the second and third quarter, respectively, up from a low of approximately 6 percent during the first quarter.
The economy is more and more supported by private consumption and the continued expansion of investment. Exports, on the other hand, have from a historical perspective developed in a rather restrained manner. Besides the slowdown of the world economy, the in recent years rapidly rising labour costs in China have affected its price competitiveness and thereby also negatively impacted its exports. Simultaneous strong increases in real imports led foreign trade to deliver a negative contribution to the overall economic expansion for seven quarters in a row. The total overall increase in GDP amounted to 7.8 percent in 2012 (after 9.6 percent in 2011).

Overall, it appears that China is in a transition towards a lower trend growth path. Its labour force tends to grow at a slower pace and labour costs have been increasing in international comparison. In addition, the real estate sector is in a downturn since 2011. The slowdown in growth was merely masked by the stimulus measures undertaken during the Great Recession.

The weaker economic expansion has apparently not led to a significant increase in unemployment – the unemployment rate in urban areas has been around 4.1 percent and thereby similar as in 2007. This suggests that the economic growth rate required to integrate the additional labour, which used to be estimated at around 8 percent, has decreased. The in March last year to 7.5 percent reduced official growth target is in line with this.

After having peaked at 6.5 percent in summer 2011, the inflation rate swiftly came down to slightly below 2 percent last autumn. This allowed the Chinese central bank, the People's Bank of China, to respond to the slowdown in economic growth by loosening its monetary policy stance. Firstly, reserve ratios were reduced in three steps by in total 1.5 percentage points. Subsequently, its key interest rate was lowered in two steps by 56 basis points to 6 percent in July 2012. And finally, by the end of August 2012, the central bank increased the liquidity in the banking sector towards a lower trend growth path. Its labour force tends to grow at a slower pace and labour costs have been increasing in international comparison. In addition, the real estate sector is in a downturn since 2011. The slowdown in growth was merely masked by the stimulus measures undertaken during the Great Recession.

In addition to these monetary measures, the Chinese government again resorts to fiscal stimuli measures to avoid a fall in the growth rate below its target. Early September 2012 they decided to support export-oriented firms by introducing tax breaks and less bureaucratic and expensive export approval procedures. Furthermore, various infrastructure projects are introduced or brought forward in time.

With negative growth rates in the second and third quarter of 2012, Japan moved once again back into recession. Whereas in 2011 the earthquake and nuclear reactor disaster caused a sharp decline in economic activity, this time the decline can largely be attributed to a drop in exports resulting from falling world demand, a continued overvaluation of the yen and the territorial dispute with China (and Taiwan) regarding the Senkaku/Diaoyu islands. The latter led to the boycott of Japanese goods and services (including tourism) and to the disruption of Japanese business activities in China. As a result, the Japanese trade balance has turned persistently negative since spring 2011. In addition, there were declines in domestic consumption and investment activity after reconstruction and fiscal measures had injected some life into the domestic economy in the winter of 2011/2012. Due to high GDP growth during the second half of 2011 and the beginning of 2012, aggregate output for 2012 is expected to have risen by 2.1 percent as compared to 2011.

Although actual inflation rates turned positive during the first half of the year the underlying core inflation dynamics, reflecting the strong appreciation of the yen and the overall weak economy, remained negative throughout. For 2012 the inflation rate is expected to have been – 0.1 percent, after – 0.3 percent in 2011. Japan has so far not been able to escape the “secular stagnation” from which it is suffering since 1997. It is a persistent challenge for the Western world not to fall into such a Japanese liquidity trap.

India’s economic growth has cooled noticeably since the beginning of 2012. After year-over-year growth rates of 5.6 and 3.9 percent in the first and second quarter, respectively, GDP only expanded by 2.8 percent in the third quarter of 2012. This was mainly due to a slowdown in private capital investment and exports. Private consumption, which accounts for more than half of GDP, has also reduced pace. One reason might be that consumer price inflation, partly due to the weak monsoon and reduced subsidies on fuel, accelerated again during the first half of 2012 to approximately 10 percent and stayed around that level since. After going through stepwise increases from its low of 4.75 percent in spring 2010 to 8.5 percent in October 2011, the Reserve Bank of India cut its key short-term lending rate by 50 basis points in April last year. In addition, the Indian government
announced some structural reforms such as the liberalisation of the retail trade and the aviation sector. Although there is still uncertainty regarding the implementation of these reforms, these announcements together with the interest rate cut and the improved global economic outlook seem to have strengthened investor confidence. As a result, both portfolio investment and foreign direct investment have started to recover in the third quarter after having been eroded in spring last year.

The East Asian countries Indonesia, South Korea, Malaysia, Taiwan, the Philippines and Singapore (in the order of their economic significance) have seen a further reduction in economic growth. This is mainly attributable to weak foreign trade, which struck hard in this region due to its high dependence on exports. In the third quarter, in particular Taiwan began to benefit from the increased momentum in China. South Korea, on the other hand, experienced with an annualised 0.2 percent the lowest growth of its economy since the Great Recession. As a reaction the Bank of Korea reduced its base rate in two steps from 3.25 percent to 2.75 percent. Given a moderate inflation rate of below 1.5 percent since summer last year, it has enough room for additional interest rate cuts. Also the government has some leeway as there is currently no need for fiscal consolidation given the low government debt of approximately 35 percent of GDP. The economies of Indonesia, Malaysia and the Philippines have remained relatively stable last year. Although the global economic slowdown also impacted their exports, this was outweighed by a strong expansion in domestic demand. Overall, it is expected that the economic performance of these East Asian countries will have increased by only 3.6 percent last year.

1.2.4 Latin America

In most Latin American countries such as Chile, Colombia, Mexico and Venezuela the economies were still running smoothly during the first half of 2012. Although the expansionary dynamics cooled down somewhat during the rest of the year, economic performance overall remained relatively robust despite the weak global environment. High prices for soy, corn and wheat helped the exporters of these goods. While a solid labour market provided ample domestic consumption, expansionary monetary and fiscal policies also supported economic activity. In the two largest economies of the region, Brazil and Argentina, the economic expansion was, however, already in the first half of 2012 considerably weaker. The Argentine economy even shrank in the second quarter. Private consumer demand and consumer confidence remained subdued due to double-digit inflation and continued restrictions on exchanging domestic currency for US dollars. The dissatisfaction of the population also was on the rise, expressed increasingly in protests and demonstrations against the government. Finally, the investment climate, as well as relations with important trading partners for Argentina (Spain and its MERCOSUR partners), both deteriorated due to increasing government intervention in the form of nationalisation, import controls or foreign exchange controls.

Brazil is only slowly finding its way out of the weak expansion still lingering since the middle of 2011 largely caused by the strong appreciation of its currency during and after the global financial crisis. The pace of growth picked up somewhat in the past two quarters with the GDP rising by 2.4 percent in the third quarter. As in the previous quarters, the increase was mainly driven by consumption; investment continued to recede. Tax breaks and step-wise interest rate cuts bringing the main refinancing rate to an historical low of 7.25 percent appear to take hold only hesitantly.

1.2.5 The European economy

The cyclical situation

The economic development of the European Union is still under the shadow of the European debt crisis. The World Economic Survey for Western Europe in January continued to deteriorate, following its downward trend since the mid-2011 (see Figure 1.2). Although the risk premiums on government bonds of several member states decreased markedly throughout the year, they nevertheless remained quite high as compared to pre-crisis years. This still reflects the continuing doubts of financial markets on the ability of the relevant countries to bear the burden of their sovereign debt. Concerns over a possible breakup of the currency union and concomitant exchange rate risks and financial market turmoil remained present, but weakened substantially, particularly as of September 2012. These fears began to escalate in the early summer of 2012 when it appeared uncertain if and how legislative action
could help recapitalise the ailing Spanish banking sector. After the parliamentary elections in June, Greece also had enormous difficulties in forming a functioning government ready and willing to meet the conditions agreed upon with the “troika”.  

Some economic decisions in the summer and early autumn have had a calming effect on the financial markets. It was agreed in July that Spain will receive up to 100 billion euros from the European Stability Mechanism’s (ESM) permanent rescue fund to support its banking sector.  

In addition, the early election in the Netherlands handed anti-euro parties a bitter defeat and produced a relatively stable coalition which has agreed to continue fiscal consolidation. Moreover, the German Constitutional Court gave green light for the permanent ESM bailout mechanism. Finally, the ECB announced shortly thereafter a new programme of unlimited purchasing of government bonds. If needed, the ECB will purchase public bonds issued by countries engaging in reasonable structural adjustment programmes, whose interest rates are classified by the ECB as exaggerated.

Consumer and manufacturer confidence in the European Union continued to slide before stabilising at a nadir in autumn. More service-oriented sectors have recovered slightly in recent months, as has construction more recently (see Figure 1.9). The nevertheless still overall prevailing pessimism reflects doubts whether enough political will is present in the crisis countries to continue eliminating the structural weaknesses at the core of the debt crisis. As a result, macroeconomic uncertainty remained high. Since the beginning of the debt crisis it has been throttling the willingness of consumers and companies to spend and final domestic demand has thereby contributed negatively to GDP growth since the second quarter of 2011 (see Figure 1.10). During the forecast period, uncertainty will remain an essential burden on economic development in the European Union and the euro area in particular.

In view of growing doubts about their solvency in the wake of the debt crisis and the resulting increase in market pressures, crisis countries have been forced to initiate massive structural adjustments in many areas including fiscal policy, labour markets, goods and service markets, and pension and health care systems. These measures are likely to promote the soundness of public finances, competitiveness and the growth potential of these economies in the long term. However, the resulting fiscal cuts and reallocations of

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2 The “troika” consists of the European Commission, the International Monetary Fund and the ECB.

3 At the time that the agreement with Spain was made, it was not entirely sure the ESM would be approved. In particular, Germany’s Constitutional Court had not yet given the ESM a green light. In a backup scenario the financial means would have stemmed from the EFSF.

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**Figure 1.9**

Confidence indicators\(^1\) for different sectors in the European Union

<table>
<thead>
<tr>
<th>Sector</th>
<th>Balance</th>
</tr>
</thead>
<tbody>
<tr>
<td>Financial services</td>
<td></td>
</tr>
<tr>
<td>(Non-fin.) services</td>
<td></td>
</tr>
<tr>
<td>Retail trade</td>
<td></td>
</tr>
<tr>
<td>Construction</td>
<td></td>
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<tr>
<td>Consumers</td>
<td></td>
</tr>
<tr>
<td>Industry</td>
<td></td>
</tr>
</tbody>
</table>

\(^1\) Arithmetic means of selected (seasonally adjusted) balances on business tendency survey questions. Balances are constructed as the difference between the percentages of respondents giving positive and negative replies.

Source: European Commission, last accessed on 31 January 2013.

**Figure 1.10**

Contributions to GDP growth\(^1\) in the European Union

<table>
<thead>
<tr>
<th>Category</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Change in inventories</td>
<td>-6</td>
</tr>
<tr>
<td>Foreign balance (excl. inventories)</td>
<td>3</td>
</tr>
<tr>
<td>Final domestic demand</td>
<td>0</td>
</tr>
<tr>
<td>Real GDP growth</td>
<td></td>
</tr>
</tbody>
</table>

\(^1\) Annualised quarterly growth. Source: Eurostat, last accessed on 31 January 2013; EEAG calculations.
production factors are causing significant burdens on these economies in the short term.

Fiscal policy has had a particularly strong dampening effect. With the exception of Ireland, in especially the crisis countries the degree of restrictiveness has increased sharply since mid-2011. As a result, Italy and Spain, the third and fourth largest economies of the euro area, as well as Cyprus, have slid into a deep recession, while the economy has continued to contract in Greece and Portugal.

In the face of a strong decline in demand from crisis countries, the high level of uncertainty and restrictive financial policy pursued in almost all member states, the level of economic activity in the European Union has dropped sharply since autumn 2011. Aggregate economic performance in the European Union shrank by a cumulative 0.5 percent between autumn 2011 and mid-2012, after which the stronger growth performance of the United Kingdom caused by the catch up of the additional holiday for the celebrations marking 60 years of the Queen's reign and the Olympic Games kicked in. In the euro area the recession continued and has now resulted in a cumulative reduction of GDP of 0.6 percent. Private consumption and both private and public investment have declined rapidly. Only foreign trade has made significant positive contributions to growth, mainly due to extremely weak growth in imports (see Figure 1.11).

Economic developments in the euro area are characterised by a growing divide among the individual member states in recent years. Cyprus, Greece, Portugal, Spain and Italy are experiencing a deep recession. The numerous structural adjustments are playing a decisive role in addition to highly contractive fiscal policy. The financing conditions for the private sector in these countries are also significantly less favourable than anywhere else in the monetary union, despite the extremely loose monetary policy of the ECB. Economic development was somewhat more robust in Belgium, France, Finland and the Netherlands, where fiscal policy was much less restrictive than in the crisis countries. However, these countries also suffer from some structural weaknesses. Finland and Belgium appear to have a poor competitive position internationally, as they are posting losses in their share of world markets (see Table 1.1). The Netherlands has a highly indebted private sector painfully hit by plummeting real-estate prices. Finally, some member states (Austria, Germany, Malta and

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**Figure 1.11**

Business cycle developments in the European Union

<table>
<thead>
<tr>
<th>Private consumption (a)</th>
<th>Consumption (left-hand scale)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Billion euros</td>
<td>Annualised quarterly growth rates (right-hand scale)</td>
</tr>
<tr>
<td>1575</td>
<td>2012</td>
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<tr>
<td>1550</td>
<td>2011</td>
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<td>1500</td>
<td>2010</td>
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<td>1450</td>
<td>2009</td>
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<td>1400</td>
<td>2008</td>
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<table>
<thead>
<tr>
<th>Annualised quarterly growth rates (GFCF)</th>
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<tr>
<td>(right-hand scale)</td>
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<tr>
<td>15 2012</td>
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<td>10 2011</td>
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<td>-20 2005</td>
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<table>
<thead>
<tr>
<th>Gross fixed capital formation (a)</th>
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</thead>
<tbody>
<tr>
<td>(left-hand scale)</td>
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<tr>
<td>Billion euros</td>
</tr>
<tr>
<td>620</td>
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<tr>
<td>580</td>
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<td>540</td>
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<td>260</td>
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<td>220</td>
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<table>
<thead>
<tr>
<th>Annualised quarterly growth rates (GFCF) (right-hand scale)</th>
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<td>15 2012</td>
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<table>
<thead>
<tr>
<th>Foreign trade (a)</th>
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<tr>
<td>(left-hand scale)</td>
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<tr>
<td>Billion euros</td>
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<table>
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<tr>
<th>Trade balance (right-hand scale)</th>
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<tr>
<td>Billion euros</td>
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<td>2007</td>
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<td>2010</td>
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<td>2011</td>
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<td>2012</td>
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(a) in constant prices, seasonally adjusted and work-day adjusted. Source: Eurostat, last accessed on 31 January 2013.
Slovakia) have seen far more robust economic momentum in recent years. They have benefitted from the relatively solid condition of their public and private finances, as well as their high level of international competitiveness.

The deterioration of the economic situation in the euro area has had a noticeable impact on the labour market, where the unemployment rate increased from 9.9 percent in summer 2011 to 11.7 percent in October 2012. This rapid rise was preceded by a period of stabilisation in 2010 and in the first half of 2011 (see Figure 1.7). Developments in national labour markets continue to be marked by increasing heterogeneity. Unemployment in countries with relatively robust economies (Austria, Denmark, Germany, the United Kingdom and the Baltic states) has declined slightly over the past year. The crisis countries of Cyprus, Greece, Italy, Portugal and Spain, which were suffering from structural problems, saw noticeable rises in unemployment (see Figure 1.12). In Spain and Greece roughly a quarter of the workforce is now unemployed. In Chapter 2 we attribute this disaster to an inflationary credit bubble that deprived these coun-
tries of their competitiveness. The effects of this credit bubble will have to be overcome via a downward realignment of prices and wages. Ireland, which also belongs to the group of crisis countries, is the only country in which the situation in the labour market has broadly stabilised, with unemployment declining slightly from its peak of 15.1 percent in January 2012 to 14.7 percent last October, following a sizeable real devaluation.

The inflation rate in the euro area has been declining since autumn 2011 falling from 3.0 percent in September 2011 to 2.2 percent in December 2012 (see Figure 1.13). Increasingly weak domestic demand and the slowing of wage growth were mainly responsible for this drop. The inflation rate nevertheless sank less quickly and less pronouncedly than may have been expected based on the recessionary state of the euro area. Excluding energy and unprocessed food items, i.e. looking at core inflation, the trend is similar, albeit less pronounced. This was primarily due to the increase in administered prices and excise duties arising from fiscal consolidation in some member states. Both actual and core inflation would have been 0.4 percentage points lower on average throughout 2012 if the direct effect of excise taxes had been excluded. Inflation has especially been driven by tax increases in the crisis countries of Italy, Portugal and Greece.

**Differences across Europe**

After a strong start, overall economic output in Germany increasingly lost momentum over the course of 2012. The cooling down in the world economy combined with the recession in Southern Europe did slightly infect the German economy via its exports. Furthermore, lingering uncertainty resulting from the European debt crisis curbed the upward forces of domestic demand. Out of all segments of domestic demand, investment in equipment and machinery was the most seriously affected and fell sharply over the course of the year, despite extremely favourable financing conditions. Investments in buildings also dropped somewhat until the middle of last year, but this was mainly due to a slump in public sector investment in construction after the subsidies of the economic stimulus packages agreed upon during the last recession expired at the end of 2011. In residential construction, on the other hand, low interest rates and the uncertainty over investing abroad continued to stimulate domestic investment demand. Although impulses clearly weakened in autumn 2012, growth was particularly boosted by international trade last year.

The economic slowdown has also impacted the labour market. The number of persons in work stopped rising recently, while the number of hours worked dropped considerably. Companies have
obviously been able to offset lower demand for staff by reducing overtime work. The fact that unemployment has been increasing since the spring, however, is primarily due to a reduction in active labour market policies.

In the fourth quarter of 2012 overall economic output growth was negative. However, Germany does not look set to slip into an outright recession. The Ifo Business Climate Index started to rise again slightly for the first time in six months in November 2012. This increase was accompanied by a clear improvement in the outlook component of the index. The economy therefore looks set to recover in the first quarter of 2013. Overall economic production is likely to have reached a growth rate of 0.7 percent for 2012 and, on balance, should stagnate in the winter months of 2012/2013.

France's economy is in the doldrums. The probability of a recession in the winter months is high. After slightly negative growth during the first half of 2012, real GDP rose again in the third quarter of 2012, albeit by only 0.9 percent. It was particularly impacted by declining gross investment. Public and private consumption, however, provided a positive contribution. Private consumption showed a much weaker than usual increase which can mainly be attributed to higher unemployment. After an overall tendency of the trade balance deficit to increase, exports picked up somewhat, while imports declined in the third quarter of 2012. With a growth rate of 0.0 percent, GDP has stagnated in 2012.

The French unemployment rate stood at 10.7 percent in October 2012, its highest level since 1999, and reached 10.4 percent on average in 2012. The annual inflation rate fell to 2.1 percent in October 2012, down from 2.6 percent at the start of the year. Higher energy and food prices resulted in a comparatively strong increase in the price level over the last year. These effects are now nearly expired and annual inflation reached 2.3 percent last year.

After shrinking for three consecutive quarters, GDP in the United Kingdom grew by 3.8 percent in the third quarter of 2012, i.e. between July and September. This strong growth can be explained by temporary special factors. According to an estimate of the Bank of England, there were catch-up effects after a 0.5 percent loss of production due to the Queen's Diamond Jubilee in spring and a 0.4 percent demand increase during the Summer Olympics in London. Given that these were one-time events, however, economic performance did again decrease by 1.2 percent in the fourth quarter. Total economic output overall stagnated last year. The unemployment rate fell slightly during the course of last year and averaged at 7.9 percent. Inflation slowed down from 4.5 percent in 2011 to 2.9 percent in 2012. However, despite the overall weak economy it still remained at an elevated level.

Italy remains embroiled in recession. GDP has been falling since the third quarter of 2011, primarily due to a significant decline in private investment, which is suffering from the banks' restrictive lending conditions, high interest rates and uncertainty about the future course of the sovereign debt crisis, as well as a sustained flight of capital. Consolidation measures initiated by Monti's government have also placed a heavy millstone on public investment and caused government spending to decline slightly. Private consumption, driven down by rising unemployment, higher taxes and higher energy and food prices, has also contributed negatively to the economic growth. Only net exports have had an expansionary impact. This, however, is less due to a revival in exports, and more to a decline in imports. Nevertheless, it turned the prevailing trade deficit of recent years into a surplus in the second quarter of 2012. Overall, GDP shrunk by 2.0 percent last year.

The unemployment rate continued its rise and stood at 11.1 percent in October 2012, its highest level in 13 years. The average unemployment rate was 10.6 percent last year. The Italian labour market is characterised by strong segmentation into a core of well-protected workers with permanent contracts and a growing number of temporary employees – mainly young workers. A central project of Monti's government was to break this segmentation within the framework of comprehensive labour market reforms, and to improve the functioning of the labour market. Under pressure from the political parties, industry and trade unions, the planned measures, however, were mitigated to the extent that they now appear inadequate to bring about a sustainable recovery of the labour market in the near future.

After an increase in value-added tax (VAT), consumer prices have risen sharply in 2012. Inflation, which peaked in March 2012 at 3.8 percent, has since fallen to 2.6 percent in November. The average annual inflation rate stood at 3.0 percent last year, which is well
above the euro area average and continues to undermine Italian competitiveness.

Spain is experiencing a cyclical and structural crisis. In the third quarter of 2012, GDP declined by an annualised 1.1 percent, the fifth quarterly decline in a row. Spain’s annual growth rate amounted to –1.3 percent for 2012. With the exception of net exports, no demand component has been able to make a positive contribution. State expenditure has been slashed considerably due to the central government’s consolidation measures. Uncertainty about the stabilisation of the banking sector, as well as high interest rates and persistent capital flight, are hampering private investment. Excess capacity in the construction sector has not yet been relieved. Private consumption is falling because of record unemployment and a high level of household indebtedness.

Exports have been significantly revived in recent years and are increasingly supporting economic activity. Recent structural reforms, particularly aimed at improving price competitiveness, are starting to bear fruits: in the second quarter of 2012, exports exceeded imports for the first time since 1998. The trade balance is now showing a surplus, while the deficit in the current account has declined significantly. However, as in the other crisis-stricken countries, the improvements come primarily from imports declining due to the recession, rather than structural improvements in the economy resulting from a real devaluation (see Chapter 2).

The labour market situation has worsened again. The unemployment rate stood at 26.2 percent in October 2012, the highest level ever recorded. The average unemployment rate stood at 25.1 percent in 2012. The annual rate of inflation has accelerated significantly during autumn last year to 3.5 percent, which is largely due to an increase in VAT by 3 percentage points in September. The average change in consumer prices was 2.1 percent in 2012.

Greece, Portugal and Ireland have been undergoing an adjustment programme agreed with the “troika” designed to bring public finances, as well as the development of the external debt of these countries, on a sustainable path through a series of structural reforms. All three economies have made significant efforts since the beginning of the debt crisis; but each of the three has achieved very different levels of progress.

As seen in the continuous improvement of national trade balances over the course of the last four years, the accumulation of external liabilities has slowed noticeably in all three countries since the outbreak of the financial crisis in 2008 (see Figure 1.14). However, again, a significant part of this adjustment only reflects the cyclically-related decline in imports relative to exports. The low interest rate for aid loans and the extra ECB refinancing credit standing behind the target liabilities have contributed to the improvement in current accounts, because interest payments on foreign loans are posted as debits on these balances. Current account adjustments are sustainable only if the crisis countries can permanently increase their price competitiveness, which fell heavily in the decade prior to the outbreak of the financial crisis. In this respect, a very mixed picture emerges in the three countries.

Ireland enjoyed comparatively flexible labour and product markets already before the outbreak of the financial crisis. The country was accordingly able to restore its price competitiveness compared to the rest of the euro area swiftly via a sectoral redistribution of its labour force combined with rapid wage and price reductions. Whereas Ireland’s unit labour costs have declined by 12.5 percent since 2008, relative to those of its competitors this even amounted to 24 percent. In addition, the noticeable improvement of the Irish current account is due to advantageous sectoral and
regional specialisations of the Irish export sector. Ireland benefitted from the clearly more robust economies in the United States and in the emerging markets.

In contrast to Ireland, both Greece and Portugal face severe economic rigidities and a significantly less favourable sectoral and regional specialisation. A noticeable recovery in international competitiveness can only be expected in Greece and Portugal after profound reforms in the labour and product markets, and only to the extent that these reforms enable widespread wage and price cuts. These processes, however, only began after adjustment programmes were adopted in 2010 by Greece and in 2011 by Portugal. As a result, unit labour costs did still increase by 5 percent in Greece and 4 percent in Portugal overall since 2008. The competitiveness of these economies has only started to improve in more recent years and relative to their trading partners.

It is difficult to assess whether the implemented and scheduled reforms are sufficient to bring about the necessary price movements in Greece and Portugal in the years ahead. Although some significant progress has been made, this does not yet seem to have been substantial enough to warrant a sufficient improvement of competitiveness in the medium term. The improvement seen in the current account has only been induced by price effects to a limited extent, and is primarily the result of the recession in the wake of the collapse in domestic demand for imports.

The three crisis-afflicted countries also showed very different developments last year. While Ireland’s economic output stagnated, Greece and Portugal continued to shrink sharply. The relatively positive development in Ireland was mainly due to the dynamic expansion of exports to countries outside of Europe. Nevertheless, there are still structural problems in Ireland. The real-estate bubble burst in 2008, leaving a debt-ridden household sector and severely troubled banks, and creating a large number of unemployed workers in the construction sector.

With the decline in demand from the euro area, the economic recovery has ground to a standstill in all countries of Central and Eastern Europe. The increase in exports slowed significantly in the first half of 2012 and the confidence of businesses dropped everywhere. Although production growth was still positive in some countries, especially in Poland and the Baltic states, the expansion slowed significantly over the course of last year. The Czech Republic and Hungary, on the other hand, moved into recession at the start of 2012. While consumer spending declined in the Czech Republic, Hungary recorded a sharp decline in investment. In both countries, inflation rates rose as a result of increases in excise taxes. Political turmoil in Romania led to a significant devaluation of the Romanian leu, an increase in inflation and higher risk premiums.

1.3 Fiscal and monetary policy in Europe

1.3.1 Fiscal policy

The growing concern of financial markets about the sustainability of public debt has forced many advanced economies to consolidate. In 2010 and 2011 substantial parts of the resulting improvement in fiscal balances could be ascribed to improvements in economic conditions (relative to the crisis years of 2008/2009) automatically leading to improved tax revenues and reduced unemployment and welfare benefits; in 2012, however, this was not the case as the year saw a return to recession in Europe and a weakening of global dynamics. Furthermore, the relatively easy to implement cut-backs of fiscal stimulus packages introduced during the Great Recession were largely implemented in the first years after it. Nevertheless sharp declines in structural deficits, i.e. deficit measures that attempt to exclude business cycle effects,
remain visible for the euro area and the United States in 2012 (see Figure 1.15). However, while this year’s structural budget deficits will also remain substantially above pre-crisis levels in the United States, Japan and the United Kingdom, the euro area’s structural budget deficit is estimated to fall to 0.4 percent of GDP in 2013, its lowest level since 1991, i.e. the first year for which this data is available.

Fiscal policy in most countries of the euro area remained restrictive in 2012 (see Table 1.2). The improvement in the overall fiscal balance, however, was, mainly due to the business cycle and was less pronounced than in 2011. For most EU countries the improvements in primary fiscal balances lagged behind those of the year before. Some countries with relatively sound fiscal histories, notably Sweden,

### Table 1.2

**Public finances**

<table>
<thead>
<tr>
<th>Gross debt</th>
<th>Fiscal balance</th>
</tr>
</thead>
<tbody>
<tr>
<td>Germany</td>
<td>63.7</td>
</tr>
<tr>
<td>France</td>
<td>61.7</td>
</tr>
<tr>
<td>Italy</td>
<td>106.4</td>
</tr>
<tr>
<td>Spain</td>
<td>49.4</td>
</tr>
<tr>
<td>Netherlands</td>
<td>51.7</td>
</tr>
<tr>
<td>Belgium</td>
<td>98.6</td>
</tr>
<tr>
<td>Austria</td>
<td>64.7</td>
</tr>
<tr>
<td>Greece</td>
<td>102.3</td>
</tr>
<tr>
<td>Ireland</td>
<td>31.8</td>
</tr>
<tr>
<td>Finland</td>
<td>42.1</td>
</tr>
<tr>
<td>Portugal</td>
<td>59.9</td>
</tr>
<tr>
<td>Slovakia</td>
<td>41.0</td>
</tr>
<tr>
<td>Slovenia</td>
<td>26.2</td>
</tr>
<tr>
<td>Luxembourg</td>
<td>6.3</td>
</tr>
<tr>
<td>Estonia</td>
<td>5.0</td>
</tr>
<tr>
<td>Cyprus</td>
<td>64.3</td>
</tr>
<tr>
<td>Malta</td>
<td>62.9</td>
</tr>
<tr>
<td><strong>Euro area</strong></td>
<td><strong>69.0</strong></td>
</tr>
</tbody>
</table>

| **United Kingdom** | 41.1 | 66.5 | 79.4 | 85.0 | 88.7 | –1.4 | –8.9 | –10.2 | –7.8 | –6.2 |
| **Sweden** | 51.5 | 40.3 | 39.5 | 38.4 | 37.4 | 1.3 | 0.4 | 0.0 | 0.2 | –0.2 |
| **Denmark** | 44.3 | 39.0 | 42.9 | 46.6 | 45.4 | 2.4 | –0.7 | –2.7 | –1.9 | –4.0 |
| **Poland** | 43.2 | 50.9 | 54.8 | 56.4 | 55.5 | –4.1 | –6.3 | –7.9 | –5.0 | –3.4 |
| **Czech Republic** | 25.2 | 33.6 | 37.8 | 40.8 | 45.1 | –3.9 | –4.3 | –4.8 | –3.2 | –3.5 |
| **Hungary** | 59.8 | 78.2 | 81.8 | 81.4 | 78.4 | –6.4 | –4.2 | –4.5 | –4.3 | –2.6 |
| **Romania** | 19.6 | 22.5 | 30.5 | 33.4 | 34.6 | –2.6 | –7.2 | –6.8 | –5.5 | –2.8 |
| **Lithuania** | 20.5 | 27.6 | 37.9 | 38.5 | 41.6 | –1.8 | –6.6 | –7.2 | –5.5 | –3.1 |
| **Bulgaria** | 46.2 | 14.8 | 16.2 | 16.3 | 19.5 | 0.6 | –1.9 | –3.1 | –2.0 | –1.5 |
| **Latvia** | 12.7 | 33.7 | 44.5 | 42.2 | 41.9 | –1.6 | –7.3 | –8.1 | –3.4 | –1.7 |
| **European Union** | **61.9** | **72.3** | **80.2** | **83.0** | **86.8** | **–1.7** | **–5.3** | **–6.5** | **–4.4** | **–3.6** |

| **United States** | 62.0 | 88.1 | 98.6 | 102.9 | 107.2 | –3.1 | –10.4 | –11.2 | –10.1 | –8.7 |
| **Japan** | 166.1 | 205.8 | 215.3 | 229.6 | 236.6 | –6.0 | –8.0 | –9.4 | –9.8 | –10.0 |

As a percentage of gross domestic product. For the European countries, definitions according to the Maastricht Treaty. For the United States and Japan, definitions according to the IMF. – b For the United States, 2001–2007.

Source: European Commission, Autumn 2012; IMF World Economic Outlook, October 2012.
Austria, Finland, Estonia, Luxembourg and Denmark, were even able to provide their economies with some fiscal impulses (see Figure 1.16).

However, consolidation efforts in recent years have nevertheless been very pronounced leading to a clear concomitant dampening of domestic demand almost everywhere. Given the scope of the austerity measures, demand is particularly weak in the crisis countries of Greece, Ireland and Portugal, Spain and more recently Cyprus. Spain was even forced to step up consolidation once again last summer. This was a response to the looming threat of missing the deficit target for that year, as well as the additional financial requirements of regional authorities. As a result, financial markets put the government in Madrid under substantial pressure by withdrawing capital at a temporarily accelerated rate in early summer. Despite the additional 13 billion euros consolidation package agreed in August last year, the Spanish government failed to push the 2012 budget deficit to the targeted 5.3 percent of GDP. This was due to substantial revenue losses and expenditure increases caused by the recession. Italy also responded to the financial market turbulence and inadequate progress in restructuring its public budget by passing additional austerity measures. The majority of the other member states have also passed extensive austerity measures to cut their public deficits, as these currently lie above those permitted by the Fiscal Compact.

Although to a somewhat smaller degree than in previous years, fiscal policy in the euro area will remain highly restrictive in 2013. Largely due to slightly improved business cycle conditions, the degree of restrictiveness will be slightly lower than in 2012 in almost all member states. As a result, the negative impact on domestic demand should also be somewhat less pronounced than in 2012. This forecast is based on the assumption described in the baseline scenario that the consolidation and reform measures announced by the European governments will be uniformly implemented. All in all, the cost-saving efforts, and particularly the increases in tax revenues in the euro area, will decrease the combined deficit of 3.3 percent of GDP in 2012 to 2.6 percent in 2013. The debt-to-GDP ratio will rise from 92.9 percent in 2012 to 94.5 percent in 2013.

In Portugal the deficit-to-GDP ratio of 9.8 percent in 2010 fell to 4.4 percent in 2011, causing the “troika” to give a positive testimony. This substantial deficit reduction, however, was largely caused by special circumstances. The primary deficit was not reduced any further last year as a result. Nevertheless, Portugal’s most recent budget figures indicate a continued reduction in the near future. The fixed deficit targets of both last year and this year, however, are likely to be missed, because the consolidation plans are, as is often the case, based on macroeconomic developments that must be regarded as overly optimistic from today’s perspective. The public deficit in relation to GDP amounted to 5 percent last year, and is likely to reach 4.7 percent this year.

In Greece, the deficit-to-GDP ratio was only slightly retracted from 10.8 percent in 2010 to 9.5 percent in 2011, which was well above the originally targeted 7.6 percent of GDP. This was largely due to the intensification of the recession, the failure to implement more structural reforms in the state apparatus, as well as insufficient progress in the privatisation of state-owned enterprises. Greece also failed to reach the deficit target of 4.2 percent of GDP, despite a successful cut to its privately-held debt. Early summer saw strong delays in implementing the consolidation programme due to the inability of the Greek government to act. The public deficit probably amounted to around 7 percent of GDP in 2012 and is forecast to drop to about 6 percent this year. The interest forgiven to Greece according to the renegotiated debt relief

Figure 1.16

Changes in the primary fiscal balances relative to pre-crisis GDP

a) To circumvent strong jumps caused by extraordinary events, in the cases of Ireland and Hungary the changes are aggregated for the years 2010/2011 and 2011/2012, respectively.

programme of autumn 2012 will provide some relief to Greece's public finances. However, huge primary surpluses are needed in the years ahead to reduce the government debt-to-GDP ratio as agreed. According to estimates by the European Commission, the primary fiscal balance is supposed to be close to zero this year (coming from – 10.5 percent of GDP in 2009). We will be surprised if these official forecasts do not turn out to have again been overly optimistic.

In contrast to Greece and Portugal, the consolidation of public finances in Ireland has largely followed the plan agreed with the “troika”. The deficit-to-GDP ratio declined to 13.3 percent in 2011, after reaching 30.9 percent in 2010 as a result of the rescue measures for the banking sector. The deficit reduction of 19.1 percentage points, as intended in the rescue plan, was almost achieved. Fiscal consolidation is likely to remain on schedule. A deficit of 8.4 percent of GDP in 2012 is expected to drop to 7.3 percent in 2013.

1.3.2 Monetary conditions and financial markets

Monetary conditions

Monetary policy has recently become more expansionary in all major industrial countries and emerging markets. In September 2012 the ECB signalled that it is willing to expand its purchase of the sovereign debt of countries that have agreed to a fiscal adjustment policy. This decision was apparently made in response to rising rates on Italian and Spanish government bonds. ECB policy is expected to remain extraordinarily expansionary during this forecast period since the deep recession in the peripheral euro area countries will keep the pressure on the EU-wide price level extremely low. The US Federal Reserve (Fed) announced another round of monetary easing given the persistent weakness in the labour market. The Fed continues to purchase mortgage-backed securities, at least initially, without predefined limits. Furthermore, the Fed has announced further expansion of the monetary policy if the economic situation does not improve in the foreseeable future. The Bank of England and the Bank of Japan also expanded their securities purchases significantly last year.

Most emerging economies also started to gradually ease their monetary policies as of mid-2012, after having tightened them repeatedly in the preceding year and a half. The easing of monetary policies should counteract the economic slowdown primarily due to falling demand from the euro area and high levels of uncertainty. Given the relatively low inflationary pressure since the beginning of 2012, monetary policy is likely to become more expansionary in the majority of emerging economies this year, especially if the global economic outlook continues to look unfavourable.

Since its last 25 basis point cut in July 2012, the ECB has left its interest rate for open market operations unchanged at 0.75 percent (see Figure 1.17). The liquidity provided through refinancing operations is still plentiful. While the outstanding volume of longer-term refinancing loans has remained relatively constant since the second round of three-year loans was announced in March 2012, demand for the weekly main refinancing operations has continued to drop since the summer. Government bond purchases had not been made since March 2012. The programme to purchase government bonds replacing the previous programme for securities markets as decided in September 2011 has not yet been implemented. Overall, the liquidity pumped into the banks in the euro system started to fall at a moderate, but continuous pace from its peak in July 2012 until the end of last year (see Figure 1.18). Over summer, the liquidity actually...
in circulation had risen quite substantially because banks reduced the amount of liquidity parked in the euro system (fixed-term deposits, deposit and surplus reserves). As the overnight deposit rate was reduced to 0 percent in July, the incentive to park money in the ECB’s deposit facility disappeared.

As a result of ample liquidity, interest rates in the interbank money market have fallen substantially during 2012. Since July, the interest rate for secured three-month money (Eurepo) on the interbank money market has even turned negative. The interest rate for unsecured three-month cash (Euribor) offered only slightly higher interest rates of less than 0.2 percent at the end of last year. Hence, the money market spread, i.e. the risk premium on the money market, fell significantly during the course of last year and is only 10 to 15 basis points above levels that pertained in the years before the housing market bubble burst in the United States. This reduction in the risk premium on the money market allowed unsecured money market rates to fall by approximately 120 basis points during the year. Only the amount of mortgages continued to expand, albeit at a somewhat more moderate pace compared to previous years.

As with lending rates, the credit dynamics have differed widely across the euro area. While lending in most of the core countries is still expanding (especially in the Netherlands), loan portfolios in the crisis countries have dropped, in some cases substantially. Despite declining lending to the private sector in the euro area as a whole, the monetary aggregate M3 managed to expand by 3.5 percent in October 2012 as compared to the year before. The discrepancy between the growth rates of M3 and the expansion of loans to the private sector, as well as a decrease in the long-term liabilities of the banks among each other.

Despite these falls in rates triggered by a further easing of monetary conditions, the volume of outstanding bank loans to the private sector in the euro area has been declining since the end of 2011. Lending to non-financial corporations, which accounts for roughly half of total credits to the non-financial sectors of the economy was significant in this respect (see Figure 1.19). The outstanding amount of consumer credits also declined considerably during the year.
Although not very likely, it is still possible that the ECB will again lower its key interest rate by 25 basis points to 0.5 percent during the first half of this year. Such a move would correspond to the logic behind the previous interest rate changes. Since then the economic situation has deteriorated and inflationary pressure has eased. However, because money market interest rates and credit and capital market interest rates in the core countries are already at historically extremely low levels, such an interest rate cut is likely to remain largely ineffective. It would only benefit those banks in the crisis countries that have only managed to keep afloat to date with the help of ECB refinancing loans. Under the assumption that the ECB will continue these unconventional measures, the liquidity of the banking system will remain ample and money market interest rates will remain low. The announced unlimited government bond purchase programme has reduced, and will reduce, the risk premiums on bonds from crisis countries. After all, the ECB has implicitly declared that it will take over the bonds of any bankrupt state of the euro area before they default, and has thus guaranteed the repayment of these bonds. Through a cut in ECB profits redistributed across national governments, any costs arising from bond purchases will ultimately be borne by the taxpayers.

Bonds, stocks and foreign exchange markets

The implicit guarantees provided by the ECB and the new permanent rescue fund, ESM, have halted the trend (particularly marked during 2011) towards government bond yields in the euro area decoupling from those in other major regions in the world, and even started to reverse it in summer 2012. Whereas in the United States and the United Kingdom these long-term interest rates basically stagnated at historically low levels during the second half of 2012, they underwent a substantial reduction in the euro area over the course of the year (see Figure 1.20). German government bond yields have remained more or less unchanged since summer 2012, at least partly because of Moody’s announcement that it is considering downgrading Germany based on its exposure in rescue operations. The yields on bonds from crisis countries, however, have declined substantially (see Figure 1.21).

Monetary easing boosted the stock markets in Europe, the United States and many emerging markets. Measured in local currencies, the Dow Jones industrial average, the Nikkei 225, the FTSE 100 and the Euro STOXX 50 correspondingly improved by 8.8 percent, 15.8 percent, 8.1 percent and 15.1 percent respectively during 2012 (see Figure 1.22) as investors are increasingly willing to reallocate their wealth away from low-interest assets. The realised appreciations of
the UK pound and Japanese yen relative to the euro reduce these gains somewhat from a euro area perspective (see Figure 1.23). The dollar-euro exchange rate, on the other hand, remained more or less stable in 2012 and compared to other years (see Figure 1.24). Although there was some depreciation of the euro relative to the dollar during the first half of the year, the overall stabilisation of European financial markets has led to a subsequent appreciation of a similar magnitude since summer 2012.

As far as the other major currencies in the world are concerned, only the yen turned out to be relatively volatile again last year, reflecting the fast-changing sentiments in financial markets regarding the importance of so-called safe haven currencies. After a substantial depreciation in early 2012 and a comparable appreciation during the summer, it lost ground again at the end of the year. The real effective exchange rate of the United Kingdom remained on a steady appreciation path that began mid-2011. For China, the stabilisation in inflation also implied a relatively flat development in its real exchange rate.

1.4 The macroeconomic outlook

1.4.1 Assumptions, risks and uncertainties

How well the European debt crisis is controlled remains a decisive factor for global economic growth. The bail-out promise of the ECB, the ruling of the German Federal Constitutional Court upholding the ESM and the agreement to provide ESM loans to support the Spanish banking sector calmed the finan-
cial markets substantially after summer 2012. This also led to a decline in risk premiums on government debt issues by the crisis countries Greece, Portugal, Spain, Italy and Ireland. This respite does not hide the fact that the European debt crisis is far from over. The ECB support programme will only be able to alleviate the symptoms of the crisis in the short term, and does not eliminate its structural causes. Tackling the systemic problems will depend heavily on how successfully the crisis countries implement structural reforms to restore their public finances, to improve their price competitiveness, and ultimately, to enhance their growth potential.

This forecast is based on the assumption that there will be no further escalation of the European debt crisis during the forecast period. This assumes that the crisis countries will strictly adhere to the course of fiscal consolidation and implement the planned structural reforms in many areas. However, it also means that other euro area countries (France, Belgium and the Netherlands) will have to implement the measures already decided or envisioned to reduce public deficits and to improve the international competitiveness without amendment and in a timely manner. This is the only way that the financial markets will be convinced that these countries will be able to service their public and foreign debt without disruption in the future.

Based on these assumptions, it is likely that investor, producer and consumer confidence will gradually stabilise over the forecast period, albeit at a low level. Today’s still heightened levels of uncertainty are not expected to increase again either. This opens up the possibility that the euro area, supported by the German economy and the recovery of non-European economies, will exit the recession in 2013. Albeit to a lesser extent than last year, it still implies on-going publicly organised capital outflow from Germany to fund continuing European bail-outs; it will probably also allow for a slow, but steady reduction of the imbalances in the Target system of the European Monetary Union.

These assumptions, however, do not mean that all member countries of the euro area can expect an economic recovery in the year ahead. The structural problems in some crisis countries are simply too big to be solved at short notice. The discussions over Greece’s potential exit from the euro that culminated in early summer 2012 have tapered off, at least for the time being. They may only flare up again if the crisis re-escalates. Such a scenario appears less likely from today’s perspective and this baseline scenario excludes the possibility that any such speculation will lead to on-going turmoil and contagion in the European financial markets.

However, there remains a high risk of a marked deterioration in the economic situation in the euro area, or even of a massive escalation of the crisis. This represents the main threat to the world’s economic development. The success of reform efforts in the crisis countries is far from assured because their governments face strong political opposition at home. The premature resignation of the Italian government under Mario Monti illustrates this risk. In particular, the announcement of the ECB’s willingness to extensively intervene in the government bond markets, or the currently discussed possibility of directly recapitalising banking systems through the ESM could reduce the willingness to reform. If the structural adjustment processes in the crisis countries slow down or fail entirely, increased macroeconomic uncertainty, a significant decline of confidence in the euro area and a new recession can be expected. In such a situation the flight of capital from the crisis countries would probably continue, which would further increase demands on the part of local banks to be financed by the euro system and the ESM. However, if the ESM’s outstanding loans were to grow strongly, its credit rating could be downgraded again. This could be intensified further if confidence were to drop in the fiscal solvency of important core countries like France, Belgium or the Netherlands that are backing up the ESM although they have their own high levels of public debt and structural weaknesses. In this case, the ESM and the euro area would probably be on the verge of collapse. Depending on how strongly the escalating debt crisis succumbs to this risk scenario, this could unleash different levels of burden for the real economy and the financial sector in almost all industrialised and emerging economies. In extreme cases, it could even come to a worldwide recession.

Risks emanate from the monetary policy of the ECB and the Fed. Both central banks announced additional, and this time unlimited programmes to purchase securities in late summer 2012. Moreover, the provision of liquidity in both regions has been very expansive since the beginning of the global financial crisis. This extremely loose monetary policy could encourage the formation of bubbles in various asset markets. The credibility of the two central banks
Chapter 1

Box 1.1

The ECB and medium-term price stability

During the global financial crisis which was followed by the euro crisis, the ECB exhausted its traditional monetary policy instruments and gradually took a rising number of extraordinary measures. The associated potential consequences for future price stability have led to heated debates in- and outside of the profession. In the short term, it is understandable that the ECB has entered the political vacuum that existed in the European Monetary Union. Medium- to long-term threats to their independence and credibility, and thus to medium-term price stability in the euro area, however, appear to be high.

The primary objective of the ECB, or more precisely of the Eurosystem (i.e. the ECB and the national central banks of the member states that use the euro), is the maintenance of price stability in the euro area. To achieve this target in the medium to long term, the independence and credibility of a central bank are nowadays considered to be essential. The price setting behaviour of economic agents is often based on future price expectations. A credible central bank is able to influence these expectations and thereby achieve the goal of price stability with lower social costs.

Politicians, however, have a potential interest in using the central bank for their often more short-term oriented purposes. They could try to persuade the central bank to buy government bonds in order to finance additional government spending, or lower interest rates in order to generate short-term above-average economic growth. In normal circumstances, both would lead to a loss in credibility and subsequently in price stability. Therefore, it is socially desirable to have monetary policy decisions take place independent of political considerations. This theoretical finding is confirmed in many empirical studies: more independent central banks generally have lower average inflation rates and lower inflation variability.

Although the primary objective of the ECB is price stability, the ECB also has to assure a properly functioning financial system. To secure the functioning of this system the ECB, like other central banks in the major industrialised nations in 2008 and 2009, was forced to intervene heavily. Almost all of the extraordinary measures taken since can be attributed to this. As indicated by the sky-rocketing risk premiums in interbank money markets in autumn 2008, banks lost trust in other banks and were barely willing to lend each other money. Central banks stepped in and provided the credit that the market was no longer willing to provide, or not at the same conditions.

The subsequent liquidity and solvency problems of some governments, the fragile situation in the banking sector and the balance-of-payments problems that have resulted from capital flight in Europe, prevented risk premiums on the interbank market from returning to pre-crisis levels and, during the second half of 2011, even triggered a sharp rise again. This prompted the ECB to take further measures and to again expand gross liquidity supply substantially in countries from which private capital had fled. More specifically, the introduction of so-called long-term refinancing operations providing liquidity via three-year tenders led to a substantial increase in gross liquidity. However, a large part of this money was hoarded, i.e. kept at deposits at the ECB. As a result, net liquidity provision, even if narrowly measured, fell substantially during the second half of 2011 (see Figure 1.18). The official net liquidity provision only jumped to historical heights when the overnight deposit rate of the ECB fell to zero percent in July last year and there was no longer any incentive to transfer money to the deposit facility provided by the ECB system. Total credit provision and the development of broad monetary aggregates, however, still indicate that this ample liquidity is being hoarded by the financial sector and hence is not really being put into circulation. Short-run inflationary pressures coming from this side therefore remain extremely moderate. Nevertheless, in the medium to long term, this ample liquidity could, in principle, make it difficult for the ECB to maintain price stability. If needed, the ECB has enough instruments at its disposal to circumvent a strong increase in the demand for credit. It could raise interest rates or limit the liquidity provided to the banking sector. The only question is whether the ECB would be willing to use these instruments given that it would thereby create problems for over-indebted countries and banks.

The real danger for the ECB therefore lies in the loss of its political independence, i.e. its ability to fulfil its mandate without political interference from over-indebted countries and banks. In addition, the ECB has an extreme interest in keeping the euro project alive: its own existence depends on it. From a political-economy perspective, this opens the door for time-inconsistent behaviour on the side of the ECB and thereby is another source that jeopardises its credibility. This raises the question of whether the public is already starting to have doubts regarding the future objectives of the ECB and thus its independence. For this purpose it is useful to evaluate the current situation with regard to its primary mandate of maintaining price stability.

The anchoring of medium-term inflation expectations is important for this. Medium-term expectations are largely unaffected by cyclical and other temporary price effects, and are therefore a good way of judging whether economists trust a central bank to realise that mandate. According to the ECB Survey of Professional Forecasters, although the average inflation expectations for the euro area have remained at around 2 percent, their distribution has become more dispersed over time.

When asked to assess the probability of euro area inflation being in between 1.5 and 1.9 percent in five years – which can be interpreted as “below but close to 2 percent”, i.e. the ECB’s interpretation of price stability – then participating professional forecasts consistently on average answered around 40 percent prior to the crisis. This
might suffer to the extent that inflationary expectations could become less attached to their current medium-term anchors of approximately 2 percent (see Box 1.1). In the euro area this could be encouraged by the ECB actually implementing its recently adopted securities purchase programme or expanding its financing of crisis banks. This would reinforce the impression that the ECB is no longer independent or has embarked on the course of monetary financing of the state. Even in the short term such fears could lead to a significantly enhanced flight of capital into secure investments. The resulting reallocations and international capital flows could immediately lead to distortions in financial markets, but also in the real economy, which would become a heavy burden for the world economy.

In summary, the amalgamation of public finance and monetary policy could harm the independence of the ECB and thus its credibility. Medium-term inflation expectations that are less well anchored can, as in the past, be seen as the first signs pointing in such a direction.

Probability forecasts of 5-years ahead inflation for the euro area

In Box 1.1, the probability has been reduced substantially during the crisis to close to 25 percent more recently (see Figure 1.25). Both the probability that inflation could move beyond 2.5 percent and the likelihood of inflation rates below 1.5 percent have increased substantially. Whereas the former could be interpreted as evidence that the ECB might lose control at the upper end as a result of expected political pressure, the latter rather suggests a prolonged weakness of the European economy which is sure to be a matter of concern to politicians.

If, on the other hand, the government were to have to shut down in March, due to the lack of any agreement to raise the debt ceiling again, then that would have far greater implications for both the United States and the world economy.

Finally, there is an appreciable risk emanating from the recent tensions in the Middle East. A worsening of the situation in this region could lead to significant drops in oil production and thus a sharp rise in the price of oil. Such an oil price shock would be a substantial burden to economic development in the oil-importing countries.

1.4.2 The global economy

Most of the advanced and emerging economies are experiencing a period of economic weakness this winter. This is particularly intense in the euro area, where aggregate economic performance very probably shrank in the fourth quarter of last year. The decisive factor for this will be the progress made in the adjustment processes of the private and the public sector in the euro area.

Even the United States is likely to tighten its fiscal reins significantly during the forecast period. The “fiscal cliff”, the automatic expiration of numerous

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fiscal support measures at the beginning of this year, has been partly avoided. This forecast assumes that about 60 percent of the measures taken in the United States will be extended either permanently or into the next year; but even the remaining 40 percent is likely to be a significant burden to the US economy. As long as no clear political agreement is made in the United States about the structure of the budget, planning will remain highly uncertain for many companies. This is likely to weigh on investment demand in the United States, as well as in other regions of the world, at least during the remaining winter months. Of the developed countries, an expansionary fiscal policy is basically only likely to be implemented in Japan this year.

In contrast to developed countries, most emerging economies have relatively low public debt levels and thus significantly more fiscal scope to stimulate the economy if needed. These low debt levels drove decisions taken in autumn 2012 by some major emerging countries (China, Brazil and South Korea) to respond to the economic slowdown with measures to stimulate the economy. Many emerging economies are also expected to further ease their fiscal policies this year, albeit to an initially moderate degree.

These expected developments also mean that the overall world economy is not expected to slip into a recession during the forecasting period. Ifo World Economic Survey participants foresee some improvement in the economic situation in all major regions during the first half of 2013 (see Figure 1.26). Hence, the global economic expansion is expected to accelerate somewhat in the course of the year, although it should remain below potential. We expect world GDP to increase by 3.3 percent in 2013 (after 3.0 percent last year), using purchasing-power-parity adjusted weights to aggregate the economies (see Figure 1.27).

Using market prices, world economic growth will reach 2.5 percent (versus 2.3 percent last year, see Table 1.A.1).

A noticeable acceleration in economic activity is likely in emerging countries due to the monetary and fiscal stimulus measures already taken and those awaiting implementation in the near future. Furthermore, disposable income in these countries is likely to remain strong, thereby giving additional stimulus to private consumption. The advanced economies are also expected to experience slightly higher growth this year as the contractive fiscal impulse in the euro area is likely to have a less severe impact than in 2012. The United States should be able to stick to its moderate growth path, i.e. after the negative fiscal shock at the beginning of the year growth will gradually strengthen again. This will be driven by the already improving
real-estate market, as well as the slowly but steadily improving asset positions of private households. Nevertheless, the consolidation efforts required of the private and public sectors will dampen the pace of expansion in virtually all advanced economies, once again implying that the strongest contribution to world economic growth will be made by the emerging markets, and particularly Asia (see Figure 1.28).

Accordingly, after having expanded by a weak 2.4 percent last year, world trade growth will be able to recover somewhat to 3.6 percent this year. The trade balances of most emerging markets are likely to deteriorate further due to rising domestic demand. In the euro area, however, the extremely weak domestic economy is expected to lead to an improvement in the current trade balance, while the current US trade deficit is likely to remain virtually unchanged. Given the weak recovery, overall inflationary pressures will remain subdued.

1.4.3 United States

US fiscal policy will determine the momentum of economic activity during the winter months. At the end of 2012, numerous economic stimulus measures including the 2010 Tax Relief Act, which among others prolonged the Bush tax cuts of 2001 and 2003, expired and the automatic spending cuts made under the Budget Control Act of 2011 to increase the federal debt ceiling were to set in at the beginning of this year. Although a substantial part of this fiscal cliff has been resolved, there are still heavy negotiations going on between the Republicans and Democrats over across-the-board spending cuts that have only been delayed until March to date. If the two parties fail to reach an agreement, then the federal budget deficit will be relieved of about 110 billion US dollars. At the same time, the decline in aggregate demand would dampen economic recovery in the second half of this year.

Besides a direct reduction in government consumption, the vast proportion of the restrictive impulses would have taken the form of higher taxes weighing down private consumption. In the last-minute agreement reached earlier this year, these taxes are now largely off the table, while the tax reductions implemented under President Bush have largely been made permanent. Nevertheless, about 30 percent of the consolidation measures implied by the fiscal cliff have become active thanks to this last-minute agreement. We assume that another 10 percent will take effect this spring. The remaining 60 percent have thereby either been avoided permanently, or delayed until next year.

The protracted negotiations over the entire fiscal cliff have already generated heightened policy uncertainty over the eventual tax and spending landscape in the United States. Thanks to expectation formation, the dampening effects of these negotiations were already felt somewhat at the end of 2012, but their main impact will materialise during the first half of this year. The budget deficit for the current fiscal year would drop to approximately 5 percent of GDP in this scenario.

Against the background of continued high unemployment, as well as the uncertainty regarding fiscal policy, the Federal Reserve will continue to follow an extremely expansionary monetary policy. It announced in September that it was going to expand its programme to purchase mortgage-backed securities to 40 billion US dollars each month. Unlike previous measures, this programme known as “Quantitative Easing 3” is not time-limited. The Federal Reserve plans to keep interest rates at a historic low of 0–0.25 percent and to continue its bond purchases until the situation on the labour market has improved significantly. This represents an extension of “Operation Twist”, a programme to increase the maturity of government bonds held by the Federal Reserve.

Figure 1.28

**Regional contributions to world GDP growth**

<table>
<thead>
<tr>
<th>Year</th>
<th>World GDP growth</th>
<th>Western and Central Europe</th>
<th>North America</th>
<th>Asia</th>
<th>Latin America and Russia</th>
<th>Other countries</th>
</tr>
</thead>
<tbody>
<tr>
<td>2013</td>
<td>2.0%</td>
<td>2.2%</td>
<td>1.5%</td>
<td>0.8%</td>
<td>1.2%</td>
<td>3.0%</td>
</tr>
<tr>
<td>2014</td>
<td>2.5%</td>
<td>2.6%</td>
<td>1.6%</td>
<td>0.9%</td>
<td>1.3%</td>
<td>3.1%</td>
</tr>
</tbody>
</table>

*Based on market weights. Source: IMF; calculations by the EEAG; 2012 and 2013: EEAG forecast.
Reserve. Expiring securities in its portfolio purchased under previous programmes are also still being continuously replaced. The Federal Reserve is attempting to increase the degree of monetary expansion and to reduce long-term interest rates for mortgage loans in order to create favourable investment conditions, as well as to further support the recovery in the real-estate market.

Good refinancing conditions and a stabilising upswing in the real-estate market will provide relief to household budgets and support consumer behaviour. In view of this development and the upcoming consolidation of the federal budget deficit, a further reduction in the private savings rate is likely. This may compensate for some of the dampening effects of fiscal consolidation.

Despite the extremely expansionary monetary policy, the risks to price stability remain relatively low against the background of currently weak economic growth. However, the recent rise in the price index for rental and owner-occupied residential property suggests that a continued recovery in the real-estate market could drive up prices in the medium term.

Largely due to the dampening effect of increased uncertainty on business and household investment, economic activity in the United States is expected to have been weak this winter. The lack of an agreement to avoid the fiscal cliff last year; followed by the debate over the necessity of increasing the federal debt ceiling in early 2013 and the lack of a federal budget for the second half of the current fiscal year fed uncertainty. In the underlying fiscal scenario, the US economy is therefore expected to do little more than stagnate in early 2013, but should gain some momentum over the course of the year driven by the catching-up effects and the recovery in the real-estate market. The continuing failure to reach an agreement on medium-term fiscal policy represents a downward risk to the forecast.

Due to the economic slowdown among major US trading partners this winter, exports are not expected to provide much stimulus in the short run either. However, the consolidation efforts in the United States will also significantly reduce import demand, meaning that net foreign trade will still be able to make a small, but positive contribution to overall economic growth in 2013.

The increase in average annual GDP will slow down from 2.2 percent in 2012 to 1.6 percent this year (see Figure 1.29). Weak economic conditions are likely to provide only a slight decline in unemployment from an average of 8.1 percent in 2012 to 7.8 percent in 2013. For the same reason inflation will remain moderate this year, averaging at around 2.1 percent.

### 1.4.4 Asia

Several leading indicators suggest that the recently increased pace of expansion in China will continue. Industrial production picked up at a slightly faster pace during the last few months of 2012. In addition, different Purchasing Managers’ indices for the manufacturing and service sectors have recently brightened and moved back into the expansion zone. These positive signals indicate an increase in private investment dynamics, which also benefit from public infrastructure projects that were brought forward.

Private consumption should provide a powerful stimulus as per capita disposable income in the third quarter of 2012 increased by over 10 percent versus the previous year’s level, with very moderate inflation rates that are currently around 2 percent. Consumer confidence indices have also risen in recent months, with retail sales seeing rapid growth recently. The high wage rises are, however, increasingly wearing away the price competitiveness of the Chinese economy, with
the real exchange rate jumping by close to 6 percent in 2012. This effect is likely to impact exports already suffering from the continuing weak demand from Europe. Due to growing domestic demand, imports, however, are likely to expand at even higher rates, causing foreign trade to stop contributing positively to Chinese GDP growth. All in all, economic growth in China has bottomed out and will gain some momentum again to reach 9 percent this year.

The on-going confrontation with China over the Senkaku/Diaoyu Islands will continue to hamper foreign trade with Japan. As a result of the unofficial boycott of Japanese products by the Chinese population, exports of Japanese cars to China dropped by a stunning 75 percent from July to October 2012. In September the trade balance against China therefore went into the red for the first time since data have been recorded.

As long as the outlook for Japan’s export markets remains overcast, a weak recovery in the economy is expected for 2013. Weak consumer and producer confidence and the gradually decreasing public reconstruction investments caused by the earthquake and tsunami disaster in 2011 will prevent the domestic economy from supporting growth. The change in government and the recent implementation of two stimulus packages amounting to approximately 11 billion euros should create some albeit weak impulses from fiscal policy. A total increase in GDP of 0.8 percent is expected. Despite continuing expansionary monetary policy, the subdued economic growth will keep inflation at about –0.2 percent.

The economy of India should slowly pick up this year. Although the persistently high inflation rate will restrain the Indian central bank from cutting interest rates substantially, exports are likely to accelerate as a result of better economic developments in important export destinations for India, China and the United States. Accordingly, GDP growth looks set to increase from 3.7 percent in 2012 to 4.6 percent this year. After 9.4 percent in 2012, inflation will continue to soar at 8.2 percent in 2013.

Supported by an expansive fiscal policy and an improved external environment, the economic growth in other Eastern and Southern Asian countries should remain stable and GDP will expand by 4.5 percent this year.

1.4.5 Latin America

In 2013, the Latin American region, i.e. Argentina, Brazil, Chile, Colombia, Mexico and Venezuela, is expected to grow by 3.6 percent (following 2.4 percent in 2012). Growth will be driven by improving conditions in Brazil, the largest economy in the region, and increased momentum in China, which is a major consumer of raw materials coming from this region. The interest cuts implemented and public investments in the pipeline for the FIFA World Cup in 2014 should boost Brazil’s economy. Elsewhere in Latin America inflation rates have now fallen to a degree such that monetary policy can be relaxed. Overall, this allows the region to return to what can be considered more or less potential growth.

1.4.6 The European economy

The cyclical situation

The aggregate economic performance of the European Union is expected to have fallen in the fourth quarter of 2012 and looks set to stagnate during the first half of 2013 (see Figure 1.30). This is suggested by the majority of leading sentiment indicators. These seem to have managed a turnaround in early winter at extremely low levels, after having suffered strong ero-
sion in the previous six months. Multiple stress factors were probably instrumental in unfavourable economic developments in the remaining winter months. The contractive impulse of fiscal policy in several member states will have driven down domestic demand in Europe. In addition, the uncertainty arising from the European debt crisis has probably led to a decline in private investment and dampened private consumption. Moreover, financing conditions for households and businesses in many member states have remained exceptionally poor to date. Finally, the fiscal tightening in the United States at the beginning of 2013 is expected to have dampened the expansion of exports during the winter months. No further deterioration in producer and consumer confidence is expected, and macroeconomic uncertainty will not increase over the course of the year ahead.

Accordingly, these factors are no longer significant additional negative factors weighing down on the European economy, but nor are they positive factors either. However, domestic demand will shrink further in the course of the year 2013 (see Figure 1.31). Restrictive fiscal policies, albeit less restrictive than in the previous year, will dampen private and public spending and investment spending in almost all member states. The continued worsening of the labour market and the further efforts to reduce private debt, especially in Spain and Ireland, will also put additional strain on the willingness of private households to spend. Business investment is also likely to decline further in the first half of this year. The very low capacity utilisation in many countries and weak domestic prospects will be significant. In the crisis countries financing conditions have even worsened of late, which will additionally complicate the accumulation of capital.

In the second half of 2013, private investment is likely to stabilise somewhat. This will be supported by continued expansionary monetary policies and increased growth in exports. Private investment should also benefit significantly from the acceleration of the pace of expansion in emerging markets and the slight growth expected in the United States in the current year. As imports are likely to remain very weak during this period, net foreign trade will provide a strong positive economic momentum. GDP growth in Europe will pick up slightly in the course of the year, although it is likely to remain extremely low.

All in all, GDP in the European Union decreased by 0.3 percent last year and is basically expected to stagnate at 0.1 percent growth this year. The economic gap among the individual member states should continue to grow in the forecast period (cf. Table 1.A.2–Table 1.A.4). Aggregate production in the crisis countries will continue to shrink with the exception of Ireland. In these countries fiscal policy will be much more restrictive than in the rest of Europe. Although financing conditions in the crisis countries have already started to improve and despite more expansionary monetary policy, they are likely to remain unfavourable, at least relative to the European core countries. After a temporary period of weakness this winter, stable economies like Germany, Finland and Austria will benefit in the rest of 2013 from relatively stronger demand from emerging markets and domestic forces; and will therefore continue to expand, if only moderately.

The weakness of the economy will continue to reduce employment in the European Union (see Figure 1.32) and thereby lead to a further rise in the overall unemployment rate from 10.5 percent last year to 10.9 percent this year (see Figure 1.33), with already large regional differences increasing further. Given the high rate of unemployment, wage increases will be very moderate, gradually slowing the rate of inflation. The recent increases in excise duties, as well as higher prices for energy and food will gradually also lose their impact. With a phasing out of these tax increases taking
place mostly in the crisis countries, the upward pressure on inflation in these economies will be significantly below the euro area average. In the aggregate, the rate of inflation should have declined to 2.5 percent last year, before further weakening to 1.8 percent this year. Thus, the core inflation rate, which particularly reflects the underlying momentum in the economy, should fall from 1.6 percent in October 2012 to 1.3 percent at the end of 2013. This will take the inflation rate well below the ECB's target inflation rate of just under 2 percent.

**Differences across Europe**

Over the course of 2013 the German economy should experience an upswing. If the euro crisis does not escalate and remains in line with the baseline scenario, domestic upward forces and rising demand for German export goods from outside the European Union should boost the economy. Private consumption and investment in equipment and machinery look set to pick up clearly as a result; a surge in foreign orders indicates that exports should also increase. International trade will not, on balance, make any direct contribution to an increase in GDP, as imports will be equally widespread due to livelier domestic demand. The steady increase in building permits indicates that construction activity will remain an engine for growth.

When comparing the fourth quarter of 2013 with the fourth quarter of 2012, the German economy is expected to expand by 1.4 percent. However, due to the low starting level caused by the weak winter, the average annual growth rate in GDP in 2013 will be just 0.7 percent (see Figure 1.34). There will be no significant growth in employment. The number of persons employed in 2013 should only be around 35,000 people higher than the previous year's value. The number of unemployed will increase during the winter months, but should gradually fall again over the course of the year ahead. Due to the abandoning of training measures, there will be a measured annual increase of 60,000 persons in 2013. The unemployment rate is expected to fall slightly from 5.5 percent in 2012 to 5.4 percent this year. The German inflation rate was 2.2 percent in 2012 and is expected to weaken to 1.7 percent this year.

**France** will see its economy grow by a very moderate 0.3 percent this year. Private investment will at best see a moderate increase due to the continuing uncertainty about the further course of the euro crisis and the subdued earnings prospects of companies. Companies will also face a 10 billion euro tax increase in 2013. Hollande’s government has paved the way for consolidation measures in 2013 amounting to a total of 30 billion euros. A third of this amount is to be achieved by keeping nominal budgets constant and thereby reducing...
expenditure in real terms. The remaining 10 billion euros will affect private households in the form of tax hikes and reduce the disposable income already threatened by rising unemployment. Consumer spending is therefore expected only to make a limited positive contribution, although decreasing inflationary pressure should create some breathing space in household budgets. Exports are expected to be a drag on the economy because France has gradually lost its price competitiveness and its share of the world market in recent years (see Chapter 2).4

The above-mentioned consolidation measures are not likely to go far enough to achieve the stated goal of an overall government deficit of 3 percent in relation to GDP in 2013. One of the reasons for this is that this goal is based upon overly optimistic economic conditions. The government of President Hollande is thus under pressure to adopt further consolidation measures in the near future, which could also strain the economy over the forecast period. In addition to a large public debt, the French economy has other structural aberrations that particularly affect price competitiveness and the labour market. Countermeasures could include reducing labour costs and a simpler protection against dismissal. If labour market reforms are actually implemented, this will probably only begin to have any impact by the end of the forecast period.

The unemployment rate is expected to rise further to 11.1 percent in 2013. Inflation, on the other hand, is expected to decrease to 1.8 percent this year due to under-utilised production capacity.

In the forecast period, the United Kingdom is not expected to fall back into recession, but should instead experience a moderate expansion. This is indicated by the leading indicators, which have mostly improved since autumn. The recovery of the labour market will drive domestic demand, despite restrictive fiscal policies. Although the unemployment rate has been declining since autumn 2011 when it reached 8.4 percent, it remains relatively high compared to an average rate of just over 5 percent between 2000 and 2008. Moreover, the central bank’s funding conditions have improved since the August introduction of the “Funding for Lending” programme, under

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4 The tax-breaks decided for French companies are supposed to lower labour costs and thereby allow companies to regain some of their lost competitiveness. Furthermore, a new agreement between unions and employers will introduce flexible working times, but will not tackle the problem of worker protection. However, to the extent that these measures prove effective, the benefits will probably not materialise during our forecasting horizon.
which the Bank of England provides liquidity at market rates to commercial banks depending on their loan portfolios. Since then, the credit conditions, particularly for households, have improved slightly. Finally, foreign demand is also expected to improve somewhat in 2013. Although the weak dynamics in the euro area will negatively affect exports, support will come from the emerging Asian markets.

Total economic output this year is expected to grow by 0.8 percent in the United Kingdom. Unemployment is expected to slowly drop to an average level of 7.6 percent in 2013, while inflation is expected to slow down only slightly, despite the overall weak economy. Due to the large increase in university tuition fees last autumn, inflation will probably only drop to 2.4 percent this year.

**Italy** will narrowly escape recession during the forecasting period. After continued negative growth during the first quarters, GDP will stagnate over the course of this year, which, given its initial position at the start of the year, should result in an average growth rate of –0.9 percent in 2013. The uncertain political situation continues to have an overall dampening effect. Gross investment is likely to suffer from state consolidation, restrictive credit provision, high interest rates and capital flight. Private consumption will also be unable to make a positive contribution because unemployment is expected to rise and disposable income will be impacted by a VAT increase of 1 percentage point on July 1, 2013. State expenditure is also likely to fall due to the envisaged consolidation measures. Only net exports are expected to make a positive contribution, as imports are likely to continue to decline and exports will increase slightly. However, if Italy does not rapidly bring forward structural reforms aimed at cutting its product prices, exports will barely be able to contribute positively to GDP growth during the forecasting period.

Due to the recession, the average unemployment rate will rise to 11.7 percent this year. The recession should keep inflation down to an average 2.3 percent, while any stronger decline will be prevented by the VAT increase.

The **Spanish** economy is likely to remain in a structural crisis until the end of the forecast period. GDP will shrink significantly by 1.2 percent this year. Private consumption spending will suffer under households’ efforts to cut their debt and from falling disposable income. Disposable income will be dampened, especially by rising unemployment and state consolidation measures. State consumption is also likely to fall further. As a rapid and sustainable solution to the banking crisis is not yet in sight, private investment will continue to contribute negatively to the economy until the end of 2013. Only net exports are expected to continue to rise because imports are falling due to decreasing incomes and exports are increasing as a result of improved competitiveness. Whereas the trade balance turned already positive last year and will improve further, the current account is still in deficit. The latter will not be completely eliminated before the end of the forecast period.

As a result of the recession, Spain’s average unemployment rate is expected to rise to 26.8 percent this year. Due to a continuing decline in economic performance and expiring VAT effects, the change in consumer prices is expected to fall to 1.8 percent this year.

**Portugal and Greece** are expected to remain in recession this year. **Ireland**, on the other hand, is likely to see a moderate expansion dampened by the on-going restructuring of the construction and banking sector. The moderate expansion is not likely to be sufficient to bring about a change in the Irish labour market and unemployment will continue to increase in all three crisis countries, albeit to varying degrees.

During the forecast period, most economies in Central and Eastern Europe (except for Hungary) are likely to benefit from orderly government finances after massive austerity and reform measures. These orderly public finances will be an important pillar of their creditworthiness. One weakness, however, remains the position of the banking sector, which is still overwhelmingly controlled by foreign banks in the region. The high percentage of Greek banks in Romania and Bulgaria is a cause for concern. However, Western European parent banks have also deleveraged their debt and credit risks significantly in other countries in the region. Although international institutions can prevent an uncoordinated withdrawal of funds from the transition countries with the establishment of the Vienna Initiative, the Western European banks have reduced their loan portfolios in Eastern Europe. However, there were significant differences between the countries of Eastern Europe in this respect. While Hungary was affected to a much

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5 The European Bank Coordination Vienna Initiative was launched in January 2009 to provide a framework for coordinating the crisis management and crisis resolution of financial sector issues that were highlighted by the economic downturn and involved large cross-border bank groups systemically important in Central and Eastern Europe. It has brought together public and private sector stakeholders of EU-based cross-border bank groups present in that region.
greater extent, the cross-border capital reduction by banks was relatively low in the Czech Republic and Poland, the two largest economies in the region. Capital reduction was also cushioned by inflows of EU funds. The European Commission, the European Bank for Reconstruction and Development (EBRD) and the International Monetary Fund again provided extensive aid packages to avoid jeopardising the economic recovery in the region. By 2014, a total of 30 billion euros will have been made available for the Eastern European countries (including Bulgaria, Czech Republic, Hungary, Latvia, Lithuania, Poland and Romania). Around 30 percent of this sum is intended to support the financial sector and thereby improve the availability of credit. Current deleveraging and the high proportion of non-performing loans (in Hungary, Romania and Bulgaria their share is currently estimated at 15 to 20 percent) are affecting lending and therefore investment activities. There are also demand-side reasons for the slowdown in lending. A speedy turnaround is not expected given the decelerating economic momentum.

During the forecast period, recessionary trends will continue in most countries of the region, especially in Hungary and the Czech Republic. Countries like Bulgaria and Romania are threatening to slip into recession because of their high dependence on exports and weak domestic demand. Poland is struggling to compensate for the weakness in export demand in its domestic market, and no revitalising impulses can be expected in terms of fiscal policy. The economic slowdown will complicate the return of public deficits, resulting in governments having to maintain their restrictive stance in terms of fiscal policy. In general, all indicators point to a cyclical deterioration in the region during the forecast period.

References


Table 1.A.1  
GDP growth, inflation and unemployment in various countries

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<th>Share of total GDP in %</th>
<th>GDP growth</th>
<th>CPI inflation</th>
<th>Unemployment rate&lt;sup&gt;d&lt;/sup&gt;</th>
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<sup>a</sup> Weighted average of Indonesia, South Korea, Malaysia, Taiwan, Thailand, Philippines, Singapore and Hong Kong. Weighted with the 2011 levels of GDP in US dollars.  
<sup>b</sup> Weighted average of Argentina, Brasil, Chile, Colombia, Mexico, Peru, Venezuela. Weighted with the 2011 level of GDP in US dollars.  
<sup>c</sup> Weighted average of the listed groups of countries.  
<sup>d</sup> Standardised unemployment rate.

Source: Eurostat, OECD, IMF, ILO, National Statistical Offices, 2012 and 2013: forecasts by the EEAG.
### Table 1.A.2

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*(a) Harmonised consumer price index (HICP). – (b) Standardised unemployment rate. – (c) Weighted average of the listed countries. – (d) Weighted average of Poland, Czech Republic, Romania, Hungary, Bulgaria, Lithuania, Latvia.

Source: Eurostat, OECD, IMF, 2012 and 2013: forecasts by the EEAG.
### Table 1.A.3
#### Key forecast figures for the European Union

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#### Percentage change over previous year

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#### Percentage of nominal gross domestic product

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**a)** Contributions to changes in real GDP (percentage of real GDP in previous year).  
**b)** Harmonised consumer price index (HCPI).  
**c)** 2012: forecasts of the European Commission.  
**d)** Standardised unemployment rate.

Source: Eurostat, 2012 and 2013: forecasts by the EEAG.

### Table 1.A.4
#### Key forecast figures for the euro area

<table>
<thead>
<tr>
<th></th>
<th>2010</th>
<th>2011</th>
<th>2012</th>
<th>2013</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Real gross domestic product</strong></td>
<td>2.0</td>
<td>1.4</td>
<td>−0.5</td>
<td>−0.1</td>
</tr>
<tr>
<td><strong>Private consumption</strong></td>
<td>0.9</td>
<td>0.1</td>
<td>−1.1</td>
<td>−0.5</td>
</tr>
<tr>
<td><strong>Government consumption</strong></td>
<td>0.7</td>
<td>−0.1</td>
<td>−0.2</td>
<td>−0.9</td>
</tr>
<tr>
<td><strong>Gross fixed capital formation</strong></td>
<td>−0.1</td>
<td>1.5</td>
<td>−3.6</td>
<td>−1.1</td>
</tr>
<tr>
<td><strong>Net exports</strong></td>
<td>0.7</td>
<td>0.9</td>
<td>1.7</td>
<td>1.0</td>
</tr>
<tr>
<td><strong>Consumer prices</strong></td>
<td>1.6</td>
<td>2.7</td>
<td>2.5</td>
<td>1.8</td>
</tr>
</tbody>
</table>

#### Percentage change over previous year

<table>
<thead>
<tr>
<th></th>
<th>2010</th>
<th>2011</th>
<th>2012</th>
<th>2013</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Real gross domestic product</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Private consumption</strong></td>
<td></td>
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<td></td>
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</tr>
<tr>
<td><strong>Government consumption</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Gross fixed capital formation</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Net exports</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Consumer prices</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

#### Percentage of nominal gross domestic product

<table>
<thead>
<tr>
<th></th>
<th>2010</th>
<th>2011</th>
<th>2012</th>
<th>2013</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Government fiscal balance</strong></td>
<td>−6.2</td>
<td>−4.1</td>
<td>−3.3</td>
<td>−2.6</td>
</tr>
<tr>
<td><strong>Unemployment rate</strong></td>
<td>10.1</td>
<td>10.2</td>
<td>11.4</td>
<td>12.1</td>
</tr>
</tbody>
</table>

**a)** Contributions to changes in real GDP (percentage of real GDP in previous year).  
**b)** Harmonised consumer price index (HCPI).  
**c)** 2012: forecasts of the European Commission.  
**d)** Standardised unemployment rate.

Source: Eurostat, 2012 and 2013: forecasts by the EEAG.
Appendix 1.B
Ifo World Economic Survey (WES)

The Ifo World Economic Survey (WES) assesses worldwide economic trends by polling transnational as well as national organizations worldwide about current economic developments in the respective country. This allows for a rapid, up-to-date assessment of the economic situation prevailing around the world. In January 2013, 1,169 economic experts in 124 countries were polled. WES is conducted in cooperation with the International Chamber of Commerce (ICC) in Paris.

The survey questionnaire focuses on qualitative information: on assessment of a country’s general economic situation and expectations regarding important economic indicators. It has proved to be a useful tool, since economic changes are revealed earlier than by traditional business statistics. The individual replies are combined for each country without weighting. The “grading” procedure consists in giving a grade of 9 to positive replies (+), a grade of 5 to indifferent replies (=) and a grade of 1 to negative (-) replies. Grades within the range of 5 to 9 indicate that positive answers prevail or that a majority expects trends to increase, whereas grades within the range of 1 to 5 reveal predominantly negative replies or expectations of decreasing trends. The survey results are published as aggregated data. The aggregation procedure is based on country classifications. Within each country group or region, the country results are weighted according to the share of the specific country’s exports and imports in total world trade.

IFO WORLD ECONOMIC SURVEY (WES)
CIS
Economic situation

Belarus, Georgia, Kazakhstan, Kyrgyzstan, Russia, Ukraine

Latin America
Economic situation

European Union (15)
Economic situation

Eastern Europe
Economic situation

Germany: Ifo business climate
Seasonally adjusted data

France
Economic situation


Assessment of business situation
Business expectations

Ifo business climate

99 00 01 02 03 04 05 06 07 08 09 10 11 12 13
95 90 85 80 75 70 65 60 55 50 45 40 35 30 25 20 15 10 5

* Manufacturing industry, construction, wholesale and retail trade.

Chapter 1

Italy
Economic situation

United Kingdom
Economic situation

Spain
Economic situation

Sweden
Economic situation

Finland
Economic situation

Austria
Economic situation

Belgium
Economic situation

Denmark
Economic situation

Greece
Economic situation

Ireland
Economic situation

Netherlands
Economic situation

Portugal
Economic situation

Chapter 1

Slovenia
Economic situation


Hungary
Economic situation


Poland
Economic situation


Czech Republic
Economic situation


Slovakia
Economic situation


Estonia
Economic situation

Chapter 1

Latvia
Economic situation


Lithuania
Economic situation


Bulgaria
Economic situation


Romania
Economic situation

European Imbalances

2.1 Introduction

Europe is in the grip of three interrelated crises: a balance-of-payments crisis, a sovereign debt crisis and a banking crisis. Both EU leaders and analysts have focused heavily on the sovereign debt and the banking crises. The fiscal compact agreed upon in December 2011 was supposed to ease the former, while the European Financial Stability Facility (EFSF) was designed to ease the latter. However, the announcement of the European Central Bank’s (ECB) unlimited bond buying scheme on September 6, 2012, signalled that the crisis is far from over; and that the existence of the euro area in its present form is still on the line. In our report last year (EEAG, 2012, Chapter 2) we argued that a credible strategy for getting the euro area back on track needs to address the problem of the large imbalances reflected in current account deficits and surpluses, as well as in foreign asset positions.

This chapter identifies the factors that led to imbalances in the euro area, which resulted in the current balance-of-payments crisis. The chapter also discusses how rebalancing might be achieved, and how fiscal policy could accelerate this process.

2.2 Imbalances in the euro area

There is a large body of literature on global imbalances. To date, however, little attention has been paid to the imbalances within the European Union or the euro area. One reason for this may be that the current account of the European Union and that of the euro area have always been roughly in balance. Hence, Europe did, and does not make any great contribution to global imbalances. Moreover, Lane and Milesi-Ferretti (2007) concluded, using a general equilibrium analysis, that a global rebalancing would have no major effect on the European Union as a whole, but would affect individual member states asymmetrically due to differences in their existing external balances. At that time, however, very little was known about the effect of such a shock on individual euro area member states, and it was not perceived to be a major problem. In earlier analyses, Sinn and Koll (2000) and Blanchard and Giavazzi (2002) even argued that divergence in external balances is natural within the euro area. This is because the euro area forms a convergence club, where poorer individual member states are catching up with their richer counterparts, and naturally run a current account deficit during this process. Thus, current account imbalances within the euro area are a natural phenomenon. All in all, imbalances were not previously recognized as a problem within the euro area.

Box 2.1

Macroeconomic Imbalance Procedure in the European Union

The Macroeconomic Imbalance Procedure (MIP) is part of the set of rules that came into force on December 13, 2011, the so-called “six-pack”. The MIP is intended to identify imbalances early, and to require countries to design policies to correct large imbalances. Part of the MIP is an alert mechanism based on a set of indicators and corresponding threshold values for these indicators (European Commission, 2012). Importantly, the set of indicators includes not only the usual fiscal indicators, but others including current account balance, real effective exchange rate, private credit stock and flow, house prices etc. The International Monetary Fund (IMF) considered a similar system of indicators (IMF, 2010).

While it seems to be a good idea for the Commission to broaden the focus of its macroeconomic monitoring, there are a number of problems with the MIP. Firstly, the set of indicators and the suggested thresholds are somewhat arbitrary, suggesting the lack of a coherent conceptual basis for the MIP (Whelan, 2012). Secondly, the large body of empirical literature on the so-called early warning indicators suggests that these indicators lead far too often to false alarms (Kaminsky and Reinhart, 1999). Finally, unlike in the case of fiscal policy, policy instruments tend to have an indirect effect on these indicators. Hence, it is unclear how the economic policy of a particular country could be monitored or assessed in terms of correcting imbalances.

1 See Obstfeld and Rogoff (2005), EEAG (2006, Chapter 2) and Sinn (2010) among many others.

2 It is important to note that global imbalances were generated by capital flowing from poor to rich countries (primarily to the United States). In contrast, European imbalances came about because capital was flowing from rich to poor countries.

3 The European Commission now recognises the problem as the introduction of the Macroeconomic Imbalance Procedure suggests. See Box 2.1 for more details.
This section begins by describing the facts behind current account imbalances and international investment positions within the euro area. It subsequently discusses the factors that may explain the emergence of these imbalances. Finally, it concludes with an analysis of how rebalancing within the euro area could be achieved.

2.2.1 Facts behind the imbalances

The current account of the euro area as a whole was roughly balanced over the period of 1995 to 2011, with alternating small surpluses or deficits. The external balance of the euro area, however, disguised a considerable imbalance within the euro area. In particular, Figure 2.1 shows that the GIIPS (Greece, Ireland, Italy, Portugal, and Spain) countries, which have received a great deal of attention during the current crisis, have run a combined current account deficit that has been rising since the late 1990s. This deficit was largely offset by the German current account surplus during the whole period, which balanced the current account of the euro area. The other member states of the euro area ran declining current account balances, moving from a 1 percent surplus to a balanced current account overall.

Greater insights into current account imbalances within the euro area can be gained by looking at individual countries’ balances. Figure 2.2 plots the current account balances of individual euro area countries for the period 2003–2011 against those for the period 1995–2002. Firstly, the figure shows that current account balances are highly persistent. Balances for the first period are good predictors of balances for the following period. However, it should also be noted that the current account balances of some countries improved, while those of others deteriorated across the two periods. The current account balances of countries above the straight line shown in Figure 2.2 improved, while those of the countries below it deteriorated. Germany, for example, turned a roughly balanced current account into a surplus averaging 5 percent of GDP. In contrast, France, Italy and Ireland on average ran a current account surplus in the first period, which turned into a small deficit in the second period. More importantly, three countries at the heart of the current crisis, namely Greece, Spain and Portugal, as well as Cyprus, not only ran a significant current account deficit over the period 1995–2002, but that deficit increased significantly during the period 2003–2011.

Figure 2.3 shows the main components of the current account of the four countries (Portugal, Ireland, Greece, and Spain) that were hit hardest by the crises.4

4 Italy is also one of the crisis hit countries, but it cannot easily be included in the periphery of the euro area. As Figure 2.2 also shows, it contributed relatively little to the imbalances during the run-up to the crisis. However, the Italian economy has deep structural problems, which are manifested, among other areas, in one of the lowest growth rates among major industrialised countries in the last 20 years.
The countries of Southern Europe show a pattern different to that of Ireland. Their balance in services was positive and slowly improved between 1995 and 2011, while their balance in goods was negative and deteriorated until 2007. Finally, their balance in income was negative and also deteriorated throughout the period. By contrast, Ireland’s balance was negative in services and positive in goods throughout the period. Like that of the Southern countries, Ireland’s balance in income was negative and deteriorating. Overall, imbalances in goods and services led to an increasing imbalance in income as countries accumulated external liabilities. Importantly, since the beginning of the crisis the balances both in goods and services have improved in these countries, primarily due to the fact that the real contraction has driven down imports.

As the balance in income for the above four countries has already suggested, current account deficits and surpluses resulted in corresponding changes in the net international asset position. As Figure 2.4 shows, Germany steadily improved its asset position over the entire period 1995–2011, giving it a net foreign asset position of nearly 10 percent of the euro area’s GDP by 2011. In contrast, the GIIPS countries swiftly accumulated a net foreign liability position over the decade between 1999 and 2009, which amounted to about 20 percent of the euro area’s GDP in 2009. Since then the GIIPS countries have maintained their international asset position at this level, although they have continued to borrow abroad, on the back of the declining market value of their existing debt, a fact that is statistically treated like a debt redemption. The rest of the euro area net foreign asset position was roughly zero.

Considering only the total international investment position does not show the changes in its composition. In particular, our last report (EEAG, 2012, Chapter 2) highlighted that, during the crisis, the ECB played a growing role in financing current account deficits and capital flight, providing extra refinancing credits that went beyond the task of providing internal liquidity for the crisis countries. As shown by Sinn and Wollmershäuser (2012), Target imbalances result from net-payment orders across the euro area countries and are identical to balance-of-payment imbalances (the sum of current account imbalances and private and intergovernmental capital exports). As a result of endogenous market reactions, they indirectly also measure the reallocation of the ECB’s refinancing credit from the core to the periphery, which was made possible by a reduction in the ECB’s collateral requirements.

The ECB’s role in replacing the capital market is illustrated by Figure 2.5, which plots the ECB’s

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The sum of the three balances is the current account balance. Source: Eurostat, last accessed 10 December 2012.
Target balances. The left panel shows that the Target debt of the GIIPS countries and Cyprus (GIPSIC) vis-à-vis the ECB began to increase in autumn 2007, after the first break-down of the interbank market; and that the increase has accelerated dramatically since the second half of 2011. It only slowed down for the first time in October 2012, following the ECB’s announcement that it would repurchase unlimited amounts of government bonds and the German Supreme Court’s rejection of appeals against the European Stability Mechanism (ESM), but it remains too early to say whether this reflects a turning point. This rise in the debt of the GIPSIC countries was matched by a corresponding increase in four countries’ claims against the ECB, and especially the claims of Germany. The right panel in Figure 2.5 shows the distribution of ECB Target credit as of the end of 2012: Germany, Luxembourg, the Netherlands and Finland financed the GIPSIC countries’ borrowing from the ECB, which amounted to almost 1 trillion euros by this date. As discussed in EEAG (2012, Chapter 2), during the crisis, the GIPSIC countries relied increasingly on public support to finance themselves internationally; and the main source of this public support was ECB Target credit. The extra refinancing credit that is reflected in the increase in the Target balances basically compensated for the reversal of capital flows, financing or co-financing the current account deficits of Greece, Portugal and Spain since winter 2007/2008, and compensating for capital flight from Ireland after the Lehman crisis, as well as from Spain and Italy since summer 2011.

Even although it operates via the mechanics of the ECB’s money providing operations, Target credit represents a public rescue operation very similar to the EFSF and ESM open rescue operations controlled by the parliaments of Europe, but in quantitative terms it is far greater than the latter. In EEAG (2012, Chapter 2) we argued that the euro area might need to settle Target balances; and Chapter 4 of this report compares the European Target system with the US settlement system.

2.2.2 Causes of the imbalances

Arguably, there were two primary and interrelated causes of current account imbalances. Firstly, as we argued in EEAG (2012, Chapter 2), the introduction of the euro eliminated the exchange rate risk and induced investors to disregard country-specific bankruptcy risks, given the unlimited firing power of the ECB. Secondly, the Eurosystem created optimistic expectations regarding the rapid convergence of the periphery countries (Greece, Ireland, Portugal and Spain) with the core of the euro area. Both causes generated an investment and credit boom in the periphery and imply that there was a catching-up process, with international capital movements from the core to the periphery that materialise as current account imbalances. The periphery countries, which are catching up, run current account deficits as imports grow together with incomes, and as inflation undermines export competitiveness.

6 Blanchard and Giavazzi (2002) set up a multi-country growth model that, in addition to rate-of-return induced capital flow, focuses on growth expectations and its implications for savings, emphasizing that catching-up countries will reduce savings, which contributes to their current account imbalances. Lane and Pels (2012) argue that growth expectations not only explain lower savings rates, but also higher construction investment at the expense of equipment investment.

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Figure 2.5

Target balances in the euro area

Claim and debt, 2003-2012

By country, 2012

- Germany, Italy: end of December; Spain, Netherlands: end of November; other countries: end of October.
It is important to emphasise that convergence only takes place as long as the sole relevant difference between core and periphery is the difference in capital stocks. If there are additional differences in human capital, economic policies or institutions, convergence cannot be taken for granted. However, the European Union in general, and the euro area in particular, can be viewed as a convergence club in which all other differences are not really relevant to the convergence process. Figure 2.6 illustrates this idea. The poorer a country was in 1995 relative to the average, the larger its current account deficit was from 2002 to 2007. Estonia, for example, which had an average income level that was only about 30 percent of that of the other euro area members in 1995, ran a deficit of about 12 percent of GDP on average from 2002 to 2007.

Current account balances have a natural counterpart in national accounts in terms of the difference between savings and investment. The first panel of Figure 2.7 shows the difference between private savings and investment, and the differences between government saving and investment, and how they contributed to the current account balances. It is worth noting that, among the crisis countries, Greece and Portugal posted large imbalances in the government sector, while the imbalances in Spain and Cyprus basically resulted from the private sector. The second panel of Figure 2.7 shows to what extent differences in net investment rates (private and public) contributed to these imbalances. Originally poorer countries such as Estonia, Spain and Ireland topped the list of investment rates, while more mature countries like the Netherlands, Finland, and Germany were to be found at the lower end. Germany had the lowest rate of net investment of all euro area countries in the period considered, which explains why it had the euro area’s second lowest growth rate in this period after Italy, and why it turned from a net immigration to a net emigration country in the years prior to the crisis. As the euro had lured capital from the core to the periphery, the periphery grew via stronger investment at the expense of the core, and thus brought about convergence.

Growth and investment in the periphery was accompanied by rapidly rising prices and led to the bubble that ultimately burst. The left panel of Figure 2.8 shows that the price levels of individual countries evolved at a rather different pace between 1995, the year of the Madrid Summit where the euro was ultimately agreed, and 2011. Prices increased relatively little in Germany, Austria and Finland (capital...
 exporting countries), but to a much greater degree in Estonia, Greece and Spain, which were all capital importers. The price level changes indicate that all euro area countries appreciated in real terms relative to Germany to a smaller or larger extent.

However, to understand the implications of inflation differentials within the euro area for current account imbalances, we need to look more closely at the source of this inflation. If an inflation differential occurs because of strong demand at home due to the surplus of investment over savings, the higher inflation leads to a loss of competitiveness at home. If, however, the inflation differential occurs due to the Balassa-Samuelson effect, higher inflation at home may not lead to a loss of competitiveness because it results from higher differential productivity growth in the domestic sector of tradables that translates into higher wages and higher prices for non-tradable labour intensive goods. The right panel in Figure 2.8 shows the labour productivity change measured by GDP per employee over the period 1995–2011. Italy, Portugal and Spain are in the bottom half of the productivity league table, while Greece and Ireland are in the top half. It is hard to determine empirically how much extra inflation in a country can be justified by the Balassa-Samuelson effect, but it is probably safe to say that Italy’s 0 percent productivity growth is hard to relate to the 45 percent increase in its price level. Comparing productivity and price level increases in Spain (10 percent vs. 58 percent) and Greece (25 percent vs. 75 percent) also suggests that the Balassa-Samuelson effect alone cannot explain the price level increases of these countries.

To get a better idea of how productivity growth may dilute the effect of real appreciation on competitiveness, and hence on current account imbalances in the euro area, we calculated the ratio of the price level index and the productivity index for the period 1995–2007 and normalised it such that Germany’s value equals 100. This (inverse) competitiveness indicator measures the deterioration in a country’s competitiveness relative to Germany under the simplifying assumption that all of the measured average aggregate productivity growth resulted from a productivity growth in the tradables sector only, while there was no productivity growth in the non-tradables sectors. While this admittedly is a strong assumption, it may still be useful to gain a first rough adjustment of the price effects for the Balassa-Samuelson effect. The idea is that a price level increase must exceed the productivity increase in order to have a negative effect on competitiveness. Countries with values of this competitiveness indicator below 100 improved their competitiveness relative to Germany, while countries with values above 100 saw their competitiveness deteriorate relative to Germany. Figure 2.9 plots the current account balances between 2001–2007 against the competitiveness indicator. Firstly, it is worth noting that Austria and Finland improved their competitiveness during this period relative to Germany. Secondly, Figure 2.9 suggests that there is a pronounced negative relationship between our (lack-of) competitiveness indicator and current account deficit. All Southern European countries lost competitiveness relative to Germany, which contributed to the deterioration of their current account balances. Ireland improved, but still ran a current account deficit due to

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8 The Balassa-Samuelson effect implies that higher productivity growth in the tradable sector leads to higher wage increases that spill over to the non-tradable sector because of cross-sector labour mobility, thereby resulting in substantial price rises there. See Rogoff (1996) for more details, as well as EEAG (2002, Chapter 4, p. 49–50).

9 Rising prices also imply a negative effect on competitiveness to the extent that the measured productivity increase also results from a productivity increase in the non-tradable goods sector. In the extreme case scenario, if all sectors exhibit the same productivity increase, the full price increase relative to Germany shows a loss in competitiveness.
a deficit in its income balance, as we have seen earlier. Greece, on the other hand, lost less competitiveness than Italy and Spain, but still ran the largest deficit in the group.

2.3 Rebalancing in the euro area: current account balances

2.3.1 Internal versus external devaluation

Countries of the European periphery need to devalue, i.e. to become cheaper relative to the countries of the core to reduce their imbalances. This boosts exports and reduces imports, thereby improving the current account. In principle, there are three ways of implementing this kind of devaluation:

i) Exit and external devaluation
ii) Internal devaluation through falling prices in the periphery
iii) Internal devaluation through rising prices in the core.\(^{10}\)

This subsection discusses the main costs, benefits and risks of the different scenarios.

If exit and external devaluation can be performed quickly, there should be no loss of output and employment in principle. However, such devaluation calls into question the stability and persistence of the monetary union. Internal devaluation through falling prices in the periphery leads to a long period of stagnation and mass unemployment in the periphery due to the downward rigidity of prices and wages. Internal devaluation through rising prices in the core does not lead to recession in the periphery. The core, however, is required to bear the cost of higher inflation in terms of internal and international wealth redistribution, which is likely to trigger substantial political resistance. In addition, higher inflation may also undermine the stability of the monetary union.

An important distinguishing aspect concerns a currency mismatch effect in the balance sheets of companies and banks.\(^{11}\) By virtue of both external devaluation and internal devaluation through price cuts, the burden of the foreign currency debt rises, which creates problems for domestic debtors and may drive banks and firms into bankruptcy. Supply declines as a result, while output and employment may also be negatively affected. The effect on exports, and hence on the current account, depends on how domestic producers that supply intermediate goods for exporters are affected by the currency mismatch.

As we pointed out in EEAG (2011), the fact that internal devaluation via price cuts distorts the internal balance sheets of companies of the real economy is often overlooked. Let us consider the balance sheet of a typical domestic company: its assets include real-estate property and equipment, and its liabilities include domestic bank debt. After an internal price cut following the burst of a real-estate bubble, the value of reproducible assets is likely to fall together with that of newly produced goods, but the value of the bank debt remains unchanged, pushing up the company's debt ratio to potentially dangerous levels and leading to a wave of bankruptcies. This problem can only be avoided by resorting to an open devaluation after an exit from the currency union, as both internal credit contracts and asset prices would be converted to the new currency in that case.

If internal devaluation occurs through rising prices in the core, there is no adverse balance sheet effect in the periphery. However, as savers in the core suffer wealth

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\(^{10}\) Internal devaluation can be achieved via a combination of the latter two, i.e., via a rise in the price level in the core exceeding that in the periphery. For expository simplicity we focus on these two cases only.

\(^{11}\) See Krugman and Taylor (1978).
losses, there is political resistance to such a policy in the core. If inflation in the core is higher than inflation in the periphery, price stability in the euro area, which is the ECB’s foremost and only mandate according to the Maastricht Treaty, could be undermined.

The ultimate goal of any devaluation is to stimulate the economy. While existing empirical evidence supports the argument that large external devaluations improve the current account, the effect on output is mixed. Freund and Warnock (2007) analysed 26 current account reversals between 1980 and 2003 in OECD countries. They found that output growth slows down during the adjustment process. Using a data set on emerging and developing countries between 1960 and 2006, a more recent study by Bussière et al. (2012) finds that large devaluations are typically preceded by a decline in output, but followed by growth. More precisely, the contraction observed around the time of large devaluations is typically caused by factors that lead to this devaluation. After the devaluation, however, the economy is twice as likely to experience positive growth within a year than to experience negative growth.

However, external devaluation is associated with a major additional difficulty that can lead to loss of output and employment in the short run. External devaluation requires an exit from the euro area, which, in turn, requires the redenomination of assets, liabilities, contracts and prices into the new currency. This is no simple matter. Firstly, the redenomination must be swift and unanticipated in a currency. This is no simple matter. Firstly, the redenomination must be swift and unanticipated in a currency. Otherwise, the government creates a currency mismatch, which has the negative short run balance sheet effect on output and employment after exit described above.

Unfortunately, however, it is difficult to implement redenomination in a democracy on an unanticipated basis. The process requires legislation by parliament preceded by discussions with stakeholders, including representatives of banks, firms, unions, and consumer associations etc. Implementation measures, such as distributing the new currency across the country and resetting teller machines, require extensive planning and organization and involve a large number of people. In short, redenomination tends to be anticipated, hence any attempt to exit a strong currency and to adopt a weak one is usually preceded by a run on assets. Secondly, it is also hard to make redenomination complete. If the government redenominates external liabilities, this would amount to default by a country on all of its external debt (public and private). However, if external liabilities are not redenominated, and an exit is anticipated, domestic lenders will transfer as many domestic liabilities abroad as possible in order to make their internal liabilities external and protect their values from devaluation. Given the large degree of integration of the financial markets within the euro area, this process is not very difficult. Hence a currency mismatch of some size is bound to emerge after any country’s exit from the currency union, with its well-known negative balance sheet effects.

The government may try to limit the undesired consequences of any anticipated euro exit by introducing capital control and deposit freezing well before any preparation for an exit gets under way. However, even implementing such measures requires some preparation and discussion. The government, for example, has to decide what type of deposits should be frozen, how and for how long. The precise nature and legality of capital control within the euro area also need to be clarified before implementation. Under all circumstances the currency conversion should be carried out quickly over a weekend and, if necessary, a subsequent bank holiday. It remains unclear whether a bank holiday time frame exists that is long enough to complete the preparation, debate and enactment of

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11 See also Gupta et al. (2003).
12 Leaving a currency union is complicated, and there are several issues that a country needs to solve. Capital Economics (2012) provides an extensive and detailed analysis of what is involved in exiting a currency union. See also Born et al. (2012).
13 If a country leaves a weak currency to adopt a strong one, there will be no run on assets. For example, if Greece leaves the euro to adopt the drachma, there will be a run on assets in Greece. If Germany leaves the euro to adopt the deutsch mark, there will be no run on assets in Germany.
14 Eichengreen (2010) argues that this is the primary reason why it is very costly to leave a currency union and why member states are unlikely to do so.
16 Some withdrawal may be allowed, otherwise households and firms cannot function. The question is how much and how frequently?
17 Should there be different rules for different firms or households, etc.? Even discussing such issues may lead to widespread panic.
all the legislation necessary for an exit, but also short enough so that households and firms do not run out of cash. Some form of capital controls will probably have to be maintained even after the conversion until the exchange rate is stabilized, otherwise expectation-driven capital flight may ensue after the new currency is introduced.

The major difficulty is bank note conversion, which usually takes time. Hence a quick implementation of the exit would require converting all bank deposits, wage contracts, credit contracts and price tags to the new currency (e.g. by just changing the euro to drachma symbols and keeping all the numbers in the contracts), while initially keeping the euro coins and notes in circulation and turning them into a permanent gift to domestic citizens. New domestic bank notes could be printed and issued thereafter. This would immediately establish a dual currency system of the kind existing today in many Eastern European countries and Turkey with strong incentives both for firms and households to write euro contracts again, but it would make it possible to accelerate realignment. In any case, under any scenario, the community of states should support the exit process by alleviating some of the external debt and helping out with subsidies for sensitive imports, which are essential for the working of the economy.

Exits from currency unions are difficult, but not uncommon in history. In 1993 the Czechoslovakian state split and two separate currencies were formed. In 1979 Ireland gave up the pound and adopted its own currency. In 1924 the Scandinavian currency union with Sweden, Norway and Denmark was dissolved; and prior to World War I, Greece exited from the Latin Currency Union. All in all, Nitsch (2005) counted 128 exits from currency unions in the post-war period 1948 to 1997. However, he finds that exits from a currency union usually occur when inflation differentials are large between members, or when there is a change in the political status of a member (countries break up or regain independence).

When a country devalues externally, the currency depreciates quickly, export and import prices adjust relatively fast. Hence, the current account is likely to improve in the short run. When a country devalues internally, on the other hand, export and import prices adjust relatively slowly. Hence, the positive effect on the current account takes time to materialise. This must mean that the country will need external finance for a longer period of time and that the potential write-off of losses on the part of foreign private or public debtors will be larger. However, it also means that the costs of potential negative balance sheet effects will be spread over time under internal devaluation, instead of being realized swiftly under an external devaluation.

The main difficulty arising from an internal devaluation through price and wage cuts is that it drives a country into a period of stagnation and mass unemployment, which undermines the stability of society and may lead to social unrest. This is the reason why economists with otherwise divergent views, like Keynes and Friedman, have both highlighted the costs of internal devaluations. Today, youth unemployment in Spain and Greece, two countries that are struggling to organize a process of internal devaluation within the euro area, is above 50 percent; and there have been riots of increasing intensity in the streets, despite the fact that only a tiny part of the total devaluation required has already been achieved, as described below. All in all, the overvalued countries of Southern Europe are stuck in a trap from which there is no easy escape. All of the options seem problematic and it is unclear, which is the least problematic.

Let us now turn to the policy dilemma of the core countries. While a periphery country may feel that keeping the euro is the better option, core countries could cut their financial support to limit their write-off losses, thereby forcing the periphery country out of the currency union. The costs and benefits of such an action depend on different kinds of contagion effects.

Firstly, there is a risk of a speculative contagion. If a periphery country exits the euro, it leaves behind euro denominated liabilities, which are held as assets in the euro area. Uncertainty about the value of these assets could lead to widespread panic and a run on euro area banks similar to events following the collapse of Lehman Brothers. Although we do not exclude the possibility that an exit may generate contagion, we believe this to be less likely than some suggest. The shock, which hit the financial markets in the United States in October 2008, was so severe due to the opaque nature of the markets for the financial products traded by these institutions. It was unclear who held the counter-party risks, and how these assets were distributed across different institutions. The market for government bonds, on the other hand, is transparent. The risk of contagion due to a lack of
market transparency is significantly lower than it was in October 2008. Moreover, this risk could be reduced by announcing sudden and extensive debt relief. If such debt relief were to be extensive, and if external devaluation were to be performed quickly, it could even stabilise expectations given that devaluation, whether external or internal, was the only way to improve a country’s current account. The Greek bailout of Spring 2012 was by far the biggest in history (Gulati et al., 2012). Prior to the bail-out, many warned that it would give rise to a Lehman-like crisis, but these warnings failed to materialise.

Secondly, there could be political contagion. A currency union is meant to be a permanently fixed exchange-rate regime. An exit would demonstrate that the union does not satisfy this criterion. This would open the door for currency attacks on other periphery countries in the euro area in the form of a run on their government bond markets. High yields for a sufficiently long period of time would make the debt dynamics unsustainable, eventually forcing the other periphery countries out of the euro area and leading to an eventual break down of the whole enterprise. The likelihood of such an attack is difficult to predict. However, over the last three years there have been several occasions on which governments in the periphery have had problems issuing new debt because of market conditions. Policy-makers currently seem to think that the long-run benefits of a single currency are higher than the costs of preventing it from falling apart.

Thirdly, there is the moral hazard contagion. If an exit is ruled out by the community of states, this is likely to recreate the pre-crisis situation under the existing institutional arrangements of the euro area, whereby risk premiums would artificially be eliminated and the true effective rates of return of the periphery countries would be driven below those in the core countries (see EEAG, 2012, which includes a proposal on how to change the existing arrangements). This effect may have been at work after the decisions of September 2012, in particular the ECB’s unlimited-bond purchase decision, the German Supreme Court’s approval of the ESM, and the German Government’s turnaround from a policy of tolerating a Greek exit to a promise of supporting Greece’s ongoing participation.19 All of this has reduced risk premiums on Southern government bonds. Whether the existing premiums remain too high or too low is hard to judge. However, it can be argued that the Eurosystem’s ultimate problem was that it created too much investor safety, thus undermining the watchdog function of the capital market by creating a system of overly soft budget constraints (Sinn, 2012). As chapter 4 of this year’s report points out, the debt mutualisation scheme of finance minister Hamilton after the foundation of the United States of America had a similar effect in that it induced a period of excessive borrowing, leading to a credit bubble bursting in the period from 1838 to 1842, driving the majority of US states into bankruptcy and undermining the stability of the new nation.

2.3.2 How to devalue internally

For the time being, the policy decisions of the euro area countries have placed little emphasis on the moral hazard effect and seem to have paved the way towards internal devaluations. So let us now turn our attention to the question of how such devaluations can actually be achieved. There are several policy measures at a government’s disposal.

Firstly, nominal wage changes have a relatively strong effect on price level changes. Cutting nominal wages, and subsequently controlling wage growth, is the most direct way to reduce the price level or substantially slow down its rise. Lowering unit labour costs both in goods and service production seems to be necessary for successful adjustment. Although governments do not control wages in the business sector directly, they can still have a strong influence on market wages. They can cut and control public sector wages, which affect market wages. Moreover, they can step in to facilitate nominal wage agreements between employees and employers for a period of time to reduce the pressure of nominal wage increases on prices.

Secondly, policy-makers may use fiscal tools to manipulate the price level and relative price, i.e. they can carry out fiscal devaluations. Among others Calmfors (1998) suggested fiscal policy instruments that can change the relative prices between tradables and non-tradables, and between home and foreign goods if policy-makers shift fiscal revenues from labour to consumption taxes.20 Cutting labour taxes, and particularly social security contributions, leads

19 See Arghyrou (2012) for a summary and analysis of events in Greece since the beginning of the crisis, and EEAG (2011, Chapter 3) for an analysis of the period before the crisis.

20 For a complete general equilibrium treatment of the problem see Farhi et al. (2011).
to a reduction in the costs of labour. This, ceteris paribus, leads to a reduction in export prices and the price level. In addition, an appropriate value-added tax (VAT) increase makes the labour tax reduction revenue neutral. The advantage of the VAT increase from a devaluation point of view is that it is levied according to the destination principle, i.e. it is a tax on imports, with exports receiving rebates and effectively eliminating all taxes levied on intermediate stages of production. This ultimately increases the internal prices of imports and the decline in export prices leads to expenditure switching from foreign to domestic goods. In addition, depending on the relative size of the labour tax cut and VAT increase on non-tradables, and on the relative size of the non-tradable sector, fiscal policy can also lead to a decline in the relative price of non-tradables, thereby generating switches from tradables to non-tradables.

The recent empirical study by de Mooij and Keen (2012) suggests that this idea may work in practice. They use an unbalanced panel of 30 OECD countries between 1965 and 2009 to study the effect of fiscal devaluation on net exports. According to their benchmark result, a revenue neutral social security contribution cut and a corresponding VAT increase amounting to 1 percent of GDP lead to an increase in net exports of between 0.9 percent and 4 percent of GDP. This is a significant effect that could be exploited by the periphery countries in the euro area to increase their competitiveness.

The only drawback in the context of the European crisis could be that the Southern crisis countries have traditionally based their tax systems on indirect, rather than direct taxation. Carrying out an internal devaluation of the kind described above would therefore require the euro area to disharmonise its tax systems even further.

Thirdly, a country can regain its competitiveness through faster productivity growth. At a given wage level, faster productivity growth reduces unit labour costs without provoking the resistance of unions and hence enables firms to reduce their prices.

Fourthly, expectations regarding rapid convergence with the euro area core are one of the factors responsible for generating the current account deficits in periphery countries prior to the crisis. However, the crisis most likely led to a downward revision of these expectations. If the expectations about future income growth were reduced, so were expectations about future consumption. This leads to an increase in savings and a reduction in aggregate demand, which decreases the pressure on the price level and improves the current account. Thus, the fall in demand should slow down inflation in the periphery compared to the core, leading to an internal devaluation in the periphery.

2.3.3 How much devaluation is needed?

The theoretical discussion on how to implement devaluation needs to be complemented by quantitative considerations. There are three crucial questions related to the need for depreciation. How do we define rebalancing, how much real depreciation is needed in the GIIPS countries to achieve this rebalancing, and how can such depreciation be achieved.

Any definition of rebalancing requires the assumption that the international investment position of the country relative to GDP is stable at some level. This may or may not require a balanced current account. A meaningful quantitative assessment of the sustainability of the international investment position requires a general equilibrium analysis. Goldman Sachs (2012) has recently carried out such an analysis for the euro area. This analysis uses a general equilibrium framework, which focuses on how goods are reallocated across countries as the real exchange rate changes when the supply of tradable and non-tradable goods is given in each country. Thus, it solely focuses on how much real exchange rate adjustment is needed to make expenditure switching between home and foreign tradable goods on the one hand, and between tradable and non-tradable goods on the other, sufficiently large so that the implied current account adjustment implies a sustainable foreign liability position. The analysis also assumes that the adjustment will last for about ten years, and requires that the net foreign investment position is stabilized between ± 25 percent of GDP.

The calibrated Goldman Sachs model implies that Portugal is required to make the largest real exchange rate adjustment. A 35 percent depreciation is required by Portugal to make its international investment position sustainable. Greece and Spain require 30 percent and 20 percent depreciations, respectively, while the fig-

\[\text{21 They use a variant of the framework of Obstfeld and Rogoff. See Obstfeld and Rogoff (2005) for a canonical open economy model to analyse current account adjustment.}\]
ure for Italy is lower at around 10–15 percent. Finally, the smallest real exchange rate depreciation of around 0–5 percent is required from Ireland. At the same time, the real exchange rate of Germany should appreciate by 25 percent. The study also calculates the size of the inflation differentials implied by the depreciations/appreciations required. Assuming an average inflation rate of 2 percent in the euro area, the Goldman Sachs (2012) study concludes that inflation of around 4 percent in Germany and the rest of the core euro area countries together with zero inflation in the periphery is required for the rebalancing process to be completed in about 10 to 15 years.

2.3.4 Lessons from the Baltics and Ireland

Four member countries of the European Union have undergone an internal devaluation since 2007. These four countries are two members of the euro area, Ireland and Estonia, and the two other Baltic countries that maintained a fixed exchange rate during the crisis period. This section reviews their adjustment process.

Figure 2.10 summarises the main macroeconomic indicators of these four countries. All four countries carried out a substantial internal devaluation while maintaining the fixed exchange rate. Latvia and Ireland devalued by over 25 percent from the peak to the trough of their exchange rate indexes. Estonia and Lithuania devalued less, but still by over 15 percent. All of the countries markedly improved upon their pre-crisis current account balance as a result, with Latvia moving from a deficit of over 20 percent of GDP to a surplus of over 10 percent of GDP within just a few years. This adjustment, however, was very costly both in terms of output and employment. The output loss was between 15–25 percent, with the largest loss recorded in Latvia and the smallest in Ireland. The Baltic countries have been growing strongly since this output trough, but they are still a fair way off their pre-crisis output levels, while Ireland’s output, on the other hand, remains fairly flat. As for unemployment, it jumped to around 20 percent in the Baltic countries before dropping to around 15 percent, and to 10 percent in the case of Estonia. Unemployment in Ireland rose gradually, reaching 15 percent at the beginning of 2012. Finally, government balances have also improved since the beginning of the crisis. Government debt has risen significantly in all countries apart from Estonia. The increase was particularly large in Ireland, where the deficit increased not only because of the recession, but also because of the bail-out of its banks. However, it must be emphasised that pub-

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22 When calculating the requisite depreciations, potential valuation effects on the net international investment position are taken into account.
lic debt levels remained low in the Baltic countries, which helped their economies during the adjustment period.

The lessons to be drawn from the adjustment experience of the Baltic countries are rather controversial and it is debatable whether they offer an example to be followed. The adjustment was achieved partially through wage cuts and partially by improving productivity through reducing employment. Both led to a fall in aggregate demand, hence to a large output loss. To restore labour productivity growth after such an output loss, a large reduction in employment was inevitably required. Was the internal devaluation successful? This question is hard to answer without knowing the extent to which these countries were overvalued before the crisis. The negative effect of appreciation on competitiveness was certainly offset to some extent by rapid productivity growth. However, it remains to be seen whether the devaluations carried out in the Baltic countries were sufficient to achieve rebalancing.

The recession in Ireland was driven by a sharp contraction in aggregate demand due to the collapse of the construction sector. Overall, the decline in aggregate demand led to deflation, and hence realignment. The GDP deflator declined by 6.5 percent between 2008 and 2011, and by about 15 percent between 2006 and 2012. However, the depreciation of sterling also contributed to this decrease, since imports from Britain, which are significant, became cheaper.

Overall the austerity measures that resulted in the necessary internal devaluation were costly in terms of output and employment, both in the Baltics and in Ireland. In the absence of counterfactual evidence, we will never know whether these countries could have achieved the adjustment at a lower cost if they had devalued their currency. Past experience suggests that this may have been possible, although the currency mismatch would have caused problems. Why did they not devalue externally? This may have been more difficult for Ireland because it could only do so by leaving the euro. Latvia and Lithuania, on the other hand, had only pegged their currency to the euro and could have devalued more easily. According to the Latvian Prime Minister, Valdis Dombrovskis, Latvia did not opt for external devaluation because it would have violated the entry conditions governing a switch from ERM II to the euro. Yet the cost of postponing entry to the euro by a few years does not seem particularly high compared to the loss of output and employment subsequently experienced by the country. However, if postponing the entry to the euro were also viewed by market participants as a signal of a broader policy and institutional regime change, abandoning the peg could have proven very costly for a country that was just recently regaining its independence and with institutions supporting the market economy that were still evolving.

2.3.5 Adjustment in progress: internal devaluation in the periphery since 2008

Since the beginning of the crisis, there has been adjustment in the periphery of the euro area, or if we include Italy, in the GIIPS countries; but the timing and the scale of adjustment has been heterogeneous. The left panel of Figure 2.11 shows that Spain and

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Figure 2.11

Current account balances and private savings

<table>
<thead>
<tr>
<th>Country</th>
<th>Change in current account balances relative to GDP, 2007-2011</th>
<th>Change in private savings relative to GDP, 2007-2011</th>
</tr>
</thead>
<tbody>
<tr>
<td>Estonia</td>
<td>-5.0</td>
<td>-2.2</td>
</tr>
<tr>
<td>Cyprus</td>
<td>-5.9</td>
<td>-2.3</td>
</tr>
<tr>
<td>Ireland</td>
<td>-5.8</td>
<td>-3.0</td>
</tr>
<tr>
<td>Spain</td>
<td>-1.8</td>
<td>-1.4</td>
</tr>
<tr>
<td>Malta</td>
<td>-2.9</td>
<td>-1.3</td>
</tr>
<tr>
<td>Latvia</td>
<td>-3.0</td>
<td>-1.2</td>
</tr>
<tr>
<td>Slovakia</td>
<td>-2.6</td>
<td>-1.0</td>
</tr>
<tr>
<td>Slovenia</td>
<td>-3.0</td>
<td>-0.9</td>
</tr>
<tr>
<td>Greece</td>
<td>-3.4</td>
<td>-0.8</td>
</tr>
<tr>
<td>Portugal</td>
<td>-3.8</td>
<td>-0.6</td>
</tr>
<tr>
<td>Austria</td>
<td>-3.6</td>
<td>-0.5</td>
</tr>
<tr>
<td>France</td>
<td>-4.5</td>
<td>-0.9</td>
</tr>
<tr>
<td>Italy</td>
<td>-3.3</td>
<td>-1.2</td>
</tr>
<tr>
<td>Germany</td>
<td>-5.4</td>
<td>-1.0</td>
</tr>
<tr>
<td>Austria</td>
<td>-5.6</td>
<td>-1.3</td>
</tr>
<tr>
<td>Luxembourg</td>
<td>-5.0</td>
<td>-1.3</td>
</tr>
<tr>
<td>Belgium</td>
<td>-5.8</td>
<td>-1.1</td>
</tr>
<tr>
<td>Finland</td>
<td>-5.9</td>
<td>-1.0</td>
</tr>
</tbody>
</table>

Source: Eurostat, last accessed on 10 December 2012.

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24 See Lane (2011) for further details about the Irish crisis.

25 Speech given at the Munich Economic Summit, see Dombrovskis (2010).
Ireland have improved their current account balance by about 6 percent of GDP in the last four years, while Greece and Portugal recorded 4.7 and 3.6 percentage point improvements. The current account balance only deteriorated in Italy, which had a relatively small current account deficit before the crisis. Overall, the pattern we observe is that the current account typically improved in countries that started out with a deficit, and worsened in countries that started out with a surplus. Figure 2.4 shows that Ireland, Greece, Portugal and Spain have improved their balance on goods markedly since 2007 and continued to improve their balance on services. It was the negative balance on income that dragged down their current account.

The most remarkable adjustment was carried out by Estonia, which improved its current account balance by almost 20 percentage points over the four year period. If we look at the counter part of this adjustment in private savings on the right panel of Figure 2.11, we see that households in Spain, Portugal and Ireland adjusted to the crisis environment by increasing their savings, and contributing substantially to the reduction of their current account deficits. In contrast, private savings declined in Italy and Greece. Without significant improvement in private savings, it is doubtful whether rebalancing can be successful in the long run. This is because higher demand at home due to lower savings will eventually push the price level up at home, thereby leading to a real appreciation.

Unfortunately, most of the improvements in current accounts seem to be due to mere income effects. Given that the crisis drove down incomes and created rising mass unemployment, imports declined with incomes, while exports remained relatively more stable. This sort of adjustment is not what the euro area needs to achieve stabilisation. It requires a substitution away from imports and towards domestic products driven by changes in relative prices, i.e. by a real devaluation.

As far as this criterion is concerned, however, there has been little improvement in the euro area. The price level in Ireland relative to Germany fell by 7.4 percent between Q1 of 2008 and Q3 of 2012, as shown by Figure 2.12. Spain depreciated by 2.8 percent relative to Germany, whereas Greece retained its respective relative price level with Germany. Italy and Portugal appreciated slightly over this period.

As noted above, such real appreciation may not have a negative impact on competitiveness if there is an equally strong aggregate average productivity increase resulting from a productivity increase in the tradable goods sector only. The right panel of Figure 2.12 shows the changes in GDP per employee relative to Germany. Firstly, it is worth noting that Ireland and Spain not only depreciated internally between Q1 of 2008 and Q3 of 2012, but also improved their productivity markedly. Secondly, although the price level of Greece and Portugal did not change much, both countries managed to improve their productivity levels. Hence, they might have improved their competitiveness relative to Germany insofar as the true decrease in tradables prices was larger than the GDP deflator shows as, according to the Balassa-Samuelson effect, the wages and prices of non-tradables rose with a differential productivity increase in the tradables sector. There is some uncertainty with this interpretation, however, because export prices in most crisis countries increased relative to the GDP deflator. Only in Spain it fell a bit. Thus, even if there was a

Figure 2.12

<table>
<thead>
<tr>
<th>Change in price levels relative to Germany 2008Q1-2012Q3</th>
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<tr>
<td>Luxembourg</td>
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<td>Slovenia</td>
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<td>Austria</td>
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<td>Estonia</td>
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<td>Spain</td>
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<td>Ireland</td>
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<table>
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<tr>
<th>Change in GDP per employee relative to Germany 2008Q1-2012Q3</th>
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<tr>
<td>Luxembourg</td>
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<td>Belgium</td>
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<td>Netherlands</td>
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<td>Bulgaria</td>
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<td>Spain</td>
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<td>Slovakia</td>
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</tbody>
</table>

* Measured with the GDP deflator.
Source: Eurostat and EEAG calculations, last accessed on 15 January 2013.
Balassa-Samuelson effect at work, inflation of tradable goods unrelated to the Balassa-Samuelson effect appears to be larger in most countries, as in the period before the crisis. Of course, if there is no differential productivity increase between tradables and non-tradables, the change in price levels cannot be attributed to the Balassa-Samuelson effect. In all events, the message as far as Italy is concerned is not very encouraging. Price level changes indicate a small real appreciation, but productivity deteriorated relative to Germany. The country’s competitiveness is therefore likely to have declined since 2008.

An alternative measure of competitiveness is unit labour costs, which are defined as the ratio of wage per unit of time and labour productivity. Figure 2.13 shows the change in nominal unit labour costs broken down by type of production (goods versus services) and by time period (2000–2007 and 2007–2011). The first important observation is that unit labour costs increased significantly in Greece prior to the crisis in goods production, but less so in the other Southern European countries or in Ireland. In contrast, unit labour costs fell in Germany and in several other countries in goods production. Unit labour costs in services obey a different dynamic. They increased prior to the crisis in all countries apart from Germany. The second observation is that the increase in unit labour costs has slowed down considerably since the crisis. It fell in Ireland, Spain and Greece in goods production. However, it has shown faster growth in Greece in services production than previously. Overall, changes in unit labour costs suggest some improvements in cost competitiveness in the Southern periphery. However, it should be emphasised that a decline in unit labour costs does not in itself improve competitiveness, but only insofar as it makes it easier for firms to reduce their prices, which is ultimately required to improve competitiveness and rebalance current accounts via a substitution effect, i.e. without increasing unemployment. Should nominal wages remain unchanged, there is a good chance that such a decline in unit labour costs does improve competitiveness. However, as the price level comparison in Figure 2.12 suggests, this process is still in its early stages.

2.4 Rebalancing in the euro area: government balances

Current account balances must also be consistent with the balance between saving and investment. This is partly the balance between government saving and investment. The GIIPS countries also need to make eventual adjustment to their fiscal balances. Such an adjustment, however, can take several years.

However, the immediate concern is how to design a fiscal policy such that it credibly commits policy-mak-
ers to a deficit reduction plan that is consistent with long-term external and internal sustainability on the one hand, and also allows for some counter-cyclical fiscal policy on the other. During a sovereign debt crisis the danger faced by policy-makers is that if they reduce the deficit sufficiently to make the fiscal adjustment credible for market participants today, it may well lead to output losses tomorrow, requiring further adjustments.

It therefore makes more sense to focus on which fiscal policy mix, i.e. combination of expenditure cuts and tax increases, is most appropriate at the time that a crisis strikes. Appropriately designed fiscal adjustment may even prove to have a positive effect on output.\footnote{There is an on-going debate over whether the results regarding an expansionary fiscal contraction are robust or not. Alesina and Perotti (1997), and Alesina and Ardagna (1998, 2012) argue that it is possible to design such a policy. In contrast, Guajardo et al. (2011) argue that the empirical evidence on the existence of such a policy is not robust. See Ramey (2011) for an overview of the literature about the effects of government expenditures.}

The general lesson from the empirical literature on this topic is that a fiscal adjustment based largely on reducing expenditure is more likely to be more successful, and longer lasting than adjustment based on tax increases.\footnote{See Alesina (2012), Alesina and Ardagna (1998, 2012), Alesina et al. (2012), and von Hagen and Strauch (2001).} In addition, fiscal adjustment based on expenditure cuts is likely to boost output, particularly when it is combined with growth-oriented reforms such as the liberalization of labour and goods markets.

Figure 2.14 shows the change in government expenditure and revenues between 2008 and 2011. It is interesting to see that the two countries that increased revenues relative to GDP significantly during this period were Greece and Portugal. These are the two countries where adjustment is slow. Given that GDP was falling in this period, adjustment required significant increases in tax rates, leading to higher distortions and to a negative effect on supply. More emphasis on expenditure cuts might have made the adjustment faster in Greece and Portugal as it did in Ireland.\footnote{The Irish expenditure figures are misleading in the sense that they include the cost of bailing-out the Irish banks.}

2.5 Conclusions

Europe is in the grip of three interrelated crises: a balance-of-payments crisis, a sovereign debt crisis and a banking crisis. Although progress has been made to resolve the sovereign debt and banking crises in the last four years, policy-makers have devoted little attention to the balance-of-payments problem. A credible strategy for getting the euro back on track also needs to address this issue.

Since 2000 large imbalances have accumulated in the euro area in the form of current account deficits and surpluses. In the euro area periphery in particular, Greece, Portugal, Spain and Ireland have run persistent current account deficits with mostly high growth, investment and house price bubbles (Portugal being an exception); while the Northern core of the euro area, and most notably Germany, have run a persistent current account surplus with declining house prices and low investment. Given that the capital market is no longer willing to finance their current account deficits, the periphery countries need to devalue in order to regain competitiveness and reduce their dependence on foreign credit. The key policy question is whether they should pursue internal or external devaluation; or whether a periphery country should remain within, or exit the euro area. The answer to this question is not clear because the preferred route of internal adjustment through inflation in the core may not be available, but deflation will result in severe distortions in company balance sheets. An external devaluation, on the other hand, may entail high contagion costs, although it improves the incentives for debtor countries not to overstretch their credit limits. In addition, it also requires the redenomination...
of assets, liabilities and contracts prior to exit, which is likely to cause severe disruption in the short run. Given that, for the time being, policy-makers have decided to exclude the exit option, the emphasis of economic policy must be on seeking possibilities for internal devaluations. As we showed, a fiscal devaluation by replacing direct with indirect taxes would be a possibility worth considering.

Since the beginning of the crisis, the countries of the periphery have all been undergoing adjustment, albeit to varying degrees. Whereas the Irish adjustment went a long way and Spain has made some progress in terms of productivity increases, the Portuguese, and particularly the Greek adjustments seem to be slow, to say the least. Against this background, the competitiveness crisis currently impacting some of the euro area countries looks set to continue for quite some time to come.

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LABOUR MARKET REFORMS AND YOUTH UNEMPLOYMENT

3.1 Introduction

High and rising unemployment rates over the last few years have drawn attention to the functioning of labour markets in European countries and the need to reform those institutions and policies that affect them. Arguments for reform are partly driven by the immediate need to reduce public borrowing, particularly in Greece, Spain, Portugal, Ireland and other countries with public debt problems. They are also driven by the need to rebalance demand towards those countries, which have become uncompetitive, have been running persistent current account deficits and now have high unemployment. Meanwhile in the background there are the long-term objectives of improving the way that these markets work, lowering the structural unemployment rate, making labour markets more shock-resistant, and giving economies greater scope for growth in the future.

This chapter examines the interactions between the different institutional characteristics of labour markets in Europe, and the impact of the current recession on their unemployment structure and dynamics.

Section 3.2 sketches the wide variety of unemployment experiences across countries in recent years, while Section 3.3 discusses the motivations for and effects of the existing configuration of labour market institutions, and possible reforms to them. Section 3.4 looks at youth unemployment, vocational training and apprenticeships. Section 3.5 traces the impact of crisis on the resulting heterogeneous labour market configurations and discusses current pressure for reform in problem countries; and Section 3.6 concludes by reviewing desirable reforms and their potentially problematic features.

3.2 Unemployment rates

As shown in Figures 3.1 and 3.2, aggregate unemployment in the European Union was 7.2 percent in 2007, and rose to 10.4 percent in 2012; while in the euro area, it rose from 7.6 to 11.3 percent over the same period. These changes (if not the levels) are comparable to those seen in the United States, where unemployment rose from 4.6 to 8.1 percent over the same period. Within the European aggregates, however, there are wide differences between countries as regards not only the overall unemployment rate, but also the level and changes in its long-term and youth components. Most relevant and striking is the contrast between the countries (Greece, Spain, Ireland, and Portugal) with the most serious debt sustainability issues and those countries that did not suffer from the resulting high interest rates and restrictive fiscal policies. Between 2008 and 2012, unemployment increased from 7.7 to 23.7 percent in Greece, from 8.3 to 25.0 percent in Spain, from 4.6 to 14.9 percent in Ireland and from 8.5 to 15.7 percent in Portugal; over the same period, aggregate unemployment has actually fallen from 7.5 to 5.5 percent in Germany, and risen only slightly in the Nether-

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1 There is a small discrepancy between the figures quoted in this chapter and Chapter 1 because the sources are different and the basis of the calculations differ slightly.
lands (from 3.1 to 5.2 percent), Austria (from 3.8 to 4.3 percent), and Finland (from 6.4 to 7.7 percent). The data for other countries lie in between, and are not as clearly related to debt sustainability issues (as for example Italy’s unemployment rate, which increased from 6.1 to 10.5 percent and that of Denmark, which rose from 3.4 to 7.7 percent).

Figure 3.3 shows that long-term unemployment, defined in Europe as the percentage of the active population that has been unemployed for over a year, has also grown considerably, following much the same pattern and rising (to 12.3 percent in Greece, 10.3 percent in Spain, 9.6 percent in Ireland, 6.9 percent in Portugal) in problem countries, but remaining low (2.7 percent in Germany, 1.0 percent in Austria, 1.8 percent in the Netherlands) in countries that recovered quickly from the Great Recession. Other countries again offer a varied picture, with long-term unemployment low in Denmark (at 2.2 percent), but higher in Italy (5.3 percent) and France (4.1 percent).

Youth unemployment rates (for persons aged 15 to 24), shown in Figure 3.4, now lie in the range of 30–55 percent in Greece, Spain, Ireland, Portugal and Italy. Those numbers actually make the youth unemployment problem look worse than it really is, as only a small fraction of the population of persons aged 15–24 is in the labour force, and most are in education or training. As Figure 3.5 shows, youth unemployment as a percentage of the population rather than the labour force is high, but less alarming.

Actual unemployment rates can be considered as the sum of two
parts. Firstly, structural unemployment is the rate that would emerge if the economy were not hit by shocks to demand or supply, if inflation were held at a low steady rate, and the economy grew smoothly. Secondly, cyclical unemployment, the remainder, results from shocks: like the boom in real-estate in some countries and in a wider range of financial assets in others between 2001 and 2007; and the collapse of demand since 2008.

How much current unemployment is structural? Some recent estimates produced by staff of the OECD and the European Commission are given in Table 3.1. The OECD estimates for 2007 range from 3.8 percent for the Netherlands, 4.2 percent for Denmark, 4.7 percent for Ireland, 4.9 percent for Austria, 5.1 percent for Sweden and Spain, up to 8.4 percent for Germany and 9.8 percent for Greece. Structural unemployment rates change over time, and they cannot be estimated with much precision, as the standard errors reported in Table 3.1, column 2, indicate. European Commission estimates for 2010 show large increases for some countries, particularly Spain, Portugal and Ireland, which have had large increases in actual unemployment. In general, however, these estimates show, unsurprisingly, that current unemployment contains a large cyclical component for most European countries. Germany, whose current unemployment rate lies well below the structural rate, is the notable exception. The countries that have had to apply the severest “austerity” policies, namely Ireland, Portugal, Spain and Greece, have (again, unsurprisingly) the largest rates of cyclical unemployment, as well as high structural employment.

### Table 3.1

<table>
<thead>
<tr>
<th>Year of estimate</th>
<th>Non-accelerating inflation rate of unemployment (NAIRU)</th>
<th>Standard error of NAIRU estimate</th>
<th>Non-accelerating wage rate of unemployment (NAWRU)</th>
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<tbody>
<tr>
<td>Austria</td>
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<td>0.30</td>
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<tr>
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<td>0.93</td>
<td>7</td>
</tr>
<tr>
<td>France</td>
<td>8.3</td>
<td>0.71</td>
<td>10</td>
</tr>
<tr>
<td>Germany</td>
<td>8.4</td>
<td>1.09</td>
<td>8</td>
</tr>
<tr>
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<td>9.8</td>
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<td>–</td>
</tr>
<tr>
<td>Ireland</td>
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<td>0.48</td>
<td>12</td>
</tr>
<tr>
<td>Italy</td>
<td>6.4</td>
<td>1.30</td>
<td>8</td>
</tr>
<tr>
<td>Netherlands</td>
<td>3.8</td>
<td>0.45</td>
<td>4</td>
</tr>
<tr>
<td>Portugal</td>
<td>6.9</td>
<td>0.99</td>
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</tr>
<tr>
<td>Spain</td>
<td>5.1</td>
<td>–</td>
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</tr>
<tr>
<td>Sweden</td>
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<td>0.80</td>
<td>7</td>
</tr>
<tr>
<td>United Kingdom</td>
<td>5.3</td>
<td>0.45</td>
<td>8</td>
</tr>
</tbody>
</table>

Unemployment rate measured in percent of labour force.

Source: Gianella (2009), Orlandi (2012).

### 3.3 Motives for and effects of labour market regulation and reform

The labour market institutions that have been the subject of reforms in the recent past and are candidates for further change now are: the system of unemployment and other social security benefits; the system of wage determination, including unions and collective bargaining; employment protection legislation; minimum wages; the tax wedge; active labour market policies; and vocational training and apprenticeships.

Some structural policy changes permit lower public spending and higher tax revenue. Such changes combine a short-term budgetary saving with a possible long-term
reduction in structural unemployment. However, they are highly contentious: some people are made clearly worse off by them in the short-term, even if many people stand to gain eventually. Cutting unemployment benefits, increasing the retirement age, cutting minimum wages, reducing severance payments or periods of notice for dismissals, for example, clearly go against the short-term interests of workers and the unemployed; they impoverish people who are already low down in the distribution of incomes. “Smart” policy changes that assemble combinations of elements may be able to compensate people who suffer losses from the effects of some of the policy elements with gains from others, and find more support.

3.3.1 Motives for intervention in labour markets: broad principles

Efficient allocation and reallocation of employment usually requires effort by workers, for whom changing jobs is costly. In laissez-faire labour markets such efforts need to be prompted by wage variability across more or less productive workers and jobs. Since it is difficult and important for individuals to be sheltered from the excesses of such variability, labour market institutions aim at reducing ex post inequality of outcomes for ex ante similar individuals, and/or at redistributing resources across different individuals. At the same time, they may affect aggregate employment and output negatively: higher wages reduce employment demand; non-employment subsidies reduce labour market participation and search effort; employment protection legislation and institutional wage compression reduce the efficiency of labour (re)allocation. To reconcile flexible reallocation and work incentives with the objective of sheltering labour incomes from risk, public training programs, in-work subsidies, and other active labour market policies combine forms of income support with measures meant to ensure that labour is not idle (as it might be in a simple unemployment benefit program) or employed in low-productivity jobs (as employment protection tends to imply). Such policies can combine “security” with “efficiency”, but imply a third “fiscal” aspect of a policy trilemma: high levels of employment and security may be achieved at the same time only by committing sizable resources to the funding of labour market policies.

Some countries lean towards activation, others towards welfare support; some have emphasised security, others incentives and opportunities. The pros and cons of the systems depend on their socio-economic characteristics. A tighter family structure can, for example, make youth non-employment more acceptable as the price of job security and high wages for older workers. Of course, there need not be clear cause and effect relationships between the two features of different countries. It may be that the poor job-finding prospects are effectively what keep youths attached to their families of origin. Complementarities between these and other characteristics of different labour markets and societies should nevertheless be kept in mind when advocating the adoption of different institutional frameworks.

3.3.2 The role of collective bargaining and restrictions on competition

While the benefits of competition are widely recognised in goods and services markets, collective wage bargaining is exempted from anti-trust rules even in the United States, where Section 6 of the 1914 Clayton acts exempts labour unions and agricultural organizations because “the labour of a human being is not a commodity or article of commerce”. Higher and more uniform wages are obviously appreciated by workers, even if they come at the cost of lower employment, production, and profits, because working households do not have access to a perfect financial market where labour income can be traded.

Restrains on wage competition can allow employers to finance their apprentices’ general human capital accumulation without fearing that a trained worker will be head-hunted by higher wage offers (Acemoglu and Pischke, 1999): this increases production efficiently in cases where financial constraints would prevent workers from funding their own training, or indeed mobility towards more productive jobs (Bertola, 2004). Unemployment benefits and employment protection can also be beneficial if, by providing a safety net financed by society or by employers, they encourage workers to take individual risks that increase average production (Sinn, 1995).

The balance between the costs and benefits of labour market policies depends on the environment in which they operate. In recent decades (characterised by globalization, information technology progress, and macroeconomic stability), for instance, acquiring general skills and the ability to adapt to new technologies and perform new jobs in flexible, evolving labour markets were often viewed as advantages of
the Anglo-Saxon approach to labour market mechanisms. The strong performance of other systems during the crisis may lead to a reassessment of this view: the jobs-for-life promise of Germanic systems of vocational education and tightly regulated occupational and wage-setting schemes seemed obsolete a short while ago. However, a crisis that revealed the shortcomings of flexibility and financial markets undoubtedly increased their appeal. Practical implementation of specific policies, however, must also be aligned with the socio-economic features of the countries involved: attempts by the United Kingdom and France to introduce apprenticeship type vocational training schemes encouraged by the German example have met with little success.

3.3.3 Inequality

Labour market rigidities not only reduce production efficiency, they also stabilise and equalise labour incomes. While international competitiveness requires labour market flexibility, workers certainly dislike insecurity. Bertola (2010a) finds that European Monetary Union (EMU) countries experienced substantially faster deregulation of their product markets and some deregulation of their labour markets. As a result, employment grew and unemployment declined everywhere, and more strongly where economic integration was tighter. In fact, changes to labour market institutions now account for all of the increase in inequality that the data also associate with EMU (Bertola, 2010b). As rigid labour markets could not cope with the internationalization of production, their increasingly unpleasant unemployment implications were addressed not only by deregulation, but also by the vigorous development of financial markets in the 1990s and early 2000s.

Labour market reforms are almost always painful. Regulations that keep primary workers’ labour income high and stable, while typically making it difficult for youth to find employment, can lower household income inequality. However, Figure 3.6 shows that employment has been higher in countries with low inequality. This may reflect persistent socio-economic differences between Mediterranean and Scandinavian countries, for example. However, inequality grew in Germany between 2005 and 2009, as employment grew. In Italy higher inequality was also associated with higher employment. In Denmark, by contrast, inequality rose while employment fell. The general tendency for inequality to rise is probably due to the nature of changes in technology, but labour market deregulation and the introduction of low-wage employment opportunities, may have contributed to it.

3.3.4 Institutions and reforms

Institutions and policies affect labour markets in many different ways, and many detailed features of them are important. Reducing them to a small number of summary indices is a hazardous task. This is nevertheless attempted by the OECD in a bid to show how institutions have changed over time and differ between countries. Tables 3.2, 3.4, 3.6 and 3.7 report a selection of the most important indicators in 1997 and 2005 to show how things changed in the years leading up to the financial crisis.

3.3.4.1 Unemployment and other social security benefits

The OECD data in Table 3.2 summarise the benefits system with measures of the gross and net replacement rates: the ratio of benefits to earnings before tax, and after tax respectively, for an average worker. There is a striking contrast between the low
net replacement rates in the United States and Japan, and those in many European countries. Three Nordic countries have high net replacement rates, as may be expected: 66 percent in Denmark, 61.4 percent in Finland, and 75.9 percent in Norway in 2007. The rate in Sweden, however, is relatively low, at 42.8 percent, since Sweden was forced to scale back benefits in the early 1990s after a major recession, caused by a banking crisis, and a collapse in demand raised unemployment to double-digit levels, making the previously very generous system unsustainable. Pressure on public finances forced a retreat from the previously successful “Swedish model”. Other countries have similarly generous regimes, including Austria (59.6 percent), Belgium (63.6 percent), and Germany (63 percent).

Labour market reforms always face difficult trade-offs. The Hartz reforms were prompted by the competitiveness pressures induced by the country’s reunification and European economic and monetary unification. While some measures were intended to increase overall productivity (for example, “workfare” rules made it possible to activate some poverty-trapped labour by allowing workers to retain a portion of their benefits when taking up work), the brunt of the reform induced wage moderation. Specifically, smaller benefit entitlements, in the absence of a legal minimum wage, strongly increased the supply of low-skill and de-unionised labour, and brought down unemployment by allowing workers to bid down the low end of wage distribution. Hence, higher employment came at the price of somewhat lower and far greater inequality as far as wage incomes are concerned (Eichhorst, 2012; Burda and Hunt, 2011; Dustmann et al., 2009). While some countries have responded to the fall in the demand for labour largely by cutting the numbers of workers employed, others have spread out the cuts by shortening working hours. When labour demand fell in Germany in 2009 working hours were reduced, partly by using the Kurzarbeit scheme in the social security legislation, but mostly by employers using the flexibility in labour agreements to modify working hours within quite broad parameters for periods of up to three months and in some cases a year. In Italy firms have made use of similar provisions that subsidise shortened working hours through the social security system, resulting in a smaller rise in unemployment. In the United Kingdom short-time working has been accepted by unions and workers as a means of preserving jobs, without any particular scheme to provide incentives via social security contributions. In Denmark, net replacement rates in the United States and Japan, and those in many European countries. Three Nordic countries have high net replacement rates, as may be expected: 66 percent in Denmark, 61.4 percent in Finland, and 75.9 percent in Norway in 2007. The rate in Sweden, however, is relatively low, at 42.8 percent, since Sweden was forced to scale back benefits in the early 1990s after a major recession, caused by a banking crisis, and a collapse in demand raised unemployment to double-digit levels, making the previously very generous system unsustainable. Pressure on public finances forced a retreat from the previously successful “Swedish model”. Other countries have similarly generous regimes, including Austria (59.6 percent), Belgium (63.6 percent), and Germany (63 percent).

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firms used their flexibility to cut jobs rather than hours very quickly after 2008. In Spain and Portugal tight restrictions on the hours and pay of regularly employed individuals have thrown the burden onto temporary workers, who have become unemployed in large numbers. However, in recent reforms (Bentolila et al., 2011) Spain has learnt a few lessons from the successful experience of the Kurzarbeit scheme in Germany. Reductions in hours will now be incentivised by reducing firms’ social security contributions while not reducing workers’ entitlements to benefits.

### 3.3.4.2 Active labour market policies

Active labour market policies (ALMPs) have become more important over the last two decades in many European countries. Following years in which governments typically paid out unemployment and other benefits, but did little to influence the behaviour of recipients, allowing a variety of social problems to worsen and the costs of the benefits system to rise as the numbers of recipients grew, governments in the 1990s started to intervene. They applied more rigorous tests of availability for work, and attempted to make an active search for work by recipients a condition for receiving benefits. The separation between the public offices that paid benefits and those supporting job searches was ended. Long-term unemployed persons are now generally interviewed and given counselling and training to help them apply for and get work. Governments in some cases provide training or retraining programmes, and in some cases guarantee jobs for the long-term unemployed, if only for a fixed period. They may also subsidise firms to take on long-term unemployed workers, or subsidise other providers of training. In Britain such policies have been described as “harassment of the work-shy”. The aim of ALMPs is to allow generous benefits to coexist with low overall structural unemployment and low long-term unemployment. ALMPs are an important ingredient in the bundle of policies that constitutes flexicurity.

While increased spending on ALMPs may improve the functioning of labour markets and reduce structural unemployment, it does not contribute to lower public deficits, and therefore is not currently an attractive policy for the cash-strapped economies of Europe’s periphery. There may nevertheless be strong arguments for spending more on ALMPs and making them work better in many of these countries as fiscal conditions improve. The OECD figures in Table 3.3 show that Denmark spent 1.9 percent of GDP on ALMPs in 2010, followed by Belgium (1.5 percent), the Netherlands (1.2 percent), France (1.1 percent), and Ireland (1.0 percent). Portugal and Sweden spent around the OECD average at 0.7 percent of GDP, Spain slightly more along with Germany at 0.9 percent, while Italy comes down low at 0.5 percent, and the United Kingdom and the United States spent the least at 0.4 and 0.1 percent, respectively.

Among the problem economies of the periphery, Spain has undertaken modest reforms recently (Bentolila et al., 2011), restricting the groups of workers eligible for subsidies on job creation and allowing private placement agencies to operate for the first time.

### 3.3.4.3 Employment protection legislation (EPL)

Excessively strong employment legislation has been a major problem in a number of countries. The OECD data in Table 3.4 include indices of the strength of the legislation for regular employees and temporary workers. The indices summarise factors like the size of the severance payments that firms are required to make, the periods of notice that are required before dismissals can be made, the range of conditions under which dismissals can be made, and so on. The distinction between regular and temporary workers has become very important in recent years since the introduction of temporary contracts in some countries has led to huge growth in the

<table>
<thead>
<tr>
<th>Country</th>
<th>Index Value</th>
</tr>
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<tbody>
<tr>
<td>Belgium</td>
<td>4.2</td>
</tr>
<tr>
<td>Denmark</td>
<td>4.1</td>
</tr>
<tr>
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<tr>
<td>Germany</td>
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<td>Netherlands</td>
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<tr>
<td>Portugal</td>
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</tr>
<tr>
<td>Spain</td>
<td>3.3</td>
</tr>
<tr>
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<td>United Kingdom</td>
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<tr>
<td>United States</td>
<td>3.0</td>
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</table>

numbers of workers on these contracts. The United States has very weak EPL; and the United Kingdom is not far behind.

Portugal has very strong EPL for regular workers and strong EPL for temporary workers, contributing to a very rigid labour market. Established workers are very secure in their jobs. External labour market pressure exerts only a weak influence on wage developments. Anecdotal evidence suggests that, in practice, employers pay substantially more than the legally required severance pay to avoid long, uncertain, and costly legal proceedings. Compared with the Netherlands, where legal issues surrounding dismissals of workers are typically resolved in a few weeks, cases in Portugal can take years.

Spain is in a similar position to Portugal’s, with strong EPL for both regular and temporary workers. Nevertheless, firms can swiftly reduce their employment of temporary workers as their contracts expire. The introduction of temporary contracts has created a sharp divide between heavily protected workers in permanent jobs and a growing number of workers in temporary jobs. Spain has a long history of very high and volatile unemployment. Bentolila et al. (2011) describe the Spanish labour market as an extreme case of a dual labour market with a highly pronounced insider-outsider divide. Job losses since the financial crisis have mainly affected temporary workers, whose numbers have fallen by 30 percent, while the number of regular workers has barely decreased at all.

Table 3.4

<table>
<thead>
<tr>
<th></th>
<th>Regular workers</th>
<th>Temporary workers</th>
</tr>
</thead>
<tbody>
<tr>
<td>Austria</td>
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<td>2.4</td>
</tr>
<tr>
<td>Belgium</td>
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<td>1.7</td>
</tr>
<tr>
<td>Czech Republic</td>
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<td>3.1</td>
</tr>
<tr>
<td>Denmark</td>
<td>1.6</td>
<td>1.6</td>
</tr>
<tr>
<td>Finland</td>
<td>2.5</td>
<td>2.2</td>
</tr>
<tr>
<td>France</td>
<td>2.3</td>
<td>2.5</td>
</tr>
<tr>
<td>Germany</td>
<td>2.7</td>
<td>3.0</td>
</tr>
<tr>
<td>Ireland</td>
<td>1.6</td>
<td>1.6</td>
</tr>
<tr>
<td>Italy</td>
<td>1.8</td>
<td>1.8</td>
</tr>
<tr>
<td>Japan</td>
<td>1.9</td>
<td>1.9</td>
</tr>
<tr>
<td>Netherlands</td>
<td>3.1</td>
<td>2.9</td>
</tr>
<tr>
<td>Norway</td>
<td>2.3</td>
<td>2.3</td>
</tr>
<tr>
<td>Poland</td>
<td>2.1</td>
<td>2.1</td>
</tr>
<tr>
<td>Portugal</td>
<td>4.3</td>
<td>4.2</td>
</tr>
<tr>
<td>Slovakia</td>
<td>2.5</td>
<td>2.3</td>
</tr>
<tr>
<td>Spain</td>
<td>3.0</td>
<td>2.6</td>
</tr>
<tr>
<td>Sweden</td>
<td>2.9</td>
<td>2.9</td>
</tr>
<tr>
<td>United Kingdom</td>
<td>0.9</td>
<td>1.1</td>
</tr>
<tr>
<td>United States</td>
<td>0.2</td>
<td>0.2</td>
</tr>
<tr>
<td>OECD average</td>
<td>2.2</td>
<td>2.1</td>
</tr>
</tbody>
</table>

*(Score range 0–6, where 0 represents the weakest employment protection legislation.)*


Under the pressure of public debt and employment problems, there have been recent labour market reforms in Spain, but they seem to have been relatively ineffective. Reforms undertaken in 2010 and 2011 were superficially wide ranging, affecting severance pay, hours of work, active labour market policies, and collective bargaining. The grounds for fair dismissal were broadened and made more explicit, and included a persistent loss in the firm’s revenues. A new employment contract for permanent employees was introduced with less generous severance payments, severance payments for temporary workers were increased, and the number of successive temporary contracts a worker could be employed on was reduced (Bentolila et al., 2011). However, in September 2011 the maximum duration extension of all temporary contracts was extended to 4.5 years, until September 2013.

How likely are these changes to make a substantial difference? Bentolila et al. (2011) argue that since neither the government nor the social partners were interested in reform, the kind of reform undertaken did not significantly reduce the fundamental insider-outsider divide in the Spanish labour market. Reforms were watered down to make them acceptable to the unions and differential EPL was preserved. The position of collective bargaining was maintained. Some of the reforms actually benefitted insiders.

One of the most costly aspects of EPL in Spain, Portugal, Italy, and elsewhere, from the viewpoint of firms, and which greatly reduces firms’ ability and willingness to adjust employment in the face of shocks to demand, is the use of the courts to adjudicate on the actual or proposed severances of work-
yers. Court proceedings are generally very expensive, of very long and variable duration, and often result in large penalties applied to firms. In Italy firms have frequently been required to reinstate dismissed workers and repay their wages for the period of litigation. Recourse to the courts is not a bad thing per se. In the Netherlands the courts are used to adjudicate on proposed dismissals of workers, but proceedings typically take a few weeks, not years, and the outcomes are relatively predictable and proportionate. Problems really arise where the judicial system is unable to process cases rapidly. There is a good argument for taking employment disputes out of the courts and establishing a separate system of tribunals and arbitration that can resolve these issues speedily.

Denmark, as might be expected as the poster-boy for flexicurity, has very limited employment protection. Andersen (2011) notes that periods of notice for workers dismissed are short (a matter of weeks in most cases, up to six months at the most), and severance payments are low (up to three months’ pay, and generally far less).

3.3.4.4 Minimum wages

Most countries have minimum wages. Table 3.5 lists them for 2011, measured as a fraction of median hourly earnings in the country in question. The table has no data for Germany, Italy, Denmark, Finland, Norway or Sweden, where minimum wages are set by collective bargaining on a sector by sector basis. The highest figure in the table is France at 60.1 percent, the lowest in Europe is Spain at 37.6 percent (leaving aside the two months of additional pay). The United Kingdom stands at 46.1 percent, the United States at 38.8 percent, and Japan at 37 percent.

Minimum wages raise the pay of the least well-paid workers, who are generally young unskilled individuals and may also be disproportionately women and part-time workers. The United Kingdom’s minimum wage directly affects the pay of about 4.4 percent of workers. Minimum wages may reduce employment opportunities. However, the evidence is overwhelmingly that negative employment effects are small, if present at all. This is understood as being the result of monopoly power in labour markets on the employers’ side, and efficiency wages. When employers have market power in labour markets, i.e., when they have some flexibility as to how much they pay their workers, they have an incentive to pay lower wages and recruit fewer workers. A well-chosen minimum wage rate can induce them both to pay higher wages and to offer more jobs. The efficiency wage argument is that when employers are forced to pay higher wages, they respond by giving their workers better training, using them more effectively, raising their productivity, or making greater efforts to retain them longer. These factors are at work when the labour market is not a textbook competitive perfectly-functioning market, but one where there is imperfect competition and information. Thus it appears that moderate minimum wages can have a beneficial effect on the distribution of earnings with no or very few offsetting detrimental effects, and there is a strong argument for countries having them.

However, there are discernible negative effects when the minimum wage for prime-age workers (25–64) is also applied to younger workers. In most countries the minimum wage for younger workers is a fraction of the prime-age rate. In the absence of a provision like this, young workers can be squeezed out of jobs. Sweden is an example where too little differentiation by age increases youth unemployment. In Greece a relatively high minimum wage with no allowance for young workers has raised youth unemployment in the past, but changes introduced in 2011 have begun to remedy this.

### Table 3.5

<table>
<thead>
<tr>
<th>Country</th>
<th>Minimum wage rate as a percentage of median wage rate</th>
</tr>
</thead>
<tbody>
<tr>
<td>Australia</td>
<td>51.8 (47.7)</td>
</tr>
<tr>
<td>Belgium</td>
<td>51.7</td>
</tr>
<tr>
<td>Canada</td>
<td>45.0</td>
</tr>
<tr>
<td>France</td>
<td>60.1</td>
</tr>
<tr>
<td>Greece</td>
<td>42.9</td>
</tr>
<tr>
<td>Ireland</td>
<td>52.9</td>
</tr>
<tr>
<td>Japan</td>
<td>37.0</td>
</tr>
<tr>
<td>Netherlands</td>
<td>43.6 (47.1)</td>
</tr>
<tr>
<td>New Zealand</td>
<td>59.1</td>
</tr>
<tr>
<td>Portugal</td>
<td>48.0 (56.0)</td>
</tr>
<tr>
<td>Spain</td>
<td>37.6 (43.8)</td>
</tr>
<tr>
<td>United Kingdom</td>
<td>46.1</td>
</tr>
<tr>
<td>United States</td>
<td>38.8</td>
</tr>
</tbody>
</table>

*Two estimates, one from LFS, other from Enterprise Survey. – b) Figure in parentheses includes 8% holiday supplement. – c) Figure in parentheses includes 2 months extra salary.*

3.3.4.5 The tax wedge

The tax wedge summarises the effects of employers’ and employees’ social security contributions, income tax and other taxes on the percentage difference between the amount received by workers and the gross amount paid by firms. A high tax wedge reduces the equilibrium employment rate and the structural unemployment rate. The tax wedge in many European countries has been high, and is often cited as a cause of high structural unemployment. Table 3.6 gives summary data for a number of OECD countries. Over the twelve years before 2007, a number of countries took steps to reduce the size of the tax wedge. Most strikingly, Ireland reduced it from 26.8 in 1995 to 2.1 percent in 2007, having been able to cut tax rates in a booming economy with buoyant public finances. Both the United States and United Kingdom made large reductions: the United States from 24.4 to 11.5 percent, the United Kingdom from 26.1 to 13.8 percent. Italy achieved a substantial reduction from 44.9 to 32.8 percent, Germany a modest reduction from 37.3 to 32.4 percent, and Finland from 42.1 to 35.6 percent. However, in some European countries the tax wedge increased in size, from 34.9 to 60.8 percent in the Netherlands. In most others the size of the wedge remained broadly unchanged. Portugal, at 26.6 percent in 1997 and 23.6 percent in 2007, and Spain at 33.3 and 31.1 percent, do not stand out as being particularly high relative to many other European countries and are, indeed, close to the OECD average.

In the current recession it has been suggested that high unemployment economies might reduce taxes on employment (or social security contributions) and shift taxation to indirect taxation like value-added tax (VAT), which does not affect the size of the wedge. This “fiscal devaluation” also promotes exports, as the costs of producing exported goods are reduced by the reduction in taxes on labour and not affected by the increased VAT. For countries that need to regain competitiveness in the euro area, this may be an attractive strategy. Keen and de Mooij (2012) estimate that a shift of around 1 percent of GDP from labour taxes to VAT (achieved by a cut in labour taxes of around 2.7 percentage points and a roughly similar rise in the VAT rates) can increase net exports by between 0.9 and 4 percent of GDP; a useful boost. This policy has been proposed for Portugal and Greece, but was actually implemented in France in 2012.

3.3.4.6 Trade unions and collective bargaining

The influence of collective bargaining is generally thought to be in gradual decline, as old, highly unionised industries in manufacturing and other production industries decline, services become more prevalent, technology and the nature of work changes, the gender balance in the workforce shifts, and part-time work becomes more widespread. Nevertheless collective bargaining remains important in Europe. The OECD data in Table 3.7 show that there has been considerable stability in unions and bargaining arrangements. The coverage of collective bargains has remained largely unchanged. The most notable changes are the fall in Germany from 70 to 62.8 percent of the labour force, in Portugal from 87 to 65 percent, and in Ireland from 60 to 44 percent. The United States and United Kingdom stand out as having low coverage of collective bargains, as well as being the least corporatist countries, and having the least coordinated bargaining arrangements, being scored 1 (out of three) on corporatism and 1 (out of 5) on coordination, unchanged between 1997 and 2007. Some of the European countries have very corporatist and coordinated bargaining (Austria, Belgium, Germany, Ireland, Italy, the Netherlands and Norway).2 Some countries are very corporatist,

<table>
<thead>
<tr>
<th>Table 3.6 Tax wedges</th>
</tr>
</thead>
<tbody>
<tr>
<td>Austria</td>
</tr>
<tr>
<td>Belgium</td>
</tr>
<tr>
<td>Denmark</td>
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<tr>
<td>Finland</td>
</tr>
<tr>
<td>France</td>
</tr>
<tr>
<td>Germany</td>
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<tr>
<td>Ireland</td>
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<tr>
<td>Italy</td>
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<tr>
<td>Japan</td>
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<tr>
<td>Netherlands</td>
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<td>Norway</td>
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<td>Portugal</td>
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<td>Spain</td>
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<tr>
<td>Sweden</td>
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<tr>
<td>United Kingdom</td>
</tr>
<tr>
<td>United States</td>
</tr>
<tr>
<td>OECD average</td>
</tr>
</tbody>
</table>


2 Very corporatist has been defined here as a country scoring a 3 on the corporatism index, and very coordinated as scoring a 4 or 5 on that index.
but slightly less coordinated (Denmark and Finland), while another group is only moderately corporatist (France, Portugal, Spain and Sweden) and scores 2 on the corporatism index, and between 2 and 4 on the coordination index.

How do collective bargaining arrangements affect the workings of labour markets? There is an argument (Calmfors and Driffill, 1988) that highly decentralised labour markets with weak unions produce outcomes that do not differ greatly from a competitive labour market, and for that reason are relatively efficient. At the other end of the scale, highly corporatist economies, with highly coordinated unions may also produce good results because the unions, although powerful, are large enough (“encompassing”) to take account of all the consequences of their actions. The problems arise in the intermediate situation, where corporatism and coordination are moderate and unions nonetheless have a lot of power. Here unions are able to protect their own workers, but are not large enough to take account of the wider economic and social consequences of their actions. This line of thought goes back to Mancur Olson (1982). In the intermediate case, high unemployment may emerge.

It is notable that Ireland, one of the troubled periphery countries, is among the most corporatist and coordinated; indeed it is the most corporatist and coordinated of those listed in the Table 3.7. It sits alongside Germany and the Netherlands, who are among the least troubled countries of the EU core. This may seem odd, but there are similarities. Germany and the Netherlands have both benefited from wage restraint and greater competitiveness. Ireland has also benefitted through the 1990s and 2000s from a series of social pacts between unions, employers and government, which have also yielded wage restraint and high employment. Since 2008 after Ireland’s debt problems began and unemployment shot up, cooperation between the social partners has allowed Ireland to adjust quickly, with deep cuts in public sector pay and employment, private sector pay cuts, and large tax increases. This cooperation has mitigated the rise in unemployment. Indeed, at the end of 2012 there were signs that unemployment has stabilised and is beginning to fall. This has been achieved with a remarkable degree of social harmony. It stands in marked contrast to the slow pace of adjustment and resistance to change in other troubled periphery countries.

Germany’s cooperative industrial relations have been the envy of British commentators since the 1960s, when Germany’s productivity and competitiveness in exports sustained strong current account surpluses and growth. While wage determination in Germany continued to be dominated for a long time by industry-wide bargains between relatively powerful unions and employer organizations, there has been growing flexibility since the early 1990s, when early plans to equalise wages between Western and Eastern parts of Germany had to be tempered to accommodate the economic problems of enterprises in the East. In 1993

### Table 3.7

<table>
<thead>
<tr>
<th>Country</th>
<th>Corporatism</th>
<th>Coordination</th>
<th>Collective bargaining coverage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Austria</td>
<td>3</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>Belgium</td>
<td>3</td>
<td>3</td>
<td>5</td>
</tr>
<tr>
<td>Czech Republic</td>
<td>1</td>
<td>1</td>
<td>2</td>
</tr>
<tr>
<td>Denmark</td>
<td>3</td>
<td>3</td>
<td>3</td>
</tr>
<tr>
<td>Finland</td>
<td>3</td>
<td>3</td>
<td>3</td>
</tr>
<tr>
<td>France</td>
<td>2</td>
<td>2</td>
<td>2</td>
</tr>
<tr>
<td>Germany</td>
<td>3</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>Ireland</td>
<td>3</td>
<td>3</td>
<td>5</td>
</tr>
<tr>
<td>Italy</td>
<td>3</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>Japan</td>
<td>3</td>
<td>3</td>
<td>5</td>
</tr>
<tr>
<td>Netherlands</td>
<td>3</td>
<td>3</td>
<td>4</td>
</tr>
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<td>Norway</td>
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<td>3</td>
<td>5</td>
</tr>
<tr>
<td>Poland</td>
<td>1</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>Portugal</td>
<td>2</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>Slovakia</td>
<td>1</td>
<td>1</td>
<td>4</td>
</tr>
<tr>
<td>Spain</td>
<td>2</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>Sweden</td>
<td>2</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>United Kingdom</td>
<td>1</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>United States</td>
<td>1</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>OECD average</td>
<td>2</td>
<td>2</td>
<td>3</td>
</tr>
</tbody>
</table>

*a Score range 1–3, where 1 represents countries with the lowest degree of corporatism.  
b Score range 1–5, where 1 represents countries with the least coordinated bargaining arrangements.  
c Measured in percent of the labour force.

a landmark settlement between the unions and Volkswagen introduced deep cuts in working time and pay in order to preserve employment. Competition from Eastern Europe after 1989, with the prospect of jobs being relocated to Poland and other states just to the East of Germany, contributed to a shift in the balance of power between social partners towards employers. The influence of unions in Germany has been in slow, but persistent decline. Whereas in 1996 union bargains covered 70 percent of the labour force in Western Germany, by 2009 they covered only 55 percent; while for the East these figures are 57 and 40 percent respectively. The Hartz reforms also contributed to the unions taking a less rigid approach. Wages scarcely grew between 2001 and 2008 (Burda and Hunt, 2011).

In contrast to Ireland and Germany, and indeed, to other more corporatist and coordinated economies, collective bargaining in Spain, Portugal and Greece has contributed to high and volatile unemployment and resistance to adjustment. Spain has had a system of automatic extension of wage bargains to all firms in the industry, of a particularly rigid form. Firms have not been free to pay wages below those stipulated in collective bargaining, or to employ workers for fewer hours. This, combined with the strong protection of the employment of regular workers, has created large scale unemployment among temporary workers. Changes demanded by the troika of international lenders have brought about reforms in this area (Bentolila et al., 2010). Firms in distress are now allowed to opt out of the wage set by the industry collective bargain by reaching an agreement with their workers, but only for a period of up to 3 years. Reforms enacted in June 2011 give firm-level agreements precedence over industry-wide agreements, providing the latter do not stipulate otherwise.

Automatic extension of wage bargains has been the rule in both Portugal and Greece, with similar results.³ It has sustained increasing (money) wage rates since 2008, despite growing unemployment. Combined with EPL for regular employees, it has placed the burden of job losses on temporary workers.

### 3.3.4.7 Flexicurity

In the eyes of the OECD and the European Union, flexicurity is a model of a successful bundling of labour market institutions, which they are keen to promulgate. Denmark and the Netherlands are currently its leading examples. “Flexicurity refers to a combination of loose employment protection legislation (EPL), generous unemployment benefits and strong efforts on active labour market policies (ALMPs).” (Koster et al, 2011).

Reform of labour markets has often proved a slow and controversial process because so many insiders stood to lose from reforms that would have weakened their grip on jobs and exposed them to greater competition from outsiders (Saint-Paul, 2000; Thompson, 2009). Flexicurity tries to buy off the potential losers from reduced employment protection with the promise of high aggregate employment, and therefore of good re-employment prospects if workers become unemployed, continued generous benefits and vigorous active labour market policies. This means training and education for the unemployed to improve their re-employment prospects, policies that tie generous benefits to their availability for and active search for work, and pro-active policies on the part of the authorities to present unemployed persons with suitable vacancies for which they must apply. Flexicurity aims to make jobs more contestable, increase labour turnover, and to allow firms to contract and expand more rapidly, which should enable the economy to respond more rapidly to shocks and changes in technology.

The Dutch have adopted a model similar to the Danish, but one that is more reliant on combinations of non-standard work, such as temporary agency work and part-time work, with regular social security rights (Koster et al., 2011).

It is interesting that while Denmark has achieved good labour market outcomes, it does not stand out in terms of summary measures of labour market institutions. However, as Andersen (2011) notes, Denmark spends by far the highest share of GDP on active labour market policies (1.9 percent). The unemployed in Denmark are required to accept places on education and training programmes and to follow up job vacancies if they wish to continue to receive benefits.

³ Portugal’s labour markets share some features of Spain’s. They are described as highly inefficient, with poor institutions constraining wage and productivity developments. Private sector real wages only started to decline in 2011, supported by “widespread administrative extension of collective agreements, long-lasting unemployment benefits and pervasive labor market segmentation” (Pina and Abreu, 2012). Between 2007 and 2010 minimum wages increased by 5.3 percent per year on average and there was another 2.1 percent increase in 2011. Around 12 percent of all employees were on the minimum wage in 2010. Portugal has, like Spain, a sharp divide between permanent and temporary jobs, with permanent jobs enjoying very strong protection against dismissal, and temporary jobs very weak protection. Bentolila et al. (2010) regard the segmentation of labour markets into permanent and temporary jobs with differing amounts of employment protection as a particularly serious problem, and believe that ending this segmentation should be a policy priority.
The recent rise in unemployment in Denmark may cast doubt on the strength of the case for flexibility. Unemployment had fallen to 3.4 percent in 2008, but has risen to 8.0 percent in 2012 Q2, while long-term unemployment has risen from 0.5 in 2008 to 2.2 percent in 2012 Q1. Youth unemployment rose from 5.3 percent of the 15-24 year-old population in 2007 to 9.8 percent in 2012 Q1 (see Figures 3.1–3.4). It is a feature of a labour market in which employment protection is weak that unemployment should rise sharply after a fall in demand for goods. However, labour turnover remains relatively high and there is a good flow out of unemployment into work, limiting the rise in long-term unemployment and youth unemployment (Andersen, 2011). It appears that some of the unemployment increase in Denmark resulted from the end of a boom in the construction industry at the time of the 2008 financial crisis, which then increased the impact of the recession.

The counterexample is the United Kingdom, where despite a steep fall in aggregate demand and GDP, and very weak EPL, unemployment has risen remarkably little since 2008. Of course, this has been helped by weak unions, relatively low unemployment benefits, and consequently flexible real wages.

3.4 Youth unemployment

3.4.1 Education, employment, training, and inactivity among young people

The data displayed in Section 3.2 indicate that young workers have been hit more than adults by the recent economic crisis (Bell and Blanchflower, 2011; Scarpetta et al., 2010), and that the crisis is more serious in some countries than in others. Of course, the alarming youth unemployment rates seen above are a large percentage of relatively small labour forces: as a fraction of the population in the same 15–24 age range, the unemployed in early 2012 were 15.5 percent in Greece, 20.0 percent in Spain, 11.0 percent in Ireland, 13.6 percent in Portugal and 10.4 percent in Italy. Since many youths are engaged in study or training schemes, and some of those that drop out of schooling may not bother to engage in the search activity that would classify them as unemployed, NEET (not in employment, education, or training) inactivity rates provide a better indication of youth labour market problems.4

Figure 3.7 displays data, available only until 2010 for the euro area countries discussed above. Since the onset of the crisis, youth activity rates have deteriorated sharply in problem countries, in marked contrast with the stable or improving situation of

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4 For example, in the United Kingdom approximately one million 15–24 year-olds were unemployed in 2011, but over 1.4 million were NEET, and both categories included some 400,000 more individuals than at the 2001 cyclical low point (ACEVO, 2012).
Germany and its neighbours. To set the stage for our analysis of how such differences may depend on institutions and policies, we focus in this section on the remarkable divergence within Europe between Germany and a number of nearby countries on the one hand, and the “problem” economies on the other, as regards these youth inactivity rates.

Institutional features of the labour market play more or less obvious roles in shaping youth employment prospects. Legal or contractual minimum wages can be set too high for the employment of young unskilled workers to be profitable, contractual wage scales may not allow suitable pay differences between young and more experienced workers, and stringent employment protection disproportionately increases the unemployment rate of young workers (who will be seeking their first job no matter how low the job finding rate is) relative to that of older workers (who face similarly difficult job-finding prospects, but are not as likely to become unemployed when firing them is difficult). For given labour market institutions, of course, the overall cyclical conditions of the labour market (Bell and Blanchflower, 2009) and the relative size of young labour market entrant cohorts (Shimer, 2001) play the larger role in determining both the overall and the youth unemployment rates. Aside from demographic dynamics, youth unemployment tends to be broadly proportional to total unemployment along the cycle, as well as across countries. Along the latter dimension, institutional features do appear to significantly affect the level and cyclical sensitivity of youth unemployment, which are relatively higher in more rigid labour markets: labour market rigidity reduces both unemployment inflows and outflows for mature workers, with ambiguous implications for their unemployment rates, but tends to leave young workers unemployed in greater numbers, especially when hiring rates are further reduced by recessions.

When unemployment is the result of ongoing search processes meant to match workers to suitable jobs under imperfect information, there are good reasons for youth unemployment to be higher than that of older age groups. For youths, search has a larger potential payoff and, inasmuch as they can rely on family support rather than having to provide it, search is less costly than in the case of older workers. The involuntary unemployment that results from wage and employment rigidities, conversely, can damage the young workers on which it is concentrated more seriously and permanently than older workers, because any loss of employability has more important implications for human capital when it occurs earlier in life, and reduces earning over a longer remaining career. To the extent that the latter mechanism is at work, therefore, there is reason to worry about the large and increasing inactivity rates of youths in the European countries that were hit hardest in the crisis, especially insofar as they reflect insufficient institutional support for young people.5

The search-and-learn process underlying the relatively high unemployment and frequent job transitions of youth in the lightly regulated labour markets of Anglo-Saxon countries may or may not be the most effective way of matching people to the work that they can do comparatively well, which is an essential ingredient of any economic system’s productivity. Society can support youth in that endeavour, and both labour market institutions and educational systems differ across countries in relevant ways.

3.4.2 Education, vocational training and apprenticeships

Germany, Switzerland, Austria, and Denmark have maintained a highly successful dual education and training system through apprenticeships. In all four countries, over 40 percent of young people who leave school when it ceases to be compulsory take up apprenticeships. These require around three years training on the job with at least one day a week at a vocational college (the Berufsschule), and lead to a formal qualification which yields a “right to practice”, legally required to work in many occupations. Employers can only offer young people jobs in a recognised occupation under an approved training contract. The Federal government, employers’ organizations, local chambers of commerce, and trade unions are all involved in and support the system. The German system imparts not only job skills, but many social skills, too. “Respect for authority, punctuality, teamwork, and learning how to learn were all fundamental to the employer’s decision as to whether the apprentice was suitable to be taken on for a given job.” In Germany, “The social partners – employers, trade unions and politicians – combine their resources to enable the transition from school student to apprentice. They are also responsible for approving the off-site VET curriculum, agreed

5 Ha et al. (2010) suggest that higher youth unemployment may, in fact, reflect age-biased changes in the structure of the welfare system: in the United Kingdom, for example, youth unemployment had already begun to increase in 2004, possibly as a result of the fact that in the early 2000s the UK Employment Service shifted its focus away from young people on Jobseeker’s Allowance, and towards Lone Parents and Incapacity Benefits recipients.
nationally and managed by the local chambers of
commerce, who also certify the skills achieved.”
(Steedman, 2001).

Britain is one of many countries where vocational
educational training (VET) is inadequate and disor-ganised. The apprenticeship system does not work as
intended and Colleges of Further Education, which
provide vocational education, are the Cinderella of
the educational world. British apprenticeships before
the 1980s were five-year long “timeserving” prepara-
tions for young male workers’ entry into skilled man-
tual jobs, governed by custom and practice, and infor-
mal agreements between employers and unions. They
catered typically for only around 120,000 young peo-
ple per year, 80 percent of them male, and in the late
1980s numbers fell to 58,000. Since then there have
been repeated reorganizations with only modest suc-
cess. After being initially absorbed into the Youth
Training Scheme, which kept them alive despite its variable quality, in 1986 they came under the frame-
work of the National Vocational Qualifications
(NVQs), and then the Modern Apprenticeship
scheme. While less successful than intended, the latter
had 279,700 apprenticeship starts in 2009/10. A per-
sistent problem is that employers have been marginal-
ised in the design and operation of the scheme, and
the providers of training have incentives to make
schemes as short as possible. British employers have
remained suspicious of formal youth training schemes
and NVQ certificates, and prefer general educational
qualifications of a more academic kind like GCSEs
and A levels. British employers appear not to think
that VET contributes to productivity; they use educa-
tional achievements to sift potential employees, and
once employed, train them on the job.

Hilary Steedman remains of the view that a good
apprenticeship scheme is important: “School- and
college-leavers in Britain desperately need the skills
and smooth transition to working life that apprentice-
ships provide. The economy desperately needs a more
highly-skilled workforce. More apprenticeships pro-
viding skills comparable to those in competitor coun-
tries can help achieve this.” However, despite the
United Kingdom’s ramshackle provision of appren-
ticeships and VET, youth unemployment, acquisition
of skills on the job, and the rate of return to the train-
ing that does occur are less disappointing than may be feared.

Ireland is in a similar position to the United Kingdom
from this perspective. Ireland had a traditional time-
serving apprenticeship system until 1991, when it was
replaced by a standards-based system.

Two countries with rather different systems are
Sweden and France. France provides full-time voca-
tional education in schools and colleges, rather than
on-the-job, and had 434,000 apprentices in 2008. In
the post-war period apprenticeship suffered from
political indifference, and sometimes hostility.
Recently there has been a revival, partly to fight
youth unemployment among the least qualified.
France, like the United Kingdom, looks to the
German system as a model. Sweden also has a
school-based education route for 16 to 19 year olds,
and has never had an apprenticeship system.
However, the Swedish model has clear failings. This
system does not make students “job ready” and leads
to high youth unemployment. Moreover, school-
based qualifications are not widely recognised in
industry. In building, for example, workers need to
do an additional apprenticeship by working in a firm
to obtain a qualification that employers recognise.
Thus Sweden introduced an apprenticeships system
in 2011, although it does not seem to be radically dif-
erent enough from the existing model. “Leavers
from VET school, in particular early leavers, have
difficulty in finding a first job. Earnings differentials
are compressed and heavily regulated by collective
bargaining and wage structures do not normally
allow for young people to be paid a training
wage/lower wage on entering first employment.
Employment protection is also very strong, meaning
that employing a young person entails relatively high
costs and risks.” (Steedman, 2010). Both Sweden and
France appear to be moving towards the Germanic
system as a response to the perceived inadequacies of
their existing provision.

These are a few examples, but vocational training and
apprenticeships in other European countries seem to
have similar problems. Portugal, Spain, Italy, and
Greece all have limited provision for training the less
academically able half of the age cohort and smooth-
ing the transition from school to employment.

Should the schooling system just equip youths to
engage in the labour market matching processes, or
should it steer them through the process of detecting
and acquiring skills suitable to specific jobs? As the
discussion above shows, different countries answer
this question in different ways. In Germany and its
neighbours (and in Japan), young people are assigned
to different tracks early in their school career. In these
countries vocational education prepares youths for specific jobs and introduces them to the labour market through administered apprenticeship contracts. In Anglo Saxon countries, on the other hand, schooling tends to be comprehensive, education is non-specialised until late in the school career, and flexible wage and employment relationships allow for the worker-financed accumulation of general on-the-job learning, as well as for individual search-and-matching processes of job allocation in competitive market settings.

Other countries display a mix of the two systems. In some, the mix lies in-between the two extremes, with some tracking, as well as some opportunities for in-work training and sorting. In others, however, features of the two systems are less appropriately mixed, as is the case when ill-focused and uninformative schooling is followed by would-be rigid work careers. This can easily result in unemployment, and in the poor matching of workers to jobs and of wage aspirations to productivity. To fill the gap between school qualifications and relatively rigid labour market relations, “non-standard” and temporary contracts can be and have been introduced that allow a degree of on-the-job evaluation and learning. These are unsurprisingly much more prevalent among young people than among prime-age workers (in France, about 50 percent of employed workers aged 15–24 are in temporary contracts, but only 10 percent of 25–54 year old workers), and this figure varies considerably across countries (ranging from 6.5 percent in Ireland to 66.3 percent in Spain).

In general, the choice between allocating youth to vocational and academic tracks, or offering comprehensive education to all, depends on the extent to which society believes individual talents are observable early, and should be allowed to influence life outcomes even when they reflect the luck of being born to well-educated parents.

The extent to which education and job search should be publicly funded and organised depends on market failures, especially the failure to provide accurate information and adequate access to financial markets. Various approaches may be efficient, depending on underlying characteristics, and no clear pattern emerges from the data: the OECD’s Education at a Glance finds no clear correlation between higher VET participation levels and lower unemployment rates among 15-29 year-olds, and only somewhat weak evidence that participation in VET programmes is associated with lowering youth inactivity levels.

It is clear that the pros and cons of early specialisation depend on labour market characteristics that differ over time, as well as across countries. The data in Figure 3.7 show both cross-country differences in the situation of young people, which are to be interpreted in the light of educational system characteristics and development levels. Germany and its neighbours already had low rates of youth inactivity prior to the crisis, even at a time when their overall unemployment rate was relatively high; and changes during the crisis period, reflecting the severity of cyclical developments and choices to remain in education. In crisis-hit countries, youths stay in school longer: this is explained by the lack of employment options, which were previously so plentiful as to give them incentives to go into work at very early ages in countries like Ireland; but more youths also fall into the not employed, not in education or training (NEET) category, which is, of course, very worrisome, as persistent loss of employability threatens an economy’s prospects of recovery. In countries like Spain, France, and Italy non-standard employment has been an alternative to both searching for a job while unemployed and apprenticeships. When schools are not equipped to provide the labour market with suitable information, temporary contracts may provide learning opportunities, much like apprenticeships. However, they may also confine workers to the lower segment of a dual labour market and, as the figure shows, leave them exposed to the brunt of labour demand shocks.

3.5 Labour market institutions and sensitivity to shocks

Differences in policies and institutions can give rise to large cross-country differences in the overall impact of economic downturns on unemployment, labour income and earnings inequality. The OECD Employment Outlook 2012 uses evidence from firm-level data to assess these effects in the context of the effects of the recent downturn, and finds that strict employment protection provisions for workers on permanent contracts reduce the importance of employment adjustment relative to working time and wages, while more temporary work is associated with more employment adjustment relative to working time and wages. Coordinated wage-bargaining institutions can contribute to good structural performance and labour market resilience. Coordination is
important for achieving low structural unemployment rates, and mitigating the effects of shocks by facilitating adjustments to wages or working time. Institutional settings that favour the use of temporary employment contracts, such as stringent employment protection for regular workers are associated with both weaker structural outcomes and less labour market resilience.

Perhaps unsurprisingly, the OECD concludes that policies and institutions that are conducive to good structural labour market outcomes also tend to be good for labour market resilience, where “good” structural outcomes are low unemployment rates (rather than, for example, low income inequality), and the policies and institutions conducive to them are those advocated by the OECD’s revised Job Study strategy. However, that tendency is not as strong as one might hope.

The large dispersion of unemployment rates across countries in the aftermath of the crisis shock reflects not only differences in institutional structures, but also the different intensities of that shock. In practice, the countries with the highest unemployment increases and final levels in Figures 3.1 and 3.2 are also those experiencing the worst banking and sovereign debt problems. Employment tended to be more fragile, and unemployment developments in fact mirror the different severity of the crisis in the various countries.

It turns out that the countries that have suffered the largest post-crisis increases in unemployment were those that had enjoyed the largest pre-crisis increases in employment (Figure 3.8). Some countries appear to have been much more volatile than others. Labour markets like that of Spain, which had enjoyed the largest deregulation-driven employment gains, unsurprisingly suffered a major breakdown. Just as exceptional financial returns were brought about by inconsiderate and unregulated leverage, it is legitimate to wonder whether the strong employment performances of recent years were just an illusion conjured up by labour market deregulation. Denmark fits this pattern, to some extent, while Germany and its neighbours stand apart from it.

Figure 3.9 shows a positive relationship between the increase in unemployment after the crisis and the growth of unit labour costs before it (which did not prevent employment growth because GDP growth was also relatively strong).
3.5.1 Germany

Thus the outstanding performance of the German economy, which has staged a remarkable turnaround since the 1980s (Möller, 2012) when the country was the embodiment of eurosclerosis (Giersch, 1985), is partly explained by the character of the macroeconomic shocks that originated in the global economy and had asymmetric implications within Europe.

While flexibility and financial development became liabilities for other economies, the manufacturing-intensive export-oriented German economic system proved able to withstand this particular crisis well. It is possible that Germany performed strongly in the crisis, and poorly before it, not due to its reforms, but because of the financial and services character of the crisis, in the context of which (unreformed) temporary layoff programs and a strong manufacturing export orientation made it possible for the country to limit employment losses and to recover quickly as emerging countries restarted importing. Nevertheless, German unemployment has continued to fall since 2008, partly due to the successful restraint of money wage growth by employers and unions, and partly due to the successful system of apprenticeships and VET. As well as the overall low unemployment rate, youth unemployment has also remained low.

3.5.2 Italy

Passive short-work and temporary layoff measures (Kurzarbeit and Cassa integrazione guadagni in deroga) have subsidised permanent employment relationships not only in Germany, but also in Italy. Firm-side financial problems have more inefficient implications if they lead to permanent severance of “solvent”, but illiquid employment relationships. In other countries, the crisis triggered massive expenditure on income and job-search support to permanently displaced workers. To understand which of these policy responses was the most appropriate, one needs to assess whether the shock was just a manifestation of financial difficulties and temporary aggregate demand shortages, or instead called for permanent restructuring and reallocation in specific countries. Italy’s technocratic government has outlined a sweeping set of reforms. These reforms aim at reducing labour market duality, introducing flexibility in regular contracts at the same time as non-standard contracts are phased out, and funds previously used to finance German-style on-the-job temporary layoffs are channelled towards universal unemployment insurance. Much as flexibility could improve labour market efficiency in a less troubled situation, limiting temporary employment opportunities and making it easier to dismiss workers for economic reasons is likely to be destabilising in a crisis situation, where the only jobs that might be created would be temporary, and fear of dismissals may encourage employed workers to perhaps work harder, but certainly to spend less.

3.5.3 Spain and Portugal

Other countries have sought a way out of high unemployment by allowing employers to offer temporary contracts to new workers, while retaining strong protection for existing permanent jobs. As the experiences of Spain and Portugal show, this strategy has proved less successful. It has created a bifurcated labour market, with marked differences between insiders and outsiders. In countries where the institutional school-to-work process is not sufficiently developed, temporary employment may substitute apprenticeships as a chance for young workers to learn “on-the-job” and for employers to train a young labour force. However, in countries that introduced labour market flexibility on the margins, deregulating temporary employment without changing employment protection legislation for standard regular workers, the employment impact of the crisis was strong and biased against young workers.

3.5.4 Greece

In contrast to the German experience of a fortunate constellation of economic shocks favourable to its industrial structure and labour market institutions, Greece has suffered a large fall in demand, which has instead exposed the weaknesses of its industrial structure and institutions. Labour force participation is low, and employment (as a fraction of the population) is low; while unemployment, noticeably

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6 Italy introduced a degree of flexibility at the margins of the labour market with its introduction of non-standard contracts in 1997, followed up by a 2000 law relaxing regulation of part-time employment, and by 2001 deregulation of fixed-term contracts. These changes made it possible to create “atypical” dependent jobs alongside the formally self-employed Collaborazione coordinata e continuativa employment relationships. Wage moderation prevailed in Italy between the early 1990s and euro area accession. During this period the pre-set planned inflation rate was ex post lower than actual inflation throughout Italy’s disinflation, so that real wages did not keep up with productivity (and employment grew, along the labour demand curve).
long-term, youth, and structural unemployment, is high. While public spending falls and taxes rise, other austerity measures and the global recession account for much of the problem, a substantial part of it is structural. Productivity in Greece has caught up with the euro area average since 1995, but nominal wages have grown faster, and unit labour costs have risen. This has contributed to the decline in private sector employment in tradable goods and the rise in public sector employment. Wage bargaining arrangements, employment protection measures, the benefits system, pensions, access to professions, and education and training have all contributed to these trends.

Greece’s neo-corporatist system of extended collective agreements, in operation since the 1930s, provides the main floor under wages (Anagnostopoulos and Siebert, 2012). The two main union federations are still funded by the state. An annual National General Collective Agreement (NGCA), supplemented by various sectorial agreements, sets a national minimum wage for private sector employees.

While union membership is low (24 percent of employees in 2008), coverage of bargains is high, bargaining at the industry and sector level predominates, and there has been a system of extension of bargains to all firms in the sector. Local or firm-level variations were (until 2010) only allowed to raise wages above the industry-wide bargain. Moreover, firm-level agreements were only allowed for the small fraction of firms with over 50 employees, and were actually used by only a fifth of the latter. A system of arbitration to which trade unions have privileged access has strengthened their position.

In so far as change has occurred, it has done so under pressure from the European Union and the troika of international lenders. Changes in laws made in December 2010 have enabled greater flexibility. Firms and their workers are allowed to agree to lower wages than stipulated by the sectorial agreements, although the wages agreed in a national labour collective agreement still set a floor. The procedures for mediation and arbitration have been rebalanced to give both employers and workers a voice.

Until 2010, a relatively high minimum wage discouraged the employment of young workers (below 25). Changes in legislation in 2010 effectively allowed a lower wage for them (84 percent of the basic wage agreed at the national level), and one-year apprenticeships for youths aged between 15 and 18 years with wages at 70 percent of the minimum wage were introduced. More changes made in 2011 have allowed anyone between 18 and 25 to be employed on fixed-term contracts for up to 24 months at a wage that is 20 percent below the applicable collective agreement, whether national or sectorial. The OECD regards this as a step in the right direction, i.e. towards cutting youth unemployment, whose effects on hardship can be partly cushioned by Greece’s extended family networks. However, they argue that it needs to be linked to the provision of more training to improve skills.

At the same time, employment protection legislation was relaxed in 2010. Firms now need to give only six months’ notice of dismissal for white collar workers with 28 or more years of service, as opposed to 24 months previously, and can pay in instalments. Collective dismissals are defined less restrictively; probationary periods are allowed to be longer, and workers can be employed on temporary contracts for longer (36 months as opposed to 24).

3.5.5 The United Kingdom

The United Kingdom was hit by a large fall in aggregate demand in 2008. GDP fell substantially, and was still several percentage points below its peak even at the end of 2012. Unemployment has risen very little, from around 5.5 in 2008 to 8 percent at the end of 2012. Employment actually rose during this period. Commentators have puzzled at the implied fall in productivity. There are several factors at work here. One is the depreciation of the pound against the euro in 2008 and 2009, which created inflation and has allowed real wages to fall, while nominal wages continued to rise very slowly. Weak unions were unable to negotiate significant wage increases. Increasingly
meagre unemployment and other social security benefits encouraged pay deals that allowed reductions in working hours to preserve jobs.

The Jobseeker’s Allowance (JSA), which was introduced in October 1996 as a reform of the UK system of unemployment compensation, increased the rate at which claimants left unemployment, but not because they found jobs; and the JSA did not do much to improve their long-term career prospects either (e.g. Petrongolo, 2009). Since 1996, the UK government has further reduced welfare support to the unemployed (with the notable exception of the various New Deals introduced by the New Labour Government). The interplay between reformed labour market institutions and the severity of the crisis may explain why there have been signs of conflict and social unrest in the United Kingdom and several other European countries, with some similarity to social and economic developments in European countries between the wars.

While the United Kingdom adopted a laissez-faire approach in its employment reactions to the crisis, notably refraining from raising modest unemployment benefits (indeed, they have been further cut back), Sweden has adopted a proactive approach aimed at restoring full employment through incentives for employers and the reduction of payroll taxes for those who hire, while trying to cushion the social effects of unemployment by relaxing the qualifying period for unemployment insurance.

3.6 Conclusions

3.6.1 General considerations

Over the course of time several different countries have jostled for pole position in the “good labour market” stakes (Bertola et al., 2002, discuss reversals of fortunes from the 1970s to the 1990s). Denmark’s institutions and reforms looked very good before the current crisis, but its unemployment rate increased by a disturbingly large amount during the crisis. The Hartz reforms introduced in Germany’s labour market created a lightly regulated, low-wage segment very similar to that enabled by Spain’s and Italy’s earlier reforms. This suggests that success might be partly due to good luck, as well as to good policies. Reforms should not be undertaken lightly and should not simply imitate past successes, which are no guarantee of future successes. They need to proceed cautiously, taking account of local circumstances.

Structural labour market problems must be addressed by reforms that reconcile the security, efficiency, and fiscal aspects of labour market policies. To be fruitful, reforms need to understand what policies and institutions do in different contexts.

The crisis calls for two types of policy reactions. Firstly, it requires policies that foster structural adjustments to persistent and potentially permanent shocks, such as those that call for shrinkage of finance, retail distribution, and construction in countries that need to develop a manufacturing export base. Lower wages are needed in some countries and are easier to achieve than higher labour productivity.

Secondly, policy reactions should focus on the impact of aggregate demand shortages and private and public financial confidence problems. Immediately prior to the crisis, increasing oil prices and a weakening euro were reasons to worry about second-round inflationary pressures from collective wage bargaining, and it was comforting to find evidence that deregulation, deunionization, and international and product market competition helped increase employment flexibility and keep wage reactions in check, as suggested by the empirical results of Bertola et al. (2012). In other words, labour market flexibility can be destabilizing in a crisis, and not positive. As with fiscal policy, medicines that are beneficial from a longer-run perspective can be detrimental if hastily administered in the midst of a low-confidence, high-uncertainty situation. Care has to be taken as regards the impact and short-run effects of labour market reforms; and it is important that these reforms should be credibly durable. Active labour market policies and unemployment benefit reductions are much more attractive and politically acceptable at times of plentiful tax revenues and expanding labour demand than during a recession. From every viewpoint country-level coordination and political cohesion proved much more important during the crisis than in the years prior to it, when shocks were mostly at the regional or sector level.

Tripartite wage agreements and public sector wage cuts could make important contributions to success in the face of country-specific issues in problem countries, as they did for many of those same countries on the path to EMU. However, the crisis has created severe political-economic tensions both within crisis-hit countries and at the European level. Policy coordination at the European Union level would obviously be desirable, because while labour mobility across jobs and occupations is beneficial, cross-country labour mobility may
Contribute to crisis dynamics: if Greek workers migrate to Germany, they may relieve the Greek social security system of the need to pay their unemployment benefits, but certainly deprive it (and Greek pensioners) of their contributions. Unfortunately, European coordination of labour market policies is even more obviously politically difficult in the current situation. While small Baltic countries may be able to reform and implement massive internal devaluations, within larger countries reform efforts may worsen already critical political situations, because labour market policies are politically divisive and economically difficult. Throughout history, income distribution and risk sharing issues have always been addressed by collective schemes with a mix of administration, authority, and social pressure. Such schemes always were, and still are, at work for individuals in families, and for families in local communities. They were implemented at the national level in the context of the commercial and industrial revolutions that made Europe rich. Currently, the political cohesion needed to support them is weak within nations, not only in crisis-stricken countries such as Spain (where Catalonia would like to be freed of its obligations), but also in the United Kingdom (where cutting social benefits is widening the divide between rich and poor, causing urban minorities to feel oppressed, and strengthening the cause of Scottish separatism), and even in Germany as the political appeal of supporting Eastern federal states fades. It is even weaker at the European level, where it would be most useful if, as is likely, harmonised labour market regulation needs to accompany market integration.

3.6.2 Some specific suggestions

Notwithstanding the cautionary notes and general principles set out above, some aspects of policy in some countries stand out as strong candidates for (further) attention:

- The two tier labour markets that have emerged in Spain, Portugal, Greece, and to some degree Italy, have thrown the burden of job cuts onto a particular segment of the labour market, those individuals on temporary contracts. Meanwhile, the heavily protected workers in regular jobs feel little pressure from the existence of many unemployed persons to moderate wage claims or change working practices to increase productivity. Changes are taking place, but more needs to be done to reduce, if not eliminate, the distinction. The amount of job protection enjoyed by workers should depend on their length of service in the job, and should be set at a level that balances the interests of current and future workers and employers.
- When severance cases are tested in the courts, with long delays and great uncertainty as to the outcome, the administration of EPL is highly inefficient. There is a good case for removing employment disputes from the courts and instituting tribunals and arbitration procedures to deal with them more quickly, cheaply, and with greater certainty.
- The automatic and legally enforced extension of wage bargains to all firms in an industry or sector in a number of countries has contributed to wages not responding to labour market conditions, inflexibility and high unemployment. It can give a small group of workers excessive influence over pay and employment in an industry. Legal provisions that support this practice need to be carefully reconsidered.
- Many European countries need to develop better arrangements for vocational education and training. Apart from Germany, Austria, and Switzerland, provision for roughly half of the age cohort that does not go to universities has been neglected, contributing to higher than necessary youth unemployment.

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US PRECEDENTS FOR EUROPE

4.1 Introduction

The discussion of European integration – both in the past and in the future – has largely been driven by analyses of how precedents on the other side of the Atlantic have worked. At the highest political level, such reflection concerns the constitution, with the US precedent encouraging European leaders to contemplate (rather unproductively to date) the possibility of drafting a European constitution. At the time of US independence in 1776, the thirteen former colonies were widely thought of as independent and sovereign entities; and Americans did not want the United States simply to be another conventional state like France or Britain. The US constitution was not drawn up until 1787, and was really only completed in 1791 with the Bill of Rights. Modern European attempts to follow the eighteenth century US constitutional path were suspended after the proposed constitutional treaty was rejected in referenda in France and the Netherlands in the summer of 2005. That was not, however, the end of the discussion. In the wake of the financial crisis, some – including Chancellor Merkel – suggested that, in the long run, a new constitutional settlement is the only acceptable way of defining the claims and obligations of member states. This is a convincing argument. If the path laid out in this section – whereby monetary union is followed by the development of some measure of fiscal federalism – were to be taken, a constitutional solution laying out clearly the extent and limits of European member states’ commitment would be an essential condition.

The aftermath of the recent financial crisis has prompted another sort of European reflection on how a workable federal fiscal system arose in the United States. Again, this system was not introduced until 1790, some fourteen years after the Declaration of Independence. Fiscal federalism actually took much longer to work its nation-building magic. It was not until the middle of the nineteenth century that “the United States is” became the accepted grammatical form (rather than “the United States are”). The federal state did not expand beyond a rather modest peacetime share of 3 percent of GDP until the middle of the twentieth century. Strikingly, that ratio of 3 percent was the size of the EU budget envisaged by European Commission President Jacques Delors at the time of the Maastricht Treaty, at a moment when the actual size of the budget was the 1 percent that it remains today.

Those who (like Jacques Delors) would like to see Europe moving in a federal direction see the long (and often tumultuous) development of the United States as a precedent. But is this development a helpful example or a grim warning? Each episode in the creation of a modern federal US state offers analogies to the painful and politically contentious road to European integration.

This chapter investigates two of the most widely debated aspects of US fiscal and financial integration: (1) the responsibility of the federation for state-level debts and for the creditworthiness of states; and (2) the working of a federal central bank. Today’s fiscal federalism in the United States is relatively robust, but the road from 1790 was rocky; and the first two decades of the Federal Reserve as rife with monetary mistakes as the first fifteen years of the European Central Bank.

4.2 Assumption of state debts

The search for a solution to Europe’s post-2008 debt crisis has awakened European interest in American precedents for federal finance. As a result, Alexander Hamilton has become the hero of contemporary Europe. Hamilton’s 1790 negotiation of a federal assumption of the high levels of state debt in the aftermath of the War of Independence looks like a tempting model for European states groaning under unbearable debt burdens. It was cited as a helpful precedent in Thomas Sargent’s Nobel Prize acceptance speech (2011) and, for example, in the annual report of the German Council of Economic Advisors (2011). The back-
ground to the assumption was a no-blame principle. The thirteen states had not been responsible for the poor fiscal performance, which was deemed a consequence of the external circumstances of the War of Independence. After all, much of the debt resulted from financing the war against Britain, and it was more or less a matter of chance in which state that war was waged and consumed financial resources.

Hamilton’s eventually successful proposal for the assumption of state debt accumulated due to the War of Independence was certainly a decisive initial step in the creation of a real union – and it accompanied the constitutionalisation of the American experiment. This assumption, however, did not produce a responsible system of state finance, and during the half century that followed there were numerous state-level defaults and a debate about new debt assumptions and/or new ways of blocking state indebtedness. The irresponsibility of individual states also gravely damaged the reputation of the federal government and made external borrowing prohibitively expensive.

Hamilton argued – against James Madison and Thomas Jefferson – that the war debt accumulated by the states in the War of Independence should be assumed by the federation. There were two sides to his case, one practical, the other philosophical. Initially the most appealing argument was that a federal takeover of war-related state debt was an exercise in providing greater security, and thus reducing interest rates from the 6 percent at which the states funded their debt to 4 percent. This was the practical side. Hamilton emphasised the importance of a commitment to sound finance as a prerequisite to public economy. “When the credit of a country is in any degree questionable, it never fails to give an extravagant premium upon all the loans it has occasion to make.” Reduced borrowing costs and a lower drain on resources arising from the need to service debt would allow the state governments to “furnish new resources,” to uphold public order and to protect the security of the Union against foreign attacks. There would be concrete benefits, accruing “to every member of the community.” Land values would increase from their post-war lows.

The historical case of the United States looks like an attractive precedent for today’s Europe, where proponents need to sell a solution as holding out gains for both debtors and creditors.

As for the philosophical side, Hamilton also insisted on a stronger reason for following good principles than merely the pursuit of expediency. There existed, he stated, “an intimate connection between public virtue and public happiness.” That virtue consisted of honouring commitments. Extended to a political body, it would build solidarity. Those principles made the fiscal union what he called “the powerful cement of our Union” (Hamilton, 1790). The promise to honour obligations had already been clearly set out during the War of Independence as a foundation of a new American identity: in Congress’s address to the states of April 18, 1781, it had stated that: “A bankrupt, faithless Republic would be a novelty in the political world, and would appear, among reputable nations, like a common prostitute among chaste and reputable matrons.”

The state debt of around 25 million US dollars at this time was smaller than the federal debt, also incurred almost entirely as a result of the war, which consisted of 11.7 million US dollars of foreign-owned federal debt (on which at that time default was unthinkable) and 40.4 million US dollars of domestically-owned debt. To put these figures into context, a modern estimate of GDP in 1790 is 158 million US dollars (see Mitchell, 1983).

The condition for success in the American case was that the Union raised its own revenue, initially mostly through new excises and federally administered customs houses. The logic of a need for specific revenue also applies in modern Europe, where the sources of funding for bank rescues or for a recapitalization fund should be clearly spelled out. This consideration has produced an initiative to impose a small levy or tax on financial transactions. In the longer term, and after the foundation of a common state with a common army, parliament and government, the analogy with Hamilton’s system would require a more extensively reformed fiscal system that might include a common administration of customs or of value added tax (with the additional benefit in both cases of eliminating a great deal of cross-border fraud).

Would an expansion of European federal fiscal capacity represent a massive transfer of power from member states to EU authorities? It is significant that the 1790 assumption of state debt occurred in the context of an understanding that federal powers should be few and limited. In Federalist paper 46, James Madison had made it clear that central authority should be carefully circumscribed, and had concluded
that: “The powers proposed to be lodged in the federal government are as little formidable to those reserved to the individual states, as they are indispensably necessary to accomplish the purposes of the Union.” (Madison, 1788).

There were two problems with the Hamilton proposals, both of which gave rise to immediate and violent political controversy. Firstly, state debt had been extensively traded on a secondary market at a deep discount. Relatively few of the original purchasers, who had acted out of patriotism, still held the debt; instead, the debt had been bought up by speculators — financial intermediaries — who hoped that something like the Hamilton scheme might be realized. A settlement that imposed no haircut and treated the debt at nominal value would, in effect, reward speculation. James Madison disliked the idea of what would effectively constitute a subsidy for Northern financiers. However, Hamilton argued that any discrimination between creditors based on the moment when they had bought debt would represent a breach of contract.

Secondly, some states had already made great efforts to pay off their wartime debt and would not benefit from the federal bailout. Virginia and Maryland in particular had largely paid off their debts, and the Virginian representatives in Congress consequently pressed for a precise calculation of the level of state debt outstanding (Mitchell, 1962, p. 70). Madison, in particular, pressed for a compensation for states that had already discharged their debt. Politically, a straightforward debt assumption was unworkable.

Initially, assumption was rejected by Congress, with potentially catastrophic consequences. Thomas Jefferson, who was opposed to the Hamilton proposal, wrote to his fellow Virginian James Monroe about the possibility of failure as Congress was split. “Unless they can be reconciled by some compromise, there will be no funding bill agreed to, our credit will burst and vanish, and the states separate” (Mitchell, 1962, p. 81).

Eventually the Union was bought, at a price, and there was a compromise. Since the financial arrangement favoured the Northern states, the South and its landed elite needed symbolic, as well as practical compensation. There were financial clauses that limited the liability of the Southern states. The exposure to the common liability of Virginia, the most politically powerful state in the Union, was limited with a ceiling. Only this inducement moved Madison to drop his opposition and agree to assumption. However, there was also a symbolic and political concession. The historic compromise also led to the capital being moved to the new site of Washington, on the border of Virginia and Maryland, rather than staying in Philadelphia. Some states, such as Georgia, opted out of the assumption.

4.3 Problems of state debt

The US experiment in federalized finance was not immediately successful from the point of view of driving economic growth in the young republic. Two important parts of Hamilton’s financial architecture were not realized at all, or only imperfectly. He proposed a model of joint stock banking on a national scale, which ran into immediate opposition, and which, curiously, was much more influential in Canada than in the United States. Secondly, the proposal for a national central bank, based on the model of the Bank of England, was eventually blocked by political opposition. The charter of the First Bank of the United States was allowed to lapse in 1811; then, one generation later, the charter of the Second Bank of the United States was successfully opposed by Andrew Jackson after 1832.

The fiscal side did not bring long-lasting relief either. Yields on US government debt fell immediately, showing the new confidence produced by the debt arrangement. By the beginning of 1792, they had fallen to 4.6 percent; but the cost of borrowing subsequently rose sharply again (see Figure 4.1). Neither did the Hamiltonian scheme of federal finance guarantee a peaceful commonwealth in the longer term. The immediate consequence of the new excise was a revolt in Pennsylvania (the Whiskey Rebellion of 1794 and four years later the Fries Rebellion). In the longer run states were divided over the shape of tariffs, which Southern states saw as disadvantageous to them since they relied on cotton exports and the import of British manufactures. In fact, the fiscal union turned out to be dynamite, rather than cement, because the tariff dispute turned into a constitutional struggle by the 1830s in which Southern states claimed that the Constitution was merely a treaty between states and that the Southern states could ignore federal laws that they deemed to be unconstitutional. The fiscal mechanism designed to allow servicing of a common liability raises inherently explosive distributional issues.
The distributional consequences between states of a fiscal mechanism would also be a potentially divisive mechanism in contemporary Europe. The most popular suggestions currently under discussion are a general financial transactions tax, which would fall heavily on major financial centres (and for this reason is resolutely blocked by the United Kingdom); or a European payroll tax, which would raise problems of different implementation and coverage in the various European states.

The fiscal union was also dangerous because it allowed states to recommence their borrowing. As with the dispute over the tariff, this problem became very apparent in the 1830s. As international capital markets developed in the first decades of the nineteenth century, American states used their newfound reputation to borrow on a large scale, and ruined their creditor status fairly quickly as a result. At first, the North American states looked to British banks and investors as more appealing debtors than the newly independent South American republics, which merely wanted to borrow in order to buy weapons. Agents of the American states swarmed over Europe in order to sell their debt. A key part of the argument for the foreign investors was that the American state borrowing was sanctioned and approved by the US government. A characteristic statement was that of the London Morning Chronicle in 1839 and 1840 that: “Persons desirous of investing money in any of the principal American securities will find on inquiry that we have never over-rated the honour and good faith which have always been shown by the United States government.” Even “the newest and smallest states” were satisfactory for Washington (McGrane, 1933, p. 677).

In addition, the difficulties of the states became acute due to banking issues. In the longstanding conflict about the Hamiltonian concept, President Andrew Jackson launched a Bank War, in the course of which he vetoed the renewal of the charter of the Second Bank of the United States, but also encouraged the establishment of other banks. The result was successful in achieving Jackson’s immediate objective, in that it decentralized credit. However, the new banks subsequently immediately started to expand their lending, above all to the states and the political elites that had facilitated their establishment. The upshot was an orgy of bank credit to individual states, often structured in a complex way so that debt securities could be repackaged and sold on foreign markets.

When in 1841 the first state, Mississippi, reneged on its debt, disingenuously claiming that its law allowing state bond issuance had been unconstitutional, the major British bank involved in the issuance of American state debt in London, Barings, counselled against a panic response: “Is it wise for this single instance of dishonesty in a remote and unimportant state to endeavour to brand the whole of the United States as wanting in good faith? We think not.” (McGrane, 1933, p. 683). But the foreign creditors also tried to push the US government into a new federal assumption of state debts, and the case was actively pushed by the anti-Jacksonian party, the so-called Whigs (while Jacksonian Democrats saw the campaign as a conspiracy to get the American taxpayer to bail-out individual states, but above all the foreign creditors).

The practice of default spread in 1841–42, with Florida, Michigan, Pennsylvania, Maryland, Indiana, Illinois, Arkansas and Louisiana all announcing their unwillingness or inability to pay. At this time, a whole palate of responses was contemplated, ranging from the expulsion of defaulters from the Union to the repetition of the Hamiltonian assumption. The situation was so precarious because of its
international consequences: not just exclusion from the European capital markets that were needed to finance American development, but also a real security threat. The federal government could not even sell bonds yielding 6 percent, while – as the US Treasury bitterly complained, “Nations with not a tithe of our resources, and with large public debts, have been able to effect loans at 3 percent per annum” (Bolles, 1885, p. 580). But the consequences of default also included the risk of international conflict, as Britain was widely thought to be willing to use naval and military power to enforce credit claims. In response to the danger of military conflict with the principle creditor country, Congressman John Quincy Adams even introduced a proposal to make the repudiation of any debt to foreigners “a violation of the Constitution of the United States” and which stipulated that any state involved in a war as a consequence of repudiation should cease to be a state of the Union (Scott, 1893, p. 248–9).

Inevitably, the Hamiltonian option was floated again. In 1843, a congressional committee recommended a new assumption, on the grounds that the debts incurred had been mostly to fund infrastructure, which was, “calculated to strengthen the bonds of Union, multiply the avenues of commerce, and augment the defences from foreign aggression” (Scott, 1893, p. 251). But this proposal was rejected, primarily on moral hazard grounds: if states were freed of present debt, they would only be likely to get into debt very quickly again. The measure also would have imposed a clear and heavy cost on the non-indebted states. The outcome of the 1840s debate was laissez-faire: no federal intervention to punish defaulters, but no bailout either.

The question of how the Union should respond to a state default inevitably hinged on the degree of responsibility of the defaulters. Subsequently, it was sometimes claimed that the US crisis had come about because of tightening credit conditions in Europe, and especially due to interest rate hikes by the Bank of England (Temin, 1969). Econometric analysis, however, shows that the surge in state yields in 1841–42 occurred first on the domestic US markets, and only with a lag (due to the slow communications technology at the time) on European exchanges (Kim and Wallis, 2005).

There are strong parallels between the development of American states in the 1830s and that of modern Europe. The American states that borrowed most heavily and then ran into problems were the less developed states that saw borrowing as a way of financing development infrastructure, especially in transport. The borrowing states were also keen to encourage the development of domestic financial institutions in order to stimulate growth and development. When problems appeared, there could be a debate as to whether they were due to external circumstances (a crisis in the world’s financial centre, the United Kingdom then, the United States now), or to a flawed development strategy, or to governance problems and corruption in both state governments and banks. These issues were extensively debated in the 1840s, and a contrast was drawn with the position of state finances in the aftermath of the War of Independence.

In the case of the state defaults of the early 1840s, as in that of contemporary Greece, the problems stemmed primarily from misguided policies, and cannot be blamed on external circumstance, war or global crisis.

One generation after the era of defaults, in the 1860s, the country was torn apart by the Civil War as a result of what was largely a dispute about states’ rights and about the character of financial burdens. In a bid to end the immoral practice of slavery, Abraham Lincoln originally proposed that the slave-owners should be compensated by the public purse. But such a buy-out would have been unacceptably expensive for the non-slave states. So in the end, the Virginians (and the rest of the South) were expropriated by the Union – at least that is the way they interpreted events. The Civil War arose out of longstanding tensions between the North and the South, and was largely driven by Southern hostility to the revenue stream chosen to service the federal debt (the Hamiltonian tariff, which protected Northern manufacturers and penalized Southern exporters), as well as by the deeply problematic issue of whether and how slave-owners might be compensated for abolition.

A second wave of state defaults occurred in the 1870s in the South (and in Minnesota), in the aftermath of the Civil War and of Reconstruction. Some Southern policy-makers – and the broader public – took as their example the Fourteenth Amendment to the Constitution, which repudiated debts that had been contracted in the interest of rebellion. Southerners disliked the new debt incurred in the process of Reconstruction – and all the more so since it was owed to Northern creditors. In addition, interest payments had risen during the war and accrued interest increased overall debt levels, while tax revenues had
collapsed. For the most severely affected of the states, Arkansas, bonds were trading at 7 percent of their nominal value by the end of the 1870s (see Figure 4.2). Unlike the defaults of the early 1840s, the problems of a specific group of Southern states no longer affected the cost of borrowing of other states or of the United States.

The eventual solution lay in the adoption of debt restraint or balanced budget laws. At the end of the nineteenth century, many states set a very low ceiling on permissible state debt, and other states limited indebtedness to a (small) share of total taxation. Only the Northern states (New Hampshire, Vermont, Massachusetts, Connecticut and Delaware), which had never really experienced the debt problem, allowed their legislatures to contract unlimited debt. By the early twenty-first century, such legislation limits state indebtedness in all but one of the 50 states.

4.4 Federal central banking

How centralized should the operation of a central bank be? The early central banks – in Sweden, England, and France – were unitary institutions that corresponded precisely to unified and centrally directed states, with a powerful capital that was also the main financial centre. The models for federal central banking came rather later, with Germany (1875), Switzerland (1907) and the United States (1914). Such a federal central bank required complex rules to ensure that there was no direction by the federal government, and that policy operations reflect-

ed the diverse conditions of a federation.

The central banking side of the US federal model, the Federal Reserve System, has often been held up as a model for the European System of Central Banks. Indeed the Federal Reserve had an impact on the development of European central banking in two ways: firstly, indirectly, in its influence on German central bank design. Allied suggestions on how to reform German central banking and free it from its previous dependence on the central German state (the Reich) drew on the US model and shaped banking law during the allied occupation. The Deutsche Bundesbank evolved out of a federal Bank deutscher Länder. It retained that federal organization, in which a board (Direktorium) met with regional heads of the Landeszentralbanken in the policymaking Bundesbank Council (Zentralbankrat). Thanks to the Bundesbank’s successful policy, especially in providing for a greater degree of price stability than any European central bank except for the Swiss National Bank, the Bundesbank’s design, in turn, heavily influenced the debate on the governance and policy-orientation of the future European Central Bank (ECB).

The US model also directly impacted the ECB’s design. When it came to designing European institutions, European federalists also consistently looked directly and explicitly to the American model. In the 1960s, the Vice-President of the European Commission, Robert Marjolin, who had pushed for the institutionalization of a Committee of ECB Governors saw that body as the “embryo of a Community Federal Reserve Board.” In 1970, German Economics Minister Karl Schiller drew up a four stage plan for increasing economic and monetary coordination, which he believed would lead to a “sort of Federal Reserve System.” The 1970 Werner Plan envisaged two parallel Community “organs” as indispensable for European stability: a centre of decision-making for economic policy and a Community system for the central banks. When in 1972, in accordance with the Werner recommendations, a European Monetary Cooperation Fund was established, its designers talked ecstatically about it becoming a new Federal
Reserve, even although the new body had only very limited routine tasks in practice. In the early 1990s, the Federal Reserve System, and its relationship to federal political authority in the executive and the legislature, was conceived of as an explicit model for European emulation. The European Commission, in particular, referred to the future ECB as a "Eurofed" in the early 1990s (James, 2012).

Both the European Commission and the existing national central bankers saw an attraction in the US institutional model. The board or council of the central bank had a permanent core, as well as some way of securing an alternation of National Central Bank (NCB) representatives analogous to that of the Federal Reserve districts, whose presidents all attend, but do not all vote in the Open Market Committee (there is a rotating voting system, for all except the president of the New York Bank). Since at the time of drawing up the ECB draft statute and negotiating the Maastricht Treaty it was unclear how many countries would initially participate in the monetary union (and that number might have been relatively small), no solution involving a rotation of committee members was adopted. By the time the euro area had increased to a membership of 17, the large number of NCB representatives had become a problem for the effective operation of the ECB Council.

Interest in learning from the Federal Reserve and its policy stance remains intense. By 2012, with the new ECB government bond purchasing program, many commentators suggested that the ECB had, at last, become more like the Fed. For some, this meant praise of institutional flexibility; for others, it meant that central banking principles had been replaced by politically driven expediency.

4.5 The Federal Reserve System

As in the case of fiscal federalism, the American precedent is filled with a legacy of policy mistakes and of bitter controversies. The question of the relationship of a central federal bank to local banking systems – and to the patronage systems built up by local elites – has always been a highly contentious issue in American politics. The feeling that local interests would be sacrificed to a Massachusetts and New York banking elite was a strong driver of opposition to Alexander Hamilton’s plans of 1790. It was also at the core of Andrew Jackson’s campaign against Nicholas Biddle and the Second Bank of the United States in the 1830s; and his attempt to establish an alternative banking system, answerable to and controlled by local elites (the so-called “pet banks”).

Initially, as a response to the US financial panic of 1907, the National Monetary Commission looked at the models of the leading institutions of the time, namely the Bank of England, the Banque de France, and the Reichsbank, and recommended a federally dominated state central bank (in the form of the Aldrich bill). That proposal was rejected by the Democrats. The alternative scheme – which was eventually adopted – was engineered to give a great deal of power and autonomy to the Reserve Banks in the individual Reserve Districts, whose boards banks were largely chosen by the regional banks. Until 1933, the power of the Washington Board was very limited, and it met and interacted relatively rarely with the Committee of Governors representing the individual Reserve Banks. After 1933, the Open Market Committee acted as the key policy-making organ of a more centralised system.

The Federal Reserve System relied on a complicated governance system that was designed to preserve checks and balances, and to ensure that the system could be neither dominated by the powerful East Coast financial community nor by the federal government in Washington. The regional Federal Reserve Banks corresponded to what were felt to be logical economic areas, which did not necessarily overlap with state boundaries. A separate Reserve Bank for each state would have created an over-complicated system, with a large and unwieldy central committee (originally termed the Federal Reserve Advisory Council). The majority on the boards of the Reserve Banks were selected by the local nationally chartered banks, which composed the US financial system and which were required to subscribe to the capital of the Reserve Bank. This principle continues to the present day. Three directors were chosen by the banks of the district to reflect the financial community, and another three to represent the general community (“commerce, agriculture or some industrial pursuit”); with a final group of three being selected by the Washington Board. The seven member Board in Washington was the political counterpart, and five members were appointed by the President with the advice and consent of the Senate. In the original Federal Reserve Act, the Treasury Secretary and the Comptroller of the Currency were also members of the Board. The twelve regional banks represented coherent regional economies. The Reserve Banks were required to pay a
The original (1914) Federal Reserve System in many ways more closely resembles the interaction of national central banks in the international system of the gold standard. The system as a whole was not like that of a bank with its own balance sheet. The twelve Reserve Banks controlled their own operations, and had their own discount policy. Any transactions with other Reserve Banks had to be settled in the same way as those with foreign central banks were. Section 17 of the 1913 Act deterred the individual Reserve Banks from issuing each other’s notes by imposing a fine, and notes from one bank were to be returned to the issuing bank: “Whenever Federal Reserve notes issued through one Federal Reserve Bank shall be received by another Federal Reserve Bank they shall be promptly returned for credit or redemption to the Federal Reserve Bank through which they were originally issued. No Federal Reserve Bank shall pay out notes issued through another under penalty of a tax of 10 per centum upon the face value of notes so paid out (…). The Federal Reserve agent shall hold such gold, gold certificates or lawful money available exclusively for exchange for the outstanding Federal Reserve notes when offered by the Reserve Bank of which he is a director. Upon the request of the Secretary of the Treasury the Federal Reserve Board shall require the Federal Reserve agent to transmit so much of said gold to the Treasury of the United States as may be required for the exclusive purpose of the redemption of such notes.” The mechanism was known as the Gold Settlement Account.

Immediately after the Federal Reserve Act took effect, the outbreak of the European War made the question of international gold movements highly sensitive, and the most important financial figure in dealing with international issues, the New York Governor Benjamin Strong, pressed for a centralization of reserves, and New York in practice became the dominant holder of gold assets in the US system. The Board was pleased with the easing of interest rates in the United States after 1915 and claimed that it was the result of the new institutional regime (Meltzer, 2003, p. 79–80).
Like national central banks in the international gold standard order, the various American Reserve Banks had their own discount policies and applied different rates – especially at moments of strain. Globally, despite the theoretical possibility of capital being sent over vast distances to other parts of the world, much capital remained local. Creditors and banks often preferred to do business with known borrowers, and where local jurisdictions could settle disputes. In particular, a critical part of the international gold standard was that individual national central banks set their own interest rates, with the aim of influencing the direction of capital movements. This became the central feature of the gold-standard world: a country that was losing gold reserves would tighten interest rates in order to attract money. Central bank discount rates (the policy rate) in France and Great Britain, major capital exporters, were constantly lower than in Germany, which had no major current account surplus, even although there was never any market expectation of a parity alteration. France and Britain in practice placed a floor under rates, and their choices affected other countries because of the possibility of arbitrage. Italy, where there were expectations of parity changes in the 1870s and 1880s, needed much higher rates.

We can see the same differentiation of interest rates in the early history of the Federal Reserve System. Individual Reserve Banks set their own discount rates. Under Section 14(b) of the 1913 Federal Reserve Act, their rates were “subject to review and determination of the Federal Reserve Board.” The Board also (section 13) had the “the right to determine or define the character of the paper thus eligible for discount.” The individual Reserve Banks had different collateral requirements and accepted differing kinds of securities. In smooth or normal times, the rates tended to converge; but in times of shocks, they could move apart (see Figure 4.3). In the summer of 1929, at the height of the credit boom, New York tightened, while the other banks left rates unchanged; in 1932, New York went much faster and further in lowering rates than other banks. This created scope for major policy conflicts. In 1919, the Attorney General ruled that the Board could change rates for a Bank; and in 1929, there was an acute conflict when the Board voted 4:3 to impose a reduction on the Chicago Bank (Chandler, 1958, p. 44; Meltzer, 2003, p. 221–3).

By the late 1930s, the rate differences were disappearing, but they only vanished completely during the Second World War, for the simple reason that operating with federal bills (a single instrument) in open market operations, rather than with a multiplicity of differently valued private securities, became the primary tool of US monetary policy. When it came to monetary policy instruments, the makers of the ECB took the practice of the post-war Federal Reserve, and assumed that the debt instruments of different member states could fill the monetary policy role of a single financial instrument (federal government securities) in the case of the Federal Reserve’s open market policy.

The gold-standard rules look very different from the modern practice of monetary union, which relies on a single uniform interest rate. That one-size-fits-all approach meant that in the 2000s interest rates in Southern European countries were too low, and in Northern Europe they were too high. Identical nominal rates with divergent real rates produced unsustainable credit booms in the South. By contrast, a gold-standard rule would have produced higher rates for the Southern European borrowers, which would have attracted funds to where capital might be productively used, and at the same time acted as a deterrent against purely speculative capital flows. A modern equivalent to the gold standard/early Federal Reserve approach would require differing (higher) lev-

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**Figure 4.3**

Federal Reserve discount rates
October 1914 - December 1939

Source: Chandler (1958).
els of collateral requirement for central banks operating in countries with a housing and credit boom (pre-2007 Spain or Ireland) than in countries with no credit boom (pre-2007 Germany), see Brunnermeier (2012).

The early history of the Federal Reserve is rarely seen as a productive source of lessons for central bank policy because it is overshadowed by dramatic policy mistakes that did not follow automatically from its design, but were probably intensified because of the governance structure and the conflicts of the different powerful Reserve Banks (especially New York, as the international financial centre and Chicago as the hub of the domestic trading system). In 1920/21, and more disastrously in 1930–33, the Federal Reserve System engineered a pernicious deflation (Friedman and Schwartz, 1963). Reform suggestions consequently focused on coordinating policy more centrally.

4.6 Reform of the Federal Reserve System

It was only in the 1930s, with the new Bank Law of 1933, that the Federal Reserve System really started to act as a modern central bank. That legislation was the result of the Great Depression, a profound disruption of economic life in which it was generally felt that both American banking and American central banking had failed.

The mechanism of settlement changed in the 1930s, and was renamed from the Gold Settlement Account to the Interdistrict Settlement Account (ISA). The change in nomenclature was necessary in that the dollar value of gold or gold certificates was arbitrarily set after 1933 by the US Treasury. In April 1975, with much larger international transactions occurring through New York, the Federal Reserve Open Market Committee agreed to institute an annual settlement (in April) of the ISA balances of the Federal Reserve Banks in terms of reallocating the ownership shares in the open market portfolio, including interest, acquired by the system in the process of money creation. From the 1970s to 2008, the balances were of small size and limited importance, because inter-district transfers occurred primarily through the interbank market. After 2008, with the seize-up of the interbank market, the ISA became very significant.

Figures 4.4, 4.5 and 4.6 compare the ISA balances in the US with the Target balances in the euro area, which have a very similar definition and which were discussed extensively in last year's report (EEAG, 2012, Chapter 2). Basically, these are net payment orders through the common reserve system that require one District Fed or one National Central Bank to credit payment orders on behalf of other such institutions, and that hence lead to the building up of local debt and asset positions. Figures 4.4 and 4.5 show the balances in absolute terms, and figure 4.6 shows the sum of the respective gross claims relative to the GDP of the US or the euro area, respectively.

As in the case of the ECB, the Fed’s settlement mechanism did not appear to be problematic or controversial until the 2008 financial crisis. After 2008, large and persistent imbalances appeared, however, with the large liabilities of the San Francisco and Richmond banks, and the large asset balances of New York. The highest levels of deficits for San Francisco were 67 billion US dollars (February 3, 2010) and 66 billion US dollars (December 28, 2011); and the maxima for the New York surpluses were 270 billion US dollars on November 12, 2008, in the aftermath of the Lehman collapse, and 368 billion US dollars on January 12, 2012. These are relatively small figures compared with the overall expansion of
the Federal Reserve System’s balance sheet, but they are not insignificant. They are comparable to European Target imbalances in that they arise from very large movements of funds out of some commercial banks that operate across the whole of the United States, but have their headquarters (and thus their financial location) in a particular place within one of the twelve Federal Reserve districts. The most plausible explanation involves the head office location of large banks in the San Francisco district (Wells Fargo) and in the Richmond district (Bank of America), with the Federal Reserve Bank keeping claims against these banks, rather than selling them in the settlement process. Since the ISA imbalances reflect fundamentally changing market perceptions of US private financial institutions, rather than current account imbalances between the various regions of the United States, and as local District Feds being private institutions are not vulnerable to local political pressure aiming at state finance with the printing press (Garber, 2010), they do not display the permanence that has characterized their European equivalents, where banks in deficit countries are paralyzed because of the ties between banks and sovereigns (with banks holding the paper of the sovereigns that bail them out).

The most pronounced difference between the United States and the European system (highlighted in Sinn and Wollmershäuser, 2011, and Sinn, 2012a) is, however, that only the United States has a settlement system that requires the debtor District Feds to securitize their ISA debt, i.e. to redeem their liabilities with interest bearing, marketable assets. In the euro area, by contrast, the debt is simply kept in the books and carried forward year by year with interest being added. Figure 4.6 shows that during the crisis, around the month of settlement (April), the US balances normally go down significantly. An exception was 2011. In that year, settlement was postponed by a year to give the deficit District Feds more time to react. In April 2010 and 2012 settlement actually took place in the United States and reduced the balances. In April 2009, by contrast, the balances came down in the months before April and rose in the months thereafter. Presumably, the District Feds in deficit had tried to avoid the transfer of interest bearing assets upon settlement by reducing their local credit supply and hence attracting private capital inflows from other regions, which reduced the ISA balances. They did this despite the fact that the system is underwritten by the US government, perhaps because only the revenue after cost is transferred to the government, while cost includes local ameni-
ties, above all the widely differing local salaries.\(^1\) At present (November 2012), the gross sum of the US ISA balances is 0.8 percent of GDP, while the euro area’s gross sum of Target balances has risen to 11 percent of GDP.

In addition to generating useful incentives to keep the interdistrict imbalances small, the settlement does protect local central banks more effectively against the break-up of the system. In Europe, the creditor central banks would probably lose their claims against the debtor central banks should the euro break up, as these are claims against a system that no longer exists. This makes the national governments that own the central banks vulnerable to political pressure to participate in further bail-out activities like government bond purchases and the establishment of intergovernmental rescue programs, which both reduce the Target imbalances. Had the euro area adopted a system of securitizing the Target claims with marketable interest bearing assets that would retain their value even after a break-up of the system, the incentive to participate in bail-out activities contrary to the Maastricht Treaty (no-bail-out clause, article 125 Union Treaty, and ban on state finance with the printing press, article 123 Union Treaty) would have been lower.\(^2\)

### 4.7 Conclusions

The US example is often cited to make the sensible point that, in the long run, any monetary union also requires some sort of a fiscal union. That demand appeared frequently in the political rhetoric of the early 1990s, when the German government in particular insisted that economic and monetary union needed to be accompanied by political union. The interconnections of state debt and (private) banking sector liabilities produce intense conflicts about who – which political authority – is the ultimately debtor. Without a political mechanism for allocating fiscal responsibility, it is hard to imagine long-term stability.

Sometimes a move to political union is suggested simply as a pragmatic solution to the borrowing incapacity of some states. In an extreme example, early in the First World War, the Russian Imperial government believed that it would be able to borrow if it declared a union with its political allies France and Great Britain. The proposal was absurd, and merely highlighted the absurd incompatibilities of very different political systems. The political union can only succeed on the basis of a constitutionalisation, as in the American example, which, in turn, depends on the recognition and acceptance of common identity, as well as of some shared interests.

There is certainly an interest-based case to be made for greater integration. When the European Monetary Union was created, no adequate provision on a European basis existed for banking supervision and regulation, which like fiscal policy, was left to rather diverse national authorities. An explosion of banking activity occurred simultaneously with the transition to monetary union and may well have been stimulated by the new single money. A “banking glut” led to a new challenge to monetary policymaking. Neither of these problems, fiscal and banking, was uniquely European, but the complexity of interaction between different levels of authority and different interests produced a coordination problem that was uniquely difficult to deal with in the European context.

In this context, it is not surprising that Europeans turn to examples of how political institutions have evolved elsewhere that solve the problem of federalism (as well as looking to the history of European federal systems, such as that of the German state system since 1806). But it is a mistake to think that the United States holds out a very simple or easy to apply model. American history shows how difficult and obstacle-filled the path to federalism can be.

### References


\(^2\) See Sinn (2012b, c) for a discussion of the potential break-up losses related to the Target balances and the resulting path dependence of rescue operations.


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