The EEAG Report

on the European Economy

2016 No.15



WHAT NEXT?

Macroeconomic Conditions and Outlook INTERGENERATIONAL FAIRNESS

Tuning Secondary Education

DENMARK: TOO GOOD TO BE TRUE?

Western Balkans: Coming Together



The EEAG Report

on the European Economy 2016

EEAG Report on the European Economy ISSN 1865-4568

Publisher and distributor

CESifo Group Munich Poschingerstraße 5 81679 Munich, Germany Phone: +49 (0)89 9224-0

Fax: +49 (0)89 9224-1409 www.cesifo.org

Reproduction permitted provided source is quoted and copy is sent to the publisher

Suggested citation

EEAG (2016), The EEAG Report on the European Economy, CESifo, Munich 2016



FOREWORD

World economic growth faced a number of fresh challenges in 2015, including the decline in oil and commodity prices, the slowdown in emerging market economies, and an initial interest rate hike by the US Federal Reserve System. Despite the turmoil, the European economy continued to recover, although the improvement remains weak and fragile, with yet another flare-up of the euro crisis in Greece. The EEAG scholars, focusing on the future, pose the question of What next? As is its tradition, the 2016 EEAG Report begins with an analysis of the business cycle situation in the major economies around the world, including a forecast for this year. Indepth chapters then delve into several topical issues. Chapter 2 addresses the demographic challenge faced by some EU countries, which is being exacerbated by labour mobility in the union, calling for a common solution to restore both cohesion between EU members and intergenerational fairness in society. Chapter 3 focuses on the need for tuning secondary education, a need starkly illustrated by the high levels of youth unemployment in Southern Europe. Practice-oriented dual education, standardised – and thus comparable – tests and greater coordination at the European level are all identified as key strategies. Chapter 4 offers an in-depth analysis of the feasibility of taking Denmark as a role model for implementing political reforms effectively. Denmark, it turns out, is not too good to be true. Finally, Chapter 5 explores developments in the Western Balkan countries, which are in the process of coming together and seeking a sustainable relationship with the EU.

The European Economic Advisory Group at CESifo, which is collectively responsible for all parts of the report, consists of a team of seven economists from six countries. This year the Group is chaired by John Driffill (Birkbeck College) and includes Torben M. Andersen (Aarhus University), Giuseppe Bertola (EDHEC Business School), Harold James (Princeton University), Jan-Egbert Sturm (KOF Swiss Economic Institute, ETH Zurich), Branko Urošević (University of Belgrade) 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 researchers and staff at CES and Ifo who helped to prepare this year's report: Nadjeschda Arnold and Christopher Weber (assistants to the group), Atanas Hristov, Nikolay Hristov and Andreas Steiner (economic forecast), Lisa Giani Contini and Julio Saavedra (editing), Christoph Zeiner (graphics), Katharina Pichler and Elisabeth Will (typesetting) and Ines Gross (cover). I also wish to thank Swiss Re for hosting our autumn meeting.

Given that I am about to retire, upon reaching the mandatory retirement age of 68, I wish to take this opportunity to thank all those who have contributed over the years to develop the EEAG Report into a true European undertaking with a non-partisan approach aiming at serving Europeans as a whole.

Hans-Werner Sinn President, CESifo Group Professor of Economics and Public Finance Ludwig Maximilian's University Munich

Munich, 22 February 2016

54

70

CONTENTS

Recommendations for Europe		
Summary	8	
Chapter 1 Macroeconomic Conditions and Outlook	14	

The industrialised countries remained in recovery mode in 2015, while growth in emerging markets slowed down markedly, with Latin-America and Russia even slipping into recession. Favourable business cycle conditions in the United States and Britain, together with moderate growth in the euro area, had a stabilising influence on the world economy. Fluctuations in the price of oil and other commodities led to very heterogeneous developments in emerging economies, with India's growth rate exceeding that of China in 2015. Demographic trends and China's growing reliance on domestic demand are expected to lead to further long-term declines in its structural growth rate, which should nevertheless remain stable in 2016.

Chapter 2 Intergenerational Fairness

The idea of a contract between generations forms the bedrock of an equitable social order, stability and sustainability. In many countries the public sector is now expected to replace the family by funding education and pensions, but social welfare models are facing major challenges. This chapter looks at how to preserve intergenerational fairness by tackling issues like demographic ageing, rising healthcare costs, blocked housing, labour market flexibility and emigration.

Chapter 3 Tuning Secondary Education

Education is one of the most controversial issues in Europe. Reforms can have major short-term budgetary effects and a strong influence on longer-term growth and inequality trends. This chapter reviews differences across Europe in the orientation of curricula, in school autonomy and private education, and in teacher management, with a special focus on the secondary education level. It interprets current reform tensions and asks whether and how country-level policy choices may benefit from supranational EU-level coordination.

Chapter 4 Denmark: Too Good to Be True? 85

The Danish welfare state and flexicurity labour market model have a reputation for functioning efficiently, but is this assessment justified? How can the strong economic performance of a small, open economy be reconciled with a large public sector and a high tax burden? And how can such an economy cope with challenges like ageing and migration?

Chapter 5 Western Balkans: Coming Together 99

What measures are required to promote the creation of a vibrant regional economy in the Western Balkans? How can the region become a development pole, instead of a potential source of instability? This chapter outlines key aspects of the Western Balkans' economic transformation in the 15 years since the break-up of the former Yugoslavia and explores reform options for building a brighter future.

Authors: The Members of the European Economic Advisory Group at CESifo

TABLE OF CONTENTS

Recommendations for Europe				
Sı	ummary	8		
1.	. Macroeconomic Conditions and Outlook	14		
	1.1 Introduction	14		
	1.2 The current situation	14		
	1.2.1 The global economy	14		
	1.2.2 United States	17		
	1.2.3 Asia	17		
	1.2.4 Latin America and Russia	20		
	1.2.5 The European economy	21		
	1.3 Fiscal and monetary policy	25		
	1.3.1 Fiscal policy	25		
	1.3.2 Monetary conditions and financial markets	29		
	1.4 The macroeconomic outlook	34		
	1.4.1 Assumptions, risks and uncertainties	34		
	1.4.2 The global economy	36		
	1.4.3 United States	37		
	1.4.4 Asia	38		
	1.4.5 Latin America and Russia	39		
	1.4.6 The European economy	39		
	Appendix 1.A: Forecasting tables	45		
	Appendix 1.B: Ifo World Economic Survey (WES)	48		
2.	. Intergenerational Fairness	54		
	2.1 Introduction	54		
	2.2 Generational conflict and class conflict	56		
	2.3 "Bank Papa": how the dual labour market creates dependence	58		
	2.4 "Hotel Mama": property ownership	60		
	2.5 "Bank Grampers": pensions	63		
	2.6 Paying for grampers: medical insurance	65		
	2.7 Running away from grampers: debt dynamics	66		
	2.8 There's nowhere in the world to run: sustainability	68		
	2.9 Conclusion	68		
3.	. Tuning Secondary Education	70		
	3.1 Introduction	70		
	3.2 Education policy problems	71		
	3.2.1 Public benefits	71		
	3.2.2 Financial imperfections	71		
	3.2.3 Imperfect information	71		
	3.2.4 Coordination problems	71		
	3.2.5 Policy imperfections	72		

3.2.5.1 Centralisation of control	72
3.2.5.2 Decentralised choices	72
3.2.5.3 The pros and cons of differentiated schooling	72
3.3 Historical trends	73
3.3.1 Secondary schooling	73
3.3.2 Tracking versus comprehensive schooling	74
3.4 Heterogeneity, within and across countries	74
3.4.1 The role of family background	74
3.4.2 The role of tracking	75
3.4.3 The role of private schools	75
3.4.4 Funding, choice, and control	77
3.5 Schooling outcomes and reforms	78
3.5.1 Education across and within EU countries	78
3.5.2 Reform pressures and resistances	80
3.6 The role of EU institutions	81
3.6.1 Cultural homogeneity	81
3.6.2 Monitoring	81
3.6.3 Coordination	81
3.6.4 The pros and cons of centralised European education	82
3.7 Conclusion	82
4. Denmark: Too Good to Be True?	85
4.1 Introduction	85
4.2 Public sector and economic performance	85
4.3 Exchange rate policy	88
4.4 Model resilience – effects of the Great Recession	89
4.4.1 The labour market – the flexicurity model	90
4.4.2 Labour market policies	92
4.5 Future challenges	92
4.5.1 Ageing and fiscal sustainability	92
4.5.2 Migration	93
4.5.3 Welfare services – increasing demands	95
4.6 Conclusion	96
5. Western Balkans: Coming Together	99
5.1 Introduction	99
5.2 Growth and income patterns	100
5.3 Population patterns	104
5.4 Unemployment, income distribution and poverty	107
5.5 Transition patterns	109
5.6 Financial development patterns	114
5.7 Coming Together	119
List of Figures, Tables and Boxes	124
The Members of the European Economic Advisory Group at CESifo	127
Previous Reports	131

RECOMMENDATIONS FOR EUROPE

Chapter 2 Intergenerational Fairness

- European countries are developing into gerontocratic societies focused more on paying out past savings than
 investing in the future. These trends need to be reversed or they may hamper future growth potential and lower
 social cohesion, not least by alienating young people.
- The northern European model of greater labour market flexibility with income protection for job losers (a safety network) reduced the potential exclusion of younger people from the social contract.
- Incentives should be provided to reduce the blocking of housing by the elderly, including reverse mortgages and higher rates of property taxes (often political taboo, especially in southern Europe).
- Retirement ages should be raised to make the pension system more sustainable. Setting Europe-wide norms would be the easiest way to achieve this, but is prone to political pushback.
- High labour mobility in an economic area enables individuals to leave nations with high debt levels. One way
 to avoid such migration may be to switch to a contributions-based insurance pension system on a cross-national basis.

Chapter 3 Tuning Secondary Education

- Education should cater for individual students' capacity and aspirations. European countries should create dual educational tracks that also offer practical education, in cooperation with private industry.
- The content of vocational education programmes should reflect labour demand characteristics, and be adapted to structural changes.
- Governments should continue to pursue the social and economic benefits of comprehensive education, and prevent family background from being the main determinant of track choice or of segregated schooling.
- Administration of public schools should ensure that teachers exert suitable effort, especially with underprivileged children. Standardised tests can be helpful to this end, as can family choices across public and private publicly-funded schools subject to quality controls.
- EU attempts to monitor and coordinate education policy should be adjusted to reflect the policy guidelines above, and deserve more attention from national policymakers and the public.

Chapter 4 Denmark: Too Good to Be True?

- The take-away lesson for other countries does not lie in the specific policies adopted by Denmark, but rather
 that a medium-term focus on economic policy and a string of reforms can work, and create scope for policy
 choices.
- Make reforms work. A large number of reforms, including forward-looking reforms to address Denmark's
 ageing population, have been launched. However, implementation is crucial and progress in harvesting their
 projected effects should be closely monitored.
- A high level of labour market-relevant qualifications and their relatively equal distribution are crucial for maintaining a high employment and income level, as well as a relatively equal distribution of income.
- Public finances will be strained in the future, calling for better reallocation of resources or improvements in the public sector's efficiency and productivity.

Chapter 5 Western Balkans: Coming Together

- The Western Balkan consumption-based growth model has reached its limits. Sustainable growth calls for reindustrialisation and a focus on producing higher value-added tradeable goods and services.
- Cooperation between the region's countries needs to be expanded beyond the free flow of goods and services to include the free movement of capital, people and ideas.
- Regional physical, institutional, financial and educational infrastructure needs to be dramatically improved and brought up to European standards. The public sector needs to be streamlined. Banks should clean up their balance sheets in order to resume lending to the productive sectors of the economy.
- To overcome the lack of competitiveness resulting from previous inflation, some countries may need to devalue, but scope for such a measure is limited, partly due to the high level of euroisation of both deposits and loans.
- Education reform is one of the key preconditions for the region's long-term viability. Students need to stop
 memorising facts and start learning how to creatively solve problems. A regional market for higher education
 should be established to support the creation of a regional labour market.

SUMMARY

2015 has created many uncertainties for Europe. The unprecedented and unexpected inflow of refugees, asylum seekers and migrants from the war in Syria and surrounding areas, the Middle East and North Africa to Europe have led to unresolved arguments about how these people and their related costs are to be distributed among EU member states. No longer-term solution to this issue has been found to date. Border controls reintroduced in the Schengen area threaten the practice, if not the principle, of freedom of movement. The terrorist attacks in Paris in November 2015, the scares in Brussels, and the mob sex attacks on New Year's Eve in German cities, linked to organised groups, raise concerns about security, the eventual integration or otherwise of immigrants, and the evolution of European societies. The substantial inflow of people will inter alia change demographic structures, the balance of skills in the labour force, and will also affect public finances. The United Kingdom's planned referendum on EU membership, the possibility of a 'Brexit', is creating uncertainty for the United Kingdom and, to some degree, for the whole EU.

Meanwhile, a slow and fragile economic recovery continued in the developed world, including much of the EU. Emerging markets, constrained by China, bolstered by a resilient India, slowed down. Oil prices collapsed, and inflation remained low. The United States is taking cautious steps towards normalising its monetary policies by making modest increases in its interest rates. But although the Federal Reserve is moving towards exiting Quantitative Easing, the Bank of Japan and the European Central Bank are continuing to pursue their policies of large-scale asset purchases. In the coming years, the equilibrium real interest rate (the interest rate net of inflation needed to keep the global economy growing near to its potential) is likely to be very low, and perhaps even negative. With inflation hovering around zero, the central banks will have little room for manoeuvre should growth falter. In many developed economies, fiscal policy will not be able to sustain demand were another downturn to come along.

Against the backdrop of this febrile conjuncture, the macroeconomic outlook of which is detailed in Chapter 1, the EEAG Report 2016 provides a detailed examination of two long-standing issues that will have a strong bearing on Europe's medium-term development. As European societies age, the political weight of the old grows, threatening intergenerational fairness, which is explored in Chapter 2. Developments in secondary education, the subject of Chapter 3, have been triggered by budget pressures and the changing environment in which young people of widely varying aptitudes have to be equipped for adult life and work. Chapter 4 focuses on the apparent success of Denmark, whose flexible labour markets, inclusive welfare state, flourishing economy and harmonious society invite admiration and imitation. Chapter 5 reviews developments in the Western Balkans, the countries that formerly made up Yugoslavia, which were wracked by war and ethnic conflict in the 1990s, but are now recovering economically and socially, boast strong links with the EU and harbour aspirations to join it.

Chapter 1 Macroeconomic Conditions and Outlook

Whereas the industrialised countries remained in recovery mode last year, economic development in the emerging markets slowed down markedly. Latin America and Russia actually went into recession, albeit for different reasons. Whereas in previous years the emerging markets were the main drivers behind world economic development, and thereby the slow recovery of the industrialised world, these roles were reversed last year. Good business cycle conditions in the United States and the United Kingdom, together with recovery towards moderate growth in the euro area, had a stabilising influence on the world economy in 2015. This development is in essence expected to continue, allowing countries like the United States and the United Kingdom to slowly change their monetary policy stance and make it less accommodating. The recessions in Latin America and Russia will lose their strength and the smaller East Asian economies will be able to return to somewhat higher growth. All in all, this will allow the world economy to remain in

the moderate recovery mode that has been witnessed since 2011.

Dependence on oil and other raw material prices has led to very heterogeneous developments within the emerging world: India's growth rate now exceeds that of China. Demographic developments and the slow transformation of the Chinese economy into one less reliant on world demand and increasingly on domestic developments have and will continue to cause structural growth to slowly fall. Nevertheless for the current year, low and, in recent months, further declining oil and commodity prices, the announced infrastructure investment plans and measures to stabilise demand for housing, together with more expansionary monetary policy, will allow the Chinese economy to continue to grow at its current pace.

For oil-exporting countries, such as Brazil, Russia and many in the Middle East, the dramatic decline in oil prices over the last couple of years means a loss of national income and places a heavy burden on their economies. On the other hand, for oil-importing countries, these dynamics provide a welcome stimulus to domestic demand. Exerting downward pressure on inflation rates, they allow monetary policy in most of the industrialised world to remain expansionary for longer than otherwise would have been the case.

The current recovery in Europe has largely been driven by an improvement in consumer demand. This has been boosted by steadily improved consumer confidence and an inflation rate that has been even lower than expected. Business, however, remains reluctant to invest. Despite the ECB's ultra-expansionary monetary policy stance, the demand for corporate credit merely stabilised at a low level in 2015.

ECB monetary policy currently seems to work most strongly through exchange rates. The euro depreciated last year, increasing the competitiveness of all its member countries vis-à-vis the rest of the world. As a result, all of the larger economies and several of the smaller ones already gained market shares last year. Countries like France and Italy, which have been suffering for years from similar structural problems and have substantially lost price competitiveness since the introduction of the euro, are now being helped by its low value. The danger is that this may slow down structural reforms of labour and product markets, and thereby backfire as soon as the euro strengthens. Low interest rates, a result of low inflation and expansion-

ary monetary policy, further reduce the pressure for fiscal consolidation. Although this supports the business cycle, it creates a significant risk of instability. Public debt is still high. There would be little room for manoeuvre should conditions deteriorate.

Progress in the crisis-afflicted countries of the euro area towards improving international competitiveness, achieved by reducing relative price levels, will continue to be made. Not only Ireland, but also Spain and Cyprus, will exceed the euro area average growth rate this year, while maintaining below average inflation. These countries are therefore on the path to recovery. The political turmoil during the first half of 2015, by contrast, sent Greece back into recession.

Chapter 2 Intergenerational Fairness

The idea of a contract between generations is the basis of an equitable social order, stability and sustainability. In many countries the public sector is now expected to replace the family by funding education and pensions, but social welfare models are facing major challenges. This chapter is concerned with the interaction of generations, the way that generational clashes are translated through the political system, and the long-term consequences for the sustainability of the economy and society.

Modern Europe is ageing rapidly. The changing demographic pyramid might give politicians incentives to cater for the demands of the elderly, since they are becoming numerically ever more dominant, and to overlook the concerns of young people. Gerontocratic politics focuses more on the paying-out of past saving than in investment for the future. The policy results in burdens on the younger generations.

Labour regulations offer security of employment that benefit fundamentally older workers, and establish disincentives for employers to hire younger people (the dual labour market, that particularly characterises Mediterranean Europe). Young people have received expensive training (perhaps not enough of it), but they are in no position to repay into the social contract. Relatively high rates of youth and younger generation unemployment have been a phenomenon of crisis economics, but the phenomenon of high exclusion rates in some parts of Europe preceded the crisis. The emigration of the young and talented makes the

demographic pyramid even more lop-sided, and raises the question of how social security systems will be financed in the future.

Housing resources are inefficiently allocated, with dwellings that are too big for the old and unavailable to the young. Older people have real estate, and younger purchasers (especially in urban centres) are deterred by rising prices (and cannot get onto the lower rungs of the "property ladder"). The younger employed or unemployed are especially disadvantaged.

Pension schemes, mostly originally designed as Pay As You Go systems, are increasingly precarious. The funding of the pension entitlements of younger people is threatened, as demographic projections predict that there will be fewer new earners paying in ("as you go"). In addition, pensions have increased because of provisions that often both index and guarantee a certain increase, even when there is a low cost of living increase. There are strong cases for raising retirement ages, but even stronger political pressures to resist such reforms.

In socialised medical insurance systems, increasingly expensive care for older people, in the last years of their life, dominates the cost structure. The health care explosion will disproportionately affect the most prosperous European countries, and they are also likely to face the prospect of exit, especially by skilled younger people.

When productive and innovative (young) people abandon their country, they leave behind a highly indebted country. Now the debt has to be paid off by a smaller, less productive, ageing population. In a sense, individual citizens have an option to "walk away" from their government debt obligation by leaving the country. Emigration can be seen as an individual's "private default option" on government debt. Government debt, often incurred in order to maintain the advantages of the elderly, is becoming unsustainable.

Finally, environmental damage threatens the future of the young, as present day output is obtained cheaply at the cost of future generations who will have to bear the burden of the clean-up costs.

Europe is confronting a radical choice on where the responsibility lies for enforcing an effective and fair social contract. In a world of high mobility the old model of competing national examples is threatened by the possibility of exit from policy failures. There is a need to Europeanise some part of the intergenerational contract and, at the same time, protect it from political interference – an interference that is characteristic not just of states with poor performance and failed policies, but also of apparently successful economic models.

Chapter 3 Tuning Secondary Education

The question of how best to organise secondary education is fraught in every country. Nations are continuously comparing the performance of their own educational systems with others, seeking improvements. Education is expected to achieve many economic and social objectives, often mutually incompatible. Governments tinker with it obsessively. There have been substantial school reforms in recent years in Italy, France, Finland, and the United Kingdom, to take just four examples. These reforms have variously addressed issues of the degree to which the curriculum has a practical orientation, the autonomy of schools, the relationship between publicly and privately funded schools, and the management of teachers. In all cases reform has been deeply controversial.

Secondary education is almost entirely publicly funded because it is recognised as producing public benefits, accruing to society as a whole, not only to the recipients of the education: it is largely a public good. It produces general skills that employers are unwilling to provide, rather than job- or firm-specific skills, which are primarily of value to a specific employer and which that employer is normally willing to provide. The students themselves, or their parents, are not called upon to finance their education because future earning power is poor collateral for a loan, so relying on parental resources disadvantages children of poor parents. In addition to the problems caused by limited financial markets, education also suffers from the problems created by imperfect information: the customers of the educational industry, the students, and even their parents, cannot judge the quality of the product they are receiving, justifying public regulation and certification, if not provision. Furthermore, education is a group activity. Children cannot be educated separately and individually: it would cost too much, and in any case the social element is important per se. Thus the curriculum and organisation of schools are a matter of common concern, unsuited to provision in a

private market. While comprehensive education dominates in practice, there is a heated debate about the merits of providing different streams or tracks through the system for students of different aptitudes, and the merits of providing both academic and more practical or vocational paths. In many countries the vocational path has languished with low prestige and often poor resources and structures, while the academic path has enjoyed excessive prestige and resources.

School systems differ widely across Europe, but there is slow convergence in some respects: for example, the average number of years of schooling across countries is becoming more similar. Family background has a major influence on achievement. Different systems attempt to offset it in different ways. The tracking or streaming of students is done differently. Some countries, like Germany, Switzerland and Austria, provide a better vocational route than others, such as the United Kingdom. The role and scale of the private sector in education differ across countries.

Evidence suggests that schools perform better when they are externally evaluated, but given sufficient autonomy. Competition from private schools may also enhance performance. Giving schools more resources moderately improves students' achievement, although it matters less than socio-economic background. While higher teachers' salaries raise students' achievement, their motivation and the respect they enjoy matter more.

Pressure for reform was partly generated by the fiscal pressures on EU member states after the financial crisis. The widespread growth of university education throughout Europe, and the resilience of the German system of dual tracks, both academic and vocational, with a strong link to apprenticeships, has prompted a rethink of secondary education.

Educational systems are the preserve of national, regional and local governments. The EU has only a minor role to play. Nevertheless it may be useful to ask what, if anything, might usefully be done at the EU level. The EU has long-established programmes for fostering exchanges between member states' educational systems. They monitor and document the evolution of school systems, and provide data for international comparisons that are highly valuable. A very useful addition to the current system might be standardised examination results. There are sound arguments for further coordination of educational systems

across the EU, particularly as and when a Union-wide labour market develops. But any such coordination and harmonisation are a very long way off.

Chapter 4

Denmark: Too Good to Be True?

Denmark boasts both high income levels and relatively equal income distribution. These facts stand out by international comparisons and have attracted a great deal of attention, not least because Denmark has a very large public sector, and thus a high tax burden, it is a small and open economy, and has successfully pursued a fixed exchange rate policy.

The Danish experience may thus seem paradoxical to some, and an exceptional recipe for circumventing common policy dilemmas to others. The Danish economy's relatively favourable performance is not the result of a quick fix, but rather the outcome of a long string of reforms addressing structural problems; and very explicitly taking into account the constraints faced by a small, open economy. The latter is immediately clear from Denmark's fixed exchange rate policy, and the need to ensure its credibility. This policy has passed the market test since the interest spread vis-àvis the euro area has been very small for years, and even occasionally negative.

The Danish case shows that policy choices are possible, even in an era of globalisation. The public sector plays a larger role than in most other countries. The interesting lesson is how the welfare state has been designed to balance concerns for economic performance on the one hand, and for the public provision of welfare services and the pursuit of egalitarian outcomes on the other. Two points are particularly important. Firstly, while the public sector is large, the private sector is very liberal in Denmark. The Danish model is thus not "politics against markets". Secondly, Denmark's welfare arrangements have a strong active focus on supporting labour market participation and human capital acquisition. Since the financial viability of the welfare model ultimately depends on maintaining a high employment level in the private sector, the conflict between welfare state objectives and economic performance is not as stark at it may appear at first.

The specific policies pursued by Denmark do not make its economy immune to crisis, neither of domestic nor of foreign origin, as seen during the recent

financial crisis. What stands out, however, is that Denmark's labour market has maintained its high degree of flexibility, and although many individuals are affected by unemployment, unemployment spells are short. Thanks to the high level of turnover in the labour market, youth and long-term unemployment are low by international comparison. High turnover rates thus effectively function as an implicit work sharing mechanism. Equal burden sharing is important from a distributional perspective, but it is also of structural importance. The alternative would be longer unemployment spells concentrated on a smaller group of individuals, more long-term unemployment and a corresponding depreciation of human and social capital. In short, high turnover rates reduce the negative structural implications of high unemployment.

Looking to the future, a sequence of reforms is being implemented to ensure the financial viability of Denmark's welfare model. The main focus of these reforms is to strengthen labour supply and private sector employment. A key feature of the reforms is gradual increases in statutory retirement ages, and their eventual indexation to developments in longevity. These reforms ensure that the conditions for fiscal sustainability are satisfied.

Another strategy to combat the labour markets of demographic ageing, namely migration, is a particularly thorny issue for a country with extensive welfare arrangements. Even if welfare arrangements are not magnets attracting migrants, the financial viability of the welfare model rests on a high employment level. Egalitarian objectives imply high entry requirements in the form of qualifications to find jobs (to qualify for high minimum wages), as well as generous social transfers. This creates a very close relationship between the employment rate and how public finances are affected by immigration. Denmark thus faces a difficult trilemma of having to choose between extremely tough immigration rules (constrained by international treaties and EU rules), lowering minimum wages or differentiating between social rights. All three avenues challenge the basic objectives of the welfare state. To date Denmark has largely pursued the first and third avenues, but how far is it possible to proceed in these directions?

While challenges remain, the political focus on medium- and long-run issues is notable. If anything in these developments stands out, it is in the political economy of establishing consensus across a broad political spectrum, leading to support for reforms, as well as continuity and consistency in policies. This consensus has been achieved, despite the fact that most governments have been minority governments (and usually coalitions among several parties), and despite frequent shifts in government.

Chapter 5 Western Balkans: Coming Together

The chapter on the Western Balkans (WB) outlines some of the important features of the economic transformation of the region in the past 15 years. The region's countries have come a long way from establishing a fragile peace towards increasing cooperation. Their economies are undergoing a transition towards the market system and several important improvements in that area have been made. The financial system was restructured with the forceful entrance of reputable European banking groups. Inflation, a long standing problem, has been eventually brought under control. With a significant help from the EU, the physical and institutional infrastructure of the region is being rebuilt. Nevertheless, there are still many important challenges ahead. We discuss the achievements, as well as some pitfalls and challenges facing the WB. In doing so, we draw lessons from the countries of the Baltics and central and south eastern European regions, which have been undergoing similar processes for a decade longer. Finally, we propose possible paths towards the sustainable development of the region.

The WB region grew strongly in the period 2001–2008, fuelled by an influx of foreign investments and growth in consumption, primarily of imported goods and services. Such growth proved unsustainable, as it led to unsustainable current account deficits and to a virtual destruction of the tradeable sector of the WB's economy. In the post-2008 period, with the exception of Albania, which was able to sustain modest growth levels throughout the crisis, most other countries of the region are either struggling to exit recession or are growing very slowly. Unemployment, already a large problem even in the boom period, is even higher in the post-crisis period. Banks operating in the region (typically, subsidiaries of the large European banking groups) are experiencing high levels of non-performing loans and are reluctant to lend. The situation is made even more challenging by unusually high levels of euroisation of both deposits and loans, reducing

the scope for standard monetary policy measures. People react to prolonged economic woes by renewed emigration from the region at both the low and the high end of skill and experience spectrum.

Clearly, significant changes in the economic model are needed in order to return to healthy growth and, increasingly, countries of the region are recognising that. It is essential that economies re-orient themselves towards creating increasingly higher value-added tradeable goods and services utilising the creative potential of the people more fully. The physical, institutional, educational, and financial infrastructure would need to be further improved to achieve that. Just as importantly, the level of cooperation between countries needs to go beyond free trade and investments to include free movement of people and ideas across the regional borders. The creation of a regional labour market would make the region potentially much more attractive to foreign investment. Regional institutions of higher learning could play an important role and benefit significantly from the creation of the regional labour market, which would, in turn, enhance the region's prospects of eventual integration with the EU.

Macroeconomic Conditions and Outlook

1.1 Introduction

After ending the year 2014 quite positively, the global economy actually weakened substantially during the first half of 2015. This was largely due to weak devel-

opments in emerging markets. The economies of Brazil and Russia suffered from an economic slowdown due to low oil prices and, in the case of Russia, international sanctions among other factors. Although economic growth in China has been continuously slowing for several years now, its weak development during the first half of 2015 in particular took the markets by surprise.

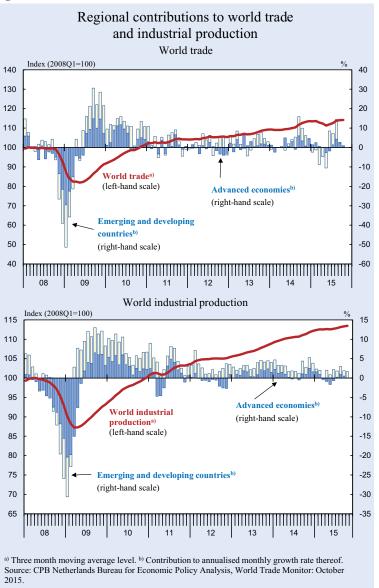
Although the US economy cannot decouple itself from the global economy, it depends more heavily on its own domestic demand than on foreign demand. By far the most important domestic demand component, private consumption, developed less dynamically over the summer half of the year. The recovery in the United States nevertheless continued in 2015, with growth rates hovering around or slightly above their potential. This allowed the US Federal Reserve to start increasing interest rates at the end of the year. The euro area also continued to recover in 2015 and this process is expected to continue in 2016, allowing its economy to grow gradually.

1.2 The current situation

1.2.1 The global economy

World trade declined during the first half of 2015 (see Figure 1.1). This was especially the case of trade with and within emerging economies. Although world trade and industrial production did pick up somewhat during the second half of 2015, they did not manage

Figure 1.1



2015.

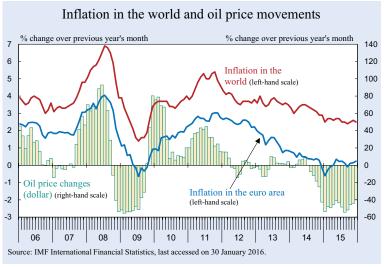
to exceed the moderate pace of expansion witnessed since 2011. During summer they recovered mainly due to the mitigation of negative trends in major commodity-exporting emerging markets, which had been suffering from the sharp decline in prices for crude oil and industrial and agricultural commodities since mid-2014. This short-lived recovery, however, only led to a modest acceleration in global economic expansion. The pace of economic growth in China and other major commodity-importing emerging economies was not affected markedly, i.e. it remained virtually unchanged and relatively moderate by historical standards. In addition, the increase in economic output in the United States slowed somewhat compared to early summer thanks to a slowdown in non-residential construction and inventory investments.

Despite the temporary slowdown during the first half of 2015, almost all advanced economies benefitted from developments in the commodity markets. The price of a barrel of Brent crude oil dropped by over 50 percent in the second half of 2014 from a level of almost 110 US dollars. After recovering slightly during the first quarter of 2015 to a little over 60 US dollars, it fell again by over 25 percent between May and August, reaching a trough of around 45 US dollars. Although the Brent price remained more or less steady at between 45 and 55 dollars during the autumn, the price of a barrel started falling again at the end of 2015, plunging to just over 35 US dollars at the start of 2016. Although not to the same degree as oil, the prices of other agricultural and industrial raw materials have also dipped noticeably since mid-2014. Whereas demandside aspects can explain the fall in many of these agricultural and industrial raw material prices, in the case of oil the expansion of production in the United States (fracking) between 2012 and mid-2015 and in some Middle Eastern countries is also a driving force behind this development. Falling oil prices were reflected in a steady decline in inflation figures throughout 2015 (see Figure 1.2).

Economic developments among individual industrial countries have nevertheless remained very heterogeneous. The United States and the United Kingdom are currently experiencing an upswing. In both countries, real Gross Domestic Product (GDP) is already well above pre-crisis levels and production capacity is largely utilised. Among other things, this is indicated by unemployment rates which are already as low as in the boom year of 2007 in both economies. Although the competitiveness of both countries will be impacted by the strong appreciation of their currencies that began in summer 2014, their domestic economies, however, are strongly supported by the increasing improvement in the labour market, the financial situation of households and low energy prices.

The pace of economic expansion in the euro area and Japan, by contrast, is still considerably lower. Although the currencies of both economies have depreciated over the past year and a half, not least due to expansionary monetary policies, their improved international competitiveness has not yet translated into a clear upturn in growth rates. In the euro area in particular, production capacity is still under-utilised. Furthermore, both economies are still suffering from a large number of unresolved structural problems, leading to only a moderate long-term trend growth path.





In China and many East Asian emerging economies, domestic demand was also supported by the favourable development in oil prices in summer 2015. However, this was offset by a number of factors, which dampened growth in emerging economies. In China growth is slowing down gradually, reflecting a structural trend that has been going on for several years. Whereas the service sector is becoming increasingly important, growth rates, especially in commodity-intensive sectors like industry and construction, are fall-

ing noticeably. Since mid-2014, this demand-side effect, together with supply-side factors, has led to a decline in the prices of oil and other industrial and agricultural commodities, thereby contributing decisively to a sharp deterioration of the economic situation in Russia, Brazil, Indonesia and other emerging economies. As these countries depend on commodity exports, the price decline has led to painful losses in national income and has limited scope for expenditure by households and enterprises. In addition, the attractiveness of commodity-exporting countries as investment targets also diminished for international investors. Accordingly, many currencies such as those of Brazil, Russia and Indonesia, decreased in value over the past year. This accelerated inflation in these economies, prompting local central banks to tighten monetary policy considerably in some cases. Finally, fiscal policy in Brazil has also taken a noticeably more restrictive course, while Russia felt the effects of the economic sanctions imposed on the country in the wake of the political conflict with Ukraine. Accordingly, GDP shrank strongly in Russia and Brazil during the first half of 2015, before the recession slowed in the second half of the same year.

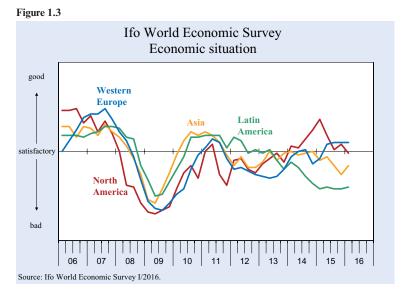
Strong turbulence in the Chinese stock market caused quite a stir last summer. The Shanghai Stock Exchange Composite – the most closely watched stock index of that country – lost about a third of its value between June and late August, before stabilising at a level that is still around 60 percent higher than on average during 2014. There are many indications that these fluctuations represent a desirable partial correction of previous, fundamentally unjustified exaggerations, which should leave no appreciable traces in the real economy. The exceptionally strong rise in share prices

from July 2014 to June 2015 contrasted sharply to macroeconomic developments – the expansion pace of the Chinese economy has decreased trend-wise in recent years. However, the sub-text of "fundamentally unjustified exaggerations" may only be part of the story. An important longterm aspect is that the Chinese stock market itself is heavily subject to structural change, which may result in higher stock values despite ever weakening fundamentals. The stock market in China is nevertheless still far less important to the wealth position

of households, or as a financing tool for companies, than in the United States, for example.

Nevertheless, turmoil in the Chinese stock markets did have a direct negative impact on international financial markets. Uncertainty among capital market participants increased and led to a restructuring of emerging market portfolios that have particularly strong trade links with China. This hit at a time when many emerging countries were already suffering from the fall in commodity export prices. Although most stock indices appeared to be back on the road to recovery by the end of October 2015 and capital flight from China and other emerging markets appeared under control by that point, market participants lost confidence again this January, resulting in further losses.

This was helped by economic developments in China, which fared significantly better than expected by many market participants. Also the repeated deferment of the first policy rate increase in years in the United States did promote the attractiveness of many emerging economies as an investment target somewhat during this time. Finally, the Chinese government intervened with a series of measures that aimed to stabilise share prices and reduce the outflow of capital. For instance, strict trade restrictions for financial market participants were imposed, and the People's Bank of China sold foreign exchange reserves. However, it seems doubtful whether the sometimes hasty intervention by the government and the central bank was actually required. At best, it contributed to effectively thwart a desirable market correction at the prize of having weakened the credibility of the Chinese leadership to gradually liberalise the financial sector.



All in all, whereas sentiment in Asia and Latin America decreased markedly during the last one and a half years, Western Europe and North America essentially remained on a recovery path, painting a diverging picture of the global economy (see Figure 1.3). World trade and world GDP are expected to have increased by 2.6 and 2.5 percent respectively last year (see Table 1.A.1).

1.2.2 United States

After a weak start to the year, the US economy initially rebounded to above potential before slowing down at the end of the year (see Figure 1.4). The weakness seen in the first quarter of 2015 was mainly due to temporary factors, such as the harsh winter and the dockworker strikes. Logically, the second quarter was characterised by catch-up effects. During the second half of 2015, GDP increased by an annualised rate of about 2.1 percent compared to the first half of the year. Throughout the year, the largest growth contributions came from consumer spending, and, to a lesser extent, from investment in equipment, highlighting that the engine for growth was found in domestic demand.

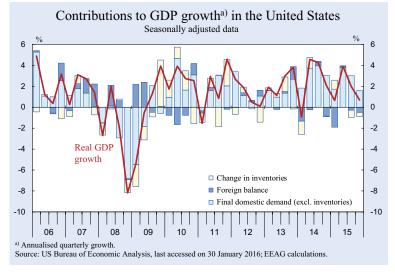
Favourable labour market conditions did not lead to an acceleration in wage growth last year. Hourly earnings before taxes in the private sector have increased by around 2 percent since the end of 2010. Nevertheless, the real disposable income of households has risen significantly in the face of low inflation and newly created jobs since the beginning of 2014. In October 2015 it was 3.9 percent higher than the previous year. Household assets also benefitted from rising real es-

tate and stock prices. All in all, and despite a weaker first quarter, this created an environment in which private consumption was able to grow at around 3 percent during the year (see Figure 1.5). Although private fixed investment did grow faster than private consumption, it nevertheless remained well behind the growth levels witnessed the years before. Overall, strong domestic demand and the appreciation of the US dollar has, via a strong rise in imports, led foreign trade to contribute negatively to GDP growth. Real GDP increased by 2.4 percent in 2015.

The labour market continued to develop positively. The unemployment rate fell from 5.7 percent at the beginning of the year to 5.0 percent in December, resulting in an average unemployment rate of 5.3 percent for 2015 (see Figure 1.6). During the year on average well-above 200,000 new jobs were created per month. Although this was less than in 2014, it clearly surpassed figures for the period from 2010 to 2013. At the same time, the share of part-time work declined and the drop in the labour force participation rate during recent years appears to have ground to a halt.

The sharp decline in oil prices and the strengthening of the US dollar even caused inflation rates to turn negative during the first trimester of the year. Despite very loose monetary policy, inflation just managed to hover above zero during the rest of the year, resulting in an average inflation rate of 0.1 percent for 2015 (see Figure 1.7). Taking food- and energy-related items out of the basket paints a different picture: the resulting core inflation rate steadily increased from 1.6 percent at the beginning of 2015 to 2.1 percent at its end.

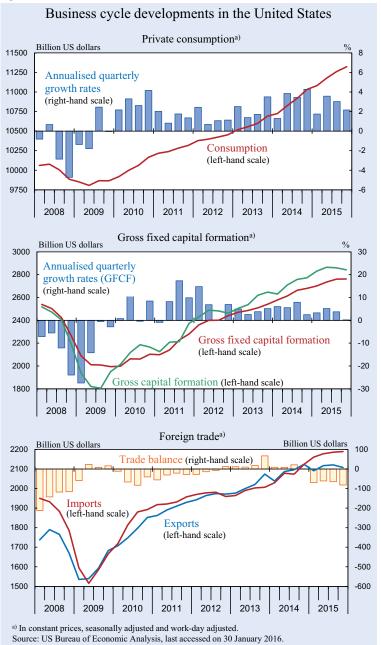
Figure 1.4



1.2.3 Asia

In *China*, the pace of expansion decelerated during 2015. After a relatively weak first quarter, real GDP grew in the second, third and fourth quarters of 2015 with annualised rates of, resp. 7.8, 7.4 and 6.6 percent compared to the previous quarter. This was significantly higher than expected by many market participants, since growth was only 5.3 percent in the first quarter of 2015. This nevertheless reflects the structur-

Figure 1.5



al slowdown seen in China's economy for several years. A key driver behind the robust expansion in the summer half of the year was the increase in private consumption, which benefitted from an increase in real disposable income and favourable earnings prospects. Last but not least, impetus was provided by fiscal policy via expanding the railway network, improving the water supply and public housing. Overall, real GDP did rise by 6.9 percent last year.

Strong turbulence in the Chinese stock markets in the summer of 2015 attracted a great deal of attention. After the speculative boom lasting from July 2014 to June 2015, during which the stock indices in Shanghai

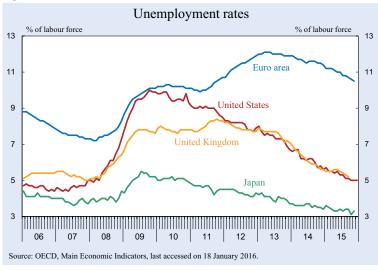
and Shenzhen rose by over 150 percent, they have lost over a third of their value since mid-June 2015. The losses have increased uncertainty among international financial investors and led to an outflow of foreign capital. Fears of a hard landing of the Chinese economy also played a role. The net capital withdrawal from China amounted to around 350 billion US dollars during the first nine months of 2015. The relatively solid development of the Chinese economy together with market interventions by Chinese policymakers, like those of the domestic public pension funds, for example, which started to invest in Chinese stocks deemed too risky by private investors, as well as the restrictions imposed on currency derivatives, contributed to a stabilisation in autumn 2015. The jittery situation in financial markets all over the world, however, led Chinese stock market indices to plummet again in January of this year.

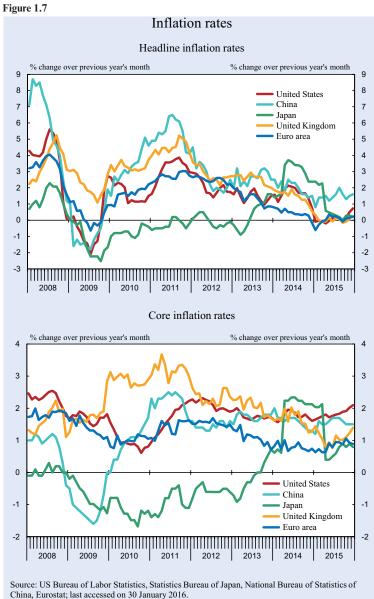
In view of the weakening economy during the first quarter, the increased uncertainty in Chinese financial markets in summer and the continuing low core inflation rate that remained below 2 percent, monetary policy was further eased throughout 2015. The key

interest rate has been lowered in several steps by a total of 265 basis points since November 2014, while bank reserve requirement ratios have decreased by 2.5 percentage points since February 2015. To stabilise real estate markets, the Chinese government also improved financing conditions and relaxed the conditions for acquiring second homes in some regions. All of these factors helped to push real estate prices back up again slightly.

Industrial production increased at historically low rates of around 6 percent last year. In some economic sectors, such as the cement and steel industries, production even declined slightly. By contrast, there were

Figure 1.6





gains in the services sector, which has been developing more dynamically than the industrial sector since 2013. As production in the services sector is more labour intensive, the slowdown in industry did not have a negative impact on overall employment. Thus, 10.7 million new jobs were created in urban and sub-urban areas in the first nine months of 2015.

Economic developments in Japan deteriorated significantly during the course of last year. After a strong first quarter, which was marked by a sharp increase in investment and an increase in inventories, output only expanded weakly during the summer and fall period. The decrease in growth was mainly due to a slump in exports. Both exports to China and other Asian countries, as well as those to Europe and the United States, declined sharply during the second quarter of the year. Investment activity was also weak during the summer half. Despite the fall in oil prices, which in principle should support real income growth, private consumption grew sluggishly and remained weak. Overall, total economic output is expected to have risen by 0.6 percent last year.

Early 2015 inflation rates were still above 2 percent due to the VAT increase in April 2014. After this one-off effect faded, inflation dropped substantially, reaching 0 percent in September and slightly rising again since. Another driving force behind the decline during the summer half year was energy prices. Correcting for this, we saw a moderate increase to levels slightly below 1 percent by the end of last year. Core inflation has thereby remained in positive territory since autumn 2013. The central bank also recently decided not to further expand its monetary policy for that reason. In addition, the depreciation of the yen, which in real effective terms amounted to almost 10 percent since summer 2014, or close to 30 percent since summer 2012, has gradually become noticeable in consumer prices. The average inflation rate for 2015 turned out to be 0.8 percent.

The labour market is very robust, despite the economic slowdown. Employment has risen over the course of the year and unemployment fell to 3.1 percent in October, its lowest level since summer 1995.

Unlike in previous years, real GDP growth in India managed to stay above 7 percent throughout 2015 in a year-over-year comparison, and is expected to result in an average growth rate of 7.3 percent. Positive impulses came from both private consumption and public investment. The mood among private households brightened, which was mainly due to moderate inflation developments. Consumer prices have been declining since the beginning of 2014, thereby strengthening the purchasing power of households. The slowdown in inflation mainly reflects the drop in energy prices, active control of food prices and the recently increased credibility of monetary policy. In addition, the government has increased its investment and also took first steps towards implementing a series of structural reforms. Among other things, it started to allow foreign direct investment to enter additional sectors, such as construction and railways. As a result, net FDI into India amounted to around 20 billion US dollars in the first six months of 2015. This corresponds to a growth rate of over 120 percent compared to the same period last year. At the same time, such investments plummeted in many other emerging economies during the same period.

In the other East Asian emerging markets (Indonesia, Korea, Malaysia, Taiwan, Thailand, Philippines, Singapore and Hong Kong), economic momentum slowed down slightly during last year. Overall growth rates are still fairly comparable to those of previous years. The slight slowdown is mainly due to a decline in demand from Chinese industry for intermediate and capital goods from these countries. In addition, the slowdown in China has exerted downward pressure on international commodity prices, and commodity exporters like Indonesia have suffered as a result. All in all, real GDP is expected to have grown by

3.2 percent in these other East Asian countries last year.

1.2.4 Latin America and Russia

Overall the GDP growth rate in Latin America (Brazil, Mexico, Argentina, Venezuela, Colombia and Chile) has declined steadily since 2010. The pronounced weakness in the region led to a - 0.7 percent decline in real GDP in 2015. A major reason is the sharp drop in commodity prices, which have worsened the terms of trade of the region. In addition, Latin American currencies continued to depreciate. The Colombian peso and the Brazilian real, for instance, have lost around 30 percent of their value in real effective terms since mid-2014. For the Mexican peso, the loss also amounted to well over 10 percent. These currency depreciations firstly imply a burden on businesses and households indebted in foreign currency. Secondly, owing to these depreciations, inflation rates in most Latin American countries lie above the inflation targets of the respective central banks. While Brazil has raised interest rates several times since autumn 2014 in response, Colombia and Chile followed with two interest rate hikes last fall. In Mexico, on the other hand, inflationary pressures have eased up since spring last year and are now within the target range of the central bank.

In Brazil, the largest economy in the region, industrial production has been declining since the middle of 2014. The unemployment rate skyrocketed from approximately 5 percent at the beginning of last year to almost 8 percent by the end of it. Producer and consumer confidence are also down due to numerous corruption scandals and political crises. Last but not least, restrictive monetary and fiscal policies are having a dampening effect. The fiscal consolidation is being driven by subsidy cuts, tax increases and increases in regulated prices. As the primary balance of the central government, i.e. the fiscal position corrected for interest payments, slipped into the red in Brazil over the past year, investors were particularly critical of the worsening of the overall budget balance. Accordingly, the government's creditworthiness was downgraded over the year to as low as junk status by some rating agencies. Mexico, Colombia and Chile, by contrast, are in better overall economic shape. In these countries, industrial production continued to expand.

The economy in Russia has been in a recession since mid-2014. High interest rates and negative growth prospects have led to a substantial scale-back in lending to businesses and households since the beginning of 2015. The amount of non-performing loans has basically doubled since the start of the crisis. High inflation rates and falling real income levels caused a downright slump in retail sales. The rate of decline started to abate in the third quarter of 2015. This turnaround was due to a number of developments, especially in the industrial and

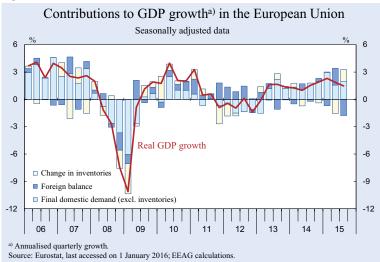
agricultural sectors. The ruble's depreciation improved profitability in certain export sectors (including in the mining, metal processing and chemical industries). Since mid-2014, the ruble has lost about half its value against the US dollar and a third of its value against the euro. Furthermore, some industries benefitted from production losses in Eastern Ukraine and larger government contracts related to defence and infrastructure spending. Agriculture and food producers benefitted from the ban on western food imports. The very fast and consistent implementation of a policy of import substitution gave Russian producers additional competitive advantages in 2015, especially in public tenders. Since many Western manufacturers were forced to protect their market shares by expanding production in Russia, foreign direct investment started increasing again in the non-banking sector. The capital flight appears to have ground to a halt and the exchange rate is likely to have stabilised. Despite the slump in commodity prices, Russia still has a positive trade balance. This, however, is also due to a sharp decline in imports. Overall GDP probably declined by – 3.2 percent last year.

1.2.5 The European economy

The cyclical situation

The economic recovery in Europe continued throughout 2015. Since the end of the recession in the second quarter of 2013, the average annualised quarterly GDP growth rate in the European Union has amounted to 1.6 percent. Although the degree of expansion weakened slightly, particularly during the summer

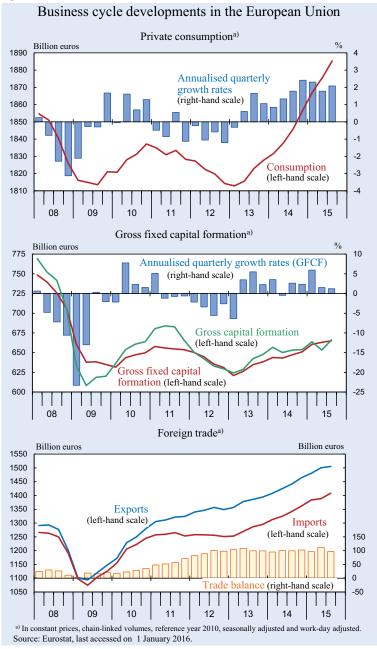
Figure 1.8



half of 2015, it still outperformed developments in 2014 (see Figure 1.8). One reason for the slowdown in the recovery was increased uncertainty about the growth prospects of the Chinese economy and the associated financial turmoil during the summer months. In addition, contributions from France and Italy were once again below average, which was also due to unresolved structural problems. Favourable developments continued from the strong devaluation of the euro against the US dollar and the relatively low price of crude oil. The financing conditions for private businesses and households are extremely advantageous in most European countries and are still improving in the crisis-inflicted nations. This has allowed overall credit demand to slowly start increasing again.

The recovery in Europe has mainly been supported by an increase in private consumption to date (see Figure 1.9). One reason for this is the improvement in the budget positions of households caused by the sharp decline in energy prices. In addition, increased real economic activity also led to an easing of labour market conditions. The unemployment rate in the European Union fell from its peak of 11 percent in early 2013 to 9.3 percent in October 2015. Employment also increased substantially last year, almost reaching its all-time high from early 2008. When focusing on the euro area, these figures point in the same direction, albeit in a clearly less pronounced manner. Here, only half of the job losses suffered in the wake of the financial and euro crises have so far been compensated for. In addition to the high level of structural unemployment, the rate of growth is still too low to bring about more rapid employment growth.

Figure 1.9



Firms have also benefitted from reduced energy costs and the depreciation of the euro. Their improved price competitiveness resulted in a further strengthening of exports. The contribution of foreign trade to overall growth was more or less neutral last year, since imports also continued to grow rapidly. Next to improvements in the competitiveness situation, capacity utilisation in the manufacturing sector has also reached a level that makes equipment investments look more attractive. Despite favourable refinancing conditions, only a moderate increase in equipment investments has occurred to date. With respect to construction investment, no noticeable revival has been observed.

The existing overcapacity and continued decline in property prices in some European countries are the reasons behind this flat situation and are reflected in historically subdued business sentiment in the construction sector.

The general price increase was still extremely low last year. In the euro area, the total annual inflation rate in December 2015 was 0.2 percent and thus well below the medium-term target of the European Central Bank (ECB) of below, but close to, 2 percent (see Figure 1.10). This low inflation rate is largely due to the marked decline in energy and commodity prices since the middle of 2014. The core inflation rate (headline inflation excluding energy, food alcohol and tobacco) has gradually recovered from its all-time low of 0.65 percent in April last year and reached almost 1 percent by the end of the year. A similar picture emerges when looking at the GDP deflator. The increased utilisation of production capacities does give companies more scope for price increases.

Differences across Europe

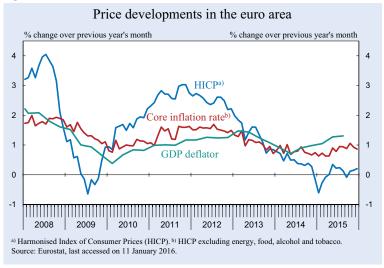
Germany witnessed moderate, but stable growth during the course of last year. Its real GDP expand-

ed at a rate of about 1.5 percent.¹ Overall capacity utilisation increased only slightly. In industry (excluding food and beverages), production capacity utilisation even declined somewhat, but is still well above its longrun average.

The moderate economic recovery was largely driven by domestic demand, and particularly by private consumption. Final consumption expenditure of house-

Please note that we are using seasonally and working-day adjusted data wherever possible. Normally these numbers do not differ much from data that is only seasonally adjusted (and not working-day adjusted). However, in terms of 2015, it does make a difference for Germany. Using seasonally adjusted data, the German GDP growth rate was probably 1.7 percent last year.

Figure 1.10



holds expanded at a rate of 1.9 percent, fostered by higher real incomes, a further expansion of employment and the recent wave of refugee migration. The massive influx of people seeking help from countries in the Balkans, as well as from civil war regions of the Middle East, also led to a significant increase in government consumption spending. More had to be spent on the provision of accommodation and in kind social transfers.

Compared to consumption, the development of investment was relatively disappointing in 2015. After seemingly speeding up last winter, it started to subsequently falter again. Equipment investment declined during summer. Given the weak order intake, particularly from non-European countries, companies did not see scope for further expanding their investment activities. After a good start owing to favourable weather conditions, construction spending slipped into the red in spring last year. Investment in research and development in general fluctuates to a lesser extent than other investment types and thereby had a stabilising influence on aggregate investment.

Apart from a temporary increase in the second quarter of 2015, the contribution of foreign trade to real GDP was negligible in 2015. Thanks largely to the weakness of key emerging markets, exports basically kept pace with imports.

Labour demand remained relatively high, despite the introduction of a nationwide legal minimum wage. While the number of employed persons clearly increased over the year, unemployment continued to decline. Refugee migration has not yet impacted the

labour market to a significant degree.

France has been facing structural weaknesses for some time. The tax burden is well above average and a substantial amount of price competitiveness has been lost over the years. As of 1999, imports have continued to grow faster than exports, which has led to trade and current account deficits. Structural weaknesses are particularly evident in weak investment developments. Current gross fixed capital formation is also basically at a level witnessed

a decade ago. While private investment in machinery and equipment still provides a small positive contribution, private construction spending fell sharply last year. This is partly because real estate prices have been falling and there is excess capacity in the construction sector. Private and public consumption remained supportive last year, expanding at relatively strong rates. Of the larger economies, it is the only country in which the upward trend in unemployment rates has not yet been broken. Real GDP growth only accelerated to a level of 1.1 percent last year, while the inflation rate basically stagnated at 0.1 percent.

Albeit at a slightly lower pace, the upswing that started early in 2013 in the United Kingdom continued throughout last year. Important growth contributions came from consumer spending and investment in machinery and equipment. Gross fixed capital formation gained momentum as the year progressed. Investment activity has shifted more towards the service sector, while the oil and gas industry continues to suffer from the fall in oil prices. Foreign trade provided a negative contribution to growth. Although exports rose, imports rose much more steeply. One of the reasons for this was the development of the exchange rate. The value of the British pound rose substantially against the euro, while it depreciated somewhat against the US dollar. Given that the euro area is by far the most import market for British exports, the appreciation against the euro was not only stronger, it also weighed more on the economy. Whereas the unemployment rate remained largely unchanged at a level of 5.5 percent during the first half of the year, it started to decline again and reached 5.1 percent by October. In 2015, real GDP grew by 2.2 percent.

Table 1.1

Poland

Hungary

Norway

Iceland

China

Japan

Switzerland

United States

Czech Republic

	Compensation per employee ^{b)}		Real compen- sation costs ^{c)}		Labour productivity		Unit labour costs		Relative unit labour costs ^{d)}		Export performance ^{e)}		
	1999	2010	1999	2010	1999	2010	1999	2010	1999	2010	1999	2010	
	_	-	_	_	_	_	_	_	_	_	_	_	
	2009	2015	2009	2015	2009	2015	2009	2015	2009	2015	2009	2015	2015
Germany	1.1	2.6	0.2	1.0	0.3	1.1	- 1.2	- 0.9	- 1.2	- 0.9	0.3	1.5	3.5
France	2.7	1.9	1.0	1.0	0.7	0.7	0.4	- 1.2	0.4	- 1.2	-2.2	0.4	3.9
Italy	2.4	0.8	0.0	-0.1	-0.4	-0.1	1.5	- 1.4	1.5	- 1.4	- 3.9	0.0	2.0
Spain	3.6	-0.1	0.3	-0.3	0.4	1.0	2.1	-3.2	2.1	-3.2	- 1.2	1.1	2.1
Netherlands	3.2	1.4	0.8	0.6	0.8	0.8	0.9	-2.1	0.9	-2.1	-0.3	0.3	1.1
Belgium	2.8	2.0	1.0	0.6	0.8	0.7	0.6	- 1.1	0.6	- 1.1	- 1.1	0.4	0.8
Austria	2.3	1.9	0.6	0.3	0.9	0.3	-0.3	- 0.3	-0.3	-0.3	- 0.6	-0.6	-2.3
Finland	3.2	2.1	1.6	0.4	1.0	0.5	0.3	- 1.1	0.3	- 1.1	-0.5	-3.0	1.0
Greece	5.2	-2.7	2.1	- 1.9	1.7	- 1.0	2.5	-3.1	2.5	-3.1	0.0	- 1.8	-2.1
Portugal	3.7	-0.3	0.7	- 1.0	1.0	0.8	0.8	- 2.2	0.8	-2.2	- 1.3	2.4	3.0
Ireland	5.1	-0.1	2.7	- 0.9	2.2	2.5	2.0	- 5.4	2.0	- 5.4	3.2	1.6	8.2
Slovakia	7.7	2.7	3.7	2.1	3.7	2.3	3.4	- 1.1	3.4	- 1.1	4.3	3.7	2.0
Slovenia	7.3	1.1	2.5	0.7	2.2	1.3	0.9	-2.7	0.9	-2.7	1.4	0.7	2.2
Estonia					4.2	2.2	4.0	- 0.3	4.0	-0.3	-0.6	4.9	0.6
United													
Kingdom	4.2	1.8	1.9	0.0	1.2	0.9	- 1.3	1.5	- 1.3	1.5	- 1.5	- 1.6	-1.1
Sweden	4.0	2.6	2.2	1.3	1.5	1.2	-0.8	1.3	-0.8	1.3	-0.7	-0.2	1.0
Denmark	3.6	1.8	1.3	0.1	0.6	1.0	1.5	- 1.6	1.5	- 1.6	0.0	-2.2	- 1.4

Labour costsa)

3.7

3.0

2.6

0.8

0.6

2.4

1.8

0.7

2.4

1.3

0.5

0.2

0.4

0.1

0.9

0.7

3.8

3.3

0.3

2.7

-1.6

3.9

1.8

0.1

-17

- 1.8

3.7

0.6

5.9

1.4

5.5

0.7

38

0.3

2.7

-1.6

3.9

-17

3.7

0.6

5.9

1.4

2.5

3.3

4.9

- 4.6

-0.6

4.9

0.2

3.2

0.2

2.3

-0.9

-3.5

0.1

4.1

-0.7

45

-1.1

-3.3

- 1.8

11.5

1.4

Source: OECD, OECD Economic Outlook, Vol. 2015 Issue 2, November.

3.5

2.4

0.7

0.0

1.3

1.5

0.1

2.0

0.6

3.8

2.2

1.2

0.4

0.8

0.8

2.0

0.6

In view of low energy prices and the appreciation of the British pound, the price level remained virtually unchanged last year compared to 2014. Whereas the core inflation rate, which excludes energy, food, alcohol and tobacco, dropped markedly early on in the year, it subsequently started to increase again reaching 1.4 percent by the end of the year.

5.9

1.7

5.0

6.8

After having been in a recession since mid-2011, the *Italian* economy started growing again at the start of 2015. As elsewhere in Europe, this upswing was largely driven by an increase in private consumption. Some labour market reforms were also implemented. Protection against dismissal was relaxed and settlement rules were unified. This should particularly promote opportunities for younger generations to (re-)enter the labour market. The unemployment rate declined, albeit slowly, as of summer 2015. Since the measures undertaken apply only to new employment, it is no sur-

prise that the implemented reforms appear not to have made a big difference yet. Their impact is likely to become visible in the course of time. For the time being, the pace of recovery is much too slow to enable a rapid increase in employment. The relatively high tax burden for firms, in addition to rigid labour and product markets, still implies a rather low potential growth rate for the Italian economy. These structural weaknesses were largely responsible for the loss in price competitiveness in the past, which led to a marked decline in Italy's share of world trade in previous years. Last year was the first time in decades that Italy saw a sizeable increase in its market share (see Table 1.1). All in all, Italy's real GDP increased by 0.7 percent in 2015.

The *Spanish* economy was able to overcome its perennial recession in the summer of 2013 and subsequently expanded at rising rates. The upswing reached almost all sectors of the economy. In particular, private invest-

^{a)} Growth rates for the total economy. – ^{b)} Compensation per employee in the private sector. – ^{c)} Compensation per employee in the private sector deflated by the GDP deflator. – ^{d)} Competitiveness: weighted relative unit labour costs. – ^{e)} Ratio between export volumes and export markets for total goods and services. A positive number indicates gains in market shares and a negative number indicates a loss in market shares.

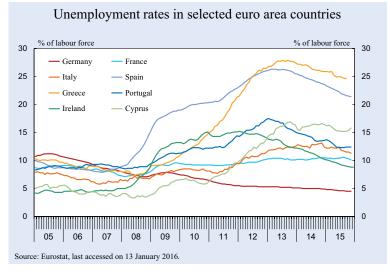
ment in machinery and equipment has been increasing vigorously for some time now. Low lending rates and an increased willingness on the part of banks to increase their lending portfolio have helped. In addition, external demand is high, not least because the price competitiveness of Spanish companies has improved. On the one hand, they benefitted from the significant depreciation of the euro against the US dollar. On the other hand, Spain has experienced one of the lowest inflation rates in the euro area for some time now. In addition, the private construction sector contributed positively again after a deep crisis and its recent reduction of immense overcapacities. Last but not least, private consumption supported the upswing, partly because Spanish households, due to their relatively high debt burden, benefitted significantly from the lower interest rates. Moreover, the favourable economic situation in association with the implemented structural reforms is having an increasingly positive effect on the labour market. The unemployment rate has declined by almost five percentage points since summer 2013 and the number of employees has increased substantially. Nevertheless, with an average unemployment rate of 22.2 percent in 2015, there is still ample room for further improvement (see Figure 1.11).

Of the crisis-inflicted countries, *Cyprus, Ireland, Portugal* and *Greece*, only Greece has not yet entered recovery mode. On the contrary, the election outcome early in 2015 created an environment in which uncertainty about future developments in Greece increased substantially. Up until the climax reached with the referendum and the subsequent setup of the 3rd bailout package with the European Union and the IMF in June and July, the increased uncertainty even supported eco-

nomic development somewhat, as it led to advanced spending by consumers amid fears of depositors suffering losses. During the second half of the year, the country slipped into recession as the negative consequences of the turmoil and the capital controls imposed became more apparent. Ireland, on the other hand, is in full recovery mode. Domestic demand and exports rebounded, resulting in a growth rate of 6.9 percent in 2015. Albeit clearly not as strongly, Cyprus and Portugal also managed to pull out of recession and grew last year by 1.4 and 1.5 percent, respectively.

In the Central and Eastern European member states of the European Union, the economy gained momentum throughout 2015. The region benefitted from the recovery in the euro area. Furthermore, cheap oil and low commodity prices acted as an additional economic stimulus. This led to a noticeable improvement in the labour market situation almost everywhere, which was accompanied by a significant drop in unemployment in many places. In addition, real household income increased, not least because the price level rose only slightly and even declined in some places. Accordingly, consumer spending delivered a strong contribution to economic growth. Gross fixed capital formation rose sharply almost everywhere. This was triggered by the positive economic outlook on the one hand, and significantly improved financing conditions on the other: interest rates remained extremely low throughout the year. In some countries exports also contributed positively to the economic recovery, which in line with the recovery of the euro area gained impetus somewhat. In Poland and the Baltic states on the other hand, exports developed less dynamically, because the recession in Russia was most noticeable in these countries.

Figure 1.11

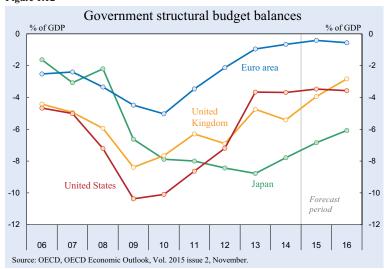


1.3 Fiscal and monetary policy

1.3.1 Fiscal policy

Compared to 2015, fiscal policy is likely to act more or less neutrally in most advanced economies in 2016 (see Figure 1.12). One clear exception is Japan. Here some large stimulus packages that were adopted in the years 2013 and 2014, as part of the "Abenomics" programme to boost economic growth and inflation, are being

Figure 1.12



phased out. In the United Kingdom, as measured by the change in the structural deficit, the fiscal stance also has been and will remain restrictive. The summer budget submitted to the lower house after the general elections assumes a continuation of fiscal consolidation and a surplus in the fiscal year 2019/2020. After the government budget deficit was 5.7 percent relative to GDP in 2014, it was reduced to 4.3 percent last year and is expected to decrease further this year to below the 3 percent threshold. Both cuts in social spending and a cap

Table 1.2

			Public	finances					
		Gross	debt ^{a)}		Fiscal balance ^{a)}				
	1999–	2008/	2010-		1999– 2008/ 2010–				
	2007	2009	2014	2015	2007	2009	2014	2015	
Germany	62.3	68.8	78.3	71.4	-2.3	-1.7	-1.0	0.9	
France	62.6	73.5	88.9	96.5	-2.5	- 5.2	- 4.9	-3.8	
Italy	102.9	107.4	123.2	133.0	-2.9	-4.0	-3.3	-2.6	
Spain	48.2	46.1	81.6	100.8	0.2	- 7.7	-8.4	-4.7	
Netherlands	49.0	55.5	64.6	68.6	-0.5	-2.6	-3.6	-2.1	
Belgium	100.6	95.9	103.5	106.7	-0.5	-3.2	-3.6	-2.7	
Austria	66.2	74.1	82.3	86.6	-2.2	-3.4	-2.6	- 1.9	
Finland	40.6	37.2	52.7	62.5	3.8	0.8	-2.3	-3.2	
Greece	102.4	118.0	166.6	194.8	-5.3	-12.7	- 9.3	-4.6	
Portugal	59.6	77.6	118.6	128.2	-4.3	-6.8	-7.2	-3.0	
Ireland	30.9	52.1	108.8	99.8	1.6	-10.4	-12.5	- 2.2	
Slovakia	40.5	32.1	48.8	52.7	-5.2	-5.1	-4.2	-2.7	
Slovenia	25.7	28.1	58.0	84.2	-2.2	-3.6	- 7.3	- 2.9	
Luxembourg	6.7	14.9	21.4	22.3	2.5	1.4	0.4	0.0	
Lithuania	20.1	21.8	38.5	42.9	- 1.7	- 6.1	- 4.5	- 1.0	
Latvia	12.2	27.7	42.3	38.3	- 1.7	- 6.6	-3.0	- 1.5	
Cyprus	59.1	49.5	82.4	106.7	-2.4	- 2.3	-6.0	- 0.7	
Estonia	5.0	5.8	8.5	10.0	0.9	- 2.4	0.3	0.2	
Malta	65.5	65.3	68.6	65.9	- 5.0	-3.7	-2.8	- 1.7	
Euro area	69.0	75.0	89.8	94.6	- 1.9	- 4.2	- 3.9	- 2.2	
United Kingdom	39.7	58.7	83.6	88.3	- 1.8	- 7.9	- 7.4	- 4.3	
Sweden	48.9	38.6	39.3	44.7	1.1	0.6	-0.8	- 1.4	
Denmark	43.6	36.9	45.0	40.2	2.3	0.2	- 1.6	- 3.3	
Poland	42.7	48.2	53.6	51.4	- 3.9	- 5.5	- 4.7	- 2.8	
Czech Republic	24.6	31.4	42.1	41.0	-3.7	-3.8	- 2.9	- 1.9	
Romania	19.5	18.2	35.9	39.4	-2.6	- 7.3	- 3.8	- 1.2	
Hungary	58.7	74.8	78.5	75.8	-6.3	- 4.1	- 3.5	- 2.3	
Croatia ^{b)}	29.5	43.4	71.2	89.2	-2.7	-4.2	-6.0	- 4.9	
Bulgaria	45.1	13.3	18.7	31.8	0.5	- 1.2	- 2.5	- 2.8	
European Union	61.8	67.6	84.2	87.8	- 1.7	- 4.6	- 4.3	- 2.4	
United States ^{b)}	47.2	79.4	101.2	104.9	- 2.4	- 9.9	- 7.4	- 3.8	
Japan	167.0	201.0	234.2	245.9	- 5.9	- 7.3	- 8.7	- 5.9	
Switzerland	60.6	48.3	47.6	46.2	0.1	1.1	0.1	- 0.2	

^{a)} As a percentage of gross domestic product. For the European countries, definitions according to the Maastricht Treaty. For the United States, Japan and Switzerland, definitions are according to the IMF. – ^{b)} Data on Croatia and the United States are only available from 2001 onwards.

Sources: European Commission, Autumn 2015; IMF World Economic Outlook, October 2015.

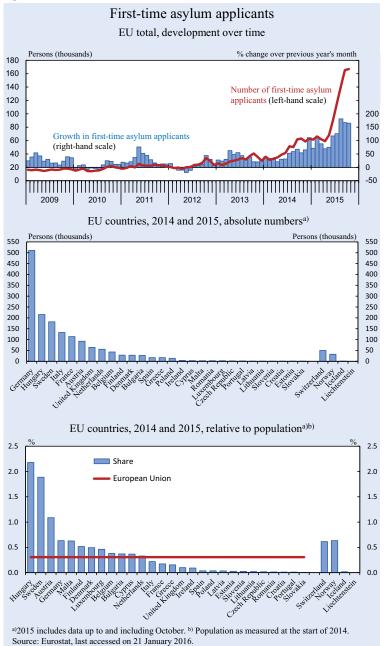
on wage growth for civil servants are in the pipeline. At the same time, via a reduction in corporate taxes an increase in international competitiveness of UK firms is to be achieved.

In the United States, a balancing act has enabled fiscal policy to support GDP growth on the one hand, while reducing the government budget deficit relative to GDP on the other. After the deficit surpassed 13 percent of GDP in 2010, its highest level since the second World War, it decreased continuously in the following years and is expected to have been 3.8 percent in 2015 (see Table 1.2). Additional spending on health care was offset by higher tax revenues and lower interest expenditure on government debt. Total government gross debt amounted to approximately 105 percent of GDP by the end of last year. After the debt ceiling for the federal level was reached in October Congress passed its repeal until March 2017. Political budgetary crises are therefore not to be expected this year.

In the emerging economies, fiscal policy is likely to be characterised by even greater heterogeneity than in previous years. In India and China public investment programmes will support the economy. Government spending pro-

grammes have also been launched in Russia that are intended to mitigate the recession. Furthermore, the Russian government finances its budget deficit via a reserve fund accumulated during times of high oil prices and which will run out in 2017, according to official projections. In Brazil, on the other hand, fiscal policy turned noticeably restrictive as early as last year. Cutbacks in social spending and subsidies, as well as various tax increases and the increase of many administered prices, have recently been adopted in Brazil. This year fiscal policy is projected to become gradually less restrictive, especially in the wake of the resignation of the pro-austerity finance minister in

Figure 1.13



December 2015 and his replacement by a less hawkish individual.

The geo-political consequences of the crises in the border regions of the European Union are becoming increasingly visible and are having an impact on the public finance situation in Europe. Not only is the fear of further terrorist attacks having direct consequences on state finance but also – and to an even greater degree – the strong inflow of refugees. The number of first-time applications for asylum has quadrupled within less than one and a half years (see Figure 1.13).

In the short run the increase in the inflow of refugees will trigger additional government spending, and will thereby stimulate internal demand. Additional funding has also been made available at EU and national levels to support countries of origin and transit. Several governments of member countries cited the additional inflow as a reason for exceeding fiscal targets as early as 2015. As early as last autumn Germany projected an additional 0.5 percent of GDP per annum of public spending in 2016 to meet the initial needs of the newly arrived immigrants and to integrate them into the labour market. Similar figures for Austria and Sweden are 0.3 and 0.9 percent of GDP, respectively. Estimates suggest that these near-term stimulus effects will amount to 0.1 or 0.2 percentage points of GDP growth for the European Union (see, e.g. OECD, 2015). Countries, however, are being hit quite differently. Whereas Germany is the country that has taken in by far the largest share of refugees, relatively to country size Hungary, Sweden, Austria and Malta have also seen a relatively strong surge in the number of first-time asylum applicants.

Over time the new migrants will enter the labour market and, depending on their skills, will start contributing to the welfare state. Over a horizon of a few years, the net contribution of these migrants is therefore unclear. However, the qualification structure of the refugees appears to be less than average. This is bound to reduce average wage income, and therefore average tax and social security contributions. This is further aggravated by a lower forecast of their labour force participation rate, especially among women. In the longer run, the extent to which refugees will be able to contribute to the sustainability of the welfare state will depend on many factors, including their ease of access to the labour market.

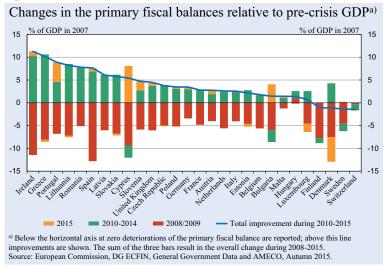
Europe's moderate recovery has allowed most member states to slowly reduce their public deficits. For the euro area the aggregate public deficit as a percentage of GDP has decreased by about 0.4 percentage points when comparing last year with 2014. For the European Union the same figure amounts to 0.6 percentage points. Comparing longer time horizons shows stronger declines. The number of countries that are still in the Excessive Deficit Procedure has been reduced to 9 at present, after 11 in early 2015 and 16 at the start of 2014. Two of these countries, namely Cyprus and Greece, are also following an economic adjustment programme.

The sharp fall in government bond yields in previous years has made it somewhat easier for governments to meet budget targets insofar as it has lowered refinancing costs. While the overall public deficit, for instance, continued to decline last year and is expected to continue to fall slowly, the primary balance, on the other hand, is expected to deteriorate slightly. The additional room to manoeuvre created by smaller interest rate payments is used to a fairly large extent to finance the additional costs associated with the increased inflow of refugees. However, unexpected drops in inflation can also make it harder for governments to meet their budgetary objectives, as revenues and expenditure are affected differently. Primary expenditure in general reacts less strongly to a change in inflation than revenues. Whereas, for instance, tax revenues are directly affected by the changing price level, most public spending is on service-related items that generally do witness relative price increases during phases of falling inflation rates, especially when these are unexpected.

Overall, however, the effects of lower inflation, through its impact on nominal interest rates, are probably having a positive effect on the public finance situation. Those countries with a larger debt burden are likely to benefit more from the lower interest rates than they stand to lose through the differing impact of lower inflation on revenues and expenditure. However, these very countries also face the highest risk should interest rates start to normalise again. These countries in particular need to increase their efforts in order to secure the sustainability of their public finances. The new interpretation of the Stability and Growth pact, as published early 2015 by the European Commission, is giving member states of the euro area somewhat more fiscal room to manoeuvre, thereby creating an environment favourable for more myopic governments.

Consolidation efforts varied across member states in 2015. The fiscal effort in 2015, as measured by the change in the primary balance, points to still a larger group of countries consolidating rather than loosening (see Figure 1.14). Consolidation ranged from over 4 percentage points of GDP in Cyprus, Portugal and Bulgaria to a loosening of over 1 percentage point in Denmark and Luxembourg. Of the remaining member states, most only saw small changes of below 0.5 percentage points in either direction. The aggregate improvement in the primary balance is largely due to the improved economic situation. From a structural point of view, hardly any improvement was noticeable for 2015, nor is any expected for this year.

Figure 1.14

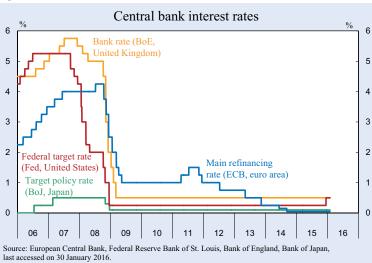


1.3.2 Monetary conditions and financial markets

Monetary conditions

Although monetary policy in the major advanced economies remains accommodative, the degree of expansion continues to diverge. Whereas central banks in the United Kingdom and the United States stopped their programmes to buy securities as early as in mid-2012 and October 2014, respectively, the European Central Bank (ECB), in view of Europe's far more moderate economic momentum and excessively low inflation, initiated a bond-buying programme in March 2015 that was extended in December last year to last until March 2017 at the very least. The Bank of Japan also continued its massive quantitative easing programme in 2015. These latter two central banks have signalled their willingness to leave their key inter-

Figure 1.15



est rates at their current level near zero until at least 2017. After several postponements, the US Federal Reserve increased its main policy rates by 25 basis points in December 2015 (see Figure 1.15). The Bank of England is expected to start increasing its interest rates early this year. As compared to the euro area, labour market conditions in both the United Kingdom and the United States are such that these turnarounds in monetary policy are clearly warranted, if not overdue. Nevertheless, it will still take a number of (further) in-

terest rate hikes before the monetary policy stance in these countries can no longer be considered as expansionary.

The monetary policy stance also started to diverge in the emerging markets last year. The central banks of many Asian countries (China, India, Thailand, and South Korea) took advantage of the leeway afforded by moderate inflation dynamics to initiate interest rate cuts. In China in particular monetary policy was relaxed quite strongly during the year. The key rate was lowered in five steps by a total of 125 basis points from 5.6 percent in February 2015 to 4.35 percent in October 2015. At the same time, the minimum reserve requirements of commercial banks were reduced sharply in three steps by a total of 2.0 percentage points, releasing large amounts of extra cash for the Chinese financial system. In addition, the central

bank extended the bandwidth within which it tolerates exchange rate fluctuations and allowed a depreciation of the yuan by about 5.5 percent against the US dollar in 2015.

In Brazil, on the other hand, monetary policy was tightened significantly in order to counteract strong downward pressure on the domestic currency and the associated increase in inflation. The key policy rate was increased in several steps by 325 basis points from October 2014 to 14.25 percent in July 2015. Besides fighting

inflation, the Brazilian central bank is also trying to reduce the increase in the real value of foreign debt – predominantly denominated in US dollars – that constitutes an additional burden on the private and public sector. In the light of the interest rate decision by the Federal Reserve, the central banks in Mexico and Chile also increased their main policy rates in December 2015. In the case of Chile, the increase followed of an earlier hike in October.

In Russia, the relevant benchmark interest rate declined from 17 percent in early 2015 to 11 percent as of August. Given an inflation rate that is still close to 16 percent, monetary policy can therefore no longer be considered restrictive. After a recovery in spring, the rouble again faced strong downward pressure during the rest of the year. In addition to the economic burdens caused by low raw material prices, this was also due to the political rift between Russia and the West that prompted international investors to massively withdraw capital from Russia.

Monetary policy in the euro area is geared towards being persistently expansive. The ECB deems the overall inflation rate to be too low and fears a permanent deviation of inflation expectations from its mediumterm target of close to, but below 2 percent. In addition, the ECB aims to revitalise lending and bring about a better utilisation of production capacity by increasing aggregate demand. It therefore decided early on in 2015 to have the euro system acquire government bonds, covered bonds and asset-backed securities for a total of around EUR 60 billion per month as part of its purchasing programme starting March 2015 (see Figure 1.16). At its meeting in December 2015, the Governing Council decided to extend these purchases by another six months, i.e. until at least March 2017, and thereby intends to increase the total assets of the euro system by about 1.5 trillion euros. In addition, the deposit interest rate that banks have to pay on their deposits and excess reserves at the ECB was reduced from -0.2 to -0.3 percent.

The adequacy of the additional expansionary measures adopted by the ECB in December 2015 can be questioned. Although price pressures in the euro area

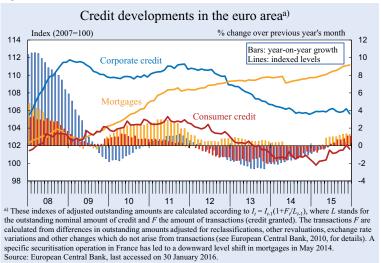
Figure 1.16 Liquidity provision by the ECB Billion euros Billion euros 1.600 1.600 1.400 1.400 Excess reservesc) Liquidity providing measures 1.200 1.200 Fixed-term depositsb) 1.000 1.000 800 800 600 600 400 400 Net liquidity provision 200 200 0 0 10 11 12 13

^{a)} Monthly average of main and longer-term refinancing operations, marginal lending facility and securities held for monetary policy purposes. ^{b)} Monthly average of the use of fixed-term deposits at the ECB. ^{e)} Monthly average of excess reserves at the ECB. ^{d)} Monthly average of all securities held for monetary purposes. Source: European Central Bank, last accessed on 1 January 2016.

were, with an overall inflation rate of only 0.2 percent in November, extremely low, this was mainly due to the sharp fall in oil prices in mid-2015. The core inflation rate on the other hand has, after reaching its trough with 0.6 percent in January last year, slowly but steadily increased, reaching 0.9 percent in December. The still negative output gap is slowly going to be reduced further throughout the year, and the effects of lower commodity prices are likely to gradually phase out. The bank lending survey also conducted by the ECB at a quarterly frequency has already revealed for some time now that the borrowing conditions for households and businesses are continuing to ease, and that demand for loans is rising. The ECB's asset purchase programme, as well as its targeted longer-term refinancing operations (TLTROs), which are still running, were already supporting bank lending before the decision in December. Accordingly, core and total inflation could also have been expected to increase without additional monetary policy measures and would have reached a level that is compatible with the medium-term inflation objective of the ECB by the end of 2017.

On the other hand, however, a substantial share of professional forecasters still attach a historically high probability to a low inflation, or even deflationary scenario for the euro area. Furthermore, although mortgage loans have been steadily increasing for years now and consumer credit growth also seemed to have return to positive dynamics last year, looking at the hard data, loans to the corporate sector have merely been able to stabilise (see Figure 1.17). Hence, the improved situation in the banking sector and the further decline in lending rates have been insufficient to substantially

Figure 1.17



uplift credit aggregates to date. While the volume of outstanding loans increased only slightly in the euro area during 2015, those in the former crisis countries continued to fall.

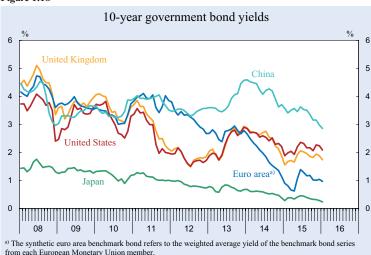
Bonds, stocks and foreign exchange markets

After reaching troughs early last year, yields on bond markets in most advanced economies remain at historically low levels. The weaker than expected recovery during summer 2015 has, at least initially, brought the upward trend that had set early in the same year to a halt (see Figure 1.18).

In the euro area, the interest rates on government bonds with the highest credit rating (AAA) fluctuated between 0.2 and 1.1 percent during the year. With the

Source: Datastream, last accessed on 30 January 2016

Figure 1.18



exception of Greece, the government bond yields and creditworthiness of weaker member states (Ireland, Italy, Portugal and Spain) showed no clear trend over the year. Their risk premium to AAA borrowers was about 1.1 percentage points on average. For Greece, the situation was different. The election results of January 2015 and the associated change in government led to a strong increase in uncertainty regarding its bailout programme and the continuation of Greece as a member of the euro area. Tensions escalated in June when

the Greek government unilaterally broke off negotiations and called for a national referendum to approve or reject the achieved preliminary negotiation results. The Greek stock market closed and access to bank accounts was limited. Early in July, a clear majority of Greek citizens voted to reject the bailout terms making a Greek exit from the euro more likely than ever before. This was prevented mid-July by reaching a provisional agreement on a third bailout programme to save Greece from bankruptcy. All this was reflected in a strong increase in the risk premium on Greek government bonds until July last year; although it did not, however, reach the levels seen in 2012, or cause any clear contagion of the yields on bonds issued by other crisis countries (see Figure 1.19).

During the course of 2015, the low funding costs of the banking sector also appear to have reached non-

> financial corporations in the crisis countries. In Italy, Portugal and Spain, the lending rates for nonfinancial corporations on new loans continued to fall during the year (see Figure 1.20). This suggests that the creditworthiness of many companies in those countries improved, and that the supply-side constraints caused by high inventories of impaired loans may have started to abate. Indeed, the economies in some former crisis countries staged major recoveries in 2015, increasing the profitability of local companies. According to several indica-

Figure 1.19

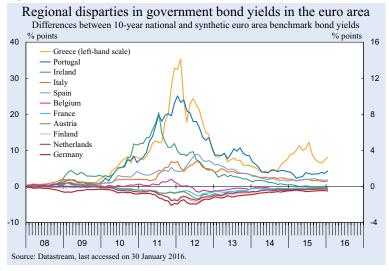


Figure 1.20

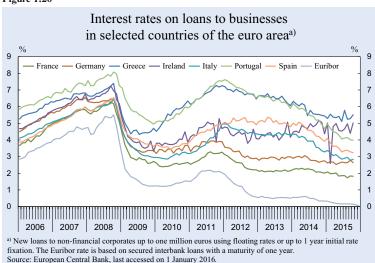
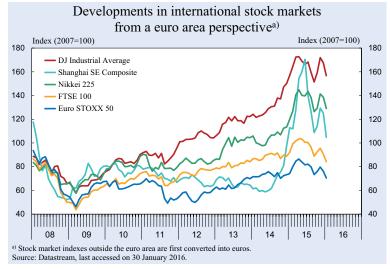


Figure 1.21



tors, the situation in the banking sector also improved. For example, in Ireland and Spain bank equity ratios were increased and the stock of loans at risk of default was reduced. From a monetary policy perspective, this implies that the disturbances in the monetary transmission mechanisms became significantly less pronounced over the year.

Given that the inflation rate is expected to gradually increase again, a moderate increase in government bond yields also appears likely this year. The ECB's bondbuying programmes will tend to limit the yield increases, since such programmes effectively reduce the supply of bonds available to the private sector.

Although monetary policy in the major advanced economies remained very expansionary last year, stock markets did not manage to benefit to the same extent as in 2014. On the contrary, most stock market indices experienced a bit of a roller coaster ride during 2015 and early this year. The Chinese stock market in particular saw markedly strong increases and falls stirring up financial markets all around the world. After having increased by a staggering 135 percent between May 2014 and June 2015 in local currency (or 190 percent measured in euros), the Shanghai Stock Exchange Composite fell by more than a third during the following three months and consequently started to increase until the end of the year to fall again in January. Over 2015, it nevertheless still gained 18.5 percent when measured in local currency. For the Nikkei 225 and the Euro STOXX 50, the increases were a mere 9.3 and 4.0 percent, respec-

tively. The Dow Jones industrial average and the FTSE 100 actually lost some ground and decreased by – 1.2 and – 5.8 percent, respectively. Given the appreciation of the US dollar and the British pound relative to the euro, some gains can still be reported from a euro area perspective in 2015 (see Figure 1.21).

Most stock market indices within the euro area are still well below the levels reached before the start of the financial crisis. By January the Athex (Greece) had returned to its low reached in June 2012, roughly 90 percent below the average value seen in 2007 and over 30 percent below its value at the end of 2014 (see Figure 1.22). The IBEX 35 (Spain) also lost ground during 2015 and fell by 6.4 percent. Although largely nullified this January the other major stock market indices for the crisis economies and the large euro area countries mostly increased by almost 10 percent in 2015. The ISEQ (Ireland) once again outperformed the others and gained approximately 30 percent in 2015.

All in all, financing conditions for the private sector should remain favourable this year. The degree of expansion of monetary policy is expected to remain high and corporate bond and lending rates low. The situation in the banking sector is likely to continue to improve and demand for corporate credit should moderately improve.

The divergence in monetary policy brought about significant changes in exchange rates last year. Whereas the euro and the Japanese yen continued to lose value when

Figure 1.22

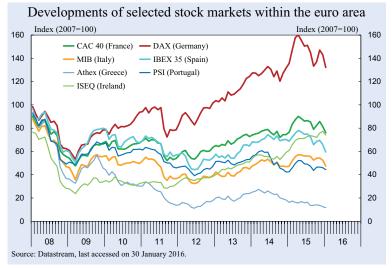


Figure 1.23

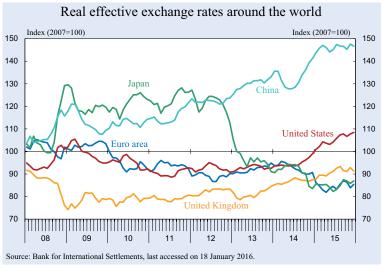
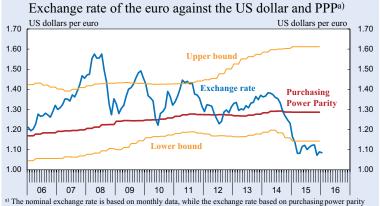


Figure 1.24



On the nominal exchange rate is based on monthly data, while the exchange rate based on purchasing power parity (PPP) is given at a quarterly frequency. The US dollar-euro PPP rate is calculated as the GDP-weighted average of the euro country-specific PPP estimates vis-à-vis the US dollar. The PPP upper bound represents the 90th percentile of the euro country-specific PPP estimates vis-à-vis the US dollar; the lower bound the 10th percentile. In calculating these bounds the 11 euro area member countries with the largest GDP weights are used.
Source: OECD, OECD Economic Outlook, Vol. 2015 issue 2, November, European Central Bank, last accessed on 30 January 2016.

comparing 2015 with 2014, the US dollar and the British pound experienced a strong upward trend (see Figure 1.23).

As of mid-October 2015, the euro again depreciated considerably compared to the US dollar (see Figure 1.24). This was primarily due to the impression of financial market participants that the ECB would continue to increase its expansion plans as of the beginning of 2016. As the ECB has often managed to surprise markets on the upside in recent years, i.e. by boosting the expansionary stance of monetary policy more strongly than expected, market expectations were very upbeat regarding the Governing Council decisions of last December. In a sense, markets expected to be positively surprised again. Although monetary policy became clearly more expansionary thanks to the decisions taken in December, no real surprises were conveyed, which was interpreted as a negative surprise by many financial market participants, allowing the euro to recoup some of its losses during the last weeks of 2015.

1.4 The macroeconomic outlook

1.4.1 Assumptions, risks and uncertainties

The present forecast is based on the assumption that oil and energy prices will roughly remain at the levels seen early this year, which are substantially lower than those seen on average during 2015. Exchange rates are also assumed to remain fairly stable throughout the year and the status quo situation regarding world politics is maintained throughout the forecast.

Of course, these assumptions all entail risks for our outlook, and, as has become usual, these risks are tilted to the downside. A key risk for the global economy this year is founded on the political tensions in the Middle East and the unclear development of this conflict. Although the most recent attacks committed by one of these parties in Paris did not make a significant short-term economic impact (see Box 1.1), the resulting political reactions in France and other nations, however, do show how explosive the geopolitical situation in the Middle East is. A further escalation of the conflicts in that region could unsettle consumers, producers and investors around the world and thereby dampen world-wide economic activity considerably. Further terrorist attacks in Europe unfortunately cannot be ruled out ei-

ther. Besides all kinds of obvious social problems, such a scenario could lead to a surge in oil prices because many of the countries in the Middle East are still among the main suppliers of this raw material and might further increase the number of refugees entering Europe.

Risks also arise from the expected gradual tightening of monetary policy in the United States. Now that the Federal Reserve has made its first interest rate increase since June 2006 and is likely to continue increasing rates at a slow pace, the relative attractiveness of the United States for financial capital is increasing. This might attract portfolio shifts out of other regions. In extreme cases, this could again lead to substantial capital outflows from emerging markets, which could trigger strong financial turmoil or even exchange rate crises. This could particularly strongly affect those countries that have a relatively high foreign debt denominated in US dollars (like Brazil, Indonesia and Turkey). For commodity-exporting emerging economies such as Russia and many Latin American countries that have already been struggling with the negative effects of lower commodity prices, the problems could also spark crises if exacerbated.

The referendum on the United Kingdom's membership of the European Union is scheduled to take place before the end of 2017. It is already creating uncertainty, especially in the United Kingdom, but also in Europe; as a potential Brexit constitutes a major risk regarding future political and economic developments in Europe.

The adopted extension of the securities purchase programme by the ECB carries risks for economic development, and not only in the euro area. This provision of cheap money could create asset price bubbles, which, if they burst, could lead to painful upheavals in the financial markets inside and outside Europe. In addition, the ECB's government bond-buying programme generates disincentives for fiscal policy to limit deficits. A number of European governments, including those of Spain and Italy, are already able to emit bonds with negative interest rates. The resulting fiscal buffers are, however, often not used to further reduce government deficits, or even to reduce debt. For political reasons, this fiscal leeway is often used to increase spending or cut taxes. While these measures leave the current overall deficit in relation to GDP roughly unchanged, they do increase long-term structural deficits and thus permanently affect the debt situation in the public sector negatively. They thereby re-

Box 1.1

The economic impact of terrorist attacks

Terrorist attacks involving deaths and injuries represent human tragedies. They can also influence the everyday behaviour of agents in the goods, services and financial markets. It is conceivable that terrorist attacks lead to a significant increase in uncertainty amongst these actors. This, in turn, could have a significant negative impact on economic development, as consumer spending and investment are often postponed in times of heightened uncertainty. In addition, the risk premiums on the capital markets may increase, creating poorer financing conditions for businesses and households.

Here, in a purely descriptive manner, we compare the impact of different terrorist attacks on a set of aggregate economic indicators to get a feel for the potential impact on the economy of the country hit. Specifically, we consider the terrorist attacks of September 11, 2001 in the United States, those on a Madrid train station on March 11, 2004, the explosions on public transport in London on July 7, 2005 and the series of assassinations in Paris on November 13, 2015.

Figure 1.25 illustrates the development of key macroeconomic variables in a time window that extends over several months before and after each attack. Following the attacks on September 11, 2001, a Tuesday, the stock market opened again the following Monday. On this day, the S&P 500 fell by 4.9 percent. Exactly one month later, the index recovered and returned to its pre-attack level. Over a longer period of time, the downward trend was unbroken. On the day of the Madrid attack (March 11, 2004) the Spanish stock index lost 2.2 percent; within four weeks, however, the index regained its pre-attack level and continued its upward trend. The British index lost 1.4 percent before continuing its upward trend. On the Paris Stock Exchange, no significant effect was apparent after the attacks.

For capital market rates, qualitatively similar effects in the wake of the attacks can be observed in the four countries: while interest rates fell on the day of the attack, this neither altered their long-run trend nor led to a level shift. With

Figure 1.25

the exception of the United States, some small depreciation in the local currencies was observed after the terrorist attacks, which was, however, corrected within a few days.

Similar qualitative effects were seen in consumer and producer confidence: as a result of the attacks neither a level shift nor a change in trend were observed. Although confidence in the short run declined more strongly in the United States, than in the other countries, it did return to its long-term course within a few months (see also Garner, 2002). In Spain and the United Kingdom, the confidence indicators continued their recent trend.

All in all, both financial market variables and confidence indicators showed only a slight reaction to the terrorist attacks. The observed effects are small and not exceptional in the context of their normal variation. In cases where effects are observed, these tend to be short-term. All indicators return to their historical trend after a relatively short period of time. Of course, this is merely a simple descriptive analysis in which it is notoriously difficult to really isolate the effects of the different attacks. As usual, many other changes occurred simultaneously for which no corrections were made in this analysis.

Development of selected macroeconomic variables arround terrorist attacks Real GDP Stock marketsa) 105 103 101 United States 100 99 Quarters Davs Interest ratesb) Exchange ratesc) 160 120 140 110 120 100 100 80 90 60 40 80 -300 -200 -100 100 200 300 -300 -200 -100 100 200 Days Consumer confidence Producer confidence ndex, seasonally adjusted Index, seasonally adjusted 103 States 102 102 United Kingdon -12 -12 -15 USA: S&P 500; Spain: IBEX 35; United Kingdom: FTSE 100; France: CAC 40. b) 10-year government bond yields ⁶ France, Spain: US Dollar per euro; United Kingdom: euro per British pound; United States: euro per US Dollar Source: BME Spanish Exchanges; US Bureau of Economic Analysis; Datastream; Euronext Paris; Merrill Lynch

International and Company CV; National Institute for Statistics and Economic Studies (INSEE); National Statistics Institute (INE); Office for National Statistics; Standard and Poors (S&P); WM/Reuters and EEAG calculations.

duce the future ability of many euro area countries to buffer adverse shocks through fiscal policy interventions and make them more vulnerable to the changing whims of international capital markets. The risk of new crises and a revival of the European debt crisis is growing with these measures.

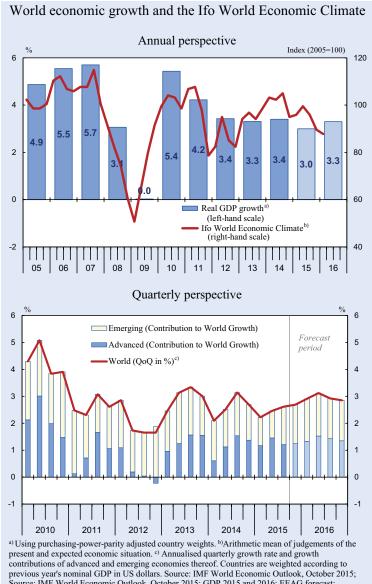
1.4.2 The global economy

Global economic expansion is expected to have continued this winter at a similar moderate pace as last summer. This was supported by the development of several coincident and leading indicators. Although these were mostly at above-average levels, the decline of the Ifo World Economic Climate during the second half of last year suggests that no acceleration of economic growth is to be expected these winter months (see Figure 1.26). During the first half of 2016, growth will increase again, partly because the positive effects of the fall in oil prices will materialise to a growing extent. The positive effect on the oil-importing countries through their higher willingness to spend is likely to be stronger than the economic bur-

den falling on oil-exporting economies. Since these effects are due to expire slowly over the year, the global rate of expansion will subsequently subside somewhat.

Macroeconomic developments in the major advanced economies will also be shaped by nominal exchange rate movements. Whereas US export growth is bound to remain subdued due to the strengthening of the US dollar, the demand for goods and services from the euro area and Japan is, given the depreciation of the euro and the yen, likely to accelerate further. Nevertheless, the aggregate economic performance of the United States will improve more vigorously than that of the euro area and Japan respectively in 2016. Although the resulting costs associated with both reforms in the banking sector, as well as in labour and

Figure 1.26

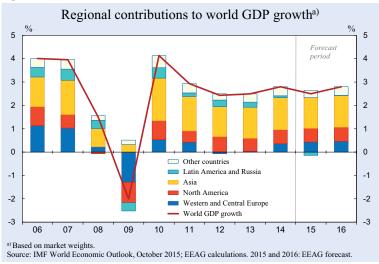


previous year's nominal GDP in US dollars. Source: IMF World Economic Outlook, October 2015; Source: IMF World Economic Outlook, October 2015; GDP 2015 and 2016: EEAG forecast; Ifo World Economic Survey I/2016.

> product markets in many countries are gradually decreasing, economic development in the euro area continues to be weakened by a number of structural problems. Japan is also expected to expand only moderately this year. Although monetary policy is extremely expansionary, and the planned gradual commissioning of a number of nuclear power plants is likely to reduce the need for energy imports, restrictive fiscal policy as well as structural factors, such as a shrinking potential labour force and relatively low productivity growth, will prevent a stronger recovery.

> Overall, the pace of expansion in emerging markets is unlikely to change significantly compared to last year. While Brazil and Russia will overcome their recessions in the course of the year, and the low oil price will pos-

Figure 1.27



itively impact China, India and many other East Asian economies, this is likely to be offset by forces that are preventing a significant economic upturn. For instance, the structural slowdown of economic growth in China is likely to continue. Furthermore, slowly rising long-term interest rates, particularly in the United States, will deteriorate financing conditions for emerging markets. Nevertheless, the growth contribution made by emerging markets to world GDP will also outstrip that of advanced economies in 2016 (see Figure 1.27).

All in all, world GDP will pick up a little momentum in 2016 and is forecasted to grow at a rate of 3.3 percent, which is slightly higher than in previous years. World trade is expected to expand by 3.2 percent this year. The current account balances of most commodity-exporting emerging economies will deteriorate. Given the strong US dollar, exports are expected to

expand significantly slower than imports in the United States. In the euro area and Japan, by contrast, the current account balance will improve.

1.4.3 United States

Not only have the expectations in the Ifo World Economic Survey for North America shown some volatility in recent quarters, but other indicators also paint a more mixed picture regarding this winter (see Figure 1.28). The Purchasing Managers' Index (PMI) deteriorated in December for the sixth consecutive month in a row to 48.2 points. It thereby fell below the expansion threshold of 50 points for the first time in three years. In fact, industrial production in October decreased slightly compared to the previous month. New orders in manufacturing (excluding defence equipment) in October were also only 0.4 percent higher than a year before. The strong US dollar dampened signals coming from foreign trade. Furthermore, the United States is also not immune to the

recent economic slowdown in emerging markets. More importantly for the US economy, however, is the development of domestic demand. Although private consumption was weak during the autumn, the upturn in the United States will continue. Positive signs underpin private consumption; as reflected by increasing consumer confidence, it is supported by the increase in real disposable income and good labour market conditions. Overall, the available economic indicators suggest that the pace of economic growth will continue during the first half of this year.

In the current year, real GDP is expected to increase at a similar pace as last year, i.e. by 2.5 percent (see Figure 1.29), so the moderate upturn will continue. Since the dampening effects of the dollar appreciation will run out of steam and, as a result of increasing capacity utilisation, business investment will be

able to expand more strongly again, economic devel-

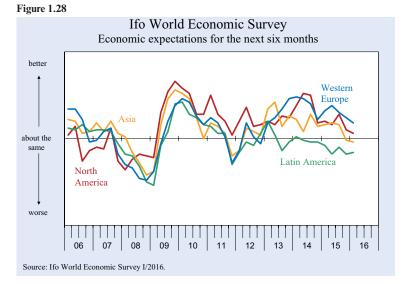
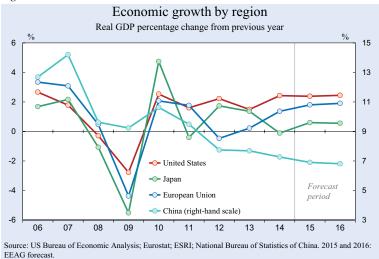


Figure 1.29



opment is expected to accelerate slightly during the summer of 2016. The unemployment rate has now fallen to what can be considered its long-run level. It will therefore only drop slightly to an average of 4.9 percent this year. As the effects of lower energy prices will abate wages will start rising somewhat faster; the inflation rate should increase to an average of 1.1 percent this year.

1.4.4 Asia

This year, the central bank of *China* is likely to focus on limiting the build-up of debt in the corporate sector, without causing a noticeable economic slowdown. It will continue to limit lending in some targeted areas, while trying to reduce the current high costs of financing for smaller private companies.

Recent developments in industrial production and the purchasing managers' index suggest that aggregate output should expand at about the same pace in early 2016 as seen during the second half of 2015. The fall in energy and commodity prices also supports economic activity; but this effect is likely to fade gradually. Positive impulses are currently generated by fiscal policy. Additional investment in the rail network, as well as in environmental protection projects, will stimulate production this year. Should the development in housing and equipment investment unexpectedly deteriorate sharply, then it is highly likely that fiscal policy will provide additional impetus with further infrastructure projects. The turbulence in the stock market will barely slow down private consumption, and will thus have a marginal

impact at most on aggregate demand. The shrinking labour force due to demographics is likely to have a negative effect on the growth trend. The transition towards a more service-oriented economy will also continue. This implies a further slowdown in the growth rates of industrial production combined with accelerating momentum in the service sector. Overall, real GDP is expected to rise by 6.8 percent this year.

The low unemployment rate in *Japan* will lead to some upward

pressure on nominal wages. Although an increasing share of the labour force has temporary contracts as opposed to permanent ones, which is constraining wage pressure somewhat, the labour market conditions do suggest that wages will rise slightly faster this year than in 2015. Despite the upward pressure that this implies for inflation dynamics, it cannot be ruled out that the Bank of Japan will loosen monetary policy further.

At the same time, fiscal policy remains restrictive against a backdrop of high public debt. Although a multi-stage reduction of corporate taxes has been implemented to promote the willingness to invest, this is more than compensated for by strong cuts in government spending. The biggest cuts are expected to be in public investments. These will steadily decrease from about 5 percent in relation to GDP in 2014 to about 3 percent in 2017. The decisive factor is the phasing out of large stimulus packages, which were adopted as part of the "Abenomics" programme to stimulate overall production and support lower income households. In addition, the VAT rate is to be increased from 8 to 10 percent again in April 2017, which will already lead to some anticipatory effects this year.

This year the Japanese economy will pick up slightly. The rising income of households is likely to fuel private consumption. In addition, companies will expand their investment given their high capacity utilisation levels. This is favoured by the reduction in corporate tax rates and record high profits. The gradual acceleration of economic growth in the East Asian emerging economies and the low external value of the Yen is ex-

pected to support demand for Japanese products and stimulate exports slightly. Structural factors, like a shrinking population, very rigid labour market conditions with lifelong employment guarantees, and overregulation in many product and service markets, will hold back the increase in production. Overall, total economic output is expected to rise by around 0.6 percent this year. Inflation is expected to rise steadily to an average of 1.0 percent this year.

In India, recent developments in new orders in the manufacturing sector, industrial production and exports do not indicate a further acceleration of economic growth in the months ahead. During the rest of the year production is likely to expand at a slightly increasing pace due to firming domestic demand. Nevertheless, the stimulating effects of lower oil prices will gradually be phased out in the course of the year. In addition, owing to the large number of bad loans and the high level of indebtedness of many companies, investment growth will slow down. On the other hand, fiscal policy is still giving out positive impulses. The drop in oil prices has made it possible for the government to raise energy taxes and reduce different subsidies, such as those on fuel. However, substantial investments to improve the transport and energy infrastructure have been announced and do more than compensate for this. In addition, there are plans to reduce corporate taxes over the next four years from 30 to 25 percent in order to encourage private investment. All in all, real GDP will grow by 7.5 percent this year.

The outlook for the remaining East Asian economies (Indonesia, Korea, Malaysia, Taiwan, Thailand, Philippines, Singapore and Hong Kong) is more optimistic compared to last year. In many places, domestic demand is expected to increase faster. Private consumption and investment is thereby going to benefit from an improved financial situation among households and businesses in the Asian Tiger economies (South Korea, Taiwan, Hong Kong and Singapore). In South Korea, the expansionary fiscal policy will support the economic situation. The government of Indonesia, which still has enough fiscal space to manoeuvre, plans to increase public spending. Moreover, exports will, especially in light of the expected slight acceleration of the world economy and the significant depreciation of the exchange rates of emerging economies, expand at a rapid pace. All in all, real GDP is expected to grow by 4.0 percent in these East Asian countries this year.

1.4.5 Latin America and Russia

Over the course of the year, the *Latin-American region* will move out of recession. Whereas the recession is likely to continue in Brazil and Venezuela, the other countries of the region will manage to more than compensate for this. Indeed, the recession in Brazil will lose its sting during the year, but the return to positive annual growth is not expected until 2017. In Mexico, Colombia and Chile, by contrast, the robust labour market and growing consumer confidence presently point to strong domestic growth throughout the year. In addition, Mexico is likely to benefit from the positive economic outlook of its main trading partner, the United States. Overall, the region's real GDP will with a growth rate of – 0.1 percent basically stagnate this year.

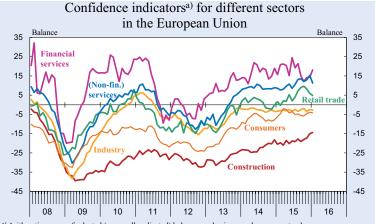
In Russia, business confidence stabilised at a low level. Even if the recession ended this winter, a quick recovery is not to be expected. Rising unemployment, falling real incomes and high inflation rates (of currently around 15 percent) have led to substantial losses in purchasing power. Although the key monetary policy rate, the CBR key rate, was gradually reduced from 17 percent at the end of 2014 by 6 percentage points during the first half of 2015, the cost of debt financing remains high. In addition, Russian banks still have very limited opportunities to refinance on international capital markets. Given the high inflation rate and poor financing conditions, private consumption and investment are hardly going to support growth. Positive impulses continue to result from the enforced import substitution programme that is funded through the State Reserve Fund and the National Prosperity Fund (the volume of both funds totals approximately 150 billion US dollars, and 12 percent of GDP). Through the weak ruble, foreign trade is expected to contribute positively to GDP growth. Overall the slight upward trend nevertheless results in a negative growth rate of -0.2 percent for this year. However, much will depend on the evolution of commodity prices and the geopolitical situation. The downside risks therefore remain high.

1.4.6 The European economy

The cyclical situation

Recent business and consumer tendency surveys indicate that real GDP in Europe is expected to increase at

Figure 1.30



a) Arithmetic means of selected (seasonally adjusted) balances on business and consumer 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 30 January 2016.

Figure 1.31

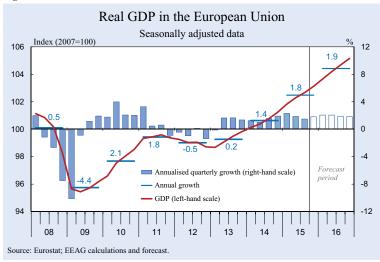
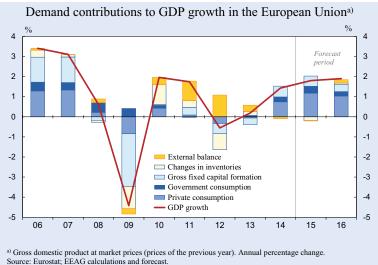


Figure 1.32



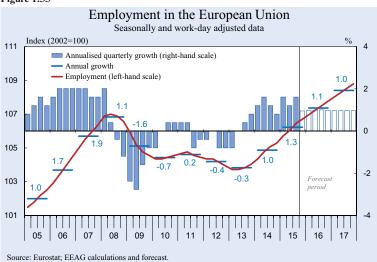
a slightly accelerated pace during the first half of the year (see Figure 1.30). Albeit at a slightly reduced pace, the recovery will continue throughout the remaining year and will allow the output gap to close slowly (see Figure 1.31).

Domestic demand, and in particular private consumption, will be the main driver behind the ongoing recovery (see Figure 1.32). Households continue to benefit from comparatively low energy prices and associated low inflation rates. Furthermore, the situation in the labour market is expected to improve further, making moderate wage increases possible. Employment will continue to grow and the unemployment rate will fall from an average of 9.5 percent in 2015 to 9.1 percent this year (see Figures 1.33 and 1.34). In addition to rising real incomes, low interest rates will contribute to a continuing revival of demand for consumer goods.

Fiscal policy, via additional public consumption and investment spending, is also likely to directly contribute to an increase in overall demand. Firstly, government bond yields are still very low and as such, loosen the budget constraints of European countries. Secondly, since the beginning of 2015, the EU Commission has started tolerating higher structural deficits if accompanied by increased public investment activities. Thirdly, some European countries have announced additional spending on military operations as well as terrorism prevention. Despite the ongoing recovery, budget deficits will only decline moderately, especially in the euro area. Whereas the total government deficit will fall from

EEAG Report 2016 40

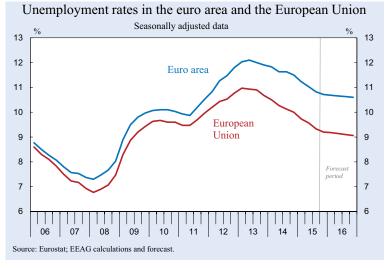
Figure 1.33



2.5 to 2.0 percent in the EU at large, it will only decline from 2.0 to 1.8 percent in the euro area this year.

Favourable conditions for private investment abound. Firstly, companies stand to benefit from the depreciation of the euro against the US dollar. This has improved cost competitiveness and sales prospects, particularly in the United States. Secondly, the oil price is still extremely low, so energy costs have dropped for many companies. Thirdly, the profitability of firms and their access to bank loans has improved. Lending rates are low and banks are increasingly willing to satisfy an increase in demand for credit. Last but not least, the increase in capacity utilisation and the closing of the output gap are gradually making investing in additional capacities more attractive. Nevertheless, no real investment boom is to be expected. Structural problems and related uncertainty over how to solve

Figure 1.34



them persists in many countries and areas within Europe, dampening the willingness of firms to invest.

Although the low value of the euro is supporting exports to the United States in particular, imports are due to the increase in domestic demand expected to rise as such that net exports will hardly contribute to European GDP growth. All in all, real GDP in the European Union is expected to grow by 1.9 percent this year. For the euro area this amounts to 1.7 percent.

Inflation is expected to gradually increase as the effects of sequential energy price drops will fade and the output gap closes. Assuming constant real energy and food prices and an unchanged exchange rate visà-vis the United States, the headline inflation is projected to average at 0.9 percent this year in both the euro area and the European Union (see Tables 1.A.3 and 1.A.4).

Differences across Europe

With the exception of Finland and Greece, the economies of the member states of the European Union are all on a recovery course. The pace of this recovery, however, differs from country to country. Whereas real GDP in Germany is increasing at a moderate rate, the recovery is somewhat bumpier in France and Italy.

Spain, on the other hand, is witnessing a strong upturn.

As indicated by coincident and leading indicators like the results of the Ifo World Economic Survey, the *German* economy is continuing to expand moderately throughout the winter. Domestic and foreign incoming orders are on the rise again. In addition, fiscal impulses owing to the strong influx of refugees and which are associated with an increase in government spending not backed up by additional revenues or spending cuts elsewhere therefore

do fully impact aggregate demand. In addition, the economy is still benefitting from terms-of-trade gains caused by the decline in crude oil prices. Economic expansion will be supported by the service, retail and wholesale trade sectors this winter; industrial activity, on the other hand, will continue to be weak given that order levels remain low. However, the Ifo Business Climate indicator for the manufacturing sector, and specifically fairly optimistic business expectations, also indicate a turn for the better here.

During the course of the year, the upswing will continue. Decisive in this respect are the continued favourable conditions faced by the German economy. Monetary policy continues to have an exceptionally expansionary impact, with interest rates that are expected to remain low. The financing conditions for new business and construction investments are therefore extremely advantageous. In addition, the government will increase its expansionary impetus, not least due to the significant rise in public consumption and transfers caused by refugee migration. Finally, consumers are still benefitting from low energy prices. This is another reason why private consumption is likely to remain the main pillar of the recovery, which is also promoted by rising labour and transfer income and a decline in the net tax burden of households. Furthermore, the export industry is only expanding at a moderate pace. Although exports will rise somewhat faster during the first half of this year, since the economic situation in major trading partner countries will improve and the impact of the strong depreciation in the euro during 2015 is still to be felt, the global economic expansion, and thus the average growth rates of German exports, will remain far behind those of previous upswings. As a result, investment in machinery and equipment will grow only modestly, despite favourable financing conditions and the largely normal capacity utilisation rates. Construction investment, on the other hand, should pick up again this year. As imports will grow stronger than exports, in view of the strong domestic demand forecast, impetus will mainly come from the domestic economy, rather than foreign trade this year. Overall, real GDP growth is expected to rise to 1.9 percent in 2016. This includes a significant growth contribution from the additional demand created by the inflow of refugees. The pricedampening effects of lower energy prices will wear out and homemade inflation will intensify gradually. Consumer prices are thereby expected to rise by 0.9 percent this year.

The inflow of refugees will have a substantial impact on the German labour market over time. Although companies' high demand for labour will continue, the labour supply will increase much faster through the increasing number of recognised asylum seekers entering the labour market. As the qualification level of the refugees is mainly low, there is likely to be a mismatch between demand and supply that is further aggravated by the nationwide minimum wage that was introduced in early 2015. As a result, unemployment is expected to rise again over the course of the year.

The *French* economy is expected to witness another year of below-average growth and only slowly declining unemployment rates. Previous attempts to reduce labour costs for businesses and to improve price competitiveness have by no means been sufficient to increase long-term growth potential and did not trigger positive short-term developments. Private and public consumption are the main drivers of growth. The latter are also on the increase as the government has initiated additional spending on military operations to counter terrorism.

Although leading indicators suggest a certain slow-down in economic momentum during this winter, the upturn in the *United Kingdom* is likely to continue and will mainly be supported by private consumption. Although nominal wage growth remains moderate from an historical perspective, real incomes are benefitting from stable prices. In addition, tax relief and the increase in the minimum wage in the context of the introduction of the "living wage" are primarily benefitting lower income groups. These have a relatively high propensity to consume.

As corporate profits, particularly in the service sector, have been picking up and borrowing costs remain low, investment should continue to gain momentum this year. The expected turnaround in policy interest rates is only going to be gradual, leaving the overall still expansionary monetary policy to further support economic growth throughout the year. However, fiscal policy will have a restrictive effect in 2016.

Overall, the British economy is likely to expand further in 2016 at a rate of 2.2 percent, which is moderate compared to previous years. The unemployment rate will continue to decline slightly. On average it will reach 5.1 percent this year. Due to rising wages and the expiring effects of fallen energy prices, the inflation rate will increase slightly to 1.0 percent this year.

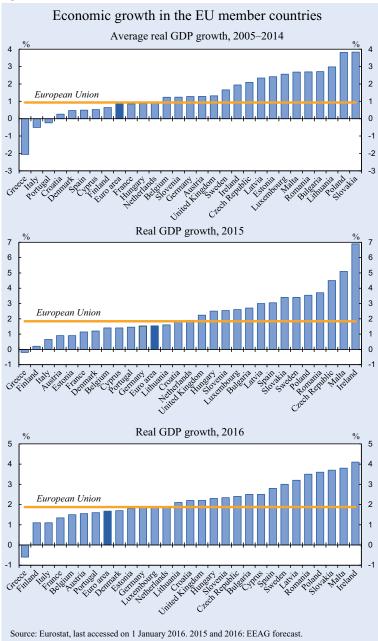
EEAG Report 2016 42

In Italy a wide-range of reforms regarding electoral law and the constitution are in the pipeline. These reforms aim to accelerate the political decision-making process considerably. However, they are merely one step towards implementing reforms that may lead to sustainably higher growth rates. The recovery of the Italian banking sector, for instance, has made little progress to date. The stock of non-performing loans, however, has increased markedly over the year and there are no signs that this will start falling soon. Previous attempts to relieve the banking sector through government intervention were mostly limited to smaller financial institutions. This was partly because the financial flexibility of the Italian state is - given the high level of government debt - limited and Italy has received no direct financial aid to date from the European Union. These structural problems do imply that Italy's recovery will continue to lag behind upturns in other European countries. GDP is expected to grow at 1.1 percent in 2016, which is well below the average for the euro area (see Figure 1.35).

This year, *Spain* is expected to continue to expand faster than the other large member states. This is partly because the bank-

ing sector is likely to gradually overcome its serious crisis. Thanks to the economic situation, the stock of non-performing loans has fallen substantially since the end of 2013. In addition, a substantial amount of very high-risk assets were outsourced to a bad bank back in 2012. Furthermore, financial aid has been granted by the European Union, allowing Spanish banks to increase their capital ratios significantly. With a forecast growth rate of 2.8 percent this year, labour market conditions continue to improve in Spain and the unemployment rate is expected to decline further to an average rate of 21.0 percent. Given persistent large overcapacities in the system, the in-

Figure 1.35



flation rate will remain subdued and should reach an average of 0.5 percent this year.

For *Greece*, the first glimmers of hope are on the horizon: early indicators pointing towards some expansion. Greece is still nevertheless a long way from recovery, with domestic and foreign orders still shrinking. Although the government intends to lift capital controls this spring, the country currently still clearly suffers from them. Amid negative carry-over effects from last year, the economy is still projected to contract by -0.6 percent this year (see Table 1.A.2).

The conditions for a continuation of the economic recovery in *Central and Eastern Europe* are generally favourable. Inflation rates and exchange rates are stable, and interest rates remain low. Lending to businesses and households will gain momentum in many places (especially in Poland and the Czech Republic), which, in turn, can be expected to have a positive effect on domestic demand. Economic stimulus is also coming from the public sector, which in most countries is in a fiscally sound shape.

In addition, countries in the region are eligible to receive substantial funding from the five structural and investment funds of the European Union (ESIF) until 2020 (around 190 billion euros alone for the six countries outside the euro area: Poland, Romania, Hungary, Czech Republic, Bulgaria and Croatia). Since these funds are granted according to the principle of co-financing, they must be accompanied by public funds from the country applying. Accordingly, fiscal policy will tend to be expansionary, especially in the region's three major economies (Poland, the Czech Republic and Hungary).

Overall, the pace of expansion in the majority of Central and Eastern European EU member states should accelerate slightly this year. The economic outlook is only cloudier in the Baltic States (Lithuania, Latvia and Estonia); these economies are feeling the impact of Russian sanctions against the European Union and are more sensitive to the Russian import substitution programme.

References

Garner, C. A. (2002), "Consumer Confidence after September 11," Federal Reserve Bank of Kansas City Economic Review 87, pp. 5–26.

OECD (2015), OECD Economic Outlook 2015-2, OECD, Paris.

Appendix 1.A Forecasting Tables

Table 1.A.1

GDP growth, inflation and unemployment in various countries

	Share of	GDP growth		CPI inflation		Unemployment rate ^{d)}				
	total		in %				in %			
	GDP	2014	2015	2016	2014	2015	2016	2014	2015	2016
Industrialised countries:										
EU 28	27.4	1.4	1.8	1.9	0.6	0.0	0.9	10.2	9.5	9.1
Euro Area	19.9	0.9	1.5	1.7	0.4	0.0	0.9	11.6	10.9	10.6
Switzerland	1.0	1.9	0.7	1.1	0.0	- 1.1	-0.5	4.5	4.5	4.7
Norway	0.8	2.2	1.2	1.5	2.0	2.1	2.3	3.5	3.7	3.8
Western and Central Europe	29.2	1.4	1.7	1.9	0.6	0.1	0.9	10.1	9.4	9.0
US	25.8	2.4	2.4	2.5	1.6	0.1	1.1	6.2	5.3	4.9
Japan	6.8	-0.1	0.6	0.6	2.7	0.8	1.0	3.6	3.4	3.2
Canada	2.7	2.4	1.1	2.0	1.9	1.1	1.9	6.9	6.9	7.0
Industrialised countries (total)	64.4	1.7	1.9	2.0	1.3	0.2	1.0	7.8	7.1	6.8
Newly industrialised countries:										
Russia	2.8	0.6	-3.2	-0.2	7.8	15.7	10.8			
China	15.4	7.3	6.9	6.8	2.0	1.5	2.2			
India	3.1	7.1	7.3	7.5	7.2	5.1	5.6			
East Asia ^{a)}	6.5	3.7	3.2	4.0	3.4	1.9	2.5			
Latin America ^{b)}	7.9	0.9	-0.7	-0.1	10.9	19.4	12.6			
Newly industrialised countries	35.6	4.7	3.7	4.3	5.1	7.0	5.5			
(total)	33.0	4. /		4.5	3.1	7.0	3.3	•	•	•
Total ^{c)}	100.0	2.8	2.5	2.8 ^{e)}						
World trade growth in %		3.4	2.6	3.2						

a) Weighted average of Indonesia, Korea, Malaysia, Taiwan, Thailand, Philippines, Singapore and Hong Kong. Weighted with the 2013 levels of GDP in US dollars. – b) Weighted average of Brasil, Mexico, Argentina, Venezuela, Colombia, Chile. Weighted with the 2013 level of GDP in US dollars. – c) Weighted average of the listed groups of countries. – d) Standardised unemployment rate. – c) 3.3 percent when using purchasing-power-parity adjusted weights.

 $Source: Eurostat, OECD, IMF, ILO, National Statistical Offices, 2015 \ and \ 2016: EEAG \ forecast.$

Table 1.A.2

GDP growth, inflation and unemployment in the European countries

	Share	GDP growth ^{a)}			Inflation ^{b)}			Unemployment ratec)		
	of	in			. %			in %		
	total GDP in %	2014	2015	2016	2014	2015	2016	2014	2015	2016
Germany	20.8	1.6	1.5	1.9	0.8	0.2	0.9	5.0	4.6	5.1
France	15.6	0.2	1.1	1.3	0.6	0.1	0.8	10.3	10.4	10.3
Italy	12.0	-0.4	0.7	1.1	0.2	0.1	0.7	12.7	11.9	11.4
Spain	7.8	1.4	3.1	2.8	-0.2	- 0.6	0.5	24.5	22.2	21.0
Netherlands	4.8	1.0	1.9	1.9	0.3	0.2	0.9	7.4	6.9	6.5
Belgium	2.9	1.3	1.4	1.5	0.5	0.6	1.6	8.5	8.3	7.7
Austria	2.4	0.4	0.9	1.6	1.5	0.8	1.3	5.6	5.7	5.7
Finland	1.5	-0.4	0.2	1.1	1.2	-0.1	0.5	8.7	9.4	9.4
Greece	1.3	0.7	-0.2	-0.6	- 1.4	- 1.1	0.1	26.5	25.1	24.9
Portugal	1.3	0.9	1.5	1.6	-0.2	0.5	0.7	14.1	12.7	12.1
Ireland	1.3	5.2	6.9	4.1	0.3	-0.1	0.7	11.3	9.4	8.7
Slovakia	0.5	2.5	3.4	3.7	-0.1	-0.3	1.0	13.2	11.5	10.1
Slovenia	0.3	3.0	2.5	2.3	0.4	-0.8	0.7	9.7	9.1	8.5
Luxembourg	0.3	4.1	2.6	1.9	0.7	0.0	0.9	6.0	6.2	5.7
Lithuania	0.3	3.0	1.6	2.1	0.2	-0.7	0.8	10.7	9.1	8.4
Latvia	0.2	2.4	3.0	3.2	0.7	0.2	1.1	10.8	9.9	9.6
Cyprus	0.1	-2.5	1.4	2.5	-0.3	- 1.6	0.0	16.1	15.6	15.1
Estonia	0.1	2.9	0.9	1.8	0.5	0.1	1.0	7.4	6.1	6.0
Malta	0.1	4.1	5.1	3.8	0.8	1.2	1.4	5.9	5.4	5.1
Euro area ^{d)}	73.5	0.9	1.5	1.7	0.4	0.0	0.9	11.6	10.9	10.6
United Kingdom	14.9	2.9	2.2	2.2	1.5	0.1	1.0	6.1	5.4	5.1
Sweden	3.2	2.3	3.4	3.0	0.2	0.7	1.3	7.9	7.4	7.0
Denmark	1.9	1.3	1.2	1.7	0.3	0.2	1.0	6.6	6.2	6.2
EU 22 ^{c)}	93.5	1.3	1.7	1.8	0.6	0.1	0.9	10.5	9.8	9.6
Poland	2.9	3.3	3.5	3.6	0.1	-0.7	0.9	9.0	7.5	6.7
Czech Rpublic	1.2	2.0	4.5	2.4	0.4	0.3	1.1	6.1	5.1	4.5
Romania	1.1	2.9	3.7	3.5	1.4	-0.4	0.6	6.8	6.8	6.4
Hungary	0.7	3.7	2.5	2.3	0.0	0.1	1.4	7.7	6.9	6.3
Croatia	0.3	-0.4	1.8	2.2	0.2	-0.5	0.5	17.3	16.6	16.2
Bulgaria	0.3	1.5	2.7	2.8	- 1.6	- 1.0	0.7	11.4	9.4	8.6
New Members ^{e)}	7.9	2.8	3.3	3.1	0.3	- 0.4	0.9	8.9	7.9	7.2
EU 28 ^{d)} a) GDP growth rate	100.0	1.4	1.8	1.9	0.6	0.0	0.9	10.2	9.5	9.1

a) GDP growth rates are based on the calender adjusted series except for Ireland, Slovakia and Romania for which Eurostat does not provide working-day adjusted GDP series. – b) Harmonised consumer price index (HICP). – c) Standardised unemployment rate. – d) Weighted average of the listed countries. – e) Weighted average over Slovakia, Slovenia, Lithuania, Latvia, Estonia, Poland, the Czech Republic, Romania, Hungary, Croatia and Bulgaria.

Source: Eurostat, 2015 and 2016: EEAG forecast.

Table 1.A.3

Kev	forecast	figures	for	the	Europear	Union
110,	Torcast	II gui Co	101	uic	Lui opcai	Cinon

	2014	2015	2016				
	Percentage of	Percentage change over previous year					
Real gross domestic product	1.4	1.8	1.9				
Private consumption	1.3	2.1	1.8				
Government consumption	1.1	1.6	1.0				
Gross fixed capital formation	1.4	2.6	1.7				
Net exports ^{a)}	-0.1	0.1	0.2				
Consumer prices ^{b)}	0.6	0.0	0.9				
	Percentage of nominal gross domestic						
	product						
Government fiscal balance ^{c)}	- 3.0	-2.5	-2.0				
	Percentage of labour force						
Unemployment rated)	10.2	9.5	9.1				

a) Contributions to changes in real GDP (percentage of real GDP in previous year). – b) Harmonised consumer price index (HCPI). – c) 2014 and 2015: forecasts of the European Commission. – d) Standardised unemployment rate.

Source: Eurostat; 2015 and 2016: EEAG forecast.

Table 1.A.4

Kev	forecast	figures	for	the	euro	area

	2014	2015	2016			
	Percentage change over previous year					
Real gross domestic product	0.9	1.5	1.7			
Private consumption	0.8	1.7	1.5			
Government consumption	0.9	1.4	1.0			
Gross fixed capital formation	1.3	2.2	1.3			
Net exports ^{a)}	0.0	0.1	0.3			
Consumer prices ^{b)}	0.4	0.0	0.9			
	Percentage of nominal gross domes					
	product					
Government fiscal balance ^{c)}	-2.6	-2.0	-1.8			
Unemployment rated)	11.6	10.9	10.7			

a) Contributions to changes in real GDP (percentage of real GDP in previous year). – b) Harmonised consumer price index (HCPI). – c) 2014 and 2015: forecasts of the European Commission. – d) Standardised unemployment rate.

Source: Eurostat; 2015 and 2016: EEAG forecast.

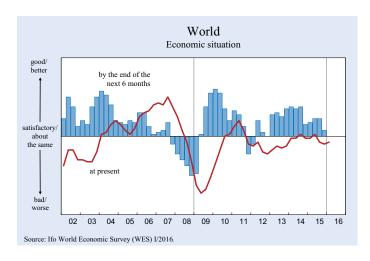
Appendix 1.B Ifo World Economic Survey (WES)

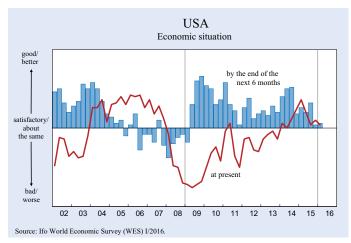
The Ifo World Economic Survey (WES) assesses worldwide economic trends by polling transnational as well as national organisations worldwide about current economic developments in the respective country. This allows for a rapid, up-to-date assessment of the economic situation prevailing around the world. In January 2016, 1,085 economic experts in 120 countries were polled.

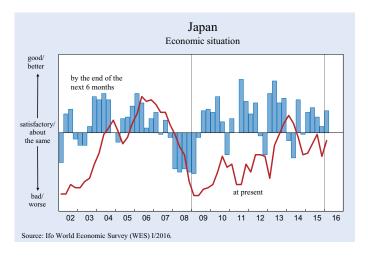
The survey questionnaire focuses on qualitative information: on assessment of a country's general economic situation and expectations regarding important economic indicators. It has proved to be a useful tool,

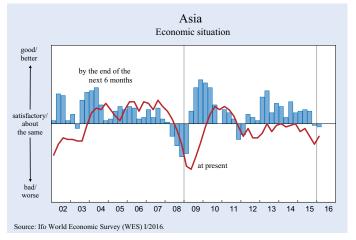
since economic changes are revealed earlier than by traditional business statistics. The individual replies are combined for each country without weighting. The "grading" procedure consists in giving a grade of 9 to positive replies (+), a grade of 5 to indifferent replies (=) and a grade of 1 to negative (-) 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.

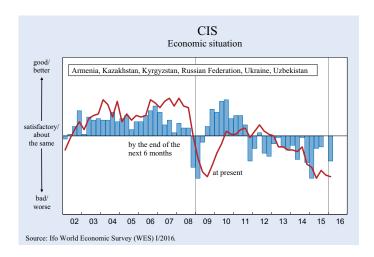
IFO WORLD ECONOMIC SURVEY (WES)

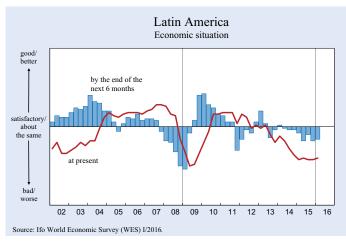


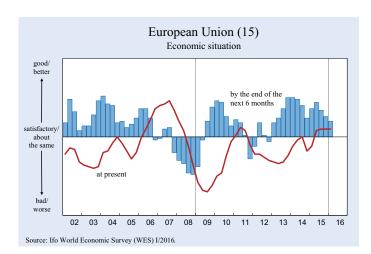


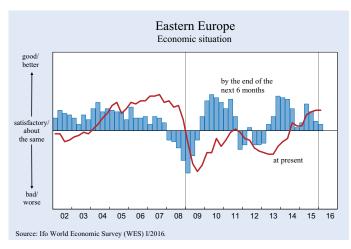


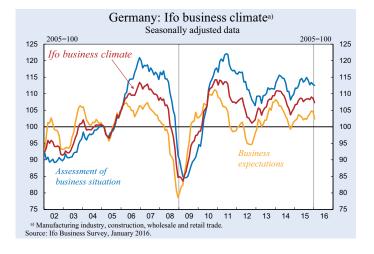


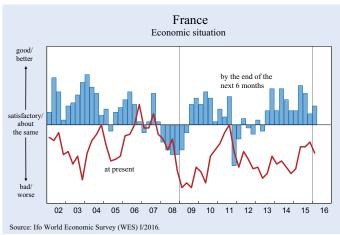


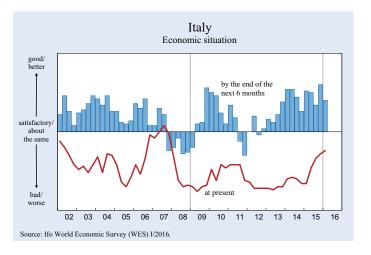


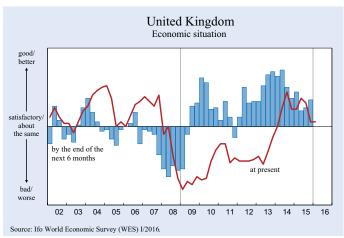


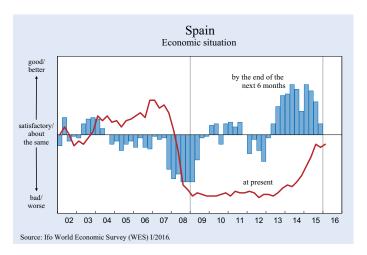


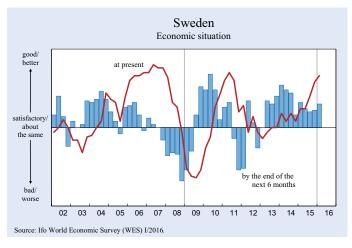




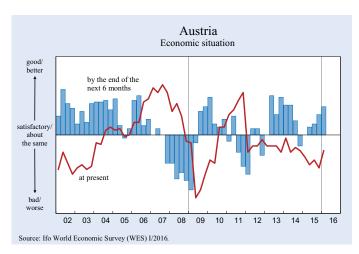


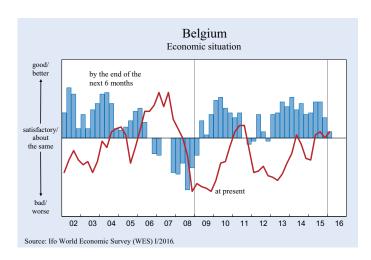


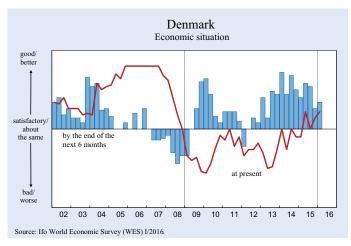


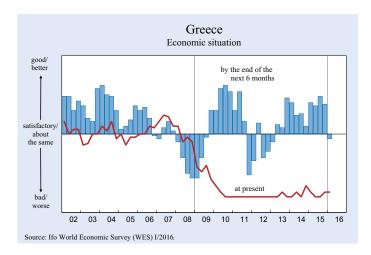


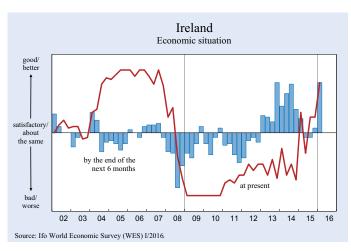


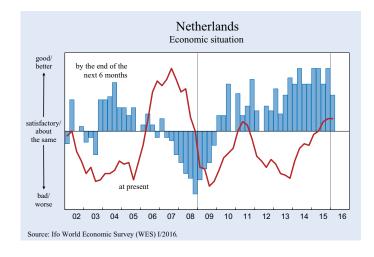


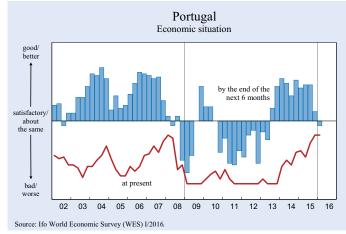


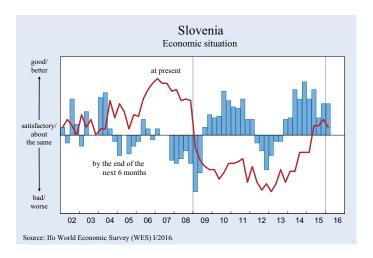


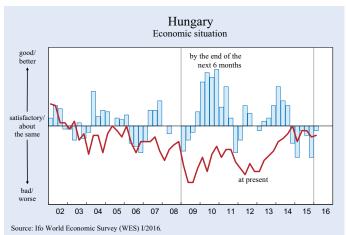




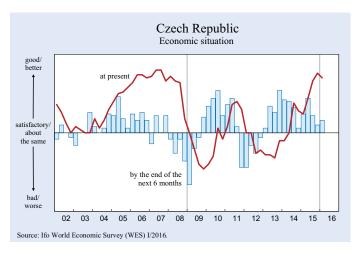


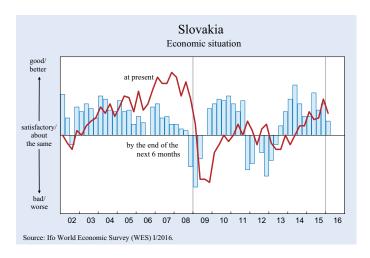




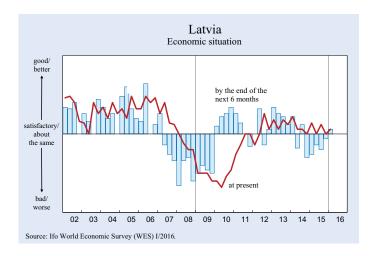




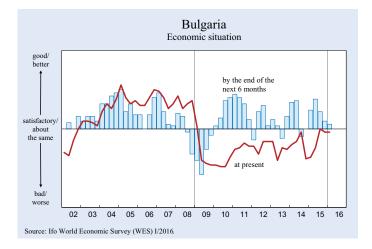


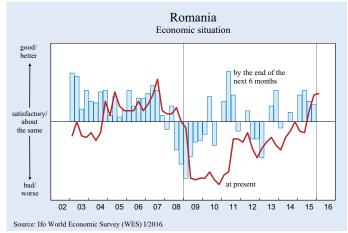












Intergenerational Fairness

2.1 Introduction

This chapter is concerned with the interaction of generations, the way that generational clashes are translated through the political system, and their long-term consequences for the sustainability of the economy and society. It concludes with a consideration of whether the generational contract is safer on a national or a supranational (including a European) level.

The idea that a contract between the generations lies at the basis of society is fundamental to visions of a just social order. It is also at the heart of any notion of social stability and sustainability. The conservative theorist Edmund Burke famously put the generational contract in a larger perspective: "Society is a contract... a partnership not only between those who are living but between those who are dead, those who are living, and those who are to be born." (Burke, 1790) Burke essentially saw a private contract that was violated by the dramatic political action of the French revolutionaries. The character of the contract has changed remarkably since Burke's time. In modern Europe, families no longer invest in children with the goal of securing their own position in old age, but have collectivised or socialised Burke's social contract (Becker, 1992). In our modern society, government becomes a vital element in the contract. The father of modern welfare economics, Arthur Pigou, envisaged the state as representing those who are "absent" from the discussion: "There is wide agreement that the State should protect the interests of the future in some degree against the effects of our irrational discounting and of our preference for ourselves over our descendants. The whole movement for 'conservation' in the United States is based on this conviction. It is the clear duty of Government, which is the trustee for unborn generations as well as for its present citizens, to watch over, and, if need be, by legislative enactment, to defend, the exhaustible natural resources of the country from rash and reckless spoliation." (Pigou, 1932, pp. 29f.) But we also know after a century of experience that the state is very likely to be captured by those who are present. In that sense, states fail to live up to the promise of yielding an equitable result.

The welfare state is an institutional and formalised version of the contract, the medium for making generational transfers. A welfare state reallocates resources at both ends of an individual's life span, replacing choices in spending that had previously been personal or private. As Becker (1992) put it, "Both the elderly and children need care - in one case because of declining health and energy, and in the other because of biological growth and dependency." The level of investment in children has a powerful effect on future outcomes: on individual well-being, but also on the health and dynamism of society. In the past parents had seen raising the human capital of their children as a way of securing their own security when they became incapable of working and earning. That is no longer needed, because the parents see the burden of their future support as collectivised. The result might well be expected to be that many resource-constrained parents no longer see any advantage to themselves in increasing the earning capacity and economic potential of their children. Decisions on educational spending thus need to be left to public authority: in its absence there is a risk of substantial under-spending. The forward-looking aspect of the socialised contract can be seen as investment in future generations.

Working age adults accumulate either private assets or claims on public support in anticipation of their own old age. The socialisation of old age provision is seen as a backward-looking corollary to the investment in the young. The calculation reflects a need to save for the future of the presently middle-aged generation that is currently investing in education for the future. In the new socialised contract, that saving is the compensation for the incomes foregone as working people finance the educational investment for the future. The socialised contract in nature is Pay As You Go: it implies an implicit return equal to wage sum growth when fertility goes down, the return falls; when longevity goes up, individuals draw more on the contract (Boldrin and Montes, 2005; Andersen and Bhattacharya, 2015).

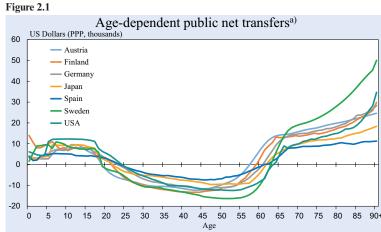
Historically, the socialisation of payments for the first part of the life cycle came earlier than the provision of old age provision. Public investment in education was motivated by the observation that poor people would try to gain from their children as early as they could (in an era of child labour), and that there was a public good in raising levels of skill and sociability. The second half of the nineteenth century was, as a result, at least in some areas of higher education and in skill levels, a period of substantial economic growth, with rising social investment and substantial increases in literacy and skills. Old age pensions – first introduced in Denmark and in Germany – were a way of buying off political discontent that looked relatively cheap, as many industrial workers could not expect to live until the retirement age. Nutritional and medical advances in the twentieth century led to large gains in longevity, and made this side of the bargain more expensive.

The generational distribution of the socialised contract occurs principally in the framework of a national context. Historically, the large expansion of the pensions system and of pension entitlements, usually funded on a Pay As You Go system (PAYG) with defined benefits, took place in the middle of the twentieth century, especially in the third quarter, when borders were very important and there were substantial restrictions to international migration. Productivity increases and population growth together drove wage increases that allowed PAYG to work unproblematically. Then came globalisation, and larger migratory flows. The ability to exit and enter the national setting, however, alters the calculation on which the lifetime promise was built. The nature of the contract will change because of the effects of migration. Emigrants

are the beneficiaries of investment in early education, but may be seen as opting out of the repayment phase of the contract (while sometimes still expecting private inheritances, and even public pensions if they re-enter on old age). A society with a great deal of emigration is likely to have additional incentives to underinvest in education. It might be expected that a society that is highly concerned with its old age future might be enthusiastic about immigration. But there are many kinds of migrants, including workers, students, family members seeking family reunification, and asylum seekers, and each group interacts differently with the labour market. In reality the debate is also frequently dominated by cultural concerns about the consequences of immigration and fear that open borders mean low skill immigration and a higher degree of dependency on welfare payments. A declining trend in productivity growth and in fertility also threatens PAYG. In short, the social contract is an implicit insurance contract, and migration holds out the possibility of adverse selection, with selection mechanisms that can undermine or even destroy the contract.

The individualisation of society, and the increasing disintegration of traditional families, have created the expectation that the state should serve as a replacement for the family. It is the public sector that pays considerable amounts for educating young people, and maintaining old people; while the middle generation pays in so as to provide the support for juniors and seniors. There are obvious differences between countries, and Scandinavian countries are especially generous in their transfers to the elderly, but the basic profile is similar across the industrial world (see Figure 2.1).

How does behaviour respond to the incentives created by the availability of transfers? The arrangement of benefits and costs creates inducements for the young to extend education/student life as long as possible, so as to extend their benefits; for them to then exit quickly so as not to pay the costs; and for the middle-aged to retire as soon as they can, in order to extend their benefits. Meanwhile, those still trapped in the working middle feel squeezed, and may not have the same af-



a) The age dependent public net transfers include the value of services in kind (positively), cash transfers (negatively) and all forms of taxation and social security contributions (negatively) as they depend on age measured in USD PPP. Data is from the year 2000 for Austria and Spain, from 2003 for Germany, Sweden and the USA and from 2004 for Finland and Japan.
Source: National Transfer Accounts.

fection for the public sector or the state as middleaged people in previous centuries developed for their families. States are also expected to make complicated selections of the appropriate kind of immigrant, and are blamed when the "wrong" immigrants arrive and the welfare state provisions are depleted rather than replenished.

Children don't expect to support their elderly parents, but on the contrary hope for an inheritance from them. The result of socialising the costs of ageing but keeping the benefits of wealth accumulation private has shifted the nature of the generational contract beyond recognition.

Socialising the generational contract has had unanticipated and unintended effects, which interact, through the political system, with long-term demographic developments. Modern Europe is ageing rapidly. The changing demographic pyramid may give politicians incentives to cater for the demands of the elderly, since they are becoming numerically ever more dominant, and to overlook the concerns of young people. They may be encouraged to focus more on paying out savings than in the investment for the future. In many European countries, a majority of voters are either retired or expect to retire within the next legislative period of the elected parliaments. These voters are very heavily focused on the provision of payouts. In addition, younger citizens have lower voting rates. As a result, the political structure is often described as a gerontocracy, and that perception may feed into the sense of younger potential voters that they are disenfranchised. Voting ratios may thus fall even further, indicating that young people wish to opt out of the political system, and further confirming its character as a gerontocracy. Pensions and old age care are more salient politically than education provision, which in some (not all) European countries is quite neglected. Speaking to the European Parliament, Pope Francis memorably described Europe as producing the "general impression of weariness and ageing, of a Europe that is now a 'grandmother', no longer fertile and vibrant." These effects - the marginalisation of the young and the assertion of the self-interest of the old - interact, and these interactions form the subject of this chapter.

It might be objected that a rational middle-aged voter – or even a late middle-aged or early retired voter –

might have a far-sighted motive in pushing for more investment in the education of the young in order to guarantee higher returns, and thus facilitate existence in their high old age – in the future. That incentive is reduced, however, by the time gap between the decision and the expected outcome: the rational voter might either hope that technical change may produce unexpected windfalls that make old age more supportable, even on reduced incomes compared to present-levels; or fear that investments are no longer generating the returns that were available in the past. The forecast of a secular stagnation made by John Maynard Keynes and Alvin Hansen in the 1930s has recently found new and influential advocates such as Larry Summers.

The extent to which the balance has shifted in favour of the older cohorts varies from country to country, and is driven by demography, changes in fertility and mortality, but also by migration. One of the most striking developments of post-war Europe has been the increase in life expectancy, with the result that most Europeans look forward to a long period after their retirement, or after they cease to be economically active. Evidence from the second half of the twentieth century shows that increased life expectancy has no positive effect on enhancing per-capita income (Acemoglu and Johnson, 2007). By living longer, people have placed themselves in the position of extracting more resources from the contractual pool.

Since labour mobility is a key feature of the European Union, it might be anticipated that the young will use the exit option from the most gerontocratic societies, making their already problematic social imbalance even more lop-sided and ultimately unsustainable. Gerontocracies thus create a vicious feedback loop, through which they constrain the only sources that could provide a basis for continuation.

2.2 Generational conflict and class conflict

In the nineteenth century, European politics was characterised by class conflict, in which a propertied upper class used the levers of political power to perpetuate its advantages. That polarisation persisted through the twentieth century, although by the beginning of the twentieth century, observers increasingly found that the old ideological divisions had become obsolete. Today, there is a new mood of intergenerational conflict, and a questioning of the way that the current

¹ Ball, D., "Pope Describes Europe as 'Elderly and Haggard'," *Wall Street Journal*, 25 November 2014, http://www.wsj.com/articles/pope-says-europe-needs-new-sense-of-purpose-1416915190.

contract has been constructed. The class conflict of previous centuries is reasserting itself in the generational clash in a new way. Since it is the well-educated and affluent, the major beneficiaries of the state's expenditure in the early life phase, that follow healthier life styles, they also live longer. So they are the beneficiaries of the transfer payments in old age. Striking new data (Case and Deaton, 2015) shows for the US but not for Europe - an increase in middle-aged mortality, particularly in lower income groups, as a result of suicides, drug and alcohol poisoning. The possibility of analogous developments in response to economic downturns in Europe is clearly worrying. Education and longer life expectancy have generally become the levers used by the privileged to secure and perpetuate their advantages. They live longer, extract greater resources in pensions and medical care, and then expect to leave larger legacies to their children. The most powerful protest movements may be expected to arise precisely where the gerontocracy is strongest, primarily involving a mobilisation of younger generation voters, and the old-established political parties may prove unable to mobilise the young precisely in these areas.

Moreover, there is an asymmetric sharing of longevity risk between the individual and the welfare state. Welfare state provisions like pensions and health are effectively life-annuities, and hence the welfare state carries the burden if an individual lives for a long time. In the opposite case, a large bequest is made to the deceased's heirs, since inheritance taxes are relatively low in most countries.

The housing lock-in also creates a hold-up problem in property taxation. There are powerful arguments why property should be taxed, but such taxes are very unpopular, and old voters in particular strongly argue against such taxes. This problem becomes larger the more the old are locked-in with large owner-occupied houses/apartments. In this way the existence of the lock-in blocks tax reforms, shifting tax from labour income to property. There is an additional reason why a lenient taxation of housing is not youth friendly: such taxes are capitalised in housing prices, and higher property taxation would thus reduce housing values for the old, and lower house prices to the benefit of the young.

A powerful mechanism cementing inter-generational stability in the twentieth century derived from productivity increases. Economic growth could en-

sure that each generation would realise that it was better off than previous generations, and thus could easily and unproblematically afford to pay for the old. At the height of this confidence, it was easy to agree on a principle of dynamic pensions, in which pensions were regularly adjusted not just to cost of living increases, but also to productivity increases. They were spectacularly popular politically: the West German election of 1957, that followed immediately after the introduction of the dynamic pension principle, is the only one in German history where a party (the ruling party) received an absolute majority of votes. As productivity faded, however, the promises incurred at this time began to look as if they were too much of a burden. Falling productivity growth reduces both market returns (real interest rates) and the implicit return in PAYG. But even in absence of the productivity slowdown, the changing demographic composition of the population was to have adverse effects - the implicit return in PAYG schemes falls when fertility goes down (longevity goes up).

The advantages of the old, and the under-privileging of the young, in modern Europe take the following forms:

- 1. Labour regulations giving security of employment that fundamentally benefit older workers, and establish disincentives for employers to hire younger people (the dual labour market, that especially characterises Mediterranean Europe).
- Property ownership, in which older people have real estate, and younger purchasers (especially in urban centers) are deterred by rising prices (and cannot get onto the lower rungs of the "property ladder").
- 3. Pension schemes, mostly originally designed as PAYG systems, in which the funding of the pension entitlements of younger people looks precarious as demographic projections predict that there will be fewer new earners paying in ("as you go").
- Socialised medical insurance systems, in which increasingly expensive care for older people dominates the cost structure.
- Government debt, in many cases incurred in order to maintain the advantages of the elderly, may become unsustainable, so that the following cohorts may not be able to fund themselves in the same way.

 Environmental damage, in which present output is obtained cheaply at the cost of future generations, who have to bear the burden of the clean-up costs.

2.3 "Bank Papa": how the dual labour market creates dependence

Perhaps the most obvious and politically explosive breach in the principle of the modern social contract is that large numbers of expensively trained or educated young people are excluded from the labour market, and in the course of unemployment or underemployment or engagement in low productivity occupations, suffer a deskilling that reduces their long-term chances of productive employment, and hence their capacity to repay as part of the contract. They have received expensive training (perhaps not enough of it), but they are in no position to repay into the social contract. Relatively high rates of youth and younger generation unemployment have been a phenomenon of crisis economics, but the phenomenon of high rates of exclusion in some parts of Europe preceded the crisis. Even in high pre-crisis employment countries such as Spain, employment growth was concentrated in lowskilled sectors (such as construction) in which there was little stability or potential for skill enhancement.

The conjunction of employment guarantees for established employees together with poorly developed social security systems is a feature of southern European labour markets, while northern Europe has moved to greater overall flexibility in labour contracts while maintaining security (protecting people rather than jobs). The difficulty of dismissing established employees can mean that poorly motivated workers are trapped in low productivity jobs, and that employers are reluctant or unwilling to hire new workers. Both effects depress the possibility of economic growth, and thus limit society's capacity to create and open new opportunities for a next generation. Younger workers are excluded from the regular or protected market, are frequently unemployed, and when they do find employment move rapidly through a succession of short-term contracts, in which it is harder to accumulate skills.

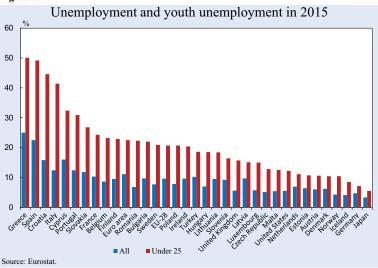
But this development is not only characteristic of southern Europe. Throughout the industrial world, the development among young people of a culture of short-term "gigs" fosters the development of what is often termed the "precariat" (Sennett, 2006; Standing,

2014). Changes in economic structure and the advent of new technologies have produced a corporate instability, which means that the old assumptions of secure life time employment with one employer are no longer realistic. In some cases, "gigs" are presented as lowly paid, or unpaid internships, in which the sole motivating goal for the young worker is supposed to be a valuable work experience, but where interns require financial support, usually from parents.

The problem of excessive job security as a source of inflexibility has been recognised for a long time, and in most southern European countries during the 1990s and 2000s there was a vigorous debate about reforms to create more flexible labour markets. But it remained a largely theoretical debate. Tackling the issue required real courage: indeed, in Italy just as anti-mafia judges and prosecutors were assassinated, there were two notorious cases in which economists were killed because of their identification with the cause of labour market reform. In May 1999, during the Romano Prodi administration, Massimo D'Antona, a centreleft law professor who advised the Minister of Labour on reform, was killed in Rome. In 2002, under the centre-right Berlusconi government, Marco Biagi, was killed as he cycled to work in Bologna. He had been calling publicly for a reform of the pension system, but also for a reform of Article 18 of the 1970 Labour Statute, which required the reinstatement of dismissed workers if the dismissal was judged unfair by an adjudication panel. The Biagi case in particular highlighted the variety of the opposition to reform. Biagi, like D'Antona, was killed by left-wing terrorists, the socalled New Red Brigades; but Biagi had received multiple threats, and the Minister of the Interior withdrew his police protection a few months before the killing.

The failure to reform before the crisis is one explanation for the striking rise in youth unemployment during the economic crisis, which was most characteristic of southern European crisis countries, but was also evident in central and eastern Europe (see Figure 2.2). In both areas, it has produced a widespread sentiment that political process is failing younger people. By contrast, the Scandinavian countries, the Baltics and Germany are doing much better, and they look like more of a magnet for the young (see Chapter 4). Statistics on youth unemployment tell a similar story to the measured ratio of those not in employment or education; in other words those who are so discouraged that they opt out of the formal labour market and training altogether (see Figure 2.3). But even the

Figure 2.2

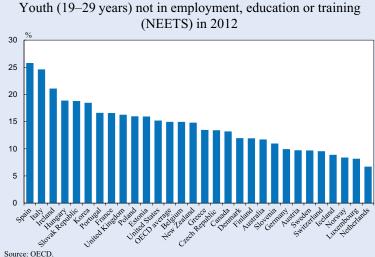


continued education of the non-NEETS may not be an altogether positive sign, as it may simply represent a way of escaping the dismal realities of the labour market. The cyclical response of youth unemployment (relative to aggregate unemployment) was generally not that different during the Great Recession to past business cycles – but clearly the large number makes the problem more visible. The Great Recession thus highlighted a fundamental pre-existing weakness (and perhaps spurred reform initiatives).

The stasis and rigidity of labour markets also interacts with a deficiency in human capital. It is difficult to establish which is cause and effect: it could be either that poor employment prospects act as a deterrent to obtaining better qualifications, or that the absence of qualifications makes young people less attractive on the labour market. Improving education might be a

Figure 2.3

Vouth (10, 20 years) not in amployment, advection or training



way around the problem of the gerontocratic society and polity, but it obviously needs to be the right education and not simply a diversionary substitute in the absence of employment (see Chapter 3). Educational attainment in Italy was poor by international comparison: in 2000, only 36 percent of adults had finished secondary education, compared to an EU average of 42 percent; for higher education the figures were 10 and 20 percent respectively (although there has since been some improvement in the Italian figures: the respective proportions

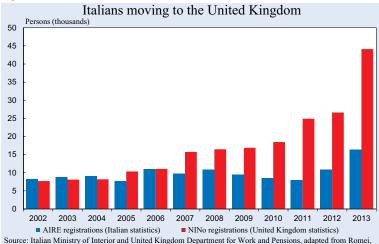
were 42 and 16 percent in 2012). Other indicators of skill levels demonstrated a lag compared with northern Europe. Three quarters of Italian enterprises carried out no vocational training.

But we do know what happens to the most skilled young people: many of them emigrate from societies with high levels of youth unemployment, indicating that the causation may flow from the institutional features of the labour market to the proclivity to seek qualifications. About 60,000 young people are thought to emigrate annually from Italy, over two thirds of them with college degrees. The outflow of the young is driven partly by very high rates of youth unemployment; but also by a sense that society is organised to marginalise them. The high rates of outflow are also characteristic of central and eastern Europe, where the "brain overflow" even affects economically dynamic countries such

as Poland (Kaczmarczyk and Okólski, 2008).

The figures on the flows are very unreliable, and thus only give a rather impressionistic view of the phenomenon. The data in the countries of origin are strikingly incomplete, as many of the emigrants (unlike in the classic emigrations of the nineteenth century) do not announce their intention to emigrate. A comparison between the official Italian figures and applications by Italians for United Kingdom National Insurance Numbers (NINos) shows

Figure 2.4



Source: Italian Ministry of Interior and United Kingdom Department for Work and Pensions, adapted from Romei, R., "Renzi's Hidden Problem: the Brain Drain," Financial Times (FT Data), 27 February 2014, http://blogs.ft.com/ftdata/2014/02/27/renzis-hidden-problem-the-brain-drain/.

a discrepancy of a factor of four, as well as different trends: the United Kingdom data suggests a consistent rise in outflows during the period of the financial crisis (see Figures 2.4 and 2.5). The overwhelming (and increasing) share of this outflow is young, aged 18–24, with a smaller share of 25–34. There are almost no over-35s. This data is merely illustrative: the United Kingdom receives fewer Italian immigrants than Germany, Switzerland, France and Belgium.

The emigration of the young and talented makes the demographic pyramid even more problematical, and raises the question of how social security systems will be financed in the future.

The phenomenon of youth exit as a response to gerontocracy was evident even prior to the euro crisis. In a widely discussed public letter to his son published in 2009 in the newspaper *La Repubblica*, the head of

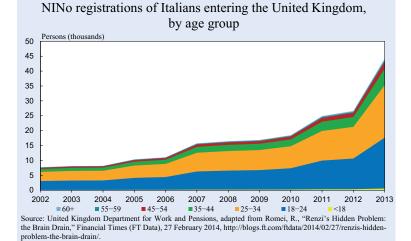
Rome's LUISS university Pier Luigi Celli wrote: "This country, your country, is no longer a place where it's possible to stay with pride ... That's why, with my heart suffering more than ever, my advice is that you, having finished your studies, take the road abroad. Choose to go where they still value loyalty, respect and the recognition of merit and results." After the outbreak of the crisis, the exodus increased.

The exodus of the young is obviously a phenomenon that could be reversed: Ireland, for instance,

suffered from this problem in the 1980s, but as the economy grew sharply at the end of the twentieth century, many skilled Irish workers returned and contributed to economic growth. In order for that reversal to take place, however, the societies of origin have to change in order to become more open and more innovative. The more their politics is under the sway of the old, the less likely that is to happen. This is the first feedback loop that makes for the self-reinforcement of the gerontocracy.

The newer northern European model of greater labour market flexibility with higher benefits for those seeking work (a safety network) has been more effective in reducing the potential for the exclusion of younger people from the social contract. That model also deals more successfully with the education part of the social contract. By contrast, the gerontocratic politics of southern Europe protect vested (middle-aged)

interests, and have been counterproductive and endanger longterm sustainability.



2.4 "Hotel Mama": property ownership

If the labour market in gerontocratic countries pushes young people out, they are sometimes kept back by the structure of

EEAG Report 2016

Figure 2.5

² Celli, P. L., "Figlio Mio, Lascia Questo Paese," *La Repubblica*, 30 November 2009, http://www.repubblica.it/2009/11/sezioni/ scuola_e_universita/servizi/celli-lettera/cellilettera/celli-lettera.html.

property ownership: not that they own property, but rather that they expect to inherit property. Property accumulations are held largely by older people, who might be thought to provide for their old age in realising the assets accumulated over their lifetime. But home ownership is particularly problematic. In the absence of financial innovations such as reverse mortgages it is hard for the elderly to realise their assets; and old people may be locked into over-ample housing that they cannot use and, in some cases, even maintain as a result. Habit

formation may imply that the old stay on in "large" houses/apartments – or smaller alternatives may not be available in the neighbourhood. There is thus an inefficient allocation of housing resources, with dwellings that are too big for the old and unavailable to the young. The locking in of property means that it becomes harder for subsequent generations to make their own starts on the property ladder; and the younger employed or unemployed (Section 2.3) are especially disadvantaged.

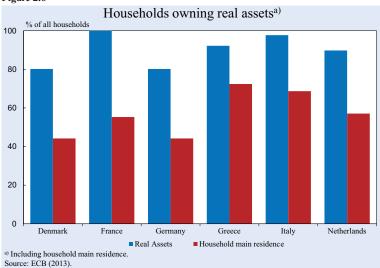
These developments and their effects differ substantially throughout Europe. Property ownership, and in particular real estate, plays an important part in the accumulation of family wealth, but not everywhere. Real estate ownership varies substantially from country to country; it is notoriously low in Germany and Austria, relatively low in France, but higher in south-

ern and (perhaps surprisingly) in eastern Europe (see Figure 2.6).

The ownership is concentrated in the older age cohorts. It falls off after the age range 55–64, but by less than the classic life-cycle hypothesis of Modigliani and Brumberg (1954) would lead us to expect: in other words, heads of household tend to retain substantial assets that they intend to pass on to future generations.

The phenomenon of high concentration of property in older cohorts is particularly striking in

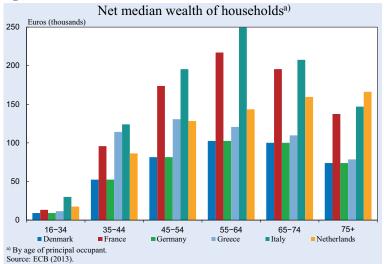
Figure 2.6



the Benelux countries, but also in some Mediterranean countries (see Figure 2.7). In Germany and Austria, the wealth of the 75+ year-old age group is strikingly lower than elsewhere, a phenomenon which the Bundesbank has tried – slightly oddly – to explain in terms of the legacy of a wartime generation (the 75+s in 2010 were born before 1935) that was not able to make an initial accumulation of wealth because of migration; more importantly perhaps, this generation did not inherit substantial amounts from its predecessor (Deutsche Bundesbank, 2013, p. 23).

Children have to "wait" a long time, often until late middle age or even after their own retirement, before they can realise the wealth that they think of as part of the family contract. With increased longevity, the waiting period grows longer. In the classic form of the family transfer union, the children are thus held in a





state of dependency for a long time (unless they seek to escape).

In the gerontocratic societies in particular, young people find it hard to afford housing, and young men in particular often stay at "Hotel Mama" into their thirties or forties as a result. They form a "boomerang generation" or "jilted generation", gathered in "accordion families" (i.e. they are continually contracting and expanding). In France, the outcome is known as the "phenomène Tanguy" (after a popular film depicting a nerdy son), while in Japan it is referred to as that of "parasite singles". This pattern of behaviour is common to both southern and eastern Europe (formerly communist economies), with surprisingly high proportions of 25-24 year olds living with their parents; it is rather rare in northern Europe. The United States and Japan lie in between these extremes. In every country, men are more likely to boomerang than women. The Hotel Mama occupants are also less skilled, and more likely to be unemployed.

There may be reasons to think that Hotel Mama is a good outcome in that it strengthens inter-generational solidarity. Multi-generational households were also a striking feature of the pre-industrial world. But today, it generally does not look like a very attractive option, and in reality, it often coincides with family breakdown that is more characteristic of lower income groups. As the rapper Macklemore put it: "It's not dope to be 25 and move back to your parents' basement."³

In fact, the Hotel Mama phenomenon is part of the overall individualisation of society, and a reflection of the increasing fragility and disintegration of the concept of the modern nuclear family: however unattractive the return to the parental home is, it is easier than leaving it to form a new couple/family. The marrying age rises sharply, and the formation of family units decreases. The family – a central part of the traditional picture of the contract across generations – is thus subject to what amounts to an effective penalty, a penalty that is higher in lower income groups and that, in this sense, contributes to enhanced inequality.

Many explanations have been given for the rise of Hotel Mama. They include shortages of affordable housing, including rentals, as well as difficulties in registering new residences. Rent control can obstruct an adequate supply of new apartments. Declining rates of marriage and higher ages at first marriage might play a

role. There are more singles among the middle and old age groups, and city living (agglomeration) seems to make a single existence more attractive. The non-availability of child care could also be a factor in keeping married children with their parents (an especially eastern European phenomenon). The property price trap particularly affects the inhabitants of big booming metropolitan centers; it can scarcely hold true for a great deal of rural Europe, where - out of easy range of big cities – property prices are falling, and villages and small towns are being depopulated. But in the United Kingdom, London has the lowest proportion of adult children living with their parents. The precarious labour market for young people is also to blame (see Section 2.1). Some argue that the phenomenon of the precariat that produces this outcome is the result of big companies and globalised capitalism; and that only effective Nordic welfare states can provide any amelioration (Newman, 2012). There are also cultural explanations that seem much older: for instance that Italy has a well-developed culture of mammismo.

Here we can identify a second vicious cycle diametrically opposed to the first: in this cycle, young people are trapped by the interaction between the labour market and the housing market, so that they stay at home, and do not search for the kind of jobs that might generate greater overall prosperity. If the first cycle identified was that of the exit or exile option, this is the internal exile choice.

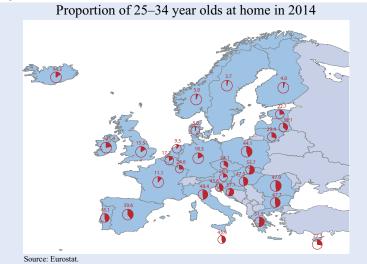
Ultimately, the phenomenon reflects some aspect of the inadequate economic opportunities and capacities open to young people. Some analysts conclude that the state has a responsibility to make expand those opportunities, by orienting the welfare state more towards the young and by providing greater encouragement of job training and searching for productive employment.

The discussion of how the welfare state might contribute to the hotel mama phenomenon requires some refinement. It is in cases where the principal element of the welfare state consists in payments to the old – largely through pensions – that the mobility of young people and their ability to set up independent households are most reduced.

The over-dependence on property, and particularly on real estate as the preferred safe and high yielding mode of asset accumulation, leads to a misallocation of resources and a trap that helps to keep young peo-

³ From the song "Otherside".

Figure 2.8



ple at home. Incentives to reduce the blocking of housing by the old include the possibility of reverse mortgages, but also higher rates of property taxes (which are often a political taboo in southern Europe). The generational allocation of housing is another area where the northern or Scandinavian social model performs better (see Figure 2.8).

2.5 "Bank Grampers": pensions

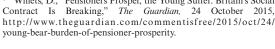
Old age pensions amount to a considerable part of government spending on social transfers. In most countries - the exceptions are Italy and Spain (where the share falls dramatically after 2000) – the tendency is for that proportion to rise. There are two causes of this tendency. In part the trend simply reflects the ageing demographic pyramid, but this fact and the gen-

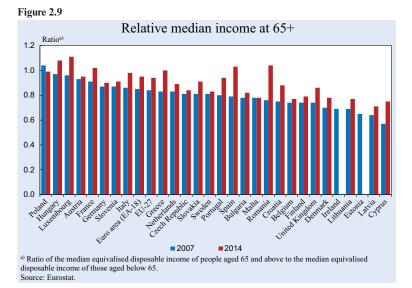
eral improvement of health in late middle age in industrial societies suggest an obvious solution to the problem: that retirement ages should be raised. This conclusion has been reached by almost every commission or think tank that issues reports on the pension funding problem (for example Pensions Commission, 2004), and many countries have introduced some form of age indexation pushing up pensionable ages.

In addition, pensions have increased because of provisions that often both index and guarantee a certain increase, even when there is a low cost of living increase. Between 2007 and 2014, in every European country except Poland (where there was a slight decline) and Malta (no change), the relative median income of pensioners has risen, in many cases significantly. In France, Greece, Hungary, Luxembourg, Romania and Spain the ratio is over 1. In many countries, the increase was a result of the phasing in of labour market pension schemes, and was thus an intended consequence to increase replacement rates. In the United Kingdom,

where the Eurostat figure for the ratio is only 0.86 for 2015 the Institute for Fiscal Studies estimated that the median income of pensioners (394 British Pounds per week) was higher than the median income of the rest of the population (385 British Pounds per week). A prominent conservative politician David Willetts responded to the publication with the comment that the United Kingdom had become "a country for older generations."4 In many countries, including Europe's most dynamic economies, the cost of the financial crisis in terms of reduced earnings has fallen on the young, rather than the old (see Figure 2.9). A recent report by the Resolution Foundation (United Kingdom) on the income effects of the financial crisis accordingly reported a 12.5 percent decline in the in-

Willets, D., "Pensioners Prosper, the Young Suffer. Britain's Social The Guardian, 24 October 2015.



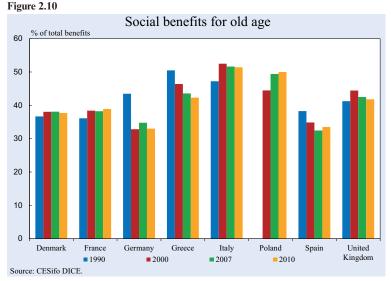


comes of 22–29 year olds between 2009 and 2014, and identifies them as a "jinxed generation;" while the incomes of over-60 year olds only fell by 3.7 percent.⁵

The problem is not simply one resulting from the financial crisis, but also a longer term question of the adjustment of pensions in the light of changes in economics and demography (lower expectations of growth, higher longevity). Many countries are trying to tackle pension sustainability by moving away from defined benefits systems to defined contributions for supplementary pensions (above a welfare minimum), in other words by transiting from PAYG to funded schemes. The debate over raising retirement ages is going on almost everywhere. But social benefits for old age as a proportion of total social payments have been rising in many countries (with the striking exceptions of Germany and Greece) (see Figure 2.10).

There are two obstacles to tackling even a simple issue such as adjusting the retirement age to demographic development. One is actuarial, and follows from the uncertainty surrounding projections of future life expectancy. It is hard to predict the future development of mortality and longevity, and hence to calculate an appropriate pension base. Thus an OECD calculation suggests a 4.5 year increase in longevity by 2050, with an implication of an increased pension cost of 3.4 percent of GDP, while an alternative calculation by Tuljapukar et al. (2000) suggests 7.5 years and a cost of 4.4 percent; and a simple extrapolation of the linear trend in declining mortality gives 11.0 years and 5 per-

. . . .



cent (Lee 2007). Population projections in recent years have tended to be upwardly adjusted as regards longevity, i.e. increases in longevity have been higher than anticipated.

The second barrier to tackling the retirement age is the fact that the future of public pensions is intrinsically connected to developments in other modes of pension provision: company schemes and individual pension savings plans. Both were widely hailed as a desirable reform that would secure the adequate funding of retirement in a new demographic environment, and were at the heart of many countries' pension reform plans that sought to move away from a dependence on publicly-funded PAYG schemes. The adoption of alternatives was part of an attempt to move away from defined benefits. But both the alternatives are currently under pressure. Public policy requirements that company pensions (the second pillar) meet certain guaranteed performance criteria have made it increasingly unattractive for companies to offer such provisions. While older workers may be grandfathered into older and more generous schemes, these are not available to new hires. Private pension schemes will equally be endangered by continued low interest rates. Both developments mean that more retirees will be dependent on public schemes, and the political pressure not to cut such schemes is higher.

In normal times pensions became a political third rail: an attempt at adjustment (by raising the retirement age, for instance) was politically impossible. Some countries that introduced such a reform later had to retract the change, because opposition featured prominently in the election campaigns of parties that were

> propelled into government by the voters of the elderly. Germany undertook such a move in 2007, with a provision for a gradual raising of the retirement age from 65 to 67. After the formation of a new Great Coalition government in 2014, the measure was retracted and provisions introduced for full pensions - under certain circumstances - at 63. In 2015, as one of its first acts, the newly elected right populist Law and Justice (PiS) government in Poland reversed the 2012 pension age increase. Other countries like the United Kingdom have introduced

⁵ See Resolution Foundation (2015) and Cosslett, R. L., "Does the Government Hate Young People? It Certainly Feels that Way," *The Guardian*, 16 October 2015, http://www.theguardian.com/commentis-free/2015/oct/16/government-young-people-student-loans-housing.

special pensioners' bonds that pay a higher rate of return in order to try to preserve private pensioner earnings in the face of the general reduction of interest rates. It is not difficult to see that both the German and the United Kingdom measures are driven by competitive electoral pressures to woo the "grey vote".

In crisis countries, with high rates of youth unemployment, the pensions of older people (grandparents) are used as a source of income for much wider family groups, and cuts consequently generate an even greater degree of political resistance, so that not only the grey vote threatens actuarial calculations on the adjustment of pensions.

Pension reform, especially in southern European countries, has become a standard part of the response to the government debt crisis. One of the reasons that it has been so sensitive politically is that it interrupts the family transfer union. In most of the crisis countries, pension reforms involve a raising of the retirement age, usually involving an equalisation of retirement ages between men and women, the limitation of provisions enabling enhanced payments, and adjustments to provisions for earlier retirement on public pensions if a specific number of years' payments has been made.

Greece had a uniquely complicated system, with 133 separate public pension funds before the crisis. As part of the agreement with the troika (European Commission, International Monetary Fund and European Central Bank), the government embarked on an initial round of reforms in 2010, whereby the retirement age for women was immediately set at 65, the same as the age for men, and pensions after 2012 were linked to GDP fluctuations. In addition, there were reductions and special taxes on higher pensions, with penalties for early retirement before 60, a practice that had been widespread before the financial crisis. In 2012 Greece made further cuts in higher level pensions and increased the retirement age to 67; it was only then that a hard commitment to coordinate pensions through the use of a social security number was undertaken. In 2014 Greece committed to the requirement that, as of the beginning of 2015, supplementary pension funds would only be financed by own contributions.

In Italy, the 2011 reform set the retirement age for men at 66, with women reaching that age by 2018. The payment moved to a defined contribution (contributivo) for employees hired after 1996, while the defined benefits were kept for earlier payments of older workers.

But many of the additional commitments to a longterm schedule of raising pension ages, such as in Spain where 67 is the age that will be mandated by 2027 or in both Italy and Spain where the retirement age is to be linked to life expectancy, are problematic in the sense that they may be reversed. In both Greece and Portugal, constitutional courts were used to reverse important parts of the pension reforms. (This is not just a European issue: courts in the United States have also intervened to block cuts in public sector pensions.) As European countries exit from crisis programmes with the International Monetary Fund, there will be more political leeway to reconsider the pension question. In addition, reductions in pension entitlements are also often compensated for by increases in other forms of transfer, notably disability payments.

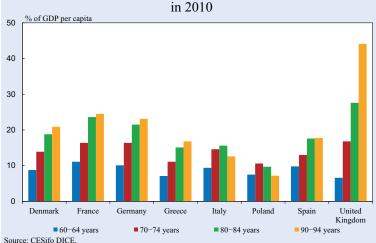
Shifting the bulk of pensions (including public sector pensions) from defined benefits to defined contributions is a prerequisite for the long-term sustainability of the pension system. Sustainability also requires a shifting to higher retirement ages. The easiest way of protecting both moves from political pushback is by setting Europe-wide norms, but that mechanism is also susceptible to political pushback.

2.6 Paying for grampers: medical insurance

Medical insurance is also a way of making transfers to older people. For most of their lives, people pay in to explicit or implicit (welfare state) insurance schemes, including state schemes. In old age, and in especially at the end of their lives, they become recipients of payments. Technical change means that an increased variety of treatments and procedures are available that are also more expensive. Most medical expense occurs in the last years of life, although obviously it is not always clear with medical interventions whether they will be made or not in a terminal case. The rising costs are putting medical care systems under pressure in every country.

Medical payments – both in absolute terms and expressed as a proportion of per-capita GDP – are higher in the richer countries (with the United Kingdom as an outlier on the high side), and very low in most formerly communist countries (see Figure 2.11). Advances in medical technology, with a wider and more expensive range of treatment options, are pushing up costs. Prosperous societies are in a better posi-

Figure 2.11
Comparison of age-related medical expenditure profiles for males in 2010



tion to realise the benefits and general welfare gains, but the advances also clearly pose a funding problem.

Like pensions, state provision of medical insurance was intended to help people escape from dependence on their family in old age. In practice, the combination of pensions and medical benefits has allowed individuals to preserve larger shares of their accumulated assets, which are then available as legacies. In this way, the young are held in a kind of dependence.

The United Kingdom, which is comparatively an outlier in terms of the high cost of care and medical treatment in old age, has been propelled by the expense of the medical liability to embark on a much stricter programme whereby old people's assets are used to pay for their long-term medical care, and hence leaving less available as bequests to children. But the reform

preserve some assets that could be bequeathed.

Medical costs are also rising due to the individualisation of societies: in many countries, hospital

was also linked to a ceiling on the

amount that an individual would

pay for long-term care, so as to

Medical costs are also rising due to the individualisation of societies: in many countries, hospital beds are occupied by elderly and fragile people who are not critically ill, but cannot safely be released because they live on their own without anyone to care for them. There is more generally the probability that an increasingly large sector of the elderly

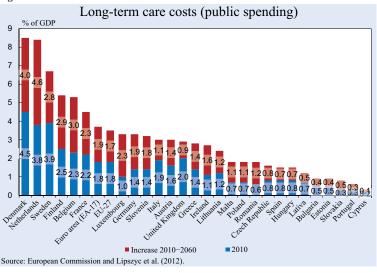
population will require long-term care (see Figure 2.12). The rise predicted is especially steep for the Scandinavian countries. That care can either be financed through the development of an insurance system featuring higher payments by current midgeneration individuals; or through the rigorous enforcement of a means-tested and means-based payment system, designed to mobilise the locked-in assets of the elderly (Section 2.2).

The combination of health and retirement costs is increasing fiscal pressure, which is likely to be particularly severe in some northern European countries, including the Benelux countries, the United Kingdom and Norway (see Figure 2.13).

The health care explosion will disproportionately affect the most prosperous European countries, and

they too are likely to face the prospect of exit, especially by skilled younger people (see next section). They will need to consider some combination of importing cheap labour for healthcare or the mechanisation/robotisation of healthcare.

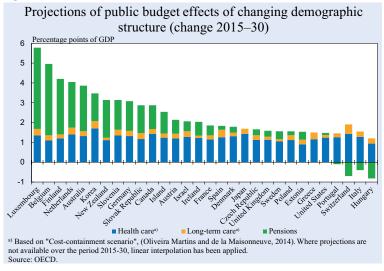
Figure 2.12



2.7 Running away from grampers: debt dynamics

There is an intergenerational aspect to debt. Public debt represents a commitment by taxpayers in the future to make payments

Figure 2.13



for goods and services that have been supplied in the present. As a result, an argument is often made that debt financed activity should be confined to investments – for instance in infrastructure – that will produce substantial returns for future citizens. Debt financed growth can pay down debt; but in the absence of that growth, a vicious cycle sets in. If debt produces a promise of larger future burdens, it will prompt those who are bound to shoulder those burdens to try to escape: or in Albert Hirschman's terminology to "exit" (cf. Hirschman, 1970). But that choice will make the predicament worse. When productive and innovative (young) people abandon their country, they leave behind a highly indebted country. Now the debt has to be paid off by a smaller, less productive, ageing population. In a sense, individual citizens have the option to "walk away" from their government debt obligation by leaving the country. Emigration can be seen

as an individual's "private default option" on government debt.

Emigrants also walk away from infrastructure financed by previous generations. If that infrastructure is extensive and well-designed, would-be emigrants have incentives not to move and to stay with a free gift from the past. In cases where, however, flawed investments in inadequate infrastructure in uneconomic areas predominate, the incentives are to move away. The extensive debt-financed infrastructure investments for Greece's Olympic

Games in 2004, crumbling stadia and swimming pools, do not constitute a strong argument for young people to stay in Greece.

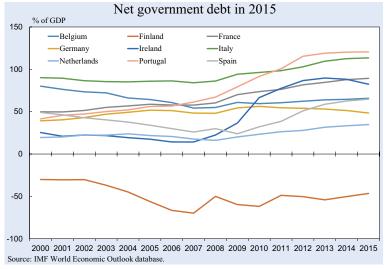
However, individualised education and the accretion of human capital – another important investment by the welfare state – are movable. Some European countries with education systems that are generally recognised as superior – such as Finland – suffer from the problem that highly educated young people take the exit option and withdraw their accumulated human capital, without

contributing in taxes to financing the education of the next generation.

Emigration has strained welfare provision within national states. Germany's eastern Länder and the Italian *Mezzogiorno* are also predominantly areas where the young move and the old remain. In the case of nation-states, social and medical services are provided by budget transfers, so that taxpayers in the more prosperous and dynamic areas shoulder the financial burden. This burden sharing currently does not take place in the case of cross-border or international migration. Debt burdens vary substantially between countries (see Figure 2.14).

The ability to exit debt in an economic area constituted by high labour mobility provides one of the clearest arguments for the partial mutualisation of debt. The

Figure 2.14



alternative would be to move to a contributions-based insurance system of old age pensions on a cross-national or European basis.

2.8 There's nowhere in the world to run: sustainability

The phenomena of advantages for the old at the expense of the young, as described so far, exist at the national level and are a result of national choices about education, pension, medical and tax regimes. But there is also a global sense in which today's middle-aged population is living at the expense of subsequent generations. The build-up of environmental damage is often interpreted as a burden that today's generation is imposing on its successors without that cost having been unambiguously calculated. The current generations do not internalise the costs.

Processes such as global warming will require costly adjustments by subsequent generations. Some argue that these high costs could be avoided by relatively small investments today. The failure to make these present day investments is effectively a tax on tomorrow's generation – a generation that is already being starved of life opportunities because of the way in which incentives are currently structured.

The landmark 2006 report by Nicholas Stern suggested that the eventual costs of global warming would amount to around 5 percent, and perhaps – in a catastrophic scenario – up to 20 percent of world GDP, while tackling the problem today would have a much lower present price tag (1 percent of GDP), cf. Stern (2006). But there are major difficulties in devising programmes that will really lead to environmental sustainability.

Some attempts to deal with the problem – like holding out the prospect of a radical reduction in the use of carbon emitting fossil fuel in the future – make the problem worse. Hans-Werner Sinn's Green Paradox examines the way in which the perception that an energy product such as petroleum will not have any value in the future prompts an increase in present production (Sinn, 2012). The resulting price pressure also constitutes a gain for today's consumers at the expense of tomorrow's population. The discussion of long-term sustainability highlights the urgency of current measures to reduce the sources of global threats, particularly in the area of CO₂ emissions.

2.9 Conclusion

Many aspects of the challenge of generational equity have been handled well in Denmark, or more generally by the Scandinavian model (see Chapter 4). This especially applies to labour market and housing issues. The co-existence of successful and unsuccessful models might be seen as a way of showcasing policy best practice, and enhancing the reform drive in less successful cases. But the process of institutional adaptation is complex, and also painful. The more pain exists, the greater the likelihood of a mass exit by individuals - and reduced overall sustainability. That threat is a powerful inducement to a search for overarching cooperation on Europe-wide retirement insurance that transcends national boundaries and corresponds to a high degree of inter-European labour mobility, and in the end to move towards something akin to the fully integrated United States social security system. Global threats (on climate sustainability) also require global solutions, and cannot be resolved on a solely national, or even on a European level.

Europe may be confronting a radical choice over where the responsibility lies for enforcing an effective and just social contract. On the one hand, there is the option of continuing with the old pattern of competing national examples, which has produced very successful institutional adaptation in the past, but which in a world of high mobility is threatened by the possibility of exit from policy failures. On the other hand, there is the option of Europeanising some part of the intergenerational contract and, at the same time, protecting it from political interference – an interference that is characteristic not just of states with poor performance and failed policies, but also of apparently successful economic models. It is currently rather hard - perhaps even impossible - to see the national state in Pigouvian terms as "protecting the interests of the future in some degree against the effects of our irrational discounting and of our preference for ourselves over our descendants."

References

Andersen, T. M. and J. Bhattacharya (2015), "The Intergenerational Welfare State and the Rise and Fall of Pay-as-you-go Pensions," *Economic Journal* (forthcoming).

Becker, G. S. (1992), *The Economic Way of Looking at Life*, Nobel Prize Lecture, 9 December 1992, http://www.nobelprize.org/nobel_prizes/economic-sciences/laureates/1992/becker-lecture.pdf.

Boldrin, M. and A. Montes (2005), "The Intergenerational State: Public Education and Pensions," *Review of Economic Studies* 72, pp. 651–64.

Burke, E. (1790), Reflections on the Revolution in France, J. Dodsley, London.

Case, A. and A. Deaton (2015), Rising Morbidity and Mortality in Midlife among White non-Hispanic Americans in the 21st Century, Proceedings of the National Academy of Sciences of the United States of America.

Deutsche Bundesbank (2013), "Household Wealth and Finances in Germany: Results of the Bundesbank Survey," *Monthly Report* June.

ECB (2013), The Eurosystem Household Finance and Consumption Survey, European Central Bank, Frankfurt.

Hirschman, A. O. (1970), Exit, Voice and Loyalty. Responses to Decline in Firms, Organizations and States, Harvard University Press, Cambridge (Mass.).

Kaczmarczyk, P. and M. Okólski (2008), "Demographic and Labour-Market Impacts of Migration on Poland," Oxford Review of Economic Policy 24, pp. 599–624.

Lee, R. D. (2007), "Demographic Change, Welfare, and Intergenerational Transfers: A Global Overview," in: Veron, J., S. Pennec and J. Legare, eds., Ages, Generations and the Social Contract: The Demographic Challenges Facing the Welfare State, Springer, Berlin, pp. 17–43.

Lipszyc, B., E. Sail and A. Xavier (2012), "Long-term Care: Need, Use and Expenditure in the EU-27," *Economic Papers* 469.

de la Maisonneuve, C. and J. Oliveira Martins (2014), "The Future of Health and Long-Term Care Spending," *OECD Journal: Economic Studies* 2014, pp. 61–96.

Modigliani, F. and R. H. Brumberg (1954), "Utility Analysis and the Consumption Function: an Interpretation of Cross-Section Data," in: K. K. Kurihara, ed., *Post-Keynesian Economics*, Rutgers University Press, New Brunswick, pp. 388–436.

Newman, K. S. (2012), *The Accordion Family: Boomerang Kids, Anxious Parents, and the Private Toll of Global Competition*, Beacon Press, Boston.

Pensions Commission ("Turner Committee") (2004), *Pensions: Challenges and Choices: The First Report of the Pensions Commission*, Her Majesty's Stationary Office, London.

Pigou, A. C. (1932), The Economics of Welfare, Macmillan, London.

Resolution Foundation (2015), Securing a Pay Rise: The Path Back to Shared Wage Growth, Resolution Foundation, London.

Sennett, R. (2006), *The Culture of the New Capitalism*, Yale University Press, New Haven.

Sinn, H.-W. (2012), The Green Paradox: A Supply-Side Approach to Global Warming, MIT Press, Cambridge (Mass.).

Standing, G. (2014), *The Precariat: the New Dangerous Class*, Bloomsbury, London and New York.

Stern, N. (2006), *The Economics of Climate Change: The Stern Review,* Cambridge University Press, Cambridge (Mass.).

Tuljapurkar, S., N. Li and C. Boe (2000), "A Universal Pattern of Mortality Decline in the G7 Countries," *Nature* 405, pp. 789–92.

TUNING SECONDARY EDUCATION

3.1 Introduction

Education is always on every parent's mind and repeatedly hit the headlines in Europe during 2015. In Italy, the government introduced legislation (*La Buona Scuola*) hiring up to 100,000 permanent teachers at substantial budgetary cost, improving school facilities with both public and tax-subsidised private funds, including some unpaid work activity by students in the high-school curriculum, and reforming education management: some organisational and personnel decisions are decentralised, granting more powers to school principals in selecting, coordinating, and rewarding teachers (whose unions protested very vocally).

In France, school reforms triggered first-page headlines, heated debates, and street demonstrations when the government introduced a broad reform of the lower secondary schools attended by 10-13 year old students (Collège: mieux apprendre pour mieux réussir). The new curriculum relaxes disciplinary constraints, introducing "pragmatic" pedagogy; it is partly chosen autonomously at the school level, where managers are granted more control over their staff. The socialist government's stated goal was to ease the difficulties encountered by disadvantaged students, deemphasising traditional subjects in favour of interdisciplinary approaches to themes of practical interest, and encouraging schools to adapt their teaching to the varied backgrounds of their students. The opposition criticised the watering down of sound disciplinary knowledge in favour of the superficial "zapping" of fashionable topics, and pointed out that the suppression of difficult optional subjects (including Latin and Greek) would prevent capable poor students from obtaining the elite knowledge others can obtain from their families or private tutors. Stronger criticism (and strikes and street demonstrations) came from teacher unions, which not only despised the inter-disciplinary approach, but

also argued that school autonomy would widen the gap between "good" and "bad" schools; that the new powers of school managers would reduce collegiality; and that the needs of disadvantaged students would be better served by smaller classes, suitably sorted according to student ability.

In Finland, were public school teachers are highly regarded and students have performed very well in international, standardised tests, the right-wing government introduced sweeping and controversial reforms: to reduce budgetary costs, private school attendance is to be subsidised by public funds (at a per-student cost lower than that of public schools); to make schooling more relevant and interesting, school curricula are to be reorganised around practical topics (such as "restaurant operations") rather than traditional academic subjects (such as languages, mathematics, and chemistry, all of which can be useful when running a restaurant).

Education reforms can have large short-term budgetary effects and a strong influence on longer-term growth and inequality trends. Those briefly summarised above differ widely in these respects, but all are similarly controversial and all deal with the more or less practical orientation of curricula, with school autonomy and private education, and with teacher management. This chapter reviews such issues, focusing particularly on the organisation of the secondary or "middle" education level which, across European countries, is configured more differently than elementary education (where children achieve the basic skills necessary to interact with society beyond their immediate family) and tertiary education, (where young adults obtain the more specialised knowledge they will individually bring to the labour market). Even more than in other economic policy areas, opinions about education policy differ sharply, and tend to be rooted in one's own experience and viewpoint, rather than on hard evidence and broader perspectives. This is particularly the case at the secondary school level, which steers teenagers towards the labour market or higher education, and plays a crucial role in shaping both social and economic outcomes.

Section 3.2 outlines how the pros and cons of different secondary education models depend on various institutional, political, and economic features. Section 3.3 uses those insights to discuss how education systems have evolved over time in Europe. Section 3.4 briefly reviews heterogeneous educational institutions within and across European countries. Section 3.5 inspects the resulting heterogeneity of schooling outcomes, their dynamics over time, and interprets current reform tensions in the light of the insights and evidence discussed in previous sections. Section 3.6 asks whether and how country-level policy choices might benefit from supranational EU-level coordination, and Section 3.7 offers some conclusions.

3.2 Education policy problems

There are several conceptually distinct reasons why education is a matter not just of individual choice, but of collective policy.

3.2.1 Public benefits

Some of the benefits of education (in the form of income and social status) accrue to individuals being educated. But some spill over to other individuals, especially when taxation or collective bargaining imply that net income is not closely related to individual productivity. And because society as a whole benefits when individuals communicate and cooperate, education is partly a public good. Society wants children to be educated not only because of a paternalistic interest in their future individual welfare, which their parents may not appropriately take into account, but also because it is in everybody's interest that all members of society acquire basic social skills. Education skills are necessary for the creation of well-functioning economic and sociological networks; and as such, they involve substantial positive externalities that justify public intervention from everybody's point of view. The mandatory and collectively financed basic education of every family's children thus stems from basic economic considerations.

While these aspects are clearly relevant for elementary or primary education, at more advanced levels each individual's social and economic position can be strengthened by increasing his or her own education, a "human capital" that yields returns that are not public, but private, and all the more so because skills are more valuable when they are scarce. There are, however, good (if controversial) reasons for policy to shape individual skill accumulation: unlike other private goods and services, skills are produced and traded in markets plagued by financial constraints, imperfect information, and externalities.

3.2.2 Financial imperfections

Employers can finance the acquisition of "specific" skills that are useful only when working for them. The acquisition of broader "general" skills should be financed by the same individuals who will reap investment returns in the labour market: but human capital is not good collateral for loans, and equity participation in a person's labour income is hardly enforceable by private contracts. Poor children cannot self-finance their own education, and in free markets would acquire inefficiently low skills. Society is the ultimate employer of all its members, and it can be efficient to finance their education with public funds.

3.2.3 Imperfect information

Information about the quality of education, unlike that of fruit and vegetables, is difficult to obtain by inspection and impossible to assess through experience: those who by middle age find out that their education was of poor quality cannot go back and try again. So it can be efficient for education to be produced, or at least monitored and certified, by public bodies, if the latter can assess and enforce quality standards better than individual market participants.

3.2.4 Coordination problems

Besides financial constraints and imperfect information, externalities also make it difficult for markets to supply education efficiently. Education is group activity because the average cost of individual education is smaller in larger classes and, much as one might want to tailor school curricula to each student's ability and ambitions, within each community students must be grouped in a limited number of school types. The production process and the value of education are influenced by the quality both of group teachers and of fellow students (through "peer effects"). So it would be very hard for markets to price education so as to appropriately influence individual choices. Even in the

absence of financial constraints and information problems, only very complicated pricing schemes (where school fees depend on each student's and the classmates' assessed and possibly evolving quality) could ensure that all individual choices appropriately take into account interpersonal spillovers. In more realistic situations, good students may hoard into schools that are good only because they are populated by good students: a preference on the part of good teachers for teaching good students reinforces this mechanism, and nothing guarantees the efficiency of the resulting polarised quality distribution of schools.

3.2.5 Policy imperfections

For all these reasons education is very rarely left completely to market forces. Policy decisions, however, also need to tackle difficult issues. To what extent should education be funded privately or by tax revenues? Should it be provided by public or private organisations, and in either case should families be allowed to choose among different schools? Should students be offered the choice of different curricula, or selected in specific ones, or should they all receive the same education? Should such policy decisions be taken centrally, or decentralised? The answers depend on the amount and quality of information available, and on whether that information is used in ways that fulfil suitable policy objectives, in each possible configuration.

3.2.5.1 Centralisation of control

The state cannot know everything, and administrative decisions may not necessarily be based on good information, particularly given that teachers may manipulate it. Because the performance of teachers and the output of schools is difficult to assess, administrative controls focus on inputs and on bureaucratic processes, but cannot control teacher effort and behaviour tightly. Hence, the public production of education may end up benefitting school workers, rather than school customers. Parents who enrol their children in private schools, or sit on the board of a school financed by local property taxes, can observe the school's operations more accurately, and provide more stringent oversight of school staff, than a distant ministerial bureaucracy. However, they may or may not use that information, and the power resulting from their ability to choose and control powers in the broad

public interest, or even in their own. Incompetent school customers may well be more easily pleased by schools that teach and assess only very easy material and make students appear very clever, instead of making them work hard.

3.2.5.2 Decentralised choices

In the presence of market failures, market-like allocation mechanisms that let families influence school resources (via the direct payment of fees, or mobility across locally financed school districts, or the allocation of public vouchers or enrolment-based transfers) need not be beneficial. Families are not only poorly informed about school output, but their choices may fail to internalise the relevant externalities: schools may end up being good only because they are attended by the culturally privileged children of rich families. Moreover, since school quality is relative and depends on the quality of enrolment, allowing school choice can trigger an arms race: even although half of the students will ultimately have to be enrolled in schools of lower-than-median quality, parents will spend whatever resources are needed in order to try and stay ahead.

3.2.5.3 The pros and cons of differentiated schooling

There are two conceptually distinct, but tightly related ways of "tracking" or "streaming" students across classrooms and schools. One, more relevant at young ages, is to separate them according to ability, but teach them the same material at different levels and in different ways. The other, more relevant at subsequent stages, is to group students by attitude and work objectives and teach them material that is substantively different, in programmes of different duration.

Society is obviously better off if medical studies and other long and demanding educational programmes are attended by youths who find it easier to learn and understand, while those with lesser intellectual ability should be assigned to routine jobs. Hence, selecting students into different education programmes can be a good idea if the abilities and talents of individuals can be reliably assessed. The implications of ability grouping, however, are not as clear for average achievement, and very clear for achievement inequality. Grouping students according to their ability can improve or worsen average education depending on how effective-

ly teachers can deal with class heterogeneity and on whether, through "peer effects," the quality of fellow students benefits low performers more or less than it slows down stronger students. Policy is more strongly influenced by the more obvious distributional implications of mixing or separating heterogeneous students. It can be efficient to impart different education to students of differing capabilities, regardless of whether their abilities are truly their own as individuals, or stem from family influences. But assessing individual ability is very difficult, and family background plays a crucial role in determining children's school careers and achievements. To the extent that education contributes to individual human capital, high quality students are naturally more interested in their own education, than in that of their classmates. Hence, views and opinions on the structure of education beyond the very basic elementary level are unavoidably polarised and controversial. Disadvantaged students and society may well benefit from comprehensive schooling, but segregation furthers the advantage of privileged students.

3.3 Historical trends

Mandatory, free, and uniform elementary education was essential to ensuring the economic viability and political sustainability of the country-sized nations that a few centuries ago replaced family- and village-level interactions with industrial production and extensive specialisation of labour. To participate effectively in such a socio-economic system, individuals obviously need to use a common language and abide by common rules. Hence the public-good role of education, as a means of fostering social communication and cooperation, was and remains a crucial element of European socio-economic systems.

3.3.1 Secondary schooling

If primary education was the first form of education to be publicly funded and organised in Europe's nation states, secondary education followed as soon as technological and organisational progress required more advanced skills and delayed the age of labour market entry.

The secondary school programmes attended by teenagers provide youths with more advanced general skills, useful for those who will attend tertiary education, but also for those who will be learning-by-doing or training in the labour market. However, secondary schools can, and often do, also teach more practical skills to the many youths who will seek employment immediately after completing their secondary education and, especially in cases where skills are not firm-specific, youths cannot count on employers' willingness to train them while working as apprentices (as in the Swiss system described and analysed by Wolter, et al., 2006; Dionisius et al., 2009, document and discuss also the German system, where formal schooling and institutional constraints play a more important role).

Their role in sorting youths into and out of tertiary education, and between early and later job market entry, respond to technological and political changes. When machines replace brute force and production takes place in complex organisations, schools have to equip workers with technical and supervisory skills. As in other policy areas, European countries historically pursued similar goals with different tools, implementing various combinations of locally and nationally organised education, often funding and regulating private education, as well as organising public schools.

The timing and character of the process that sorts students across various curricula has also changed over time in every country's history, in response to technological and socio-political forces. Over time, academic schools meant to prepare students for tertiary education (such as private elite schools run by the Jesuit order, Napoleonic *Lycées*, Austro-German *Gymnasiums*) evolved alongside vocational secondary education institutions that traced their origin to the apprenticeship system of craftsmen's guilds, came to be organized by industrial employers or their associations, and were formalised by nation-states in the form of dual education systems that combine public education with practical skill transmission by private employers.

As more complex socio-economic interactions began to require not only basic literacy, but also more advanced general skills, a role similar to that of elementary schools became natural for similarly comprehensive secondary schools, which could also be politically attractive to the extent that tracked schooling tends to perpetuate and extend socio-economic inequality. For these reasons, reforms typically delayed not only the age at which students enter the labour market over time, but also the age at which they are sorted across academic and vocational tracks.

Many European countries adopted comprehensive lower secondary schools in the 1960s (Italy, for example, did so in 1963; France's relevant legislation was introduced in 1959, but some curriculum differentiation persisted until 1975). Scandinavian countries took the same route somewhat later and more drastically: for example, in Finland a reform phased in between 1972 and 1977 increased the tracking age in secondary education from age 10 to 16, abolished academically-oriented upper secondary private schools, and was associated with significantly stronger intergenerational income mobility (Pekkarinen et al., 2006). Socialist countries kept early tracking and vocational education as a mainstay of the secondary school systems way beyond the 1970s; Poland's educational reform only delayed tracking in 1999 and this, together with greater resources devoted to education (particularly to instruction time), resulted in significantly better PISA test results (OECD, 2011).

3.3.2 Tracking versus comprehensive schooling

While these trends are broadly similar across Europe, their timing and the resulting organisation of secondary education are very different across countries and over time. And there is a notable exception to the trend towards delaying tracking and extending comprehensive education in German-speaking countries, where children as young as 10 are already sorted according to their school performance, into tracks teaching standard subjects at different levels and in different ways. In Germany, Austria, and Switzerland the preparation offered by the more academically ambitious lower-secondary tracks is suitable for upper-secondary tracks that lead to University enrolment; that offered by the less ambitious tracks is suitable for vocational upper-secondary tracks, mixing classroom work with workplace apprenticeships, meant to bring students quickly to labor market or in some cases to practical tertiary education programs.

Because secondary schools meant to provide universal and mandatory education face a task that is more complex and difficult than preparing students either for work or for higher education, transitions from the latter "tracked" to the former "comprehensive" model typically were, and often still are, problematic. Schools tasked to teach a common curriculum to students with very heterogeneous backgrounds and different goals are, in effect, asked to perform a multitude of tasks. They may end up performing none well, as obscure

compromises between supporters of an egalitarian single track and those who stress the efficiency of early tracking can result in a gradual relaxation of quality standards, monitoring, and comparability of results (Bertola and Sestito, 2011 and 2013, review Italy's comparative experience in this and other respects).

Confused policy guidelines naturally result in a relaxation of administrative controls. To the extent that egalitarian pressures are effective, some equalisation may result in the grades attained by students. But lax control may allow schools and teachers to minimise their own efforts, instead of maximising either the vocational or the academic achievements of their students. From this point of view, it is not surprising that, after the vast expansion of European educational systems in the baby-boom years, the downsizing of teaching staff was often avoided by decreasing class sizes or reducing teacher class time. Yet, in the absence of pedagogical efforts targeted to weaker students, actual competencies will be largely determined by family background, and remain highly unequal.

3.4 Heterogeneity, within and across countries

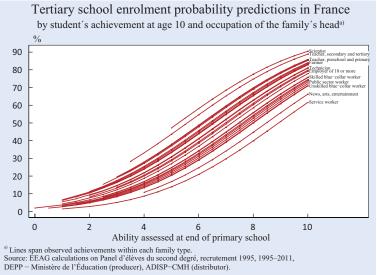
The structure of European educational institutions is very heterogeneous in many more respects that it is possible to consider here, but some aspects are particularly relevant to the policy issues outlined in Section 3.2.

3.4.1 The role of family background

The implications of early tracking are very different for different social groups, because the "quality" of students that plays a crucial role in arguments supporting simpler schooling is very closely linked to family background. Test score differences between children at the extremes of the distribution of the number of books at home, an observable proxy of a family's socio-economic level, can be as much as three times what students on average learn during a whole school year (this is the case in England, the country with the largest such differential among those studied by Hanushek and Wößmann, 2010).

Family background is extremely relevant not only to school results, but also to university enrolment, and to further socio-economic success. Figure 3.1 shows that this is also very much the case in France, a country

Figure 3.1



where family background influences test scores relatively mildly (Hanushek and Wößmann, 2010, report a difference equivalent to about one school-year between households with the most and the least books at home). It is not surprising to see in the figure that children hailing from better backgrounds are, on average, more competent at age 10, when they have already been able to take advantage of their family's cultural background. It is more unsettling to see that many children from underprivileged families are just as smart as their peers at that age but, even in a relatively egalitarian and meritocratic school system, socio-economic privilege strongly determines the probability of reaching advanced education opportunities. If the family's head is a scientist or a teacher, a child assessed at ability level 5 on a 1-10 scale has a 50 percent probability of enrolling in higher education, a key step to further economic and social success for him and his children; while a similarly clever child has less than a 10 percent probability of success when the head of his family is unemployed, or fails to report any occupation. The ability of some children in the latter situation is scored at 9 or 10, but even they have only a 50 percent chance of success. If it is so difficult for the smart children of disadvantaged families to reach higher education, not only is inequality higher and more persistent, but society is also missing an opportunity to exploit the available talent pool.

3.4.2 The role of tracking

The relevance of socio-economic background varies across countries in ways that both theory and evidence suggest depend on the age at which secondary schools students are "tracked" across more or less demanding curricula. Because tests can easily misjudge talent, one's ability to learn or to perform can only be assessed by actually trying and possibly failing to do so. And because children from low-income households can hardly afford to try and fail, school systems that either allocate or allow self-sorting of youth across different programmes tend to aggravate and perpetuate socioeconomic inequality.

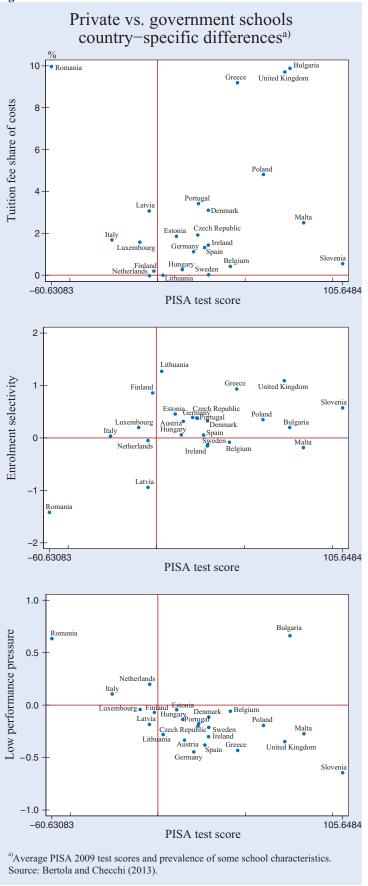
This mechanism influences income inequality and socio-eco-

nomic status persistence at two levels (Brunello and Checchi, 2007). Early tracking makes it more difficult for the brightest among underprivileged students to reach higher education, but can make it easier for the average underprivileged student to obtain training and valuable intermediate skills. In countries with earlier tracking, it is not impossible, but typically quite difficult for students to move from less demanding to more demanding academic tracks if they do well. Still, the vocational upper-secondary school tracks do impart both general and practical skills, and prepare their typical students to perform strongly in a society that values jobs well done. In England, conversely, secondary schools target the rather specialised academic skills assessed by A-level exams, and the absence of well-developed and articulate vocational tracks leaves too many youths uneducated, leading to calls for education reforms aimed at developing character, resilience and communication skills, rather than just pushing children through "exam factories" (Corrigan, 2013).

3.4.3 The role of private schools

The percentage of students attending private schools varies widely in the *OECD Education at a glance* statistics, which distinguish between schools controlled by a non-government organisation but largely funded by public money (among the EU member countries of the OECD Belgium, Spain, Denmark, and France feature double-digit percentages of primary and secondary student enrolment in such schools), and independent schools for which over 50 percent of core funding is private (these schools enrol over 10 percent of upper secondary students only in Poland and Portugal).

Figure 3.2



The appeal of private schools is related to the intensity of tracking, because in a comprehensive system privileged families may prefer to segregate their children in socially selective schools. Not only the size, but also the characteristics and role of the private school sector differ significantly across countries, including those within the EU.

Figure 3.2 plots some evidence for EU member countries covered by the OECD survey. In the top panel the test results are not correlated across countries with a measure of private funding: while privately managed schools typically do cover more of their costs with user fees than government schools, their students do not always perform better in the standardised PISA achievement test. This would be quite surprising if the best students were selected into a private sector that supplies better education: performance should be stronger in private schools, all the more so where the percentage of school funding from fees or charges paid by parents differ more across private and government schools.

The middle and bottom panel of the figure show possible reasons for this. PISA test scores quite intuitively tend to be better in more demanding schools, which attract more capable students and make them work harder. But private schools are not always more selective and more rigorous than public schools: in other countries, such as Italy, the opposite is the case (for definitions and formal evidence).

Government-organised schools may cater for low or high ability students, leaving different market niches to be filled by privately-funded schools. School resources can be configured in ways that complement individual

ability, or remedy its deficiency. If public schools are tailored to suit average or median ability, there is room for expensive private schools that use their additional resources to cater for better students. But students in expensive private schools will be less talented when those schools use their autonomy in ways that attract slow learners away from demanding government schools.

3.4.4 Funding, choice, and control

Like vouchers and other schemes that allow families to choose between schools, the public funding of autonomously operated schools can relax the borrowing constraints that exclude brilliant, but poor students from better schools. More or less stringently regulated privately-managed schools are fully funded by the government in Austria, the Czech Republic, Finland, Germany (where federal states provide varying amounts of funding to private schools), Hungary, Iceland, Latvia, Lithuania, Netherlands, Norway, Slovak Republic, Serbia, Slovenia, and Sweden. Allowing the school system to cater more effectively to the distribution of heterogeneously skills can improve equality of opportunities, while simultaneously enhancing the productivity of society's educational resources. But if high-quality government schools attract the more capable segment of the student pool, then the public funding of privately-organised education benefits students who are not rich or dumb enough to purchase unsubsidised remedial education. While the resulting redistribution across differently wealthy and differently able individuals may be politically attractive in some cases, the public funding of private schools need not enhance the overall equality of opportunities and efficiency in countries where governments supply high-quality education (Bertola and Checchi, 2013).

In France, the state pays and certifies all teachers in private schools that accept strict curriculum regulation, and for this reason French public and private schools are not flagged differently in PISA data. Because families may choose to enrol their children in private schools, rather than attend their local public schools, private school enrolment is to some extent driven not only by religion (most state-funded private schools are Catholic), but also by an avoidance of underprivileged classmates. Interestingly, the relationships illustrated in Figure 3.1 between achievement and family background are a little weaker at private

schools, where parental education is also less relevant to student performance: children of culturally disadvantaged families who can afford to pay private school fees (which are small, but not negligible in France) appear to find more suitable help in private schools than in public schools where teachers have passed more stringent tests, and are more demanding, but less helpful (Bertola, 2015).

When public school teachers are academically competent, but have little incentives to help students who do not come from well-educated families, families that are culturally poor but financially unconstrained may pay for the remedial education they cannot obtain from state schools in private schools. In the English system, public schools are administered by local authorities, and families have limited freedom in choosing among them (Burgess et al., 2015). "Academy" or "Free" schools are semi-autonomous state-funded schools, and their appeal and performance at least partly reflects the fact that their management is more likely to serve students' (rather than teachers') needs.

While families' freedom to choose their children's school exerts performance pressure on educators, it can be problematic in practice. In Sweden publiclyfunded, privately-operated schools cannot select applicants, and have to accept students on a first-come, first-served basis. As a result, demanding families have to apply for admission to "good" schools (attended by children of other demanding families) as soon as a baby is born. It is natural to doubt that choices made so far in advance can be based on reliable information, and to wonder whether choice really improves education quality in a system where good schools are good only because children hail from good backgrounds, rather than because of their teachers' quality and effort. Yet, it is difficult to control the natural and possibly detrimental tendency towards school segregation. Even in countries that restrict school choice by linking enrolment to residence, and aim to provide uniform education everywhere, similar mechanisms are at work through residence choices. Families that move to areas where schools are good raise housing prices. As housing becomes less affordable for poorer families, a self-reinforcing loop tends to segregate population segments geographically, and the opportunities offered by nominally similar, but really different schools tend to perpetuate those differences across generations. This mechanism is empirically detectable in France (Fack and Grenet, 2010), and plausible in any country where population is segmented, for exam-

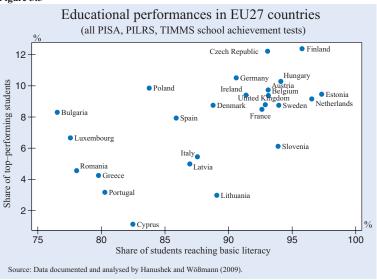
ple, according to national origin or other cultural characteristics. It may be particularly relevant when, as is currently the case, European countries are receiving unprecedented numbers of asylum seekers. Allowing them to cluster in specific areas would endanger the broader cultural homogeneity that is essential to social and economic interactions within every country.

3.5 Schooling outcomes and reforms

Institutional differences are significantly related to schooling outcomes in ways that can be interpreted sensibly in the light of Section 3.2's outline of theoretical mechanisms. International evidence suggests that early tracking increases educational inequality and might perhaps reduce mean performance, which is enhanced by outside evaluation (typically in the form of standardised exams) of autonomous teachers and school administrators (Hanushek and Wößmann, 2006, 2010). Competition from private schools can also offer appropriate incentives to autonomous school choices, all the more so when privately-operated schools receive more generous public funding. For if good students, no matter how poor, may indeed choose private schools, competition forces public schools to use the degrees of freedom they are allowed in the production of education. The association of student achievement with school resources - whether measured in terms of expenditure, or of class size and teacher-student ratios - is empirically much weaker than that with socio-economic backgrounds. Teacher education and salaries do have a positive effect, especially when the class size is large. How much the teachers are paid does matter to the selection of good personnel, but motivation and respect matter more. And what they are made to do, particularly through the accountability implied by standardised exams and parental freedom of choice, may matter even more.

Here, we briefly outline and discuss some aspects of the wide cross-country heterogeneity of education outcomes across EU member countries. While very many other structural and policy features differ across and within those countries, these indicators are certainly related to the structure of countries' education

Figure 3.3



systems on the one hand, and to the level and distribution of their citizens' income on the other.

3.5.1 Education across and within EU countries

Figure 3.3 reports summary indicators of student competencies in an international survey (PISA for 15 year-olds, PIRLS and TIMMS for 4th and 8th grade students). There are obviously very wide gaps across countries in the actual skills of individuals at similar stages of their education career. While better education appears to lead to faster economic growth on average (Hanushek and Wößmann, 2009), the competences assessed by international surveys are not obviously correlated with per-capita income. Some countries (such as Italy until the 1980s) have much higher incomes than one would expect on the basis of their students' school performance, presumably because formal education is not as complementary to their production structure as in other countries.

These statistics, which report the shares of more or less competent students, document that educational outcomes vary within as well as across countries. They obviously also vary over time, and an interesting source of relevant information is the International Adult Literacy Survey (IALS) that was collected in 1994, 1996, and 1998, and can be used to measure the number of years of formal schooling and skills (in terms of performance on a literacy test) of adult individuals whose schooling experience dates back to many years in the past.

Figure 3.4

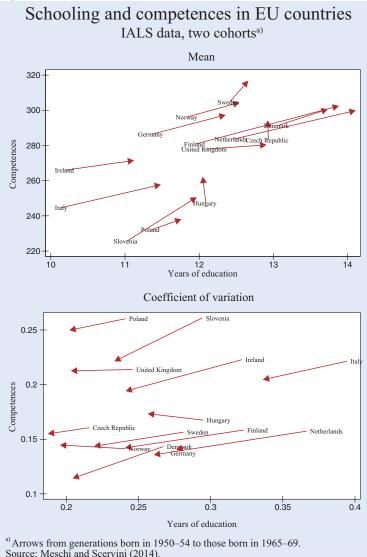


Figure 3.5

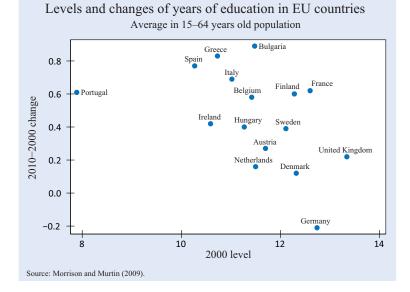


Figure 3.4 displays the mean of years of education and of competences for individuals born in two different periods for all available EU countries, and also the coefficient of variation of these indicators. There is a high degree of heterogeneity across countries in both the duration of education careers and in the resulting competences (OECD's more recent PIAAC survey of adult competences detects similar cross-country patterns, particularly confirming the peculiarly low competences of Italian adults). The two indicators are positively related, but the same number of school years results in much higher competences in Nordic countries.

Interestingly, and perhaps as a result of differently organised education, the countries with lower mean competences and education years often also display higher levels of variation in these indicators across their citizens. Denmark and Germany, for example, are obviously very different in many respects: but if only their education systems were different, then one would conclude that the Danish system delivers both higher and more equal education outcomes than its German counterpart. Over time, however, cohorts born in later years in all countries feature both higher means and (except in Hungary) lower coefficients of variation of these education outcomes.

Heterogeneity of education is very high within as well as across EU countries, but does tend to decrease over time. Figure 3.5 shows that, as a result of both cohorts' education and demographics, average years of education in the working-age population converge across the EU countries for

which information is available. Between 2000 and 2010, 0.11 years of the initial educational difference were erased on average across the countries shown (0.20 if Portugal is excluded). This process would obviously take a long time to substantially reduce the wide heterogeneity observed in 2000 (when average years of education ranged from 10 years in Spain, and below this figure in Portugal, to about 13 years in Germany and in the United Kingdom). However the underlying socio-economic trends, unlike the income fluctuations generated over the same period by the crisis, do indicate that EU countries tend to become more homogeneous over time.

3.5.2 Reform pressures and resistances

European school systems have been converging recently, but remain very different. It would be too complex and difficult to reconstruct the historical origins and discuss the implications of this heterogeneity. It is somewhat easier to discuss, in light of the insights and facts reviewed in the previous sections, the motivation and implications of reforms like those outlined in the introduction, focusing in particular on their tendency to invert previous trends privileging comprehensive education, and to emphasise practical and vocational education instead.

Historically determined schooling systems are difficult to reform, and the most important effects of any reform are not realised for a long time. However, because the pros and cons of school systems depend on circumstances, school reforms are endlessly debated among individuals and families whose circumstances differ, and occasionally implemented when society's own circumstances and perspectives change. The financial and public debt crises of 2008 and 2010 certainly did influence European countries' education budgets, as well as the appeal of their different education system structures.

Between 2009 and 2011 education expenditure fell continuously in Ireland, in Spain, and in Italy: these are the only 3-year spells of declining education expenditure in Eurostat data, and were plausibly a result of the euro crisis, as during the same three years, edu-

cation expenditure always increased in Germany, France, and Luxembourg (EACEA, 2012).

And while comprehensive schooling was perceived as adequately providing the general skills to adapt new technologies and perform new jobs in flexible, evolving labour markets before the crisis, the strong performance of countries with "dual" track education systems triggered a reassessment of this view. Crosscountry differences in the labour market situation of youths had always depended on educational system characteristics, and became much more pronounced as Germany and its neighbours withstood the crisis far better than other countries (EEAG, 2013, pp. 76-7). The implicit jobs-for-life promise of the Germanic systems of dual vocational education and tightly regulated occupational and wage-setting schemes seemed obsolete before the crisis, when academic skills and a flexible labour market appeared better equipped to adapt to frequent and unpredictable shifts in the demand for skills. But a crisis where flexibility and financial markets showed their shortcomings vastly increased its appeal. Dual education systems have had the advantage of leading to lower rates of youth unemployment. This is the reason why even the United States under President Clinton seriously discussed the introduction of a German-style dual education system as a possible way to increase average labour productivity and integrate disadvantaged youth into civil society.

Of course, it is difficult for other countries to simply adopt a dual educational structure that may not necessarily fit their other institutional and structural characteristics as well as it does in Germany, Austria, or Switzerland. The costs and benefits of vocational education need to be shared between the public and private sector in possibly unfamiliar ways, and should be assessed over a lengthy and uncertain transition period. These simple considerations may nevertheless explain why the reforms briefly outlined in the introduction above all tend to introduce practical aspects in more or less effective academic curricula, even if their budgetary implications are negative when the government aims to stimulate demand (as in Italy), or positive when the government adheres to the austerity paradigm (as in Finland). The discussion above also suggests reasons why reforms tend to introduce managerial control over public school teachers, and makes it unsurprising that reforms encounter two types of opposition: from those who, even under the country's new circumstances, support more egalitarian comprehensive education on the one hand, and from teachers

The small decline in the average years spent in education in Germany is not due to recent reforms, which have reduced pre-tertiary schooling from 13 to 12 years in most states as of 2012. It began already in the 1990s (German reunification should not be influential because the data claims to refer throughout to the same territory). In the IALS data of Figure 3.4, years of education are higher for those born in 1940–44 than for those born in the following 10 years, and increase over younger cohorts.

defending both academic curricula and their own work habits on the other.

3.6 The role of EU institutions

Should some central authority or collective agency finance education, restrict choices, collect and certify information at the EU level? As discussed above, the answers are not clear-cut at the country level, because they depend on structural factors and points of view. However, the same questions and the same qualified answers are appropriate when considering policy issues across tightly integrated nations, and many aspects of the policy problem interact with European integration.

3.6.1 Cultural homogeneity

Homogeneous and publicly-provided elementary schools were a backbone of national projects, and mutually reinforced the cultural convergence originating from countrywide economic interactions. A suitable and possibly homogeneous cultural level is beneficial across national borders when international mobility becomes easier. EU institutions are, in fact, active in facilitating some relevant cultural exchanges. This is the explicit goal of such exchange programmes as "Erasmus" for university students and "Erasmus+" for secondary school teachers, administered by EACEA, the EU's Education, Audiovisual and Culture Executive Agency.

3.6.2 Monitoring

EACEA also monitors and documents the bewildering array of current configurations and ongoing reforms of education systems on its Eurydice website, which is the source of much of the information reported in the previous sections and interpreted in light of theoretical issues and broader international evidence. This information, and that collected and analysed by the OECD's Directorate for Education and Skills, is obviously very valuable, not least because it can foster cross-country "yardstick" competition. Families can hardly choose to send their children to school in other countries, and international competition among systems cannot exercise the same performance pressure exercised by private schools on public schools within countries. But families, and their politi-

cal representatives, can in principle use information from other systems to gauge their own system's performance, and act accordingly.

As is the case within countries, this mechanism could be strengthened by availability of standardised exam results. As usual, when discussing EU issues it can be useful to consider how similar issues are addressed in the Unites States, a much older economic and monetary union with a solid federal layer of government. In the Unites States, states can adopt the "Common Core State Standards" specification of expected achievement at each grade level of elementary and secondary school, and good results in tests can give them access to some federal funds. As many as 42 states have adopted these standards since they were introduced in 2010, but increasingly many of these states (most recently Massachusetts in November 2015) are rejecting them for reasons that would certainly also be relevant in Europe: the achievement tests cover a curriculum that is necessarily very limited, with a danger of "teaching to the test" and neglecting broader, but less easily measured educational achievement, yet too uniform to fit states' diverse socio-economic circumstances. Conservative supporters of state autonomy, supported by teacher unions resenting evaluation of school performance by abstract and imprecise tests, have even reversed the initial adoption of Common Core standards in Massachusetts, replacing them with tests that are locally designed and administered.

3.6.3 Coordination

There are obvious reasons not to envision homogenous schooling across vast and diverse regions: diverse school systems, each homogeneous within, are difficult to design, and their boundaries need not coincide with those of countries or regions. In the education field, in fact, the European Treaties do not envision any "harmonisation of the laws and regulations of the Member States" through directives. As in welfare and labour policy, the historically determined configuration of national education systems is too heterogeneous and politically important to be subject to the same degree of harmonisation as goods market regulations, or to unification as in monetary policy.

European "Bologna process" guidelines exist for higher education: member countries and single institutions, on a voluntary basis, can harmonise the duration and, to some extent, the content of university curricula, making it possible to implement the ECTS university credit transfer system. The role of EU policies is similar, but even less significant in the vocational education and training aspects on which this chapter focuses. CEDEFOP, the European Centre for the Development of Vocational Training, is tasked and funded by the EU to study "[...] how transparency, comparability, transferability and recognition of competences and/or qualifications, between different countries and at different levels, could be promoted by developing reference levels, common principles for certification, and common measures, including a credit transfer system for vocational education and training." The 2010 Bruges communiqué, agreed upon in the midst of the euro crisis, envisioned a series of national actions aimed at improving, certifying, and internationalising initial and continuing vocational education, with some support and information activity at the EU level. CEDEFOP is in charge of much of the relevant coordination and monitoring action, and has guardedly assessed developments towards the 2014 first-stage objectives as a "multifaceted process which shows clear signs of progress, but with more work to do."

3.6.4 The pros and cons of centralised European education

Common and comparable standards would certainly contribute to European labour market integration: the first draft of the Bolkestein directive, meant to remove international barriers in services markets, would have forced automatic recognition of exactly those professional qualifications that, in tracked systems, are granted by vocational programmes and apprenticeships. Rejection by the European Parliament and subsequent dilution of the directive was partly motivated by the defense of qualification holders within each country against "Polish plumber" competition, opponents also invoked the need to avoid the deterioration of quality standards: in the absence of European guidelines, each country might have incentives to grant qualifications leniently to individuals who would work elsewhere.

Like almost everything (especially in matters of education), harmonisation has costs as well as benefits. Competition among standards has advantages in terms of accommodating diversity and allowing experimentation, and different standards may indeed be appropriate for different geographically segmented services markets. The relevant heterogeneity is in fact larger within than across European countries. In Germany, for example, regional cultural diversity arguments are considered so strong that there is not even a federal budget for schooling or universities.2 While there are good reasons for different educational systems to coexist in each country and in Europe, economic and cultural interactions undoubtedly benefit from some standardisation (in language skills, for example, or of the way numbers are handwritten or typed using points or commas as a decimal separator), and basic economic reasoning implies that public funding of education should in principle be pooled and harmonized throughout areas where labor mobility lets an integrated labor market be the ultimate employer of all individuals, wherever they were educated.3 In practice, of course, labour mobility is not as intense within culturally heterogeneous countries (let alone across the borders of European countries) to make this a serious concern.

3.7 Conclusion

Education is too important, and its quality is too difficult to assess, to be left to markets. It has some of the features of a public good, in that it provides youth with basic social skills and shared values: this always was, and certainly remains, important at the country level, especially as many are immigrants or children of immigrants, and extends across country boundaries as socio-economic interactions span the European continent and beyond. This motivation for public policy in education is strongest at the primary level, but extends to later ages as socio-economic interactions become more complex and require more sophisticated skills.

Whether and to what extent and level different types of education should be publicly funded and organised, rather than left to individual choices and markets, depends on the availability of accurate information, as well as on financial market imperfections. To improve on market outcomes, the public provision

Wößmann (2007) documents within-Germany patterns of institutional features and school outcomes that are consistent with international evidence: test scores are less correlated to socio-economic status in states where tracking begins at an older age and, while German private school results are not better than those of public schools, their presence is positively associated with system performance at the state level.

³ Locally financed education of mobile workers is obviously exposed to race-to-the bottom tensions, and might legitimate demands for a refund of the cost of migrating individuals (as was the case, before Germany's reunification, when citizens of the Democratic Republic relocated to the Federal Republic).

and regulation of education have to rely on effective administrative tools. This is a more likely outcome, both in theory and empirically, when public providers are subject to competitive pressure.

The choice of whether to allocate youth to vocational and academic tracks, or offer 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, as well as on implementation details.

Tracking children as young as ten into different academic streams may in theory tailor teaching to individual skills, but in practice tends to exclude from higher education many able students from a labour class background. And while it can reduce youth unemployment and make well-paid jobs with favorable social status available to underprivileged students, it tends probably to widen and certainly to perpetuate cultural inequality. In Germany, for example, both firm-based and school-based vocational education tracks are not only highly occupation-specific, which reduces their students' adaptability to labor market developments, but also strongly segmented by family origin and achievement (Protsch and Solga, 2015). To address these issues it is advisable to delay tracking to about age 15 and ensure that vocational students are equipped with suitably flexible cultural skills. Conversely, a comprehensive education system that keeps all youth together only effectively reduces cultural inequality if schools are geared towards helping students from disadvantaged backgrounds. This is more likely when teachers are suitably selected and are given appropriate pedagogical incentives. Otherwise, poor performance in academic education leads to long spells of unemployment or unskilled employment opportunities.

Both within and across countries, the advantages and disadvantages of differentiation across schools and school systems depend on circumstances. Practically-oriented teaching lets students learn concepts working on real-life problems, but may not let them develop the ability to face other problems as they arise. Because the pros and cons of choices depend on the economic environment in which they are made, countries should not rush to imitate configurations that did well in the recent crisis. The good youth unemployment performance of countries with dual education systems was also related to those countries' industrial structure and to the character of shocks. Just like different oc-

cupations may fare better or worse in the face of business cycles and structural change within a country, so across countries different ways of organising education and production may take turns in grasping good opportunities.

While competition among systems has advantages in terms of accommodating diversity and allowing experimentation, there are also advantages to the mandatory enforcement of at least minimum standards. It might therefore be advisable for Europe to develop a supranational framework that buffers unbalanced cross-country impacts on the one hand, and eases mobility across occupations and national borders on the other. Because the pros and cons of different systems differ drastically across different households, however, education policy is a politically-charged issue that cannot be assigned to the EU in the absence of effective supranational political processes. While the potential benefits of a European education policy are obvious it is safe to presume that, for the foreseeable future, European-level measures shall remain "voluntary and principally developed through bottom-up cooperation," and ineffective.

References

Bertola, G. (2015), "France's Almost Public Private Schools," *CESifo Working Paper* No. 5690.

Bertola, G. and D. Checchi (2013), "Who Chooses Which Private Education? Theory and International Evidence," *Labour* 27, pp. 249–71.

Bertola, G. and P. Sestito (2011), "A Comparative Perspective on Italy's Human Capital Accumulation," *Quaderni di Storia Economica* N. 6, Banca d'Italia, Rome.

Bertola, G. and P. Sestito (2013), "Human Capital," in: G. Toniolo, ed., *The Oxford Handbook of the Italian Economy Since Unification*, Oxford University Press, New York, pp. 249–70.

Brunello, G. and D. Checchi (2007), "Does School Tracking Affect Equality of Opportunity? New International Evidence," *Economic Policy* 22, pp. 781–861.

Burgess, S., E. Greaves, A. Vignoles and D. Wilson (2015), "What Parents Want: School Preferences and School Choice," *Economic Journal* 125, pp. 1262–89.

Corrigan, O. (2013), Technical Matters. Building a High Quality Technical and Vocational Route Through the Education System, Policy Exchange. London.

Dionisius, R., S. Mühlemann, H. Pfeifer, G. Walden, F. Wenzelmann, and S. C. Wolter (2009), "Costs and Benefits of Apprenticeship Training. A Comparison of Germany and Switzerland," *Applied Economics Quarterly* 55, pp. 5–38.

EACEA (2012), Government Education Expenditure in the European Union during the Economic Crisis (2008–2011), European Commission, Brussels.

EEAG (2013), *The EEAG Report on the European Economy*, "Labour Market Reforms and Youth Unemployment," CESifo, Munich 2013, pp. 73–94.

Fack, G. and J. Grenet (2010), "When Do Better Schools Raise Housing Prices? Evidence from Paris Public and Private Schools," *Journal of Public Economics* 94, pp. 59–77.

Hanushek, E. A. and L. Wößmann (2006), "Does Educational Tracking Affect Performance and Inequality? Differences-in-Differences Evidence Across Countries," *Economic Journal* 116, pp. C63–C76.

Hanushek, E. A. and L. Wößmann (2009), "Do Better Schools Lead to More Growth? Cognitive Skills, Economic Outcomes, and Causation," *NBER Working Paper* No. 14633.

Hanushek, E. A. and L. Wößmann (2010), "The Economics of International Differences in Educational Achievement," in: E. A. Hanushek, S. Machin and L. Wößmann, eds., *Handbook of the Economics of Education* 3, North Holland, Amsterdam, pp. 89–200.

Meschi, E. and F. Scervini (2014), "A New Dataset on Educational Inequality," *Empirical Economics* 47, pp. 695–716.

Morrisson, C. and F. Murtin (2009), "The Century of Education," *Journal of Human Capital* 3, pp. 1–42.

OECD (2011), "The Impact of the 1999 Education Reform in Poland," OECD Education Working Paper No. 49.

Protsch, P. and H. Solga (2015), "The Social Stratification of the German VET System," *Journal of Education and Work*, forthcoming.

Pekkarinen, T., R. Uusitalo and S. Pekkala (2006), "Education Policy and Intergenerational Income Mobility: Evidence from the Finnish Comprehensive School Reform," *IZA Discussion Paper* No. 2204.

Wößmann, L. (2007), "Fundamental Determinants of School Efficiency and Equity: German States as a Microcosm for OECD Countries," *Program on Education Policy and Governance Research Paper* PEPG 07-02, Harvard University, Cambridge (Mass.).

Wolter, S. C., S. Mühlemann and J. Schweri (2006), "Why Some Firms Train Apprentices and Many Others Do Not," *German Economic Review* 7, pp. 249–64.

DENMARK: Too Good to BE True?

4.1 Introduction

Denmark is known to some as the country of Lego and fairy tales, and for decades it was pinpointed as an example not to be followed. Unemployment was persistently high, the current account and the public budget displayed systematic deficits, there were frequent devaluations, and recurrent changes of government etc. In recent times, the picture has changed radically. There are frequent references to the Danish welfare model, the flexicurity model is highlighted as an example of a well-functioning labour market, the pension system is ranked as the best in the world,¹ and Danes are usually found to be among the happiest people in the world.²

In the case of Denmark one may also see a number of paradoxes. It is a small and open economy with one of the largest public sectors within the OECD, and yet Denmark's economic performance indicators, like per-capita income and employment rates, are among the highest of all OECD countries. At the same time, income inequality is low. In discussions on monetary policy and exchange rate regimes, the option of a stable and credible unilateral exchange rate peg seems to be ruled out, and yet Denmark has successfully maintained such a regime. Denmark has a tradition for being highly open, and there is widespread support for EU-membership among its citizens. The country is a front-runner in the implementation of EU rules and regulations, and yet the euro has not been adopted and exemptions remain regarding military, police and judicial cooperation within the EU.

This chapter takes a closer look at the Danish case – is it too good to be true? The short answer is that Denmark has not worked miracles. Its performance is based on foundations laid years ago in response to an

unsustainable economic situation. In the 1980s policy-makers invested in the credibility of the fixed exchange rate policy and accepted the discipline that this required. Labour market reforms in the 1990s laid the foundation for the flexicurity model as it is currently known. Subsequently, a consolidation of public finances and concerns over the financial viability of the welfare model prompted reforms of welfare arrangements, including pension and retirement reforms. Among policymakers there is an understanding of the constraints faced by a small and open economy, and that the viability of the welfare model ultimately depends on maintaining a high employment level in the private sector.

Danish achievements are the result of hard political work. The policies applied in Denmark are not unique: their packing may differ, but the ingredients are familiar. Denmark's achievements are a result of economic reforms, initially directed at overcoming the crisis and subsequently turned more forward-looking. If anything in these developments stands out, it is the political economy of establishing consensus across a broad political spectrum. This implies both support for reforms and that continuity and consistency have been maintained in economic policy, despite the fact that most governments have been minority governments (and usually coalitions among several parties) and that there have been frequent changes in government.

4.2 Public sector and economic performance

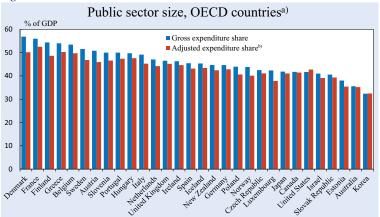
The key question asked by outside observers is: "How is it possible to reconcile Denmark's relatively good economic performance with its large public sector and high tax rates?" Have fundamental trade-offs been avoided? How can this be explained?

International comparisons suffer from potential measurement issues both when comparing public sector sizes and GDP levels. Some of these problems are discussed in Box 4.1, but they do not fundamentally alter the point that Denmark has a relatively strong economic performance, measured in terms of per-cap-

According to the Melbourne Mercer Global Pension Index, cf. Mercer (2015)

 $^{^2\,}$ Ranked 3 of 158 in the 2015 World Happiness Report 2015, cf. Helliwell et al. (2015).





Public sector size is measured as total general government expenditure as a share of GDP.

Third Section size is measured as total general government experiments as the numbers comparable since transfers follow a gross (taxable income) and a net (non-taxable income) principle across countries, see Box 4.1. Data applies to 2011 to allow for this adjustment.

ita income, for instance, and that the public sector is large, cf. Figure 4.1.

The size of Denmark's public sector clearly reflects its political priorities. Equal opportunities, the eradication of poverty and low income inequality are important policy goals. Universal entitlement to education, health and the social safety net are thus defining characteristics of the Danish/Nordic welfare model. At the same time, Denmark aims to be one of the most affluent countries in the world.

The Danish lesson is not that incentives do not matter, or that there are no trade-offs. Micro-analyses of the incentive effects of taxes or unemployment benefits etc. do not put Denmark in a particular position.3 Denmark, however, may stand out in terms of what has been done to flatten the trade-off, or counteract the effects of high taxes via the packaging of policies.

While there is a heavy burden on Denmark's large public sector, it is often overlooked that its private sector is among the most liberal in the OECD area. Markets can be distorted not only by taxes, but also by

Box 4.1

Measurement issues

Cross-country comparisons of public sectors commonly use gross expenditure or revenue measures as a share of GDP, cf. Figure 4.1. This approach is problematic since it neglects important institutional differences; see Adema et al. (2011). Some countries pursue a gross principle where social transfers as a rule are taxable income, while others follow a net-principle whereby transfers are not taxable income. Obviously, recorded expenditure and tax revenues are larger under the gross principle for the same net transfers and thus net expenditure. Such differences must be taken into account in cross-country comparisons.

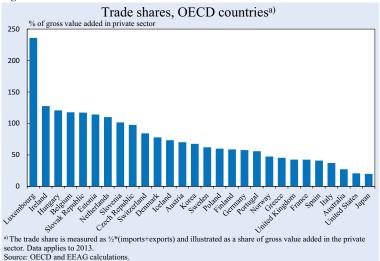
The OECD produces statistics for net and gross public social expenditure. In 2011 gross public social expenditure as a percent of GDP was 30.1 percent in Denmark, 27.2 percent in Sweden, 25.5 percent in Germany and 22.7 percent in the UK. Considering net expenditure narrows the differences considerably. The share was 23.4 percent in Denmark, 22.5 percent in Sweden, 23.7 percent in Germany and 21.4 percent in the UK. In short, the usual measurement approach exaggerates differences in the size of welfare arrangements and thus the size of the public sector. To illustrate the implications of public sector size, Figure 4.1 corrects the gross expenditure share by the difference between gross and net social expenditure. Measured in this way the public sector is still large in Denmark, but not that much larger than in many other countries (and not the largest within the OECD).

The public sector may influence international comparisons in other ways. GDP is a measure of value added created by market activities. Hence, if activities like day-care are shifted from the household sphere to the public sector, recorded GDP will increase. This implies that GDP measures for countries like Denmark, where the public sector to a larger extent has taken over care activities and the like, may have a higher recorded GDP level; see Sinn (2006). Correcting GDP measures for such public activities as old-age, incapacity and child care, GDP falls by 5-6 percent for Denmark and Sweden, but by only 0.8 percent for Italy, for example; see Andersen (2015a). However, the ranking of countries does not change significantly by such a correction, but the absolute differences do. This brings up the general problem that GDP is an imprecise measure of living standards and thus welfare, and that there are a number of institutional and cross-country differences influencing recorded GDP levels. As an example, Gordon (2006) argues that while the gap in GDP per capita between the USA and Europe is about 30 percent, it is reduced to 17 percent when account is taken of excess energy use, prison population, metropolitan dispersion and an inefficient medical care system. For a general discussion of GDP measures, see Stiglitz et al. (2009).

There are also reasons why GDP may be underestimated, especially in countries with a large public sector. Under traditional national accounting conventions, the output value of public activities is assessed from the input (cost) side, and therefore productivity growth is, by definition, zero. Over time this may lead to a systematic underestimation of GDP. To address this issue, the European Commission has decided that output indicators should be used to assess public production in national accounts. Applying this approach over the period 2005-12, Statistics Denmark (2014) reports the average annual productivity growth in the public sector to be 0.8 percent, and the level of GDP based on the traditional approach is therefore an underestimation.

The system also includes a number of checks and balances, for instance individual identification numbers to ensure that all income is declared for taxation. This raises "Big Brother" issues. It is also the reason why the Nordic countries have such rich individualised data available for research!

Figure 4.2



rules and regulations, a lack of competition etc. Therefore, for international comparisons, all potential "distortions" should be taken into account. To mention just a few indicators in support of this, the OECD index of product market regulation for 2013 ranks Denmark as having the fifth lowest level of product market regulation (close to the level in the US).4 The World Bank ranks Denmark number four (highest in Europe, and also above the US) in its 2015 version of the "Ease of Doing Business Index" including 189 countries,⁵ and the World Economic Forum Global Competitiveness Index for 2014-15 has Denmark ranked 13 among 144 countries.6

The liberal private sector is intimately related to the fact that Denmark is a small and open economy. There are few large companies, but a large number of small and medium-sized enterprises, who are facing international competition in export and/or import markets. The trade share is high (see Figure 4.2), and the more broad KOF Globalization Index ranks Denmark as number seven out of 204 countries.7 Maintaining competitiveness has thus been a continuous challenge. Interestingly, terms of trade have followed an upward trend, which may reflect an ability to innovate and move up the value added chain (Danish Economic Council, 2014). The current account has since the late 1980s displayed surpluses. There is a widespread understanding of the importance of remaining competi-

tive to sustain high income and employment levels. See OECD, "Economy-wide Regulation," OECD Product Market

Globalisation is not a new phenomenon. Denmark is not an example of "politics against markets" - if anything, it is an example of how to find a "third way" in striking a balance between markets and state.

Secondly, not only the size, but also the structure of the welfare state matters. The effects of taxes cannot be assessed without taking into account what they fi-Different expenditure types and taxes affect economic performance in dissimilar ways.

As an example, consider labour supply in cases where one may distinguish between passive expenditure reducing labour supply (such as early retirement) and active expenditure supporting labour supply (such as day care, education). Recent empirical work on the nexus between economic performance (economic growth) and the public sector shows that the composition of public expenditure and the mode of financing is more important than its sheer size. The distinction between active/productive and passive/non-productive expenditure is important, and the former may have positive effects on growth (see, for example, Gemmell et al., 2011, and Arnold et al., 2011). A relatively large share of public expenditure is of the "active" type in Denmark, and this helps to explain why economic performance has been relatively good, despite the large public sector, cf. Andersen (2015a). A similar distinction applies to transfers; they are not passive in the sense that they can be claimed unconditionally.8 Various conditionalities - known as workfare or active labour market policies – are part of the system to balance concern for income security and active job search incentives. It is also a case in point that there are trade-offs, and these policies come at a cost. Denmark spends 1.8 percent of GDP (2013 data) on active labour market policies (direct expenditure on programmes and their administration, and expenditure on transfers come on top of this). This is the highest level of expenditure among OECD countries, where the average is 0.6 percent of GDP.

Regulation Statistics (database), last accessed on 31 December 2015. See World Bank (2015)

See Sala-i-Martin et al. (2014).

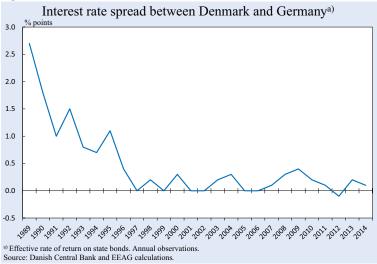
Cf. 2015 KOF Index of Globalization, http://globalization.kof. ethz.ch/media/filer_public/2015/03/04/rankings_2015.pdf, last accessed 31 December 2015.

Entitlement to the basic social safety net is universal in the sense that it is not contribution-based. However, this is not tantamount to transfers being akin to a basic income scheme since various eligibility conditions apply.

See OECD (2015), especially Table Q.

Finally, it is worth noting that the "active" approach may also contribute to reducing income inequality. It is thus notable that low income inequality in Denmark - and the other Nordic countries - can largely be attributed to an equal distribution of market incomes. Education and labour market policies create the basis for high employment and a relatively equal distribution of income. Low inequality is often attributed to taxes and transfers, and although they are important, the labour market outcomes constitute the foundation for the egalitarian outcomes.

Figure 4.3



4.3 Exchange rate policy

Economic policies in Denmark are continuously up to a market test since Denmark is one of the few countries where a unilateral fixed exchange rate is pursued. The Danish Krone is pegged to the euro, and the interest spread to the euro area is a metric of the credibility of the peg, and thus ultimately of economic policy.

During the 1970s and 1980s, when the economy suffered from various imbalances, the interest rate spread was high, and recurrent devaluations took place. Credibility was low, and economic policies were not consistent. A firmer fixed exchange regime was established in the 1980s, based on the premise that discrete devaluations were not a policy option, and the credibility of the peg should be ensured via fiscal policies (and structural reforms). The exchange rate was thus effectively pegged to the Deutsche Mark, and to the euro as of 1999. Denmark has adopted a narrow band for variations of the Danish Krone relative to the euro of \pm 2.25 percent within the Exchange Rate Mechanism II, and this policy has attained a strong credibility. 10 The interest rate spread to the euro area is very small, and has occasionally even been negative,11 cf. Figure 4.3. It is

Since the Danish Krone is pegged to the euro, it is often difficult for outsiders to understand why Denmark does not join the EMU. The question is highly sensitive and the issue has become taboo in policy debates. In parliament, there is a clear majority for membership, but there is a political commitment that the issue should be decided in a referendum. A referendum has been held twice without obtaining support for membership,12 and the political risk of calling a new referendum is therefore high. In recent pools the noside has a clear majority, or over two thirds of votes.¹³ There is hardly any public debate on the issue, and the positions are at a stalemate. Proponents of membership argue that since the fixed exchange rate policy is not being politically contested, Denmark might as well join to be present at the decision table, while its opponents argue that staying out has not been a problem, so why join.

bank was financing its operations by short-term foreign borrowing) and the central bank raised interest rates, but the markets calmed quickly. Interestingly, and unthinkably just a few years ago, the Danish Krone has also been under an appreciating pressure. This happened during the sovereign debt crisis in 2011–12, and more intensively in early 2015 when the Swiss central bank abandoned the "peg" vis-à-vis the euro and allowed the Swiss Franc to appreciate.

worth noting that, over the same period, the situation changed from a scenario of systematic current account deficits and rising foreign debt (peaking at close to 50 percent of GDP in the late 1980s) to systematic surpluses and a net foreign asset position (of about 40 percent of GDP).

The exchange rate has been very close to its parity. The parity is at 746.038 and daily exchange rates have been within the \pm 1 percent band over the entire period from January 1999 to June 2015. Over the period of 2 January 1999 to 14 August 2015, the Danish Krone-euro exchange rate reached a peak of 747.17 and sank to a low of 742.32. The standard deviation over the period is 1.1.

There have been occasional devaluation pressures on the Danish Krone. For instance, at the onset of the Great Recession, there was some capital outflow (mainly driven by the fact that a major Danish

The Maastricht Treaty was not approved by a referendum in 1992. In 1993 a referendum approved the so-called Edinburgh agreement allowing Denmark to opt out of not only the economic and monetary union, but also the parts dealing with cooperation in areas such as the military, the police and the judicial system, as well as union citizenship. A referendum in 2000 had 53.2 percent of the votes against EMU membership.

 $^{^{\}rm 13}\,$ In previous referenda, the majority of the no-side was lower at the referendum.

4.4 Model resilience – effects of the Great Recession

Being a small and open economy, Denmark was severely affected by the Great Recession. No less than thirteen countries—including Denmark—experienced a drop in real GDP of 5 percent or more between 2008 and 2009.

Denmark has experienced a boom-bust pattern in the past, cf. Figure 4.4. Prior to the Great Recession, aggregate activity was at or above full capacity utilisation. There were several signs of

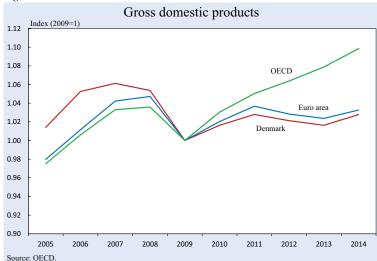
over-heating, including very low unemployment (significantly below the structural level), accelerating wage increases, and a booming housing market. This development was largely driven by domestic demand. The economy was thus not on a sustainable path, and on the eve of the Great Recession there were already signs that economic activity was fading. The Great Recession accelerated this development. The combination of an already decelerating path and the Great Recession induced a steep decrease in GDP (see Figure 4.4) and employment. Unemployment increased by 2.5 percentage points between 2008 and 2009, and 4 percentage points between 2008 and 2010, almost double the increase for OECD countries on average, although unemployment remained below the OECD average. While the initial increase was larger than for euro and OECD countries, subsequent unemployment has been slightly declining, cf. Figure 4.5.

Figure 4.5

Source: OECD

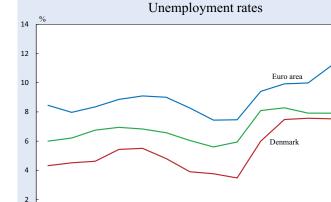
The financial crisis did not only have foreign causes, but also domestic roots related to a price bubble in the Danish housing market. The financial sector was severely affected by the crisis, and "bank packages" were introduced, but since they relied on bail-in mechanisms there have been no public bailouts of the financial sector. It is also noteworthy that, despite the large turnaround, not least in the housing market, there was no significant increase in household bankruptcies in Denmark. The boom-bust

Figure 4.4



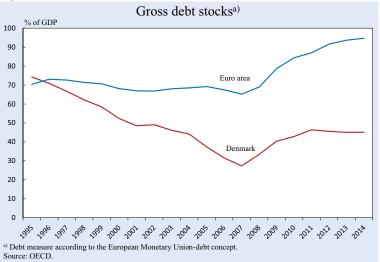
pattern was thus in some respect similar to that seen in some Southern European countries (like Portugal and Spain), but with the important difference that Denmark's financial sector was more resilient and public finances were in a much better position to absorb the consequences of the downturn in economic activity.

The boom-bust pattern can partly be attributed to an excessively lean fiscal policy. The economy was booming with high growth in private consumption and investments, and fiscal policy was expansionary. However, policymakers were reluctant to tighten fiscal policy. When confronted with calls from several economists to tighten fiscal policy, the Danish prime minister stated that economists had to rewrite their textbooks if they did not appreciate how good the situation was. Subsequent developments confirmed that



2000 2001 2002 2003 2004 2005 2006 2007 2008 2009 2010 2011 2012 2013 2014

Figure 4.6



the textbooks were closer to the mark than the prime minister!

The destabilising effects of fiscal policy had two main sources: a tax freeze and high public expenditure growth. The liberal-conservative government introduced a so-called tax freeze with the intention of curbing public sector expenditure. The tax freeze meant that tax rates were not to increase, but for property taxes and some excise taxes the freeze was defined in terms of nominal tax payments.14 In a situation with rapidly increasing house prices, this reduced effective tax rates which, in turn, contributed to further house price increases. At the same time, public consumption growth was high. The average annual growth rate for public expenditure was about 2 percent in the period prior to the Great Recession - primarily driven by increasing health expenditure - while the target was around 1 percent. Fiscal policy was thus clearly procyclical during this period.

After the onset of the Great Recession, fiscal policy was expansionary. Denmark is among the group of countries that pursued the most expansionary fiscal policy over the period 2009–10.¹⁵ The presence of fiscal space allowed automatic stabilisers to work (the strongest within the OECD area) and left room for

discretionary policies.¹⁶ It is thus also part of the story that public finances were consolidated prior to the crisis, cf. Figure 4.6, which meant that there was some room for manoeuvre during the Great Recession.

Although Denmark is one of the European countries with the least problems assessed in terms of standard macroeconomic indicators, the crisis has proved very persistent. As illustrated in Figure 4.4, activity has essentially remained unchanged after a small improvement in 2010–11. Aggre-

gate demand has remained subdued, particularly due to domestic private consumption and investment, while net export has grown. The protracted reduction in private domestic demand may be related to debt consolidation, precautionary savings and pessimistic expectations driven by the boom-bust pattern. However, being a small and open economy, foreign demand remains of crucial importance.

4.4.1 The labour market – the flexicurity model

Denmark's low unemployment, especially prior to the Great Recession, generated a great deal of hype surrounding the so-called flexicurity labour market model.¹⁷

The short version of the flexicurity model is as follows: hiring and firing rules are fairly flexible, and the unemployment insurance scheme is generous by international standards. However, this was also the case in the period from the mid-1970s to the early part of the 1990s, where Denmark was routinely listed as a crisis country with problems for almost any macroeconomic indicator, including high and persistent unemployment. Therefore, the *flex* and the *security* part of the Danish policy package cannot, in isolation, account for the performance of the Danish labour market. This is not denying the importance of these elements, but it points out that they are no guarantees of a low and stable unemployment rate. A series of reforms

¹⁴ Property taxation has two parts: a property value tax to the state and a land tax (municipal property tax) to the municipalities. The state property value tax is 1 percent of the assessed housing value (3 percent of the value above some threshold, in 2015 3,040,000 Danish Krone). A so-called tax freeze implies that the housing value for most house owners remains at the 2002 valuation. The municipal property tax decided by the municipalities lies within the interval of 0.16 percent and 0.34 percent of the assessed land value. A temporary freeze of the land tax has been launched in 2016. ¹⁵ According to Danish Ministry of Finance estimates, discretionary fiscal policy was expansionary over the years 2009–10 and mildly contractionary over the years 2011–14.

¹⁶ Denmark has been in the excessive deficit procedure due to deficits exceeding the 3 percent limit in 2010–14. Measured in terms of deficits, public debt etc., Denmark is one of the EU countries facing the smallest problems with public finances.

¹⁷ This section partly builds on Andersen (2015b).

during the last half of the 1990s plays an important role in accounting for the Danish experience. The main thrust of these reforms was a shift from a passive focus on income protection to a more active focus on job search and employment. The policy tightened eligibility for unemployment benefits and shortened their duration,¹⁸ as well as introducing workfare elements into unemployment insurance and social policies in general.

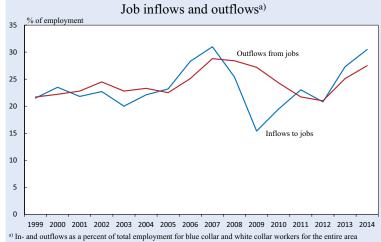
Since Denmark took a severe beating during the Great Reces-

sion, the flexicurity model has been put to a serious test. The model as such cannot prevent cycles, and the interesting question is whether the model can weather a significant downturn. Lax firing rules make it likely that employment will fall drastically when aggregate demand drops, and although the social safety net cushions incomes for unemployed, the financial viability of the model is at risk from a persistent decline in employment. A prolonged decline in employment will reduce tax revenues and increase social expenditure, and thus put public finances under strain.

A hallmark of the flexicurity model is a high level of job-turnover, implying that the unemployed (as well as the young entering the labour market) can find a job fairly easily; and that most unemployment spells are short. Can this characteristic survive a large drop in employment?

The answer to this question is given by Figure 4.7 showing inflow and outflow rates to and from jobs for a large part of the private labour market.¹⁹ The effects of the Great Recession are clearly

Figure 4.7

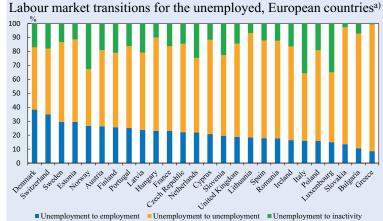


a) In- and outflows as a percent of total employment for blue collar and white collar workers for the entire area covered by the Danish Employers Association. Shifts in job for the same employer (work place) are not included. Source: Danish Employer Association.

visible. Outflows from jobs increased and inflows into jobs declined. More striking is the fact that turnover levels recovered to the levels seen prior to the boom period, despite the overall level of activity remaining gloomy, cf. Figure 4.4. The turnover rates are high from a comparative perspective, and the transition rate from unemployment into employment is also high, cf. Figure 4.8.

Two additional facts are important: exit rates from unemployment are not significantly lower than during the boom years before the Great Recession, for example. Accordingly, most unemployment spells are short. The average duration of an unemployment spell among those on unemployment benefits was 17 weeks in 2014 (compared to about 13 weeks during the boom period). Importantly, exits from unemployment into employment are also back to normal levels.

Figure 4.8



[&]quot;Unemployment to employment Unemployment to unemployment Unemployment to unemployment to mactivity

a) This figure shows the transition rate between given labour market status quarter-to-quarter, here from unemployment to employment, unemployment or inactivity and for the first two quarters of 2015. Data is not seasonally adjusted.

Source: Eurostat and EEAG calculations

¹⁸ Benefit duration was further reduced from four to two years. A recent reform, following the work of the Unemployment Insurance Commission, has allowed for more flexible employment eligibility rules related to claiming benefits.

¹⁹ A new statistic comprising the entire labour market shows the turnover rate at the same level and a rising trend in job-matches (inflows) from 2009 to 2014. This statistic is only available since 2009 and does not display the changes induced by the Great Recession.

The point of the evidence reported here is that although unemployment has increased, most unemployment spells are short (close to 50 percent of total unemployment is made up of spells of less than three months in 2013).20 As a result of the high level of turnover in the labour market, youth and long-term unemployment are low by international comparison. High turnover rates thus effectively work as an implicit work sharing mechanism. Equal burden sharing is important from a distributional perspective, but it is also of structural importance. The alternative would be longer unemployment spells concentrated on a smaller group of individuals, more long-term unemployed and a corresponding depreciation of human and social capital. In short, high turnover rates reduce the negative structural implications of high unemployment.

One critical question concerning the flexicurity model is whether labour turnover is excessive. Short tenure may reduce the incentive of both firms and workers to invest in firm-specific human capital, causing lower productivity growth. It is not clear that this is a major problem. International comparisons indicate that human capital acquisition of employees is fairly high.²¹ Empirical studies also show that the turnover is conducive to structural adjustments, which in turn improves productivity growth; see Parrotta and Pozzoli (2012).

Excessive temporary lay-offs may also follow, since employers indirectly obtain a subsidy when workers are compensated by unemployment insurance in case of temporary variations in the need for labour. Employers contribute to unemployment insurance financing by covering the first three days of an unemployment spell (if the employment relation has had a duration of at least three months), and this may fall short of the social costs of lay-offs; see Blanchard and Tirole (2003).

4.4.2 Labour market policies

Activation policies are an integral part of the Danish labour market model. Policies in this area have been continuously revised in the light of experience, research and policy discussions. Most recently, the focus has been two-fold. Firstly, there is rising pressure on the young to obtain an education. This is reflected in a recent reform of the social assistance system. For indi-

²⁰ For unemployed individuals entitled to unemployment insurance. ²¹ The share of persons in the age group 24–70 years receiving lifelong education is way above the EU average, according to Eurostat data viduals below the age of 30 (previously the critical age was 25) without a qualifying education, the social assistance level has been reduced so that it does not provide better compensation than study grants. To be eligible for support, it is mandatory for individuals to commence education, or participate in activation programmes.

Secondly, activation policies have been changed from a rather rigid scheme to a more flexible system directed towards labour market needs and an individual focus relying more on job-search/matching than programme participation, as well as incentives to ensure a quicker return to employment. In the first part of an unemployment spell (3 months for persons below age 30, 6 months for persons aged 30 to 49, and 3 months for persons above age 50), the main intervention consists of meetings and counselling to strengthen and target job-search, and further into the unemployment spell this is followed by programme participation (a right and a duty). All of the unemployed also have a right to participate in an education programme lasting up to six weeks (individually chosen from a short-list). The pendula thus swings from very rigid activation policies to more flexible policies, and since the policy shift is still under implementation, it is too early to assess how effectively it is working.

4.5 Future challenges

Complacency about past performance may blind, and it is crucial to consider how well prepared Denmark is in relation to future challenges including ageing and migration. How will they affect the model?

4.5.1 Ageing and fiscal sustainability

The global ageing trend also affects Denmark, although the increase in the dependency ratio is to the lower side since fertility rates are comparatively high. The key driver behind ageing is the trend increase in longevity.

A changed age composition may put public finances on an unsustainable path, and this concern has been high on the policy agenda for some years.²² A number

²² The core of the Danish pension system is a combination of taxfinanced public pensions and labour market pensions. The latter is a funded defined contribution scheme, which is bargained between social partners (participation is thus mandatory for the individual).

of reforms have been enacted and they all share the common strategic aim of increasing labour supply and employment, which, in turn, improves public finances via lower expenditure on social benefits and higher tax revenue.

A pivotal element in these reforms has been increases in the statutory retirement/pension ages via reforms undertaken in 2006 (the welfare reform) and 2011 (the retirement reform). Both the early retirement age and the statutory pension age will increase in steps from currently 60 and 65 years to

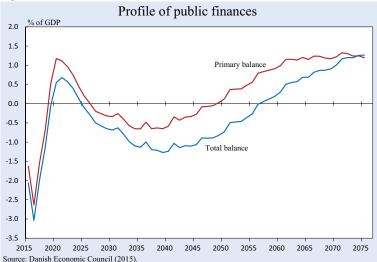
62 and 67 years, respectively.²³ When these changes are phased in, statutory retirement ages will be indexed to the life expectancy at the age of 60 in order to target an expected pension period of 14.5 years (17.5 including early retirement). Currently, the expected pension periods are 18.5/23.5 years, so the reforms are quite ambitious from this perspective.

Moreover, all key social transfers constituting the social safety net (disability pensions, social assistance, unemployment insurance etc.) have been reformed to further increase the labour supply and employment.

The labour market implications of the reforms are rather large, leading to a projected increase of five percentage points in Denmark's labour force participation rate, which was already one of the highest in the OECD at the outset. The labour market challenge is to ensure that these increases in labour supply translate into employment.

The reform initiatives ensure that Danish public finances meet the criteria for fiscal sustainability (see Danish Ministry of Finance, 2015, and Danish Economic Council, 2015).²⁴ In that sense, the welfare system is robustly funded. The projected profile for public finances, taking into account both ageing and the reforms outlined above, is shown in Figure 4.9. Although the technical requirement for fiscal sustainability is satisfied, the profile for public finances is problematic since it involves a long string of years with deficits to be followed by surpluses in the distant





future. This implies that the public balance will be in conflict with the fiscal budget norm, stipulating that the structural budget deficit is not to exceed 0.5 percent of GDP. Moreover, the margin for coping with business cycle fluctuations within the 3 percent deficit limit will be small. The particular budget profile arises mainly because life expectancy has grown substantially since the reforms were agreed in 2011 (by about 1½ year for a person at the age of 60). Since the indexation mechanism linking retirement ages to longevity will not be operative until later, some cohorts gain a longer pension period than originally planned. In the long run the indexation formula for statutory pension ages is rather tough, since an expected pension period of 14.5 years implies that the share of life spent in the labour market increases when longevity goes up; hence, the long-term improvement in the budget. This latter feature may call into question the medium-run political sustainability of the indexation mechanism.

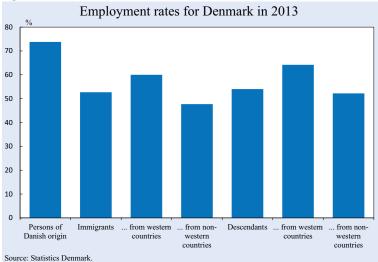
4.5.2 Migration

Migration is a particularly sensitive issue in Denmark. It is a predominant theme in public debates, and has been a major issue in parliamentary elections for a number of years. Denmark has traditionally been very open, and in other respects known for having rather liberal views on the way people live their lives. The recent asylum crisis has further attenuated the migration issue, and Denmark has opted out of participating in a common EU-solution to the problem.²⁵

The early retirement period is reduced from five to three years.
 Defined such that the present value of projected revenues is at least as large as the present value of projected expenditure, plus initial net-debt for the public sector.

²⁵ Measured relative to population size, Denmark received the fifth most asylum seekers in 2014 among EU countries. The relative position will be lower for 2015.

Figure 4.10



It is well-established that the implications of immigration for public finances are closely aligned with the employment rate of immigrants; see OECD (2013) and Hansen et al. (2015). The higher the employment rate, the larger the net contribution to public finances, and vice versa. This is no surprise since most of the jobless are entitled to some form of social transfer and the tax burden on earned income is high. In an extended welfare state, public finances are highly sensitive to the employment rate; see Andersen (2015a).

It is therefore impossible to generalise about how immigration affects public finances, and thus the financial viability of the welfare model, since this depends on the employment record of the group in question, cf. Figure 4.10. The labour market performance of immigrants varies significantly, making it difficult to generalise. But at an aggregate level, immigration from high-income countries (higher share of migrant workers, students, well-educated etc.) may improve public finances (be neutral), while immigration from low-income countries (more asylum seekers, family reunification, lower qualifications etc.) tends to negatively impact public finances.

The design of the welfare model in general may in itself be an impediment to labour market entry for some immigrants. ²⁶ The Danish labour market is characterised by relatively high minimum wages and a compressed wage structure. Working in a poorly paid position is not an option. It is a consequence that there are

relatively high qualification requirements for finding a job, and few low-skilled jobs.

In addition, the reference point for labour market participation is high for both men and women. By international comparison, the employment rate for various groups of immigrants is not particularly low in Denmark. However, employment gaps are large, reflecting generally high employment rates for natives (the welfare model is an "employment model"), especially for women. Lower labour market participation rates

may also reflect different cultures and norms for some immigrants with respect to gender roles, for example. This effect may be compounded by language barriers, problems related to recognising foreign education qualifications and possible discrimination in the labour market.

The policy debate on migration has been lively in Denmark, and various policy initiatives have been taken.

Firstly, immigration rules have been tightened. International conventions and EU-rules limit the room for manoeuvre in this respect, but Denmark has introduced tougher criteria for family unification.²⁷ For voluntary migrants from outside the EU, there are selection criteria that depend on qualifications, job opportunities etc. The latter follows an international trend and a "race to the top" to attract the best qualified labour; see for example Chaloff and Lemaître (2009).

Secondly, there have been several changes in the social safety net prompted by immigration issues. The welfare model builds on the principle of universality; that is, equal rights for all independent of past history (employment, tax payments etc.). This has not been changed for welfare services, but there have been changes for social transfers. However, the options are constrained, not least due to EU-rules. Since eligibility cannot be made directly dependent on nationality, screening is attempted via eligibility criteria in the social safety net.

²⁶ Empirical evidence does not find strong support that welfare arrangements function as magnets attracting migrants; see Pedersen et al. (2008) and Giuletti et al. (2013). There is some indication of "welfare magnet" effects between the "old" and "new" EU member states (see De Giorgi and Pellizzari, 2013), but not more generally influencing EU migration flows; see Skupnik (2014).

²⁷ The so-called 24-years rule is much debated. It requires both spouses to be at least 24 years old. Additionally, the couple's connection to Denmark must be stronger than to the country of origin, unless one spouse has lived in Denmark for more than 26 years.

The core element of the social safety net is the socalled social assistance, which provides a floor for economic support to all those unable to support themselves and their family. A residence principle for eligibility was introduced in 2002, implying that full social rights to social assistance are attained after residence in Denmark for 7 out of the last 8 years. In 2006 this was further strengthened by adding an employment criterion, stipulating that eligibility depends on having been in ordinary employment for an accumulated period of at least 21/2 years within the last 8 years.28 Individuals who do not fulfil these requirements are entitled to a different transfer (start aid/introduction benefit) equivalent to roughly half of the value of social assistance. Although, these conditions did not achieve a complete screening, since they also affected Danes returning after extended periods abroad, they did have the largest effect on groups of immigrants with a low employment rate and thus very likely to receive social assistance.

This scheme was extensively debated, not least because the employment effects of the benefit reductions were small. The above-mentioned rules were abolished by the Social Democratic government in 2012, but the newly elected Liberal government (2015) has reintroduced a similar scheme. The frequent changes in policies in this area reflect the sensitivity of the issue and different political standpoints on it, but the overall trend has been towards a tightening of the rules on both immigration and access to the social safety net.

A particularly controversial issue is the universal state child subsidy (børnechecken) to which all parents are eligible. This implies that a guest worker who leaves his family in his home country is still eligible to the subsidy, even if the children are not living in Denmark. To many this is a sign that the generosity of the Danish welfare model goes too far. In 2010 an eligibility condition was introduced, stipulating that full entitlement to the subsidy requires two years of residence in Denmark (the subsidy is reduced proportionally in case of a shorter residence period, starting with 25 percent of the subsidy after 6 months' residence). This rule applies to all immigrants, including those from EU countries. The EU court has twice (in 2011 and 2013) ruled this to be in conflict with EU rules. Since 2013 the scheme has been administered according to EU rules, but the issue is being contested by policymakers.

Immigration, particularly by migrant workers, also directly affects labour markets. As for other "old" EU countries, there has been an upward trend in migrant workers. While this is an intentional consequence of EU-enlargement and the single market, there have been concerns about its labour market effects. Firstly, there have been problems in terms of ensuring compliance with labour market and tax rules. Secondly, many labour market issues in Denmark (like minimum wages, for example) are not regulated by law, but settled via collective wage bargaining. Among unions there is thus a concern that migrant workers undermine collective bargained outcomes and release "race-to-the-bottom" mechanisms.

4.5.3 Welfare services – increasing demands

Denmark – and the other Nordic countries – stand out by virtue of the extensive public provision of welfare services like education, care and health. This has important implications for equal access (universality) and opportunities, but it also contributes to redistribution. Moreover, solutions offered by the welfare state are supposed to meet reasonable standards acceptable to most, and are not supposed to be of a lower standard only acceptable to those who cannot afford better quality private solutions.

The extensive provision of welfare services raises various challenges. Services may be exposed to both the Baumol cost disease (low productivity growth) and the Wagner effect (high income elasticity of demand), which creates an expenditure surge. This is most clearly seen in the area of health. Life sciences make ongoing progress offering new and better treatment, but this immediately translates into an expenditure pressure on public health expenditure.

The importance of the health area is reflected in a consensus across the political spectrum, irrespective of views on the size of the public sector, that health expenditure should increase. As mentioned above, the fiscal targets for expenditure growth in the early 2000s were violated primarily due to a public expenditure hike in health.

Education is a topic of lively debate in Denmark, which has the highest public education spending as a

²⁸ A further employment criterion was added to target couples, implying lower levels of social assistance (for those meeting the abovementioned criterion) to couples with an insufficient employment record.

share of GDP among all OECD countries. Yet educational outcomes are mediocre, and there is a great deal of discussion over the achievements of the educational system in both qualitative and quantitative terms; see e.g. Bogetoft et al. (2015). In qualitative terms, Denmark does not score particularly high in the Pisa tests, for example. In quantitative terms, around 1/5 of a cohort still does not get any education beyond basic schooling (10 years). Moreover, there is also the problem of high turn-over (most youths embark on higher education, but drop-out rates are high) and low completion rates. A further issue is the choice of subject, and whether the consumption value of education dominates the investment value (relevance for the labour market), since education is publicly financed and study grants are relatively generous.

All levels of the educational system are currently undergoing reforms to address some of these challenges. Some of these reforms are still in the pipeline, and others are in the implementation phase, meaning that it is still too early to judge their success.

The large level of public consumption (and thus the high public employment level) raises important questions on productivity and efficiency in the public sector.²⁹ These issues are not new, but have been brought to the fore by the discussion of the financial sustainability of the welfare model. While reforms imply that the requirements for fiscal sustainability are met, this only ensures that it is possible to finance current standards. Financial scope for improvements needs to be found if they are to be realised. Since reforms have already considered most routes by which labour supply and employment can be increased, the need to prioritise will be sharper in the future. Pressures to increase expenditure in various areas require financing via tax increases, cuts in other areas, or improvements in efficiency and productivity. Most policymakers refrain from the first two, and the focus therefore switches to efficiency and productivity within the public sector.

It is much easier to agree in principle on the need for productivity and efficiency improvements in the public sector than to deliver such improvements. There are ongoing discussions on this. Explicit targets have been formulated, but there are obvious measurement problems in controlling whether these targets are met. Some recent changes to make public provision more productive have been taken, a controversial example being a new "time agreement" for teachers. Outsourcing may be a solution in some areas, but more generally it is important to have a clear management structure for public institutions, so that their performance can be evaluated continuously and in a systematic way.

4.6 Conclusion

Public debates often pronounce particular countries to be "super-models", as is the case for Germany and Sweden, for example, and more recently for Denmark. Despite differences in country performances and lessons to be learned from cross-country benchmarking, such discussions easily become superficial, leading to a naïve "copy and paste" view. This neglects the complementarity between different policy instruments, the institutional structure and the political environment. History also documents that the "super-models" have their ups and downs, stressing that performance is shock dependent and various models/countries have different comparative advantages.

The relatively favourable performance of the Danish economy is not the result of a quick fix, but the outcome of a long string of reforms addressing structural problems and very explicitly taking into account the constraints faced by a small and open economy. The latter is immediately clear from the fixed exchange rate policy and the need to ensure that it is credible. This has passed a market test since the interest rate spread vis-à-vis the euro area has been very small for years, and even negative in some periods. The Danish case also shows that policy choices are possible even in an era of globalisation. Denmark's public sector plays a larger role than in most other countries. The interesting lesson is how the welfare state has been designed so as to balance concerns over economic performance on the one hand, and the public provision of welfare services and the pursuit of egalitarian outcomes on the other. Two points are particularly important. Firstly, while the public sector is large, the private sector is very liberal in Denmark. The Danish model is thus not "politics against markets". Secondly, welfare arrangements have a strong active focus on supporting labour market participation and human capital acquisition. Since the financial viability of the welfare model ultimately depends on maintaining a high employment level in the private sector, the conflict between welfare objectives and

²⁹ Productivity in this context refers to whether a given task is solved cost efficiently or with the highest possible quality for given costs, while efficiency refers to whether the right tasks are being addressed.

economic performance is not as stark as it may first appear.

Looking forward, the future holds both political and economic challenges for Denmark. On the political side, it is unclear whether Denmark is a fully-fledged member of the EU. Denmark's rejection of the euro and the exceptions to EU regulations that it has introduced on a number of other issues makes it unclear whether Denmark is in or out. Is it a tenable position to be a selective member? This question was revitalised by the referendum in December 2015 on whether Denmark should change its blanket opt-out on all EU justice and home affairs cooperation in favour of an opt-in model as adopted by the UK and Ireland. The outcome was a "no", further confirming Denmark's "side-lined" position on EU cooperation.

Looking to the future, migration is a particularly thorny issue for a country with extensive welfare arrangements. Even if welfare arrangements are not magnets attracting migrants, the financial viability of the welfare model rests on a high employment level. Egalitarian objectives imply high entry requirements in the form of qualifications to find jobs (to qualify for high minimum wages), as well as generous social transfers. This causes a very tight relation between the employment rate and how public finances are affected by immigration. Denmark thus faces a difficult trilemma of having to choose between extremely restrictive immigration rules (constrained by international treaties and EU rules), lowering minimum wages or differentiating between social rights. All three avenues challenge the basic objectives of the welfare state. To date Denmark has largely pursued the first and third avenues, but how far is it possible to proceed in these directions?

Ageing challenges fiscal sustainability. In the Danish case, the first test has been passed. A number of reforms, notably increases in pension ages, imply that the criterion for fiscal sustainability is met. The second test is to ensure that the reforms work out and deliver the anticipated effects. Policy discussions often focus on new initiatives to be taken; but it is equally important to ensure the effective implementation of already approved reforms and make them work. In the case of Denmark this is not a trivial point, since its economic policy strategy relies critically on substantial increases in labour supply and employment. This is not an impossible task, but not a trivial one either. Retirement ages are going to increase significantly, and although

this is motivated by increasing longevity and healthy ageing, there are still hurdles to pass. Does the design of the system provide the right economic incentives to support increases in the labour supply and employment? How can the level of qualification be maintained and developed to facilitate such increases?

The strategy of ensuring both high employment and an equal distribution of income depends critically on ensuring not only a high level, but also a reasonably equal distribution of qualifications. Despite the substantial resources devoted to education, guaranteeing "value for money" in education is a major challenge. A particularly severe problem is the large share of young cohorts who do not receive a labour market relevant education.

There are also challenges within the public sector. Since it is large, and not directly exposed to market forces, it is essential to maintain focus on efficiency and productivity within the sector. Public finances will be strained in the future, and room for improvement has to be found either via the reallocation of resources or improvements in efficiency and productivity.

References

Adema, W., P. Fron and M. Ladaique (2011), "Is the European Welfare State Really More Expensive? Indicators on Social Spending, 1980–2012," *OECD Social, Employment and Migration Working Paper* No. 124.

Andersen, T. M. (2015a), "The Welfare State and Economic Performance," Bilaga Långtidsutredningen 2015, SOU 2015:53, Ministry of Finance, Stockholm.

Andersen, T. M. (2015b), "The Danish Flexicurity Labour Market during the Great Recession," *De Economist* 163, pp. 473–90.

Arnold, J., B. Brys, C. Heady, A. Johannson, C. Schwellnus and L. Vartia (2011), "Tax Policy for Economic Recovery and Growth," *Economic Journal* 121, pp. F59–80.

Bogetoft, P., E. Heinesen and T. Tranæs (2015), "The Efficiency of Educational Production: A Comparison of the Nordic Countries with other OECD Countries," *CESifo Working Paper* No. 5514.

Blanchard, O. and J. Tirole (2003), "Contours of Employment Protection Reform," *MIT Department of Economics Working Paper* No. 03-35.

Chaloff, J. and G. Lemaître (2009), "Managing Highly Skilled Labour Migration: A Comparative Analysis of Migration Policies and Challenges in OECD Countries," *OECD Working Paper* No. 79.

Danish Economic Council (2014), The Danish Economy – Autumn (Dansk Økonomi – Efterår 2014), Copenhagen.

Danish Economic Council (2015), The Danish Economy – Autumn (Dansk Økonomi – Forår 2015), Copenhagen.

Danish Ministry of Finance (2015), Danish Convergence Programme, Copenhagen.

De Girogi, G. and M. Pellizzari (2013), "Welfare Migration in Europe," *Labour Economics* 16, pp. 353–63.

Gemmell, N., R. Kneller and I. Sanz (2011), "The Timing and Persistence of Fiscal Policy Impacts on Growth: Evidence from OECD Countries," *Economic Journal* 121, pp. F33–58.

Giulietti, C., M. Guzi., M. Kahanec and K. F. Zimmermann (2013), "Unemployment Benefits and Immigration: Evidence from the EU," *International Journal of Manpower* 34, pp. 24–38.

Gordon, R. (2007), "Issues in the Comparison of Welfare between Europe and the United States," *Working Paper*, North-Western University.

Hansen, M. F., M.L. Schultz-Nielsen and T. Tranæs (2015), "The Impact of Immigrants on Public Finances – A Forecast Analysis for Denmark," *Rockwool Foundation Research Unit Study Paper* No. 90.

Helliwell, J. F., H. Huang and S. Wang (2015), "The Geography of World Happiness," in: J. Helliwell, R. Layard and J. Sachs, eds., World Happiness Report 2015, Sustainable Development Solutions Network, New York, pp. 12–41.

Mercer (2015), Melbourne Mercer Global Pension Index, Australian Centre for Financial Studies, Melbourne.

OECD (2013), "The Fiscal Impact of Immigration in OECD Countries," in: *International Migration Outlook 2013*, OECD, Paris.

OECD (2015), OECD Employment Outlook 2015, OECD Publishing, Paris

Parrotta, P. and D. Pozzoli (2012), "The Effect of Learning by Hiring on Productivity," *The RAND Journal of Economics* 43, pp. 167–85.

Pedersen, P. J., M. Pytlikova and N. Smith (2008), "Selection and Network Effects: Migration Flows into OECD Countries 1990–2000," *European Economic Review* 52, pp. 1160–86.

Sala-i-Martin, X., B. Bilbao-Osorio, A. Di Battista, M. Drzeniek Hanouz, C. Galvan and T. Geiger (2014), "The Global Competitiveness Index 2014–2015: Accelerating a Robust Recovery to Create Productive Jobs and Support Inclusive Growth," in: K. Schwab, ed., *The Global Competitiveness Report 2014–2015*, World Economic Forum, Geneva, pp. 3–52.

Skupnik, C. (2014), "EU Enlargement and the Race to the Bottom of Welfare States," *IZA Journal of Migration* 3:15, pp. 1–21.

Sinn, H.-W. (2006), "Scandinavia's Accounting Trick," *Ifo Viewpoint* No. 80.

Statistics Denmark (2014), Offentlig production og effektivitet 2005–2012 (Public Production and Efficiency 2005–2012), Copenhagen.

Stiglitz, J. E., A. Sen and J.-P. Fitoussi (2009), Report by the Commission on the Measurement of Economic Performance, and Social Progress, Paris.

World Bank (2015), *Doing Business 2015 – Going Beyond Efficiency*, The World Bank Group, Washington, D.C.

WESTERN BALKANS: COMING TOGETHER

5.1 Introduction

This chapter outlines some of the key features of the economic transformation of the Western Balkans (WB) over the past 15 years. We discuss the achievements of this transformation, as well as some of the related pitfalls and challenges. In doing so, we draw lessons from those countries of the Baltics¹ and CESEE² regions that have been undergoing similar processes for a decade longer. We define the WB as Albania, Bosnia and Herzegovina (BiH), Croatia, Former Yugoslav Republic (FYR) Macedonia, Montenegro, and Serbia.³

The WB region, with a current population of around 20 million, is the gateway between West and East, between Europe and the Middle East. It is a region steeped in history: over 20 Roman emperors in the 3rd and 4th centuries A.D. were born on the territory of WB.⁴ The boundary between Eastern and Western Roman empires and, consequently, between the Orthodox and Catholic worlds, as well as the border between the Austrian and Ottoman Empire passed through the region. As a result, the WB region has been home to an exciting, but often volatile mix of ethnic and religious groups throughout history, including Orthodox and Catholic Christians as well as Muslims.

The contemporary political landscape of the WB region was shaped in the 1990s with the disintegration of the former Yugoslavia, as all of the countries that are now members of the WB region, with the excep-

tion of Albania, are former Yugoslav republics.5 Yugoslavia was unique among the former socialist countries on many levels. It enjoyed excellent economic, cultural and political ties with the West and, at the same time, a solid working relationship with the Eastern Block. As a result, Yugoslavian citizens, unlike other Eastern Europeans, could travel to most countries of the world visa-free. As one of the leaders of the Non-Aligned movement, a block of over 100 developing economies of Africa, Asia and Latin America, Yugoslavia also had excellent economic and political ties with most emerging economies. Yugoslav firms led many large infrastructure projects throughout the developing world. Tens of thousands of students from non-aligned countries studied in Belgrade, Zagreb, Ljubljana, and Sarajevo.

Yugoslavia's economic system was also unique and can be described as socialist market economy. It was based on labour-managed (socially-owned) firms that competed in goods and services markets. Managers made production decisions together with workers (these decisions were not the result of a strict central planning), but could not (until the late 1980s) own their companies outright. Farmers, by contrast, could own land (up to 10 hectares). Importantly, the quality of goods and services was high, with the German industrial DIN standard serving as a template in Yugoslavia. One key feature of the Yugoslav system was a strong reliance on remittances from its citizens living abroad (in Germany, Austria, Switzerland, etc.).6 In order to attract their savings, the government had encouraged savings accounts in foreign currencies. Decades later, this measure is still haunting policymakers in Yugoslavia's successor states (see below) as it led to very high levels of euroisation in the region and made it difficult to enact a currency devaluation.

The system ground to an abrupt halt in the late 1980s. Aiming to reform the country, move it towards the membership of the European Economic Union and trying to fight chronically high inflation, the last prime

 $^{^{\}scriptscriptstyle 1}$ $\,$ This group of countries consists of Estonia, Latvia and Lithuania.

² This group of countries includes the central European countries Czech Republic, Hungary, Poland, Slovakia, and Slovenia, as well as the south eastern European countries Bulgaria, and Romania.

³ Geographically, the province of Kosovo also belongs to the region of WB. Since its unilateral secession from Serbia is not recognised by Serbia itself, by some members of the EU, or by the United Nations, we exclude it from consideration. For consistency's sake, all data on Serbia in this paper excludes Kosovo.

⁴ Of that number, 18 were born on what is now the territory of Serbia alone.

⁵ The only former Yugoslav republic that is not a member of the WB is Slovenia.

⁶ In 1989, remittances to Yugoslavia totalled around 6.2 billion US Dollar, or around 19 percent of the world's total remittances for that year

minister of Yugoslavia, Ante Marković, introduced a number of reforms. These reforms included the internal convertibility of the dinar and a fixed exchange rate with respect to the Deutsche Mark. The fixed exchange rate coupled with the large interest rate differential between the Yugoslav dinar and the Deutsche Mark led to arbitrage opportunities, to a fast and unsustainable increase in Yugoslavia's trade deficit and, eventually, to a depletion of currency reserves. The peg failed, causing a spiralling rise in inflation.

The economic difficulties, requests for full political liberalisation and the introduction of the multi-party democracy, and, above all, the national aspirations of the peoples that made up Yugoslavia, led to popular discontent. The first multi-party elections brought to the fore leaders in the largest republics (Serbia and Croatia) that had decided to use unresolved national issues to boost their popularity and solidify their grip on power. Prime Minister Marković tried to present an alternative to these nationalist movements. However, his power base was not strong enough and he failed to preserve the unity of the country and transform it in a new, more democratic fashion. Civil war ensued. It was the bloodiest conflict seen in Europe since the Second World War, resulting in over 100,000 deaths, several hundred thousands of refugees and the wholesale devastation of the country's human and physical capital.

The economic costs of the break-up of Yugoslavia alone were enormous. A relatively vibrant, well-integrated market was violently fragmented, property belonging to individuals and firms from other republics was wilfully expropriated or simply destroyed. In addition, Serbia and Montenegro were placed under a regime of strict UN-imposed economic, cultural, scientific and political sanctions for several years which, for all practical purposes, cut them off from the rest of the world. State institutions significantly weakened, together with the rule of law. The economy became increasingly informal. Corruption, previously a moderate problem, became endemic in most parts of the former Yugoslavia.

By 2001, more cooperative governments came to power in the entire region. Albania joined this mix. Albania's socialist experience was very different from that of Yugoslavia. The country remained in a virtually complete self-imposed isolation for at least 40 years, maintaining a somewhat closer relationship only with China. The collapse of the system left

Albania as the poorest country in Europe, but determined to make progress. Changes at the dawn of the new century represented a real chance for a new beginning for the entire WB region. While the initial conditions were challenging for most countries in the region, they are trying to catch up with their peers in CESEE and the Baltics and, eventually, join the European Union.

5.2 Growth and income patterns

From 2001 until the inception of the global crisis the WB, along with the rest of emerging Europe, experienced strong growth (see Figures 5.1 and 5.2). During that period Albania and Serbia boasted the highest regional growth rates of around 6 percent per annum on average. Baltic countries, Romania and Slovakia grew even faster. Especially stellar were growth rates of Latvia and Lithuania, averaging around 7.5 percent per annum (see Figure 5.1).⁷

At that time ample money had become available for investment throughout emerging Europe. Foreign direct investment started entering the WB region. The first sectors to be liberalised were financial services (banking), goods trade and mobile telecommunications at a later date. The transition to a market economy became a political priority in the region. The privatisation of formerly state-owned and socially-owned companies8 led to an increase in total factor productivity, which, along with strong growth in private consumption, fuelled growth in that period. The consumption was driven by ample access to mortgage lending, consumer credit and government borrowing. In some WB countries such as Serbia, the funds raised by privatisation were mostly consumed rather than invested. Thus, throughout the region, imported funds were used for consumption rather than capital accumulation and growth, developing the non-traded goods sectors and imports at the expense of exports.9

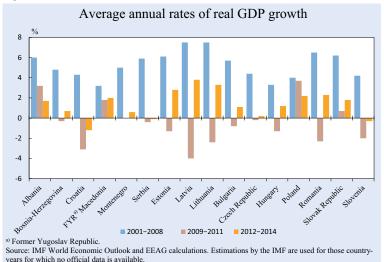
The consumption-led growth model was in no small measure driven by exporters, banks and the financial investors of developed economies. Clearly, there was (and, partly, still is) a desire in the population of the region to catch up with "Western" consumer goods, so

 $^{^7\,}$ In a recent IMF report, Murgasova et al. (2015) provide a detailed account of the transition experience of WB in the past 15 years.

Socially-owned companies were remnants of the unique socialist system of Yugoslavia.

⁹ One partial exception to this rule was Macedonia, which re-focused on more diversified growth and the development of tradeable goods exporting capacity from around 2004 on.

Figure 5.1



the "push" from exporters was warmly welcomed by the "pull" from WB consumers. Financial investors, expecting a repetition of what was experienced in Central and Eastern Europe, were banking on a gradual convergence of local financial markets with those of Europe, while getting a lot of "bang for their buck" from high local interest rates and foreseeable foreign exchange trends. With all that in mind and "easy money" from both money markets and Western depositors, foreign banks who set up shop locally stood by to provide financing, hence reinforcing this one-sided trend.

The industrial capacity of the region, already seriously impaired and technologically out-of-date, shrank even further in that period. Local currency appreciation and wage increases indirectly or directly financed by the inflow of foreign capital went beyond produc-

tivity increases and revalued the economy, depriving it of its international competitiveness. The problems were, in that sense, very similar to those in southern European countries, which also experienced an inflationary credit bubble due to the abundance of cheap foreign capital and the resulting wage increases.¹⁰

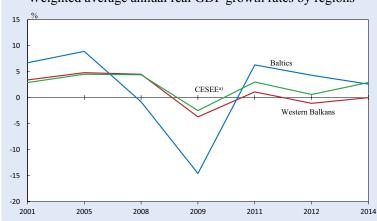
Private trading companies, protected from true competition, created oligopolies in the region. Their business model was largely to import foreign products and sell them for a hefty premium

while, at the same time, squeezing domestic suppliers utilising market power. Obviously, there were natural limits to such a growth model. These limits were exposed when the crisis hit.

The growth model in 2001–2008 led to large and unsustainable current account deficits in both the WB and Baltic regions (see Figures 5.3 and 5.4). This reflected the fact that both regions lived beyond their means at that time period. A particularly stark example is that of Montenegro where the current account deficit reached almost 50 percent of GDP in 2008 and of Serbia, where it went from a surplus of 2 percent of GDP (in 2001) to a deficit of over 21 percent (in 2008). The situation was structurally different in many CESEE countries, since an important fraction of their deficit came from importing machinery needed to build large tradeable goods sector (Romania and Slovakia, for example).

Figure 5.2

Weighted average annual real GDP growth rates by regions



a) Central European and south eastern European countries.
Source: IMF World Economic Outlook and EEAG calculations. Estimations by the IMF are used for those country-years for which no official data is available.

With the onset of the great recession, growth patterns started to diverge sharply across the regions of emerging Europe and between countries of the same region.¹¹ The crisis hit the Baltics as early as 2008, while the WB and CESEE regions continued growing until 2009. As a result of the Vienna Initiative 1, large Western financial groups that dominate the financial landscape of emerg-

EEAG Report 2016

101

¹⁰ See Sinn (2014), Chapters 2 and 4.

¹¹ Bakker and Klingen (2012) document experiences in emerging Europe during the 2008–2009 crisis.

Figure 5.3

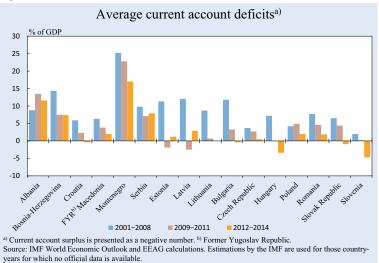
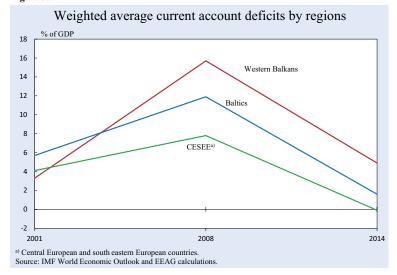


Figure 5.4



ing Europe agreed not to deleverage in the WB region during the height of the crisis. Some even increased their lending during that period. After the measures expired, however, the WB region was hit hard by deleveraging. As many firms in the region struggled with liquidity, the share of nonperforming loans increased substantially (see Section 5.6).

While most of Europe was in recession in 2009, Albania and FYR Macedonia continued to grow, albeit at lower rates. As we shall see later, these are countries that improved their business climate in the first years of transition along several dimensions (this is particularly true of FYR Macedonia). On the other hand, Serbia, Croatia and BiH were hit by recessions. The debt-driven bubbles burst like those in southern Europe. The response to the crisis in these countries varied, but typically involved providing

government support to struggling businesses. Serbia used various forms of state subsidies for the large loss-making state companies. In addition, the government instituted programmes that would subsidise banks to lower the interest rates for eligible private companies. This led to a sharp increase in public debt: Serbia's gross government debt increased from 32 percent (in 2008) to over 72 percent of GDP (in 2014). During the same period, Croatia's public debt rose from 36 percent to 80 percent of GDP. For emerging countries that mostly borrow in foreign currency, such debt levels can easily become unsustainable.12

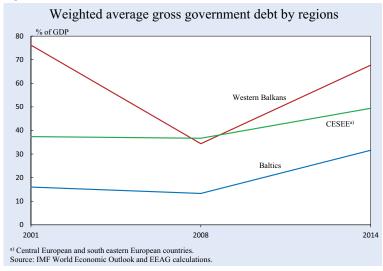
In contrast to the WB region, the Baltic countries had little public debt before the crisis. While Estonia continues to have very low debt levels (below 10 percent of GDP), the debt levels of Lithuania and Latvia grew close to 38 percent by 2014. In the CESEE region, Slovenia tried to preserve its unique economic model featuring a significant involvement of the state in the large business sector and at-

tempted to bail out large government-controlled banks and companies. As a result, it increased its public debt from 22 percent (in 2008) to over 80 percent of GDP (in 2014). Figure 5.5 illustrates the change in government debt as a fraction of GDP for the three regions.

When the influx of foreign credit dried up, a change in the economic model was needed in order to address unsustainably high current account deficits. As shown in Figure 5.3, most countries in our sample significantly and painfully reduced their current account deficits by sliding into recessions and curtailing their imports; some even turned their deficits into a surplus (Hungary, Slovenia, Slovakia, and Bulgaria). The only exception in the entire sample, in that respect, is

 $^{^{12}}$ Koczan (2015) provides an overview of fiscal deficits and the public debt experiences of the WB over the past 15 years.

Figure 5.5



Albania. Its current account deficit continued to grow even after the crisis hit and is expected to reach almost 15 percent of GDP in 2015. For sure, this is another bubble in the making.¹³ While Montenegro slightly improved the overall situation with its current account deficit, it was still astronomical, paving the way for a disaster.

A borrow-and-spend strategy did not help Serbia and Croatia to return to growth. In the period of 2012-2014 Serbia dipped in and out of recession a couple of times while Croatia contracted for 4 years. It became increasingly obvious to the governments of the WB that what they called a "consumptiongrowth model" was, in fact, just over-borrowing and bubble creation with a temporary hype, followed by misery when the bubble burst, as has been observed in so many countries of this world. Countries like FYR Macedonia that were reforming their business environment had healthier growth than those lagging behind in reforms. In Serbia, the decision was made to refocus on the production of tradeable goods and services by attracting large multinationals. The free trade agreement that Serbia has with Russia, Belorussia and the Ukraine, as well as with the EU, the proximity to key EU markets and relatively low labour costs, make Serbia a potentially attractive destination for foreign direct investment.

As in the WB, the growth in the Baltics prior to the crisis was largely driven by an increase in consumption and ample foreign credit. After the crisis hit, however, the Baltic governments reacted quite differ-

ently from the governments of the WB countries. In order to preserve the peg with the euro and their prospects of joining the Eurozone, they underwent real devaluations by rigorously cutting wages and prices and imposing harsh austerity measures with large cuts in public expenditure.14 As a result, the region contracted by over 14 percent in 2009. After that year, however, the period of recovery began. By 2012 the Baltics returned to strong growth. By contrast, the WB countries, led by Croatia, dipped back into the negative

territory of growth. While WB countries are only gradually reducing their current account deficits, Baltic countries have already balanced their current accounts.

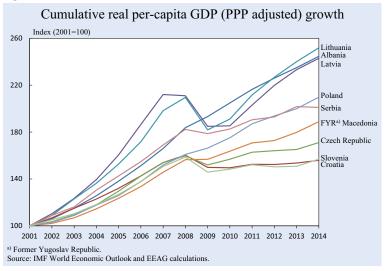
In the CESEE region, several countries depend on tradeable goods exports. Slovenia's economy, for instance, contracted by 7.8 percent in 2009. Slovenian production mostly goes to the EU market (especially car parts). A sharp decline in the car industry had a strong negative effect on Slovenia's economy, which dipped in and out of recession before finally returning to healthy growth (2.6 percent) in 2014. As exports improved, Slovenia's current account moved into a strong surplus (estimated at 5.8 percent in 2014 and over 7 percent of GDP in 2015). Romania and Hungary also faced serious challenges. Both countries have strong exports. Both implemented substantial cost cutting measures to regain competitiveness and, in Hungary's case, to avoid insolvency. By 2014, Hungary had a healthy current account surplus of over 4 percent, while Romania had reduced its deficit to less than 0.5 percent of GDP. Poland, the largest and most diversified economy in our sample, continued to grow throughout the crisis. While Poland never had a large current account deficit, in the past few years it has kept its deficit below 2 percent (supported by large transfers from the EU).

We saw previously that the WB countries grew quite strongly in real terms in the period 2001–2008, but that growth tapered-off in subsequent years. Similar patterns can be seen in cumulative GDP per-capita growth (compare Figure 5.6).

¹³ But, for now, despite the high level of deficit, in Albania financing has been available through debt and foreign direct investments, see World Bank (2015), p. 1.

¹⁴ See Sinn (2014), Chapter 3.

Figure 5.6



The highest cumulative change in per-capita income was in Lithuania (over 150 percent), Albania (145 percent) and Latvia (143 percent). Please note that all 3 of these countries not only saw substantial real GDP growth, but also a significant reduction in their population (see the next section). Per-capita income in the economically most developed former Yugoslav republics, Croatia and Slovenia, grew the least (56 and 57 percent, respectively). Much of the growth was achieved in the period 2001–2008. In 2009–2014, Albania and Poland had the highest cumulative growth (over 30 percent), while Croatia and Slovenia had a cumulative reduction of (PPP adjusted) per-capita income.

In per-capita terms, Albania was the poorest in 2001, while Slovenia was the most affluent country in our sample. By 2014, BiH had the smallest per-capita income, while the Czech Republic had the largest. Is there any evidence of income convergence in the WB region and emerging Europe as a whole? Firstly, we compare the per-capita incomes of the richest and the poorest country in the WB region and the total sample for 2001 and 2014 in Table 5.1.

Please note that the poorest countries (Albania in 2001, and BiH in 2014, both belonging to the WB region)

Table 5.1

Ratios of PPP-adjusted per-capita income of the richest and the poorest country

	2001	2014
Western Balkans	2.88	2.12
Total sample	4.06	3.04

Source: IMF World Economic Outlook and EEAG calculations

were both absolutely and relatively less poor in 2014 than in 2001 with respect to the richest countries of emerging Europe: ratios of the highest to the lowest per-capita incomes decreased over time. Thus, extreme differences in per-capita incomes have gotten smaller both within the WB region and in the total sample. In addition, variability of income, defined as the ratio of standard deviation to average per-capita income within the WB countries got smaller (from 0.41 in 2001 it dropped to 0.27 in 2014), indicating some convergence of income within the WB region.

On average, however, the WB region is increasingly lagging behind both Baltic and CESEE regions (Table 5.2). Namely, while in 2001 the average income of the Baltic countries was about 1.4 times higher that of WB, this ratio grew to 1.9 by 2014. On the other hand, the ratio of average incomes between CESEE and WB regions increased marginally in that period (from 1.6 it grew to 1.7).

Note that the Baltic countries have surpassed the CESEE region in terms of average per-capita income (while the ratio of CESEE to Baltics average income was 1.11 in 2001, in 2014 it was only 0.93). Thus, it was the Baltics whose per-capita income grew the most, in average, in the preceding period.

5.3 Population patterns

In the past couple of decades emerging Europe has been getting increasingly depopulated. This is particularly true for the Baltics and the Western Balkans (Figure 5.7).

Table 5.2

Ratios of weighted average (PPP-adjusted) per-capita income with respect to the weighted average income of the Western Balkans

	2001	2014		
Baltics	1.4	1.9		
CESEE ^{a)}	1.6	1.7		
a) Central European and south eastern European				
countries.				

Source: IMF World Economic Outlook and EEAG calculations

Figure 5.7

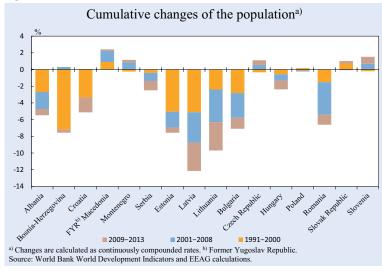


Figure 5.8

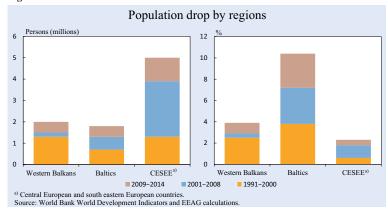
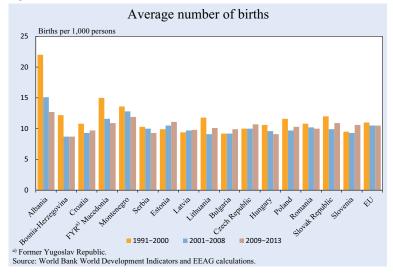


Figure 5.9



Out of the 16 countries in our sample, 10 saw their population decline in the period 1991–2014. In percentage terms, by far the biggest depopulation occurred in Latvia (a 12.6 percent drop), followed by Lithuania (10.1 percent) and Estonia (7.7 percent). In WB, BiH,

after losing over 7 percent of its population in the decade of the war, the population grew slightly, fuelled by the return of a fraction of refugees. While both Albania and Serbia lost population overall (Albania by over 5.5 percent and Serbia by 2.7 percent), the depopulation of Albania is tapering off, while in Serbia it is accelerating. In Croatia, the population drop is starting to accelerate in connection with the country's membership of the EU and people looking for jobs in developed countries of that trading block. At the other end of the spectrum, the largest net gain in the WB region and among all 16 countries was made FYR Macedonia (2.4 percent) and Slovenia (1.4 percent). Looking at regions on the whole, the situation looks like in Figure 5.8.

As a result of depopulation, the total number of people in the 16 countries of our sample dropped from over 128 million (in 1991) to less than 120 million (in 2014), representing a drop of around 3 percent. As the largest of the three regions, CESEE lost 5 million people, or 2.3 percent. Of those countries, Romania and Bulgaria lost around 7 percent of population respectively. Poland during that same period lost only around 0.12 percent, or around 100 thousand people. As mentioned before, Baltic countries experienced the highest loss of population. While smaller in percentage terms than the depopulation of Romania and the Baltics, the depopulation of the WB region is nevertheless quite dramatic.

It is clear that a reduction in population may be caused by both low fertility (and/or high mortality) rates, as well as by net emigration. Let us, therefore, first consider the natural causes.

Albania (see Figure 5.9) has by far the highest birth rates of any country in the sample, followed by FYR Macedonia (which also has a significant fraction of the Albanian population). However, in both of these countries birth rates declined significantly in the 2000s, moving towards the EU average. BiH saw a dramatic drop in birth rates in the 2000s, which are currently the lowest in our sample. Birth rates in Slovenia, by contrast, have increased slightly in recent years.

Not only does Albania have higher birth rates than the other countries in the sample, but it also has very low mortality rates (see Figure 5.10) – less than half the mortality rates of Serbia, Latvia or Hungary, reflecting the fact that the population of these countries is older on average than that of Albania. Calculating the cumulative net contribution to population change from natural causes (births net of deaths) we obtain Figure 5.11.

Figure 5.10

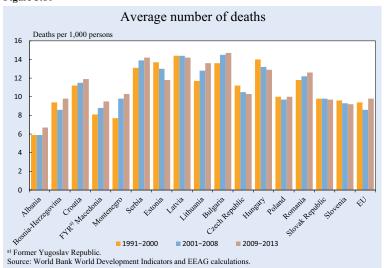
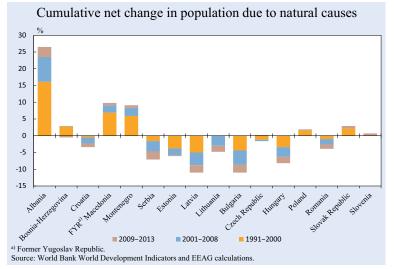


Figure 5.11



Thus, while the population of Albania has decreased substantially, this has been due entirely to high levels of net emigration. The population change seen in Latvia, by contrast, can largely be attributed to natural causes and, to a lesser extent, to net emigration.

These numbers, however, do not tell the whole picture. Consider Serbia, for example. The cumulative decrease in its population from natural causes is higher than the total loss of population, indicating a net migration *into* the country. Does that mean that Serbian citizens did not emigrate? It certainly does not. Indeed, both during the 1990s and, with a renewed intensity, in the past few years, a large number of highly skilled professionals (among others) have been leaving the country in a search of better life. Taking advantage of a bilateral contract between Germany and Serbia, for example, hundreds of medical professionals have

left Serbia to (legally) work in Germany. On the other hand, Serbia has also gained a large number of new residents as a result of conflicts in BiH, Croatia and Kosovo. In net terms, Serbia had a positive net immigration trend in the period of 1991–2013, i.e. it absorbed more people into the country than the number of people that emigrated.

One of the important parameters of quality of life is expected lifespan (at birth). Throughout emerging Europe and in the EU, life expectancy has been rising steadily over the past couple of decades. Not surprisingly, Slovenia and the Czech Republic, the two countries with the highest per-capita income in our sample, came on top. More specifically, the expected lifespan in Slovenia has risen to almost 80 years, very close to the EU average. On the other hand, it was Albania that came in third

¹⁵ In addition, a large number of low skilled and unskilled people, mostly of Roma and Albanian origin, used visa liberalisation after 2009 with the WB countries to ask for political asylum in the richer EU countries in search of better economic outcomes.

Average life expectancy in the EU was 77.5 years in 2001 and 80.4 years in 2013. Source: World Bank World Development Indicators

Figure 5.12

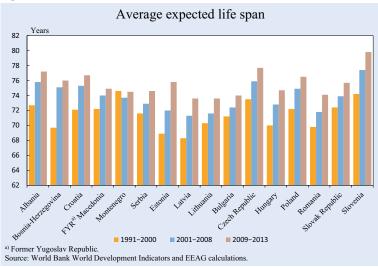


Figure 5.13

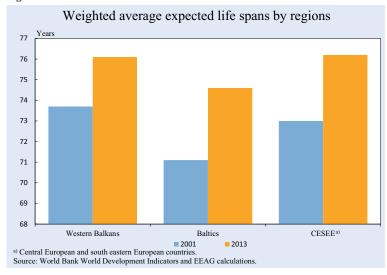
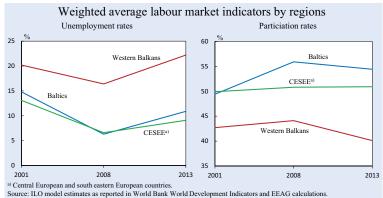


Figure 5.14



in the sample in the period of 2009–2013 and first in the WB region (see Figure 5.12).

Overall, the WB region outperforms the Baltics according to this criterion. In addition, people in WB

had a somewhat higher expected lifespan than the population of CESEE as well in 2001. By 2013, the expected lifespan for the CESEE region caught up with the WB region (see Figure 5.13).

5.4 Unemployment, income distribution and poverty

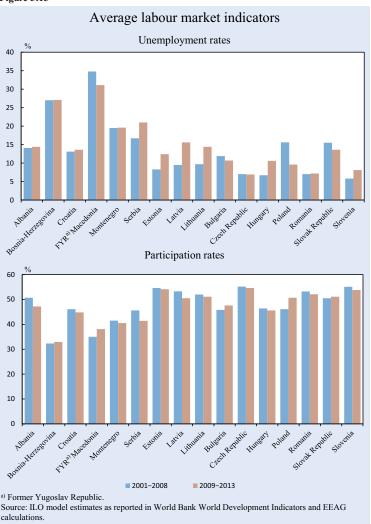
Persistently high unemployment has been one of the biggest challenges for the economies of the WB region, with regional average unemployment rates well above the Baltics and, especially, the CESEE figures (see Figures 5.14 and 5.15).17 In 2001, FYR Macedonia had the highest unemployment rate in the region (30.5 percent), while Serbia had the lowest (12.8 percent), the reason being that many sociallyowned companies were not yet privatised at that time and hoarded excess labour. By 2008, helped by growth, unemployment rates fell throughout emerging Europe. However, the situation improved much more in the Baltic countries and CESEE than in the WB region. Unemployment actually worsened in Macedonia, where it reached 33.8 percent in 2008. In Serbia, the effects of downsizing and privatisation had translated into an unemployment rate of over 20 percent by 2006. Thus, even in the boom period, many WB countries struggled with very high unemployment.

The onset of the great recession pushed up unemployment in all

regions of emerging Europe, but especially in the WB. The only country of the region with unemployment consistently below 15 percent in the period 2002–2013 was Albania (helped largely by the export of excess la-

¹⁷ Gligorov et al. (2008) analyse structural issues related to the labour

Figure 5.15



veloped countries, Slovenia and the Czech Republic (around 55 percent). These are also the countries with the lowest unemployment rates in the sample. Another country with relatively low unemployment and a high labour market participation rate is Romania (another country with very high emigration).

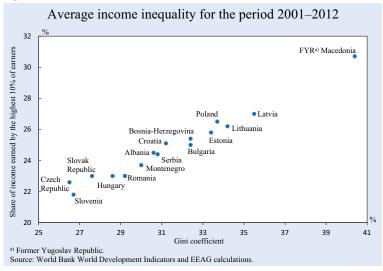
One of the key reasons for persistently high unemployment (and low employment) rates are the institutional and business environments of the WB region. When these start changing for the better, unemployment rates drop and labour participation rises. Consider the case of FYR Macedonia. In the past few years it has significantly improved its business environment (see the next section). While the country still has the highest unemployment and the lowest labour participation rates in our sample, its unemployment rate fell from a peak of 37.3 percent in 2005 to 29 percent in 2013. Labour participation rates, by contrast, grew from 32.4 percent in 2004 to 39.2 percent in 2013.

bour force). With a protracted recession, unemployment rates grew in Croatia from 8.4 percent (in 2008) to close to 18 percent in 2013.

Consistent with the high unemployment rates, the WB countries also had low participation rates (i.e. the fraction of 15+ year olds who are active participants in the labour market). Even in relatively good times, such as in 2008, participation rates in the WB countries were well below 50 percent, with the corresponding numbers particularly low for FRY Macedonia (32 percent), and BiH (36 percent). The highest rates of participation in the WB region, in line with lower rates of unemployment, were seen in Albania. It is worth noting that the Baltic countries posted higher participation rates after the crisis than the CESEE region, and much higher than those of the WB region. Average participation rates in the CESEE region are fairly stable at slightly over 50 percent. The highest participation rates in our sample were seen in the two most deNext, we address the issue of income inequality by using two measures: the Gini coefficient and the share of income earned by the highest 10 percent of earners. For both of these measures, higher values correspond to higher inequality of income. Figure 5.16 demonstrates that these two measures are almost perfectly correlated.

In our sample, FRY Macedonia had the highest income inequality, followed by the Baltic countries, while Slovenia had the most equitable income distribution. In the WB region, the smallest average Gini coefficient had Serbia, while Montenegro had the smallest concentration of income by the top 10 percent of earners. For the same time period, the average Gini coefficients for Finland and the United States were 28.2 and 41.1 percent, respectively. Thus, Slovenia had even a more equitable income distribution than a country that is traditionally considered as a beacon of the welfare state (Finland). On the other

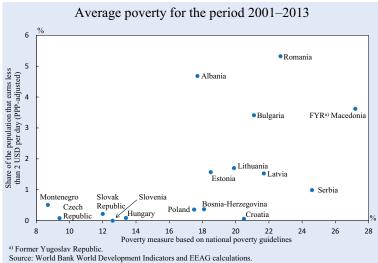
Figure 5.16



hand, US income distribution is even more inequitable than FRY Macedonia.

Let us now consider poverty. Again, we use two measures: the first one is based upon the national standards of poverty in each country, with the poverty head-count ratio at national poverty lines as a fraction of the population size. One problem with this measure is that each country may have a somewhat different definition of what poverty actually means. So we also use another measure defined as the headcount ratio of individuals who make (PPP-adjusted) 2 dollars a day or less (as a fraction of total number of population). This measure determines a fraction of the population in dire poverty. It is worth noting that these two measures have little correlation (see Figure 5.17). However, it is clear that poverty is still a problem in the WB re-

Figure 5.17



109

gion, Bulgaria and Romania; and a much smaller problem in the countries of Central and Eastern Europe. More specifically, there is still a non-negligible fraction of people in dire poverty in all WB countries except in Croatia.

5.5 Transition patterns

The European Bank for Reconstruction and Development (EBRD) has been collecting transition scores (from 1989) for all countries within its zone of responsibility, including the coun-

tries of the WB region, Baltics and CESEE regions. There are several transition categories and the scores awarded each year are from 1 to 5. A score of 4 or higher means an almost complete transition to best market practices in a particular category, while a score of 1 indicates that no transition in that category has taken place to date.¹⁸

Initially, the republics of the Former Yugoslavia were the frontrunners in transition, since Yugoslavia was the first country to undertake a small scale privatisation in 1989. However, with the disintegration of the country, some of the former republics, particularly BiH and Serbia, backtracked on transition for several years (see Figures 5.18 and 5.19).

In BiH, strict price controls were introduced during the war from 1992 to 1995. Since establishing peace in

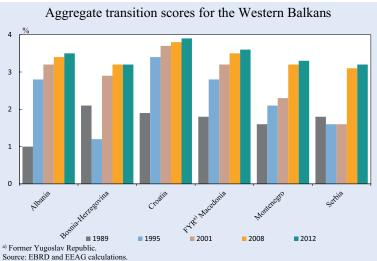
> 1995, the country has been under de-facto foreign tutorage. At the beginning, several market reforms were enforced so the aggregate transition index increased from 1.2 (in 1995) to 2.9 (in 2001). In the 2000s, local civil administration started to take responsibility for day-to-day decisions in the country. Here, a structural problem of BiH revealed itself. Namely, the complicated political system developed by the Dayton Peace Agreement, effective in ensuring peace, but not conducive to efficient deci-

¹⁸ See EBRD (2013).

Figure 5.18 Weighted average transition scores for the 5 main EBRD transition categories by regions^{a)} Large-Scale Privatisation Small-Scale Privatisation 5 Baltics Baltics CESEE¹ CESEE^{b)} Western Balkans 3 3 Western Balkans 2 2 1 1 2008 Governance and Enterprise Restructuring Trade and Forex System 5 CESEE Baltic Western Balkans CESEE 2 2 Baltics 2001 2008 1989 1989 1995 2001 2008 2012 Competition Policy Aggregate score 5 Baltics Baltic CESEE CESEE Western Balkans Western Balkan 1 0 – 1989 2008 1995 2001 2001 2008 2012 1995 1989 a) In EBRD transition reports we could not find data for the Czech Republic. Regional averages are calculated using all other countries in the CESEE sample. ^{b)} Central European and south eastern European

countries.
Source: EBRD and EEAG calculations.

Figure 5.19



sion-making, created an environment where major changes are hard to make. This, in turn, slowed down the transition process.¹⁹

The decade of the 1990s is known in Serbia as "the Lost Decade". The economic sanctions sealed off the country completely in 1993-1996 and partially (the socalled outer wall of sanctions) in 1997-2000. During that time, like in BiH, price controls were in place, but not successful: in 1993 the country went through one of the most severe hyperinflations in history (see the next section). After a pro-Western coalition took power in the late 2000, the outer wall of sanctions was lifted and Serbia was allowed back into the "international community". By that time the economy was devastated. The region of Kosovo, around 15 percent of the territory rich in coal and minerals, was de-facto separated from the country following the NATO intervention in 1999. The issue of Kosovo has been a serious stumbling block for Serbia ever since. Nevertheless, as of 2001 the country has been trying to catch up with the rest of emerging Europe. In 2001-2008, Serbia made substantial progress in transitioning towards a market economy (from an average score of 1.6 in 2001 to 3.2 in 2008). After 4 to 5 years of relative stagnation following the great recession, Serbia has started to address most of the remaining tough issues over the past two years, including the issue of Kosovo, the restructuring of lossmaking public companies, and

The system in BiH is based upon the principle of consensus (somewhat similar to Switzerland) between three constituent nations (Bosniaks-Muslims, Croats and Serbs) and two political entities (Federation of Bosnia and Herzegovina and Republika Srpska). In addition, the Federation itself consists of a number of cantons.

generally improving the competitiveness and quality of the country's institutions.

The following examples illustrate the recent restructuring of public companies in Serbia. Yugoslav Airlines, a loss-making national carrier, was restructured in partnership with Etihad Airlines, which took a 49 percent stake in the company. The company changed its name to Air Serbia to mark the new beginning. Importantly, Etihad took over management of the joint venture and greatly improved it. The company significantly increased its number of passengers flown and started posting profits instead of losses after just one year. Another example of large-scale, successful restructuring was seen in the car industry. There, Fiat took over an ailing car manufacturer, Zastava, and became the largest exporter in Serbia. Some other foreign companies moved parts of their production to Serbia (Bosch, Siemens and Benetton, among others). As mentioned before, free trade agreements between Serbia and both the EU and Russia are making the country attractive for European investors.

Montenegro was the smallest republic of the Former Yugoslavia. Formally part of the federation with Serbia until it declared independence in 2006, it acted de-facto independently of the central government after 1994. As a result, it made inroads in transition, even at a time Serbia did not (in the 1990s), albeit at a slower pace than Croatia, Albania and Macedonia. Interestingly, it had unilaterally adopted the euro (previously Deutsche Mark) as its currency, while still formally being part of the federation with Serbia. In the period of 2001-2008 the pace of transition in Montenegro accelerated. For a few years, a large number of foreign investors, mostly from Russia, purchased properties in Montenegro, bringing flood of money into the country. A real estate bubble was created, fuelled by easy access to loans in the pre-crisis period. After the crisis hit, the bubble burst and the country is still trying to find an alternative way of going forward.

FYR Macedonia has traditionally always been one of the poorest Yugoslav republics. After the break-up of Yugoslavia it achieved macroeconomic stability relatively quickly, but had the slowest growth rates among the former Yugoslav republics in the early 2000s and by far the highest rates of unemployment. By the mid-2000s the government decided to make the country attractive for foreign investment. Its reform efforts are starting to pay off. The aggregate transition score of FYR Macedonia in 2012 (3.6) is second in the WB re-

gion only to Croatia's score (3.9). As a result of these reforms, the country continued to grow throughout the crisis period when several other countries in the region went into recession.

Croatia is another interesting case. Despite the fact that for 4 years (1991-1995) the country was practically split in two as a result of the rebellion by the Serbian population of Croatia, it has never stopped developing towards a fully-fledged market economy. This fact was eventually reflected in its membership of the EU in 2014. Croatia is the most economically developed part of the WB, with high, steady revenues from tourism, and it has received assistance from the leading Western powers ever since its declaration of independence. Most importantly, perhaps, it stands out among the other WB countries by virtue of the quality of its institutions and its infrastructure. While Croatia scored a solid 3.3 for governance and enterprise restructuring in 2012 and 3.0 for competition policy, the closest competitor in that sense in the WB region had corresponding scores of just 2.7 and 2.7 (FYR Macedonia). On the other hand, comparable numbers for BiH are only 2.0 and 2.3, respectively.

The pace of Albania's transition was similar to that of FYR Macedonia (it has been outpaced by it in terms of reforms in recent years). As a result, Albania has been steadily lifting itself out of poverty and improving its population's quality of life. The country grew quite strongly in the boom period (2001–2008). It continued to grow at a slower pace even after the crisis. The unemployment rate, high by European standards, has been one of the lowest in the region for over a decade.

Overall, all WB countries, with the partial exception of Croatia, are still seriously lagging behind in terms of governance and the restructuring of large enterprises and, especially, in assuring a level competitive playing field.

The Baltic countries made the fastest and most comprehensive transition in our sample. From the start, they instituted liberal economic policies that were kept in place independently of the ruling parties. As a result, the aggregate transition score of the Baltic countries reached 3.9 in 2012, the highest of the three regions. Importantly, in those areas that most countries in emerging Europe found particularly challenging, namely governance and enterprise restructuring and competition policy, the average scores for the Baltics

in 2012 were 3.3 and 3.7, respectively (the corresponding scores for WB were 2.5 and 2.4 and for CESEE 3.3 and 3.2). The commitment of the Baltic nations to the free market was proven, once more, in the aftermath of the great recession.

In the CESEE region, the average aggregate scores are similar, but a little lower than those for the Baltics. Hungary, Poland and Slovakia are on a par with the Baltics in transition scores, including governance and enterprise restructuring and competi-

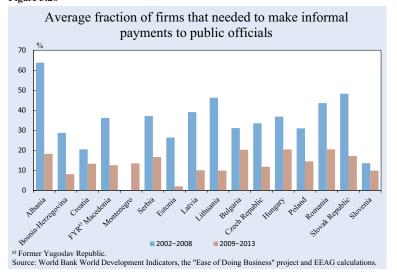
tion policy. On the other hand, Slovenia, one of the most developed countries in emerging Europe, achieved scores of just 3.0 and 2.7 for these two categories of transition in 2012, respectively (and scored lower than Croatia, for example). The strong protectionist inclinations of the Slovenian government cost the country a severe drop in output in the post-2008 period.

Sometimes a country can change its business climate relatively quickly. A case in point is Slovakia. After several years under an authoritarian rule and in a relative isolation from the rest of Europe, Slovakia, with a change in government, quickly transitioned towards a vibrant market economy. Importantly, a serious effort was made to increase the efficiency of its public institutions. This paid off handsomely, especially in Slovakia's Western parts, which developed into an export-driven powerhouse (primarily in the car industry).

While the World Bank's "Ease of Doing Business" aggregate scores are susceptible to potential gaming by countries and should therefore be used with caution, the analysis behind them provides important additional insights into the institutional strengths and weakness of countries. As we show below, these insights are broadly consistent with the EBRD indicators discussed above.

One of the common problems in most transitioning economies is corruption. The reason is simple. When, after a long period of equitable income distribution, an initial accumulation of capital in the hands of the few is allowed or, indeed, encouraged, serious tempta-

Figure 5.20

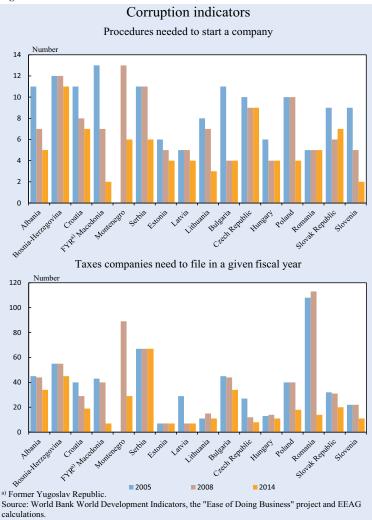


tions may occur. Corruption appears in various guises. Apart from an outright extraction of money by public officials, it can implicitly be present when unnecessary or overly complicated procedures are imposed on businesses. This, in turn, provides an opportunity to extract bribes to "speed up" processes, or to ensure positive outcomes.

Based on the results in Figure 5.20, reported corruption dropped substantially in the post-crisis period throughout the sample. This can be interpreted as a sign of a genuine progress or, perhaps, corruption is just being less frequently reported. To corroborate these findings, we look into less subjective measures that can proxy for potential corruption: the number of procedures needed to start a company and the number of taxes that firms need to pay in a given year (see Figure 5.21).

We see that, on average, the countries in the WB region still have more complicated procedures along both dimensions when compared to the Baltic and CESEE regions. However, all three regions improved after the crisis, with CESEE and, to some extent the WB region, catching up with the Baltics. It is worth noting that some countries made significant headway, while others made little progress. In the WB region (and, together with Slovenia, overall in the sample), FYR Macedonia had the smallest number of procedures needed to open a company in 2014 (only 2). The second-best regional performer was Albania with 5 procedures. In contrast, the worst performer, BiH, required 11 procedures to start a company in 2014. In terms of the number of different taxes that a company needs to pay in a single year, FRY Macedonia once

Figure 5.21



again ranked top of the entire sample in 2014, together with Estonia and Latvia (7). The region's second best performer was Croatia with 19 taxes. The worst

performers were BiH (45) and Serbia (67). While

Figure 5.22



Serbia did not, at least until 2014, change its complicated tax procedures, Romania reduced the number of taxes from 113 (in 2008) to only 14 (in 2014). Clearly, significant improvements are needed in most WB countries, with the exception of Macedonia, in terms of simplifying tax procedures.

WB countries made serious headway along another related measure, namely the number of days needed to legally start a new business (compare Figure 5.22).

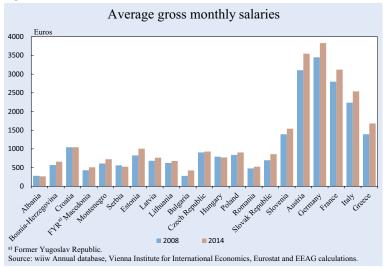
The best overall performer in 2014 was FYR Macedonia (2 days), with Lithuania (4 days) and Albania, Estonia and Hungary (5 days) close behind. All of these countries made significant improvements with respect to the 2003 situation, along with Serbia, Slovak Republic and Slovenia, among others. The worst performers in this respect were Poland (30 days) and BiH (37 days).

Finally, let us have a look at the average gross monthly salaries for

the 16 countries of our sample and for five major trading partners of WB countries (Austria, Germany, France, Italy, and Greece) for the years 2008 and 2014 in Figure 5.23. In the WB region, Croatia had the

> highest and Albania the lowest gross monthly salaries both in 2008 and in 2014. Albanian and Serbian salaries dropped slightly (measured in euros) in 2014 with respect to 2008, while the salaries of other WB countries did not fall, despite the crisis. Slovenia posted by far the highest average gross monthly salaries among the 16 countries of emerging Europe and Germany overall in the sample presented. In particular, the average gross monthly salary in Serbia and FYR Macedonia was just one third of that of Slovenia and 14 percent of Germany's av-

Figure 5.23



erage salary level in 2014. The corresponding ratios for Albania were 17 and 7 percent, respectively. In 2014, only Albania and Bulgaria had lower wages than Serbia and FYR Macedonia. It is worth noting that the average gross monthly salary in Greece increased from 2008 to 2014. While Greek average gross salaries were below those of Slovenia in 2008, they surpassed them in 2014. The patterns are similar when one compares average net salaries.

In short, while WB countries still lag behind the Baltic states and some CESEE countries in terms of institutional development, especially in terms of large enterprise restructuring and competition policy, they are certainly making progress towards becoming functioning market economies. Albania, Serbia and Macedonia have managed to keep wages competitively low, while BiH and, especially, Croatia, are more expensive.

5.6 Financial development patterns

The 1990s were very challenging for the financial sector in WB countries. Prior to the disintegration of Yugoslavia, large state-owned banks were well-capitalised and liquid. With the failure of the reform in the late 1980s, all of the republics of that country entered into a period of hyperinflation. People lost confidence in the banking system. Dinar deposits, which before the crisis constituted roughly 50 percent of the deposit total (the other half of deposits were primarily denominated in Deutsche Marks), quickly lost value. On the other hand, banks lost the ability to repay hard currency deposits. As a result, these hard currency deposits

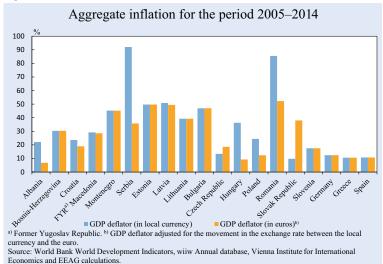
were effectively frozen. In response to the situation, the Slovenian government issued government bonds and recapitalised its banks, thus preserving those banks headquartered in Slovenia that existed prior to the break-up of the country. While banks became common-stock companies, Slovenia introduced measures that prevented foreign banking groups from taking control of their large banks (until recently). The Croatian government also recapitalised its banks and preserved previously existing banking entities. However, recapitalisation was not sufficient

– banks had to find foreign strategic partners. In Serbia and Montenegro hyperinflation was persistent and reached 3.7×10¹⁴ percent (a number of 37 with 13 zeros afterwards) in 1993.²⁰ Large state banks became empty shells. In this environment, the citizens of Serbia and Montenegro were allowed to open private banks. Only a small amount of initial capital was required (just 6,000 Deutsche Marks) and very lax supervision was imposed. Two private banks created a large pyramid scheme in which a large share of citizens lost their savings. In Albania, the collapse of a similar pyramid scheme led to the toppling of the government in 1997 and to a popular revolt. While banking crises also occurred in the Baltic and CESEE countries, they were not as severe as in the WB region.

Inflation was a long standing problem for WB countries. With the normalisation of the political situation in the 2000s, the introduction of market reforms in the financial sector and an independent central banking function, inflation was gradually brought under control. In 2001, Serbia, Romania and Montenegro were still struggling to stabilise prices. By 2005 inflation was tamed in all sample countries apart from Serbia. FYR Macedonia even experienced deflation that year. By 2008, however, inflation was on the rise again in the Baltics, Bulgaria and Montenegro among other countries as a result of a large increase in bank lending. The great recession led to a reduction in inflation in all 16 countries including, in the past couple of years, in Serbia. Moreover, in 2014, 7 out of 16 countries in the sample entered into deflation (largely imported from the Eurozone). Arresting inflation in the WB states

²⁰ Year-on-year inflation only fell below 100 percent in 1996. Source: Statistical Office of the Republic of Serbia.

Figure 5.24



significantly boosted the credibility of the region's central banks.

In Figure 5.24 we present aggregate inflation, measured through the GDP deflator, in the period between 2005 and 2014 for the 16 countries of our sample and for Germany, Greece and Spain. It is worth noting that, measured in the local currency, Serbia and Romania had the highest aggregate inflation in that period (92 and 85 percent, respectively). However, both countries substantially depreciated their currencies with respect to the euro. This, in turn, helped them stay relatively competitive, despite high inflation in the local currency. Additional depreciation in these two countries would be desirable in order to improve competitiveness. On the other hand, due to the high level of euroisation (especially in Serbia), substantial further depreciation would probably have a negative impact on

financial stability. Besides, gross salaries in these countries are already lower than in most European countries in euro terms (see Figure 5.23). Measured in terms of the change in prices expressed in euros, Albania had the smallest aggregate inflation rate in that period among the 19 countries presented here (less than 7 percent in aggregate).

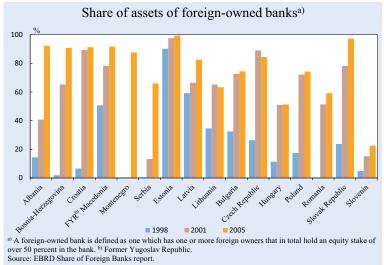
Apart from taming inflation, another key reform in the financial sector was to completely restructure the banking system by allowing the strong entry of Austrian, Italian, French, Greek, and even Hungarian and Slovenian banks into the region. The presence of reputable foreign banking groups helped to restore savers' confidence and brought in the knowhow needed. Moreover, since ample money was available in 2001–2008, and large returns on investment were expected, it became possible to obtain loans both for businesses and individuals.

Much of the bank ownership transformation in emerging Europe occurred between 1998 and 2001.²¹ By 2001, the majority of

assets were held by foreign-owned banks in all countries except in Albania, Serbia and Slovenia (compare Figure 5.25). Transformation of the banking system in Serbia started in 2001 with the Central Bank's closure of the four largest state banks. In their place, foreign financial institutions were invited to start from a de-facto clean slate. By 2005, foreign banking groups dominated the market in all countries apart from Slovenia.²²

Domestic credit to the private sector is a frequentlyused measure of financial deepening. It refers to finan-

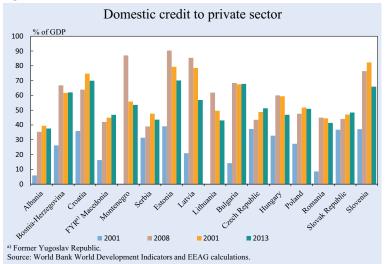
Figure 5.25



²¹ In the Baltics, the process of bank restructuring that involved the entry of Nordic banks into the region was largely completed by 1998. At that time, bank restructuring was just beginning in the other two regions.

²² Long-resisted bank ownership transformation is currently underway in Slovenia. After the creation of the Bad Bank, the second largest bank in Slovenia was sold to a consortium of foreign investors. The sale of the largest bank, Nova Ljubljanska Banka, seems imminent.

Figure 5.26



cial resources provided to the private sector by financial corporations. Below we measure it as a fraction of GDP.²³ In the boom period there was a significant financial deepening in emerging Europe, especially in the Baltics, which was the first region to transform its

banking system. The market first started to become shallower in that region after 2009, followed by most other countries after 2011. Mild deepening only continued in the Czech Republic, FYR Macedonia, and the Slovak Republic, where the ratios of domestic credit to the private sector were moderate to begin with (see Figure 5.26).

Table 5.3 summarises EU membership status, the monetary policy regime and the EMU accession date (where applicable) for the 16 countries of emerging Europe in our sample. It is worth noting that, out of the 16 sample countries, 5 are currently members of the Eurozone, one has unilaterally adopted the euro, two have currency boards, one has a formal currency peg and one uses the exchange rate with the euro as a nominal anchor. Five countries have adopted inflation targeting (IT) as a stated monetary policy.

One of the most important features of financial development in emerging Europe is the high level of euroisation of both loans and deposits in those countries that do not already use the euro as a legal tender (compare Figure 5.27).

Deposits in Deutsche Marks were an important feature of the former Yugoslavia's banking system for decades. After its collapse in the 1990s, the propensity to save in hard currency (first in Deutsche Marks and then in euros) became, if anything, even

stronger. This does not depend heavily on the type of exchange rate regime or the level of inflation prevailing in a country over an extended period of time. The cases in point are Croatia and Serbia. In both countries deposit euroisation was very high in 2007 and in-

Table 5.3

EU and EMU accession date	(if annlicable) and monetary	nolicy regimes
EU anu Elvi U accession date	(II applicable	<i>j</i> and monetary	poncy regimes

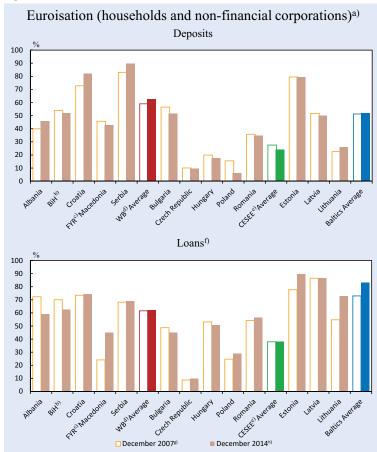
	EU accession date	Monetary policy regime adopted	EMU accession date
Albania	-	Inflation targeting (IT) since 2009	-
BiH ^{a)}	_	Currency board	_
Bulgaria	01/01/2007	Currency board	_
Croatia	01/07/2013	Exchange rate as nominal anchor	-
Czech Republic	01/05/2004	IT since 1997	-
_		Fixed exchange rate	
Estonia	01/05/2004	regime	01/01/2011
		before joining EMU	
Hungary	01/05/2004	IT since 2001	_
		Fixed exchange rate	
Latvia	01/05/2004	regime	01/01/2014
		before joining EMU	
****	01/05/04	Fixed exchange rate	01/01/2015
Lithuania	01/05/04	regime	01/01/2015
FYR ^{b)}		before joining EMU	
Macedonia	_	Peg to euro	_
		Unilateral introduction	
Montenegro	_	of euro as a legal tender	
Poland	01/05/2004	IT since 1999	_
Romania	01/01/2007	IT since 2005	_
Serbia	_	IT since 2009	_
Slovak Republic	01/05/2004	Implicit IT since 1999; IT since 2005	01/01/2009
Slovenia	01/05/2004	Exchange rate anchor before joining EMU	01/01/2007

^{a)} Bosnia and Herzegovina. – ^{b)} Former Yugoslav Republic.

Source: Jahan (2012) and National Banks' websites.

²³ Cottarelli et al. (2003), among others, study growth in the bank credit issued to the private sector in emerging Europe.

Figure 5.27



a) Montenegro, Slovak Republic and Slovenia are not represented on the graphs since they used the euro as a legal tender prior to the first date in the sample. ^{b)} Bosnia and Herzegovina. ^{c)} Former Yugoslav Republic. ^{d)} Western Balkans. ^{e)} Central European and south eastern European countries. ^{f)} BiH: Share of Loans with FX clause in total loans. ^{g)} BiH and Serbia: December 2008 and July 2008, respectively, for loan euroisation since data before these dates is unavailable. ^{h)} Estonia and Latvia: December 2010 and December 2013, respectively, i.e. prior to the countries joining the EMU. BiH: June 2014 for loan euroisation.

Source: National Banks' websites and EEAG calculations.

creased even further by 2014 (in Croatia, from 72.3 to 82.3 percent, and in Serbia from 83.1 to 89.6 percent). At the same time, the monetary policy regime and inflation track record differ significantly in the two countries. Serbia has pursued inflation targeting since 2009, while Croatia used the Deutsche Mark for many years and subsequently the euro as a nominal anchor. Serbia also had a history of far higher inflation than Croatia (13.6 versus 2.6 percent, on average per annum, for the period 2001-2014). Yet, in both countries people simply do not seem to trust their domestic currency as a store of value. Similarly, BiH has had a currency board since the 1990s, but slightly over half of its deposits are in a foreign currency (euros). Even those countries with the smallest level of euroisation in the WB region, namely FRY Macedonia and Albania, posted rather high levels of deposit euroisation (42.8 and 45.9 percent, respectively) in 2014.

In contrast to WB, deposit euroisation is low in some CESEE countries, especially those with strong export industries: in December 2014, deposit euroisation was only 6.0 percent in Poland, 9.6 percent in the Czech Republic and 17.7 percent in Hungary. While the Baltic countries are now in EMU, prior to joining the Eurozone the euroisation levels of deposits in these states had varied considerably: with Estonia at around 80 percent, Latvia around 50 and Lithuania only around 25 percent.

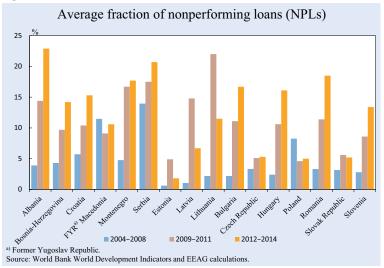
A high level of deposit euroisation increases the hard currency reserves of a country. On the other hand, the euroisation of domestic deposits increases the desire of banks to issue hard currency-denominated loans in order to match the currency structure of assets and liabilities.24 If that is not legally allowed (as is the case in Serbia, for example), then the banks issue hard currency (mostly euro)-pegged loans. For such loans, interest rates are typically set based on a premium with respect to EURIBOR. Im-

portantly, monthly payments depend on the current level of the nominal exchange rate between the anchor currency (the euro, for example) and the local currency.25 Even if interest rates were fixed (or, indeed, small as was the case with Swiss franc-denominated mortgages), a sudden appreciation of the anchor currency can still significantly constrain borrowers' ability to pay, if borrower income is not hedged against such risks. For individuals taking out mortgages this is usually the case, since salaries are rarely pegged to hard currency. Thus, by issuing hard-currency-pegged loans banks reduce their exchange rate risk (which could potentially be hedged relatively easily) and create highly correlated potential credit events (which banks have more difficulty hedging against).

²⁴ Post-crisis regulation in some countries (e.g. Austria) is tilting towards making domestic deposits the primary source of loan-issuance in a host country (instead of borrowing from the mother bank).

²⁵ See Božović et al. (2009).

Figure 5.28



There is, also, a demand side reason for issuing hard currency-pegged loans. Namely, loans pegged to the euro and, especially, to the Swiss franc traditionally had much lower interest rates than domestic currency loans. Part of the reason for the large price differential (in Serbia, in particular) is the exchange rate risk that is priced into domestic currency loans. Moreover, in order to have long term loans in domestic currency, a yield curve must exist that can be used for pricing such loans. Unfortunately, with the partial exception of Croatia, domestic financial markets are highly underdeveloped in WB countries. 26

High levels of loan euroisation dramatically limit a central bank's scope to conduct independent monetary policy.²⁷ Even if a country proclaims to be targeting inflation, a central bank policy rate can only directly impact local currency-denominated loans. At the same time, a high level of loan euroisation imposes a limitation on the exchange rate depreciation a country may allow without seriously impacting its financial stability. Thus, the highly euroised economies of WB bear many of the costs of being in the Eurozone, without any of the potential benefits of being the actual members.

High level of loan euroisation is part of the reason for high levels of nonperforming loans (NPLs) in WB countries shown in Figure 5.28.²⁸

Prior to the crisis (2004–2008) NPLs were over 10 percent only in FYR Macedonia and Serbia out of the

16 countries in our sample. In the period of 2009-2011, NPLs significantly increased in most WB countries, and continued to grow in 2012-2014. Currently NPLs present a serious challenge for most WB countries, except FYR Macedonia where they are stable (around 10 percent).29 In particular, NPLs are now over 20 percent in both Serbia and Albania. It is instructive to compare the WB region with the Baltic experience. In particular, the Baltic region had very few NPLs in the boom period (2004-2008). In crisis times (2009-2011) NPLs in the region

rose dramatically. After the crisis, unlike in the WB region, Baltic countries mostly cleaned up their bank balance sheets.

High levels of NPLs make it more difficult for banks to support economic growth. Loans are both less available and more expensive than in countries with low levels of NPLs like the Czech Republic, Estonia and Slovakia, among others. One issue preventing the clean-up of balance sheets in the WB states is the tax treatment of bad loans. Currently, strategies are being devised to address NPLs in both Serbia and Albania. The situation is also difficult in Bulgaria, Hungary and Romania. In order to address both foreign-currency pegged loans and related high levels of NPLs, administrative measures in Hungary effectively halved loan euroisation rates from 50 to 25 percent in March 2015.³⁰

Given the high levels of NPLs and the history of financial crises in the 1990s, should we worry about the safety of WB banks? In order to answer that question let us first consider the level of loss coverage provisions as a share of non-performing loans in Figure 5.29. This ratio shows the extent to which non-performing loans are already covered by provisions. It turns out that in Serbia, a country with one of the highest levels of NPLs, banks cover more than the full amount of potential losses on average (i.e. the ratio is greater than 1). In contrast to Serbia, the loss coverage

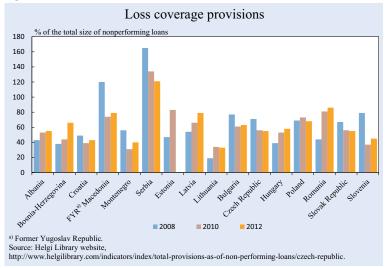
²⁶ Generally, very low liquidity characterises all capital markets in the former Yugoslavia, especially in the period after the crisis. By contrast, Polish or Hungarian markets are significantly more liquid.

See discussion of Grga and Urošević (2014) for the case of Serbia.
 For a discussion of NPLs in emerging Europe, see European Banking Coordination Vienna Initiative (2012).

²⁹ In some WB countries such as Serbia, one of the driving factors behind high levels of NPLs is large exposure of banks to a relatively small group of dominant market players which have financed fast expansion of their business empires by sharply increasing their leverage.

³⁰ Much of the problematic loans in Hungary were related to Swiss-franc denominated loans.

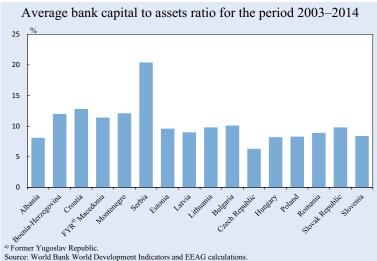
Figure 5.29



ratio is only around 55 percent in Albania. Thus, while NPLs are very high in both countries, this seems to be more of a real threat in Albania than in Serbia.

The bank capital to assets ratio³¹ as shown in Figure 5.30 reflects the size of a bank's financial cushion and measures its ability to withstand a serious crisis. Again, it is the banks in Serbia that have by far the highest capital buffer (over 20 percent) on average. In addition, while banks in most countries increased their bank capital buffers after the crisis, these buffers

Figure 5.30



increased the most in the WB states and the least in the CESEE region. Since risks are higher than prior to the crisis, increases in capital buffers are prudent. However, they are also costly. A higher capital buffer means that less money remains available for investment in productive projects.

In summary, WB countries have integrated into the European financial system and have made substantial progress towards stabilising prices and modernising their banking systems. On the other hand, high levels of NPLs

and financial euroisation present serious challenges that need to be addressed in the future. While financial, insurance and private pension fund markets exist in most of the region's countries, they do not (yet) play a significant role.

5.7 Coming Together

In the past, most of the WB was part of an economically and politically relatively strong country, Yugoslavia. It had a diversified economy and was well-integrated into the world economy and the world community of its time. The creation of several small, quarrelling, inward-looking nation-states, several small markets for goods, services, and ideas in place of one larger vibrant market is clearly limiting the prospects of each and every country of WB. After 15 years of peace, the

question is: what is the appropriate level of cooperation between these countries required for each of them to realise their full potential?

Within the political elites, as well as much of the region's population, there is a consensus that the only way forward is for the WB countries to eventually join the EU: it is within this wider group of nations that they would be, in some way, reunited again. This makes sense for both political and economic reasons, especially since all of the countries of the WB region are either candidate

³¹ Bank capital to assets is the ratio of bank capital and reserves to total assets. Capital and reserves include funds contributed by owners, retained earnings, general and special reserves, provisions, and valuation adjustments. Capital includes tier 1 capital (paid-up shares and common stock), which is a common feature in all countries' banking systems, and total regulatory capital, which includes several specified types of subordinated debt instruments that need not be repaid if the funds are required to maintain minimum capital levels (these comprise tier 2 and tier 3 capital). Total assets include all nonfinancial and financial assets. Source: World Bank World Development Indicators.

countries, or have already joined the EU (Croatia). They enjoy visa-free travel within the EU (with the exception of Kosovo); and have free trade agreements with each other and with the EU. However, there are challenges that would need to be addressed before the rest of the region can actually join the EU.

In the political arena, the key question is the same as that which led to the disintegration of Yugoslavia: the unresolved national aspirations of various ethnic groups. In the breaking up of Yugoslavia, administrative lines drawn rather arbitrarily by former Communist leaders were elevated to the status of national borders, regardless of the ethnic and religious makeup of these new nations.32 An exception was made in Kosovo, formerly an autonomous province of Serbia that was, as a result of NATO intervention, separated from it. There, the national makeup of the province (ethnic Albanians currently constitute the majority) was used to justify the secession. Serbia does not formally recognise the secession of Kosovo, but de-facto increasingly cooperates with it. BiH does not formally recognise Kosovo either. Within BiH and FYR Macedonia there are strong forces pushing for their disintegration along ethnic/religious lines. In addition, FYR Macedonia has a name dispute with Greece. Thus, neither borders nor the names of all WB countries are universally accepted as such. Forging a way forward requires finding a creative compromise that would reflect the legitimate interests of all parties involved. This is a difficult task. In the case of Kosovo, substantial progress has been made in the past two years via EU-mediated talks, but care must be taken that both sides implement the agreements.

Given its turbulent history, true progress in the region is only possible in the longer run if the borders between WB countries increasingly become irrelevant, so that not only goods and services but also investments, people, culture and ideas can circulate freely across them. Instead of Chinese walls between people, we suggest building new physical and human regional infrastructure. The process of EU integration is certainly helpful in this respect.

Paramount to the destiny of the region is its economic development. No political arrangement can be stable

if economies falter. The people of Yugoslavia lived peacefully together in times of prosperity. Problems came with the economic crisis in the late 1980s.³³ The economic situation of WB region is currently fairly challenging. Large numbers of people are leaving it to move to the EU: while lower-qualified people (mostly of Albanian and Roma origin) are trying to become economic refugees, highly-qualified individuals are leaving on official work visas, resulting in a drain on the region's scarce human capital. In addition, hundreds of thousands of refugees from the Middle East are using the Western Balkans route to go to Germany and other developed EU countries. This is creating growing tensions in EU and WB countries alike. In order to prevent more problems and solve existing ones, the level of cooperation between all countries involved needs to rise dramatically. While it may be necessary to overhaul immigration and asylum rules, it is also important to preserve visa-free travel between EU and WB as one of the principal achievements of the European project. The stability of the WB is important for the stability of EU, and not just vice-versa, since the region is simply too close to be ignored. It is also the gateway to the East.

While some of the transition toward a functioning market economy has been completed in all of the WB countries, much more work needs to be done in terms of improving the efficiency of public institutions, improving physical and financial infrastructure, the governance of large companies, and levelling off the competitive playing field.

Instead of efficiently serving citizens, public institutions in the WB region are the principal source of employment for the political party members (and their friends and family). This needs to fundamentally change. As Slovakia's example shows, it is possible to simultaneously reduce costs and greatly improve the quality of public institutions by introducing principles of efficiency at all levels of administration. Streamlining procedures, using new technologies and reducing the number of less productive public employees while, at the same time, increasing the motivational pay of the most productive workers is one way forward.

In most WB countries infrastructure needs to be upgraded significantly. For a long time, there was a talk of building Corridor 10 that would connect Hungary

The last Constitution of Yugoslavia, adopted in 1974, laid the foundation for the country's disintegration. It allowed the republics of Yugoslavia the right to self-determination, including secession from the country. On the other hand, it did not specify a constitutional mechanism for such a secession. This facilitated a bloody, rather than peaceful, separation in 1990s. It is worth notingin passing that the EU does not have specified mechanisms for a country to secede from the Union either (or from the Eurozone, for that matter).

³³ Similarly, Europeans seem to be increasingly moving away from the idea of the continent's closer integration as a result of the protracted economic crisis

and Serbia with the Adriatic port of Bar in Montenegro. It is a high time for this project to be executed. Several other regional infrastructural projects also need to be completed. In addition, a lot more needs to be done to protect the environment by reducing energy consumption, by producing cleaner energy and by recycling (in all these areas Croatia is significantly ahead of the curve in the region). Closely related to improving infrastructure is the issue of restructuring large public companies which is, in most WB countries, seriously lagging behind the Baltics and some of the CESEE countries. Large public companies serve as rent-extraction devices for the political class. Noneconomic employment in such companies is also used to buy social peace. Difficult economic situations and the requirements of EU integration are making it increasingly clear to the top politicians in the region that, however painful, the restructuring and professionalisation of management of these companies simply has to proceed. Electrical power utilities and the railroad systems seem to be particularly inefficient.

Financial infrastructure also needs a significant upgrade. Banks need to clean up their balance sheets and rid themselves of excessive NPL baggage, so that they can resume lending to potentially productive companies. The high level of euroisation also needs to be addressed as far as possible. Unfortunately, no quick fixes are possible without risking large disturbances in an already fragile financial sector. Painful memories of hyperinflation and lost savings are still very strong in people's minds. In the longer run, low, predictable levels of inflation in the local currency would help to increase the local-currency deposit base. Even if this is achieved, however, as we have seen in case of Croatia, euroisation may be quite persistent. In Serbia, advertising and trade in real estate and other expensive items in foreign currencies instead of the local currency is also contributing to the high level of euroisation. In line with EU policy, such practices may have to be prohibited. In many cases, people are also unaware of the risks inherent in foreign-currency pegged loans. Such risks should be much more clearly communicated to the general public by both regulators and the financial industry. Preferential tax treatment of domestic currency deposits and the differential capital cost of foreign and domestic currency loans may also be helpful instruments. Other, more forceful administrative measures such as banning the issuance of new unhedged foreign exchange or foreign exchange-pegged loans should also be considered.

If the financial system is to truly support the creation of a vibrant regional economy, however, far more needs to be done. The region's current bank-driven system leaves little room for innovative start-ups to be financed. The creation of regional financial markets (they currently only exist in a rudimentary form, except to a certain extent, in Croatia), and regional venture funds and angel investor firms would be very useful in tapping into the productive potential of the WB population. To this end, it would be helpful to systematically spread information on innovative firms in the region via social networks and the web.

Another area where the WB countries are lagging behind is in ensuring a level competitive playing field. Favouritism takes many forms. During the privatisation process, the rules were often designed to favour certain market players (typically, those with the best political connections). These large players effectively divided the spoils of privatisation between themselves, leaving a substantial share of WB economies in dire straits. In Serbia, large retailers typically enjoy far higher margins than in the West. Consumers not only pay more, but are often offered a poorer selection of inferior quality goods.³⁴ On a more positive note, Serbia is quite open to both investment and trade: the largest retail chain in Serbia is Belgian-owned, while the second largest is Croatian-owned. By contrast, the market in Croatia is generally more competitive than in Serbia. However, Croatia discourages, albeit unofficially, Serbian-owned businesses from entering the Croatian market. Overall, however, investment and trade between WB countries is increasing, driven by the regional free trade (CEFTA) agreement brokered by the EU. While the EU is the leading trading partner of the WB nations, the region itself is the second most important export market for most of them. Nevertheless, far more needs to be done if a truly competitive regional market is to become a reality in the Western Balkans.

We believe that cooperation between WB countries needs to go beyond just free trade and investments. In the next step of the integration process, prior to EU accession (and, perhaps, as a test of its viability), we propose a significant deregulation of labour laws and the creation of an integrated labour market in the WB region as an extension of the CEFTA agreement. For in small, fragmented economies, it is often hard to find people with the right skills and expertise. As a result,

³⁴ The average quality of goods sold seems to have declined since the break-up of the former Yugoslavia due to the abandonment of DIN standards.

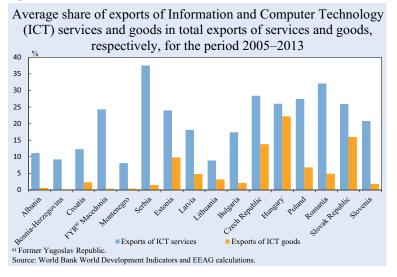
many ideas are never realised. If people were able to look for jobs across the region, this would, contrary to popular fears, reduce unemployment over time by encouraging firms to think regionally.³⁵ It would also facilitate growth. If all of the WB countries were to participate in this process, a common market of 20 million people, with rules and business practices gradually harmonised with the EU, would be much more attractive to investors than each of the small WB markets taken separately. Such a common market would also brighten the region's pros-

pects of eventually integrating with the EU. Croatia, the most developed country of the Western Balkans and already an EU member, could serve as a natural bridge between the region and the EU.

Institutions of higher learning could play an important role in supporting the creation of a regional labour market, as this would give universities in the WB region an incentive to reach out to the entire region (and beyond), and not just to their small, local communities. This would dramatically improve the quality of universities, as well as their relevance to society. Given that the number of young people in the region is diminishing, and that many leave to study in Western countries and often never return, regionalisation may be necessary for these universities to survive and develop. Apart from potentially reducing the brain-drain from the region, regionalisation of the education process would be helpful to combat prejudices between various national and religious groups and could open up the possibility of gradually lowering regional tensions.

Improving the education process at all levels, with a shift away from learning by rote and towards solving real-life problems, and using the best regional and world practices to do so, has to become a regional priority. Given WB population trends, most future growth will have to come from increasingly higher value-added activities, and not from activities that require ample cheap labour. Estonia is an excellent example of a country that has implemented swift, yet well-thought out reforms in education. It is the first

Figure 5.31



country in the world, for example, to incorporate a pioneering computer-based method of teaching math in schools. There, students learn necessary math concepts by posing and solving interesting and challenging real-life problems. In doing so they use highly sophisticated, but user-friendly, computer technology. As a result of its varied educational reforms, Estonia ranks very highly in global PISA scores. Good education over time leads to innovations. Skype, one of the world's leading communication platforms, was largely developed in Estonia.

The Western Balkans has significant potential to further develop and fully exploit its human capital. For example, Serbia ranks first among the 16 countries of our sample in terms of the average share of Information and Computer Technology (ICT) of total services exports (36.5 percent, compare Figure 5.31).³⁶

A growing number of Microsoft products for the world market have been developed in the Microsoft Development Center Serbia in Belgrade, one of the leading employers of software engineers in the country. Several Western financial firms are outsourcing back office work to companies that operate in Belgrade. Increasingly, due to improvements in quantitative finance education in the country, Serbian firms are being asked not only to code, but also to develop trading strategies, risk management models, etc., i.e. to work up the value chain. Regional software firms

³⁵ This may be politically challenging but, unlike in the EU, most people in the former Yugoslavia can communicate in their own language(s) with each other without any difficulty.

³⁶ Another country in which ICT services exports account for over 30 percent of services exports (on average) is Romania (32.1 percent). Among WB countries, the second place in that category is held by FRY Macedonia (24.1 percent). It is worth noting that export of ICT services (software) is relatively far more important for WB countries than the export of ICT hardware. The latter is the most important for Hungary.

are developing proprietary products for various niche software markets around the world. A Croatian firm has developed and is successfully marketing one of the best trams on the world market. Similar examples can be found elsewhere in the region.

Another area that could be greatly improved in the future is agriculture. In several areas of WB there are exceptional conditions for the development in this area. Focusing on higher-value-added activities such as organic production could be a key future strategy for regional agriculture.

To dramatically improve the lives of the people in the WB region, their economic and political leaders need to show both courage and commitment to significantly improving institutions, tearing down regional barriers, and creating a level playing field in terms of competition. This may well prove harder than it sounds since those in power at every level in the region are used to exploiting that power to extract rents. This is why the EU accession process offers the most potential benefits for the region's population, as pressure from Europe may be needed to speed up the process. On the other hand, as recent events amply demonstrate, the EU itself is experiencing a deep structural crisis and cannot be seen as a universal panacea for the WB region's problems. The desire to truly reform and build a better life for the region's people has to come from within the region itself. There are some hopeful signs that this gradually seems to be dawning on regional leaders. If they pursue reforms, the Western Balkans may yet become a regional development pole, instead of a potential source of instability.

References

Bakker, B. and C. Klingen (2012), How Emerging Europe Came Through the 2008/09 Crisis. An Account by the Staff of the IMF's European Department, International Monetary Fund, Washington, D.C.

Božović, M., B. Urošević, and B. Živković (2009), "On the Spillover of Exchange Rate Risk into Default Risk," *Economic Annals* 183, pp. 32–55.

Cottarellli, C., G. Dell'Arrica and I. Vladkova-Hollar (2003), "Early Birds, Late Risers, and Sleeping Beauties: Bank Credit Growth to the Private Sector in Central and Eastern Europe and the Balkans," *IMF Working Paper* No. 03/213.

European Bank for Reconstruction and Development (2013), *Transition Report*, London.

European Banking Coordination Vienna Initiative (2012), Report from the Working Group on NPLs in Central, Eastern and Southeastern Europe.

Gligorov V., A. Iara, M. Landesmann, R. Stehrer and H. Vidovic (2008), "Western Balkan Countries: Adjustment Capacity to External

Shocks, with a Focus on Labor Markets," Wiiw Research Report No. 352, The Vienna Institute for International Economic Studies, Vienna

Grga, N. and B. Urošević (2014), "Application of Dynamic Stochastic General Equilibrium Models to the Case of the Serbian Economy," *Economic Annals* 201, pp. 35–68.

Jahan, S. (2012), *Inflation Targeting: Holding the Line*, IMF Finance & Development, Washington, D.C.

Koczan, Z. (2015), "Fiscal Deficit and Public Debt in the Western Balkans: 15 Years of Economic Transition," *IMF Working Paper* No. 15/172.

Murgasova, Z., N. Ilahi, J. Miniane, A. Scott, I. Vladkova-Hollar and an IMF Staff Team (2015), *The Western Balkans 15 Years of Economic Transition, Regional Economic Issues Special Report,* International Monetary Fund, Washington, D.C.

Sinn, Hans-Werner (2014), The Euro Trap. On Bursting Bubbles, Budgets and Beliefs, Oxford University Press, Oxford.

World Bank (2015), Albania World Bank Group Partnership Program Snapshot April 2015, Washington, D.C.

List of Figures

Figure 1.1:	Regional contributions to world trade and industrial production	14
Figure 1.2:	Inflation in the world and oil price movements	15
Figure 1.3:	Ifo World Economic Survey – Economic situation	16
Figure 1.4:	Contributions to GDP growth in the United States	17
Figure 1.5:	Business cycle developments in the United States	18
Figure 1.6:	Unemployment rates	19
Figure 1.7:	Inflation rates	19
Figure 1.8:	Contributions to GDP growth in the European Union	21
Figure 1.9:	Business cycle developments in the European Union	22
Figure 1.10:	Price developments in the euro area	23
Figure 1.11:	Unemployment rates in selected euro area countries	25
Figure 1.12:	Government structural budget balances	26
Figure 1.13:	First-time asylum applicants	27
Figure 1.14:	Changes in the primary fiscal balances relative to pre-crisis GDP	29
Figure 1.15:	Central bank interest rates	29
Figure 1.16:	Liquidity provision by the ECB	30
Figure 1.17:	Credit developments in the euro area	31
Figure 1.18:	10-year government bond yields	31
Figure 1.19:	Regional disparities in government bond yields in the euro area	32
Figure 1.20:	Interest rates on loans to businesses in selected countries of the euro area	32
Figure 1.21:	Developments in international stock markets from a euro area perspective	32
Figure 1.22:	Developments in selected stock markets within the euro area	33
Figure 1.23:	Real effective exchange rates around the world	33
Figure 1.24:	Exchange rate of the euro against the US dollar and PPP	33
Figure 1.25:	Development of selected macroeconomic variable around terrorist attacks	35
Figure 1.26:	World economic growth and the Ifo World Economic Climate	36
Figure 1.27:	Regional contributions to world GDP growth	37
Figure 1.28:	Ifo World Economic Survey	37
Figure 1.29:	Economic growth by region	38
Figure 1.30:	Confidence indicators for different sectors in the European Union	40
Figure 1.31:	Real GDP in the European Union	40
Figure 1.32:	Demand contributions to GDP growth in the European Union	40
Figure 1.33:	Employment in the European Union	41
Figure 1.34:	Unemployment rates in the euro area and the European Union	41
Figure 1.35:	Economic growth in the EU member countries	43
Figure 2.1:	Age-dependent public net transfers	55
Figure 2.2:	Unemployment and youth unemployment in 2015	59
Figure 2.3:	Youth (19–29 years) not in employment, education or training (NEETS) in 2012	59
Figure 2.4:	Italians moving to the United Kingdom	60
Figure 2.5:	NINo registrations of Italians entering the United Kingdom, by age group	60
Figure 2.6:	Households owning real assets	61
Figure 2.7:	Net median wealth of households	61
Figure 2.8:	Proportion of 25–34 year olds at home in 2014	63
Figure 2.9:	Relative median income at 65+	63
Figure 2.10:	Social benefits for old age	64
Figure 2.11:	Comparison of age-related medical expenditure profiles for males in 2010	66
Figure 2.12:	Long-term care costs (public spending)	66
Figure 2.13:	Projections of public budget effects of changing demographic structure (change 2015–30)	67
Figure 2.14:	Net government debt in 2015	67

Figure 3.1:	Tertiary school enrolment probability predictions in France	75
Figure 3.2:	Private vs. government schools country-specific differences	76
Figure 3.3:	Educational performances in EU27 countries	78
Figure 3.4:	Schooling and competences in EU countries	79
Figure 3.5:	Levels and changes of years of education in EU countries	79
Figure 4.1:	Public sector size, OECD countries	86
Figure 4.2:	Trade shares, OECD countries	87
Figure 4.3:	Interest rate spread between Denmark and Germany	88
Figure 4.4:	Gross domestic products	89
Figure 4.5:	Unemployment rates	89
Figure 4.6:	Gross debt stocks	90
Figure 4.7:	Job inflows and outflows	91
Figure 4.8:	Labour market transitions for the unemployed, European countries	91
Figure 4.9:	Profile of public finances	93
Figure 4.10:	Employment rates for Denmark in 2013	94
Figure 5.1:	Average annual rates of real GDP growth	101
Figure 5.2:	Weighted average annual real GDP growth rates by regions	101
Figure 5.3:	Average current account deficits	102
Figure 5.4:	Weighted average current account deficits by regions	102
Figure 5.5:	Weighted average gross government debt by regions	103
Figure 5.6:	Cumulative real per-capita GDP (PPP adjusted) growth	104
Figure 5.7:	Cumulative changes of the population	105
Figure 5.8:	Population drop by regions	105
Figure 5.9:	Average number of births	105
Figure 5.10:	Average number of deaths	106
Figure 5.11:	Cumulative net change in population due to natural causes	106
Figure 5.12:	Average expected life span	107
Figure 5.13:	Weighted average expected life spans by regions	107
Figure 5.14:	Weighted average labour market indicators by regions	107
Figure 5.15:	Average labour market indicators	108
Figure 5.16:	Average income inequality for the period 2001–2012	109
Figure 5.17:	Average poverty for the period 2001–2013	109
Figure 5.18:	Weighted average transition scores for the 5 main EBRD transition categories by regions	110
Figure 5.19:	Aggregate transition scores for the Western Balkans	110
Figure 5.20:	Average fraction of firms that needed to make informal payments to public officials	112
Figure 5.21:	Corruption indicators	113
Figure 5.22:	Time needed to legally start a company	113
Figure 5.23:	Average gross monthly salaries	114
Figure 5.24:	Aggregate inflation for the period 2005–2014	115
Figure 5.25:	Share of assets of foreign-owned banks	115
Figure 5.26:	Domestic credit to private sector	116
Figure 5.27:	Euroisation (households and non-financial corporations)	117
Figure 5.28:	Average fraction of nonperforming loans (NPLs)	118
Figure 5.29:	Loss coverage provisions	119
Figure 5.30:	Average bank capital to assets ratio for the period 2003–2014	119
Figure 5.31:	Average share of exports of Information and Computer Technology (ICT) services and	a = .
	goods in total exports of services and goods, respectively, for the period 2005–2013	122

LIST OF TABLES

Table 1.1:	Labour costs	24
Table 1.2:	Public finances	26
Table 1.A.1:	GDP growth, inflation and unemployment in various countries	45
Table 1.A.2:	GDP growth, inflation and unemployment in the European countries	46
Table 1.A.3:	Key forecast figures for the European Union	47
Table 1.A.4:	Key forecast figures for the euro area	47
Table 5.1:	Ratios of PPP-adjusted per-capita income of the richest and the poorest country	104
Table 5.2:	Ratios of weighted average (PPP-adjusted) per-capita income with respect to the	
	weighted average income of the Western Balkans	104
Table 5.3:	EU and EMU accession date (if applicable) and monetary policy regimes	116
List of	Boxes	
Box 1.1:	The economic impact of terrorist attacks	35
Roy 4 1.	Measurement issues	86

THE MEMBERS OF THE EUROPEAN ECONOMIC ADVISORY GROUP AT CESIFO



Torben M. Andersen

(PhD, CORE, Université Catholique, Louvain-la-Neuve, Belgium, 1986) is Professor of Economics at Aarhus University, Denmark and a Fellow of CESifo, Centre for Economic Policy Research and IZA. He has served as de-

partment head and member of various university committees. He has had various short-term visiting positions at other universities, served as editor of the Scandinavian Journal of Economics (1991-1997), and as member of several editorial boards. He has been extensively involved in policy advice in Denmark and abroad. In Denmark among other as chairman of the Economic Council (1993-1996 and 2001-2003), the Welfare Commission (2003-2006), and the Pension Commission (2014-2015) and as member of the Systemic Risk Council (since 2013). Abroad his advisory activities include the EU Commission, member of the Fiscal Policy Council in Sweden (2007–2011), Economic Policy Council Finland (since 2014) and chairman of the Economic Council, Greenland (since 2012), and commission on Migration in Norway (2009-2011). Most of his research has been on macroeconomics, labour economics and the economics of the welfare state. He has published in many scholarly journals, including the Economic Journal, Journal of Public Economics, Journal of International Economics, Economic Theory, and European Economic Review. He has published several books and edited volumes, most recently Reform Capacity and Macroeconomic Performance in the Nordic Countries, edited with U. Michael Bergman and Svend E. Hougaard Jesen, Oxford University Press, 2015.

Torben M. Andersen Aarhus University Department of Economics and Business Economics Fuglesangs Allé 4, building 2621, 2 8210 Aarhus V Denmark tandersen@econ.au.dk



Giuseppe Bertola

(Ph.D., Massachusetts Institute of Technology, 1988) is Professor of Economics at EDHEC Business School, on extended leave without pay from his position at Università di Torino where he has been Professore Associato (since 1993) and

Ordinario (since 1996) di Economia Politica. In 1997-2003 he was full-time Professor at the European University Institute; in 1989-93 he was Assistant Professor and Assistant Director of the International Finance Section, Princeton University. He has served as a Managing Editor of Economic Policy (2001-08), Condirettore of Giornale degli Economisti e Annali di Economia (1996-2011), and a Programme Director of CEPR's Labour Economics programme (2009-2013). He has performed scientific advisory work for the European Commission, the European Central Bank, and other organizations. His research currently focuses on the structural and institutional aspects of labour and financial markets, from an international comparative perspective, particularly as regards their distributional impact and interaction with the European process of economic and monetary unification. He has applied similar methods to exchange rate and money-market policies, interactions between growth and distribution, households' durable consumption and borrowing, and educational systems. He has also published widely in the Review of Economic Studies, the American Economic Review, the European Economic Review, other academic journals and books, also authoring chapters in Handbook of Labor Economics and Handbook of Income Distribution (North-Holland), co-authoring Models for Dynamic Macroeconomics (Oxford University Press) and Income Distribution in Macroeconomic Models (Princeton University Press), and co-editing Welfare and Employment in a United Europe and The Economics of Consumer Credit (MIT Press).

Giuseppe Bertola EDHEC Business School 393 promenade des Anglais BP 3116 France giuseppe.bertola@edhec.edu



John Driffill

(Ph.D., Princeton University, 1977) is a Professor of Economics at Birkbeck College, University of London, and a Fellow of the Centre for Economic Policy Research. He has previously worked at the University of Southampton, Tilburg Uni-

versity, and Queen Mary and Westfield College, University of London, and held visiting positions at Queen's University (Kingston, Canada), in Stockholm, Aarhus, Tokyo, and Paris. From 2004 to 2010 he was the Director of the UK Economic and Social Research Council's programme on World Economy and Finance. From 2000 to 2004 he was on the Council and Executive Committee of the Royal Economic Society. He has advised the House of Lords Select Committee on the European Union (Sub-Committee A: Economic and Financial Affairs) in enquiries into the euro and the Stability and Growth Pact. Most of his research has been on macroeconomics and monetary policy, and he has published in many scholarly journals, including the American Economic Review, the Review of Economic Studies, the Journal of Monetary Economics, and the European Economic Review. He has published two edited volumes, one on A Currency for Europe, another on The Role of Financial Markets in the Transition Process, and an introductory textbook, Economics with Joseph E. Stiglitz (W. W. Norton and Co, 2000).

John Driffill Birkbeck College Malet Street London WC1E 7HX United Kingdom j.driffill@bbk.ac.uk



Harold James

(Ph.D. Cambridge University, 1982) is Claude and Lore Kelly Professor in European Studies and a Professor of History at Princeton University, a Professor of International Affairs in the Woodrow Wilson School, as well as an Adjunct Professor

at BI Norwegian Business School. He is Director of the Program in Contemporary European Politics and Society and serves on the editorial committee of the journal World Politics and is Chairman of the Academic Council of The European Association for Banking and Financial History (EABH). Before coming to the United States in 1986, he was a Fellow of Peterhouse for eight years. He was awarded with the Ellen MacArthur Prize for Economic History at the University of Cambridge in 1982, the Helmut Schmidt Prize in Economic History at the German Historical Institute in Washington, D.C. in 2004 and the Ludwig Erhard Prize for writing about economics in 2005. His research focuses on European economic history, and German history in particular. He has published and co-authored several books analysing Germany's financial history in the interwar era, the changing character of national identity in Germany and detailed studies about the Deutsche Bundesbank. His latest book, Making the European Monetary Union published by the Harvard University Press in 2012, deals with the role of the Committee of Central Bank Governors and the origins of the European Central Bank, giving us a deeper understanding of the European monetary crisis by tracing the decade-long process of implementing the idea of a Europe-wide monetary union and common currency, which finally morphed into the European Central Bank.

Harold James
Princeton University
History Department
129 Dickinson Hall
Princeton, NJ 08544-1017
USA
hjames@princeton.edu



Hans-Werner Sinn

is Professor of Economics and Public Finance at the University of Munich (LMU) and President of the CESifo Group. He has been a member of the Council of Economic Advisors to the German Ministry of Economics since 1989 and is a

fellow of a number of learned societies. From 1997–2000 he was President of the German Economic Association (Verein für Socialpolitik) and from 2006-2009 of the International Institute of Public Finance. He holds honorary doctorates from the Universities of Magdeburg (1999) and Helsinki (2011), as well as the HHL Leipzig (2013), and an honorary professorship from the University of Vienna. He has taught at the University of Western Ontario, and held visiting fellowships at the London School of Economics, as well as at Bergen, Hebrew, Oslo, Princeton and Stanford Universities. He received the best of year awards from the University of Mannheim for his dissertation and habilitation theses, and a number of other prizes and awards from various institutions including the Corine Award (2004) for his bestseller Ist Deutschland noch zu retten? (Can Germany be Saved?), the Ludwig-Erhard-Prize for Economic Journalism (2013), the Gustav-Schmoller-Medal (2014), and the distinction as the university professor of the year in Germany (2015). He features in the worldwide list of the Top 100 Thought Leaders for his work on the bazaar economy. He was awarded the Officer's Cross of the Order of Merit of the Federal Republic of Germany in 2005 and the Bavarian Maximilian Order in 2008. In 1999 he gave the Yrjö Jahnsson Lectures, in 2000 the Stevenson Lectures, in 2004 the Tinbergen Lectures, in 2005 the World Economy Annual Lecture, in 2007 the Thünen Lecture, in 2010 the D.B. Doran Lecture, in 2011 the European Economy Lecture, in 2012 the Van Lanschot and the Egon Sohmen Lectures, and in 2013 the Whitman, the Julian Hodge and the Booth Lectures. Sinn has published in the American Economic Review, the Quarterly Journal of Economics, the European Economic Review, the Journal of Public Economics and many other journals. He has published 12 major and 18 smaller monographs in six languages including Economic Decisions under Uncertainty, Capital Income Taxation and Resource Allocation, Jumpstart - The Economic Unification of Germany, The New Systems Competition, Casino Capitalism, The Green Paradox, and The Euro Trap.

Hans-Werner Sinn
Ifo Institute
Poschingerstr. 5, 81679 Munich, Germany sinn@ifo.de



Jan-Egbert Sturm

(Ph.D. University of Groningen, 1997) is Professor of Applied Macroeconomics, Director of the KOF Swiss Economic Institute at the ETH Zurich, President of the Centre for International Research on Economic Tendency Surveys (CIRET) and

Editor of the European Journal of Political Economy. He was a researcher at the University of Groningen, The Netherlands, until 2001, and taught as Visiting Professor at the School of Business, Bond University, Gold Coast, Australia, in 2000 and 2005. As Head of the Department for Economic Forecasting and Financial Markets at the Ifo Institute for Economic Research, he was also Professor of Economics at the University of Munich (LMU) at the Center for Economic Studies (CES), 2001-2003. He held the Chair of Monetary Economics in Open Economies at the University of Konstanz, Germany, which was coupled with the position of Director of the Thurgau Institute of Economics (TWI) in Kreuzlingen, Switzerland, 2003–2005. In his research, Jan-Egbert Sturm relies heavily on empirical methods and statistics, concentrating on monetary economics, macroeconomics as well as political economy. His applied studies have focused on, for example, economic growth and central bank policy. He has published several books, contributed articles to various anthologies and international journals including the American Economic Review, the European Economic Review, the European Journal of Political Economy, the Journal of Banking and Finance, the Journal of Development Economics, the Oxford Economic Papers, Public Choice, and the Scandinavian Journal of Economics. Jan-Egbert Sturm headed the Ifo research team in the Joint Analysis of the Six Leading German Economic Research Institutes, 2001-2003. Since 2001 he has been member of the CESifo Research Network and since 2003 Research Professor at the Ifo Institute. In 2006 he was appointed member of the User Advisory Council of the Ifo Institute.

Jan-Egbert Sturm
ETH Zurich
KOF Swiss Economic Institute
LEE G 116
Leonhardstr. 21
8092 Zurich
Switzerland
sturm@kof.ethz.ch



Branko Urošević

(PhD Business Administration, U.C. Berkeley, 2002; PhD Physics, Brown University, 1995) is Professor of Finance and Operations Research and Director of the International Master in Quantitative Finance (IMQF) pro-

gramme at the University of Belgrade. Previously he taught and directed Master of Finance programme at Universitat Pompeu Fabra, Barcelona. He is Vice-Chairman of the National Council for Higher Education, the regulatory body for higher education in Serbia, Advisor to the Governor of the National Bank of Serbia (for research) and a member of the Advisory Board of the Diligan Research Center of the Central Bank of Armenia. He is a permanent member of the Committee for Economic Sciences of the Serbian Academy of Arts and Sciences, a visiting professor at ICEF, Moscow, and a member of the International Scientific Committee of UniCredit and Universities Foundation, Milan. His research is published in the leading international journals including Journal of Political Economy, Proceedings of the American Academy of Sciences (PNAS), and Management Science, among many others. His interests include dynamic moral hazard problems, banking and risk management, education economics, real estate finance, and asset pricing. His research was supported by grants from EU, Spain, US, and Serbia. He worked as a consultant in McKinsey & Co and KPMG in Chicago, IL. He consulted, also, central banks of Armenia and Serbia, Ministry of Finance of Serbia and a number of commercial banks. He is one of the founders of a consultancy specializing in financial risk management and was the Chairman of the largest private pension fund in Serbia.

Branko Urošević University of Belgrade Faculty of Economics Kamenička 6, 11000 Belgrade Serbia urosevic@ekof.bg.ac.rs

PREVIOUS REPORTS

The EEAG Report on the European Economy 2015: Blurring the Borders

Macroeconomic Outlook

The European Energy Conundrum: Power Failure European Regional Disparity: Borders Strike Back

Migration in the European Union: Too Much of a Good Thing?

The EEAG Report on the European Economy 2014: The Road Towards Cohesion

Macroeconomic Outlook

Switzerland: Relic of the Past, Model for the Future?

Austerity: Hurting but Helping

Banking Union: Who Should Take Charge?

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 EEAG Report on the European Economy 2012: The Euro Crisis

Macroeconomic Outlook

The European Balance-of-Payments Problem

Banking Regulation

The Swedish Model

The Hungarian Crisis

Pricing Climate Change

The EEAG Report on the European Economy 2011: Governing Europe

Macroeconomic Outlook

A New Crisis Mechanism for the Euro Area

Greece

Spain

Taxation and Regulation of the Financial Sector

The EEAG Report on the European Economy 2010: Exiting the Crisis

The European Economy: Macroeconomic Outlook and Policy

A Trust-driven Financial Crisis. Implications for the Future of Financial Markets

From Fiscal Rescue to Global Debt

Implications of the Crisis for US Adjustment Needs

The Financial Crisis: Risks and challenges for the euro area

The EEAG Report on the European Economy 2009

The European Economy: Macroeconomic Outlook and Policy

Financial Crisis Private Equity

Country Chapter: France

The EEAG Report on the European Economy 2008: Europe in a Globalised World

The European Economy: Macroeconomic Outlook and Policy How Much Real Dollar Depreciation is Needed to Correct Global Imbalances?

The Effect of Globalisation on Western European Jobs: Curse or Blessing?

Industrial Policy

Global Warming: The Neglected Supply Side

The EEAG Report on the European Economy 2007

The European Economy: Macroeconomic Outlook and Policy

Macroeonomic Adjustment in the Euro Area - the Cases of Ireland and Italy

The New EU Members

Scandinavia Today: An Economic Miracle?

Tax Competition Economic Nationalism

The EEAG Report on the European Economy 2006

The European Economy: Macroeconomic Outlook and Policy

Global Imbalances

Economic Growth in the European Union Prospects for Education Policy in Europe Mergers and Competition Policy in Europe

The EEAG Report on the European Economy 2005

The European Economy: Current Situation and Economic Outlook for 2005

Outsourcing

Longer Working Hours - the Beginning of a new Trend?

Pensions and Children House Prices in Europe

The EEAG Report on the European Economy 2004

The European Economy: Current Situation and Economic Outlook

Labour Market Reform in Europe

Pay-setting Systems in Europe: On-going Development and Possible Reforms

The Economics of Discrimination: Equity, Equality and Diversity in the New European Constitution

The 2004 EU Enlargement: Key Economic Issues Acceding Countries: The Road to the Euro

The EEAG Report on the European Economy 2003

The European Economy: Current Situation and Economic Outlook

Fiscal Policy and Macroeconomic Stabilisation in the Euro Area: Possible Reforms of the Stability and Growth

Pact and National Decision-Making-Processes

Rethinking Subsidiarity in the EU: Economic Principles

Financial Architecture

Should We Worry about the Brain Drain?

The EEAG Report on the European Economy 2002

The European Economy: Current Situation and Economic Outlook

The Weakness of the Euro: Is it Really a Mystery?

Fiscal and Monetary Policy

Prices, Wages and Inflation after the Euro - What Europeans Should or Should not Expect

Growth and Productivity

Welfare to Work

CAP Reform

CESifo Economic Studies

Publishing provocative, high-quality, accessible articles in economics, with a particular focus on policy issues.



SPEED

- Quick online submission
- Speedy review time
- Advance Access publication

VALUE

- I Free editor's choice articles throughout the year
- Free Sample Issue
- Numerous Special Issues, on topics ranging from inequality in China, to reinventing Europe, global environmental economics, and executive compensation

IMPACT

- Over 2,500 institutional subscribers worldwide
- Over 5,000 full-text downloads per month

Visit the website to read **free content**, sign-up for electronic alerting services, recommend to your library and submit your work.

cesifo.oxfordjournals.org









THE AUTHORS

Torben M. Andersen

Aarhus University



Professor of Economics at the Department of Economics and Business Economics, Aarhus University. Former chairman of the Danish Economic Council.

Giuseppe Bertola

Edhec Business School, Università di Torino **EEAG Vice-Chairman**



Professor of Economics at Edhec Business School, Nice, on extended leave from Università di Torino where he has been Professore di Economia Politica since 1996. Former editor of Economic Policy.

John Driffill

Birkbeck College, University of London FFAG Chairman



Professor of Economics at Birkbeck College, University of London. Formerly, Director of the ESRC research programme on 'World Economy and Finance' from 2004 to 2010.

Harold James

Princeton University



Professor of History and International Affairs, Claude and Lore Kelly Professor of European Studies, and Director of the Program in Contemporary European Studies at Princeton University.

Hans-Werner Sinn

Ifo Institute and University of Munich



Professor of Economics and Public Finance at the University of Munich and President of the CESifo Group.

Jan-Egbert Sturm

KOF, ETH Zurich



Professor of Applied Macroeconomics and Director of the KOF Swiss Economic Institute, ETH Zurich. President of the Centre for International Research on Economic Tendency Surveys (CIRET) and Editor of the European Journal of Political Economy.

Branko Urošević

University of Belgrade



Professor of Finance and Operations Research and Director of the International Masters in Quantitative Finance (IMQF) programme at University of Belgrade. Advisor to the Governor, National Bank of Serbia.