OECD Economic Surveys
EUROPEAN UNION

JUNE 2016

OECD

OECD Economic Surveys: European Union 2016

BETTER POLICIES FOR BETTER LIVES

Please cite this publication as:
OECD (2016), *OECD Economic Surveys: European Union 2016*, OECD Publishing, Paris.
http://dx.doi.org/10.1787/eco_surveys-eur-2016-en

ISBN 978-92-64-25621-7 (print)
ISBN 978-92-64-25628-6 (PDF)
ISBN 978-92-64-25630-9 (epub)

Series: OECD Economic Surveys
ISSN 0376-6438 (print)
ISSN 1609-7513 (online)

OECD Economic Surveys: European Union
ISSN 2072-5078 (print)
ISSN 2072-506X (online)

Photo credits: Cover © iStockphoto.com/Jooris Van Ostaeyen.

Corrigenda to OECD publications may be found on line at: *www.oecd.org/about/publishing/corrigenda.htm*.

Table of contents

Thematic chapter

Box

Tables

Figures

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

The economic situation and policies of European Union were reviewed by the Committee on 3 May 2016. The draft report was then revised in the light of the discussions and given final approval as the agreed report of the whole Committee on 23 May 2016.

The Secretariat's draft report was prepared for the Committee by Jan Strásky and Álvaro Pina under the supervision of Pierre Beynet. Research assistance was provided by Desney Wilkinson-Erb and Secretarial assistance was provided by Sylvie Ricordeau.

The previous Survey of the European Union was issued in April 2014.

BASIC STATISTICS OF THE EUROPEAN UNION,[a] 2015

(Numbers in parentheses refer to the OECD average)[b]

LAND, PEOPLE AND ELECTORAL CYCLE

Population (million)	508.5		Population density per km²	116.0	(35.1)
Under 15 (%)	15.6	(18.0)	Life expectancy (years, 2014)	80.9	(80.5)
Over 65 (%)	18.9	(16.3)	Men	78.1	(77.8)
Foreign-born (%)	10.4		Women	83.6	(83.1)
Latest 5-year average growth (%)	0.2	(0.6)	Latest general election	May 2014	

ECONOMY

Gross domestic product (GDP)			Value added shares (%, 2014)		
In current prices (billion USD)	16.224		Primary sector	1.6	(2.4)
In current prices (billion EUR)	14.625		Industry including construction	24.4	(26.7)
Latest 5-year average real growth (%)	1.0	(1.7)	Services	74.0	(70.9)
Per capita (000 USD PPP)	37.6	(40.2)			

GENERAL GOVERNMENT

Per cent of GDP

Expenditure	47.4	(42.3)	Gross financial debt	85.2	
Revenue	45.0	(38.5)			

EXTERNAL ACCOUNTS

			Main exports (% of total merchandise exports)		
			Machinery and transport equipment	44.2	
In per cent of GDP			Other manufactured goods	23.7	
Exports of goods and services (including intra EU)	43.5	(54.1)	Chemicals and related products, n.e.s.	18.5	
Imports of goods and services (including intra EU)	40.2	(49.7)	Main imports (% of total merchandise imports)		
Current account balance	1.1	(0.1)	Machinery and transport equipment	31.6	
			Other manufactured goods	26.7	
			Mineral fuels, lubricants and related materials	19.4	

LABOUR MARKET, SKILLS AND INNOVATION

Employment rate for 15-64 year-olds (%)	65.6	(66.2)	Unemployment rate, Labour Force Survey (age 15 and over, %)	9.4	(6.8)
Men	70.9	(74.1)	Youth (age 15-24, %)	20.4	(13.9)
Women	60.4	(58.5)	Long-term unemployed (1 year and over, %)	4.5	(2.5)
Participation rate for 15-64 year-olds (%)	72.5	(71.2)	Tertiary educational attainment 25-64 year-olds (%)	30.1	(33.3)
Average hours worked per year (2014)[c]	1 609	(1 770)	Gross domestic expenditure on R&D (% of GDP, 2014)	2.0	(2.4)

ENVIRONMENT

Total primary energy supply per capita (toe, 2014)	3.3	(4.1)	CO_2 emissions from fuel combustion per capita (tonnes, 2013)	6.6	(9.6)
Renewables (%)	12.2	(9.1)	Municipal waste per capita (tonnes, 2014)	0.5	(0.5)
Fine particulate matter concentration ($PM_{2.5}$, µg/m^3, 2013)	13.8	(13.8)			

SOCIETY

Income inequality (Gini coefficient, 2014)	0.309	(0.308)	Education outcomes (PISA score, 2012)		
At risk of poverty rate (%, 2014)	10.8		Reading	489	(496)
Public and private spending (% of GDP)			Mathematics	489	(494)
Health care, current expenditure (2013)[c]	8.8	(8.9)	Science	497	(501)
Pensions (2011)[c]	9.1	(8.7)	Share of women in parliament (%, April 2016)	27.9	(27.9)
Education (primary, secondary, post sec. non tertiary, 2013)	3.4	(3.7)	Net official development assistance (% of GNI, 2014)	0.32	(0.37)

Better life index: *www.oecdbetterlifeindex.org*

a) Average of European Union 28 countries unless otherwise indicated.

b) Where the OECD aggregate is not provided in the source database, a simple OECD average of latest available data is calculated where data exist for at least 29 member countries.

c) Average of the European Union member countries that are also members of the OECD (21 countries).

Source: Calculations based on data extracted from the databases of the following organisations: Eurostat, OECD, International Energy Agency, World Bank, International Monetary Fund and Inter-Parliamentary Union.

Abbreviations and acronyms

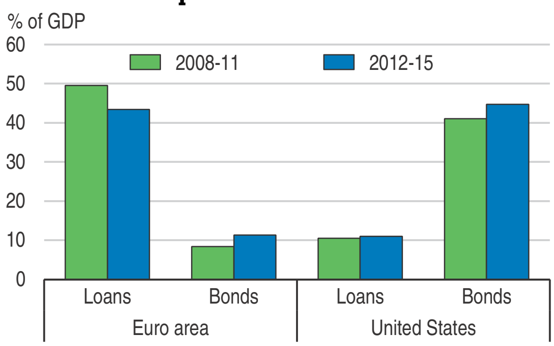
BEPS	Base erosion and profit shifting
CMU	Capital markets union
CO_2	Carbon dioxide
COP21	United Nations Conference on Climate Change, 21st session
ECB	European Central Bank
ESMA	European Securities and Markets Authority
ETS	Emissions trading system
EU	European Union
EUR	Euro
Frontex	European agency for the management of operational cooperation at the external borders of the member states of the European Union
GDP	Gross domestic product
GHG	Greenhouse gas
IEA	International Energy Agency
ICT	Information and communication technology
ISDS	Investor-to-state dispute settlement
PISA	Programme for international student assessment
REFIT	Regulatory fitness and performance programme
RTAs	Regional trade agreements
SMEs	Small and medium-sized enterprises
TTIP	Transatlantic trade and investment partnership
US	United States

Executive summary

- *Diversifying sources of financing would strengthen investment and help sustain the recovery*
- *Deepening the Single Market and supporting green growth through reforms in network sectors*
- *Co-ordinated response for better labour market mobility and effective integration of legal migrants*

Diversifying sources of financing would strengthen investment and help sustain the recovery

Corporate loans and bonds



Source: Eurostat, ECB, US BEA, Federal Reserve and SIFMA.

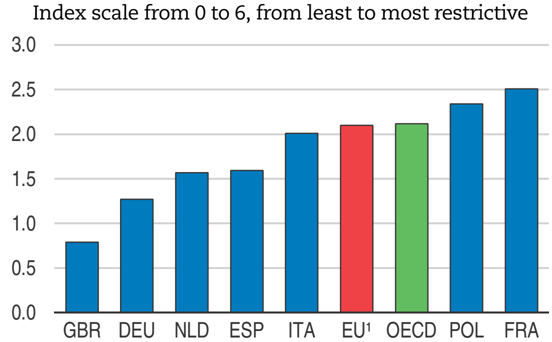
StatLink http://dx.doi.org/10.1787/888933366508

Building connected capital markets will reduce the over-reliance of European firms on bank lending at a time when the banking sector is still fragile in many countries. Diversifying both the domestic and cross-border sources of financing will lead to efficiency gains and help companies to expand, while allowing for a better sharing of risk among investors. Bank lending could be complemented by alternative financing, including securitisation, covered bonds, venture capital and private placements.

Deepening the Single Market and supporting green growth through reforms in network sectors

Energy, transport and communication regulation

Index scale from 0 to 6, from least to most restrictive



1. European Union 28 countries.

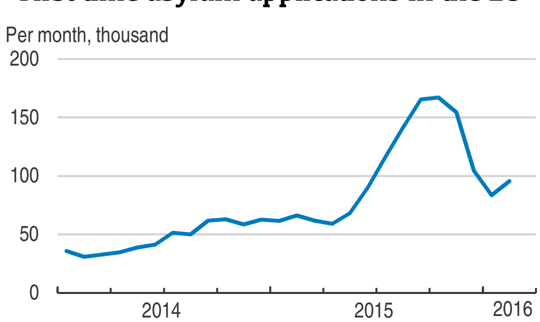
Source: OECD (2015), *OECD Product Market Regulation Statistics* (database).

StatLink http://dx.doi.org/10.1787/888933366512

The EU Single Market remains far from completed and the progress in goods and services markets integration has been limited since the crisis. The digital economy is developing quickly, but its full cross-border potential remains unrealised. EU energy markets require substantial investment in trans-European infrastructure, both to improve interconnection and to achieve targets for renewable energy production. Further harmonisation of regulations and technical standards in transport markets would sharpen competition and significantly raise income.

Co-ordinated response for better labour market mobility and effective integration of legal migrants

First time asylum applications in the EU



Source: Eurostat (2016), "Asylum and managed migration", *Eurostat Database*.

StatLink http://dx.doi.org/10.1787/888933366526

Barriers to intra-EU labour mobility, including recognition of professional qualifications and supplementary pension portability, remain significant and need to be reduced. Labour market requirements for non-EU migrants should be further standardised. The inflow of refugees is a major and pressing challenge that must be met collectively by the EU countries. A coordinated and comprehensive response is crucial to ensure effective provision of international protection, sharing of costs and successful integration of refugees.

MAIN FINDINGS	KEY RECOMMENDATIONS
Developing market-based financing alternatives for firms	
European financial markets are fragmented along national lines and financial intermediation is still predominantly bank-based.	Ease the regulatory treatment of simple, transparent and standardised securitisation to unlock lending to small and medium-sized enterprises. Collect and share internationally comparable credit information on smaller firms. Lower capital requirements for long-term and infrastructure investment.
The investor base in European corporate bond markets remains narrow, impeding non-bank sources of finance.	Lower the regulatory barriers in corporate bond markets by addressing issues in securities ownership and harmonising insolvency proceedings.
Enhancing labour market mobility and integration	
Barriers to intra-EU labour mobility, such as licensing procedures for professionals and limited supplementary pension portability, remain high.	Reduce the administrative burden associated with recognition of professional qualifications by using electronic procedures such as the European Professional Card. Legislate effective portability of supplementary pension rights.
The share of high-skilled immigrants in the EU is below the OECD average.	Simplify the eligibility requirements and procedures of the Blue Card scheme to make it more attractive to non-EU high-skilled labour migrants than existing schemes.
The EU policy response to the refugee crisis has been lagging developments on the ground.	Strengthen joint protection of external borders. Speed up administrative decisions on asylum applications and ease labour market access for recognised refugees.
Connecting network sectors would foster internal market and green growth	
Unnecessary costs of regulation and regulatory heterogeneity hamper the internal market.	Improve the quality of impact assessment of legislative proposals, notably amendments, and the quality of *ex post* evaluation of policies.
The digital economy is growing, but remains hampered by national borders.	Harmonise the rules for online purchases and reduce unjustified geographical discrimination of consumers.
Low competition in network sectors can be addressed by improving interconnectivity and co-ordinated regulatory frameworks.	Harmonise, taking into account the specificities of each member state, national regulations and technical specifications in network sectors, with the target of transferring decision powers in technical matters to a single EU regulator. Prioritise the Trans-European transport and energy network projects to support the completion of the Single Market.
The impact of the Emissions Trading System (ETS) on investment behaviour is limited due to too many emission allowances.	To ensure a functioning EU carbon market, reform the ETS by reducing the emissions cap and introducing a reserve of allowances to smooth market fluctuations.

Assessment and recommendations

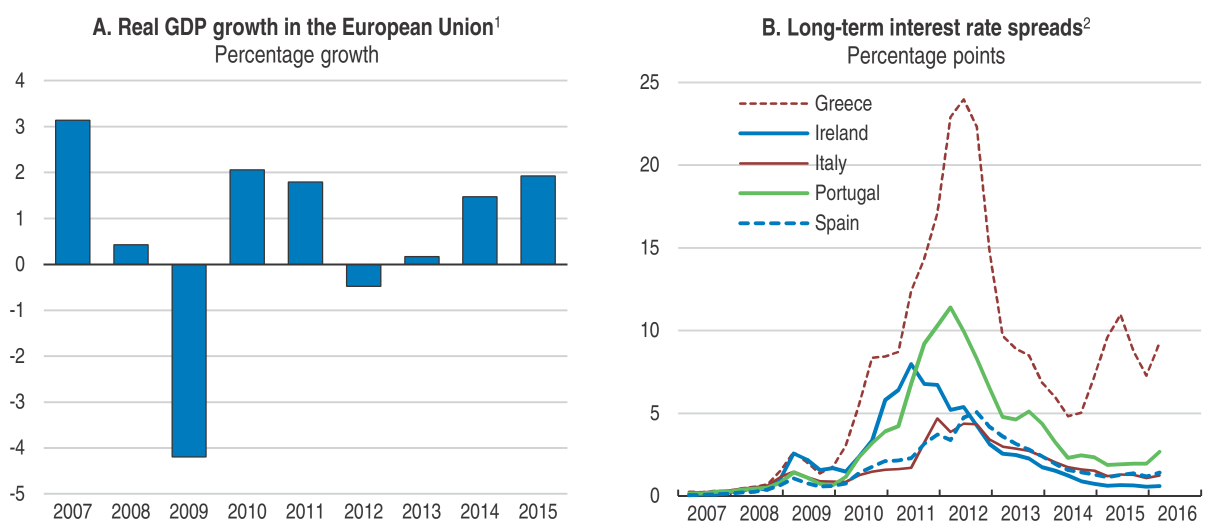
- *Challenges facing Europe*
- *Fostering recovery and rebalancing*
- *The refugee crisis*
- *The state of the Single Market*
- *Capital mobility-enhancing policies*
- *Labour mobility-enhancing policies*
- *Regulatory and horizontal policies to support potential growth*
- *Key service sector policies to lift growth*

The statistical data for Israel are supplied by and under the responsibility of the relevant Israeli authorities. The use of such data by the OECD is without prejudice to the status of the Golan Heights, East Jerusalem and Israeli settlements in the West Bank under the terms of international law.

Challenges facing Europe

Europe has made important progress in harnessing and reinforcing its policies and institutions to recover from a double-dip recession and improve crisis management. Very supportive monetary policy has helped growth to pick up gradually over the past three years (Figure 1, Panel A), and contributed to reduce tensions in sovereign debt markets (Figure 1, Panel B). The effect of fiscal policy on demand has turned broadly neutral. Important building blocks of banking union, on both supervision and resolution fronts, have come into operation, improving the resilience of the European financial system. Confidence in the European project has recovered from its lows in 2013, although it is still well below what it was before the crisis (Figure 2).

Figure 1. **GDP growth and long-term interest rate spreads**



1. European Union member countries that are also members of the OECD (21 countries).
2. Ten-year government bond spreads relative to the German rate.

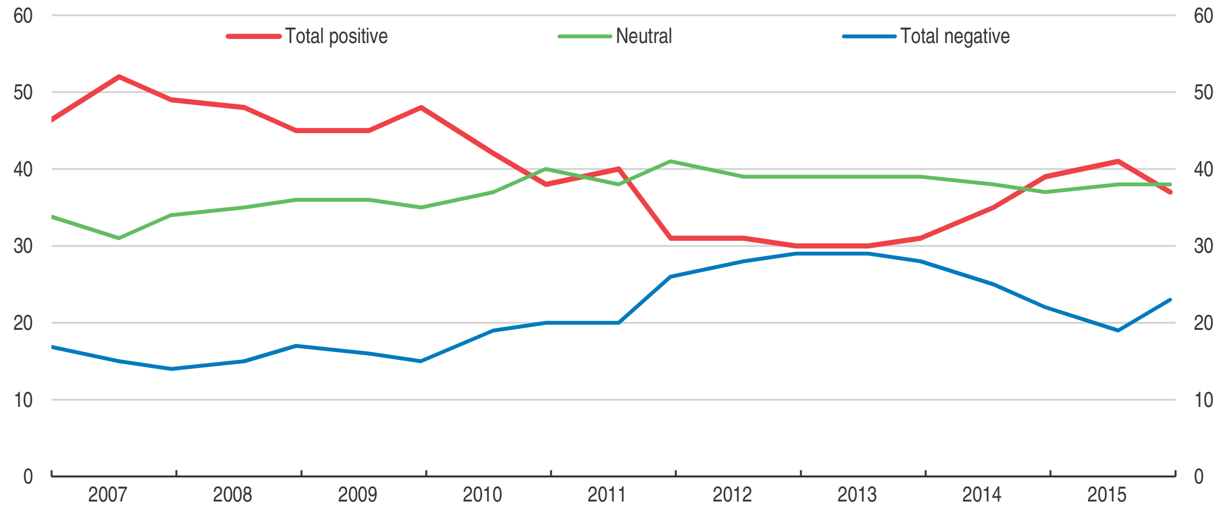
Source: OECD (2016), *OECD Economic Outlook: Statistics and Projections* and *Main Economic Indicators* (databases).

StatLink http://dx.doi.org/10.1787/888933366539

However, many legacies of the crisis are still unresolved, and major new problems have emerged. Unemployment is still high in many countries, and there is a wide dispersion across the euro area (Figure 3). Unlike in the United States, investment is still far below 2007 levels, especially in those countries hit hardest by the crisis (Figure 4), mainly due to weak demand but also to high non-performing loans and, in many countries, high corporate indebtedness, which hamper credit (OECD, 2015a). Political tensions have flared up recently due to large inflows of refugees, and have put some strains on border-free travel within the Schengen zone. The reintroduction of border controls in some Schengen zone countries is a setback for European integration.

Figure 2. **Eurobarometer: Public opinion of the European Union**

Question responses,[1] per cent



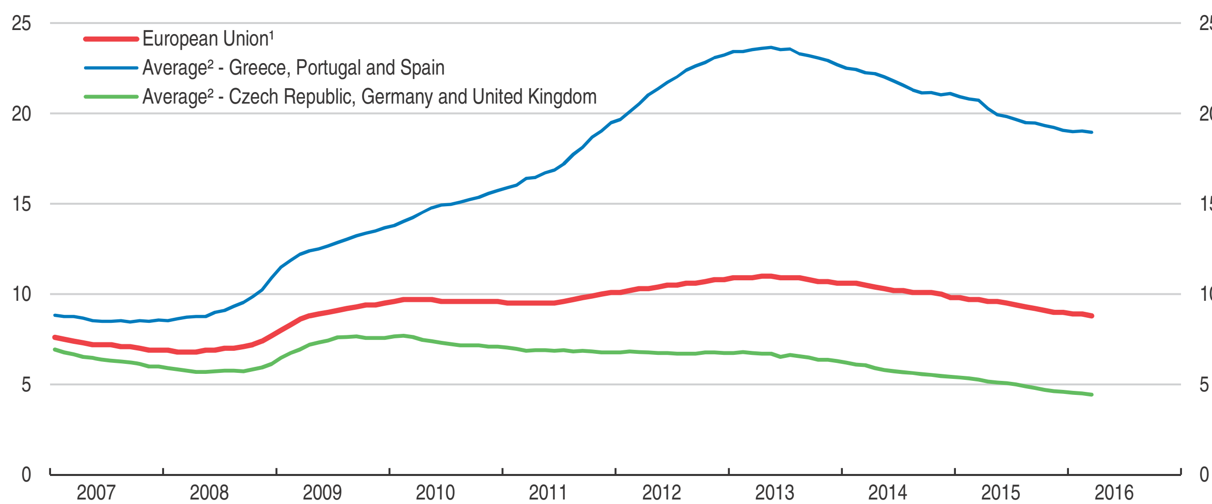
1. "In general, does the EU conjure up for you a very positive, fairly positive, neutral, fairly negative or very negative image?"

Source: European Commission, "Public Opinion in the European Union", *Standard Eurobarometer*, various editions.

StatLink http://dx.doi.org/10.1787/888933366545

Figure 3. **Unemployment dispersion in the European Union**

Unemployment rates, per cent



1. European Union 28 countries.
2. Unweighted average.

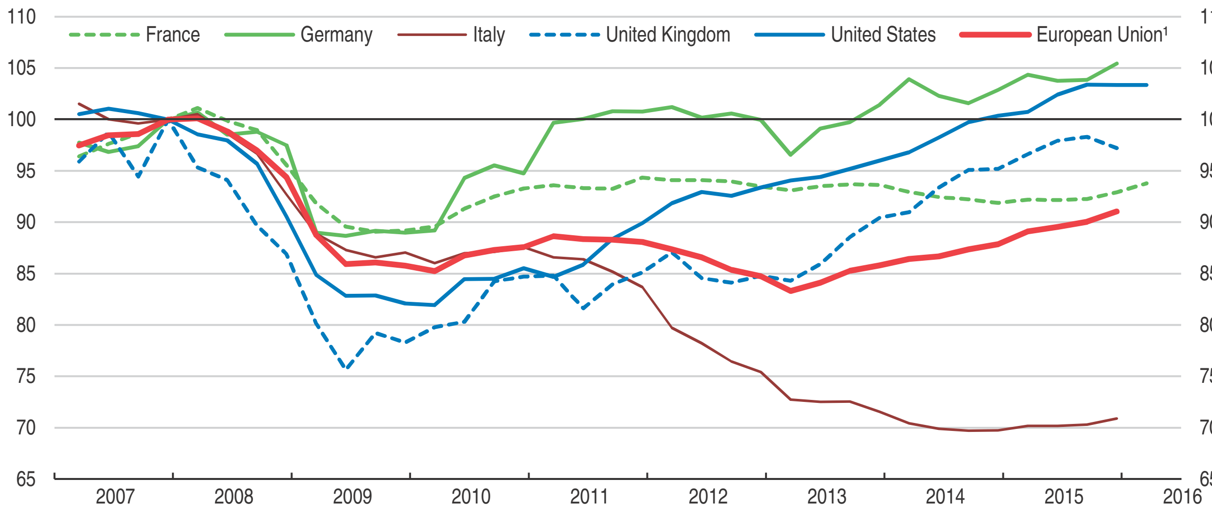
Source: Eurostat (2016), "Employment and unemployment (LFS)", *Eurostat Database*.

StatLink http://dx.doi.org/10.1787/888933366551

These challenges weigh on economic performance and, more broadly, on the quality of life of European citizens. Well-being in the European Union often displays large disparities across countries (Figure 5). These tend to be most acute in income, labour market outcomes and subjective well-being, all of which were deeply affected by the crisis. Furthermore, some countries often find themselves among the best or the worst

Figure 4. **Investment is still far below 2007 levels**

Real gross fixed capital formation, index Q4 2007 = 100



1. European Union member countries that are also members of the OECD (21 countries).

Source: OECD (2016), *OECD Economic Outlook: Statistics and Projections* (database).

StatLink http://dx.doi.org/10.1787/888933366563

performers in most dimensions of well-being (Figure 5). Improving well-being requires stronger and more even growth and job creation across the euro area, but also reforms in specific policy areas, such as education and health, where the composition and efficiency of public spending plays a crucial role.

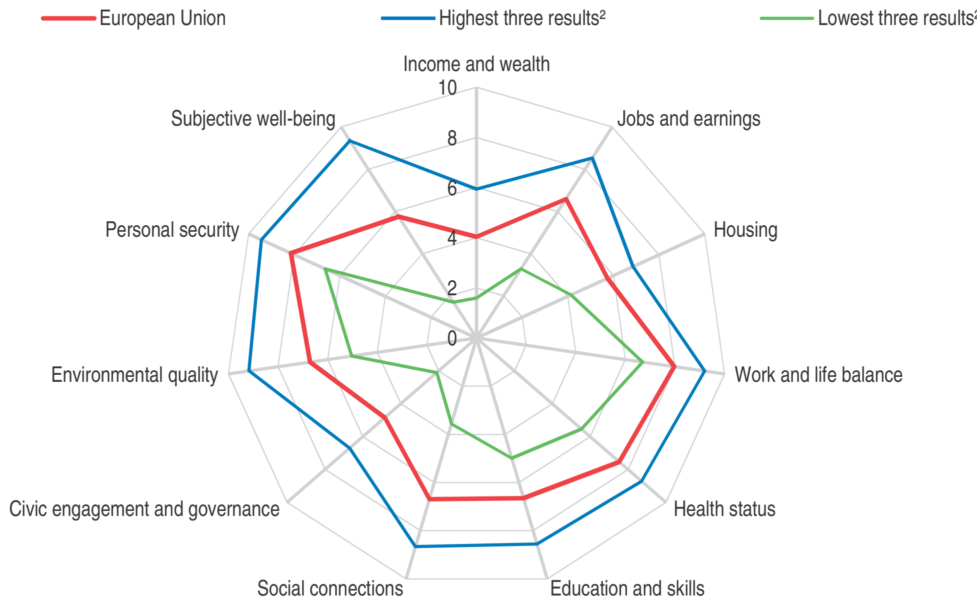
Building a better future calls for stronger collective action on several fronts. Despite recent progress, banking union remains incomplete, which hampers monetary policy transmission and capital market integration, and the resulting mutual dependence of national governments and national banks poses vulnerabilities during a crisis. Joint action is also needed to protect external borders and share the financial burden of the refugee inflow. Public investment remains depressed, due to strong and lopsided fiscal consolidations in the recent past, which have fallen heavily on capital spending, and insufficient consideration of cross-country spillovers. Business investment is further hampered by the high levels of corporate debt overhang, by remaining weaknesses in some national banking systems and by scant progress in goods and services markets integration after the crisis, not least through the persistence of high regulatory heterogeneity.

In this context, the 2016 *OECD Economic Survey* of the euro area mainly focusses on fiscal and financial challenges, and the 2016 *OECD Economic Survey* of the European Union on structural reform priorities to complete the Single Market. The main messages of this *Survey* are:

- To deal with the problems they face, the member governments need to harness EU institutions to develop and implement collective and cooperative solutions.
- The European Union economy is gradually recovering, but investment remains weak and the wide disparity in economic performance and well-being is still a major concern.
- The refugee crisis poses an immediate challenge that must be dealt with collectively, based on burden sharing.
- Completing the Single Market is the best way forward to raise the well-being of Europeans in the years ahead.

Figure 5. **Well-being outcomes**[1]

European Union, 2016



1. European Union member countries that are also members of the OECD (21 countries). Each well-being dimension is measured by one to three indicators from the OECD Better Life indicator set. Normalised indicators are averaged with equal weights. Indicators are normalised to range between 10 (best) and 0 according to the following formula: ([indicator value – worst value]/[best value – worst value]) x 10.
2. Calculated as a simple average of the highest and lowest performers of the European Union cross-country distribution.

Source: OECD Better Life Index, *www.oecdbetterlifeindex.org*.

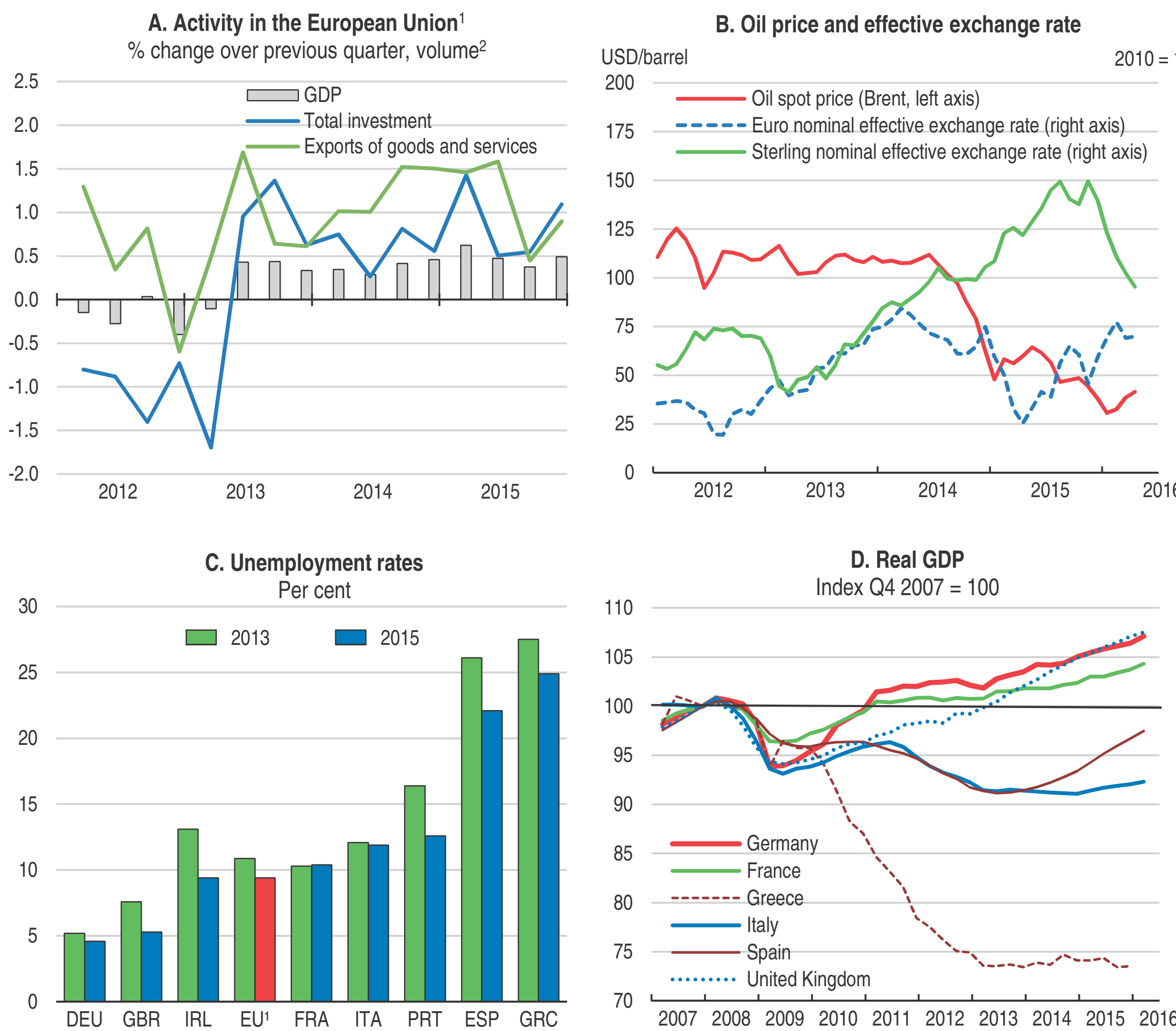
StatLink http://dx.doi.org/10.1787/888933366578

Fostering recovery and rebalancing

Growth has gathered pace since mid-2014, supported by monetary expansion and exchange rate depreciation in some countries (Figure 6). The sharp fall in global oil prices has raised household incomes and the fiscal policy is no longer weighing on domestic demand. Exports have grown robustly for several quarters, reflecting the euro depreciation and stronger activity in major markets, such as the United States. More recently, a stronger euro and the slowdown in emerging markets has weighed on export growth in the European Union, while sterling depreciation probably helped support net exports in the United Kingdom. Business investment has disappointed, largely due to weak growth expectations and possibly, in some countries, credit constraints.

Economic performance has been uneven from country to country. The sovereign debt crisis and the associated large fiscal and macroeconomic adjustment efforts by the countries hit hardest (e.g. Greece, Ireland, Italy, Portugal and Spain) led to very divergent output and unemployment developments across the European Union. This divergence has been modestly reversed over the past two years, with some of those countries recording above-average growth. Despite narrowing interest rate differentials and significant reductions in lending rates, credit and investment in most of those countries has remained hampered by high non-performing loans and corporate debt (Figure 7), and incomplete capital market integration. Non-euro area EU countries, like the United Kingdom and Sweden, on the other hand, have enjoyed a more accommodative monetary policy and

Figure 6. **Activity has gradually recovered but sharp cross-country divergence remains**



1. European Union member countries that are also members of the OECD (21 countries).
2. Economic Outlook No. 99.

Source: OECD (2016), *OECD Economic Outlook: Statistics and Projections* and *Main Economic Indicators* (databases); and Eurostat (2016), "Employment and unemployment (LFS)", *Eurostat Database*.

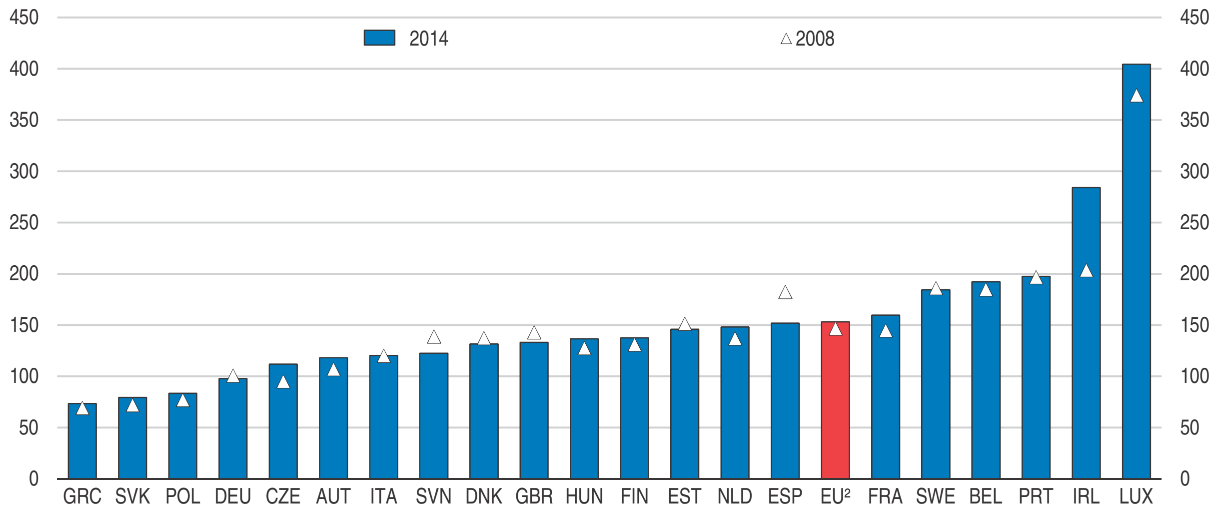
StatLink http://dx.doi.org/10.1787/888933366580

more benign financial environment, owing mostly to the significant progress made in cleaning up banks' balance sheets.

External positions are rebalancing, but the process has been asymmetric and incomplete. Germany and the Netherlands have further increased their already significant surpluses. The countries hit hardest by global financial and euro-area crises have all eliminated significant current account deficits, although, in spite of structural improvement, this also reflects still weak domestic demand and, therefore, imports (Figure 8). The same countries also improved cost competitiveness (Figure 9), in the context of substantial output losses. Apart from Greece and Italy, export performance has improved as well. However, a number of these countries continue to display poor net

Figure 7. **Debt of non-financial corporations in the European Union**[1]

As a percentage of GDP



1. Debt is calculated as the sum of the following liability categories, whenever available/applicable: special drawing rights; currency and deposits; debt securities; loans; insurance, pension, and standardised guarantees; and other accounts payable.
2. Unweighted average of data for European Union member countries that are also members of the OECD (21 countries).

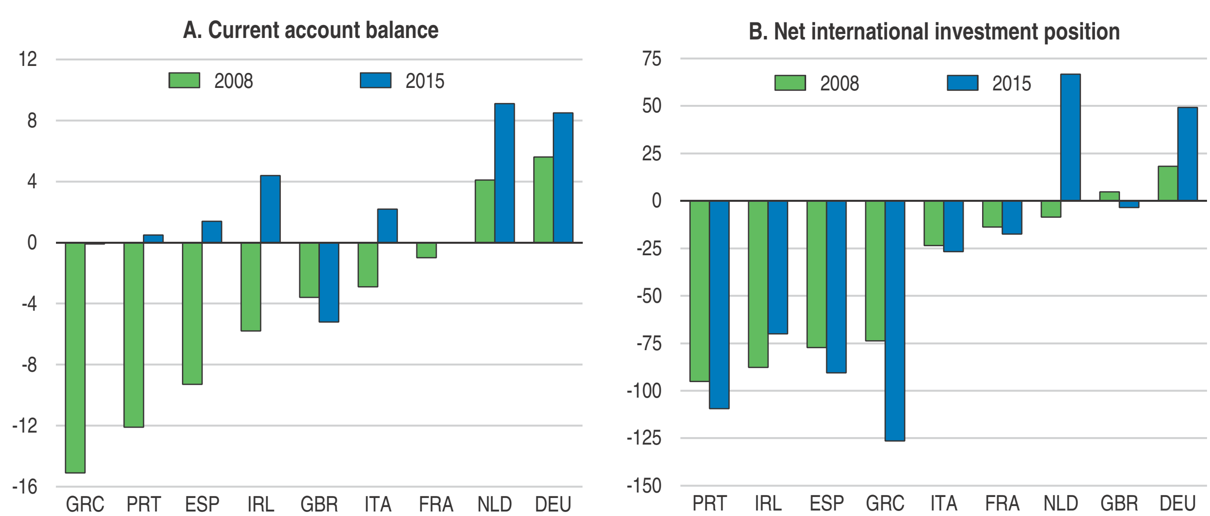
Source: OECD (2016), "Financial Dashboard", *OECD National Accounts Statistics* (database).

StatLink http://dx.doi.org/10.1787/888933366599

international investment positions, and improving them will require sustained GDP growth and current account surpluses in the medium and long run. Stronger wage and internal demand growth in surplus countries will ease further rebalancing and make it more symmetric, not least by reversing the persistent decline in their relative unit labour costs (Figure 9).

Figure 8. **Indicators of external balance**

As a percentage of GDP

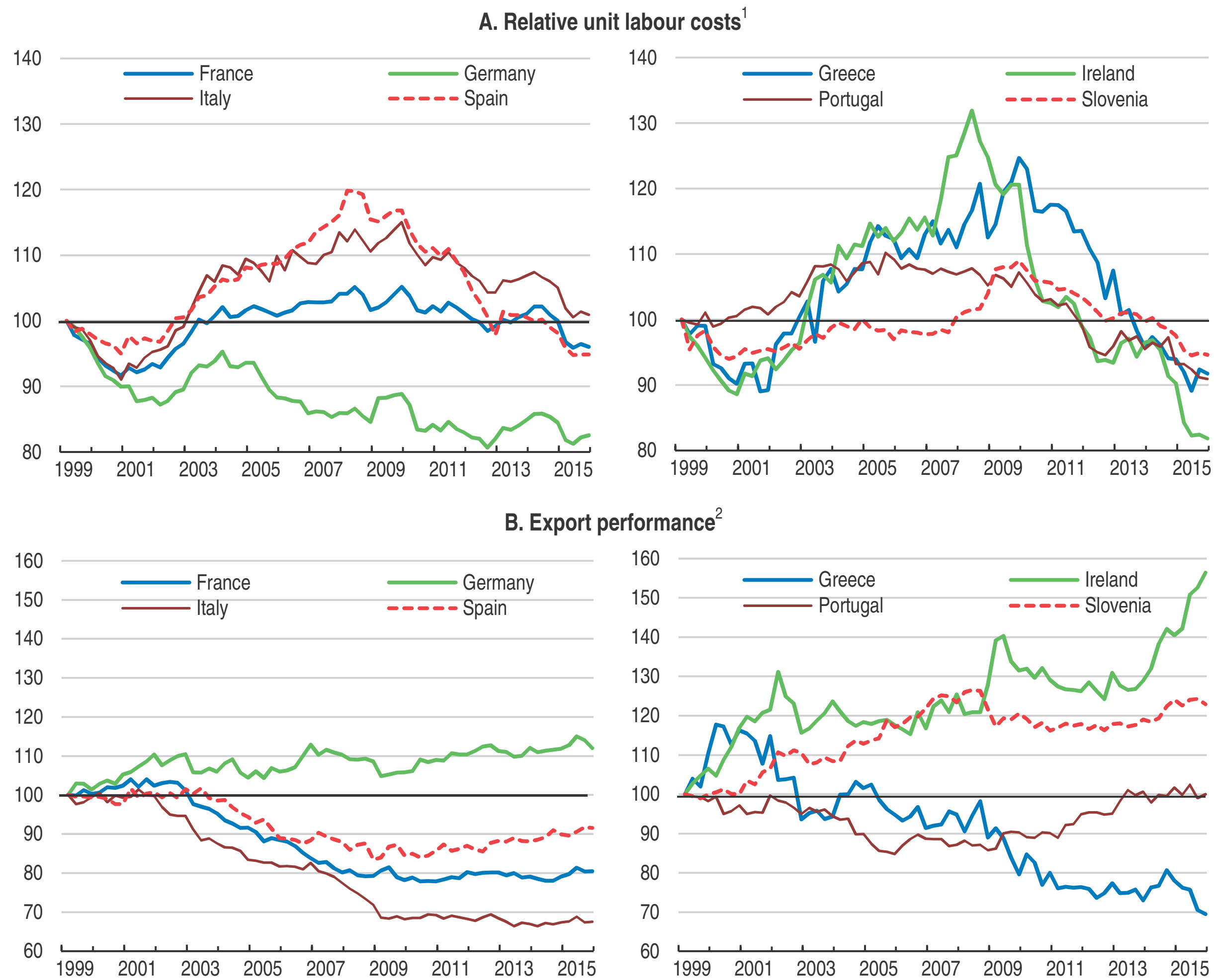


Source: Eurostat (2016), "Balance of payments statistics and international investment positions (BPM6)", *Eurostat Database*.

StatLink http://dx.doi.org/10.1787/888933366601

Figure 9. **Export performance and competitiveness**

Index, Q1 1999 = 100



1. Real harmonised competitiveness indicator for unit labour costs in total economy.
2. Ratio between export volumes and export markets for total goods and services.

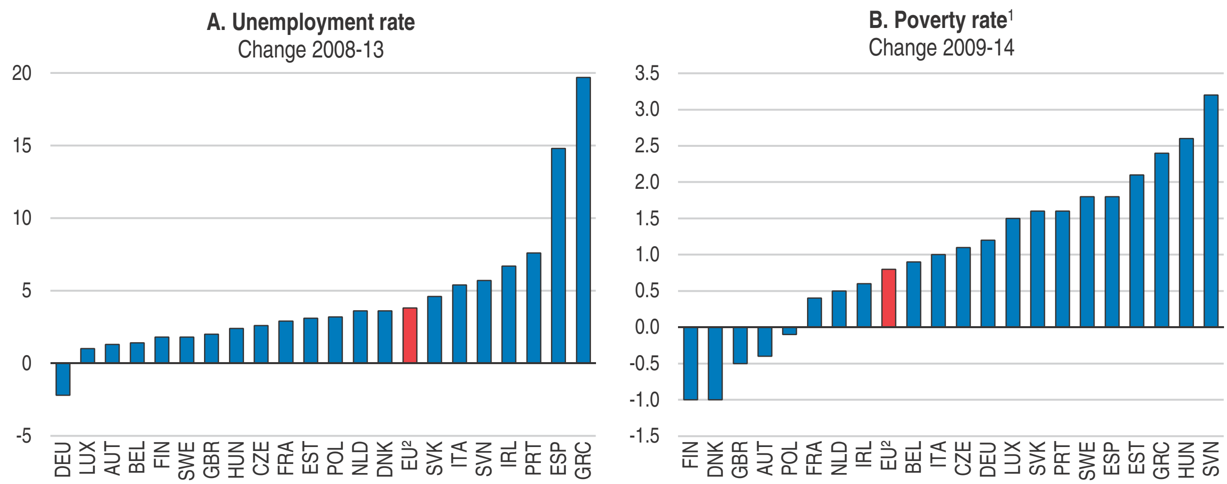
Source: OECD (2016), *OECD Economic Outlook: Statistics and Projections* (database) and ECB (2016), *Statistical Data Warehouse*, European Central Bank.

StatLink http://dx.doi.org/10.1787/888933366617

Labour market developments have also varied markedly across countries. As EU-wide unemployment started to increase in 2008, so did its dispersion across euro area countries, which has only fallen slightly recently (Figure 3). Moreover, especially in the countries hit hardest by the crisis, estimates of structural unemployment have risen (Ollivaud and Turner, 2014) and the labour force has fallen as workers have become discouraged and, in some countries, have emigrated in search of better job opportunities (OECD, 2015b). Conversely, Germany has benefited from lower unemployment and an increased labour force. Unsurprisingly, poverty has tended to increase more in those countries with large hikes in joblessness (Figure 10). Furthermore, recent consolidation efforts in the countries most affected by the crisis have often included deep cuts to unemployment benefits (Gonçalves and Pina, 2016), which have likely worsened distributional impacts.

Figure 10. **Developments in unemployment and poverty**

Percentage points



1. The poverty rate is the share of persons with disposable income (equivalised for family size) below 60% of national median disposable income.
2. European Union 28 countries excluding Croatia.

Source: Eurostat (2016), "Income distribution and monetary poverty" and "Unemployment and employment (LFS)", *Eurostat Database*.

StatLink http://dx.doi.org/10.1787/888933366623

Gross domestic product (GDP) growth in the European Union is projected to accelerate modestly to close to 2%, despite a slowdown in several emerging markets (Table 1). Activity will continue to be supported by sustained monetary stimulus, a broadly neutral fiscal stance and lower oil prices. However, high private indebtedness will remain a drag on consumption and investment in many countries, and falling demand from emerging economies will weigh on exports. Unemployment will decline only gradually, and the stark differences across countries will persist. Inflation should edge up to about 1% by 2017 as the effects of cheaper energy wane and cyclical slack gradually decreases.

A stronger-than-projected slowdown in China and other emerging market economies would weaken demand in the euro area through several channels. Impacts through trade linkages alone would likely be small (about 0.1% of GDP per percentage point fall in Chinese domestic demand), as even the whole of Asia accounts for less than 15% of EU goods exports. However, repercussions on EU's GDP could increase by a factor of three if the demand slowdown in China led to adjustments in global financial markets, such as higher risk premia (OECD, 2015c). While tail risks of financial stress have receded, the outcome of the upcoming referendum in the United Kingdom could have important implications for economic performance in both the United Kingdom and the rest of Europe (Kierzenkowski et al., 2016). The refugee crisis is already straining the Schengen agreement and might even affect the free flow of goods and, especially, labour in Europe. This would to some extent undo the benefits of the single market and shake confidence in the European Union more generally. There is considerable uncertainty regarding the inflation projection, and a more long-lasting period of low inflation, or even falling prices, cannot be ruled out. This could make debt burdens more difficult to manage.

Table 1. **Macroeconomic indicators and projections**

European Union,[1] annual percentage change, volume (2009 prices)

	2013	2014	2015	Projections 2016	Projections 2017
Gross domestic product (GDP)	**0.2**	**1.5**	**1.9**	**1.8**	**1.9**
Private consumption	-0.1	1.2	2.0	2.0	1.9
Government consumption	0.3	1.2	1.4	1.6	1.2
Gross fixed capital formation	-1.6	2.9	3.3	2.7	3.7
Final domestic demand	-0.3	1.6	2.1	2.1	2.1
Total domestic demand	-0.2	1.6	2.1	2.2	2.1
Exports of goods and services	2.3	4.2	5.3	3.2	4.1
Imports of goods and services	1.6	4.9	6.0	4.3	4.6
Other indicators (growth rates, unless specified)					
Potential GDP	0.8	1.0	1.1	1.2	1.2
Output gap[2]	-3.0	-2.5	-1.8	-1.2	-0.5
Employment	-0.2	1.1	1.2	1.3	0.9
Unemployment rate	10.9	10.2	9.4	8.8	8.5
GDP deflator	1.4	1.0	1.0	0.8	1.2
Consumer price index	1.3	0.4	0.0	0.1	1.1
Core consumer prices	1.1	0.8	0.8	0.9	1.1
Household saving ratio, net[3]	5.0	4.8	4.7	4.9	4.7
Current account balance[4]	1.8	1.7	2.2	2.1	2.1
General government fiscal balance[4]	-3.4	-3.0	-2.4	-2.1	-1.7
Underlying general government fiscal balance[2]	-1.9	-1.7	-1.6	-1.7	-1.6
Underlying general government primary fiscal balance[2]	0.5	0.4	0.4	0.2	0.1
General government gross debt (Maastricht)[4]	88.1	88.8	87.9	87.3	86.4
General government net debt[4]	61.7	68.3	68.1	68.4	68.0
Three-month money market rate, average	0.5	0.4	0.2	0.0	0.1
Memorandum item					
Gross government debt[4]	100.5	107.6	105.6	105.4	104.6

1. European Union member countries that are also members of the OECD (21 countries).
2. As a percentage of potential GDP.
3. As a percentage of household disposable income.
4. As a percentage of GDP.

Source: OECD (2016), "OECD Economic Outlook No. 99", *OECD Economic Outlook: Statistics and Projections* (database).

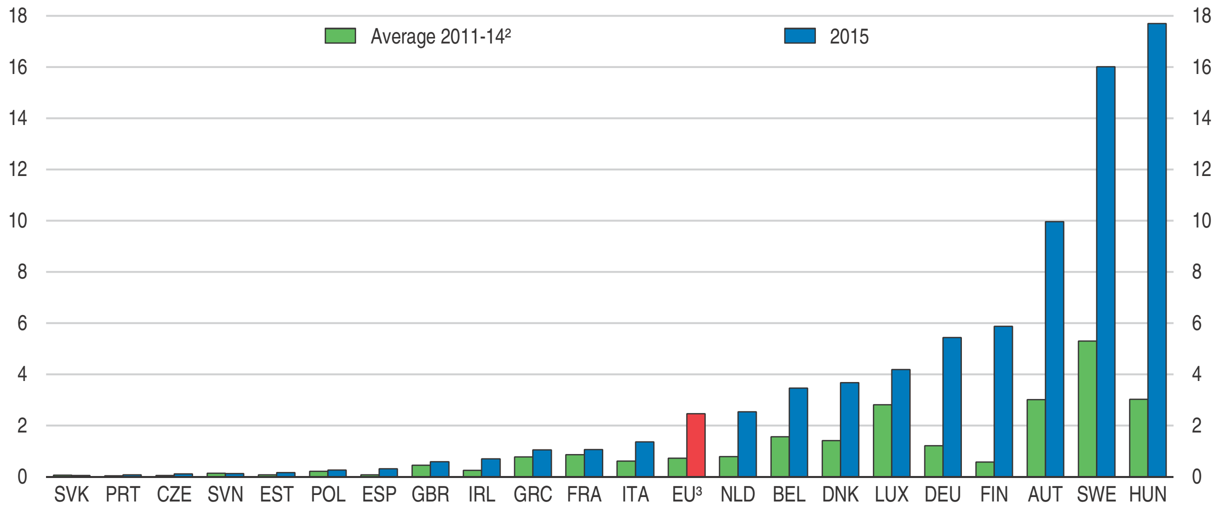
On the other hand, more rapid progress in fiscal and structural reforms would boost growth relative to the projection. Of particular importance are collective fiscal action to boost investment and growth, the banking union and further progress on the single market. A resolution of the refugee crisis would bolster confidence in the EU institutional framework and thereby improve growth prospects. Recent and potential future policy moves by the European Central Bank (ECB) may prove more effective in raising inflation towards its target than assumed. Similarly, cheap oil may have a stronger-than-expected impact on demand.

The refugee crisis

The recent surge of asylum seekers is still small relative to aggregate EU population (Figure 11), although asylum seekers are only a part of the total inflow. However, most asylum seekers that arrived in 2015 applied for protection in only a few member states – mainly Germany, Austria, Sweden and Hungary – where they often represent a sizeable share of the population (close to 2% in Sweden and Hungary). Fiscal measures related to

Figure 11. **Asylum applications in EU countries**

First-time asylum seekers applying for protection within the EU, per thousand inhabitants[1]



1. Resident population at 1 January.
2. 2014 only for Austria, 2012-14 for Finland and 2013-14 for Hungary.
3. European Union 28 countries.

Source: Eurostat (2016), "Asylum and managed migration" and "Demography and migration", *Eurostat Database*.

StatLink http://dx.doi.org/10.1787/888933366631

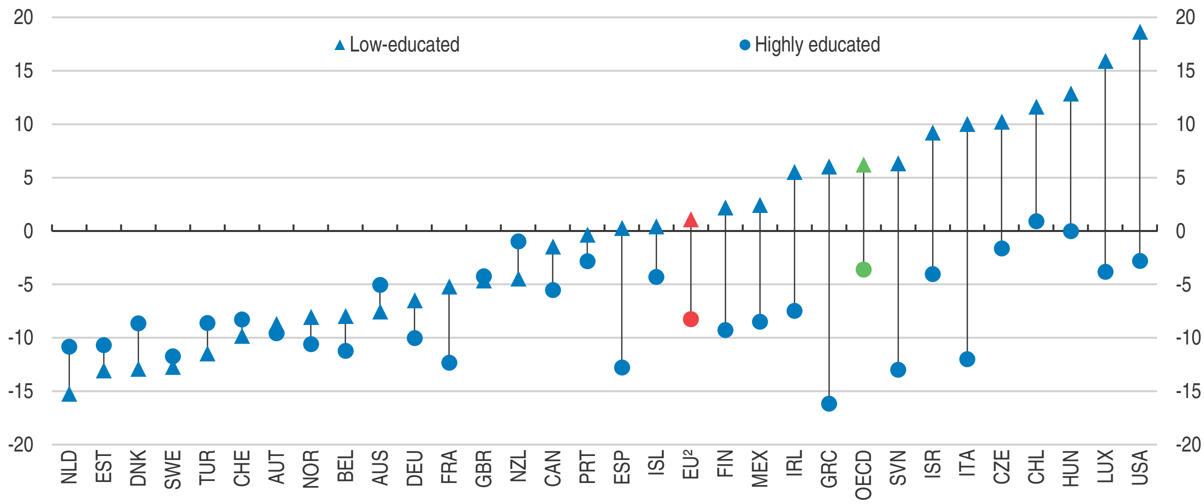
the surge of refugees, including spending to meet their initial needs and to integrate them in the labour market, foreseen for 2016 are estimated to be about 0.1-0.2% of EU GDP, but up to 0.9% of GDP in Sweden (OECD, 2015c). The long-term impact of the current surge of asylum seekers on growth is uncertain. The newcomers will raise the number of people that could work, but how many actually get jobs, how soon they get jobs and their productivity once in a job will depend on how fast and well integrated they are into society and the labour market.

A coordinated and comprehensive policy response by EU institutions and member states will be essential to handling these asylum seekers and legal migrants and those that might arrive in the years ahead. Their successful integration requires comprehensive, tailored measures that take into account their countries of origin, educational background and family situation (OECD, 2015c; OECD 2015d). Such programmes, addressing lack of transferrable skills and low language proficiency, as well as making use of active labour market policies and wage subsidies, have often been effective in raising the employment of immigrants and facilitating integration (IMF, 2016a). It is important to avoid creating high concentrations of immigrants and to settle them where there are job opportunities (OECD, 2016a).

Integration of refugees also requires an approach to make best use of their skills that combines taking stock of their qualifications, supplementary education and upskilling, especially concerning the host-country language, and finally activation (OECD, 2015d). Immigrants with higher-education degrees tend to struggle on the host country labour market more than their native peers (Figure 12), partly due to the difficulties with having their credentials recognised (OECD/European Union, 2015). Low-educated immigrants in the EU as a whole enjoy similar employment rates to those of the natives, but the outcomes vary a lot across individual member states. For children, early training in the host-country language, rapidly after arrival, including for children below primary school age, is key for a

Figure 12. **Employment rates of foreign-born population**[1]

Difference in percentage points with the native-born, 2012-13



1. Population aged 15-64 not in education. Canadian data include people still in education. Australian data include people aged over 24 who are still in education. The United States includes people over 55 who are still in education and calculates employment rates for the 16-64 age group.
2. European Union 28 countries.

Source: OECD/European Union (2015), *Indicators of Immigrant Integration 2015: Settling In.*

StatLink http://dx.doi.org/10.1787/888933366649

successful transition into the education system. Recent data from the Programme for international student assessment (PISA) show the importance of schools having sufficient resources to help immigrant students learn the language of the host country and overcome the trauma of displacement (OECD, 2015e).

In comparison to the 1990s, when many refugees to the European Union received a status that excluded them, often for years, from the labour market, most of the current asylum seekers have better access to the labour market, including in the stages prior to the application decision (OECD, 2015d). This is welcome as early labour market entry appears to be a key factor in ensuring a lasting integration of immigrants (OECD, 2014a). Even so, the conditions to access the labour market during the processing of asylum claims vary significantly across EU countries (OECD, 2015f). In some countries (Greece, Portugal, Sweden), labour market access can be granted almost immediately, while elsewhere there are waiting times of 2 months (Italy), 3 months (Austria, Finland, Germany), 4 months (Belgium), 6 months (Czech Republic, Netherlands, Poland, Spain), 9 months (France, Hungary, Luxembourg) or even 12 months (United Kingdom). Even after the waiting period, labour market access may be tied to fulfilling other conditions.

Differences in waiting periods for accessing the labour market broadly reflect the average duration of the application process and decision times. It may be possible to reduce the average duration of the standard procedure, including through fast-tracking, wider use of accelerated procedures and fines for administrators exceeding the time limits; these measures have been taken in the Netherlands, where the majority of applications is decided within one month. Such measures could be complemented by waiving labour market tests that require employers to look for suitable resident workers before hiring others (IMF, 2016a).

The Commission has made several legislative and non-legislative proposals to deal with the crisis. These include the scheme for permanent relocation of refugees across member states and strengthening Frontex into a European Border and Coast Guard with a rapid reserve pool of border guards and technical equipment. The proposals, especially for stronger joint protection of the external Schengen border, are welcome, because they increase confidence that the European Union can, through collective action, manage the crisis. However, the policy response at the EU level has been lagging developments on the ground and the member states are slow to fulfil their commitments, including the emergency relocation of asylum seekers agreed in September 2015 and pledges to match the increased EU funding for refugees by additional contributions. The March 2016 EU-Turkey agreement could lower incentives for irregular migration, if fully implemented.

One short-term effect of the crisis has been to strain the Schengen system, under which people can move between most EU countries (and the four non-EU Schengen countries of the European Free Trade Association) as though they were moving within a country. Disintegration of the Schengen area would result in higher transaction and transportation costs, which would hurt cross-border supply chains. Simulations from two computable general equilibrium models with slightly different assumptions about the modelling of the Schengen agreement disruption put the losses in the range of 0.1% to 0.2% of GDP per country per year (Böhmer et al., 2016) or about 0.8% of the Schengen area GDP between now and 2025 (Aussilloux and Le Hir, 2016). However, the disruption of the Schengen agreement would also have significant negative symbolic value, for the citizens regard border-free travel as the most noticeable representation of the European unification process.

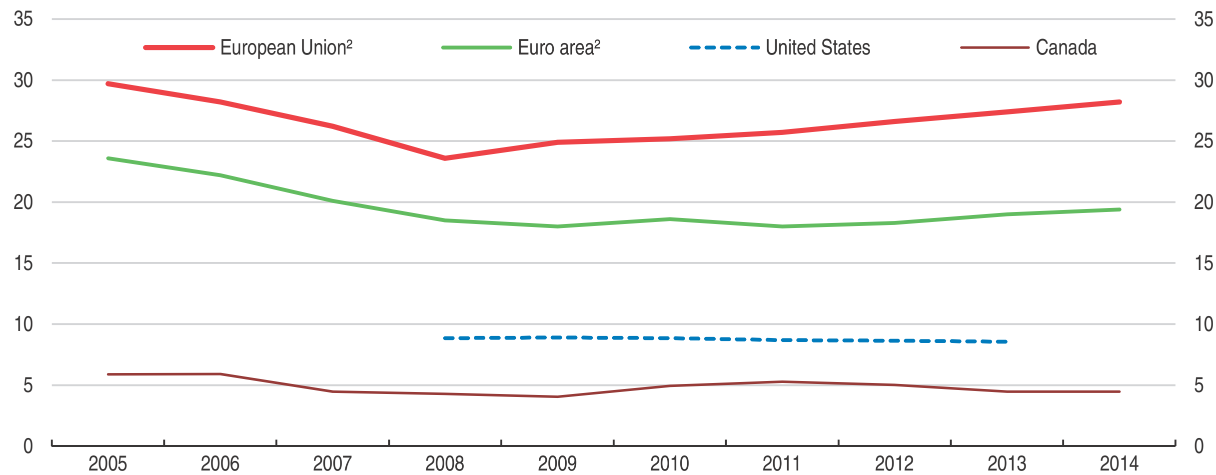
The state of the Single Market

The EU Single Market remains unfinished and the degree of its completeness varies across the four fundamental freedoms of movement. The goods market is the most integrated in the European Union, well beyond markets in services, capital and labour, but still far from fully integrated. The progress of goods and services market integration has stalled in the aftermath of the financial crisis: price dispersion in the euro area remains above that among the US states, suggesting a persistent "border effect" distorting the Single Market (Figure 13). The positive effect of the Services Directive on growth since 2012 has been estimated at about 0.1% of the EU GDP and most reforms between 2012 and 2014, measured by the number of abolished restrictions in services, took place in countries under financial assistance, such as Greece and Portugal (European Commission, 2015a). Many other countries did not act on their services-related country-specific recommendations. The positive effect of Single Market on trade in goods and services and investment flows suffers from high level of regulation in some sectors as well as from a high level of regulatory heterogeneity among the member states (Fournier, 2015; Fournier et al., 2015).

Capital and labour mobility in the Single Market could in principle help improve economic performance and resilience to regional or country-specific shocks just as well as trade in goods and services. The euro area and EU financial markets remain fragmented along national lines, especially for small and medium-sized enterprises (SMEs), and financial intermediation in Europe is still predominantly bank-based. Although cross-border financial integration has been improving since 2012 (Figure 14), the degree of improvement differs across individual markets: it is less clear in equity market integration

Figure 13. **Aggregate price level convergence**

Coefficient of variation, per cent[1]



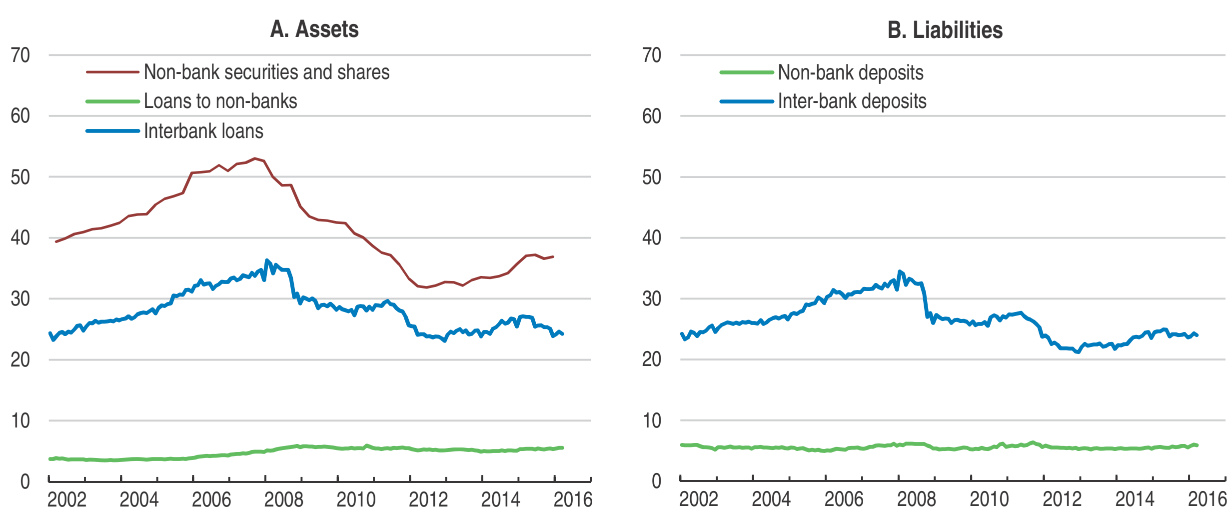
1. The coefficient of variation indicates the extent of variability relative to the mean of a series. Here the series shown are the price level index of household final consumption expenditure for the European Union and euro area, the implicit regional price deflator for the United States and the intercity index of price differentials of consumer goods and services for Canada.
2. European Union 28 countries and euro area 19 countries.

Source: Eurostat (2015), "Price convergence indicator", *Eurostat Database*; BEA (2015), "Real Personal Income for States and Metropolitan Areas, 2013", US Bureau of Economic Analysis; and Statistics Canada (2016), "Table 326-0015", *CANSIM Database*.

StatLink http://dx.doi.org/10.1787/888933366659

Figure 14. **Cross-border positions of euro area monetary financial institutions**

Per cent[1]



1. Cross-border activity as a percentage of the total provision of financial services in the euro area.

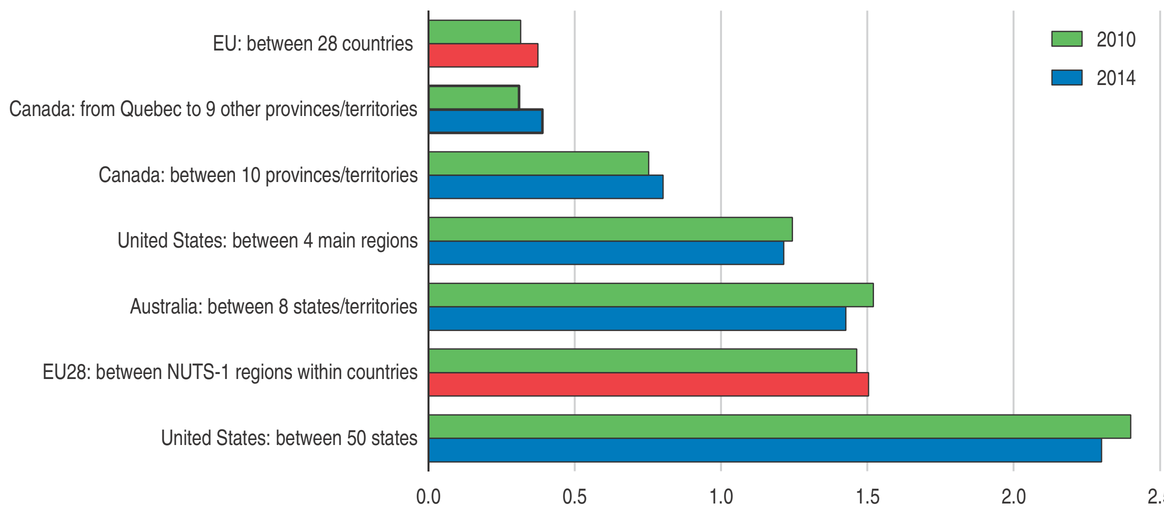
Source: ECB (2016), "MFI balance sheets: Monetary statistics", *Statistical Data Warehouse*, European Central Bank.

StatLink http://dx.doi.org/10.1787/888933366662

than in money, bond and banking markets (ECB, 2015). Labour mobility between the EU countries remains low compared to mobility between the US states and between Australian states, although the annual rates are similar to those between Canadian provinces with different languages (Figure 15). Although commuting and posting of workers may, in the EU context, be important alternatives to moving permanently to a

Figure 15. **Annual cross-border mobility**[1]

As a percentage of total population



1. Population mobility for Australia, Canada and the United States; labour mobility for the European Union.

Source: Eurostat, "Employment and unemployment"*Dataset*; Australian Bureau of Statistics, *ABS.Stat Database*; Statistics Canada, "Population and demography"*Dataset*; and US Census Bureau, *American Community Survey*.

StatLink http://dx.doi.org/10.1787/888933366670

different country, labour market fragmentation in Europe is still substantial. The financial crisis has triggered equilibrating labour flows, both within the euro area and between the euro area and the rest of the EU, but the overall effect of these flows has been too small for national labour market adjustment (Chaloff et al., 2012).

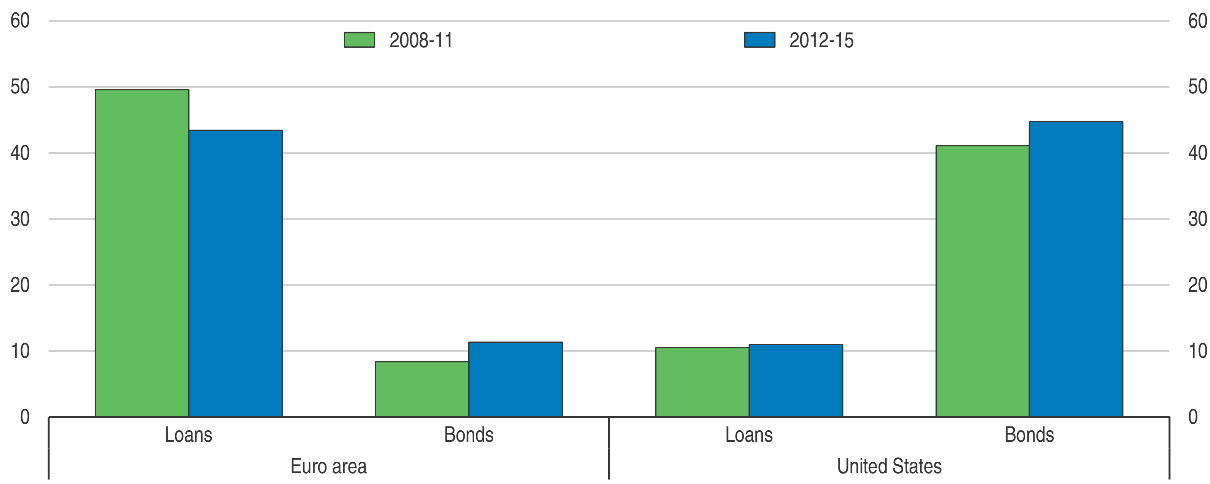
Completion of the Single Market through reforms of product markets and in policy areas, like trade, where the European Union legislates either alone or, like network sectors and environment, shares competence with the member states, could support the ongoing recovery and boost the EU potential growth in the medium and long run. Both labour and capital market mobility increase resilience in the event of shocks, making the macroeconomic policies at EU level more efficient and, by lowering transaction costs, enhancing private risk-sharing, in the absence of public risk-sharing mechanisms.

Capital mobility-enhancing policies

Capital markets in the European Union are less integrated than in the United States, and the reliance of EU firms on bank financing is much higher than in the United States (Figure 16). The objective of the Capital Markets Union (CMU), an important part of the effort to increase collective investment in the European Union, is to enhance both the domestic and cross-border supply of capital, especially to SMEs, mainly through lowering regulatory barriers, widening of investor base and investment choices, and deepening financial integration. The CMU package consists of both legislative proposals and non-legislative initiatives. The immediately actionable measures include a proposal for a Prospectus Regulation aiming at facilitating secondary issuances and simplifying disclosure requirements for smaller issuers, lower capital requirements for long-term and infrastructure investment in Solvency II and Capital Requirements Regulation and simple, transparent and standardised securitisation. These are commendable policies, but they need to create momentum for more ambitious actions to follow.

Figure 16. **Bank and capital market financing of enterprises**

Outstanding loans[1] and bonds of non-financial corporations as a percentage of GDP, period average



1. Loans of monetary and financial institutions.

Source: Eurostat, European Central Bank, US Bureau of Economic Analysis, Board of Governors of the Federal Reserve System, and Securities Industry and Financial Markets Association.

StatLink http://dx.doi.org/10.1787/888933366508

The fulfilment of longer-term aims of the CMU will require addressing the legal and regulatory barriers in the EU capital markets, including harmonisation of company, securities and insolvency laws. As harmonisation by the means of a single rulebook alone does not seem to be sufficient for effective implementation and consistent enforcement of the CMU rules and standards (Cœuré, 2015), it will also require an increased focus by the European Securities and Markets Authority (ESMA) on achieving convergence of supervisory outcomes. The links within the EU regulatory network, including the co-operation with national authorities and supervisory convergence with the Single Supervisory Mechanism (and vice versa) should be strengthened further. Implementation and enforcement of the single rulebook may profit from co-operation on issues common to banking and securities market supervision. Such co-operation may strengthen the integration of capital markets, without harming the peer-review model of the national supervisors (Valiante, 2015; Véron and Wolff, 2015).

Capital market integration under the CMU would also profit from improvements in areas under competence of national states, such as taxation. In particular, the CMU Action Plan aims at tackling burdensome withholding tax procedures, which remain a long-standing barrier to cross-border investment. Issues remain in other areas, including taxation of debt versus equity, and as announced in its Action Plan on Corporate Taxation, the European Union plans to reduce the bias in the corporate tax treatment of debt and equity, be it through carefully designed allowance for corporate equity schemes, limitations on the deduction of interest payments, or the integration of capital income taxes at the corporate and personal level. In addition, the EU Anti-Tax Avoidance Package tangibly contributes to the implementation of the OECD Base Erosion and Profit Shifting (BEPS) Project by addressing gaps in the tax laws of EU member states which have led to double non-taxation or less than single taxation (OECD, 2016b). Swift and comprehensive implementation of the internationally agreed standards is crucial for the success of the BEPS project. Consistent implementation of the BEPS package through international co-operation will enhance the efficiency of the tax system and will reduce compliance costs for taxpayers. The intention of the European Union to stay a frontrunner in BEPS implementation is thus welcome. Already significant progress has been made at the EU level as regards to transparency of tax information, and the European Union also plans to develop a list of non-cooperative jurisdictions and options for co-ordinated defensive measures which will be defined by the Council.

The accumulated gap in European infrastructure investment remains substantial (Della Croce and Gatti, 2014). Moreover, public investment in infrastructure could induce additional private spending (OECD, 2015a). The European Fund for Strategic Investments participates in financing economically viable projects and providing dedicated SME financing as discussed in the *OECD Economic Survey* of the euro area. In addition, the plan to lower the calculation of the regulatory capital for long-term and infrastructure investment is welcome, as it would allow banks and insurers to treat it as a specific asset class. The rules for simple, transparent and standardised securitisation may help SME lending, especially after the current very low policy interest rates come to an end.

The investor base could be expanded by the introduction of standardised pan-European financial products and investment vehicles, including venture capital fund-of-funds and multi-country funds. Supporting the development of the most effective information system that connects SMEs with a range of funding sources can be an effective tool to tackle the asymmetric information problem associated with SME financing, for example, through transparent and standardised data warehouses that collect and share credit information on smaller firms with all market participants, such as the ECB's AnaCredit database (OECD, 2015g).

Labour mobility-enhancing policies

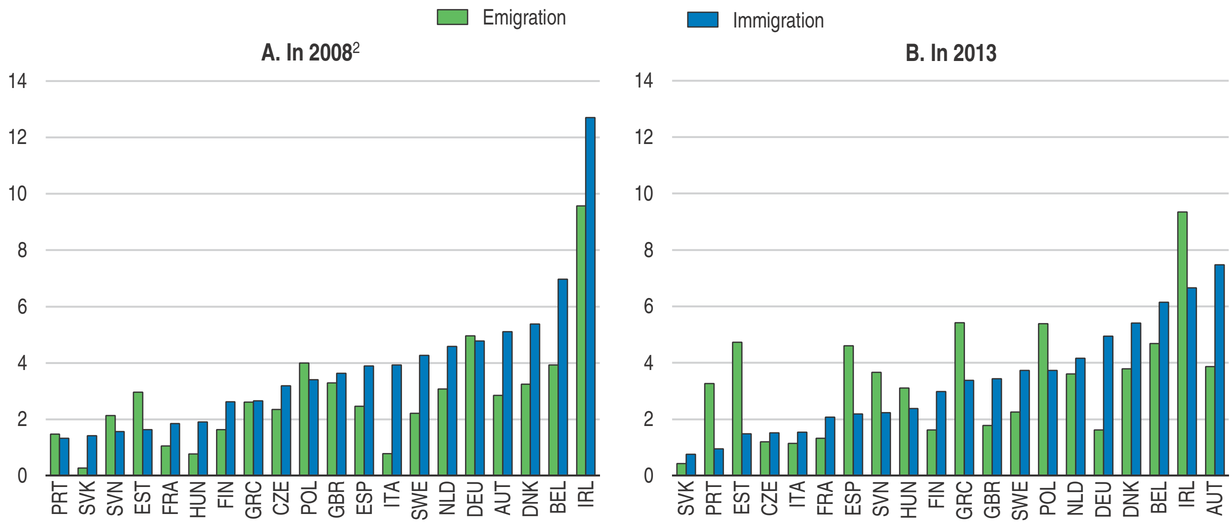
Labour mobility in the EU is low, reflecting non-policy factors such as linguistic and cultural differences, as well as policy barriers including the lack of harmonisation of social security systems and of professional qualifications (OECD, 2014b). There is some evidence of equilibrating migration flows in the wake of the financial crisis, as inflows to crisis-hit countries such as Spain and Ireland declined and immigration to others, like Germany and Austria, rose (Figure 17). At least in some labour market segments, such as health personnel, intra-EU mobility seemed to have a balancing effect by reducing the risks of under-employment in countries hit by the crisis; moreover, this adjustment has been facilitated by EU provisions for mutual recognition of professional qualifications (OECD, 2015b).

Since language skills are not firm-specific and given the significant positive externalities for society from ensuring that the host-country language is spoken well by immigrants, there is a strong case to boost public funding for language training. Indeed, an important factor that keeps the intra-EU labour mobility low is the lack of proficiency in the language of potential destination countries, an impediment cited by more than a half of respondents in the Eurobarometer survey on geographical and labour market mobility (European Commission, 2010). Publicly funded language courses are available to newcomers in only 14 member states. As they are usually available as part of integration policies for immigrants, they are largely disconnected from policies supporting labour mobility and are not tailored to EU workers (Eurofound, 2015). Few OECD countries provide publicly-funded language training for labour migrants, even though in some OECD countries language knowledge is a pre-condition for labour migrants (OECD, 2013a).

Regulated professions, such as medical personnel, lawyers, educators and transport workers, often impose legally binding qualifications. Only some 5% of applications for

Figure 17. **Immigration and emigration flows between EU countries**[1]

Per thousand inhabitants



1. "Immigration" covers persons establishing their usual residence in an EU country for at least 12 months having previously been usually resident in another EU country; "Emigration" covers persons having previously been usually resident in an EU country who cease to have their usual residence in that country for at least 12 months. Data for EU27 countries in 2008 and EU28 countries in 2013. International migration flow data are based mainly on administrative sources or national surveys and differences in definitions and practices can affect the comparability of data across countries.
2. 2009 for Poland and 2010 for Belgium.

Source: Eurostat (2016), "Demography and migration", *Eurostat Database*.

StatLink http://dx.doi.org/10.1787/888933366689

recognition of qualification have been rejected EU-wide in 2014, and an additional 15% are in the process of assessment (European Commission, 2016). But slow decision-making in itself can constitute a barrier to mobility, even if the overall success rate is high, so the European Union should monitor improvements and best practice (CEPS, 2014) and consider application of a silence-is-consent rule in areas without major safety or environmental concerns. The European Professional Card, initially available for nurses, physiotherapists, pharmacists, real estate agents and mountain guides, enhances communication of professionals with relevant authorities and includes a silence-is-consent rule for some aspects. It is a welcome policy tool, but would be even more beneficial if extended to other qualifications, such as engineers.

Differences in regulation affect the number of recognitions, which remains relatively small relative to employment and varies substantially across the European Union. Some countries, such as Norway, Sweden and United Kingdom, have awarded and applied for a large number of recognitions, while others, such as France and Italy, did not, despite being parties to the same mutual recognition directives. Moreover, countries with the lowest barriers to entry into professions may face the highest barriers to providing services abroad, as in the case of engineering. When engineering is not a regulated profession, the barriers to entry are low, including for entrants from countries with stricter regulations. The opposite is however not true in countries that regulate engineering through licensing, often creating insurmountable obstacles to engineers from unregulated countries (Nordås, 2016).

Under the revised Professional Qualifications Directive, member states have the obligation to demonstrate, when reviewing existing professional regulations or proposing new ones, that regulation be justified and that public interest objectives cannot be otherwise achieved through other means than by limiting access to professional activities. This obligation should be implemented in a more restrictive way, so as to limit the amount of regulation. Regulatory barriers arising from diverging legal forms, shareholding requirements and other organisational requirements in accounting, architecture, civil engineering and construction companies should be reviewed. Most reforms between 2012 and 2014 have taken place in countries under financial assistance, while other countries either did not act on their services-related country-specific recommendations or even reversed the liberalisation process (European Commission, 2015a).

The risk of losing part of acquired supplementary pension rights and long vesting periods to build up new rights is a strong disincentive to taking up work abroad (CEPS, 2014). The current situation often involves years without entitlement and five-year vesting periods. A directive adopted in 2014, introduces a maximum period of contribution and an obligatory minimum age for acquiring pension rights. Moreover, the pension rights of former workers must be preserved in a way comparable with those of current workers. This improvement is welcome.

Non-EU nationals outnumber EU immigrants in many EU countries (Eurostat, 2015). Non-EU nationals can normally move within the European Union for work and training purposes after becoming long-term residents, i.e. after at least five years of continuous residence, but the Long-term Residents Directive (2003/109/EC) is not well implemented in many member states, which tend to impose additional conditions (European Commission, 2011). However, Denmark, Ireland and the United Kingdom are exempted from the application of the directive. It is important that the member states take better account of temporary stays in the calculation of the five-year period and encourage circular migration through more flexible arrangements regarding periods of absence from EU territory.

The share of high-skilled immigrants in the EU is below the OECD average, despite the similar share of foreign-born in total population of about 10% in both areas (OECD/European Union, 2015). The Blue Card scheme allowing high-skilled non-EU citizens to work and live in the European Union remains the main tool for attracting workers from non-EU countries and filling skills shortages, but its uneven application and limited use stands in the way of achieving its objective. Member states have considerable discretion in defining the parameters, such as earning thresholds. The Blue Card scheme should be modernised and its eligibility requirements and procedures simplified, in order to make it more attractive relative to existing schemes (Chaloff, 2016).

Regulatory and horizontal policies to support potential growth

Both regulatory stringency within a country, as measured by the product market regulation index, and regulatory heterogeneity among OECD countries reduce trade intensity (Fournier et al., 2015) and cross-border investment flows (Fournier, 2015). Similar effects of regulatory heterogeneity on bilateral intra-EU trade and intra-EU foreign direct investment flows in service sectors were found by Kox and Lejour (2006) and Nordås and Kox (2009). Regulatory barriers in network sectors, such as barriers to entry, are strongly correlated with lower investment, both at the sectoral level (Égert, 2009) and the country level (Kerdrain et al., 2010), and hence reduce capital stock in the long run.

The lack of predictability and stability of legislation remains an important obstacle to firms' activity in the European Union, as reported by 77% of firms at the EU28 level

(European Commission, 2015b). The variation of assessment between countries is substantial, ranging from some 40% of firms in Denmark and Sweden to more than 90% in France and Greece, however it should be noted that the assessment conflates factors at the EU and national levels. Other surveys confirm ambivalence about EU regulation, noting the benefits of free markets and freedom of travel, but on the other hand reflect concerns about inefficient and overly interfering EU regulation (European Commission, 2014).

Regulatory quality enhancing policies

The European Union has launched a number of measures to reduce unnecessary costs of regulation, which in many cases remain to be implemented at the national level (OECD, 2014b). The Commission's Better Regulation package proposes new ways to consult stakeholders, improves the tools and institutions involved in regulatory impact assessment, strengthens the *ex post* evaluation and outlines new modes of intra-institutional co-ordination at the EU level. However, it does not provide enough detail on where the resources for extended consultations and impact assessment are to come from, or enough guidance on the balance between regulatory costs on one hand and the quality of resulting regulation on the other. More detail would also be welcome on methodological issues, including a link between analytical criteria and the Europe 2020 indicators that, in principle, represent EU's vision of smart, sustainable and inclusive growth.

The quality of regulation could be improved by more systematic use of impact assessment by co-legislators. While the Commission has produced some 700 impact assessments between 2007 and 2014, Parliament has since 2012 assessed about 20 of its amendments and the Council none (European Commission, 2015c). The Commission has emphasised evidence-based policy-making and it indeed seems useful to have an impact assessment of final legislation that can also serve as an input for the following evaluation, completing the policy cycle (Renda, 2015). In April 2016 a new inter-institutional agreement on better law-making was reached between the Commission, the Parliament and the Council. This agreement covers several aspects of law-making including transparency, simplification, evaluation and the feasibility of establishing objectives for administrative burden reduction in key sectors. It also sets out a general commitment to assess impacts of Commission proposals and of significant amendments by co-legislators, where considered relevant. However, an agreement on subjecting the Parliament's and the Council's legislation to impact assessment (similar to that applied to the Commission), already proposed by the Commission in 2003 and 2005, was not reached.

Regulatory co-operation in regional trade agreements

Regional trade agreements (RTAs) could be important regulatory co-operation instruments, as they often include provisions on competition, domestic regulation, technical standards or transparency of rules (OECD, 2013b). Achieving regulatory convergence may require prolonged negotiations and similar level of ambition. Less comprehensive and binding schemes of international regulatory co-operation may lead to lower compliance unless supported by other institutions, including multilateral forums and international organisations (OECD, 2015h). Looking at existing preferential trade agreements, it appears that regulatory compatibility can be achieved more effectively through strong institutional mechanisms, such as joint committees that meet on regular basis than with bilateral committees comprised of government officials that only meet once a year (Steger, 2012).

The Transatlantic Trade and Investment Partnership (TTIP), if agreed, would remove barriers to trade and investment and develop a new model of integration based on permanent bilateral regulatory co-operation mechanism including horizontal provisions as well as a number of sector-specific commitments (Alemanno, 2015). Importantly, the creation of a permanent institutional mechanism will allow identification of new areas of co-operation without re-opening the initial international agreement.

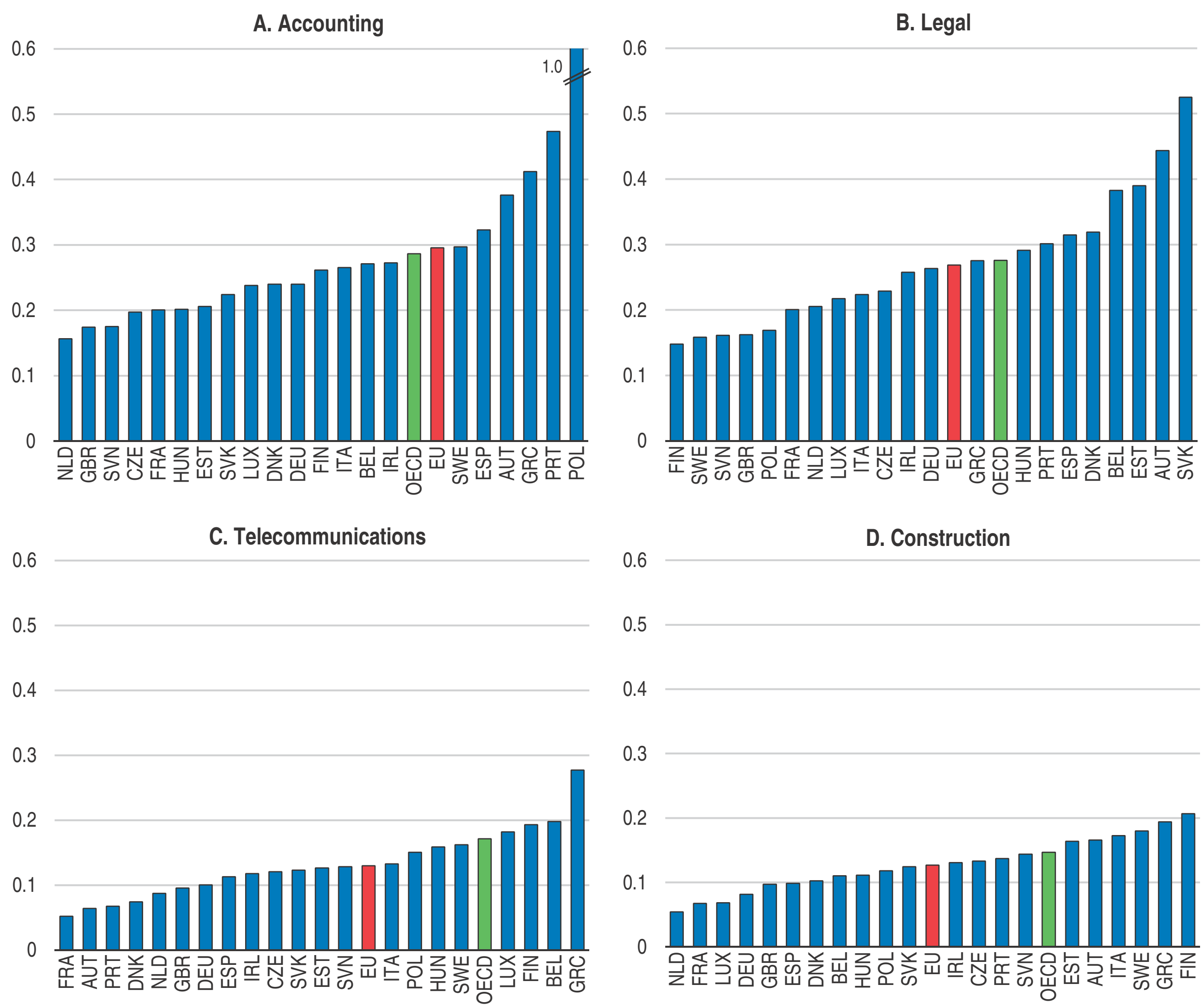
Key service sector policies to lift growth

Services liberalisation

In the process of transposition of the Services Directive, member states could maintain a number of regulatory requirements if they assessed them as non-discriminatory, necessary and proportionate. As a result, the EU trade in services remains subject to administrative and regulatory barriers that vary considerably across individual countries (Figure 18). There is

Figure 18. **Services trade restrictiveness index**

Index scale from 0 (completely open) to 1 (completely closed), 2015[1]



1. Measures included in the index cover restrictions on foreign entry and movement of people, barriers to competition, regulatory transparency and other discriminatory measures. Aggregates are unweighted averages; the European Union covers member countries that are also members of the OECD (21 countries).

Source: OECD (2016), *Services Trade Restrictiveness Index Regulatory Database.*

StatLink http://dx.doi.org/10.1787/888933366695

evidence that unjustified and disproportionate requirements are still widespread (European Commission, 2015c) and that between 2012 and 2014, the most restrictions have been removed in countries under financial assistance, while other member states either did not act on their services-related country-specific recommendations or even introduced new barriers (European Commission, 2015a).

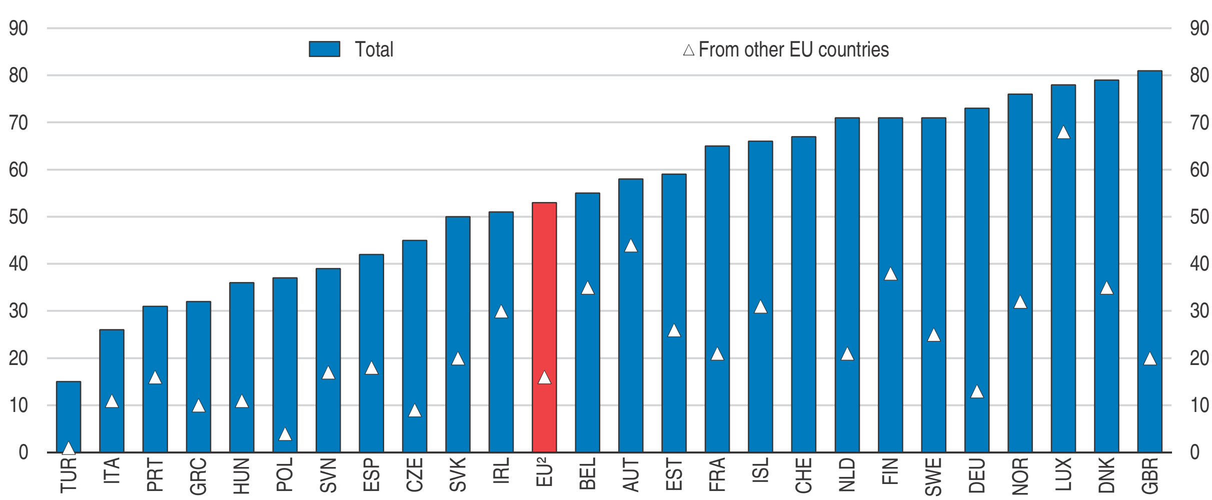
The Digital Single Market

Digitalisation facilitates diffusion and replication of innovative ideas and together with information and communication technology (ICT) is likely to remain a key driver of productivity growth, especially in advanced, frontier economies (Brynjolfsson and McAfee, 2011; OECD, 2015h). Digital technologies raise GDP growth through ICT-induced labour productivity improvements. Although the digital economy is growing quickly (OECD, 2013c), the scope for further uptake remains considerable, as consumers account only for a fraction of e-commerce, with some 90% of the value of e-commerce being transactions between businesses (OECD, 2015i). The consumer e-commerce also remains domestic (Figure 19), especially when involving SMEs: some 12% of large firms (above 250 employees) sold online across borders in 2012, but the same was true for only 6% of medium-sized firms (50-249 employees) and 3% of small firms (10-49 employees) (Eurostat, 2013). The Digital Single Market Strategy aims at providing more choice and better consumer protection to consumers as well as opportunities for firms, especially SMEs, to expand across the EU borders by making use of the growth potential of the digital economy (European Commission, 2015d).

Modernisation of the EU copyright framework has begun with a proposed regulation for cross-border portability of online content based on the principles of residence and temporary presence. This will allow businesses to improve their offer to consumers as they will be able to have continued access to digital-content services legitimately acquired in

Figure 19. **Internet purchases by individuals**

As a percentage of Internet users, 2015[1]



1. Individuals who bought or ordered goods or services for private use over the Internet in the last 12 months. 2014 for Iceland and Switzerland.
2. European Union 28 countries.

Source: Eurostat (2015), "Information Society Statistics", *Eurostat Database*.

StatLink http://dx.doi.org/10.1787/888933366709

the home member state when they travel. Further measures concerning cross-border access to copyrighted content will be proposed by the Commission at the later stage and may require revision of the EU copyright framework. In addition, the Commission has also committed to adopt measures against unjustified geo-blocking and other forms of discrimination in terms of access, prices or other sales conditions on grounds of residence or nationality.

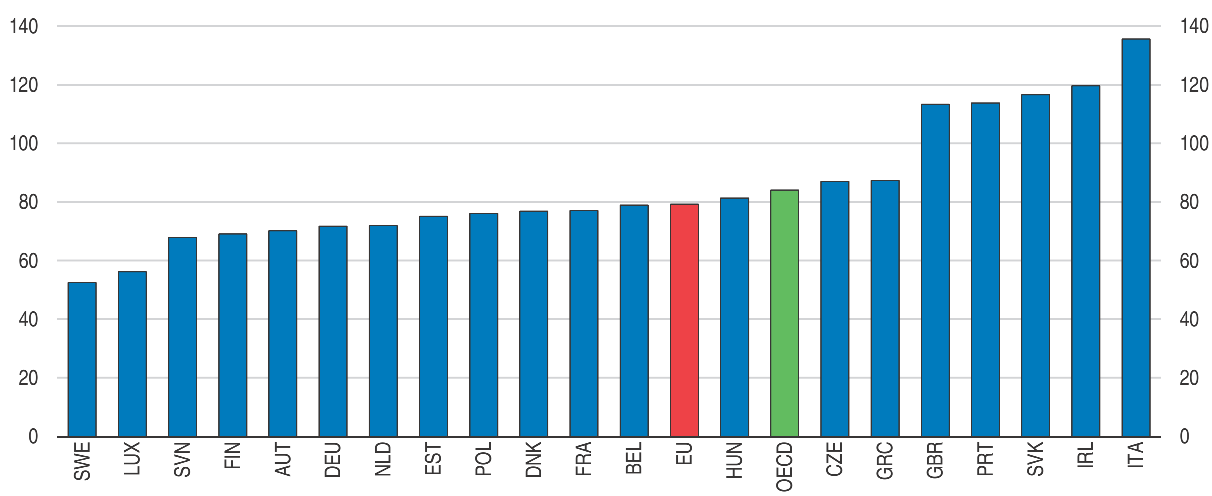
The Energy Union and Circular Economy

The Energy Union is a welcome opportunity to achieve the "triple" objective of energy security, decarbonisation and competitiveness (Helm, 2015). The initial focus of EU energy policies on liberalisation and unbundling created necessary, but not sufficient, conditions for a well-functioning EU market. However, the full benefits of this effort have not yet fully materialised due to missing elements, such as interconnection between member states, common regulation for grid and pipeline access and common accounting basis for charging fees. The inefficiency of the EU energy market, and the corresponding potential for gains from trade, is illustrated by the substantial dispersion of energy prices across the European Union (Figure 20). On the other hand, the intended benefits of the EU energy market has been reduced by developments in climate policy and renewable energy support, such as provision of renewables at zero marginal cost, leading to a misalignment between the functioning of wholesale electricity markets and decarbonisation policies (OECD/IEA/NEA/ITF, 2015).

Better interconnections help create more efficient electricity markets, encourage more competition and could alleviate the variability of flows associated with renewables generation (IEA, 2014). While most of the EU wholesale electricity markets are coupled to one or more neighbours, showing signs of price convergence, marked price differentials remain with regard to gas, partly due to long-term contracts and missing interconnections (European

Figure 20. **Electricity prices for industry**

EUR per megawatt hour, before taxes, 2015[1]



1. 2014 for Germany, Greece, Netherlands and United Kingdom. Aggregates are unweighted averages of latest data available. The European Union covers member countries that are also members of the OECD (21 countries) excluding Spain (no data available) and the OECD covers 29 countries.

Source: IEA (2016), *IEA Energy Prices and Taxes Statistics* and OECD (2016), *OECD Economic Outlook: Statistics and Projections* (databases).

StatLink http://dx.doi.org/10.1787/888933366715

Commission, 2015e). The "triple" objective is politically difficult, but feasible, if one employs a top-down strategy, a credible estimate of the gains from fully integrated energy markets to build consensus and a centralised outline of European gas and electricity grids (Helm, 2015).

The Energy Union should ensure flexibility in the energy sector by increased interconnectivity. National regulation, budget constraints and weak incentives of national network companies could all prevent investment in interconnections and grids needed to achieve the existing interconnectivity targets. The adoption of the second list of cross-border projects of common interest is welcome, but more is needed. The European clean energy strategy should be put in place to ensure that the Investment Plan for Europe and other EU funds are channelled to the investment needs of the Energy Union to ensure that publicly-backed investment is used to deliver on European energy security and climate goals (Gaventa et al., 2015).

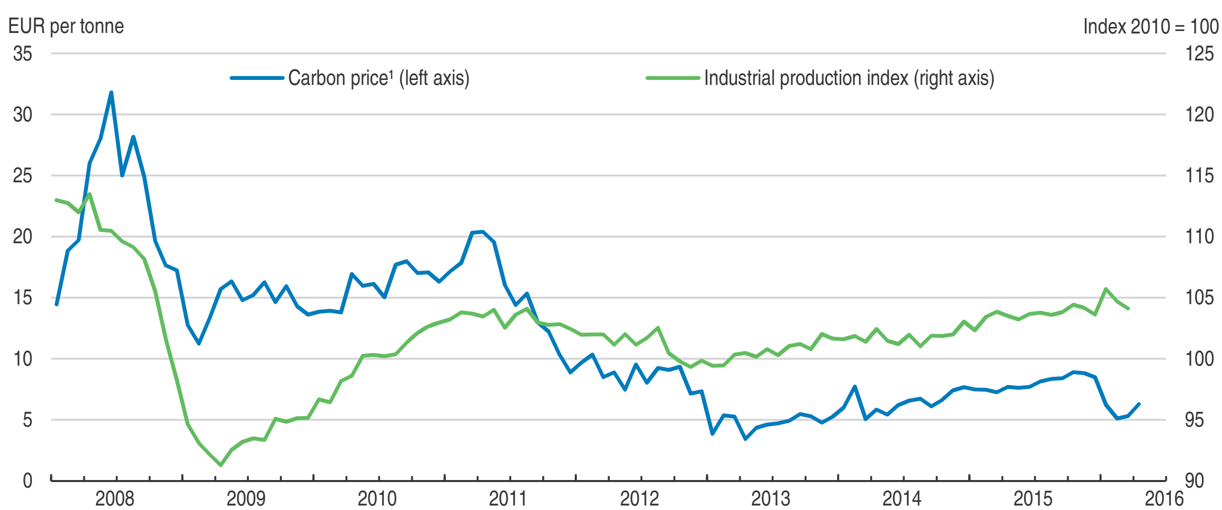
Disconnection between the EU energy policy and its climate policy should be eliminated or reduced following the recent COP21 agreement. In its 2030 Climate and Energy Policy Framework, now fully part of the Energy Union Strategy, the EU contributed a collective pledge to reduce domestic greenhouse gas (GHG) emissions by at least 40% below 1990 levels by 2030. In this context, it is worth noting that although the reduction of emissions by 19% achieved since 1990 is partly the result of the structural changes in member states that joined after 2004 and of the consequences of the global financial and economic crisis, concerted policy effort, such as the support of renewables, has contributed to this outcome (IEA, 2014). After 2008 an increasing decoupling of economic growth and energy consumption could also be observed, notably driven by a comprehensive set of energy efficiency policies. The other elements of the 2030 framework include a target for a minimum 27% share of renewable sources in energy consumption, an indicative target of 27% improvement in energy efficiency and an electricity interconnection target of 15% by 2030.

The effort going forward will require not only a shift to low-carbon and renewable sources of energy, but also improved resource efficiency, including more recycling and a reduction of raw material use (Behrens, 2016). The Circular Economy Package (European Commission, 2015f) outlines a welcome legislative proposal in this respect. It broadens the focus from energy efficiency to other features including best practices in repair, re-use, eco-design and recycling and waste that are together likely to reduce both the amount of natural resources used and emissions and waste produced by the EU economy. However, the proposal lacks even an indicative target for increasing resource efficiency, which is a weakness in terms of monitoring and sharing of best practices in resource efficiency policies (Behrens, 2016). The private sector, especially SMEs, may also need practical, technical and financial support to identify and realise business opportunities associated with the circular economy (Rizos et al., 2015).

EU climate and energy policies need to ensure balance between sustainability, competitiveness and security of supply. Strengthening market-based measures (including a reform of ETS), a competitive electricity market and a stable regulatory framework for low-carbon technologies will all be needed to deliver the 2030 targets. As part of the energy market liberalisation, energy subsidies that are still often used to lower energy prices should be phased out (IEA, 2014). Instead, a three-pillar approach, including carbon pricing (a more robust ETS and taxes on non-ETS sectors, where appropriate), targeted energy efficiency regulations ensuring rational energy use and support for low-carbon technologies, should be put in place (OECD/IEA/ITF/NEA, 2015). Carbon taxes or trading systems, such as those that are in place in the European Union, can raise revenues, creating room for reduction of other more distorting taxes, and establish price signals (IMF, 2016b).

The EU Emission Trading System (ETS) is the world's largest GHG emissions trading system covering power generation, manufacturing and commercial aviation and thus about 45% of the EU's total GHG emissions. The potential of the ETS and its practical impact on firms behaviour and investment patterns, however, has been limited by a surplus of emission allowances, mainly from lower-than-anticipated levels of energy demand, subsidies to renewable electricity supply and the large inflow of international credits from the Clean Development Mechanism. As a result, carbon emission allowances trade at less than EUR 10 per tonne of carbon dioxide (CO_2) (Figure 1.21), providing only a weak incentive for sectors covered by the ETS scheme to invest in low-carbon technologies (OECD, 2015j). Analysis by the International Energy Agency (IEA) and business groups also shows that for ETS to drive capital investment in power generation, a carbon price of EUR 30 per tonne of CO_2 would be needed for onshore wind investments, while the price of EUR 40 per tonne of CO_2 would be needed to shift production from coal to gas plants reflecting the threshold for coal-to-gas switching at current commodity prices (IEA, 2014).

Figure 21. **EU emission allowances price**



1. Intercontinental Exchange EUA Futures Contract, settlement price.

Source: Thomson Reuters (2016), *Datastream Database* and Eurostat (2016), "Short-term Business Statistics", *Eurostat Database*.

StatLink http://dx.doi.org/10.1787/888933366726

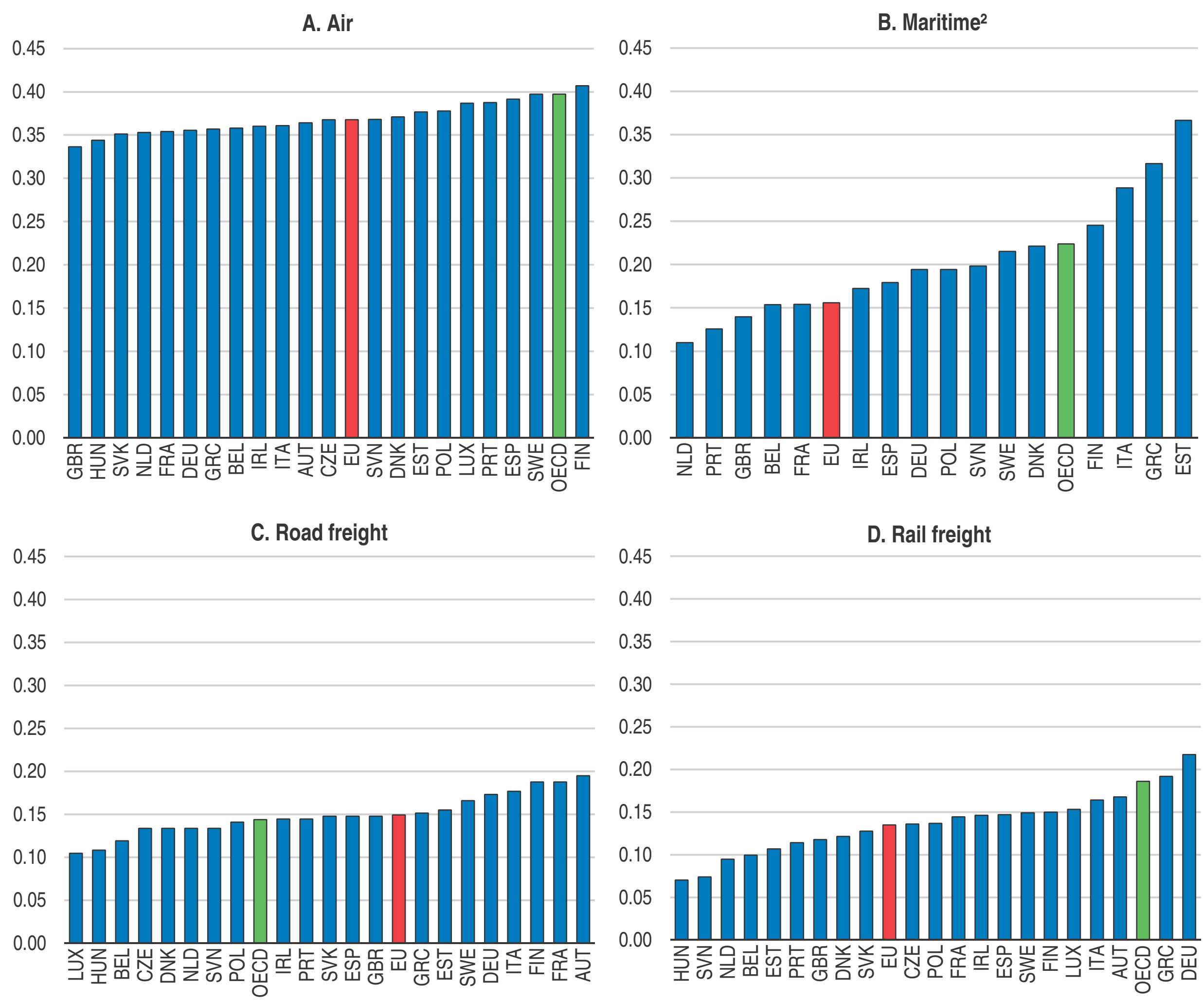
The reform of ETS is vital to ensure a functioning carbon market in the European Union. Measures to reduce the cap, including the decision to postpone the auctioning of 900 million allowances to reduce the short-term supply, the decision to introduce a market stability reserve starting from 2019 and the proposal to reduce the cap by 2.2% a year are meant to achieve that goal. The consistency between ETS and other decarbonisation measures, such as policies supporting renewables and energy efficiency is unclear. Enlarging the scope of ETS into other sectors, such as transport fuels, may in current conditions only create a minimal price signal, while it risks undermining the use of taxation by member states as the primary environmental instrument in transport (IEA, 2014).

Transportation

The Single Market would profit from improved and more competitive transport services and the EU institutions should step up their efforts in this area (Figure 22). Competition in road transport could be improved by simpler and more enforceable rules in the haulage market and promoting a level playing field in domestic passenger services (European Commission, 2015g). The fourth railway package, in its recently agreed technical pillar, would strengthen the role of the European Railway Agency as authority in certification and approval of vehicles. Agreement is also building up on the more controversial part of the package regarding non-discriminatory access to the railway networks of member states and competitive tendering, with targeted measures ensuring

Figure 22. **Services trade restrictiveness in transport**

Index scale from 0 (completely open) to 1 (completely closed), 2015[1]



1. Measures included in the index cover restrictions on foreign entry and movement of people, barriers to competition, regulatory transparency and other discriminatory measures. Aggregates are unweighted averages; the European Union covers member countries that are also members of the OECD (21 countries).
2. Aggregates exclude countries where no data is available: Austria, Czech Republic, Hungary, Luxembourg, Slovak Republic and Switzerland.

Source: OECD (2016), *Services Trade Restrictiveness Index Regulatory Database.*

StatLink *http://dx.doi.org/10.1787/888933366737* impartiality of infrastructure managers and addressing risks of cross-subsidisation. In both cases, significant transition periods are foreseen, facilitating adoption.

Competitive transport services require physical infrastructure that is often lacking or suffering from technical barriers such as incompatible standards. In some EU countries, maintenance of infrastructure assets has been neglected, to the point that replacement investment is needed (European Commission, 2015h). The development of Trans-European Transport Network, including the identification of main corridors and the work plans until 2030, is welcome. Collective action in transportation should focus on high-multiplier infrastructure investments that can augment GDP growth sufficiently to reduce debt-to-GDP ratios in the near term (OECD, 2015a). Member states, in co-operation with the Commission, should adjust their procurement as well as permitting procedures and consider developing a single legal framework for cross-border infrastructure projects. Financing from the Connecting Europe Facility and the European Structural and Investment Funds should be harnessed to enhance collective action and risk diversification across sectors and modes of transport (European Commission, 2015i).

Bibliography

Alemanno, A. (2015), “The Regulatory Cooperation Chapter of the Transatlantic Trade and Investment Partnership: Institutional Structures and Democratic Consequences”, *Journal of International Economic Law*, Vol. 18, No. 3, Oxford Journals.

Aussilloux, V. and B. Le Hir (2016), “The economic cost of rolling back Schengen”, *Analytical Note*, No. 39, France Stratégie, Paris.

Behrens, A. (2016), “Time to connect the dots: What is the link between climate change policy and the circular economy?”, *CEPS Policy Brief*, No. 337, Centre for European Policy Studies, Brussels.

Böhmer, M. et al. (2016), “Departure from the Schengen Agreement: Macroeconomic impacts on Germany and the countries of the European Union”, Bertelsmann Stiftung, Gütersloh.

Brynjolfsson, E. and A. McAfee (2011), *Race Against the Machine: How the Digital Revolution is Accelerating Innovation, Driving Productivity, and Irreversibly Transforming Employment and the Economy*, Digital Frontier Press.

CEPS (2014), “Making the most of EU labour mobility”, Report of a CEPS Task Force, Rapporteurs: M. Barslund and M. Busse, Centre for European Policy Studies, Brussels.

Chaloff, J. (2016), “The impact of EU Directives on the labour migration framework in EU countries”, *OECD Social, Employment and Migration Working Papers*, forthcoming.

Chaloff, J., et al. (2012), “Free labour mobility and economic shocks: the experience of the crisis”, in OECD, *Free Movement of Workers and Labour Market Adjustment: Recent Experiences from OECD Countries and the European Union*, OECD Publishing, Paris, *http://dx.doi.org/10.1787/9789264177185-5-en*.

Cœuré, B. (2015), “Capital Markets Union in Europe: an ambitious but essential objective”, A speech at the Institute for Law and Finance in Frankfurt, 18 March.

Della Croce, R. and S. Gatti (2014), “Financing infrastructure – International trends”, *OECD Journal: Financial Market Trends*, Vol. 2014/1, *http://dx.doi.org/10.1787/fmt-2014-5jxvpb4jfrf1*.

ECB (2015), *Financial Integration in Europe*, European Central Bank, Frankfurt am Main.

Égert, B. (2009), “Infrastructure investment in network industries: the role of incentive regulation and regulatory independence”, *OECD Economics Department Working Paper*, No. 688, Paris, *http://dx.doi.org/10.1787/225261508320*.

Eurofound (2015), “The thorny issue of labour mobility: Hotly debated but still a slow burner”, *Foundation Focus*, December.

European Commission (2016), *Regulated Professions Database*, *http://ec.europa.eu/growth/tools-databases/regprof* (accessed on 23 February).

European Commission (2015a), "Assessment of the economic impact of the Services Directive: Update of the 2012 study", European Commission, Brussels.

European Commission (2015b), "European Business and Public Administration", *Flash Eurobarometer*, No. 417, European Commission, Brussels.

European Commission (2015c), "Better regulation for better results: An EU agenda", Communication COM(2015) 215 final, European Commission, Brussels.

European Commission (2015d), "A Digital Single Market Strategy for Europe", Commission Communication COM(2015) 192 final, 6 May.

European Commission (2015e), "State of the Energy Union 2015", Communication COM(2015) 572 final, European Commission, Brussels.

European Commission (2015f), "Closing the loop – An EU action plan for the Circular Economy", Communication COM(2015) 614 final, European Commission, Brussels.

European Commission (2015g), "Upgrading the Single Market: more opportunities for people and business", Commission Communication COM(2015) 550 final, Brussels, 28 October.

European Commission (2015h), "Opportunities for the transport sector under the Investment Plan", Note to Ministers for 8 October 2015 Transport Council, *http://ec.europa.eu/transport/themes/infrastructure/ten-t-guidelines/doc/2015-09-30-non-paper-transport-sg.pdf*.

European Commission (2015i), "Action Plan for Making the best use of new financial schemes for European transport infrastructure projects", European Commission, Brussels.

European Commission (2014), "The Promise of the EU: Aggregate Report", *Eurobarometer Qualitative Study*, European Commission, Brussels.

European Commission (2011), "Report on the application of Directive 2003/109/EC concerning the status of third-country nationals who are long-term residents", Report COM (2011) 585 final, European Commission, Brussels.

European Commission (2010), "Geographical and labour market mobility", Special Eurobarometer, No. 337, European Commission, Brussels.

Eurostat (2015), "Foreign citizens living in the EU Member States", *News Release*, No. 230, Eurostat.

Eurostat (2013), "Information Society Statistics", *Eurostat Database*.

Fournier, J. (2015), "The negative effect of regulatory divergence on foreign direct investment", *OECD Economics Department Working Papers*, No. 1268, OECD Publishing, Paris, *http://dx.doi.org/10.1787/5jrqgvg0dw27-en*.

Fournier, J. et al. (2015), "Implicit Regulatory Barriers in the EU Single Market: New Empirical Evidence from Gravity Models", *OECD Economics Department Working Papers*, No. 1181, OECD Publishing, Paris, *http://dx.doi.org/10.1787/5js7xj0xckf6-en*.

Gaventa, J., N. Mabey, S. Dixson-Declève, H. Spence-Jackson and D. Acke (2015), "EU Energy Union Assessment 2015: Towards a resilient Energy Union with a forward-looking climate policy", *E3G Briefing Paper*.

Gonçalves, D. and Á. Pina (2016), "The composition of fiscal consolidation episodes: Impacts and determinants", *OECD Economics Department Working Papers*, forthcoming.

Helm, D. (2015), "The EU Energy Union: More than the sum of its part?", Centre for European Reform, London.

IEA (2014), *Energy Policies of IEA Countries: European Union 2014 Review*, International Energy Agency, Paris, *http://dx.doi.org/10.1787/9789264190832-en*.

IMF (2016a), "The Refugee Surge in Europe: Economic Challenges", *IMF Staff Discussion Note*, No. 16/02, International Monetary Fund, Washington DC.

IMF (2016b), "After Paris: Fiscal, Macroeconomic, and Financial Implications of Climate Change", *IMF Staff Discussion Note*, No. 16/01, International Monetary Fund, Washington DC.

Kedrain, C. et al. (2010), "The impact of structural policies on saving, investment and current accounts", *OECD Economics Department Working Papers,* No. 815, OECD Publishing, Paris, *http://dx.doi.org/10.1787/5km398ttzlkg-en*.

Kierzenkowski R, N. Pain, E. Rusticelli and S. Zwart (2016), "The economic consequences of Brexit: A taxing decision", *OECD Economic Policy Papers*, No. 16, OECD Publishing, Paris, *http://dx.doi.org/10.1787/5jm0lsvdkf6k-en*.

Kox, H. and A. Lejour (2006), "The Effects of the Services Directive on Intra-EU Trade and FDI", *Revue économique*, Presses de Sciences Po, Vol. 57, pp. 747-769, Taylor & Francis Online.

Nordås, H.K. (2016), "Does mutual recognition of qualifications stimulate services trade? The case of the European Union", *Applied Economics*, Vol. 48, No. 20, pp. 1852-1865, Taylor & Francis Online.

Nordås, H.K. and H. Kox (2009), "Quantifying Regulatory Barriers to Services Trade", *OECD Trade Policy Papers*, No. 85, OECD Publishing, Paris, *http://dx.doi.org/10.1787/5kgkcjqsm6kd-en*.

OECD (2016a), *Making Integration Work: Refugees and others in need of protection*, OECD Publishing, Paris, *http://dx.doi.org/10.1787/9789264251236-en*.

OECD (2016b), "Executive Summaries – 2015 Final Reports", *OECD/G20 Base Erosion and Profit Shifting Project*, *http://www.oecd.org/ctp/beps-reports-2015-executive-summaries.pdf*.

OECD (2015a), *OECD Economic Outlook, Volume 2015 Issue 1*, OECD Publishing, Paris, *http://dx.doi.org/10.1787/eco_outlook-v2015-1-en*.

OECD (2015b), *International Migration Outlook 2015*, OECD Publishing, Paris, *http://dx.doi.org/10.1787/migr_outlook-2015-en*.

OECD (2015c), *OECD Economic Outlook, Volume 2015 Issue 2*, OECD Publishing, Paris, *http://dx.doi.org/10.1787/eco_outlook-v2015-2-en*.

OECD (2015d), "Is this humanitarian migration crisis different?", *Migration Policy Debates*, No. 7, OECD Publishing, Paris, *www.oecd.org/migration/migration-policy-debates.htm*.

OECD (2015e), "Can the performance gap between immigrant and non-immigrant students be closed?", *PISA in Focus*, No. 53, OECD Publishing, Paris, *http://dx.doi.org/10.1787/5jrxqs8mv327-en*.

OECD (2015f), "How will the refugee surge affect the European economy?", *Migration Policy Debates*, No. 8, OECD Publishing, Paris, *www.oecd.org/migration/migration-policy-debates.htm*.

OECD (2015g), *OECD Business and Finance Outlook 2015*, OECD Publishing, Paris, *http://dx.doi.org/10.1787/9789264234291-en*.

OECD (2015h), *OECD Regulatory Policy Outlook 2015*, OECD Publishing, Paris, *http://dx.doi.org/10.1787/9789264238770-19-en*.

OECD (2015i), *OECD Digital Economy Outlook 2015*, OECD Publishing, Paris, *http://dx.doi.org/10.1787/9789264232440-en*.

OECD (2015j), *Climate Change Mitigation: Policies and Progress*, OECD Publishing, Paris, *http://dx.doi.org/10.1787/9789264238787-en*.

OECD (2014a), "Labour market integration of immigrants and their children: Developing, activating and using skills", in *International Migration Outlook 2014*, OECD Publishing, Paris, *http://dx.doi.org/10.1787/migr_outlook-2014-5-en*.

OECD (2014b), *OECD Economic Surveys: European Union 2014*, OECD Publishing, Paris, *http://dx.doi.org/10.1787/eco_surveys-eur-2014-en*.

OECD (2013a), *Recruiting Immigrant Workers: Germany 2013*, OECD Publishing, Paris, *http://dx.doi.org/10.1787/9789264189034-en*.

OECD (2013b), *International Regulatory Co-operation: Addressing Global Challenges*, OECD Publishing, Paris, *http://dx.doi.org/10.1787/9789264200463-en*.

OECD (2013c), *The Internet Economy on the Rise: Progress since the Seoul Declaration*, OECD Publishing, Paris, *http://dx.doi.org/10.1787/9789264201545-en*.

OECD/European Union (2015), *Indicators of Immigrant Integration 2015: Settling In*, OECD Publishing, Paris, *http://dx.doi.org/10.1787/9789264234024-en*.

OECD/IEA/NEA/ITF (2015), *Aligning Policies for a Low-carbon Economy*, OECD Publishing Paris, *http://dx.doi.org/10.1787/9789264233294-en*.

Ollivaud, P. and D. Turner (2014), "The Effect of the Global Financial Crisis on OECD Potential Output", *OECD Economics Department Working Papers*, No. 1166, OECD Publishing, Paris, *http://dx.doi.org/10.1787/5jxwtl8h75bw-en*.

Renda, A. (2015), "Too good to be true? A quick assessment of the European Commission's new Better Regulation Package", *CEPS Special Report*, No. 108, Centre for European Policy Studies, Brussels.

Rizos, V. et al. (2015), "The Circular Economy: Barriers and Opportunities for SMEs", *CEPS Working Document*, No. 412, Centre for European Policy Studies, Brussels.

Steger, D. (2012), "Institutions for Regulatory Cooperation in 'New Generation' Economic and Trade Agreements", *Legal Issues of Economic Integration*, Vol. 38, No. 4, pp. 109-126, Kluwer Law Online.

Valiante, D. (2015), "Light and shadows in Europe's new Action Plan for Capital Markets Union", *CEPS/ ECMI Commentary*, No. 40/5, Centre for European Policy Research, Brussels.

Véron, N. and G. Wolff (2015), "Capital Markets Union: A Vision for the Long Term", *Bruegel Policy Contribution*, No. 2015/05, Bruegel, Brussels.

ANNEX

Progress in structural reform

Main recommendations	Action taken since the previous *Survey* (2014)
A. Raising inclusive long-term growth	
Enhance the EU Semester process by focusing more on spill-over effects, strengthening the underpinning analysis, systematically assessing employment, social and environmental impacts of reforms. Continue to address structural imbalances, and better co-ordinate communication with EU member states.	The European Semester now starts with recommendations for the euro area to ensure that country-specific recommendations reflect common euro area concerns. Social impact assessment took place in the context of the Greek support programme. National Parliaments are encouraged to participate in the European Semester process.
Reinforce the EU Impact Assessment system and the new EU Regulatory Fitness (REFIT) programme to improve the design of policies and reduce burdens for firms and national public administrations.	Simplifications under the REFIT programme include electronic value-added tax invoicing and simpler registration of chemical substances. New ways to consult stakeholders, improved tools and a new institution, the Regulatory Scrutiny Board, involved in impact assessment and evaluation were implemented.
Implement the EU Horizon 2020 framework programme for research and innovation to simplify procedures, and bridge a gap between research institutions and the private market.	The Horizon 2020 procedures were simplified, including the use of an electronic signature and an eight months' time to grant in 95% of cases. The participation of industry and small and medium-sized enterprises (SMEs) has increased thanks to the new SME financing instrument.
B. Completing the Single Market	
Improve the implementation of the Services Directive, in particular by eliminating unjustified and disproportionate restrictions to the cross-border provision of services and to the establishment of businesses.	Administrative burden has been reduced by the European Professional Card, an electronic procedure for the recognition of qualifications for selected professions.
In network sectors that require regulation, further strengthen co-operation between national regulators, with a view to moving towards cross-border regulators	The role of the European Railway Agency in authorisation of rolling stock for operations was strengthened. Political agreement on the opening of domestic railway markets is emerging.
Deepen the internal energy market through further development of energy interconnections.	Electricity and gas regional initiatives fostered the integration of energy markets at a regional level. A new interconnectivity target of 15% of installed capacity by 2030 has been introduced and an updated list of projects of common interest was published in November 2015.
Move forward with the adoption of the proposed directives on free movement of workers and on acquisition and preservation of supplementary pension rights. Take measures to eliminate double taxation of pensions, develop automatic qualification recognition, and eliminate disproportionate national barriers related to regulated professions.	Directives on improved enforcement of workers' rights (2014/54/EU) and on acquisition and preservation of supplementary pension rights (2014/50/EU) were adopted in April 2014 and are to be transposed by May 2016 and May 2018, respectively. Administrative burden related to regulated professions has been reduced by the European Professional Card (see above).
Continue the intensive engagement in multilateral trade negotiations, move forward with a trade agreement with the United States to reduce non-tariff barriers, while continuing to negotiate trade agreements with other partners.	The negotiations of the trade agreement with the United States continue. A novel investment protection mechanism based on a permanent investment tribunal and an appeal tribunal has recently been adopted in trade agreements with Canada and Vietnam.
C. Low carbon economy	
Strengthen the EU Emission Trading Scheme (ETS) by adopting an ambitious 2030 target accompanied by a tight ETS allowance cap. In this context, the renewable energy target and subsidy schemes should avoid creating distortions within the Single Market.	Short-term supply of allowances has been reduced by the decision to postpone the auctioning of 900 million allowances. Market stability reserve will be in operation from 2019 and a faster annual reduction of the cap, at the rate of 2.2% rather than 1.74%, will start in 2021.
Make sure that each sector is either subject to carbon dioxide taxation (for example, under the planned Energy Taxation Directive) or participates in the ETS, as appropriate.	No action taken.
Encourage ownership unbundling of generation, supply and network activities within vertically-integrated electricity utilities, and streamline permit procedures to support electricity grids investment.	The unbundling rules were enforced through infringement procedures. The correct application of the rules was supported through opinions on the certification of transmission system operators.

Thematic chapter

Chapter 1

Priorities for completing the single market

The EU Single Market remains far from completed: progress in goods and services market integration has stalled, financial markets are still fragmented along national lines and the barriers to labour mobility remain high. Restrictive regulation within countries and regulatory heterogeneity across them hamper the internal market, reducing trade and investment flows. Network sectors, such as energy and transportation, are insufficiently interconnected and open to competition, and inefficient as a result. Reinvigorating the single market is one of the key tools to strengthen the recovery of the European Union and restore faster growth of income per capita.

To support the recovery, structural reforms that yield short-run as well as long-run gains should be prioritised. Policies enhancing labour and capital mobility are especially relevant, as they provide channels of adjustment to country-specific shocks and reinforce the effectiveness of stabilisation policies. Policies enhancing capital mobility include improved securitisation, better collection and sharing of credit information regarding smaller firms and the convergence of insolvency regimes. Labour mobility within the European Union would profit from reduced administrative and regulatory burden, such as faster recognition of professional qualifications and better portability of social and pension rights. Product markets reforms also have the potential to deliver benefits swiftly, not least by unlocking investment. Regulatory burdens could be alleviated by better impact assessment for legislative proposals and ex post *evaluation of policies. Product market reforms in network sectors should include harmonisation of regulations and technical specifications, with the target of establishing single EU regulators.*

The statistical data for Israel are supplied by and under the responsibility of the relevant Israeli authorities. The use of such data by the OECD is without prejudice to the status of the Golan Heights, East Jerusalem and Israeli settlements in the West Bank under the terms of international law.

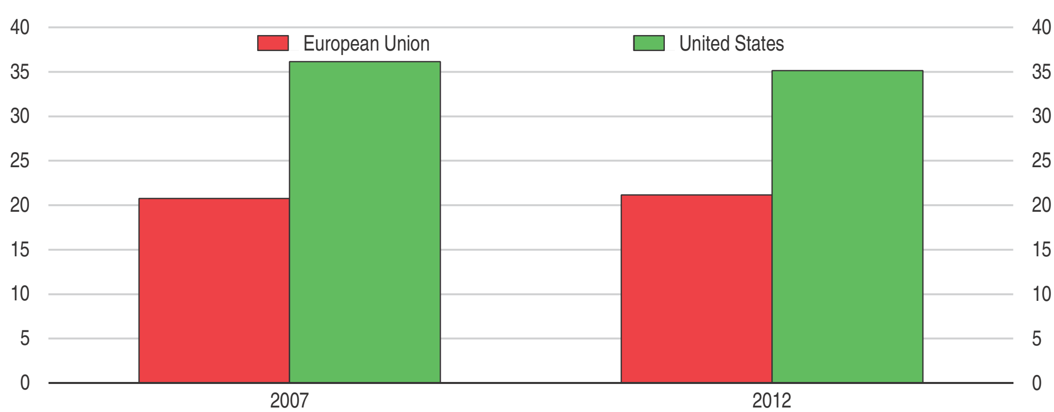
Priorities and sequencing of reforms at the current juncture

How far is the Single Market from a single market?

Market integration in the European Union (EU) remains uneven. The goods market is the most integrated in the European Union, well beyond markets in services, capital and labour. Intra-EU trade in goods has benefited from the formation of the internal market, but progress in goods market integration seems to have stalled in the wake of the financial crisis, as intra-EU goods trade as a fraction of GDP has been roughly unchanged between 2007 and 2012 (Figure 1.1). Empirical evidence shows that joining the Single Market has a positive impact on trade, but that trade could be further increased by removing implicit regulatory barriers, especially heterogeneous product market regulations (Fournier et al., 2015). Intra-EU trade in manufactured goods as a share of GDP remains considerably lower than interstate trade in the United States (Figure 1.1).

Figure 1.1. **Inter-state trade in manufactured goods**[1]

As a percentage of GDP



1. Data refer to trade flows among states for the United States and among EU 28 member states for the European Union.

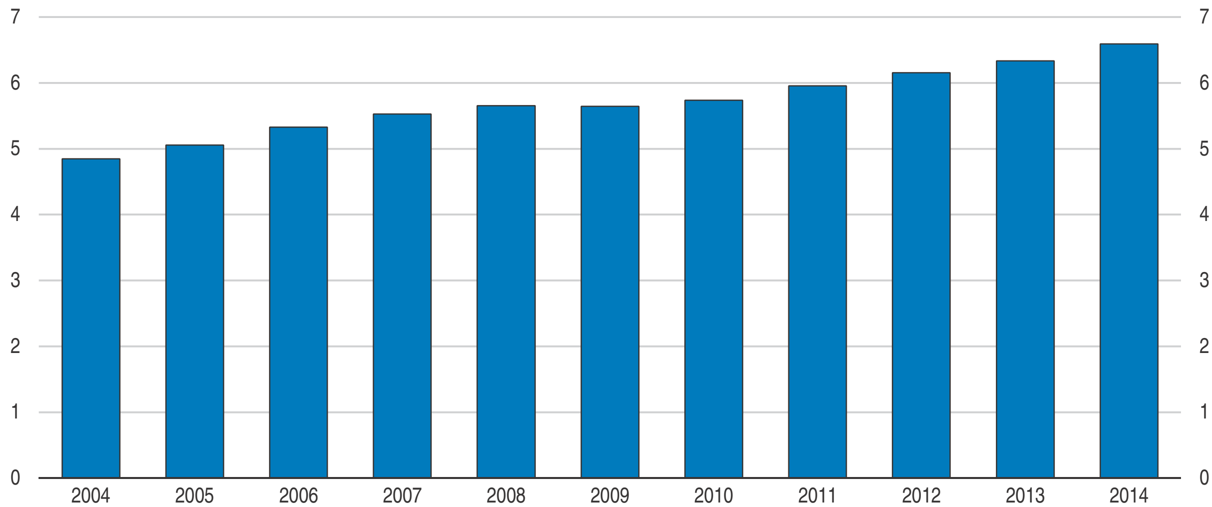
Source: Eurostat (2015), "International trade data", *Eurostat Database*; US Bureau of Transportation Statistics, *Commodity Flow Survey 2012* and OECD (2015), *National Accounts Statistics* (database).

StatLink http://dx.doi.org/10.1787/888933366749

Trade integration in services is far lower than for goods and the deepening of the internal market in services has been slow (Figure 1.2), despite the enactment of the Services Directive and the reduction of regulatory heterogeneity in professional services between 2008 and 2013 (Fournier, 2015). This may partly be explained by the measurement methodology. The European Union distinguishes three modes of cross-border trade in services: *i)* trade at a distance (such as e-commerce), *ii)* trade where the consumer crosses the border (such as tourism), and *iii)* trade where the supplier crosses the border (mainly covered by the Services Directive). Sales by subsidiaries of service firms located in another country do not qualify as international trade, although they probably account for the largest share of cross-border supply of services (Bénassy-Quéré et al., 2006).

Figure 1.2. **Intra-EU trade in services**

Intra EU exports of services as a percentage of GDP[1]



1. Balance of payments basis. Data for EU 27 countries until 2009 based on the fifth edition of the Balance of Payments methodology and data for EU 28 countries from 2010 onwards based on the sixth edition.

Source: Eurostat (2016), "Balance of payments – International transactions" and "Annual national accounts", *Eurostat Database*.

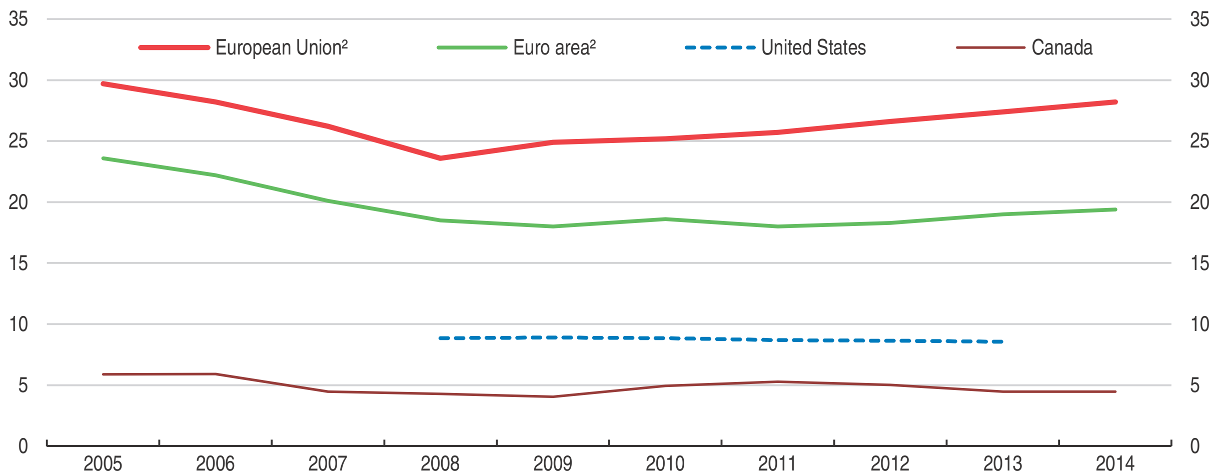
StatLink http://dx.doi.org/10.1787/888933366750

The progress of economic integration can be assessed by the degree of aggregate price level convergence across the areas constituting the market, such as the EU countries and the US states. As this measure combines developments in relative living standards and market integration, it has to be interpreted with caution. Prior to 2008, price convergence was considerably faster in the European Union than the euro area, but prices started to diverge in the European Union in 2009 and the price convergence has stopped in the euro area since 2012 (Figure 1.3). Consumers are now facing increasingly different prices for the same products in different countries. The slow progress of price convergence in the euro area has been linked to heavy regulation in the services sector, but the conjecture that the EU Services Directive may be "a stronger vector of price convergence than the single currency" (Bénassy-Quéré, 2010, p. 412) does not seem to be supported by the data. Price dispersion in the euro area remains above that among the US states, suggesting a persistent "border effect", documented in the previous work on the United States and Canada (Engel and Rogers, 1996), the OECD countries (Braconier and Pisu, 2013) and the euro area (Reiff and Rumler, 2014).

The overall indicator of product market regulation shows little improvement between 2008 and 2013 in the European Union as a whole, although changes have been significant in a few countries (Figure 1.4). The heterogeneity of regulation has hardly changed either (OECD, 2014a). Individual EU countries display various approaches to regulation, possibly reflecting citizens' preferences. For example, some countries combine flexible and open markets in network industries with some of the strictest regulations of professional services, but other countries do the opposite (Figure 1.5).

Figure 1.3. **Aggregate price level convergence**

Coefficient of variation, per cent[1]



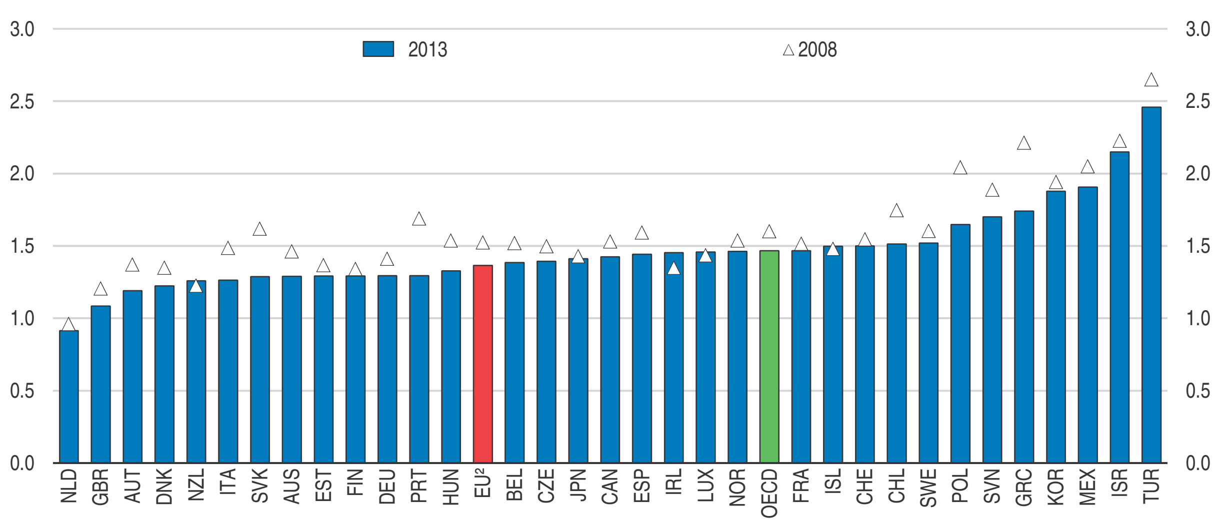
1. The coefficient of variation indicates the extent of variability relative to the mean of a series. Here the series shown are the price level index of household final consumption expenditure for the European Union and euro area, the implicit regional price deflator for the United States and the intercity index of price differentials of consumer goods and services for Canada.
2. European Union 28 countries and euro area 19 countries.

Source: Eurostat (2015), "Price convergence indicator", *Eurostat Database*; BEA (2015), "Real Personal Income for States and Metropolitan Areas, 2013", US Bureau of Economic Analysis; and Statistics Canada (2016), "Table 326-0015", *CANSIM Database*.

StatLink http://dx.doi.org/10.1787/888933366659

Figure 1.4. **Product market regulation indicator**

Total economy, index scale from 0 to 6, from least to most restrictive[1]



1. Data may no longer fully reflect the current situation in fast reforming countries. Data for 2013 is not available for the United States and it is excluded from the OECD aggregate in that year; the 2008 number for the United States is 1.11.
2. European Union member countries that are also members of the OECD (21 countries).

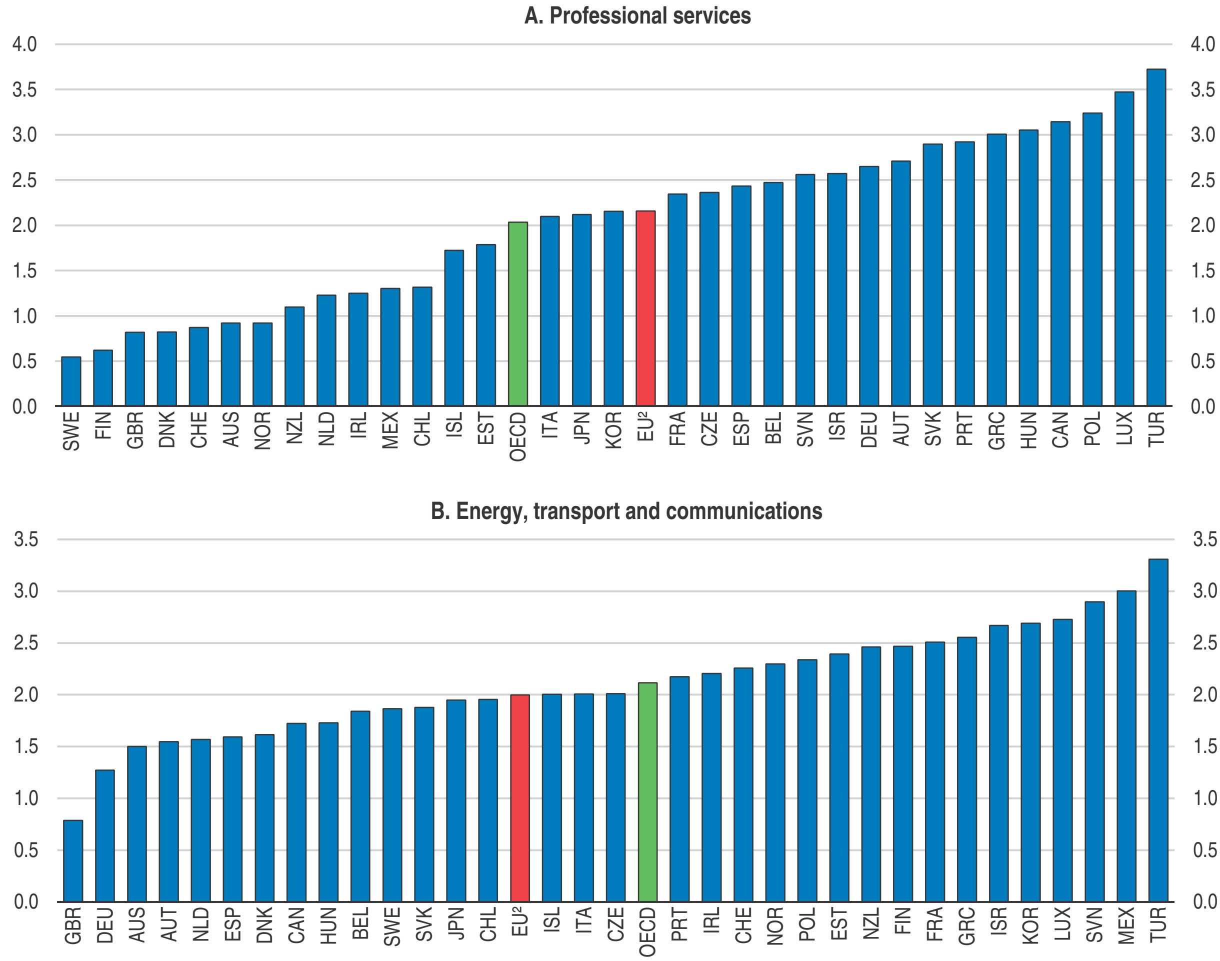
Source: OECD (2015), "Economy-wide regulation", *OECD Product Market Regulation Statistics* (database).

StatLink http://dx.doi.org/10.1787/888933366762

The mobility of capital and labour, two of the "fundamental freedoms" of the internal market (alongside the free movement of goods and services) would improve the economic performance in a way similar to trade in goods and services. Foreign markets can be served

Figure 1.5. **Regulation in professional services and network sectors**

Product market regulation indicator, index scale from 0 to 6, from least to most restrictive,[1] 2013



1. Data may no longer fully reflect the current situation in fast reforming countries. Data for 2013 is not available for the United States and it is excluded from the OECD aggregate; the corresponding 2008 numbers for the United States are 1.35 for professional services and 1.65 for energy, transport and communications.
2. European Union member countries that are also members of the OECD (21 countries).

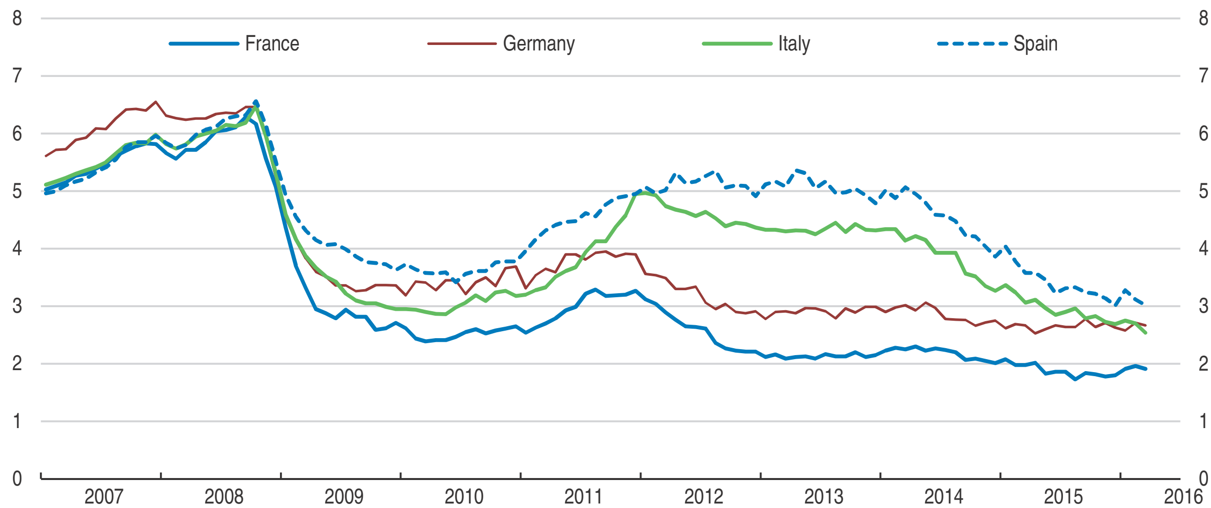
Source: OECD (2015), "Sectoral regulation", *OECD Product Market Regulation Statistics* (database).

StatLink http://dx.doi.org/10.1787/888933366776

just as well through implantation of foreign firms as through imports, and firms investing in other EU countries or establishing themselves abroad are a key ingredient of the internal market. The financial and banking markets in the European Union remain fragmented, especially for small and medium-sized enterprises (SMEs). Borrowing costs have diverged across the euro area, especially for non-financial corporations, and despite narrowing in 2015, the dispersion has not yet returned to the level before the start of the sovereign debt crisis (Figure 1.6). In some countries interest rates continue to be held up by national sovereign debt positions and macroeconomic weakness (OECD, 2015a). Cross-border financial integration, although steadily improving, is unlikely to reach pre-crisis levels, as these were partly driven by unsustainable business models and excessive risk-taking (Figure 1.7) The picture is also mixed across individual financial markets, as the improvement in equity market integration is less clear than in money, bond and banking markets (ECB, 2015).

Figure 1.6. **Dispersion of nominal interest rates**

Interest rates on loans to non-financial corporations, per cent[1]



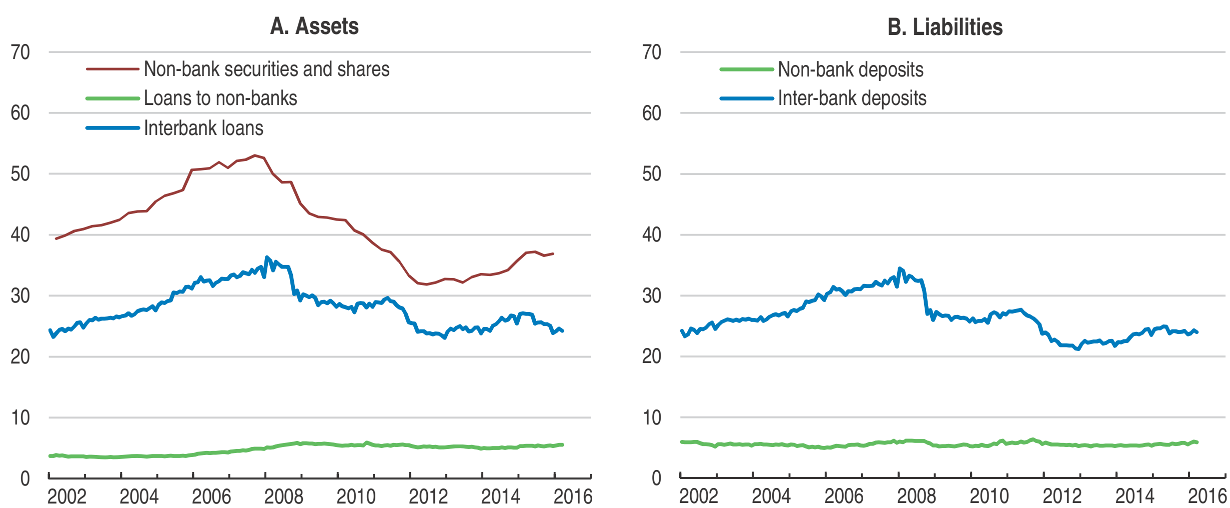
1. Loans of monetary and financial institutions to non-financial corporations up to and including EUR 1 million. Operations with an initial rate fixation period of less than one year for new business.

Source: ECB (2016), "Bank interest rates statistics", *Statistical Data Warehouse*, European Central Bank.

StatLink http://dx.doi.org/10.1787/888933366781

Figure 1.7. **Cross-border positions of euro area monetary financial institutions**

Per cent[1]



1. Cross-border activity as a percentage of the total provision of financial services in the euro area.

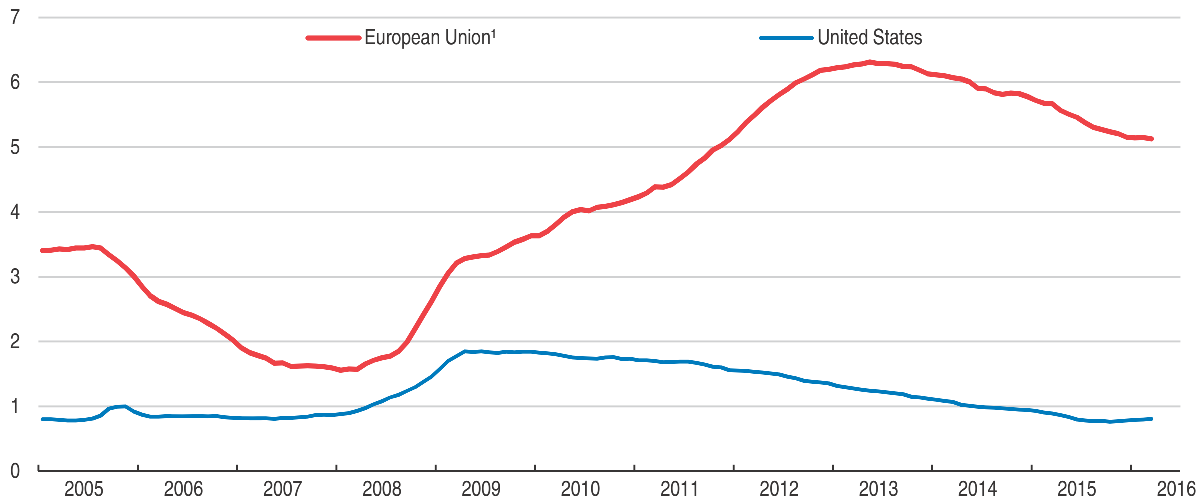
Source: ECB (2016), "MFI balance sheets: Monetary statistics", *Statistical Data Warehouse*, European Central Bank.

StatLink http://dx.doi.org/10.1787/888933366662

Labour mobility in the European Union and the euro area is still low compared to the United States, as documented by the evolution of unemployment rate variability in Europe and the United States (Figure 1.8). Although the 2008 financial crisis did trigger equilibrating labour flows in the European Union, most of the flows took place between the new and the old EU member states and in any case, the overall effect of these flows has been too small to help adjustment to regional labour market shocks (Chaloff et al., 2012). Some econometric studies using VAR models suggest that labour mobility response to

Figure 1.8. **Labour market fragmentation**

Weighted standard deviation of unemployment rates, per cent



1. European Union 28 countries.

Source: Eurostat (2016), "Employment and unemployment (LFS)", *Eurostat Database* and BLS (2016), "Local Area Unemployment Statistics", US Bureau of Labour Statistics.

StatLink http://dx.doi.org/10.1787/888933366796

cyclical changes in the euro area has been stronger than in the United States since the 2008 financial crisis (Dao et al., 2014; Jauer et al., 2014). The weaker US response may, however, be due to an increasing homogeneity of labour market conditions across US regions that could result in lower interstate migration.

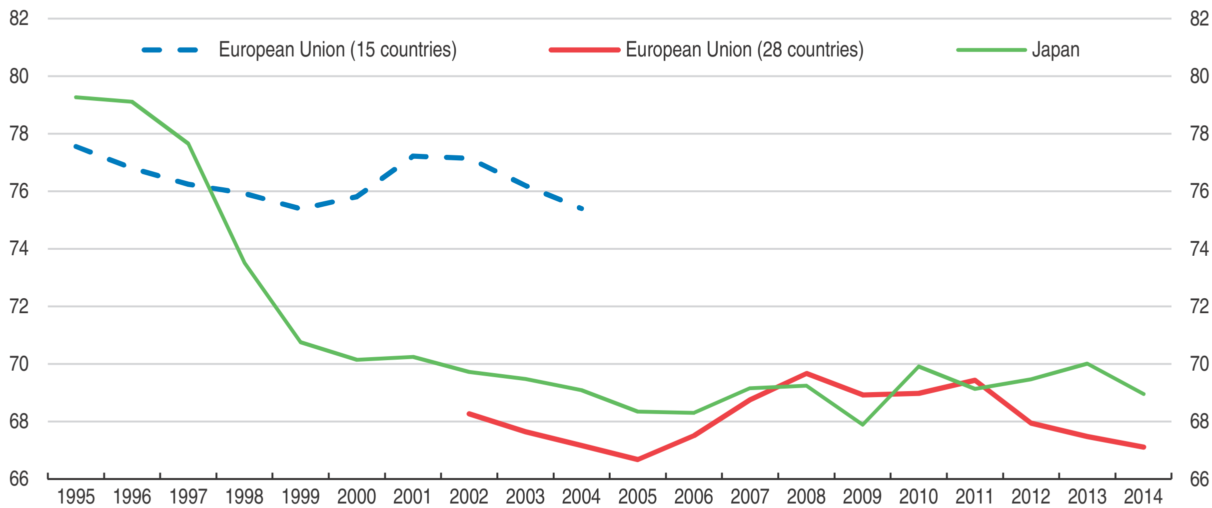
What reforms at the current juncture?

The economic recovery in Europe is modest and uneven, with asymmetries in cyclical conditions across countries. Weak public finances and monetary policy restricted by the zero-lower bound limit the support of the recovery through expansionary macroeconomic policies. Convergence of GDP per capita toward the United States level in the European Union has stalled in the 1990s and started deteriorating in the wake of the financial crisis (Figure 1.9), driven by both under-utilisation of labour and low labour productivity (Figure 1.10). Since monetary and fiscal policies remain constrained, and in any case limited in achieving objectives beyond the cyclical support, structural policies need to be geared toward boosting living standards and more income equality in the medium term, while supporting, or at least not damaging, the ongoing recovery.

Policies to enhance labour and capital mobility are especially relevant at the current juncture, as they provide both the support for cyclical stabilisation and the medium-term benefits, including improved allocation of resources leading to higher productivity. Labour and capital mobility enhancing policies facilitate equilibrating flows of labour and capital in the aftermath of asymmetric shocks, and thus act as an important shock-absorber and an implicit risk-sharing mechanism (de Grauwe, 2014). Capital mobility is also important for effective monetary policy transmission, since fragmented financial markets inhibit changes in the policy rate from translating into changes in financing costs for borrowers. In order to make the transmission channels of macroeconomic policies, such as credit provision, work again, other measures will be needed, including the reform of insolvency regimes (AFME, 2016).

Figure 1.9. **Gross domestic product per capita**[1]

United States = 100



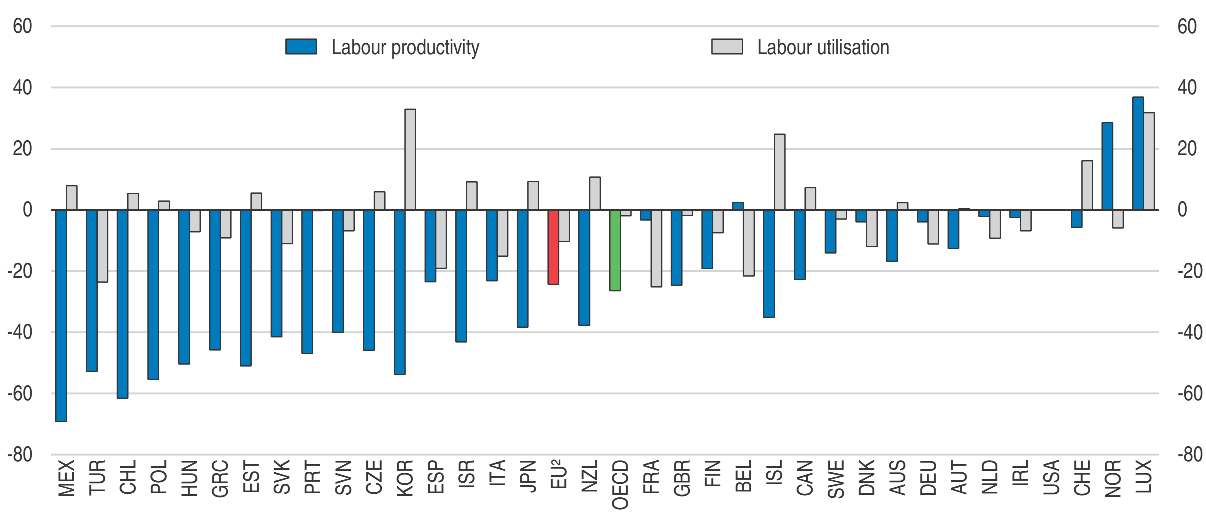
1. GDP at constant prices and constant purchasing power parities.

Source: OECD (2016), "Aggregate National Accounts, SNA 2008: Gross domestic product", *OECD National Accounts Statistics* (database).

StatLink http://dx.doi.org/10.1787/888933366805

Figure 1.10. **Labour utilisation and productivity**

Percentage difference compared with the United States, 2014[1]



1. Labour productivity is measured by GDP per hour worked and labour utilisation by hours worked per head of population. Data are sorted in order of GDP per capita percentage difference with the United States.
2. European Union 28 countries.

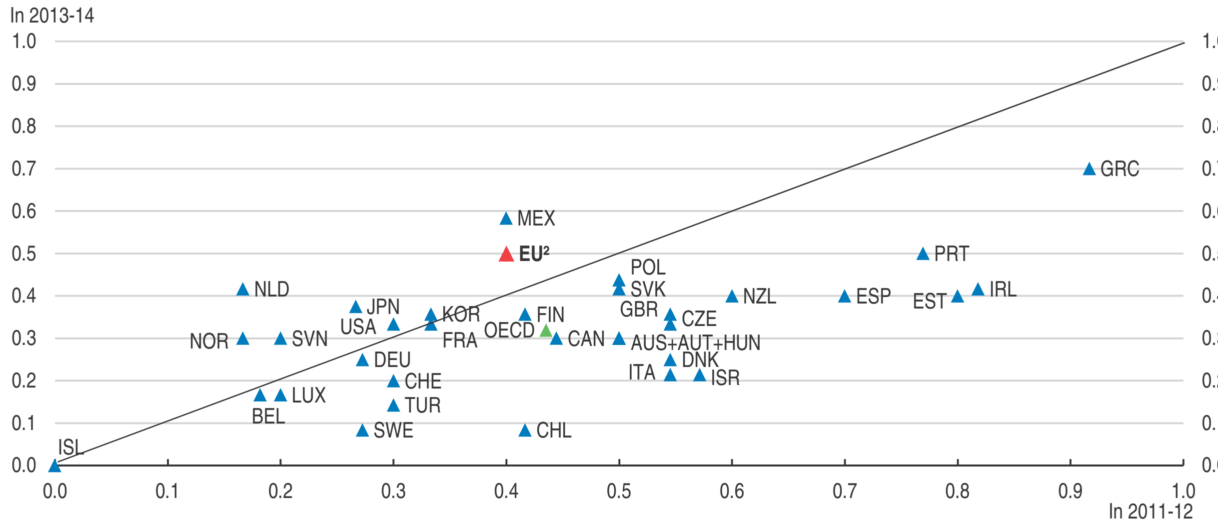
Source: OECD (2016), "GDP per capita and productivity levels", *OECD Productivity Statistics* (database).

StatLink http://dx.doi.org/10.1787/888933366815

The medium-term improvements to productivity and potential output will require the continuation of substantial structural reforms. The *Going for Growth* responsiveness indicator shows a slowdown in reforms in many OECD countries (Figure 1.11). The slowdown is most pronounced in countries that exhibited highest levels of reform responsiveness between 2009 and 2012, including the euro area countries with programmes of financial support.

Figure 1.11. **The pace of reforms has slowed**

Reform responsiveness rate indicator[1]



1. The index of structural reform is measured by the change in the composite indicator which is based on a scoring system where recommendations set in the previous issue of *Going for Growth* take a value of one if "significant" action is taken and zero if not. An action is considered as "significant" if the associated reform addresses the underlying policy recommendation and if it is actually legislated; announced reforms are not taken into account.
2. European Union member countries that are also members of the OECD (21 countries).

Source: OECD (2015), *Economic Policy Reforms 2015: Going for Growth*.

StatLink http://dx.doi.org/10.1787/888933366828

The growing literature on the sequencing of reforms suggests that when the economy is weak transitory costs and distributional impacts of reforms tend to favour product market reforms over labour market reforms (Caldera Sánchez et al., 2016). Product market reforms have potentially large payoffs, including higher real wages, which may facilitate the subsequent labour market reform (Blanchard and Giavazzi, 2003). Pro-competition reforms in product markets are also needed to ensure that recent labour market reforms implemented in the programme countries result in job creation in sectors where there is pent-up demand and in lower consumer prices rather than higher profits (OECD, 2015b).

Competition-enhancing product market reforms foster innovation and productivity (Aghion et al., 2009), often through investment in knowledge-based capital, thus reducing the demand for low-skill, routine jobs in favour of high-skilled workers (Bresnahan et al., 2002). This effect can be contained if complemented with labour mobility-enhancing and job creating policies (OECD, 2015b; Causa et al. 2015). Empirical OECD studies show that many structural policies, with the possible exception of innovation policies and skill-biased technological progress, have little or no impact on income inequality among households (Braconier and Ruiz-Valenzuela, 2014). The need to compensate, at least partly, some of those who lose out from structural reforms, may, however, add to the cost of reforms in the short and medium term.

The next section discusses labour and capital mobility-enhancing policies as tools in support of the ongoing recovery; the subsequent two sections examine, respectively, horizontal and sector-specific policies for boosting potential growth in the European Union.

Structural reforms to facilitate the recovery

Both labour and capital mobility increase resilience in the face of idiosyncratic shocks. Cross-border financial flows play an important role both as a buffer against shocks and a precondition of effective monetary policy transmission. Financial intermediation in Europe remains predominantly bank-based. As a result of this dependence, the level of risk-sharing compared to federations like the United States, Canada or Germany tends to be considerably lower and biased towards credit, rather than capital flows (IMF, 2013). Moreover, the risk-sharing through bank credit channel tends to break down in periods of crisis, making the adjustment in the euro area a costly and protracted process (Furceri and Zdzienicka, 2013).

Labour mobility can better match demand and supply in the internal market, and in doing so can reduce qualification mismatches apparent in some EU countries and help people return to work. Cross-border movement of workers also reduces unemployment in the country of origin and may even help rebalancing through remittance flows. In addition to increasing resistance to asymmetric shocks (Ahrend et al., 2011), the advantages of labour mobility in a monetary union at the zero-lower bound and with limited fiscal space may even extend to common shocks (Erceg and Lindé, 2010). In addition to its role in enabling better and more uniform transmission of monetary policy, labour mobility can also improve the accumulation of human capital in the medium term, as mobile workers acquire better skills and contribute to the diffusion of best working practices.

Capital mobility-enhancing policies

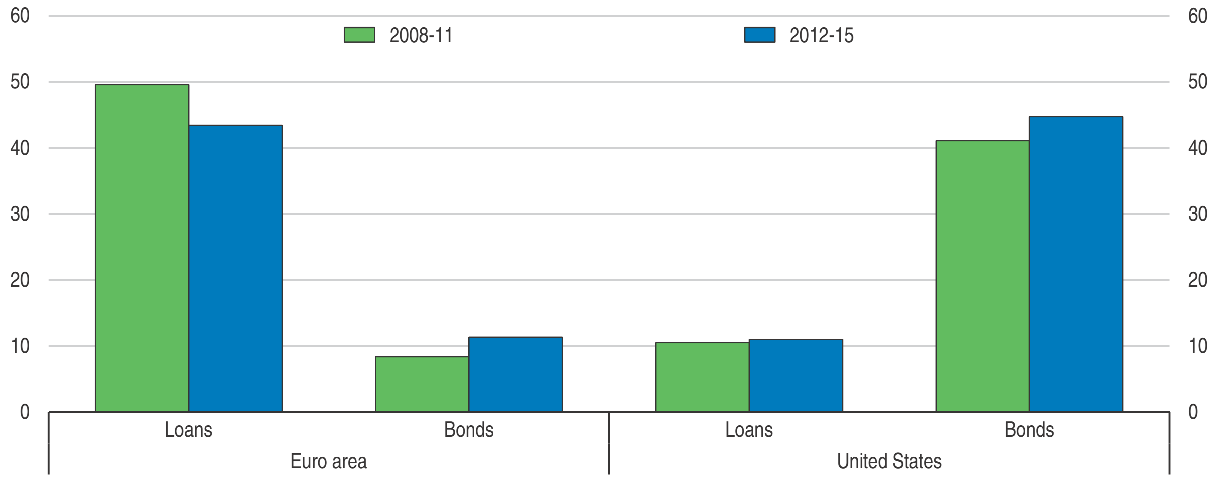
Capital markets in the European Union are less integrated than in the United States. Moreover, the reliance of EU firms on bank financing is much higher than in the United States (Figure 1.12). A functioning capital markets union (CMU) is an important complement to the banking union that will improve the balance of financial intermediation in Europe, reduce the reliance of non-financial companies on banks and by enhancing cross-border risk-sharing help weaken the bank-sovereign nexus (Cœuré, 2015). Removing or decreasing the major obstacles to capital markets integration will also increase resilience and encourage banks to reach an optimal size relative to the European market.

The overarching objective of the CMU is to enhance both the domestic and cross-border supply of capital to firms, especially SMEs, mainly through lowering regulatory barriers, widening of investor base and investment choices, and deepening financial integration. The CMU package consists of both legislative proposals and non-legislative initiatives. Proposals that have already been operationalised, such as making prospectuses more accessible for investors, revising the risk calibrations on infrastructure investments by banks and insurers, and simple, transparent and standardised securitisation are welcome and could help creating positive momentum for the forthcoming parts of the package.

The reduction of regulatory heterogeneity can bring short-term improvements. Stock exchange groups that operate in more than one EU country (such as Euronext or Nasdaq Nordic) are currently subject to both harmonised rules, for example under the Markets in Financial Instruments directive, and non-harmonised local rules that only apply in individual local markets. Harmonising the local rules, such as local admission and trading rules, could reduce operational costs and spur another wave of stock exchange

Figure 1.12. **Bank and capital market financing of enterprises**

Outstanding loans[1] and bonds of non-financial corporations as a percentage of GDP, period average



1. Loans of monetary and financial institutions.

Source: Eurostat, European Central Bank, US Bureau of Economic Analysis, Board of Governors of the Federal Reserve System, and Securities Industry and Financial Markets Association.

StatLink http://dx.doi.org/10.1787/888933366508

consolidation improving liquidity and providing more efficient pricing that may further lower the financing costs for market participants (Kaya, 2015). Barriers resulting from complex and fragmented trading and post-trading infrastructure in the European Union, reflecting the legacies of past national systems as described in the Giovannini reports, should be reduced or eliminated (Véron and Wolff, 2015).

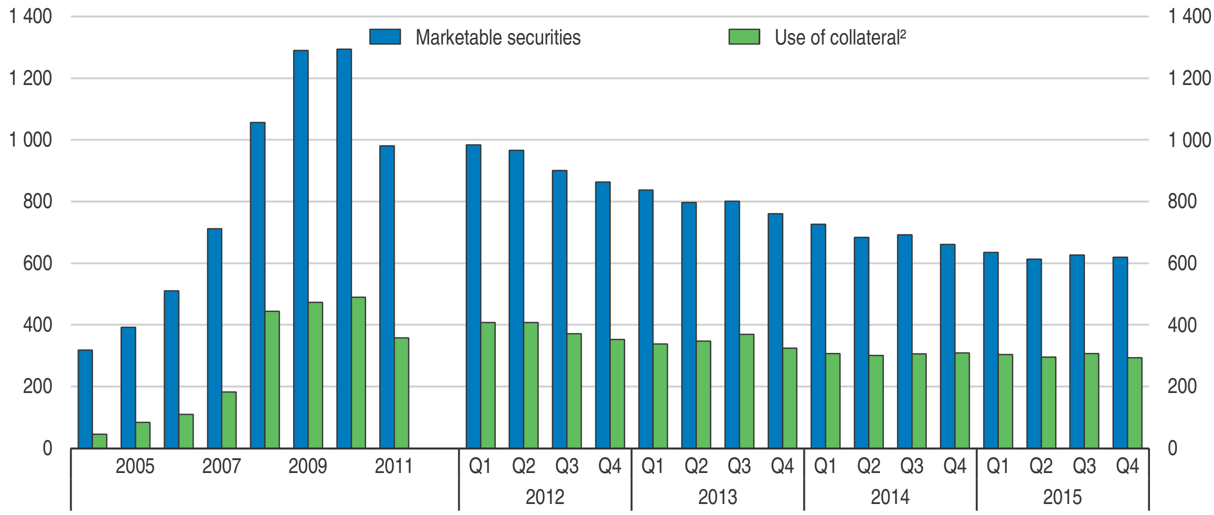
Under-pricing of risk coupled with potentially inadequate regulation in the run-up to the financial crisis tarnished the reputation of securitisation. There was a sharp contraction in issuance, although this was mitigated in Europe by the eligibility of some products, including asset-backed securities and covered bonds, for the European Central Bank (ECB) refinancing operations and asset-purchase programmes (Figure 1.13). The rebound in securitisation is important for bank lending and for financing of SMEs unlikely to tap the stock and bond markets. The CMU could help reviving the securitisation markets by easing the regulatory treatment that discourages institutional investors. The rules for simple, transparent and standardised securitisation may help SME lending, especially after the current period of very low policy interest rates comes to an end.

The investor base could be expanded by introducing standardised pan-European financial products and investment vehicles, including venture capital fund-of-funds and multi-country funds. Supporting the development of the most effective information system that connects SMEs with a range of funding sources can be an effective tool to tackle the asymmetric information problem associated with SME financing, for example through transparent and standardised data warehouses that collect and share credit information on smaller firms with all market participants, such as already used by the Banque de France for French companies or AnaCredit recently constructed by the ECB (OECD, 2015a).

The potential success of the CMU, beyond important and useful fine-tuning of the existing rules, will require addressing the legal and regulatory barriers in the EU capital

Figure 1.13. **Asset-backed securities used in refinancing operations with the ECB**

Eligible and pledged marketable asset-backed securities, nominal amounts in billion EUR[1]



1. Averages of end of month data over each time period shown.
2. After valuation and haircuts.

Source: ECB (2016), "Eurosystem Collateral Data", European Central Bank, *www.ecb.europa.eu/paym/coll/html/index.en.html*.

StatLink http://dx.doi.org/10.1787/888933366837

markets, including those resulting from company, securities and insolvency laws. Barriers also exist in other areas under competence of national states, such as taxation, both of debt versus equity and residents versus non-residents. The bias in tax treatment of debt and equity should be reduced. Some member states lower the debt-equity bias through an allowance for corporate equity, which requires a careful design to prevent abuse (Zangari, 2014). Limitations on the deduction of interest payments, in line with the recommendations of the OECD/G20 Base Erosion and Profit Shifting Action Plan, provide another way of reducing the debt-equity bias, as does the integration of capital income taxes at the corporate and personal level.

The absence of an EU-wide insolvency regime discourages cross-border investment and timely restructuring and complicates the resolution of non-performing loans that absorb large volumes of regulatory capital and hamper new bank lending (IMF, 2015). National insolvency laws and practices vary across multiple dimensions, including the applicable triggers of insolvency, ranking of creditors, filing and verification of claims and liability of management and shareholders. A more efficient European insolvency regime might require, for example, a consistent framework for valuation and resolution of valuation disputes as well as sufficient time for the debtor to reach agreement with creditors and an increased involvement of creditors in insolvency proceedings, possibly introduced through a harmonised introduction of minimum standards into national systems of all member states. Furthermore, consistency in the application of insolvency laws and procedures by the courts and practitioners should also be supported at the EU level (AFME, 2016).

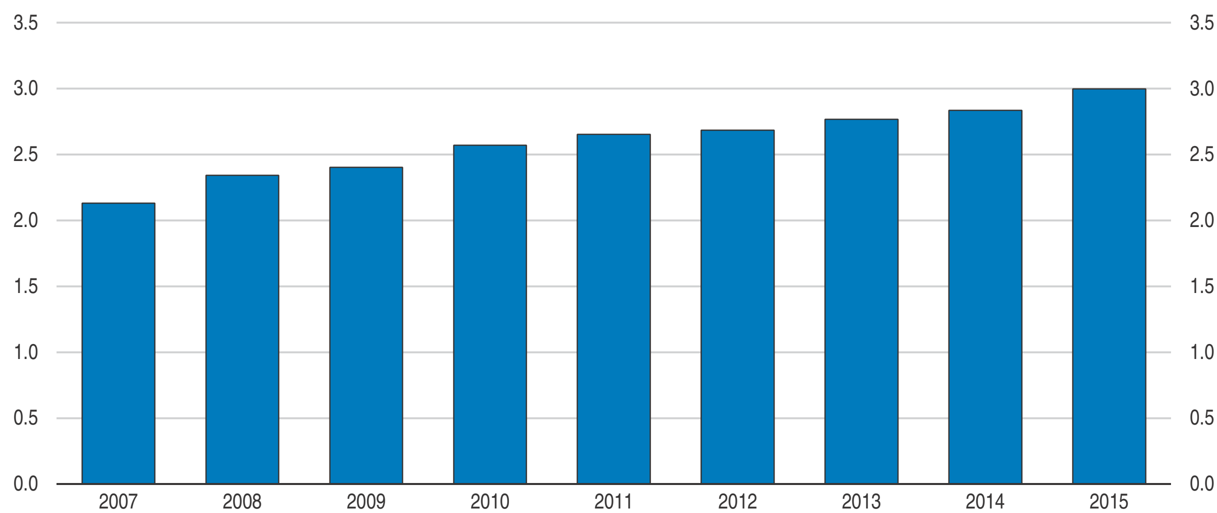
As harmonisation by the means of a single rulebook alone does not seem to be sufficient for effective implementation and consistent enforcement of the CMU rules and standards (Cœuré, 2015), it will also require an increased focus by the European Securities and Markets Authority on achieving convergence of supervisory outcomes. The links within the EU regulatory network, including the co-operation with national authorities and supervisory convergence with the Single Supervisory Mechanism (and vice versa), should be strengthened further. Implementation and enforcement of the single rulebook may profit from co-operation on issues common to banking and securities market supervision. Such co-operation may strengthen the integration of capital markets, without harming the peer-review model of the national supervisors (Valiante, 2015; Véron and Wolff, 2015).

Labour mobility-enhancing policies

Labour market mobility in the European Union is increasing (Figure 1.14), as confirmed by preliminary OECD data on free movement in 2014 (OECD, 2015c), reflecting, among other things, posted workers, intra-company transferees and seasonal migration from the Central and Eastern European member states. The overall level of labour mobility in the European Union, however, remains low in comparison with the United States and other federal countries, which reflects a number of non-policy factors, such as linguistic and cultural differences, as well as policy barriers, including the lack of harmonisation of social security systems and of professional qualifications, and other legal and administrative barriers (OECD, 2014a).

Figure 1.14. **Stock of migrant population within the European Union**

Population that are citizens of another EU28 country, as a percentage of total population



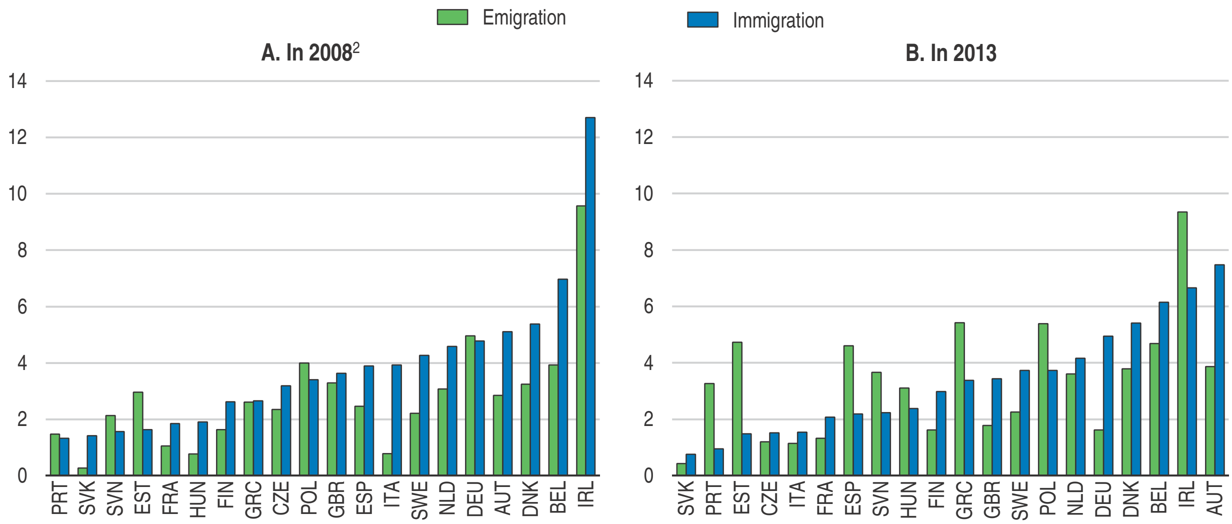
Source: Eurostat (2015), "Population on 1 January by five year age group, sex and citizenship", *Eurostat Database*.

StatLink http://dx.doi.org/10.1787/888933366841

There is some evidence of equilibrating migration flows in the wake of the financial crisis (Jauer et al., 2014), as the net inflows to crisis-hit countries such as Spain and Ireland reversed into net outflows and net immigration to countries like Germany and Austria, characterised by low unemployment rates, rose (Figure 1.15). At least in some labour market segments, such as health personnel, the intra-EU mobility seemed to have a balancing effect by reducing the risks of under-employment and supporting the living standards in countries hit by the crisis; moreover, this adjustment has been facilitated by the EU provisions for recognising professional qualifications (OECD, 2015c).

Figure 1.15. **Immigration and emigration flows between EU countries**[1]

Per thousand inhabitants



1. "Immigration" covers persons establishing their usual residence in an EU country for at least 12 months having previously been usually resident in another EU country; "Emigration" covers persons having previously been usually resident in an EU country who cease to have their usual residence in that country for at least 12 months. Data for EU27 countries in 2008 and EU28 countries in 2013. International migration flow data are based mainly on administrative sources or national surveys and differences in definitions and practices can affect the comparability of data across countries.
2. 2009 for Poland and 2010 for Belgium.

Source: Eurostat (2016), "Demography and migration", *Eurostat Database*.

StatLink http://dx.doi.org/10.1787/888933366689

Since language skills are not firm-specific and given the significant positive externalities for the society from ensuring that the host-country language is spoken well by immigrants, there is a strong case for public funding for language training. Indeed, an important factor that keeps the intra-EU labour mobility low is the lack of proficiency in the language of potential destination countries, an impediment cited by more than a half of respondents in the special Eurobarometer survey on geographical and labour market mobility (European Commission, 2010). Publicly funded language courses are available to newcomers in only 14 member states. As they are usually available as part of integration policies for third-country nationals, they are largely disconnected from policies supporting labour mobility and are not tailored to EU workers (Eurofound, 2015). Few OECD countries provide publicly-funded language training for labour migrants, even though in some OECD countries language knowledge is a pre-condition for labour migrants for obtaining a work permit (OECD, 2013a).

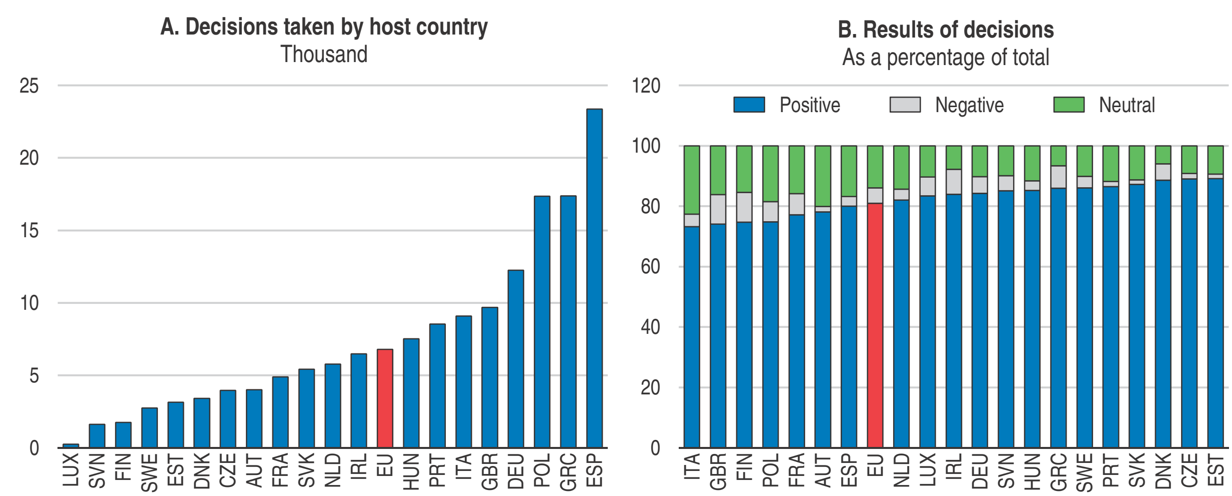
Better foreign language proficiency among students would pave the way for higher labour mobility upon completion of studies. The Erasmus programme facilitates foreign language learning by encouraging cross-border exchanges and contains useful elements, including provisions for access to loans for a Master's programme in another country. However, the programme should be extended to include more students, as less than 5% of graduates in 2012 and 2013 profited from it (European Commission, 2015a).

Recognition of professional qualifications has been facilitated by the amended Directive 2005/36/EC that updates training requirements for a number of professions and opens the way to wider automatic recognition by introducing training frameworks based on common sets of knowledge and competences (EUA, 2014). Introduction of the European

Professional Card, an electronic procedure for professional qualification recognition that applies the silence-is-consent approach in some of its aspects, will help reduce administrative burdens and speed up procedures associated with recognition of professional qualifications. Only some 5% of applications for recognition of qualification have been rejected EU-wide between 2010 and 2014, with considerable differences in rejection rates across the member states (Figure 1.16). Even if the overall success rate is high, slow procedures can still constitute a barrier to mobility, so the European Union should monitor improvements and best practice and consider partial recognition complemented by a shortened additional education (CEPS, 2014) and application of a silence-is-consent principle in areas without major safety or environmental concerns. Regulatory barriers arising from diverging legal forms, shareholding requirements and other organisational requirements in accounting, architecture, civil engineering and construction companies should also be reviewed and reduced.

Figure 1.16. **Recognition of professional qualifications**

By country where the qualification was obtained, 2010-15[1]



1. Within European Union applications only. The European Union aggregate is an unweighted average of data for the 28 member countries.

Source: European Commission (2016), *Regulated Professions Database*, *http://ec.europa.eu/growth/tools-databases/regprof* (accessed on 11 May).

StatLink http://dx.doi.org/10.1787/888933366851

Labour mobility also increases with the portability of supplementary pension rights, as the risk of losing acquired pension rights and long vesting periods can be a strong disincentive to taking up work abroad (CEPS, 2014). Directive 2014/50/EU adopted in 2014 improves the situation by limiting the vesting and waiting periods to three years. Portability of other social benefits, such as unemployment, family and health care benefits is also important for labour mobility. The empirical analysis of EU data for various types of benefits suggests that less complicated portability may increase the propensity to move abroad for professional reasons (d'Addio and Cavalleri, 2015).

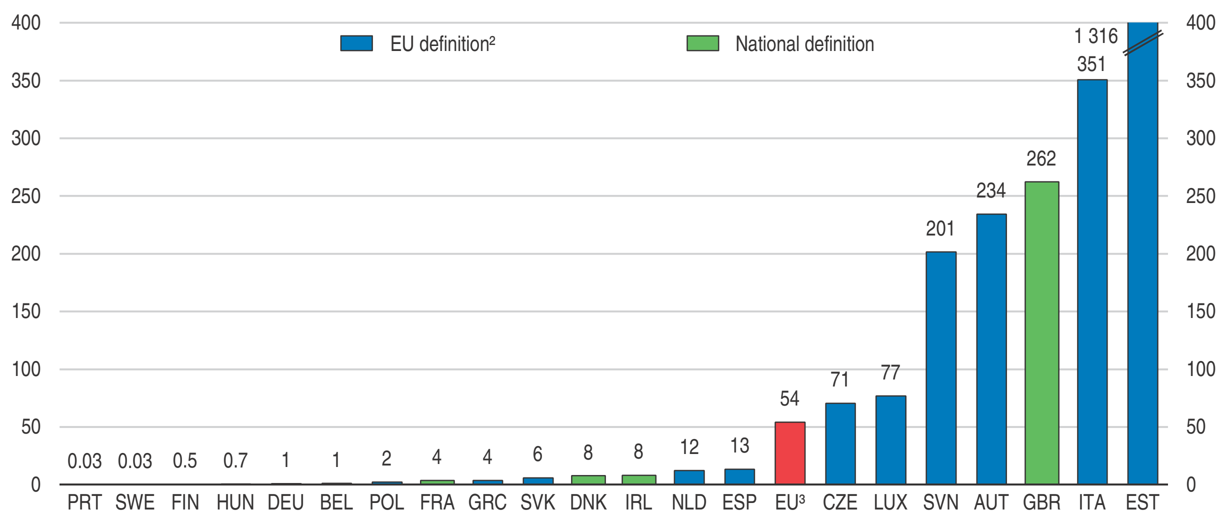
Labour mobility is also dampened by the possibility of double taxation issues related to pensions as well as incomes of cross-border commuters who live in one EU country but work in another, of workers posted abroad and of people living and looking for work abroad who exported their unemployment benefits to another country. Supplementary pensions were made more portable by adoption of a 2014 directive, but other situations are mostly covered by bilateral tax agreements and would profit from broader co-ordination across EU countries (OECD, 2014a).

Public employment services in the member states also have an important role in promoting the cross-border job matching. The new rules for the European employment services network enhance the labour mobility through extended coverage and participation. The online portal will provide information about most of publicly available vacancies as well as specific support to cross-border workers from EU countries.

There are also obstacles to the mobility of non-EU nationals, which put EU countries at a disadvantage in the global competition for skills and talent. Non-EU nationals may reside in a second EU country for work and training purposes after becoming long-term residents (after at least five years of legal and continuous residence in a first member state) but the Long-term Residents directive is not implemented in a comparable way in all member states (European Commission, 2011), and Denmark, Ireland and the United Kingdom are exempted from the application of the directive. The shares of awarded long-term residency permits vary considerably across countries, reflecting in part additional conditions applied by the member states (Figure 1.17). The Blue Card scheme allowing high-skilled non-EU citizens to work and live in the European Union should be modernised and its eligibility requirements and procedures simplified, in order to make it more attractive relative to existing schemes (Chaloff, 2016). Transparent EU-wide minimum salary levels for eligibility could help to ensure that the card issued to certain professions in one EU country is valid for all member states (CEPS, 2014).

Figure 1.17. **Long-term residency permits**

Number of persons with long-term residence status per 10 000 inhabitants, 2012-14[1]



1. Due to the recent implementation of the Residence Permits Data Collection, some methodological and administrative differences still exist between the Member States. 2012-13 for the Netherlands.
2. EU long-term resident status as defined in Council Directive 2003/109/EC (not adopted by Denmark, Ireland and the United Kingdom). The main criteria are five years of legal and continuous residence, stable and regular resources (no social assistance) and sickness insurance. In addition the presence of the person should not constitute a threat to public policy or security.
3. European Union 28 countries.

Source: Eurostat (2016), "Asylum and managed migration" and "Demography and migration", *Eurostat Database*.

StatLink http://dx.doi.org/10.1787/888933366861

Horizontal policies to boost potential living standards

Improvements in the quality of regulation can raise incomes, and therefore well-being, by providing simple and coherent rules that minimise costs and market distortions, promote innovation and are implemented in a fair and transparent manner (OECD, 2015d). Excessive regulation and regulatory heterogeneity across countries also lowers potential growth, because it leads to sub-optimal trade and investment flows (Fournier et al., 2015; Fournier, 2015). Similar effects of regulatory heterogeneity on bilateral intra-EU trade and intra-EU foreign direct investment flows in service sectors were found by Nordås and Kox (2009).

Better Regulation

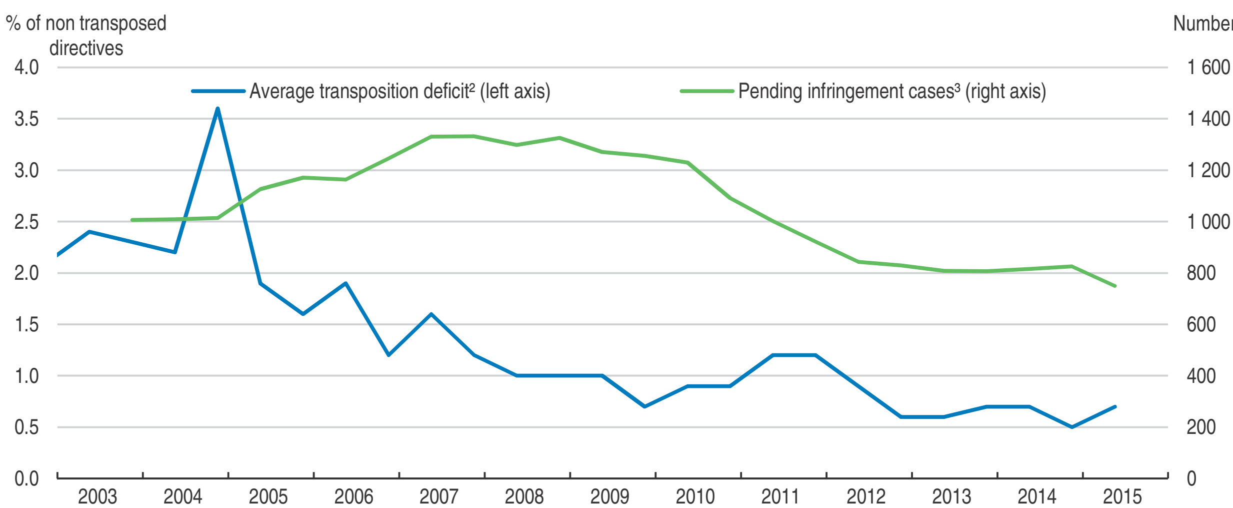
The EU effort to improve the quality of regulation and lighten the regulatory burden spans several initiatives, which in many cases have not been fully implemented at the national level. The Better Regulation package proposes improvements in developing, adoption, implementation and *ex post* evaluation of EU legislation (European Commission, 2015b). The Commission has emphasised evidence-based policy-making and it indeed seems useful to have an impact assessment of final legislation that can also serve as an input for the following evaluation, completing the policy cycle (Renda, 2015). In April 2016 a new inter-institutional agreement on better law-making was reached between the Commission, the Parliament and the Council. This agreement covers several aspects of law-making including transparency, simplification, evaluation and the feasibility of establishing objectives for administrative burden reduction in key sectors. It also sets out a general commitment to assess impacts of Commission proposals and of significant amendments by co-legislators, where considered relevant. However, an agreement on subjecting the Parliament's and the Council's legislation to impact assessment (similar to that applied to the Commission), already proposed by the Commission in 2003 and 2005 was not reached.

The Commission is obliged to conduct public consultations as an essential element of its policy preparation and review. The Better Regulation package further strengthens the commitment to consult throughout the policy cycle, including the establishment of a consultation strategy for each initiative before the work starts, obligatory 12 week public consultations for all initiatives subject to an impact assessment as well as feedback opportunity for citizens and stakeholders on various documents, including the draft legal acts (OECD, 2015d). While broadly in line with the existing best practice, the proposal does not provide enough detail on where the resources for new impact assessments will come from, or enough guidance on the balance between regulatory costs on one hand and the quality of resulting regulation on the other. More detail would also be welcome on how the analytical criteria for regulatory impact assessments align with the Europe 2020 indicators that represent EU's vision of smart, sustainable and inclusive growth.

In order to improve the law-making process, the European Commission proposes turning the existing Regulatory Fitness and Performance Programme (REFIT) for simplification and reduction of regulatory burdens into a permanent platform for dialogue with member states and stakeholders (European Commission, 2015b). The Impact Assessment Board was replaced by a new body, the Regulatory Scrutiny Board, which includes external experts and scrutinises the quality of impact assessments, evaluations and fitness-checks carried out by the Commission. The involvement of independent experts is welcome, although the Regulatory Scrutiny Board will not have the power to block the Commission's proposals. The proposed structure, including the chairperson of the Regulatory Scrutiny Board, is complex and it remains to be seen whether it delivers results (PACT European Affairs, 2015).

Correct and timely transposition of EU directives by member states is crucial for the functioning of the Single Market. Improvement in the pace and the quality of transposition is reflected in the declining number of infringement cases as well as in the low number of directives that at least one member state failed to transpose, the so-called incompleteness rate, both currently at long-term lows (Figure 1.18). The quality and timeliness of the process has been enhanced by information sharing tools, such as the EU Pilot and SOLVIT, designed to solve compliance problems without resorting to infringement proceedings. Based on voluntary compliance, both schemes have achieved resolution rates above 70% and declining average times of handling cases (Pelkmans and Correia de Brito, 2012). These pre-infringement initiatives should be given sufficient resources, including staff, to ensure their successful continuation.

Figure 1.18. **Internal market scoreboard indicators**[1]



1. European Union changing composition.
2. Transposition notifications made by 10 May 2015, for directives with a transposition deadline of 30 April 2015.
3. Infringement proceedings open on 1 May 2015.

Source: European Commission (2015), *Single Market Scoreboard*, October, *http://ec.europa.eu/internal_market/scoreboard*.

StatLink http://dx.doi.org/10.1787/888933366877

Regulatory co-operation in regional trade agreements

Regional trade agreements (RTAs) could be important regulatory co-operation instruments, as they often include provisions on competition, domestic regulation, technical standards or transparency of rules (OECD, 2013b). Achieving regulatory convergence may require prolonged negotiations and a similar level of ambition. Less comprehensive and binding schemes of international regulatory co-operation may lead to lower compliance unless supported by other institutions, including multilateral forums and international organisations (OECD, 2015d). Looking at existing preferential trade agreements, it appears that regulatory compatibility can be achieved more effectively through strong institutional mechanisms, such as joint committees that meet on a regular basis than with bilateral committees comprised of government officials that only meet once a year (Steger, 2012).

The Transatlantic Trade and Investment Partnership (TTIP), if agreed, would remove barriers to trade and investment and develop a new model of integration based on a permanent bilateral regulatory co-operation mechanism including horizontal provisions as well as a number of sector-specific commitments (Alemanno, 2015). Importantly, the creation of a permanent institutional mechanism will allow the identification of new areas of co-operation without re-opening the initial international agreement.

Governments are facing an increasing number of arbitration claims by foreign investors (Gaukrodger and Gordon, 2012) and the evidence on positive effects of international investor protection on investment flows remains inconclusive (Poulsen et al., 2015). Since the entry into force of the Lisbon Treaty and the transfer of competence for foreign direct investment as part of the common commercial policy, the European Union has started a reform of investor protection and dispute settlement system with the main aim of finding the right balance between investor protection and safeguarding the EU's and its member states' right to regulate. The investor-to-state dispute settlement (ISDS) mechanism, based on arbitration, has been criticised for possible discrimination between domestic and foreign investors, the ways of selecting and regulating the arbitrators and the lack of decision-making consistency (Gaukrodger and Gordon, 2012). The Commission's proposal to replace the ISDS by a permanent system of investment courts reflects the negative feedback from the public consultation and incorporates welcome elements, such as early dismissal of unfounded claims and independence of judges (Baetens, 2015).

Key sectoral policies to lift potential growth

Services liberalisation

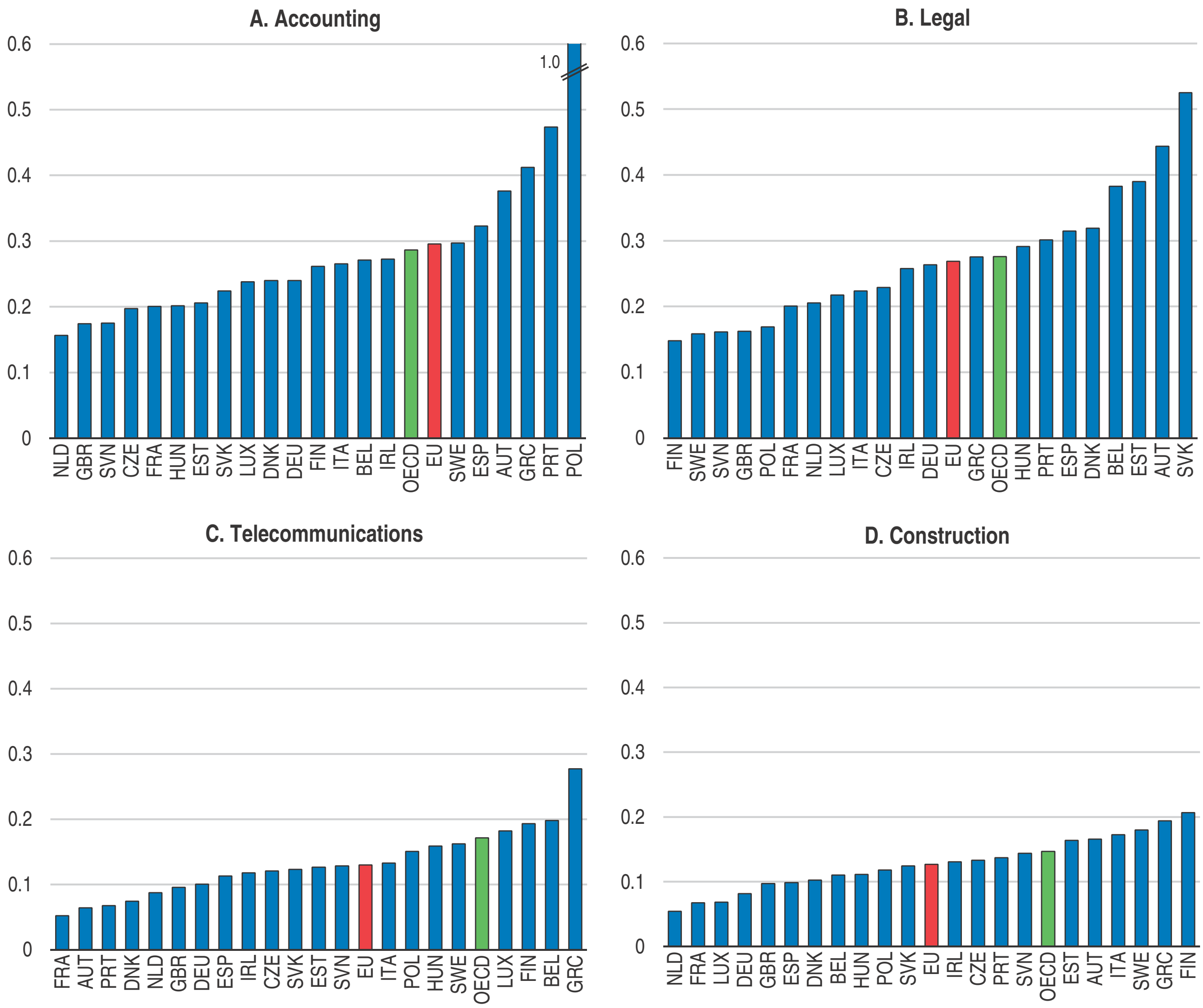
In the process of transposition of the Services Directive, member states could maintain a number of regulatory requirements if they assessed them as non-discriminatory, necessary and proportionate. As a result, EU trade in services remains subject to administrative and other barriers that vary considerably across individual countries (Figure 1.19). There are indications that unjustified and disproportionate requirements are still widespread and that regulation of professions varies substantially among the member states (OECD, 2014a; European Commission, 2015c). Moreover, between 2012 and 2014, the most restrictions have been removed in countries under financial assistance, while other member states either did not act on their services-related country-specific recommendations or even introduced new barriers (European Commission, 2015d).

Companies providing cross-border services often lack reliable information on applicable administrative requirements, such as the rules governing the posting of workers. The rules, especially regarding social security and income taxation, are often perceived as unclear (European Commission, 2015b). Provision by the Commission of reliable information, the introduction of harmonised forms and the introduction of an electronic services passport using single electronic notification procedure and a common electronic repository of documents to eliminate the need for multiple requests for information and documentation are welcome and should lower compliance costs (European Commission, 2015c).

Besides reducing administrative burdens, electronic services passports could be used to achieve other goals, such as facilitating temporary cross-border service provision and secondary establishment. Common rules concerning selected sector-specific requirements,

Figure 1.19. **Services trade restrictiveness index**

Index scale from 0 (completely open) to 1 (completely closed), 2015[1]



1. Measures included in the index cover restrictions on foreign entry and movement of people, barriers to competition, regulatory transparency and other discriminatory measures. Aggregates are unweighted averages; the European Union covers member countries that are also members of the OECD (21 countries).

Source: OECD (2016), *Services Trade Restrictiveness Index Regulatory Database*.

StatLink http://dx.doi.org/10.1787/888933366695

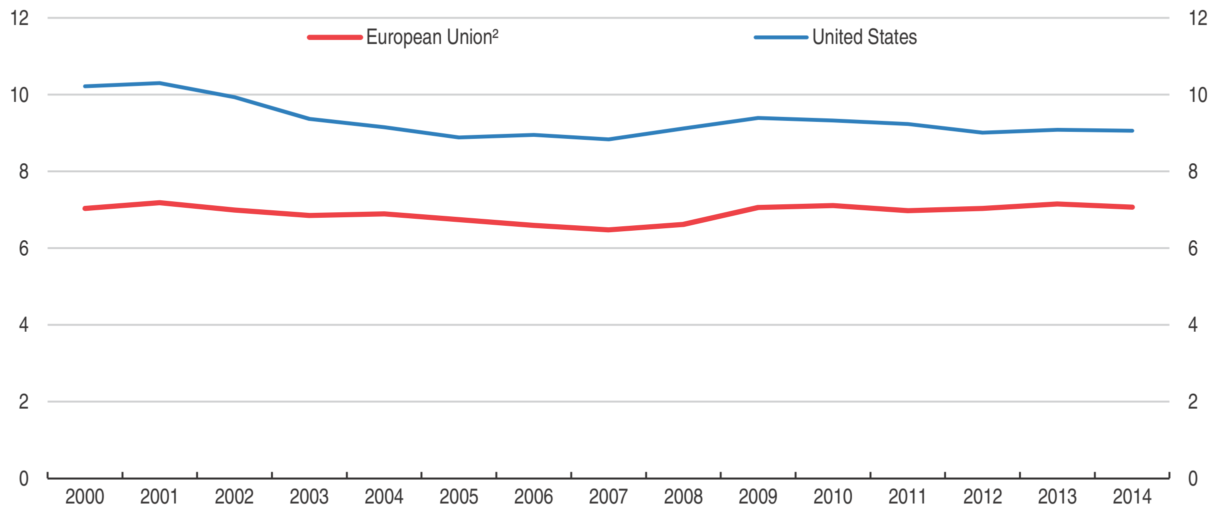
such as the legal form of companies, admissible management requirements and minimum health and safety standards, could be considered with a view of leading toward mutual recognition. Further legislative action foreseen in the Single Market strategy could help reduce remaining regulatory barriers in key business and construction services.

Digital Single Market

Digitalisation facilitates diffusion and replication of innovative ideas, and together with information and communication technology (ICT) is likely to remain a key driver of productivity growth, especially in advanced, frontier economies (Brynjolfsson and McAfee, 2011; OECD, 2015e). Digital technologies raise GDP growth through ICT-induced labour productivity improvements and the measures of accumulated ICT capital stock show a persistent gap between Europe and the United States (Figure 1.20). Although the digital

Figure 1.20. **Information, communication and technology (ICT) capital stock**[1]

As a percentage of GDP



1. Net fixed assets in current prices for total activities. ICT covers ICT equipment (computer hardware and telecommunications equipment) plus computer software and databases.
2. Unweighted average of the 15 countries for which data is available; 2014 is an estimate.

Source: OECD (2016), *OECD National Accounts Statistics* (database).

StatLink http://dx.doi.org/10.1787/888933366881

economy is growing quickly, the scope for further uptake remains considerable, as consumers account only for a small fraction of e-commerce, with some 90% of the value of e-commerce being transactions between businesses (OECD, 2015f).

Complex consumer protection rules can discourage consumers and SMEs from engaging in cross-border e-commerce. The Commission proposes to tackle the issue by further harmonising rules for online purchases (European Commission, 2015e). A comprehensive framework for consumer rights for online sale of tangible goods is already provided by EU laws, such as the Consumer Rights directive. In contrast, consumer protection for online purchases of digital content seems inadequate in many member states (BEUC, 2015). The effort should be directed at consumer protection of digital content purchases, while avoiding discrepancies in consumer protection between online and offline purchases of tangible goods.

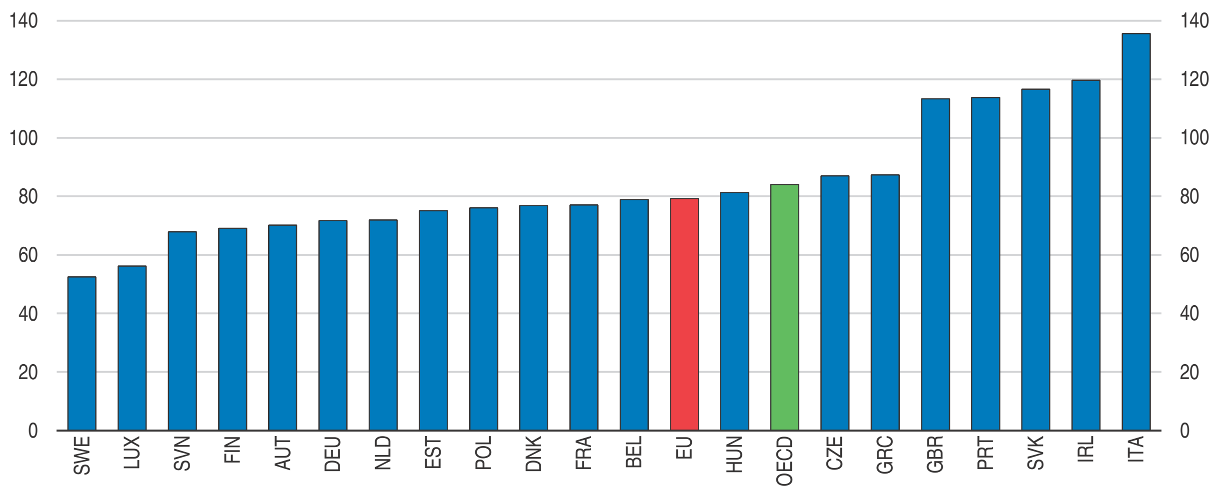
The gradual elimination of roaming surcharges in mobile telecommunications is an important step towards an EU telecoms market, as it should reduce price differences for consumers between networks at home and abroad. But this should be followed by limited additional co-ordination in aspects such as spectrum assignment and by cross-country regulatory harmonisation. Co-ordinated spectrum auctioning at the EU level, while respecting the fact that markets will remain regulated on a national basis for the foreseeable future, could lead to a reduction in participation costs and make auctions more predictable for bidders (Mariniello and Salemi, 2015).

The Energy Union

The Energy Union is a welcome opportunity to achieve the "triple" objective of energy security, decarbonisation and competitiveness (Helm, 2015). The initial focus of EU energy policies on liberalisation and unbundling created necessary, but not sufficient, conditions for a well-functioning EU market. However, the full benefits of this effort have not yet fully materialised due to missing elements, such as interconnection between member states, common regulation for grid and pipeline access and common accounting basis for charging fees. The inefficiency of the EU energy market, and the corresponding potential for gains from trade, is illustrated by the substantial dispersion of energy prices across the European Union (Figure 1.21). On the other hand, the intended benefits of the EU energy market has been reduced by developments in climate policy and renewable energy support, such as provision of renewables at zero marginal cost, leading to a misalignment between the functioning of wholesale electricity markets and decarbonisation policies (OECD/IEA/NEA/ITF, 2015).

Figure 1.21. **Electricity prices for industry**

EUR per megawatt hour, before taxes, 2015[1]



1. 2014 for Germany, Greece, Netherlands and United Kingdom. Aggregates are unweighted averages of latest data available. The European Union covers member countries that are also members of the OECD (21 countries) excluding Spain (no data available) and the OECD covers 29 countries.

Source: IEA (2016), *IEA Energy Prices and Taxes Statistics* and OECD (2016), *OECD Economic Outlook: Statistics and Projections* (databases).

StatLink http://dx.doi.org/10.1787/888933366715

Better interconnections help create more efficient electricity markets, encourage more competition and could alleviate the variability of flows associated with renewables generation (IEA, 2014). While most of the EU wholesale electricity markets are coupled to one or more neighbours, showing signs of price convergence, marked price differentials remain with regard to gas, partly due to long-term contracts and missing interconnections (European Commission, 2015f). The "triple" objective is politically difficult, but feasible, if one employs a top-down strategy, a credible estimate of the gains from fully integrated energy markets to build consensus and a centralised outline of European gas and electricity grids (Helm, 2015).

The Energy Union should ensure flexibility in the energy sector by increased interconnectivity. The European clean energy strategy should be put in place to ensure that the Investment Plan for Europe and other EU funds are channelled to the investment needs of the Energy Union to ensure that publicly-backed investment is used to deliver on European energy security and climate goals (Gaventa et al., 2015).

Disconnection between the EU energy policy and its climate policy should be eliminated or reduced following the recent COP21 agreement. In this vein, the Energy Union strategy based on five related and mutually reinforcing dimensions, now includes the 2030 Climate and Energy Policy Framework, in which the European Union contributed a collective pledge to reduce domestic greenhouse gas (GHG) emissions by at least 40% below 1990 levels by 2030 (the target entails reductions in the Emissions Trading System [ETS] and non-ETS sectors amounting to 43% and 30% respectively compared to 2005 levels). In this context, it is worth noting that although the reduction of emissions by 19% achieved since 1990 is partly the result of the structural changes in member states that joined after 2004 and of the consequences of the global financial and economic crisis, concerted policy effort, such as the support of renewables, has contributed to this outcome (IEA, 2014). After 2008, an increasing decoupling of economic growth and energy consumption could also be observed, notably driven by a comprehensive set of energy efficiency policies. The other elements of the 2030 framework include a binding EU level target for a minimum 27% share of renewable sources in energy consumption, an indicative EU level target of 27% improvement in energy efficiency and an electricity interconnection target of 15% by 2030. The effort going forward will require not only a shift to low-carbon and renewable sources of energy, but also improved resource efficiency, including more recycling and a reduction of raw material use (Behrens, 2016).

The EU climate and energy policies need to ensure balance between sustainability, competitiveness and security of supply. Strengthening market-based measures (including a reform of the ETS), a competitive electricity market and a stable regulatory framework for low-carbon technologies will all be needed to deliver the 2030 targets. As part of the energy market liberalisation, energy subsidies that are still often used to lower energy prices should be phased out (IEA, 2014). Instead, a three-pillar approach, including carbon pricing (a more robust ETS and taxes on non-ETS sectors, where appropriate), targeted energy efficiency regulations ensuring rational energy use and support for low-carbon technologies, should be put in place (OECD/IEA/ITF/NEA, 2015). Carbon taxes or trading systems, such as those that are in place in the European Union, can raise revenues, creating room for reduction of other more distorting taxes, and establish price signals (IMF, 2016).

Transportation

The Single Market would profit from improved and more competitive transport services in road, rail, air and maritime transport. Road freight transport is the main inland transport mode in the European Union. As more than 90% of all national road transport activity in each country is still carried out by domestically registered vehicles, the market remains uncompetitive and highly segmented along the national borders. Competition could be improved by opening up the domestic markets to operators from other EU countries. Reducing restrictions on international transport and cross-border provision of services (cabotage), such as restrictive provisions applying to type of goods mainly transported by non-resident hauliers, and more stringent enforcement of existing rules could help in doing so (European Commission, 2014). The international bus and coach transport inside the EU has been mostly liberalised and operators with a Community licence issued in their home country have free access to the whole international road transport market.

Completion of the single European railway area would further increase competition in railway transport and reduce costs of public services contracts. The fourth railway package, in its recently agreed technical pillar, will strengthen the role of the European Railway Agency as authority in certification and approval of vehicles. This is a key precondition for an EU-wide railway market, since technical characteristics of national networks, such as signalling and circulation rules, electricity supply and even the tracks width can diverge (Savy et al., 2013). Agreement is also building up on non-discriminatory access to the railway networks and competitive tendering of public service contracts that will open up the domestic markets to cross-border competition, increasing quality of service and cost efficiency. Although targeted measures may be needed to ensure impartiality of infrastructure managers in vertically integrated structures and address risks of cross-subsidisation, existing evidence from European countries suggests that competitive tendering could lead to cost savings of at least 20% in both service provision (European Commission, 2013) and infrastructure maintenance (Odolinski and Smith, 2014).

The European airspace is still fragmented, partly because the air traffic management remains fragmented and suffering from a lack of co-ordination, leading to longer flight routes with greater environmental footprint, due to pockets of restricted airspace, and unnecessary delays and costs in service provision (OECD, 2014a). The progress with the Single European Sky framework, including the modernisation of Eurocontrol agreed in 2013, is welcome, especially in the area of the performance scheme, network operation and technological modernisation, and may gradually lead to a less fragmented European airspace (European Commission, 2015g). The Commission's aviation strategy that calls for optimising the use of EU airports and monitoring both intra-EU and extra-EU connectivity to identify shortcomings is also welcome.

Recommendations on priorities for completing the Single Market

Structural reforms to support the recovery and improve adjustment to shocks

Developing market-based financing alternatives for firms

Key recommendations

- Ease the regulatory treatment of simple, transparent and standardised securitisation to unlock lending to small and medium-sized enterprises.
- Collect and share internationally comparable credit information on smaller firms.
- Lower capital requirements for long-term and infrastructure investment.
- Lower the regulatory barriers in corporate bond markets by addressing issues in securities ownership and harmonising insolvency proceedings.

Additional recommendation

- Further harmonise the local rules for financial trading and improve the settlement infrastructure, in order to reduce operational costs for market participants.

Enhancing labour market mobility and integration

Key recommendations

- Reduce the administrative burden associated with recognition of professional qualifications by using electronic procedures such as the European Professional Card.
- Legislate effective portability of supplementary pension rights.
- Simplify the eligibility requirements and procedures of the Blue Card scheme to make it more attractive to non-EU high-skilled labour migrants than existing schemes.
- Strengthen joint protection of external borders.
- Speed up administrative decisions on asylum applications and ease labour market access for recognised refugees.

Recommendations on priorities for completing the Single Market *(cont.)*

Additional recommendations

- Provide publicly funded language training tailored to mobile workers, so as to increase the intra-EU labour mobility.
- Develop common rules for an EU-wide treatment of double taxation issues related to pensions, incomes of cross-border commuters and posted workers and improve the portability of social benefits.

Structural reforms to boost potential growth

Better regulation

Key recommendation

- Improve the quality of impact assessment of legislative proposals, notably amendments, and the quality of *ex post* evaluation of policies.

Additional recommendation

- Use electronic services passport, harmonised forms and common rules concerning selected sector-specific requirements to reduce administrative burdens for service providers and regulatory barriers in the services sector.

Network services sectors

Key recommendations

- Harmonise the rules for online purchases and reduce unjustified geographical discrimination of consumers.
- Harmonise, taking into account the specificities of each member state, national regulations and technical specifications in network sectors, with the target of transferring decision powers in technical matters to a single EU regulator.
- Prioritise the Trans-European transport and energy network projects to support the completion of the Single Market.

Additional recommendations

- Support a single market in wireless networks by introducing co-ordinated multi-national EU-wide spectrum auctions and by increasing the convergence of spectrum selection processes and assignment conditions.
- Strengthen the Single Market by ensuring more competitive transport services by opening up domestic road transportation to operators from other countries and completing the single European railway area.

Bibliography

d'Addio, A. and M. Cavalleri (2015), "Labour mobility and the portability of social right in the EU", *CESifo Economic Studies*, Vol. 61, 2/2015, pp. 346-376, Oxford University Press.

AFME (2016), "Potential economic gains from reforming insolvency law in Europe", Association for Financial Markets in Europe, Brussels.

Aghion, P. et al. (2009), "The effects of entry on incumbent innovation and productivity", *Review of Economics and Statistics*, Vol. 91, No. 1, pp. 20-32, MIT Press.

Ahrend, R., J. Arnold and C. Moser (2011), "The sharing of macroeconomic risk: Who loses (and gains) from macroeconomic shocks", *OECD Economics Department Working Papers*, No. 877, OECD Publishing, Paris, *http://dx.doi.org/10.1787/5kg8hw5467wd-en*.

Alemanno, A. (2015), "The regulatory cooperation chapter of the Transatlantic Trade and Investment Partnership: Institutional structures and democratic consequences", *Journal of International Economic Law*, Vol. 18, No. 3, Oxford Journals.

Baetens, F. (2015), "Transatlantic investment treaty protection – A response to Pouslen, Bonnitcha and Yackee", Chapter 6 in D. Hamilton and J. Pelkmans (eds.), *Rule-Makers or Rule-Takers? Exploring the Transatlantic Trade and Investment Partnership*, Johns Hopkins University School of Advanced International Studies, Washington, DC and Centre for European Policy Studies, Brussels.

Behrens, A. (2016), "Time to connect the dots: What is the link between climate change policy and the circular economy?", *CEPS Policy Brief*, No. 337, Centre for European Policy Studies, Brussels.

Bénassy-Quéré, A. (2010), *Economic Policy: Theory and Practice*, Oxford University Press, Oxford.

Bénassy-Quéré, A., C. Schwellnus and D. Ünal-Kesenci (2006), "International trade: Services included", *Lettre du CEPII*, No. 255, Centre d'études prospectives et d'informations internationales, Paris.

BEUC (2015), "A consumer-driven Digital Single Market", The European Consumer Organisation, Brussels.

Blanchard, O. and A. Giavazzi (2003), "Macroeconomic effects of regulation and deregulation in goods and labour markets", *Quarterly Journal of Economics*, Vol. 122, No. 58, pp. 349-402, Oxford Journals.

Braconier, H. and M. Pisu (2013), "Road connectivity and the border effect: Evidence from Europe", *OECD Economics Department Working Papers*, No. 1073, OECD Publishing, Paris, *http://dx.doi.org/10.1787/5k43nxmh51mw-en*.

Braconier, H. and J. Ruiz-Valenzuela (2014), "Gross earning inequalities in OECD countries and major non-member economies: Determinants and future scenarios", *OECD Economics Department Working Papers*, No. 1139, OECD Publishing, Paris, *http://dx.doi.org/10.1787/5jz123k7s8bv-en*.

Bresnahan, T.F., E. Brynjolfsson and L.M. Hitt (2002), "Information technology, workplace organization, and the demand for skilled labor: Firm-level evidence", *Quarterly Journal of Economics*, Vol. 117, No. 1, pp. 339-376, Oxford University Press.

Brynjolfsson, E. and A. McAfee (2011), *Race Against the Machine: How the Digital Revolution is Accelerating Innovation, Driving Productivity, and Irreversibly Transforming Employment and the Economy*, Digital Frontier Press.

Caldera Sánchez, A., A. de Serres and N. Yashiro (2016) "Reforming in a difficult macro context: A review of the issues and recent literature", *OECD Economics Department Working Papers*, No. 1297, OECD Publishing, Paris, *http://dx.doi.org/10.1787/5jlzgj45b3q0-en*.

Causa, O., A. de Serres and N. Ruiz (2015), "Can pro-growth policies lift all boats? An analysis based on household disposable income", *OECD Journal: Economic Studies*, Vol. 2015/1, *http://dx.doi.org/10.1787/eco_studies-2015-5jrqhbb1t5jb*.

CEPS (2014), "Making the most of EU labour mobility", Report of a CEPS Task Force, Rapporteurs: M. Barslund and M. Busse, Centre for European Policy Studies, Brussels.

Chaloff, J. (2016), "The impact of EU Directives on the labour migration framework in EU countries", *OECD Social, Employment and Migration Working Papers*, forthcoming.

Chaloff, J., et al. (2012), "Free labour mobility and economic shocks: the experience of the crisis", in OECD, *Free Movement of Workers and Labour Market Adjustment: Recent Experiences from OECD Countries and the European Union*, OECD Publishing, Paris, *http://dx.doi.org/10.1787/9789264177185-5-en*.

Cœuré, B. (2015), "Capital Markets Union in Europe: an ambitious but essential objective", A speech at the Institute for Law and Finance in Frankfurt, 18 March.

Dao, M., D. Furceri and P. Loungani (2014), "Regional labour market adjustments in the US and Europe", *IMF Working Paper*, WP/14/26, International Monetary Fund, Washington DC.

ECB (2015), *Financial Integration in Europe*, European Central Bank, Frankfurt am Main.

Engel, C. and J.H. Rogers (1996), "How wide is the border?", *American Economic Review*, Vol. 6, No. 5, pp. 1112-1125, American Economic Association.

Erceg, C.J. and J. Lindé (2010), "Asymmetric shocks in a currency union with monetary and fiscal handcuffs", in R. Clarida and F. Giavazzi (eds.), *NBER International Seminar on Macroeconomics 2010*, pp. 95-135, University of Chicago Press.

EUA (2014), "EUA Briefing note on Directive 2013/55/EU, containing the amendments to Directive 2005/36/EC on the Recognition of Professional Qualifications", European University Association, Brussels.

Eurofound (2015), "The thorny issue of labour mobility: Hotly debated but still a slow burner", Foundation Focus, December.

European Commission (2015a), "Erasmus – Facts, figures and trends. The European Union support for student and staff exchanges and university cooperation in 2013-14", European Commission, Brussels.

European Commission (2015b), "Better regulation for better results: An EU agenda", Communication COM(2015) 215 final, European Commission, Brussels.

European Commission (2015c), "Upgrading the Single Market: more opportunities for people and business", COM(2015) 550 final, Brussels.

European Commission (2015d), "Assessment of the economic impact of the Services Directive: Update of the 2012 study", European Commission, Brussels.

European Commission (2015e), "A Digital Single Market Strategy for Europe", Commission Communication COM(2015) 192 final, 6 May.

European Commission (2015f), "State of the Energy Union 2015", Communication COM(2015) 572 final, European Commission, Brussels.

European Commission (2015g), "Report from the Commission to the Parliament and the Council on the implementation and progress of the Single European Sky during 2012-14 period", COM(2015) 663 final, European Commission, Brussels.

European Commission (2014), "Report from the Commission to the Parliament and the Council on the state of the Union road transport market", COM(2014) 222 final, European Commission, Brussels.

European Commission (2013), "Impact Assessment accompanying the proposals for Regulation 1370/2007 and Directive 2012/34/EU concerning the opening of the market for domestic passenger transport services by rail", SWD(2013) 10 final Part 1, European Commission, Brussels.

European Commission (2011), "Report on the application of Directive 2003/109/EC concerning the status of third-country nationals who are long-term residents", Report COM (2011) 585 final, European Commission, Brussels.

European Commission (2010), "Geographical and labour market mobility", *Eurobarometer Special Survey* No. 337, European Commission, Brussels.

Fournier, J. (2015), "The heterogeneity of product market regulations", *OECD Economics Department Working Papers*, No. 1182, OECD Publishing, Paris, *http://dx.doi.org/10.1787/5js7xhxwrnwd-en*.

Fournier, J., A. Domps, Y. Gorin, X. Guillet and D. Morchoisne (2015), "Implicit regulatory barriers in the EU single market: New empirical evidence from gravity models", *OECD Economics Department Working Papers*, No. 1181, OECD Publishing, Paris, *http://dx.doi.org/10.1787/5js7xj0xckf6-en*.

Furceri, D. and A. Zdzienicka (2013), "The euro area crisis: Need for a supranational fiscal risk sharing mechanism?", *IMF Working Paper*, WP/13/198, International Monetary Fund, Washington DC.

Gaukrodger, D. and K. Gordon (2012), "Investor-state dispute settlement: A scoping paper for the investment policy community", *OECD Working Papers on International Investment*, No. 2012/03, OECD Publishing, Paris, *http://dx.doi.org/10.1787/5k46b1r85j6f-en*.

Gaventa, J., N. Mabey, S. Dixson-Declève, H. Spence-Jackson and D. Acke (2015), "EU Energy Union Assessment 2015: Towards a resilient Energy Union with a forward-looking climate policy", *E3G Briefing Paper*.

de Grauwe, P. (2014), *Economics of Monetary Union*, 10th Edition, Oxford University Press.

Helm, D. (2015), "The EU Energy Union: More than the sum of its part?", Centre for European Reform, London.

IEA (2014), *Energy Policies of IEA Countries: European Union 2014 Review*, International Energy Agency, Paris, *http://dx.doi.org/10.1787/9789264190832-en*.

IMF (2016), "After Paris: Fiscal, macroeconomic, and financial implications of climate change", *IMF Staff Discussion Note*, No. 16/01, International Monetary Fund, Washington DC.

IMF (2015), "A strategy for resolving Europe's problem loans", *IMF Staff Discussion Note*, SDN/15/19, International Monetary Fund, Washington DC.

IMF (2013), "Toward a fiscal union for the euro area", *IMF Staff Discussion Note*, SDN/13/09, International Monetary Fund, Washington DC.

Jauer, J., T. Liebig, J.P. Martin and P. Puhani (2014), "Migration as an adjustment mechanism in the crisis? A comparison of Europe and the United States", *OECD Social, Employment and Migration Working Papers*, No. 155, OECD Publishing, Paris, *http://dx.doi.org/10.1787/5jzb8p51gvhl-en*.

Kaya, O. (2015), "Capital markets union: An ambitious goal, but few quick wins", EU Monitor Global Financial Markets, Deutsche Bank Research, Frankfurt am Main.

Mariniello, M. and F. Salemi (2015), "Addressing fragmentation in EU mobile telecoms markets", *Bruegel Policy Contribution*, No. 2015/13, Bruegel, Brussels.

Nordås, H.K. and H. Kox (2009), "Quantifying regulatory barriers to services trade", *OECD Trade Policy Papers*, No. 85, OECD Publishing, Paris, *http://dx.doi.org/10.1787/5kgkcjqsm6kd-en*.

Odolinski, K. and A.S.J. Smith (2014), "Assessing the cost impact of competitive tendering in rail infrastructure maintenance: evidence from the Swedish reforms (1999-2011) ", *CTS Working Paper*, No. 2014:17, Centre for Transport Studies, Stockholm.

OECD (2015a), *OECD Business and Finance Outlook 2015*, OECD Publishing, Paris, *http://dx.doi.org/10.1787/9789264234291-en*.

OECD (2015b), *Economic Policy Reforms 2015: Going for Growth*, OECD Publishing, Paris, *http://dx.doi.org/10.1787/growth-2015-en*.

OECD (2015c), *International Migration Outlook 2015*, OECD Publishing, Paris, *http://dx.doi.org/10.1787/migr_outlook-2015-en*.

OECD (2015d), *OECD Regulatory Policy Outlook 2015*, OECD Publishing, Paris, *http://dx.doi.org/10.1787/9789264238770-19-en*.

OECD (2015e), *The Future of Productivity*, OECD Publishing, Paris, *http://dx.doi.org/10.1787/9789264248533-en*.

OECD (2015f), *OECD Digital Economy Outlook 2015*, OECD Publishing, Paris, *http://dx.doi.org/10.1787/9789264232440-en*.

OECD (2014a), *OECD Economic Surveys: European Union 2014*, OECD Publishing, Paris, *http://dx.doi.org/10.1787/eco_surveys-eur-2014-en*.

OECD (2014b), *OECD Economic Surveys: Hungary 2014*, OECD Publishing, Paris, *http://dx.doi.org/10.1787/eco_surveys-hun-2014-en*.

OECD (2013a), *Recruiting Immigrant Workers: Germany 2013*, OECD Publishing, Paris, *http://dx.doi.org/10.1787/9789264189034-en*.

OECD (2013b), *International Regulatory Co-operation: Addressing Global Challenges*, OECD Publishing, Paris, *http://dx.doi.org/10.1787/9789264200463-en*.

OECD/IEA/NEA/ITF (2015), *Aligning Policies for a Low-carbon Economy*, OECD Publishing, Paris, *http://dx.doi.org/10.1787/9789264233294-en*.

PACT European Affairs (2015), "The Better Regulation package and Inter-institutional Agreement: What does it mean for EU public affairs?", PACT European Affairs, Brussels, *www.pacteurope.eu/pact/wp-content/uploads/2015/06/PACT_Better_Regulation_booklet_2015.pdf*.

Pelkmans, J. and A. Correia de Brito (2012), *Enforcement in the EU Single Market*, Centre for European Policy Studies, Brussels.

Poulsen, L., J. Bonnitcha and J. Yackee (2015), "Transatlantic investment treaty protection", Chapter 5 in D. Hamilton and J. Pelkmans (eds.), *Rule-Makers or Rule-Takers? Exploring the Transatlantic Trade and Investment Partnership*, Johns Hopkins University School of Advanced International Studies, Washington DC and Centre for European Policy Studies, Brussels.

Reiff, Á. and F. Rumler (2014), "Within- and cross-country price dispersion in the euro area", *ECB Working Paper*, No. 1742, European Central Bank, Frankfurt am Main.

Renda, A. (2015), "Too good to be true? A quick assessment of the European Commission's new Better Regulation Package", *CEPS Special Report*, No. 108, Centre for European Policy Studies, Brussels.

Savy, M. et al. (2013), "Transport management as a key logistics issue", Chapter 9 in P. Wieser et al. (eds.), *Essentials of Logistics and Management: The Global Supply Chain*, EPFL Press, 3rd edition.

Steger, D. (2012), “Institutions for regulatory cooperation in ‘New Generation’ economic and trade agreements”, *Legal Issues of Economic Integration*, Vol. 39, No. 1, pp. 109-126, Kluwer Law Online.

Valiante, D. (2015), “Light and shadows in Europe’s new Action Plan for Capital Markets Union”, *CEPS/ECMI Commentary*, No. 40/5, Centre for European Policy Research, Brussels.

Véron, N. and G. Wolff (2015), “Capital markets union: A vision for the long term”, *Bruegel Policy Contribution*, No. 2015/05, Bruegel, Brussels.

Zangari, E. (2014), “Addressing the debt bias: A comparison between the Belgian and the Italian ACE Systems”, *Taxation Papers*, No. 44, European Commission, Brussels.

ANNEX 1.A1

Quantification of the impact of recommended structural reforms

The quantification of structural reforms is based on the OECD's *Going for Growth* framework of policy indicators and empirical estimates of the relationship between policy and economic outcomes, which is rooted in an extensive research programme over many years to understand these relationships. A similar methodology has been used in previous work by the OECD, including the IMF-OECD exercise for the G-20 Brisbane Summit in 2014, which evaluated the contribution of growth strategies by G-20 countries at 2.1% growth of the world's gross domestic product (GDP).

The quantitative assessment documented in this report focuses on the macroeconomic effects of competition-enhancing reforms advocated through a set of key policy recommendations. It proceeds in two steps: first, the magnitude of the reduction in barriers to competition implied by each key recommendation is evaluated on the basis of OECD product market regulation (PMR) indicators. Second, the estimated changes in the PMR indicator from selected key recommendations (those suitable for quantification) are in turn transposed into associated productivity and GDP gains, based on the empirical findings from previous OECD studies.

The reform scenario corresponds to a subset of the key recommendations to reduce barriers to capital and labour mobility, as well as to entry and competition through better regulation, in particular in the areas of professional services and network sectors. Each quantifiable recommendation is linked to the relevant area of reform in the overall PMR indicator (Table 1.A1.1). Technically, the quantified effect is that of a reduction in the level of product market regulation on multifactor productivity, i.e. the first (and quantitatively the most important) of the eight channels identified in the IMF-OECD exercise for G-20.

Some of the key recommendations do not lend themselves to quantification and are not included in this exercise. In general, the mapping of reform recommendations into changes in corresponding PMR components is not perfect and necessarily involves judgement. For two of the recommendations, PMR questions on communication and simplification of rules and procedures have been used as a basis for quantification. The recommendation to improve regulatory quality, which includes a reinforcement of the EU Regulatory Fitness (REFIT) programme, has been quantified as a reduction in the administrative burden. Changes in the PMR indicators by area of reform and by country are summarised in Table 1.A1.2.

Table 1.A1.1. **List of quantified key recommendations**

Area of reform	Recommendation
1. Barriers to entrepreneurship – Barriers in services	Reduce the administrative burden associated with recognition of professional qualifications by using electronic procedures such as the European Professional Card.
2. Barriers to entrepreneurship – Communication and simplification of rules and procedures	Improve the quality of impact assessment of legislative proposals, notably amendments, and the quality of *ex post* evaluation of policies. Harmonise the rules for online purchases and reduce unjustified geographical discrimination of consumers.
3. Barriers to entrepreneurship – Barriers in network sectors	Prioritise the Trans-European transport and energy network projects to support the completion of the Single Market. Harmonise, taking into account the specifities of each member state, national regulations and technical specifications in network sectors, with the target of transferring decision powers in technical matters to a single EU regulator.

Table 1.A1.2. **Reduction in the product market regulation (PMR) indicator**[1]

Per cent

Area of reform	Total	France	Germany	Italy	Spain	United Kingdom
Barriers to entrepreneurship – Barriers in services	2.57	2.52	2.86	3.91	2.57	1.14
Barriers to entrepreneurship – Communication and simplification of rules and procedures	1.42	1.51	1.38	1.56	1.61	1.15
Barriers in network sectors	2.12	2.41	2.47	2.48	1.67	1.31

1. The changes are calculated with respect to the latest PMR data available (2013).

Since a PMR-based quantification exercise cannot yield estimates of impacts from reforms in several important areas, and the macroeconomic impact of structural reforms is in any case uncertain and sensitive to model assumptions, the approach pursued in this annex can be usefully complemented by a literature review on the quantification of structural reforms in the EU context to give a broader range of potential estimates (Box 1.A1.1).

Box 1.A1.1. **Literature on the quantification of EU structural reforms**

A number of studies look at reforms in several policy areas. Varga and in't Veld (2014) employ the Commission's dynamic stochastic general equilibrium model QUEST and find significant gains in output and employment if countries close the gap with respect to the best EU performers in a broad set of areas (including tax structure, research and development expenditure, labour market participation, active labour market policies, regulation in product markets). The simulations suggest an increase in EU gross domestic product (GDP) of 3% after five years and 6% after ten years.

European Commission (2016) studies a subset of reforms from National Reform Programmes of Italy, France, Spain and Portugal that could be realistically quantified, thus providing a conservative estimate of the impact of those countries' reform efforts. Simulations, again using the QUEST model, suggest GDP increases between 1¼ per cent and 2% by 2020.

Box 1.A1.1. **Literature on the quantification of EU structural reforms** *(cont.)*

Other studies focus on reforms in individual policy areas. More specifically, the main findings for some of the key areas of reforms pursued by the European Commission and the member states found in the literature are:

- **Single market in services:** Monteagudo et al. (2012) find that the full implementation of the Services Directive would increase the EU GDP by 2.6%. The analytical framework involves both a gravity equation and a general equilibrium model and identifies increased labour productivity as the main driver of the positive GDP effect. The benefits realised from the adoption of the Directive to 2012 are estimated at only 0.8% of EU GDP, implying an additional gain of 1.8% to be reaped. In a follow-up study, the European Commission (2015) assessed the reform effort from 2012 to 2014 and found a limited additional gain of 0.1% of EU GDP.
- **Digital Single Market:** Lorenzani and Varga (2014) find significant growth potential of both already implemented and planned digital structural reforms. Those already implemented could raise long-run GDP by 1%, while the foreseen reforms in selected policy areas of the Digital Agenda for Europe could add 3.1% of EU GDP in the long run (0.3% of EU GDP from radio spectrum policies, 0.4% from professional e-skills policies, 1.9% from e-commerce policies and 0.4% from fixed broadband policies). Civic Consulting (2011) find that completion of an EU-wide e-commerce market could raise EU GDP by 1.7%, with two thirds of consumer welfare gains coming from increased consumer choice and one third from lower online prices. European Parliament (2014) finds that completion of the digital single market would raise EU GDP by 0.4%.
- **External trade agreements:** CEPR (2013) uses a computable general equilibrium model to find that the proposed trade agreement between the United States and the European Union could increase EU GDP by 0.5% by 2027. A joint study by the European Commission and the Government of Canada (2008) estimated that a trade deal between the EU and Canada could increase EU GDP by 0.1% in the long run. The European Commission (2012) estimated that a trade agreement between the EU and Japan could raise EU GDP by 0.3% in the long run.

The analytical framework of Bourlès et al. (2010) is employed to assess the impact of pro-competition regulatory reforms. Multifactor productivity (MFP) is assumed to follow an error correction model (ECM) of the form:

$$\Delta \ln MPF_{i,j,t} = a_0 \Delta \ln MPF_{F,j,t} + a_1 gap_{i,j,t-1} + a_2 REG_{i,j,t-1} + a_3 REG_{i,j,t-1} \times gap_{i,j,t-1} + f_i + f_{j,t}$$

where $MFP_{i,j,t}$ is the MFP level of a non-frontier sector-country pair i,j in year t, $MFP_{F,j,t}$ is the MFP level at the technological frontier F for sector i in year t, $REG_{i,j,t}$ is the OECD's indicator of product market regulation – which measures regulatory burdens stemming from anti-competitive product market regulations in upstream sectors – in each country/sector/year triad,[1] and $gap_{i,j,t}$ is the country-sector distance from the sector frontier in year t, defined as:

$$gap_{i,j,t} = \ln\left(\frac{MFP_{F,j,t}}{MFP_{i,j,t}}\right)$$

f_i and $f_{j,t}$ denote respectively sector and country-year fixed effects. Estimated coeffcients (over the 1995-2007 period for 24 OECD countries)[2] indicate that the leader country's MFP growth and the gap between the leader country both have a positive impact on MFP growth in that same sector in less productive countries. More importantly, the indicator of regulatory burden has a negative influence on MFP growth (a_2 = -0.124). This effect is found to be even more negative for country/sector/period triads close to the technological frontier, as suggested by the positive coefficient on the interaction term (a_3 = 0.132). This framework is used to estimate the MFP growth (thereby GDP growth implied from the supply-side) resulting from product market reforms that translate into a given percentage reduction in the OECD PMR indicator.

The effect of reforms on the European Union multifactor productivity is approximated by considering the five largest EU economies (France, Germany, Italy, Spain and United Kingdom and aggregating the effects obtained using 2014 GDP weights (constant prices, constant purchasing power parities and output approach). According to this approximation,[3] the implementation of key recommendations listed in Table 1.A1.1 would lead to an increase in the level of total GDP by 0.4% after five years, compared to a situation, in which none of these reforms is implemented (Table 1.A1.3). The corresponding increase in the level of total GDP after ten years would be 0.7% (Table 1.A1.4).

Table 1.A1.3. **Five-year impact on GDP**[1]

Per cent of GDP

Area of reform	Total	France	Germany	Italy	Spain	United Kingdom
Barriers to entrepreneurship – Barriers in services	0.17	0.16	0.17	0.33	0.13	0.06
Barriers to entrepreneurship – Communication and simplification of rules and procedures	0.09	0.10	0.08	0.13	0.08	0.06
Barriers in network sectors	0.13	0.15	0.14	0.21	0.08	0.07
Total	**0.39**	**0.41**	**0.39**	**0.66**	**0.30**	**0.20**

1. Aggregation using 2014 GDP weights (output approach, constant prices, constant purchasing power parities, OECD base year).

Table 1.A1.4. **Ten year impact on GDP**[1]

Per cent of GDP

Area of Reform	Total	France	Germany	Italy	Spain	United Kingdom
Barriers to entrepreneurship – Barriers in services	0.29	0.28	0.29	0.56	0.23	0.11
Barriers to entrepreneurship – Communication and simplification of rules and procedures	0.15	0.17	0.14	0.22	0.14	0.11
Barriers in network sectors	0.23	0.27	0.25	0.35	0.15	0.13
Total	**0.67**	**0.72**	**0.67**	**1.13**	**0.52**	**0.35**

1. Aggregation using 2014 GDP weights (output approach, constant prices, constant purchasing power parities, OECD base year).

This quantification aims to provide only an order of magnitude estimate of the potential benefits of product market reforms, as it rests on a number of assumptions. For instance, since the PMR indicator is designed to capture domestic product market regulatory regimes, some of the recommendations that specifically refer to cross-border regulations cannot be directly translated into changes of the PMR. In these cases, an equivalent measure within the PMR structure has been used to proxy for the effect of such recommendations. As an example, the recommendation that suggests harmonising national regulations and technical specifications in network sectors, with the target of transferring decision powers in technical matters to a single EU regulator, has been considered equivalent to the PMR question referring to the change in the access of third party to the transmission grid from negotiated to regulated.

The magnitude of projected output gains is in line with similar exercises performed for other OECD countries (Bourlès et al., 2010; Bouis and Duval, 2011; Anderson et al., 2014). Based on the quantified PMR changes considered in the exercise, the biggest GDP improvement at both horizons is associated with removal of barriers to entrepreneurship in services. Removal of barriers in network sectors, including the EU commitment for more co-ordinated action in the energy and transport sectors made in the G-20 context is the second most important factor of the output gains, followed by simplification of rules and procedures and its positive effect on entrepreneurship. Although Italy and France appear as countries that stand to gain most from the implementation of product market reforms, the gains available to other countries are important in the current weak growth environment.

Notes

1. Bourlès et al. (2010) calculated this indicator for each country by using total input-output coefficients as follows:

   $$REG_{j,t} = \sum_k NMR_{k,t} \times w_{k,j}$$

   where $NMR_{k,t}$ is the OECD indicator of anti-competitive regulation in non-manufacturing sector *k* in year *t* and the weight $w_{k,j}$ (comprised between 0 and 1) is the total input requirement of sector *j* for intermediate inputs from non-manufacturing sector *k*. This exercise adopts this approach to the change in the OECD indicator of an economy-wide stringency of PMR.
2. Column (4) of Table 1 in Bourlès et al. (2010).
3. Note that the sum of GDP of these five countries accounts for 68% of EU (28 countries) total GDP, therefore the effect found on these five countries can be considered a good approximation of the average effect that may materialise at the EU level if all the countries were to implement such reforms.

Bibliography

Anderson, D., B. Barkbu, L. Lusinyan and D. Muir (2014), "Assessing the Gains from Structural Reforms for Jobs and Growth", Chapter 7 in IMF (2014), *Jobs and Growth: Supporting the European Recovery*, International Monetary Fund, Washington DC, *www.imf.org/external/np/seminars/eng/2014/eurbook/pdf/7.pdf*.

Bouis, R. and R. Duval (2011), "Raising potential growth after the crisis. A quantitative assessment of the potential gains from various structural reforms in the OECD area and beyond", OECD *Economics Department Working Papers*, No. 835, OECD Publishing, Paris, *http://dx.doi.org/10.1787/5kgk9qj18s8n-en*.

Bourlès, R., G. Cette, J. Lopez, J. Mairesse and G. Nicoletti (2010), "Do product market regulations in upstream sectors curb productivity growth? Panel data evidence for OECD countries", *NBER Working Papers*, No. 16520, National Bureau of Economic Research, Cambridge MA, *http://dx.doi.org/10.3386/w16520*.

CEPR (2013), "Reducing Transatlantic Barriers to Trade and Investment: An Economic Assessment", Centre for Economic Policy Research, London.

Civic Consulting (2011), "Consumer market study on the functioning of e-commerce and Internet marketing and selling techniques in the retail of goods", Report for the European Commission prepared by Civic Consulting, Berlin.

European Commission (2016), "The economic impact of selected structural reform measures in Italy, France, Spain and Portugal", European Commission, Brussels, *http://ec.europa.eu/economy_finance/publications/eeip/pdf/ip023_en.pdf*.

European Commission (2015), “Economic Impact of the Services Directive: A 2014 update”, European Commission, Brussels.

European Commission (2012), “Impact assessment report on EU-Japan trade relations”, *Commission Staff Working Document*, European Commission, Brussels, *http://trade.ec.europa.eu/doclib/docs/2012/july/tradoc_149809.pdf*.

European Commission and Government of Canada (2008), “Assessing the costs and benefits of a closer EU-Canada economic partnership”, A joint study by the European Commission and the Government of Canada, *http://trade.ec.europa.eu/doclib/docs/2008/october/tradoc_141032.pdf*.

European Parliament (2014), “The cost of non-Europe in the single market, part III – Digital single market”, Report for the European Added Value Unit prepared by GHK, Brussels.

Lorenzani, D. and J. Varga (2014), “The Economic impact of digital structural reforms”, *Economic Papers*, No. 529, European Commission, Brussels.

Monteagudo, J., A. Rutkowski and D. Lorenzani (2012), “The economic impact of the Services Directive: A first assessment following implementation”, *Economic Papers*, No. 456, European Commission, Brussels.

Varga, J. and J. in ’t Veld (2014), “The potential growth impact of structural reforms in the EU: A benchmarking exercise”, *Economic Papers*, No. 541, European Commission, Brussels.

ORGANISATION FOR ECONOMIC CO-OPERATION AND DEVELOPMENT

The OECD is a unique forum where governments work together to address the economic, social and environmental challenges of globalisation. The OECD is also at the forefront of efforts to understand and to help governments respond to new developments and concerns, such as corporate governance, the information economy and the challenges of an ageing population. The Organisation provides a setting where governments can compare policy experiences, seek answers to common problems, identify good practice and work to co-ordinate domestic and international policies.

The OECD member countries are: Australia, Austria, Belgium, Canada, Chile, the Czech Republic, Denmark, Estonia, Finland, France, Germany, Greece, Hungary, Iceland, Ireland, Israel, Italy, Japan, Korea, Luxembourg, Mexico, the Netherlands, New Zealand, Norway, Poland, Portugal, the Slovak Republic, Slovenia, Spain, Sweden, Switzerland, Turkey, the United Kingdom and the United States. The European Union takes part in the work of the OECD.

OECD Publishing disseminates widely the results of the Organisation's statistics gathering and research on economic, social and environmental issues, as well as the conventions, guidelines and standards agreed by its members.

OECD PUBLISHING, 2, rue André-Pascal, 75775 PARIS CEDEX 16
(10 2016 12 1 P) ISBN 978-92-64-25621-7 – 2016

OECD Economic Surveys

EUROPEAN UNION

SPECIAL FEATURE: PRIORITIES FOR COMPLETING THE SINGLE MARKET

Most recent editions

Australia, December 2014
Austria, July 2015
Belgium, February 2015
Brazil, November 2015
Canada, June 2016
Chile, November 2015
China, March 2015
Colombia, January 2015
Costa Rica, February 2016
Czech Republic, June 2016
Denmark, May 2016
Estonia, January 2015
Euro area, June 2016
European Union, June 2016
Finland, January 2016
France, March 2015
Germany, April 2016
Greece, March 2016
Hungary, May 2016
Iceland, September 2015
India, November 2014
Indonesia, March 2015
Ireland, September 2015
Israel, January 2016
Italy, February 2015
Japan, April 2015
Korea, May 2016
Latvia, February 2015
Lithuania, March 2016
Luxembourg, March 2015
Mexico, January 2015
Netherlands, March 2016
New Zealand, June 2015
Norway, January 2016
Poland, March 2016
Portugal, October 2014
Russian Federation, January 2014
Slovak Republic, November 2014
Slovenia, May 2015
South Africa, July 2015
Spain, September 2014
Sweden, March 2015
Switzerland, November 2015
Turkey, July 2014
United Kingdom, February 2015
United States, June 2014

Consult this publication on line at ***http://dx.doi.org/10.1787/eco_surveys-eur-2016-en***.

This work is published on the OECD iLibrary, which gathers all OECD books, periodicals and statistical databases. Visit ***www.oecd-ilibrary.org*** for more information.

Volume 2016/12
June 2016

OECD*publishing*
www.oecd.org/publishing

ISSN 0376-6438
2016 SUBSCRIPTION
(18 ISSUES)

ISBN 978-92-64-25621-7
10 2016 12 1 P

9 789264 256217