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Basic Statistics of the European Union, 2017

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

LAND, PEOPLE AND ELECTORAL CYCLE					
Population (million)	511.5		Population density per km²	116.7	(37.2)
Under 15 (%)	15.5	(17.9)	Life expectancy (years, 2016)[c]	81.0	(80.5)
Over 65 (%)	18.8	(17.0)	Men	78.2	(77.9)
Foreign-born (%)	11.2		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 (%, 2016)		
In current prices (billion USD)	17,277		Primary sector	1.5	(2.5)
In current prices (billion EUR)	15,326		Industry including construction	24.8	(26.7)
Latest 5-year average real growth (%)	1.7	(2.1)	Services	73.7	(70.8)
Per capita (000 USD PPP)	39.2	(42.2)			
GENERAL GOVERNMENT[d]					
			Per cent of GDP		
Expenditure	45.8	(40.6)	Gross financial debt	81.6	
Revenue	44.9	(37.7)			
EXTERNAL ACCOUNTS					
			Main exports (% of total merchandise exports)		
			Machinery and transport equipment	42.2	
In per cent of GDP			Other manufactured goods	22.6	
Exports of goods and services (including intra EU)	45.7	(58.0)	Chemicals and related products, n.e.s.	17.7	
Imports of goods and services (including intra EU)	42.2	(53.3)	Main imports (% of total merchandise imports)		
Current account balance	1.4	(0.4)	Machinery and transport equipment	32.0	
			Other manufactured goods	25.6	
			Mineral fuels, lubricants and related materials	18.2	
LABOUR MARKET, SKILLS AND INNOVATION					
Employment rate for 15-64 year-olds (%,)	67.7	(67.7)	Unemployment rate, Labour Force Survey (age 15 and over, %)	7.6	(5.8)
Men	73.0	(75.4)	Youth (age 15-24, %)	16.8	(11.9)
Women	62.5	(60.1)	Long-term unemployed (1 year and over, %)	3.4	(1.7)
Participation rate for 15-64 year-olds (%)	73.3	(71.1)	Tertiary educational attainment 25-64 year-olds (%)[c]	31.2	(35.7)
Average hours worked per year (2016)[b]	1 636	(1 763)	Gross domestic expenditure on R&D (% of GDP, 2016)	2.0	(2.3)
ENVIRONMENT					
Total primary energy supply per capita (toe, 2016)[c]	3.3	(4.1)	CO_2 emissions from fuel combustion per capita (tonnes, 2015)	6.9	(9.2)
Renewables (%)	13.0	(9.6)	Municipal waste per capita (tonnes, 2016)	0.5	(0.5)
Exposure to air pollution (more than 10 g/m3 of PM2.5, % of population, 2015)	72.9	(75.2)			
SOCIETY					
Income inequality (Gini coefficient, 2016)[c]	0.308	(0.311)	Education outcomes (PISA score, 2015)		
At risk of poverty rate (%, 2016)	10.9		Reading	486	(493)
Public and private spending (% of GDP)			Mathematics	487	(490)
Health care, current expenditure (2016)[b]	8.6	(9.0)	Science	487	(493)
Pensions (2013)[b]	9.5	(9.1)	Share of women in parliament (%, April 2018)	30.1	(29.7)
Education (primary, secondary, post sec. non tertiary, 2014)	3.4	(3.7)	Net official development assistance (% of GNI)	0.34	(0.40)

Better life index : www.oecdbetterlifeindex.org

Note: Average of European Union 28 countries unless otherwise indicated.

a. 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 (22 countries) plus Lithuania.

d. Latest available year for the OECD average.

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.

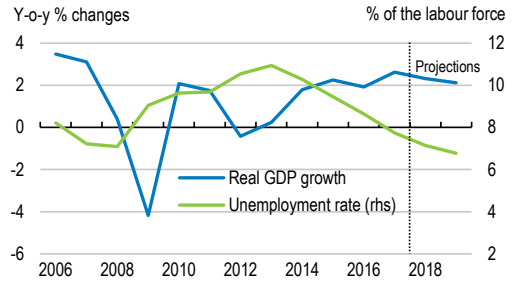
Executive summary

- *The economy is expanding supported by accommodative macroeconomic policies*
- *Policies to pursue stronger growth and make it more inclusive are needed*

Economic conditions keep improving…

The EU economy is finally growing robustly. After years of crisis, the European economy has robustly expanded in 2017 (Figure A), helped by very accommodative monetary policy, mildly expansionary fiscal policy and a recovering global economy. GDP growth is projected to remain strong in 2018 and 2019 by the standards of recent years.

Figure A. The economy has recovered strongly



Source: OECD (2018), *OECD Economic Outlook: Statistics and Projections* (database).

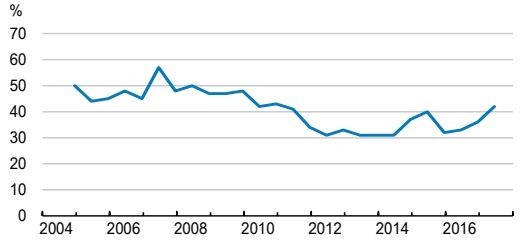
StatLink http://dx.doi.org/10.1787/888933747432

…but important challenges remain

With an expansion underway, attention needs to shift to Europe's long-term challenges. Wellbeing disparities, the UK vote to exit the EU, low potential growth, an ageing population and continuous technological developments are all important challenges. To further strengthen the confidence of all its citizens (Figure B), the European Union needs to focus on policies that support a stronger and more inclusive growth.

Figure B. Citizens' trust in the EU is recovering

% of population claiming they tend to trust the EU, as an institution



Source: European Commission, Public Opinion in the European Union, Standard Eurobarometer Survey.

StatLink http://dx.doi.org/10.1787/888933747451

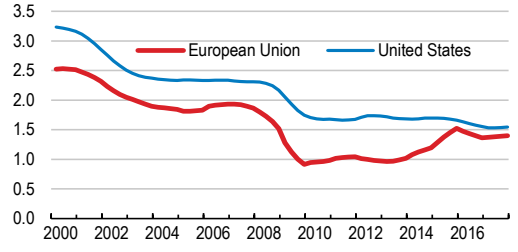
Bringing everyone on board to revive the European project. Income inequality in EU countries is on average lower than in other OECD countries. At the same time, the crises have left a legacy of social problems and discontent. Unemployment remains above pre-crisis levels in many countries and real wages fell sharply in some countries hard hit by the crisis and stagnated or barely grew in others. Youth unemployment, at about 16% on average, remains high and there are still too many youth left behind.

Improving long-term growth is key to make growth more inclusive

Potential growth has fallen substantially since the financial crisis (Figure C). Sustained improvements in living standards are held back by weak productivity and investment in many countries. The EU can lift the EU's low growth potential by creating the right incentives and conditions to support national reforms. Across Europe there is ample scope for reforms to boost competition, encourage innovation and business dynamism and make growth more inclusive. It is in good times that countries can best afford the adjustment costs of such reforms.

Figure C. The EU's potential output growth is low

As a percentage of potential GDP



Source: OECD (2018), *OECD Economic Outlook: Statistics and Projections* (database).

StatLink http://dx.doi.org/10.1787/888933747470

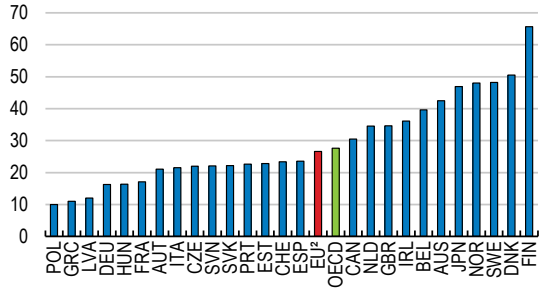
Deepening the Single Market is a key EU lever to enhance prosperity. A dynamic and large single market, that stimulates competition and efficiency, is the EU's main asset for spurring productivity, investment and economic growth. However, the single market remains

fragmented, with barriers in key areas, including services, transport, finance, energy and digital markets. Removing unnecessary barriers to competition and cutting red tape can help to improve economic dynamism, facilitating firm entry and exit, reallocation of resources across firms and technological diffusion. New efforts to complete the single market by creating new business opportunities would also stimulate business investment, which is increasing but remains below pre-crisis.

Better harnessing digital technologies to adapt to rapid technological change. An important factor for future growth will be the ability of EU economies to reap the benefits of digitalisation. Several countries lag behind in the quality of digital infrastructure: use of advanced digital tools falls short in many countries (Figure D). A better designed EU regulatory framework could encourage greater investment in high quality network infrastructure. This should be accompanied by strong national efforts to develop the right digital skills among people of all ages and educational attainment. The EU could support the development of digital skills by establishing common definitions of skill needs and helping countries develop data tools to monitor skill gaps.

Figure D. Use of advanced digital tools falls short in many countries

% of enterprises using cloud computed services, 2017[1]



1. Or latest available year.
2. Unweighted average across European Union members that are also members of the OECD (22 countries), plus Lithuania.
Source: OECD (2018), *ICT Access and Usage by Businesses* (database); see figure 23 for details.

StatLink http://dx.doi.org/10.1787/888933747489

Creating inclusive labour markets to raise living standards and potential growth. With the recovery maturing, some central European countries are already facing labour shortages. Now is the time to build on national reforms to ensure that women, youth, older workers and migrants are integrated in the labour market. Making it much easier to hire skilled workers from outside the EU, by simplifying the eligibility requirements and procedures for the EU Blue Card, would also help. Swiftly integrating refugees would improve both their wellbeing and expand the labour force and help address EU citizens' concerns. Labour mobility between EU countries has increased in recent years but still remains relatively low. To a large extent, this reflects Europe's linguistic and cultural diversity, which is an asset. But policy-induced barriers also inhibit movement. These include difficulties in having professional qualifications recognised and different social security systems. Even if the EU has rules to coordinate social security systems to ensure the portability of social security rights.

A reformed EU budget could enhance growth and make it more inclusive

The approaching negotiations for the next multiannual financial framework provide an opportunity to rethink the EU budget. The EU budget is already stretched and there are new financing needs. Reforming the budget has become even more urgent with Brexit: the UK departure will lead to a gap of about 7% of the annual budget after 2020. If not addressed this shortfall could lead to significant cuts in some crucial European programmes.

Financing new priorities and filling the UK gap will require higher member states' income-based contributions, new sources of revenue coming from taxation, a reallocation of spending or a combination of these measures. Additional funding could come from eliminating the system of special reductions that some of the largest net contributor countries benefit from. Although politically difficult, cohesion funding should be focussed more tightly on lagging regions, which would more effectively address regional divides. Reforms have reduced the weight of agriculture in the

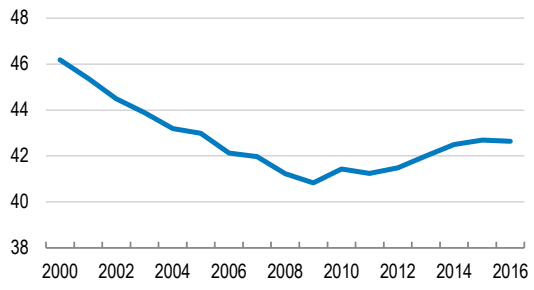
EU budget to 37%. However, about 27% of the support to producers is still linked to production and should be phased out. Spending on R&D, which only accounts for 13% of the EU budget, should be significantly increased given Europe's low growth potential and the evidence of the value added of EU-level R&D support compared to national programmes. The EU could better support those who lose out from globalisation and are displaced by technological change through a reformed and better funded European Globalisation Adjustment Fund. Increased funding for programmes with a strong apprenticeship component and job-placement support such as "Erasmus Pro" could help less qualified workers, especially youth.

Narrowing regional divides

The EU's record on reducing regional income disparities is mixed. Average regional disparities in GDP per capita have declined over the last decade. But progress on regional convergence came to a halt with the crisis and has not resumed since (Figure E).

Figure E. Convergence in regional GDP per capita came to a halt with the crisis

Population-weighted coefficient of variation[1], %



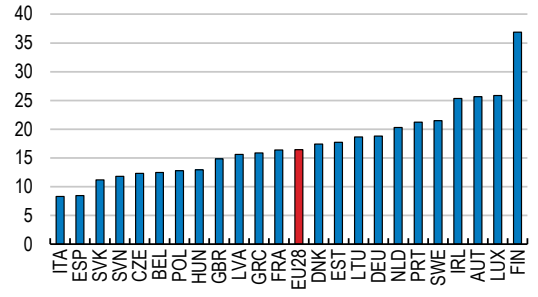
1. The graph shows disparities in GDP per capita (in PPS) between NUTS-2 EU regions.
Source: European Commission (see figure 14).

StatLink http://dx.doi.org/10.1787/888933747508

Making the best of cohesion policy to reduce regional divides. To further support income convergence, cohesion spending should focus on items with long-term growth benefits and clear spillovers across borders, including human capital, innovation and transport, energy and digital networks. There is too much focus on spending the funds and not enough on the quality of investment. Higher co-funding rates could encourage greater spending effectiveness. Slow starts of projects at the beginning of the programming period (Figure F) lead to a back-loading of investment resulting in poor project quality. Reducing the burden of administration is a must to make cohesion policy more effective and reduce slow starts. Creating a single-rule book for EU funding could help.

Figure F. Slow use of structural funds is common

Spending as a % of planned investment[1]



1. 2014-20 programming period, as of end 2017.
Source: European Commission (2018), Cohesion Open Data Portal for the European Structural and Investment Funds (https://cohesiondata.ec.europa.eu/).

StatLink http://dx.doi.org/10.1787/888933747527

Climate change is a global challenge that requires all countries to act decisively

Over 90% of Europeans see climate change as a serious problem. Under the Paris agreement, the EU and its member states committed to reducing greenhouse-gas (GHG) emissions by at least 40% by 2030 from 1990 levels. Policy must be strengthened, even more so to meet the objective of "significantly less than 2°". The EU emission trading system (ETS) has not played as great a role as it could in driving low-carbon investments. The recession, extensive promotion of renewables and other measures have generated a large surplus of allowances and a low carbon price. The ETS will need to be tightened further and taxation increased on the use of fossil fuel outside electricity generation. Bringing all emissions, notably transport, into the ETS could make room to progressively replace most other climate policies. Working through price incentives would increase coherence and lower overall costs. Supporting policies, ranging from smart grids and other infrastructure, through energy labelling and information provision, will remain necessary.

MAIN FINDINGS	KEY RECOMMENDATIONS
Reforming the EU budget to foster more inclusive growth	
There are new priorities to support more inclusive growth that need to be financed and the departure of the UK will lead to a financing gap. The burden of financing the EU budget does not reflect countries ability to pay.	Consider enhancing the efficiency of spending and increasing revenues, and reassess how the European budget is financed. Phase out production-based payments in the Common Agricultural Policy. Increase research and development (R&D) spending.
Reducing regional divides by making cohesion policy more effective	
There is a significant productivity gap between less developed regions and the rest.	Prioritise cohesion funding to less developed regions.
Multiple objectives are reducing the effectiveness of cohesion policy, scattering resources and making evaluating its effectiveness very difficult.	Better target cohesion funding on spending with long-term growth benefits (human capital, innovation and network infrastructure), and to projects with clear spillovers across borders.
There is too much focus on spending structural and cohesion funds and not enough on the quality of investment.	Consider increasing national co-financing rates to encourage better project selection taking into account the relative impact of the project and the EU added value.
The overwhelming amount of regulation, with frequent rule changes makes cohesion policy difficult to manage and control.	Create a "single rule book" for EU funding programmes. Use e-government and e-procurement more often.
Leveraging the single market to improve long-term growth and living standards	
Business services experience many administrative and regulatory barriers.	Simplify administrative formalities for the establishment and provision of cross-border services, and provide guidance on implementing EU legislation.
European energy markets are too fragmented; high market concentration and weak competition remain an issue, investment is insufficient and final energy prices are high for citizens and businesses.	Pursue the planned cross-border co-operation on power system operation and trade, including interconnection capacity calculations and reserve margins.
A shortage of workers with the right digital skills is constraining investment and productivity.	Develop tools to help member states monitor digital skill needs. Set EU standards for the monitoring of digital skills and task content of occupations.
Eliminating barriers to people working and supporting intra-EU mobility	
The EU is relatively weak at attracting highly skilled foreign workers.	Make effective the proposed simplification of eligibility and procedures for the EU Blue Card for high-skilled labour migrants.
Intra-EU labour mobility is weak owing to linguistic differences, slow recognition of qualifications and barriers to access regulated professions among others.	Increase spending on mobility programmes such as Erasmus+, and facilitate access irrespective of socio-economic background. Foster the harmonisation of professions' curricula at the EU level. Make the electronic European professional card available to all sectors.
Methods to circumvent labour and tax laws persist.	Step up efforts at the EU level to coordinate the design and organisation of joint cross-border labour and tax control activities.
Better protecting EU citizens in the face of change	
The effectiveness of the European Globalisation Adjustment Fund is reduced by a complex and slow approval process.	Revise application requirements and procedures to speed the use of the Fund and expand eligibility to workers affected by other shocks, such as automation.
Over 90% of Europeans see climate change as a serious problem. To meet the EU 2030 greenhouse-gas emission targets without excessive costs, policy needs to be tightened, with more attention given to cost-effectiveness.	Increase the price of greenhouse gas emissions and consider bringing all fuel use, including transport, into the EU Emissions Trading System (ETS). Increase minimum tax rates on fossil fuel use that falls outside the ETS, especially where tax rates are currently low or zero.

Key Policy Insights

- *The economic expansion continues*
- *Time is ripe for a reform of the EU budget*
- *Addressing regional divides*
- *Deepening the single market*
- *Strengthening labour markets*
- *Fighting climate change*

Challenges facing the European Union

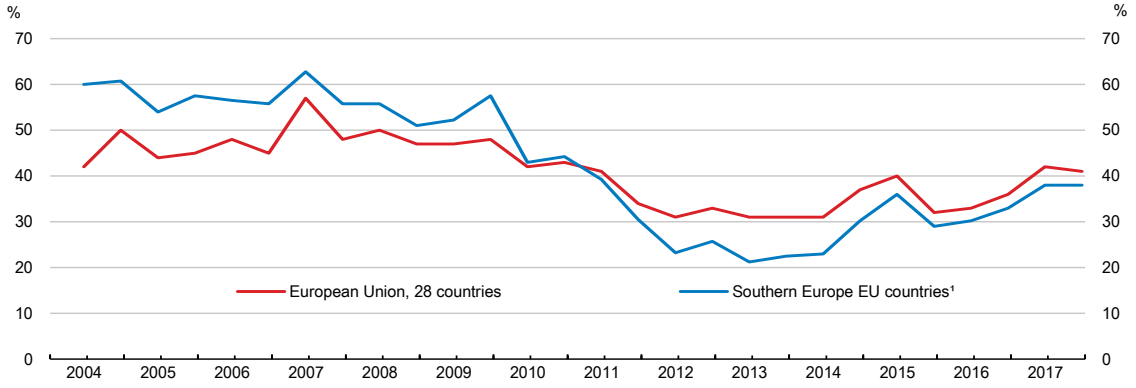
After years of crisis, a positive economic momentum has taken hold in the European Union over the last couple of years, helped by very accommodative monetary policy, mildly expansionary fiscal policy and a recovering global economy. Growth has continued at a dynamic pace in 2017, broadening across sectors and countries and lowering unemployment.

These positive developments provide an opportunity to renew efforts to meet the long-term challenges facing the European Union. Sustained improvements in living standards are held back by weak productivity and investment in many countries. Europe's rapid ageing will lead to a decline in output per capita and squeeze public finances, unless employment rates and productivity increase. The short and medium term economic impact of the UK departure from the EU ("Brexit") on the EU has been estimated to be relatively small (Kierzenkowski et al., 2016), but some short-term disruptions cannot be ruled out. Migration remains an important concern for Europeans. The numbers of refugees entering the EU have come down, but the latest wave of refugees has shown the limitations of the EU policy. An additional challenge, discussed in the accompanying Euro Area Survey, is how to put the economic and monetary union on a stronger footing to make the euro area less vulnerable to crises.

In view of these challenges, the EU needs to show more than ever the concrete benefits it brings to people. Citizens' trust on the European Union is on the rise, after having significantly fallen during the sovereign and refugee crises, but the popularity of the EU remains strikingly low by past standards (Figure 1). Part of this discontent stems from significant gaps in well-being among EU citizens in key areas including income, jobs, health and education (Figure 2). Income inequality is lower in Europe than in other OECD countries, but the crises have left a legacy of social problems. Unemployment remains above pre-crisis levels in many countries and is painfully high in some others (Figure 3), especially among young people. Real wages have stagnated or barely grown in most countries, and have fallen significantly in countries hard hit by the crisis. There are also significant regional divides across Europe. While leading European regions, mostly cities and major urban areas grow ahead, lagging regions seem to stall (OECD, 2018a; Bachtler et al. 2017).

Figure 1. Trust in the EU is recovering, but remains below pre-crisis levels

Respondents claiming they tend to trust the European Union, as an institution, in per cent of total respondents



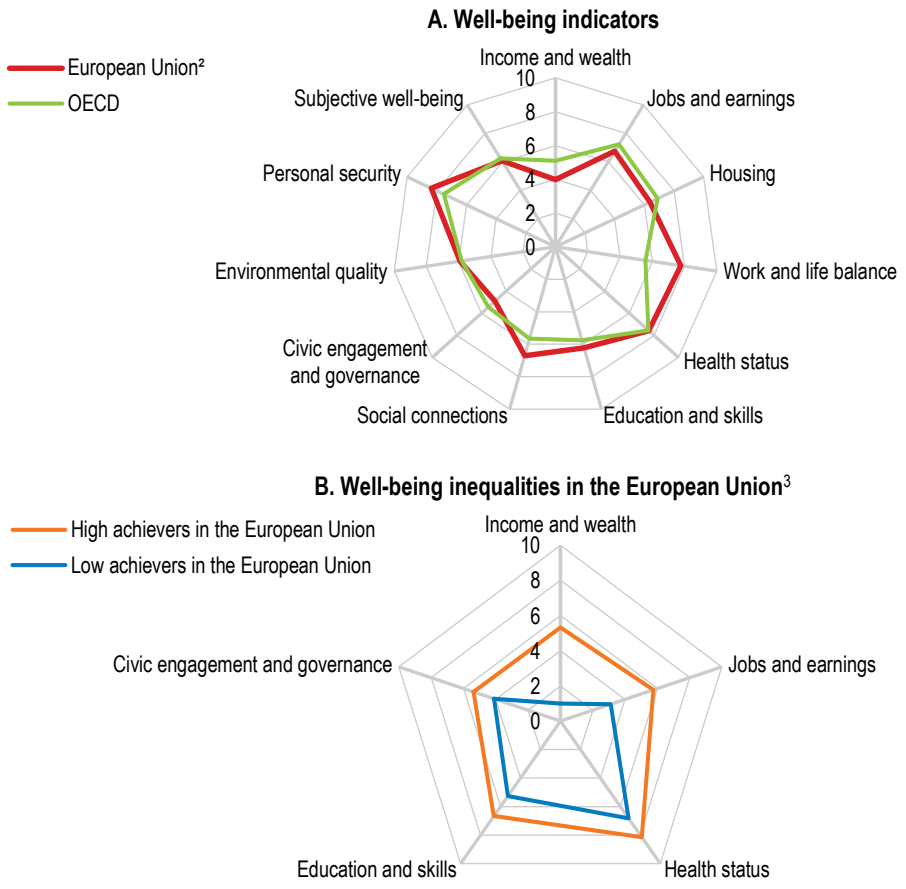
1. Unweighted average of Greece, Italy, Portugal and Spain.

Source: European Commission, Public Opinion in the European Union, Standard Eurobarometer Survey.

StatLink http://dx.doi.org/10.1787/888933747546

Figure 2. Average well-being is high, but there are significant inequalities

Better Life Index, 2017[1]



1. Each well-being dimension is measured by one to four indicators from the OECD Better Life Index set. Normalised indicators are averaged with equal weights. Indicators are normalised to range between 10 (best) and 0 (worst) according to the following formula: (indicator value - minimum value) / (maximum value - minimum value) x 10.
2. European Union member countries that are also members of the OECD (21 countries).
3. The panel shows well-being outcomes in various dimensions for people in the European Union with different socio-economic background. In the dimensions of "income and wealth", "health" and "civic engagement and governance", "high (/low) achievers" are people with an income belonging to the top /(bottom) quintile of the income distribution; in "jobs and earnings", "high (/low) achievers" are people with the high/(low)est educational attainment (i.e. ISCED 5/6 versus ISCED 0/1/2) or with gross earnings belonging to the top /(bottom) quintile of the distribution; in "education and skills", "high (/low) achievers" are people with a score belonging to the top /(bottom) quintile of the PISA index of economic, social and cultural status; Outcomes are shown as normalised scores on a scale from 0 (worst condition) to 10 (best condition) computed over OECD countries, Brazil, the Russian Federation and South Africa.
Source: OECD (2017), OECD Better Life Index, www.oecdbetterlifeindex.org .

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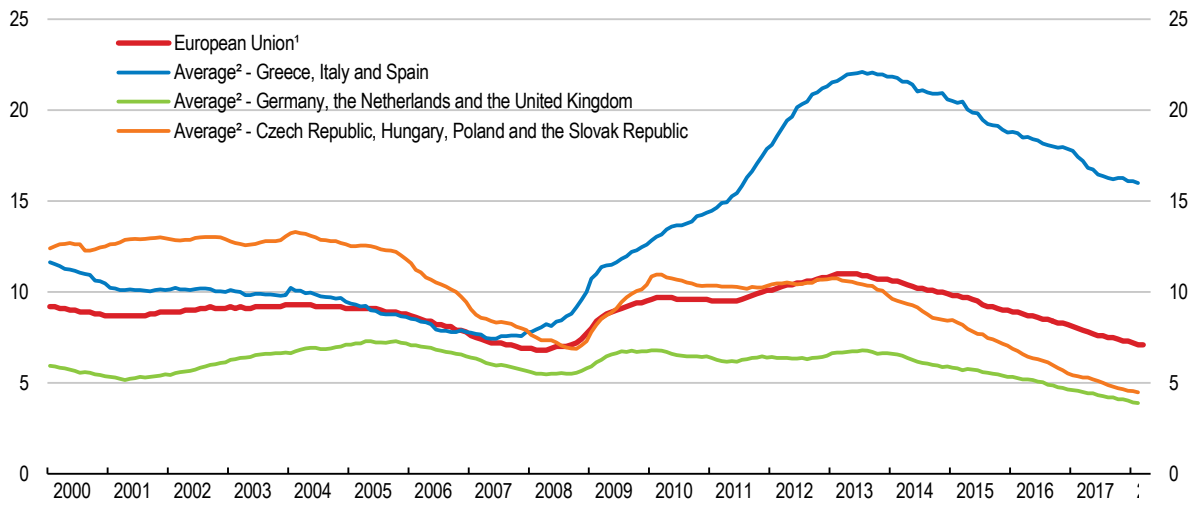
Figure 3. Unemployment has fallen but remains significant

Unemployment rates, per cent of the labour force



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

Source: Eurostat (2018), "Employment and unemployment (LFS)", *Eurostat database*.

StatLink http://dx.doi.org/10.1787/888933747584

Policies to pursue stronger growth and make it more inclusive are mostly to be undertaken at the national level, but EU policies are needed to complement national efforts. Against this backdrop, the main messages of this Survey are:

- With an expansion under way, attention needs to shift to Europe's long-term challenges. A reformed EU budget could enhance growth and make it more inclusive by stepping up investment in R&D, better targeted cohesion and agriculture spending to more effectively address regional divides, and increased funding to support less qualified youth.
- To spur long term growth and sustained improvements in living standards, the EU needs to revive the single market project, by removing remaining barriers in services, energy, digital and transport. Greater intra-EU labour mobility and making it much easier to hire skilled workers from outside the EU could ease labour shortages.
- Deepening the single market and faster adoption of digital technologies will create new jobs but put at risk others. The EU should better help lagging regions catch up and support those who lose out from globalisation and are displaced by technological change.

Recent macroeconomic developments and short-term prospects

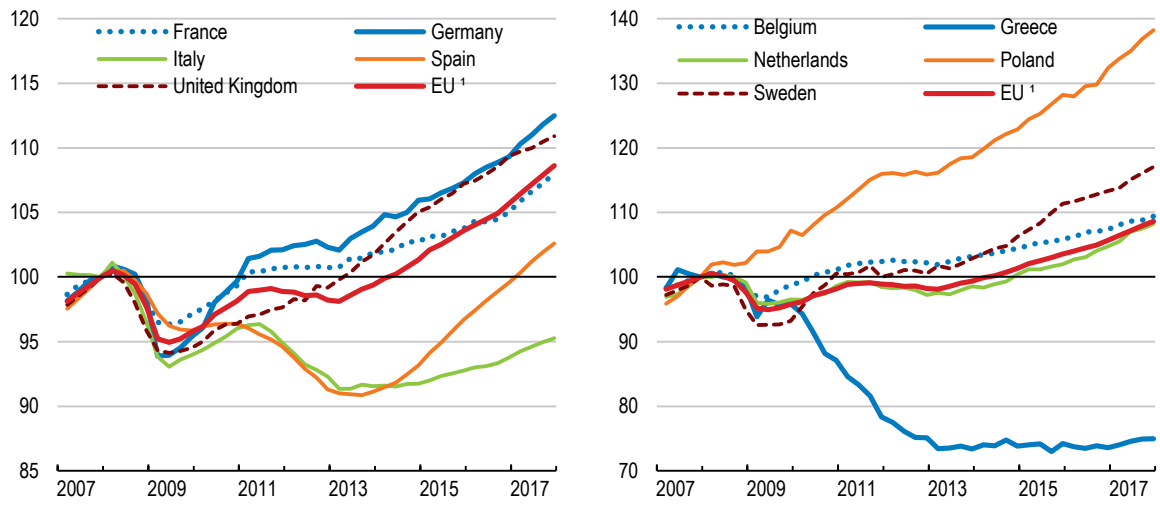
The upswing continues

The European economy is growing at a fast pace (Figure 4), is broadening across sectors and countries, and is supported mostly by domestic demand (Figure 5, Panel A). Improving labour markets and very favourable financing conditions continue to boost incomes, and together with higher consumer confidence (Figure 5, Panel B), private consumption, despite lacklustre real wage growth in a majority of member states.

Investment is expanding at a dynamic pace in most countries (Figure 5, Panel C), as private investment expands sustained by buoyant business sentiment, rising profits and easy financial conditions. Public investment, on the other hand, remains subdued in some member states (Figure 6). Exports have continued to strengthen on the back of an improved economic outlook in Europe and the rebound in world trade. Business and consumer confidence indicators remain very high pointing to healthy growth ahead and in some sectors and countries firms are starting to face equipment and capacity constraints (Figure 5, Panel D).

Figure 4. The upturn continues and is broad-based

Real GDP, index 2007-Q4=100



1. European Union member countries that are also members of the OECD (22 countries).
Source: OECD (2018), *OECD Economic Outlook: Statistics and Projections* (database).

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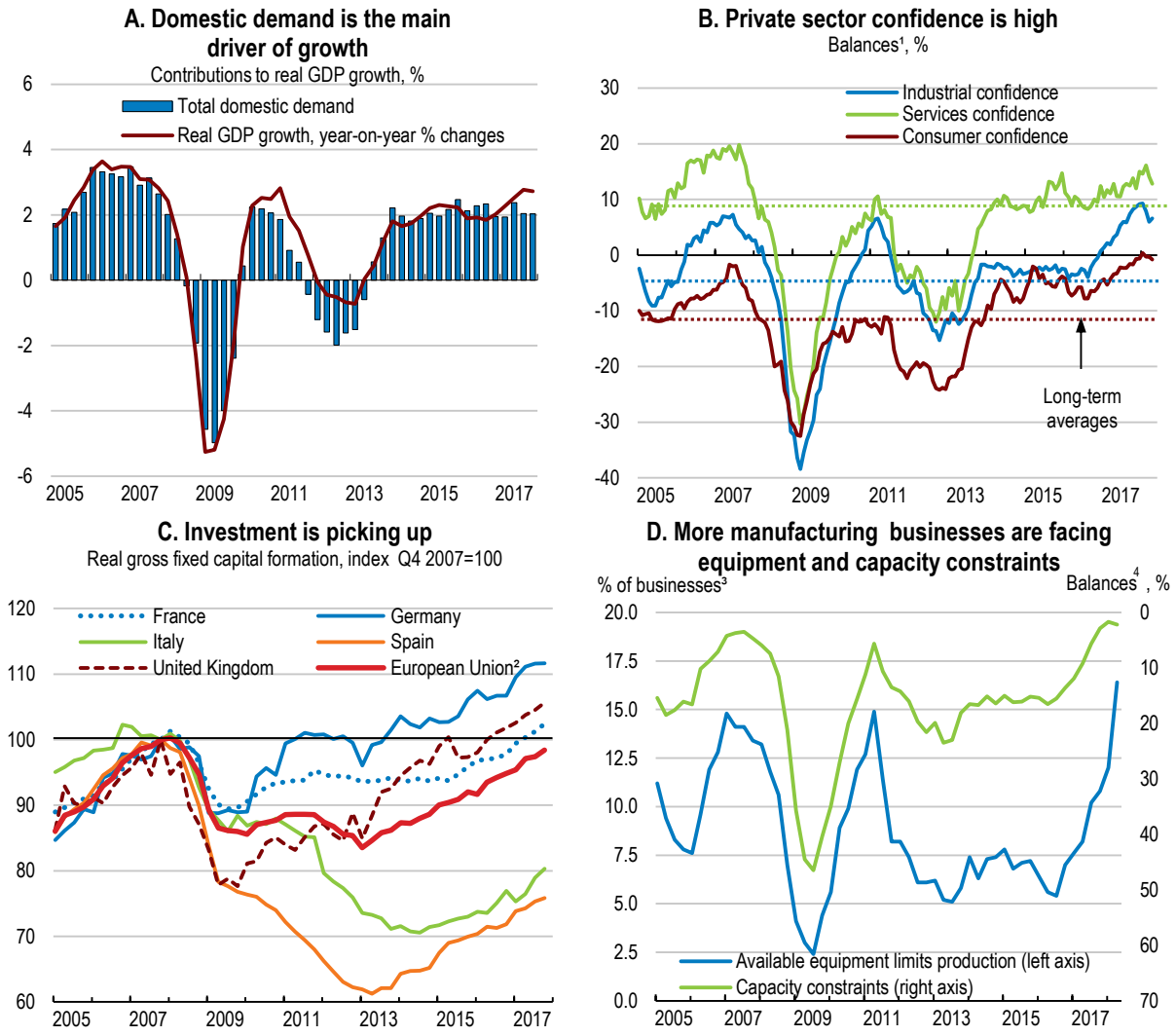
Figure 5. The broad-based recovery should positively support investment growth



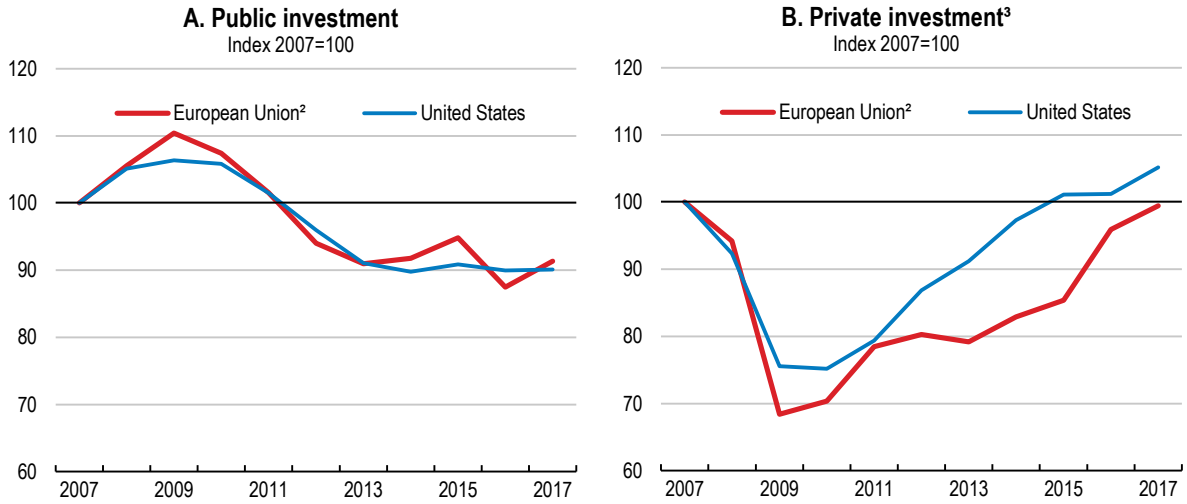
1. Difference between the percentages of respondents giving positive and negative replies.
2. European Union member countries that are also members of the OECD (22 countries).
3. Percentage of businesses answering that their business is limited by shortage of space and/or equipment.
4. Difference between the percentages of respondents assessing that their current production capacity is more than sufficient and the percentage share of those assessing the latter as not sufficient,

Source: OECD (2018), *OECD Economic Outlook: Statistics and Projections* (database); European Commission (2018), *Business and Consumer Surveys* (database), Brussels.

StatLink http://dx.doi.org/10.1787/888933747622

Figure 6. Private investment is recovering, while public investment remains subdued

Volume[1]



1. The series underlying the displayed indices are deflated by the GDP deflator.
2. European Union member countries that are also members of the OECD (22 countries).
3. Private investment is obtained as gross fixed capital formation of the total economy minus government fixed capital formation (appropriation account).

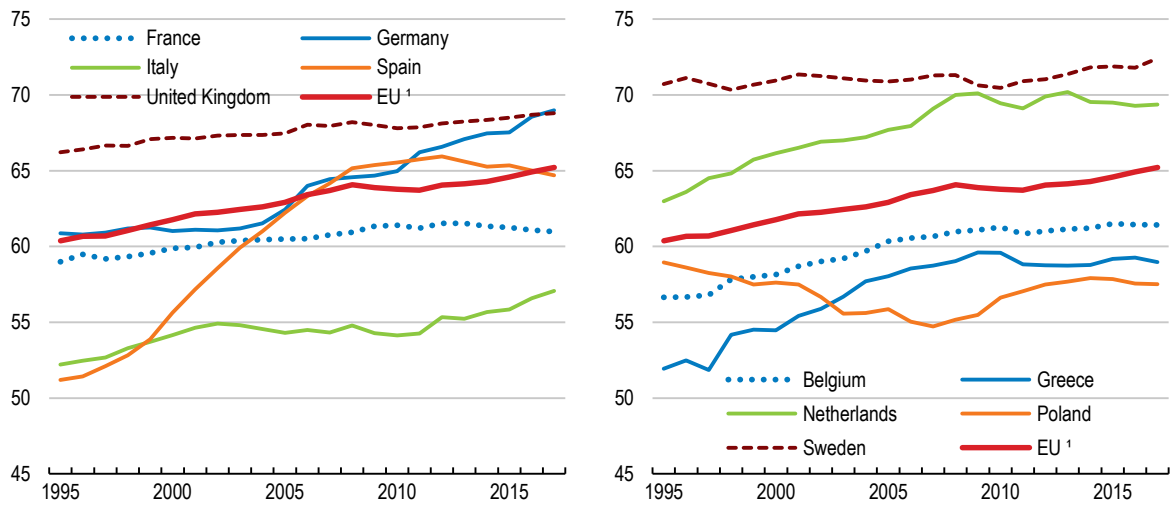
Source: OECD (2018), *OECD Economic Outlook: Statistics and Projections* (database).

StatLink http://dx.doi.org/10.1787/888933747641

Labour market conditions also continue to improve. Employment and labour force participation rates in many countries are now above their levels prior to the crisis (Figure 7), helped by stronger demand and by reforms that have raised activation, enhanced job creation and lowered barriers to female labour force participation (OECD, 2017a). The EU average unemployment rate was 7.1 in April 2018. Yet, significant differences remain across countries (Figure 8, Panel A) and most EU countries have yet to regain their pre-crisis unemployment levels. There are also significant differences in unemployment across regions (Figure 9).

Figure 7. Participation rates have risen in many countries

Labour force as a percentage of the population aged 15-74



1. Unweighted average across European Union member countries that are also members of the OECD (22 countries) and Lithuania.
Source: OECD (2018), *OECD Economic Outlook: Statistics and Projections* (database).

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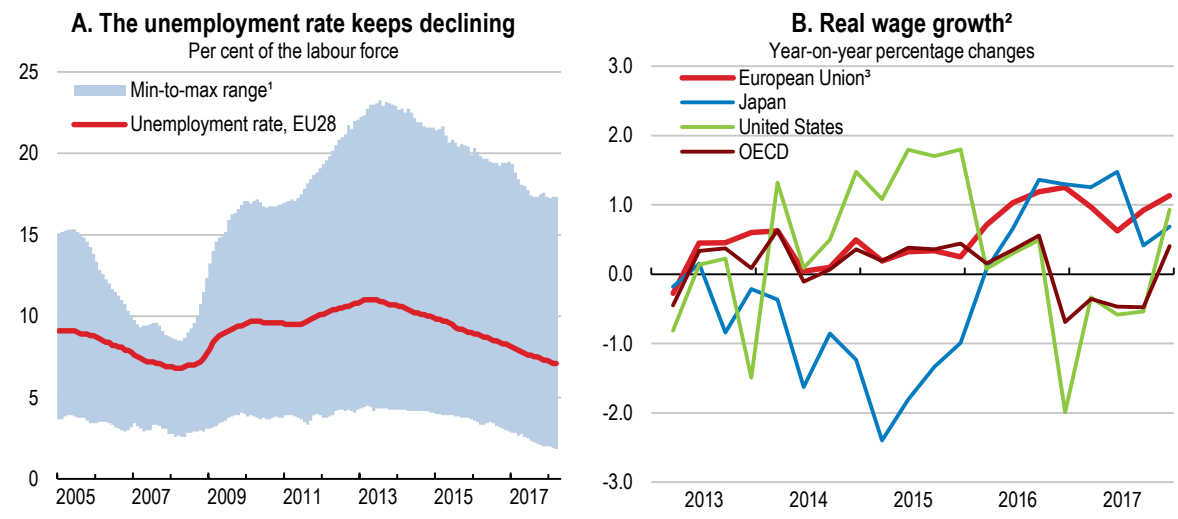
Figure 8. The labour market is improving but wage pressures remain limited

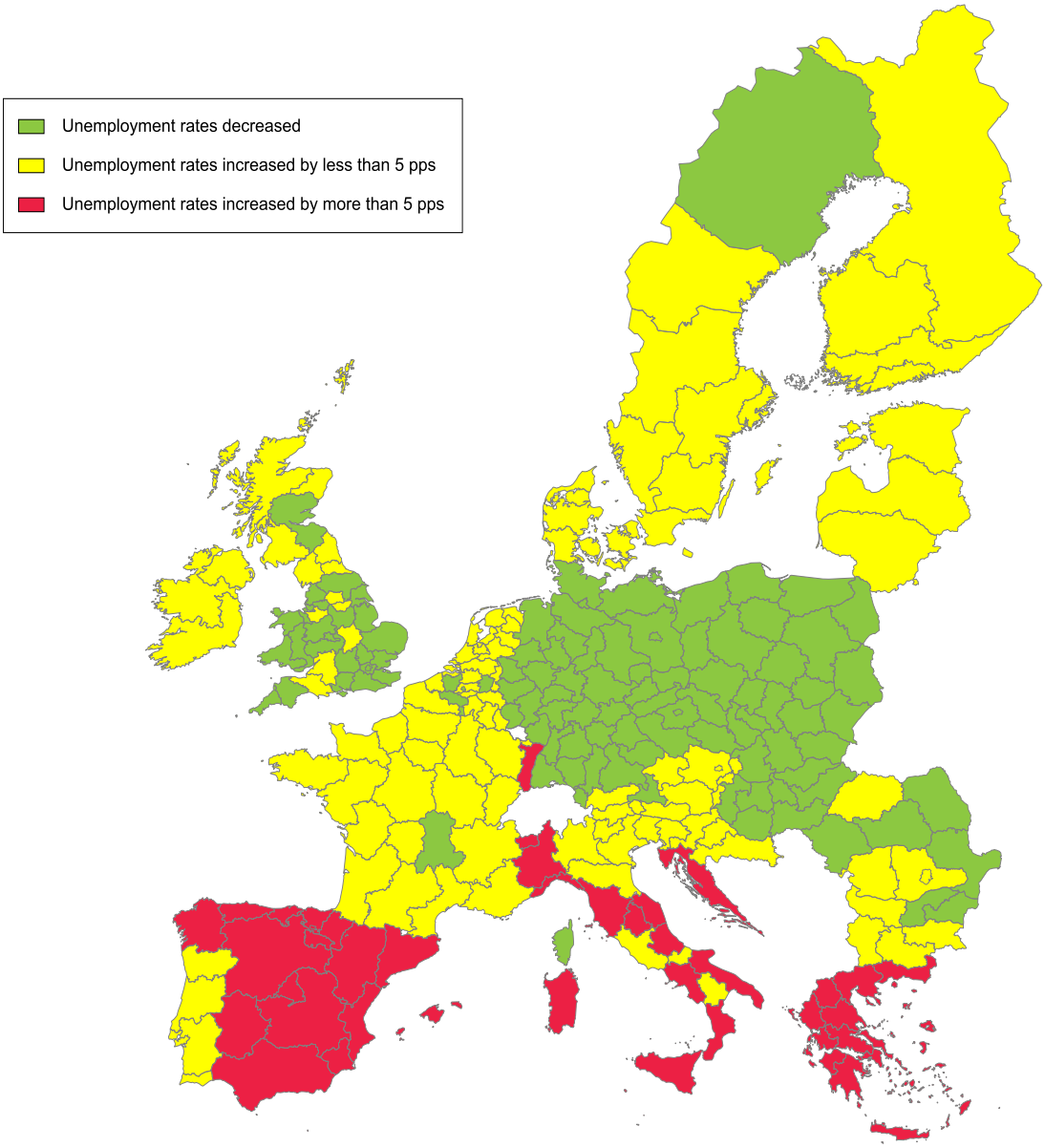


1. Measures, for each single monthly observation, the range between the minimum and the maximum unemployment rate registered across EU Member States.
2. Real wages are measured as labour compensation per employee deflated by the GDP deflator.
3. European Union member countries that are also members of the OECD (22 countries).
Source: Eurostat (2018), "Employment and unemployment (Labour Force Survey)", *Eurostat database*; OECD (2018), *OECD Economic Outlook: Statistics and Projections* (database).

StatLink http://dx.doi.org/10.1787/888933747679

Although labour shortages are beginning to appear in some countries, improving labour market conditions have not yet translated into much wage pressures (Figure 8, Panel B). A number of factors seem to weigh on wage growth including still significant labour market slack in some countries and weak productivity growth in past years. The shares of involuntary part-time work and discouraged workers in the labour force are still elevated and declining only slowly (OECD, 2017b), suggesting that labour market slack is probably bigger than what the unemployment rate suggests. Faster wage growth may have also been held down in recent years by an increasing share of part-time jobs, rising female labour force participation and growing employment in low-wage service sectors (OECD, 2018b; Broadbent, 2015; Daly and Hobijn, 2017).

Figure 9. Regional unemployment rates in the European Union: difference in levels between 2007 and 2016



Source: Eurostat (2018), "Regional labour market statistics", *Eurostat Database*.

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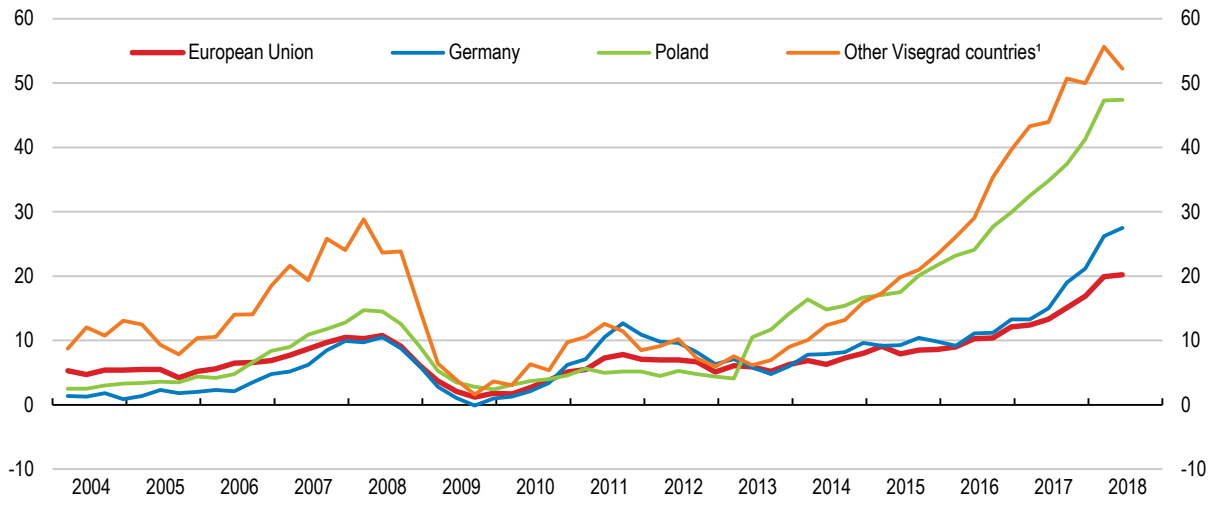
At the same time, the labour market situation is not homogenous across Europe. While some countries, like Greece and Spain still face high unemployment rates (Figure 3), the labour market is tightening in a number of central European countries like Germany and Poland. Indeed, business surveys indicate that labour market shortages are a key factor limiting production and firms' growth in Poland and other Visegrad countries (Figure 10), that are benefiting from the revival in the global economy thanks to their close ties to global value chains.

Figure 10. Labour shortages are increasing in some countries, especially in central Europe

Percentage of manufacturing firms pointing to labour shortages as a factor limiting production



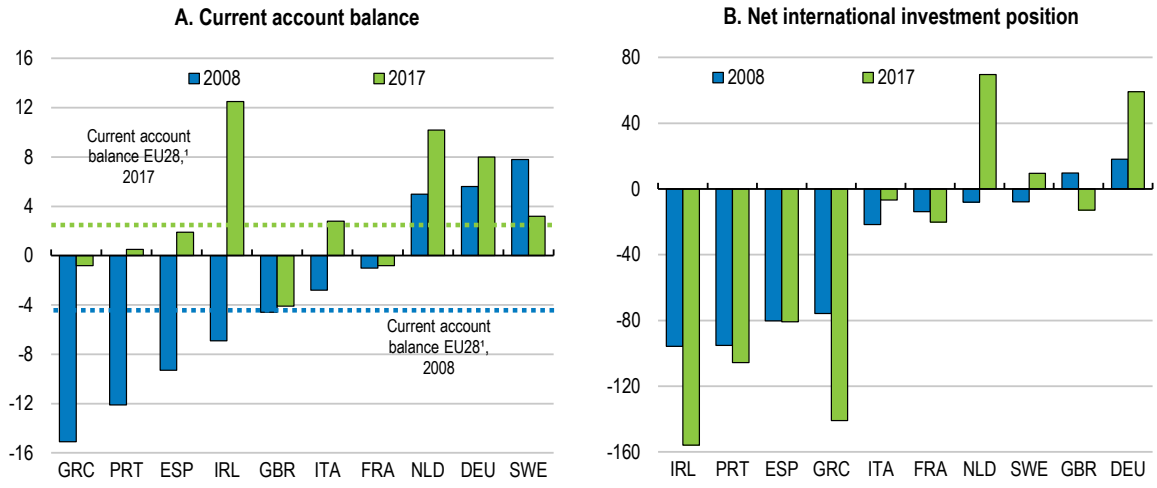
1. Hungary, Czech and Slovak Republics; unweighted average.
Source: European Commission (2018), "Industry/Business Climate Indicator", *Business and Consumer Surveys*, Brussels.

StatLink http://dx.doi.org/10.1787/888933747717

Imbalances within Europe have declined asymmetrically since the financial crisis, with adjustments mainly taking place in countries with larger net external liabilities. Net external debtor countries that had persistent and large current account deficits before the crisis, such as Portugal and Spain, have seen significant current account and some net foreign asset adjustments (Figure 11), reflecting moderated domestic demand and a more competitive economy. However, additional adjustments are needed to bring the net international investment position to more sustainable levels in some countries. At the same time, elevated external surpluses have persisted in Germany, the Netherlands and Sweden. These external surpluses have led the European Union average current account surplus to reach a peak of 2.6% of EU GDP in 2017, with significant projected current account surpluses also in 2018 and 2019. Reforms to remove barriers to entry in services and higher spending in public infrastructure, would help reduce the large current account surplus in Germany, while higher public spending in R&D would in the short term reduce the current account surplus in the Netherlands. In countries with previously large current account deficits, structural policies aimed at fostering productivity growth and further improvements in price and non-price competitiveness would help to unwind the large net foreign liabilities.

Figure 11. The EU current account surplus remains high

As a percentage of GDP



1. The EU28 is an unweighted average.

Source: Eurostat (2018), "Balance of payments statistics and international investment positions (BPM6)", *Eurostat Database*.

StatLink http://dx.doi.org/10.1787/888933747736

GDP growth is projected to average slightly above 2% per annum in the region in 2018-19 supported by accommodative macroeconomic policies and a recovering world economy (Table 1). While all EU economies are showing positive growth rates, they are at varying points in their cycles (Table 2). Rising employment should boost incomes and support private consumption, as wages are expected to rise faster than in the past. High business confidence, increasing corporate profitability and encouraging global demand should keep supporting investment. Despite tepid export growth, a large area-wide current account surplus will remain, with a projected continuation of significant current account surpluses in Germany and the Netherlands. Inflation will gradually strengthen in an environment with higher oil prices, disappearing slack and higher wage growth.

Table 1. Macroeconomic indicators and projections

European Union, [1] annual percentage change, volume (2015 prices)

				Projections	
	2015	2016	2017	2018	2019
Gross domestic product (GDP)	2.2	1.9	2.6	2.3	2.1
Private consumption	2.0	2.3	2.0	1.7	1.7
Government consumption	1.3	1.6	1.2	1.5	1.3
Gross fixed capital formation	3.5	3.0	3.8	4.3	3.9
Final domestic demand	2.2	2.3	2.2	2.2	2.1
Total domestic demand	2.2	2.2	2.2	2.2	2.1
Exports of goods and services	6.0	3.6	5.7	4.7	4.6
Imports of goods and services	6.2	4.8	4.9	4.6	4.7
Other indicators (growth rates, unless specified)					
Potential GDP	1.4	1.4	1.4	1.5	1.5
Output gap[2]	-2.1	-1.7	-0.5	0.3	0.9
Employment	1.2	1.7	1.4	1.3	0.9
Unemployment rate	9.5	8.6	7.7	7.1	6.8
GDP deflator	1.2	0.9	1.3	1.6	1.9
Consumer price index	0.0	0.3	1.8	1.8	1.9
Core consumer prices	0.9	0.9	1.2	1.4	1.9
Household saving ratio, net[3]	5.2	4.9	4.3	4.2	4.1
Current account balance[4]	2.1	2.1	2.6	2.7	2.8
General government fiscal balance[4]	-2.4	-1.7	-1.0	-0.8	-0.5
Underlying general government fiscal balance[2]	-1.3	-0.9	-0.7	-0.9	-0.9
Underlying general government primary fiscal balance[2]	0.6	0.9	1.0	0.7	0.7
General government gross debt (Maastricht)[4]	87.0	86.5	84.2	82.4	80.7
General government net debt[4]	67.5	68.5	64.9	63.1	61.2
Three-month money market rate, average	0.2	0.0	-0.1	0.0	0.3
Memorandum item					
Gross government debt[4]	105.1	106.0	102.2	100.2	98.2

1. European Union member countries that are also members of the OECD (22 countries).
2. As a percentage of potential GDP.
3. As a percentage of household disposable income.
4. As a percentage of GDP.

Source: OECD (2018), "OECD Economic Outlook No. 103", *OECD Economic Outlook: Statistics and Projections* (database).

Table 2. Projected real GDP growth rates in the European Union

Year-on-year percentage changes[1]

Year	2018	2019	Year	2018	2019
Member states:					
Austria	2.7	2.0	Latvia	4.1	3.6
Belgium	1.7	1.7	Lithuania	3.3	2.9
Czech Republic	3.7	3.2	Luxembourg	3.6	3.8
Denmark	1.7	1.9	Netherlands	3.3	2.9
Estonia	3.7	3.2	Poland	4.6	3.8
Finland	2.9	2.5	Portugal	2.2	2.2
France	1.9	1.9	Slovak Republic	4.0	4.5
Germany	2.1	2.1	Slovenia	5.0	3.9
Greece	2.0	2.3	Spain	2.8	2.4
Hungary	4.4	3.6	Sweden	2.8	2.2
Ireland	4.0	2.9	United Kingdom	1.4	1.3
Italy	1.4	1.1			
Aggregates:					
European Union	2.3	2.1	OECD	2.6	2.5

1. European Union member countries that are also members of the OECD (22 countries).
Source: OECD (2018), "OECD Economic Outlook No. 103", *OECD Economic Outlook: Statistics and Projections* (database).

Policy uncertainty remains high and could increase further. Brexit is not considered a major macro-economic risk for the EU as a whole, as discussed below, nonetheless, countries with the closest trade links to the United Kingdom could be severely impacted if the United Kingdom left the European Union without any trade agreement. An increase in trade protectionist measures or a sudden tightening of global financial conditions would negatively affect global demand and Europe's trade and investment. A too rapid tightening of monetary policy could weigh on the recovery in countries with high unemployment and negative output gaps. High debt countries may have difficulties coping with higher borrowing costs if monetary accommodation is rapidly reduced. On the upside, the cyclical recovery in world trade or stronger confidence generated by on-going momentum in solving euro area institutional weaknesses could lead to stronger than expected growth in Europe. The EU's economic prospects are also subject to medium-term risks, the problems and consequences of which are difficult to quantify in terms of risks to the projections (Table 3).

Table 3. Risks about the European Union economies' growth prospects

Risks	Possible outcome
EU disintegration	The worst of the euro area crisis has passed, but the UK is leaving the EU. Populist parties in favour of referendums on membership of the EU, the euro or both could gain power across the continent.
Rising protectionism in trade and investment	Many EU economies are dependent on unimpeded trade and investment flows. An increase in trade protectionism would negatively affect confidence, investment and jobs, and harm longer-term growth prospects.

Dealing with the UK departure from the EU

Risks on macroeconomic and financial stability are manageable

Brexit is not considered a major macro-economic risk for the EU. While a "hard" Brexit would generate a large negative shock to the UK economy reducing GDP by an estimated 3.3% by 2020, the impact on the EU as a whole will reduce GDP by around 1 percentage point by 2020 according to OECD estimates (Kierzenkowski et al. 2016). Nonetheless the impact will vary across member states and some countries, like Ireland will be more severely impacted (OECD, 2018c). The political agreement between the EU and UK to set up a 21-month transition period after Brexit is a positive step in defining the economic relationship during the transition period (Box 1 and OECD, 2017c). However, there are still areas where agreement needs to be reached for the transition period to take effect as part of the withdrawal agreement.

Box 1. Overview of key developments in the Brexit negotiations since early 2018

On 28 February 2018, the European Commission published the EU's proposal for a Withdrawal Agreement between the European Union and the United Kingdom that translates into legal terms the joint report from the negotiators of the European Union and the United Kingdom government from December 2017 on the first phase of negotiations.

On 19th March 2018, lead negotiators from the European Commission and the UK government presented a coloured version of the Draft Agreement on the withdrawal of the UK from the European Union. Text highlighted in green in the Draft Agreement corresponds to issues that were agreed at negotiators' level and will only be subject to technical legal revision, such as citizens' rights, the financial settlement, the transition period, some of the other separation issues. Notable details include:

- The transition period will last until 31 December 2020. During this period the UK will continue to apply fully the Union acquis, therefore effectively remaining in the EU single market and customs union.
- The rights of UK citizens living in EU countries and EU citizens living in the UK will be fully protected according to Union law. Individuals who relocate during the transition period will continue to have their rights protected after 2020 in line with the arrangements found in the Draft Withdrawal agreement.
- The UK will have the right to negotiate trade deals with other countries. However if a trade deal is agreed upon during the transition period, it cannot be implemented until after December 31, 2020.
- During the transition period, the UK is excluded from participation in the Union decision-making but may be exceptionally invited to attend, without voting rights, comitology or Commission expert groups or similar meetings where the UK is concerned or where it is necessary for the effective implementation of Union acquis. The UK will remain subject to the EU Common Fisheries Policy, and will have consultation rights regarding the setting of the 2020 fishing opportunities.
- The draft Agreement includes a Protocol providing for a "backstop" solution for the border between Ireland and Northern Ireland issue that the Joint Report called for. This states that in absence of any agreed upon solutions, Northern Ireland will maintain full alignment with the single market and customs rules following the end of the transition period.

- During transition, institutions of the European Union will have the Treaty powers in relation to UK as if it were a Member State. In particular the Court of Justice will have the same jurisdiction as now with respect to UK.

However, transitional arrangements are part of the Withdrawal Agreement. This means that there will be no legal certainty about the transition until the Withdrawal Agreement has been ratified by the EU and the UK.

On 23rd March 2018, the European Council adopted the guidelines on the framework for the future relationship with the UK after Brexit. The EU stated its determination to have as close as possible a partnership with the UK in the future. Such a partnership should cover trade and economic cooperation as well as other areas, in particular the fight against terrorism and international crime, as well as security, defence and foreign policy.

The Brexit process is now on-going in several strands:

1) Pursuit of negotiations and finalisation of the Withdrawal Agreement with the UK, which includes an agreement on transitional arrangements.

2) Scoping of the framework for the future relationship. This will be elaborated in a political declaration accompanying the Withdrawal Agreement.

3) Preparing EU institutions, Member States, and stakeholders for the UK becoming a third country, possibly without a ratified Withdrawal Agreement.

Sources: European Council (Art. 50) guidelines on the framework for the future EU-UK relationship; Draft Agreement on the withdrawal of the United Kingdom of Great Britain and Northern Ireland from the European Union and the European Atomic Energy Community; Text of the Draft Withdrawal Agreement.

Risks on financial stability for the EU as a whole from Brexit should be manageable if financial market participants are sufficiently prepared for various exit scenarios. The Financial Policy Committee at the Bank of England and the European Banking Authority have pointed to several risks of disruption to the end-users of financial services (BoE, 2018; EBA, 2017). Although a number of important financial services are provided from London, it is unlikely that the access of EU entities' to financial services will be restricted (ECB, 2017). EU entities will probably retain sufficient access to wholesale and retail financial services post-Brexit, as most financial services are currently already provided in the EU-27 and relevant UK entities can relocate part of their activities to other EU member states.

On the other hand, moving from a wholesale banking centred in London to a potentially more fragmented banking landscape might increase the cost of capital for households and non-financial corporations, as the economies of scale and scope of the London industry may diminish (ECB, 2017). In this respect, the EU should see the UK departure from the EU as an opportunity to advance faster on the Capital Markets Union, as argued in the Euro Area Survey. A fully developed Capital Markets Union would enhance both the domestic and cross-border supply of capital, especially to small and medium-sized enterprises, and facilitate risk-sharing in the European Union. Recent proposals by the Commission for more harmonised rules on distribution of investment funds, cross-border transactions in claims and regulatory treatment of covered bonds, as discussed in the Euro Area Survey, are a step in the right direction.

Brexit will have significant consequences for the EU's finances, as the UK is one of the biggest net payers to the EU budget. The consequences of Brexit on the 2014-2020

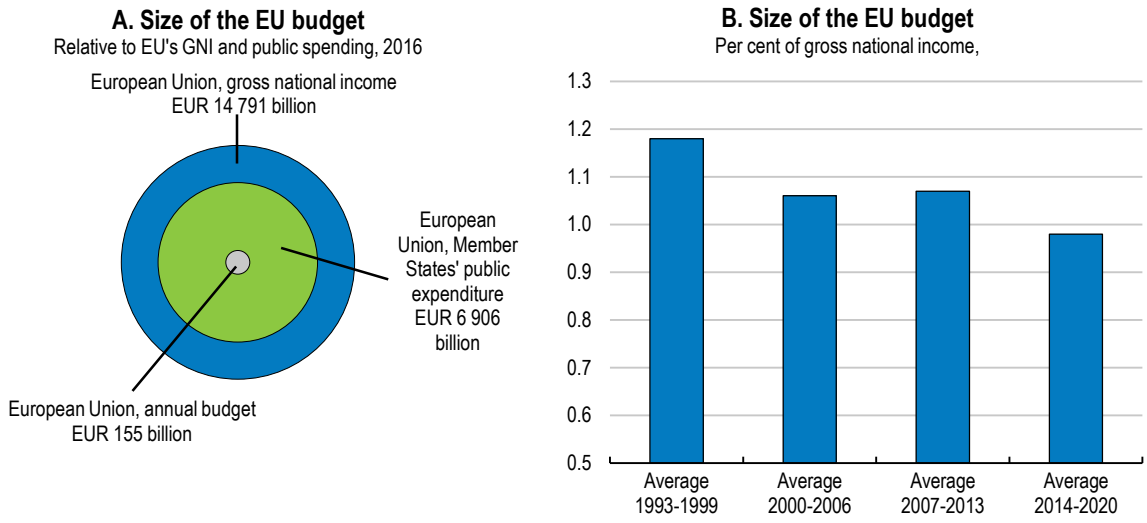
multiannual financial framework have been addressed by the UK commitment to pay its annual contribution until 2020, as well as outstanding commitments as at end-2020, which will be paid after 2020. However, from 2021 onwards the UK departure will likely lead to a permanent funding gap of about 7% or 10 billion Euros per year (EC, 2017a; Hass and Rubio, 2017).

Time is ripe for a reform of the EU budget

The negotiation of the next multiyear budgetary period to start in 2018 and the UK departure from the EU present an opportunity to reform the EU budget. The EU budget is already stretched and some spending had to be reduced in recent years to finance emerging needs (ECA, 2016). The entire EU budget accounts for approximatively 1% of the EU's annual GNI (Figure 12), and around 2% of EU public expenditure. In view of scarce resources, the EU budget should complement national budgets by focusing on EU policies with the highest potential for value added and where EU funding can lead to economies of scale, efficiency gains and generate cross-national externalities and benefits for the EU and its citizens. Examples of these include cross-border infrastructure projects, R&D spending, or to fight climate change.

In addition, new challenges need to be addressed. For instance, the recent migration crisis has showed that additional EU action will be needed to address internal, external security or external border control issues that are now only marginally financed by the common budget (EC, 2018a).

Figure 12. The EU budget is small and has declined over time



Source: European Commission.

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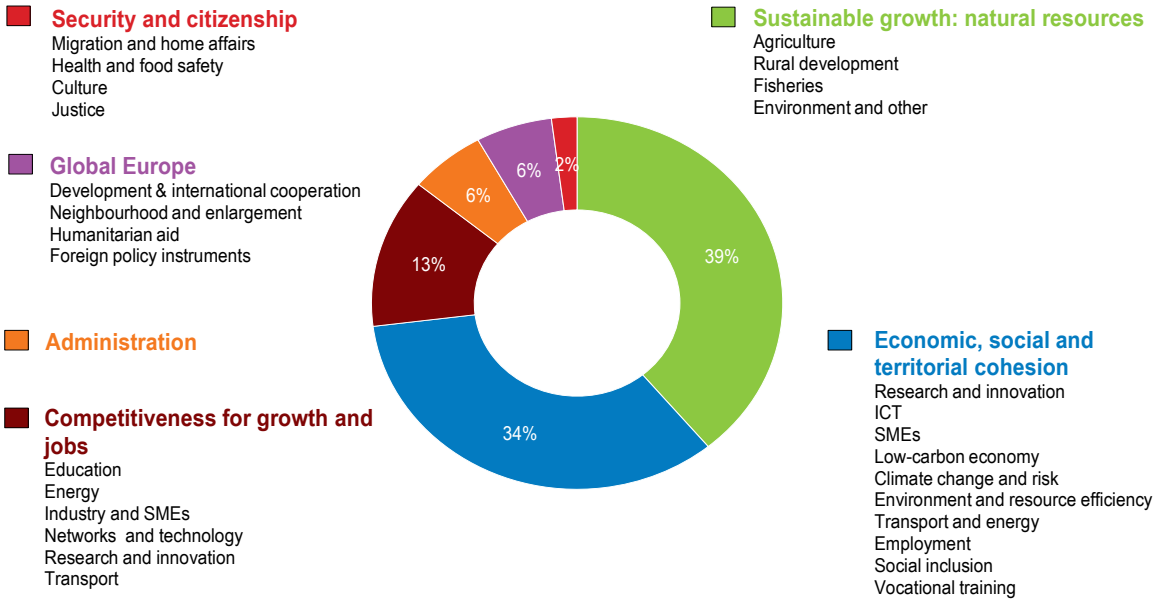
Reducing economic and social differences between member states and regions are also important challenges for the European Union and crucial for the long-term success of the EU project. A significant part of the EU budget (43.6%) already seeks such redistribution mainly through cohesion policy, which promotes economic convergence as well as social and territorial cohesion, and via the Common Agricultural Policy through support for rural development, accounting for around 24% of the CAP budget (Figure 13).

Figure 13. What does the EU budget finance?

2014-2020 multiannual financial framework



Source: European Commission.

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There is scope to make EU cohesion spending more redistributive. The bulk of cohesion support does go to poorer regions and poorer member states. But, relatively wealthier regions also receive significant cohesion support: 25% of the funds (90 billion Euros) over 2014-20 will go to regions with a GDP per capital above 75% of the EU-28 average. Although politically difficult, cohesion funding should be directed mostly to lagging regions with a GDP per capita of less than 75% of the EU average. Improving spending oversight and reducing bureaucracy, could also bring some savings and improve the effectiveness of cohesion policy, as discussed below. Moreover, the EU budget could become more inclusive by supporting better those left behind in the EU. The European Globalisation Fund needs to be improved and its scope broadened not only to help workers displaced by globalisation or an economic crisis, but also due to other reasons such as automation. Additional funding to support the career and mobility opportunities of less qualified workers, especially youth, through strengthened mobility programmes would also be helpful, as discussed below.

There is also scope to reform the Common Agricultural Policy (CAP). Reforms since the nineties have considerably reduced its weight in the EU budget (from 70% in the 1960s to 37% today) and improved the composition of support (OECD, 2017d). Payments that do not require production have gained weight, offering producers the flexibility to respond to market signals and make production choices independently from support. However, about 27% of the support to producers is linked to production and maintains prices above world levels. In addition, direct payments (about 70% of CAP spending) are still largely determined by historic entitlements and concentrated on large farms and land owners (EC, 2017c). In a recent evaluation of the CAP (OECD, 2017d), the OECD advises that to achieve long-term competitiveness and productivity gains, production based payments

need to be phased out. Direct support should be re-assessed and better targeted to the provision of European public goods such as environment and climate change and to facilitate the transition towards farming methods more resilient to climate risk. Agricultural reforms carried out in other countries, such as Australia, could provide useful insights.

Higher spending in R&D should be a priority for the future in a context where EU productivity is low and European research competes with other global players. However, research and development accounts only for about 13% of the EU budget and 10% of total public investment in research and innovation in the EU, despite of evidence of significant value added of EU spending compared to national R&D public spending. According to its interim evaluation, 83 % of Horizon 2020-funded projects would not have gone ahead without EU-level support (EC, 2017b). The budget for the post-2020 EU research and innovation programme should be significantly increased.

How to finance new priorities and fill in the UK gap in the EU budget?

Given the political difficulties in increasing member states contributions or on agreeing on new sources of funding, cutting spending in some areas to finance others might appear appealing. However, research suggests that financing the UK gap only via spending reductions would imply a significant cut in some of the EU's flagship programmes, such as eliminating the entire EU R&D funding (Horizon 2020) plus the fund for asylum, migration and integration (Hass and Rubio, 2017). This suggests that financing new priorities and filling the UK gap will require higher member states' contributions, finding new sources of revenue, reducing spending or a combination of these different options.

At present, about 70% of the budget is financed through member states contributions based on their income level (GNI), with the rest coming from contributions from national value added taxes and custom duties collected at EU external borders. EU countries have historically supported GNI-based contributions to finance the EU budget as it is seen as a fair burden-sharing system reflecting countries relative ability to pay. But, when account is taken of the special reductions ("rebates") that some of the largest net contributors (including the UK, Germany, the Netherlands, Sweden and Austria) have the budget is regressive (Monti et al. 2017). The withdrawal of the UK from the EU entails the end of the UK reduction. Eliminating the reductions for the other countries ("rebates on the rebate") would bring additional resources, and make the system more redistributive and, less complex and opaque.

Additional revenues from national taxes could complement member states GNI-based contributions, as proposed by the high level committee on own resources appointed by the Commission (Monti et al. 2017). Depending on its design, this could provide a tighter link between EU financed spending and those financing it (Monti et al. 2017). A first promising option to raise revenues from national taxes is reforming the current VAT-own resource system. The VAT already finances about 12% of the EU budget by levying a 0.3% rate on member states VAT bases, with member states VAT bases capped based on their GNIs to make the system less regressive. However, the system is very complex and non-transparent. National VAT bases are theoretically harmonised through difficult calculations to offset the impact of diverging rates and structures on national VAT bases. Moreover, the "rebates" make the system even more complex and non-transparent, as they imply reductions for some countries in their VAT contributions. Higher revenues and a less complex system could be achieved by applying a single EU rate to a broader harmonised VAT base on all goods, services and transactions, as proposed by the high

level committee. The Commission VAT Action Plan, which includes various measures to improve the operation of the VAT system and to fight fraud, could provide the necessary momentum for the reform. Further VAT reform could contribute to fight fraud and reduce cross-border administrative burdens for businesses. Annual estimates of cross-border VAT fraud account for 50 billion a year. Tackling this cross-border VAT fraud would not only broaden member states' VAT base but indirectly also VAT receipts paid to the EU budget.

Another new source of revenue could be an EU corporate income tax. The Commission has recently put forward a package to re-launch the common consolidated corporate tax base (CCCTB). While the initiative aims at developing a consolidated tax base, a share of the CCCTB could be transferred to the EU budget. Under the Commission current proposal, a constraint would be that participation is based on the voluntary registering of companies, except for large companies (Monti et al. 2017), which might reduce the size of country contributions to the EU budget.

Other alternatives include a carbon-based tax own resource and the proceeds from auctioning ETS permits (Monti, et al. 2016). At present six EU countries have a carbon tax in place (Denmark, Ireland, Finland, Sweden, France and Slovenia), however, rates and coverage differ between countries. A European carbon tax based on a single minimum rate for CO2 emissions to all sectors not covered by the EU ETS, as the Commission proposed in the context of the revision of the Energy Taxation Directive, could be an option to finance the EU budget. Using the proceeds from auctioning ETS permits to finance the EU budget would be another option; however, as proceeds are relatively small and unstable over time, they would need to be complemented with other revenues.

Finally, savings, although insufficient by themselves, could help. The Commission conducts mid-term spending reviews to assess the efficiency of EU budget programmes. But these are not comprehensive enough to identify spending inefficiencies. As recommended by the European Court of Auditors (ECA, 2016), a first step would be to carry out a comprehensive EU spending review to assess if the allocation of the EU budget reflects the EU strategic priorities, as well as assess performance and added value of the various programmes. Moreover, a streamlined, simplified approach to budget reporting, both ex-ante and ex-post, would help to improve public assurance and trust, as recommended by the OECD EU budget review (OECD, 2017e).

Regional divides need to be addressed more effectively to foster greater trust in the EU

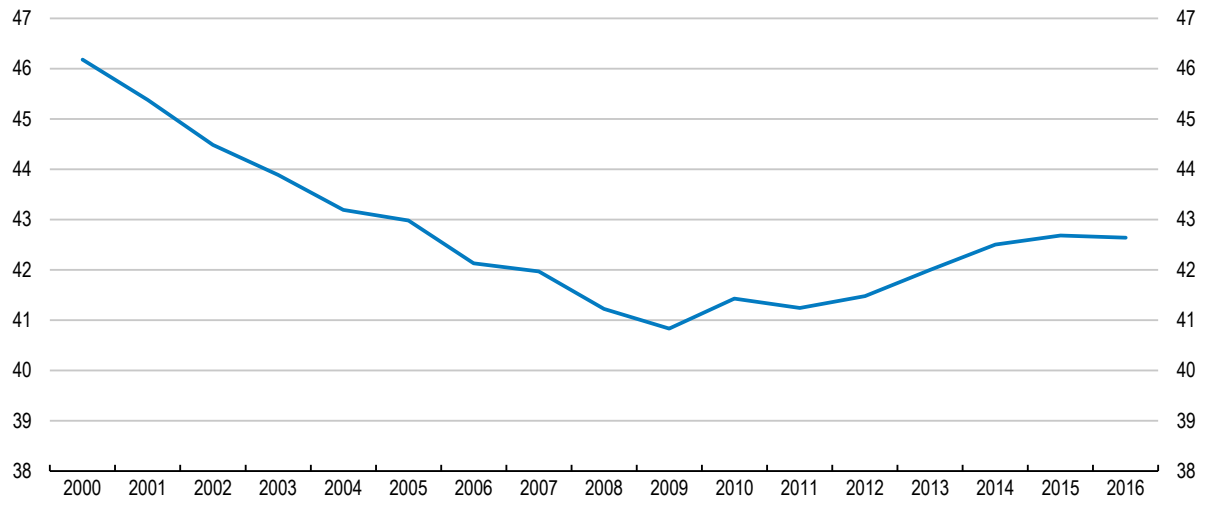
Evidence suggests that those who tend to be left behind, such as workers with low levels of education, are those who are less supportive of the European Union (Dustmann et al., 2017). This is particularly the case in some regions affected by on-going globalisation trends. For instance, votes for populist anti-European parties have grown in regions hard hit by import competition in the EU-15 (Colantone et al. 2016). The continuous improvement of labour market conditions across Europe should help to improve citizens' trust in the EU, as economic insecurity is an important source of people's concerns. However, the EU can play a better role in supporting those left behind by reforming cohesion policy to more effectively address regional disparities.

Reforming cohesion policy to make it more effective

The prime goal of cohesion policy is the reduction of regional income per capita disparities. The record of EU cohesion policy is, however, mixed: in the majority of EU countries regional GDP per capita disparities have declined over time and there is convergence both at the country and regional level, as shown in the thematic Chapter. However, progress on regional convergence came to a halt with the crisis and has not resumed since 2009 (Figure 14). This suggests there is scope for making cohesion spending more effective. However, cohesion policy is not a silver bullet. EU efforts to foster convergence via cohesion policy are only a complement to other factors affecting regional convergence. A more effective use of the funds must be accompanied by national policies to develop a favourable environment for investment and for human capital development.

Figure 14. Convergence in regional GDP per capita came to a halt with the crisis

Population-weighted coefficient of variation[1], %



1. The graph shows disparities in GDP per capita (in PPS) between NUTS-2 EU regions.
Source: European Commission (2018), DG for Regional and Urban Policy, calculations based on Eurostat data.

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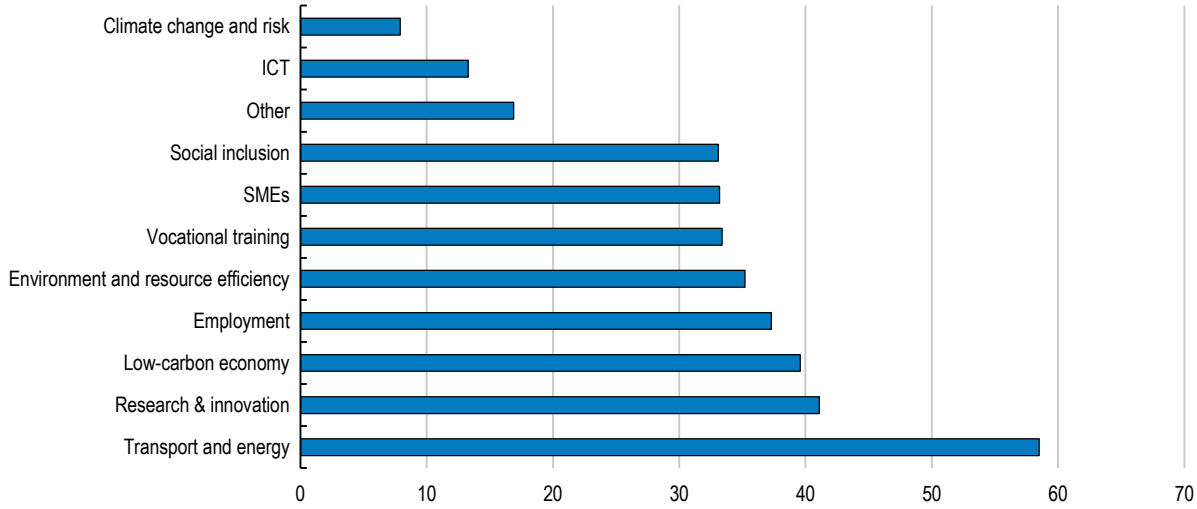
The next programming period, starting in 2020, is an opportunity to deeply reform cohesion policy. The goals of cohesion policy seem very ambitious: fostering economic convergence, facilitating integration, encouraging sustainable development (Figure 15). So many objectives risk reducing the effectiveness of cohesion policy, scattering resources and making evaluating its effectiveness very difficult. Cohesion spending should focus on items that will support higher sustainable growth, including human capital (education and training), innovation and infrastructure projects with clear spillovers across borders, such as transport, energy or digital projects.

Figure 15. What does cohesion policy finance?

2014-2020, in billion EUR



Source: European Commission.

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The Commission has introduced stronger focus on performance as of 2014 - including ex-ante conditions to access funding, performance targets to monitor progress, and tighter monitoring -, but the new performance tools are cumbersome and as a result member states are having difficulties to implement them. At the beginning of each programming period authorities need to set-up a performance framework, select indicators to monitor progress and establish clear, realistic and measurable milestones. Monitoring has also been strengthened: every year, countries have to report progress towards targets and submit detailed progress reports at the end of the funding cycle. The Commission has also set up a so-called performance reserve to reward projects and priorities that have achieved their milestones ahead of schedule.

Deeper changes are needed to further improve spending effectiveness. Member states co-finance cohesion spending to ensure additional investment. The problem is that such additionality is hard to enforce and verify and evidence suggests that there is crowding out of national public investment by EU structural funds (CPB, 2012). An additional problem is that there is too much focus on spending the funds, especially towards the end of the programming period, for fear of losing European money, and not enough on the quality of investment (ECA, 2017a). Returns on projects financed by cohesion policy can also be low as authorities consider the full-benefits of the project, but not the full costs. Higher co-financing rates are needed to reduce the risk that EU funds are spent on low value projects.

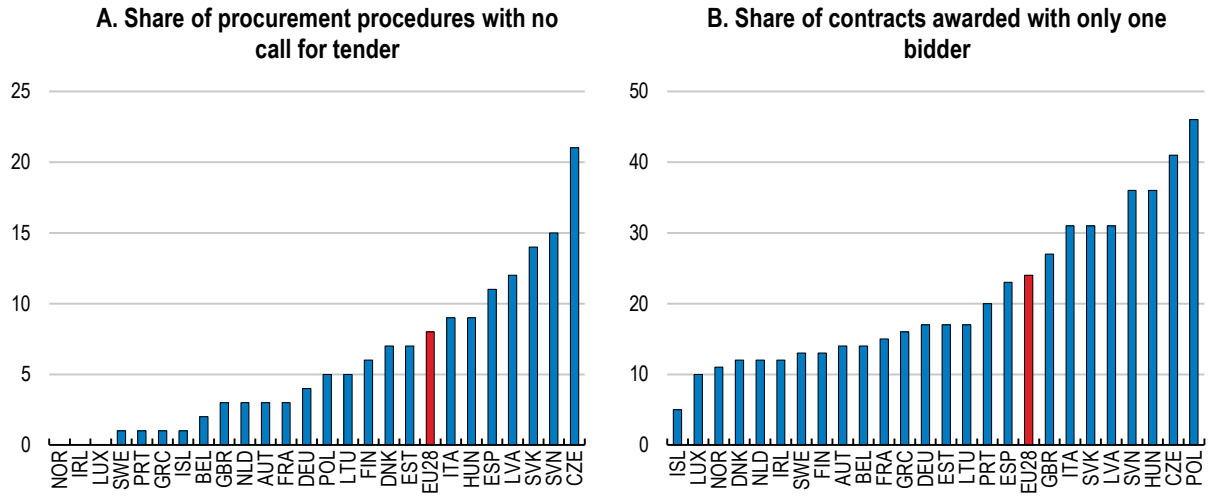
Reducing the administrative burden is necessary to make cohesion policy more effective. Merging the different structural funds into one fund, although difficult because it would require changing the EU treaties, would have important benefits as it would minimise duplication, reduce the scattering of resources, and facilitate synergies and planning. Perhaps more politically feasible in the medium-term would be to move towards “a single-rule book” with a common set of rules and definitions covering the five structural funds. Even if this would still require difficult coordination across several Commission

directorates, and the need to manage several funds, it could still help simplify administration and foster synergies.

More efforts are needed to improve control of how structural funds are spent. Cohesion policy has been marred by the highest implementation errors in the EU budget (ECA, 2014). Some of these errors are minor, but others involve serious breaches such as absence of fair competition in the awarding of projects or projects not awarded to the best bidders (ECA, 2017b). There is significant scope to improve public procurement practices in many countries (Figure 16). This should be coupled with simplification of the rules and greater use of e-government and e-procurement to help improve efficiency and reduce opportunities for abuse of power.

Figure 16. Competition in public procurement is weak in many countries

Per cent, 2016



Source: European Commission, Single Market Scoreboard, http://ec.europa.eu/internal_market/scoreboard/performance_per_policy_area/public_procurement/index_en.htm .

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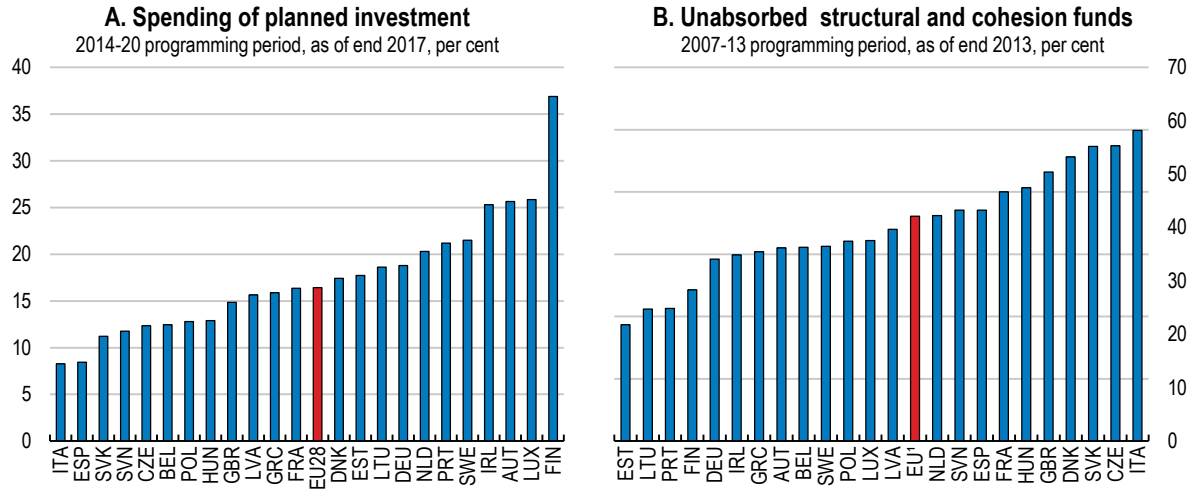
Fraud in the use of structural funds also occurs (EC, 2012a), and should be better addressed. In 2016, the European Court of Auditors estimated that 60% of the fraud affecting the EU budget was in the area of cohesion and fisheries spending, amounting to an estimated annual €391 million (ECA, 2017c). This is about 0.5% of total cohesion spending in 2016; however, given the relatively uncoordinated web of national and European checks and balances controlling cohesion policy it is hard to quantify how much fraud is truly going on. The European Parliament has backed the creation of a European Public Prosecutor Office to strengthen the fight against fraud in the use of EU funds. All member states should join the jurisdiction of the new European Public Prosecutor.

Slow starts of projects are a recurrent problem. By end 2017, only 16% of expenditure of that planned over 2014-2020 had been disbursed (Figure 17). Slow starts are problematic because they lead to a back-loading of investment and can result in poor project quality and higher risk of irregularities (OECD, 2016a; OECD, 2014). An earlier start of spending would allow for a smoother distribution of investment over the period, which would help create a more stable macroeconomic environment. The experience of Czech

Republic, Latvia, Lithuania, Slovak Republic, Slovenia and Hungary in 2015-2016 shows that uneven distribution of significant public investment over time makes macroeconomic management challenging in countries where the structural funds account for a significant part of investment (OECD, 2017a; Figure 18).

Figure 17. Slow use of structural funds is common



1. Unweighted average across 25 EU countries.

Source: European Commission (2018), Open Data Portal for the European Structural and Investment Funds (https://cohesiondata.ec.europa.eu/); European Commission (2014), "Analysis of the Budgetary Implementation of the Structural and Cohesion Funds in 2013".

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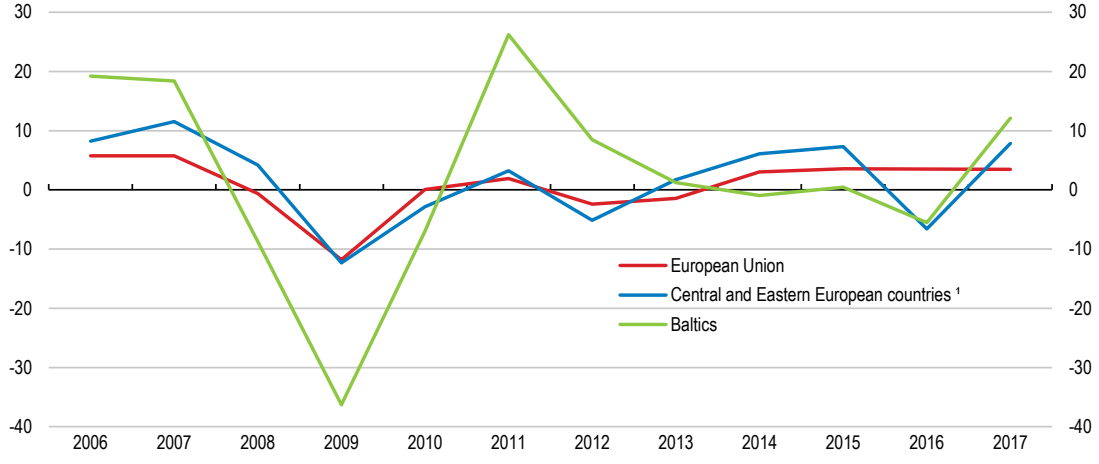
Figure 18. Macroeconomic management is challenging in countries receiving a substantial share of cohesion funding

Total gross fixed capital formation, annual percentage changes in volume



1. Simple average across the Czech and Slovak Republics, Hungary, Poland and Slovenia.

Source: Eurostat (2018), "GDP and Main Components", *Eurostat Database*.

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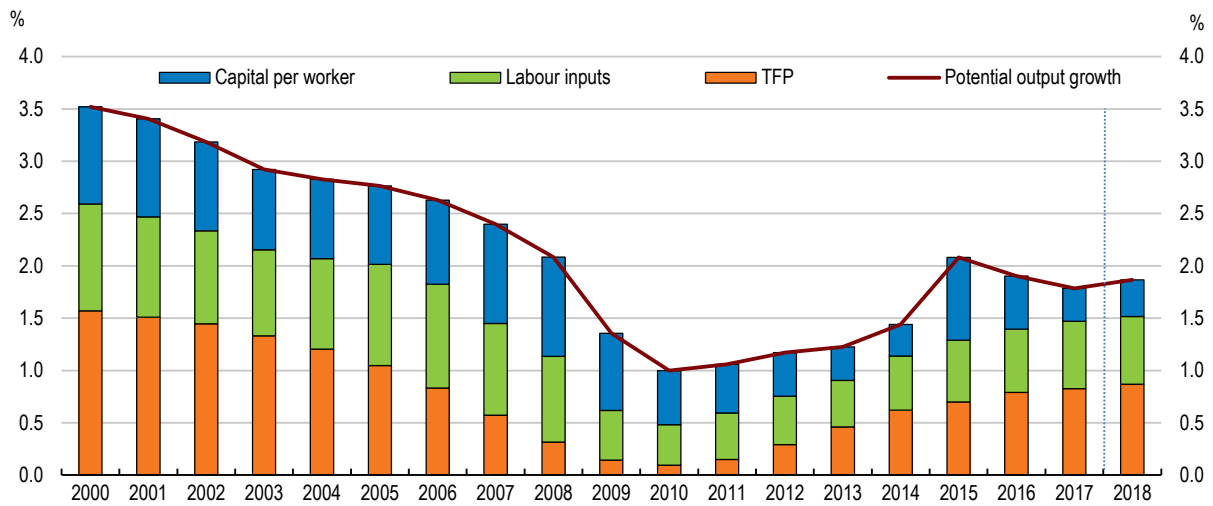
Several measures can be taken to reduce slow starts and smooth transitions between the structural funds financing periods. On the EU side, speeding up the negotiation of the programming period, which is often very slow and leads to delays in implementation, would help to reduce slow starts. There is also scope for the Commission to prepare guidance documents in a timelier manner and to simplify the carrying over of projects from one period to the next. On the national side, countries should streamline administrative procedures, strengthen administrative capacities to manage the funds, harmonise EU and national criteria, and improve the timeliness of project approval, building on existing country experiences to improve the absorption of structural funds, discussed in the thematic Chapter.

Deepening the single market to boost long-term growth

As every OECD European Union Survey since 2007 has noted (Table 4), one of the European Union's strongest tools to boost the EU's weak long-term growth (Figure 19) is the binding instruments that underpin the Single Market Project to dismantle barriers to the free movement of people, goods, services and capital. The single market is one of EU's greatest achievements. It eases intra-EU trade by reducing non-tariff barriers, facilitates capital flows and trade in services and grants full mobility to EU citizens. According to Commission estimates it generated a 2.1% increase in EU GDP in its first 15 years (EC, 2012b).

Figure 19. The EU has seen a significant decline in potential output growth



Note: European Union refers to OECD EU Member countries excluding Estonia, for which data covering the entire reference period are unavailable.
Source: OECD (2018), *OECD Economic Outlook: Statistics and Projections* (database).

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Yet, the single market remains incomplete, holding back the EU's economic performance, as discussed in the thematic Chapter. Goods are rather easily traded across borders. However, services, energy, transport, finance and digital markets are far from integrated. Labour mobility is also relatively low: only 3.9% of EU citizens in working age lived in 2016 in another member state.

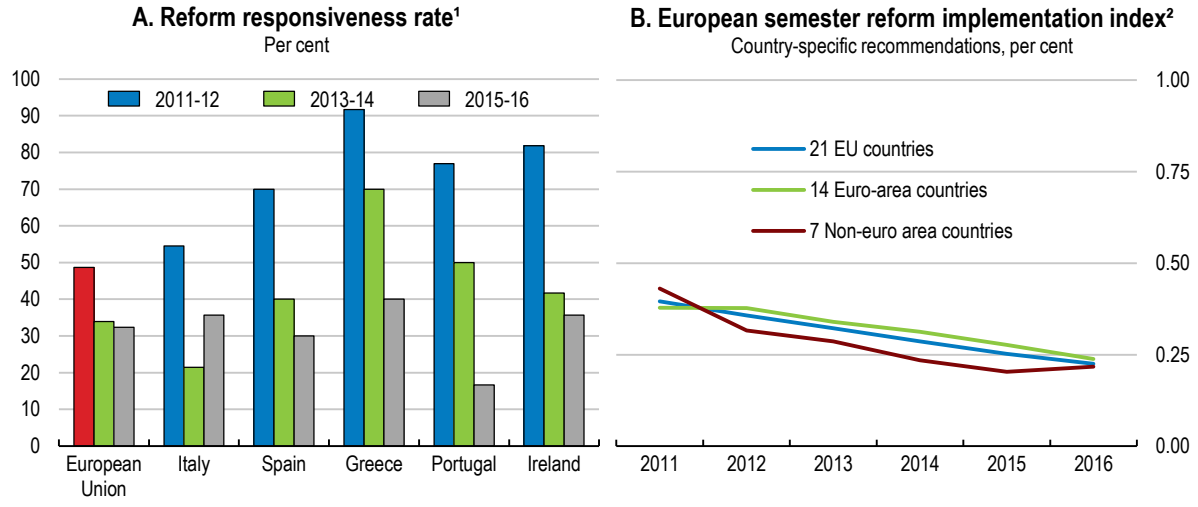
Renewed political commitment is needed to deepen the single market. When the Commission took office in 2014, it vowed to accelerate integration in energy, digital services and capital markets, but progress has been slow, despite significant potential benefits. For instance, fully implementing the current services directive could add 1.7% to EU GDP (European Commission, 2017b). An integrated digital market could in theory add about 8 billion Euros a year to EU GDP (European Commission, 2015a).

Table 4. Past OECD recommendations to deepen the Single Market

Recommendations in 2016 Economic Survey	Actions taken since 2016
Improve the quality of impact assessment of legislative proposals, notably amendments, and the quality of ex post evaluation of policies.	The Better Regulation Guidelines and the underlying toolbox were updated and strengthened in July 2017.
Prioritise the Trans-European transport and energy network projects to support the completion of the Single Market.	Four bottlenecks on TEN-T core network corridors have been removed in 2016, with additional 11, 25 and 53 expected in 2017, 2018 and 2019.
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.	The proposal of September 2016 for the European Electronic Communications Code defines how providers of networks and/or services can be regulated by national regulators.
Harmonise the rules for online purchases and reduce unjustified geographical discrimination of consumers.	In 2017, there were political agreements a) new legislation to address unjustified geoblocking and other forms of discrimination on the grounds of nationality, residence or establishment in the internal market and b) a legislative proposal on cross-border parcel delivery services to increase transparency of prices and improve regulatory oversight.

Actions at the EU level to deepen the single market should be accompanied by renewed national efforts to foster growth-enhancing reforms, in line with country-specific recommendations in OECD Economic Surveys and in Going for Growth. The reform momentum in EU countries has declined over time (Figure 20, Panel A), especially in countries most affected by the crises. The implementation record of the European Semester country-specific recommendations is also weak, and keeps deteriorating since the Semester was established in 2011 (Figure 20, Panel B). The momentum for reform is weakening at a time when renewed efforts are needed to boost productivity and long-term growth. OECD estimates suggest that reforms to raise productivity could increase GDP by as much as 0.7% up to 2023 in the EU alone (Figure 21). Reforms that stimulate innovation and enhance competition in product markets and reforms that improve the business environment and the quality of institutions could help also to foster economic resilience in the member states and the euro area as a whole (EC, 2017d).

Figure 20. Implementation of policy recommendations is weak



1. Number of actions taken as a percent of total country-specific policy recommendations.
2. The indicator is the ratio of the sum of scores to the total number divided by the number of recommendations; each country-specific recommendation is assigned a score ranging from 0 (no or limited progress) to 1 (full, substantial progress). The series displayed are unweighted averages across 21 EU countries for which data are available.

Source: OECD (2017), *Going for Growth 2017*, OECD Publishing, Paris; Bruegel and OECD based on European Parliament studies.

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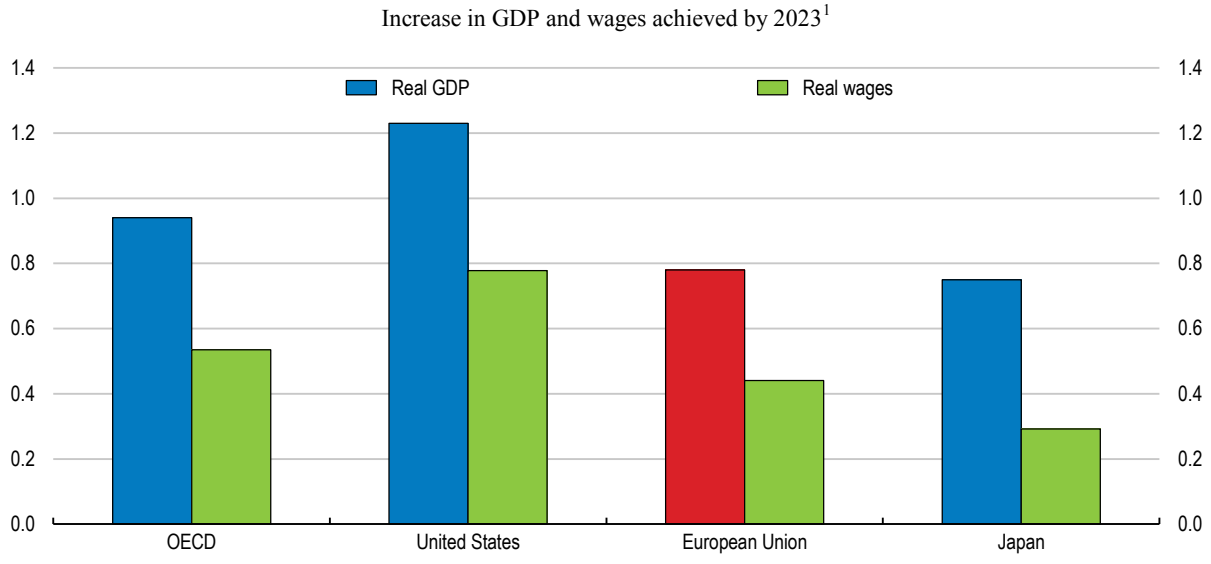
Figure 21. Gains from reforms raising productivity by 1% over 5 years



1. The scenario considers the effects of raising labour-augmenting technical progress by 0.2 percentage point per annum in all of the advanced economies for five years, beginning at end-2017, with the 1% higher level of technical progress being maintained permanently thereafter.

Source: Box 1.1. in OECD (2017), OECD Economic Outlook, Volume 2017 Issue 2, OECD Publishing, Paris; OECD calculations.

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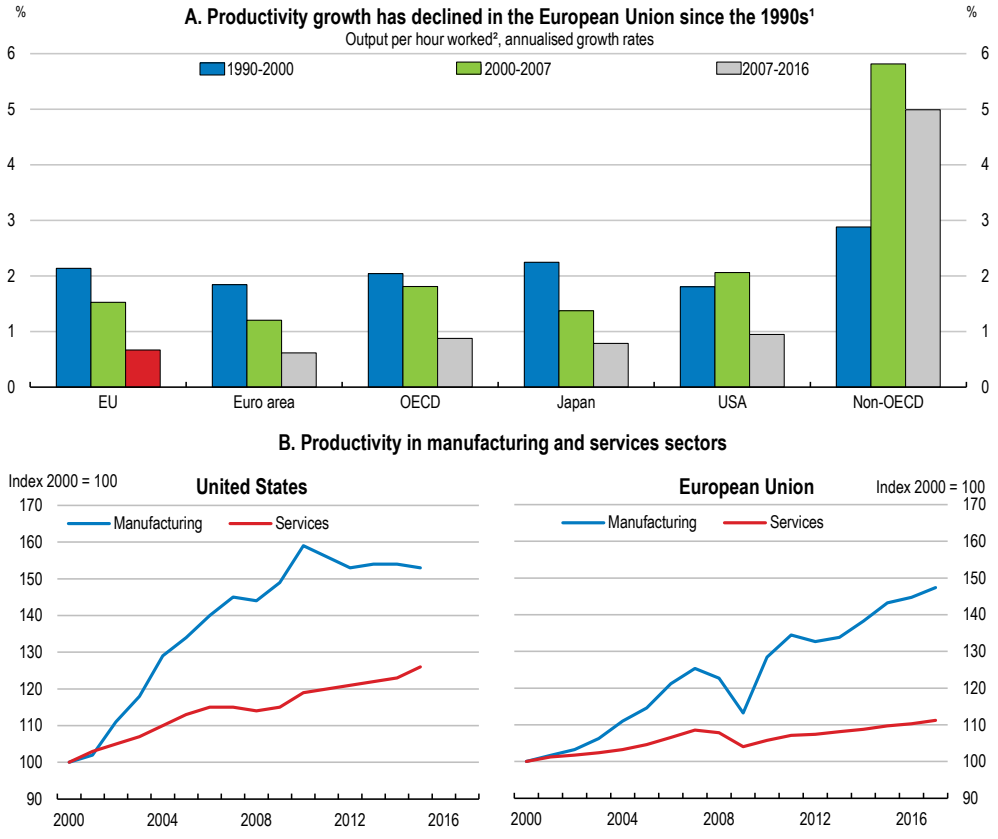
Services experience significant administrative and regulatory barriers when going cross-border

Service sectors are particularly fragmented. Cross-border services make up only 5% of EU GDP, despite accounting for 70% of EU GDP. This weighs on productivity. The EU productivity gap, increasing since the 1990s, is particularly wide in service sectors (Figure 22). At the firm level, there is an increasing productivity gap between leading frontier firms and the rest in both manufacturing and services as there is insufficient diffusion of technology and knowledge from frontier to lagging firms (Andrews et al. 2017; 2016). Businesses still experience many administrative and regulatory barriers when providing services in another member state, including high shareholder requirements, requirement for professionals to hold 100% of the voting rights in some countries or compulsory minimum tariffs for some professions (EC, 2017e). Administrative complexity and costs are also high, including lack of information about applicable rules, differences in rules and requirements among countries, complexity of procedures and formalities, lack of electronic procedures, unclear deadlines and multiple fees. These policy obstacles fall disproportionally on smaller firms.

Figure 22. The productivity gap is particularly large in services



1. The EU and the Euro area aggregates refer solely to Member States that are OECD countries. Non-OECD is Argentina, Brazil, China, Colombia, India, Indonesia, Latvia, Lithuania, Russia, South Africa and Saudi Arabia. EU, Euro area, OECD and non-OECD are aggregated using GDP PPP weights. Data for several countries begin between 1991 and 1995, not in 1990.
2. Productivity is measured as output per employee for Non-OECD countries.

Source: OECD estimations using OECD National Accounts database; OECD Productivity database; International Labour Organisation database.

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To further reduce barriers, the Commission launched a new services package in January 2017 that aims at facilitating the mobility of professionals and streamline cross-border administrative procedures in construction and business services (e.g. accounting, tax advice, architecture, engineering, IT) (Table 5). One of the key measures proposed was a new services e-card to help reducing information asymmetries and eliminate the need for multiple requests of information to facilitate more firms go abroad. E-cards were intended to facilitate the temporary provision of services across borders and the set-up of agencies, branches and offices, where administrative complexity and legal uncertainty is still an important challenge, as recommended in the 2016 Survey. However, the e-card proposals in their current form are unlikely to be approved in the EU legislative process. A solution should be found to reduce barriers in the business services sector by simplifying procedures for self-employed and companies to complete the administrative formalities to establish and provide cross-border services.

There is significant scope for improving the functioning of the European retail sector. Retailers face persisting barriers to market entry including burdensome and complex authorisation processes, restrictive requirements linked to the size and location of shops, as well as operational restrictions, including shop opening hours or rules on promotions and discounts. As a result, evidence by the Commission shows that, as a result, consumer prices are high, and product innovation and labour productivity growth are low (EC, 2015a). The Commission has launched an initiative in May on April 19th, which consists of best practices to guide member states' reforms of the regulatory environment for retail. Such efforts are welcome. Close monitoring by the Commission of the level of regulatory restrictiveness in the retail sector and its economic impacts should be used to measure member states' reform efforts.

An integrated EU energy market would be good for consumers, energy security and the environment

Despite progress made in recent years, much remains to be done to achieve a fully-integrated internal energy market. The European energy market is still too fragmented; high market concentration and weak competition remain an issue, infrastructure is outdated in some areas, investment is insufficient and final energy prices are high for citizens and businesses (IEA, 2014; OECD, 2016b). Trading of electricity across borders has increased markedly since the 1990s and, in recent years, average prices have fallen and some of the largest divergences between countries narrowed. But there remain significant price divergences across countries, in part because of lack of sufficient cross-border interconnection capacity. The economic losses due to these price divergences are substantial, amounting to around €1.1 billion annually by some estimates; incumbent electricity producers benefit particularly from the reduced competition resulting from the lack of adequate connectivity. A well interconnected grid is also crucial to accommodate increasing levels of renewables in a cost-effective way and help meet the EU climate goals. An integrated electricity market would increase the potential for renewables to be supplied beyond national borders contributing to the shift towards a low-carbon economy and to fight climate change.

To further integrate energy markets, investment needs are substantial. The Commission estimates that some EUR 200 billion are needed up to 2020 to build the necessary infrastructure to adequately interconnect all EU countries, about half of it for electricity projects alone out of which 35 billion are needed for interconnections (EC, 2015b). As recommended in the 2016 Survey (Table 4), EU funding, including through the structural funds and the Investment Plan for Europe (so-called "Juncker plan"), should prioritize

trans-European energy networks to fill some of those investment gaps with a positive cost-benefit analysis outcome.

But low investment is not the only constraint on cross-border trade in electricity. Security of supply concerns reduces efficiency and cross-border trade. National operators tend to keep higher reserve capacity margins on cross-border lines than they do on domestic ones, as insurance against occasional unexpected losses of power or surges in demand, reducing cross-border energy supply. The Commission's proposed modification to the regulatory framework for the internal electricity market would help minimise regulatory barriers by explicitly requiring national regulators to treat cross-border links in the same way as the domestic equivalent in market planning. A review of regulations to try to minimize any inadvertent regulatory barriers to cross-border trade would also be welcome. Encouraging regional solutions on power system operation and trade would also help to reduce energy costs and ensure security of supply and the "Clean Energy for Europe" package should provide solutions and practical guidance to revitalise regional cooperation. To make best use of developing technologies (which will require investment in physical infrastructure but also in software), "integrated resource planning" is needed, where the development of generating capacity, the distribution network and market design are all considered together. To enhance trade between member countries, integrated resource planning needs to take place across the whole network, reaching across national boundaries. The ten year investment plans, updated every two years, by the European Network of Transmission System Operators employ such methods and national system operators have to follow up with their own plans.

Deepening the digital single market

The EU is still lagging behind in the uptake and use of digital technologies and this is holding down Europe's growth potential. While some countries like Sweden and Finland are leading on the global stage, the ICT sector value added is significantly smaller in most European countries, and some large economies are trailing behind the EU average. Less than 30% of European businesses in important manufacturing sectors like automotive and mechanical engineering are exploiting digital technologies (EC, 2017f). Business uptake of digital technologies could be improved in many EU countries, especially among smaller companies (Figure 23). This implies an untapped potential to allow firms to capture customers' demand more accurately and reduce failures in the innovation process.

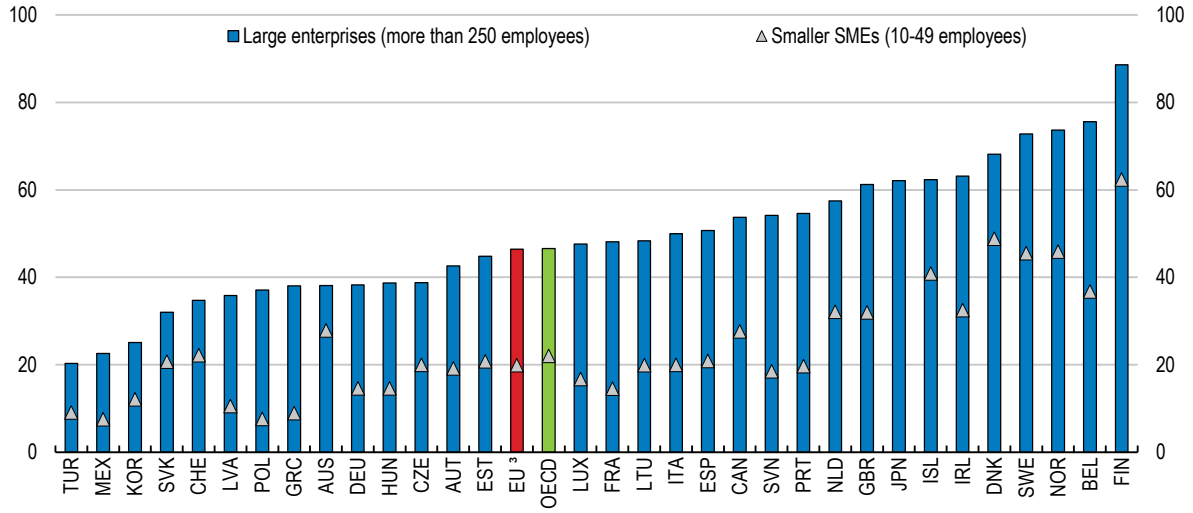
The EU and member states have made deepening the digital single market a priority, aiming to establish common rules for online purchases, integrate telecom regulations, improve postal services and reduce the burden on businesses caused by diverging VAT regimes, among others. Important achievements have been made including improved cross-border portability of online content services and the removal of roaming charges and geo blocking (Table 4). But much remains to be done to create a unified digital market. Other important legislative measures such as modernisation of copyright rules, taxation of e-commerce, cyber-security and addressing unfair contractual clauses and trading practices identified in platform-to-business (P2B) relations are still in the legislative process (Table 4). Moreover, access to proper funding is a critical barrier to the development of digital start-ups. Further efforts to develop the Capital Markets Union, as discussed in the Euro Area Survey would enhance both the domestic and cross-border supply of capital, especially to small and medium-sized enterprises.

High quality network infrastructure is the backbone of the digital economy. However, some member states have weak digital infrastructure, as evidenced by slow average internet connection speed (Figure 24). Digitalisation can facilitate the diffusion of new

technologies and boost productivity by enhancing efficiency in production and administration.

Figure 23. Business uptake of digital technologies could be improved in many firms, especially among smaller ones

Enterprises using cloud computing services[1] as a percentage of all enterprises, 2017[2]



1. Cloud computing refers to ICT services used over the Internet as a set of computing resources to access software, computing power, storage capacity and so on. Data refer to manufacturing and non-financial market services enterprises with ten or more persons employed.
2. Or latest available year; 2016 for the EU and the OECD average.
3. Unweighted average across European Union member countries that are also members of the OECD (22 countries) and Lithuania.

Source: OECD (2018), *ICT Access and Usage by Businesses* (database).

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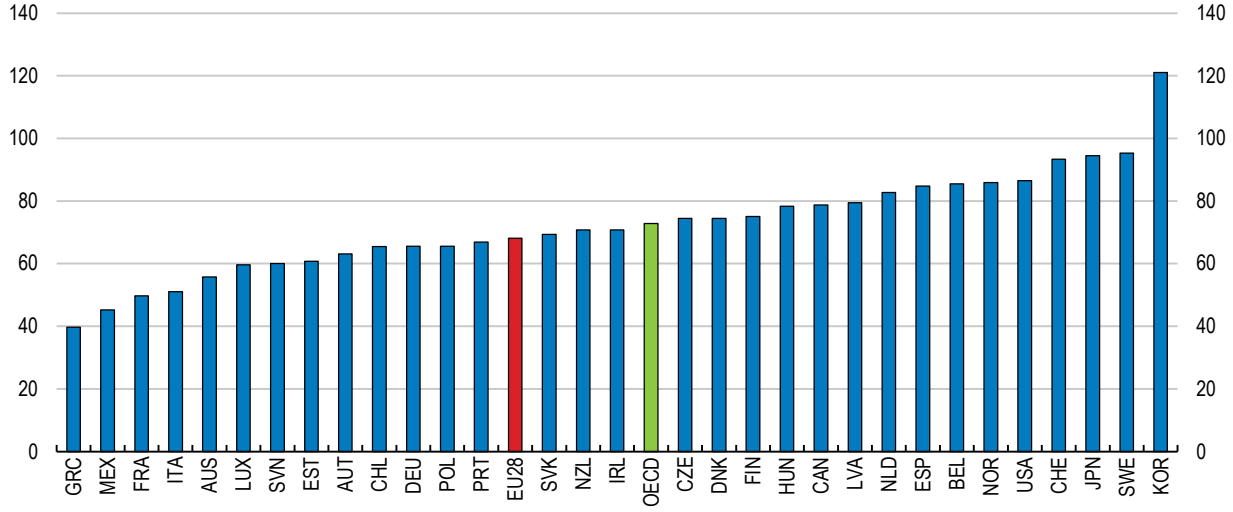
Figure 24. The internet connection speed is still relatively modest in some countries

Akamai's average peak connection speed in Mbps, Q1 2017



Source: Akamai (2017), "Akamai's state of the Internet report: Q1 2017 report", https://www.akamai.com .

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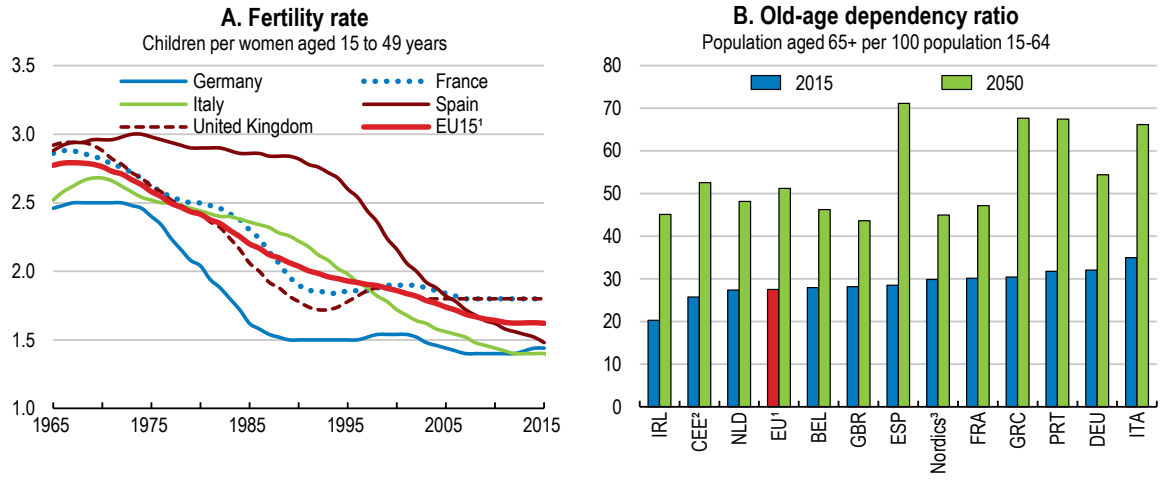
This situation reflects years of low investment in digital infrastructure, and spending remains low (EIB, 2017). The EU supports investments in connectivity through the European Regional Development fund, the Connecting Europe Facility, the Juncker plan and other tools. Such financing can contribute to alleviate the financing gap by easing access to credit and leveraging support for high risk projects. The Commission has also proposed the revision of the regulatory framework for electronic communication markets to provide, among other aims, greater incentives for infrastructure investments in very high capacity networks, especially in less viable areas. The Commission proposal requires national regulators to refrain from imposing regulation on dominant operators regarding new network elements when they offer a possibility for other operators to invest together in new high capacity networks and provided that pre-defined conditions for such co-investment offer are met. However, the body of European regulators for electronic communications (BEREC, 2017) has warned that such co-investments can lead to anti-competitive coordinated behaviours among operators and advised that to exempt co-investment projects from regulation a case-by-case in depth assessment of competitive dynamics would be advisable. The Council and the European Parliament have provided amendments to the Commission's proposal, reflecting their respective views on the rules under which regulatory incentives should be granted. The legislative process is still on-going.

Ensuring that everyone has the right skills for an increasingly digital and globalised world is essential to promote inclusive labour markets and to spur innovation, productivity and growth. At the moment, a shortage of people with the right digital skills is an important bottleneck to greater digitalisation. Close to half of the EU population have insufficient digital skills (Rute, 2017). The Commission is monitoring and forecasting supply and demand of IT professionals in Europe and supporting the development of new curriculum guidelines for schools and universities. The EU launched in June 2016 a Skills Agenda for Europe that also aims at improving digital skills. These efforts are welcome and should be stepped up by establishing common definitions of digital skill needs. The EU could also help member states by developing data tools to monitor skills gaps.

Strengthening the labour market through greater labour mobility and a better EU-level immigration policy

Some central European countries are already facing labour shortages and many businesses see labour shortages as an important constraint to further investment. Now is the time to build on national reforms to increase labour force participation of women, youth and older workers to improve the labour market opportunities of these groups and help alleviate labour shortages. Moreover Europe is rapidly ageing (Figure 25). Immigration has played a role in attenuating the effects of ageing and has helped to fill in labour shortages in the last two decades (EC-OECD, 2014) and it is likely to continue doing so in the future, but immigration alone cannot compensate for Europe's rising age profile. Europe can do better at fostering labour mobility across Europe, attracting high skilled migrants and integrating refugees (Table 5).

Figure 25. Europe is rapidly ageing



1. Unweighted average.
2. Eastern European Member States, including Bulgaria, Croatia, Hungary, Poland, Romania, Slovenia and the Czech and Slovak Republics; unweighted average.
3. Refers to Denmark, Finland, Sweden and the Baltic States; unweighted average.

Source: OECD (2018), *OECD Health Statistics* (database); United Nations (2017), World Population Prospects, 2017 Revision.

StatLink http://dx.doi.org/10.1787/888933748002

Table 5. Past OECD recommendations on labour market mobility and integration of migrants

Recommendations in 2016 Economic Survey	Actions taken since 2016
Reduce the administrative burden associated with recognition of professional qualifications by using electronic procedures such as the European Professional Card.	In 2017, the European Commission presented a communication on reform recommendations for regulation in professional services addressed to each member state, a proposal on a proportionality test before adoption of new regulation of professions, and a proposal for a European services e-card simplifying administrative formalities required to provide services in another Member State. The Commission proposed establishing a single digital gateway to provide information, procedures, assistance and problem solving services.
Legislate effective portability of supplementary pension rights.	EU member states have been transposing Directive 2014/50/EU, with a deadline of 21 May 2018.
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.	In June 2016, the Commission proposed a revision of the EU Blue Card Directive to harmonise conditions, procedures and rights.
Strengthen joint protection of external borders.	The European Border and Coast Guard was established in October 2016.
Speed up administrative decisions on asylum applications and ease labour market access for recognised refugees.	In July 2016, the Commission presented a second package of legislative proposals to complete the reform of the Common European Asylum System.

Fostering intra-EU mobility whilst respecting fair competition and workers' rights

While growing steadily, intra-EU mobility is still relatively weak owing to linguistic and cultural differences as well as policy barriers such as difficulties in having professional qualifications recognised. Migration between EU countries stood at 3.9% of the EU

working age population in 2016 (about 11.8 million people), up from 1.6% in 2004, though is still below inter-state mobility in the US or other federal systems (OECD, 2016b). Moreover, during the crisis, while labour mobility increased in the EU, its shock-absorption role remained modest especially in the euro area (Jauer et al. 2014). Migration flows directed towards the UK and Germany increased, as a result of significant outflows from many Eastern European countries, while outflows from countries suffering deep economic stress remained modest compared to their record-high unemployment rates.

The complexity and heterogeneity of the migration and integration patterns of highly qualified intra-EU immigrants make it difficult to identify brain drain and gain processes within the EU (Schellinger, 2017). On the one hand, outflows of highly-skilled workers, if permanent and of large scale, can lead to skilled labour shortages in the sending countries, weakening productivity and hurting growth. On the other hand, sending countries may benefit from increased remittances or transnational networks (Chiswick, 2005), citizens' strengthened incentives to invest in human capital (Beine et al., 2008) or improved domestic labour allocation (Kaczmarczyk, 2015). Moreover, mobile workers, especially young ones, may return to their home country later, bringing new experience and new skills, acquired in the host country.

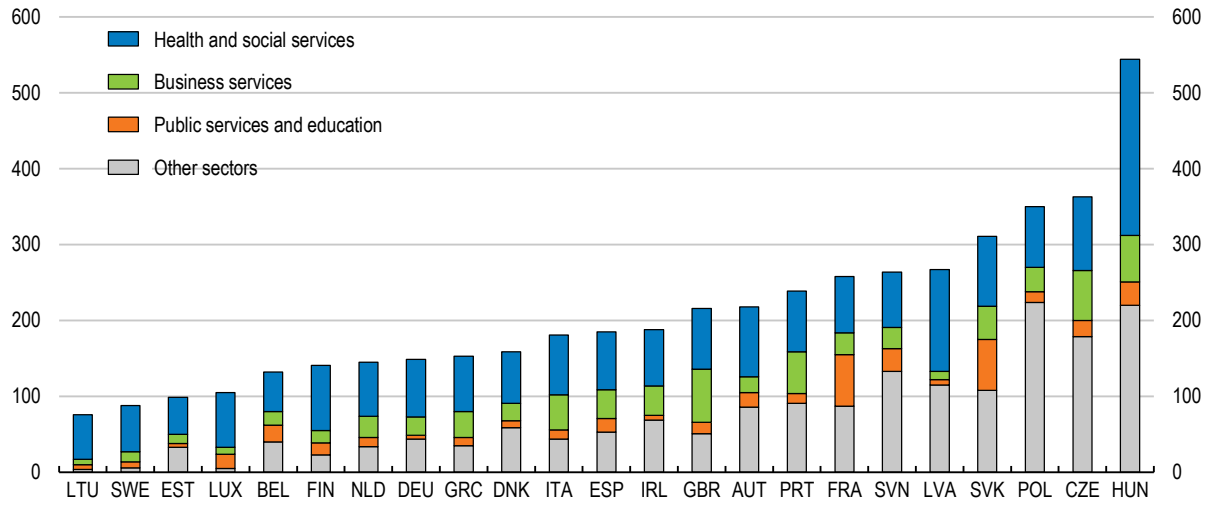
To mitigate the adverse effects of international mobility on their economies, sending countries could create an environment that encourages potential mobile workers to stay and that promotes their return. Beyond increasing investment in education and innovation to create better jobs, sending countries could facilitate the validation of experiences and skills acquired abroad and engage more actively with so-called "diasporas" to advertise domestic business and job opportunities (OECD, 2016c; OECD, 2018e). By taking further steps to deepen the single market and a more effective use of cohesion funds, the EU can also contribute to foster growth and convergence in sending countries which could help to attract back mobile workers.

Language seems to be the most important barrier to intra-EU mobility (European Commission, 2010). Evidence suggests that experiences abroad enhance students' career opportunities (Alfranseder et al., 2012), through improved knowledge of foreign languages, acquisition of soft skills, or increased probability to pursue doctoral studies (Grotheer et al., 2012). The 2014-2020 Erasmus+ programme has a budget of EUR 14.7 billion (around 1.3% of the EU budget), which can only offer learning mobility opportunities to less than 4% of young people living in Europe (EC, 2018). Cultural exchange programmes including the Erasmus + should be expanded to further facilitate mobility. To make mobility opportunities more inclusive, the successor of the current Erasmus+ programme could expand in particular its school and VET related parts and include targeted actions for disadvantaged learners.

Better recognising the qualification of learners and skilled movers would also help to enhance mobility. Qualification and training requirements to access regulated professions vary widely across countries and the recognition of qualifications is often made on a case-by-case basis, favouring uncertainty. Increased harmonisation of professions' curricula at the EU level beyond the seven professions currently covered could help make recognition of qualifications more automatic. The recently introduced electronic European Professional Card that ensures the recognition of professional qualifications via digitally-secured information exchanges between authorities should be equally generalised. Further reducing the high barriers to access regulated professions, whose number remains high, in many countries (Figure 26), could further support mobility, as well as long-term productivity growth.

Figure 26. In many EU countries the number of regulated professions is high

Number of regulated professions by main sector, 2016



Source: European Commission (2017), Regulated Professions Database.

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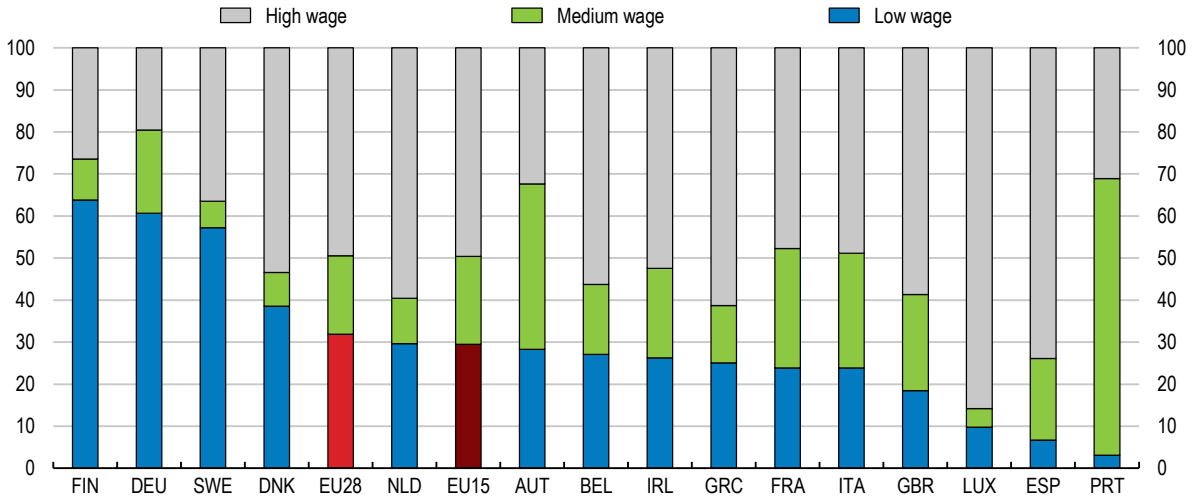
Persisting differences in the principles and generosity of national social security systems still complicate migration (Meyer et al., 2013). Strengthened mobility incentives require more harmonised social security systems. While the EU has no competence to harmonise the social security systems, the EU has rules in place to coordinate national systems to make sure people do not lose their social security rights when moving to another member state. Improvements in the portability of pension rights as well as the recent Commission proposal to extend the exportability of unemployment benefits from three to six months or make the country of last employment responsible for paying cross-border workers' benefits (instead of the country of residence) have contributed to ease EU-movers' concerns about their social rights. Moreover, the Electronic Exchange of Social Security Information (EESSI), a secured digital platform linking EU social security institutions – at national, regional and local levels – to be implemented by all participating countries by mid-2019, will allow for a quicker, easier and secure exchange of social security information throughout the EU, thus facilitating administrative processes. Citizens who have lived and worked in several of the participating countries will see their social security benefits calculated quicker and more efficiently. The platform, if backed by single European social security and business registration numbers, could also effectively contribute to ease administrative burdens and improve cross-border monitoring and surveillance (Aussilloux et al., 2017).

Having grown by more than 40% since 2010 (Pacolet and De Wispelaere, 2016), workers who are employed in one member state and are sent by their employer temporarily to another member state (posted workers) have become a sensitive political issue, despite accounting for less than 1% of total EU employment in 2015. Their strong concentration in labour-intensive sectors (construction, manufacturing as well as health, education and professional services), coupled with significant wage differences between local and posted workers of up to 50% in some sectors, have led to growing fears of wage and

social dumping (FGB, 2016; Houwerzijl, 2013), despite the fact that only a quarter of posted workers in the EU-15 comes from low-wage countries (Figure 27).

Figure 27. Only a quarter of posted workers in the EU15 come from lower-wage countries

EU15 countries receiving posted workers by wage levels in sending countries[1], 2016, per cent



1. EU28 countries sending posted workers in the EU15 are included in the high, medium or low wage group if, in year 2012, their average wage was above, around or less than half of the EU average, respectively. High-wage countries include Austria, Belgium, Denmark, Finland, France, Germany, Ireland, Italy, Luxembourg, the Netherlands and Sweden. Medium wage countries are: Greece, Portugal, Slovenia and Spain. Low wage countries include: Bulgaria, Croatia, Czech Republic, Estonia, Hungary, Latvia, Lithuania, Poland, Romania and the Slovak Republic. Data on the destination of postings from the UK are not available.
Source: European Commission.

StatLink http://dx.doi.org/10.1787/888933748040

To ease these concerns, on 19th March 2018, the Commission, the Council and the European Parliament provisionally agreed new rules revising a 1996 directive and requiring that posted workers become subject to full-blown host country's labour laws when their posting exceeds 12 months (extendable up to 18 months) and that they have the same working and salary conditions as local workers from day one. Though still pending final approval by the European Parliament and Council, these steps to address concerns that workers are treated fairly while not creating obstacles to the free movement of services are welcome. However, they could prove of limited effectiveness, insofar as posted workers' remain affiliated to their home social security system (Richard, 2016) and there are significant cross-country differences in labour taxes. Moreover, in international transport, which is one of the areas where wage gaps are most significant, the posting directive is only partially applied in practice, pending the approval of an EU transport legislation, currently under discussion.

Better protecting mobile workers' rights requires more effectively coordinated cross-border policies. Differences in wages between posted workers and other workers are limited to some sectors and countries, but methods to circumvent the law, like "letter-box" companies (firms with no or very little activity at the place where they are established) and "bogus" self-employment (individuals working de facto as employees but registered as self-employed), are increasingly widespread, creating tax revenue losses

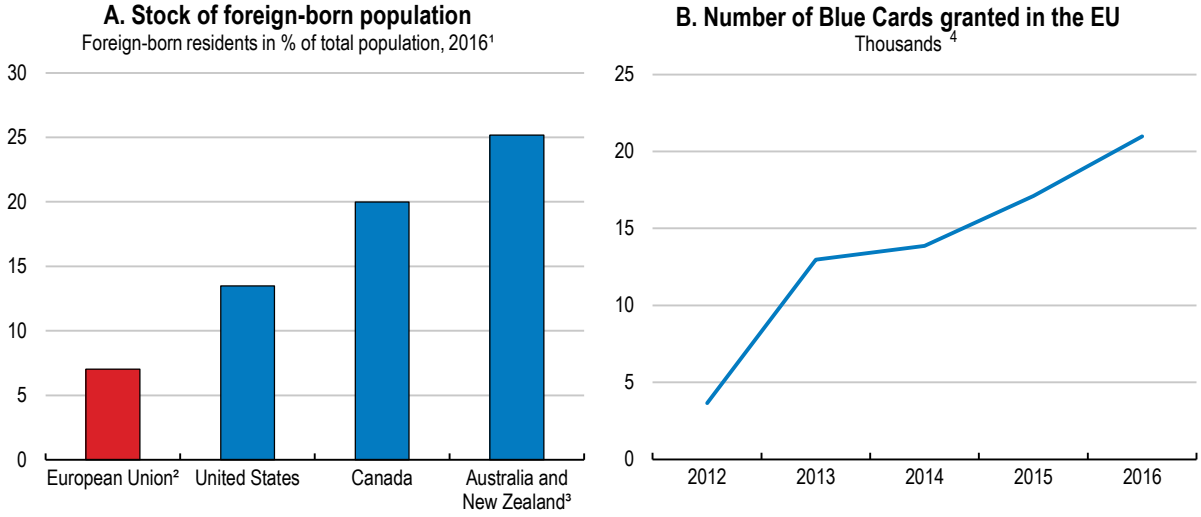
and possibly abuses of workers' rights (Wickham and Bobek, 2016). To strengthen transnational coordination in the fight against fraud, a 2014 EU directive has clarified and enhanced administrative cooperation procedures and improved tools for controlling the lawful nature of postings and hiring businesses (Cremers, 2016). In addition, deadlines to respond to cross-border requests for information have been significantly shortened. Although welcome, these measures disregard the impact the likely surge in cross-border information requests and infringement procedures will have on the already understaffed national labour inspectorates (Walters, 2016). At the national level, strengthening national labour inspectorates would help. At the EU level, a recent proposal to set up a European Labour Authority to better coordinate the design and organisation of joint cross-border labour, social security and tax control and monitoring activities could boost the effectiveness of transnational efforts against labour fraud and undeclared work.

A better EU approach to immigration

The EU is underachieving on the global competition for talent (Figure 28, Panel A; OECD, 2016d). One key problem is that labour market and migration regulations are different in each member state. The Blue Card, an EU-wide scheme, allowing high skilled non-EU citizens to work and live in any EU country (excluding Denmark, Ireland and the UK), was designed to make the EU attractive to skilled migrants by offering common admission conditions and set of rights for highly skilled foreigners to live and work in the EU – including provisions for intra-EU mobility and better long-term residence rights. However, the EU Blue Card has proven to be insufficiently attractive, with only a limited number of permits issued (Figure 28, Panel B). Restrictive admission conditions and different rules, conditions and procedures across the EU have limited the use of the scheme (EC, 2016). As recommended in the 2016 Survey, the scheme should be modernised and its eligibility requirements and procedures simplified, so it is more often used (Table 5). In June 2016, the Commission proposed a revision of the EU Blue Card Directive to harmonise conditions, procedures and rights.

Integrating refugees early is key to improving their wellbeing and labour market opportunities and to strengthen people's trust. Europe has experienced the largest inflow of asylum seekers since World War II, with 3.6 million first-time asylum applications since early 2013 (29, OECD 2017d), and this is an important concern for Europeans, as shown by the Eurobarometer Surveys. At the EU level a coordinated and comprehensive policy response is essential to effectively integrate asylum seekers as the 2016 Survey argued (Table 5). The best way to integrate newcomers is to get them into work quickly. Boosting early labour market access, further increasing places for integration programmes and language training (including vocational language training), accurately assessing the skill levels of immigrants and tying the dispersion of asylum seekers more to areas with better labour market conditions in the host country could all improve the wellbeing of migrants and promote more inclusive growth (OECD, 2017g). In a welcome move, the Commission has developed a skills profile tool to support early identification of the skills and work experience of refugees, migrants and other third country nationals and to provide guidance on training, education or employment. The influx of refugees included many children, and educating them will be crucial for their long-term integration. For instance Germany, has recruited new teachers and set up one-year "welcome classes" for newcomers with a focus on language teaching.

Figure 28. The attractiveness of the EU to foreign migrants, especially highly skilled ones, is still relatively limited



1. 2015 for the United States, 2014 for Australia-New Zealand and 2013 for Canada.
2. Mid-year estimate, excluding intra-EU mobility.
3. Excluding bilateral mobility between Australia and New Zealand themselves.
4. The EU Blue Card offers highly educated and skilled workers of non-EU countries the opportunity and the right to work and stay in the European Union.

Source: Eurostat (2018), "Population Statistics", *Eurostat Database*; OECD (2018), *International Migration Statistics* (database).

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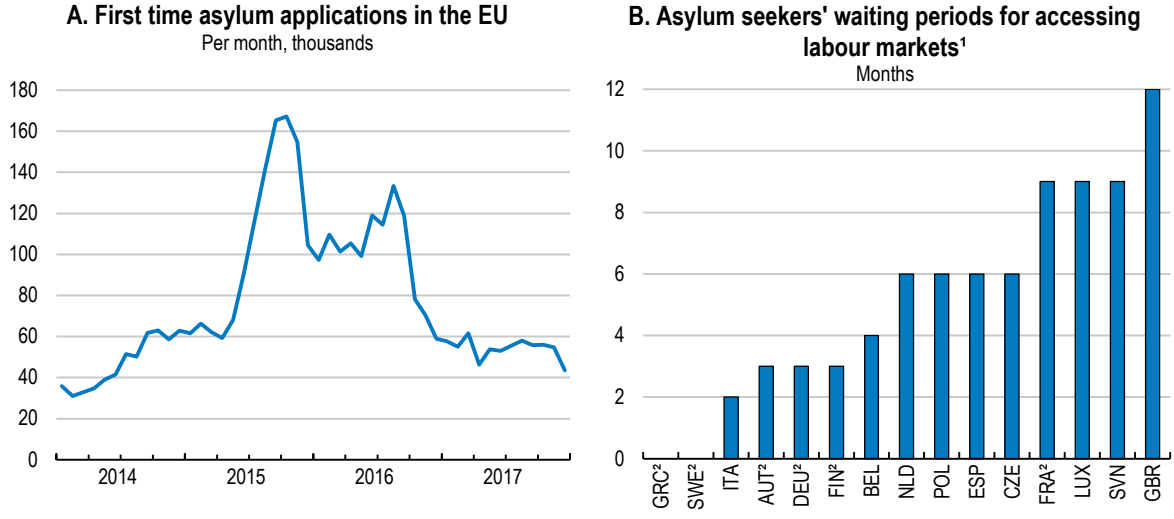
Figure 29. The inflow of refugees is an important challenge



1. Asylum seekers' most favourable waiting periods for labour market access in a selection of EU countries.
2. Access to labour market is granted under certain conditions.

Source: Eurostat (2018), "Asylum and managed migration", *Eurostat Database*; OECD (2016), Migration Policy Debates No. 10.

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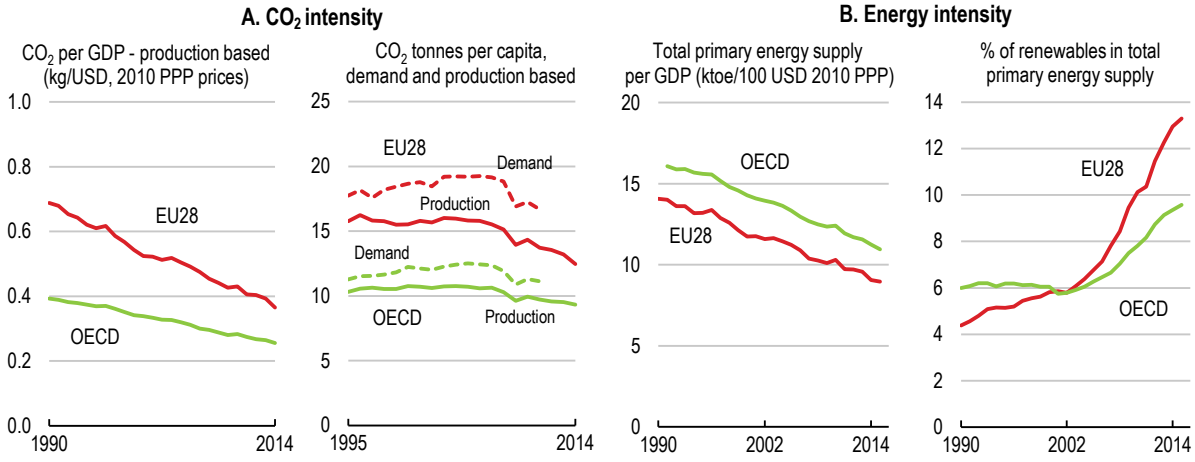
Strengthening the drive to fight climate change

According to a recent Eurobarometer, over 90% of Europeans see climate change as a serious problem (EC, 2017g). Emissions of CO_2 per capita and per unit of GDP are higher than the OECD average but have been steadily declining (Figure 30). In 2007, the EU pledged to reduce its greenhouse gas emissions by at least 20% from their 1990 levels by 2020. The EU is on track to meet its target to reduce its greenhouse gas emissions by at least 20% from their 1990 levels by 2020, partly because of the impact of the recession. Most countries are expected to reach their 2020 targets (EC, 2017h).

Figure 30. $C0_2$ intensity and energy intensity have fallen in the EU

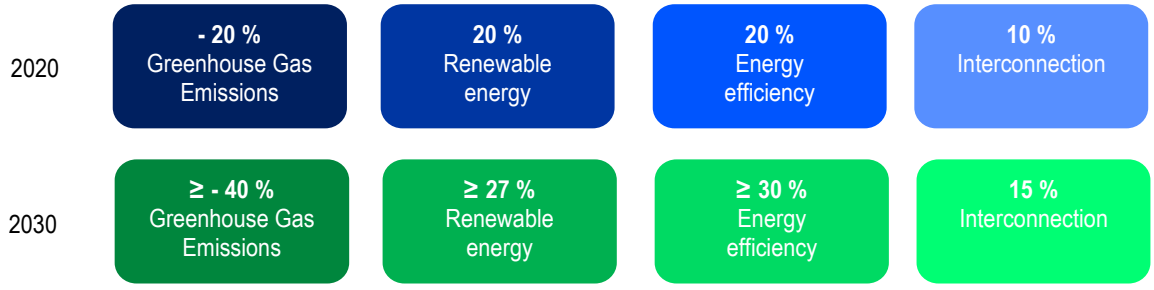


Source: OECD (2018), *Green Growth Indicators* (database).

StatLink http://dx.doi.org/10.1787/888933748097

The main EU-level policy instrument – the EU emissions trading system (ETS) – is supplemented by a battery of EU legislation mandating various intermediate targets (Figure 31).Under the Paris agreement, the EU and its member states have collectively committed to decrease their domestic greenhouse gas emissions by at least 40 % by 2030 from 1990 levels (Figure 31). On current policies, greenhouse gas emissions are projected to exceed the 2030 target.

Figure 31. Agreed EU headline targets for climate and energy



Source: European Commission (2017), Third Report on the State of the Energy Union.

The ETS is often regarded as the main tool for cutting emissions, but it has probably had a limited impact when it comes to driving low-carbon investments: the price of emission allowances, which has long been under 10 euros per tonne, is too low to drive long-term low-carbon investments. Estimates suggest that a carbon price of 30 euros would be needed to make onshore wind investment profitable, while a price of 40 euros would be required to shift production from coal to gas, according to analysis from the International Energy Agency and business groups (EIA, 2014). This low ETS price is due to a combination of low economic growth, extensive promotion of renewable energy and the large inflow of international credits from the Clean Development Mechanism. The supply of credits has exceeded emissions, leading to a surplus of unused CO_2 emission allowances.

Some recent measures aim at making the ETS more effective. In November 2017, EU negotiators agreed to reduce the number of allowances by 2.2% per year from 2021 on (Table 6). It may take some time for this to have an impact. In addition, the so-called Market Stability Reserve ("MSR") agreed in 2015 will start operating as of 1 January 2019 with a view to address the current surplus of allowances. Whenever the surplus exceeds a predefined threshold of 833 million allowances (equivalent to almost one half of current annual emissions of installations covered by the ETS), some allowances due to be auctioned will not be auctioned but will instead be placed in the MSR, thus tightening the annual supply of allowances further. The amount thus placed in the MSR in a year will be 24% of the surplus for the first five years of its operation and 12% of the surplus after that. If the surplus falls below 400 million allowances, allowances from the MSR will be released for auction.

Also in November 2017, changes to the Market Stability Reserve were agreed, enabling it to double the speed at which it absorbs the surplus in the first five years of its operation and introducing the provision that allowances in the MSR above a previous year's auction volume will lose their validity as from 2023 onwards, meaning that they cannot be released back into market. This measure could be a useful tightening. Phasing out of free permits outside the electricity sector could further strengthen low carbon investment signals (Flues and Van Dender, 2017).

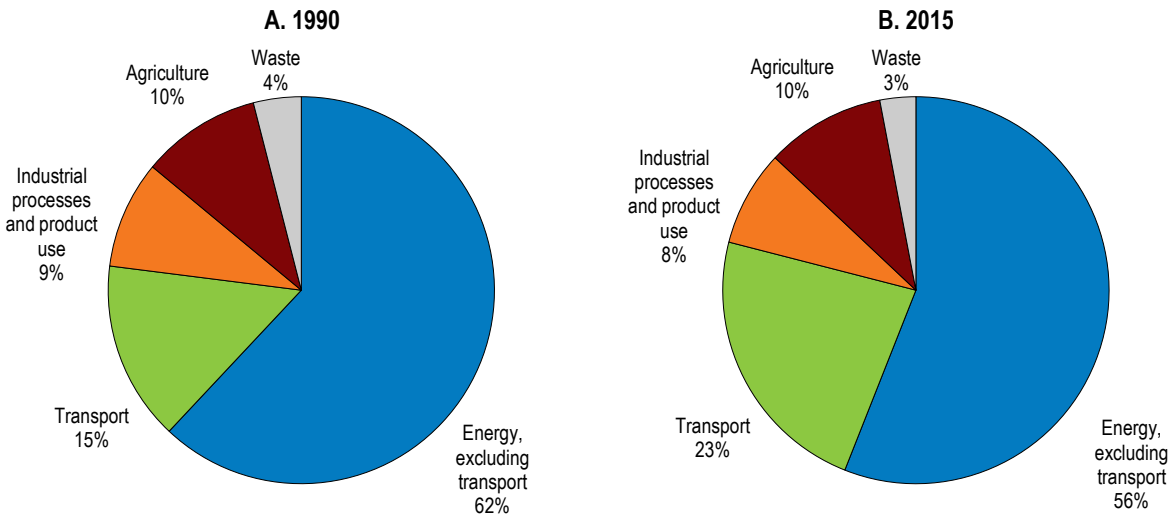
Table 6. Past OECD recommendations on environmental policy

Recommendations in 2016 Economic Survey	Actions taken since 2016
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.	The EU has revised the EU ETS and corresponding legislation for the period after 2021. The cap will be reduced by 2.2% per year as of 2021 and the Market stability reserve, to address the surplus and improve the ETS's resilience to major shocks, will start operating as of 1 January 2019.

The absence of some key emitters from the ETS, notably fuel for transport, commercial and household heating, means that other policies have to be used to tackle those sectors. Transport is the EU's second-biggest greenhouse-gas emitter after energy and is generally the main cause of air pollution in cities. It represents a rising proportion, currently about one fifth, of greenhouse gas emissions (Figure 32), with road transport accounting for some 80% of these (EC, 2017f). EU Member States have the possibility of including the transport sector – or any other sector – in the ETS.

Figure 32. The rising share of transport in European Union GHG emissions

Emissions of greenhouse gases[1]



1. Excluding land use, land-use change and forestry (LULUCF).
Source: Eurostat (2017), "Greenhouse gas emissions by source sector", *Eurostat Database*; European Environment Agency.

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Widening the ETS to include transport and all other uses of fossil fuels, with a cap to match the 2030 target, would move the EU towards a simpler, more direct and more cost-effective policy: the various intermediate targets and sector-specific policies could be progressively eliminated. Relying fully on the ETS implies some risk of very high emission allowance prices in some circumstances, but a phased approach, which would be necessary anyway, would minimise this risk.

While a widened ETS is the best tool to reduce GHG emissions in nearly all sectors, other policies matter. For example, taxation, public procurement, land-use policies and urban planning can all be more or less climate friendly; urban planning is especially important as it constrains choices on transport and heating for long into the future. The OECD Aligning Policies report (OECD, 2015) surveys a wide range of such policies. Policies in agriculture and waste, whose emissions are difficult to include in the ETS, may also need reinforcing; a cost benchmark related to the ETS allowance price (or estimated costs of other mitigation policies if these continue to dominate) could be applied. Moreover, the Commission has issued in March 2018 an Action Plan for Financing Sustainable Growth to be rolled out in 2019, which aims at re-orienting capital flows towards sustainable investment, to manage financial risks stemming from climate change and to foster transparency in financial and economic activity (EC, 2018b).

Instead of mandating the inclusion of transport in the ETS, the EU authorities are planning a battery of measures for the sector: in July 2016 the Commission adopted an EU Strategy for low emission mobility (EC, 2017f) addressing key levers: efficiency of the transport system, low – emission alternative energy for transport and low and zero emission vehicles. The Commission has now proposed legislative initiatives to implements this strategy, including: 1) revisions of Eurovignette, Clean vehicles and

Combined Transport Directives, 2) a recast of the renewable Energy directive with a blending mandate on fuel suppliers to ensure that by 2030 at least 6.8% of low-carbon and renewable fuels will enter the EU market, and 3) a proposal for CO_2 emission standards for new cars and vans. The latter proposal also includes incentives for zero and low-emissions vehicles. The overall level of taxation on emission-creating activity will need to increase. The EU cannot act directly on taxation, but minimum levels can be agreed on: the tax on diesel fuel should always be higher than that on petrol, since it emits at least as much and usually more pollution, including CO_2, per litre consumed. Despite signs of change, diesel taxes per litre remain lower than those on petrol in many countries (OECD, 2018f).

Bibliography

Alfranseder, E., J. Escrivá, J. Fellinger, A. Haley, A. Nigmonov, and M. Taivere (2012), "Exchange,employment and added value", Research report of the ESN Survey 2011, Erasmus Student Network (ESN) AISBL. Brussels. http://www.esn.org/sites/default/files/esnsurvey2011_web.pdf

Andrews, D., C; Criscuolo, and P. Gal (2017), "The Best vs. the Rest: The Global Productivity Slowdown Hides an Increasing Performance Gap across Firms", VoxEU.org, 27 March.

Andrews, D., C. Criscuolo and P. Gal (2016), "The Best versus the Rest: The Global Productivity Slowdown, Divergence Across Firms And the Role of Public Policy", OECD Productivity Working Papers, No. 5, OECD Publishing, Paris. DOI: http://dx.doi.org/10.1787/63629cc9-en

Aussilloux, V., A. Bénassy-Quéré, C. Fuest and G. Wolff (2017), "Making the Best of the European Single Market", Policy Contribution, Issue No. 3, Bruegel.

Bachtler, J. J. Oliveira Martins and P. Zuber (2017), Towards Cohesion Policy 4.0 - Structural Transformation and Inclusive Growth, Regional Studies Association Europe.

Bank of England (2018), "FPC judgement of progress against actions to mitigate the risk of disruption to end users of financial services as at 12 March 2018".

Beine, M., F. Docquier and H. Rapoport (2008), "Brain Drain and Human Capital Formation in Developing Countries: Winners and Losers", The Economic Journal, 118 (528), 631-652.

BEREC (2017), "BEREC views on Article 74 of the draft Code Co-investment and "very high-capacity (VHC) networks", BEREC Press Releases.

Broadbent, B. (2015), "Compositional Shifts in the Labour Market", speech at Bank of England conference 'Understanding the Great Recession: From Micro to Macro', September.

Chiswick, B. (2005), "High Skilled Immigration in the International Arena", IZA Discussion Paper No. 1782.

Colantone, I and P Stanig (2016) "Global competition and Brexit", BAFFI CAREFIN Centre Research Paper 2016-44, November.

CPB (2012), "Fertile soil for Structural Funds?: A panel data analysis of the conditional effectiveness of European Cohesion Policy", CPB Discussion Papers.

Cremers, J., (2017), "Towards a European Labour Authority: Mandate, Main Tasks and Open Questions", Friedrich-Ebert-Stiftung Foundation.

Cremers, J., (2016), "Economic Freedoms and Labour Standards in the European Union", Transfer: European Review of Labour and Research, Vol 22, Issue 2, pp. 149-162.

Daly, M. and B. Hobijn (2017), "Composition, Selection and Aggregate Real Wage Growth", American Economic Review (Papers and Proceedings), 107(5), 349-52.

Dhéret, C., and A. Ghimis (2016), "The Revision of the Posted Workers Directive: Towards a Sufficient Policy Adjustment?", EPC Discussion Paper, European Policy Centre.

Dustmann, C, B Eichengreen, S Otten, A Sapir, G Tabellini and G Zoega (2017), Europe's Trust Deficit: Causes and Remedies, Monitoring International Integration 1, CEPR Press.

ECB (2017), "Financial Stability Review", November.

ECB (2016), "The productivity challenge for Europe", Lectio magistralis by Mario Draghi, President of the ECB, marking the 100th anniversary of the Deusto Business School.

EIB (2017), "EIB Investment Survey - Tracking investment needs and constraints across Europe".

European Banking Authority (2017), "Risk assessment of the European Banking System", November 2017.

European Commission (2018a), "A new modern Multiannual Financial Framework for a European Union that delivers efficiently on its priorities post-2020", Communication from the Commission to the European Parliament, the European Council and the Council.

European Commission (2018b), "Action Plan for Financing Sustainable Growth", Communication from the Commission to the European Parliament, the European Council, the Council, the European Central Bank, the European Economic and Social Committee and the Committee of the Regions.

European Commission (2017a), "Possible Impact of Brexit on the EU Budget, and in particular, CAP Funding", Directorate General for Internal Policies.

European Commission (2017b), "LAB-FAB-APP: Investing in the European Future we want" Report of the independent High Level Group on maximising the impact of EU Research & Innovation Programmes.

European Commission (2017c), "Reflection Paper on the Future of EU Finances", COM(2017), 28.06.2017, 358 Final.

European Commission (2017d) "Recommendation for a Council Recommendation on the Economic Policy of the Euro Area"

European Commission (2017e), "Proposal for a Directive of the European Parliament and of the Council on the legal and operational framework of the European services e-card introduced by Regulation", Commission Staff Working Paper.

European Commission (2017f), "Digital Transformation Scoreboard. Evidence of Positive Outcomes and Current Opportunities for EU Businesses". Brussels

European Commission (2017g), "Eurobarometer on Climate Change", September 2017.

European Commission (2017h), "Two Years After Paris: Progress towards meeting the EU's climate commitments", European Commission, November 2017.

European Commission (2016), "An improved EU Blue Card scheme and the Action Plan on Integration", European Commission Fact Sheet.

European Commission (2015a), "A Single Market Strategy for Europe- Analysis and Evidence", Commission Staff Working Paper SWD(2015) 202 final, 28 October.

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

European Commission (2012a), "Deterrence of Fraud with EU Funds through investigative journalism in EU27", Directorate General for Internal Policies.

European Commission (2012b), "Single Market Act II, Together for New Growth", Communication from the Commission to the European Parliament, the Council, the European Economic and Social Committee and the Committee of the Regions, COM(2012) 573.

European Commission (2010), "Geographical and Labour Market Mobility", Special Eurobarometer 337, Brussels.

European Court of Auditors (2017a) "The Commission Negotiation of 2014-2020 Partnership Agreements and Programmes in Cohesion", Special Report No 2/2017.

European Court of Auditors (2017b), "Speech by Klaus-Heiner Lehne, President of the European Court of Auditors, Presentation of the ECA's 2016 Annual Report", September 2017.

European Court of Auditors (2017c), "Fighting Fraud in EU Spending", October 2017.

European Court of Auditors (2016), "EU budget: time to reform", October 2016.

Fondazione Giacomo Brodolini, FGB (2016), "Study on wage setting systems and minimum rates of pay applicable to posted workers in accordance with Directive 96/71/EC in a selected number of Member States and sectors", Report prepared for the European Commission.

Flues, F. and K. van Dender (2017), "Permit allocation rules and investment incentives in emissions trading systems", OECD Taxation Working Papers, No. 33, OECD Publishing, Paris, http://dx.doi.org/10.1787/c3acf05e-en

Grotheer, M., S. Isleib, N. Netz, and K. Briedis (2012), "Hochqualifiziert und gefragt: Ergebnisse der zweiten HIS-HF Absolventenbefragung des Jahrgangs 2005", HIS Hochschul-Informations-System. Hannover.

Hass, J. and E. Rubio "Brexit and the EU Budget: Threat or Opportunity"? Jacques Delors Institute Policy Paper.

Houwerzijl, M.S. (2013), "The Dutch Understanding of Posting of Workers in the Context of Free Services Provision and Enlargement: A Neutral Approach?", in S. Evju, Cross-Border Services, Posting of Workers, and Multilevel Governance, Vol. 193.

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

Jauer, J. et al (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.

Kaczmarczyk, P. (2015), "Between Brain Drain and Brain Gain: The Case of Poland", Friedrich Ebert Foundation, Bonn.

Katz, L. and A. Krueger (2016), "The Rise and Nature of Alternative Work Arrangements in the United States", NBER WORKING PAPER SERIES, No. 22667, http://www.nber.org/papers/w22667.pdf (accessed on 23 November 2017).

Kierzenkowski R. et al. (2016), "The Economic Consequences of Brexit: A Taxing Decision", OECD Economic Policy Papers, http://dx.doi.org/10.1787/2226583X

Meyer, T., P. Bridgen and C. Andow (2013),"Free Movement? The Impact of Legislation, Benefit Generosity and Wages on the Pensions of European Migrants", Population, Space and Place, Vol. 19, pp. 714-726.

Monti et al. (2017) "Future Funding of the EU: Final report and recommendations of the high level group on own resources", December 2016.

OECD (2018a), Productivity and Jobs in a Globalised World: (How) can all regions benefit?, Center for Entrepreneurship, SMEs, Local Development and Tourism, https://one.oecd.org/document/CFE/RDPC(2017)7/en/pdf

OECD (2018b), "Policy considerations in the current economic situation", Economics Department, Economic Policy Committee.

OECD (2018c), OECD Economic Surveys – Ireland, OECD Publishing, Paris.

OECD (2018d), OECD Economic Surveys – Germany, OECD Publishing, Paris.

OECD (2018e), OECD Reviews of Labour Market and Social Policies: Lithuania, OECD Publishing, Paris.

OECD (2018f), Taxing Energy Use 2018: Companion to the Taxing Energy Use Database, OECD Publishing, Paris. http://dx.doi.org/10.1787/9789264289635-en

OECD (2017a), Economic Policy Reforms 2017: Going for Growth, OECD Publishing, Paris. http://dx.doi.org/10.1787/growth-2017-en

OECD (2017b), OECD Economic Outlook, Volume 2017, Issue 2, OECD Publishing, Paris. DOI: http://dx.doi.org/10.1787/eco_outlook-v2017-2-en

OECD (2017c), OECD Economic Surveys – United Kingdom, OECD Publishing, Paris. http://dx.doi.org/10.1787/eco_surveys-gbr-2017-en

OECD (2017d), "Evaluation of Agricultural Policy Reforms in the European Union: The Common Agricultural Policy (CAP) 2014-20", OECD Publishing, Paris. http://dx.doi.org/10.1787/9789264278783-en

OECD (2017e), "Budgeting and performance in the European Union: A review by the OECD in the context of EU budget focused results", OECD Journal of Budgeting, Volume 2017/1.

OECD (2017f), OECD Employment Outlook 2017, OECD Publishing, Paris. http://dx.doi.org/10.1787/empl_outlook-2017-en

OECD (2017g), OECD Economic Outlook, Volume 2017, Issue 1, OECD Publishing, Paris. DOI: http://dx.doi.org/10.1787/eco_outlook-v2017-2-en

OECD (2016a), OECD Economic Surveys: Czech Republic 2016, OECD Publishing, Paris. http://dx.doi.org/10.1787/eco_surveys-cze-2016-en

OECD (2016b), OECD Economic Surveys – European Union, OECD Publishing, Paris.

OECD (2016c), OECD Economic Surveys: Poland 2016, OECD Publishing, Paris.

OECD (2016d), "Recruiting Immigrant Workers: Europe 2016", OECD Publishing, Paris. http://dx.doi.org/10.1787/9789264257290-en

OECD/IEA/NEA/ITF (2015), Aligning Policies for a Low-carbon Economy, OECD Publishing, Paris.

http://dx.doi.org/10.1787/9789264233294-en

OECD (2014), OECD Economic Surveys: Slovak Republic 2014, OECD Publishing. http://dx.doi.org/10.1787/eco_surveys-svk-2014

Pacolet, J. and F. De Wispelaere (2016), "Posting of Workers – Report on A1 Portable Documents Issued in 2015", Report prepared for the European Commission.

Richard, S., (2016), "The Implementing Directive on Posted Workers: and What Now?", European Issues No. 383, Fondation Robert Schuman.

Schellinger, E. (2017), "Brain Drain – Brain Gain: European Labour Markets in Times of Crisis", Friedrich Ebert Foundation, Bonn.

Walters, D., (2016), "Labour Inspection and Health and Safety in the EU", Hesa-Mag No. 14, Special Report 3/34, European Trade Union Institute.

Wickham, J. and A. Bobek (2016), "Bogus Self-Employment in the Irish Construction Industry", Report submitted to the Irish Department of Finance.

Annex. Progress in main structural reforms

This annex reviews action taken on recommendations from previous Surveys since the June 2016 European Union Survey.

Main recommendations	Action taken since the previous Survey (2016)
A. Developing market-based financing alternatives for firms	
Ease the regulatory treatment of simple, transparent and standardised securitisation to unlock lending to small and medium-sized enterprises.	The amended Capital Requirements Regulation, reflecting the adoption of the new securitisation framework, was published in the EU Official Journal on 28 December 2017. Work is ongoing on the adaptation of Solvency II implementing measures, with a view that, like the STS package, they enter into application on 1 January 2019.
Collect and share internationally comparable credit information on smaller firms.	No regulatory action taken. In the context of the Capital Markets Union (CMU), the Commission issued a staff working document with best practices on SME advisory support. In the context of the CMU Mid-term Review, the political conclusions reached in July 2017 agreed that enhancing the cost-effective availability of SMEs' information should be pursued initially by building on voluntary initiatives by the private sector and, should this approach fail to deliver its expected benefits, through other means that would have the potential to be more effective.
Lower capital requirements for long-term and infrastructure investment.	The European Commission has adopted an amendment of the Solvency II Delegated Act lowering capital requirements for investments in qualifying infrastructure corporates. In a previous amendment the capital charges for investments in qualifying infrastructure projects had already been reduced.. As far as banking regulation is concerned, the Commission in its proposal to amend the CRD, adopted in 2016, has included a more risk-sensitive treatment of infrastructure projects fulfilling a set of requirements able to reduce their riskiness.
Lower the regulatory barriers in corporate bond markets by addressing issues in securities ownership and harmonising insolvency proceedings.	With regard to securities ownership, the Commission held a public consultation on third party effects of transactions in securities and claims. Regarding the harmonisation of insolvency proceedings, the Commission proposed, in November 2016, a Directive for preventive restructuring frameworks, second chance and measures to increase the efficiency of restructuring, insolvency and discharge procedures. The Commission consulted publicly on measures to enhance the protection of secured creditors. The Commission services are undertaking a benchmarking of national loan enforcement and insolvency regimes from a bank creditor perspective.
B. Enhancing labour market mobility and integration	
Reduce the administrative burden associated with recognition of professional qualifications by using electronic procedures such as the European Professional Card.	In 2017, the European Commission presented a communication on reform recommendations for regulation in professional services addressed to each Member State, a proposal on a proportionality test before adoption of new regulation of professions, and a proposal for a European services e-card simplifying administrative formalities required to provide services in another Member State.
Legislate effective portability of supplementary pension rights.	Member States have been transposing Directive 2014/50/EU on minimum requirements for enhancing worker mobility between Member States by improving the acquisition and preservation of supplementary pension rights, to meet the deadline of 21st May 2018.
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.	In June 2016, the Commission proposed a revision of the Blue Card Directive in order to make it a truly EU-wide scheme with more harmonised conditions, procedures and rights and where parallel national schemes would not be allowed. Moreover rights of Blue Card holders would be reinforced in terms of labour market access, intra-EU mobility, family reunification and access to EU long-term residence status.
Strengthen joint protection of external borders.	The European Border and Coast Guard has been established in October 2016.
Speed up administrative decisions on asylum applications and ease labour market access for recognized refugees.	In July 2016, the Commission presented a second package of legislative proposals to complete the reform of the Common European Asylum System (CEAS). The proposal for an Asylum Procedure Regulation simplifies, streamlines and consolidates procedural arrangements and provides for short but reasonable time limits throughout the procedure to ensure fast but high quality decisions. The proposal for a recast Reception Conditions Directive ensures that asylum seekers are given effective access to the labour market within 6 months from the application for international

	protection was lodged. The proposal for a Qualification Regulation sets uniform standards for recognising persons in need of protection and rights granted to beneficiaries of international protection, and clarifies employment related equal treatment rights.
C. Connecting network sectors would foster internal market and green growth	
Improve the quality of impact assessment of legislative proposals, notably amendments, and the quality of ex post evaluation of policies.	An interinstitutional agreement adopted in 2016 expands the commitment to impact assessment also to the legislators where appropriate for their substantive amendments and includes a commitment by all three institutions to appropriate reporting, monitoring and evaluation requirements. The Better Regulation Guidelines and the underlying toolbox were updated and strengthened in July 2017. All the steps undertaken since 2016 in the Better regulation agenda are reported in the Communication "Completing the Better Regulation Agenda: Better solutions for better results" .
Harmonise the rules for online purchases and reduce unjustified geographical discrimination of consumers.	At the end of 2017, political agreements has been reached on a) new legislation to address unjustified geoblocking and other forms of discrimination on the grounds of nationality, residence or establishment in the internal market and b) a legislative proposal on cross-border parcel delivery services to increase the transparency of prices and improve regulatory oversight, respectively. In May 2016, the Commission presented a legislative proposal to strengthen enforcement of consumer rights and guidance to clarify, among others, what qualifies as an unfair commercial practice in the digital world. In October 2017, the Commission presented an amended proposal concerning contracts for the online and other distance sales of goods.
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.	The proposal of September 2016 for the European Electronic Communications Code (EECC) sets EU-wide common rules and objectives on how the telecom industry should be regulated. It applies to providers of networks and/or services and defines how they can be regulated by national regulators. It vests the Body of European Regulators of Electronic Communications (BEREC) with a limited number of decision-making powers. The accompanying proposal for a revised BEREC Regulation aims at making the governance structure of BEREC simpler and more efficient The role of the European Railway Agency in authorisation of rolling stock for operations was strengthened. The technical pillar of the 4th Railway Package, adopted in April 2016, aims at improving interoperability between national railroad networks and at cutting red tape for operations beyond one single Member State. Political agreement on the opening of domestic railway markets is emerging. In the inland navigation sector, waterways of European dimension, i.e. serving cross-border traffic needs, are part of the TEN-T core network corridors. The adoption of Directive (EU) 2016/1629) on technical standards of inland navigation vessels strengthens the Single Market, enhancing safety and performance of the inland waterways fleet. For road transport, the market for intra-EU freight has been entirely opened to competition. The Commission has made proposals to further reduce market access barriers and to harmonise technical and social standards. Political agreement on these proposals is pending. For energy, the measures proposed by the Commission in the 'Clean Energy for All Europeans' package of 30 November 2016 will constitute a significant step towards the creation of the Energy Union. The package included eight different legislative proposals covering energy efficiency, energy performance in buildings, renewable energy, governance, electricity market design (the Electricity Directive, Electricity Regulation, and Risk-Preparedness Regulation) and rules for the regulatory agency, ACER. The proposed Renewable Energy Directive, together with the proposals on the new electricity Market Design, will set a regulatory framework that allows a level playing field for all technologies without jeopardising the EU's climate and energy targets. With respect to ACER, the proposal would strengthen its powers for those cross-border issues which require a coordinated regional decision, thereby contributing to faster and more effective decision-making on cross-border issues. National regulators, deciding within ACER on those issues, would remain fully involved in the process.

Prioritise the Trans-European transport and energy network projects to support the completion of the Single Market. .	Four bottlenecks on TEN-T core network corridors have been removed in 2016, with additional 11, 25 and 53 expected in 2017, 2018 and 2019. The EU average for the completion of the TEN-T rail core network is 60% (2014). The EU average for the completion of the TEN-T road core network is 74% (2014). In November 2017, the Commission published a Communication on strengthening Europe's energy networks and published the third list of Projects of Community Interest (PCI)'s. Since 2013, the TEN-E policy framework will have seen approximately 30 energy infrastructure projects of common interest (PCIs) completed or being in operation by the end of 2018. Another 47 important projects are scheduled to be completed around 2020 out of a total of 173.
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.	The Market Stability Reserve (MSR), established at the end of 2015 by EU legislation to tackle the persisting surplus of allowances on the EU carbon market, will operate as of 1 January 2019. In addition, the EU has revised the EU ETS and corresponding legislation for the period after 2021 with a view to implementing its commitment of reducing emissions by at least 40% by 2030 in the context of the Paris Agreement. Besides the adjustment of the cap, the revised EU ETS legislation foresees further measures to strengthen the EU carbon market and to enhance support for innovation and the modernisation of energy systems, in particular in lower income EU Member States. With regard to a stronger carbon market, it has in particular been agreed to temporarily double the feeding rate for the MSR (from 12% to 24%) to restore the demand-supply balance on the market at a faster pace and to invalidate a certain amount of allowances held in the MSR as from 2023.

Thematic chapter

Chapter 1.
Building a stronger and more integrated Europe

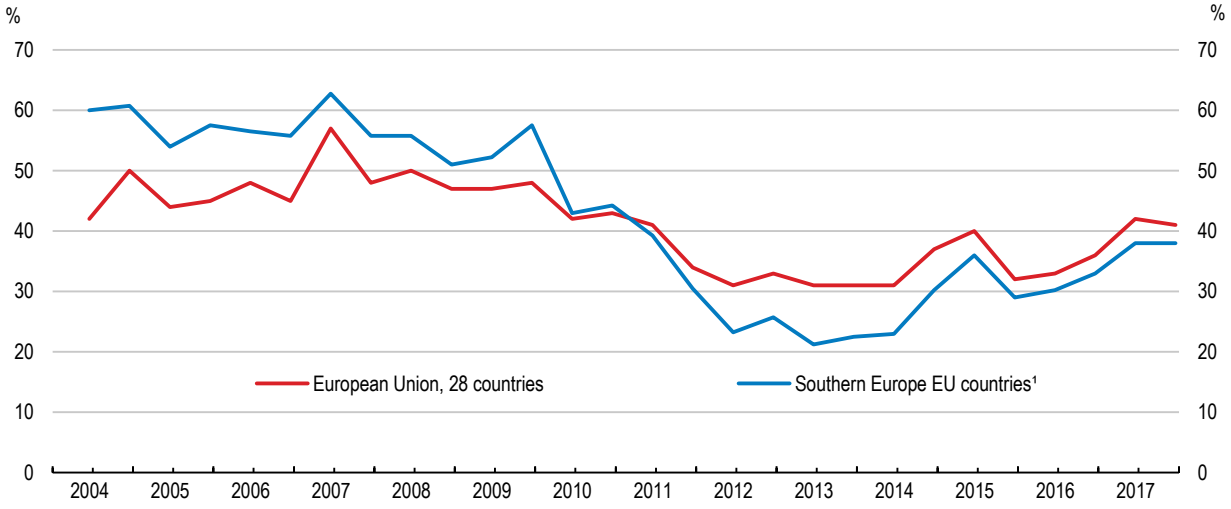
Europe's economy is finally growing robustly. These positive developments provide an opportunity to renew efforts to meet the long-term challenges facing the European Union (EU). The EU's record on reducing regional income disparities is mixed and this explains some of citizens' discontent with the European project. Reforming cohesion policy by focusing spending more on items with long-term growth benefits and clear spillovers across borders, including human capital and infrastructure investment could further support income convergence. Higher co-funding rates and less burdensome administration of the cohesion and structural funds could encourage greater spending effectiveness. Sustained improvements in living standards are held back by weak productivity and investment in many countries. Reviving the single market project, by removing remaining barriers in services, energy, digital and transport can help to spur long-term growth. Deepening the single market and faster adoption of digital technologies will create new jobs but put at risk others, perhaps in lagging regions. The EU can help lagging regions catch up by reforming cohesion policy and facilitating firm creation through the removal of barriers across the single market. It can also support better those who lose out from globalisation and are displaced by technological change by making access to the European Globalisation Adjustment Fund easier and broadening its scope not only to help workers displaced by globalisation or an economic crisis, but also due to other reasons such as automation.

Challenges remain to make growth stronger and more inclusive

The European economy is showing a strong positive momentum over the last couple of years, with growth becoming entrenched across sectors and countries. Citizens' trust on the European Union is on the rise (Figure 1.1), after having significantly fallen during the sovereign and refugee crises. The continuous improvement of labour market conditions across Europe should help to further improve trust, as economic insecurity is an important source of people's concerns. However, the popularity of the EU remains low by past standards.

Figure 1.1. Trust in the EU is recovering, but remains below pre-crisis levels

Respondents claiming they tend to trust the European Union, as an institution, in per cent of total respondents



1. Unweighted average of Greece, Italy, Portugal and Spain.
Source: European Commission, Public Opinion in the European Union, Standard Eurobarometer Survey.

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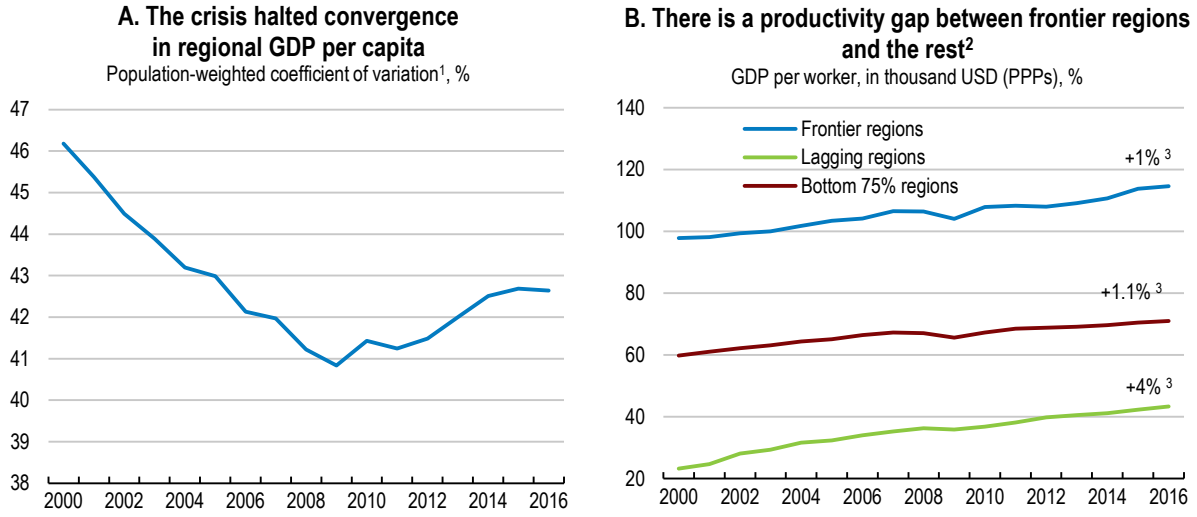
Discontent with the European project is largest among those left behind by the crises, globalisation and the digital transformation and in poorer EU-15 regions. Workers with low levels of education are those who are less supportive of the European Union (Dustmann et al., 2017). While the combined effect of globalisation and digitalisation has led to some job creation, European labour markets have become increasingly polarised with a decline of middle-skill routine jobs. Real wages fell sharply in some countries hard hit by the crisis and stagnated or have barely grown in others in recent years. Unemployment has declined rapidly lately, yet significant differences across countries remain and many countries have yet to regain their pre-crisis levels. Many workers would like to work more or remain only marginally attached to the labour market.

Regional GDP per capita disparities have declined over time. But progress on regional convergence came to a halt with the crisis and has not resumed since (Figure 1.2, Panel A). Moreover, while narrowing over time, there is still a significant productivity gap between leading European regions and the rest (Figure 1.2, Panel B). Votes for populist anti-European parties have grown most in regions hard hit by import competition in the EU-15 (Colantone et al. 2016), suggesting that globalisation also plays a role.

Figure 1.2. Regional disparities are still relevant



1. The panel shows disparities in GDP per capita (in PPS) between NUTS-2 EU regions.
2. The panel shows productivity per worker (in USD PPPs) across main groups of regions in 21 EU countries; regions are defined as Level 2 territorial units (LT2 macro-regions), according to the OECD regional classification. Frontier regions correspond to the top 10% of EU regions in the distribution of average regional-level labour productivity, measured as GDP per worker in USD PPPs; lagging and bottom 75% regions correspond, respectively, to the bottom 10% and 75% of the same distribution.
3. Average annual growth rates over the entire reference period.

Source: European Commission (2018), DG for Regional and Urban Policy, calculations based on Eurostat data; OECD calculations based on data from the *OECD Regional Statistics* (database).

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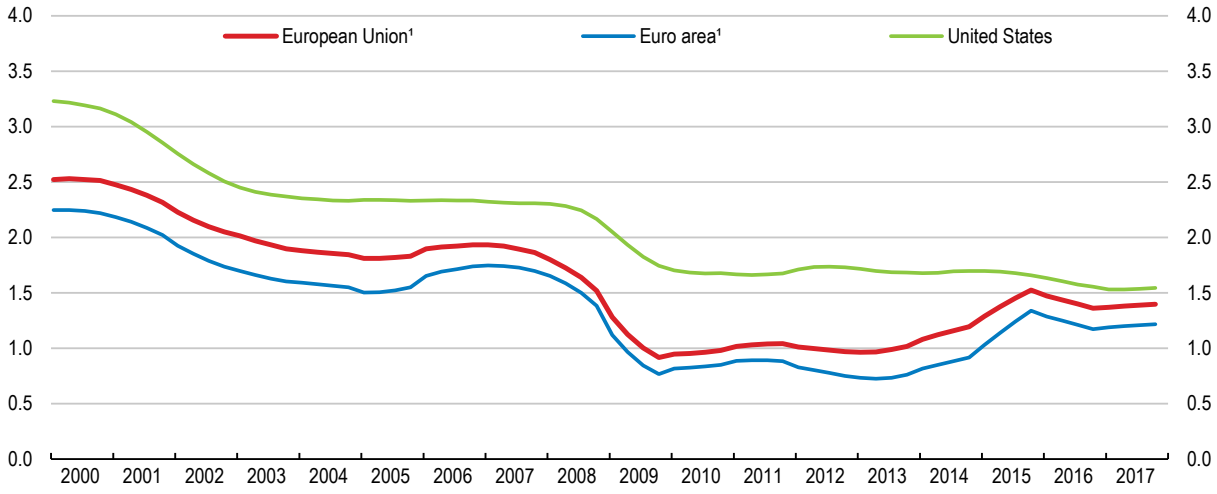
Despite recent robust growth, sustained improvements in living standards for more people are held back by weak productivity and investment in many countries. Potential growth has fallen substantially in the EU since the global financial crisis (Figure 1.3).

Figure 1.3. The EU's potential output growth is low



1. European Union and euro area refer to OECD EU and euro area Member countries (22 and 16 countries, respectively).

Source: OECD (2018), *OECD Economic Outlook: Statistics and Projections* (database).

StatLink http://dx.doi.org/10.1787/888933748173

Weak productivity growth already prior to the crisis and low investment rates during the crisis have come on top of a rapidly aging population reducing the long-term growth potential of many European economies. Weak business dynamism and the inability of low productive firms to catch up with the best performing firms is one of the factors behind poor aggregate productivity growth.

To further strengthen the confidence of all its citizens, the European Union needs to focus on policies that support a stronger and more inclusive growth. The chapter discusses a broad range of policies the EU can harness to further reduce regional divides, to better support EU citizens in face of change, to spur productivity and economic growth by deepening the single market in services, energy, transport and digital markets and to make better use of digital technologies.

Better addressing regional divides

Improving the effectiveness of cohesion policy

The prime goal of cohesion policy is the reduction of regional disparities and to create the basis for sustainable development in the most disadvantaged regions (Box 1.1). The record of EU cohesion policy is, however, mixed: in the majority of EU countries regional GDP per capita disparities have declined over time and there is convergence both at the country and regional level (Box 1.2). However, these averages mask significant regional divides (Figure 1.2; Figure 1.4).

Box 1.1. An overview of the European Structural and Investment Funds

The EU cohesion policy is channelled through five funds, which together are known as the European Structural and Investment (ESI) Funds.

- The **European Regional Development Fund** (ERDF) is by far the biggest fund and finances infrastructure projects and initiatives aimed at boosting competitiveness. The ERDF focuses on three priorities: 1) Strengthening research, technological development and innovation; 2) Enhancing access to, and use and quality of ICT; 3) Supporting the shift towards a low-carbon economy in all sectors. The ERDF also funds cross-border, interregional and transnational projects under the European territorial cooperation objective.
- The **European Social Fund** (ESF) finances education and training measures. It invests in improving the skills of disadvantaged people such as the long-term unemployed, people with disabilities, migrants, ethnic minorities, marginalised communities and people of all ages facing poverty and social exclusion through, for example, the development of community based support services and the prevention segregated living arrangements.
- The **Cohesion Fund** was established by the Maastricht Treaty and is intended to support the ERDF and the ESF by strengthening economic and social cohesion in the EU. The Cohesion Fund mainly finances trans-European transport networks and environmental projects and contrary to the ERDF and the ESF operates at the national rather than the regional level. Member states qualify for transfers from the Cohesion Fund if their Gross National Income per inhabitant falls below 90% of the EU average. Until the 2004 enlargement, only Greece, Portugal, Spain and Ireland were eligible for the Cohesion Fund. During the period 2007-2013 the Cohesion Fund covered the new member states as well as Greece, Portugal and,

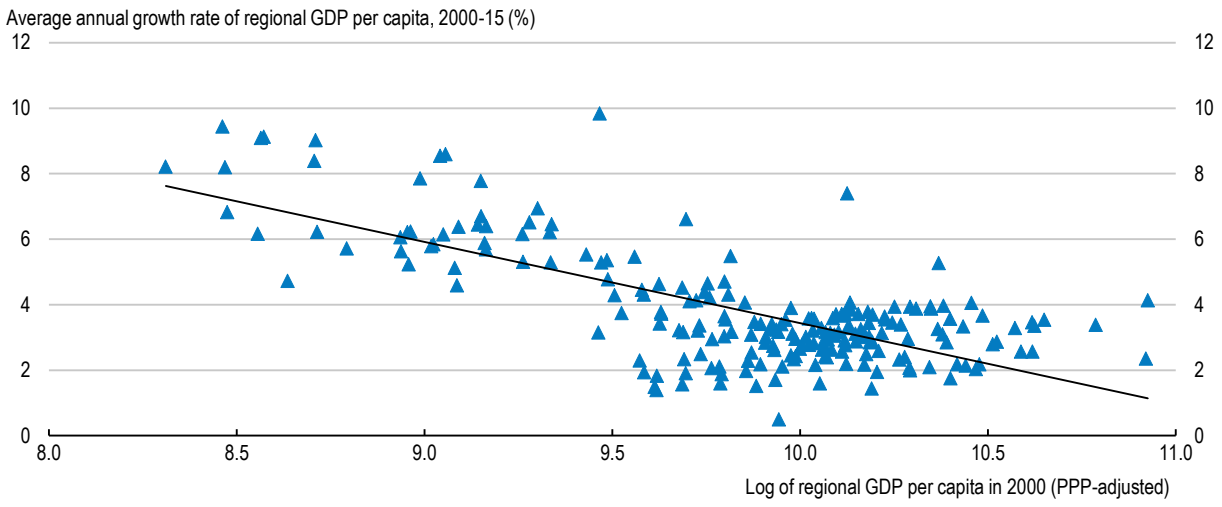
for a limited period of time, Spain. Compared to the ERDF and the ESF, the Cohesion Fund typically requires less co-financing from member states, about 15% compared to 25% in the case of the Structural Funds.

- The **European Agricultural Fund for Rural Development** supports European policy on rural development by financing rural development programmes across the member states and the regions of the EU. For the 2014-20 programming period, the Fund focuses on three main objectives: fostering the competitiveness of agriculture; ensuring the sustainable management of natural resources, and climate action; achieving a balanced territorial development of rural economies and communities including the creation and maintenance of employment.
- The **European Maritime and Fisheries Fund** aims at supporting the EU's maritime and fisheries policies by: helping fishermen in the transition to sustainable fishing; supporting coastal communities in diversifying their economies; financing projects that create new jobs and improve the quality of life along European coasts; making it easier for applicants to access financing.

Source: European Commission.

Figure 1.4. Low-income regions have grown faster than high-income ones

NUTS-2 regions



Source: OECD (2017), *OECD Regional Economy Statistics* (database).

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Box 1.2. Has there been real convergence in the EU?

In the economic growth literature, real convergence is measured by two complementary measures, beta convergence and sigma convergence.

Beta convergence: measures the process of catch up and the tendency for low-income countries or regions to grow faster than high-income ones. Catch up is typically displayed by a negative relationship between the growth rate of GDP per capita (in purchasing parity terms) and the initial level of GDP per capita. Figure 1.4 shows there is a clear pattern of catching up: low income regions have grown faster, on average, than high income ones over 2000-2014.

Sigma convergence: is captured by a lower dispersion of the income distribution. This is typically measured as the coefficient of variation of GDP per capita. If the cross-sectional dispersion falls over time, there is sigma convergence for economies in the sample. Figure 1.2 suggests that there has been convergence among regions in Europe in the past decade, although it somewhat stalled after the crisis.

The evidence on the impact of cohesion policy on convergence is also mixed. Most econometric studies find a positive, although small, impact of the structural funds on GDP growth (Pieńkowski and Berkowitz, 2015), while a small number of studies find no significant impact on regional growth, or even a negative impact. Studies employing macroeconomic models do find greater positive effects of cohesion spending on the level of GDP in recipient countries, both during programme implementation and in the long term (Bradley and Untiedt 2012, Varga and in t'Veld 2010). However, there are important differences between models as regards the size and time distribution of the impacts and results are influenced by the theoretical assumptions imposed on the models that imply an ideal optimal spending of the funds (Pieńkowski and Berkowitz, 2015), which might not happen in practice.

Critics argue that the benefits of cohesion policy are not as big as they could for several reasons. Member states co-finance cohesion spending to ensure additional investment. Member states will contribute on average to 38% of all cohesion spending over 2014-2020 (EC, 2017a). The problem is that such additionality is hard to enforce and verify in practice and evidence suggests that there is substantial crowding out (CPB, 2012). Moreover, there is too much focus on spending the funds for fear of losing money, regardless of the quality of investment, especially towards the end of the programming period (European Court of Auditors, 2017ab). Finally, some argue that cohesion policy, and especially a substantial inflow of funds, induces corruption and rent-seeking (Blankhart and Ehmke, 2015). Higher co-funding rates could help reduce crowding out and the risk that EU funds are spent on low value projects.

Acknowledging some of these critiques and to improve the effectiveness of the structural funds, the Commission has introduced a much stronger focus on performance as of 2014. At the beginning of each programming period authorities need to set-up a performance framework, select indicators to monitor progress and establish clear, realistic and measurable milestones. Monitoring has also been strengthened: every year, countries have to report progress towards targets and submit detailed progress reports at the end of the funding cycle. The Commission has also set up a so-called “performance reserve” to reward projects and priorities that have achieved their milestones early on. If projects are seriously falling behind, the Commission can suspend all or part of interim payments.

Finally, countries need to comply with ex-ante conditions that are meant to ensure that there is sufficient administrative and regulatory capacity to make the best of the funds.

It is too early to say whether this new results-oriented framework will lead to greater spending effectiveness. However, there are already some lessons to draw to improve the new framework. For instance, implementing the new performance tools has proven very difficult in practice. Member states and regions have found it hard to formulate well-defined specific goals and fix programme targets. The European Court of Auditors has also found that performance is assessed against an unnecessarily high number of indicators and in an inconsistent way across the different funds even when the objectives are similar (European Court of Auditors, 2017a). The number of indicators to measure performance should be reduced and harmonised amongst the different funds. The number of impact evaluation reports should also be reduced and made proportional to the size of the project not to overburden beneficiaries. Finally, managing authorities need support and appropriate feedback to implement the new tools.

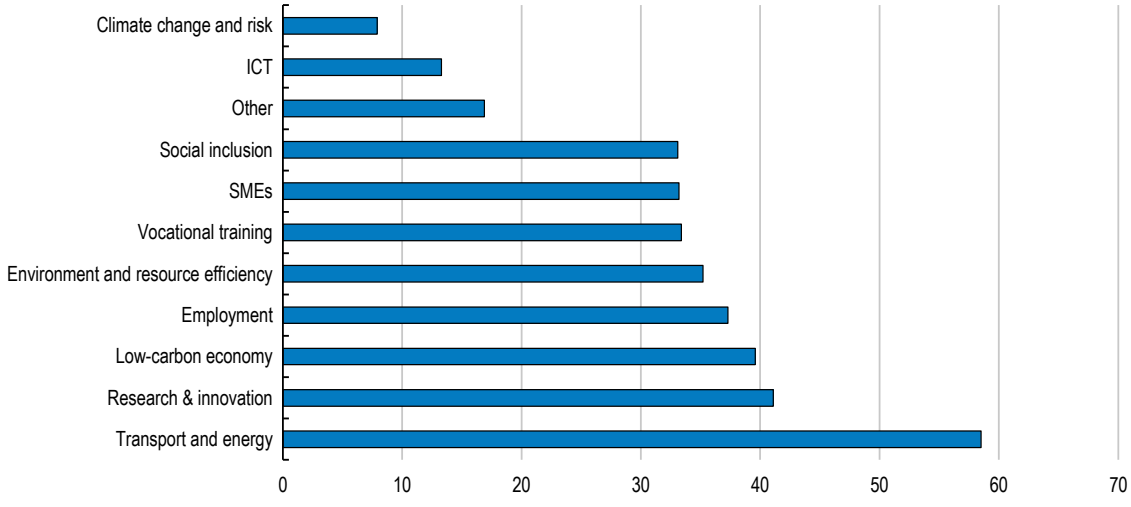
A more effective cohesion policy would contribute to reducing regional disparities, but cannot deliver this outcome on its own. The effective use of the funds must be accompanied by national policies to develop a favourable environment for investment and for human capital development.

Focusing cohesion spending on long-term growth items

There is a risk that too many objectives are over-burdening cohesion policy. Cohesion policy aims at fostering economic convergence, but also broader goals, such as facilitating integration, boosting competitiveness or assuring sustainable development. It covers all countries regardless of development needs and can finance a very wide and dispersed set of activities (Figure 1.5), without necessarily prioritising investments with the greatest growth and convergence dividends. This broad scope undermines the effectiveness of cohesion policy, scatters resources, and renders the evaluation of the policy effectiveness very hard.

Figure 1.5. What does cohesion policy finance?

2014-2020, in billion EUR



Source: European Commission.

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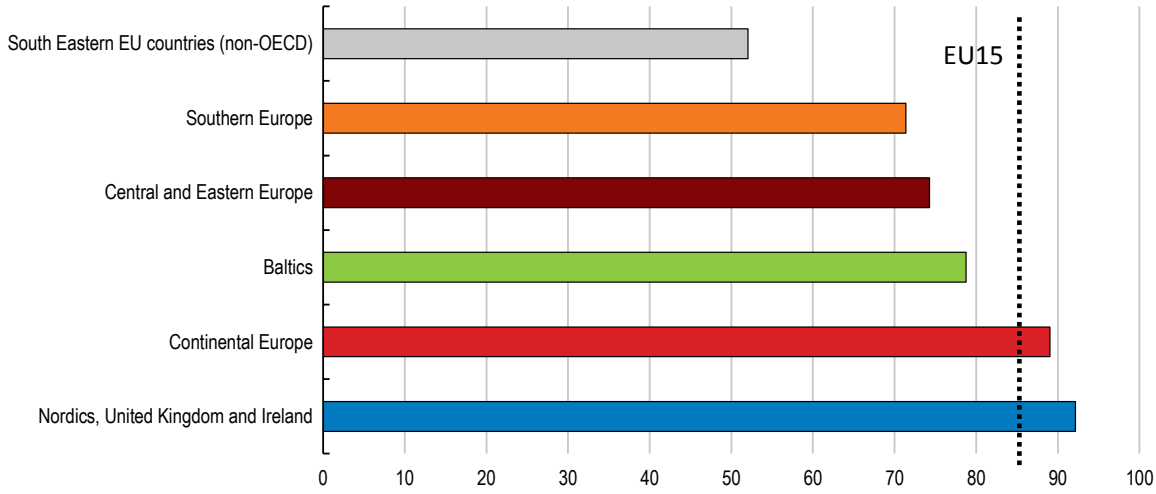
To better support convergence, it would be best that cohesion policy spending focuses primarily on items with long-term growth benefits, including human capital (education, and training), innovation and infrastructure. Supporting investment in infrastructure projects (transport, ICT or energy) in areas that span national borders and national governments would not be able to fund on their own are also important to support growth in Europe.

Improving institutional quality is also important. Evidence suggests that efficient public administration and institutional capacity are key for structural funds to generate growth (Rodriguez-Pose A, 2013). The EU has supported institutional capacity building via a dedicated budget in the structural funds and via ex-ante conditions to access funds. Nonetheless, there are still significant disparities in the quality of institutions across Europe (Figure 1.6, Charron et al. 2016). Efforts to support institutional upgrading could be stepped up by increasing investment in capacity-building, such as training of public officials involved in the management of structural funds or building platforms for exchange of best practices. Stricter conditionality and a stronger link between cohesion funding and country performance on economic reforms, in particular those regarding public procurement or government effectiveness, could also be envisaged, as suggested by some member states. This could incentivise member states to put in place the programming, legal, and institutional frameworks for effectively using the structural funds. More broadly, tighter conditionality in the reception of the structural funds and/or the possibility to freeze funding could provide a tool to tackle threats to EU fundamental values, including the rule of law, in a more effective way than through the Article 7 that suspends voting rights, recently used in the case of Poland, which requires unanimity.

Figure 1.6. The quality of institutions needs to improve in some countries

Worldwide Governance Indicator[1], average percentile rank among all countries, from 0 (lowest) to 100 (highest)



1. Simple average of aggregate indicators of the following six broad dimensions of governance: voice and accountability, political stability and absence of violence/terrorism, government effectiveness, regulatory quality, rule of law and control of corruption. Nordics include Denmark, Finland and Sweden; Continental Europe refers to Austria, Belgium, France, Germany, Luxembourg and the Netherlands; Baltics are Estonia, Latvia and Lithuania; Southern Europe includes Greece, Italy, Portugal and Spain; Central and Eastern Europe's countries are Hungary, Poland, Slovenia and the Czech and Slovak Republics; South Eastern EU countries that are not OECD members include Bulgaria, Croatia and Romania.

Source: World Bank (2017), *Worldwide Governance Indicators* (database), The World Bank Group, Washington, D.C.

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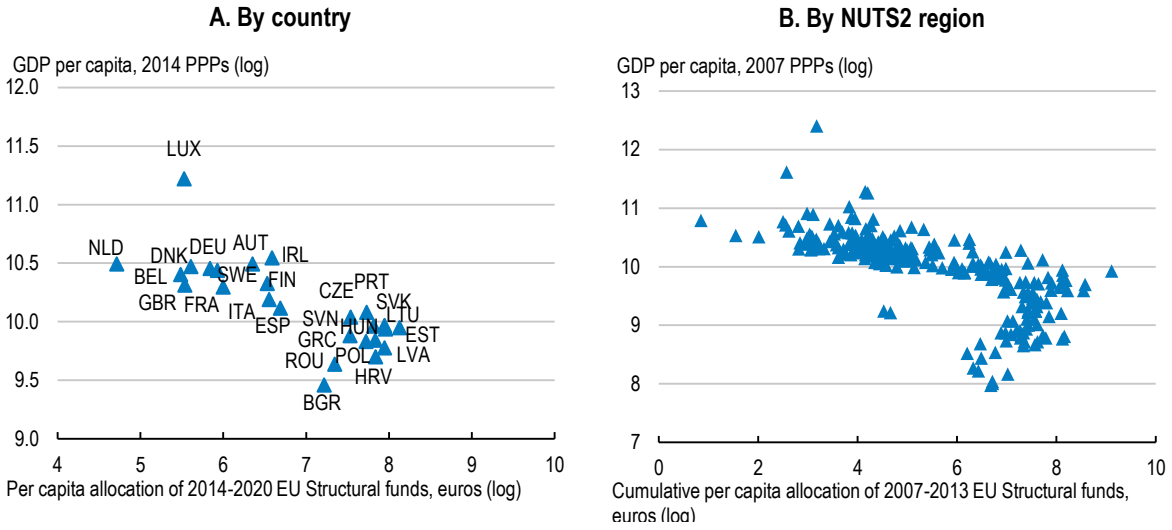
There is scope to make EU cohesion spending more redistributive

The bulk of cohesion support does go to poorer regions and poorer member states (Figure 1.7). But, relatively wealthier regions also receive significant cohesion support: 25% of all funds over 2014-20 (90 Billion Euros) will go to regions with a GDP per capital above 75% of the EU-27 average (so-called "transition" and "more developed" regions). In order to reach an agreement on the EU budget, there is a tendency to balance EU transfers across member states. This is reinforced by the fact that the unanimity rule that regulates the planning of cohesion policy funding gives every country a considerable amount of leverage. However, granting significant amounts of cohesion funding to relatively wealthier countries reduces the redistributive effectiveness of the policy and resources for lower income countries.

Although this would be politically challenging, cohesion funding should be much more highly focused on lagging regions with a GDP per capita of less than 75% of the EU average. The Commission has assessed that if the European Regional Development Fund and the European Social Fund were to end support to more developed and transition regions this would free approximately EUR 95 billion over the period, or a quarter of current allocations for those funds (EC, 2018). This money could be redirected towards less developed regions or cross-border infrastructure projects and projects to support long-term growth in Europe.

Figure 1.7. The bulk of cohesion support goes to poorer member states and regions



Source: European Commission (2018), Open Data Portal for the European Structural and Investment Funds: ESIF database; Eurostat (2018), "National Accounts Statistics", *Eurostat Database*.

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Reducing administrative burdens: the need for fewer, clearer and shorter rules

An overwhelming amount of regulations, changes in regulations, and different interpretation of the rules by the national and European authorities make EU funds implementation difficult to manage and control, often lead to mistakes, and can also mask fraud. Receivers and managing authorities complain that handling the funds is very complicated (Mendez and Bachler 2015; Kah et al. 2015). The smallest beneficiaries, like SMEs and start-ups are particularly challenged by often overlapping and ever growing

rules (High level expert group, 2017). In some cases, some argue that the cost of managing the funds might even be higher than the scale of funding (EC, 2016a).

European and national authorities have simplified cohesion policy several times. Most recently, new measures were introduced for the 2014-2020 period: member states need to draft just one document to apply for funding instead of one per fund, and can use simplified cost options using pre-defined accounting methods. The Commission considers the further simplification of its funding programmes a key priority and has created a high-level group to advice on the simplification of rules and of the architecture of funds for the next funding period after 2020. The group has recommended reducing the number of regulations and guidelines, increasing stability and legal certainty from one funding period to the next and ensuring that the Commission delivers new regulations on time, so the so common delays in starting spending are minimised (High level expert group, 2017). To promote stability and legal certainty, the group advised that the retroactive application of rules, guidelines, texts, doctrines or decisions, in particular regarding audits, should be avoided. These are worthy recommendations and should be taken on board.

A bolder move towards a simplified cohesion policy would be merging the different structural funds into one fund. The complexity of cohesion policy partly stems from the coexistence of several structural funds. The five European Structural and Investment funds often pursue similar objectives but have different rules and are managed by different authorities, both within the Commission and in member states. While challenging, given that it would require EU treaty changes, a single fund could reduce duplication and, the scattering of resources, and would facilitate synergies and planning. Perhaps more feasible in the medium-term would be to move towards "a single-rule book" with a common set of rules and definitions covering the five funds. Different rules and many authorities discourage synergies between funds and difficult monitoring. The single rule book should be accompanied by greater coordination among the different directorate generals in the Commission. For instance, developing joint-work programmes or joint calls for the structural funds could help. It would also be important to harmonise regulations regarding the exchange of information and reporting requirements for different instruments.

Regulations should be clear, reasonably short, and as much as possible stable in time. Reporting obligations have significantly increased over the years, in an effort to better track spending, which is welcome, but have substantially added to the administrative burden (COR, 2016). The Commission has carried out horizontal reviews of reporting requirements in different policy areas which have led to streamlining initiatives. It should continue to review reporting requirements to identify what is really needed to measure progress and success in spending and eliminate unnecessary reporting. Information should be submitted only once and exchanging information only electronically should be mandatory. The Commission already encourages the electronic exchange of information, but many countries are lagging behind in the use of e-services. The EU should also promote and facilitate the exchange of best practices in the management of structural funds. There are useful lessons worth spreading. For instance, Slovakia has set a common platform across funds at national and regional level, which seems to have helped to manage more effectively the funds. Welsh, Estonian and Flemish regions have developed good practices which could be shared (High level expert group, 2017).

Auditing is one area where many rules and actors create problems. Beneficiaries complain that managing authorities and the different audit authorities – European Court

of Auditors, European Commission, and national and/or regional audit authorities – interpret the same rules differently (COR, 2016). Differences in interpretation lead to uncertainty and financial risks. Greater coordination between the managing and audit authorities from the start of programming period to the closure would help. Fewer rules and a greater use of the single audit principle – which implies that a single operation should not be audited twice and that different audit authorities build on each other's work – would also help.

Compliance with state aid rules seems to be another difficult area (COR, 2016; High level group, 2016). State aid elements are more difficult to determine in the case of financial instruments, which adds uncertainty and reduces the up-take of financial instruments (COR, 2016). The application of state aid rules is particularly complicated in the context of European Territorial Cooperation Programmes, as state aid rules can be interpreted differently by member states (COR, 2016). The Commission could provide clearer guidance on how state aid rules apply for structural funds projects and common obligations in terms of selection, management and reporting procedures. Within the European Commission, DG COMP is working closely with DG REGIO to identify areas where further streamlining and simplification of the rules could facilitate the use of EU funds. DG COMP and DG REGIO also extensively cooperate on training programmes to national authorities related to the use of state aid rules in connection with structural funds.

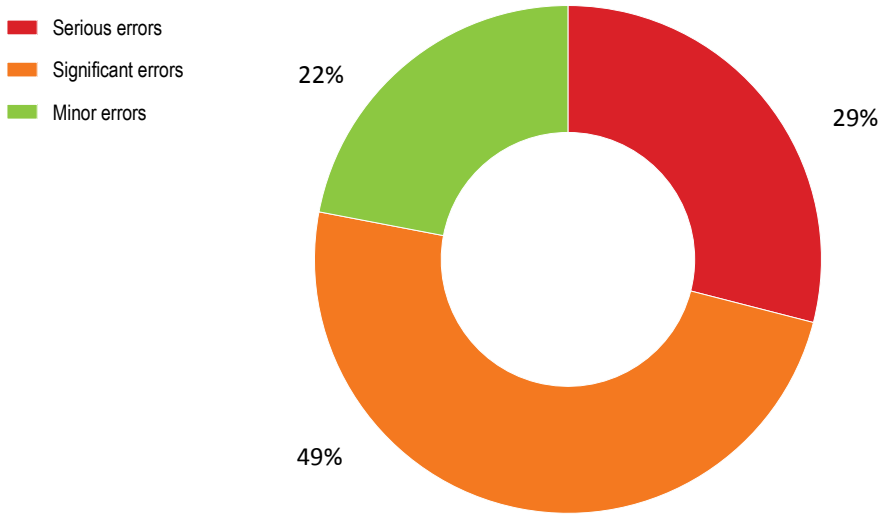
Improving the management of funds

Cohesion policy has been marred by the highest implementation errors in the EU budget, mostly as a result of mistakes in the application of public procurement rules and eligibility of expenditures. Among the projects over 2009-2013 it analysed, the European Court of Auditors detected problems in about 40% of the public procurement projects (ECA, 2015), and significant or serious errors in about 80% of all cases (Figure 1.8). In cases where there were serious errors this means that there was a lack or complete absence of fair competition and/or that contracts financed through the structural funds were not awarded to the best bidders. According to a report for the European Parliament, typical examples of poor practice in public procurement include deliberately removing companies from the bidding process so there is only one viable candidate or limiting the amount of time a company has to respond to a tender for a new contract (European Parliament, 2016).

Better management in the use of structural funds is possible. First, a high volume of legislation and/or guidelines, lack of administrative capacity both by contracting authorities and audit authorities and insufficient planning often leads to errors (ECA, 2015). Second, legal terms are unclear and the Commission often applies legal interpretations retroactively, with audits being a specially problematic area often coming too late in the process to identify problems (COR, 2016). Thirdly, different interpretations of procurement rules by different authorities (e.g. the Commission or national authorities like Public Procurement Offices, audit authorities) are also a problem (High level expert group, 2017).

Figure 1.8. Errors in the accounting of structural funds are common

Distribution of errors found in audits according to their seriousness, 2009-2013[1]



1. Errors detected by the European Court of Auditors in its Statement of Assurance audits, with reference to transactions co-financed from the EU budget through the European Regional Development Fund, the Cohesion Fund and the European Social Fund.

Source: European Court of Auditors (2015), "Efforts to address problems with public procurement in EU cohesion expenditure should be intensified", Special Report N0. 10.

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Fraud in the use of structural funds also occurs (EC, 2012a). In 2016, the European Court of Auditors estimated that 60% of the fraud affecting the EU budget was in the area of cohesion and fisheries spending, amounting to an estimated €391 million (European Court of Auditors, 2017b). There is also a general perception that fraud happens: many Europeans (71%) think that fraud in the use of the EU budget is common, according to a 2015 Eurobarometer survey. While estimates of fraud are small (0.5% of spending on cohesion and 0.2% of the EU budget in 2016), it is hard to quantify how much fraud is truly going on. As spending is overseen by a complex, relatively un-coordinated web of checks and balances at national, regional and Commission level, abuses can happen. Member states are supposed to report suspected cases of fraud in the use of EU money to OLAF – the EU anti-fraud body – but they have little incentive to do so as they will be fined (European Court of Auditors, 2017ab).

Moreover, OLAF does not have the resources to investigate all cases of suspected fraud nor the power to sanction; it can only issue reports and recommendations that the national authority and the national judicial system need to follow-up on. However, investigations of fraud by national authorities are often held back by lengthy judicial processes and meagre resources. Cases of fraud are often complex requiring specific knowledge and experience. There is also a low conviction rate of cases reported by OLAF: between 2009 and 2016 OLAF sent 541 judicial recommendations to member states and only 44% resulted in an indictment by the judicial authority (European Court of Auditors, 2017b)

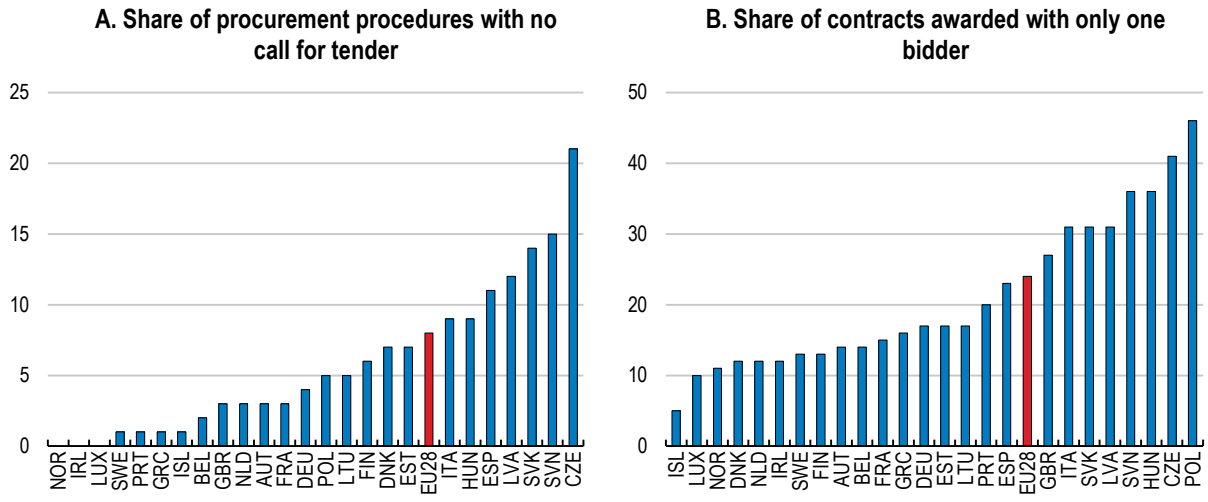
Greater efforts to fight fraud could contribute to build trust in EU institutions. In a welcome move, in 2013 the Commission proposed the creation of the European Public Prosecutor Office to strengthen the fight against fraud in the use of the EU budget and the European Parliament backed its creation in October 2017. The office will have the power to investigate, prosecute and bring to trial criminal offences related to fraud against the

financial interests of the European Union. There are 20 member states officially taking part in the new office from its start in 2020. The other member states (Hungary, Ireland, Malta, the Netherlands, Poland, Sweden and the UK) may join the 20 founding member states at any time. As a complement, simplification of the rules and greater use of e-government and e-procurement could help improve efficiency and reduce opportunities for abuse of power. Improved public availability of data on how the structural funds are spent would facilitate external oversight and ex-post analysis of the effectiveness of the funds which could help guide cohesion policy spending on more value for money principles.

Public procurement is an area where more could be done (Figure 1.9). The Commission and member states have developed an Action Plan on Public Procurement to improve the performance of both administrations and beneficiaries. The Commission has also developed public procurement toolkits, which have helped, but there is still scope for improvement in many countries. Audits of public procurement should be carried out as soon as possible to anticipate errors and reduce corrections, following successful example of some member states (COR, 2016). Better training for public officials in charge of public procurement and for beneficiaries could help to achieve meaningful change.

Figure 1.9. Competition in public procurement is weak in many countries

Per cent, 2016



Source: European Commission, Single Market Scoreboard.

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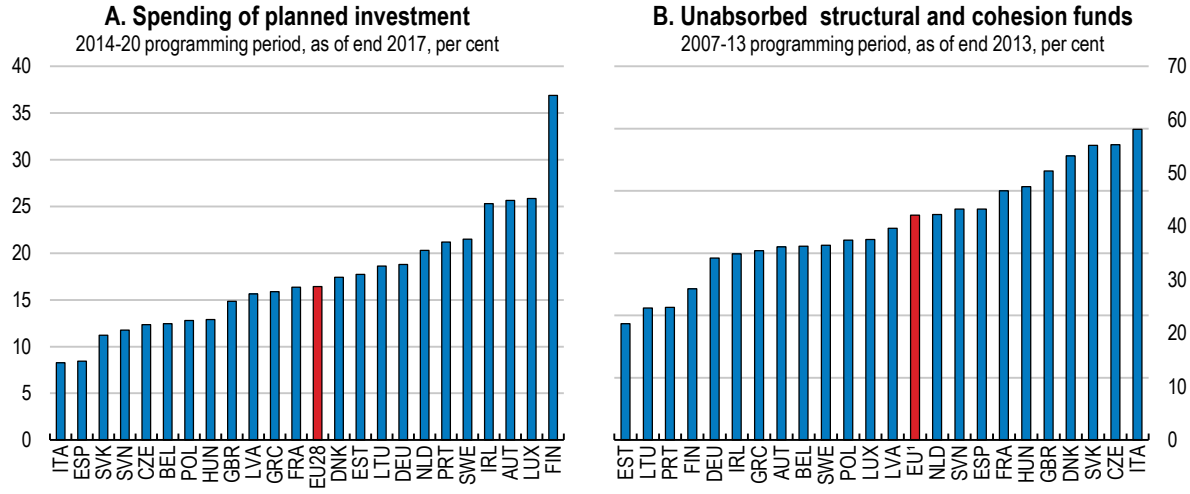
Reducing slow starts and smoothing transitions between financing periods

Slow starts of projects are a recurrent problem with the structural funds. By end 2017, only 16% of expenditure of that planned over 2014-2020 had been disbursed and 53% of funding committed to selected projects (Figure 1.10, Panel A). As a result it is common that at the start of the new financing period significant funds of the previous period are not yet spent: on average 36% of the funds were unused at the end of the last financing period (Figure 1.10, Panel B), which is substantial even if countries have an additional few years to spend the funds. To some extent a low take-up in the beginning of the programming period is normal as projects need time to be crafted, implemented and funds to be reimbursed. However, slow starts are problematic because they lead to back-loading of investment and can result in poor project quality and higher risk of irregularities as

several OECD surveys have documented (OECD, 2016a; OECD, 2014a). Anecdotal evidence from Slovakia and Hungary suggests that at the end of the programming period, projects are chosen by the urgency to spend the funds, rather than the quality of projects (KPMG, 2017). The experience of Czech Republic, Latvia, Lithuania, Slovak Republic, Slovenia and Hungary in 2015-2016 shows that uneven distribution of significant public investment over time makes macroeconomic management challenging in countries where the structural funds account for a significant part of investment (OECD, 2017a; Figure 1.11).

Figure 1.10. Slow use of structural funds is common



1. Unweighted average across 23 EU countries.

Source: European Commission (2018), Open Data Portal for the European Structural and Investment Funds (https://cohesiondata.ec.europa.eu/); European Commission (2014), "Analysis of the Budgetary Implementation of the Structural and Cohesion Funds in 2013".

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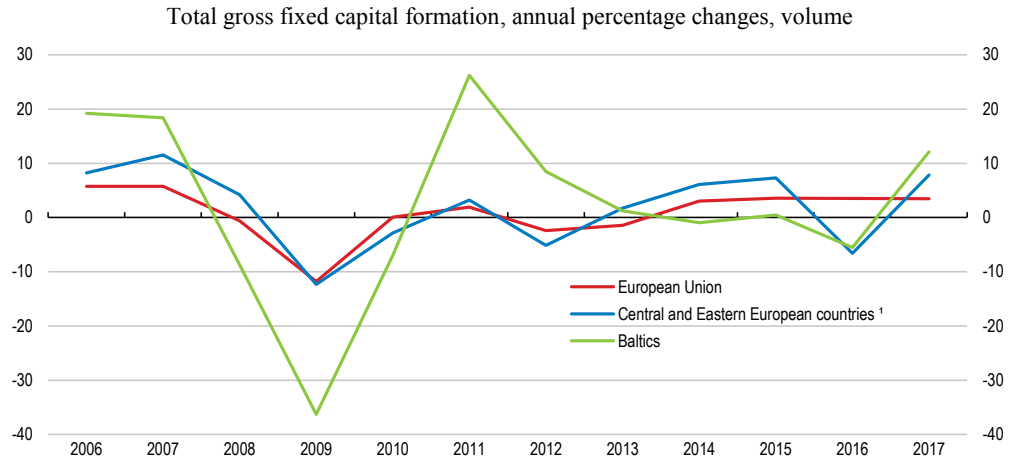
Figure 1.11. Macroeconomic management is challenging in countries receiving a substantial share of cohesion funding



1. Simple average across the Czech and Slovak Republics, Hungary, Poland and Slovenia..

Source: Eurostat (2018), "GDP and Main Components", *Eurostat Database*.

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Factors that delay implementation and slow the use of funds are multiple. On the EU side, the focus and rules of EU funds tend to change from one period to the other and it takes long time to learn again how such a complex system works. On the national side, they include poor quality of programming documents, which result in postponed or unsuccessful calls for proposals, significant turnover of qualified staff, delayed fulfilment of ex-ante conditions to access funding or dependency on the political cycle (KPMG, 2017; European Court of Auditors, 2014).

Actions on the EU and national side are needed to reduce slow starts and smooth transitions between financing periods. On the EU side, speeding up the negotiation of the programming period, which is often very slow and leads to delays in implementation, would help. In this respect, the Commission should ensure that the legislative proposals for the post-2020 period are presented with sufficient time to complete the negotiations between the European Parliament and Council not to delay the implementation of the policy. There is also scope for the Commission to prepare guidance documents in a timelier manner and to simplify the carrying over of projects from one period to the next. Additional steps to simplify regulations would also help. On the national side, countries should streamline administrative procedures, strengthen the administrative capacities to manage the funds, harmonise EU and national criteria, and improve the timeliness of project approval, building on existing country experiences to improve the absorption of structural funds (Box 1.3).

Box 1.3. Reforms to improve the absorption of EU structural funds: selected country experiences

A number of countries have done reforms to improve the implementation of EU Funds. The experiences of these countries suggest that improving capacity, greater use of electronic applications, simplified processes, and greater coordination can help to speed implementation.

Bulgaria: Initial weakness resulted in a low absorption rate, which was mitigated by increasing advanced payments, applying electronic application and reporting procedures, simplifying and unifying tender processes; and strengthening the role of international financial institutions and banks in project preparation, evaluation and monitoring (Paliova and Lybek, 2014).

Czech Republic: Significant steps have been taken to improve co-ordination, capacities and framework conditions for the 2014-20 period (OECD, 2016a). "Standing conferences" have been established at the national and regional level (using the eight regional groupings channelling EU funding). These conferences include important territorial stakeholders and will prepare action plans that form the basis for calls for tender. There is also a stronger focus on integrated strategies within regions and community-led local development. The number of programmes has been reduced, procedures for managing the programmes have been simplified and a uniform methodology applied across all programmes.

Poland: A forum has been introduced for coordination of strategic planning for the EU-funded investments (IMF, 2016). Project management and transparency of execution have improved as part of efforts to better absorb the EU Funds. Technical assistance funds have been used to train regions and beneficiaries of project funds in performance monitoring. An informational system for monitoring and controlling structural and cohesion funds was put in place in 2007 to monitor

the financial and physical progress of projects co-financed by EU Funds throughout their implementation, which was meant to facilitate the certification process for release of the EU Funds. Each such project was also assigned a monitoring committee that carried out systematic progress assessments over the life of the project.

Slovak Republic: Some steps have been taken to improve the administration of EU funds, such as the semi-annual publication on the implementation of EU funds that allows the authorities to react promptly in case of identified problems regarding absorption of the funds (OECD, 2014a). Administrative procedures have also been simplified and allow the managing authority to request only partial project documentation upon the application submission, the rest of the documentation being required only after projects are selected (OECD, 2017b). Following 2014 and 2015 government resolutions, it was decided to significantly increase the number of employees working in entities responsible for the European Structural and Investment Funds. The Analytical Unit of Central Coordination Body was created in June 2015. The main aim of this body is to provide input for evidence-based policy-making, with a special emphasis on the study of the effectiveness of EU funds IMF (2017) an electronic system to exchange data between managing authorities and EU funds beneficiaries has been put in place to monitor and evaluate the whole process. The managing authorities started to collaborate with regional offices to offer technical assistance and free consultations to help applicants with the application process. The recently adopted National Public Procurement Package is supposed to facilitate the application and disbursement process.

Slovenia: The government has created an inter-ministerial coordination, which organises meetings with potential applicants and advises smaller companies has been created (Paliova and Lybek, 2014). Slovenia has also simplified procedures for payments and improved the timeliness of announcement of public tenders.

Lithuania: Since joining the EU in 2004, Lithuania has taken steps to improve planning and implementation of public investment projects, particularly those financed by the EU Funds (IMF, 2016). To deal with an expanding pool of potential project applications to use the EU funds, a competition-based project selection procedure was introduced which meant that public entities and public service providers had to apply for financing on an equal basis and to follow the well-defined criteria and procedures.

Greece: Through the Commission's Structural Reform Support Service (SRSS) technical support is provided for building administrative capacity for the design and implementation of reforms of importance for the absorption and use of EU funds. Simplification measures were carried out in the legislation and the implementation of EU structural funds. Such measures included the demarcation between political and administrative tasks, enhanced coordination of the funds as well as reinforcement of anti-fraud measures. Greece set up an inter-ministerial committee with the aim to lift bottlenecks in the implementation of projects and took legislative action to simplify the payment circuit of projects in order to increase absorption. A “ring-fence mechanism” was put in place to ensure that EU money reaches the real economy and is used solely for payments to beneficiaries of the Operational Programmes.

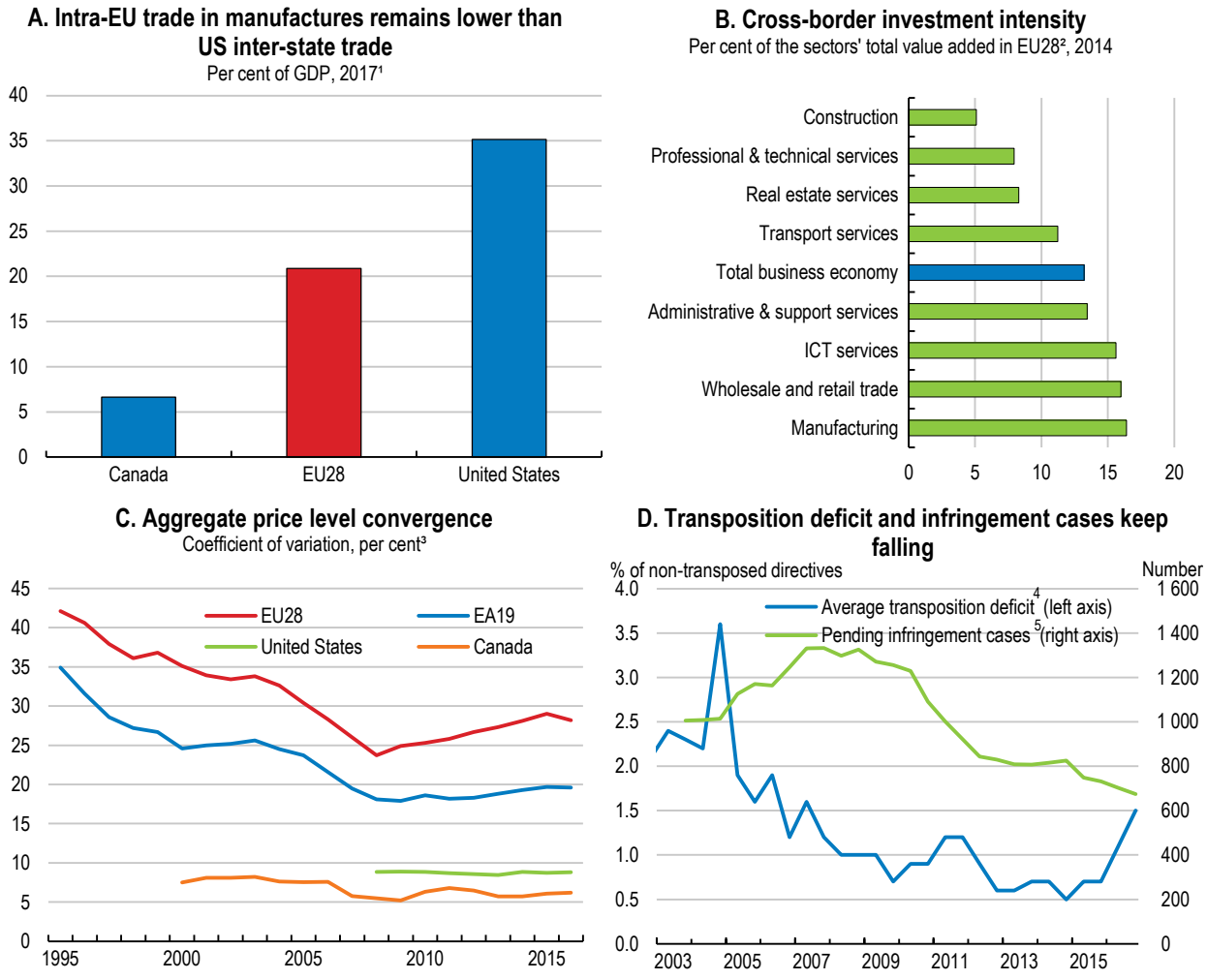
Deepening the single market is a key EU lever to boost long-term growth and catch up

A dynamic and large single market, that stimulates competition and efficiency, is the EU's main asset for spurring productivity, investment and economic growth. A deeper single market would also help the catch-up of lagging regions by expanding their markets and economic opportunities. The creation of the single market in 1986-1992 is one of Europe's biggest achievements. By broadening the customs union for free trade in goods to include the free movement of people, services, and capital the single market has delivered important benefits to EU citizens over the last 25 years (OECD, 2007). The European Commission has estimated that the single market programme added a 2.1% increase in EU GDP in its first 15 years (EC, 2012b).

Despite these acknowledged benefits, there is wide consensus that the single market is unfinished business. The single market remains fragmented along several dimensions, as showed by a battery of indicators typically used to gauge progress in deepening the single market (Figure 1.12):

- **Free movement of goods**: The goods market is relatively well integrated. Nonetheless intra-EU trade in goods at close to 20% of GDP remains much below that in the US (Figure 1.12, Panel A).
- **Free movement of services**: Intra-EU trade in services has grown steadily since 1992, with intra-EU exports of services as a % of EU GDP doubling from 3% in 1992 to 7% in 2016. However, intra-EU trade in services remains less than one third of the value of intra-EU trade in goods.
- **Free movement of people**: Migration between EU countries stood at 3.9% of the EU working age population in 2016 (about 11.8 million people), up from 1.6% in 2004, though is still below inter-state mobility in the US or other federal systems.
- **Price convergence**: The single market contributed to boost price convergence between countries, however, price dispersion within countries remains higher than in the US (Figure 1.12, Panel C).
- **Productivity and growth**: The ultimate channel through which the single market was supposed to boost growth and welfare was through productivity via a variety of different direct and indirect channels, both in the medium and long-term (Marinello et al. 2015). However, the productivity gap with the US remains large (Figure 1.13, Panel A), and at the firm level is particularly large in services (Figure 1.13, Panel B), where the single market is least developed.

Figure 1.12. The Single Market is still fragmented



1. 2014 for Canada and 2012 for the United States, both based on census-data.
2. Cross-border investment intensity is measured as the proportion of total value added - by sector - generated by intra-EU28 foreign affiliates; coverage is limited to the business economy and excludes financial and insurance services.
3. 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.
4. Transposition notifications made by 11 December 2016, for directives with a transposition deadline on or before 30 November 2016
5. Infringement proceedings open on 1st December 2016.

Source: Eurostat (2018), "Intra and Extra-EU trade by Member State and by product group", *Eurostat Database*; US Bureau of Transportation Statistics, Commodity Flow Survey 2012; Statistics Canada, Interprovincial Trade Flows (Panel A); Eurostat (2018), "Structural Business Statistics", *Eurostat Database* (Panel B); Eurostat (2018), "Price convergence indicator", *Eurostat Database*; BEA (2018), "Real Personal Income for States and Metropolitan Areas", US Bureau of Economic Analysis; and Statistics Canada (2018), "Table 326-0015", CANSIM Database (Panel C); European Commission (2017), Single Market Scoreboard, July, http://ec.europa.eu/internal_market/scoreboard/ (Panel D).

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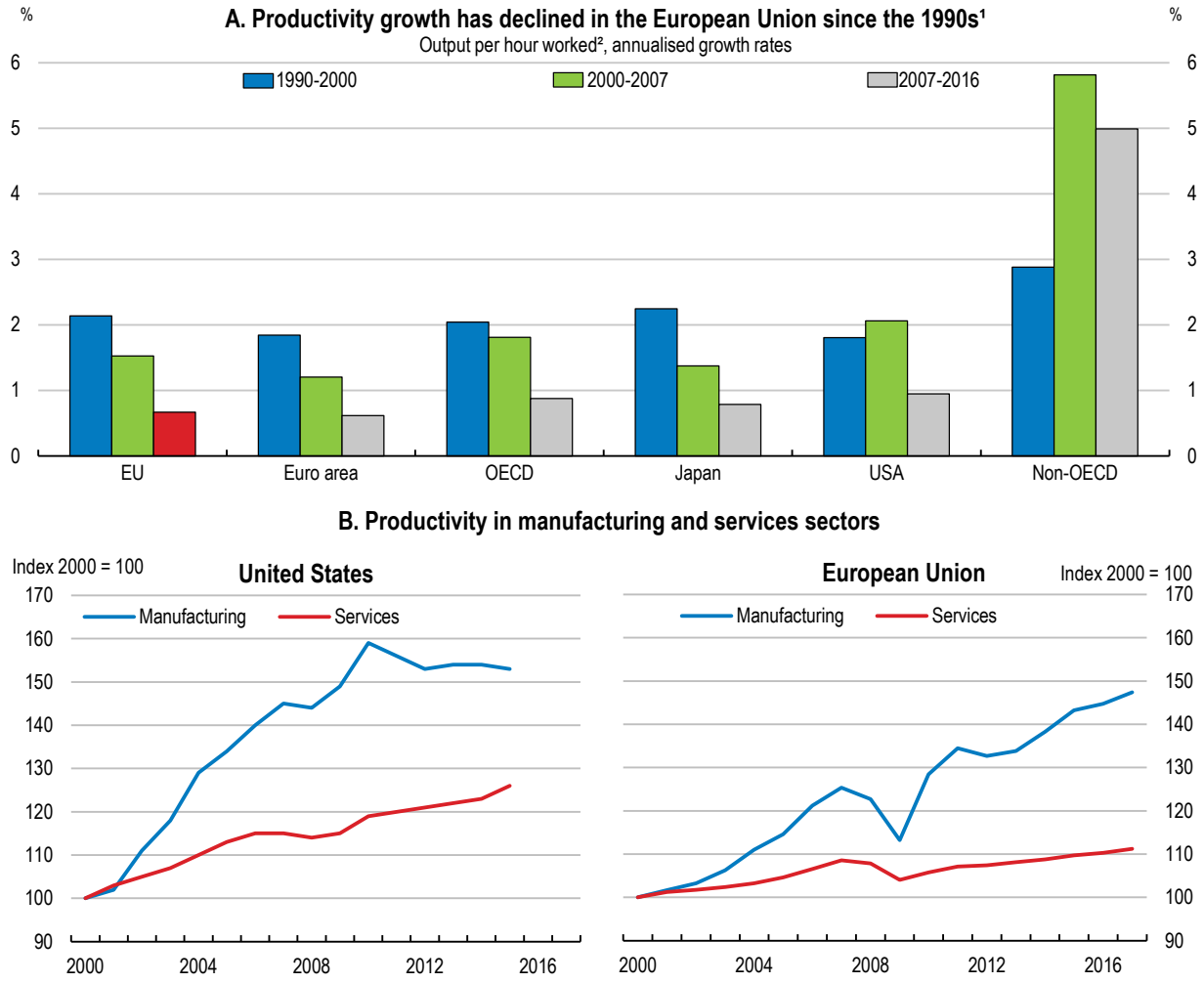
Figure 1.13. The productivity gap is particularly large in services



1. The EU and the Euro area aggregates refer solely to Member States that are OECD countries. Non-OECD is Argentina, Brazil, China, Colombia, India, Indonesia, Latvia, Lithuania, Russia, South Africa and Saudi Arabia. EU, Euro area, OECD and non-OECD are aggregated using GDP PPP weights. Data for several countries begin between 1991 and 1995, not in 1990.
2. Productivity is measured as output per employee for Non-OECD countries.
Source: OECD estimations using OECD National Accounts database; OECD Productivity database; International Labour Organisation database.

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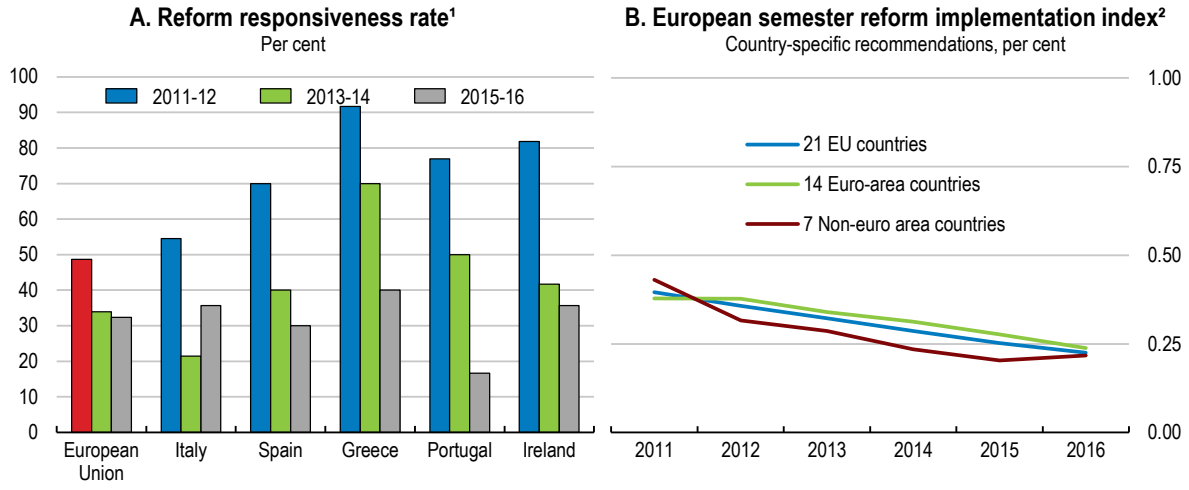
The implementation of single market directives is another indicator to gauge the development of the single market. The EU average transposition deficit has decreased steadily over the years thanks to strong political commitment, improved coordination and targets set by the European Council (Figure 1.12, Panel D). Nonetheless, in 2016 most Member States experienced significant delays in transposing recent directives. These delays should be closely monitored and pre-infringement initiatives should be given sufficient resources, including staff to ensure their successful continuation, as argued in the 2016 EU Survey. There are also wide differences in the adoption and implementation of single market legislation.

The EU needs to give the single market a fresh impetus to boost productivity, promote investment and growth, especially in the areas where the scope for progress is largest, including services, energy, transport and digital. Actions at the EU level should be accompanied by renewed national efforts to foster growth-enhancing reforms, in line with country-specific recommendations in Economic Surveys and in Going for Growth. The reform impetus has steadily declined since 2011-12 (Figure 1.14, Panel A). A similar message emerges by looking at the implementation of the European Semester country-specific recommendations. Implementation has steadily deteriorated over time since the adoption of the European Semester in 2011 (Figure 1.14, Panel B). Reforms that stimulate innovation and enhance competition in product markets and reforms that improve the business environment and the quality of institutions could help also to foster economic resilience in the member states and the euro area as a whole (EC, 2017b).

Figure 1.14. Implementation of policy recommendations is weak



1. Number of actions taken as a percent of total policy recommendations.
2. The indicator is the ratio of the sum of scores to the total number divided by the number of recommendations; each country-specific recommendation is assigned a score ranging from 0 (no or limited progress) to 1 (full, substantial progress). The series displayed are unweighted averages across 21 EU countries for which data are available.

Source: OECD (2017), *Going for Growth 2017*, OECD Publishing, Paris; Bruegel and OECD based on European Parliament studies.

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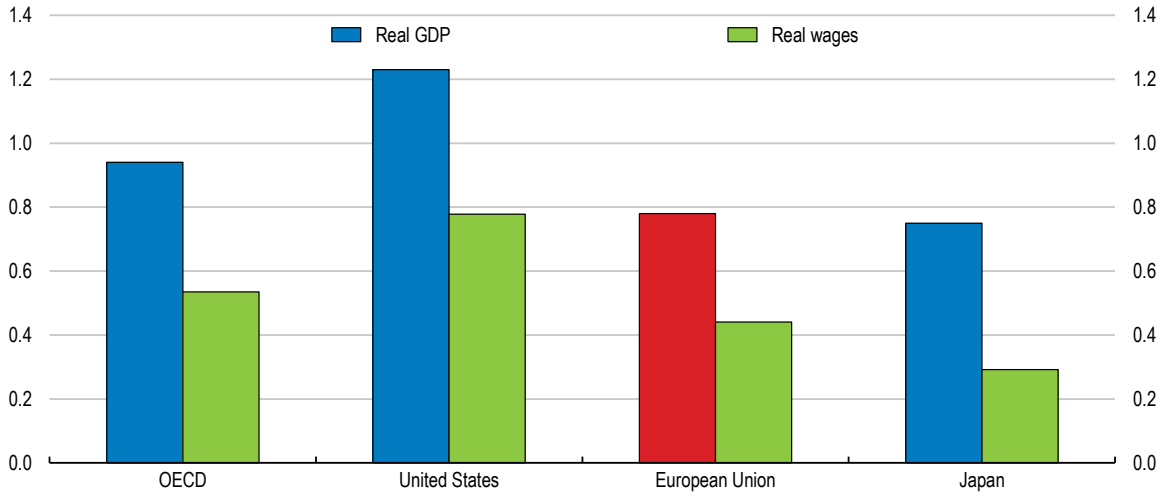
Across Europe there is ample scope for product market reforms to boost competition, encourage innovation and business dynamism and enhance diffusion of new technologies (Table 1.A1-A3). If Europe pushes for productivity-enhancing reforms, OECD estimates suggest that reforms to raise productivity could increase GDP by as much as 0.7% up to 2023 in the EU (Figure 1.15).

Figure 1.15. Gains from reforms raising productivity by 1% over 5 years

Difference from baseline, per cent[1]



1. The scenario considers the effects of raising labour-augmenting technical progress by 0.2 percentage point per annum in all of the advanced economies for five years, beginning at end-2017, with the 1% higher level of technical progress being maintained permanently thereafter.
Source: Box 1.1. in OECD (2017), *OECD Economic Outlook, Volume 2017 Issue 2*, OECD Publishing, Paris; OECD calculations.

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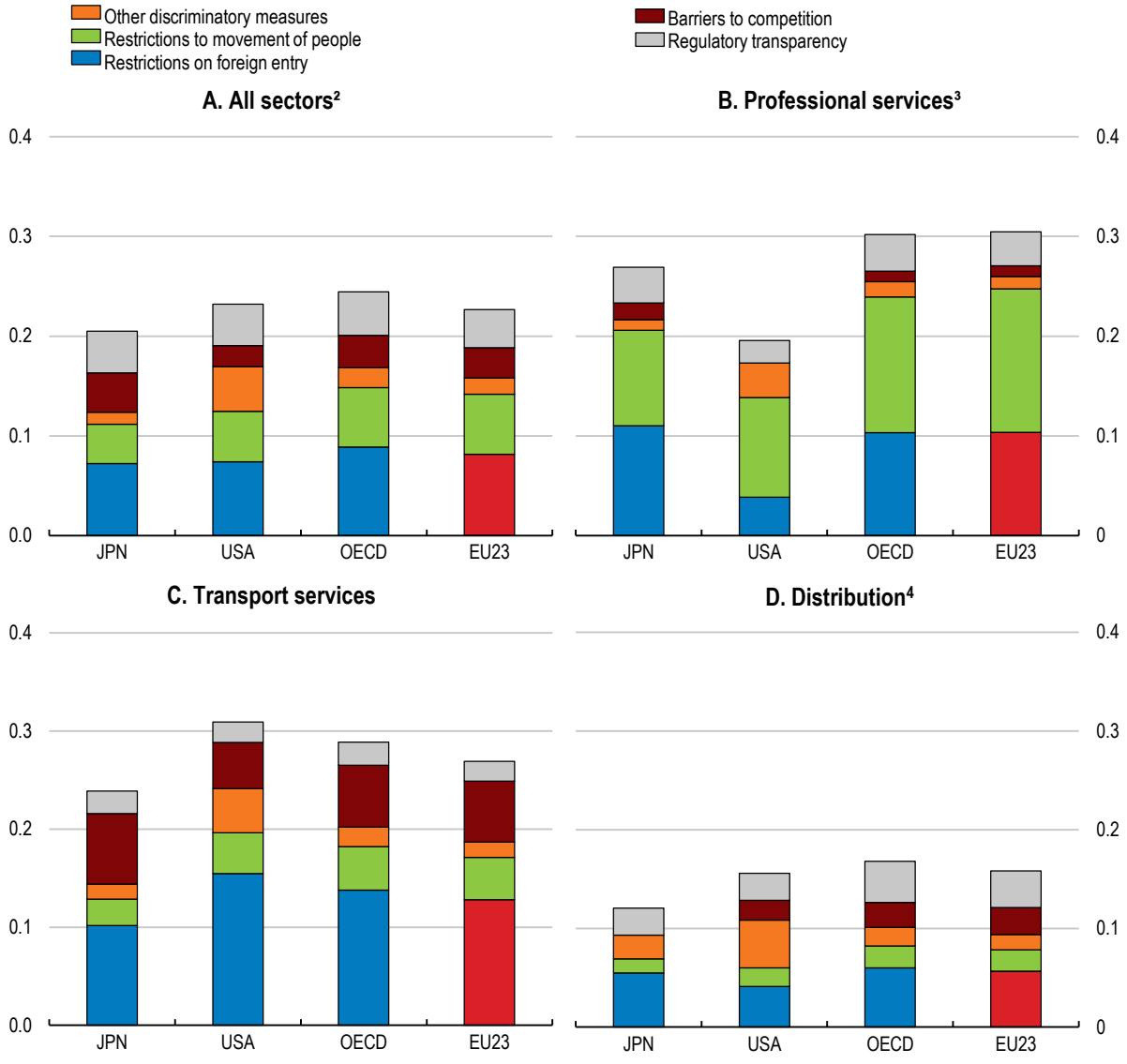
Services experience significant administrative and regulatory barriers when going cross-border

Businesses still experience many administrative and regulatory barriers when providing services in another member states (Figure 1.16), with the burden of restrictions falling disproportionally on smaller firms (Figure 1.17). Sluggish services reform efforts are an important factor holding down productivity growth (Figure 1.18). While services represent 70% of the EU GDP and account for some 70% of total employment, cross border services only make up 5% of the EU GDP compared to about 20% for goods. For instance, only 10% of providers in business services and construction provide services across the border (European Commission, 2017b).

Figure 1.16. There is still room to ease regulations in EU services

Services Trade Restrictiveness Index[1] (STRI), from completely open (0) to completely closed (1), 2017



1. The STRI index measures the restrictive effect of regulations on trade.
2. Simple average across the 22 services sectors for which data are currently available.
3. Simple average of accounting, architecture, engineering and legal professional services.
4. Includes both wholesale and retail trade.

Source: OECD (2018), *OECD Services Trade Restrictiveness Index* (database).

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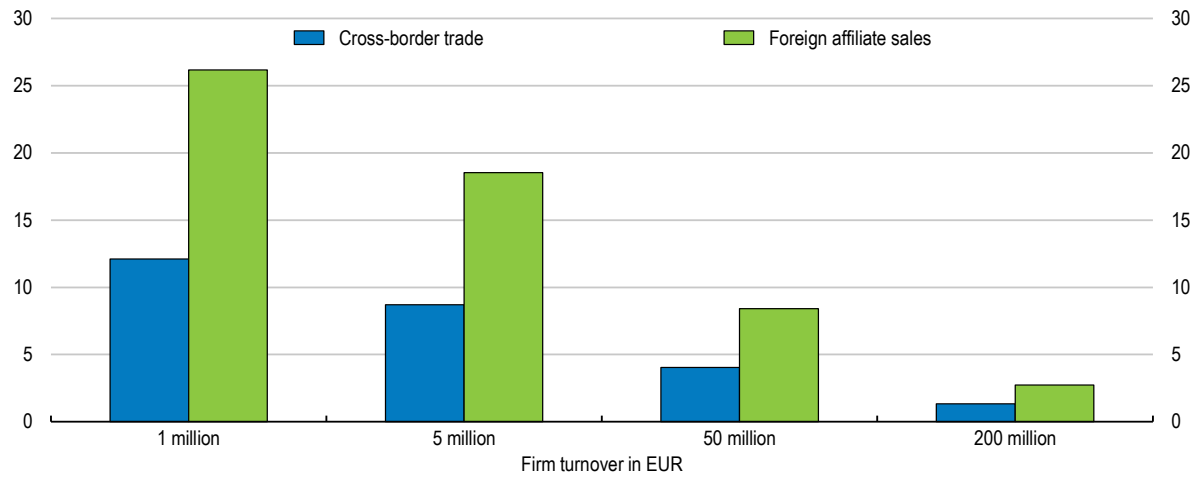
Figure 1.17. The burden of restrictions falls disproportionately on smaller firms

Average effect across sectors and countries[1], per cent



Note: The numbers indicate the ad valorem tariff equivalent of an STRI score of 0.2 on top of what is incurred by firms with turnovers of EUR 500 million and above.

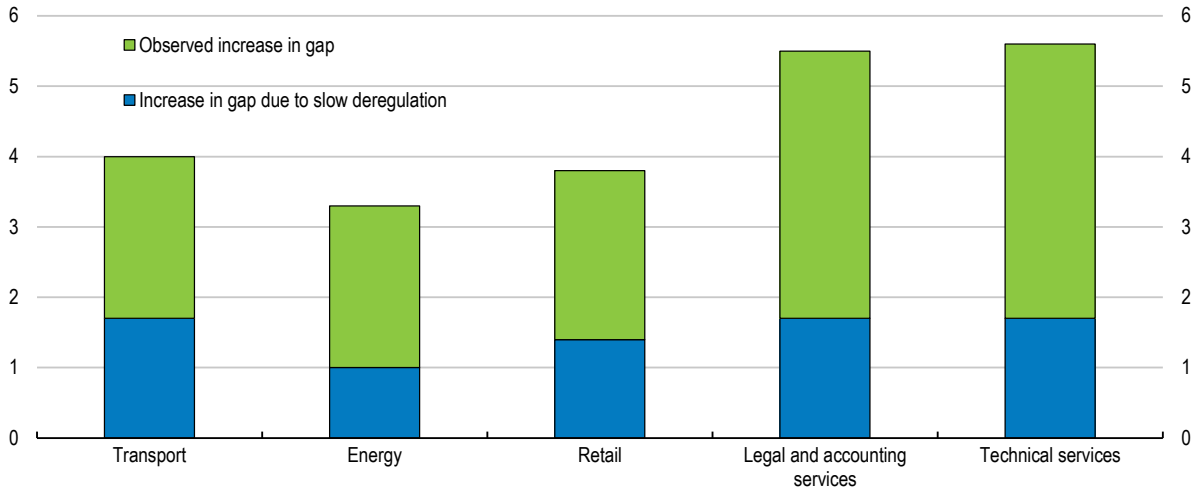
1. Based on microdata from Belgium, Finland, Germany, Italy, Japan, the United Kingdom and the United States.

Source: Rouzet, D., S. Benz and F. Spinelli (2017), "Trading firms and trading costs in services: Firm-level analysis", OECD Trade Policy Papers, No. 210, OECD Publishing, Paris.

StatLink http://dx.doi.org/10.1787/888933748439

Figure 1.18. Sluggish services reform efforts are linked to productivity divergence

Percentage contribution to the annual change in the MFP gap of the slower pace of reform relative to the best practice industry[1]



1. The figure shows the annual change in the revenue-based MFP (MFPR) gap between the frontier and laggard firms, and the part that is explained by slower deregulation than that observed in the fastest deregulating industry (telecom) based on coefficients estimated by the authors. Estimates are averaged over countries and years. Growth rates expressed in percentages are approximated by log-point differences.

Source: Andrews, D., Criscuolo C., and Gal P. N. (2016), "The Best versus the Rest: The Global Productivity Slowdown, Divergence across Firms and the Role of Public Policy", OECD Productivity Working Papers, 2016-05, OECD Publishing, Paris.

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Service providers in several sectors complain about administrative complexity and costs when going cross-border (European Court of Auditors, 2016). Barriers include not only lack of information about applicable rules but also complexity of procedures and formalities, a lack of electronic procedures, differences in rules and requirements among countries, unclear deadlines and multiple fees. Business services (e.g. accounting, tax advice, architecture, engineering, IT) and construction are particularly affected by stringent regulatory obstacles when going cross-border. These include excessive shareholder requirements, requirement for professionals to hold 100% of the voting rights or capital in a company or compulsory minimum tariffs for some professions (European Commission, 2017c). Finally, the 2003 Service Directive established a system to enhance administrative cooperation between Member States and exchange information; however, it is seldom used. As a result member states continue to impose specific domestic requirements on service providers established in other Member States.

Removing barriers further could create opportunities for new companies to expand to more markets and foster growth. Estimates suggest that the full implementation of the services directive could add 1.7% to EU GDP (European Commission, 2017c). There is great scope to remove barriers in particular in those service sectors where cross-border trade and cross-border investment remain low (Figure 1.12, Panel B).

To make it easier for companies and professionals to provide services in another member state, the Commission launched a new service package in January 2017. One of the key measures was a new e-services card. Other measures in the services package include the proposal on notifications in services, the proposal on the proportionality test before adoption of new regulation of professions, as well as the reform recommendations for regulation of professional services, which all provide incentives for Member States to assess and reform the barriers that exist in their services markets.

The e-card aimed at reducing information asymmetries and eliminating the need for multiple requests of information facilitating that more firms go abroad in the sectors of construction services and business services, which still show very low levels of cross-border trade. E-cards would also be used to facilitate the temporary provision of services across borders and the set-up of agencies, branches and offices where administrative complexity and legal uncertainty is still an important challenge (EC, 2017c), as recommended in the 2016 OECD Survey. However, the e-card proposals in their current form are unlikely to be approved in the EU legislative process. A solution should be found to reduce barriers in the business services sector by simplifying procedures for self-employed and companies to complete the administrative formalities to establish and provide cross-border services.

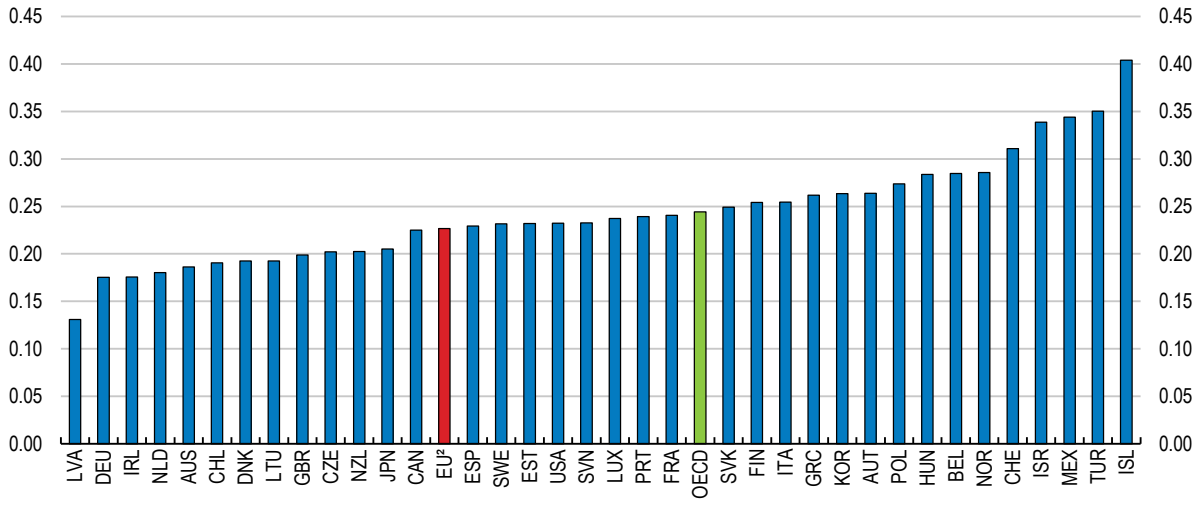
There is significant scope for improving the functioning of the European retail sector. Retailers face persisting barriers to market entry including burdensome and complex authorisation processes, restrictive requirements linked to the size and location of shops, as well as operational restrictions, including shop opening hours or rules on promotions and discounts. Evidence by the Commission shows that, as a result, prices are high and product innovation and labour productivity growth are low (EC, 2015a). The Commission has launched an initiative in May, which consists of best practices to guide member states' reform of the regulatory environment for retail. Such efforts are welcome. Close monitoring by the Commission of the level of regulatory restrictiveness in the retail sector and its economic impacts should be used to measure member states' reform efforts.

According to the OECD's Services Trade Restrictiveness Index (STRI), the EU service market is relatively open to third countries compared to other OECD countries

(Figure 1.19). The EU is the largest exporter and importer of services in the world; exports and imports of services were valued at €1,517 billion in 2015 (WTO, 2017). The openness of EU services markets is largely reflected in commitments bound in the World Trade Organisation and in Free Trade Agreements and covers all levels of government (EU, member states and sub-federal entities) and extends to procurement. Because of the openness of the EU's services market, a more integrated single market by generating additional growth and demand will not only benefit European businesses but also suppliers from other countries.

Figure 1.19. The degree of openness of the EU services market is relatively elevated

Services Trade Restrictiveness Index[1] (STRI), from completely open (0) to completely closed (1), 2017



1. The STRI index measures the restrictive effect of regulations on trade; unweighted average across the available 22 sectoral indicators.
2. European Union member countries that are also members of the OECD (22 countries), plus Lithuania.
Source: OECD (2018), *OECD Services Trade Restrictiveness Index* (database).

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Professional services face constraints to labour mobility and investment

One way for people to benefit directly from the single market is to move to work in another EU country. However, very few people work in another member state. Languages are obstacles to mobility, but there are also policy-induced barriers to mobility including that national rules are sometimes unnecessarily burdensome and outdated making it difficult to work in another country. Barriers include conduct or practice restrictions, education and training requirements and compulsory membership of professional associations.

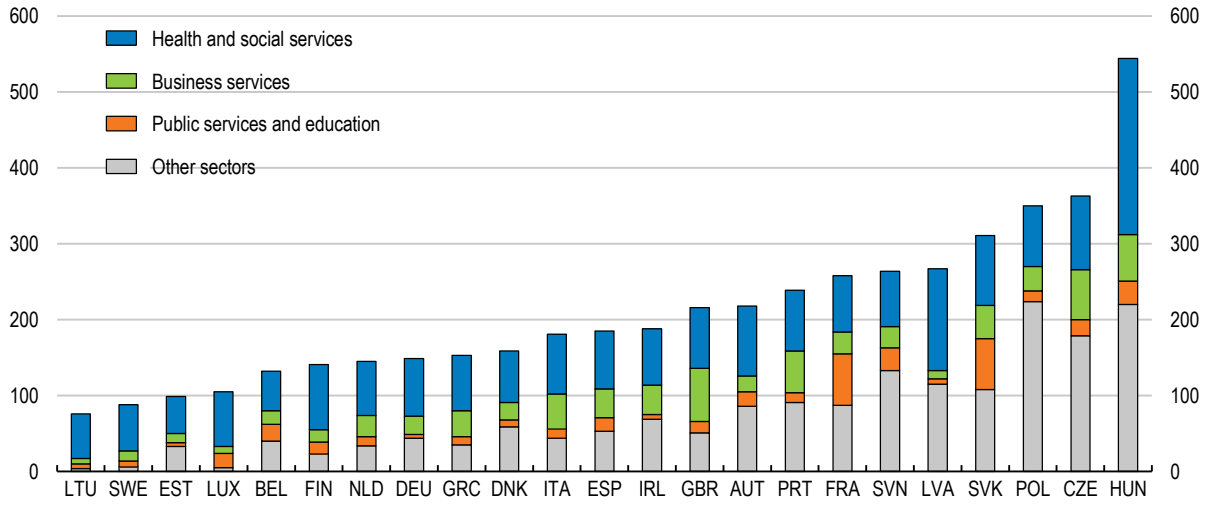
The 2013 Professional Qualifications Directive regulates the recognition of professional qualifications across the EU and seeks to promote the automatic recognition of professional experience, however, in practice the procedures do not work well. Qualification and training requirements to access regulated professions vary widely across countries and the recognition of qualifications is often made on a case-by-case basis, favouring uncertainty. To improve the situation, an electronic European

professional card became available in January 2016 to help professionals get their qualifications recognised more quickly and easily. The card specifies the obligations of member states in the process and sets deadlines for treating applications. If host country authorities do not reach a final decision within a deadline, then recognition is granted automatically. At present the card is available for only five professions and should be expanded to other professions, as recommended in the 2016 OECD Survey. Increased harmonisation of professions' curricula at the EU level beyond the seven professions currently covered could also help make recognition of qualifications more automatic.

Further reducing the high barriers to access regulated professions in many countries (Figure 1.20), could support mobility, as well as long-term productivity growth. The Commission has recently proposed that member states should undertake a comprehensive and transparent test based on some pre-defined criteria every time they want to adopt or amend their national professional services. The intention of the test would be to address disproportionate and unnecessary regulation, which is welcome. However, the criteria proposed by the Commission are quite broad and leaves a wide scope for interpretation. The Commission should also ensure that the new test does not put a break on member states reform efforts, which are already faltering and increases the already high administrative burden.

Figure 1.20. In many EU countries the number of regulated professions is high

Number of regulated professions by main sector, 2016



Source: European Commission (2018), Regulated Professions Database.

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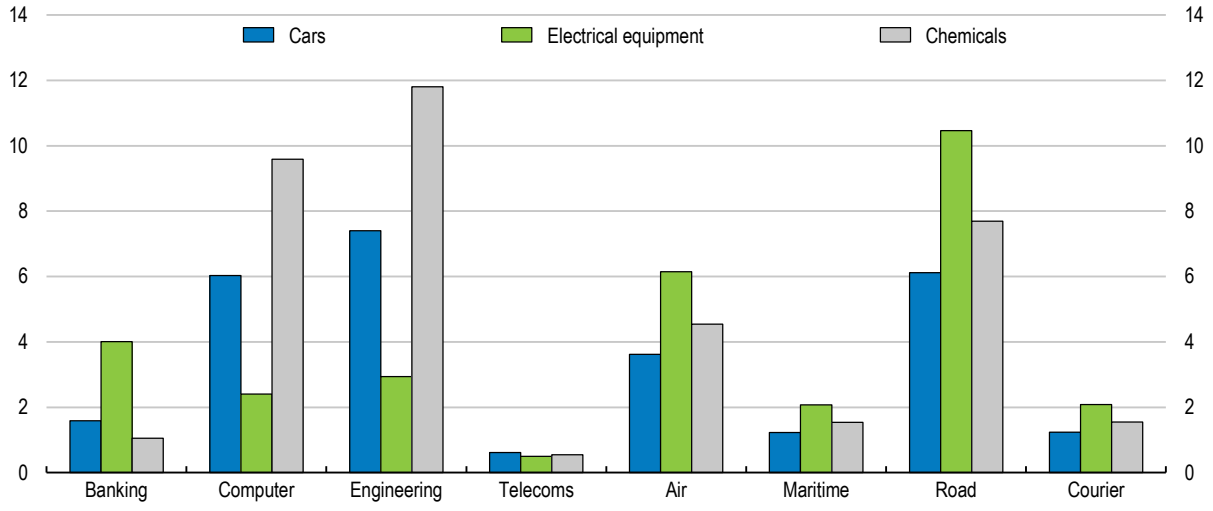
A competitive transport system to get the Single Market moving

A well-functioning and integrated transport system would facilitate the free movement of goods and people, including across borders. This would not only improve the productivity of transport sectors, but also benefit other sectors by reducing trade costs and ensuring that supply chains work effectively. For instance, OECD evidence suggests that countries with higher restrictions on road freight (relative to other transport modes) inhibit exports of key industries including cars, electrical equipment and chemicals (OECD, 2017c; Figure 1.21). As discussed in previous Surveys (OECD, 2016b), road transport remains highly segmented along national borders, which is potentially very costly given that three

quarters of all freight transport in Europe is by road, according to Eurostat. There are also important investment needs to remedy crucial links in the core TEN-T network, especially in the core road network in Central and Eastern European countries, in particular Estonia, Lithuania, Poland, Slovakia and Romania (Eurocities, 2017).

Figure 1.21. Countries with higher restrictions on road transport export less

Estimated percentage impact of halving the distance to best-practice STRI[1] on manufacturing exports by sector in the EU[2], 2014



1. Best-practice in the Services Trade Restrictiveness Index refers to the lowest score among the countries included in the sample.
2. Data coverage extends to 23 EU member countries.

Source: OECD calculations based on the CEPII BACI database, according to the methodology applied in Arbache, J., D. Rouzet and F. Spinelli (2016), "The role of services for economic performance in Brazil", OECD Trade Policy Papers, No. 193, OECD Publishing, Paris, http://dx.doi.org/10.1787/5jlpl4nx0ptc-en

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In May and November 2017, the European Commission launched new mobility packages to strengthen the internal road transport market, improve and harmonise road charging systems and clarify the EU rules on the posting of transport workers. The package changes restrictions on cabotage – when a foreign truck makes a delivery on the territory of a member state right after an international trip from another member state or from a country outside the EU – by allowing unlimited cabotage operations within five days of the international delivery (currently a maximum of three operations is allowed during seven days after the international carriage). The new rules will be easier to enforce, as there is no need to count the trips, and should also help to reduce the number of empty runs, and pollution: in 2015, 23% of all heavy good vehicles in the EU ran empty (EC, 2017d). In addition, an initiative to streamline electronic toll systems would make it easier and cheaper for (truck) drivers to cross borders, and reduce the regulatory burden for companies by ensuring that road users can use an unique device to pay tolls when crossing EU borders. A 2009 law to develop a unique device compatible with all European toll systems has only worked in some countries, as European electronic toll service providers face barriers to entry and excessive national requirements to operate (EC, 2017e).

The European rail network is quite fragmented, as member states use different safety standards and technical systems, making it difficult to develop an EU-wide market. Cross-border train services, for example, have to get safety authorisation from several

different national authorities and deal with several different signaling systems. This makes it complicated and expensive for new rail operators and new technical equipment to enter the market, thus deterring competition (EC, 2011). This is set to change with the entry into force of the 4th railway package, adopted in 2016 after 5 years of difficult negotiations. The technical pillar of the 4th railway package, adopted in April 2016, completes efforts to lay down common technical standards to make it easier to run trains across frontiers. The new legislation aims at improving safety and interoperability between national railroad networks and at cutting red tape for operations beyond one single member state. Moreover, from 16 June 2019, the European Union Agency for Railways will gain a new task as system authority for the European railway traffic management system and will perform of junior authority responsible for issuing authorisations for the placement on the market of railway vehicles and issues single safety certificates. This should ensure a more transparent and uniform process for vehicle authorisations throughout the EU.

As regards market access, three rail-reform packages since 2001 have made significant progress (OECD, 2012; 2014b; 2016b), competition has been gradually introduced into freight and cross-border passenger services; some common technical standards have been laid down to make it easier to run trains across frontiers, and the beginning of a single market in cross-border passenger services has been introduced. This process was completed by the adoption in December 2016 of the market pillar of the 4th railway package. The market pillar aims at removing remaining barriers to the creation of a single European rail area by dismantling the remaining legal monopolies and introducing competition in domestic passenger markets by 1 January 2019. The new legislation also aims at preventing cross-subsidies between infrastructure management and railway operations. Increased competition should encourage innovation, leading to an improved functioning of the rail network. The boost in efficiency and reduced transport costs should encourage an increased use of rail transport and help the EU meet its reduction targets for CO_2 emissions.

Overcoming the fragmentation of EU energy markets

Despite progress made in recent years, the European energy market is still too fragmented; market concentration and weak competition remain an issue, infrastructure is outdated in some areas, investment is insufficient and final energy prices are high for citizens and businesses (IEA, 2014; OECD, 2016b). The original role of the European high-voltage cross-border transmission links was to help maintain security of supply at times when demand is unexpectedly high or generating capacity unexpectedly unavailable. With the single market this role was extended and imports provide not only a last-resort source of supply but also increase competition across the European market with the objective of reducing prices and increase choice of energy suppliers. At the same time, the single market in electricity increases the potential for renewables to be supplied beyond national boundaries contributing to the shift towards a low-carbon economy and to fight climate change.

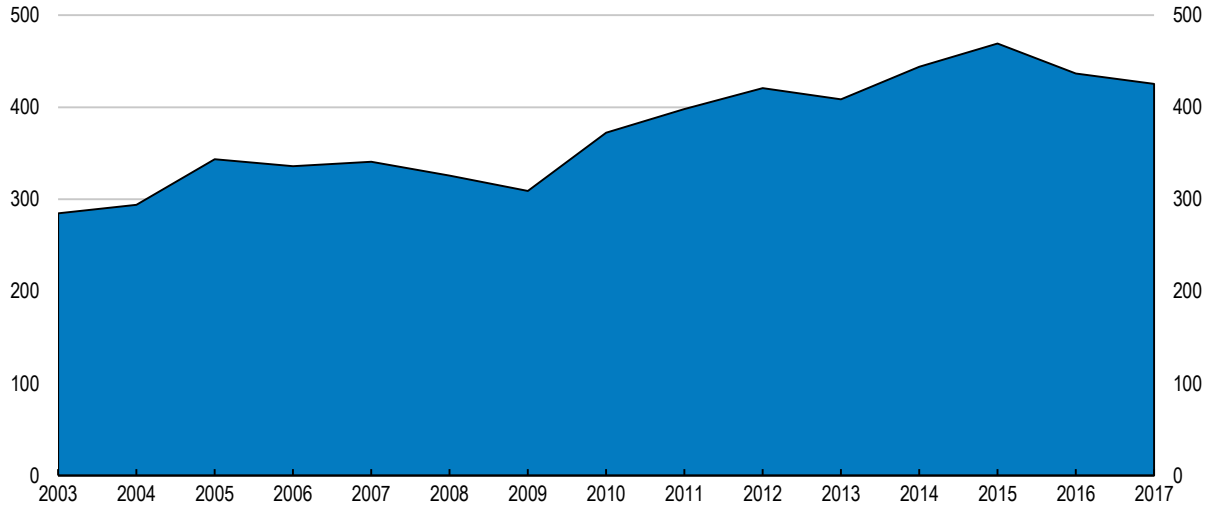
Large investment needs in cross-border interconnection

A better connected European energy grid is vital for Europe's energy security, to increase competition and to achieve the European Union's climate policy targets. Cross-border exchanges of electricity have increased markedly since the 1990s (Figure 1.22) and, in recent years, average prices have fallen and some of the largest divergences between countries – notably involving Italy – have diminished (Figure 1.23). But there remain

divergences in average prices across countries, and short-run divergences may even be larger than what average prices show.

Figure 1.22. Cross-border electricity exchanges have increased markedly in Europe

Cross-border electricity exchanges between countries[1], terawatt hours



1. The European Network of Transmission System Operators, ENTSO-E, represents 43 electricity Transmission System Operators (TSOs) from 36 countries across Europe. The network was established in 2009 with the aim of setting up an EU internal energy market and ensuring its optimal and sustainable functioning in the light of the European energy and climate agenda.

Source: European Network of Transmission System Operators (ENTSO-E).

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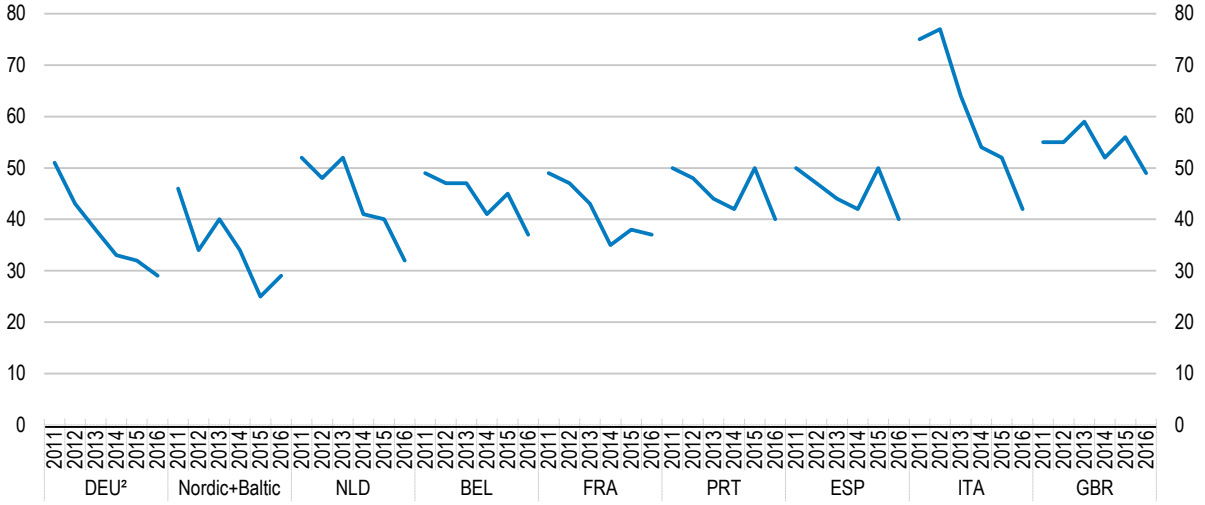
Figure 1.23. Evolution of electricity wholesale prices in Europe

2011-2016, euros/MWh[1]



1. Electricity wholesale prices in different European power exchanges, day-ahead market. The day-ahead market sets a price each day at noon for offers of supply and demand for delivery the following day.

2. Data refer to the delivery zone also including Austria and Luxembourg.

Source: ACER/CEER (2017), Annual Report on the Results of Monitoring the Internal Electricity and Gas Markets in 2016, ACER/CEER, Brussels.

StatLink http://dx.doi.org/10.1787/888933748553

Lack of cross-border interconnection capacity is one of the reasons price differences are not removed by arbitrage. The energy regulators' association estimate that the economic losses due to these price divergences are substantial and can be estimated at several billion euros per year in the EU as a whole (ACER/CEER, 2017). Incumbent electricity producers benefit particularly from the reduced competition resulting from the lack of adequate connectivity. ENTSOE estimates from its modelled scenarios that the largest reductions in gaps between generation costs from increased capacity would be between the UK and both Ireland (with the UK benefitting from lower costs) and continental Europe; but significant price gaps also exist across boundaries in the east of Europe, between Italy and its neighbours, and across the Franco-Spanish border (ENTSOE, 2016a, 2016b). To speed up completion efforts, the EU has set interconnection targets for 2020 and 2030, but four member states are expected to remain below the 2020 interconnection target of at least 10% of the installed capacity in place (EC, 2017f). This target means that each country should have in place electricity cables that allow at least 10% of the electricity that is produced by their power plants to be exported to its neighbouring countries.

A well interconnected grid is also crucial to accommodate increasing levels of renewables in a cost-effective way and help meet the EU climate goals. At present, fossil fuels are sometimes being used in Europe to generate electricity even though renewables capacity (with near-zero marginal cost) is available in other countries, because the available cross-border capacity is fully allocated. Increased cross-border transmission capacity, together with investment in renewables production, investment in transmission and distribution infrastructure is needed to meet Europe's renewable targets.

To further integrate energy markets investment needs are substantial. The Commission estimates that some EUR 200 billion are needed up to 2020 to build the necessary infrastructure to adequately interconnect all EU member states, about half of it for electricity projects alone out of which 35 billion are needed for interconnections. The Connecting Europe Facility will provide about 3% of the investment needed up to 2020 to finance infrastructure projects of common interest, which include about 50 electricity interconnection projects across Europe. Special priority should be given to those projects that will address insufficient interconnection capacity between member states.

Security of supply concerns are reducing efficiency and cross-border electricity trade

Physical capacity is not the only constraint on cross-border trade in electricity. In day-to-day operation a prime concern is security of supply, generally defined as some "acceptable" level of supply interruptions. Renewable energy has increased unscheduled flows, creating new security of supply constraints for system operators. As cross-border capacity and the share of renewables expand in Europe these challenges will increase as unexpected demand or supply in one country may increasingly affect security of supply in other countries (IEA, 2014; ENTSOE, 2016b).

National grids have become more and more integrated with the EU wholesale markets; however, there are no EU wide rules to guide national regulators responsible for security of supply to take into account the neighbouring grids. According to the Association of European Energy Regulators (ACER), this leads to underutilisation of existing physical cross-border capacity. National Transmission System Operators (TSOs) keep higher reserve capacity margins on cross-border lines than they do on their domestic grid, either because they explicitly favour domestic suppliers or because they feel they have less

information about outside sources of volatility. The effective capacity of cross-border links may be reduced by as much as one third (ACER, 2016), though it is not easy to be precise about this. A review of regulations to try to minimise any inadvertent regulatory barriers to cross-border trade is needed. The Commission's proposed modification to the regulatory framework for the internal electricity market under the "Clean Energy Package for All Europeans" would move a long way in this direction, explicitly requiring national regulators to treat cross-border links in the same way as the domestic equivalent in market planning.

Incentives for investment in non-intermittent sources are needed

Not only does a higher renewable share increase variability, it can undermine the viability of non-intermittent thermal plants that are necessary as backup. To amortise the fixed costs of necessary non-intermittent sources, the price paid for electricity might have to be very high. Although very high prices would apply for only short periods of time and need not affect the overall average price of electricity, investors may doubt whether such high prices would be politically acceptable and hesitate to invest.

Europe has seen the introduction of a range of national capacity remuneration systems (CRM) over the past five years, as a way of guaranteeing capacity while avoiding high peak prices. They include both market-wide systems and other market-based measures, like grid stability or "strategic" reserves, where such capacity does not enter the day-to-day wholesale market. If not carefully specified, payments for such capacity might look like a subsidy to fossil fuel capacity - but its cost could be kept down by creating a capacity market, in which generators compete to offer capacity at a lower cost than competitors. Some countries are already experimenting with such a system, for example France, the UK and, within Canada, the province of Alberta. CRMs rarely consider the implications or impact of cross-border trade, so that national regulators (i.e. TSOs) and governments tend to focus on the need for capacity in their own countries rather than at the (lower, overall) level that would make sense in a fully integrated European system (ACER/CEER, 2016).

In the light of those issues, the International Energy Agency's review of the EU recommended a number of measures for the EU and its member countries to foster market integration and ensure investment in non-intermittent sources. These included a flexible market framework, harmonisation of rules emergencies, cooperation on security of supply, moving to a European-level assessment of system adequacy with a proper incorporation of interconnections and the potential contribution from demand management (IEA, 2014).

Demand management and smart grids

Demand-side flexibility can also reduce the need for spare capacity in the management of renewables. Some consumers of electricity are willing and able to adjust the time at which they use electricity to match its availability, if they get it a lower cost. Low night-time tariffs are a long-established example. Interruptible contracts, where an industrial consumer obtains a lower price in return for being ready to cut consumption during unusually high peaks are a more recent adaptation.

Partly because technology increasingly allows rapid transmission of information on supply, demand and the technical state of the distribution network, and also because of the change in the nature of generating capacity away from a relatively small number of very large units towards a very large number of highly-dispersed low capacity units

requires a different approach, more sophisticated pricing and contract structures are becoming feasible. The term "smart grid" has been coined to cover networks with these properties.

The development of smart grids alongside expanding renewables capacity and increased interconnectedness across European countries will provide higher levels of demand-side flexibility. Provided the markets work effectively, increased demand flexibility and interconnectedness would significantly reduce aggregate reserve capacity needs and therefore overall costs. As IEA (2011) points out, many steps are necessary to develop large-scale smart grids, on the regulatory side but also in a range of issues from consumer information to cyber security. Digitalisation itself should facilitate power system interconnection and flexibility (IEA, 2017). Some steps are already part of the Commission's "Clean Energy For All Europeans" 2016 package. To make best use of developing technologies (which will require investment in physical infrastructure but also in software), "integrated resource planning" is needed, where the development of generating capacity, the distribution network and market design are all considered together. To make best use of the potential for trade between member countries, integrated planning across the network is needed.

Unbundling, which has been good for competition, makes designing a planning process more important; coordination between upstream and downstream actors (with a new one – storage – potentially to become important) that would previously have been within a vertically integrated entity. The proposed revised EU electricity directive takes some steps to accommodate this, for example by providing greater legal clarity on when transmission or system operators can operate storage under several conditions.

Encouraging regional solutions for cross-border energy trade

Whatever demand and supply management tools are used, they should be designed with EU cross-border trade in mind, so that such trade can make the most effective contribution to reducing energy costs and assuring security of supply. This may not require that neighbouring countries adopt identical systems. Indeed, in the short run a common integrated resource planning approach across the whole EU may be asking too much. Such planning may be more feasible within geographical regions that already have a degree of integration and effective cooperation. So planning for smart grids within, for example, some existing bidding regions, or a small group of them, as a step on the road to wider integration, and as a learning process, could be considered. One fairly natural regional grouping might be France-Germany-Benelux and Iberia. Already close links across the Nordic market with the vision towards a common retail market might also develop in this way, if governments step up their cross-border collaboration on these matters. The challenge is to maintain a high level of government collaboration and greater power systems integration driven by national regulators. These regulators may need more guidance, coherent across all countries, about their mandates and responsibilities. The "Clean Energy for Europe" package should provide solutions and practical guidance and revitalise collaboration, at a point in time when the share of variable renewables is rising at a fast growing pace.

Reaping the full benefits of a digital single market

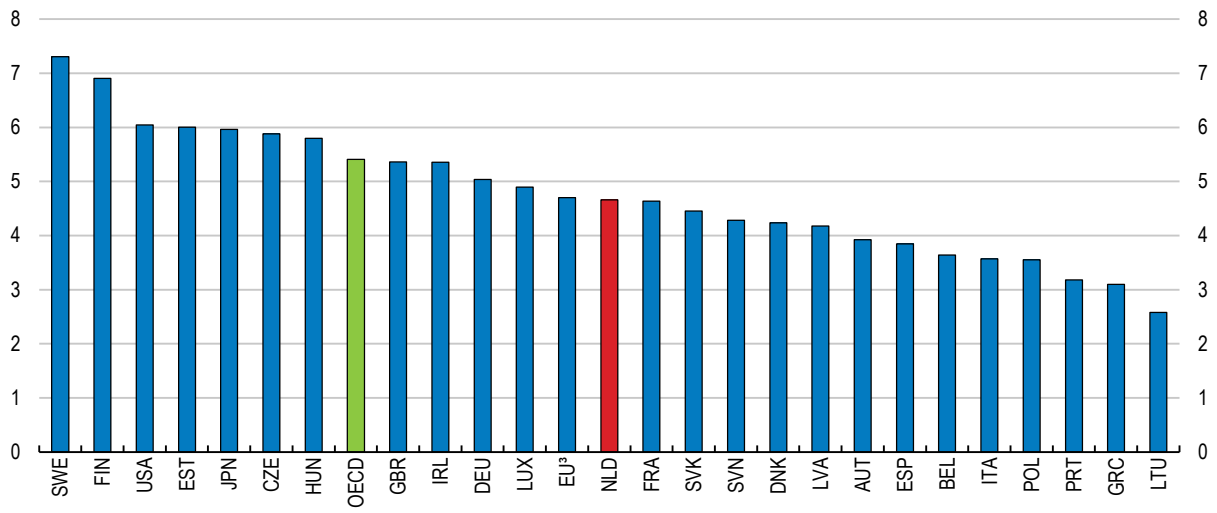
There has been significant progress in the implementation of the digital single market strategy since its adoption in 2015. One fourth of the 24 legislative initiatives proposed by the Commission have already been adopted by the European Parliament and Council,

including important measures such as the cross-border portability of online content services and the removal of roaming charges and of geo-blocking. Other important legislative measures such as the modernisation of copyright rules, taxation of e-commerce, cyber-security and addressing unfair contractual clauses and trading practices identified in platform-to-business (P2B) relations are still in the legislative process.

Despite these significant advances the EU is still lagging behind in the uptake and use of digital technologies. While some countries like Sweden and Finland are leading on the global stage, the ICT sector is significantly smaller in most European countries and some large economies are trailing behind the EU average (Figure 1.24). For instance, less than 30% of European businesses in important manufacturing sectors like automotive and mechanical engineering are exploiting digital technologies, despite being aware of their potential benefits (EC, 2017g). Progress will at some point be needed to develop a digital single market, notably in three key areas: i) improved connectivity – broadband coverage and investment in network infrastructure; ii) removing barriers to greater adoption of ICT by firms, especially SMEs and iii) facilitate the penetration of digital technologies in the public administration.

Figure 1.24. The EU ICT sector is smaller than in technological leaders

Value added of the ICT sector[1] as a percentage of GDP, 2015[2]



1. The ICT sector is defined as Sector J, Nace Revision 2 in Eurostat and as the sum of industries ISIC rev.4: 26 Computer, electronic and optical products; 582 Software publishing; 61 Telecommunications; and 62-63 IT and other information services for OECD data. Therefore, information for some countries is directly comparable.
2. Data for Bulgaria, Croatia, Lithuania, Malta, Romania are from Eurostat. Data for Bulgaria. Germany, Spain, Croatia, Latvia, Lithuania, Malta, Poland, Portugal, Romania and Japan are for 2014.
3. Simple average computed across Member States for which information is available (27 countries).
Source: OECD (2017), OECD Digital Economy Outlook 2017, OECD Publishing, Paris; Eurostat.

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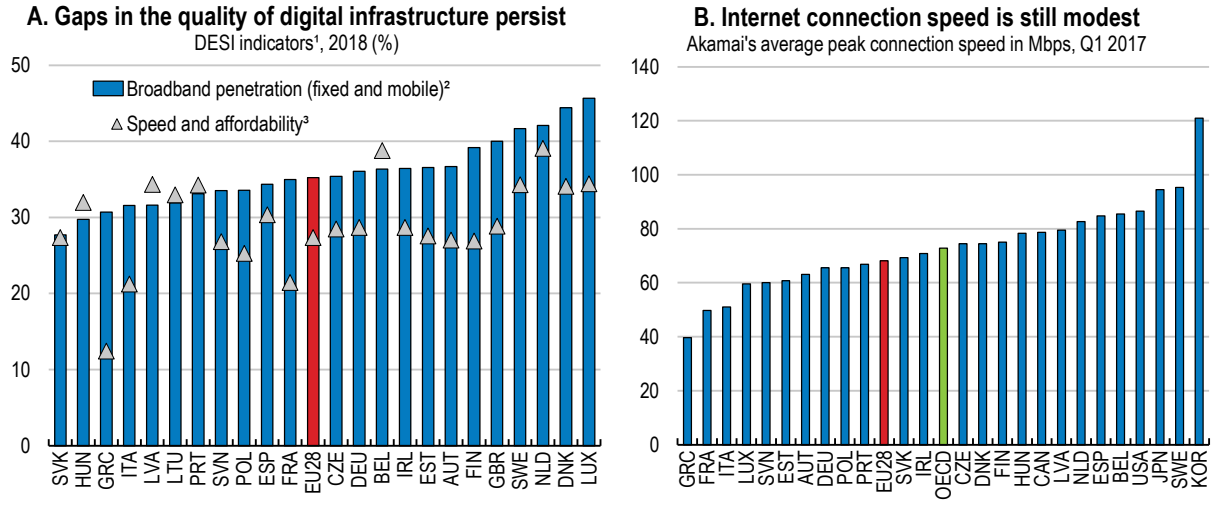
Improving digital infrastructure

High quality network infrastructure is the backbone of the digital economy and a pre-requisite for the digital revolution, the facilitation of modern public services and the take up of cutting edge innovations by firms (Renda, 2017). Yet, member states differ

substantially in the quality of their network infrastructure as measured by broadband penetration, speed and affordability (Figure 1.25). In a recent survey, close to half of all surveyed firms (43%) indicated that lack of access to digital infrastructure is a barrier to investment (EIB, 2017). Moreover, as digital technologies keep evolving, the quality and performance of the network will become even more important. For instance, high-speed wireless connections such as 5G rely on very-high-capacity networks.

Figure 1.25. Large gaps in deployment and quality of broadband infrastructure undermine the development of the Digital Single Market



1. The Digital Economy and Society Index (DESI) is a composite indicator computed as the weighted average of five main dimensions: connectivity, human capital, use of internet, integration of digital technology and digital public services; higher values correspond to better performances.
2. Cumulated score of the fixed and mobile broadband indicators of the DESI "Connectivity" dimension.
3. Cumulated score of the fast broadband, ultrafast broadband and broadband price index indicators of the DESI "Connectivity" dimension.
Source: European Commission (2018), Digital Economy and Society Index 2018, available at https://ec.europa.eu/digital-single-market/digital-economy-and-society-index-desi; Akamai (2017), "Akamai's state of the Internet report: Q1 2017 report", https://www.akamai.com.

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EU financing can contribute to alleviate the financing gap by easing access to credit and leveraging support for high risk projects. The Commission estimates that to improve connectivity and to fill gaps where there is poor or no internet network infrastructure in Europe about Euro 500 billion investment will be needed up to 2025 (EC, 2016b), including an estimated Euro 155 billion of private investment. The EU cohesion policies support investment in high speed broadband networks (EC, 2015a), which is welcome, as well as the European Fund for Strategic Investment. The Connecting Europe Broadband Fund, to be launched in mid-2018, will support smaller-scale and higher-risk broadband projects especially in rural areas across Europe.

In September 2016, the Commission proposed a revision of the regulatory framework for electronic communications markets and to establish the European Electronic Communications Code, which is currently going through the legislative process. One objective of the code is to provide greater incentives for infrastructure investments in very

high capacity broadband networks, especially in less viable areas. To that end the Commission proposal requires national regulators to refrain from imposing regulation on dominant operators regarding new network elements when they offer a possibility for other operators to invest together in new high capacity networks and provided that, pre-defined conditions for such co-investment are met. However, the body of European regulators for electronic communications (BEREC, 2017) has warned that such co-investments can lead to anti-competitive coordinated behaviours among providers and advised that to exempt co-investment projects from regulation a case-by-case in depth assessment of competitive dynamics would be advisable. The Council and the European Parliament have provided amendments to the Commission's proposal, reflecting their respective views on the rules under which regulatory incentives should be granted. The legislative process is still on-going.

One way to create incentives to invest in high-quality network infrastructure could be to grant lower rental fees to new service providers that commit to undertake productive investment and to upgrade the network. By committing to improve the network equipment in the future, entrants currently lacking financial resources to finance new infrastructure would signal to the incumbent that they are engaged in long-term productivity-enhancing plans. Incumbents have an incentive to grant lower fees to young but innovative companies with a long-term vision. Attracting such firms could help incumbents to successfully roll out new technologies like 5G, which imply substantial disruption and the need for upgrading equipment.

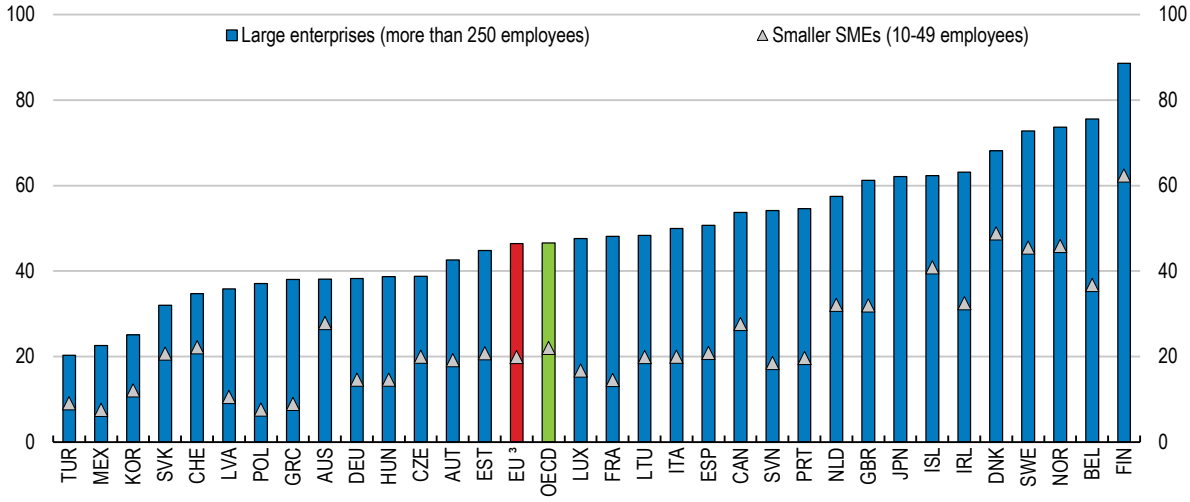
A potential issue with the new regulatory framework is that access obligations are granted "only when and where necessary to address the shortcomings of the market".. In this regard, it is important that the Code retains and reinforces the mechanisms for ensuring consistent regulatory outcomes and predictability of the regulatory environment. Critical importance should be given to ensuring that a single market approach, for example, through commonly established criteria is applied across EU countries when imposing regulatory remedies. To achieve this, the Commission has proposed to enhance the current notification mechanism by empowering the Commission to request the national regulatory authority to withdraw its draft regulatory measures if the Body of European Regulators for Electronic Communications (BEREC) agrees with the Commission's assessment that the proposed measures create a single market barrier or are incompatible with EU law.

Facilitating the adoption of productivity-enhancing ICT tools by firms

For digitalisation to strengthen overall growth performance, the divide between frontier and lagging firms needs to be closed by firms investing in intangible capital and adapting their business models; workers acquiring new skills; and countries developing their digital infrastructure and adopting favourable framework policies (OECD, 2018b). Many firms in Europe are connected to broadband network and have their own website. However, advanced ICT applications such as enterprise resource planning software, cloud computing and big data are used only by some firms, typically the largest ones (EC, 2017f). As an example, only 25% of large enterprises and 10% of SMEs (Figure 1.26) used big data that allows firms to capture customers' demand more accurately and reduce failures in the innovation process.

Figure 1.26. Business uptake of digital technologies could be improved in many firms, especially among smaller ones

Enterprises using cloud computing services[1] as a percentage of all enterprises, 2017[2]



1. Cloud computing refers to ICT services used over the Internet as a set of computing resources to access software, computing power, storage capacity and so on. Data refer to manufacturing and non-financial market services enterprises with ten or more persons employed.
2. Or latest available year; 2016 for the EU and the OECD average.
3. Unweighted average across European Union member countries that are also members of the OECD (22 countries) and Lithuania.
Source: OECD (2018), *ICT Access and Usage by Businesses* (database).

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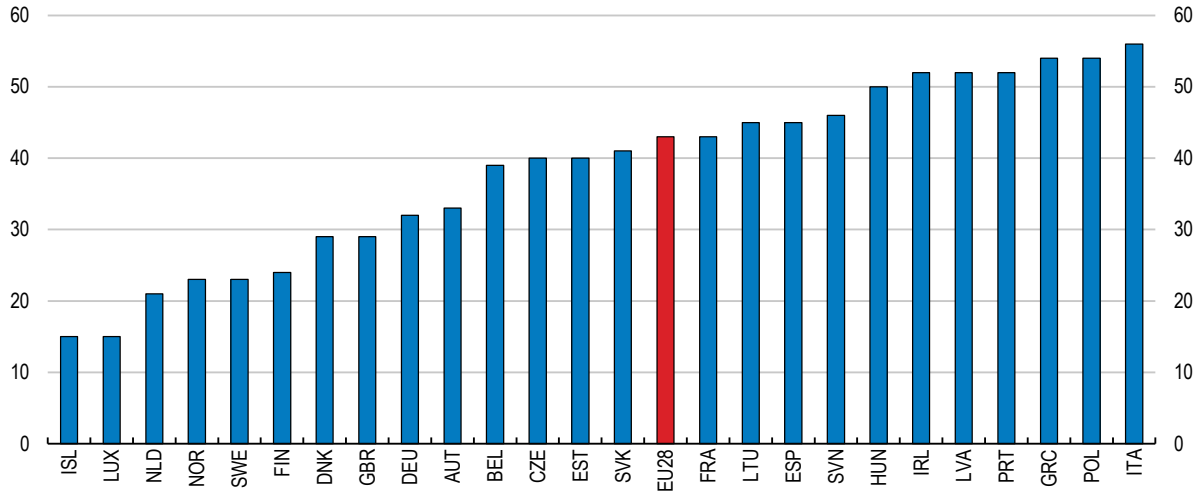
According to a recent survey, the most significant barrier to more business investment in Europe is no longer a lack of finance or uncertainty about the future, but a shortage of workers (EIB, 2017). The problem is particularly acute in central European economies, such as Poland and the Czech Republic who are suffering substantial migration of skilled workers, as well as places with low unemployment like Germany, Austria and the UK.

Ensuring that everyone has the right skills for an increasingly digital and globalised world is essential to promote inclusive labour markets and to spur innovation, productivity and growth. Yet, many individuals lack digital skills in Europe (Figure 1.27). While 90% of jobs require at least minimum digital skills, only 45% of the EU population and 37% of the EU labour force have insufficient digital skills (EU, 2017). Insufficient skills might affect more severely smaller enterprises, which lacking organisational capital and the financial ability to hire the best talents could miss the opportunities offered by digital technologies. Moreover, without policy action the situation might only worsen: many jobs in the EU will be affected by the digital transformation, as discussed below.

Figure 1.27. Many individuals still lack digital skills

As a percentage of 16-74 year-olds, 2017[1]



1. 2016 for Italy and Portugal.
Source: Eurostat (2018), "Individuals' level of digital skills", *Eurostat Database*.

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The EU supports member states in their efforts to improve digital education. The Commission monitors and forecasts supply and demand of IT professionals in Europe and supports the development of new curriculum guidelines for schools and universities through The Grand Coalition for Digital Jobs strategy. This is a worthy initiative that could be further supported by high-quality data on specific tasks and skills required in each occupation. The Commission could further support efforts to improve digital skills by establishing common definitions of skills needs and help develop data tools to monitor skill gaps. To that end, more emphasis could be placed on projects that provide multilingual classifications of skills and competences, and that monitor skill trends at the European level, such as ESCO and Skill Panorama.

Lack of information is also a barrier to investment in digital technologies. In surveys, two-thirds of managers indicate that they have difficulties assessing the return of investing in digital innovations, have problems trusting the technology, or are not sure about the maturity of the latest technologies (EC, 2017f). Besides better training in digital technologies, which is already supported by the European Social Fund and the European Regional Development Fund, information sharing and the possibility to test and experiment with technologies before engaging in digital innovation could help. The EU could draw inspiration from successful experiences of transition towards digitalisation, such as Korea's "Creative Korea-Smart Nation" or Germany's initiative "Mittelstand-Digital", which aims at promoting the use of software for enhancing business processes by SMEs.

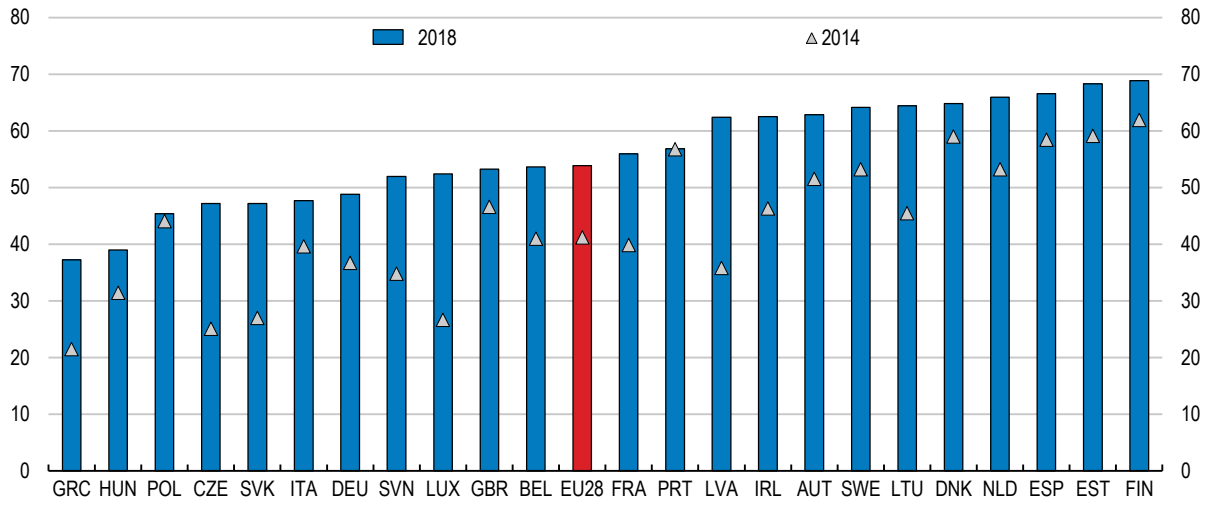
More efficient public administration through e-government

Greater use of digital technologies cannot only reduce the costs for governments, but also for citizens and businesses, boosting investment, productivity and facilitating business creation (IDABC, 2005; EC, 2004a). Estimates suggest that the digital single market

could cut the administrative burden in the public sector by 15-20% (EC, 2015b). Moreover, increasing transparency and favouring cross-border data sharing could boost trade and help attract foreign direct investment. European governments have advanced in making public services digital, however, several member states; have hardly made any improvement (Figure 1.28).

Figure 1.28. The penetration of digital technologies in the public administration is low in some countries

Digital Economy and Society Index (DESI)[1], higher values correspond to better performance



1. DESI E-Government sub-dimension computed as the weighted average of the following normalised indicators: E-government users, use of pre-filled forms, on-line service completion and open-data availability.

Source: European Commission (2018), Digital Economy and Society Index 2018, available at https://ec.europa.eu/digital-single-market/digital-economy-and-society-index-desi.

StatLink http://dx.doi.org/10.1787/888933748648

Potential barriers to the successful implementation of e-government include technical barriers, such as the legal validity of the data exchanged due to privacy and confidentiality issues, but also organisational inertia due to lack of digital skills among public employees (OECD, 2014b; 2017c). Extending the scope of existing programmes such as Skills Agenda for Europe and Digital Skills and Jobs Coalition, to specifically target public service officials could be a way of reducing resistance to change. The European Fund for Strategic Investments and the European Regional Development Fund could finance capacity building in the public administration, which is weak (See section on cohesion).

The EU has continued pursuing an ambitious trade agenda

The EU is an open economy, has a transparent trade and investment regime and plays a crucial role in the global economy and international trade (WTO, 2017). Over the past two years, the EU has continued its efforts to advance negotiations inter alia on agriculture, fisheries subsidies, environmental goods and trade in services. The EU has also continued its trade liberalisation process through progressive bilateral free trade agreements with a number of countries (Viet Nam, Singapore, Canada, Japan and

Mexico) while continuing to provide non-reciprocal preferential access for developing countries. The EU has contributed to the successful expansion of the Information Technology Agreement to remove customs duties on a wide range of goods, including semi-conductors, medical equipment, game consoles and GPS devices. It has constructively engaged in the Environmental Goods Agreement (EGA) and the plurilateral Trade in Services Agreement (TiSA) to open up markets and improve rules in areas such as licensing, financial services, telecoms, e-commerce, maritime transport, and professionals moving abroad temporarily to provide services.

Policies to help workers affected by deeper integration and globalisation adapt

Deepening the single market, globalisation and faster adoption of digital technologies will create new jobs but put at risk others. It is essential to provide workers who are displaced by these changes with a safety net to ensure that they and their families do not fall into poverty, and to provide them with the necessary means to find a new job. The main responsibility for alleviating the pain of job losses rests with member states. Adequate unemployment insurance, effective training schemes and active placement policies are among the key ingredients that can help making restructuring less painful and the OECD has recommended several member states to step up their efforts in these areas (Table 1.1). OECD experience suggests that such general programmes are also the most effective approach to speed the re-employment of workers displaced by globalisation (OECD, 2017a).

Table 1.1. OECD recommendations on improving active labour market policies in EU countries

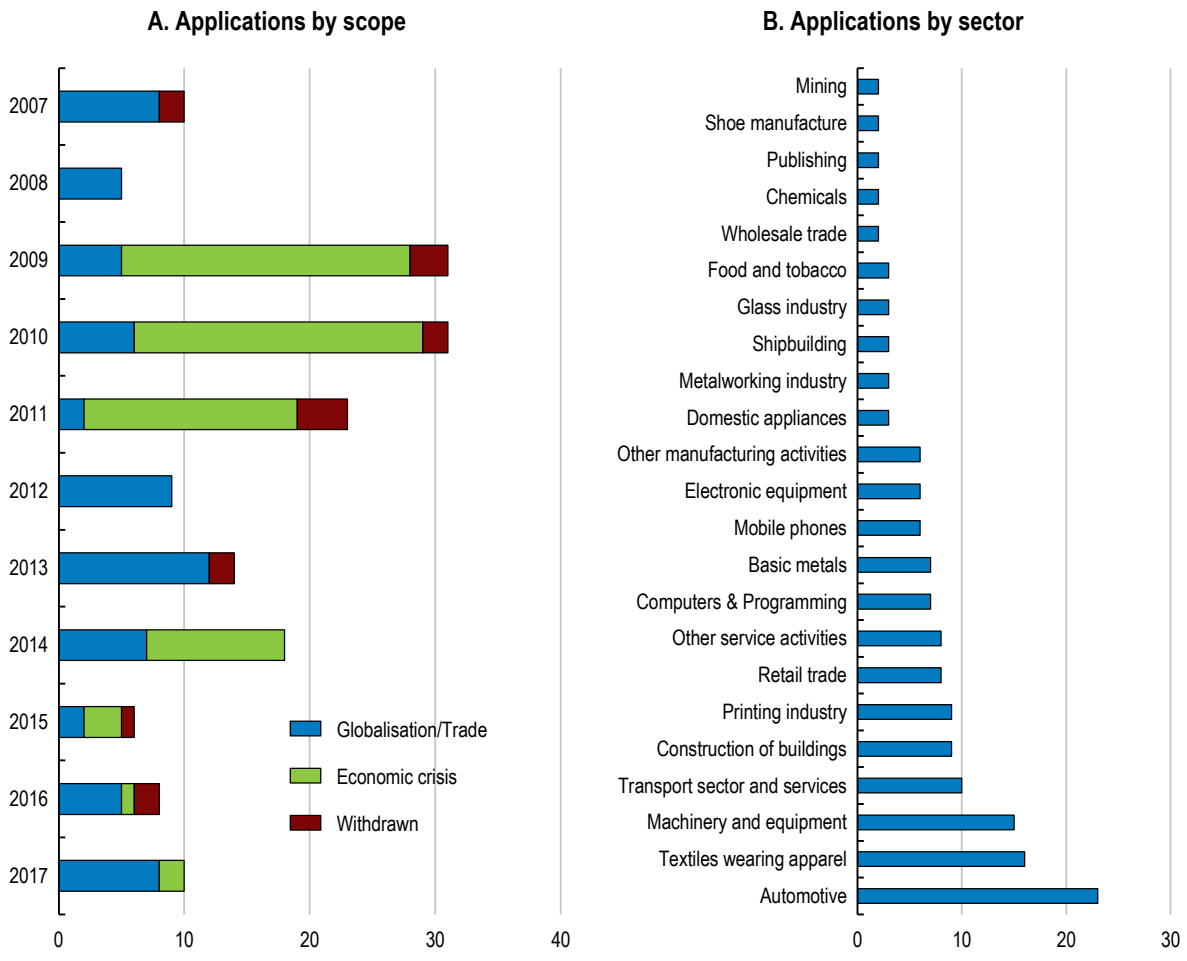
Policy area	Countries
Increase spending on activation	ESP EST GBR GRC LVA LTU SVN
Expand some specific programs (e.g. for the long-term unemployed)	ESP GRC HUN IRL
Improve efficiency of activation policies	ESP GBR ITA LUX NLD SVK SVN
Focus on key risks groups	EST FIN FRA NLD SVN
Better enforce mutual obligation	IRL FIN FRA
Improve coordination between different government levels	ESP ITA LVA

Source: Going for growth (2017)

Yet the EU has a role to play, not least to mitigate the discontent that further European and global integration might bring. The EU supports people affected by trade-related shocks through the European Globalisation Adjustment Fund (EGF). Since 2006, the fund co-finances one-off time-limited support for active labour market policies targeted at workers who have lost their jobs as a consequence of globalisation or a crisis (Figure 1.29). Member states provide the other part of the funding and are responsible for implementing the defined measures. Assistance targeted specifically at trade displaced workers has had a mixed success, in part because it is not easy to identify workers adversely affected by trade liberalisation and also because these programmes are often too slow (OECD, 2017a; Francois et al. 2011). Statistics on the effectiveness of the globalisation fund seem impressive, mid-term evaluations by the Commission show re-employment rates above 50% and in some cases of 70% within one year. But success relative to the amount spent or relative to other schemes is very hard to measure.

Figure 1.29. The European Globalisation Adjustment Fund

Number of applications in the period from 2007 to 2017[1]



1. As of January 2018.
Source: European Commission.

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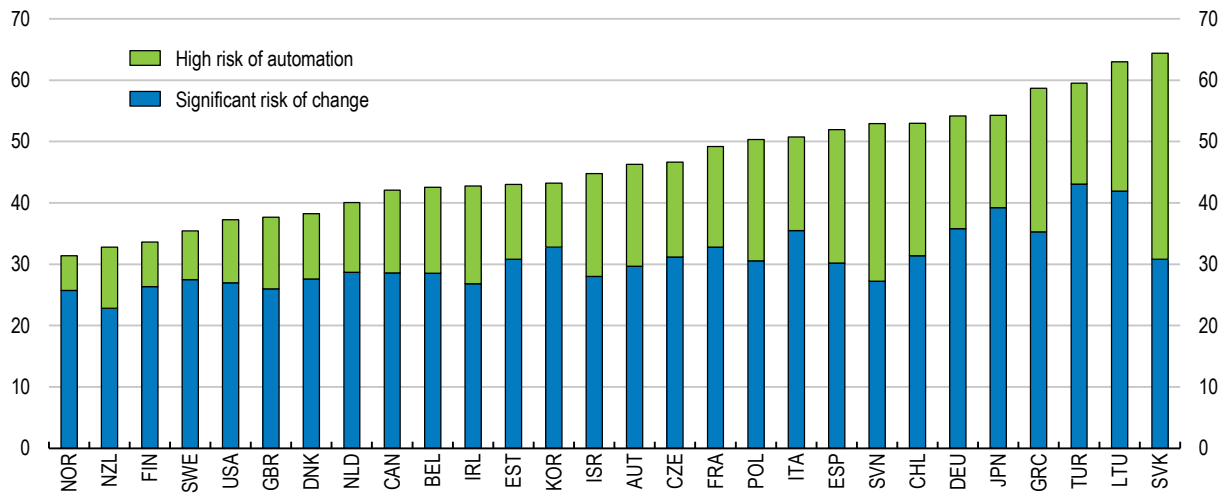
In the long run the objective should be to improve the capacity of national labour market programmes to assist displaced workers, rather than to expand the globalisation fund to become a major source of assistance. Nonetheless, there are a number of ways to make the globalisation fund more effective. The effectiveness of the fund is hobbled by the complex and slow process of eligibility for funding. The European Parliament and the Council need to vote on every grant, which substantially slows up the approval process and raises the risk of politicised decisions. The whole application process can take up to a year. Applying is also tricky, because it is difficult to single out a specific factor that triggered the redundancies. This may explain why even if small, the European Globalisation Adjustment Fund is hardly ever fully used (Cernat and Mustilli, 2017). The Commission should revise the application requirements and procedures to speed the use of the fund and consider whether the EGF budget could be placed in the EU budget, so

the Parliament and Council don't need to approve every application or find ways to speed the approval process by the Parliament and Council.

The scope of the Fund could be broadened not only to help workers displaced by globalisation or an economic crisis, but also due to other reasons such as automation. Automation can lead to job losses in the short-term, particularly in the exposed industries as new technologies make some jobs redundant, even if in the long-term it can raise the demand for other jobs and encourage the creation of new tasks (Acemoglu and Restrepo, 2016; Figure 1.30). While recent estimates suggest that about 14% of today's jobs in OECD countries have a high risk of automation in the next 15-20 years, a further 32% could see substantial change in the way they are carried out and the tasks performed (Nedelkoska and Quintini, 2018). This may give rise to complicated transitions for workers and create distress in the sectors and regions that have fewer opportunities to adapt. Incentives and opportunities to re-skill and upgrade existing skills will need to be strengthened, especially for low-skilled workers who face the highest risk of seeing their jobs either partially or totally automated.

Figure 1.30. A significant share of jobs will be affected by automation

Percentage of jobs at high risk of automation and at risk of significant change



Source: OECD (2018), "The Framework for Policy Action on Inclusive Growth", OECD Publishing, Paris.

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The Commission argues that an important difficulty for member states to access the fund is that they lack the capacity to come up with tailor-made measures for redundant workers. Better support and clearer guidelines for member states on preparing their applications could help. It is precisely those countries and regions where re-employment and training support for the unemployed are under-resourced where EU support is most important. Evidence suggests that the chances of success when using the fund increase when there is a good knowledge of the application process (EC, 2017h). Finally, building support for the fund might be easier if evidence of its benefits were more solid. The Commission and member states should improve the quality of their datasets and the analysis of workers re-integration into employment.

But policies to help displaced workers are not enough; without firms to hire them even the best skilled workers will not find jobs (OECD, 2018a). Indeed, the effects of trade shocks are often localised in specific regions, therefore when a company or industry goes bankrupt the spillovers often affect the whole region. Encouraging firm creation, by removing barriers to entry, as discussed above, entrepreneurship or start-up assistance can help to rebuild and sustain the regional fabric of firms. Besides the support provided through the European Globalisation Adjustment Fund and the European Social Fund, the EU could play a key role in showcasing successful examples and spreading good practices across the continent. Examples of privately led successful programmes in Europe include the Austrian Steel Foundation, which assists steel workers affected by structural change through various types of training and support, and have fostered the development of more than one hundred firms (2018). Another example of pro-active assistance is the case of Saab Automobile in Sweden (Eurofund, 2014), which supported workers through counselling, psychological guidance and training for workers while still on the job, to help them transition to a new position. More broadly, the Commission has a role to play in enhancing cooperation in smart specialisation strategies to develop new businesses in the European Union based on the experience of several successful cases (OECD, 2018). It can, for instance, provide guidance and good practice examples, facilitate peer-reviews and mutual learning and train policymakers.

Recommendations for stronger growth and more integrated Europe

Making cohesion policy more effective

Key recommendations

- Prioritise cohesion funding to less developed regions.
- Better target cohesion funding on spending with long-term growth benefits (human capital, innovation and network infrastructure), and to projects with clear spillovers across borders.
- Consider increasing national co-financing rates to encourage better project selection taking into account the relative impact of the project and the EU added value.
- Create a “single rule book” for EU funding programmes.
- Use e-government and e-procurement more often.

Other recommendations

- Reduce the number of ex-ante conditions to access cohesion funding and to assess performance and put a greater focus on conditions ensuring effective spending, such as the quality of public procurement.
- Enhance legal certainty and consistency in the application of public procurement rules.
- Put in place a one-stop shop for data collection, processing and analysis to assess the effectiveness of the funds.

Deepening the services market

Key recommendations

- Address barriers in the business services sector through simplified administrative formalities for the establishment and provision of cross-border services and guidance on implementing existing EU legislation.

- Make the electronic European professional card available to all sectors.

Deepening the energy market

Key recommendations

- Pursue the planned cross-border co-operation on power system operation and trade, including interconnection capacity calculations and reserve margins.

Other recommendations

- Ensure that the European-wide energy wide resource assessment is properly reflected in national 10-year network plans.

Deepening the digital single market

Key recommendations

- Develop tools to help member states monitor digital skill needs. Set EU standards for the monitoring of digital skills and task content of occupations.

Other recommendations

- To create incentives to invest in high-quality network infrastructures, grant lower access fees to new service providers that commit to undertake productive investment.
- To ensure neutrality and coherence across countries, promote greater involvement of the Body of European Regulators for Electronic Communications in member states assessments of regulatory issues in electronic communications markets.
- Foster the use of e-government by enhancing digital skills of public servants with targeted training programmers to reduce organisational inertia.

Policies to help workers affected by deeper integration and globalisation adapt

- Revise application requirements and procedures to speed the use of the European Globalisation Adjustment fund and expand eligibility to help workers affected by other shocks, such as automation.

Bibliography

Acemoglu, D., & Restrepo, P. (2016), "The race between machine and man: Implications of technology for growth, factor shares and employment", No. w22252, National Bureau of Economic Research.

ACER/CEER (2016) Annual Report on the Results of Monitoring the Internal Electricity Markets in 2015, Agency for the Cooperation of Energy Regulators, Council of European Energy Regulators, September.

BEREC (2017), "BEREC views on Article 74 of the draft Code Co-investment and "very high-capacity (VHC) networks", BEREC Press Releases.

Blankhart, C. and D. Ehmke (2015), "Overcoming the Rent Seeking Deffect in Regional Policy: Time to Rethink the Institutional Design".

Bradley, J. and G. Untiedt, 'Assessing the impact of EU Cohesion Policy: What can economic models tell us?', HERMIN Economic Paper 2, 2012.

Cernat, L. and F. Mustilli (2017) "Trade and Labour Adjustment in Europe: What role for the European Globalisation Adjustment Fund?", Chief Economist Note, DG Trade.

Charron, Nicholas, Stefan Dahlberg, Sören Holmberg, Bo Rothstein, Anna Khomenko & Richard Svensson. 2016. The Quality of Government EU Regional Dataset, version Sep16. University of Gothenburg: The Quality of Government Institute, http://www.qog.pol.gu.se.

Colantone, I and P Stanig (2016) "Global competition and Brexit", BAFFI CAREFIN Centre Research Paper 2016-44, November.

Committee of the Regions (2016) "Simplification of the implementation of Cohesion Policy", Final report, Workshops on 27 January and 10 March 2016.

CPB (2012), "Fertile soil for Structural Funds?: A panel data analysis of the conditional effectiveness of European Cohesion Policy", CPB Discussion Papers.

Darvas, Z and A. Leandro (2015), "The Limitations of Policy Coordination in the Euro Area under the European Semester", Bruegel Policy Contribution, Issue 2015/19.

Dustmann, C, B Eichengreen, S Otten, A Sapir, G Tabellini and G Zoega (2017), Europe's Trust Deficit: Causes and Remedies, Monitoring International Integration 1, CEPR Press.

EIB (2017), "EIB Investment Survey - Tracking investment needs and constraints across Europe".

ENTSOE (2016a) "Mid-term adequacy forecast: Edition 2016", European Network of Transmission System Operators for Electricity https://www.entsoe.eu/Documents/SDC%20documents/MAF/ENSTOE_MAF_2016.pdf

ENTSOE (2016b) "Ten-year Network Development Plan 2016" http://tyndp.entsoe.eu/projects/2016-12-20-1600-exec-report.pdf

EU (2017), "Tallin Digital Summit: Backrground Paper", https://www.eu2017.ee/sites/default/files/2017-09/EU2017_Tallinn%20Digital%20Summit%20Background%20Paper_0.pdf

Eurocities (2017), "EU Mobility Package: Europe on the Move" Briefing Note.

Eurofund (2014), Effects of Restructuring at Regional Level and Approaches to Dealing with the Consequences.

European Commission (2018), "A new modern Mulfannual Financial Framework for a European Union that delivers efficiently on its priorities post-2020", Communication from the Commission to the European Parliament, the European Council and the Council.

European Commission (2017a) "Seventh Report on Economic Social and Territorial Cohesion", Regional and Urban Policy.

European Commission (2017b) "Recommendation for a Council Recommendation on the Economic Policy of the Euro Area".

European Commission (2017c), "Proposal for a Directive of the European Parliament and of the Council on the legal and operational framework of the European services e-card introduced by Regulation", Commission Staff Working Document.

European Commission (2017d) "Internal Market Cabotage" European Commission Factsheet. https://ec.europa.eu/transport/sites/transport/files/mobility-factsheet-road-initiatives-cabotage.pdf

European Commission (2017e) "Proposal for a Directive of the European Parliament and of the Council on the interoperability of electronic road toll systems and facilitating cross-border exchange of information on the failure to pay road fees in the Union (recast)", COM (2017) 280 final.

European Commission (2017f) "Third Report on the State of the Energy Union", Communication from the Commission to the European Parliament, The Council, The European Economic and Social Committee, the Committee of the Regions and the European Investment Bank.

European Commission (2017g), "Digital Transformation Scoreboard. Evidence of Positive Outcomes and Current Opportunities for EU Businesses", Brussels.

European Commission (2017h) "Report from the Commission on the Activities of the European Globalisation Ajustment Fund in 2015 and 2016".

European Commission (2016a) "Ex-post Evaluation of the ERDF and Cohesion Fund 2007-13" Commission Staff Working Paper, 318, September.

European Commission (2016b), "State of the Union 2016: Commission paves the way for more and better internet connectivity for all citizens and businesses", Press release: http://europa.eu/rapid/press-release_IP-16-3008_en.htm

European Commission (2015a), "Communication – Connectivity for a Competitive Digital Single Market - Towards a European Gigabit Society".

European Commission (2015b), "Digital Transformation of European Industry and Enterprises", Report from the Strategic Policy Forum on Digital Entrepreneurship.

European Commission (2012a), "Deterrence of Fraud with EU Funds through investigative journalism in EU27", Directorate General for Internal Policies.

European Commission (2012b), "Single Market Act II, Together for New Growth", Communication from the Commission to the European Parliament, the Council, the European Economic and Social Committee and the Committee of the Regions, COM(2012) 573.

European Commission (2011), "Roadmap to a single European Transport Area - Towards a competitive and resource efficient transport system".

European Commission (2004a), "European Competitiveness Report 2004", Commission Staff Working Paper.

European Court of Auditors (2017a) "The Commission Negotiation of 2014-2020 Partnership Agreements and Programmes in Cohesion", Special Report No 2/2017.

European Court of Auditors (2017b), "Fighting Fraud in EU Spending", October 2017.

European Court of Auditors (2016), "Special report No 5/2016: Has the Commission ensured effective implementation of the Services Directive?", European Union.

European Court of Auditors (2015) "Special report: Efforts to address problems with public procurement in EU cohesion expenditure should be intensified".

European Court of Auditors (2014) "Making the best use of EU money: a landscape review of the risks to the financial management of the EU budget".

European Parliament (2018), "EU electronic communications code and co-investment, taking stock of the policy discussions", European Parliamentary Research Service.

European Parliament (2016), "The Cost of non-Europe in the Area of Organised Crime and Corruption", European Parliamentary Research Service.

Francois, J., M. Jansen and R. Peters (2011), "Trade Adjustment Costs and Assistance: the Labour Dynamic" in Trade and Employment: From Myth to Facts, ILO-EC Publication.

High level expert group (2017) "Final conclusions and recommendations of the High Level Group on Simplification for post 2020".

High level expert group (2016) "Report on Goldplatting" https://ec.europa.eu/futurium/en/system/files/ged/hlg_2016_0006_00_en_report_on_goldplating_from_rapporteurs.pdf

IDABC (2005), "The impact of e-government on competitiveness, growth and jobs". IDABC eGovernment Observatory Background Research Paper February 2005. Available at: https://www.cisco.com/c/dam/global/de_de/assets/pdfs/publicsector/egov_competitiveness_02_05.pdf

IEA (2017), Digitalization & Energy, IEA/OECD, 2017, https://www.iea.org/publications/freepublications/publication/DigitalizationandEnergy3.pdf

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

IEA (2011), Technology Roadmap: Smart Grids https://www.iea.org/publications/freepublications/publication/smartgrids_roadmap.pdf

IMF (2017) "Slovak Republic: Selected Issues", IMF Country Report No. 17/72.

IMF (2016), "Central, Eastern and Southeastern Europe: Effective Government for Stronger Growth", Regional Economic Issues, November 2016.

Kah S, Mendez C, Bachtler J and Miller S (2015) Strategic coherence of Cohesion Policy: comparison of the 2007-13 and 2014-20 programming periods, Report to the European Parliament's Committee on Regional Development, Brussels.

KPMG (2017) "EU Funds in Central and Eastern Europe: progress summaries 2014-2016" https://assets.kpmg.com/content/dam/kpmg/bg/pdf/KPMG-EU-Funds-2014-2016.pdf

Marinello, M. A. Sapir, A. Terzi (2015), "The long road towards the European Single Market", Bruegel Working Paper 2015/01.

Mendez C and Bachtler J (2015) Permanent revolution in Cohesion policy: restarting the reform debate, EoRPA Paper 15/4.

Nedelkoska, L. and G. Quintini (2018), "Automation, Skills and Training", OECD Social, Employment and Migration Working Papers, OECD Publishing, Paris http://dx.doi.org/10.1787/2e2f4eea-en

OECD (2018a), Productivity and Jobs in a Globalised World: (How) can all regions benefit?, Center for Entrepreneurship, SMEs, Local Development and Tourism. https://one.oecd.org/document/CFE/RDPC(2017)7/en/pdf

OECD (2018b), "New OECD Jobs Strategy", forthcoming.

OECD (2018c), "The Framework for Policy Action on Inclusive Growth", forthcoming.

OECD (2017a), OECD Economic Outlook, Volume 2017, Issue 1, OECD Publishing, Paris. DOI: http://dx.doi.org/10.1787/eco_outlook-v2017-2-en

OECD (2017b), "OECD Economic Surveys: Slovak Republic 2017", OECD Publishing.

OECD (2017c), "Service Trade Policies and the Global Economy", OECD Publishing, Paris. http://dx.doi.org/10.1787/9789264275232-en

OECD (2016a), "OECD Economic Surveys: Czech Republic 2016", OECD Publishing, Paris. http://dx.doi.org/10.1787/eco_surveys-cze-2016-en

OECD (2016b), OECD Economic Surveys – European Union, OECD Publishing, Paris.

OECD (2014a), "OECD Economic Surveys: Slovak Republic 2014", OECD Publishing. http://dx.doi.org/10.1787/eco_surveys-svk-2014

OECD (2014b), OECD Economic Surveys – European Union, OECD Publishing, Paris.

OECD (2012), OECD Economic Surveys – European Union, OECD Publishing, Paris.

OECD (2007), OECD Economic Surveys – European Union, OECD Publishing, Paris.

Paliova and Lybek (2014), "Bulgaria's EU Funds Absorption: Maximizing the Potential!" IMF Working Paper 14/21.

Pieńkowski, J. and P. Berkowitz (2015) "Econometric assessments of Cohesion Policy growth effects: How to make them more relevant for policy makers?", European Commission Working Papers, Regional and Urban Policy Directorate.

Renda, A. (2017), "Will the DSM Spur Innovation?". Centre for European Policy Studies. Brussels. DOI: 10.1007/s10272-017-0674-7

Rodriguez-Pose A. (2013) "Do Institutions Matter for Regional Development?" Regional Studies, Volume 47, Issue 7.

Varga J. and J in 't Vel (2010), "The Potential Impact of EU Cohesion Policy Spending in the 2007-13 Programming Period: A Model Based Analysis", Economic Papers 422| September 2010

World Trade Organisation (2017), "Trade Policy Review: the European Union", WT/TPR/S/357.

Annex 1.A.

Annex Table 1.A.1. Recommendations on economy wide regulations

Policy area	Countries
Streamline permits/licensing/red tape	BEL GRC HUN IRL LVA POL SVN
Introduce or expand regulatory impact assessment	DEU GRC HUN
Strengthen competition and regulatory authorities	DNK GRC HUN LVA POL
Improve bankruptcy procedures	EST ITA POL PRT
Improve competition framework	CZE HUN
Reduce the scope of public ownership	CZE DEU NOR POL SVN
Improve SOEs governance	LVA LTU
Facilitate firm entry	POL

Source: Going for Growth (2017).

Annex Table 1.A.2. Recommendations on sector specific regulations

Policy area	Countries
Professional services	AUT BEL DEU ESP FRA IRL LVA LUX PRT SVN
Retail	AUT BEL CZE FIN FRA HUN IRL LUX NOR
All network sectors	BEL CZE GRC HUN LVA NOR
Energy	EST HUN
Transport	DEU ESP
Services	BEL DNK
Post	DEU NOR
Ports	ESP IRL PRT
Construction	FIN DNK
Telecommunications	DEU

Source: Going for Growth (2017).

Annex Table 1.A.3. Recommendations on raising the efficiency of R&D and innovation policies

Policy area	Countries
Strengthen collaboration between research centres/universities and industry	EST IRL ITA LUX PRT SVN
Evaluate/reform R&D tax credits	PRT
Improve coordination of public policies	CZE EST
Increase direct and/or indirect support	GBR NLD CZE

Source: Going for Growth (2017).

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