

THE EUROPEAN UNION: A PEOPLE-CENTRED AGENDA

An International Perspective



May 2019

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FOREWORD: STANDING BACK AND LOOKING AT THE EUROPEAN PROJECT

The publication of this OECD document comes at a critical moment for the EU project. There is a plethora of debates taking place at the moment, which tend to blur what the people of Europe have achieved since setting off on this journey over 60 years ago. There is an urgent need to concentrate beyond the noise to consider what Europe has delivered for its people and what place it has in the world economy today.

In many ways, the debates about the European Union are no different from those taking place at the domestic level in most countries. They relate to whether economies are delivering enough for their people, whether policy makers have shaped globalisation and digitalisation to maximise the benefits for all, and whether countries are jointly doing enough to address global challenges, such as climate change. In the search for a more inclusive and sustainable growth model, the OECD has long conducted evidence-based work, comparing countries across the globe on the outcomes of their policies. In this sense, the OECD is well placed to stand back and bring to the fore the value of the European Project, a unique construction in modern history. Moreover, the world today can draw many lessons from the European model, and the OECD can be a bridge in this important learning process.

The European Project is, however, also a work in progress. Thus, much needs to continue to change for it to deliver the full results that citizens expect. There is frustration with the pace of needed reforms and the speed at which decisions are taken. There is discontent with the response to the global financial crisis and its effects, especially among the most vulnerable. There is also a valid debate about what should be the orientation of the project itself. Is it too economic and market-focused? Does it suffer from a democratic deficit? Have citizens and the social pillar been placed in the back seat? Is the EU responding adequately to a changing global landscape? Is the EU regulating too much or too little? Europeans must address these questions.

Nonetheless, the debate about necessary changes should not deter us from acknowledging the benefits that the EU has brought to its members, as well as its increasing importance in today's global economy. In these turbulent times for the future of the European project, it is our duty to help inform the debate with facts and to dispel frequent misconceptions. For instance, Brussels is given little credit for its success stories and is often blamed for all problems, even if many are the result of domestic policies or are global in nature.

Like the EU, the OECD is itself an offspring of World War II, of a realisation by those who witnessed the destruction caused by divisive nationalism and demagogic populism that, together, we do better. The evidence proves that they were right. For the rest of the world, the EU is a model of peace, democratic stability and socio-economic progress. It shows how much can be accomplished when countries put their differences behind them and work together towards the common goal of improving the lives of their people. This is particularly relevant today, when our planet confronts challenges that no country can address on its own.

In a context in which we hear the resurgence of voices from the past – for example, those who seek a retreat into national borders – it is important to highlight Europe's achievements, so that we do not put them at risk. It is also important for Europeans to continue learning from the challenges and difficulties confronting Europe and to outline a way for the future. The evidence clearly shows it. Europe was and is a most positive and constructive achievement. Let us all join forces to make sure that it continues on that path and that it goes from strength to strength. We all need a stronger, more effective, more united Europe.



Angel Gurría
Secretary-General, OECD

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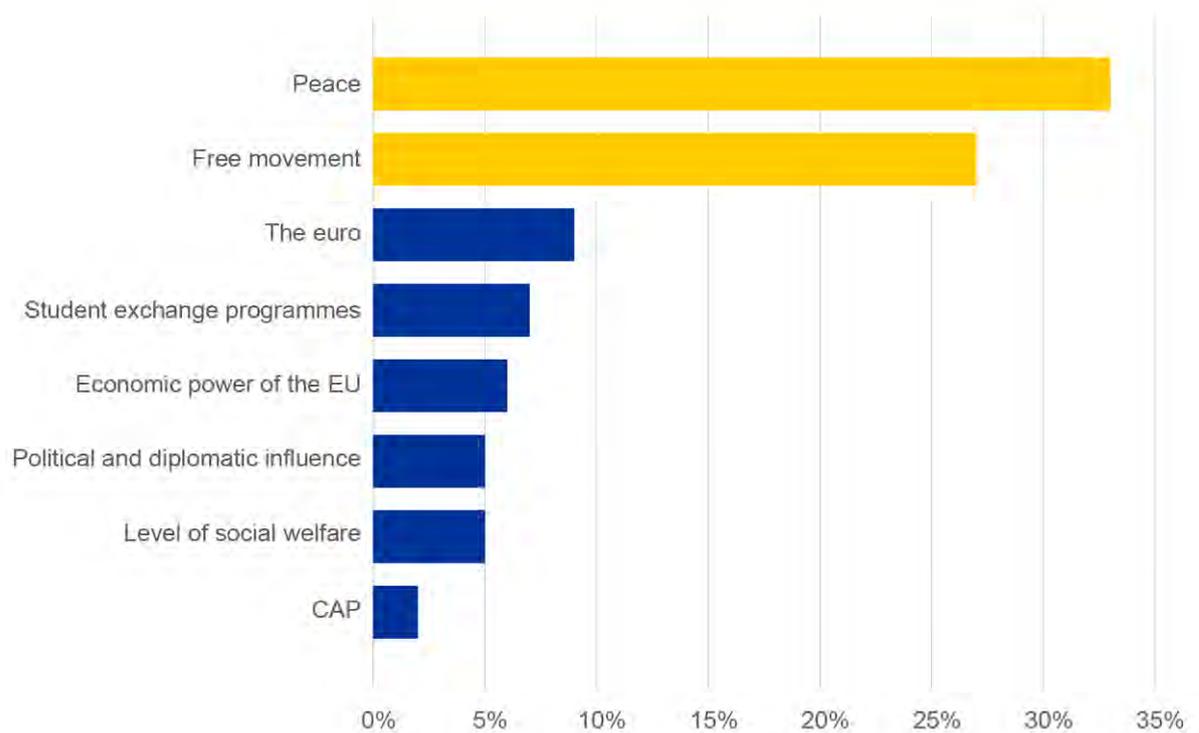
INTRODUCTION: THE EUROPEAN PROJECT AND ITS CORE VALUES

The European Union as a bulwark of peace. Born in the aftermath of World War II, after centuries of war and confrontation, the European project has bolstered peace and freedom on the continent – and Europeans value this achievement (Figure 1). The European Project has mainly been incarnated in the construction of the European Union (EU), which has grown from 6 to 28 members over the past 60 years. Although for the first time one member has requested to leave the EU, two-thirds of Europeans believe their country has benefitted from being a member.

Built on joint core values to support a people-centred agenda. The European Project has put at its core the key values of democracy, transparency and well-being along with open markets and competition, supported by solidarity and convergence, protecting people’s rights and facilitating free movement, including of people, goods and services across countries, which are all shared values.

Figure 1. Citizens strongly value the European Union for peace and free movement

Which of the following are the most positive results of the EU?



Source: EC (European Commission) (2018), Standard Eurobarometer 90, “Which of the following do you think is the most positive result of the EU? Firstly? And then?” November 2018.

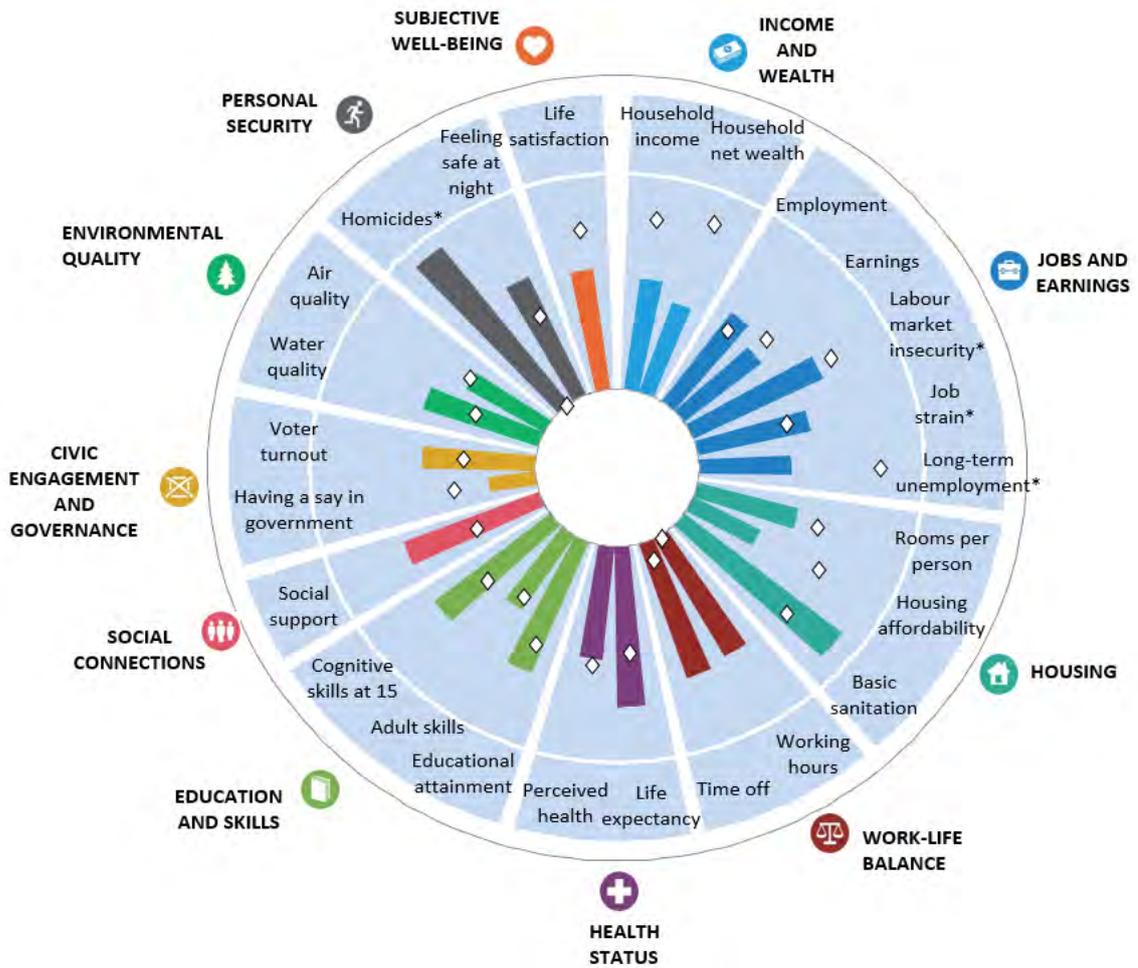
Taking a broad view of the European project. Although the competences of the EU are limited by the Treaties between its member states, underpinned by the subsidiarity principle (the EU only legislates in those areas where there is a clear advantage to have an EU legislation over national ones), there are some areas of exclusive competences, and some areas of shared competence, as well as some competence to support, coordinate or supplement actions of member states, or to provide arrangements for member states to coordinate, depending on the policy domain. However, this paper takes a broader view of the European

Project, standing back on the common achievements of countries acting together in the broader frame of European institutions. In practice, this means looking not only at the achievements within the competencies of the EU as an institution, but also at the actions at domestic level that often result from countries learning from one another, a practice which has been significantly deepened through the European Project. For the same reasons, the paper does not look at the European Project by level of competency, such as the construction of the Schengen area, the Monetary Union or the Single Market. Rather, it aims to address the following question: What have the European model and common values brought to European citizens?

A vehicle for shared prosperity and protection. The EU is a stable and relatively affluent region of the world, with a relatively good quality of life overall compared to other countries (Figure 2). By joining forces in the global economy and with its policies supporting citizens' rights, providing skills and training opportunities and helping poorer regions to develop, the EU has contributed to improving social and economic outcomes and to advancing convergence among member states with different levels of development. Difficulties remain to foster higher levels of growth and to address increases in regional inequalities within countries, beside tackling the legacies brought about by the 2008 global financial crisis. The main policy challenges remain to achieve a more even distribution of opportunities and outcomes across member countries and regions, revive labour productivity, in some cases to reduce high unemployment, in particular for youth, and to build more innovative economies in the context of population ageing. Support for the euro, the official currency for 19 of the 28 EU member countries, is strong, with 77% of people in the euro area in favour of it in 2018 (Figure 3). However, the Economic and Monetary Union remains a work in progress, with further steps needed to complete the banking union and put in place a common fiscal capacity. These are necessary instruments to allow the common currency area withstand the next major economic crisis.

Figure 2. EU citizens have a comparatively good quality of life

EU (coloured bars) and non-EU (diamonds) OECD countries' relative well-being

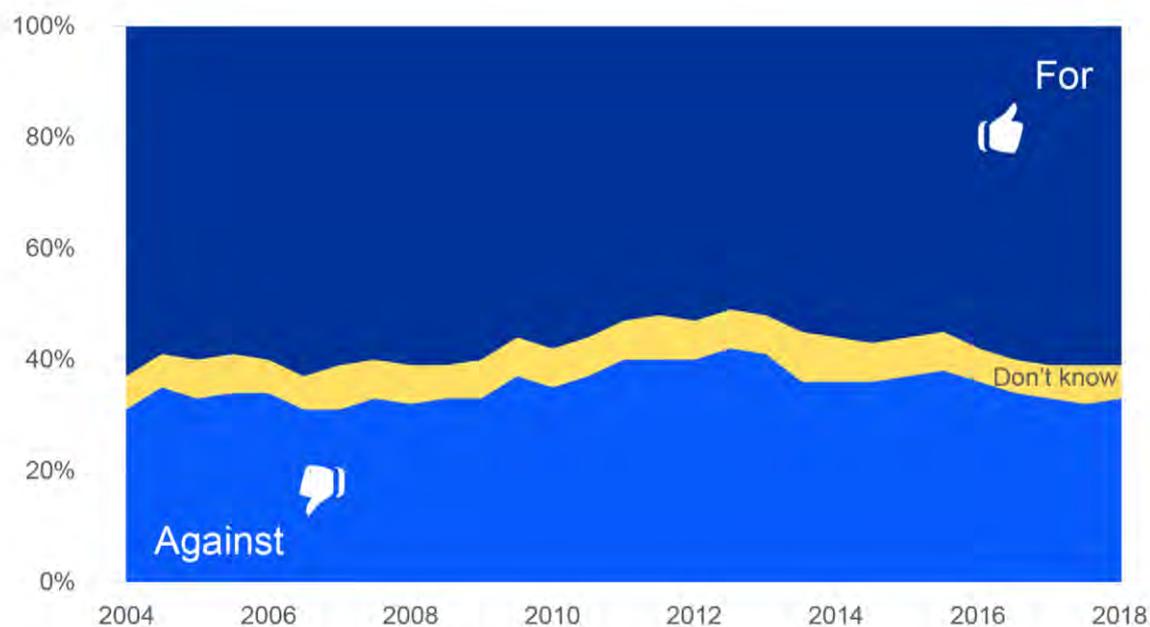


Note: For both positive and negative indicators (such as homicides, marked with an “*”), longer bars always indicate better outcomes (i.e. higher well-being).

Source: OECD calculations based on (OECD, 2017) *How's Life 2017: Measuring Well-being*.

Figure 3. Support for the euro is relatively strong

Are you for or against a European Economic and Monetary Union with one single currency, the euro?



Source: EC (2018), Standard Eurobarometer 90, "What is your opinion on the following statement? Please tell me whether you are for it or against it: A European economic and monetary union with one single currency, the euro", November 2018.

Together in a globalised and interconnected world. EU countries, by acting as a single bloc of over half a billion people, are comparable to major players of the trading world and provide a large market for European companies to scale up production and become major players globally. Thanks to its size, the EU has also taken a leading role in tackling global issues on competition and digitalisation, and in defending citizens' interests on the global stage. 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, securing more, better and cheaper goods and services. Despite these benefits, the Single Market has yet to be completed, as it remains fragmented in key areas – including services, transport, finance, energy and digital markets.

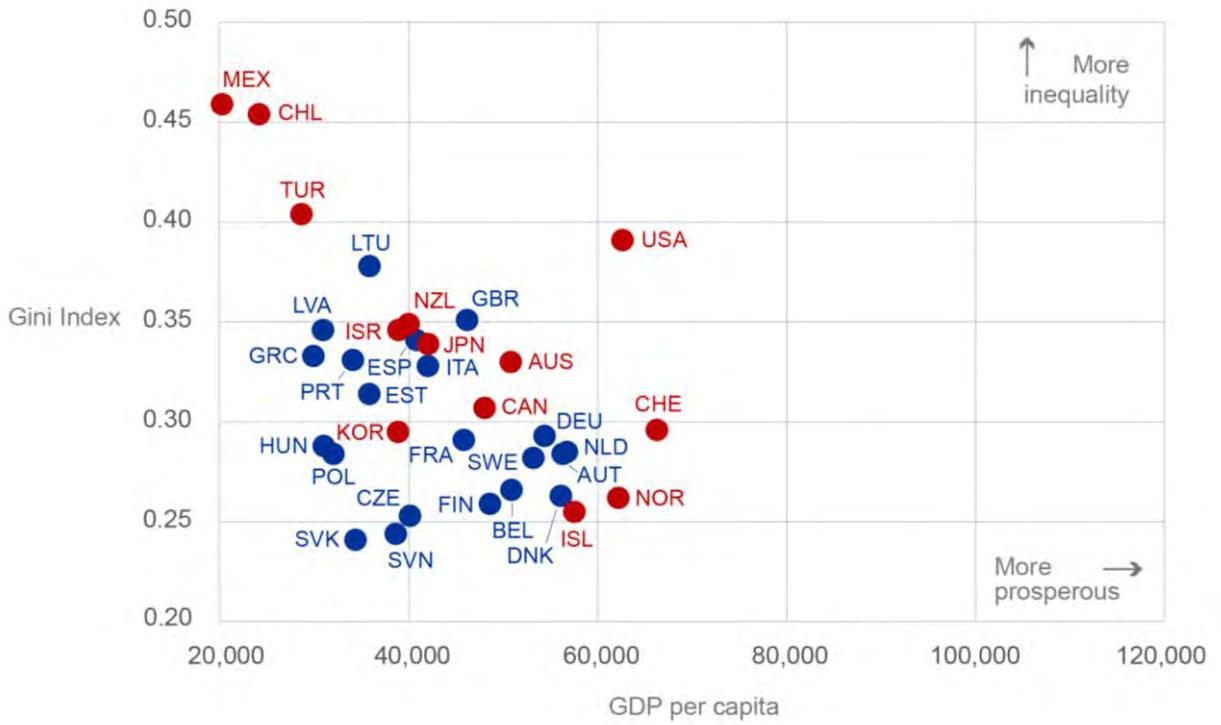
A frontrunner on environmental protection and development. The EU and its members have taken a leading role in advancing international action on climate change and environmental protection, although much remains to be done; and they are the world's largest provider of official development aid.

A work in progress. Trust in EU institutions is in the process of recovering, reaching 42% in 2018, slightly higher than the average for trust in national European governments. More work needs to be done for the EU to continue to support an inclusive growth model, lead on the environment, more effectively address migration, humanitarian and peace-threatening challenges, and secure a competitive position in international markets and the digital world.

A small overall budget. The EU's 2018 annual budget amounted to about EUR 160 billion, which represents 1% of the EU's GDP and around 2% of public expenditure of EU countries. Nevertheless, the composition of the budget could be further improved (around 40% is on farming, compared to 70% in 1985) to make it more inclusive and growth-enhancing. Its small size remains a limit on possible gains from more coordinated policies across the region, notably to help spur convergence and smooth economic shocks.

Figure 4. Many European countries are among the most affluent and most equal in the world

GDP per capita and Gini Index after taxes and transfers, for European countries (blue series) and non-EU OECD countries (red series)



Source: OECD Statistics.

PEOPLE'S RIGHTS AND SOLIDARITY

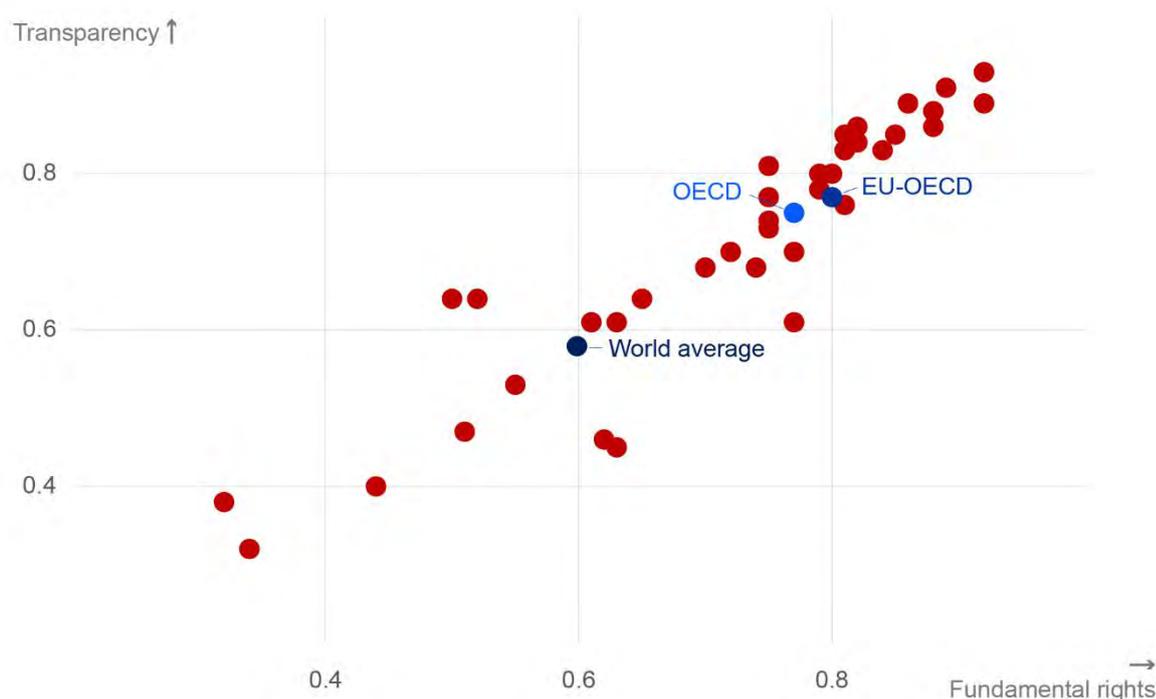
Section 1. Supporting democracy and people's rights

What has been achieved?

EU countries are committed to the rule of law and fundamental principles that protect freedom. A strong rule of law ensures the protection of fundamental rights and constrains government discretion. EU countries generally score high in this regard (Figure 1.1).

Figure 1.1. European countries strive to strongly protect fundamental rights and the rule of law

Scope/limitation of government discretion and fundamental rights, 2016



Note: Data are collected by the World Justice Project through a set of questionnaires administered to representative samples of the general public and legal experts. All variables used to score each of the factors are coded and normalised to range between 0 and 1, where 1 signifies the highest score and 0 the lowest.

Source: OECD calculations based on the World Justice Project.

Protection of citizens' rights has been strengthened. The values of human dignity, freedom, democracy, equality, the rule of law and respect for human rights are embedded in the EU treaties and the EU Charter of Fundamental Rights. As in other OECD countries, rights and freedoms from discrimination on any ground are protected at the national level, but also through the EU's institutions and anti-discrimination legislation and policy.

A leading role on consumer rights and data protection. The EU is a strong advocate of international cooperation to complement domestic efforts to stop human trafficking, smuggling and corruption. For instance, a key achievement of EU consumer policy is the Rapid Alert System (RAPEX), through which countries share information on dangerous products, which are then removed from other national markets.

The amount of information shared across countries has increased significantly, from around 460 alerts in 2004 to over 2 000 in 2016.¹

In view of a limited institutional setting, the EU has established direct ways to better listen to citizens' concerns. There have been over 1 200 *Citizens' Dialogues* since 2015,² where citizens have had an opportunity to suggest concrete legal changes in any field where the European Commission has power to propose legislation, such as the environment, agriculture, energy, transport or trade. Over 160 000 people have participated.³ The *REFIT Platform* allows citizens and other public and private stakeholders to get involved in improving EU legislation. During 2018-19, the European Commission, the Committee of the Regions and the European Economic and Social Committee have been holding in-person and online consultations about the Future of Europe. The results will feed into the informal meeting of EU leaders in May 2019.

Challenges and proposed solutions

- ***In the face of rising perceptions of a democratic deficit, consider ways of strengthening institutional linkages across national and EU institutions*** to provide for more integrated democratic representation, and continue involving EU citizens more meaningfully in drafting legislation at different levels.
- ***As rapid technological change without appropriate policies in place may threaten to leave many people behind,*** leverage new technologies in communication between European citizens and institutions to ensure that their views are taken into account.

¹ EC (European Commission) (2017), 2016 Report of the Rapid Alert System for non-food dangerous products.

² EC (2018), *Citizens' Dialogues and Citizens' Consultations: Progress report*.

³ *Ibid.*

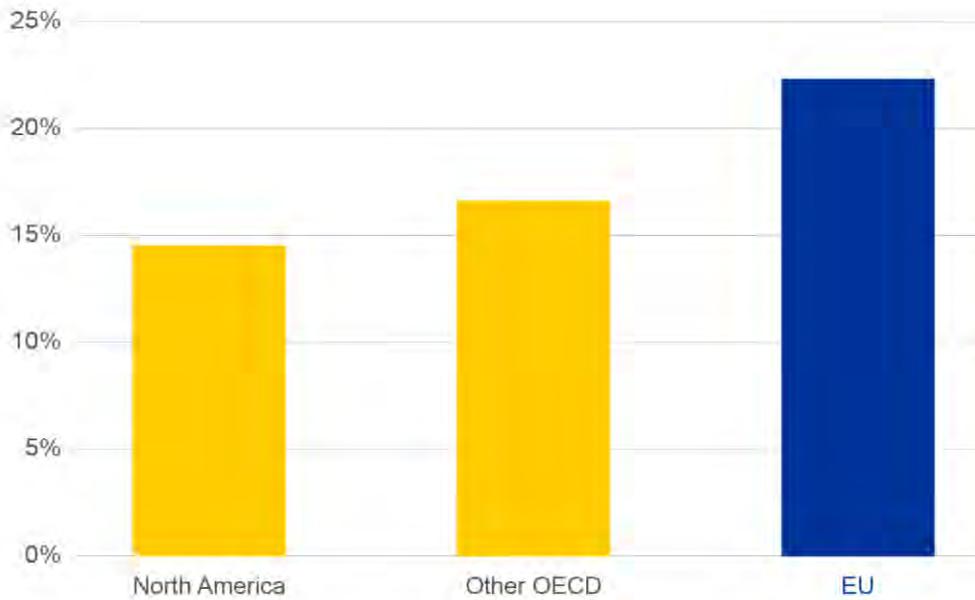
Section 2. Building a social Europe by promoting social rights

What has been achieved?

Citizens of EU countries strongly support social protection. Eighty-five percent of Europeans expect a free-market economy to go hand in hand with high levels of social protection.⁴ European countries have developed growth models underpinned by high levels of social spending (Figure 2.1).

Figure 2.1. High public social spending signals a strong commitment to creating a social Europe

Public social expenditure as a percent of GDP, 2018 (or nearest year)



Source: OECD (2019) OECD Social Expenditure Database.

EU countries show greater income equality. Owing to their own individual policies, income inequality after taxes and transfers is lower on average in EU countries than in non-EU countries (Figure 2.2), even though it has increased in recent years but less so than in other regions of the world; the extent of income concentration at the top is also the lowest globally (Figure 2.3).

⁴ EC (2018), Standard Eurobarometer 90.

Figure 2.2. European incomes are significantly less unequal, after taxes and transfers

Changes in Gini coefficient, before and after taxes and transfers, working age population, 2016 (or nearest year)

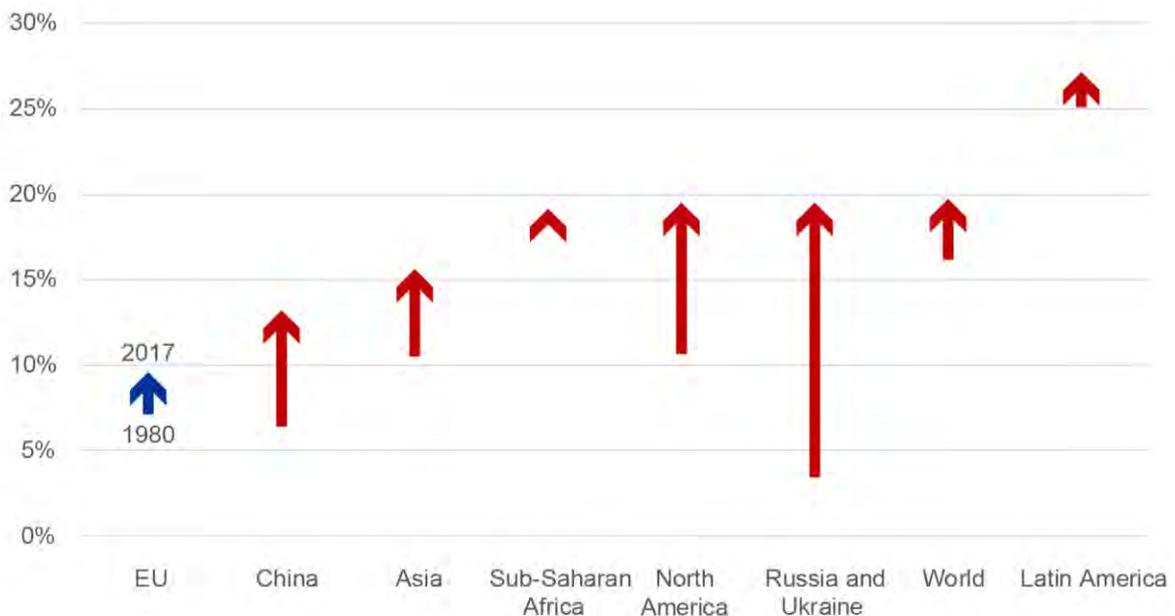


A Gini coefficient of 0 expresses perfect equality, where everyone has the same income.
 A Gini coefficient of 1 expresses maximal inequality where only one person has all the income and all others have none.

Source: OECD Income Distribution Database.

Figure 2.3. Income concentration is relatively low in the European Union and has increased less than in many regions of the world

Top 1% national income share, 1980 and 2017 (or latest available year)



Note: Data for China from 2015; Data for Asia, Sub-Saharan Africa, North America, Russia and Ukraine, World and Latin America from 2016.

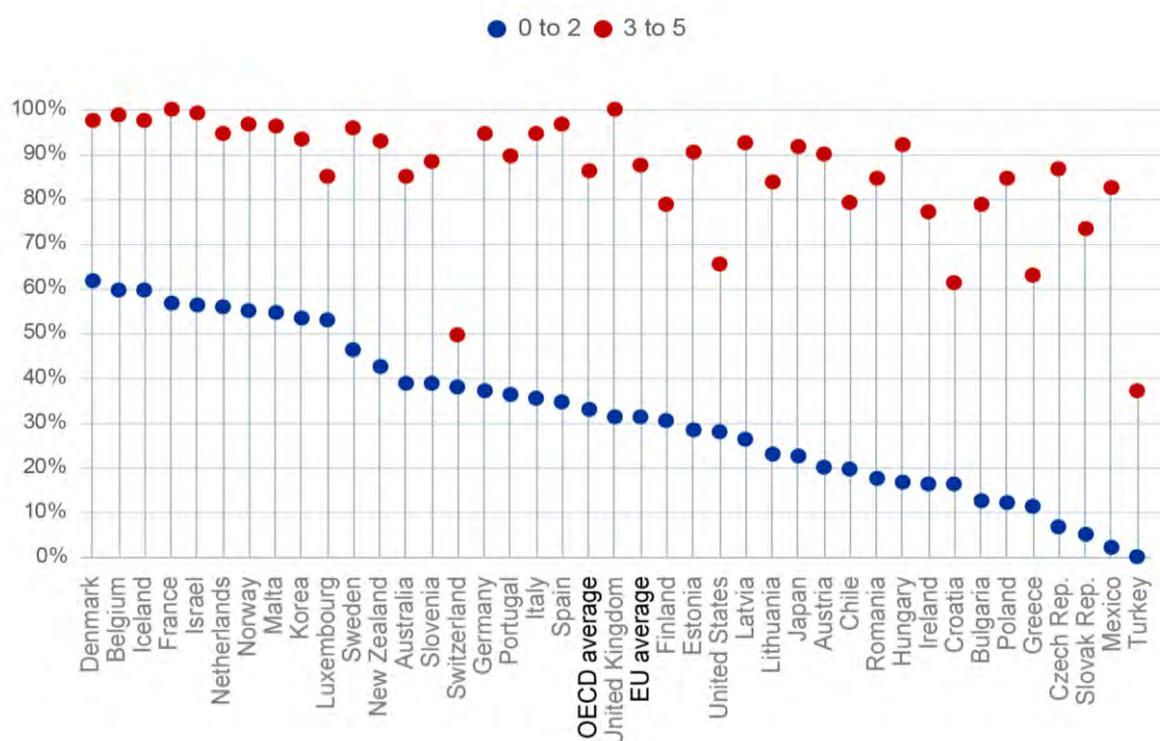
Source: World Inequality Database, <https://wid.world/>.

Social achievements are core to the European construction. The EU proclaimed the *European Pillar of Social Rights*, which outlines 20 principles and rights for fairer labour markets and better functioning welfare systems. These principles and rights are structured under three main categories: equal opportunities and access to the labour market; fair working conditions; and social protection and inclusion. Progress is monitored through the European Semester cycle of economic policy co-ordination. Several initiatives at the EU level serve to implement the Pillar. Two of them support in particular workers engaged in new forms of work. The Directive on Transparent and Predictable Working Conditions aims to provide workers with new minimum rights. The Recommendation on Access to social protection for all workers and the self-employed is intended to ensure that all working people, regardless of their employment status, are sufficiently covered by social security schemes and protected against economic uncertainty.

Childcare provision has augmented and targets have been established. Participation in good-quality early childhood education and care (ECEC) is key to fostering child development and parental employment, and it also lowers inequalities for life, as supported by OECD findings on inclusive growth. There is considerable variation across countries (Figure 2.4), but EU countries have, on average, met the Barcelona target of enrolling at least 33% of children under age 3, and they are close to reaching the objective that at least 90% of children between age 3 and the mandatory school age participate in ECEC (86.3% in 2016).⁵

Figure 2.4. Many EU members are close to achieving the Barcelona targets for childcare enrolment

Percent of 0-2 year-olds enrolled in ECEC services (ISCED 0 and other registered ECEC services), and percent of 3-5 year-olds enrolled in ECEC (ISCED 2011 level 0) or primary education (ISCED 2011 level 1), 2016 or latest available



Source: OECD Family Database (<http://www.oecd.org/els/family/database.htm>) Indicator PF3.2 for more detail.

a) Footnote by Turkey: The information in this document with reference to “Cyprus” relates to the southern part of the Island. There is no single authority representing both Turkish and Greek Cypriot people on the Island. Turkey recognises the Turkish Republic of Northern Cyprus (TRNC). Until a lasting and equitable solution is found within the context of United Nations, Turkey shall preserve its position concerning the “Cyprus issue”.

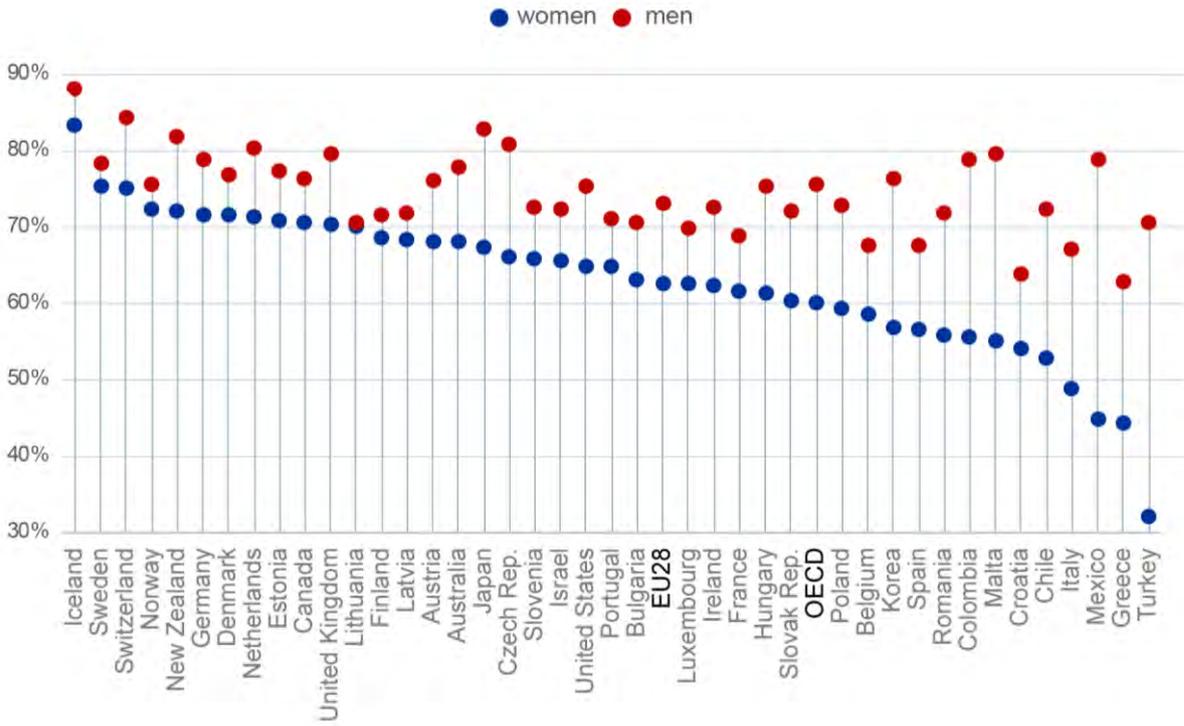
b) Footnote by all the European Union Member States of the OECD and the European Commission: The Republic of Cyprus is recognised by all members of the United Nations with the exception of Turkey. The information in this document relates to the area under the effective control of the Government of the Republic of Cyprus.

⁵ European Council (2002), Presidency Conclusions, European Barcelona Council, 2002.

Investing in youth is a priority in the EU. In 2013, the EU Youth Guarantee set a political commitment to offer all people under the age of 25 a good employment, education or training opportunity, supported by Youth Employment Initiative funding and the European Social Fund. In 2014-17, 22.3 million young people entered into Youth Guarantee projects, and 14 million subsequently took up employment, education or training opportunities. However, the programme could be made more effective, notably in countries with high youth unemployment.⁶

Social and workers’ rights are better respected in the EU than in other regions. These, in turn, encourage greater labour-market participation for men and women (Figure 2.4). As one of the EU’s over 50 directives on social and worker’s rights, the Working Time Directive sets minimum standards to protect Europe’s workers from health and safety risks from excessive working hours. The EU Pregnant Workers Directive also sets a minimum of 14 weeks maternity leave in EU countries. Going forward, the EU’s Supporting Work-Life Balance for Working Parents and Carers initiative aims to modernise the existing EU legal framework and to set out a legal and policy package. As part of this, the political agreement for a new EU Directive includes the introduction of ten days of paid paternity leave, five working days of carers’ leave per year, four months of parental leave per parent (of which two months are non-transferable), and the right to request reduced and flexible working hours (and flexibility of the workplace) for all carers and all working parents with children up to at least age 8.

Figure 2.5. Gender employment gaps in EU members are often smaller than in the OECD
 Employment rates by sex, 15-64 year-olds, 2017



Source: OECD Employment Database, <http://www.oecd.org/employment/emp/onlineoecdemploymentdatabase.htm>.

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⁶ EC (2018), Youth Guarantee Indicator Framework database, Data collection for monitoring of Youth Guarantee schemes 2017 (December 2018).

Challenges and proposed solutions

- ***In the light of weak labour market mobility across the EU, better recognise citizens' qualifications*** and enlarge the scope for harmonization of professional qualifications through convergence of studies and diploma, to help improve their job prospects. Ensuring access to social security and the portability of supplementary pension rights is also key to facilitating mobility.
- ***Reform the EU budget*** by increasing investment in R&D, better targeting cohesion funding and agriculture spending to more effectively address regional divides, and increase funding to support less qualified youth, including by stepping up the Erasmus+ programme.

Section 3. Investing in education and skills

What has been achieved?

Europeans enjoy high levels of educational enrolment. On average across EU countries, at least 90% of the population was enrolled in education from age 4 to age 17 in 2016.⁷ The enrolment rate of 15-19 year-olds was 87% on average, above the OECD average of 85%.⁸ Enrolment rates of 3-5 year-olds is also high in the EU (89%), compared to the OECD average (86%).⁹ On average, EU countries spent almost EUR 10 000 per student on direct expenditures within educational institutions in 2015, slightly higher than the OECD average.¹⁰ EU countries share national practice in vocational education and training through the European Centre for the Development of Vocational Training.

Europe's higher education institutions attract many international students. The EU is a key geographical area of inward mobility, with 1.6 million international students (including intra-EU mobility) enrolled in European university programmes in 2016, 13% more than in 2013.¹¹

The EU has created the largest educational mobility area in the world. European international students constitute the second biggest cohort of cross-border students studying in OECD countries (Figure 3.1), after Asian students. In 2016, 845 000 European students crossed borders for the purpose of studying and 80% of them enrol in tertiary studies in another European country. Through the Bologna Process (which now spreads far beyond the borders of the EU) and the creation of the European Higher Education Area, European countries have made their education systems more integrated. The Erasmus+ programme has increased the mobility of students and learners in Europe. Between 2014 and 2020, more than 4 million people will have benefited from learning opportunities in Europe and beyond, including 2.2 million tertiary students.¹² These initiatives increase multicultural understanding and create a European identity going beyond national borders, underpinned by the free movement of people in the Schengen area.

The EU helps its members to achieve higher investment in skills. Through the Skills Agenda for Europe, the European Social Fund (ESF) and Erasmus+, the EU supports its members to improve the quality and relevance of education and training (including digital skills) and to analyse trends in the demand for skills and jobs. The ESF finances education and training measures, with a focus on investing in the skills of disadvantaged people. Between 2014 and 2017, the EU's ESF and Youth Employment Initiative programmes together funded 15.3 million people to participate in training schemes, including 7.9 million unemployed and 4.9 million inactive. As part of the European Alliance for Apprenticeships, the Youth Guarantee, the European Pact4Youth and ErasmusPRO, the European Commission has brought together governments, businesses and education institutions to create close to 1.3 million apprenticeships, traineeships and entry-level jobs since 2013.¹³

Digital education is a priority of the EU. While 90% of jobs require at least minimum digital skills, only 45% of the EU population and 37% of the EU labour force have sufficient digital skills. The *Digital Skills and Jobs Coalition* is one of the ten actions under the Skills Agenda that brings together EU members, companies, social partners, non-profit organisations and education and training providers to take action to improve digital skills in Europe, with the goal of training 1 million unemployed young people for digital jobs by 2020.

⁷ OECD (2018), *Education at a Glance 2018: OECD Indicators*.

⁸ *Ibid.*

⁹ *Ibid.*

¹⁰ *Ibid.*

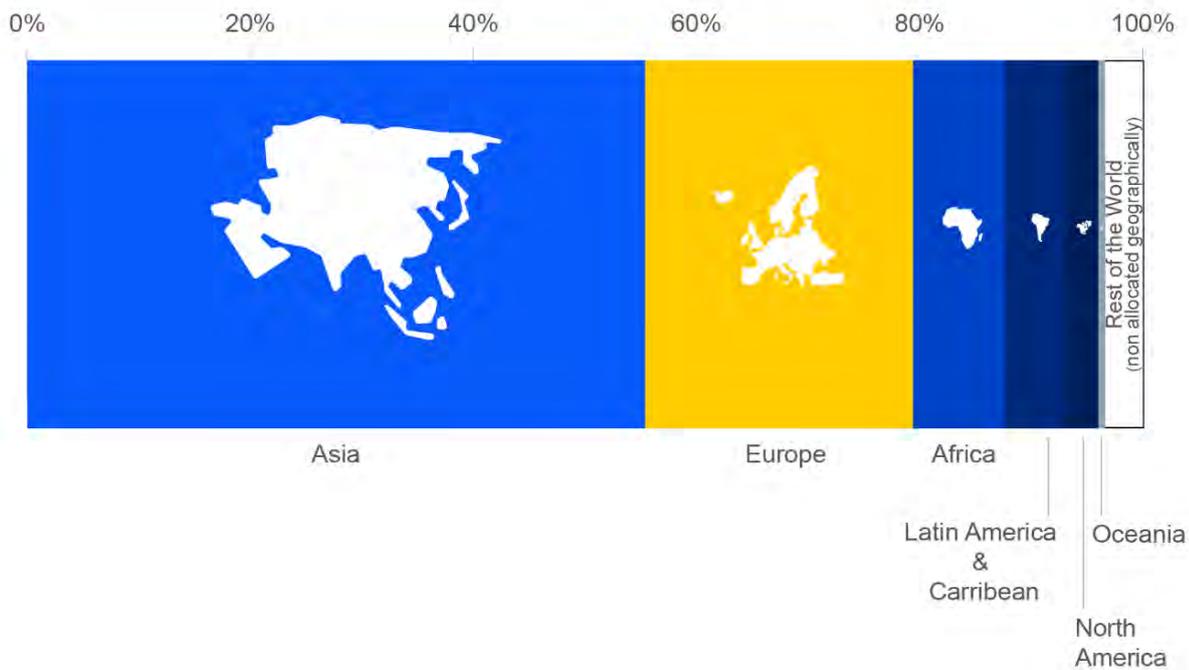
¹¹ *Ibid.*

¹² EC (n.d.), Erasmus+, Key Figures. : https://ec.europa.eu/programmes/erasmus-plus/about/key-figures_en.

¹³ EC (n.d.), Factsheet New Skills Agenda for Europe, http://www.google.com/url?sa=t&rct=j&q=&esrc=s&source=web&cd=2&cad=rja&uact=8&ved=2ahUKEwiYwYKvNzhAhXI4IUUKHW_YAMIQFjABegQIBBAC&url=http%3A%2F%2Fec.europa.eu%2Frapid%2Fattachment%2FIP-17-3585%2Fen%2FFactsheet%2520New%2520Skills%2520Agenda%2520for%2520EU_09.pdf&usg=AOvVaw0WbHUPwRYq96JvxNSKBAL.

Figure 3.1. European students gain international experience

Distribution of international or mobile students enrolled in OECD countries, by region of origin (2016)



Source: OECD (2018), Education at a Glance Database, <http://stats.oecd.org>.

Challenges and proposed solutions

- **There is scope to bolster the skills of students** to help foster economic growth and social development. The EU has set an ambitious target to reduce the share of 15-year-olds with underachievement in reading, mathematics or science to below 15% by 2020, as measured by the OECD Programme for International Student Assessment (PISA). PISA 2015 results show that, on average across all 28 EU member states, the share of pupils who fail to reach basic competences is 19.7 % in reading, 22.2 % in maths and 20.6 % in science.
- **Reduce the risk of skill mismatches, better support people of all ages, and develop tools to monitor skill needs.** Developing transversal and digital skills would foster equality of opportunity and also help small and medium-sized enterprises (SMEs) find the right skills in the digital era. The EU can add value by establishing common definitions of skills needs and helping to develop data tools to monitor skills gaps.
- **Sustain cross-border mobility of students** which requires sufficient resources and recognition of educational achievements. Increase spending on mobility programmes such as Erasmus+, and facilitate access irrespective of socio-economic background. In addition, further convergence and automatic recognition of qualifications and the outcomes of learning periods across the EU would further foster the mobility of students.
- **Improve the labour market integration of migrants** through greater efforts to build new skills or recognise their existing competences. Mechanisms for assessing and acknowledging informal skills, participation in language courses and a higher enrolment in vocational education and training programmes would improve the job prospects of migrants and refugees.

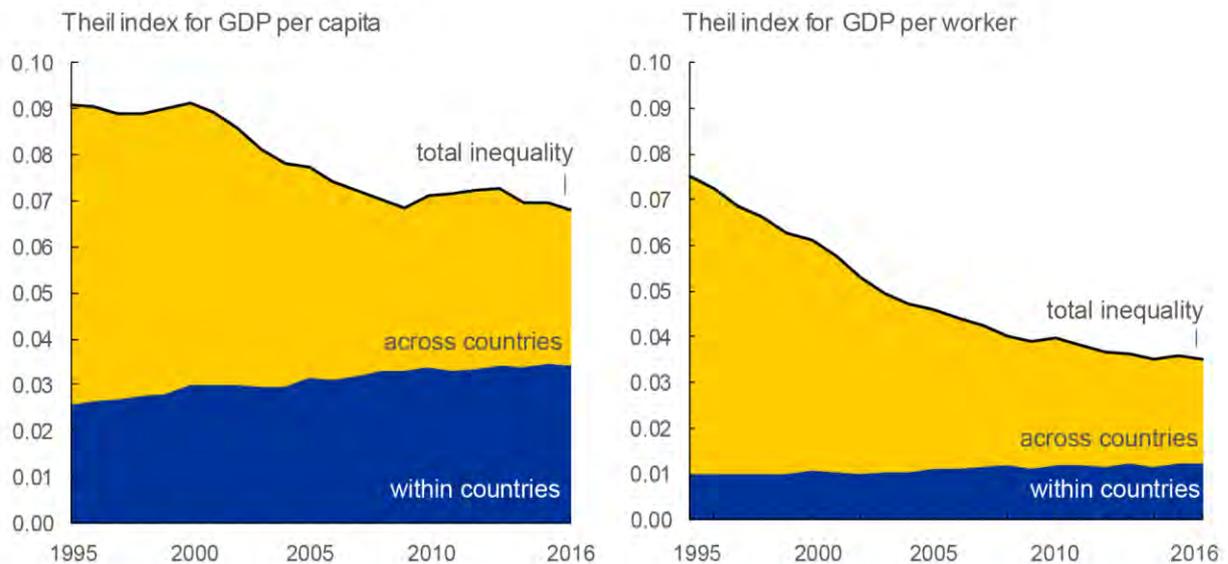
Section 4. Helping reduce regional disparities

What has been achieved?

Convergence among regions is key in the European growth model. EU cohesion policy aims to reduce regional disparities and promote sustainable development across European regions.

Since 1995, regional inequality across countries has been reduced significantly, though the 2008 crisis temporarily undid some progress. Inequality of GDP between European regions has declined by about 25%. Regions with lower per capita income have significantly reduced the gap with other regions of the EU.¹⁴ This reduction has been achieved despite slowly growing regional GDP inequalities within most EU countries and other parts of the world. The reduction in inequality of GDP per worker has happened at an even faster pace and greater extent than the reduction in per capita GDP inequality (Figure 4.1).

Figure 4.1. Regional inequality across EU countries has fallen



Source: OECD (2019), OECD Regional Statistics (database), <http://dx.doi.org/10.1787/region-data-en>.

One-third of the EU budget is allocated to reducing economic and structural differences between EU regions. Between 2014 and 2020, the EU will have spent EUR 350 billion on cohesion policy investments to support growth and employment in Europe's regions, with 16% of cohesion policy investments in the transport network and energy infrastructure. While these unique efforts of solidarity in the world have brought significant results, much remains to be done, as regional economic differences within EU countries remain large.

EU cohesion policy investments more than doubled for low-income regions relative to the size of their regional economy – increasing from 7% in the 2000-06 programming period to 15% in the 2007-13 programming period.¹⁵

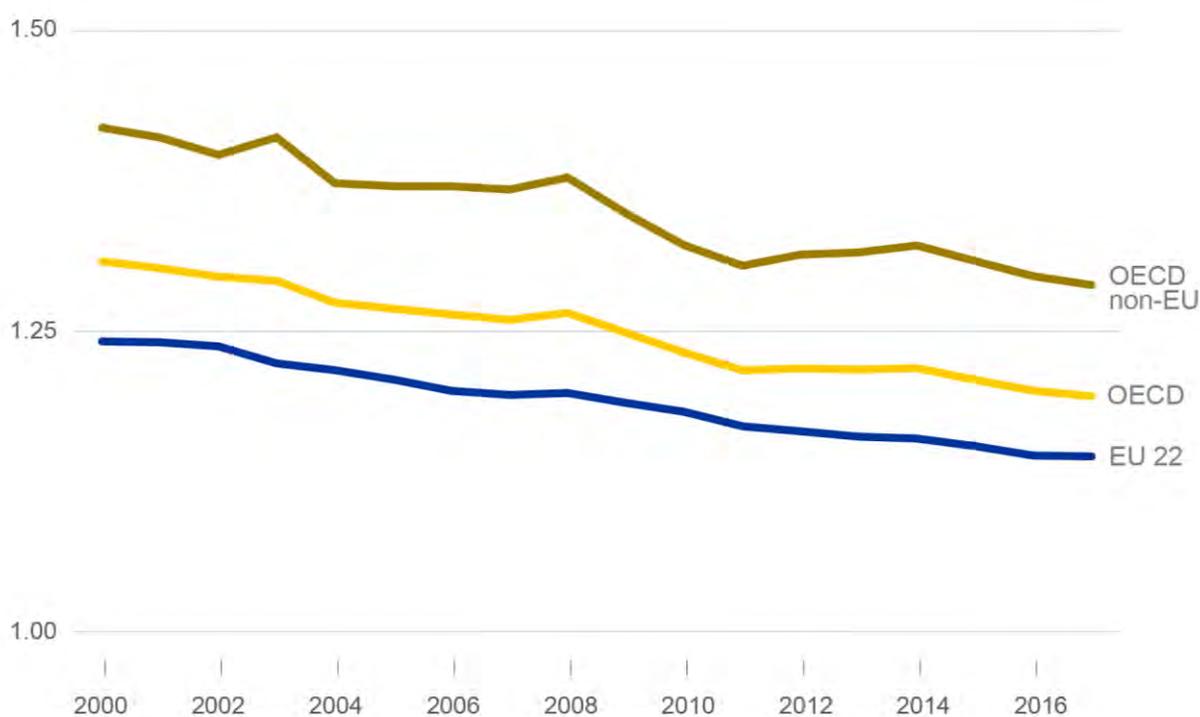
Most EU countries have reduced regional differences in access to the Internet and to education. Among EU countries, differences in access to the Internet between the top and bottom regions (representing 10% of the population) decreased by more than 30% between 2007 and 2017. Regional differences in household attainment of at least upper secondary education decreased by 8% between 2000 and 2017 (Figure 4.2).

¹⁴ OECD (2019), OECD Regional Statistics (database), <http://dx.doi.org/10.1787/region-data-en>.

¹⁵ OECD calculation based on EC European Structural and Investment Funds Data; see <https://cohesiondata.ec.europa.eu/>.

Figure 4.2 Regional differences in education levels have decreased by 8% in EU countries

Share of labour force with at least upper secondary education, top 10% over bottom 10% ratios, large regions (TL2)



Note: EU and OECD aggregates are simple average of country top 10% over bottom 10% ratios.

Source: OECD Regional Statistics database.

Challenges and proposed solutions

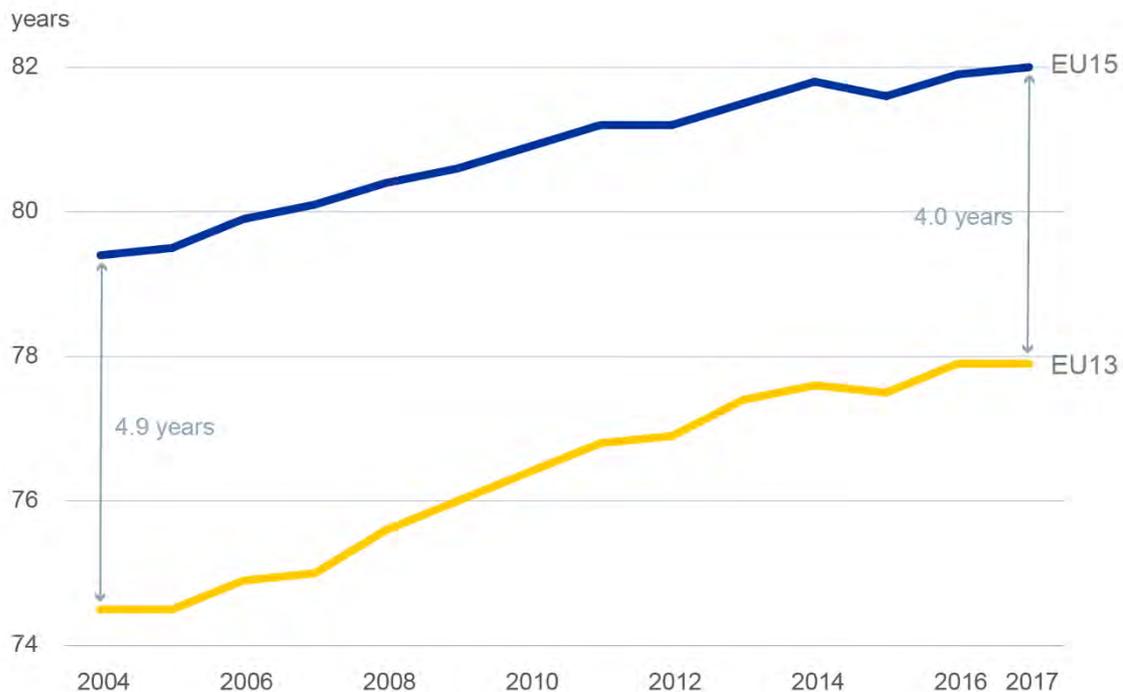
- **With high unemployment rate in many regions and low public investment, EU countries should develop better national policies and the EU should improve its cohesion policy** to address regional divides in GDP per capita and help people left behind. Youth unemployment remains higher than 50% in certain regions in Italy and Greece. The capacity to maintain good infrastructure, public services and managing the digital and environmental transition is likely to be increasingly challenging in many regions. Therefore, the EU could improve the effectiveness of cohesion policy, by focusing spending on investments in human capital, innovation and network infrastructure, linkages across regions (notably between urban and rural), while continuing to promote a place-based approach to policy, as well as prioritising cohesion spending to the poorest regions.
- **Some countries face challenges to absorb EU funds effectively, pointing to the need for improved management of EU funds.** Higher national co-funding rates for EU funds could encourage greater spending effectiveness and a better selection of projects. Lowering administrative burdens by creating a single rule book for EU funding could help make cohesion policy more effective and reduce slow starts. There is significant scope to improve public procurement practices in many countries, coupled with greater use of e-government and e-procurement to help improve efficiency and reduce dominant positions. The European Parliament has backed the creation of a European Public Prosecutor's Office (EPPO) to strengthen the fight against fraud in the use of EU funds. All member states should join the jurisdiction of the new EPPO.
- **Efforts to make structural reforms happen have eased off, making it necessary to continue support to countries in identifying and implementing reform priorities.** Regional policy should continue to be accompanied with the structural policy package. In this regard, recent efforts of the European Commission to reinforce the capacity of EU countries to design and implement structural reforms at the central and local level are welcome.

Section 5. Improving people's health outcomes

What has been achieved?

Europeans enjoy relatively long and healthy lives. Life expectancy now reaches 80.9 years on average across EU countries, and healthy life expectancy is over 68 years.¹⁶ The gap in life expectancy at birth between countries that joined the EU around 2004 compared those that have been members for longer has decreased by almost one year since then (Figure 5.1). However, large inequalities in life expectancy persist by socio-economic status, as people with a low level of education can expect to live six years less than those with a high level of education.

Figure 5.1. Gap in life expectancy between EU15 and EU13 has narrowed since 2004



Note: EU15 and EU13 are the unweighted averages of life expectancies at birth for the countries that joined the European Union before 2004 (EU15) and those that joined in or after 2004 (EU13).

Source: Eurostat Database.

Most EU countries have achieved universal (or near-universal) coverage for a core set of health services. This coverage, which reaches 97% in the EU, includes consultations with doctors, tests and examinations, and hospital care.¹⁷ On average across EU countries, 18% of health spending is paid out-of-pocket by households.¹⁸

The EU has supported access to healthcare for EU citizens across the bloc. The *European Health Insurance Card* allows EU citizens to receive medical treatment in another member state free of charge or at a reduced cost.

The EU has encouraged reduction of tobacco consumption. Tobacco consumption is one of the most significant cause of premature death. The Tobacco Products Directive, which became effective in all EU member states in May 2016 (although significant variations remain in transposition of the Directive into national legislation), makes larger health warnings on packages mandatory, introduces safety regulations for e-cigarettes and particularly targets young people. The EU is also active in strengthening smoke-free legislation in public spaces. Effective policies for tobacco control, such as those enforced by the Directive, are helping to decrease the prevalence of tobacco use.

¹⁶ OECD (2017), *Health at a Glance 2017: OECD Indicators*.

¹⁷ *Ibid.*

¹⁸ *Ibid.*

The Digital Single Market Strategy sets out objectives to improve the health and care sector across the EU.

For example, such improvements aim at sharing personal health information across borders, strengthening citizen empowerment and individual care through e-health solutions and new care models.

Active competition law enforcement at the EU and national levels has helped to increase purchasing power and quality. Greater competition in the pharmaceutical sector has contributed, in some countries, to delivering more affordable medicines and more choice to patients and healthcare systems, and promoted further innovation.

Challenges and proposed solutions

- ***Inequalities in access to quality healthcare and in outcomes across socio-economic groups require policies at national level to address such gaps*** by supporting the most vulnerable people. The EU can promote measurement of health outcomes that matter most for people, which can serve as a tool to improve national policy design and implementation.
- ***Lowering exposure to risk factors would promote further overall gains and convergence in life expectancy across the EU.*** The EU can continue to support national efforts to reduce exposure to risk factors for chronic non-communicable diseases.

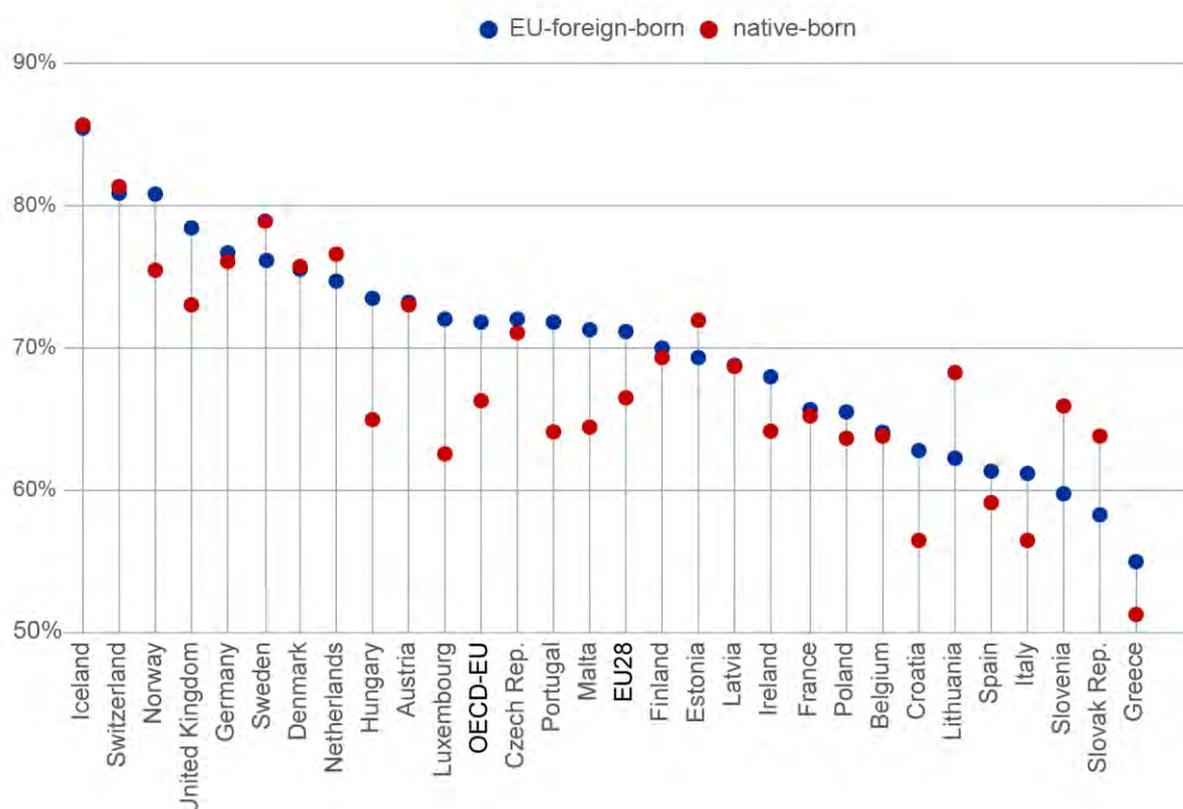
Section 6. Reaping the benefits of internal and external migration

What has been achieved?

Free mobility in the EU has brought widespread benefits. About 18 million people in the EU were born in another EU country, and intra-EU movements explain almost half of all permanent-type migration movements in the EU over the past 12 years. In addition, more than 2 million EU citizens work temporarily in another EU country every year. The Schengen Area brings annual economic benefits estimated in tens of billions of euros.¹⁹ To a certain extent, intra-EU migration flows change with economic conditions, thereby providing a buffer for local labour markets. Evidence from the OECD suggests that free mobility has lowered unemployment in Europe, as people move from areas of high unemployment to those with labour shortages.²⁰ EU-born immigrants have a higher employment rate (71%) than their native-born peers (66.5%), and many have been willing to take up jobs which locals did not want (Figure 6.1).

Figure 6.1. EU foreign-born are well integrated into EU destination countries

Employment rate of EU-foreign-born and native-born population, age 15-64, 2015/16



Source: OECD/EU (2018), *Settling In 2018: Indicators of Immigrant Integration*.

EU policies help enhance labour mobility. Language is an important barrier to intra-EU mobility, and studying abroad could also enhance career opportunities by improving knowledge of foreign languages. The public sees EU student mobility programmes, such as Erasmus+, as one of the most positive results of European integration. However, funds for the 2014-20 Erasmus+ programme are 1.3% of the EU budget, which can offer learning mobility to only about 4% of young Europeans. The increase in posted workers (those who, for a limited amount of time, carry out their work in the territory of an EU country other than the one in which they normally work) has created some tensions, notably when methods to circumvent the law may have led to undue tax revenue losses or abuse of worker rights.

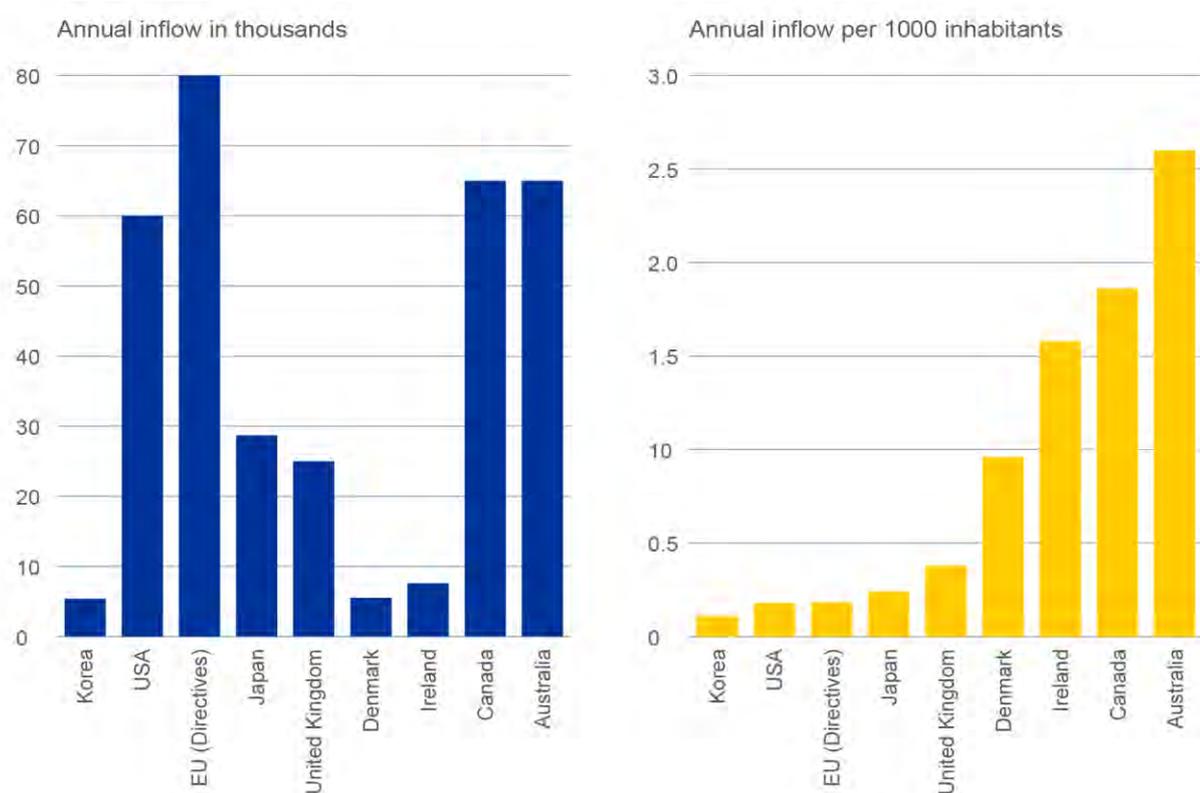
¹⁹ European Parliament (2016), *The Cost of Non-Schengen: the Impact of Border Controls within Schengen on the Single Market*.

²⁰ OECD (2014), *Migration as an Adjustment Mechanism in the Crisis? A Comparison of Europe and the United States*, https://www.oecd-ilibrary.org/social-issues-migration-health/migration-as-an-adjustment-mechanism-in-the-crisis-a-comparison-of-europe-and-the-united-states_5jzb8p51gvhl-en.

The EU as a single labour market has more potential to attract international talent than the sum of individual countries. There is global competition for top talent, and many individual EU members have punched below their weight, leading the EU to have a smaller share of globally mobile highly qualified migrants relative to other blocs. The EU as a whole is more attractive by offering a standardised residence permit for highly qualified workers. However, the Blue Card work and residence permit for non-EU/EEA nationals could be modernised and its eligibility requirements and procedures simplified, so it is more often used (Figure 6.2). The EU has helped make the conditions for international students in EU countries more transparent and accessible. EU countries that have implemented these conditions have experienced improved ability to attract international students, while countries outside the EU have seen declines (Figure 6.3). The EU has contributed to improving national conditions for family reunification for the spouses and children of highly qualified migrant workers, making member countries more attractive for this group.

Figure 6.2. EU countries participating in the EU Blue Card programme get relatively more skilled migrants

Skilled labour migration permit flows, 2015 or most recent year, selected destinations, absolute value and as a share of the population



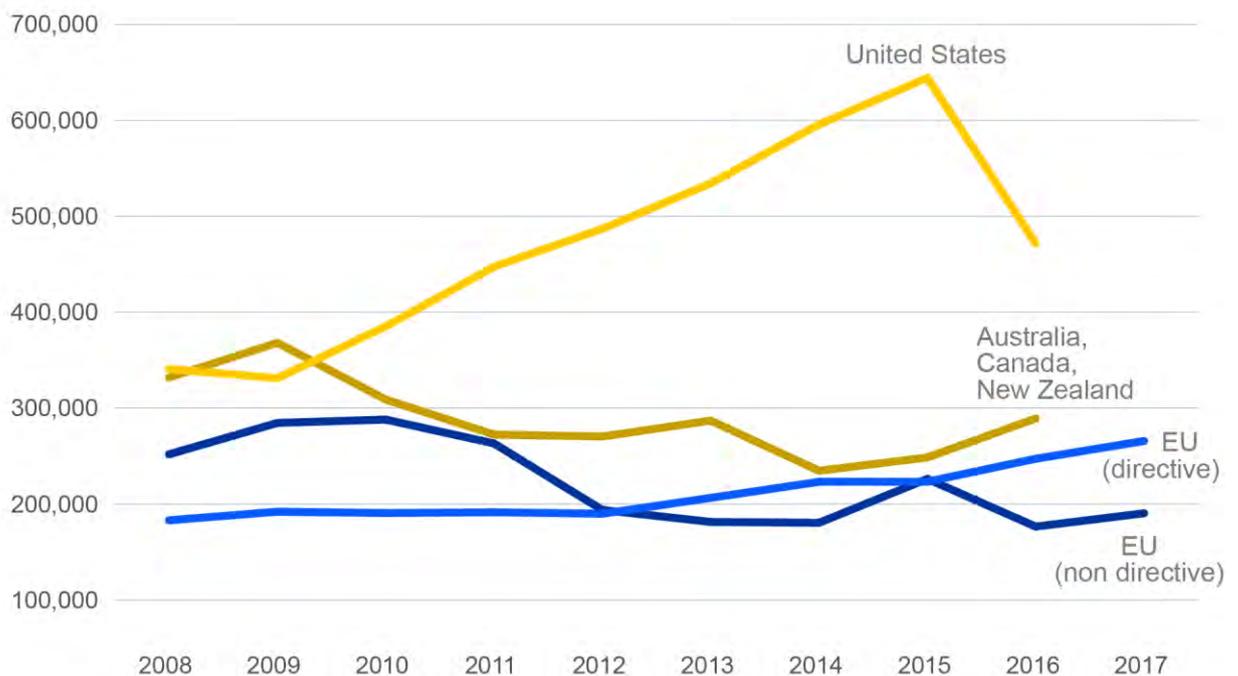
Source: OECD/EU (2016), Recruiting Immigrant Workers: Europe 2016.

Migrant integration policies are promoted by the EU. The EU provides shared experience and support in the area of integration for immigrants and their children through the European Integration Network and various funds. The EU has developed tools to assess foreign skills and qualifications. Together with the OECD, the EU provides for regular monitoring of integration outcomes of immigrants and their children. This helps countries by providing benchmarks to put their outcomes into perspective, and by identifying and addressing common challenges.

The EU has faced a major refugee and humanitarian crisis in recent years and has had difficulties in developing a common policy. No country can address the complexity of forced and humanitarian migration crises alone, but national preferences have challenged efforts to welcome refugees and asylum seekers and to integrate them. Given the future prospects for such movements, it is important for the EU members to strengthen policy co-operation in this area.

Figure 6.3. The EU is attracting a steadily increasing international student population

Inflows of international students, 2008-2017, main OECD destinations, EU countries covered by directives and outside directives (UK, IE, DK), excluding intra-EU international students



Source: OECD/EU (2016), Recruiting Immigrant Workers: Europe 2016.

Challenges and proposed solutions

- **Strengthen labour mobility among EU countries.** Increase spending on mobility programmes such as Erasmus+, and make it more inclusive by including targeted actions for disadvantaged groups. Speed up recognition of professional qualifications by increased harmonisation of professional curricula.
- **Reduce barriers in access to regulated professions that hamper labour mobility within the Single Market.** In many EU countries, the number of regulated professions is unnecessarily high. Pruning the number of regulated professions and the qualification requirements to access them, while preventing deterioration in the quality of services, would help enhance mobility.
- **Ensure a level playing field.** Strengthened mobility incentives require more harmonised social security systems – or at least the portability of rights – and stronger guarantees of the social rights of workers, through strict enforcement of labour and tax laws. At the EU level, the upcoming European Labour Authority to better co-ordinate the design and organisation of joint cross-border labour, social security and tax control is a step in the right direction. It should be fully operational by 2023.
- **Revise the EU Blue Card to harmonise conditions, procedures and rights,** so that it is more widely used.
- **Address the challenge of a major refugee crisis by jointly protecting the external EU borders.** Host countries need to share the burden of response to spikes in demand for international protection and work together with third countries to facilitate return and sustainable reintegration. The EU is the right level for doing so. EU instruments for anticipating and monitoring refugees are widely used, and they could be further reinforced to strengthen co-ordination efforts. Thanks to the EU, border guards work together to stop illegal and illicit entries at its external borders. The establishment of the European Border and Coast Guard in 2016 was key to reinforcing the protection of EU external borders, but it should be further strengthened while humanitarian aspects should continue to be taken into account.

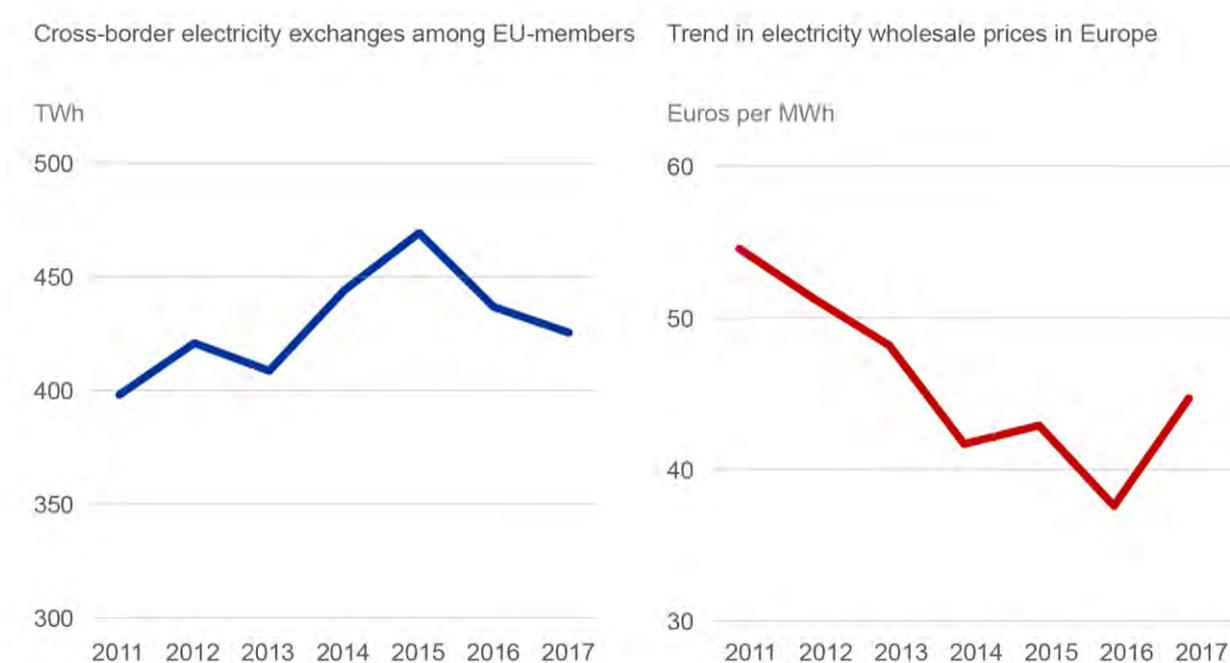
MAKING EUROPE MORE RESILIENT IN A DIGITAL AND INTERCONNECTED WORLD

Section 7. Furthering economic integration

What has been achieved in the European Union?

The Single Market, aiming for free movement of people, goods, services and capital, has delivered important outcomes. The European Commission estimates that the Single Market has raised GDP in the EU by between 8% and 9%, taking into account both the direct trade and competition effects.²¹ The Single Market delivered to consumers more and better choice at lower prices. For instance, it has contributed to a greater interconnectedness of electricity markets, which in turn has supported lower electricity prices for consumers (Figure 7.1). The Single Market for services has been growing, partly driven by new EU rules but also by domestic policy reforms in member countries. These changes lower the unnecessary costs that result from restrictive or widely divergent national regulatory standards and enable businesses, in particular SMEs, to improve their productivity and to contribute to new and better jobs.

Figure 7.1. Average electricity prices have fallen as interconnectedness has risen in Europe



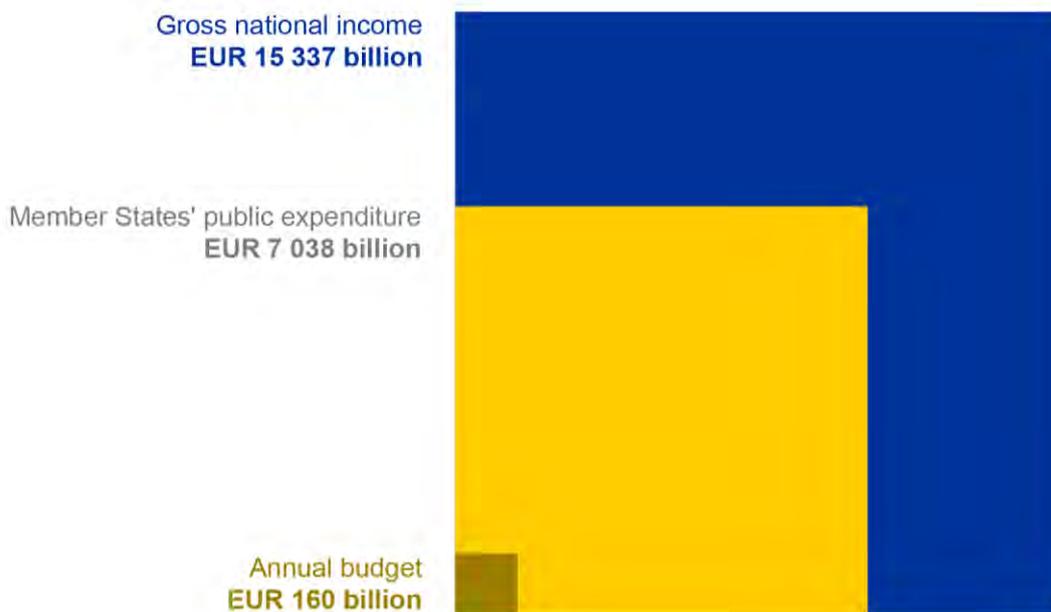
Source: ACER (Agency for the Cooperation of Energy Regulators) and CEER (Council of European Energy Regulators) (2018), *Annual Report on the Results of Monitoring the Internal Electricity and Gas Markets in 2017*.

The Single Market is a work in progress and its potential benefits still remain large. Goods flow freely across the Single Market, but that is less the case for services. In addition, working in a different EU country has been made easier and become more common. Lending and investing across European borders is still hampered by national regulatory barriers.

²¹ Veld, J. (2019), Quantifying the Economic Effects of the Single Market in a Structural Macromodel, Discussion Paper 094.

The EU budget has made it possible to finance many successful policies, but it needs reform. Policies pursuing many important economic and social goals, from regional convergence to student mobility, are analysed in different sections of this document. But, at barely more than 1% of GDP, the EU budget is already stretched (Figure 7.2) and there are new financing needs.

Figure 7.2. The EU budget is small



Source: European Commission.

What has been achieved in the euro area?

In 1999, the euro became the common currency of 11 EU countries. Another 8 countries have adopted it since. The single currency underpins the Single Market by eliminating the exchange rate burden, reducing transaction costs for exporters and for tourists.

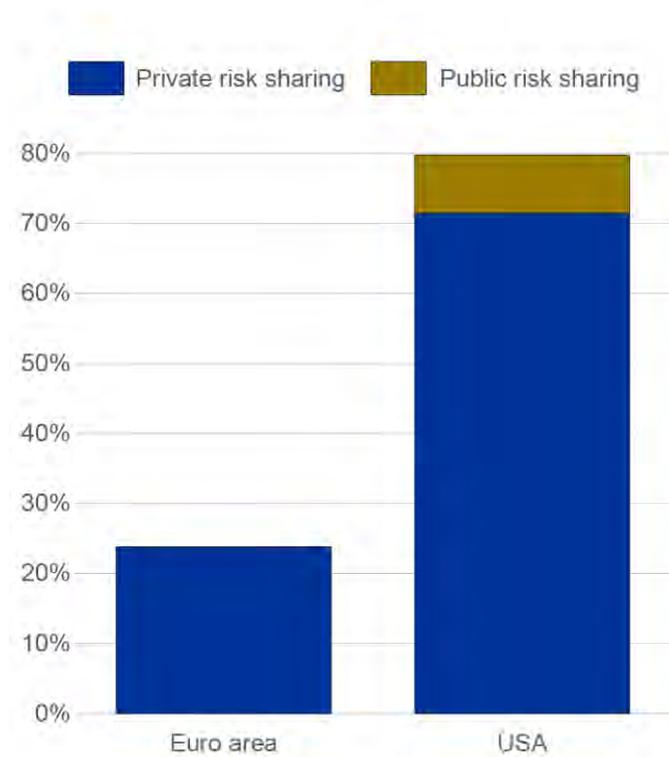
The common monetary policy, entrusted to the European Central Bank (ECB), has delivered price stability. Inflation has been low since the creation of the euro, protecting the purchasing power of citizens. Low inflation has made the euro a reliable currency, which is widely used around the world. Bold action by the ECB has also helped the euro area economy recover from the global financial crisis and the ensuing sovereign debt crisis.

The architecture of the euro area has progressed beyond a single currency and a common monetary policy. Lending tools, notably the European Stability Mechanism, have been created to provide funding to countries facing a liquidity crisis. The construction of a Banking Union is under way, reinforcing bank supervision. Across Europe, banks are better capitalized than before the crisis, and non-performing loans have generally decreased in recent years. However, banks in some countries are still burdened by a high level of non-performing loans, which tends to hamper new lending, and remain considerably exposed to domestic sovereign bonds.

The economic and monetary union is still a work in progress. Countries no longer have a national monetary policy to respond to negative shocks. To operate well and foster prosperity for all member countries, the euro area needs a complete financial architecture that will allow to smooth risks through financial markets, and a fiscal capacity. This would reduce the impact of economic and financial shocks for all countries (Figure 7.3).

Figure 7.3. Cross-border risk sharing in the euro area is low

In % of total asymmetric shock to output



Note: Public risk sharing refers to cross-border fiscal transfers, whereas private risk sharing refers to the smoothing effect of cross-border factor income (capital and labour) and credit markets.

Source: (2016), "Cross-border risk sharing after asymmetric shocks: Evidence from the euro area and the United States", *Quarterly Report on the Euro Area*, Volume 15, No. 2.

Challenges and proposed solutions in the European Union

- **The EU budget is not sufficiently supportive of growth and integration and higher spending is needed on R&D and cross-border infrastructure.** Spending on R&D only accounts for 13% of the EU budget. It 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. Financing new priorities will require higher income-based contributions from member states', new sources of revenue, 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. Modernising the composition of the budget would also allow better targeting of new priorities, such as digital infrastructure.
- **The Single Market is incomplete. Further policy steps are necessary to deepen its construction, particularly for services and to facilitate labour mobility.** The Single Market remains largely fragmented, with barriers in key areas, including services, transport, finance, energy and digital markets. Reforms are particularly important in the services sector, which represents 75% of the EU economy. Priority areas for reform include logistics, distribution and rail freight. The authorities should simplify administrative formalities for the establishment and provision of cross-border services and provide guidance on implementing EU legislation.

- **Convergence remains unfinished, which highlights the need to more tightly focus cohesion policy investments in lagging regions.** Greater targeting of EU investments would more effectively address regional divides. Moreover, 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.

Challenges and proposed solutions in the euro area

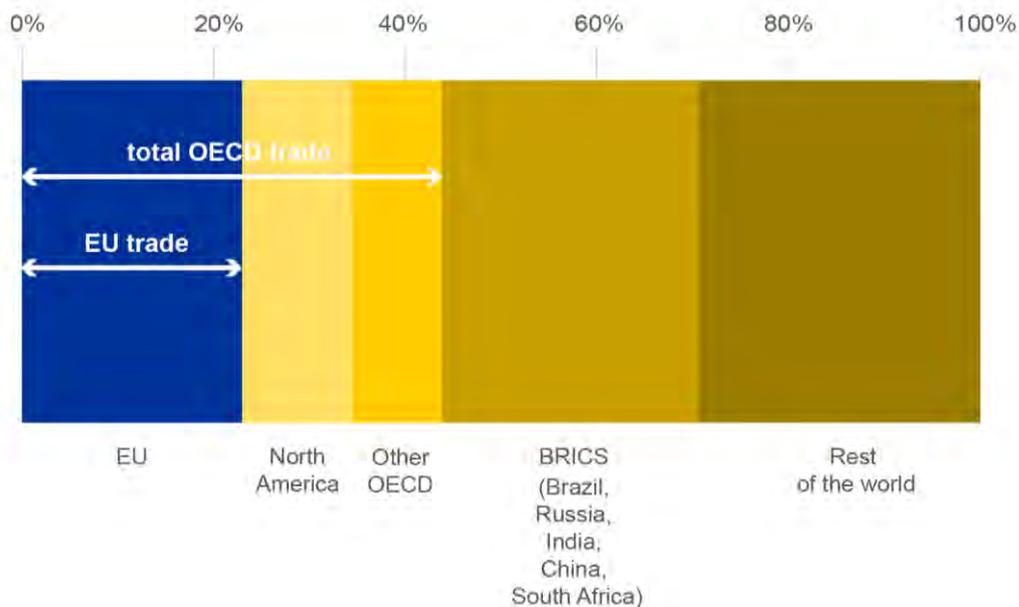
- **In the absence of common deposit insurance and common financing to bank resolution, the Banking Union is incomplete.** Depositors should have the same protection everywhere across the euro area, and support to banks in difficulties should ultimately be financed by shareholders or other investors, rather than by national taxpayers. To further delink banks from domestic public finances, greater diversification of banks' holding of sovereign bonds should be fostered. Additionally, rapid resolution of remaining non-performing loans would boost credit and investment.
- **Improve financing conditions to firms and risk-sharing across countries through stronger integration of capital markets.** Regulatory barriers to capital mobility, like those stemming from different national insolvency regimes and national accounting specificities need to be reduced. A fully-fledged Banking Union would also foster capital market integration.
- **The euro area is missing a stabilisation fund distinct from the EU budget to cope with recessions and negative shocks.** A common stabilisation instrument would help countries facing a downturn and cyclical rises in unemployment.

Section 8. Leveraging Europe's size in global markets

What has been achieved?

The Single Market allows the EU to play a crucial role in the global economy and international trade. With just 7% of the world's population, the EU represents one-fifth of world output and accounts for almost one-quarter of global trade and more than half of total OECD trade (Figure 8.1).

Figure 8.1. Together, EU countries represent almost one-quarter of global trade



Note: Geographical aggregates are obtained as sum of single countries' total trade in goods and services. Thus, the blue area in the chart includes both intra- and extra-EU trade.

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

The EU is stronger by acting as a single trading bloc. The EU has negotiated dozens of free trade agreements across five continents, including the EU-Japan Economic Partnership Agreement, which came into force in February 2019 and has created the largest open trade zone in the world. In EU countries, 31 million jobs depend on trade with countries outside the EU²². The EU contributes to setting and upholding fairer rules for world trade and also supports some displaced workers through the European Globalisation Adjustment Fund.

Challenges and proposed solutions

- **In the context of rising protectionism and trade tensions, the EU has the economic size and importance to sustain free, fair and open global markets.** The EU plays a crucial role in supporting a level playing field, not just among its members, but globally. A rules-based international trading system works to the benefit of all citizens and businesses.
- **Some workers are exposed to global trends and unexpected shocks, making the European Globalisation Adjustment Fund an important instrument to cope with implied adjustments.** The Fund should be made larger and more effective by speeding up and simplifying procedures and expanding eligibility to workers affected by automation. This can help to mitigate the negative impacts on the most vulnerable exposed to unexpected shocks, whether they are due to technological change, shifts in trade patterns or resource depletion.

²² World Trade Organisation Regional Trade Agreements Notification System:
<http://rtais.wto.org/UI/PublicSearchByMemberResult.aspx?MemberCode=918&lang=1&redirect=1>

Section 9. Protecting consumers and producers

What has been achieved?

The EU has policies in place to help improve food safety and food quality and consumer rights. This is done through control systems and evaluation of compliance with EU standards in food safety and quality, animal health, animal welfare, animal nutrition and plant health, both within the EU and in third countries, in relation to exports to and from the EU. Consumer rights are among EU priorities through legislation keeping pace with economic and social changes (especially in the areas of digital and energy services) and promoting comprehensive information on different distribution channels (including for shopping online).

Common public information logos enhance the recognition and knowledge of products by EU consumers. These include logos of products that conform with EU legislation, meet strict ecological standards, are made of paper that can be recycled, or those can be detrimental to health if not used properly (Figure 9.1). The EU has developed quality schemes to protect the names of specific products. This policy aims to safeguard and promote the unique characteristics of certain products, linked to their geographical origin and traditional know-how.

Figure 9.1. Examples of labels on EU products meeting certain standards



Challenges and proposed solutions

- **Work towards ensuring greater consumer trust in the enforcement of regulations in the services sector.** Only slightly more than half of consumers trust that businesses in the services sectors abide by consumer rules.²³
- **Support greater trust for certain goods and services in markets where confidence is lagging behind.**²⁴ The bottom three services sectors in terms of trust include real estate, mortgages and investment products; private personal pensions; and securities. The bottom three goods sectors in terms of trust comprise second-hand cars; new cars; and meat and meat products.

²³ European Commission (2018), Consumer Market Scoreboard: Making markets work for consumers, https://ec.europa.eu/info/sites/info/files/consumer-markets-scoreboard-2018_en.pdf.

²⁴ *Ibid.*

Section 10. Leading a common and inclusive digital future

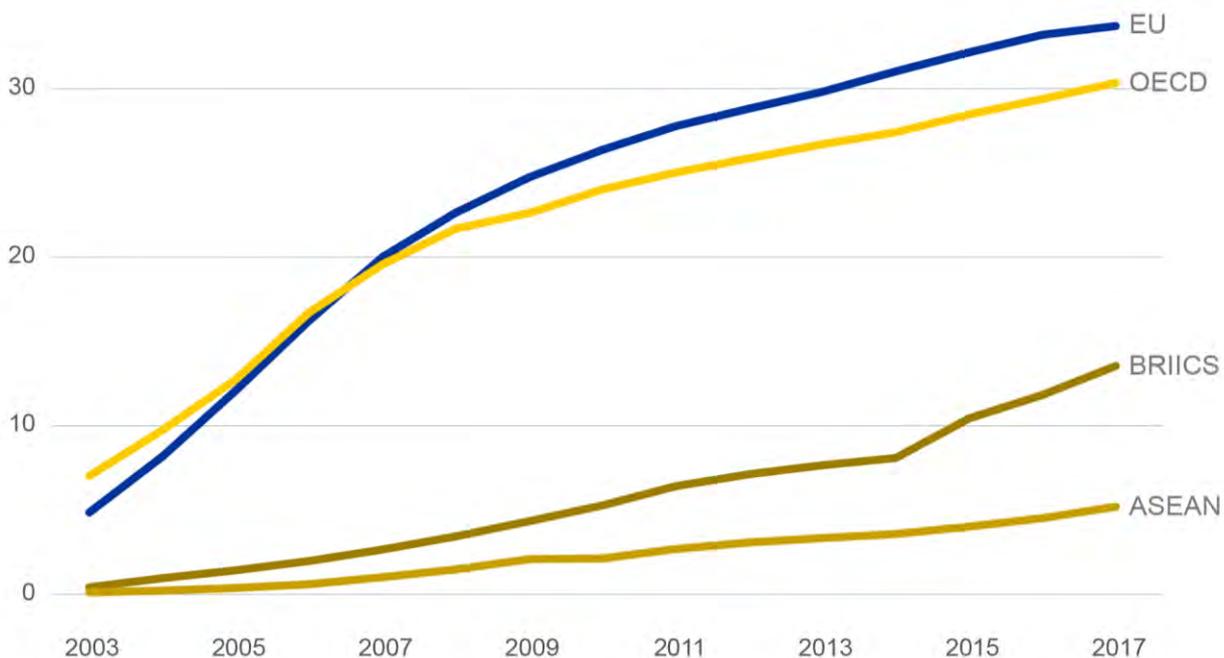
What has been achieved?

There is large economic potential in a digital single market, especially to catch up on investment in the digital area. If successfully completed, it is estimated that such a market could be worth on average EUR 809 per year to each person in the EU,²⁵ and it could be the largest market in the world in terms of size.

EU countries have good access to broadband. In Europe, 96% of businesses and 86% of households have access to fixed or mobile broadband networks.²⁶ Fixed broadband subscriptions amount to 34 per 100 inhabitants, slightly more than the OECD average (Figure 10.1).

Figure 10.1. EU countries have good access to broadband

Fixed broadband subscriptions per 100 inhabitants



Source: OECD Broadband Portal (<http://www.oecd.org/sti/broadband/broadband-statistics/>) for OECD and NAFTA, EC Digital Scoreboard 2017 [<https://ec.europa.eu/digital-single-market/en/digital-scoreboard>] for EU, and ITU World Telecommunication/ICT Indicators Database for ASEAN, BRIICS and MERCOSUR.

The EU has been helping Europeans to benefit from the digital transformation, for example by removing roaming charges. The EU launched its Digital Single Market Strategy in 2015. Achievements already secured include the removal of mobile roaming charges for mobile phone users, among others.

The EU has started to regulate to help protect privacy. The EU General Data Protection Regulation (GDPR) aims to safeguard citizens' fundamental rights in the digital world and to facilitate business by clarifying rules for firms and other bodies. The GDPR has created a harmonised regulatory environment in EU countries, which has simplified procedures. However, the GDPR is complex legislation, and its implementation and enforcement will require interpretation.

²⁵ EC (n.d.) Shaping the Digital Single Market, <https://ec.europa.eu/digital-single-market/en/policies/shaping-digital-single-market> and https://ec.europa.eu/eurostat/statistics-explained/index.php/Population_and_population_change_statistics.

²⁶ OECD Statistics (accessed on 30 Jan 2019).

Challenges and proposed solutions

- **Europe lags behind leading countries in several emerging fields, and digital disparities persist among EU countries.** The development of artificial intelligence (AI) is weak, accounting for just 8% of global AI equity investment in 2017.²⁷ Access to fibre-based broadband connections is uneven in Europe, high in Lithuania, Latvia or Sweden and low in Belgium and Germany. This has implications for the ability to make inroads in Industry 4.0 activities. The ambition now must be to complete the policy reforms established in the Digital Single Market Strategy, which should be a priority for all EU countries, so as to foster framework conditions to support the growth of digital companies and strengthen their ability to compete on the global marketplace. Reforms include the harmonization of regulations across countries and the roll out of key infrastructure, particularly fibre networks, which provide the ubiquitous high-speed and low-latency broadband needed for the Internet of Things.
- **Prioritise ending digital divides, including by helping to equip citizens with digital skills.** To ensure an inclusive digital future, it is necessary not only to bridge gaps among EU member countries and regions through investment in infrastructure, but also to encourage citizens, particularly women, to become involved in the digital economy. While over 95% of all EU citizens between the ages of 14 and 16 report that they go online on a daily basis, just 53% of those aged 55-74 do so.²⁸ More broadly, European countries vary widely in their citizens' readiness for the digital world, with significant differences in the share of people with qualifications in ICT, science and engineering, as well as the share of workers receiving training in the workplace. By setting standards, including by taking gender aspects into account, the EU can help its members monitor digital skills needs.
- **Some businesses are poorly equipped in the face of ongoing technological changes.** This highlights the need to continue to encourage firms of all sizes to take up more advanced digital tools. For example, while almost 45% of EU firms with more than 250 employees purchased cloud-computing services, just 19% of companies with 10 to 49 employees did so.²⁹ Connection speeds can be a limiting factor: fewer than half of business broadband connections in the EU offer speeds of 30Mbps or more.

²⁷ OECD (2018), "Private Equity Investment in Artificial Intelligence", *OECD Going Digital Policy Note* <http://www.oecd.org/going-digital/ai/private-equity-investment-in-artificial-intelligence.pdf>.

²⁸ OECD Stat (accessed on 30 Apr 2019).

²⁹ OECD Stat (accessed on 01 Feb 2019).

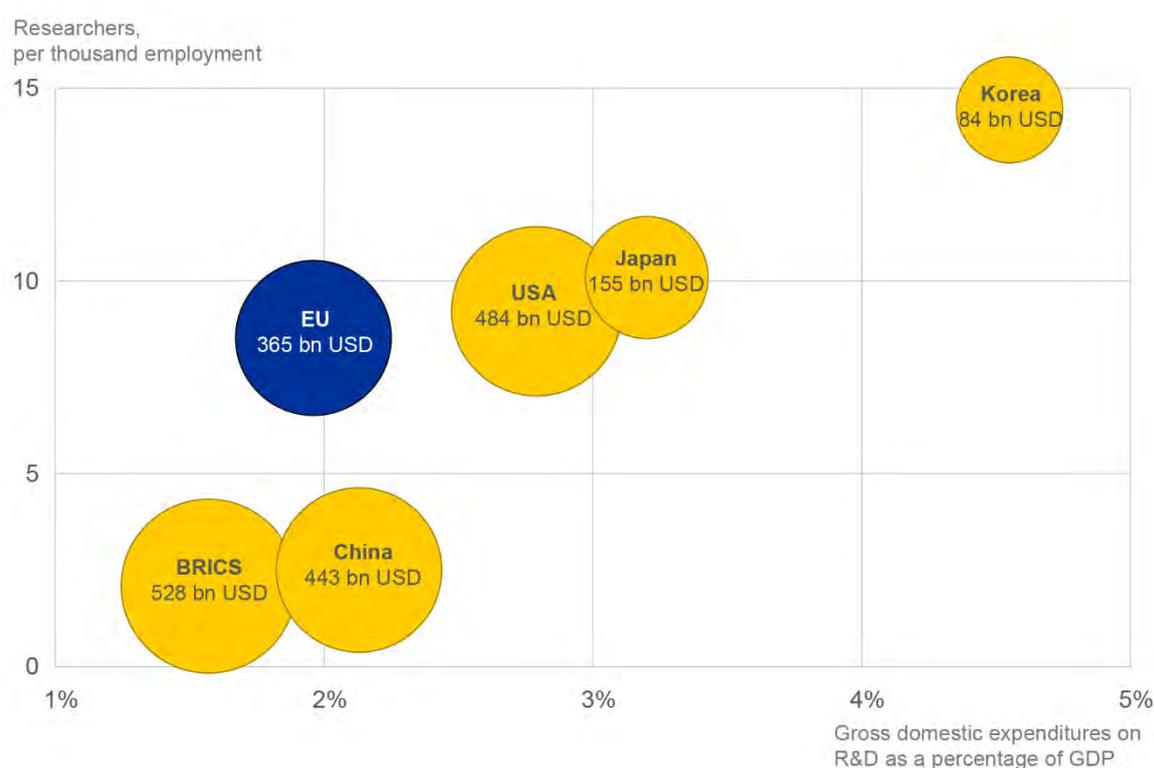
Section 11. Boosting innovation

What has been achieved?

Through its research and innovation programmes, which complement domestic policies, the EU is an important player in boosting science and innovation. Horizon 2020, with funding of over EUR 77 billion, is the largest publicly funded research and innovation programme in the world, supporting Europe's efforts to promote innovation across member countries. Its successor, Horizon Europe, is proposed to increase this funding to up to EUR 100 billion, with 35% of its budget targeted to tackle climate change. EU-funded research achieved fundamental results in advancing knowledge and providing key solutions to societal challenges, from securing a rapid deployment of a vaccine for Ebola to underpinning the circular economy. The EU also has a high rate of researchers (8 per 1 000 people employed), although it still lags behind global leaders, such as Korea, which has almost double that rate (Figure 11.1).

Figure 11.1. Together, EU countries can catch up with best performers in R&D

Investing in R&D, 2016

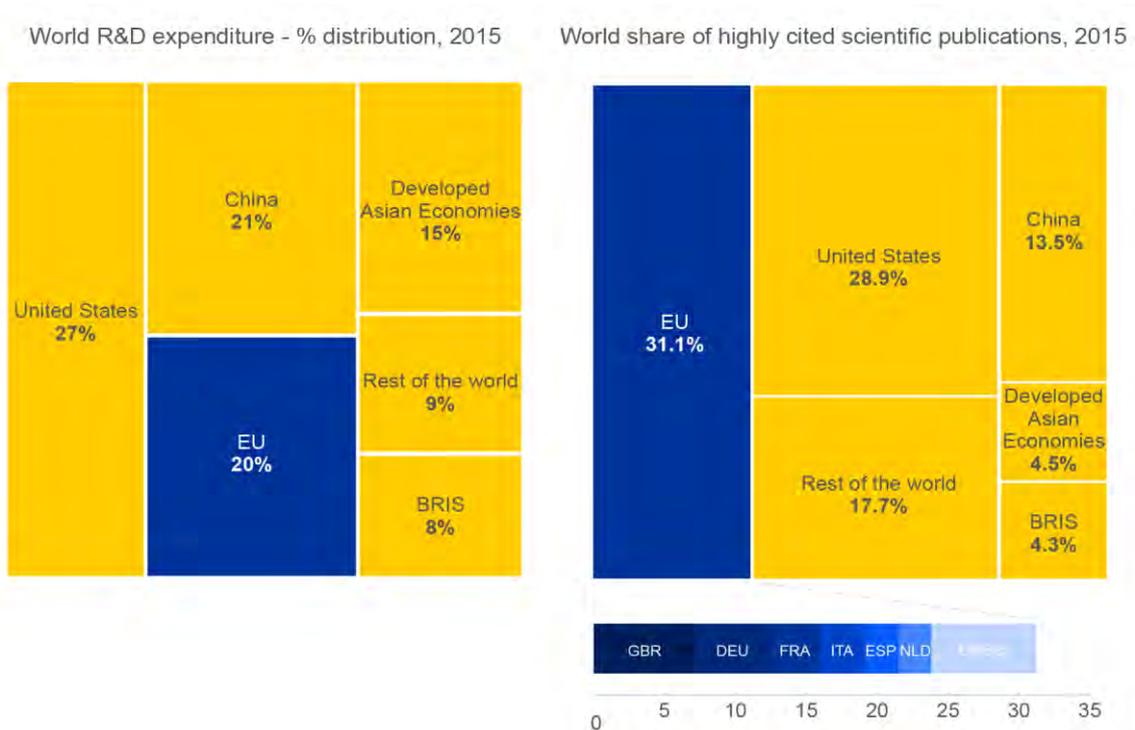


Note: Data for China is shown both individually and as part of the BRICS to highlight that China makes up the majority of R&D investment in this block of countries.

Source: OECD, Main Science and Technology Indicators database; OECD Research and Development Statistics database; and UNESCO Institute for Statistics, Research and Development, (full dataset), March 2019.

The EU as a whole has a strong potential to play a bigger scientific role on the global scene. With 7% of the global population, the EU is responsible for one-fifth of global R&D investment and one-third of highly cited scientific publications worldwide (Figure 11.2). However, the overall level of R&D spending relative to GDP is still relatively low compared to some non-EU countries. Korea, Japan, the United States and China spend more on R&D as a share of GDP than the EU.

Figure 11.2. Europe has potential as a scientific powerhouse



Note: Scientific publications within the 10% most cited scientific publications worldwide as a percentage of total scientific publications of the country; fractional counting method.

Source: EC, Directorate General, Research and Innovation, Unit for Reforms and Economic Impact – country intelligence, Data: CWTS (Centre for Science and Technology Studies), based on Web of Science database.

The EU benefits from a large and collaborative scientific community of nearly 2 million researchers. In 2017, the EU had 1.96 million researchers (full-time equivalent), while China had 1.74 million, and the United States had 1.37 million in 2016.

Challenges and proposed solutions

- **R&D investment is insufficient requiring greater efforts to fund frontier research and further deepen the Single Market as a major lever for innovation.** The EU as a whole lags behind the United States, China, Japan or South Korea in its collective efforts to invest in R&D, especially in terms of business R&D. Greater efforts are needed to spur Europe’s scientific excellence, attract some of the best talent to Europe and identify and scale up breakthrough innovation to accelerate the most promising innovations. Multi-stakeholder research and innovation efforts are needed to focus public efforts and funding on tackling the most pressing societal challenges. Fragmentation of the Single Market in services, energy, transport, financial and digital markets is also holding back the EU’s capacity to innovate.
- **Knowledge and innovation diffusion throughout the EU could be improved through open science policies, open innovation and the use of European Structural and Investment Funds to foster innovation in regions.** Smart specialisation strategies should be streamlined and strengthened to enable interregional innovation support. It is essential to reap synergies between Horizon Europe, InvestEU, the European Social Fund, Erasmus +, Digital Europe, the Common Agricultural Policy and other EU programmes by creating linkages between the various programmes.

- ***Some EU countries have conditions less conducive to innovations than their peers. This highlights the need to apply high standards to the business environment in the whole EU.*** EU and national regulatory frameworks should apply the innovation principle under which impact on innovation is fully assessed whenever policy and legislation are reviewed, developed or implemented. Important potential gains from improved framework conditions for innovation could also be realised at the level of the EU countries, including through better access to finance and lower administrative burden for young and innovative firms.

Section 12. Preventing market abuses and promoting fair competition

What has been achieved?

Tackling anti-competitive behaviour by companies is a high EU priority. The EU is playing a key role in tracking abuses of dominant position and defending consumer interests. Determined enforcement action taken against large players helps to keep markets open to smaller firms.

Enforcement of antitrust, merger and public subsidy rules at EU and national level is well established. This action helps to safeguard competitive markets and innovation in the longer term. In the area of cartels and antitrust enforcement, the EU imposes high fines to end and prevent harmful behaviour, and to keep markets open and accessible to smaller competitors (Table 12.1).

Table 12.1. Tackling uncompetitive practices supports a level playing field

Top 10 Antitrust Fines by the European Commission

| Year | Case | Total amount (EUR)* |
|-----------|---------------------------------------|---------------------|
| 2018 | Google (Android) | 4 342 865 000 |
| 2016/2017 | Trucks | 3 807 022 000 |
| 2017 | Google Search (Shopping) | 2 424 495 000 |
| 2019 | Google (AdSense) | 1 494 459 000 |
| 2012 | TV and computer monitor tubes | 1 409 588 000 |
| 2013/2016 | Euro interest rate derivatives (EIRD) | 1 310 039 000 |
| 2008 | Carglass | 1 185 500 000 |
| 2009 | Intel | 1 060 000 000 |
| 2018 | Qualcomm | 997 439 000 |
| 2014 | Automotive bearings | 953 306 000 |

* Amounts adjusted for changes following judgments of the Courts (General Court and European Court of Justice) and / or amendment decisions.

Source: European Commission.

Citizens and businesses benefit from EU enforcement action. Between 2015 and 2017, EU enforcement action generated consumer benefits in the range of EUR 31.6 billion to EUR 51.2 billion.³⁰ It is also possible to reclaim damages incurred through anticompetitive actions, based on the Commission's enforcement actions. Damages claimed regularly amount to a multiple of the fines imposed.

The EU has policies in place to support a level playing field for SMEs, which also face better conditions to grow and innovate within the Single Market. The EU's Small Business Act aims to improve entrepreneurship in Europe and remove the remaining barriers for SME development, to help SMEs can compete on an equal level. The Single Market is the go-to market for SMEs, and it absorbed 70% of all EU SME exports in 2016.³¹

The EU aims to help foster competition by supporting women in entrepreneurship. The EU promotes and supports female entrepreneurship through the Small Business Act, the Entrepreneurship 2020 Action Plan, and initiatives such as the WEgate platform. These actions seek to tap into women's creativity and entrepreneurial potential, which is an under-exploited source of economic growth and job creation.

The EU aims to make public procurement more inclusive. The 2017 EU public procurement strategy aims to make bids in public markets more flexible and accessible. This should benefit SMEs in particular, which currently win 45% of the value of public contracts.³²

³⁰ Source: European Commission (2017), Annual Activity Report, DG Competition, https://ec.europa.eu/info/sites/info/files/file_import/comp_aar_2017_final.pdf.

³¹ Source: European Commission (2018) Annual Report on European SMEs (2017/2018): SMEs growing beyond borders, DOI 10.2873/248745.

³² EC (n.d.), Public procurement strategy.

Challenges and proposed solutions

- ***There is scope to improve effective enforcement against competition restrictions, and it may be necessary to adapt regulation for large digital players and platforms.*** Online selling and digital tools, such as price algorithms, can facilitate price monitoring and collusion, making effective enforcement necessary to support an “equality of arms”. Competition rules may require adjustment, and regulation may be needed to define the rules for powerful market players.
- ***While not changing competition rules, the implementation of state-aid rules should also take into account the wider impact on the economy (externalities).*** For example, the resolution of non-performing loans may require setting up asset-management companies with state support. The current interpretation of state-aid rules combined with the bank recovery and resolution directive could hinder the resolution of non-performing loans with state support in some member states. This could make it more difficult to restart lending in the economy.

Section 13. Fostering infrastructure and services for a more cohesive Europe

What has been achieved?

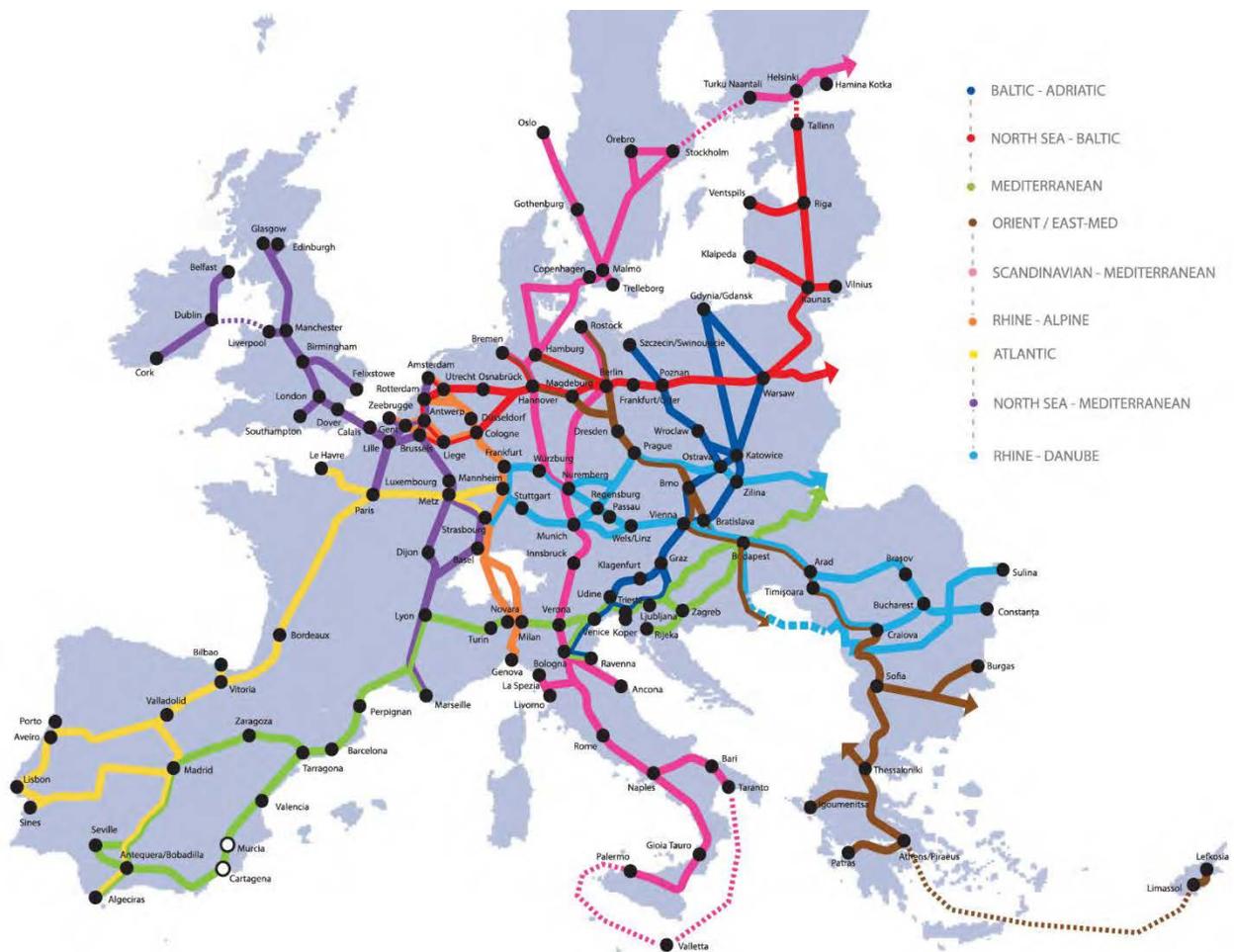
Infrastructure is a key ingredient for inclusive growth. In particular, supporting investment in infrastructure projects (transport, ICT or energy) in areas that span national borders and that national governments would not be able to fund on their own is key to support the Single Market and inclusive growth in Europe.

EU countries are strong performers in quality of infrastructure. According to the WEF Global Competitiveness Index, 24 of the best 50 countries in the world in terms of quality and extension of transport infrastructure (road, rail, water and air) and utility infrastructure are European countries.

EU countries are becoming more interconnected. This interconnectedness is apparent notably through the Trans-European Transport Network (Figure 13.1). EU countries have more than 4.5 million km of paved roads, 212 500 km of railway lines and 41 000 km of navigable inland waterways.³³ High-speed trains have cut travel time between large cities: by 43% between Brussels and Frankfurt, and by more than 60% between Brussels and London.³⁴

Figure 13.1. Europe is becoming more interconnected

Illustration of transport corridors across the EU



Source: European Commission, Trans-European Transport Network, http://ec.europa.eu/transport/infrastructure/tentec/tentec-portal/site/index_en.htm.

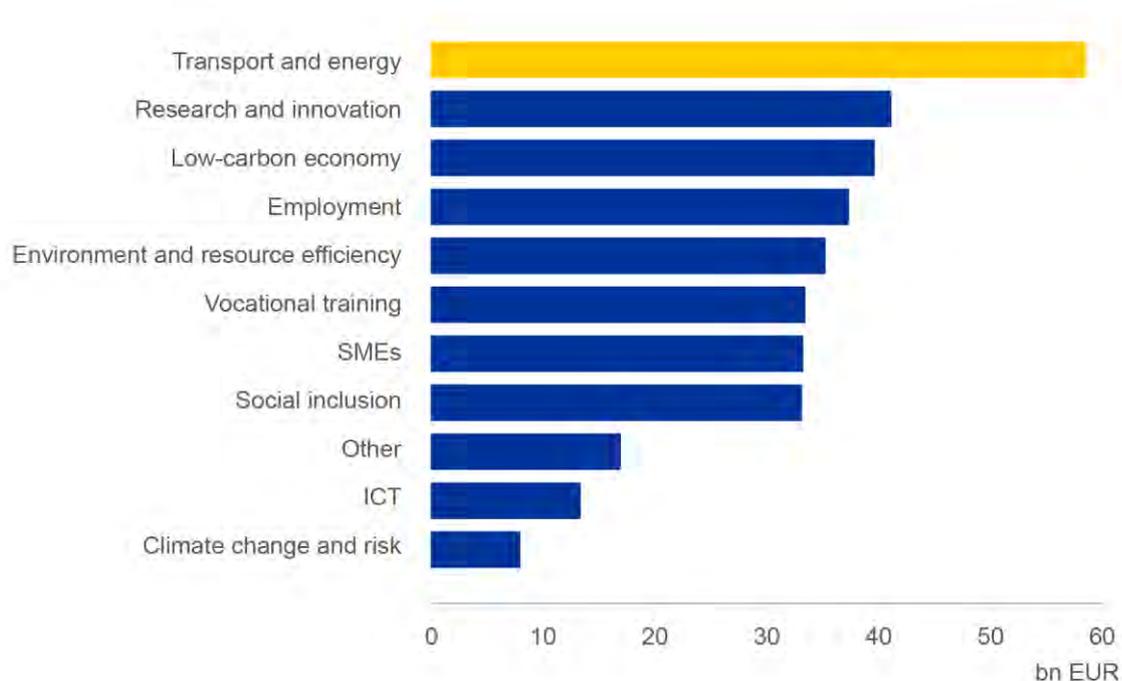
³³ EC (n.d.) Roadmap to a Single European Transport Area - Facts and figures.

³⁴ *Ibid.*

The EU has been investing in infrastructure to foster cohesion and convergence. Almost 60% of cohesion policy financing is spent on transport and energy (Figure 13.2). The European Regional Development Fund aims to strengthen economic and social cohesion in the EU by correcting imbalances between its regions. The Connecting Europe Facility is a key EU funding instrument to promote growth, jobs and competitiveness through targeted infrastructure investment at the European level. It will provide about 3% of the investment needed up to 2020 to finance infrastructure projects across Europe, with special priority given to projects tackling insufficient interconnectivity between member states. High spending on infrastructure in Central and Eastern European countries has been fostering convergence across Europe.

Figure 13.2. The EU invests heavily in transport and energy

Areas funded by cohesion policy finance



Source: OECD (2018), *OECD Economic Surveys: European Union 2018*.

Challenges and proposed solutions

- **The EU needs to sustain infrastructure investment to ensure integrated markets.** This will require further investment. A high-quality infrastructure network is the backbone of the economy, and greater market integration is needed, particularly for energy markets. This would be beneficial for consumers, energy security and the environment.

TACKLING GLOBAL CHALLENGES

Section 14. Leading change on environmental protection, but with much still to do

What has been achieved?

European citizens care about climate change. Ninety-three percent of Europeans believe climate change is caused by humans,³⁵ and 90% think it is a serious problem.³⁶

The EU is helping to lead international action on climate change. Under the Paris Agreement, the EU and its members have collectively committed to reduce GHG emissions by at least 40% from 1990 levels by 2030. The EU is also preparing an ambitious long-term strategy for a climate-neutral Europe by 2050. The EU has already exceeded its 2020 target of reducing by 20% GHG emission and has put in place an economy-wide framework of climate and energy policies to help ensure it meets its Paris commitment for 2030.

While much more is needed, the EU's efforts to price carbon emissions are helping to reduce the carbon intensity of GDP. Taken as a group, EU countries that are also OECD members price around 48% of their carbon emissions from energy at a level that reflects a conservative estimate of their social cost (EUR 30/tCO₂).³⁷ This is higher than in other groups, like the G7 countries, G20 countries, NAFTA or BRIICS. EU countries also have relatively lower levels of carbon emissions per unit of GDP (Figure 14.1). However, EU carbon pricing efforts leave a 52% “carbon pricing gap” at even the modest social cost estimate of EUR 30/tCO₂, which needs to be closed.³⁸ A significant increase in pricing levels will be needed to achieve the 2030 targets for emissions reductions. In addition, expanding the coverage of the EU Emissions Trading System (ETS) would help enhance the cost-effectiveness of EU climate policy (see below).

The Emissions Trading System is a pillar of the EU's climate measures, but implementing measures to address the surplus in EU emissions allowances will be essential. The ETS has induced emissions reductions of around 10% in regulated entities between 2005 and 2012.³⁹ Importantly, the ETS appears to have had no negative impact on profits or employment of regulated firms.⁴⁰ The first phases of the operation of the ETS have also played an important role in advancing international understanding of carbon markets, as surplus CO₂ emission allowances have reduced the impact of the scheme. OECD analysis suggests that a 50% reduction in pre-ETS emissions allocations would have resulted in a 25% reduction in emissions over 2005-12, compared to the 10% reductions achieved.⁴¹ The EU is implementing measures to address the surplus.⁴²

³⁵ EC(2018), “Special Eurobarometer479: Future of Europe”, EC Brussels, https://data.europa.eu/euodp/data/dataset/S2217_90_2_479_ENG (accessed 23 January 2019).

³⁶ EC (2017), “Special Eurobarometer 459, Report: Climate change”, https://ec.europa.eu/clima/sites/clima/files/support/docs/report_2017_en.pdf (accessed 23 January 2019).

³⁷ OECD (2018), *Effective Carbon Rates 2018: Pricing Carbon Emissions through Taxes and Emissions Trading* (database), OECD Publishing, Paris, <https://doi.org/10.1787/9789264305304-en>.

³⁸ *Ibid.*

³⁹ Dechezleprêtre, A., D. Nachtigall and F. Venmans (2018), “The joint impact of the European Union emissions trading system on carbon emissions and economic performance”, *OECD Economics Department Working Papers*, No. 1515, OECD Publishing, Paris, <https://doi.org/10.1787/4819b016-en>.

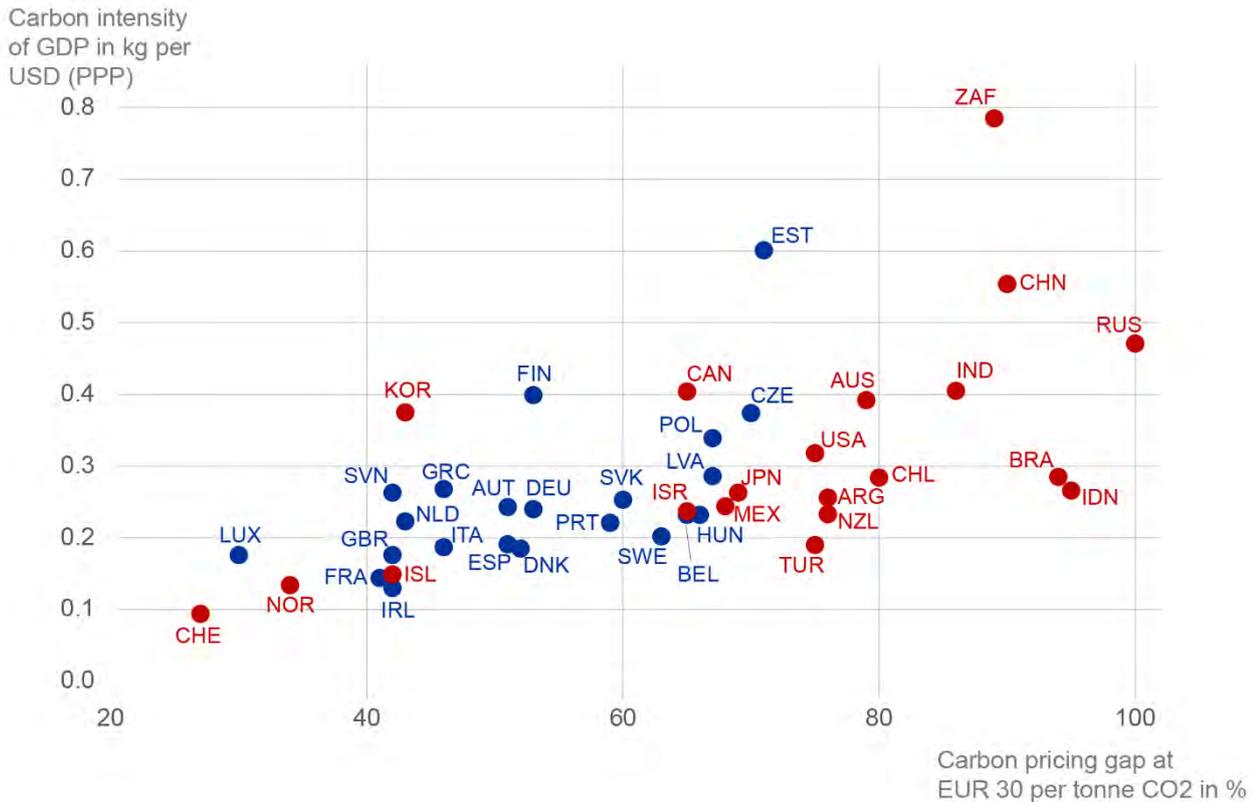
⁴⁰ *Ibid.*

⁴¹ *Ibid.*

⁴² EC(2019), Climate action website, https://ec.europa.eu/clima/policies/ets/reform_en (accessed 25 January 2019).

Figure 14.1: EU countries price a higher share of emissions in line with a benchmark level

The share of carbon emissions from energy use priced below EUR 30/tCO₂ (i.e. the “carbon pricing gap”) and carbon intensity of GDP in 2015



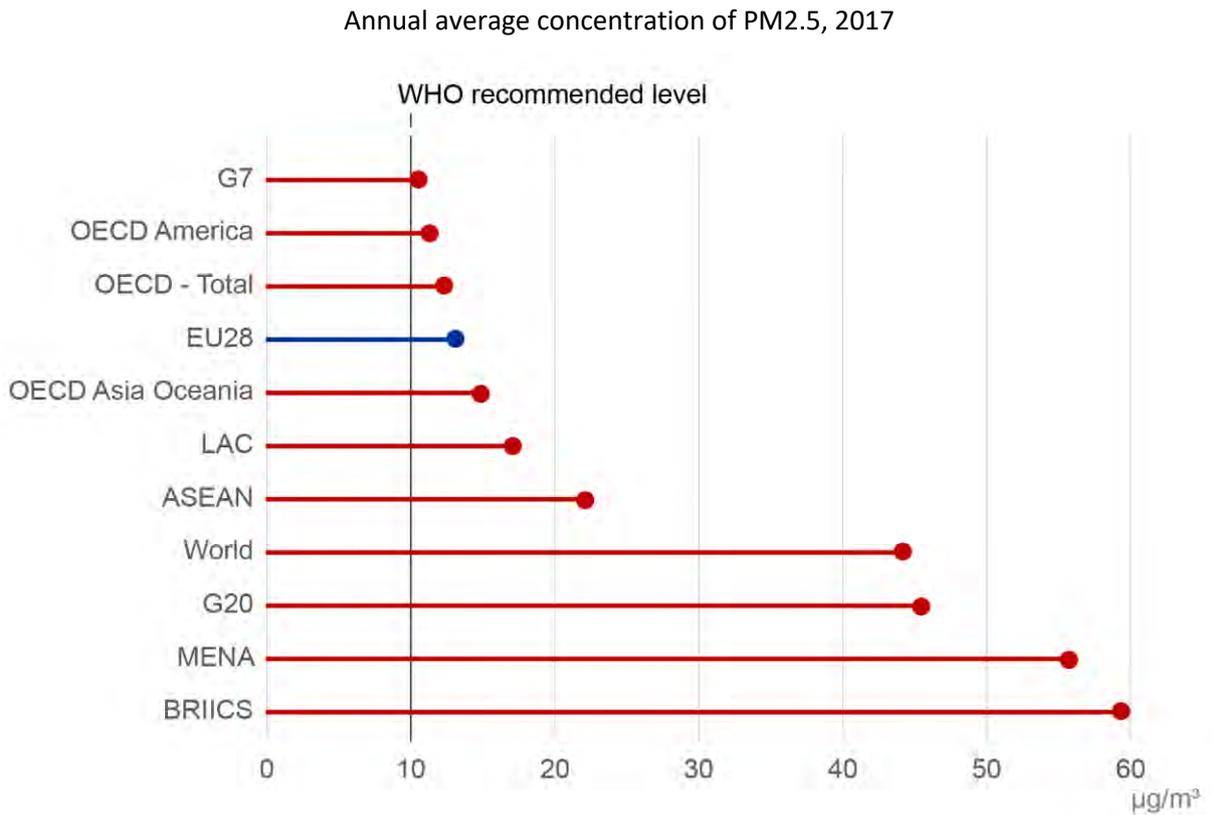
Source: OECD (2018), *Effective Carbon Rates 2018: Pricing Carbon Emissions through Taxes and Emissions Trading*.

Europe’s air quality is improving. Between 2000 and 2016 emissions of nitrogen oxides (NO_x) decreased by 42%, and emissions of sulphur dioxide (SO₂) decreased by 76%. In 2009-2011, 33% of the urban population in the EU were exposed to fine particulate matter PM₁₀ concentration above EU limit values; in 2014-2016, that had decreased to 19%. Average concentrations of fine particulate matter PM_{2.5} across the EU are also relatively low, but continue to be above the recommendations of the World Health Organization (Figure 14.2).

The EU is taking steps towards becoming a circular economy. In 2015, the Commission adopted an ambitious Circular Economy Action Plan. There is continuous progress in EU countries and an overall good performance at EU level in implementing waste rules; in 2016, Europeans generated on average 480 kg of municipal waste per person, 46% of which was recycled or composted, while a quarter was landfilled. However, there are still serious gaps in reaching municipal waste recycling targets. The 2018 EU Strategy for Plastics in a Circular Economy is the first EU-wide policy framework adopting a material-specific life cycle approach to integrate circular design, use, reuse and recycling activities into plastics value chains. In addition, rules on Single-Use Plastics items and fishing equipment, addressing the ten most found items on EU beaches, place the EU at the forefront. It will be important to monitor and assess the impact of the Strategy as implementation proceeds to ensure it is achieving its objectives.

The EU uses offshore wind to generate renewable electricity. The EU represented over 85% of new offshore wind capacity in 2015, with more than 3 GW connected to the grid in 2015 (Figure 14.3).

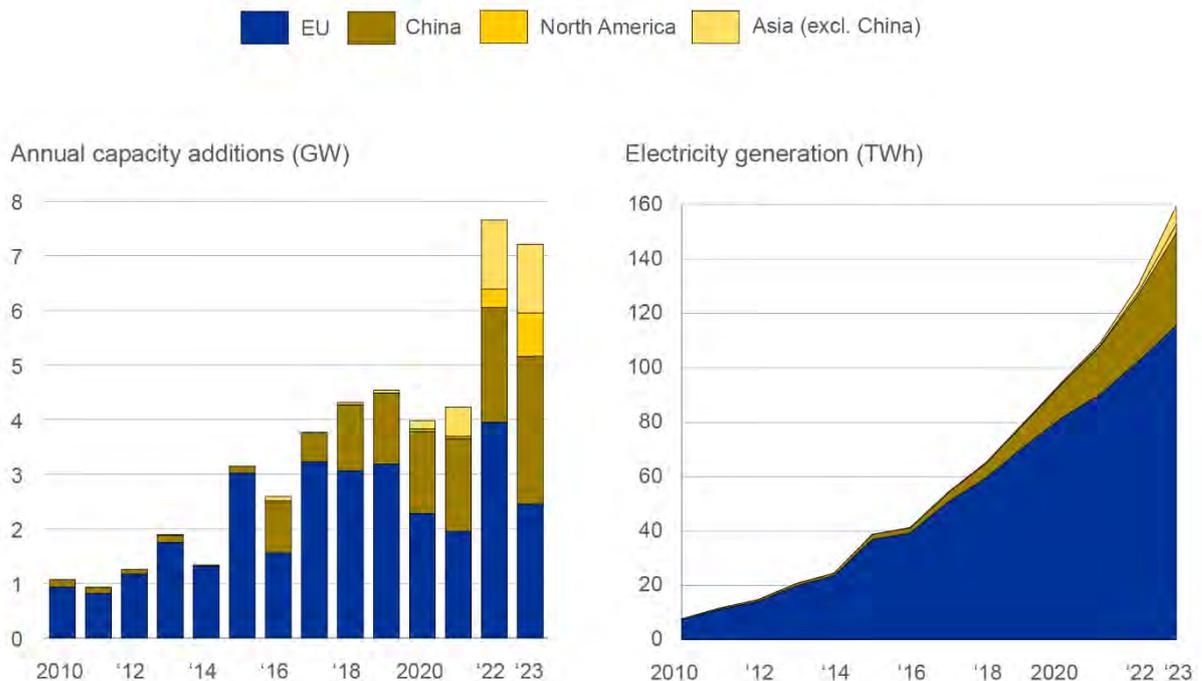
Figure 14.2. On average, EU citizens are exposed to relatively low concentrations of fine particulate matter (but still significantly above WHO recommendations of 10 $\mu\text{g}/\text{m}^3$)



Source: OECD (2018), Air quality and health: Exposure to PM2.5 fine particles - countries and regions, *OECD Environment Statistics* (database).

Figure 14.3. The EU generates a growing share of renewable electricity from offshore wind

Offshore wind annual additions and generation forecast by region



Source: IEA (2016), Medium-Term Renewable Energy Market Report 2016.

Challenges and proposed solutions

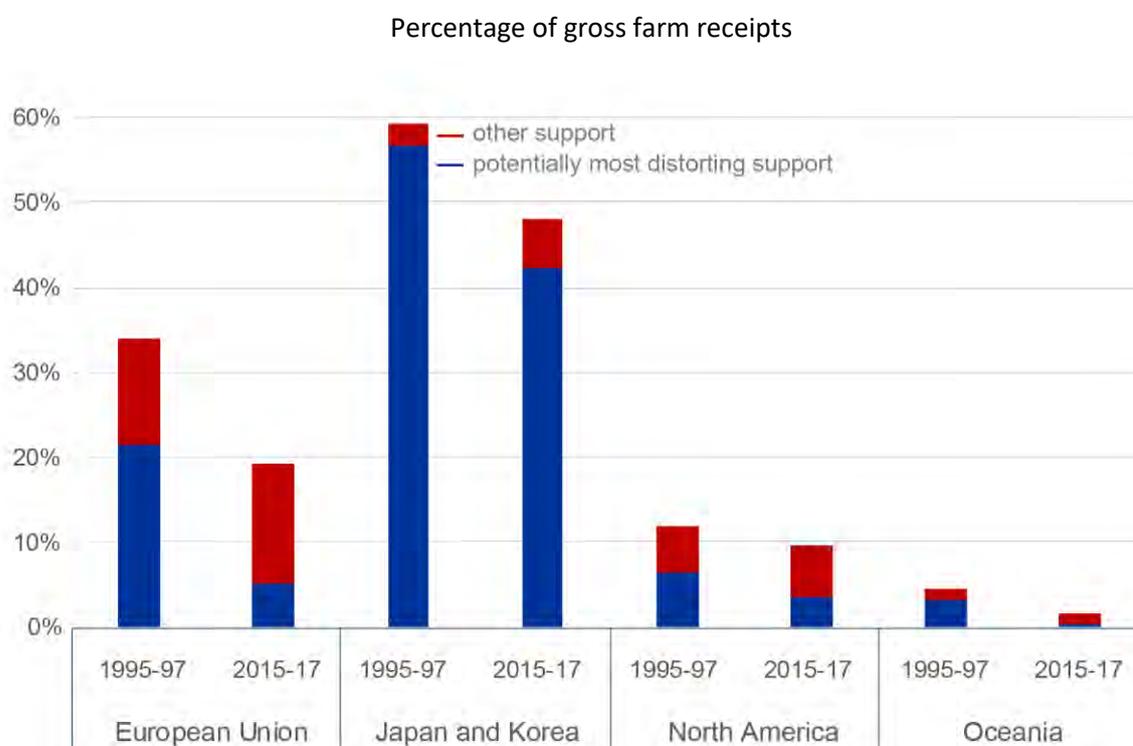
- ***Addressing climate change remains a key challenge, necessitating further resolute action by each country to reduce CO₂ emissions.*** Europe needs to lead by example and deliver ambitious nationally determined contributions in the context of the Paris Agreement. For this, it will be essential to focus on closing the carbon pricing gap, strengthening pricing signals and implementing measures to address the surplus in EU emissions allowances. It will also be vital to develop strategies to ensure a balanced and equitable transition and to support regions, industries and households that stand to lose out as well as creating an active social dialogue between government, employers and workers.
- ***Good air quality is not yet ensured everywhere, making full implementation of EU Clean Air policies an important priority.*** Particulate matter, nitrogen dioxide and ozone remain prevalent problems, especially in urban areas, requiring policy action to bolster efforts to meet air quality standards. Implementing the National Emission Ceilings Directive of 2016 would cut emissions, so as to halve the adverse health impacts in the EU by 2030 (compared to 2005).

Section 15. Working towards more sustainable agriculture

What has been achieved?

The EU continues to shift its farm policy emphasis away from production- and trade-distorting support towards measures that support sustainable resources. Following successive Common Agricultural Policy (CAP) reforms, financial support to European farmers as a share of their farm revenues has been significantly reduced over the past two decades. Most importantly, the support that most distorts production and trade has declined from close to two-thirds in the mid-1990s to just over one-quarter in 2015-17 (Figure 15.1).

Figure 15.1. EU overall agriculture support and its most distorting forms have declined



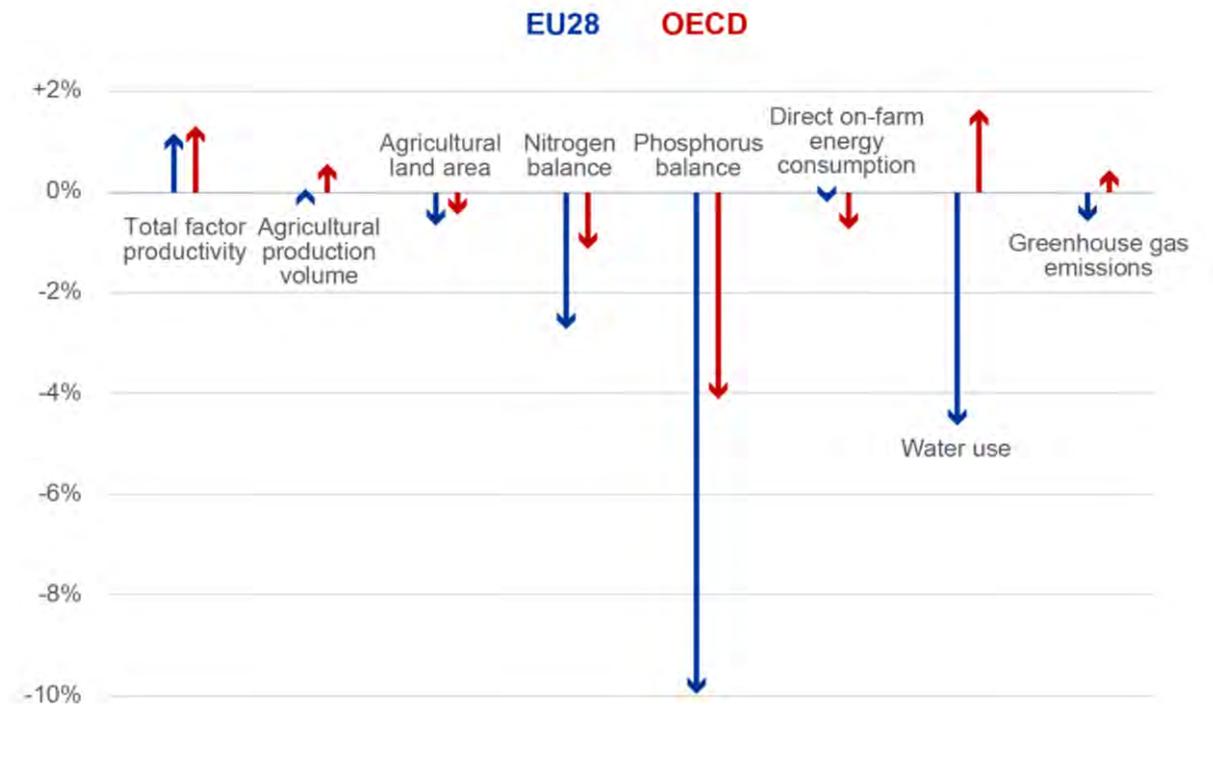
Note: Oceania corresponds to Australia and New Zealand; support based on output (including market price support and output payments) and on the unconstrained use of variable inputs.

Source: OECD (2018), Producer and Consumer Support Estimates, OECD Agriculture statistics database.

On the whole, the Common Agricultural Policy has progressively strengthened its environmental and climate ambition to support more environmentally sustainable agriculture. As a result, some environmental pressures have decreased often more quickly in the EU than in OECD countries on average (Figure 15.2). However, some other environmental pressures have increased, especially those related to biodiversity in farmed areas.

Figure 15.2 Some agri-environmental pressures have been reduced

Average annual percent change 2003-05 to 2013-15 (or nearest available period)



Sources: OECD (2018), Agri-environmental indicators database; Agriculture gross production value, FAO; Total Factor Productivity: USDA Economic Research Service Agricultural Productivity database.

Challenges and proposed solutions

- **Distorting forms of agricultural support remain, and the policy mix could be further adapted to improve the productivity, sustainability and resilience of the food and agriculture sector.** Policies that distort farm production decisions and trade, including agricultural subsidies, should be phased-out, while taking into consideration the social situation of farm households. Policy effort should be re-directed to ensure the availability of public services that benefit producers, consumers and society overall. Increasing investment in innovation and taking advantage of digital technologies would bolster the productivity of the agriculture sector.
- **More could be done to enhance environmental sustainability.** For example, biodiversity in farmland continues to decline, and greenhouse gas emissions per hectare have decreased at a slower pace recently than in the decade from 1990 to 2000. Diffuse pollution from agriculture is preventing the EU from achieving its aim to attain a good ecological status of water bodies.
- **There is a long-standing need to improve the understanding of the financial and well-being situation of European farm households.** To build a smarter, modern and sustainable CAP, better data are needed on the income and well-being status of farm households across the EU. This needs to go beyond aggregates and averages to encompass the distribution of farm and non-farm income and wealth.

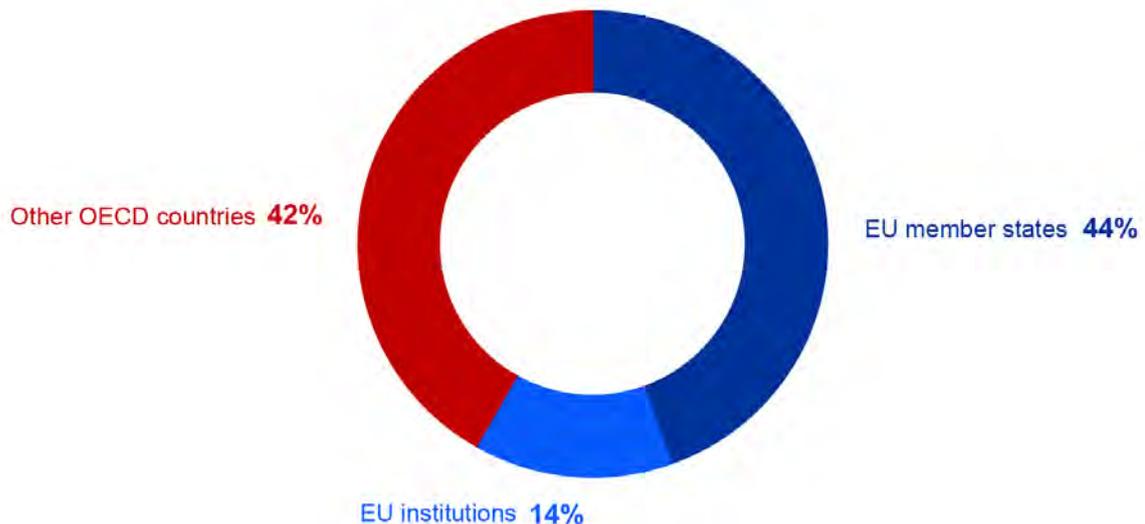
Section 16. Maintaining Europe's leadership in development aid

What has been achieved?

As a block, the EU is the largest provider of official development assistance (ODA). Collectively, the EU institutions and its members' net disbursements accounted for approximately 58% of total ODA in 2017 (Figure 16.1).

Figure 16.1. The EU and its Members States are the largest provider of ODA

2017 Official Development Assistance



Source: OECD International Development Statistics.

The EU approach aims to embrace the United Nations 2030 Agenda for Sustainable Development and increase the impact of development co-operation. The European Consensus on Development, approved in 2017, emphasises the need for more innovative, diverse and tailored partnerships with countries at all levels of development. It promotes an innovative engagement with more advanced developing countries, through new partnerships focused on the exchange of best practices, technical assistance and knowledge sharing. It considers means of domestic resource mobilisation to couple international development assistance with initiatives that allow partners to collect more revenue, spend it better and participate more actively in global tax governance and standard setting processes, including the OECD's Global Forum on Transparency and Exchange of Information for Tax Purposes and the base erosion and profit shifting initiative (BEPS).

Challenges and proposed solutions

- **Improve impact measurement of development policies. Efforts to promote policy coherence need to be broadened, by assessing the effect of policies on developing countries.** Also, partner country priorities need to be well targeted when mobilising finance from the private sector to achieve the United Nations Sustainable Development Goals and Agenda 2030.
- **Development assistance should be better structured.** It is necessary to establish operational guidance on how EU institutions and its members as a whole will implement the European Consensus on Development. Also, the EU should lead by example by allocating more resources to least developed countries.
- **There is not enough region-to-region co-operation, which could be increased.** In their bilateral relations, the EU and other regional entities could explore complementarities and mutual efforts to foster inclusive growth through not only traditional development co-operation, but also wider international co-operation on global public goods and challenges, trade and investment, and region-to-region knowledge sharing.

BIBLIOGRAPHY

- ACER (Agency for the Cooperation of Energy Regulators) and CEER (Council of European Energy Regulators) (2018), *Annual Report on the Results of Monitoring the Internal Electricity and Gas Markets in 2017*, ACER, Ljubljana, and CEER, Brussels, https://www.acer.europa.eu/Official_documents/Acts_of_the_Agency/Publication/ACER%20Market%20Monitoring%20Report%202017%20-%20Electricity%20and%20Gas%20Retail%20Markets%20Volume.pdf.
- CWTS (Centre for Science and Technology Studies), www.cwts.nl.
- Dechezleprêtre, A., D. Nachtigall and F. Venmans (2018), "The joint impact of the European Union emissions trading system on carbon emissions and economic performance", *OECD Economics Department Working Papers*, No. 1515, OECD Publishing, Paris, <https://doi.org/10.1787/4819b016-en>.
- EC (European Commission), European Structural and Investment Funds data, <https://cohesiondata.ec.europa.eu/>.
- EC, Digital Scoreboard 2017, <https://ec.europa.eu/digital-single-market/en/digital-scoreboard>.
- EC, Directorate General, Research and Innovation, <https://ec.europa.eu/info/departments/research-and-innovation>.
- EC, Trans-European Transport Network, http://ec.europa.eu/transport/infrastructure/tentec/tentec-portal/site/index_en.htm.
- EC (n.d.), Erasmus+, Key Figures, EC, Brussels, https://ec.europa.eu/programmes/erasmus-plus/about/key-figures_en.
- EC (n.d.), Factsheet, New Skills Agenda for Europe, EC, Brussels, http://www.google.com/url?sa=t&rct=j&q=&esrc=s&source=web&cd=2&cad=rja&uact=8&ved=2ahUKEwiYwYKvkNzhAhXl4IUkHW_YAMIQFjABegQIBBAC&url=http%3A%2F%2Fec.europa.eu%2Frapid%2Fattachent%2FIP-17-3585%2Fen%2FFactsheet%2520New%2520Skills%2520Agenda%2520for%2520EU_09.pdf&usq=AOVvaw0WbHUPwRYq96lJvxNSKBAL.
- EC (n.d.), Shaping the Digital Single Market, EC, Brussels, <https://ec.europa.eu/digital-single-market/en/policies/shaping-digital-single-market>.
- EC (n.d.), Public procurement strategy, https://ec.europa.eu/growth/single-market/public-procurement/strategy_en.
- EC (n.d.), Roadmap to a Single European Transport Area – Facts and figures, http://ec.europa.eu/transport/infrastructure/tentec/tentec-portal/site/en/facts_and_figures.html.
- EC (2018), Standard Eurobarometer 90, EC, Brussels, <http://ec.europa.eu/commfrontoffice/publicopinion/index.cfm/survey/getsurveydetail/instruments/standard/surveyky/2215>.
- EC (2018), Citizens' Dialogues and Citizens' Consultations: Progress report, EC, Brussels. https://ec.europa.eu/commission/sites/beta-political/files/eu-progress-report-consultations-111218_en.pdf.
- EC (2018), Youth Guarantee Indicator Framework database, Data collection for monitoring of Youth Guarantee schemes 2017, EC, Brussels, <https://ec.europa.eu/social/main.jsp?catId=1143&langId=en#YGIF>.
- EC (2018), Annual Report on European SMEs (2017/2018): SMEs growing beyond borders, Publications Office of the European Union, Luxembourg, <https://doi.org/10.2873/248745>.

EC (2018), Special Eurobarometer 479: Future of Europe, EC, Brussels, https://data.europa.eu/euodp/data/dataset/S2217_90_2_479_ENG (accessed 23 January 2019).

EC (2017), 2016 Report of the Rapid Alert System for non-food dangerous products, EC, Brussels, Factsheet at europa.eu/rapid/press-release_MEMO-17-630_en.pdf, and Press release, http://europa.eu/rapid/press-release_IP-17-602_en.htm.

EC (2017), Special Eurobarometer 459: Climate Change, https://ec.europa.eu/clima/sites/clima/files/support/docs/report_2017_en.pdf (accessed 23 January 2019).

EC (2016), "Cross-border risk sharing after asymmetric shocks: Evidence from the euro area and the United States", *Quarterly Report on the Euro Area*, Volume 15, No. 2, https://ec.europa.eu/info/sites/info/files/file_import/ip030_en_2.pdf.

European Council (2002), Presidency Conclusions, European Barcelona Council, 2002, EC, Brussels, http://ec.europa.eu/invest-in-research/pdf/download_en/barcelona_european_council.pdf.

European Parliament (2016), The Cost of Non-Schengen: the Impact of Border Controls within Schengen on the Single Market, European Parliament, Brussels, http://www.europarl.europa.eu/RegData/etudes/STUD/2016/581383/EPRS_STU%282016%29581383_EN.pdf.

Eurostat Database, <https://ec.europa.eu/eurostat/data/database>.

Eurostat (2018), Population and population change statistics, EC, Brussels, https://ec.europa.eu/eurostat/statistics-explained/index.php/Population_and_population_change_statistics.

FAO (Food and Agriculture Organization), <http://www.fao.org/home/en/>.

IEA (International Energy Agency) (2016), *Medium-Term Renewable Energy Market Report 2016*, IEA, Paris, <https://doi.org/10.1787/renewmar-2016-en>.

in 't Veld, J. (2019), Quantifying the Economic Effects of the Single Market in a Structural Macromodel, Discussion Paper 094, Publications Office of the European Union, Luxembourg, https://ec.europa.eu/info/sites/info/files/economy-finance/dp094_en.pdf.

ITU World Telecommunication/ICT Indicators Database, <https://www.itu.int/en/ITU-D/Statistics/Pages/publications/wtid.aspx>.

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, OECD Publishing, Paris, <https://doi.org/10.1787/5jzb8p51gvhl-en>.

OECD, Agri-environmental indicators database, <http://www.oecd.org/greengrowth/sustainable-agriculture/agri-environmentalindicators.htm>.

OECD Broadband Portal, <http://www.oecd.org/sti/broadband/broadband-statistics/>.

OECD Economic Outlook: Statistics and Projections database, https://www.oecd-ilibrary.org/economics/data/oecd-economic-outlook-statistics-and-projections_eo-data-en.

OECD, Education at a Glance Database, <http://stats.oecd.org>.

OECD Employment Database, <http://www.oecd.org/employment/emp/onlineoecdemploymentdatabase.htm>.

OECD Family Database, <http://www.oecd.org/els/family/database.htm>.

OECD Income Distribution Database, <https://www.oecd.org/social/income-distribution-database.htm>.

OECD International Development Statistics, <http://www.oecd.org/dac/stats/idsonline.htm>.

OECD, Main Science and Technology Indicators database, <http://oe.cd/msti>.

OECD, Producer and Consumer Support Estimates, OECD Agriculture statistics database.

OECD Regional Statistics database, <http://dx.doi.org/10.1787/region-data-en>.

OECD Research and Development Statistics database, <http://oe.cd/rds>.

OECD Social Expenditure Database, <http://www.oecd.org/social/expenditure.htm>.

OECD (2018), *Education at a Glance 2018: OECD Indicators*, OECD Publishing, Paris, <https://doi.org/10.1787/eag-2018-en>.

OECD (2018), "Private Equity Investment in Artificial Intelligence", *OECD Going Digital Policy Note*, OECD, Paris, <http://www.oecd.org/going-digital/ai/private-equity-investment-in-artificial-intelligence.pdf>.

OECD (2018), *OECD Economic Surveys: European Union 2018*, OECD Publishing, Paris, https://doi.org/10.1787/eco_surveys-eur-2018-en.

OECD (2018), *Effective Carbon Rates 2018: Pricing Carbon Emissions Through Taxes and Emissions Trading*, OECD Publishing, Paris, <https://doi.org/10.1787/9789264305304-en>.

OECD (2018), Air quality and health: Exposure to PM2.5 fine particles - countries and regions, *OECD Environment Statistics* (database), <https://doi.org/10.1787/96171c76-en>.

OECD (2017), *How's Life? 2017: Measuring Well-being*, OECD Publishing, Paris, https://doi.org/10.1787/how_life-2017-en.

OECD (2017), *Health at a Glance 2017: OECD Indicators*, OECD Publishing, Paris, https://doi.org/10.1787/health_glance-2017-en.

OECD/EU (2018), *Settling In 2018: Indicators of Immigrant Integration*, OECD Publishing, Paris/EU, Brussels, <https://doi.org/10.1787/9789264307216-en>.

OECD/EU (2016), *Recruiting Immigrant Workers: Europe 2016*, Recruiting Immigrant Workers, OECD Publishing, Paris, <https://doi.org/10.1787/9789264257290-en>.

USDA (United States Department of Agriculture), Economic Research Service Agricultural Productivity database, <https://www.ers.usda.gov/data-products/international-agricultural-productivity/>.

UNESCO Institute for Statistics, Research and Development, <http://uis.unesco.org/en/topic/research-and-development>.

World Justice Project, www.worldjusticeproject.org/.

World Trade Organization, Regional Trade Agreements Notification System, <http://rtais.wto.org/UI/PublicSearchByMemberResult.aspx?MemberCode=918&lang=1&redirect=1>.

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