

# Employment and Social Developments in Europe

*Sustainable growth for all:  
choices for the future of social Europe*



*Annual Review 2019*



# Employment and Social Developments in Europe 2019

Sustainable growth for all:  
choices for the future of Social Europe

**European Commission**

Directorate-General for Employment, Social Affairs and Inclusion

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# Foreword



In 2018, we witnessed positive developments in the European economy, labour markets and society. For the sixth consecutive year, the EU's ambitious agenda for jobs, growth and investment boosted a robust and job-rich recovery.

As we come to the end of this political mandate, it is a good time to reflect on how to keep sustaining growth and spread its benefits across the EU in the future. Sustainability cannot be an afterthought. All our policies need to integrate the economic, social and environmental dimensions of sustainability from the design phase on, to keep our economy competitive and entrepreneurship innovative, to maintain our valued welfare state and our ambitious climate-change engagements. In May, EU citizens made choices during the European elections that will help to define the future

of our Union. In June, EU leaders advanced this reflection by adopting the EU's strategic agenda for the next five years and a vision of the Europe we want to live in by 2030 and beyond. Fostering a protective, competitive and fair Europe and sustaining it for future generations is at the heart of this.

The Employment and Social Developments in Europe (ESDE) review is here again to provide evidence-based groundwork for this reflection. The 2019 edition focuses on **"Sustainable growth for all: choices for the future of social Europe"**. It explores the EU's understanding of sustainable development and its links to economic growth, social inclusion, equality and well-being, climate and natural resources, and labour market institutions. The news from ESDE's analysis is good. Making Europe's development sustainable is a perfectly realistic goal. Mainstreaming our actions upfront in the social domain as well as on climate and the environment can be a productive investment in economic performance. This is key to preserve our living standards. In addition, it is less costly than compensating in hindsight for unfavourable social outcomes. Therefore, this year's review analyses specific policies through which the EU and the Member States, with the support of the social partners, could accompany our workforce and citizens in the sustainability transition. Social investment in education, skills and childcare, as well as affordable housing and energy, can bring more people to better employment, help them to fulfil their dreams and participate in society. It can also support them through the increasing number of life-course transitions that we face in the changing world of work, and improve people's well-being overall. The simulations in this report also point to measures that could boost the impact of EU funding, such as the European Social Fund +, in Member States and regions for the benefit of all EU citizens, as we are heading into a new financing period under the 2021-2027 Multiannual Financial Framework. If we want to implement people's social rights across the board, we have to combat social and territorial inequalities. Everybody needs access to opportunities, despite constraints such as demographic ageing, technological upheaval and public finances.

This year's analysis follows in the footsteps of our previous ESDE editions that look at policy-relevant long-term global trends.

The strategic choices the EU is facing make me confident that the valuable insights of this new edition of ESDE will again resonate widely across academic circles and policymakers.

A blue ink signature of Marianne Thyssen, written in a cursive style.

**Marianne Thyssen**

Commissioner for Employment,  
Social Affairs, Skills and Labour Mobility

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# Sustainable growth for all: choices for the future of social Europe

## Executive Summary

### SUSTAINABLE GROWTH FOR ALL: CHOICES FOR THE FUTURE OF SOCIAL EUROPE

In 2018, the EU economy saw a continuation of the improvements that began in 2013 when economic activity started to recover from the financial and economic crisis. Employment in the EU reached new record highs, while unemployment and the risk of poverty and social exclusion continued to fall. These developments provide grounds for confidence and show that EU policies over the last years have had an impact. These developments are materialising, however, at a time of accelerating change. This change particularly concerns the demographic ageing of our societies as well as technological transformation and the fast digitalisation of our economies and societies. Together, these mega-trends are leading to new forms of work requiring new skills, as well as to labour shortages in some areas and new challenges for the European social model. <sup>(1)</sup>

Last year was also rich in reminders of the fragility of the recent achievements in the medium and long term. At global level, new risks such as protectionist tendencies in trade and increased international economic and geopolitical uncertainties contributed to a slowdown in global and EU growth in 2018 and led to further downward corrections of economic forecasts. <sup>(2)</sup> In addition, while domestic dynamics are generally set to support the European economy, major challenges need to be addressed to ensure a protective, competitive, fair and sustainable Europe. <sup>(3)</sup> These challenges include low productivity growth, persistent gender gaps in employment and pay, significant investment shortfalls, concerns regarding energy costs and housing affordability and a reduced yet substantial burden of public and private debt.

Climate change, environmental degradation and inefficient use of natural resources also weigh on sustainable development prospects in the EU and the world. Europeans are increasingly demonstrating a keen awareness of these challenges and of the importance of addressing all three dimensions of sustainability – economic, social and environmental – together. The aim is to make all of Europe's achievements — its competitive economy, high

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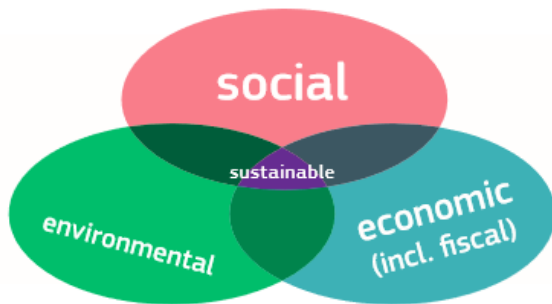
<sup>(1)</sup> For further detail on the employment and social impacts of these changes and mega-trends, see the 2017 and 2018 *Employment and Social Developments in Europe* annual reviews, with their respective focus on "Intra-generational fairness and solidarity" and the "New world of work: Beyond digitalisation". For further analysis of skill shortages, labour mobility and migration, also see the 2015 *Employment and Social Developments in Europe* annual review, notably the chapter on "Mobility and migration in the EU: Opportunities and challenges".

<sup>(2)</sup> European Commission (2019), *European Economic Forecast: Spring 2019*, European Economy Institutional Paper 102, May 2019.

<sup>(3)</sup> See European Commission (2019), *Europe in May 2019: Preparing for a more united, stronger and more democratic Union in an increasingly uncertain world*, The European Commission's contribution to the informal EU-27 leaders' meeting in Sibiu (Romania) on 9 May 2019.



living standards, valued welfare state, and pioneering engagement with the environment — sustainable in the long term for future generations. In particular by participating in weekly ‘climate marches’ across Europe since the second half of 2018, students and other EU citizens have requested accelerated action against climate change. Meanwhile, other parts of the population voiced their anxiety about the cost of the economic transition necessary to combat climate change and the fairness of sharing that cost.



The EU has comprehensive Treaty foundations and long-standing experience with policy agendas that pursue economic, social and environmental objectives simultaneously. It also had a leading role in the formulation of the United Nations’ Sustainable Development Goals (SDGs) in 2015. Moreover, in December 2018, at the sidelines of COP24, <sup>(4)</sup> the EU and 20 Member States signed the Silesia Declaration on Solidarity and Just Transition. In it, they underlined that considering the social aspect of the transition towards a low-carbon economy is crucial for gaining social approval

for the changes taking place. The EU and its Member States hence are key actors in shaping policy answers to the complex challenges of our time not only at national and European levels but also at global level. The Reflection Paper “Towards a Sustainable Europe by 2030”, issued on 30 January 2019, sets out in particular options for internalising the Sustainable Development Goals in the EU’s strategic policy framework. The Paper reminds us that “sustainable development is about upgrading people’s living standards by giving them real choices, creating an enabling environment” and leading to “a situation where we are living well within the boundaries of our planet through a smarter use of resources and a modern economy that serve our health and well-being.” It highlights the links between the three dimensions of sustainable development, including the importance of the social-environmental nexus, which is the crux of the sustainability puzzle, <sup>(5)</sup> and warns that, “no matter how tumultuous the coming years will be, not losing sight of our goals for the future will be the most important task.” <sup>(6)</sup>

As regards the social dimension of sustainable development, often referred to as “social sustainability”, the EU has confirmed its policy commitments through the proclamation of the European Pillar of Social Rights by the European Parliament, the Council and the Commission at the Gothenburg Social Summit of 17 November 2017. The Pillar is at the very heart of the European project, not least in the light of the sustainability challenges that social Europe is facing. Its proclamation also reflects the growing concern that the scars of the crisis may not yet have healed evenly. In fact, there is a contrast between the enduring recovery and improvements in the employment and social situation in the EU overall and less favourable developments for some income groups, Member States and regions. The latter include slowing convergence between Member States in certain domains and increasing divergence within some Member States as well as persistent unemployment, growing income inequality and in-work poverty in several Member States.

These contrasts in the employment and social domain have important repercussions for how Europeans perceive the economic and social situation in the EU. In recent Eurobarometer surveys, Europeans mention social concerns related to rising prices, health and social security, pensions and the financial situation of their household as the most important issues they face at a personal level. Concerns relating to environment, climate and energy issues and housing are gaining ground over time. Europeans increasingly demand action to address the evident contrasts, while continuing efforts to address other important challenges - notably migration and security - and combat climate change and environmental degradation.

The policy challenge is multiple and requires simultaneous responses: to those who face difficulties making ends meet, who feel uncertain about their employment prospects, who enjoy lower levels of well-being or feel left behind; to those who believe that climate action is currently too limited and too slow; to those who fear that it is happening faster than they can afford, or adjust to or that it is diverting resources away from other investments or innovation; and also to those who caution that unilateral climate action might hurt the EU’s productivity and competitiveness.

Finally, there is an increasing sense of urgency to make common, concrete and effective policy choices that promote sustainable growth and development in the EU. This was recognised in the Sibiu Declaration of May 9 2019, which committed the EU and its Member States to “always uphold the principle of fairness, whether it be in the labour market, in welfare, in the economy or in the digital transformation, [...] further reduce disparities

<sup>(4)</sup> COP24 stands for the 24th Conference of the Parties to the United Nations Framework Convention on Climate Change.

<sup>(5)</sup> See in particular European Commission (2019), *Europe’s Sustainability Puzzle: Broadening the Debate*, European Political Strategy Centre paper, 8 April 2019.

<sup>(6)</sup> European Strategy and Policy Analysis System (ESPAS), *Global Trends to 2030: Challenges and Choices for Europe*, April 2019

between us and [...] help the most vulnerable in Europe, putting people before politics” and “safeguard the future for the next generations of Europeans, [...] invest in young people and build a Union fit for the future, able to cope with the most pressing challenges of the 21st century”. <sup>(7)</sup>

The 2019 Employment and Social Developments in Europe (ESDE) Review contributes to analysis of and reflection on this problematic. It is titled **“Sustainable growth for all: choices for the future of social Europe”** and examines the following topics:

Chapter 1 – Main Employment and Social Developments

Chapter 2 – Sustainable Growth and Development in the EU: Concepts and Challenges

Chapter 3 – Economic and Social Fundamentals: From Productivity to Fair and Sustainable Growth

Chapter 4 – Investing in People and Social Sustainability: Short-Term Costs and Long-Term Benefits

Chapter 5 – Towards a Greener Future: Employment and Social Impacts of Climate Change

Chapter 6 – Sustainability and Governance: The Role of Social Dialogue

Chapter 1 reviews key employment and social developments of the last year in the EU and its Member States, focusing on trends in employment, unemployment and income distribution across the Member States as well as on vulnerable groups. Chapter 2 reviews the main concept of sustainability and the definitions of its different dimensions, including the social dimension. It identifies sustainability’s main drivers and related risks, it discusses the challenges on the EU’s path to sustainable development as well as the synergies and potential trade-offs between its social, economic, and environmental dimensions. Chapter 3 addresses one of the major sustainability challenges, notably sluggish productivity growth despite accelerating technological change and the increasing qualification levels of the EU labour force. It explores the preconditions for sustained economic growth, based on region-level and firm-level data analysis, focusing on complementarities between efficiency, innovation, human capital, job quality, fairness and working conditions. The chapter further identifies policies that could boost productivity without increasing inequality. Chapter 4 focuses on social investment in selected areas and its role for social sustainability. It analyses the potential of policies to raise activity, employment and productivity, while alleviating unfavourable social situations. This chapter identifies childcare and long-term care, education and training, skills, mobility and housing as key areas where policy intervention could enhance the sustainability and upward convergence of Member States’ socio-economic performance. Chapter 5 reviews the impact of climate action on the economy and on employment, income and skills. It also analyses aspects of energy poverty as a distinct type of poverty in the EU and discusses the effects of environment-linked health risks, such as air pollution, and the policies that would have a beneficial impact on both the environment and people. Finally, Chapter 6 discusses what the social partners and social dialogue, including wage bargaining, can do and are doing to promote sustainable growth and development.

## 1. MAIN EMPLOYMENT AND SOCIAL DEVELOPMENTS

In both the EU and the euro area, the expansion of economic activity continued in 2018, although more slowly than expected. This reflects a slowdown in the global economy, after sustained economic growth over the last six years. Economic forecasts have been corrected downwards as uncertainties have increased and as low productivity growth, persistent labour market segmentation and social and territorial disparities continue to constitute challenges to sustainable growth in the EU.

*Robust economic expansion slowed down in 2018 in the midst of increasing uncertainties.*

**240.7 million**

**Europeans were employed  
in Q1 2019**

EU employment continued to grow to reach the highest level ever recorded: in the first quarter of 2019, 240.7 million people were in employment, <sup>(8)</sup> 13.4 million more than when the Juncker Commission

*EU employment soars to new heights but gender gaps persist.*

came into office in November 2014.

<sup>(7)</sup> The Sibiu Declaration, declaration of the informal EU-27 leaders’ meeting in Sibiu, 9 May 2019; accessible at: <https://www.consilium.europa.eu/en/press/press-releases/2019/05/09/the-sibiu-declaration>

<sup>(8)</sup> Eurostat, [namq\\_10\\_pe](#)

The EU employment rate also registered a new record, reaching 73.5% at the end of 2018, and the employment rate gap with the US keeps closing. The employment rate in full-time equivalents (FTE) also grew for the fifth consecutive year and in 2018 stood at 67.2% – 2.2pp higher than in 2008. However, the pace at which the employment rate increased has slowed down. At the current pace of employment growth in the EU (1.3% per year vs. 1.6% in 2017), the EU employment rate in 2020 would slightly undershoot the 'Europe 2020' target of 75%. Moreover, despite earlier convergence between men's and women's employment rates, progress in closing the gender gap in employment has also slowed down. In 2018, the gender employment gap stood at 11.6 pp, almost unchanged since 2013.

*The EU employment rate reached 73.5% and the employment rate gap with the US is closing.*

**6.4%**

**is a new historical low for EU unemployment**

The annual EU unemployment rate stood at 6.8% in 2018, down 0.8 pp from its 2017 level. In April 2019, unemployment reached a new historic low of 6.4%. Several Member States are now close to full employment.

*EU unemployment recedes to historical lows without substantially reducing differences between Member States.*

Youth unemployment continued to decrease to 15.2% in 2018 (and to 14.2% in April 2019), 0.7 pp lower than the pre-crisis level in 2008, as did long-term unemployment. However, differences in employment and unemployment rates at Member State and regional level remain very large. The dispersion of employment rates across national and subnational territories is gradually narrowing, while the dispersion of unemployment rates has continued to widen since 2007.

**53%**

**of middle-class Europeans feel vulnerable**

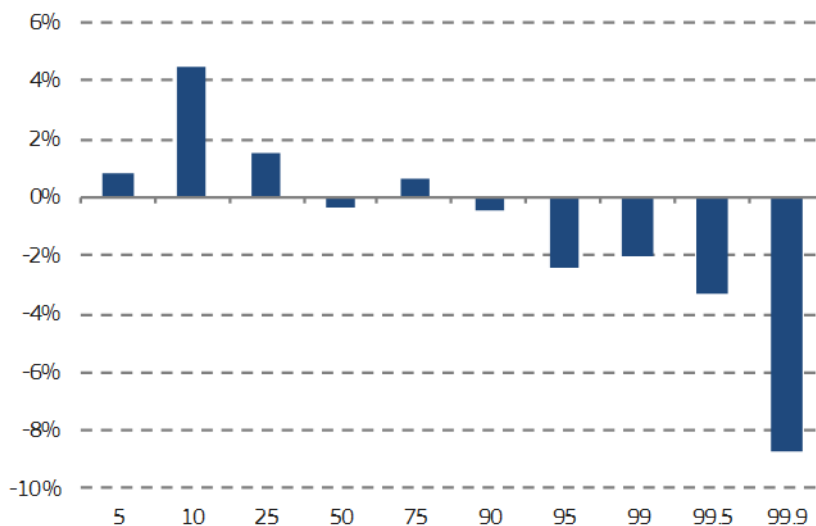
The size of the middle class – the backbone of EU societies defined as the income group between 75% and 200% of median national income – is increasingly similar across countries. While this does reflect some upward convergence, data also show a

*The size of the middle class is increasingly similar across Member States...*

tendency for the middle class to grow in size in eastern Member States while shrinking in the EU's West. At EU level, more than half (53%) of people in the middle class report a feeling of vulnerability and difficulty in making ends meet, financially.

*The poorest income groups in the EU-28 have improved their conditions compared with their pre-crisis level*

% change of real disposable income in 2008-2015, selected percentiles, EU-28 income distribution. Source: DG-EMPL calculations. EU-SILC UDB and data series produced by the World Inequality Lab (see chapter 1).



**4% higher income  
for poorer people in the EU,  
relative to before the crisis**

In 2018, the real annual growth of the gross disposable household income (GDHI) was 2% in the EU and 1.5% in the euro area. In the latest year for which data is available (2017), GDHI per capita in the euro area surpassed the pre-crisis 2008

*...and the income of lower income groups in the EU has risen.*

level (which, in the EU, had already been surpassed in 2015). However, GDHI per capita has still not recovered to its 2008 level in eight Member States (notably in Greece, Cyprus, Italy and Spain). After increasing in the wake of the economic and financial crisis, income inequality within Member States began to decline in some of them in 2017. Analysis of income in the EU as a single distribution shows an improvement in the position of lower income groups and convergence among subsets of EU Member States from 2007 to 2015. Those at the 10th percentile of the population gained over 4% in real terms, compared to their pre-crisis income. This was mostly a result of the rising income of some of the poorest in the eastern Member States. Meanwhile, the income of the poorest in the southern Member States deteriorated.

**As much as 90%:  
highest gap in median income  
between EU cities and rural  
areas**

Incomes in cities are usually higher than those in rural areas. The most notable gaps exist in Romania and Bulgaria, where median income in cities is around 90% and 60% higher respectively. Nevertheless, the likelihood of being in income poverty

*Incomes in cities usually exceed those in rural areas.*

and severe material deprivation is higher in cities than in rural areas in most western Member States.

Some population groups (notably people with disabilities, people with a migrant background and ethnic minorities) are more vulnerable than others in terms of access to education, services and the labour market. This translates into poorer employment outcomes, lower well-being and a higher risk of poverty and social exclusion. For instance, in 2016 about 48.1% of people with disabilities were employed in the EU compared with 73.9% of people without disabilities. The European Pillar of Social Rights establishes principles that should guarantee rights to these groups and guide related policy action at EU and Member State levels.

*Vulnerable groups' access to education, services and the labour market remains challenging.*

**4.2 million people fewer  
at risk of poverty or social  
exclusion in 2017 than in 2008**

The number of people 'at risk of poverty or social exclusion' (AROPE) has been falling slowly below its pre-crisis level. By 2017, 4.2 million fewer people were at risk of poverty and social exclusion than at the 2008 low point in the EU-27 (excluding Croatia,

*The number of people at risk of poverty and social exclusion declined below its pre-crisis 2008 low point..*

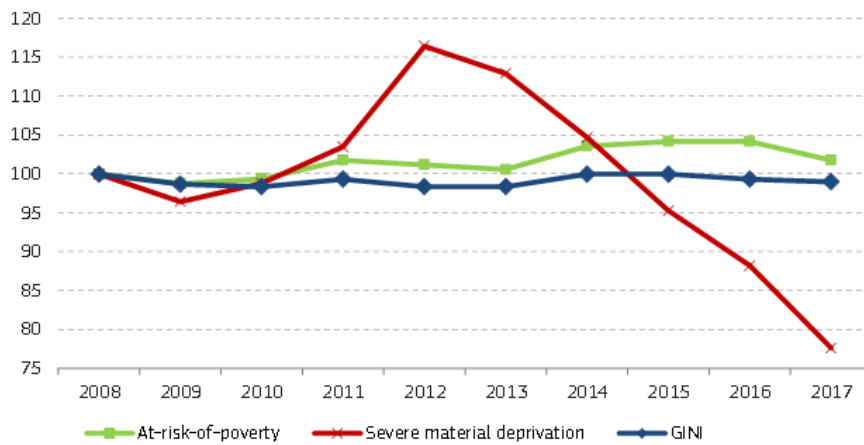
which joined after the target was set). This decline reduced the AROPE share from 23.7% in the pre-crisis year 2008, or from 24.8% in the peak year 2012, to 22.4% in 2017. All three components of the AROPE indicator declined: people at risk of poverty, those in severe material deprivation and those living in very low work-intensity households.

Severe material deprivation has declined continuously since 2012, indicating improvements in standards of living. It affected 4.7 million people fewer in 2017 than in 2016. After remaining broadly unchanged between 2014 and 2016, the proportion of people at risk of poverty declined from 17.3% to 16.9% in 2017. The proportion of people in very low work-intensity households decreased from 10.5% in 2016 to 9.5% in 2017, i.e. by around 3.8 million people.

*...supported by decreases in absolute poverty, relative poverty and low work intensity.*

## Living standards have improved despite persistent poverty and inequality

Poverty threshold (in real terms), at-risk-of-poverty rate, Gini coefficient of disposable income, severe material deprivation rate (cumulative change – index 2008=100), EU. Source: Eurostat, EU SILC, DG EMPL calculations (see chapter 1).



### Selected Macroeconomic, Labour market and Social indicators for the EU28

	2008	2013	2017	2018
<b>Real GDP (annual growth)</b>	0.5	0.3	2.5	2.0
<b>Employment</b>				
annual growth	1.0	-0.3	1.6	1.3
number of employed (000)	231 181	224 442	235 898	239 040
<b>Employment rate (total, 20-64)</b>	70.2	68.4	72.2	73.2
rate (men, 20-64)	77.8	74.3	78.0	79.0
rate (women, 20-64)	62.7	62.6	66.5	67.4
<b>Labour productivity (annual growth)</b>				
per person employed	-0.5	0.6	0.9	0.6
per hour worked	-0.3	1.0	1.3	0.8
<b>Unemployment</b>				
rate (total, 15-74)	7.0	10.9	7.6	6.8
rate (men, 15-74)	6.6	10.8	7.4	6.6
rate (women, 15-74)	7.5	10.9	7.9	7.1
rate youth (15-24)	15.9	23.8	16.8	15.2
long-term unemployment rate	2.6	5.1	3.4	2.9
very long-term unemployment rate	1.5	2.9	2.1	1.8
number of unemployed (000)	16 768	26 334	18 774	16 887
<b>Real Gross Household Disposable income per capita (2008=100)</b>	100.0	97.9	103.5	105.3
<b>At-risk-of-poverty or exclusion rate</b>	23.7	24.6	22.4	
<b>Inequality</b>				
Income quintile share ratio S80/S20	5.0	5.0	5.1	
GINI coefficient of disposable income	31.0	30.5	30.7	

Source: Eurostat (National Accounts, LFS, SILC)

Note: EU27 for At-risk-of-poverty or exclusion rate, S80/20 and GINI in 2008

## 2. SUSTAINABLE GROWTH AND DEVELOPMENT IN THE EU: CONCEPTS, DEFINITIONS AND CHALLENGES

Sustainable development is defined as “meeting the needs of the present without compromising the ability of future generations to meet their own needs”. This was the vision underlying the Lisbon agenda of June 2000. It was developed further in the Europe 2020 agenda with its ambitious targets in the economic, social and environmental domains. In 2015, the United Nations adopted a resolution on the 2030 Agenda for Sustainable Development, which set a comprehensive global agenda for sustainable development covering its social, economic, environmental and governance dimensions on an equal footing.

*The EU has been supporting sustainable development goals at EU and global level.*

### The top 5 concerns of Europeans are socio- economic and environmental

The Treaty on the EU includes sustainable development in its economic, social and environmental dimensions as a fundamental Union objective and considers inclusive growth as an integral part of sustainability. The social dimension

*The economic, social, and environmental dimensions of sustainability are anchored in EU law and embraced by Europeans.*

covers the promotion of employment, good working conditions and well-being, the improvement and harmonisation of living and working standards, the fight against social exclusion and discrimination, social justice, human capital development, gender equality and social dialogue. Evidence from Eurobarometer surveys indicates that all three dimensions of sustainable development are high on the list of European citizens' preoccupations. According to the latest Eurobarometer survey of autumn 2018 the top five concerns of EU citizens “for them personally” are socioeconomic and environmental issues: rising prices (32%), health and social security (17%), pensions (16%), the financial situation of their household (13%) as well as taxation, education, the environment and climate and energy issues (all at 10%).

The EU ranks very well in international comparisons in terms of social progress, as confirmed by the indexes developed to monitor progress towards the Sustainable Development Goals. Nonetheless, the track records and challenges vary significantly across Member States. Moreover, the challenges emanating from the mega-trends of ageing, digitalisation, globalisation and climate change risk undermining the sustainability of these achievements.

*While the EU ranks high in international comparisons, further progress is needed towards a sustainable social Europe ...*

### less than 2 workers per person over 65 years of age by 2060, as opposed to over 3 today

Demographic change results in a growing number of older people and a shrinking working-age population: between today and 2060, the number of people aged over 65 is expected to increase from 30.5 to 51.6 per 100 people of working age (15-64). This

*... that promotes productivity growth and its wider distribution in an increasingly digital economy ...*

implies that for economic growth to be sustainable, it has to rely increasingly on productivity gains and their wider distribution. In addition, inter-generational fairness and the financial sustainability of the welfare state are at stake. Digitalisation has opened the way for new forms of work organisation, including platform work, as well as for the increasing automation of work. Digitalisation also brings considerable job creation potential, especially in innovative, high-productivity businesses and for well-educated, highly skilled people. The legal framework and social protection systems need to evolve in order to cover these new forms of work better.

Challenges to social sustainability include still large disparities within Member States and persistent inequalities, which have emerged since the economic crisis and result from labour market segmentation and the polarisation of skills and income. In some cases, the convergence patterns of regions differ from those of Member States. For example, while there was convergence of Member States in relation to the employment rate over 2004–2016, divergence was recorded at regional level. Containing geographical disparities depends on the ability of national and subnational territories to converge upwardly and to guarantee

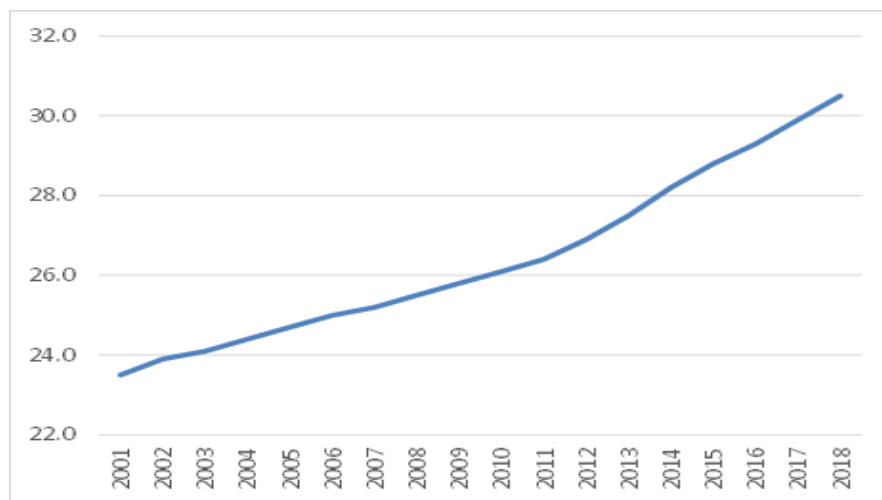
*... as well as equality of opportunities, including in places undergoing difficult industrial transition, with the support of EU funds and industrial policy tools.*



equal access to services in different areas. Tackling divergence calls for a mix of policies that accompany both people and places in the transition to new ways of producing and working, while respecting local specificities. Such a policy mix includes support from EU Structural and Investment Funds, notably the European Social Fund, and can benefit from increasing attention to EU action that supports industrial competitiveness and innovation.

*There are ever more people of retirement age relative to those of working age*

Old age dependency ratio (population aged 65+ over population aged 15-64), EU-28. Source: Eurostat [demo-pjanind] (see chapter 2).



A factor analysis identified four principal components (factors) which reinforce each other and linking the different dimensions of sustainability. These motivate the four main chapters of this report. The first component regroups factors contributing to a virtuous circle of sustainable development by promoting productivity and efficiency through policies focusing on human capital (skills and social welfare in general) and institutions (functioning collective bargaining and trust in the work of government institutions). The second factor revolves around labour market efficiency as a precondition for sustainable development. It reveals structural weaknesses in product and labour markets that undermine sustainable development and hence competitiveness, wage increases and employment prospects. A third factor reflects favourable social conditions and relates to the efficiency of the welfare state in lowering poverty rates and inequality. Finally, a fourth factor represents limitations to growth potentially linked to high labour taxes.

*A skilled workforce, labour productivity, efficient labour markets, trust in institutions and effective social welfare are key ingredients of sustainable development.*

A cluster analysis points to significant sustainability challenges and persistent structural labour market problems in the South of Europe, with high unemployment, poor labour market performance of vulnerable groups and low bargaining power of employees. Most North-Western Member States, on the other hand, are found to have solid sustainability foundations: investment in skills which supports higher productivity, reinforced by effective and trustworthy institutions. These countries also invest more in social welfare and display higher efficiency in the use of natural resources. Eastern Member States have been catching up with the other Member States in GDP per capita and labour productivity, even though their tradition of social dialogue is less developed, trust in their institutions remains lower and they often lag behind in the implementation of skills and environmental policies.

*Member States are not all on a sustainable development path.*

### 3. ECONOMIC AND SOCIAL FUNDAMENTALS: FROM PRODUCTIVITY TO FAIR AND SUSTAINABLE GROWTH

**19% Total Factor Productivity growth in the EU since 1995 vs. 24% in the US**

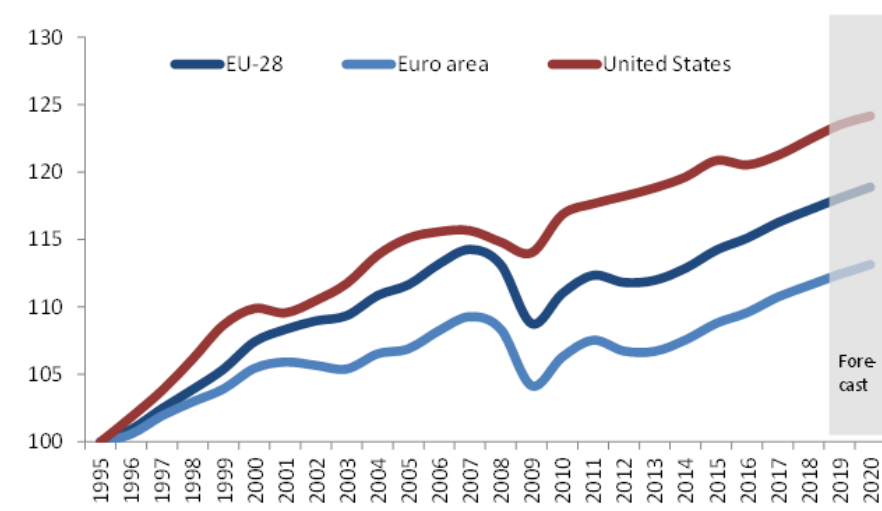
Given the limitations on human resources imposed by demographic ageing, and scarcity of natural resources, growth in the EU has to rely increasingly on changing the modes of production and consumption and on a more efficient use of existing resources. One of

*Sluggish TFP growth and its widening dispersion is one of the EU's main sustainability challenges.*

Europe's chronic challenges relates to Total Factor Productivity (TFP), which measures that part of economic growth that is due not to an increase in factor input but to higher efficiency in production. TFP is an important indicator of the sustainability of growth. TFP growth in the EU is low relative to other major economies. Its increase between 1995 and 2020 (including forecasts for 2019 and 2020) is estimated at 19% in the EU, compared with 24% in the US. There is considerable dispersion in TFP performance both between and within Member States as well as between sectors and companies of different size. TFP levels in Eastern European countries have been converging towards the EU average, albeit from low levels.

#### *EU TFP grows more slowly than before the crisis*

TFP between 1995 and 2020, 1995=100. Source: Commission services AMECO database (see chapter 3).



A region's capacity to innovate and the education level of its labour force raise total factor productivity and efficiency. The further away a region is from the so-called 'technology frontier', the higher tends to be its TFP growth, and hence the faster its convergence. At the same time, a region's TFP growth potential depends on its capacity to adopt new technologies from advanced, "technological benchmark" regions, and this in turn depends on the skills of the workforce. The better educated a region's workers are, and the higher its R&D expenditure, the stronger is its capacity to adopt new technologies. Effective government institutions and citizens' and companies' trust in those institutions also play a key role in raising productivity.

*Innovation based on R&D, human capital and efficient institutions drives up TFP in European regions...*

Analysis at firm-level shows that firms with high TFP usually invest in high-quality, innovative capital as opposed to simply increasing previous-standard capital stock. By becoming more competitive in this way, they create more jobs and pay a productivity premium to their workers so that higher wages accompany efficiency in production. Exporting firms also tend to exhibit higher TFP, mainly because their exposure to global competition forces them to become more efficient.

*...as well as in firms, producing a higher-wage dividend for workers, too.*



**Efficient labour markets, innovative capital, equal opportunities and good working climate foster TFP**

Labour market imperfections weigh on economies' growth potential. Examples include entry barriers for certain workers, uneven job protection, or low bargaining power of certain groups of workers relative to others. This

*Excluding people from important resources and equal opportunities limits growth potential.*

underlines the importance of equal opportunities in the labour market. Labour market segmentation due to discrimination or exclusion from job or training opportunities distorts wage setting and in turn leads to the sub-optimal use of labour, eventually lowering the growth potential.

According to the European Working Conditions Survey (EWCS), managers consider that a good working climate, greater workers' autonomy and workers' regular access to training favour productivity growth, including through improved motivation and a lower incidence of sick leave, greater attraction of skilled workers and higher retention rates. According to managers, firms that create new products or introduce new production processes also enjoy higher productivity.

*Productivity is higher in firms with a good working climate and training opportunities.*

**GDP: +1%  
in the long term in less developed regions through 2021-27 ESF+**

EU instruments and policies play a key role in promoting competitiveness and raising productivity. A tentative simulation exercise shows that the EU's Cohesion Policy has a long-lasting positive impact on the economy. The simulation takes the European Social Fund (ESF) as an

*EU policies and instruments have a key role: the European Social Fund can help boost productivity, especially in less developed regions.*

example. The ESF in particular contributes to improving workers' employability through social investment and training. For 2021-2027, the Commission has proposed total ESF+ spending worth EUR 101.2 billion. The simulation shows that investment supported by the ESF+ is expected to have an impact on the economy of receiving countries, which lasts much longer than 2027, the last year of the programme. A particularly strong positive impact is expected in the EU's Less Developed Regions, i.e. those regions where GDP per inhabitant is less than 75% of the EU average. In those regions, investments supported by the ESF+ could raise labour productivity by 0.7% and GDP by 1% in the long term, compared with a no-investment scenario.

Policies can contribute significantly to improving the EU's productivity performance. Model simulations confirm the positive long-term macroeconomic impact notably of government training support to firms, designed to motivate their workers to take up more training. The sources of finance for training support can vary and include public, private and shared financing. This matters for its impact, especially on employment, GDP and the wage share. Training

*Training subsidies can increase productivity, notably by targeting those most in need, while supporting innovation and investment in excellence.*

**Public support to training and upskilling increases productivity and GDP**

increases workers' productivity, and, consequently, labour demand and wages. The impact of such measures also depends on their target groups. Raising the overall qualification level requires a combination of training support specifically for

the lower-qualified and incentives to encourage their upskilling through further studies. The resulting increase in the average qualification level would contribute to improving sustainability by enhancing the economy's innovation potential and labour reallocation, while improving the employability of those most in need of support.

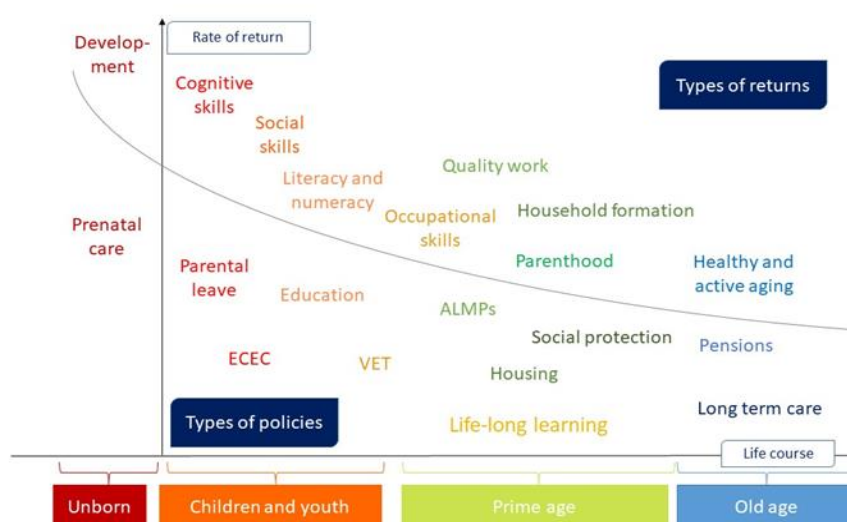
## 4. INVESTING IN PEOPLE AND SOCIAL SUSTAINABILITY: SHORT-TERM COSTS AND LONG-TERM BENEFITS

Enhancing the skills and qualifications of the EU workforce and strengthening its innovation potential are only a few of several areas in need of investment, in order to support sustainability. Given major demographic and technological shifts, there is a broad consensus on the need to invest in people. Such 'social investment' helps to improve individuals' well-being and prevent and mitigate social risks, by enabling citizens to acquire new skills and become or remain active in the labour market and by providing them with support during critical life course transitions. This chapter focuses on selected areas related to such transitions, notably on childcare and long-term care, education, training and skills, and housing.

*Social investment enables people to reach their potential and supports them in critical life course transitions.*

### *Returns on social investment are higher at early life stages*

Expected returns on social investment and rate of return, by life stage. Source: J. Kvist (2014). "A framework for social investment strategies: Integrating generational, life course and gender perspectives in the EU social investment strategy." *Comparative European Politics*, 13(1), 131-149 (see chapter 4).



Investing in children and families and promoting equal opportunities can take different forms, including affordable and high-quality early childhood education and care (ECEC) and long-term care (LTC). Income support through social transfers can in particular help to address disadvantage stemming from inequality of opportunity among children, as well as e.g. lack of access to basic services in remote or rural areas or old-age poverty.

*Investing in childcare and long-term care and access to basic services help address disadvantage.*

**Over 20 hrs/week  
is the biggest difference in  
childcare use intensity  
between Member States**

Between 2008 and 2016, family-related expenditure per child increased in most Member States. The use of formal childcare has increased considerably in the EU although there is room for further improvement. Half of the Member States have yet to reach the two Barcelona targets on formal childcare use set in 2002, i.e. to provide childcare by 2010 to at least 90% of children between 3 years old and the mandatory school age, and to at least 33% of children under 3. The average number of hours of formal childcare use per week in 2017 varied by more than 20 hours across Member States.

*Childcare use intensity varies widely between Member States.*

The availability of affordable and good quality childcare is important for parents as it increases incentives or enables them to work. There is evidence that the care of children plays a crucial role in mothers' and households' labour supply

*Access to childcare enables parents to work.*

**More than 14 pps**  
**is the employment rate gap**  
**between mothers and other**  
**women in the EU**

decisions: in 2017, the employment rate of women with children aged 6 or less was 64.6% in the EU as opposed to 79% for women without children. Availability and affordability of childcare services can largely explain the different levels of mothers' employment across the EU.

The higher the use of formal childcare for children below 3 years old, the higher is women's employment. Sweden and Czechia are two clear examples of this relationship at opposite ends of the spectrum. In Sweden, the high employment rate of mothers (82.8%) is accompanied by a high use of childcare services (52.6%), while Czechia has both a very low maternal employment rate (45.1%), and very low childcare use (6.5%).

**Average use of childcare**  
**by richer families is more**  
**than double that of poorer**  
**families**

Childcare is not only beneficial to mothers' employment. Formal childcare services provide children with stimulating environments where they can gain new skills they can capitalise on throughout their life course and which can reduce

*Poorer families tend to make less use of childcare.*

inequalities at the start of school life. It is important that these services be provided for all social groups, in particular for the most vulnerable. However, poorer families use childcare services less than richer families, and lack of affordability is the main reason. At EU-level, average childcare use by the families in the lowest quintile of the income distribution is 18.3% of children aged 3 or less, whereas average use by families in the top quintile is 42.5% (measured in full-time equivalents of 30 hours a week for every child enrolled).

**Public expenditure on**  
**long-term care will**  
**increase**  
**from 1.6% of GDP in 2016 to**  
**2.7% in 2070**

Because of population ageing, public expenditure on long-term care is expected to increase substantially over future decades (from 1.6% of GDP in 2016 to 2.7% in 2070). The provision of high quality and affordable long-term care and work-life balance arrangements (such as flexible

*Population ageing will impact public expenditure on long-term care.*

work and care leave) may alleviate the burden on people with caring responsibilities, and therefore have a positive impact on their employment.

The European social model has historically considered skills as one of the primary tools for improving labour market participation and boosting productivity and competitiveness. A labour force with an up-to-date skill set is key to sustainable development and growth.

*Skills are the key to labour market participation and future growth.*

**45% greater likelihood**  
**of having a job for people**  
**with tertiary education**

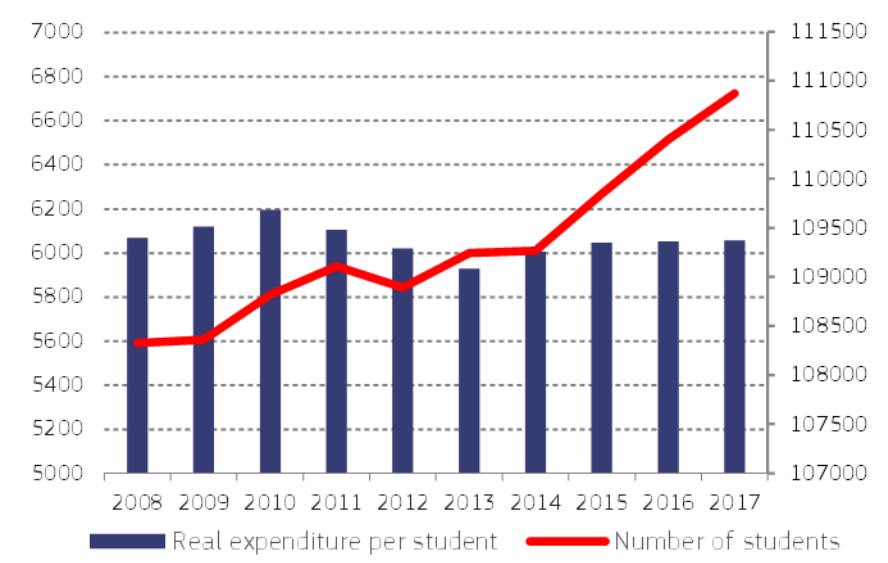
EU governments fund more than 80% of education spending. Nominal investment in education and training systems grew in the last decade, albeit less than GDP. Real education expenditure per student has remained fairly stable in the EU

*Higher qualifications have important individual and social benefits, yet education expenditure is falling behind.*

overall and fallen in some Member States, notably Ireland, Greece and the UK. Investing in education has several positive spillovers. Higher qualifications are linked to higher employment rates and higher wages (+16% for people with secondary education, +45% for those with tertiary education,) and to better health conditions for individuals. Benefits for society include higher tax revenues and social security contributions, lower social expenditure and more active citizens. Yet, since tertiary educational attainment is correlated across generations, there is a risk of accumulated advantage (the so-called 'Matthew effect'), i.e. public spending on education ultimately conferring more benefit on families that already have a good level of education than on those that do not.

*While the number of students has gradually increased, real expenditure per student is around pre-crisis levels*

Evolution of number of students and real expenditure in education per student in the period 2008-2017; number of students (in thousands) on rhs, and real average expenditure (in EUR) by student on lhs. Source: DG EMPL calculations based on Eurostat data (see chapter 4).



Work experience during studies as part of the curriculum increases the chances of subsequent employment. Europeans with paid working experience during their studies had a roughly 9% higher likelihood of working compared with those without such experience. Vocational pathways at secondary level are also linked to higher employment. These effects apply to all groups, although the employment probability is generally higher (by up to 6%) for EU mobile citizens and lower (by up to 11%) for people with a non-EU migrant background.

*Work experience and vocational education improve the chances of finding a job.*

Adult education and training are increasing in the EU, driven by non-formal training. This most likely reflects the higher flexibility of non-formal training, its lower costs, and the limited transferability of the skills acquired from such training: all these characteristics commend it to employers who fund it.

*Adult education and non-formal training are increasing.*

Housing as a sector and policy field is distinct from enabling social policies that directly invest in people. Access to affordable and adequate housing, including social housing, is an important factor enabling Europeans to access education and training opportunities and to enter and stay in the labour market, where they can best fulfil their potential and participate in community life and relevant social networks. By doing so, it contributes, both directly and indirectly, to skills formation, increased productivity, sustained growth and social cohesion. Affordable housing is a decisive factor in accessing enabling public services and facilitates mobility and labour market transitions. Inadequate housing can have adverse long-term effects on health and social inclusion. The housing situation differs markedly across EU Member States with regard to such key features as affordability, quality, ownership status and average tenure.

*Access to affordable housing is key for access to education and employment, and participation in society overall.*

**28% of tenants spend more than 40% of their income on housing**

'Daily living costs' depend on housing expenses for the main dwelling, which include the cost of the home (mortgage or rent) and the costs of utilities and insurance. Several indicators point to positive developments in the EU since the economic recovery. Housing costs as a

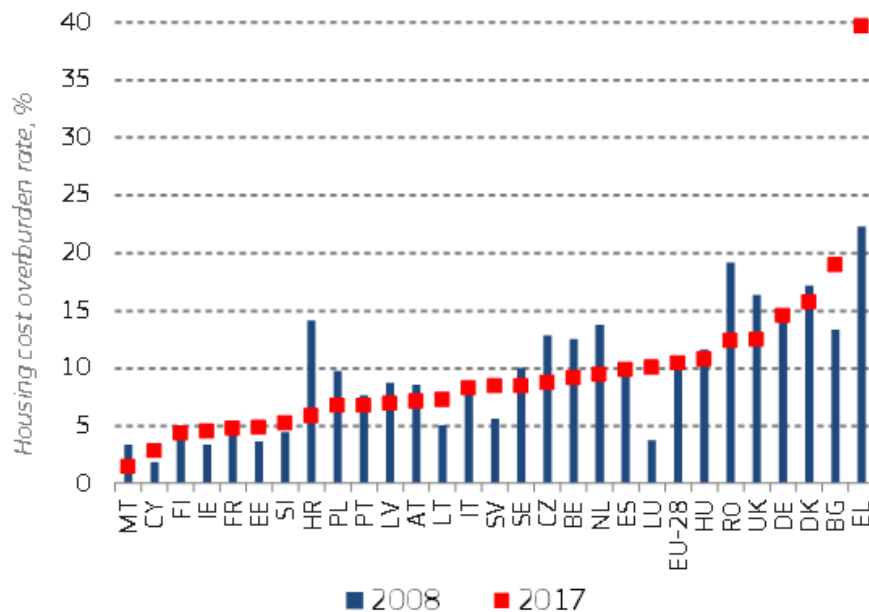
*While on average housing costs and financial overburden have declined in the EU, housing affordability is an issue for tenants and single parents, notably in cities.*

percentage of disposable income decreased on average from 22.7% of disposable income in 2014 to 21.4% in 2017. The self-reported heavy burden of housing costs declined from a peak of 38% of households in 2013 to 31% in 2017. At the same time, the share of households that spend more than two fifths of their income on housing costs declined from 11.6% to 10.4% of the

population, although the situation varies across Member States. Despite these positive trends, there are specific groups, which are more likely to face housing affordability issues: tenants, single people, particularly those with children and those living in cities.

### *One in ten Europeans spends 40% or more of household income on housing costs*

Housing cost overburden rate, 2008-2017. Source: Eurostat, EU-SILC (see chapter 4).



Severe housing deprivation is declining, particularly in Central and Eastern Europe. However, approximately one out of seven Europeans lives in a dwelling that has a leaking roof, damp walls, floors or foundation, or rot in window frames or floor. These issues predominantly affect tenants, including those in social housing. Owners with mortgages tend to be the least vulnerable group, both in terms of affordability and housing deprivation. Despite certain general improvements in the affordability and quality of housing, extreme forms of housing exclusion such as homelessness are growing in many countries.

*Severe housing deprivation is declining in the EU, while homelessness is increasing in many Member States.*

Beyond social cohesion, housing plays an important role in promoting sustainable economic growth, enabling mobility and efficient labour allocation. Housing is also an important sector for environmental sustainability. Long commutes to the workplace create negative environmental spillovers, while residential buildings are responsible for one quarter of the EU's overall energy consumption.

*Housing impacts labour mobility, energy use, pollution and therefore economic and environmental sustainability.*

## 5. TOWARDS A GREENER FUTURE: EMPLOYMENT AND SOCIAL IMPACTS OF CLIMATE CHANGE

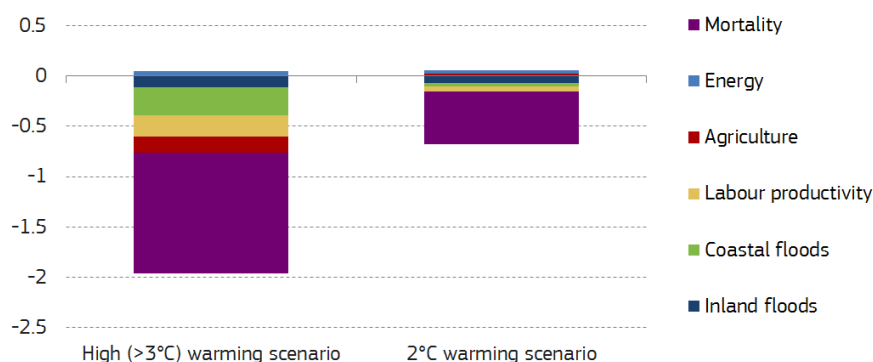
Environmental sustainability is one of the main dimensions of sustainability. There are many synergies between environmental sustainability and economic performance, from the impacts of production and consumption patterns on employment, through effects on job quality and health and safety at the workplace, to new opportunities for innovation. The socio-economic cost of inaction on environmental and climate issues would be huge, leading to frequent severe weather events and natural disasters as well as reducing EU GDP by up to 2% and GDP in southern Europe by more than 4% in the long term. Making progress towards a Sustainable Europe 2030 and achieving the ambitious vision defined in the Commission Communication "A Clean Planet for All" of November 2018 requires a broad policy mix. It also requires timely implementation of measures, at EU, national and regional levels in energy and transport, taxation,

*Progressing towards Sustainable Europe 2030 requires a broad policy mix and has many benefits.*

research, industrial and competition policy as well as employment and social policies. Like social investments, climate-related investments bring long-term, largely universal benefits while having short-term and largely concentrated costs.

### *EU welfare losses from climate inaction by main socio-economic impact*

% of GDP. Source: European Commission, PESETA III studies, Joint Research Centre, Seville.



**75% of EU workers  
are employed in sectors  
producing less than 10%  
of CO2 emissions**

Employment and value generation in the EU economy are taking place increasingly in economic sectors that are relatively low in carbon emissions and material inputs. Electricity production, transport, extractive industries, agriculture and manufacturing, together produce close

*Low-carbon sectors spearhead structural change and job creation, but progress is not automatic.*

to 90% of all CO2 emissions by business sectors, yet account for less than 25% of employment and gross value added in the EU. These sectors have to reduce their emissions and expectations are growing in this respect. Research and innovation as well as new technologies can help meet these expectations. On the other hand, low-carbon industries and service sectors produce less than 10% of all CO2 emissions, but employ more than 70% of the EU workforce and are also the sectors with the strongest employment increases. Yet progress is not automatic, as service sectors also rely increasingly on electricity. This means that targeted policies are needed to steer the process of decarbonisation.

**1.2 million more jobs  
may be just one of the  
benefits of the green  
transition**

Overall, projections of the impacts of a full implementation of the Paris agreement <sup>(9)</sup> show that the transition to a low-carbon economy could raise GDP by an additional 1.1% and employment by 0.5% compared to a scenario without climate action policies. This amounts to

*The low-carbon transition contributes to GDP and employment growth and mitigates job polarisation.*

an additional 1.2 million jobs in the EU by 2030, on top of the 12 million new jobs already expected. Job creation is projected mostly in growing green(ing) sectors, both in industry and services, including construction, waste management and sustainable finance. The positive impact on GDP and employment is largely due to the investment required to achieve such a transition, together with lower spending on fossil fuel imports. Furthermore, lower consumer prices, notably of solar photovoltaic electricity, would increase disposable incomes, consumer expenditure and consequently the demand for (generally labour-intensive) consumer services. The low-carbon transition could also somewhat mitigate ongoing job polarisation resulting from automation and digitalisation by creating jobs in the middle of the wage and skill distributions. These impacts, however, vary considerably among sectors and countries but, overall, are positive. Projections undertaken for the longer term (2050) confirm a similarly positive

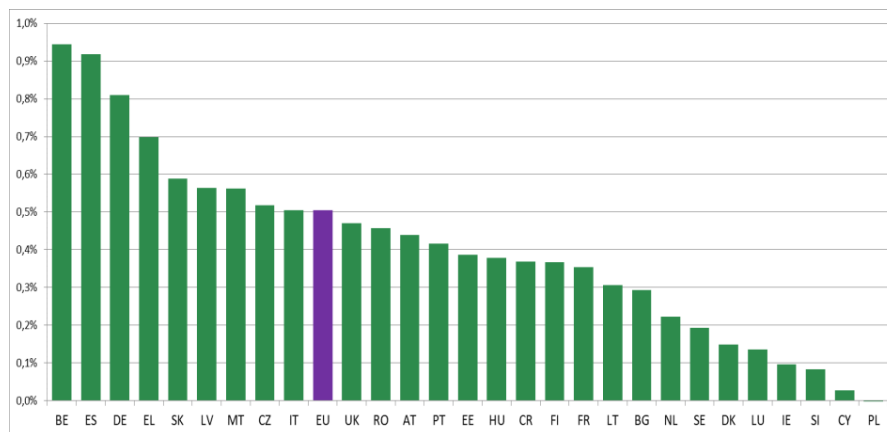
<sup>(9)</sup> Eurofound (2019), Future of manufacturing - Energy scenario: Employment implications of the Paris Climate Agreement, Eurofound Research Report, February 2019



impact on total employment, in particular if carbon revenues are used to generate a tax shift away from labour and towards environmental taxes.

### *Employment gains from climate action in EU Member States, 2030*

Employment impacts by country, deviation from the baseline in %, in 2030. Source: Eurofound (2019), Future of manufacturing - Energy scenario: Employment implications of the Paris Climate Agreement, Eurofound Research Report, February 2019 (see chapter 5).



The transition to a low-carbon, circular, climate-neutral economy will not be inclusive by default as it implies potentially significant costs and risks for specific sectors. Necessary measures and reforms may have a substantial impact on people and regions, including significant labour reallocation across sectors and occupations and profound changes in future skill requirements. EU instruments such as the ESF and the European Globalisation Adjustment Fund (EGF) as well as the European Social Dialogue can contribute to a just transition by supporting workers and families who have been dependent on work in energy-intensive sectors during the transition, including through retraining, reskilling, individualised job search counselling and potentially income replacement.

*However, the transition to a low-carbon economy is not inclusive by default and comes with risks, too, including labour reallocation.*

Adequate warmth, cooling, lighting and energy to power appliances are essential for ensuring a decent standard of living. One risk related to decarbonisation is energy poverty, where a growing share of households is unable to afford heating or other energy services due to a combination of low income, high expenditure on energy and poor energy efficiency of their homes. Energy poverty has impacts on health, the environment and productivity. This highlights the importance of affordable and quality housing, including social housing, for social fairness and for securing acceptance of climate action. Energy prices, one of energy-poverty's key drivers, have risen substantially over the last two decades, increasing financial pressure on households. Well-targeted social benefits, social housing and energy bill support, as well as energy-efficiency measures, can mitigate energy poverty. Overall, there have been some recent positive developments in the EU and the ability to keep one's home warm, has on average decreased below its 2010 level. However, not only low-income households but in some Member States also a significant proportion of the middle income households are still not able to keep their homes warm, particularly in towns and rural areas. The Clean Energy for All Europeans package brings a new and holistic focus to energy poverty in the EU climate and energy framework – addressing it in electricity market legislation, energy efficiency legislations and in National Energy and Climate Plans. This represents a key component of ensuring a just transition.

*Another potential risk is energy poverty, which has decreased in the EU but still affects low and middle-income households in several Member States.*

The greatest environmental health risk in the EU is air pollution, causing around 400 000 premature deaths per year. Emissions of the main air pollutants in the EU have decreased but still exceed relevant EU and World Health Organisation guidelines. Certain groups are more vulnerable than others to the negative effects of air pollution, including children, the elderly, those with pre-existing health problems and those from lower socio-economic backgrounds. More urban than rural dwellers report being exposed to pollution and other environmental problems. Tackling air pollution through climate action is an opportunity for raising popular and political support for climate change policies because the gains from reducing air pollution are local, visible and short-term compared with more abstract climate mitigation action. Targeted measures, including those under climate change action, could prevent one third of premature deaths by 2050.

*Air pollution is the greatest environment-linked health risk in the EU, affecting particularly the elderly, children and poorer people.*

Finally, “greening” production and consumption patterns and supporting green job creation also foster opportunities for climate-smart and inclusive growth with innovation and productivity benefits for firms and increased well-being for people. Environmental taxation, notably a tax shift from labour to energy consumption, waste and pollution in particular, could help internalise social and environmental externalities, avoid the setting up of ‘pollution havens’ and incentivise the reallocation of resources and re-orientation of global value chains towards low energy-intensive and low carbon production.

*Climate action offers new opportunities for technology and process innovation, fostering firms’ productivity.*

## 6. SUSTAINABILITY AND GOVERNANCE: THE ROLE OF SOCIAL DIALOGUE

Social dialogue plays an important role in promoting sustainability in all its dimensions, economic, social and environmental. Given the substantial challenges related to a just transition to a green economy and sustainable growth, engaging social partners is crucial in order to take into account relevant information and to reach consensus on action. Social dialogue can bring considerable experience in facilitating cooperation and synergies between key players. Social partners contribute actively to the implementation of the European Pillar of Social Rights and EU policy agendas. They also contribute to progress towards some of the Sustainable Development Goals (SDGs), especially by a) fostering equality at work and good working conditions, b) promoting inclusiveness and c) agreeing on steps towards more environmentally friendly ways of running our economies and d) by strengthening the democratic foundations of our societies.

*Social partners contribute to sustainable development by promoting good, inclusive workplaces and multi-stakeholder governance.*

**Trade union density in the Member State with the lowest in-work poverty is 45 percentage points higher than in the Member State with the highest in-work poverty**

Core tenets of social dialogue such as fairness at work, satisfactory working conditions and workers’ rights are at the heart of the social and economic dimensions of sustainability. Evidence suggests that collective bargaining reduces wage dispersion, that higher centralisation of wage bargaining is associated with lower income

*Wage bargaining correlates with positive social outcomes, including lower income inequality.*

inequality and that higher trade union density is associated with lower in-work poverty rates. Employee representation, in general, tends to improve the quality of the work environment. For instance, employees represented by a trade union or works council are 34% less likely to consider that their work affects their health negatively. This suggests the importance of employee representation in ensuring high standards in work environments, particularly given the projected changes in work quality associated with the low-carbon transition.



Social partners also promote inclusiveness, which is key to both social and economic sustainability. Examples can be found in the areas of social protection and transnational activities, where social partners defend the extension of social protection and other social rights to all workers in a specific sector, beyond their own membership. Social partners have also become increasingly active in the environmental dimension of sustainability. However, their approach to the low-carbon transition differs markedly across sectors, from defensive attitudes in those that are at risk of job loss, such as mining and fossil fuel extraction, to whole-hearted promotion in sectors where the transition is expected to generate employment, such as construction.

Employees with some form of representation have a **66% higher chance of receiving paid training**

Essential for this low-carbon transition is facilitating workers' reskilling and upskilling. Education and training can help sectors at risk and help social partners to formulate responses that ensure a fairer transition. Employee representation is associated with more training opportunities within companies. For instance, employees represented by a trade union are 66% more likely to receive paid training.

In addition to facilitating the transition to sustainability, the processes of social dialogue, such as bipartite+ or tripartite+ partnerships, strengthen democratic participation in EU society. They allow workers and employers to influence the choices on the way to a greener economy, giving them some leverage in the midst of the megatrends transforming the world economy. Relying on social partners for the management of transitions, in consultation with experts and with the support of governments, can result in the least disruptive solutions. By integrating environmental aspects into a traditional socio-economic agenda, social partners are becoming crucial actors in fostering green and inclusive growth.

*Social partners promote inclusive social protection and, more often than not, a transition to the low-carbon economy...*

*...and encourage upskilling with a view to a just and socially fair transition.*

*Social dialogue supported by expert advice and governments can identify the least disruptive solutions to sustainability issues.*

## CONCLUSIONS

For the sixth consecutive year, improvements in employment and social outcomes have accompanied the economic recovery. Nonetheless, persistent risks and emerging uncertainties at global and EU-level raise questions about the prospects for further growth. Meanwhile, the continuing expansion of the EU economy has shifted attention to long-term sustainability issues. The urgency of the situation and increasing awareness of environmental degradation and the effects of climate change has intensified pressure on policymakers to accelerate the transition to a low-carbon, more circular, environmentally sustainable and inclusive economic model. The EU can already boast an innovative, highly performing economy, as well as high levels of social and environmental protection. The objective is to make these achievements sustainable over time so that future generations can avail themselves of the same resources that current generations enjoy, and to improve people's lives today, by ensuring their social rights and equal opportunities. Employment and social policies in particular should help to ensure social sustainability in a world reshaped by demographic ageing, digitalisation, globalisation and action against climate change. A generalized, upstream integration of social and environmental concerns in future policies is essential and would contribute to promoting social acceptance of necessary reforms.

Robust economic expansion in the EU cannot be sustained without higher total factor productivity growth, which relies more on the efficient use of productive factors, rather than just expanding their use. Total factor productivity thrives in Member States and regions with strong labour market institutions and in firms that invest in workers' training and innovative capital and processes. Policies that help to develop human capital and facilitate workplace innovation are most effective in increasing productivity in the long term, provided labour markets do not discriminate and firms can access the necessary capital.

Given major demographic and technological shifts, social investment contributes to sustainability by preventing and mitigating social risks. It enables citizens to be active in the labour market and acquire new skills, and provides support during critical life course transitions. It thus raises activity and employment rates and lowers social risks. Childcare and early childhood education stand out among such investments, supporting mothers' labour market participation and employment, while fostering skills and equal opportunities early on in children's lives. Investment in skills, qualifications, and formal adult training supports firms' competitiveness as well as wages. Access to affordable and adequate housing is an important factor enabling Europeans to fulfil their potential in the labour market and to participate in society on more equal footing.

The transition to a low-carbon economy is generally expected to have positive effects on GDP, total employment and well-being. Early preparation for this transition through better and new skills can mitigate job losses in occupations, sectors and regions still linked to the high-carbon economy and better avail of the job-creation potential in green sectors. However, the transition to a climate-neutral economy is not socially inclusive by default. Integrating the social dimension from the outset is fundamental to the success of the EU's climate and energy strategy. Where appropriate, compensatory measures, including those aiming to reduce energy poverty, can contribute to a socially fair transition and should be part of necessary reforms. Environmental taxes also offer an opportunity to generate a tax shift away from labour taxation, with positive implications for total employment and earnings. Policy and investments should also target environment-linked health hazards, such as air pollution, and can help gain public support for climate action and reforms.

Finally, the multi-stakeholder governance of social dialogue is eminently suitable for building a broad consensus to promote more sustainable economies and societies. Well-functioning social dialogue enhances social fairness by improving working conditions without hampering long-term economic performance. Trade union and employer organisations could accelerate their efforts to manage the transition to a low-carbon economy, despite persisting differences in positions, linked to the uneven sectoral impact of the "greening" of the economy.

Mainstreaming and integrating social and environmental objectives in the design of all EU policies, as opposed to addressing social and environmental risks through ex-post remedial action, is the only credible way of pursuing a truly balanced, multi-dimensional sustainable development model. This might not be the silver bullet for all of the EU's challenges, but it will guarantee a green and social Europe that is committed to its global responsibilities.

# Main Employment and Social Developments

## 1. INTRODUCTION <sup>(10)</sup>

**In 2018 economic growth in the EU continued at a slower pace than in 2016 and 2017.** Positive labour market conditions persisted and employment rose to 240.7 million in the first quarter of 2019. The employment rate reached 73.5% in the last quarter of 2018, the highest level ever recorded, while the activity rate maintained a steady long-term upward trend. In 2018 the unemployment rate stood at 6.8% of the labour force, its lowest level since records started at EU level in 2000, and it further declined to 6.4% in March 2019.

**The recovery has contributed to increasing incomes and a visible reduction in poverty and social exclusion.** The at-risk-of-poverty and social exclusion rate (AROPE) decreased in 2017 to below its 2008 level of 23.7%, recording 23.5% in 2016 and 22.4% in 2017 and a reduction by 5 million per year in these two years. While the overall economic and employment outlook remains positive, uncertainties have increased and important challenges remain with regard to productivity growth, labour market segmentation and social and geographical convergence. And increasingly there are questions as to whether the world economy can avoid, and would be resilient in the face of a significant new economic downturn. All of these represent risks to sustainable growth and development in Europe.

**The middle class remains the backbone of European societies and welfare states but is more vulnerable.** The middle class, defined as the

income group between 75% and 200% of national median income, is sizeable in all Member States, constituting from 53% to 77% of the total population. However, its weight is shrinking in some Member States and there are signs of its perceived vulnerability, with potential implications for social sustainability and political stability. In particular, the proportion of individuals in the middle class who report that they have difficulty making ends meet stands at 53% (though similar levels were seen pre-crisis).

**Some groups in society have traditionally been vulnerable.** People with disabilities, people from migrant backgrounds and ethnic minorities tend to find themselves at a disadvantage in the labour market and with regard to access to public services; they are also at higher risk of poverty and social exclusion.

**This chapter reviews the latest socio-economic developments at the EU level and in Member States.** The analysis covers overall macro-economic developments and their implications for the labour market, including a focus on regional developments and territorial cohesion within the EU as well as international comparisons. This chapter also assesses recent trends regarding the social situation and income developments, with a special focus on the middle class and on the above-mentioned vulnerable groups.

## 2. MACROECONOMIC ENVIRONMENT

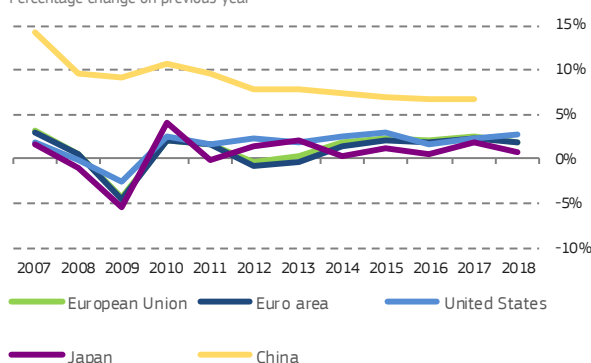
### 2.1. Shadows over favourable global macroeconomic developments

**After a period of sustained economic growth since 2012, the global economy is showing signs of slowing down.** Economic activity in some

<sup>(10)</sup> This chapter was written by Petrica Badea, Fabio De Franceschi, Stefano Filauro and Luca Pappalardo.

advanced economies, such as the euro area and Japan, as well as in emerging economies, notably China, is weaker than predicted. <sup>(11)</sup> The Chinese economy is cooling down as a consequence of weakening exports (which have been affected by uncertainties with regard to future US-China trade relations) and moderate internal consumption growth. The weakest economic growth rates were recorded in Japan, in line with the sluggish trends of previous years. On the other hand, the US economy grew slightly faster than the EU economy, and is expected to grow faster in 2019, backed by a robust labour market and fiscal expansion – in spite of some institutional and political uncertainties that could hamper consumer sentiment and business investment.

Chart 1.1  
Real GDP growth in selected large economies  
Percentage change on previous year

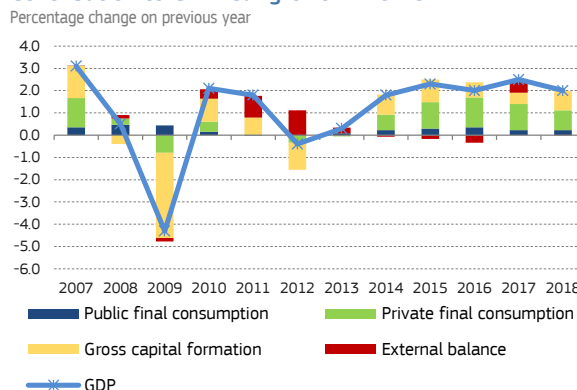


Source: AMECO except China; IMF for China  
[Click here to download chart.](#)

**In both the EU and the euro area, economic activity continued to expand in 2018, although more slowly than expected.** The economy has been expanding for six consecutive years in the EU, and for five in the euro area, yet at growth rates below those of 2017. These developments, and the leading indicators such as new export orders, indicate that the economic outlook is weakening. Nevertheless, in 2019 domestic consumption and investment should continue to ensure growth in economic activity and employment, in spite of increasing geopolitical and international uncertainties and rising tensions in trade.

<sup>(11)</sup> See for instance European Commission (2019a)

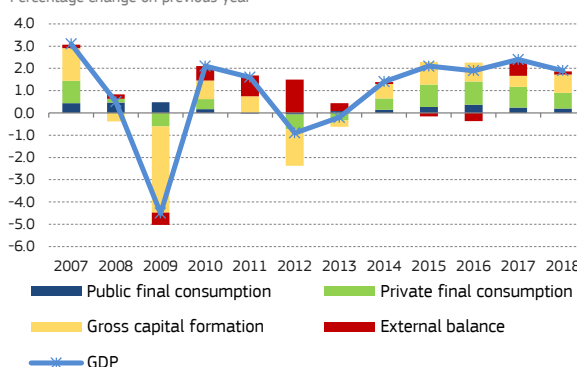
Chart 1.2  
Contribution to GDP real growth – EU 28  
Percentage change on previous year



Source: Eurostat, National Accounts [nama\_10\_gdp]  
[Click here to download chart.](#)

**In 2018 gross domestic product grew by 2.0% in the EU and by 1.8% in the euro area.** Uncertainty in respect of structural reforms and of the political situation hampered growth, which was slower than in 2017, when it grew by 2.6% and 2.4% respectively. Nevertheless, the growth rate remains positive and significant. The main contributions came from private consumption and investment, and to a lesser extent from the external sector and government expenditure. Private consumption and investment each accounted for about 40% of growth in both the EU and the euro area. Public consumption made a less significant contribution of about 10%. The external balance made the smallest contribution, accounting for about 10% of EU growth and about 5% of euro area growth.

Chart 1.3  
Contribution to GDP growth – Euro area  
Percentage change on previous year

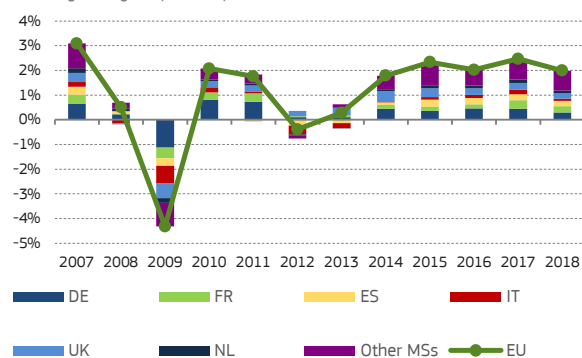


Source: Eurostat, National Accounts [nama\_10\_gdp]  
[Click here to download chart.](#)

**The external balance made the smallest contribution to GDP growth.** This drop was not offset by the developments in internal demand. External balance accounted for about 10% of EU growth and about 5% of euro area growth, as exports continued to perform below expectations. The weak export performance of the euro area was due mainly to a drop in exports of goods, even though exports of services remained robust. The deceleration of growth in world trade was felt relatively more strongly in the euro area, because of the geographical orientation and product specialisation of exports. However, to the extent that fundamentals continue to support

domestic demand, growth is expected to regain momentum once the temporary factors hampering growth fade.

Chart 1.4  
Member States' contribution to EU GDP growth  
Percentage change on previous year



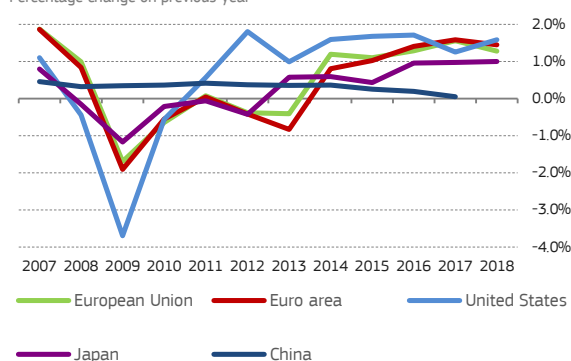
Source: Eurostat, National Accounts [nama\_10\_gdp]  
[Click here to download chart.](#)

**In 2018 the contribution to EU growth of the four largest economies (Germany, France, the UK and Italy) declined further.** Whereas in the previous two years they accounted for about half of total growth, in 2018 this share shrank to 43%. In particular, the contribution of German growth to that of the EU fell to 14.9, from 18.1% in 2017 and 22.9% in 2016: this is the smallest figure recorded since 2012. France's contribution accounted for 13.2%, the UK's for 10.5% and Italy's for 4.9%. Meanwhile the contribution of the smallest economies increased to 40% from 34% in 2017.

**In 2018 over a third of Member States recorded growth that was more than twice that of the EU.** Growth was particularly notable in Ireland, Malta, where reached 6.7%, and Poland, which recorded a rate of 5.1%. On the other hand, GDP in Belgium, Denmark, Germany, Greece, France, Italy and the UK grew less than in the EU overall. Italy recorded the lowest rate of GDP growth (0.9%).

## 2.2. Employment rises as the economy expands

Chart 1.5  
Employment growth in selected large economies  
Percentage change on previous year



Source: AMECO except China; IMF for China.  
[Click here to download chart.](#)

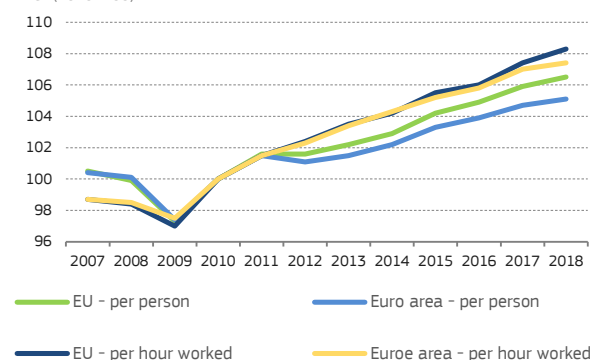
**Employment in the EU continued to expand through 2018 and in the first quarter of 2019, reaching the highest level ever recorded, 240.7 million.** This is 13.4 million more than when the Juncker Commission came into office in November 2014. Having been on a downward trend until 2013, employment has been growing robustly since then and in 2016 surpassed its pre-crisis high for the first time. In 2018, it grew by 1.3%. A similar trend was recorded in the euro area, where the total number of people employed in 2018 was 158 million, 1.4% more than in the previous year.

**In 2018 the growth of employment in the EU and the euro area was in line with developments was somewhat weaker than in the US.** In 2017, however, after several years of recording stronger results than Europe, the US experienced weaker expansion than Europe. Japanese employment, after some years of weak growth, continued the upward trend started in 2016 and grew in 2018 at a stronger pace than that of the EU and the Euro area.

**The number of hours worked per employed person in the EU and euro area continued their slow steady decline in 2018.** This number has been declining since 2012, in line with a decade-long steady downward trend. Thus the number of people employed grew faster than the total hours worked.

## 2.3. Productivity and labour costs

Chart 1.6  
Real productivity per person and per hour worked in the EU and in the euro area  
Index (2010=100)



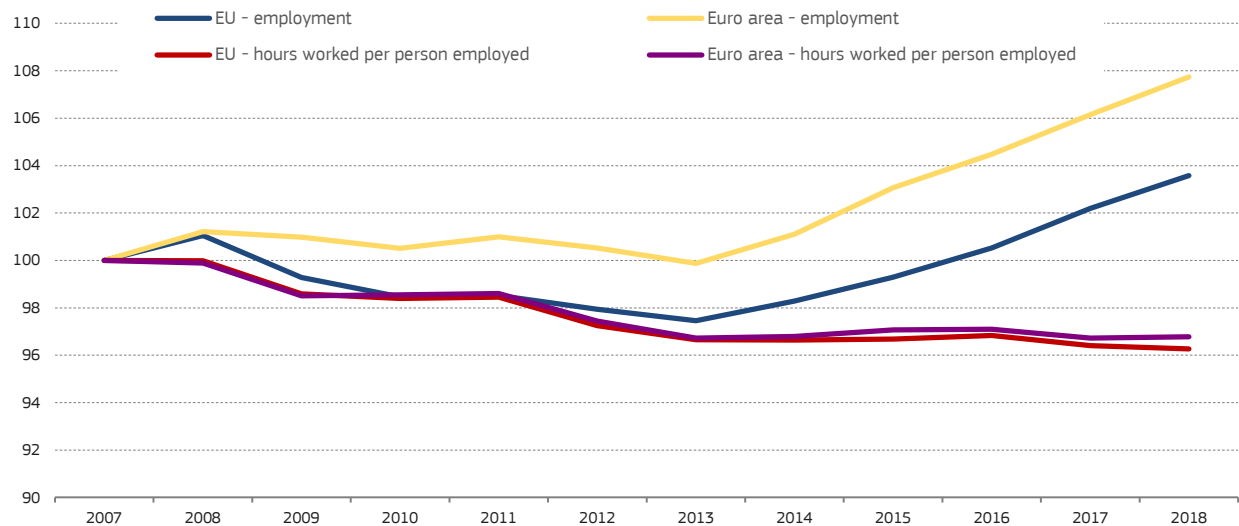
Source: Eurostat, National Accounts [nama\_10\_lp\_ulc]  
[Click here to download chart.](#)

**Productivity per hour worked has been increasing steadily in both the EU and the euro area.** In 2018 it was 12% (EU) and 10% (euro area) above the record low levels of 2009. However, productivity per person grew more slowly than productivity per hour worked, in line with trends over the last decade.

Chart 1.7

**Employment and total hours worked per person employed - European Union and euro area**

Index 2007 = 100



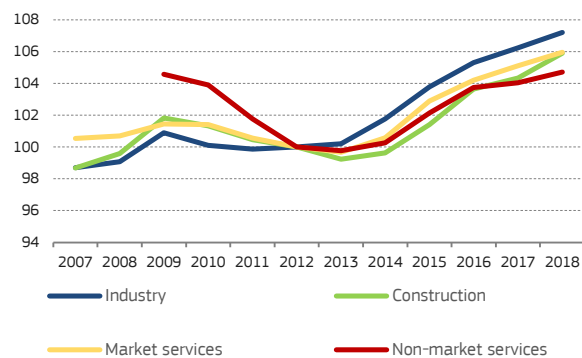
Source: Eurostat, National Accounts [nama\_10\_pe, nama\_10\_a10\_e]

[Click here to download chart.](#)

Chart 1.8

**Real labour cost by sector of economic activity in the EU**

Index - 2012 = 100



Note: Nominal labour cost index deflated by the harmonised index of consumer prices

Source: DG EMPL calculation on Eurostat data [lc\_lci\_r2\_a, prc\_hicp\_a1nd]

[Click here to download chart.](#)

The labour cost index, after the fall experienced in the years that followed the great recession, has been growing again since 2013 in all sectors of economic activity. Industry is the sector that has experienced the biggest increase in real terms, and its labour cost is 7.2% higher than it was in 2012. The next biggest increases have been in market services and construction, which have followed similar paths in the past decade, although construction suffered more in the aftermath of the crisis. In non-market services labour cost grew more slowly, and is now about 5% higher than in 2012. It is worth highlighting that between 2012 and 2018 GDP grew more than the real labour cost index in all sectors of economic activity, and in 2018 it exceeded the 2012 level by more than 10%.

### 3. LABOUR MARKET DEVELOPMENTS

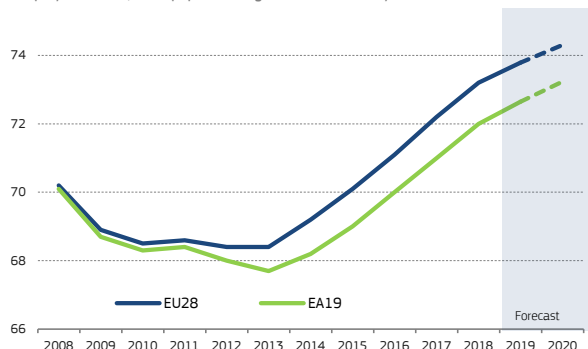
#### 3.1. Employment rates/levels

**The employment rate in the EU reached 73.2% in 2018 and 73.5% in the last quarter of the same year, the highest rates ever recorded.** Furthermore, the employment rate in full-time equivalents (FTE) grew for the fifth consecutive year and stood in 2018 at 67.2%, 2.2pp higher than in 2008.

Chart 1.9

**The employment rate is growing but at a slower pace**

Employment rate, % of population aged from 20 to 64 years



Note: The forecast is calculated with the estimation of employment growth and assuming a similar size of the workforce

Source: Eurostat, LFS [lfsi\_emp\_a], Commission Spring 2019 Economic Forecast and EMPL calculations

[Click here to download chart.](#)

**However, this positive performance masks a slowdown in the pace of growth of the employment rate.** The employment rate in 2018 grew by 1.0pp compared with 2017 to reach 73.2%, a yearly difference that is slightly lower than that recorded in 2017 (1.1pp). According to the Spring 2019 Commission forecasts, total employment will grow in 2019 and 2020 at a slower pace than in 2018; the forecasts also point out that "with moderate



economic growth lasting longer, the question arises as to how long and to what extent employment growth can continue".<sup>(12)</sup> If these slower growth dynamics continue, then the employment rate would reach 74.3% in 2020 and the 'EU 2020' employment rate target of 75% could therefore be slightly missed.

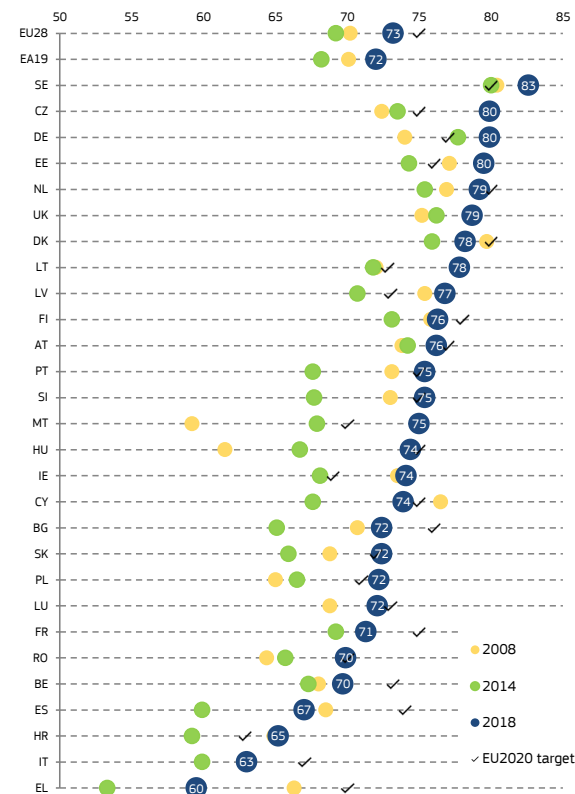
### Also, there are strong differences among Member States, regions and population groups.

The employment rates of Member States still vary greatly. There is a difference of about 23 pp between the lowest rate (Greece, 59.5%) and the highest (Sweden, 82.6%). Nonetheless, all Member States have seen an improvement in their employment rate in 2018. Also, the difference between the highest and lowest rate has been reduced by almost 1pp, suggesting that the employment rate continues on a path of upward convergence.<sup>(13)</sup>

Chart 1.10

#### Most Member States have already reached their 'EU2020' target

Employment rate, % of population 20-64



Note: No Europe 2020 target for the UK. FR 2008 data is missing. The Europe 2020 target for France excludes the overseas departments. The employment rate in 2018 for France without the overseas departments was 71.8%. The achievement of the national targets by all Member States does not imply the achievement of the EU28 target.

Source: Eurostat, LFS [lfsi\_emp\_a]

[Click here to download chart.](#)

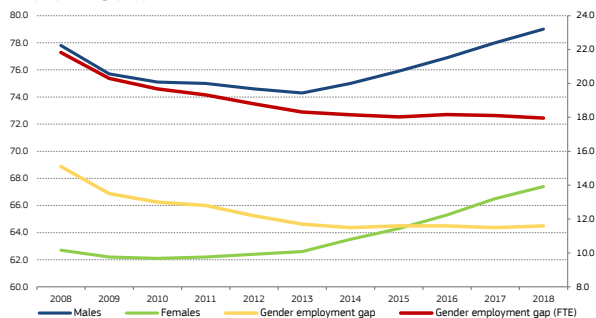
**There remain important gender-related difference in employment performances.** The gender employment gap is 11.6pp and has barely changed since 2013, although the trend in the last ten years has been towards convergence between male

and female employment rates. Between 2008 and 2013, as the overall employment rate fell, these rates fell, too, by 3.5pp for men and 0.1pp for women. During the recovery they have risen equally for both sexes. It is worth noting, however, that the gender employment gap measured in full-time equivalents (FTE) is higher and stood at 18pp in 2018, reflecting the higher incidence of part-time work among women (see below for more details). Recent improvements in the supply of childcare<sup>(14)</sup> may have had a positive effect in reducing the gender gap, but policies to support the participation of women in the labour market should be maintained and where possible reinforced in order to make further progress.<sup>(15)</sup>

Chart 1.11

#### The gender employment gap remains stable

Employment rates by sex (% of population aged 20-64 years, lhs) and gender employment gap (pps, rhs)



Note: The gender employment gap is calculated as the difference in the employment rate of men and women aged 20 to 64

Source: Eurostat, LFS [lfsi\_emp\_a] and EMPL own calculations

[Click here to download chart.](#)

**Employment rates have increased in all age groups and most notably among people aged 55-64.** The employment rate of older people (55-64) went up from 57.1% in 2017 to 58.7% in 2018. This may be due to the impact of demographic factors (as more active cohorts have replaced previous ones in past years) as well as to the effects of recent pension reforms in several Member States.<sup>(16)</sup> The employment rate in the largest age group (25-54) rose 0.8pp to 80.5%. For young people aged 15 to 24 it increased by 0.6pp to 35.4%, which is still lower than in 2008.

<sup>(14)</sup> See Chapter 4 for a more in-depth analysis of recent childcare developments in the EU.

<sup>(15)</sup> See Eurofound (2016): "these persistent disparities and significant cross-country differences represent an economic and social challenge and explain the emphasis policymakers put on women's integration into the labour market" (p85).

<sup>(16)</sup> See European Commission (2018c), pp. 91-95) for a more detailed analysis.

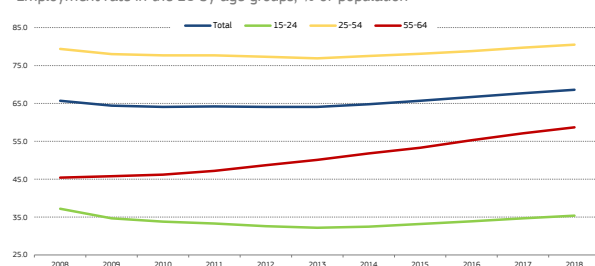
<sup>(12)</sup> European Commission (2019a): p 48.

<sup>(13)</sup> See European Commission (2018a), chapter 1, for a more detailed analysis of convergence in the EU.

Chart 1.12

### Employment rates grow for all age groups but more slowly for young people

Employment rate in the EU by age groups, % of population



Note: "Total" refers to the age group 15-64

Source: Eurostat, LFS [lfsi\_emp\_a]

[Click here to download chart.](#)

**Temporary employment as a proportion of total employment has remained broadly stable in the last two years.** However, it is still 0.6pp higher than in 2013. Temporary contracts for people aged 15-64 amounted in 2018 to 12.1% of total employment, just 0.1pp lower than in 2017. For women, the figure was 13.1%, about 2pp higher than that for men (11.2%); both figures were 0.1pp lower than in 2017. However, there are very wide disparities among Member States. Temporary work is at above 20%, and rising, in Spain and slightly below 20% in Poland – on a declining trend – and Portugal. The United Kingdom, Romania, Bulgaria and the Baltic States have rates below 5%.

**The majority of temporary employees in the EU continue to be in temporary work involuntarily.** They have represented over 50% of the total number of temporary workers for more than ten years. More women than men are involuntarily in temporary work (53.7% versus 51.9% of temporary employees in 2018), while for young employees (aged 15-24) the percentage is lower and stands at 29.9%. In five Member States (Spain, Croatia, Italy, Cyprus and Portugal), at least four out of five temporary employees are working involuntarily on this type of contract.

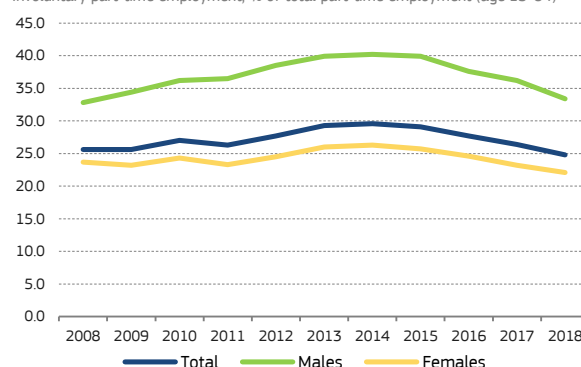
**Part-time work as a proportion of total employment decreased slightly, from 19.4% in 2017 to 19.2% in 2018.** The reduction has been greater, albeit from much higher levels, for women (down 0.4pp from 31.7% in 2017 to 31.3% in 2018) than for men (down from 8.8% in 2017 to 8.7% in 2018). The incidence of involuntary part-time work remains significant although in decline. In 2018 about a quarter of part-time workers said they would like to work more. <sup>(17)</sup> This percentage is higher among men (33.4%) than women (22.1%), and it is above 50% in several Member States (Bulgaria, Greece, Spain, Italy, Cyprus and Romania). As 75% of part-time workers are then voluntarily on this working pattern, this means that about 5% of all workers are involuntarily in part-time employment.

<sup>(17)</sup> Involuntary part-time employment is one of the indicators included under SDG8 (Decent Work and Economic Growth) in the European Commission's Reflection Paper "Towards a Sustainable Europe by 2030" (European Commission, 2019b).

Chart 1.13

### Involuntary part-time work remains high especially among men

Involuntary part-time employment, % of total part-time employment (age 15-64)



Source: Eurostat, LFS [lfsa\_eppgai]

[Click here to download chart.](#)

**In 2018, employment grew most in the services sector, in line with post-crisis trends.** According to LFS data, the services sector, pushed in particular by the "information and communication" subsector, grew by 1.3%, while industry, pulled by construction, grew by 1.0%. Employment in agriculture, on the other hand, shrank by 3.1% following a long-lasting declining trend.

**In 2018 the employment rate of host-country citizens in the EU was 6.9pp higher than that of foreign citizens (73.8% versus 66.9%).** <sup>(18)</sup> This difference increased in the years following the financial and economic crisis: it was 4.3pp in 2008. The Member States with the highest differences in favour of host-country citizens are Sweden, Finland, France and the Netherlands. In Luxembourg and Poland, by contrast, foreign citizens have higher employment rates than nationals by more than 5pp.

**However, the employment rate of non-EU citizens is much lower than that of EU28 nationals.** The average difference between non-EU foreign citizens and host-country citizens in the EU was 14.5pp (73.8% versus 59.3%), with the highest differences in Sweden, Belgium, Finland, Netherlands, and Germany. These countries, in particular Sweden and Germany, experienced a strong inflow of refugees, especially between 2014 and 2016, – although the gap was already large before 2014. The employment rate is higher for non-EU citizens than for nationals in a few Member States, most notably Romania (8pp) and to a lesser extent in Poland, Malta, Czechia, Slovakia and Italy.

## 3.2. Unemployment rates

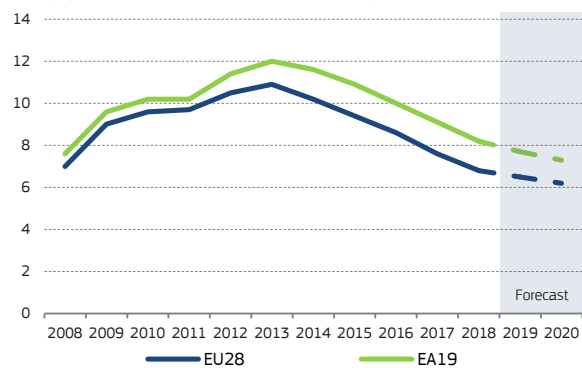
**The EU unemployment rate fell 0.6pp from 2017 to 2018, to reach a new historic low of 6.8% of the labour force.** It has declined further to 6.4% in

<sup>(18)</sup> Foreign citizens are here considered people of different citizenship, even of another EU Member State, from the country of residence. Section 5 of the Chapter will also present evidence on the employment and social conditions gaps between the non-EU born and the total population.



April 2019. Unemployment rates have fallen in all Member States, with especially strong declines in Cyprus (2.7pp), Croatia (2.5pp), Greece (2.2pp), Portugal (2.0pp) and Spain (1.9pp). Rates in several Member States have reached, or are very close to, the structural unemployment rate. <sup>(19)</sup>

Chart 1.14  
**Unemployment in the EU reaches a historic low**  
Unemployment rate, % of labour force from 15 to 74 years



Source: Eurostat, Unemployment series [une\_rt\_a] and European Commission Spring 2019 Forecast

[Click here to download chart.](#)

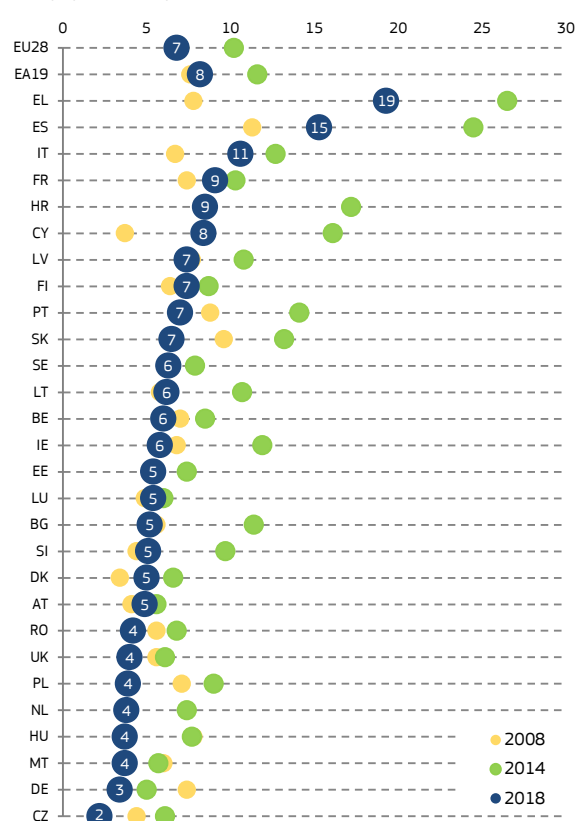
**The difference in unemployment rates between men and women is not very large overall.** Nonetheless, the female unemployment rate is 0.5pp higher than the male rate (7.1% versus 6.6%). The difference has been stable since 2017 but is still higher than in any of the years between 2009 and 2016. The relatively small difference is in part explained by women's lower activity rates and higher rates of involuntary part-time work.

<sup>(19)</sup> The estimated structural unemployment rate is the unemployment rate consistent with long-run price and wage stability. See European Commission (2018b), pp 18-20, for a more detailed analysis.

Chart 1.15

**All Member States have lower unemployment rates than in 2014**

Unemployment rates by Member States, % of labour force



Source: Eurostat, Unemployment series [une\_rt\_a]

[Click here to download chart.](#)

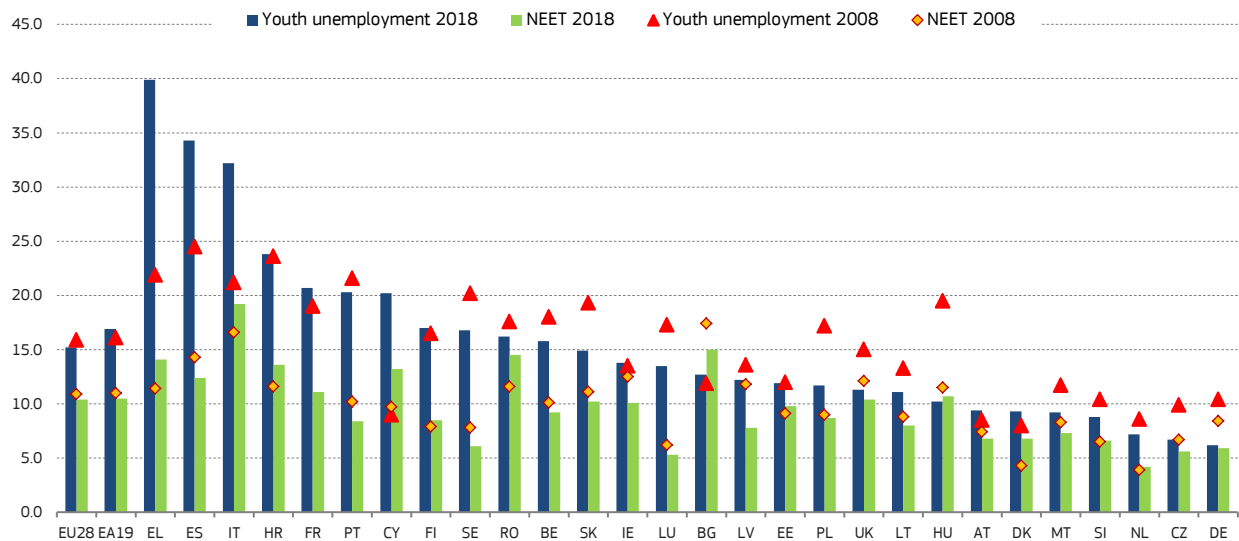
**Youth unemployment continued to decline, as in previous years.** In 2018, it stood at 15.2%. This is 0.7pp lower than the pre-crisis level of 2008. It further dropped in the first months of 2019 reaching 14.2% in April. The youth unemployment rate decreased in all Member States, but there are still huge differences within the EU. In Greece, the youth unemployment rate is slightly below 40% and more than 24pp above the EU rate. Rates in Spain and Italy are also above 30% (34.3% and 32.2% respectively) and therefore more than 15pp above the EU average. These high levels suggest that there are difficulties in integrating young workers into the economy, and they pose serious problems regarding the sustainability of welfare states in the Member States concerned. The youth unemployment rate is lower for women (14.5%) than for men (15.7%), a difference that has been roughly constant over the last eight years.

**The downward trend in the proportion of young people aged 15-24 who are neither in employment nor in education and training (NEET) continued throughout 2018.** The annual average was 10.4%, down 0.5pp from 2017. Significant reductions in NEET rates were recorded in most Member States and particularly in Cyprus, Latvia and Slovakia. However, rates in some countries are still well above 2008 levels, and most notably in Cyprus (3.5pp), Romania (2.9pp) and Greece (2.7pp). Italy is the country with the highest NEET rate, with almost

Chart 1.16

**Youth unemployment and NEET declined in almost all Member States but still with large differences**

Unemployment rate (% of labour force, 15-24) and young people aged 15-24 neither in employment nor in education and training (NEET) (% of total population)



Note: No FR data in 2008

Source: Eurostat, LFS [une\_rt\_a; ifsi\_neet\_a]

[Click here to download chart.](#)

one young person out of five in this situation (2.6pp more than in 2008).

**Long-term unemployment rates**

**Long-term unemployment decreased in 2018 for the fifth consecutive year, to 2.9% of the active population.** Gender differences are very small, with rates for women at 3.0% and for men at 2.8%. Very long-term unemployment <sup>(20)</sup> has also decreased, to 1.8%.

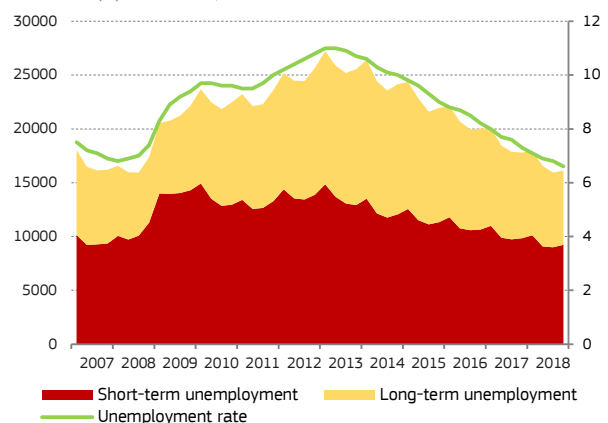
**The decrease in long-term unemployment is good news for the integration of unemployed people in the EU labour market.** In all Member States this indicator improved or remained stable, with the strongest decreases recorded in Greece, Cyprus and Portugal. Differences among Member States have decreased, although almost 13 percentage points divide the highest rate (Greece, 13.6%) from the lowest (Czechia, 0.7%).

<sup>(20)</sup> Very long-term unemployment refers to people who have not had a job for 24 months or more.

Chart 1.17

**Many people are still in long-term unemployment despite general labour market improvements**

Long-term and short-term unemployment (thousand people, lhs) and unemployment rates (% of population 15-74, rhs)



Note: Long-term and short-term unemployment figures are unadjusted, the unemployment rate is seasonally and calendar adjusted

Source: Eurostat, LFS [lfsq\_ugad, une\_rt\_q]

[Click here to download chart.](#)

**Long-term unemployment also decreased in 2018, but about 7 million people are still affected by it.** It decreased from 44.7% to 43.0% of total unemployment. Very long-term unemployment also decreased in 2018, from 27.9% to 26.7% of total unemployment. The long-term unemployed account for more than two thirds of all unemployed people in Greece, against less than 20% in Sweden. Member States with higher rates of unemployment tend to have a higher proportion of long-term unemployment, although in some countries such as Bulgaria and Slovakia, quite high levels of long-term unemployment co-exist with relatively low levels of unemployment, around or below the EU average.

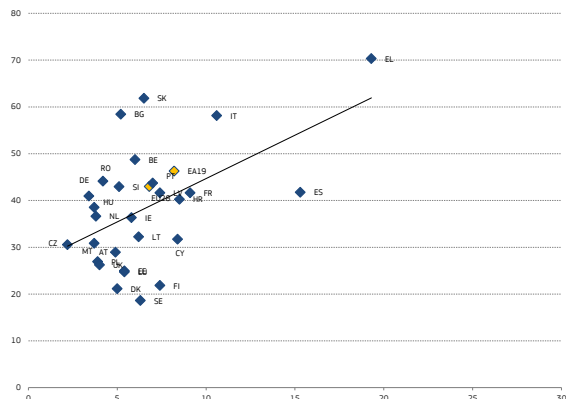
**The causes of the persistence of long-term unemployment may vary among Member States.** They include lack of economic growth, institutional

constraints and, in some cases, ineffective labour market policies for the activation and integration of unemployed people (Bentolila and Jansen, 2016; Council, 2016).

Chart 1.18

### Some Member States with high unemployment rates have also a high incidence of long-term unemployment

Long-term unemployment (% of unemployment) and unemployment rate (% of labour force 15-74)



Note: Long-term unemployment on y axis and unemployment rates on x axis. 2018 data

Source: Eurostat, unemployment series [une\_ltu\_a, une\_rt\_a]

[Click here to download chart.](#)

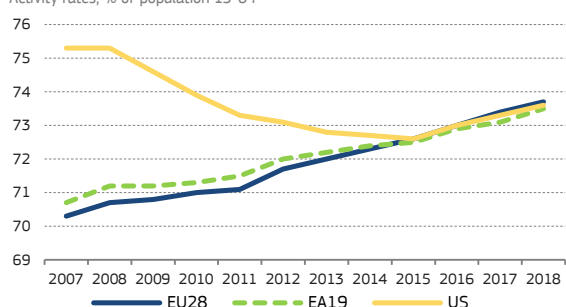
## 3.3. Activity rates

**The activity rate <sup>(21)</sup> for people aged 15-64 in the EU rose to a record 73.7% in 2018, 0.3pp more than in 2017.** The activity rate of women stood at 68.3% while that of men was significantly higher at 79.2%. The sustained increase of the activity rates in the EU can be explained by several factors, including increases in the retirement age (see European Commission, 2018b, p.14).

Chart 1.19

### The activity rate follows an increasing trend

Activity rates, % of population 15-64



Source: Eurostat, LFS [lfsi\_emp\_a] and OECD

[Click here to download chart.](#)

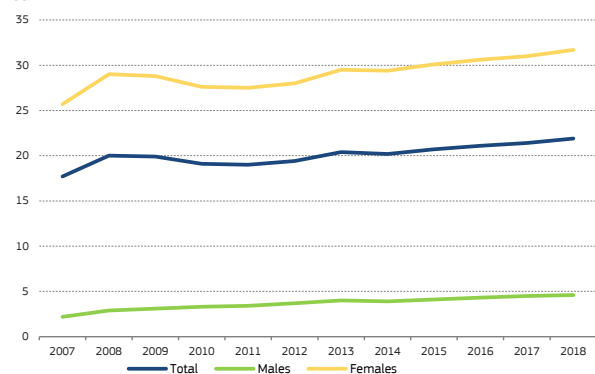
**The gender gap in labour force participation amounted to roughly 11pp.** One of the causes <sup>(22)</sup> of this gap may be the fact that many more women than men have caring responsibilities <sup>(23)</sup> The

proportion of people aged 20-64 who are inactive due to caring responsibilities stood at 21.9% in the EU in 2018: it has risen every year since the start of the current series in 2005, when it amounted to 16.9%, and has increased for both sexes in the last years. The percentage of men who are inactive for this reason has increased in recent years and was 4.6% in 2018. This cause of inactivity affects women disproportionately, representing the reason why 31.7% of them are not participating in the labour market. In 2018, this was the main reason why women in the EU are inactive, ahead of own illness or disability, and retirement.

Chart 1.20

### Far more women than men are inactive because of their caring responsibilities

Percentage of population (aged 20-64 years) inactive due to caring responsibilities by sex



Note: This indicator shows the share of inactive population whose main reasons for not actively seeking work are caring responsibilities. 'Inactivity due to caring responsibilities' refers to looking after children or incapacitated adults and other family or personal responsibilities.

Source: Eurostat, LFS [lfsa\_igar; sdg\_05\_40]

[Click here to download chart.](#)

**The increase in the activity rate in 2018 was again mainly driven by the rise in participation of people aged 55-64.** The activity rate of people in this age group rose by 1.4pp, from 60.6% in 2017 to 62.0% in 2018. The activity rate of the 25-54 age group rose 0.2pp, to reach 85.9%, while that of the 15-24 age group remained stable at 41.7%.

**On average, the activity rate for people aged 15-64 in the EU in 2018 was slightly higher for citizens of the reporting country (73.8%) than for foreign citizens (72.4%).** <sup>(24)</sup> However, the situation varied between Member States. In half of the Member States, labour force participation was higher among citizens of the reporting country, with the widest participation gaps in the Netherlands (12.3pp) and Germany (10.1pp). In the other half, foreign citizens had a higher activity rate than citizens of that Member State, with the strongest differences in

"Inactivity due to caring responsibilities" refers to 'looking after children or incapacitated adults' and 'other family or personal responsibilities'.

<sup>(24)</sup> Foreign citizens are here considered people of different citizenship, even of another EU Member State, from the country of residence. See also footnote in section 3.1. Only Member States for which reliable data are available are taken into account in this analysis.

<sup>(21)</sup> The activity rate is the measure of the participation of population, whether employed or unemployed, in the labour market.

<sup>(22)</sup> See also European Commission (2017a, p.3).

<sup>(23)</sup> The indicator measures the reasons why individuals are not actively seeking work, so they are neither employed nor unemployed and considered to be outside the labour force.

Luxembourg (9.7pp), Malta (9.4pp) and Poland (8.3pp). Furthermore, within the foreign population there is a marked difference in the participation rate. In the EU, the activity rate of those with citizenship from another EU country was 79.8%, 12.9pp higher than for non-EU citizens (66.9%). In almost all Member States for which there are reliable data the activity rate of foreigners with citizenship from another EU country is higher than that of non-EU foreign citizens, with the widest gaps in Finland (19.8pp), Germany (19.4pp) and the Netherlands (18.9pp). The activity rate is higher for citizens from non-EU countries in Slovakia, Greece and Estonia.

### 3.4. Regional dimension

#### Employment rates

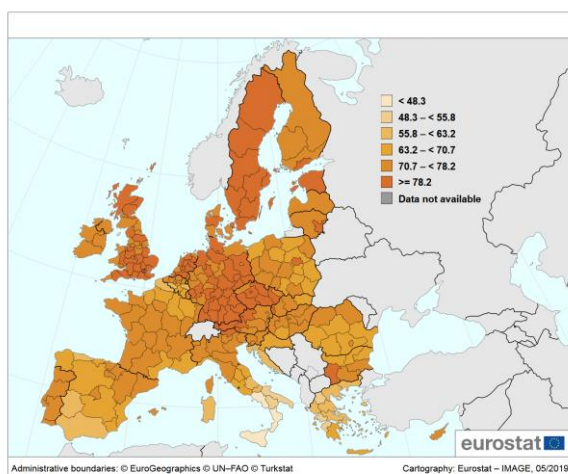
**There were important variations in the employment rate across EU regions (25) in 2018.**

The highest rates were recorded in Stockholm, Sweden (85.7%), Åland, Finland (85.1%) and Oberbayern, Germany (84.1%). The lowest rates were found in French overseas departments (Mayotte, La Réunion and Guyane) and southern Italian regions (Sicilia, Campania, Calabria and Puglia), all below or around 50%.

Figure 1.1

**The employment rate varies strongly across EU regions**

Employment rates by NUTS2, % of population aged 20-64



Note: 2018 data

Source: Eurostat [lfst\_r\_lfe2empt]

[Click here to download figure.](#)

**The dispersion of regional employment rates (26) across the EU stood at 12.2% in 2017, the**

(25) In this subchapter "regions" are those at NUTS2 level except for the urban/rural dimension where they are those at NUTS3 level.

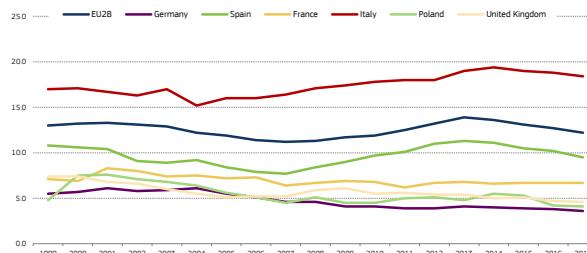
(26) The **dispersion of employment (unemployment) rates** is the coefficient of variation of regional employment (unemployment) rates. The **coefficient of variation** is defined as the ratio of the standard deviation to the mean. This coefficient of variation is multiplied by 100 to make a percentage. This indicator measures the spread of regional employment (unemployment) rates as regards the national or EU employment (unemployment) rate. If all the regional employment (unemployment) rates of a country are equal, the dispersion is zero. Significant differences between regional

**lowest level since 2011.** However, the spread in regional employment rates remains above the lowest level observed since the start of the series in 1999, which was recorded in 2007 (11.2%). The dispersion of employment rates is highest in Italy (18.4%), Spain (9.5%) and Belgium (9.0%). *Figure 1.1* highlights a divide between north-western and south-eastern EU regions. According to the latest Cohesion Report (European Commission, 2017b), north-western regions can benefit from better interconnections and a more innovative environment. The Cohesion Report suggests that stronger investment in innovation and skills is needed to reduce regional differences.

Chart 1.21

**Regional dispersion of employment rates increased during the crisis but is now on a descending trend**

Dispersion of regional employment rates of age group 15-64 by NUTS 2 regions, %



Source: Eurostat, [lfst\_r\_lmdr]

[Click here to download chart.](#)

#### Unemployment rates

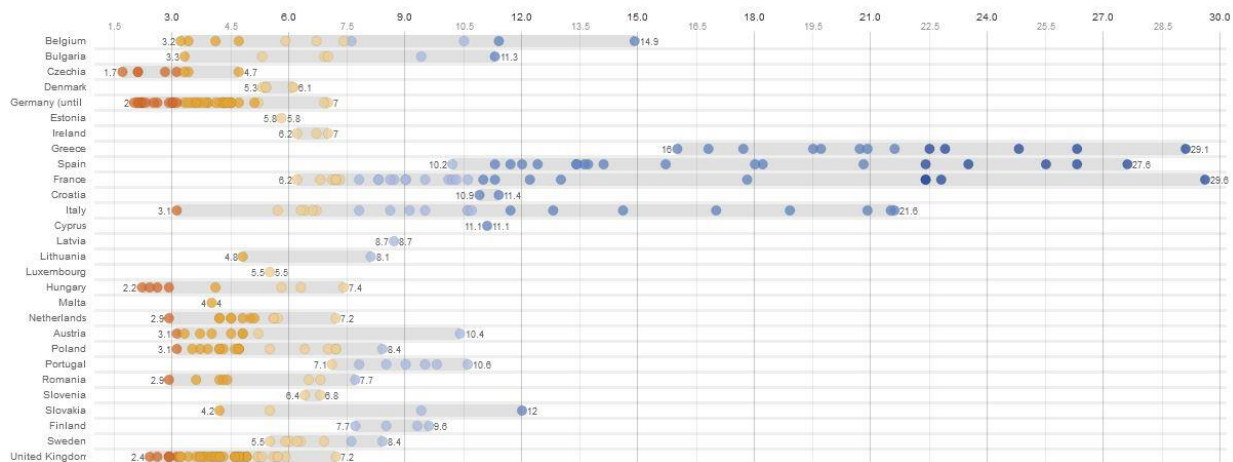
**The highest regional unemployment rates in the EU in 2018 were recorded in Mayotte, France (35.1%), Ceuta, Spain (29.0%), and Dytiki Makedonia, Greece (27.0%).** The lowest levels were in Praha and Jihozápad, Czechia (1.3% and 1.5% respectively), and Mittelfranken, Germany (1.8%).

employment (unemployment) rates within a country imply a fairly wide dispersion.

Figure 1.2

**Differences in unemployment rates among EU regions are still very wide**

Unemployment rates by NUTS2 regions, % of labour force aged 15 to 74



Note: 2017 data

Source: Eurostat, Regions and Cities Illustrated

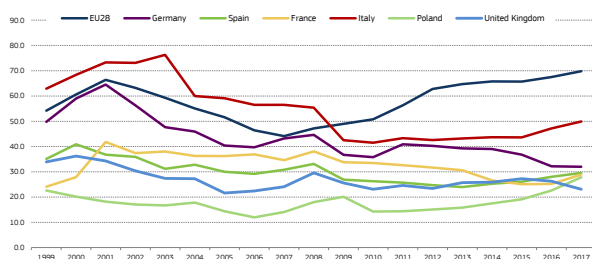
[Click here to download figure.](#)

**Unlike the equivalent measure for employment rates, the dispersion of regional unemployment rates<sup>(27)</sup> has diminished for several Member States but has increased over recent years for the EU as a whole.** It stood at 69.8% in 2017, the tenth consecutive year of increase (except for a small decline in 2015) from the level of 44.1% in 2007. This suggests that while within-countries differences have diminished for large countries like Germany or Italy, often as a consequence of the reduction of unemployment, differences among regions across the EU have increased. The latest Cohesion Report (European Commission, 2017b) already pointed out that the narrowing in regional disparities in terms of GDP growth had not been reflected in a reduction of differences in unemployment. This could be due to a crisis in the competitiveness of middle-income regions ("middle-income trap") and in the reduction of public investment following the economic crisis (see European Commission, 2017b, pp.xii, xvii).

Chart 1.22

**The dispersion of unemployment rates among EU regions has been on a growing trend since 2007**

Dispersion of regional unemployment rates by NUTS 2 regions, %



Source: Eurostat, [lfst\_r\_lmdur]

[Click here to download chart.](#)**3.5. Urban/rural dimension<sup>(28)</sup>****Employment rates**

**The (15-64) employment rate in 2017 was higher in urban areas than in rural areas for 15 out of 23 Member States with available data.** This proportion has remained fairly stable over the last 15 years. The employment rate has increased on average in all urban and rural areas within Member States since 2014, with the highest increases in the urban areas of Hungary (6.5pp) and Lithuania (6.1pp), and the rural areas of Hungary (6.4pp) and Spain (5.8pp). According to the latest Cohesion Report (European Commission, 2017b), p.58, the population in rural areas increased slightly between 2005 and 2015, but only thanks to an increase in net migration, while in urban areas the population has grown because of a positive balance between births and deaths. This could put a strain on the employment rates of rural areas, considering that the integration of people from a different region in the labour market can be more difficult than the integration of local people.

<sup>(28)</sup> Eurostat defines areas as "predominantly" urban or "predominantly" rural. For ease of reading, they will be referred to in this section as simply "urban" and "rural" areas, respectively. Intermediate areas have not been included in the analysis of employment and unemployment rates. On the "urban-rural" typology please see: [https://ec.europa.eu/eurostat/statistics-explained/index.php/Archive:Urban-rural\\_typology](https://ec.europa.eu/eurostat/statistics-explained/index.php/Archive:Urban-rural_typology).

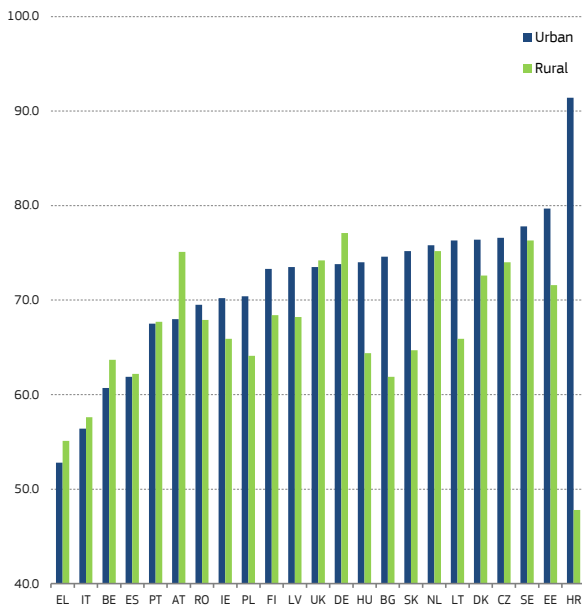
<sup>(27)</sup> See previous footnote.



Chart 1.23

### Employment rates tend to be higher in urban areas than in rural ones

Employment rates by territorial typology, % of population 15-64 years



Note: Year 2017

Source: Eurostat, [urt\_lfe3emprt]

[Click here to download chart.](#)

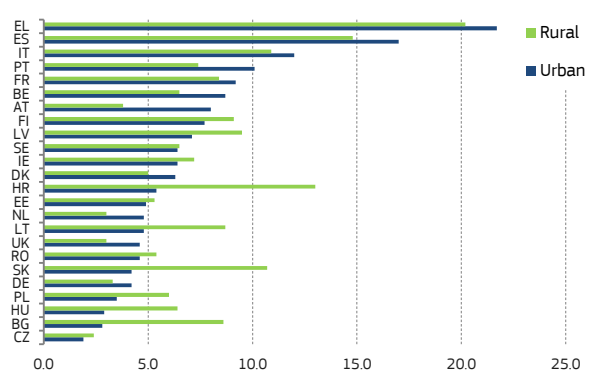
## Unemployment rates

**In 2017, for the 13 EU Member States out of the 24 for which data is available, the unemployment rate of people aged 15 years or over was higher in rural areas than in urban areas.** This disparity has evolved over time. For example, in 2005 the unemployment rate was still higher in urban areas for 15 out of 21 Member States. However, the unemployment rate differences between rural and urban areas have declined in recent years in some Member States. Between 2014 and 2017, the difference has decreased in Bulgaria from 8.6pp to 5.8pp, in Ireland from 2.8pp to 0.8pp, in Croatia from 11.3pp to 7.6pp and in Slovakia from 10.3pp to 6.5pp. Except for the urban areas of Finland and Austria, the tendency since 2014 has been towards a reduction of average unemployment rates in both urban and rural areas in all Member States.

Chart 1.24

### Differences in unemployment rates between urban and rural areas can be high, but with variations among MS

Unemployment rates by territorial typology, % of labour force 15 years or over



Note: Year 2017

Source: Eurostat, [urt\_lfu3rt]

[Click here to download chart.](#)

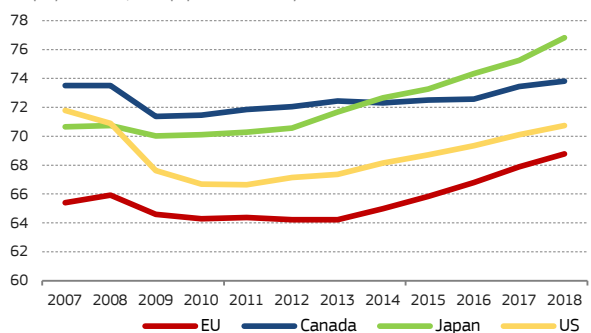
## 3.6. International dimension

**According to OECD data, the employment rate of the EU28 in 2017 was lower than that of other major world economies.** However, the EU has been able to reduce this gap in recent years. In 2018 the EU's employment rate "deficit" with respect to the US and Canada was the lowest since 2000. Only in comparison with Japan was the gap lower in the first decade of the century, having remained stable over the last 5 years at about 7.5-8pp.

Chart 1.25

### The EU is reducing the employment rate gap with US and Canada

Employment rate, % of population 15-64 years



Source: OECD

[Click here to download chart.](#)

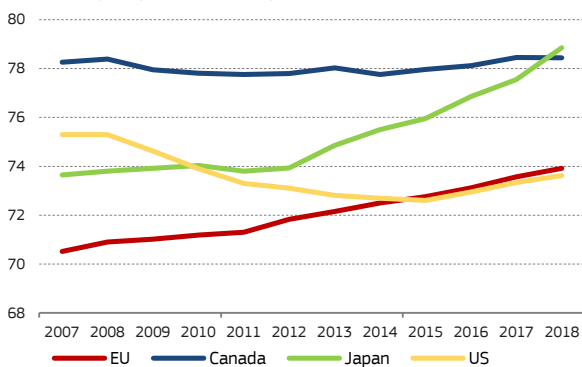
**The gap in the rate of labour force participation between the EU and the other major economies has also been reduced.** The difference with Canada is below 5pp, down more than 3pp since 2005. The EU participation rate has exceeded that in the US since 2015, partly due to the fact that the US was the only major world economy to experience a prolonged decline (2008-2015) in labour force participation following the financial and economic crisis. The participation rate in Japan exceeded that of the EU by about 5pp. This could be the consequence of a shortage in the Japanese labour supply due to an ageing population combined with an improvement in

the integration of women and older workers in the labour market. <sup>(29)</sup>

Chart 1.26

**The EU's activity rate has caught up with the US's and is getting closer to Canada's**

Labour force participation rate (15-64 years)



Source: OECD

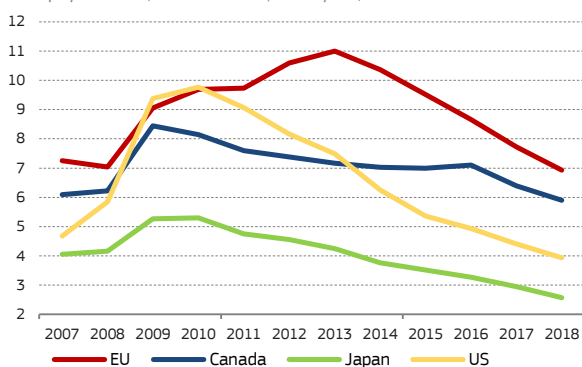
[Click here to download chart.](#)

**The rate of unemployment in the population aged 15-64 has been systematically higher in the EU than in other major economies.** This gap has nevertheless been reduced since 2013, its extent is all the more remarkable considering that, as seen above, the participation rate in the EU has grown faster than in these other economies, with the exception of Japan. <sup>(30)</sup>

Chart 1.27

**The unemployment rate in the EU is higher than but approaching the rates of other major economies**

Unemployment rate (% of labour force, 15-64 years)



Source: OECD

[Click here to download chart.](#)

## 4. SOCIAL SITUATION, POVERTY AND INCOME DEVELOPMENTS

**The social situation in the EU continues to improve.** In 2017 <sup>(31)</sup> nearly 113 million people were

<sup>(29)</sup> See European Commission. (2018b) for a more detailed analysis (p.13).

<sup>(30)</sup> See European Commission. (2018b) for a more detailed analysis (pp. 10-13).

<sup>(31)</sup> Note on the reference year: EU-SILC data, used in poverty and inequality indicators, reflect incomes of the previous year (except for the UK and Ireland where incomes refer to the interview period). However, in this document, the reference year is the survey year and not the income year. This choice is for consistency with indicators commonly used: Eurostat indicators

living at risk of poverty or social exclusion (AROPE), which was 10.8 million fewer than at the peak of 2012. Median income has been increasing in real terms in most Member States (*Chart 1.47*) and the number of people in material deprivation declined. Disposable income inequality was stable in 2014 and 2015 and then decreased slightly in 2016 and 2017.

**Flash estimates <sup>(32)</sup> from Eurostat show that in nearly all Member States there were only minor changes in the at-risk-of-poverty rates (AROP) in 2018.** The exceptions are Greece, Portugal and Romania with significant decreases and the UK with a very slight increase. However, for EU-28 one could expect the AROP to continue the decrease started in 2017, due to the three mentioned countries and combined with small decreases in other countries. Favourable developments in the economic situation, in the labour market and in household incomes in 2017 are likely to have led to improvements in the social situation.

### 4.1. Households' financial situation is improved but not yet back to pre-crisis levels

**Disposable income per capita still below pre-crisis level in eight Member States**

**In 2017 the disposable income of households <sup>(33)</sup> (GDHI) per capita exceeded the pre-crisis level of 2008 in the euro area.** This target was already achieved in the EU as a whole in 2015. However, there are still eight Member States that are not yet back to the 2008 level (*Chart 1.29*). In particular, GDHI per

and most of EMPL monitoring tools and reports use the survey year. Moreover AROPE combines AROP, VLWI (previous year) and SMD (survey year). The 2017 reference year is based on EU-SILC 2017, which reflects the 2016 income year and activity status in 2016.

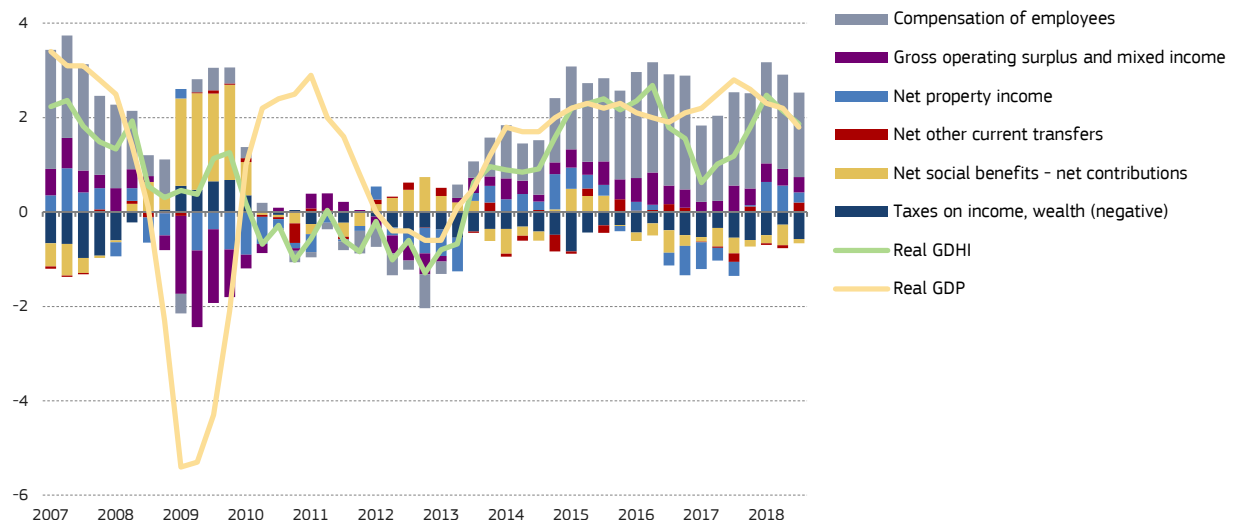
<sup>(32)</sup> A flash estimate is an early estimate for an economic variable of interest over the most recent reference period and is normally calculated on the basis of a statistical or econometric model. The flash estimate should have a release date appreciably earlier than the first release date of the actual data for that variable. Although it is likely calculated using a more incomplete set of information than the set used for traditional estimates, it is produced using the same methodology that is employed for the regular estimates. Statistical techniques can help in adjusting the temporary incomplete observations.

<sup>(33)</sup> Gross disposable household income (GDHI) is the amount of money that all of the individuals in the household sector have available for spending or saving after income distribution measures (for example, taxes, social contributions and benefits) have taken effect. The households sector is combined with non-profit institutions serving households (NPISH) under a single heading. The NPISH sector is relatively small. Yearly gross disposable income of households and adjusted gross disposable income of households in real terms per capita can be found on the Eurostat non-financial transactions database: `nasa_10_nf_tr`. Quarterly unadjusted and seasonally adjusted, gross disposable income of households and adjusted gross disposable income of households in real terms per capita are available on the Eurostat non-financial transactions database: `nasq_10_nf_tr`. EU and EA19 quarterly seasonally adjusted, adjusted gross disposable income of households in real terms per capita (% change on previous period) are available under `nasq_10_ki`.

Chart 1.28

**Disposable household income supported primarily by higher income from work**

GDP and GDHI growth (% change on previous year), and contribution of GDHI components (pps), EU



Note: The nominal GDHI is converted into real GDHI by deflating with the price-index of household final consumption expenditure [prc\_hicp\_aind].

Source: DG EMPL calculations based on Eurostat data, National Accounts [nasq\_10\_nf\_tr, namq\_10\_gdp]; Data non-seasonally adjusted

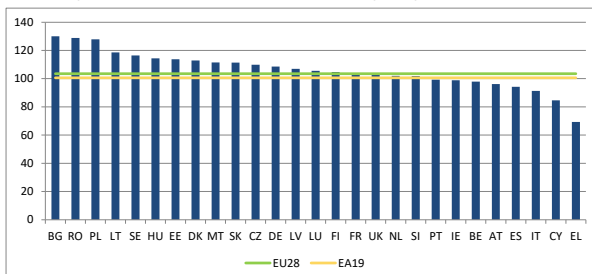
[Click here to download chart.](#)

capita is about 30% less than in 2008 in Greece, 15% less in Cyprus, 9% less in Italy, 6% less in Spain and 4% less in Austria. Belgium, Ireland and Portugal record also levels of GDHI per capita below 2008 by 2% or less.

Chart 1.29

**The GDHI per capita in eight Member States is not yet at 2008 levels**

Gross disposable income of households in real terms per capita (2008=100)



Note: Year 2017. Data not available for Croatia.

Source: Eurostat, National Accounts [tepsr\_wc310]

[Click here to download chart.](#)

**Aggregate disposable household income benefits from higher income from work**

**Aggregate disposable income of households in the EU increased further in 2018.** After dropping to a low point in 2012-2013, gross disposable household income has been increasing in real terms since then. Household income continued to benefit from expansion in economic activity and improved labour market conditions (Chart 1.28).<sup>(34)</sup> In the EU, GDHI had returned to its previous peak of 2008-2009 by 2015. In the euro area, where GDHI had dropped much more steeply than in the EU as a whole, it returned to its previous peak in 2016. In 2018, GDHI annual growth in

real terms was over 2% in EU and 1.5% in the euro area.

**Households have continued to benefit from higher income from work, while social benefits have stabilised over the last years.** The labour income of both employees and the self-employed resumed its growth in 2014, mainly due to the recovery in the labour market, and has continued since then. Growth in property income and other transfers has been mixed in recent years. At aggregate level, households began to get less support in social benefits and to make higher contributions as market incomes improved. Increases in social benefits have moderated since the second half of 2016 and virtually stabilised in 2017. This development, combined with increases in social contributions which have been particularly strong since 2016 (Chart 1.28)<sup>(35)</sup>, resulted in the 'net social benefits-net social contributions' indicator becoming negative in the last few years.

**More social protection expenditure went towards old-age pensions and health needs**

**Social protection played a major role in stabilising incomes between 2007 and 2009, especially for the unemployed.** After some reduction of benefits in 2011-2012 for all categories of beneficiaries from social protection, social expenditure started to accelerate again in real terms from 2013 (Chart 1.30).<sup>(36)</sup> Growth in expenditure

<sup>(35)</sup> For a detailed discussion of disposable household income from work and wealth across different household compositions, based on the Household Finance and Consumption Survey (HFCS), see European Central Bank <https://www.ecb.europa.eu/pub/pdf/scpsps/ecbsp18.en.pdf>.

<sup>(36)</sup> To reflect trends in real social expenditure, the harmonised index of consumer prices (HICP) is used as a deflator. It allows estimation of the trend in the overall real value or purchasing power of social expenditure. Inflation reflects the differential in HICP growth from one year to the other. When inflation is

<sup>(34)</sup> See European Commission (2018b).



reached 3% in 2015, driven in particular by in-kind expenditure. <sup>(37)</sup>

**By 2016, social protection expenditure shifted to structural expenses (old-age pensions and healthcare).** The increases in social expenditure in the years 2013 to 2015 (*Chart 1.31*) were mainly due to further increases in spending on old age (driven partly by demographic factors) and on healthcare. By contrast, expenditure on unemployment stabilised in 2013 and declined in 2014, as the economic environment improved. Expenditure on families, housing and combating social exclusion increased slightly in 2014-2015. <sup>(38)</sup>

Chart 1.30

#### Old-age pensions and health-related expenditure drive up social protection spending

Growth in social protection expenditure (% change on previous year, in real terms) and contribution by functions (pps), EU



**Note:** The nominal expenditure is converted into real expenditure by deflating with the Harmonised Index of Consumer Prices (HICP). Inflation reflects the differential in HICP growth from one year to the other. When inflation is constant it has no impact, when inflation is declining it contributes positively, when inflation increases it contributes negatively. PL excluded from growth in 2014.

**Source:** Eurostat, ESSPROS [spr\_exp\_sum] and Price Statistics [prc\_hicp\_aind]; DG EMPL calculations

[Click here to download chart.](#)

### Social protection expenditure continued to increase in nearly all Member States in 2016.

Expenditure on old-age pensions and survivors' pensions increased in most Member States (partly reflecting demographic change) except in Denmark, Lithuania, UK and Greece where expenditure on pensions declined (*Chart 1.31*, right column). Sickness and disability expenses contributed significantly to the overall expenditure growth in most Member States, except in UK and Finland where expenses on sickness and disability declined (*Chart 1.31*, right column).

constant it has no impact, when inflation is declining it contributes positively, when inflation increases it contributes negatively. The HICP is a price index that reflects changes in prices of a basket of goods and services, which appears closer to the actual expenditure on consumption of households than the deflator of household consumption from the National Accounts (which also includes imputed rents, for instance).

<sup>(37)</sup> The available National Accounts data disaggregate expenditure by in-cash and in-kind, but do not disaggregate it by function. The National Accounts data on government expenditure are available through 2016, as covered by the ESDE Annual Review.

<sup>(38)</sup> This is in line with many country-specific recommendations of the European Commission to shift social spending towards working-age adults (European Commission 2019).

**Between 2012 and 2016, expenditure on pensions in countries with large crisis-related fiscal consolidation needs, such as Greece and Cyprus, decreased.** Greece and Croatia spent less on sickness and disability; and Lithuania spent less on social exclusion (*Chart 1.31*, left column). Expenditure on unemployment benefits declined notably in some Member States, including Belgium, Cyprus, Ireland, Portugal and Spain, as labour markets improved (*Chart 1.31*, left column).

### 4.2. Social transfers mitigate persistent income inequality in the EU

**Disposable income inequality in the EU appeared to be slightly lower in 2017 (income year 2016) than in the previous year, but still slightly higher than in 2012.** <sup>(39)</sup> Inequality at EU level, as measured by the GINI coefficient, <sup>(40)</sup> increased between 2012 and 2014 and then decreased for three consecutive years (*Chart 1.32*). The quintile share ratio S80/S20 <sup>(41)</sup> indicated that the top quintile had an equivalised disposable income around five times higher than that of the lowest quintile. In Lithuania and Bulgaria the S80/S20 ratio exceeded 7.0 in 2017 while in Romania and Spain it was equal to 6.5 or higher.

<sup>(39)</sup> The reporting year in this chapter refers to the EU-SILC survey year, which measures income of the previous year. The latest survey 2017 data refer to income distribution in 2016.

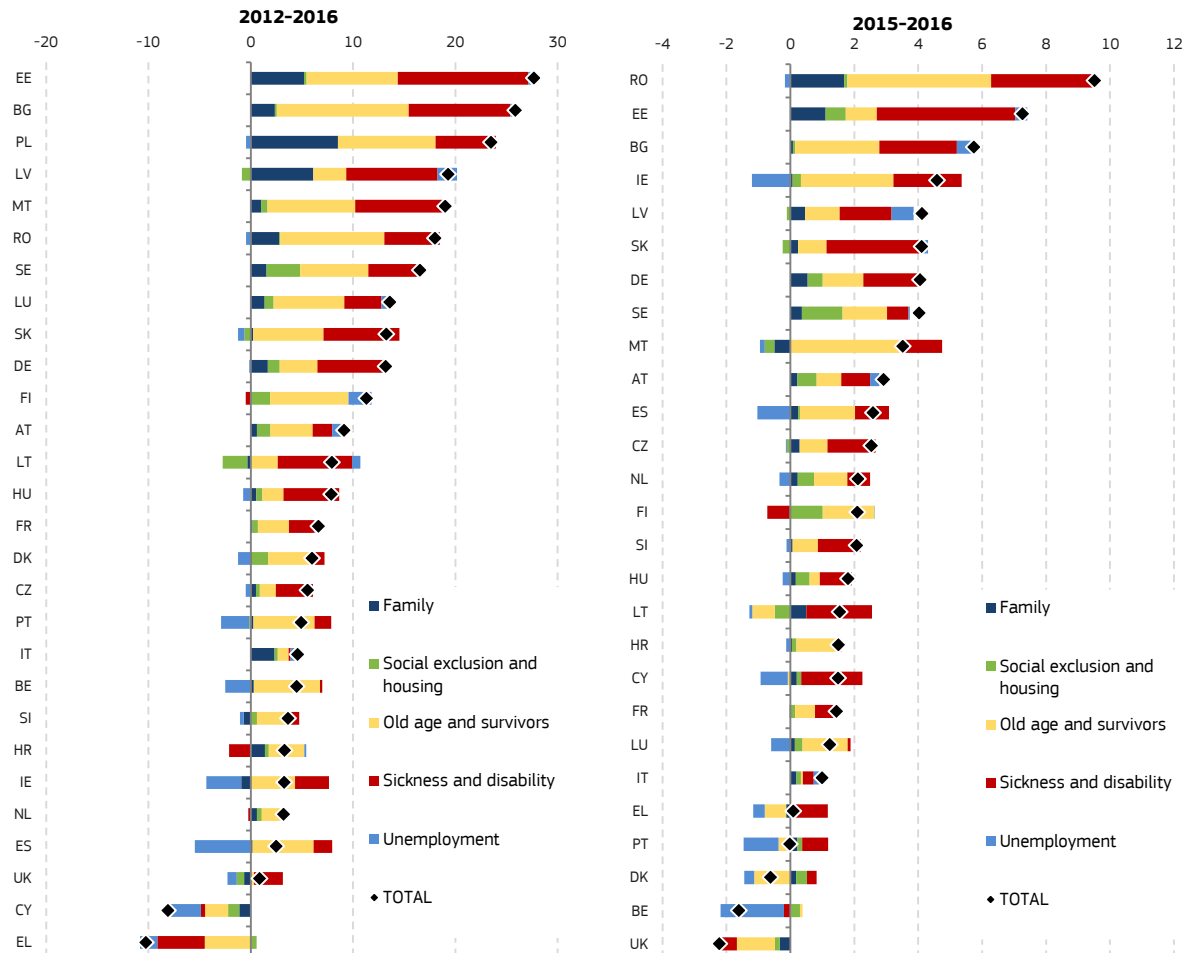
<sup>(40)</sup> The Gini coefficient is an indicator with a value between 0 and 1 (between 0 and 100 in this chart). Lower values indicate higher equality. In other words a value equal to 0 indicates everybody has the same income, a value equal to 1 indicates that one person has all the income. Gini is based on total equivalised disposable household income. The year refers to the EU-SILC survey year referring to incomes of the previous year except for IE and UK.

<sup>(41)</sup> The S80/S20 income quintile share ratio refers to the ratio of total equivalised disposable income received by the 20% of the country's population with the highest equivalised disposable income (top quintile) to that received by the 20% of the country's population with the lowest equivalised disposable income (lowest quintile).

Chart 1.31

**Social protection expenditure increases in most Member States**

Growth in social protection expenditure in 2012-2016 and in 2015-2016 (% change, in real terms) and contribution (pps) by functions, EU Member States



Note: The nominal expenditure is converted into real expenditure by deflating with the Harmonised Index of Consumer Prices (HICP). Poland data from 2014.

Source: Eurostat, ESSPROS [spr\_exp\_sum] and Price Statistics [prc\_hicp\_aind]; DG EMPL calculations

[Click here to download chart.](#)

**According to Eurostat flash estimates, inequality remained stable in (income year) 2017.** Flash estimates for the income year 2017, released as experimental data by Eurostat in Autumn 2018, indicate that no statistically significant change in inequality, as measured by S80/S20, will be observed between (income years) 2016 and 2017 in most Member States. <sup>(42)</sup> Inequality was estimated to have decreased significantly only in Luxembourg and to a lesser extent in Greece and Cyprus. However, overall in EU28 one could expect slight reductions.

<sup>(42)</sup> See report on Flash Estimates by Eurostat at <http://ec.europa.eu/eurostat/web/experimental-statistics/income-inequality-and-poverty-indicators>.

Chart 1.32

**Income inequality in the EU before and after social transfers has been fairly stable over the last decade**

GINI coefficient before social transfers and GINI coefficient of disposable income, EU



Note: The Gini coefficient is an indicator with a value between 0 and 1 (0 to 100 in this chart). Lower values indicate higher equality. In other words a value of 0 indicates everybody has the same income, a value of 100 indicates that one person has all the income. Gini is based on total equalised disposable household income. The year refers to the EU-SILC survey year; income measured is from the previous year. Values refer to EU27 between 2005 and 2007. The confidence intervals may suggest that the yearly changes in the Gini coefficient may not always be statistically significant.

Source: Eurostat, EU-SILC [ilc\_di12, ilc\_di12c]

[Click here to download chart.](#)

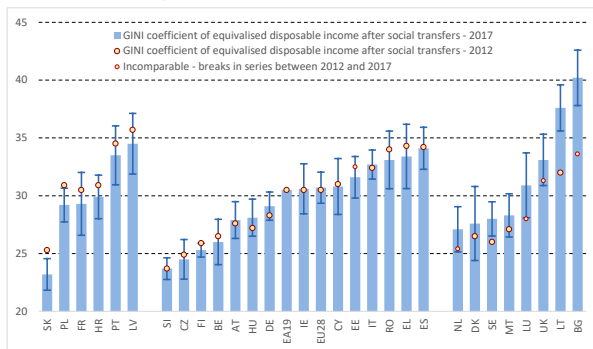
## Progress in reducing inequality varies across Member States

**Income inequality increased in eight Member States and decreased in six between 2012 and 2017.** Several Member States (notably Bulgaria and Lithuania)<sup>(43)</sup> saw increases in disposable income inequality between 2012 and 2017 (*Chart 1.33*). The extent to which the redistribution had an effect on inequality differed. The impact of social transfers other than pensions on income inequality (shown by the green parts of the bars (*Chart 1.34*)) differed across Member States. Social transfers reduced income inequality by less than 10% in Bulgaria, Greece, Italy, Latvia, Lithuania, Portugal and Romania but by more than 20% in Belgium, Denmark, Finland, Ireland and Sweden.

Chart 1.33

### Income inequality increases in eight Member States, decreases in six and fairly stable for the rest

GINI coefficient of disposable income - 2012/2017, EU Member States



**Note:** Breaks in series: EE 2014, SE 2015, BG, LU and NL 2016. These Member States are classified based on EMPL estimation. For these Member States GINI 2012 is marked with smaller dots to indicate that comparison of 2012 to 2016 values should be avoided. Confidence intervals for the 2017 Gini coefficients suggest that the changes in the Gini coefficients may not always be statistically significant. The standard errors to compute the confidence intervals have been obtained as in Zardo-Trinidad and Goedemé (2016).

**Source:** Eurostat, EU-SILC [ilc\_di12, ilc\_di12bdi12c].

[Click here to download chart.](#)

**Income inequality would be much higher without the redistributive effects of transfers.** These effects are measured by the difference between market income inequality and disposable income inequality.<sup>(44)</sup> Market income inequality (before transfers) has stabilised over recent years (2015 – 2017). The same is largely true for the redistributive effects of transfers, although these were slightly stronger between 2008 and 2011 and weaker between 2013 and 2016 (*Chart 1.32*).<sup>(45)</sup>

<sup>(43)</sup> In both Bulgaria and Lithuania the increase in income inequality is due to income growth more pronounced at the top than at the bottom of the income distribution, see the Eurostat figure: ilc\_di01.

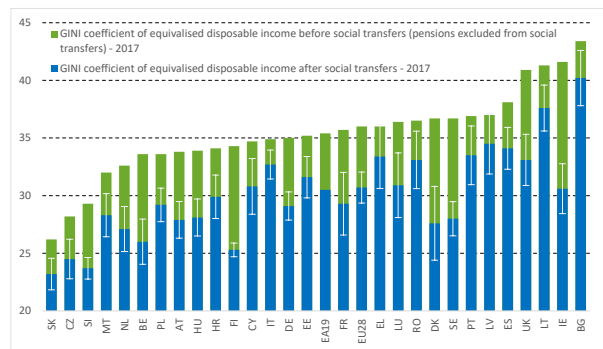
<sup>(44)</sup> Market incomes are the gross incomes earned by individuals or households before any redistribution via taxes and transfers, while disposable incomes are final incomes taking into consideration the effects of redistributive policies (which may involve the provision of in-kind benefits and services).

<sup>(45)</sup> See European Commission (2016a).

Chart 1.34

### The impact of social transfers on inequality varies across Member States

GINI coefficient before social transfers and GINI coefficient of disposable income - 2017, EU Member States



**Note:** Green bars reflect redistributive effects of taxes and transfers, measured by differences between market income inequalities (the top of green bars) and disposable income inequalities (the top of blue bars). The white bars represent the confidence interval for the GINI coefficient of disposable income. The standard errors to compute the confidence intervals have been obtained as in Zardo-Trinidad and Goedemé (2016).

**Source:** Eurostat, EU-SILC [ilc\_di12, ilc\_di12c].

[Click here to download chart.](#)

**Income inequality in the EU as a world region is lower than in some other major advanced economies, but it remains a concern.** Inequality in the EU is still lower than in Japan, the United States or Australia.<sup>(46)</sup> Moreover, while inequality appears to be rising in the United States, it has remained fairly constant since 2010 in the EU-28. High inequality raises concerns about fairness, as entrenched inequality may result in inequality of opportunity and reduce potential growth. Relatively high inequality may be associated to a higher risk-of-poverty rate and more pronounced social exclusion as well as a higher incidence of financial distress and, as such, it may reduce social cohesion.

**Financial distress faced by the poorest households continued to ease in 2017 but it persists at high levels.** Measured as the percentage of people who need to draw on savings or to run into debt in order to cover current expenditure, financial distress has eased over recent years, after a steep increase between 2011 and 2013 when the gap between income groups widened as financial distress increased most for people in the lowest quartile of household income. In 2017, 9% of adults in low-income households in the EU were in debt and a further 14% drew on savings to cover current expenditure (compared with 4% and 9% respectively for the total population).

<sup>(46)</sup> For inequality trends among Europeans based on the EU-wide income distribution see Filauro and Parolin (2018) and Brandolini and Rosolia (2019). Both studies document that inequality among EU individuals decreased before the crisis and have remained constant since then.

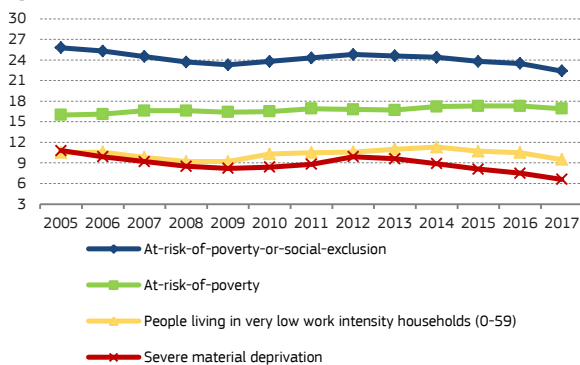
#### 4.3. Decline in the risk of poverty or social exclusion is due to lower rates of all three components: AROPE, joblessness and material deprivation

**The number of people at risk of poverty or social exclusion <sup>(47)</sup> (AROPE) in the EU continued to decrease in 2017. <sup>(48)</sup>** In 2017 (referring to income in 2016) 10.8 million fewer people in the EU were at risk of poverty or social exclusion than at the peak in 2012. The AROPE decrease followed strong increases in incomes stemming from the recovery in economic activity and improvements in labour markets, including the reduction in long-term unemployment and in youth exclusion as well as increased participation of older workers and women in the labour market.

Chart 1.35

##### Risk of poverty and social exclusion continues to decline due to decrease in all three components

At risk of poverty or social exclusion rate, at risk of poverty rate, severe material deprivation rate (% of population), very low work intensity households (% of population aged 0-59), EU



Note: The year refers to the EU-SILC survey year; income measured is from the previous year. AROPE, AROP: income from the previous year, SMD: current year, 2017 data estimated. VLWI: status in the past year. EU27 until 2009, EU28 thereafter.

Source: Eurostat, EU SILC [ilc\_peps01, ilc\_li02, ilc\_mddd11 (estimates) and , ilc\_lvh111] [Click here to download chart](#).

**The number of people at risk-of-poverty or social exclusion (AROPE) fell back to the pre-crisis level in 2016.** It decreased more strongly in 2017. By 2017 the number of people at risk-of-poverty or social exclusion dropped to a level lower than the 2008 low point by 3.096 million for the EU28. The decline brought the AROPE rate down to 22.4%, below the lowest 2009 value (23.3%) (Chart 1.35). Yet, almost 113 million Europeans, including 74 million in the euro area, were still at risk of poverty or social exclusion (AROPE) in 2017. The Europe 2020 target of lifting 20 million people out of poverty by 2020 was set in 2008 before the crisis. The onset of the crisis, which resulted in an increase in the AROPE rate from 23.3% in 2009 to 24.8% in 2012, made this target far more challenging. The reduction in AROPE rate at EU

<sup>(47)</sup> The at-risk-of-poverty or social exclusion (AROPE) indicator corresponds to the number of people who are in at least one of the following situations: at risk-of-poverty or severely materially deprived or living in households with very low work intensity.

<sup>(48)</sup> The year in this chapter refers to the EU-SILC survey year, which measures income in the previous year. The latest survey 2016 data refer to income distribution in 2015.

level has been underpinned by the same trend in AROPE's three components: at risk of poverty rate, severe material deprivation rate and very low work intensity rate (Chart 1.35).

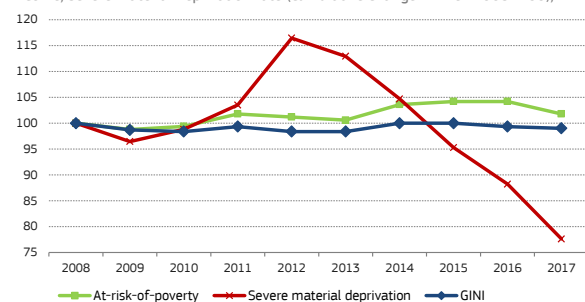
**Severe material deprivation <sup>(49)</sup> (SMD) has been declining continuously since 2012, indicating improvements in standards of living.** In 2017, <sup>(50)</sup> 4.67 million fewer people were in SMD than in 2016. This reduction added to a cumulative reduction of 16.37 million over 2012 - 2016. This continuous and significant drop at EU level was mainly driven by strong decreases in a few Member States, i.e. Bulgaria, Germany, Hungary, Italy, Poland, Romania and the UK. However, the incidence of SMD for non-EU born remains significantly higher than that of the EU-born (15.2% against 6.4%, population over 18).

**A recovery in the labour market led to a reduction in the number of people living in very low work intensity <sup>(51)</sup> (VLWI) households.** The VLWI rate decreased from 10.5% in 2016 to 9.5% in 2017, <sup>(52)</sup> meaning that around 3.8 million fewer people were in jobless households.

Chart 1.36

##### Living standards have improved since 2012 despite persistent poverty and inequality: median income (and the poverty threshold) have risen and severe material deprivation has fallen

Poverty threshold (in real terms), at-risk-of-poverty rate, Gini coefficient of disposable income, severe material deprivation rate (cumulative change - index 2008=100), EU



Note: The year refers to the EU-SILC survey year; income measured is from the previous year. EU27 until 2009, EU28 thereafter. The nominal income is converted into real income by deflating with the Harmonised Index of Consumer Prices (HICP).

Source: Eurostat, EU SILC [ilc\_li02, ilc\_mddd11, ilc\_di12, ilc\_di04]; DG EMPL calculations [Click here to download chart](#).

<sup>(49)</sup> Severely materially deprived (SMD) people have living conditions severely constrained by a lack of resources, i.e. they experience at least 4 out of the following 9 deprivations: they cannot afford i) to pay rent or utility bills, ii) to keep their home warm enough, iii) to face unexpected expenses, iv) to eat meat, fish or a protein equivalent every second day, v) a week's holiday away from home, vi) a car, vii) a washing machine, viii) a colour TV or ix) a telephone.

<sup>(50)</sup> Latest data available, estimated by Eurostat.

<sup>(51)</sup> People living in households with very low work intensity (VLWI) are those aged 0-59 living in households where the adults (aged 18-59, excluding students aged 18-24) worked not more than 20% of their total work potential during the past year

<sup>(52)</sup> According to Eurostat, LFS data [lfsi\_jhh\_a].

**The at-risk-of-poverty rate<sup>(53)</sup> (AROP) has started to decrease again after three relatively stable years.** This component of AROPE has followed a different pattern, due to its dependency on median income. After its surge in 2014, the share of people at risk of poverty remained broadly unchanged up to 2016 at 17.3% thereafter decreasing to 16.9% in 2017. The number of people at risk of poverty decreased by 1.6 million in 2017 (referring to incomes in 2016), after cumulative increases by 152 000 in 2016 and 783 000 in 2015. The 2017 improvement was driven mainly by the reduction in the number of people in AROP broadly in the same Member States recording fewer people were in severe material deprivation.

**The increase in the median income (Chart 1.47) reflected an improvement in living standards.** However, it contributed to a deceleration in the reduction of the at risk-of-poverty rate. The 2014-2015 surge in the number of people at risk of poverty reflected two different phenomena: first, the weak economic and labour market situation until mid-2013; and secondly, the upward shift in the median income and therefore the poverty threshold<sup>(54)</sup> (set at 60% of national median income) as household incomes started to recover in mid-2013. However, after the surge in 2014, both AROP and inequality in the EU stabilised, whereas median incomes and poverty thresholds increased by a significant 6.4% between 2013 and 2016 (Chart 1.36). Eurostat flash estimates indicate that in 2017 there will be a further significant increase in median income in most EU countries, of more than 5% in eleven Member States.

### Progress in reducing poverty and social exclusion varies across Member States

**The at-risk-of-poverty-or-social-exclusion rate (AROPE) has decreased or stabilised since 2012 in most Member States.** Bulgaria, Croatia, Hungary, Ireland, Latvia, Poland and Romania recorded notable declines while fourteen other countries recorded smaller declines. Small increases appear only in Greece, Estonia and the Netherlands (Chart 1.37). The 'at risk of poverty rate' (AROP) has either increased or remained stable since 2012 in 20 Member States (Chart 1.37, second column). Poverty rates were

gradually reduced between 2012 and 2017 in the remaining 8 Member States, namely Romania, Greece, Croatia, Portugal, Poland, France, Slovakia and Finland. In Greece, this reduction must be seen in the context of the 20% reduction in the median income (or poverty threshold).

<sup>(53)</sup> People at risk-of-poverty (AROP) have an equivalised disposable income below the risk-of-poverty threshold, which is set at 60% of the national median equivalised disposable income (after social transfers).

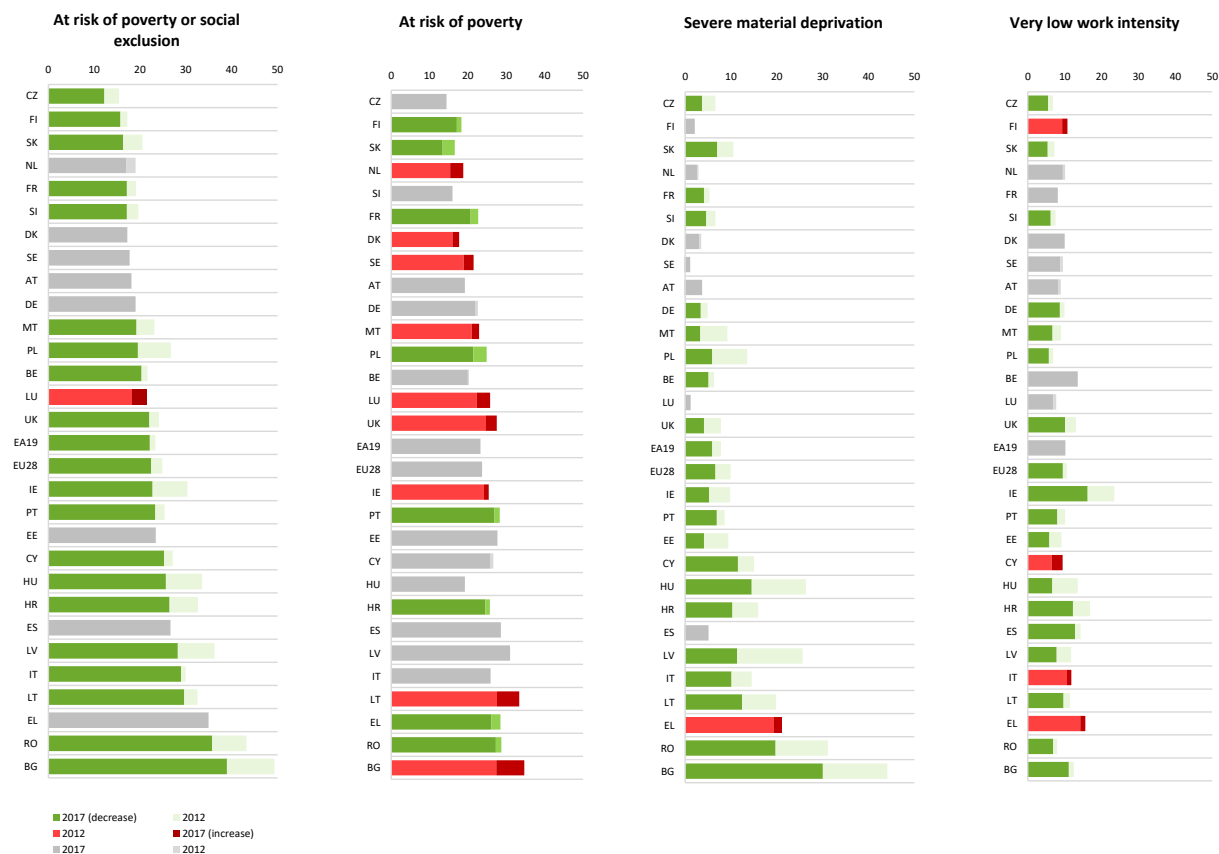
<sup>(54)</sup> The 'at risk-of-poverty' threshold is set at 60% of the national median equivalised disposable income (after tax and other deductions and after social transfers). The total equivalised disposable household income, used in poverty and inequality indicators, takes into account the impact of differences in household size and composition. The equivalised income attributed to each member of the household is calculated by dividing the total disposable income of the household by the equalisation factor. This indicator gives a weight of 1.0 to the first person aged 14 or more, a weight of 0.5 each to other people aged 14 or more and a weight of 0.3 each to people aged 0-13.



Chart 1.37

**Risk of poverty or social exclusion declining in half of the Member States**

At-risk-of-poverty-or-social-exclusion rate, at-risk-of-poverty rate, severe material deprivation rate (% of population), very low work intensity households (% of population aged 0-59), EU Member States, 2012-2017



Note: Green bars indicate decrease between 2012 (where light green bars end) and 2015 (where dark green bars end), and red bars indicate increase between 2012 (where light red bars end) and 2015 (where dark red bars end), and grey bars indicate little or no change. AROPE combines AROP, SMD and VLWI. The length of bars of components should not add to the length of AROPE bar, because components overlap in AROPE. The year refers to the EU-SILC survey year, referring to the previous income year. AROPE, AROP: income from the previous year, SMD: current survey year, VLWI: status in the past year. Breaks in series: AROPE: BG EE 2014, SE 2015, LU NL 2016, AROP BG LU NL 2016, SMD SE 2015, BG LU NL 2016, VLWI EE 2014, SE 2015, BG LU NL 2016. These Member States are classified based on EMPL estimation. For these Member States the values for 2012 should not be compared to values in 2016.

Source: Eurostat, EU SILC [ilc\_peps01, ilc\_li02, ilc\_mddd11, ilc\_vhl11].

[Click here to download chart.](#)

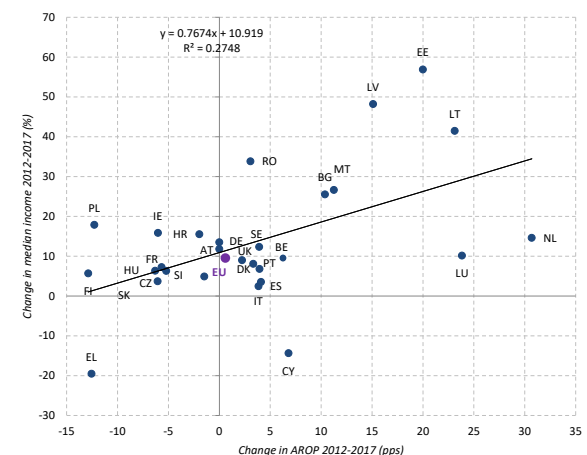
**Median income in the EU increased by 6.4% in real terms between 2013 and 2017.** However, different distributional patterns emerge in relation to disposable income in different quintiles of the distribution in different Member States. The AROP rate could go up when the median income increases.<sup>(55)</sup> This is what actually happened with the substantial rise of AROP rates in the Baltic States accompanied by a significant increase in median incomes (*Chart 1.38*). The chart 1.38 shows that for these countries, between 2012 and 2017, the median income raised by more than 40% while the AROP rate raised as well more than 15%. The reduction in the severe material deprivation rate has been the main factor contributing to the reduction in AROPE in the Member States. The incidence of severe material deprivation has declined in most member States since 2012, while remaining stable in Austria, Denmark, Spain, Luxembourg Finland, Sweden and the Netherlands. The only Member State where severe material deprivation increased in 2017 is Greece.

<sup>(55)</sup> A median income increase raises up the the AROP threshold that is set at 60% of the median income. If the income of the bottom end of the distribution increases at a lower pace, this will result in a higher AROP rate.

Chart 1.38

**Increase in risk of poverty may be linked with increase of the median income**

Poverty threshold (in real terms) and at-risk-of-poverty rate (%), EU Member States



Note: The year refers to the EU-SILC survey year, income measured is from the previous year. Breaks in series: BG LU NL 2016. Changes in AROP for these Member States are indicative, based on EMPL estimation.

Source: Eurostat, EU SILC [ilc\_li02, ilc\_di04]; DG EMPL calculations

[Click here to download chart.](#)

**The reduction in the severe material deprivation rate has been the main factor contributing to the reduction in AROPE in the Member States.**

The incidence of severe material deprivation has declined in most member States since 2012, while remaining stable in Austria, Denmark, Spain, Luxembourg, Finland, Sweden and the Netherlands. The only Member State where severe material deprivation increased in 2017 is Greece.

**The decrease in low work intensity has also contributed to reducing AROPE in many Member States.** This third component of AROPE has declined in 17 Member States, has stayed constant in another 7 and has increased in 4 (*Chart 1.37*, the far right column).

**The number of people living in social and material deprivation declined between 2014 and 2017.** According to Eurostat's new measure of deprivation, 13.7% of Europeans (70 million) experienced a lack of resources to cover material needs and ensure social participation in 2017, down from 15.7% in 2016. Only Greece registered an increase of 2.2% between 2016 and 2017 while Denmark, Finland, Latvia and Slovenia had small increases (*Chart 1.39*).

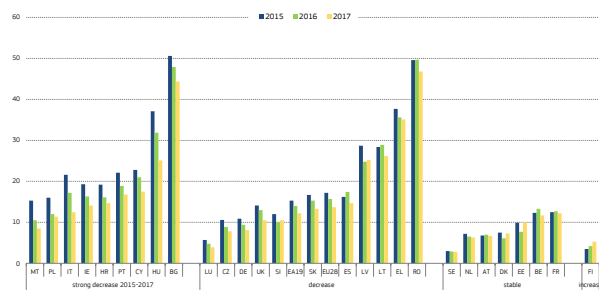
**Despite positive signs, the risk of poverty or social exclusion remains a challenge, especially in southern<sup>(56)</sup> and Baltic Member States.** The risk remains high in Bulgaria and Romania despite recent improvements, as well as in Greece – the only Member State where severe material deprivation has intensified since 2012. Between 2012 and 2017, AROPE increased in nine countries (*Chart 1.37*). Together with an increase in inequality in many Member States, the persistence of the risk of poverty or social exclusion ranks at the top of the challenges to social cohesion in the EU.

<sup>(56)</sup> In the remaining part of the Chapter southern Member States are: Portugal, Spain, Italy, Greece, Malta and Cyprus. Central-eastern Member States are: Estonia, Latvia, Lithuania, Poland, Czechia, Slovak Republic, Hungary, Slovenia, Croatia, Romania, Bulgaria. The remaining Member States are the western ones.

Chart 1.39

**Social and material deprivation declined in most Member States in 2014-2017**

Social and material deprivation rate (% of population), EU Member States, 2014-2017



**Note:** This new indicator of social and material deprivation relates to people who have experienced living conditions constrained by a lack of resources, as explained in the footnotes defined here <https://ec.europa.eu/eurostat/web/products-eurostat-news/-/DDN-20171212-1>. T. The year refers to the EU-SILC current survey year. Breaks in series: BG 2016, LU 2016, NL 2016, SE 2015. These Member States are classified based on EMPL estimation.

Source: Eurostat, EU SILC (ilc\_mdsd07)

[Click here to download chart.](#)

## Energy poverty

**An important aspect of household poverty is the inability to keep one's home warm because of the expense involved.** Latest SILC data show that countries differ in the evolution of indicators of energy poverty between 2008 and 2017 (*Chart 1.40*). The percentage of the population not able to satisfy heating needs has been falling sharply in Bulgaria, Cyprus, Portugal, Romania, Latvia and Poland, but increasing in Estonia, Spain, Greece, Ireland, Italy and Lithuania (*Chart 1.40*, left hand side). Arrears in the payment of utility bills are decreasing in 11 countries, especially in Croatia, Italy and Romania, but increasing in nine, with the strongest increases in Greece and Cyprus (*Chart 1.40*, right hand side). <sup>(57)</sup>

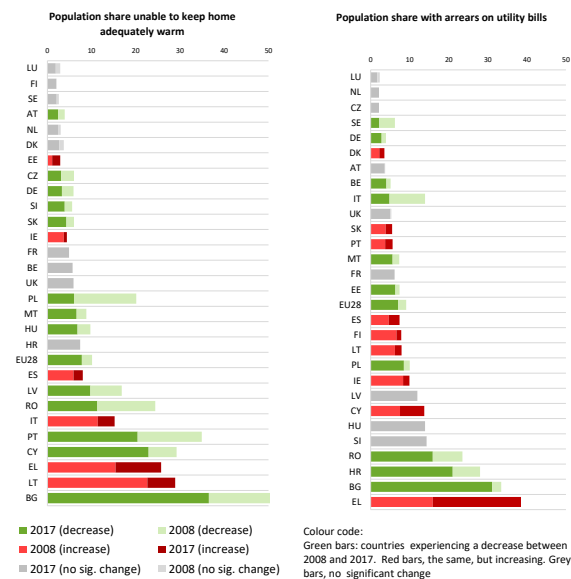
<sup>(57)</sup> For a more in-depth discussion on energy poverty, see chapter 5.



Chart 1.40

**Indicators of energy poverty: divergent evolution**

Population shares unable to keep home adequately warm and with arrears on utility bills - EU-SILC survey in 2017 as compared to 2008



Note: Colour code: Green bars: countries experiencing a decrease between 2008 and 2017. Red bars, the same, but increasing. Grey bars, no significant change.

Source: Eurostat, dataset: ilc\_mdcs07 and table sdg\_07\_60

[Click here to download chart.](#)

#### 4.4. Social convergence in the EU?

**Social convergence can be analysed by reference to poverty - either relative poverty, as measured by the at-risk-of-poverty rate (AROP), or severe material deprivation rate (SMD).** Alternatively, it can be analysed by reference to inequality, which remains a challenge, especially in certain Member States.

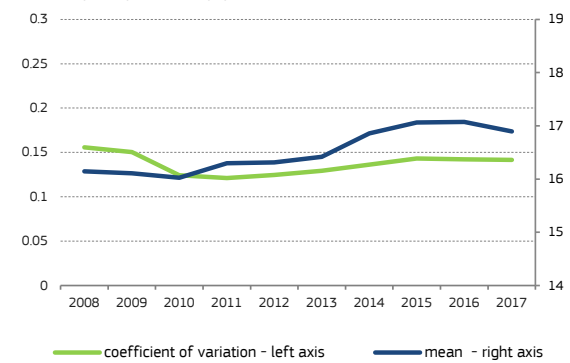
**While the AROP rate in the EU has not tended to converge over the last decade, increases in the AROP rate did not translate into higher divergence.** As discussed in section 3 of this chapter, the average AROP rate in the EU slightly increased over the last decade and it only decreased between 2016 and 2017. In terms of convergence as measured by the coefficient of variation of the rates for all Member States, evolution has been stable, except during the early years of the crisis when some downward convergence<sup>(58)</sup> was observed. This can be attributed mainly to exceptionally large reductions in the AROP rate in Latvia and Estonia (~5.5pps and ~3.9pps in 2010), but the reductions were linked to sharp declines in median income that were less significant at the bottom of the income distribution.

<sup>(58)</sup> Here 'downward convergence' means a tendency of the national rates to converge when the average is decreasing. Thus, in the case of AROP or SMD, a downward convergence is interpreted as an improvement.

Chart 1.41

**Increases in the AROP rate did not translate into higher divergence across the EU**

At-risk-of-poverty rate, % of population, EU



Source: Eurostat, SILC [ilc\_li02]

[Click here to download chart.](#)

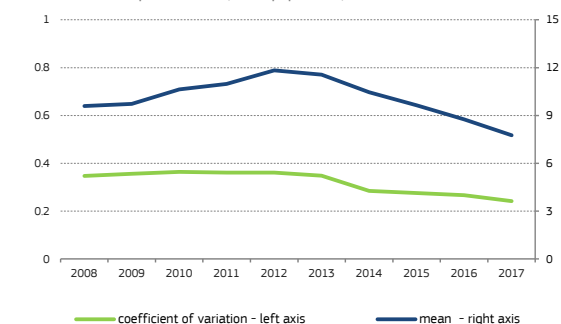
#### **Severe material deprivation has developed along a trend of both convergence and improvement.**

Over the last decade the SMD rates for the EU Member States showed clear signs of convergence (the rate declined strongly in the EU as a whole). More recently, since 2014, while the average SMD rate has continued to fall in almost all Member States, there has been some convergence as well.

Chart 1.42

**Severe material deprivation converged across the EU**

Severe material deprivation rate, % of population, EU



Source: Eurostat, SILC [ilc\_mddd11]

[Click here to download chart.](#)

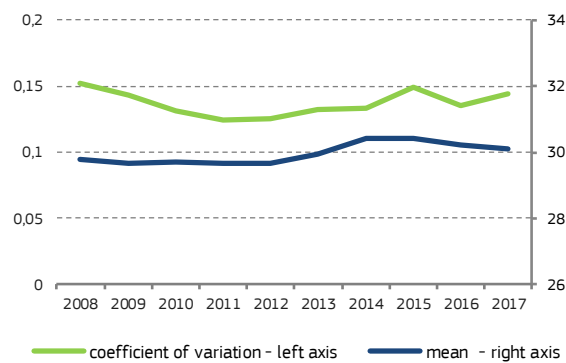
**Inequality levels do not clearly converge.** As measured by the GINI coefficient,<sup>(59)</sup> inequality remained stable during the crisis and deteriorated slightly during the recovery. During this time, the indicator showed no clear convergence or divergence pattern.

<sup>(59)</sup> For the definition of GINI see footnote in section 4.2.

Chart 1.43

**Inequality remained unchanged during the recovery; its divergence across the EU has not increased**

GINI coefficient, EU



Source: Eurostat, SILC [ilc\_di12]

[Click here to download chart.](#)

#### 4.5. EU Income trends: middle class, pan-European distribution and territorial dimensions

**Different income groups have experienced different developments over the last decade.**

While income poverty trends are well documented through the at-risk-of-poverty (AROP) rate, this section examines how the income conditions of EU citizens have changed across the whole income distribution in the different Member States and in the EU as a whole.

**The middle class is the backbone of EU societies, converging across countries ...**

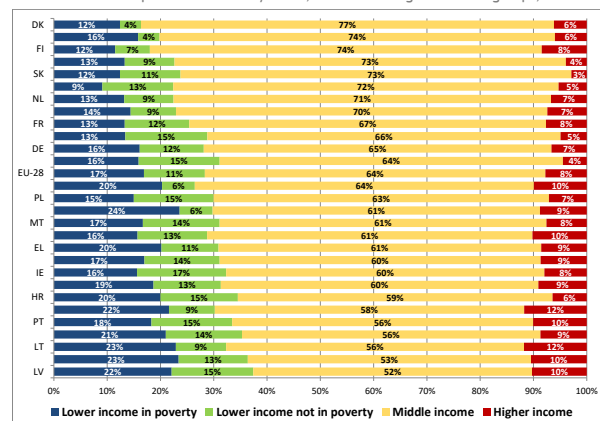
**The middle class is a key component of economic growth and social cohesion in the EU Member States.** A strong middle class is usually an engine for consumption-led growth, as it has a higher propensity to consume than the upper income groups. Moreover, a strong and stable middle class is usually associated with a higher level of social cohesion and trust in the institutions. Countries with a sizeable middle class are also those with better educational and health outcomes, at least in the EU, because an expanding middle class has historically had the leverage to push for higher shares of public expenditure to be spent on health and education. <sup>(60)</sup>

**The size of the middle class in the EU Member States, based on an income definition, varied considerably in 2017** (see *Chart 1.44*). Individuals are considered to be in the middle class if their equivalised income is included in the range from 75% to 200% of the equivalised national median income. At one end of the range, in Denmark, the middle class accounts for 78% of the overall population. At the other end, in Latvia, it accounts for 53% of the population.

Chart 1.44

**The middle class makes up over 50% of the population in all EU countries**

Distribution of disposable income by lower, middle and higher income groups, 2017



**Note:** Individuals are in the middle class when they have an equivalised income between 75% and 200% of the national equivalised median income. Individuals are in poverty when they have an equivalised income lower than 60% of the national median income.

Source: DG-EMPL calculations. EU-SILC UDB 2017.

[Click here to download chart.](#)

**The composition of the middle class based on an income definition has changed since the crisis.**

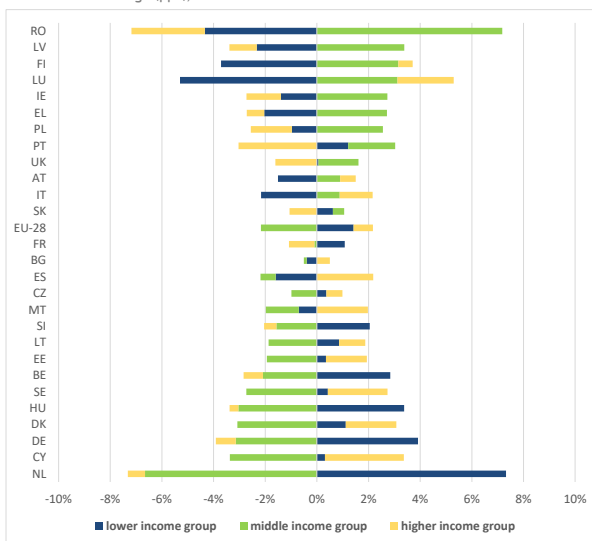
*Chart 1.45* illustrates how the middle classes fared in the aftermath of the crisis and puts the size of the middle class in 2017 in a time perspective. For example, the middle class in Latvia, which appeared relatively small in 2017, has seen a sizeable increase (over 3pps) as a result of both a decline of the higher income group and a reallocation of the lower income group in the middle class. On the other hand, the large middle class in Denmark, very sizeable in 2017, has decreased in size, partly in favour of the upper income group and partly because a proportion slid into the lower income group. All in all, in some central-eastern Member States there seems to be a general trend towards a rising middle class. This is not the case for Slovenia or Hungary, where there has been a reallocation of 3pps of the middle class into the lower income group. In parallel, many richer Member States have shrinking middle classes as a result of transition either to the upper income group (e.g. in Sweden) or to the lower income group (e.g. in the Netherlands).

<sup>(60)</sup> An EU-financed OECD study (2019) shows that the middle class has changed size in many EU countries over the last decade. See also a forthcoming Eurofound publication.

Chart 1.45

### Middle class trends, very heterogeneous across Member States – up or down?

Middle class change (pps), from 2007-2008 to 2016-2017



Note: Middle class' size has been averaged in 2007-08 and in 2016-17 to reduce potential yearly volatility. Member States with negative green bars and positive yellow and blue bars experienced an income polarisation.

Source: DG-EMPL calculations. EU-SILC UDB.

[Click here to download chart.](#)

**These income developments indicate a slight convergence in the size of the middle-income group across EU Member States over the last decade.** This results from a reduction in the size of middle classes in the richer Member States coupled with a rise in the middle class in some central-eastern Member States. Over a longer time horizon there has been a composition change in the middle class of the relatively richer Member States. As regards the demographic characteristics of the middle class over the last 30 years, the likelihood of people aged 65 or more entering the middle-income group has increased to the detriment of working-age adults. Households with children have seen a reduction in the probability of their being in the middle-income group over this period, especially in the case of single parents who are nowadays most likely to be found in the lower-income group. Finally, workers with middle- and low-skill jobs find it more difficult to gain access to the middle-income class than in the past. These changes in the skills distribution across income groups may generate dissatisfaction: lower-skilled workers may find their relative income conditions deteriorating in comparison with what they would have been in previous generations.<sup>(61)</sup>

...but the perception of strain is relatively high

**The middle class' perception of financial insecurity has changed over time within Member States but has stayed fairly constant at slightly over 53% in the EU as a whole** (see Chart 1.46). There is a widespread perception that the middle classes, despite income levels well above the at-risk-of-poverty threshold, are experiencing increasing

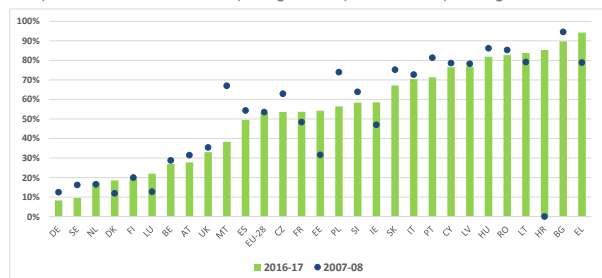
strains in terms of their financial security and their ability to make ends meet.<sup>(62)</sup>

**However, the proportion of those in the middle class who report financial strain varies dramatically across Member States.** While the Scandinavian and northern middle classes report very low levels of difficulty in making ends meet, some other middle classes, mostly in central-eastern and southern Member States, feel the strain more. In Member States such as Greece, Bulgaria and Croatia the middle class reports severe levels of perceived financial difficulty, while in Member States such as Ireland and Italy, as well as in France, the middle class report increasing difficulties since the crisis, with levels ranging from 53% in France to 70% in Italy in 2017. The strain perceived by middle classes in central-eastern Member States is much higher but the size of the middle class seems to be moderately converging with western Member States. Even if the national middle classes in the most crisis-hit southern Member States and in France have not shrunk in size, they nonetheless report increasing distress in paying their normal day-to-day expenses.

Chart 1.46

### Over 50% of the middle class report that making ends meet is difficult

Proportion of the middle class reporting that they have difficulty making ends meet (%)



Note: The original question in the EU-SILC defines three categories: great difficulty, difficulty and some difficulty. In this chart the three categories have been aggregated.

Source: DG-EMPL calculations. EU-SILC UDB.

[Click here to download chart.](#)

### Median incomes improved very unevenly across Member States compared to pre-crisis levels.

While the evolution of size and characteristics of the middle class reveals much about societal changes of this group, the wellbeing of the average citizen is usually approximated by the median income. Moreover, the definition of the middle class is anchored to the national median income (i.e. from 75% to 200% of the national median income). Thus, the evolution of the median income since the crisis may help explain the high financial strain experienced by the middle classes in some Member States despite being larger in size. This is the case of Greece where the middle class has increased in size but mostly because the real median income has worsened over time, lowering the threshold to access the middle-income group. As documented in section 4.1 for gross disposable household income (GDHI), median income has improved compared to pre-crisis levels for a

<sup>(61)</sup> OECD, *ibid.*

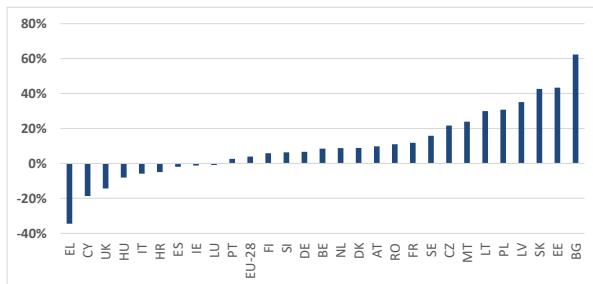
<sup>(62)</sup> OECD, *ibid.*; Bussolo *et al.* (2018).

majority of Member States while in some others real median incomes have lost since 2008 (see *Chart 1.47*).

Chart 1.47

### Median incomes improved very unevenly across Member States

Real growth of median income from 2007-2008 to 2016-2017.



Note: Real median incomes in 2007-08 and in 2016-17 have been averaged to reduce yearly volatility.

Source: DG-EMPL calculations. Eurostat data (median income: ilc\_di03; harmonised index of consumer prices: prc\_hicp\_aind).

[Click here to download chart.](#)

## From the national to the pan-European view

**In terms of pan-European income developments, the income levels of the European poor have improved over the last decade.** <sup>(63)</sup> The changes in the EU-28 income distribution over the last ten years are the result of the different income trends experienced by different Member States. *Chart 1.48* shows an improvement in lower EU incomes, a stagnation around the median and a decline of high-income groups in the EU-28 distribution. <sup>(64)</sup> Overall, the evolution of incomes in the EU-28 has led to more equal outcomes than those of 2007, as the income condition of the poorest people in the EU, mostly located in central-eastern Member States, has improved. Meanwhile, the income of the poorest in the southern Member States deteriorated. <sup>(65)</sup>

<sup>(63)</sup> In this section, the EU-28 income distribution is considered as a single country. Disposable incomes of individuals from different Member States are corrected for the different purchasing power parities following EUROSTAT procedures and expressed in real terms in 2015 values.

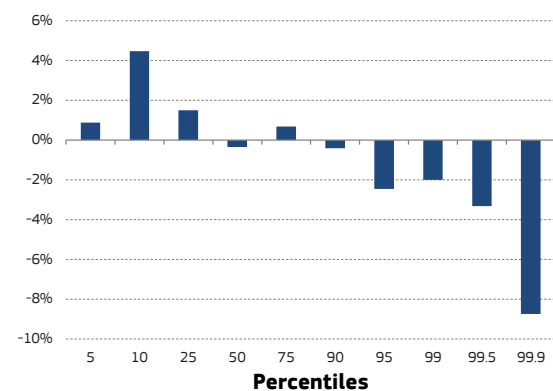
<sup>(64)</sup> This is also confirmed by a World Inequality Lab working paper (2019) that examines pre-tax incomes, more accurately captured from fiscal data than surveys, for Europe as a whole (including non-EU countries). However, when they look at the long-run dynamics of the income distribution they state that: “very rich groups benefited much more from the last decades of the twentieth century than they were hurt by the 2007-2008 financial crisis” (Blanchet et al., 2019: p. 39).

<sup>(65)</sup> Joint Research Center (2019).

Chart 1.48

### The poorest income groups in the EU-28 have improved their conditions compared with their pre-crisis level

Real change of disposable income (2008-2015) in selected percentiles of the EU-28 income distribution



Note: The EU-28 is treated as a single country. The EU-28 income distribution is obtained after pooling incomes of all EU MS, applying purchasing power parities (prc\_ppp\_ind) and correcting for the national consumer price index (prc\_hicp\_aind) to express them in real terms (2015 prices). Growth rates for the 99, 99.5 and 99.9th percentile are based on data series produced by the World Inequality Lab (Blanchet, Chancel & Gethin 2019).

Source: DG-EMPL calculations. EU-SILC UDB and data series produced by the World Inequality Lab, available on <https://wid.world/>

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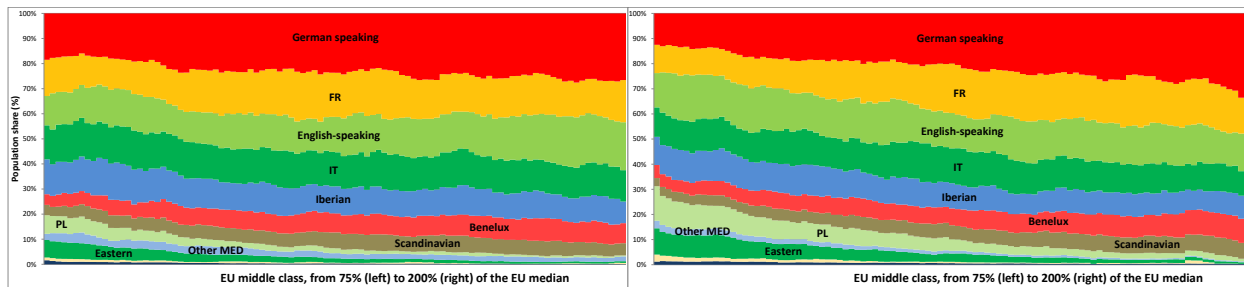
**The catching-up process of the central-eastern Member States determined a real 4% increase of the EU-28 10<sup>th</sup> percentile.** Their income growth was stronger than for all other Member States along the whole income distribution. On the other hand, income levels in southern Member States fell across the income distribution, but fell particularly strongly for low-middle income groups, which therefore diverged from EU-wide income levels. <sup>(66)</sup> These income developments across the EU are reflected in the EU middle class, which is the group of all EU individuals with disposable income between 75% and 200% of the EU median income. Between 2008 and 2016 the proportion of Poles and other citizens from central-eastern Member States in the EU middle class increased, while the proportion of Greeks, Italians and French declined, especially at the lower end of the EU middle class (see *Chart 1.48*).

<sup>(66)</sup> Further empirical evidence can be found in Cseres-Gergely and Kvedaras (2019) and Brandolini and Rosolia (2019).

Chart 1.49

**In 2016 more households from central-eastern Member States make it to the EU middle class compared with 2008**

EU middle class by Member States in 2008 (left) and 2016 (right)



**Note:** Individuals are included in the EU middle class when they have an equivalised income between 75% and 200% of the EU equivalised median income. EU-28 disposable income distribution is obtained after pooling incomes of all EU Member States and applying EUROSTAT purchasing power parities (prc\_ppp\_ind). German-speaking Member States are Germany and Austria; English-speaking Member States are the United Kingdom and Ireland; Iberian Member States are Spain and Portugal; Benelux is the Netherlands, Belgium and Luxembourg. Scandinavian Member States are Sweden, Denmark and Finland; Other MED are Greece, Malta and Cyprus; Eastern Member States are Czechia, Slovak Republic, Hungary, Croatia and Slovenia. Southern and Baltic Member States are the two residuals areas in the charts.

**Source:** DG-EMPL calculations. EU-SILC UDB.

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## The territorial dimension of income evolution

**Income conditions throughout the European Union have a spatial dimension.** While some areas have prospered in the last decade because they were more suited to reaping the benefits of a more knowledge-intensive economy, others have lagged behind, especially former industrial areas. However, the rural-urban territorial divide does not seem to have become larger in the aftermath of the crisis, at least in terms of employment, because the sectors most affected, construction and industry, are less present in rural areas, especially in the EU-15 where employment was more affected in urban and intermediate areas. <sup>(67)</sup>

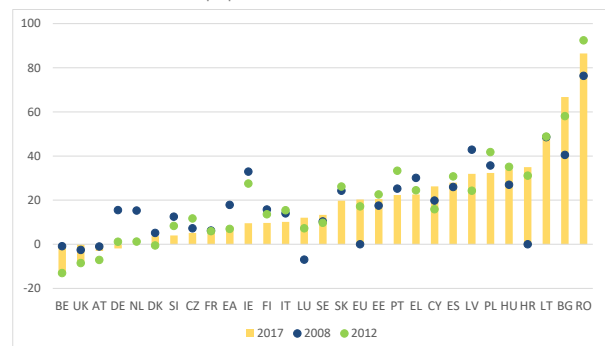
**The high concentration of economic activity in urban areas is a reason why median disposable income in cities is usually higher than in rural areas in almost all Member States** (see *Chart 1.50*). Especially in the EU-13 Member States, median urban disposable income is at least 20% higher than median income in rural areas. The most extreme cases are Romania and Bulgaria where median incomes in urban areas are respectively over 80% and 60% higher than in rural areas.

<sup>(67)</sup> European Commission (2017).

Chart 1.50

**Median income is usually higher in densely populated areas**

Urban median income as a proportion of median income in rural areas (%)



**Note:** The ratio is negative when median income is higher in rural areas.

**Source:** DG-EMPL calculations. EUROSTAT data (ilc\_di17).

[Click here to download chart.](#)

**However, the picture is complicated by an ‘urban paradox’.** Although cities are characterised by greater economic activity, higher employment rates and larger stocks of wealth as well as a higher potential for growth than rural areas, the distribution of economic growth in the cities may be remarkably unequal. This is the ‘urban paradox’: in cities there are more job opportunities but also higher proportions of people living at the margins of the world of work. In turn, spatial segregation in the cities tends to reproduce and deepen these inequalities across generations. <sup>(68)</sup>

**As a consequence, the income differences between urban and rural areas translate into gaps in severe material deprivation between areas.** Central-eastern Member States where the income gap between cities and rural areas is the highest tend to display higher levels of severe material deprivation in rural areas, with the exception of Czechia. Conversely, in the EU 15 it is usually in the cities, where the ‘urban paradox’ is present, that people are more at risk of severe material deprivation, as documented for all the Member States whose gap in *Chart 1.51* is positive.

<sup>(68)</sup> European Commission (2016b).



### Box 1.1: Urban, intermediate and rural areas: classification by degree of urbanisation

In this section rural and urban areas are categorised by degree of urbanisation.<sup>(1)</sup> The degree of urbanisation is a classification of local administrative units (LAUs) that indicates the characteristics of a particular area, based on a population grid composed of 1 km<sup>2</sup> cells (and clusters thereof), identifying:

- Densely populated areas: contiguous grid cells of 1km<sup>2</sup> with a density of at least 1 500 inhabitants per km<sup>2</sup> and a minimum population of 50 000
- Intermediate areas: clusters of contiguous grid cells of 1km<sup>2</sup> with a density of at least 300 inhabitants per km<sup>2</sup> and a minimum population of 5 000
- Thinly populated areas: grid cells outside urban clusters.

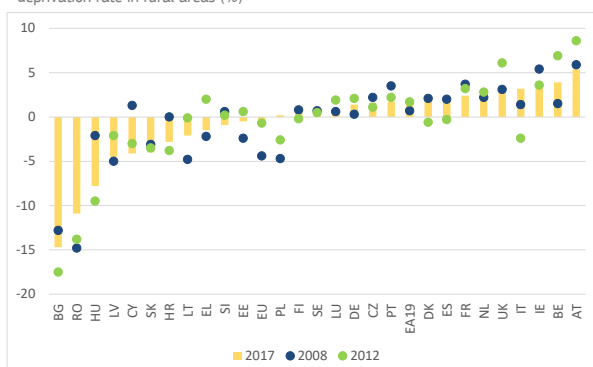
Therefore, an urban centre is defined as contiguous (in other words, neighbouring or adjoining) grid cells of 1 km<sup>2</sup> with a population density of at least 1 500 inhabitants per km<sup>2</sup>; these clusters are used to identify all cities with urban centres of at least 50 thousand inhabitants. An urban cluster is defined as contiguous grid cells of 1 km<sup>2</sup> with a population density of at least 300 inhabitants per km<sup>2</sup> and a minimum population of 5 thousand inhabitants. Rural grid cells are defined as those grid cells outside of high-density and urban clusters.

<sup>(1)</sup> This is the same classification adopted for most of the "Urban Europe" Report (European Commission, 2016)

Chart 1.51

**Severe material deprivation is relatively higher in urban areas in western Member States, while in the central-eastern Member States it affects the rural areas more.**

Severe material deprivation rate in urban areas as a proportion of severe material deprivation rate in rural areas (%)



Note: The ratio is negative when the severe material deprivation rate is higher in rural areas.

Source: DG-EMPL calculations. EU-SILC UDB.

[Click here to download chart.](#)

## 5. EMPLOYMENT AND SOCIAL SITUATION OF VULNERABLE GROUPS

**This section considers developments for vulnerable groups in EU societies, especially in terms of employment, income and educational outcomes.** Vulnerable groups, by definition, are exposed to greater risks than the majority of the population, and some may end up being excluded from access to housing and struggle to find employment, depriving societies of their full potential. They may also be exposed disproportionately to environmental or health problems, including air pollution. The inclusion in educational systems and in employment of those who are in a condition of disadvantage, as well as their access to public services, is recognised as a key element in the European Pillar of Social Rights.

### People with disabilities

**People with disabilities make up a large segment of EU societies.** In 2016, about 24.1% of over-16s declared an activity limitation (27.1% in 2014 and 25.3% in 2015), with more women than men experiencing this condition (about 26.3% of women compared with 21.8% of men on average in the EU). In the EU-SILC, from which the following figures are derived, disability is self-reported on the basis of a limitation in activities because of health problems for at least the last 6 months.<sup>(69)</sup> In 2016, about 48.1% of people with disabilities in the EU were employed (47.4% in 2015) compared with 73.9% of people without disabilities (73.1% in 2015, see *Table 1.1*). However, the situation across Member States differs significantly and since 2010 there has been a continuous moderate increase in the employment rate of people with disabilities.

**The proportion of early school leavers among the young disabled is at 23.6%, much higher than the 12.0% for non-disabled young people.<sup>(70)</sup>** Higher levels of early school leaving represent an important barrier to the integration of disabled people in the world of work and are one of the reasons for their lower employment rate.<sup>(71)</sup> Besides current

<sup>(69)</sup> This definition may not necessarily coincide with the UN Convention on the Rights of Persons with Disabilities (2006), which states: "Persons with disabilities include those who have long-term physical, mental, intellectual or sensory impairments which in interaction with various barriers may hinder their full and effective participation in society on an equal basis with others".

<sup>(70)</sup> The current 2016 EU figure for early school leaving derived from the EU-LFS stands at 10.7%. However, in *Table 1.1* the figure reported amounts to 12% because it is derived from the EU-SILC for the sake of comparing it with the figures referred to early school leavers with disabilities.

<sup>(71)</sup> A lower employment rate may not only be the result of an education or qualifications problem, although these factors might further affect the employment probability of people with disabilities. This raises the question of the nature of the adaptations and assistance required. While mobility problems often lead to a need for technical aids and work place

Table 1.1

**People with disabilities face challenges and more social risks than the rest of the population**

Summary of the main EU indicators regarding people with limitations

	2008	2009	2010	2011	2012	2013	2014	2015 *	2016 *
Persons with limitations 16+ (Disabled)	25.1%	25.7%	25.0%	25.9%	26.1%	26.9%	27.1%	25.3%	24.1%
<b>Europe 2020 objectives, achievements and other indicators</b>									
	2008	2009	2010	2011	2012	2013	2014	2015	2016
<b>Employment</b>	75 % of the population, aged 20-64, should be employed.								
Disabled	46.4%	46.1%	46.0%	46.9%	47.9%	48.5%	48.7%	47.4%	48.1%
Total	68.7%	67.6%	67.3%	67.3%	67.0%	66.9%	67.8%	68.4%	69.3%
<b>Unemployment rate (20-64)</b>									
Disabled	15.9%	17.3%	18.0%	17.4%	18.1%	19.0%	19.6%	20.2%	19.6%
Total	8.4%	10.2%	10.9%	11.2%	12.2%	12.9%	12.6%	12.1%	11.4%
<b>Activity rate (20-64)</b>									
Disabled	55.1%	55.8%	56.1%	56.7%	58.5%	59.8%	60.6%	59.5%	59.7%
Total	75.0%	75.2%	75.5%	75.8%	76.3%	76.8%	77.5%	77.8%	78.2%
<b>Early school leavers</b>	The share of early school leavers should be under 10% (Persons aged 18-24 with at most lower secondary education and not in further education or training). New classification in 2014.								
Disabled	25.1%	23.0%	21.6%	18.9%	21.8%	21.5%	22.5%	22.0%	23.6%
Total	13.2%	13.1%	12.7%	11.6%	11.2%	10.7%	12.2%	12.5%	12.0%
<b>Tertiary education</b>	40% of persons aged 30-34 ought to have completed a tertiary or equivalent education. New								
Disabled	20.4%	21.6%	22.8%	27.1%	27.8%	28.0%	29.7%	29.4%	30.3%
Total	31.6%	33.9%	35.5%	36.0%	38.1%	39.3%	41.2%	41.6%	42.2%
<b>Very low work intensity</b>	People living in households where the adults work less than 20% of their total work potential during the past year. Age 16-59.								
Disabled	23.2%	22.8%	24.2%	24.5%	23.9%	24.1%	25.1%	25.6%	25.8%
Total	(9.1%)	(9.1%)	10.2%	10.4%	10.8%	11.2%	11.6%	11.1%	11.0%
<b>At risk of poverty</b>	Persons with a household equivalised disposable income less than 60% of the median national household equivalised disposable income (after social transfers). Age 16+								
Disabled	20.1%	19.6%	18.9%	19.3%	19.1%	18.7%	19.7%	20.0%	20.2%
Total (ALL)	15.8%	15.7%	15.6%	16.1%	16.1%	15.9%	16.5%	16.6%	16.7%
<b>Severely deprived</b>	Inability to afford certain goods or services (at least 4 items out of 9). Age 16+								
Disabled	11.2%	10.5%	11.2%	12.1%	12.8%	12.6%	12.1%	11.3%	10.8%
Total	8.6%	7.8%	7.8%	8.5%	9.5%	9.3%	8.6%	7.7%	7.3%
<b>At risk of poverty or social exclusion</b>	Persons at-risk-of-poverty after social transfers, severe material deprivation, or people living in households with very low work intensity. Age 16+.								
Disabled	30.9%	29.7%	29.6%	30.5%	30.3%	30.1%	30.1%	30.2%	30.1%
Total (ALL)	(23.3%)	(22.7%)	22.7%	23.6%	24.1%	23.8%	23.8%	23.2%	23.1%
*	The data are not strictly comparable with those of 2014 due to a change of the definition of 'activity limitations'.								
**	<b>Total:</b> It includes only persons for which we do have information on disability status. <b>ALL:</b> It includes all persons, including those for which we do not have information on disability status. The difference between the two is marginal.								

Note: Limitation in activities due to health problems is reported by the respondents in EU-SILC to the extent they are limited in activities people usually do, because of health problems, for at least the last 6 months.

Source: Academic Network of European Disability (ANED) figures (2019) based on EUROSTAT and EU-SILC UDB.

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difficulties with finding, early school leaving may also affect the future adaptability of people with disabilities to technological change and the development of their careers when they are in employment. This disadvantage is notably high for young disabled people. In 2016, 30.3% of people with disabilities had completed tertiary or equivalent education, compared with 43.5% of people without disabilities. Women reported higher achievements than

adaptations, depression and health problems require a different kind of assistance – in the form, for example, of reduced working hours, a different kind of work, less stress at work and personal support (Academic Network of European Disability Experts, 2019).

men for all groups. Despite a persisting gap vis-à-vis non-disabled people, the proportion of people with disabilities who have a degree has significantly increased over the last decade.

**People with disabilities are also at higher risk of poverty and social exclusion because they face higher risks under all three dimensions of AROPE: income poverty, severely material deprivation and especially low work intensity.** In 2016, at the European level, 30.1% of people with disabilities aged 16 and over lived in households that were at risk of poverty or social exclusion, compared with 20.9% of people without a disability in the same



### Box 1.2: Non-EU migrants, country of birth and citizenship

This Section considers integration challenges of non-EU migrants. This group may be referred to as individuals born outside the EU or third country nationals (TCNs) when a non-EU born has acquired citizenship rights. Although for policy purposes a clear-cut legal category such as TCNs is generally preferred, the Section focuses on non-EU born, regardless of citizenship, as the challenges for their integration in the host country societies do not depend only on citizenship access.

The figures presented here are hardly representative of the most recent inflow of refugees, due to their relative size and the difficulty of traditional surveys to monitor these groups. For example, in 2017, there were around 650,000 asylum requests in the EU and asylum was granted in 442,925 cases out of 973,415 decisions – resulting in 46% of the decisions granting refugee status (see *migr\_asydcfstq* on the EUROSTAT database).

Finally, the outcomes of EU-mobile citizens residing in an EU MS different from their own as well as those native-born with a migrant background are not examined here as their socio-economic outcomes are relatively more similar to those of natives as they are generally benefitting from the freedom of movement granted in the EU and have personal characteristics more in line with the average of the destination country. <sup>(1)</sup>

<sup>(1)</sup> For further analysis of the socio-economic outcomes of EU-mobile citizens, see European Commission (2018d).

age group. Moreover, as previous studies have documented, when household income is corrected for a factor that takes into account the higher monetary needs of people with disabilities, the income poverty of households with disabled people generally rises. <sup>(72)</sup> The situation of people with disabilities in employment, education and social inclusion has not improved significantly over recent years, suggesting the need for legislative action. With the aim of securing an improvement in these domains the European Commission proposed a European Accessibility Act in 2015, adopted by the Council and the European Parliament on April 2019, to set common accessibility requirements for certain key products and services that would help people with disabilities in the EU to participate fully in society in line with their capacities. <sup>(73)</sup> This is in line with the European Pillar of Social Rights' emphasis on the inclusion of people with disabilities in society, focusing on social protection and employment. <sup>(74)</sup>

### People with a migrant background

**People born out of the EU accounted for 7.5% of the total population living in EU-28 in 2018.** <sup>(75)</sup> Member States differ considerably in both the relative size and the composition of their immigrant groups. A

recent joint EU-OECD publication <sup>(76)</sup> classifies host countries as:

- Long-standing destinations

with many recent and highly educated immigrants (LU, UK);

with many settled low-level educated immigrants (BE, FR, NL as well as traditionally AT and DE);

with significant recent and humanitarian migration (DK, FI, SE).

- New destination countries

with many recent, low-level educated immigrants (EL, IT, PT, ES);

with many recent highly-educated immigrants (CY, IE, MT);

where the immigrant population is shaped by border changes and/or by national minorities, usually with small recent non-EU population (HR, CZ, EE, HU, LV, LT, PL, SK, SI, BG, RO).

**Disparities in educational and employment outcomes between the EU-born and the non-EU-born tend to be more acute in long-standing destination countries.** Member States are clearly more exposed to integration challenges if they have a longer history of receiving immigrants with only low-level education and humanitarian migrants, where the non-EU born are a larger segment of the population (see *Table 1.2*). Although education, both formal and informal, is a crucial driver of integration, non-EU-born children participate at a lower rate in early childhood education and care. <sup>(77)</sup> They then often face

<sup>(72)</sup> Zaidi, A. and Burchardt, T. (2005).

<sup>(73)</sup> The proposed directive aims to improve the functioning of the internal market, making it easier for companies to provide accessible products and services across borders by setting common rules in the EU. The Accessibility Act is to be implemented by 2021.

<sup>(74)</sup> "People with disabilities have the right to income support that ensures living in dignity, services that enable them to participate in the labour market and in society, and a work environment adapted to their needs." See: [https://ec.europa.eu/commission/priorities/deeper-and-fairer-economic-and-monetary-union/european-pillar-social-rights/european-pillar-social-rights-20-principles\\_en](https://ec.europa.eu/commission/priorities/deeper-and-fairer-economic-and-monetary-union/european-pillar-social-rights/european-pillar-social-rights-20-principles_en)

<sup>(75)</sup> Figure derived from Eurostat (*migr\_pop3ctb*).

<sup>(76)</sup> OECD/EU (2018).

<sup>(77)</sup> Across the EU in 2016, 77% of all children aged 2 to 5 in immigrant households attended some type of preschool

Table 1.2

**Non-EU born migrants face significant disadvantages in many socio-economic domains**

Summary of the main EU indicators regarding non-EU-born, 2017 (except for the % of population, 2018)

	% of population	Employment rate (20-64)		Female activity rate (20-64)		Early school leavers (18-24)		At-risk-of-poverty rate		Severe material deprivation	
	Non-EU born	Non-EU born	Native born	Non-EU born	Native born	Non-EU born	Native born	Non-EU born	Native born	Non-EU born	Native born
EU28	7.5	63	73	63	72.8	19.3	9.6	30.8	15.3	12.3	7
BE	9.0	52	71	62.9	79.9	16.7	7.9	46.3	11.4	14.8	3.5
BG	1.4	65.1	71.4	63.3	71.5		12.8	17	22.2	22.8	30.6
CZ	2.6	79.4	78.5	71.8	73.1	11	6.7	12.9	8.5	9.1	3.4
DK	7.8	61	78.9	49.7	71.2	11.8	8.8	30.2	11.8	14.3	2.5
DE	9.4	64.5	81.6	60.8	80.7	21.8	8.1	26.7	16.3	6.4	3.7
EE	13.1	71.3	79.6	69.6	80.5		10.9	31.4	20.6	6.6	3.9
IE	4.2	66.5	73.1	63.1	71.4		5.3	27.8	15.1	11.2	5.1
EL	8.7	54	58.1	65.5	64.7	16	5.4	43.1	17.4	51.8	18.2
ES	9.2	61.6	66	75.3	73	30	15.6	42.9	17.2	14.5	3.8
FR	9.0	55.6	72.6	56.4	75.7	15.2	8.3	26.5	10.7	11	3.5
HR	11.2	57.5	64.1	56.6	66.9		3.1	27.1	18.5	15.5	12.4
IT	7.2	62.1	62.3	58.5	59.5	30.9	12	36.6	17.1	22	8.9
CY	6.9	67.6	71	73.6	74.7	18.5	5.7	30.8	13.7	18.5	11.9
LV	11.3	67.1	75.7	67.2	80.4		8.6	29.5	21.8	12.2	11.5
LT	3.9	70.2	76.2	74	80.5		5.4	22.7	21	19.3	13.7
LU	11.6	62.7	69.3	63.3	68.8		6.8	40.6	8.8	3.8	1.3
HU	2.1	71.7	73.2	70	68.7		12.5		12.8	26.9	13.5
MT	8.7	64.1	72	56	61.1		18.4	26.1	15.4	6.1	2.9
NL	9.3	59.9	80.5	58.3	79	7.1	7.1	27	11.5	9.5	2
AT	10.5	60.9	77.8	60.9	77.3	22	5.3	34.1	9.4	12.9	2
PL	1.2	73	70.9	75.9	66.8		5	18.9	15.4	6.9	6.1
PT	6.2	74.5	73	79.5	76.4	12	12.5	21.3	17.7	9.8	6.7
RO	1.5	76.3	68.8		62.6		18.1		21.5		19.2
SI	8.9	68.7	74.1	70.1	76.1		4.2	23.5	12.3	8.2	4.6
SK	0.6	70.7	71.1	62.9	70.5		9.3	21.4	10.9		7.9
FI	4.3	56.2	75	60.2	79.3		7.9	25.2	11.3	4.2	2.1
SE	13.1	66.2	85.5	73.7	87.2	16.5	6.2	35.6	12	3.5	0.7
UK	8.7	70.6	78.8	64.6	77.3	6.6	10.8	23.1	14.5	5.4	4.7

Note: Non-EU born are all those individuals born outside the EU irrespective of their citizenship, i.e. they may have acquired the citizenship of the host country.

Source: EUROSTAT data: population: migr\_pop3ctb; early school leavers: edat\_ifse\_Q2; female activity rate: ifsa\_argacob; employment rate: ifsa\_ergacob; AROP rate: ilc\_peps06; severe material deprivation: ilc\_mddd16.

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considerable difficulties in schools later on, with an early school-leaving rate markedly higher than that of the native-born. While Member States have made progress in reducing early school leaving among both the native-born and the foreign-born, the gap between them in 2016 still exceeded 10pps in Italy, Spain, Germany, Greece, Austria and Cyprus (see *Table 1.2*).

**Challenges to integration into the education and training system include various factors.** Among these the most notable are: language learning; lack of adapted teaching resources; training teachers in multicultural teaching; the low level of skills in children and students who have been deprived of education and training during a significant period of their life; geographical and social segregation; and finally civic education. However, the degree of severity of these issues as well as policy responses in these areas varies starkly across Member States.

**Due to both lower activity and higher unemployment, employment rates among the non-EU-born are relatively low in most though not all EU Member States.** The disparity with the native born was about 20pp in Belgium, Finland, Netherlands and Sweden, and above 15pp in Denmark, Germany, France and Austria in 2017. Between 2008 and 2017, the employment challenge increased as the gap widened by about 5.5pp, with above average increases in Malta, Netherlands, Greece, Hungary, Italy, Spain and Estonia (see *Table 1.2*).

**Women also face a problem of activation: the inactivity gap is particularly high when comparing native and non-EU-born women.** In Belgium and Netherlands the inactivity gap amounts to more than 20pp and in Germany, France, Finland, Denmark and Austria it stands above 15pp. The reasons why women are less likely to be in work in long-standing destination countries need to be further analysed as the inactivity of women has a detrimental effect on the likelihood of the next generation being actively in work (see *Box 1.3*). Recent studies showed that immigrant women are more prone to involuntary inactivity with *family responsibilities* rather than *discouragement* as main reason to be economically inactive. <sup>(78)</sup>

**The challenges facing the non-EU-born and the disparities between them and the native-born in education and employment translate into higher social risks.** Non-EU born people are more likely to be income poor than the native-born: in 2016 the income disparity in the EU between native and non-EU born people was 15.5pp, and was over 30pp in Belgium and Luxembourg and over 20pp in Sweden and Austria, Greece and Spain. As migrant households tend to be larger than native ones, income also tends to be shared among more members in non-EU-born households, contributing to lower individual income. Severe material deprivation rates are also higher for the migrant population in some Member States. In 2016, 12.3% of the non-EU-born population was severely materially deprived, while the level was 7.0%

education and care against 81.2% among children in native households. (UE/OECD 2018).

<sup>(78)</sup> OECD/EU, *ibid* Section 6.5.

### Box 1.3: Natives with a migrant background: employment and educational gaps

The EU-funded OECD Report 'Catching-up Intergenerational Mobility and Children of Immigrants' (2017) examines in detail in cross-country comparison the persistent disadvantage that natives with a migrant background face in the education system, the school-to-work transition and employment. <sup>(1)</sup>

In 2017, 21% of people aged 15-34 had a migrant background (25.5 million), of whom a little over 4% were the native-born offspring of immigrants, with the same number arriving as children under 15; 5% were natives of mixed parentage and a further 8% of the EU youth population immigrated as adults. <sup>(2)</sup>

Natives with non-EU parents have lower educational attainment and weaker learning outcomes than their peers with native-born parents in most EU countries, especially in those countries with large-scale immigration of low-educated immigrants in the past (FR, BE, AT).

This gap may become even more visible as native-born persons with two foreign-born parents are a growing group virtually everywhere. Natives with non-EU parents are 4 pps less likely to choose an academic higher education stream than their peers with native-born parents and similar education levels.

Nevertheless, there is a convergence of educational attainment across generations.

On average across the EU, natives with non-EU parents have on average 1.3 years more schooling than their parents, (while their peers with native-born parents have 0.7 years) but this is the result of generally lower starting points of the immigrant parents. This is particularly visible among the group with a Turkish immigrant background in Germany: almost 50% of migrant women and about 30% of migrant men had no educational degree in 2012. In contrast, less than 10% of their children born in Germany had left school without any diploma.

In the EU, the employment gap between children with non-EU parents and children of native-born decreases for the highly educated – a person's own education is a stronger driver for the employment among children of non-EU immigrants than among children of natives. Low-educated natives with low-educated foreign parents have an employment rate almost 8 pp lower than their peers with native parents, while the gap is only about half that for higher levels of education.

15% of natives with non-EU parents have a mother with no completed formal education at all, which is five times the share for the children of native born. The overrepresentation of mothers with no education among the children with non-EU origin indicates that they have a more challenging "starting point" which could partly explain their weaker employment rate, especially for girls. For example, less than 5% of children with Turkish immigrant parents receive help with homework from their mothers in France compared to over 60% of children with native-born mothers. Or in the Netherlands, 25% of the daughters of Turkish and Moroccan immigrants stop working in a paid job after having their first child, compared with 10% of women with native Dutch parents.

Finally, natives with non-EU parents EU experience less occupational upward mobility than their peers with native-born parents. About a third of natives with native parents manage to move upward on the occupational ladder. For natives with non-EU parents, only 1 in 5 has a job requiring a higher skill level than his/her father needed in his occupation.

<sup>(1)</sup> [https://www.oecd-ilibrary.org/social-issues-migration-health/catching-up-intergenerational-mobility-and-children-of-immigrants\\_9789264288041-en](https://www.oecd-ilibrary.org/social-issues-migration-health/catching-up-intergenerational-mobility-and-children-of-immigrants_9789264288041-en)

<sup>(2)</sup> UE/OECD (2018).

for the native-born. Other factors specific to the integration of migrants in the labour market and contributing to higher social risks are their lower skill levels and resulting labour income, as well as their lower hourly wages. In 2016 12.3% of the non-EU-born population was severely materially deprived, while the level was 7.0% for the native-born population.

**Integration policies aim to reduce disparities between migrants and their receiving communities and to ensure equal rights, obligations and opportunities for all.** The Commission Action Plan on the Integration of Third-Country Nationals <sup>(79)</sup> adopted in 2016 in particular sets out policy priorities and tools at EU level to

support migrants' inclusion in education and employment and guarantee their full participation in all aspects of community and social life. Several Member States have included their integration priorities in general policies (public employment services, training and upskilling, youth employment and NEET) but have taken some specific measures (language training, recognition of skills and qualifications and mentoring. <sup>(80)</sup> Continued coverage of this topic within the European Semester will follow as integration of the non-EU-born will remain a key challenge in the years ahead.

<sup>(80)</sup> European Migration Network (2019). See: [https://ec.europa.eu/home-affairs/sites/homeaffairs/files/00\\_eu\\_labour\\_market\\_integration\\_final\\_en.pdf](https://ec.europa.eu/home-affairs/sites/homeaffairs/files/00_eu_labour_market_integration_final_en.pdf).

<sup>(79)</sup> See: [https://ec.europa.eu/home-affairs/what-we-do/policies/legal-migration/integration/action-plan-integration-third-country-nationals\\_en](https://ec.europa.eu/home-affairs/what-we-do/policies/legal-migration/integration/action-plan-integration-third-country-nationals_en).

## Roma

**With an estimated population of 6 million, Roma are the largest minority in the European Union.**

Four EU Member States (Romania, Bulgaria, Slovakia and Hungary) host large Roma populations (estimated to be up to +/- 10% of the total population). Czechia has a smaller Roma population (+/- 2% of the total population), followed by Greece and Spain (around 1.6%). Roma are often the victims of discrimination and social exclusion and are at risk of deep poverty, lacking access to quality education, employment, healthcare and decent housing. Indicators on socio-economic outcomes of the Roma population computed from the Second European Union minorities and discrimination survey (MIDIS II) show remarkable levels of disadvantage compared with the rest of the population (see *Table 1.3*).<sup>(81)</sup>

**Roma represent a significant and growing proportion of the school-age population and the future workforce in Bulgaria and Romania.** The average age of Roma is 25, compared with 40 for the general population. Around 20% of the new potential workforce is Roma, yet their outcomes in terms of the Europe 2020 targets for education and employment are still far below the country averages.

Table 1.3

**Access to educational systems and subsequent employability are very low for Roma in the majority of the Member States surveyed**

Summary of the main EU indicators regarding Roma in selected EU MS with significant Roma population

	Employment rate (20-64)		Early school leavers (18-24)		NEET 16-24		At-risk-of-poverty rate	
	Roma	Total	Roma	Total	Roma	Total	Roma	Total
BG	49	67.1	67	13.4	65	19.3	86	21.8
CZ	43	74.8	57	6.2	51	7.5	58	9.7
EL	52	54.9	92	7.9	60	17.2	96	22.1
ES	24	62	70	20	77	15.6	98	22.2
HR	21	60.6	68	2.8	77	18.1	93	19.4
HU	49	68.9	68	11.6	51	11.6	75	15
PT	38	69.1	90	13.7	52	11.3		
RO	46	66	77	19.1	64	18.1	70	25.1
SK	43	67.7	58	6.9	65	13.7	87	12.6

Source: EUROSTAT and the Second European Union Minorities and Discrimination Survey (EU-MIDIS II) Roma – Selected findings.

[Click here to download table.](#)

**Young Roma continue to be over-represented among early school-leavers, with high disparities from the rest of the population.** However, the gap in early school leaving varies among the Member States surveyed. When comparing these outcomes with the previous MIDIS I survey, early school-leaving for young Roma seems to be declining, particularly in Bulgaria, Czechia, Romania and Slovakia.

**Low inclusion of Roma youth in the education systems and high early school-leaving result in pronounced employment disparities between the Roma workforce and the total population.** This gap is fairly high in almost all Member States

surveyed except Greece, where the employment rate of the total workforce is significantly below the EU average. There are other reasons for the poor employment situation of Roma, both on the supply and the demand side. On the supply side, they include poor employability due to lack of skills and competences, the limited role of the public employment services in supporting disadvantaged jobseekers and the spatial segregation of the Roma communities. On the demand side, a persistent barrier to their employment is the discrimination by employers. These demand and supply factors probably account for the markedly higher NEET rate among young Roma.

**The Roma population is at particular risk of poverty.** Income poverty affects over 70% of the Roma population in all the Member States surveyed except Czechia.

**The inclusion of Roma in education systems and employment is a relevant challenge for the Member States analysed and is high on the EU agenda.** The 2011 EU Framework for National Roma Integration Strategies up to 2020 is the policy framework on Roma inclusion that calls on Member States to have and implement a National Roma Integration Strategy (NRIS) and to advance Roma inclusion notably in the areas of education, employment, health and housing. These are notably related to principles and rights of the European Pillar of Social Rights that states: “regardless of gender, racial or ethnic origin, religion or belief, disability, age or sexual orientation, everyone has the right to equal treatment and opportunities regarding employment, social protection, education, and access to goods and services available to the public”.

## Homelessness

**Homelessness and housing exclusion are extreme manifestations of poverty and social exclusion.**<sup>(82)</sup> Many factors may trigger the incidence of homelessness: among them rising housing costs, intra-EU mobility and migration from third countries.<sup>(83)</sup> Other long-time demographic trends such as ageing or increasing single parenthood may be drivers of homelessness, as may family breakdown and de-institutionalisation without adequate follow-up support.

**There is no common indicator at EU level that estimates the number of the homeless, because of the difficulty of monitoring people in such a state of deprivation through traditional surveys.** According to estimations by the OECD, all countries with available data reported that homeless people represented less than 1% of the total population in 2015.<sup>(84)</sup> However, recent data compiled by the

<sup>(81)</sup> Data on socio-economic outcomes of the Roma population Overall, it should be noted that EU-MIDIS II is a comparative survey between countries and sample sizes do not allow disaggregating on a very detailed national level. EU MIDIS II indicators are often similar – but not always identical – to those applied in standard European surveys, such as EU SILC or the EU LFS.

<sup>(82)</sup> See: <https://ec.europa.eu/social/main.jsp?catId=1061&langId=en>.

<sup>(83)</sup> See Chapter 4 as regards the analysis of the evolution of the housing costs.

<sup>(84)</sup> OECD Affordable Housing Database.



federation of national civil society organisations working with the homeless in Europe suggest a deterioration of the situation in recent years. <sup>(85)</sup> In 2017, homelessness has increased in all Member States but Finland. <sup>(86)</sup> The population most at risk of homelessness in the EU is largely made up of middle-aged men with long-standing social problems, mental health issues and/or alcohol and drug addiction. <sup>(87)</sup> However, in the aftermath of the crisis, the risk of homelessness has extended to other segments of the population, in particular third country migrants, young people, the newly unemployed and victims of loan sharking. Due to the difficulty of monitoring such an extreme phenomenon of social exclusion, it is difficult to identify the main characteristics of the homeless population. But some publications identify large families with children, Roma communities and other minorities as particularly exposed to homelessness. <sup>(88)</sup>

**Homelessness remains a predominantly urban phenomenon.** In terms of the education profile and the spatial dimension, those with only lower-level education in urban areas seem to be overrepresented. Before the crisis, some 70% of the young homeless had left school with no more than lower secondary education. <sup>(89)</sup> As regards the age profile of the risk of homelessness, young people from a disadvantaged background are more often exposed to mental and physical health problems. This puts them more at risk of forced evictions, even where youth homelessness remains invisible because many manage to stay temporarily with friends or relatives.

**At the same time, a considerable and growing number of people over 50 have been homeless or exposed to housing exclusion for at least a year.** <sup>(90)</sup> Divorce, death of a spouse and an inadequate pension are the major trigger factors. The growing lack of carers in ageing societies may also increase the vulnerability of older people to housing exclusion. Older people who depend on affordable home care and who are left struggling are also at risk of homelessness.

**The risk of homelessness may therefore affect very large segments of the population.** As a response, the EU recognises an integrated approach to combat homelessness. In particular, the European Pillar of Social Rights identifies three clear principles in this policy area:

- Access to social housing or housing assistance of good quality shall be provided for those in need.
- Vulnerable people have the right to appropriate assistance and protection against forced eviction.
- Adequate shelter and services shall be provided to the homeless in order to promote their social inclusion.

To flesh out these principles, the EU has implemented various policy actions, for example in the frame of the Social Investment Package <sup>(91)</sup> and the EU Urban Agenda Housing Partnership. <sup>(92)</sup>

## 6. CONCLUSIONS

**A favourable global macroeconomic outlook has started to show signs of a slowdown.** In 2018 economic activity in some advanced economies, as well as emerging ones, was weaker than expected, although the US economy continued to show positive results. Gross domestic product grew by 2.0% in the EU and 1.8% in the euro area, marking a deceleration in comparison with 2017. These results were below expectations: they were affected by uncertainty over structural reforms and the institutional environment and by underperforming exports, particularly as far as goods are concerned.

**Productivity per hour worked is slowly but steadily increasing in the EU and in 2018 it was 12% higher than the record low of 2009.** On the other hand, productivity per person grew at a slower pace. The labour cost index has been growing in real terms in all sectors of economic activity since 2013. Industry is the sector that recorded the strongest growth, and in 2018 it was 7.2% higher there than in 2012.

**Employment has reached a new record level, with 240.7 million at work at the beginning of 2019.** The employment rate in 2018 reached 73.2%, 1.0pp higher than in 2017. However, the employment rate will need to grow at a faster pace in the next two years for the EU to reach the EU2020 objective of 75%. Furthermore, the gender employment gap has not improved substantially in recent years and remains above 10pp.

**At 6.8% of the labour force, the unemployment rate reached a historically low level in 2018.** Nonetheless, the incidence of long-term unemployment, albeit in slow decline, is still quite high. While weak economic conditions in some countries can be a cause, an improvement in active labour market policies could help the integration of the long-term unemployed in the labour market.

<sup>(85)</sup> Although the figures are not comparable by country, due to different methodologies for monitoring the number of the homeless, it is possible to monitor the evolution of the issue over time within the same Member State.

<sup>(86)</sup> The FEANTSA report (2018) states that homelessness in the Finnish case was tackled as a housing problem and a violation of fundamental rights rather than an inevitable social problem resulting from personal issues.

<sup>(87)</sup> European Commission (2012).

<sup>(88)</sup> FEANTSA (2007).

<sup>(89)</sup> CSEYHP (2011). See: <https://www.movisie.nl/en/themes/combating-youth-homelessness>.

<sup>(90)</sup> European Commission (2013).

<sup>(91)</sup> European Commission (2013).

<sup>(92)</sup> See: <https://ec.europa.eu/futurium/en/housing>.

**Differences among Member States and among regions, especially in unemployment rates, remain very high, even where economic conditions have improved.** Policies to improve public investment and to push regions out of the middle-income trap can have a positive impact in the reduction of differences in unemployment.

**The social situation in the EU has improved, especially with regard to higher standards of living in most Member States.** Over the last three years, incomes from work have continued to increase and, together with social transfers, have led to an increase in the disposable incomes of households. The risk of poverty or social exclusion in the EU has steadily declined from its 2012 peak. Severe material deprivation has decreased in all Member States except Greece.

**However, progress in reducing inequality and relative poverty (AROP) has been modest.** Inequality in the EU has been largely stable since 2014. Without the redistributive effects of tax-benefit systems, inequality and poverty in the EU would have been much higher. Additionally, progress at the EU level conceals significant differences between Member States. The risk of poverty (AROP) has increased or stabilised in most Member States, while inequality has intensified in eight Member States and can therefore be considered one of the main socio-economic challenges in the EU.<sup>(93)</sup> The risks of poverty or social exclusion are more pronounced for certain types of workers and for vulnerable groups.

**The middle class is a key component of all European societies, making up well over half of the EU population.** However, in some Member States the middle class feels under strain and reports high levels of financial difficulty. Overall in the EU, there has been an improvement for the lowest income groups, mostly located in central-eastern Member States as a result of their economic catching-up, while the income conditions of the lower income groups in Mediterranean Member States have, if anything, worsened.

**Improvements in labour markets should in principle translate into better social situations for more Europeans.** Addressing the aforementioned challenges in social situations calls, among other things, for more effective and efficient social protection systems. In this respect, there is scope for more effective policy action by the Member States. Such action could be focused on principles of the Pillar of Social Rights, particularly on: the right to adequate social protection; the right to adequate minimum

income; the right to training; and facilitating access to housing and assistance for the homeless and to essential services for all.

<sup>(93)</sup> While this statement is accurate in the EU context, Filauro and Parolin (2018) and Blanchet et al. (2019) show that income inequality in the EU can be considered low by comparison with the USA. Darvas and Wolff (2016, p.2) present similar findings in comparison to the emerging economies of Asia, Africa and Latin America, and contend that poverty defined using very low absolute income is rare in the EU.

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# Sustainable growth and development in the EU: concepts and challenges

## 1. INTRODUCTION <sup>(94)</sup>

**Sustainability as a global concern emerged in the second half of the 20th century out of growing recognition of the detrimental impacts of economic development on the environment and human health.** Sustainability refers to the ability of a system, organism or human-made product to endure indefinitely. The concept evolved out of “sustainable development”, a term coined in 1987 by the seminal report issued by the World Commission on Environment and Development, chaired by Norwegian Prime Minister Gro Harlem Brundtland under the auspices of the United Nations. The report called sustainable development one “that strikes a balance between meeting the needs of the present without compromising the ability of future generations to meet their own needs.”<sup>(95)</sup> Related concepts emphasise the ultimate common goods and values that need to be sustained, as in “sustainable society”: “one where economic growth is compatible with planetary boundaries and fairly distributed among its citizens.”<sup>(96)</sup>

**Sustainable development is one of the European Union’s fundamental aims and a matter of international credibility.** It is enshrined in Article 3.3 of the Treaty on the European Union (TEU), which states that “The Union shall [...] work for the sustainable development of Europe based on balanced economic growth and price stability, a highly competitive social market economy, aiming at full

employment and social progress, and a high level of protection and improvement of the quality of the environment.” Thus, according to the Treaty, sustainable development in the EU:

- presupposes enduring and inclusive economic growth;
- is based on macroeconomic stability without imbalances;
- should be pursued through a highly competitive “social market economy” (i.e. on a distinctly European model of economic policies <sup>(97)</sup> which promote fair market competition within a welfare state);
- should aim at full employment and social progress;
- should aim at protecting and improving the environment.

**Sustainable development in the EU is understood as having three interlinked and equal dimensions – economic, social, and environmental.** Underlying this view (illustrated in *Figure 2.1*) is the belief that “it is not possible to achieve a desired level of ecological or social or economic sustainability (separately) without achieving at least a basic level of all three forms of sustainability, simultaneously.”<sup>(98)</sup> The Europe 2020 strategy for “smart, sustainable and inclusive

<sup>(94)</sup> This chapter was written by Katarina Jaksic, Jörg Peschner and Argyrios Pisiotis.

<sup>(95)</sup> World Commission on Environment and Development (1987).

<sup>(96)</sup> Falkenberg (2016).

<sup>(97)</sup> The “social” element of the model refers to support for the provision of equal opportunity and protection of those unable to enter the free market labour force because of old age, disability, or unemployment.

<sup>(98)</sup> The view owes much to the corporate accounting term “triple bottom line,” coined by business sociologist John Elkington (1997) and (1999), p.75.

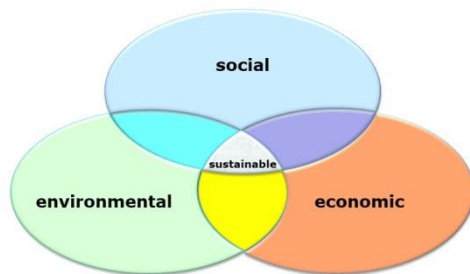
growth”, issued in early 2010, is also consistent with this tri-dimensional view of sustainable development.

**Sustainable development has become a mainstream concept.** It has been invoked by scholars, multinational business and advocacy groups, governments and multilateral institutions. In September 2015, the United Nations resolution on the 2030 Agenda for Sustainable Development and its 17 Sustainable Development Goals (SDGs, see *Figure 2.2*) marked the culmination of a process that has made “sustainability” the global framework for international and national development efforts in all their economic, social, environmental and governance dimensions.<sup>(99)</sup>

Figure 2.1

**Sustainability as the intersection between environment, economy and society**

Sustainability and its dimensions



Source: Authors' own presentation.

[Click here to download figure.](#)

<sup>(99)</sup> See the UN resolution at <https://sustainabledevelopment.un.org/post2015/transformingourworld>. The concept of resilience, initially used in engineering and environmental sciences, started being transferred to social sciences, where it has also become a paradigm or “perspective”, moulding development action in national settings and international cooperation. See Folke (2006) and Brown (2014), pp. 107–117. In the EU, resilience has progressively gained prominence as a concept similar to the concept of sustainability. It can be defined as the “ability of the society to face shocks and persistent structural changes without losing its ability to deliver societal well-being in a sustainable way,” while a “resilient society aims to sustain its level of individual and societal wellbeing in an intergenerationally fair distribution”; see Manca and Zec (2019) and Manca et al. (2017), p.6.

Figure 2.2

**SDGs require simultaneous and mutually reinforcing action towards three core objectives: economic growth, social inclusion and environmental protection**

Sustainable Development Goals



Source: <https://www.un.org/sustainabledevelopment/news/communications-material/>  
[Click here to download figure.](#)

**The EU was one of the leaders in the formulation of the SDG agenda and has taken follow-up action towards its implementation.** In 2017, the European Commission established the High Level Multi-stakeholder Platform on the SDGs, bringing together ideas for the Commission’s Reflection Paper “Towards a Sustainable Europe by 2030.”<sup>(100)</sup> Issued on 30 January 2019, the Reflection Paper contributed to the wider debate on the ‘Future of Europe’, launched in March 2017 by European Commission President Juncker. It aimed at stimulating further reflection on the vision of a sustainable EU and a strategy for implementation of sustainable development goals. It complemented a series of other Reflection Papers launched before, including on the social dimension of Europe<sup>(101)</sup> and on Harnessing Globalisation.<sup>(102)</sup>

**Fast and bold common policy choices are needed for making the EU sustainable.** A recent report by the European Commission’s Political Strategy Centre points to “global existential challenges” which urgently required a common EU policy response.<sup>(103)</sup> In its

<sup>(100)</sup> Accessible at [https://ec.europa.eu/commission/sites/beta-political/files/rp\\_sustainable\\_europe\\_30-01\\_en\\_web.pdf](https://ec.europa.eu/commission/sites/beta-political/files/rp_sustainable_europe_30-01_en_web.pdf).

<sup>(101)</sup> The Reflection Paper on the Social Dimension of Europe discusses how to sustain our standards of living, create more and better jobs, equip people with the right skills and create more unity within EU society, in the light of major changes. See: European Commission (2017), Reflection paper on the Social Dimension of Europe, COM(2017) 206, 26 April 2017; accessible at [https://ec.europa.eu/commission/sites/beta-political/files/reflection-paper-social-dimension-europe\\_en.pdf](https://ec.europa.eu/commission/sites/beta-political/files/reflection-paper-social-dimension-europe_en.pdf).

<sup>(102)</sup> The Reflection Paper on Harnessing Globalisation discusses ways to protect and empower citizens through robust social policies and education and training support throughout their lives, as well as through progressive tax policies and investment in innovation. In external relations, the Paper posits the need to shape a truly sustainable global order, based on a multilateral set of global rules and a common agenda.

<sup>(103)</sup> European Political Strategy Centre (2019). The paper provides an overview of the long-term structural trends accelerating and intersecting at EU level. These trends bear economic, technological, societal and governance-related risks. They include significant growth divergence between countries,

Reflection Paper, the European Commission outlined policy choices for setting the EU's economy on a path towards sustainability, while taking account of the inextricable links between the various dimensions of sustainability, each facing particular challenges.<sup>(104)</sup> It focuses on promoting a circular economy, sustainable production, consumption, including in the key agro-food sector, energy generation and consumption, and a socially fair transition to environmentally sustainable economic growth. The Paper also identifies domains in which policy action can have a horizontal enabling effect in fostering sustainable development. These are education, science, technology, research and innovation, financing, taxation and competition policies, corporate social responsibility and coming to terms with new business models, open trade, and effective multi-level governance.

**This chapter reviews concepts of sustainability and identifies key implementation challenges.**

Different sections dedicated to: firstly, the concept of sustainability and its measurement, with a focus on the social dimension of sustainability; secondly, a factor analysis aimed at identifying the principal components of sustainable growth as well as synergies and trade-offs between the different dimensions of sustainable development; and thirdly, identifying the main challenges to social sustainability in the EU. These are addressed in detail in the subsequent chapters.

## 2. SUSTAINABILITY AS AN EU OBJECTIVE: DEFINING AND MEASURING THE SOCIAL DIMENSION

**The social dimension of the EU is of fundamental importance.** Whether subsumed directly under “sustainable development” or not, the scope of the social dimension is broadly delineated in the Treaties through explicit or implicit references to the following aspects:<sup>(105)</sup>

- (social) justice;
- human dignity and equality;
- inter- and intra-generational solidarity;
- promotion of (high) employment;

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regions and businesses; changing demographics and rising inequalities; unsustainable consumption patterns; societal unease with rapid pace of change; rising protectionism; and climate change.

<sup>(104)</sup> See European Commission (2019c), p. 3, chart adapted from Kate Raworth's 'Donut of social and planetary boundaries' (2017).

<sup>(105)</sup> All references are to either the Treaty on the European Union (TEU) or the Treaty on the Functioning of the European Union (TFEU). Article 2 TEU conveys the strong social content of the EU's shared foundational values. Article 3.3. TEU lists primary EU objectives emanating from these values (art. 2 TEU) and from the EU's fundamental goal (art. 3.1 TEU.) Article 151 TFEU elaborates on EU objectives related to human resource development, labour markets and social conditions.

- working conditions and their harmonisation across Member States;
- the improvement of living conditions and upward convergence in living standards;
- welfare states (indirectly through the stated preference for a “social market economy”);
- the fight against social exclusion and discrimination;
- (proper) social protection;
- social dialogue;
- human capital development;
- gender equality;
- protection of the rights of the child;
- economic, social and territorial cohesion; and
- solidarity among Member States.

**The EU aims for “inclusive growth”, including through the implementation of its Europe 2020 strategy.**

As shown in Chapter 3, economic growth benefits from efficient product (and credit) markets and fair competition. This is important for allocating resources to their most productive use, and for incentivising innovation. However, the concept of inclusive growth is broader. For the EU, it includes empowering people through opportunities for all throughout the lifecycle: investing in skills in order to attain high levels of employment; fighting poverty and thus building a cohesive society; and sharing the gains of growth widely. For growth to be inclusive, labour markets need to be modernised, training and social protection systems adjusted to help people to anticipate and manage technological transformation and more frequent labour market transitions. In its Lisbon and Europe 2020 strategies, the EU anticipated the particular risks attached to Europe's ageing population and the need to make the fullest possible use of its labour potential to sustain growth and prosperity. In this context, promoting gender equality and facilitating the inclusion of people with disabilities is as much a measure of support for the EU's growth potential, benefiting all, as it is a matter of principle aimed at improving the lives of the individuals concerned.

**The European Pillar of Social Rights gives prominence and visibility to the social dimension of sustainability.**

Proclaimed at the Gothenburg Social Summit of 17 November 2017 by the European Parliament, the Council and the Commission, the Pillar showed the commitment of EU institutions and Member States to work on all of the aforementioned aspects of the social dimension. The principles of the Pillar provide a compass for upward convergence towards more equal opportunities and access to the

labour market, fairer working conditions and more decent living conditions through social protection and inclusion. They can also be considered a “to do” list for promoting social sustainability.

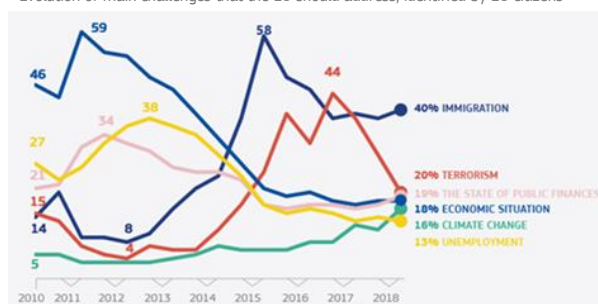
## 2.1. European citizens' views and expectations regarding sustainability

**All three dimensions of sustainable development are high on the list of European citizens' preoccupations, while environmental concerns are gaining ground.** According to the most recent standard Eurobarometer survey of autumn 2018, citizens regard migration as by far the biggest issue the EU is facing, but concerns about climate change and environmental sustainability are growing, while concerns about security, unemployment and the overall economic situation continue to decline (see *Chart 2.1*).

Chart 2.1

**EU citizens' see migration, security and sustainability as the most important issues the EU is facing**

Evolution of main challenges that the EU should address, identified by EU citizens



Note: Data are in percentage of EU-total respondents. Only the six most frequently chosen answers are represented in the graph.

Source: Eurobarometer, autumn 2018.

[Click here to download chart.](#)

**However, the concerns of EU citizens at personal and national level continue to focus on household finances, purchasing power and employment outlook.** Interestingly, when citizens are asked – in the same survey of 2018 – about their “most important concerns personally and nationally”, the results look somewhat different (see *Table 2.1*). The top five concerns of EU citizens “for them personally” are: rising prices (32%), health and social security (17%), pensions (16%), the financial situation of the household (13%) as well as taxation, education and environment, climate and energy issues (all at 10%). Immigration (6%) and terrorism (3%), on the other hand, rank last in this survey. Main concerns at the national level mirror those at the personal level to a great extent with unemployment heading the list, followed by rising prices, immigration, health and social security and the economic situation. While depending on multiple factors, the discrepancies in reported EU-level, national level and personal concerns accompany the observed divergences between EU aggregate indicators and individual perceptions.

Table 2.1

**EU citizens' personal and national challenges differ significantly from those facing the EU and remain predominantly focused on social issues**

Most important issues that the EU and citizens personally are facing (both in the view of citizens)

Rank (% of respondents)	Main concern at national level	Most important issue citizens are facing personally
<b>Immigration</b>	<b>3</b> (21%)	<b>15</b> (6.0%)
Terrorism	13 (8%)	16 (2.7%)
State of public finances	11 (10%)	
Economic situation	5 (15%)	11 (8.1%)
Climate change	7 (14%)	6 (10.3%)
<b>Unemployment</b>	<b>1</b> (23%)	<b>7</b> (9.9%)
<b>Rising prices</b>	<b>2</b> (21%)	<b>1</b> (31.7%)
The environment	7 (14%)	6 (10.3%)
Crime	8 (12%)	14 (6.1%)
<b>Pensions</b>	<b>6</b> (15%)	<b>3</b> (15.9%)
Energy supply	7 (14%)	
Taxation	13 (8%)	5 (11.7%)
<b>Health and social security</b>	<b>4</b> (20%)	<b>2</b> (16.9%)
<b>Household finances</b>		<b>4</b> (13.2%)
Education systems	10 (11%)	8 (9.8%)
Working conditions		9 (8.6%)
Living conditions		10 (8.4%)
Housing	9 (11%)	13 (6.9%)

Note: Data are percentages of EU total respondents. Responses regarding main challenges at national level are based on pre-defined answer categories; responses regarding main challenges faced personally are based on free answers without pre-defined categories. The top four responses in each category are listed in bold and in colour.

Source: Eurobarometer, autumn 2018.

## Europeans also see the need for modernising and strengthening social welfare systems in the EU.

Whereas welfare systems are within the competence of Member states, it is worth noting that almost two thirds of the citizens surveyed by Eurobarometer favour harmonising social welfare systems within the EU, a two-point increase on the previous year. One in four (26%) are opposed to this.

## 2.2. Measuring (social) sustainability

### Measuring and assessing (social) sustainability are still in their infancy.

The realization of the need for such a measure is not new. The “Commission on the Measurement of Economic Performance and Social Progress”, <sup>(106)</sup> admitted the difficulty of devising measures that can accurately determine whether current levels of well-being can be maintained for future generations. The report emphasised that the assessment of sustainability is complementary to the determination of current economic performance or well-being and should be measured separately. The authors warned against combining measures of

<sup>(106)</sup> The Commission, established by former President of France Nicholas Sarkozy in 2008, was coordinated by Nobel laureates Joseph Stiglitz and Amartya Sen and French economist Jean-Paul Fitoussi.



current well-being and sustainability into a single indicator or confusing the former with the latter. This means that measurement of sustainability in the employment and social domains cannot be tantamount to the measurement of current performance in these domains, based on familiar stylised indicators.

**Measuring sustainability requires a methodology based on “stocks”, “flows” and “thresholds.”** The report of the “Stiglitz Commission” concluded that any assessment of sustainability, in the economic, environmental or social dimensions, requires a dashboard of indicators partly reflecting the methodology of the environmental sciences. This methodology would represent the variability of the “stocks” to be sustained, i.e. quantities and qualities of natural, physical, human, and social capital. It would also monitor “flows” in and out of these stocks and establish threshold values for each stock “beyond which [adverse effects] would be highly detrimental to future well-being” <sup>(107)</sup>.

**The social dimension of sustainability has commonly been measured through stylised indicators of labour market and social outcomes.** These are indicators such as employment, activity and unemployment rates and their breakdown components, Gross Disposable Household Income and its distribution, <sup>(108)</sup> the rate of people at risk of poverty and social exclusion and its breakdown components, in-work poverty, gender gaps, etc. <sup>(109)</sup> This stems from the relative difficulty of suggesting a definition of social sustainability that would gain widespread visibility and political acceptance, as has happened with environmental sustainability. This simple yet practical approach could be complemented with the measurement of the forward-looking dimension of the desired performance under each such indicator. It also foregoes any attempt to explore the interplay between indicators and whether and how they reinforce each other.

**The EU's SDG indicators offer an extensive view of the evolution of the social dimension.** Yet they concentrate on trends and outcomes rather than assessing the sustainability of current well-being. From 2017 onwards, the Commission carried out regular monitoring of the SDGs in an EU context, developing a reference indicator framework for this purpose and drawing on the wide range of ongoing monitoring and assessment across the Commission, Agencies, European External Action Service and Member States. <sup>(110)</sup>

<sup>(107)</sup> Stiglitz et al (2009), p. 266.

<sup>(108)</sup> Income distribution is typically measured using the Gini-coefficient and the S80/S20 ratio.

<sup>(109)</sup> This approach is similar to that of Eurofound in the project titled “Developing a conceptual framework to monitor convergence in the European Union.” See Mascherini et al. (2018).

<sup>(110)</sup> European Commission, 2016a, p. 16; See also Eurostat (2018b).

**A focus on “common goods” and “capabilities” could further enrich the approach of social sustainability.** The concept of functional “capabilities” builds on the premise that the citizens’ established rights to certain public goods are meaningless without active measures by governments to enable citizens to exercise these rights. These include economic facilities and social opportunities, such as education and healthcare, which allow people to live better lives and realise their potential.<sup>(111)</sup> The capabilities approach has become a predominant paradigm for policy in human development, inspiring the creation of the UN’s Human Development Index, which captures health, education, and income capabilities. <sup>(112)</sup> The strengths of the capabilities approach are: a) the emphasis of welfare economics on subjective individual choices; b) the contextualisation of development efforts in a specific society with its regulatory, institutional and legal aspects; and c) the possibility of weighting indicators of development according to people’s situation in life.

**The Social Scoreboard accompanying the European Pillar of Social Rights offers a framework for measuring social sustainability in the EU.** Although measuring social sustainability does not have to mimic methods developed for the environmental dimension, monitoring flows in and out of the existing stocks can be crucial to policy. Ascertaining the positive or negative direction of an indicator’s evolution can assist policy target setting to influence the direction and speed of this evolution. <sup>(113)</sup> The European Semester uses the Social Scoreboard to monitor performance in the social dimension (see Annex 1).

### 3. IDENTIFYING THE PRINCIPAL COMPONENTS OF SUSTAINABLE DEVELOPMENT: A FACTOR ANALYSIS

**The previous section shows that the concept of ‘social sustainability’ is not clear-cut.** The empirical analysis in this chapter therefore starts by attempting to refine and realise the concept. This section seeks to complement previous efforts to operationalise the social dimension in two ways:

<sup>(111)</sup> The capabilities approach developed out of the collaboration of development economists Amartya Sen, Sudhir Anand and James Foster and philosopher Martha Nussbaum. See Sen (2001) and (2010), pp. 195–220, Nussbaum and Sen (1993).

<sup>(112)</sup> The Human Development Index (HDI) is a statistic composite index of life expectancy, education, and per capita income indicators, which is used to rank countries into four tiers of human development. A country scores a higher HDI when the lifespan is higher, the education level is higher, and the GDP per capita is higher.

<sup>(113)</sup> This is particularly true since many social system characteristics (e.g. human capital development, social networking, leadership) allow for both adaptation and transformation of human production, consumption and conservation activity. See Appgar et al. (2015), cited in Johnson et al. (2018), p. 15.



### Box 2.1: Explorative Factor Analysis

The factors are being extracted from the original dataset, following two rules:

- The extracted factors themselves are uncorrelated (orthogonal) so that they reflect different dimensions of social sustainability (are independent of each other).

- Extraction happens in a way as to maximise correlation of a factor with some variables while minimising correlation with other variables. This makes it possible to interpret each factor as each factor can be related to certain variables.

The correlation between the factors and the original variables is called 'factor loading'.

**Firstly, it seeks synergies between the different aspects of the social dimension**, as represented by the principles of the Social Pillar. In other words, it explores whether and which of these aspects/principles reinforce each other.

**Secondly, it extends the quest for synergies beyond the social dimension**, to the other two dimensions of sustainability — the environmental and economic.

**The objective of the analysis is to identify the principal components of sustainable development.** These bind together the social, environmental and economic dimensions. The principles of social sustainability are listed in the previous section. If they are pursued without paying attention to the constraints imposed by environmental and economic concerns the EU risks making progress on one dimension at the expense of the other two. To mitigate such risks, it is crucial to pursue improvements in the social dimension by capitalising on potential synergies with the other dimensions. The analytical framework usually used for this kind of question is an explorative Factor Analysis (FA), also called 'Principal Component Analysis' (see Box 2.1).<sup>(114)</sup>

**A factor analysis identifies groups of inter-correlated macro, social and environmental variables.**<sup>(115)</sup> In the present case, the first step was to identify all the country-level variables deemed relevant to describing the core dimensions of the UN Sustainable Development Goals. The next step was to reduce this list of more than 400 variables to a manageable set of indicators.<sup>(116)</sup> This reduced final list contains variables that correlate highly with others which have been eliminated in the reduction process. *Annex 2* presents a table of non-included variables together with their correlations with the factors.<sup>(117)</sup> A

further step was to use information about cross-country correlations between these variables to find out whether there are common drivers behind them. Those are the factors, or principal components, of sustainable development, with a focus on the social dimension.

The final list of indicators taken into account for the factor analysis is shown in *Table 2.2*, first column. It comprises 45 indicators from very different sources, distributed across six broad themes (policy areas) that are considered relevant to people's well-being: (1) the labour market situation in the respective country, (2) the availability of job-related skills and qualifications, (3) the macro-economic conditions, (4) the social outcomes, (5) the welfare state and institutions, and (6) the environmental conditions. The table also displays the Sustainable Development Goals covered by the respective theme. *Annex 2* explains variables and their data sources, indicating why they were included.

<sup>(114)</sup> See, for example, Backhaus et al (2008), Ch. II.7.

<sup>(115)</sup> See European Commission (2011, p. 210). The ESDE 2011 had used the same methodology in the context of identifying the main dimensions of Active Ageing.








































<sup>(116)</sup> Starting out from several hundred variables, the final list is the outcome of numerous rounds of reduction of redundant variables, or adding of new variables, based on the themes they cover and the contribution they made to the overall model's explanatory power.

<sup>(117)</sup> That is, these variables were taken into account although they were technically not part of the model.

Table 2.2

**Sustainable development can be summarized through four main factors**

Four factors extracted from 45 labour market, social and institutional variables

No	Original Indicator	Factor				Sum over squared loadings (indicator's communality)	Data source	
		Human capital and effective institutions favour productivity	Degree of labour market (in-) efficiency	Effective welfare states favour good social outcomes	Limits to growth, costly labour, high social expenditure			
Labour Market			  					
1	Employment rate of population aged 20-64 - total		-.83			.86	1	
2	EDR - Economic Dependency Rate 15+ (Population/Employment - 1)		.85			.84	1	
3	Unemployment rate of labour force 15+		.77			.70	1	
4	NEET rate for population aged 15-24 - total		.57			.71	1	
5	Involuntary temporary employment as % of total employees 15-64		.64			.45	1	
6	Job tenure in years (15-64)		.80			.68	1	
7	Self-employment – Share of self-employed workers among overall employment		.70			.57	1	
8	Unemployment gender gap (20-64)		.83			.72	1	
9	Share of adult population (aged 25-64) with upper secondary or tertiary education - total		-.53			.53	1	
10	Job satisfaction		-.70			.80	9	
11	Statement: "Difficult to fulfil family responsibilities because of time spent on job"		-.79			.70	9	
(Job) Skills			    					
12	Share of employment in professional, scientific, and technical activities; administrative and support activities	.74				.58	1	
13	Share of employment in care and health care activities	.84				.83	1	
14	Individuals who have basic or above basic overall digital skills	.75				.82	12	
15	Life long learning - percentage of adult population (aged 25-64) participating in education and training	.72				.74	1	
Macroeconomic environment			   					
16	Government Gross Debt		.87			.81	2	
17	Nominal unit labour cost - growth over 3 most recent periods		-.59			.87	2	
18	Average real GDP growth over 3 years				-.92	.88	2	
19	Labour productivity growth - GDP per employed person - growth over 3 most recent periods				-.75	.65	2	
20	Country's export share in GDP				-.57	.45	2	
21	Labour Productivity in percent of EU-28 average	.89				.85	2	
22	GDP per capita in EURO in percent of EU-28 average	.88				.83	2	
Social outcomes			    					
23	Poverty threshold (60% of median income) - value of threshold (in PPS)	.92				.88	3	
24	At-risk-of poverty rate (60% of median income)				-.92	.92	3	
25	Severe material deprivation rate (can't afford 4 and more items)	-.64			-.50	.69	3	
26	In-work poverty - total				-.75	.65	3	
27	At-risk-of poverty rate of children (aged 0-17)				-.87	.86	3	
28	S80/S20				-.87	.88	3	
Welfare state and institutions			      					
29	Social protection expenditure in % of GDP - Social protection benefits, total	.66				.57	.93	4
30	Social protection expenditure in % of GDP - Old age					.65	.81	4
31	Impact of social transfers (incl pensions) in reducing poverty				.81		.80	4
32	Tax wedge, earnings 100%, single					.65	.43	5
33	Trade union density	.56					.36	5
34	Bargaining coverage rate (ICTWSS)	.73					.73	6
35	Coll. Bargaining at Sectoral or Regional level ECS	.67					.69	7
36	Voice and Accountability	.89					.88	8
37	Government Effectiveness Index	.81					.90	8
38	Rule of Law Index	.81					.93	8
39	Control of Corruption Index	.83					.92	8
40	Child care – Children cared for (by formal arrangements other than by the family) (age 3 to mandatory	.68					.52	3
41	Perceived independence of the justice system - Index	.74					.68	10
42	Population with confidence in EU institutions by institution - Index		-.55				.49	10
Environment			 	  	 			
43	Energy productivity	.74					.79	11
44	Resource productivity and domestic material consumption	.77					.66	11
45	Municipal waste recycled and composted 2014	.71					.68	11
Sum over squared loadings (Factor's Eigenvalue)		14.6	8.5	5.6	4.3	Sum: 33.0		

## Data Sources:

- 1 Eurostat EU Labour Force Survey (2017)
- 2 Annual Macro-Economic Database of the European Commission (AMECO, 2017)
- 3 Eurostat EU Survey of Income and Living Conditions (2017)
- 4 European system of integrated social protection statistics (ESSPROS, 2015)
- 5 OECD
- 6 Database on Institutional Characteristics of Trade Unions, Wage Setting, State Intervention and Social Pacts (2013)
- 7 European Company Survey (2013)
- 8 Worldwide Governance Indicators (World Bank, 2017)
- 9 European Quality of Life Survey (Eurofound, 2016)
- 10 European Commission, DG Communication
- 11 Eurostat, Sustainable Development Indicator for the EU (2016, 2017)
- 12 European Commission, DG Communication Networks, Content and Technology

**Note:** The overall variability of the model is normalised to a value of 45, i.e. 45 variables with a standardised variance of one each. Summing up the (squared) loadings along one variable gives the variable's communality. It denotes the percentage of this variable's cross-country differences that all four factors manage to explain. Summing up the (squared) loadings over one factor gives the factor's Eigenvalue. It denotes the percentage of all original variables' cross-country differences that each factor can explain. The sum over all four Eigenvalues is equal to 33.0, equal to the sum over all 45 communalities. The four factors thus explain 73% (33/45) of the cross-country differences between the 45 original variables.

**Source:** DG EMPL calculation based on Eurostat: EU LFS, EU SILC National Accounts; Eurofound: EWCS, ESS; ICTWSS database (University of Amsterdam).

[Click here to download table.](#)

### 3.1. The principle components of sustainable development

The right part of *Table 2.2* presents each of the four factors as they were extracted from the analysis (columns). The table shows how each factor correlates with each original variable – the so-called factor loadings. Only those higher than 0.5 are shown. The following observations can be made:

#### **Factor 1: Human capital and effective institutions favour productivity.**

Countries scoring high on the first factor also tend to

- score high on all skill-related variables. In other words, the first factor correlates strongly with skills;
- score high on productivity, GDP per capita and income (60% of median income is used as the poverty threshold);
- score high on variables that indicate high coverage of workers by collective bargaining. In other words, workers benefit from coordinated (as opposed to individual) bargaining over working conditions as members of trade unions. Factor 1 also correlates positively with favourable indices of corruption, accountability, the rule of law and government effectiveness, signalling trust in the functioning and effectiveness of government institutions;
- score high in terms of social expenditure;
- score high on 'green' indicators that may indicate prior investment in energy productivity and resource efficiency of production.

Factor 1 is the factor with the highest explanatory power. It explains the biggest share (44%) of the cross-country differences in the 45 original variables included. Henceforth it is referred to as "Human Capital" (unless otherwise noted).

#### **Factor 2: Labour market efficiency is a precondition to sustainable development.**

This factor has a negative connotation. A high score signals less favourable outcomes. Countries scoring high on Factor 2 show:

- low employment outcomes (and high unemployment) for different groups of workers;
- signs of imperfect labour markets in the form of strong labour market dualities, with privileged insiders and certain groups at a high risk of being (and remaining) outsiders. A high Factor 2 score implies high job tenure, a high level of involuntary temporary work, a high share of self-employment, a low share of at least medium-educated people and low overall job satisfaction;

- signs of adjustment to persistently unfavourable labour market situations. A high Factor 2 score combines high government gross debt (reflecting long-standing structural problems) and low wage dynamics;

Factor 2 explains 26% of the original dataset's cross-country differences. Henceforth it is referred to as "Degree of labour market (in-)efficiency".

#### **Factor 3: Favourable social outcomes.**

- Factor 3 has a strong negative correlation with all poverty-related and inequality-related variables. A high score in Factor 3 implies very favourable social outcomes.
- At the same time, in countries scoring high on Factor 3, social transfers tend to be effective in reducing poverty.

This factor explains 17% of the original variables' overall cross-country variance. Henceforth, factor 3 is referred to as "Effective welfare states favour good social outcomes".

#### **Factor 4: Regulatory barriers, high taxes and inefficient social expenditure represent important 'limits to growth'.**

The fourth factor correlates with only a few variables and therefore contributes least to the overall variance (13%). However, it is included because it is effective in capturing growth and labour taxation characteristics. Countries scoring high on Factor 4:

- show low recent productivity-growth and hence GDP growth rates;
- tend to show high tax wedges on labour which, together with lower export shares in GDP, may reflect competitiveness problems in some countries;
- spend much of their GDP on old-age-related social protection, which implies little investment in the current workforce;

#### **First conclusions**

Before considering how countries perform on the four factors, some important findings can be derived from the way factors emerge from the comprehensive original dataset and how they reinforce each other. Comparing countries' performance on the four factors, it seems that:

- **Skills go hand in hand with higher productivity.** Effective and trustworthy political and labour-market institutions further reinforce this link. Countries where this is the case are also in a position to invest more in social welfare in a more efficient use of natural resources. Factor 1 provides evidence that policies focusing on human

capital and social and environmental sustainability create trust and favour (rather than hinder) economic efficiency.

- **Structural inefficiency in the labour market, if not tackled, accumulates over time.** It can thus lead to internal devaluation in the form of low wage increases and subdued employment prospects.
- **High effectiveness of welfare spending goes hand in hand with lower poverty rates and lower inequality.**
- **Regulatory barriers may hamper productivity growth and a high tax wedge on labour raises labour costs and reduces workers' take-home pay.** Both may thus lead to lower rates of economic growth.<sup>(118)</sup> This may be the case for Member States where income levels are already high and where certain social and institutional standards have been developed over past decades, the financing of which requires higher labour taxes. To the extent that high labour taxes are needed to guarantee high social standards, this could hint at problems of competitiveness that may arise in the future. Yet countries like the Nordic Member States, Germany and Austria score well on both the Human Capital (Factor 1) and Limits to Growth (Factor 4) factors. That is, they combine high social standards with high productivity.

### 3.2. A taxonomy of sustainable social development in the EU

**Based on the components (factors) of sustainable development identified it is possible to show how Member States score on each of the factors.** It appears that in some countries the foundations of sustainable development have been laid. In others, there seem to be shortcomings in one or more dimensions of sustainability. A Cluster Analysis (CA) seeks to build a hierarchy of groups (clusters) of countries based on the similarity or dissimilarity of their scores on all four factors.<sup>(119)</sup> Chart 2.2 plots the first two factors against each other. They are the strongest factors in the sense that they represent 70% of the total variation on all four factors. The colours chosen for the chart reflect the clusters identified for Member States, based on all four factors. Factor values are standardised to ensure that a value of zero reflects the (unweighted) average across all countries. The factor scores of certain smaller countries do not

allow them to be assigned to any of the broader clusters.<sup>(120)</sup> The following findings emerge:

**There is structural labour market inefficiency in the South of Europe.** Southern Member States show clear signs of segmented labour markets, with high unemployment and low employment performance of vulnerable groups such as young people, women, or people with only low-level qualifications. Workers' bargaining power has generally weakened in these countries, especially for workers on non-standard contracts, so it may be difficult for them to push effectively for higher wages.

**There is an East-West divide in terms of institutions.** Almost all eastern Member States<sup>(121)</sup> (EU-13, green and blue) are on the left side of the chart, while western Member States (EU-15) are on the right.<sup>(122)</sup> The eastern EU countries tend to perform less well on the Human Capital factor (which also captures productivity and effectiveness of institutions). They are still in the process of catching-up economically with western Member States, with labour productivity and per-capita GDP not yet reaching the same standard. The culture of social dialogue appears less developed as the share of workers covered by collective bargaining tends to be lower than in western Member States. In addition, in a number of eastern Member States trust in the functioning of labour market institutions is significantly lower. Finally, these Member States face relatively large environmental challenges and/or struggle with an investment gap in pollution abatement.

<sup>(118)</sup> Earlier model-based Commission analysis on the allocative impact of higher labour taxes confirms this finding. See ESDE 2016.

<sup>(119)</sup> The method is called "hierarchical clustering", where the Ward-methodology is being used. See Backhaus et al (2008), pp. 420ff, European Commission (2011), p. 212.

<sup>(120)</sup> Ireland and Malta are distant outliers on the 'Limits to Growth' dimension (which complicates this factor's interpretation). They show by far the highest GDP and productivity growth and are among the countries with the lowest tax wedge for labour. Hence, these countries gain competitiveness through low taxation and (especially in the case of Ireland) low growth in labour costs. One should also consider a certain upward bias in Ireland's GDP measurement, reflecting the impact of mere changes in accounting practices of multinational companies. Luxembourg has a highly competitive and particularly large financial sector (European Commission 2019a). It pushes Luxembourg's score on the Human Capital dimension to the top. Its small open economy is highly exposed to global competition and shows by far the highest export share in GDP and the highest per-capita GDP in the EU.

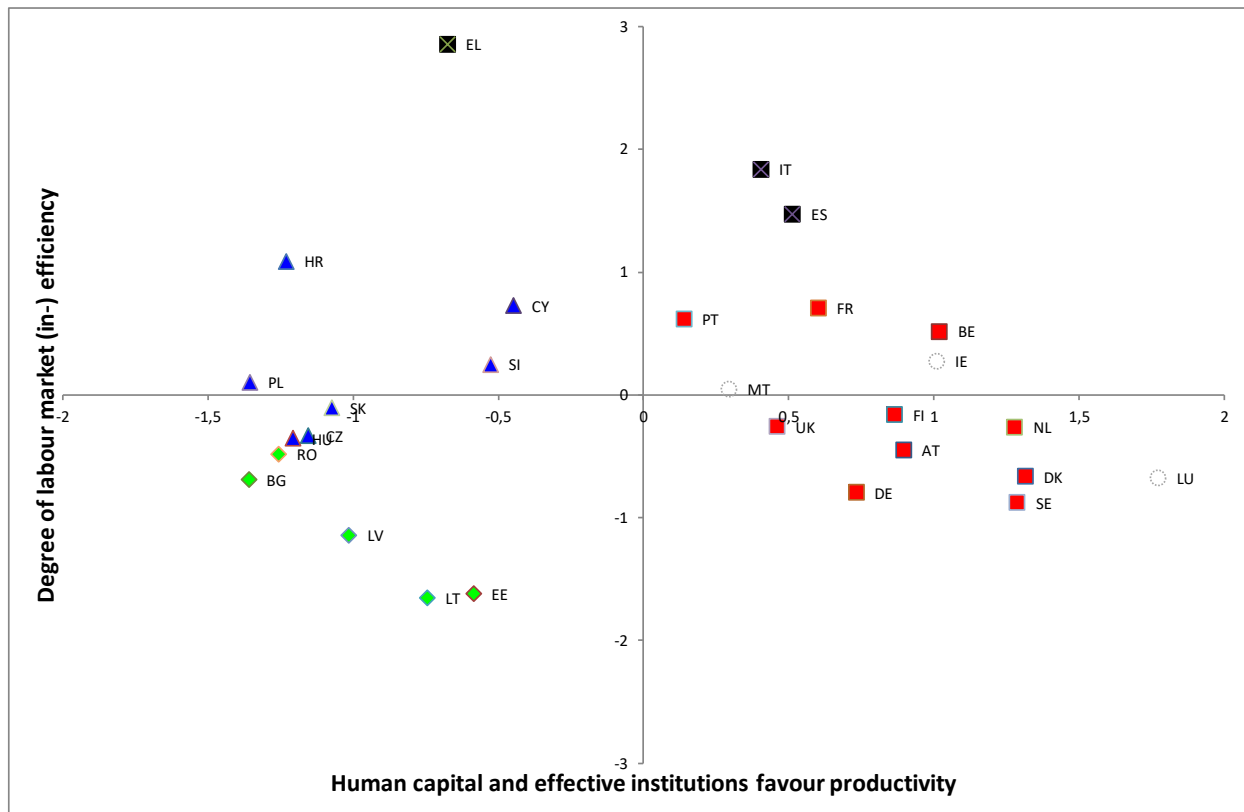
<sup>(121)</sup> For the purpose of the analysis, "eastern" Member States are considered those that acceded in the EU in 2004 or later (EU-13).

<sup>(122)</sup> "Western" Member States are those 15 countries that made up the EU before the 2004 enlargement (EU-15).

Chart 2.2

**A South-East-West divide**

The components of Sustainable Development (factors 1 and 2)



Note: Luxembourg, Ireland and Malta are not assigned to any of the clusters.

Source: DG EMPL calculations

[Click here to download chart.](#)

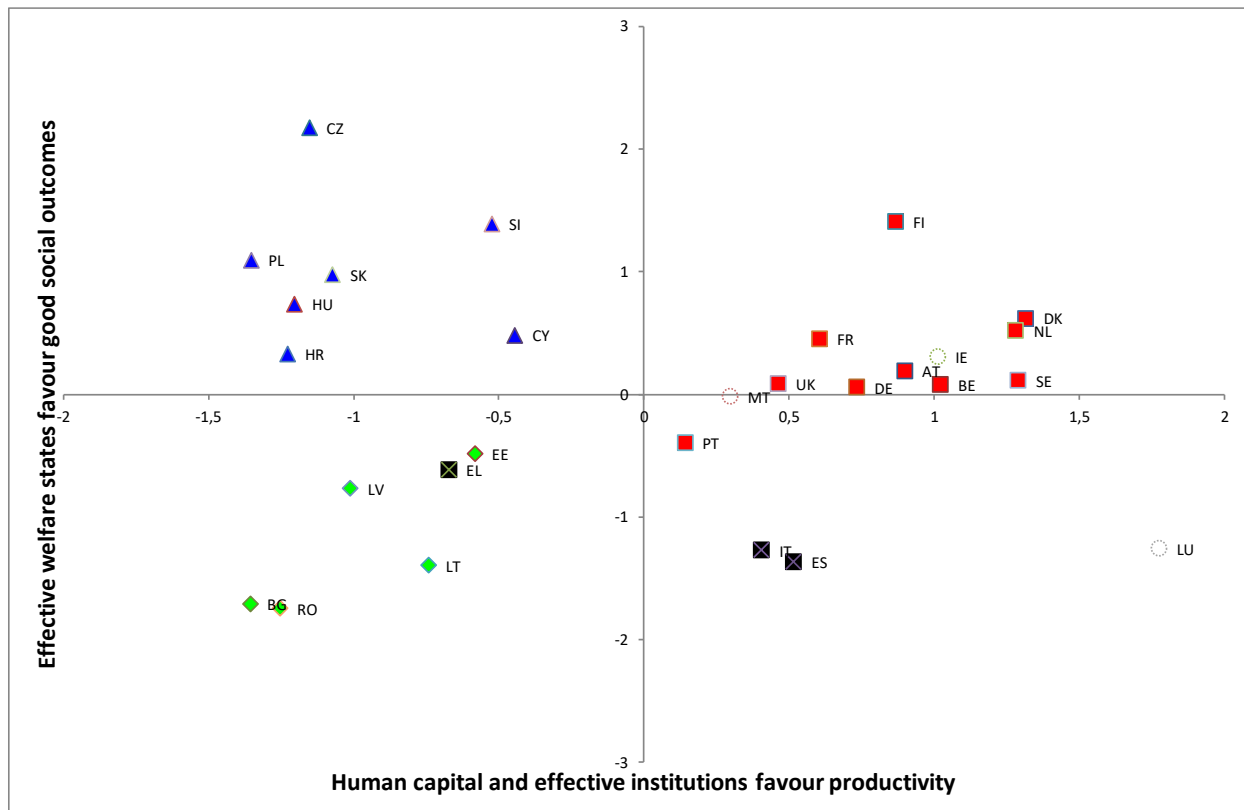
### Southern Europe and parts of eastern Europe face challenges as regards social outcomes.

The clustering procedure assigns the Baltic States as well as Romania and Bulgaria to one cluster (green), separate from other eastern Member States (blue). These eastern European Member States are less affected than the southern cluster by labour market segmentation (vertical on *Chart 2.2*). Yet, like the southern cluster, they show relatively unfavourable scores on factor 3 "Effective welfare state favours good social outcomes". This factor captures Member States' performance on indicators related to inequality, poverty, and the potential for social transfers to reduce poverty. Factor 3 is shown on the vertical axis of *Chart 2.3* where it is plotted against the "Human Capital" factor.

Chart 2.3

**A diverse eastern European pattern**

The components of Sustainable Development (Factors 1 and 3)



Note: Luxembourg, Ireland and Malta are not assigned to any of the clusters.

Source: DG EMPL calculations.

[Click here to download chart.](#)

## 4. SOCIAL SUSTAINABILITY IN THE EU: CHALLENGES, SYNERGIES, TRADE-OFFS

**The Reflection Paper “Towards a sustainable Europe by 2030” states that “sustainable development is about upgrading people’s living standards by giving people real choices, creating an enabling environment” and leading to “a situation where we are living well within the boundaries of our planet through smarter use of resources and a modern economy that serves our health and well-being”.<sup>(123)</sup>** This section looks at where the EU stands today and which issues are particularly challenging on the EU’s path to achieving this declared vision of balanced development. Specifically, the section examines the synergies and trade-offs between the different sustainability dimensions, which the factor analysis has already identified, by confirming and expanding upon them with examples from literature and some key findings from the subsequent chapters.

### 4.1. The Social-Economic Nexus

**Decades of economic growth have brought steady improvements in living standards in the EU.** On average, Europeans today live longer than ever before and are better educated. However, the

economic recession represented a major setback in terms of employment and social inclusion, including poverty. Since the recovery, employment has grown strongly again, severe material deprivation has decreased, while activity rates have continued their long-term upward trend. The crisis and its aftermath made it clear that employment and social goals cannot be disconnected from broader growth objectives.

**While public finances currently have some room for manoeuvre, long-term (economic and social) sustainability remains an issue.** After substantial de-leveraging and reinforced fiscal discipline to safeguard financial stability, EU level debt is forecast to fall to 78.8% of GDP in 2020, 10 pp. lower than its peak in 2014 but more than 20 pp. higher than its pre-crisis low. The overall deficit for 2019 and 2020 is forecast to remain below 1% of GDP.<sup>(124)</sup> However, in high-debt countries fiscal buffers need to be further reinforced to create fiscal space for stimulating growth during the economic slowdown while at the same time investing in social and environmental sustainability. For example, welfare systems need to be sufficiently robust to cushion the impact the ageing of the society may have on economic growth and higher demographic dependency.<sup>(125)</sup> Welfare systems also need to fund better protection and empower people to make the most of labour market

<sup>(124)</sup> European Commission Spring Economic Forecast 2019 (no-policy assumption).

<sup>(125)</sup> European Commission (2017b): ESDE2017, Chapters 2 and 4.

<sup>(123)</sup> European Commission (2019c).



opportunities. In this context, the quality, effectiveness and composition of public spending is of paramount importance and difficult reforms to public spending and taxation may therefore be needed.<sup>(126)</sup> Efficient tax systems incentivise investment in areas that foster productivity and equity, thus supporting growth. In the absence of such structural reforms, ageing-related expenditure (pensions, health and long-term care) is projected to exert significant long-term pressure on the public budgets of a majority of Member States.

## Labour markets and productivity

**Current employment levels are at a record high but further gains depend on the ability to provide quality jobs.** The margin for further gains is largest for groups currently facing difficulties in participating in the job market, such as young people, the low-skilled, the elderly, the disabled, migrants and marginalised communities. The prolonged detachment from work of many young people and migrant women in particular can have negative consequences for potential growth and be disadvantageous for the individuals concerned; they face skill depreciation and a higher risk of poverty and social exclusion later in life.

**Gender gaps persist across the board, weighing down on the sustainability of both economic growth and social cohesion.** These gaps encompass employment rates, pay, caring and household duties, part-time work and pension entitlements. The gender employment gap illustrates the mixed progress achieved in reducing gender gaps. While the gender employment gap remains stable at EU-level, it has widened in 11 Member States. In addition, the higher educational attainment levels of women, coupled with their over-representation in jobs below their qualification and skill levels, represent a clear productivity loss for the economy. In 2014, female workers earned 16.6% less than male workers on average (see *Chart 2.4*). Women working more frequently in lower-paying sectors and occupations can explain part of this gap. In some Member States, however, the average characteristics of the female workforce are more favourable than those of the male workforce and female workers would be expected – all else being equal – to earn more than men if they were remunerated on the same basis.<sup>(127)</sup>

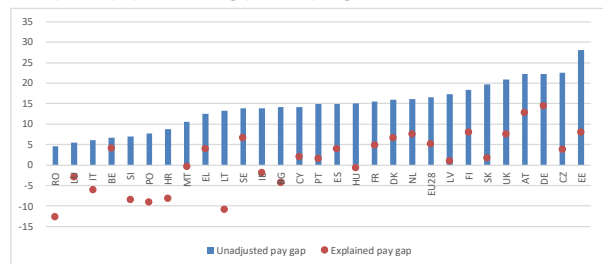
<sup>(126)</sup> European Commission, Annual Growth Survey 2019.

<sup>(127)</sup> This holds for countries where the explained part of the gender pay gap is negative. The Member States where the largest proportion of the gap is explained by the different average characteristics of the female workforce are Germany, Austria, the Netherlands, Finland, and Denmark. See also ESDE 2018, Chapter 4, pp. 123–126.

Chart 2.4

### The gender pay gap is high and cannot be explained only by the characteristics of the female workforce

Unadjusted gender pay gap (% of average gross hourly earnings of men) and the 'unexplained' proportion of the gap, in hourly wages (2014)



Note: The unexplained pay gap is the gap that cannot be explained by differences in the average characteristics of the male and female workforce (age, education, occupation, job experience, employment contract, working time, enterprise characteristics). Countries are sorted by unexplained pay gap. Only unadjusted gender pay gap are considered official statistics.

Source: Figures from Eurostat (2018), Decomposition of the unadjusted gender pay gap using Structure of Earnings Survey data. (2014 wave).

[Click here to download chart.](#)

**Similar to labour market participation, productivity growth becomes ever more important.** To maintain and improve standards of living, the EU economy needs to remain competitive and resilient to shocks.<sup>(128)</sup> High productivity growth contributes to competitiveness and competitive economies are more likely to grow sustainably and inclusively.<sup>(129)</sup> Projected demographic trends indicate that productivity growth will become the main source of economic expansion in the long term. Policy-induced changes leading to both higher fertility rates and increased net immigration, if well managed, would also be beneficial to economic growth.<sup>(130)</sup> This requires continuous structural reforms and investment in both human and physical capital. Equality of opportunities and adequate mechanisms for redistribution through tax benefit systems need to be in place to allow everyone to benefit from economic growth. In addition to generating higher productivity growth, enhancing human capital improves social mobility, supports living conditions and improves people's employability across generations.<sup>(131)</sup>

**Investment in human capital is crucial.** This is demonstrated by the factor analysis and is one of the main findings of the regional and firm-level analyses of Chapter 3. The efficient use of productive factors largely depends on firms' human capital: workers' qualifications, their access to training as well as more transversal elements, such as the workers' potential to innovate or to transfer knowledge across regions and companies. Fast-changing technological frontiers further accentuate the need for well-skilled labour. In general, investment in human capital through the life cycle gives workers access to the resources they need to be successful in the labour market.<sup>(132)</sup> These policies benefit society because they aim to contain

<sup>(128)</sup> For recent work by European Commission services on resilience, see Bencur (forthcoming).

<sup>(129)</sup> World Economic Forum.

<sup>(130)</sup> See European Commission (2017b): ESDE (2017), Chapter 2.

<sup>(131)</sup> European Commission (2018): ESDE 2018, Chapter 3.

<sup>(132)</sup> ESDE 2018, Chapters 2 and 3.

costs by preventing social risks rather than compensating for them ex-post. In its productive function, social investment promotes higher participation in the labour market, employment and productivity, work-life balance and longer working lives; it provides incentives for skills acquisition and reskilling, thus smoothing out transitions in the labour market (see Chapter 4).

### Social outcomes and social protection

**Poverty and social exclusion reflect a lack of resources to ensure a sustainable livelihood, as well as limited access to education and other basic services.** Supported by robust economic and employment expansion, the proportion of people at risk of poverty or social exclusion fell below pre-crisis levels to 22.5% of the total population in 2017, representing 113 million people. The decrease was driven by lower numbers of people in severe material deprivation and/or in very low work intensity households. However, there are large differences between Member States. The residual effort necessary to reach the 2020 poverty and social exclusion reduction target at EU level remains considerable. Social risks can emanate from social isolation and the instability that can accompany changing lifestyles and smaller families. For example, one-person households stand a much higher risk of poverty than the entire population.<sup>(133)</sup> In 2015, they accounted for a third of all households in the EU.

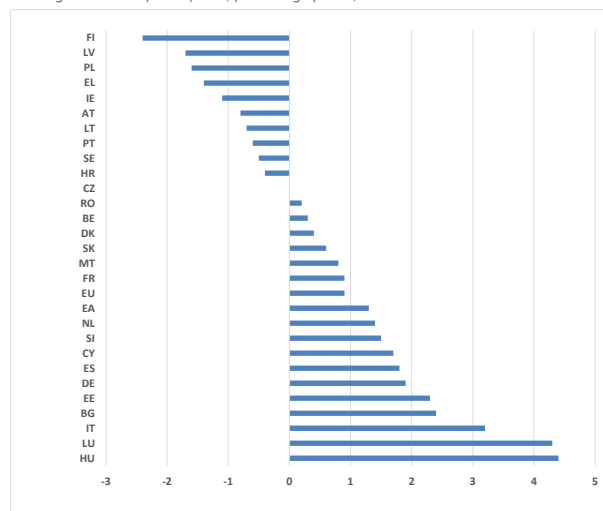
**Work does not always protect from social risks.** Working poverty in the EU affected 9.6% of the employed in 2017, up from 8.5% in 2008. Although it has slightly declined in the last two years, since 2014 the in-work poverty rate has oscillated higher than before the crisis. From 2008 to 2017 in-work poverty increased in the majority (16) of Member States (see *Chart 2.5*), indicating that work is less of a guarantee of a secure, adequate income than before the crisis.

<sup>(133)</sup> At-risk-of-poverty rates for the EU-28: 26% for single person, 16.9% for the whole society (2017). Source: Eurostat EU SILC.

Chart 2.5

#### From 2008 to 2017, in-work poverty increased in the majority of Member States

Change in in-work poverty rate, percentage points, 2008-2017



Source: Eurostat, ilc\_iw01.

[Click here to download chart.](#)

**Income inequality and inequality of opportunities may negatively impact medium- and long-term growth.** While higher productivity tends to be rewarded by higher wages, equality of opportunities and adequate mechanisms for redistribution through tax benefit systems need to be in place to enable everyone to benefit from economic expansion and thus enhance the human capital stock necessary to sustain economic growth for the long duration.<sup>(134)</sup> Inequality of opportunities, notably in access to quality education and training, remains a pressing issue in the EU and contributes to weaker upward social mobility. People with highly educated parents are much more likely to have a higher education themselves than those from families with low levels of education.<sup>(135)</sup> The negative consequences of inequality on social outcomes have been fully identified by research.<sup>(136)</sup> Furthermore, failure to deliver inclusive growth increases the difficulty of building a political consensus around structural reforms.<sup>(137)</sup>

**Social sustainability also depends on containing socio-economic disparities between territories, particularly in the larger EU context.** Cohesion across territories is a fundamental objective of the EU (Article 3.3 TEU). Containing geographical disparities depends on the ability of national and subnational territories to converge upward and to guarantee equal access to services in different areas. The profile of inequalities described in Chapter 1 and outlined above is different at EU, Member State and subnational level. Regional heterogeneity is often masked at Member State level (see *Figure 2.3* and *Figure 2.4*). Notably,

<sup>(134)</sup> OECD (2014), "Focus on Inequality and Growth - December 2014".

<sup>(135)</sup> European Commission (2018b): ESDE (2018), Chapter 3.

<sup>(136)</sup> See Klasen and Lamanna (2008); Dabla-Norris et. al. (2015); Hirschman (1973), pp. 29-36.

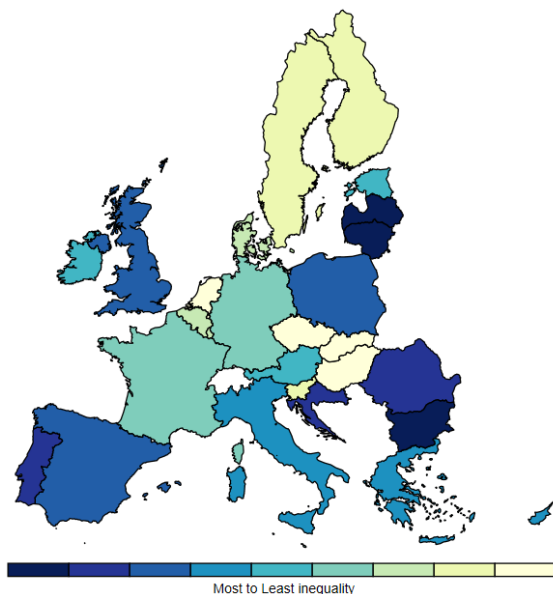
<sup>(137)</sup> See Ostry et al. (2014); Easterly (2007), pp. 755-776; Thorbecke and Charumilind (2002), pp. 1477-1495.

where labour market indicators are concerned, disparities are usually larger between EU regions than between EU Member States. Furthermore, in some cases, the convergence patterns of regions differ from those of Member States. For example, over 2004–2016 Member States' employment rates converged while divergence was recorded at regional level.<sup>(138)</sup> Moreover, income inequality in the EU population has increased considerably over the 2011–2016 period, with still large differences between Member States,<sup>(139)</sup> reflecting the impact of the economic crisis. The variation among euro zone Member States has increased and regional disparities have expanded since the onset of the crisis.<sup>(140)</sup>

Figure 2.3

**Income inequality at national level...**

S80/S20 income quintile share ratio at Member State level (NUTS 0), 2016



Note: Inequality is measured here by the S80/S20 income quintile share ratio, which refers to the ratio of total equivalised disposable income received by the 20% of the country's population with the highest equivalised disposable income (top quintile) to that received by the 20% of the country's population with the lowest equivalised disposable income (lowest quintile). The darker colours on the map denote higher values and therefore higher inequality. NUTS refers to the EU nomenclature of territorial units for statistics. NUTS 0 denotes the Member State level. The current NUTS 2016 classification, which entered into force on 01/01/2018, lists 104 regions at NUTS 1, 281 regions at NUTS 2 and 1348 regions at NUTS 3 level.

Source: Map by Commission services, based on Eurostat data.

[Click here to download figure.](#)

**Social protection systems have the potential to raise economic efficiency and contribute to economic growth in the face of market failures.** The efficient market-based provision of insurance against ill health or unemployment and for old age is often subverted by imperfections in the corresponding markets. State intervention ensuring the provision of such insurance has a clear economic benefit: it allows individuals to smooth out consumption over the life cycle (old-age pension) and face important risks (sickness, unemployment).

<sup>(138)</sup> Mascherini and Istituto per la Ricerca Sociale (2018), p. 5.

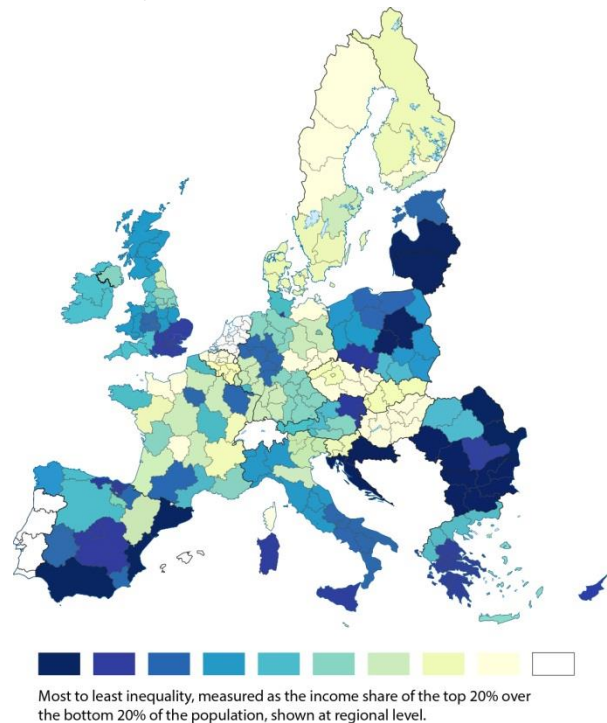
<sup>(139)</sup> Mascherini and Bisello (2018), p.12. Eurostat data on the Gini coefficient confirms that inequality has significantly increased in a number of Member States such as Bulgaria, Denmark, Spain, Lithuania, Hungary and Austria.

<sup>(140)</sup> Ibidem.

Figure 2.4

**... does not capture the significant socio-economic disparities within Member States**

S80/S20 income quintile share ratio at NUTS 2 level, 2016



Note: Inequality is measured here by the S80/S20 income quintile share ratio. The darker colours on the map denote higher values and therefore higher inequality. NUTS refers to the EU nomenclature of territorial units for statistics. NUTS 2, shown here, is the primary regional level in which Cohesion Policy intervenes.

Source: Map by Commission services, based on Eurostat data.

[Click here to download figure.](#)

**Such policies may further underpin economic performance to the extent that, in the absence of insurance, people are likely to be more risk-averse in their choice of activities.** When protected by the benefit system, people engage in risky and profitable economic activities, which they would probably not undertake otherwise. Social insurance may thus contribute to aggregate economic performance by facilitating better matching between labour demand and supply (e.g. unemployment insurance facilitating a search for jobs that match one's skills better) or encouraging innovation and entrepreneurship, which in turn can raise productivity and growth.

**In addition, public social insurance schemes play a major role in macroeconomic stabilisation.** They dampen fluctuations in real GDP and thereby in unemployment by acting as automatic stabilisers. These help to limit the loss of economic efficiency resulting from volatility in the economy, contributing to enhanced economic performance – to the extent that large output fluctuations can, notably in the absence of wage flexibility, result in a trend increase in unemployment (hysteresis effects) and erode human capital thereby undermining existing living standards.

**The effectiveness of social transfers (excluding pensions) in poverty reduction has been different across Member States.** The EU's limited success in poverty reduction under EU2020 and

persisting inequalities call for enhancing access to and coverage by social protection systems, while improving the adequacy of benefits. Beyond becoming more inclusive, modernised social protection also entails combining minimum income support schemes with stronger incentives to participate in the labour market.

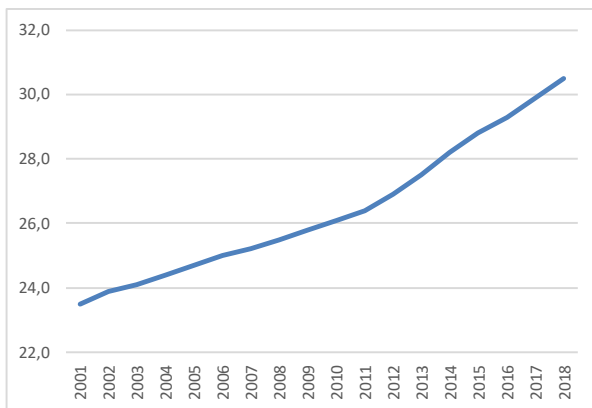
### In the future, demographic change may impose further challenges to social sustainability.

Advances in the medical sciences and a higher quality of life have enabled Europeans to live longer. In line with a universal process of rising living standards and a transition from pre-modern to post-industrial demographic patterns, <sup>(141)</sup> average life expectancy at birth in the EU has risen to roughly 81 years. As a result, the EU's old age dependency ratio has increased uninterruptedly in the last two decades (see *Chart 2.6*). Demographic change is also affected by migration. Although migration influences the size of working-age population, it may not necessarily lower the ratio between people *not* in employment and the employed population (Economic Dependency Rate). <sup>(142)</sup> A lot will depend on how well migrants get integrated into the labour market and whether they settle for the long-term (in which case they would add to the dependent part of the population after their working lives).

Chart 2.6

#### The EU's old-age dependency ratio has been rising rather fast

Old age dependency ratio (population aged 65 and over to population aged 15-64, EU-28)



Source: Eurostat [demo\_pjanind]

[Click here to download chart.](#)

**Demographic ageing puts pressure on social security systems.** An increasing proportion of people in retirement age (65+) raises concern due to their dependence on a smaller labour force. Between today and 2060, the number of people aged over 65 is expected to increase from 30.5 to 51.6 per 100 people of working age (15-64). Moreover, between 2001 and 2018 the proportion of people aged 80 and over

increased by almost 60% (see *Chart 2.7*). These developments have a profound impact on the sustainability and adequacy of pension systems as well as on accessible provision of quality long-term care and health care. All this puts particular pressure on the cohorts of young Europeans, who will, compared with their parents, have to pay higher contribution rates and will receive lower pensions in retirement. Indeed, earlier Commission analyses have identified this 'double burden' for today's young and for future generations. Ageing, together with frequent breaks in their careers or part-time work, contributes to that situation. In addition, the uncertainty of the legal framework and social protection regarding new types of work further accentuates this concern. <sup>(143)</sup>

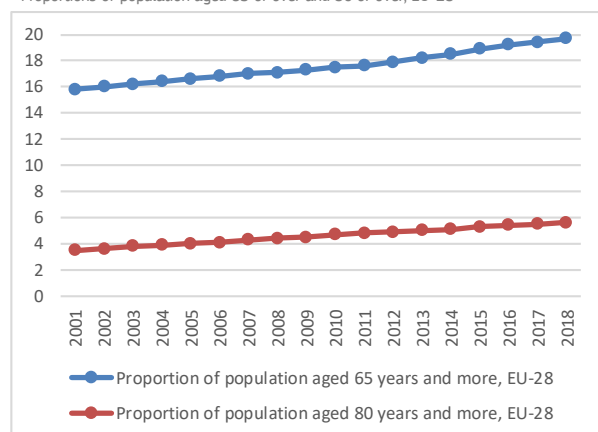
### However, longer working lives can alleviate this pressure.

The concerns above do not factor in the many years of healthy and potentially active lives that Europeans live today. Reaching the age of 65 does not have to be the end of a person's productive life, so there is a margin for extending the labour force participation of older workers. Flexible retirement ages and working arrangements as well as adjusted infrastructure and equipment can help to alleviate the economic challenges arising from changes in the traditionally defined working-age population and the increasing ratio of workers to non-workers (dependency ratio). Annex 3 demonstrates that longer working lives would significantly lower the burden on the working population. Finally, a similar and very effective remedy to the negative repercussions of population ageing is increasing the labour force participation of women to levels closer or equal to those of men.

Chart 2.7

#### The shares of Europeans in inactive age is increasing rapidly, putting pressure on the labour force and social protection systems

Proportions of population aged 65 or over and 80 or over, EU-28



Source: DG EMPL calculations based on Eurostat data [demo\_pjanind]

[Click here to download chart.](#)

## Demography and Mobility

### Despite its important benefits, intra-EU labour mobility can magnify the effects of population

<sup>(143)</sup> See ESDE 2018, Chapters 2, 4, 5.

<sup>(141)</sup> See Rosling (2018), Chapter 2.

<sup>(142)</sup> See the findings of the study co-authored by the European Commission's Joint Research Centre on Demographic Scenarios for the EU in Lutz (2019), pp. 36-43. ESDE 2015 had also shown that the number of migrants necessary to maintain today's economic dependency rate in the future would have to climb to unrealistic magnitudes (p. 165).



**ageing in some cases.** One of the four fundamental freedoms of the EU single market, the free movement of people between Member States has also contributed to population changes in the EU. By enhancing the allocation of productive factors, free movement of labour has beneficial effects on the economies of sending and receiving countries and of the EU as a whole. Short-term benefits of sending countries include the absorption, through mobility, of labour demand shocks, when these cause unemployment, and thereby a reduction of the burden on public finances and insurance systems due to lower expenditure on unemployment benefits and social assistance. On the other hand, labour flows into the receiving Member States may compensate for shortfalls in their labour supplies.

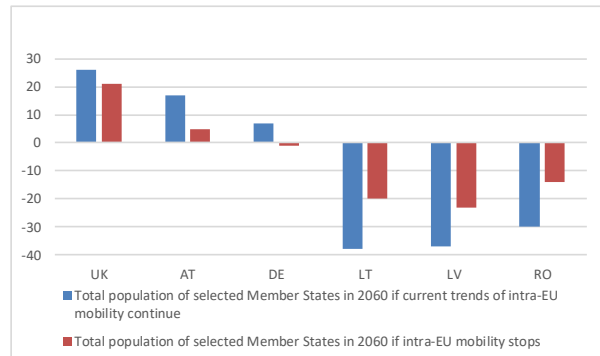
**Even when certain patterns of intra-EU mobility are disruptive, they are reversible.** Over the last two decades, differences in wages and living standards between Member States encouraged many citizens to seek employment outside their countries of origin. The main flows are from East to West and from South to North, influencing the size of both the total population and the labour force of sending and receiving Member States but having a disproportionate effect on the former, due to their usually smaller size. A pattern of high emigration of educated citizens ('brain drain') and other skilled labour can mean a smaller and lower-skilled workforce in sending countries. In the medium- to long-term, this can lower productivity and innovation potential and accelerate depopulation and population ageing, as emigrants are often early-career adults (see *Chart 2.8*). As a result, sending countries may experience skill shortages, erosion of their tax bases, lower overall return from their earlier investments in the welfare and education of their citizens and difficulty to maintain infrastructure and services. In turn, this may increase socio-economic disparities between Member States and their regions, counteracting the objectives of certain EU policies, notably of cohesion policy.<sup>(144)</sup> However, the recently increasing returns of skilled labour to EU sending countries show that these trends are not predictable with certainty. Changing macroeconomic and labour market positions and incentivizing policies (e.g. competitive employment opportunities for the highly skilled) can safeguard sending countries from excessive loss of talent (see Box 4.2 in Chapter 4 for a detailed discussion of 'brain drain' in the EU).

<sup>(144)</sup> See Lutz (2019), pp. 44-50.

Chart 2.8

#### Under certain conditions, intra-EU mobility could affect the population size of Member States

Change in total population of selected Member States based on the assumption of a continuation of mobility trends without substantial increase in returns, or, alternatively, on the hypothetical scenario of a full stop to mobility



Source: Authors' chart based on calculations in the publication 'Demographic Scenarios for the EU: Migration, Population and Education' (2019).

[Click here to download chart.](#)

## 4.2. The Social-Environmental Nexus

**The EU has been at the forefront of decoupling economic activity from its negative effects on the environment.** This decoupling has to be achieved through resource and energy efficiency increases, sustainable consumption and production. The transition to a low-carbon, low-waste, low-polluting economy requires the transformation of production methods and consumption patterns in a manner that addresses the three dimensions of sustainable development simultaneously: boosting competitiveness to promote economic growth, create new jobs and promote equity and inclusiveness while ensuring that this growth does not have a negative impact on the environment. Inter alia, this requires "closing the loop" in the life cycles of products and materials, i.e. from production and consumption to waste management and then to markets for secondary raw materials, as recognised in the 2015 European Commission's action plan "Towards a circular economy". The 2030 climate and energy framework, addressing energy efficiency, renewable energy, revised Emissions Trading Scheme and emission standards was adopted to achieve EU-wide targets and policy objectives under the 'Paris agreement'. The framework is a key driver of the transition to a low-carbon economy and builds an energy system, which ensures that there is a secure supply of and affordable energy for all, creates new opportunities for growth and jobs and brings environmental and health benefits through reduced air pollution.<sup>(145)</sup>

**Greater efforts are required at the EU and global level.** The urgency of the transition to a low-carbon economy raises the question of potential trade-offs. The recently-published climate change report by the Intergovernmental Panel on Climate Change (IPCC)<sup>(146)</sup>

<sup>(145)</sup> [https://ec.europa.eu/clima/policies/strategies/2030\\_en](https://ec.europa.eu/clima/policies/strategies/2030_en)

<sup>(146)</sup> IPCC (2018), Special Report on the impacts of global warming of 1.5°C above pre-industrial levels and related global

urges further decisive action on climate change (one of the 'planetary boundaries') to limit the rise in global warming since pre-industrial times to 1.5 degrees. Beyond this limit, the risks of droughts, floods, extreme heat and poverty worsen significantly. Additional efforts imply additional costs as well as opportunities for the economy and society. This begs the question of whether economic expansion and environmental sustainability can reinforce each other or if the one can only be achieved to the detriment of the other. The cost of the transition to a low-carbon economy in terms of employment, skills and the ability to meet basic needs also has to be explored, as do the distributional effects of bearing this cost. Who would be the losers from this and what compensation and adjustment mechanisms can be put in place to enable a fairer sharing of the costs of transition?

**Climate change action and the related energy transition are expected to have limited, typically positive total employment effects, but composition effects are also important.** Several recent studies and model projections (impact assessment on long-term GHG reduction strategy 2018, impacts of circular economy policies on the labour market 2018, *Employment in Europe* report 2009) have shown that climate change action to meet the Paris agreement targets should have a limited impact on GDP growth (between -1.3% and +2.2%) and aggregate employment in the EU (+0.3% to +0.9%). However, the transition to low carbon society is bound to produce winners and losers across various economic sectors and regions, at least in the short to medium term. The composition of employment across some sectors is likely to be affected significantly. Job increases are projected primarily in the renewable energy and energy efficiency sectors, including construction and eco-system services (e.g. agriculture). Jobs are most likely to disappear in mining and extraction, while the results for services and manufacturing are more ambiguous. EU regions that rely predominantly on sectors expected to experience job losses and those where industry will have to adapt the most, are likely to see more significant challenges from the transition. It will therefore be important to design compensation and adaptation measures in order to support these regions in transition. As the economy restructures, so will skill requirements of existing jobs. The current workforce in the declining sectors is not a perfect substitute for the human capital needs in the expanding sectors and, therefore, reskilling will be necessary. However, the transition to a low-carbon economy is expected to require more of the existing skills sets, with the emphasis on transversal skills in design, monitoring, and communications rather than the development of a

completely new set of skills, as, for example, in the case of digitalisation. <sup>(147)</sup>

**In the transition to a low carbon economy, energy prices are expected to increase in the medium term, having a potentially detrimental effect on energy poverty.**<sup>(148)</sup> Energy-poor households experience inadequate levels of essential energy services - warmth, cooling and lighting - which guarantee a decent quality of life including health. This does not necessarily affect only those at the bottom of the income distribution and it requires measures in addition to those for fighting poverty. Energy poverty is driven by a combination of factors including high energy prices, low incomes and inefficient buildings and appliances. In 2015, the poorest households spent around 10% of their total consumption expenditure on energy products including electricity, gas, liquid and solid fuels and central heating. Differences across Member States are significant, ranging from 3% in Sweden to 23% in Slovakia. <sup>(149)</sup> Up to 2030, energy expenses are expected to increase significantly in absolute terms, but in relative terms they will increase less than they did between 2000-2015. After the 2030 peak a decline is expected under different modelling scenarios, as the benefits of the energy transition materialise fully. Subsidies to poor households are often badly designed, subsidising the cost of energy instead of compensating poor households for lost income and / or enabling them to invest in energy efficiency and thus lowering future consumption costs. These subsidies do little to encourage energy saving and switching to non-fossil fuels. In addition, poor households face greater constraints in frontloading investment in energy efficiency and renewable energy.

**There is no standardised or commonly accepted way of assessing vulnerability to environmental health hazards.** <sup>(150)</sup> However, recent studies show that the detrimental impact of degrading environmental components is already visible today. For example, the recent Court of Auditors report finds that air pollution is the biggest environmental risk to health in Europe <sup>(151)</sup>. It causes about 400,000 premature deaths in the EU and results in hundreds of billions of euro in health-related external costs. This has a direct effect on the quality of life, on productivity in terms of lost days at work and on public budgets.

**Environmental health hazards tend to affect more negatively groups of lower socio-economic standing.** However, evidence about the level of exposure of different groups is mixed. Regions that are both relatively poorer and more polluted in terms of particulate matter (PM) are located mainly in eastern

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greenhouse gas emission pathways, in the context of strengthening the global response to the threat of climate change, sustainable development, and efforts to eradicate poverty., <https://www.ipcc.ch/sr15/>

<sup>(147)</sup> CEDEFOP (2012); Cambridge Econometrics et al. (2018).

<sup>(148)</sup> Methodological issues related to the concept of energy poverty call for a cautious interpretation of these estimates.

<sup>(149)</sup> EU energy poverty observatory, <https://www.energy-poverty.eu>

<sup>(150)</sup> European Environmental Agency (2018), p. 77.

<sup>(151)</sup> For the link between climate change and air pollution see Chapter 5.



and south-eastern Europe. There is also a link between socio-economic status and exposure to PM at a finer-scale, local level. Wealthier sub-national regions tend to have higher average levels of nitrogen dioxide (NO<sub>2</sub>), mostly because of the concentration of traffic and industrial activities in these locations. However, poorer communities also tend to be exposed to higher local levels of NO<sub>2</sub>, as shown by studies with finer spatial granularity. In many cities, poorer communities are exposed to higher temperatures because of the urban heat island effect. <sup>(152)</sup> These temperatures are projected to continue to increase gradually due to climate change. However, a relatively high proportion of the individuals reporting pollution and other environmental problems in the EU belong to the national middle classes (see Chapter 5).

## 5. CONCLUSIONS

**Sustainable development in its economic, social and environmental dimensions is a fundamental EU objective.** All three dimensions of sustainable development, including the social, are high on the list of European citizens' preoccupations.

**The social dimension figures prominently among EU priorities as set out in the Treaties and policies.** It covers areas such as the promotion of employment, good working conditions, improvement of living standards, the fight against social exclusion and discrimination, social justice, human capital development, gender equality and social dialogue. The EU ranks very high in international comparisons in terms of social progress, as confirmed by a number of international indices developed to monitor progress towards the Sustainable Development Goals. Nonetheless, challenges resulting from ageing, digitalisation and globalisation risk undermining the sustainability of these achievements.

**Social sustainability in its temporal aspect is difficult to measure.** Different approaches have been proposed in the past. The Social Scoreboard can be considered as a tool for measuring progress in the social dimension of sustainability. Its overall methodology implicitly measures existing stocks and monitors flows under 14 headline indicators.

**Identifying synergies among different dimensions of social sustainability as well as between social, economic and environmental dimensions is crucial.** Useful as these approaches are, dashboard-type metrics do not necessarily identify synergies between the constituent aspects of the social dimension or between the social and other dimensions of sustainability. More information on these synergies could provide pivotal guidance to policymakers on promoting various objectives across all dimensions of sustainability in a balanced manner. This chapter has undertaken a factor analysis that

reveals four principal components (factors) linking the different dimensions of sustainability.

**The first factor – policies focusing on human capital (skills and social welfare) – most resembles a virtuous circle of sustainable development.** This factor also shows how effective institutions and high energy productivity create social trust and favour economic efficiency. By contrast, the second factor illustrates conditions and weaknesses that undermine sustainable development – unaddressed structural problems, which accumulate over time and lead to internal devaluation. Another factor suggests that targeted welfare spending can be effective in lowering poverty rates and inequality.

**The factor analysis identifies clusters of Member States according to their (social) sustainability characteristics.** The cluster analysis presents some initial evidence of structural labour market inefficiencies in certain Member States in the South of Europe. Such inefficiencies are indicated by high unemployment, poor labour market performance of vulnerable groups and low bargaining power of employees. <sup>(153)</sup> Most north-western Member States seem to have solid sustainability foundations: a skilled workforce coincides with higher productivity, reinforced by effective and trustworthy institutions. These countries also invest more in social welfare and display higher efficiency in the use of natural resources. Eastern Member States are still catching up with founding Member States in terms of GDP per capita and labour productivity. Their tradition of social dialogue is less developed and people have a lower level of trust in institutions. Finally, a number of these countries lag behind in terms of skills and environmental policy implementation. The Baltic States together with Romania and Bulgaria have high poverty and inequality and low potential for social transfers to ameliorate these social outcomes.

**Policy action needs to exploit synergies between the social and other dimensions of sustainable development.** Employment and social policies need to support social sustainability in a world that is being reshaped by demographic change, automation/digitalisation and climate change. Social policies have to be accompanied by a broader policy mix to ensure that no one is left behind in the upcoming transitions. To secure social acceptance of the necessary reforms, a generalized upstream integration of the social dimension in all future policies is essential.

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<sup>(153)</sup> For a more detailed analysis of labour-market inefficiency and its drivers see section 3.3 of Chapter 3.

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<sup>(152)</sup> European Environmental Agency (2018).

## Annex 1: The Social Scoreboard

The Social Scoreboard is a central tool for monitoring performance in the employment and social domains, and convergence towards better living and working conditions. It helps to monitor the situation of Member States on measurable dimensions of the Pillar, complementing the existing monitoring tools, e.g. the Employment Performance Monitor and the Social Protection Performance Monitor. The Scoreboard's 14 headline indicators assess employment and social trends in:

- Equal opportunities and access to the labour market
- Share of early leavers from education and training, age 18-24
- Gender gap in employment rate, age 20-64
- Income inequality measured as quintile share ratio - S80/S20
- At-risk-of-poverty or social exclusion rate (AROPE)
- Young people neither in employment nor in education or training (NEET rate), age 15-24
- Dynamic labour markets and fair working conditions:
- Employment rate, age 20-64
- Unemployment rate, age 15-74
- Long-term unemployment rate, age 15-74
- Gross disposable income of households in real terms, per capita
- Net earnings of a full-time single worker without children earning an average wage
- Public support / Social protection and inclusion
- Impact of social transfers (other than pensions) on poverty reduction
- Children aged under 3 in formal childcare
- Self-reported unmet need for medical care
- Share of population whose overall digital skills are basic or above.

The methodology for analysing headline indicators has been agreed by the Employment Committee and the Social Protection Committee. The 2019 exercise of the Scoreboard shows that Europe is making progress in labour market and social situations. In a context of improving labour markets and declining poverty, all 14 headline indicators recorded an improvement, on

average, over the previous available year (2017 or 2016). The most significant progress was recorded in (overall and long-term) unemployment rates, which decreased in all Member States in 2017, with only one "critical situation" highlighted. Although labour markets have improved considerably across the Member States, the fact that most problematic flags appear in the social situation is an additional indication of the fact that the dividends of recovery/growth are unevenly distributed across income quintiles and territories. Similar to the 2018 Joint Employment Report, problematic flags appear more frequently in the area of 'public support/social protection and inclusion', with an average of 9.8 cases (of which 3.5 are 'critical situations') per indicator. 'Children aged under 3 in formal childcare' appears as the indicator with most flags, i.e. for 12 Member States (of which 4 are in the bottom category).

The Social Scoreboard measures progress in key dimensions of the Social Pillar, using mostly existing and well-established indicators. The methodology allows measurement of convergence by analysis of both the levels of and changes in the indicators. The presentation of results using a colour code is relatively straightforward. However, the Scoreboard does not cover all Social Pillar principles. It also does not allow capturing *upward* convergence, as the benchmark is the change regardless of the direction.

## Annex 2: Variables in the factor analysis

### A2.1.1. Additional variables complementing the Factor Analysis

Table 2.2 of this chapter presented the results of a Factor Analysis, which included 45 different variables from seven thematic blocks that are relevant to sustainable development.

Those 45 original variables were reduced to just four principal components of sustainable development. Given that the original variables are correlated, it was possible to radically reduce their numbers while keeping 73% of the information about cross-country differences captured in the original variables.

However, the number of indicators that were funneled into the analysis as input information was much higher than 45 - several hundred variables from very different sources were tested. Most were eliminated because they did not sufficiently contribute to explaining one of the factors (no correlation). Others were not sufficiently related in terms of the content of one of the seven thematic blocks. In addition, a number of variables were excluded from the final Factor Analysis because they were so highly correlated to other variables that they would not yield any additional information.

A number of variables not included may well have added value. However, inserting too many variables in the extraction of only four factors would render the factors unstable and complicate their interpretation. The following table gives a selection of variables for which this is the case, presenting their correlation with the four factors (if the value of their loading is equal to at least 0.5). They confirm the interpretation of the

factors provided in the chapter.

The following sections explain variables whose definition may not be self-explanatory or commonly known.

### A2.1.2. Explaining the variables used in the Factor Analysis

#### NEET rate for population aged 15-24 – total

Young people neither in employment nor in education or training

Source: Eurostat

#### Job satisfaction

Measurement based on a question from the Quality of Life Survey 2016: "Could you please tell me on a scale of 1 to 10 how satisfied you are with the job, where 1 means you are very dissatisfied and 10 means you are very satisfied?"

Source: Eurofound

#### Lifelong learning (percentage of adult population participating in education and training)

Information from the EU Labour Force Survey 2017: Participation in formal and non-formal education and training in the last four weeks before the survey.

Source: Eurostat

Chart A2.1

#### Additional variables confirm the four principal components of sustainable development

Variables not included in the Factor Analysis of Table 2.2: correlation with the four factors (suppressed if < 0.5)

	Investment and effective institutions favour productivity	Degree of labour market (in-)efficiency	Effective welfare states favour good social outcomes	Limits to growth, costly labour, high social expenditure	Source
Overall employment growth: total growth over 3 most recent periods - total				-0.59	1
Change in share of part-time employment in overall employment (over last 3 years)				0.57	1
People at-risk-of poverty or social exclusion - total			-0.79		2
Impact of social transfers (other than pensions) in reducing poverty			0.72		2
Relative median poverty risk gap			-0.73		2
Persistent at-risk-of-poverty rate			-0.81		2
At-risk-of poverty rate of children (aged 0-17)			-0.87		2
Relative median poverty risk gap (18-64)			-0.73		2
Housing deprivation (65+)			-0.51		2
Youth unemployment rate, for population aged 15-24 - total		0.82			1
Job tenure in years (15-64)		0.80			1
Rate of long-term unemployment (as % active population) - total		0.80			1
Share of employees working in involuntary fixed-term or part-time contracts - men		0.73			1
Share of employees working in involuntary fixed-term or part-time contracts - women		0.75			1
Median relative income ratio of elderly people (65+)		0.55			2
Self-perceived health (very good + good)	0.60				2
Child care – Children cared for (by formal arrangements other than by the family) (age 0 to 3)	0.79				2
Gender gap in part-time employment	0.80				1
Completion of tertiary or equivalent education (aged 30-34) - men	0.56				1
Eco-Innovation Index	0.77				3

Data sources:

1 Eurostat EU Labour Force Survey (2017)

2 Eurostat EU Survey of Income and Living Conditions (2017)

3 Eco-Innovation Index published by Eurostat

Note: Data sources: 1: Eurostat EU Labour Force Survey (2017); 2: Eurostat EU Survey of Income and Living Conditions (2017); 3: Eco-Innovation Index published by Eurostat

Source: Commission Services

[Click here to download chart.](#)

**Poverty threshold (60% of median income)**

60 % of the national median equivalised disposable income after social transfers. Information from the EU Survey of Income and Living Conditions.

Source: Eurostat

**At-risk-of poverty rate**

The share of people with an equivalised disposable income (after social transfers) below the at-risk-of-poverty threshold. Information from the EU Survey of Income and Living Conditions.

Source: Eurostat

**Impact of social transfers (incl. pensions) in reducing poverty**

The reduction in percentage of the risk of poverty rate, due to social transfers: compares the at-risk-of-poverty rates before and after social transfers (transfers without pensions).

Source: Eurostat

**Severe material deprivation rate**

A measure of living conditions severely constrained by a lack of resources, in which people experience at least 4 out of the following 9 deprivations: they cannot afford i) to pay rent or utility bills, ii) to keep their home warm enough, iii) to face unexpected expenses, iv) to eat meat, fish or a protein equivalent every second day, v) a week's holiday away from home, vi) a car, vii) a washing machine, viii) a colour TV or ix) a telephone.

Source: Eurostat

**In-work poverty**

The proportion of employed persons at risk of poverty. Information from the EU Survey of Income and Living Conditions.

Source: Eurostat

**S80/S20**

Ratio between the highest and the lowest income quintile, i.e., the 80<sup>th</sup> percentile divided by the 20<sup>th</sup> percentile of the income distribution.

Source: Eurostat

**Social protection expenditure in % of GDP**

Under the European system of integrated social protection statistics (ESSPROSS), the expenditure of social protection is classified by type and function, old-age being one of these functions.

Source: Eurostat

**Tax wedge, earnings 100%, single**

An OECD measure defined as the ratio between the amount of taxes paid by an average single worker (a single person at 100% of average earnings) without children and the corresponding total labour cost for the employer.'

Source: OECD

**Trade union density**

A measure that OECD defines as 'union membership as a proportion of wage and salary earners'.

Source: OECD

**Bargaining coverage rate**

The 'proportion of all wage earners with right to bargaining' defined in the Database on Institutional Characteristics of Trade Unions, Wage Setting, State Intervention and Social Pacts (ICTWSS), maintained by the University of Amsterdam.

Source: ICTWSS

**Collective Bargaining at Sectoral or Regional level**

In the questionnaire of the 2013 European Company Survey distributed to managers one question was: "Are employees in this establishment covered by any of the following collective wage agreements?" One of the answer options is: "A collective agreement negotiated at sectoral or regional level" (as opposed to national, or individual - i.e. company - level).

Source: Eurofound

**Voice and Accountability**

According to the Worldwide Governance Indicators project (WGI) this indicator "reflects perceptions of the extent to which a country's citizens are able to participate in selecting their government, as well as freedom of expression, freedom of association, and a free media."

Source: WGI (World Bank)

**Government Effectiveness**

According to the Worldwide Governance Indicators project (WGI), this indicator "reflects perceptions of the quality of public services, the quality of the civil service and the degree of its independence from political pressures, the quality of policy formulation and implementation, and the credibility of the government's commitment to such policies."

Source: WGI (World Bank)

**Rule of Law**

According to the Worldwide Governance Indicators project (WGI), this indicator "reflects perceptions of the extent to which agents have confidence in and abide by the rules of society, and in particular the quality of contract enforcement, property rights, the police, and the courts, as well as the likelihood of crime and violence."

Source: WGI (World Bank)

### **Control of Corruption Index**

According to the Worldwide Governance Indicators project (WGI), this indicator "reflects perceptions of the extent to which public power is exercised for private gain, including both petty and grand forms of corruption, as well as 'capture' of the state by elites and private interests."

Source: WGI (World Bank)

### **Energy productivity**

The indicator measures the amount of economic output that is produced per unit of available energy. Further Information: [Eurostat](#). The variable is part of the set of indicators supporting the Sustainable Development Goals in an EU context.

Source: [Eurostat](#)

### **Resource productivity and domestic material consumption**

Gross domestic product divided by domestic material consumption (DMC). DMC measures the total amount of materials directly used by an economy. For further information see [Eurostat](#). The variable is part of the set of indicators supporting the Sustainable Development Goals in an EU context.

Source: [Eurostat](#)

## **A2.1.3. Additional variables**

### **People at-risk-of poverty or social exclusion**

People at risk of poverty (threshold: 60% of the national median equivalised income) *or* severely materially deprived *or* living in households with very low work intensity. People living in households with very low work intensity are those aged 0-59 living in households where the adults (aged 18-59) work 20% or less of their total work potential during the past year.

Source: [Eurostat](#)

### **Relative median poverty risk gap**

Gap between the median income of those living below the poverty threshold and the poverty threshold itself (as percent of the poverty threshold).

Source: [Eurostat](#)

### **Persistent at-risk-of-poverty rate**

People at risk of poverty for the current and at least two out of the preceding three years.

Source: [Eurostat](#)

### **Median relative income ratio of elderly people (65+)**

The ratio of the median equivalised disposable income of people aged above 65 to the median equivalised disposable income of those aged below 65.

Source: [Eurostat](#)

### **Housing deprivation (65+)**

Percentage of the population deprived of certain housing items. For more information see [Eurostat](#).

Source: [Eurostat](#)

### **Self-perceived health (very good + good)**

Indicator expresses subjective assessment by the respondent of his/her health. It is based on one question from the EU statistics on income and living conditions (EU-SILC): "How is your health in general?" (four answer options).

Source: [Eurostat](#)

### **Gender gap in part-time employment**

Difference between the share of part-time employment in total employment of women and men aged 20-64. The indicator is based on the EU Labour Force Survey.

Source: [Eurostat](#)

### **Eco-Innovation Index**

A composite indicator is calculated from 16 sub-indices, which measure ecological efficiency and innovation. For more information see [EU Open Data Portal](#).

Source: [Eurostat](#).



## Annex 3: Longer working lives help sustain pension systems

In the 2017 *Employment and Social Developments in Europe* annual review a simple illustration was presented to demonstrate how demographic ageing in the EU may impact future pension levels and contribution rates to the EU's pension schemes.<sup>(154)</sup> This model can be extended to show how longer working lives can help sustain current pension systems.

The model starts from the extreme assumption that the EU had one single pension scheme, with one single contribution rate paid by workers and one average level of pensions, relative to average wages. Everyone of working age (20 to 65 years) is assumed to be in employment, everyone older than 65 is on a pension. The pension level is assumed to be 47% of the average wage, which corresponds to today's average level of pensions. Under these assumptions, workers will have to pay a contribution rate equal to 14% of wages in order to finance these pensions in a pure Pay-As-You-Go pension system.

Under these simple assumptions, the only determinant of the pension level and the contribution rate is demographic change.<sup>(155)</sup> Working-age population is projected to decline whereas the number of older people will increase. As a result, there will be more than 0.5 older people per person of working age in 2060, up from 0.3 today. Considering the strong increase in demographic dependency, it is assumed that some kind of pension reform will be implemented today (in the base-year 2017). This reform will lower the level of pensions with the aim of limiting the expected necessary increase of the pension contribution rate to a maximum of 20% (which otherwise would increase beyond that level). The reforms may be deemed necessary to keep labour costs from increasing too strongly, given that employers will have to pay their share of workers' social security contributions.

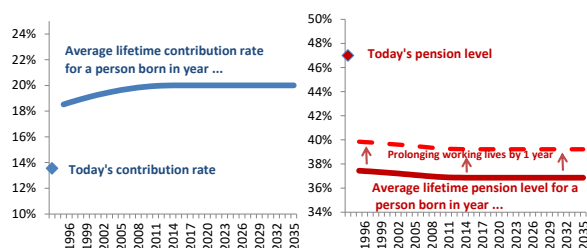
The model looks at cohorts, starting with workers born in 1997 who are assumed to start their working lives aged 20 (in 2017) and then work for 46 years, before receiving a pension for 20 years.

The left chart shows the average contribution rate workers of the different cohorts would have to pay throughout their entire working lives. For workers born today it is already very close to the 20% limit, much higher than what today's workers pay on average (14%).

Chart A3.1

### Longer working lives can reduce the double burden on future cohorts significantly.

Average lifetime contribution rate and average pension level by cohort if contribution rates were not to increase beyond 20%, EU-28



Source: Commission calculations based on Eurostat 2015 population projection s

[Click here to download chart.](#)

The right chart shows the level of pensions (in percent of wages) which the respective cohorts will receive when retired. The same cohorts that had to pay higher contributions during their working lives will receive a pension equivalent to some 37% of average wages, much lower than today's pension level of 47%. This decline is necessary because we do not allow the increase of the contribution rate beyond 20%, so that higher pensions can no longer be financed.

To demonstrate the impact of longer working lives one could assume that every worker worked for one more year (47 instead of 46), retiring aged 67 instead of 66. As a result, contributions are being paid for one more year. Accordingly, pensions would have to be paid for only 19 instead of 20 years. In that case, an average lifetime contribution rate of 20% would be sufficient to finance a lifetime pension level of 39%, two percentage points higher than without with lower retirement age (see right side of the Chart). The 'double burden' of ageing for future cohorts would be thus alleviated to a significant extent.

<sup>(154)</sup> ESDE 2017, Chapter 4, especially Box 4.2 on pp. 122-3.

<sup>(155)</sup> ESDE 2018 extends the model by including a labour market scenario (Chapter 5, especially Box 5.5).



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# Economic and social fundamentals: from productivity to fair and sustainable growth

### 1. INTRODUCTION <sup>(156)</sup>

**Current economic growth may not be sustainable over the long-term.** Chapter 2 showed that the concepts of growth and welfare need to incorporate a number of dimensions in order for growth to be sustainable over the long term. High economic growth tends being accompanied by environmental problems, suggesting that there may be a trade-off between our economy delivering welfare gains and staying within the limits set by planetary boundaries <sup>(157)</sup>. Indeed, the economy consumes resources to achieve a certain level of income. The scarcity of these resources could cause bottlenecks in the future while the consequences of not respecting the planetary boundaries may include social costs in the form of environmental harm and climate change (see Chapter 5). <sup>(158)</sup>

**The use of natural resources is not the only challenge to sustainable growth.** Labour supply, too, is becoming scarcer due to demographic developments and the shrinkage of the EU's working-age population that started in 2010 and is set to

continue over the next few decades. <sup>(159)</sup> Moreover, growth may not be socially sustainable, for instance, if it excludes workers from decent wages, decent social protection standards or wider career opportunities. Finally, GDP growth may not be sustainable if it relies on obsolete technologies and if it focuses too little on innovation and raising competitiveness in the future (see Chapter 4).

**Quality growth comes from efficient use of scarce resources.** The constraints mentioned above are highly relevant to the quality dimension of economic growth. Many of them may not be sufficiently captured by the standard economic accounting framework, with GDP as the traditional measure of economic activity and welfare. <sup>(160)</sup> Yet, this standard framework still allows for analysing problems that arise from the inefficient use of resources in generating production. Economic growth depends on the possibility of increasing the input of labour or other resources in production. But it also comes from using these factors more efficiently in production. A given quantity of productive factors can be used more efficiently in two ways: <sup>(161)</sup>

- Productive factors are re-allocated to tasks where they can add more to production so that their potential is not wasted (allocative efficiency).
- The quality of the factors increases, e.g. through improved work organisation, smoother procedures,

<sup>(156)</sup> This chapter was written by Jörg Peschner, Giuseppe Piroli (DG Employment, Social Affairs and Inclusion) and D'Artis Kancs (DG Joint Research Centre).

<sup>(157)</sup> European Political Strategy Centre (2019), p. 4

<sup>(158)</sup> Human activities have significantly changed the climate and increased the magnitude of extreme weather events such as heat waves, heavy precipitation and droughts. Climate-related extremes will affect many European regions in the future. "The total reported economic losses caused by climate-related extremes in the EEA member countries over the period 1980–2013 were almost EUR 400 billion (2013 value) " (European Environmental Agency, 2017, p. 195).

<sup>(159)</sup> ESDE 2017 (Chapter 2) has shown that the pressure to achieve productivity growth in the future will strongly increase as working-age population declines.

<sup>(160)</sup> The 'Beyond GDP' initiative seeks alternative measures for 'more inclusive environmental and social aspects of progress'. See [http://ec.europa.eu/environment/beyond\\_gdp/index\\_en.html](http://ec.europa.eu/environment/beyond_gdp/index_en.html)

<sup>(161)</sup> Nicodème and Sauner-Leroy (2004), p. 3.



more use of innovative capital, faster diffusion of knowledge or better trained labour (productive/dynamic efficiency).<sup>(162)</sup>

**Total Factor Productivity is an indicator of qualitative aspects of growth.** While the concepts of labour and capital productivity relate a firm's output to labour or capital input, Total Factor Productivity (TFP) accounts for the specific part of output expansion that is *not* due to an increase of factor input. TFP can thus be interpreted as a measure of the qualitative part of economic growth, i.e. the extent to which a given range of productive factors are used efficiently. TFP can therefore be considered as an indicator of a firm's innovative capacity and its degree of resource efficiency in production.<sup>(163)</sup> Annex 1 provides a technical explanation of the concept of TFP.

**Many countries have considerable potential for higher growth through higher efficiency.** Chart 3.1 shows that roughly half of the EU's cumulative growth in potential GDP since the turn of the century is due to TFP growth. However, the EU's TFP growth has been lower than in the US in the last few decades. There is also little evidence that the EU's TFP levels catch up to the US in recent years.<sup>(164)</sup> Authors attribute this finding to problems in the market services sector in particular: market imperfections (low competition) as a result of non-completion of the single market and a failure effectively to tap into the potential of ICT technologies.<sup>(165)</sup> Within the EU, there is a wide variation across Member States. For a number of Member States, the overall GDP growth performance has been modest. These countries have the potential to improve their GDP growth rates significantly through higher TFP growth rates.

<sup>(162)</sup> Improving the quality of capital or the skills of workers will increase workers' productivity. Workers will then, on average, add more value to production. These improvements can be attributed to labour input and the efficiency gain will be treated as additional labour input (referred to as 'labour augmented progress' in the literature). By contrast, pure labour input can be separated from these efficient gains and thus considered only in terms of the number of hours worked. In this case the efficiency gains will appear in the accounts of total factor productivity. The latter is the approach taken in the following unless otherwise indicated.

<sup>(163)</sup> For example, see Comin (2010), p. 260. The link between productivity and innovation is complex however (Hall, 2011).

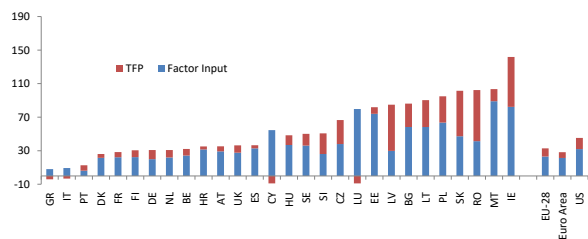
<sup>(164)</sup> Thum-Thysen and Raciborski (2017) explored euro area TFP convergence with the US.

<sup>(165)</sup> Timmer et al (2010), van Ark (2014).

Chart 3.1

### Roughly one third of the EU's potential GDP growth comes from growth in TFP

Growth of potential GDP between 2001 to 2020 and its components, percent



Note: 2019 and 2020: Commission 2019 Spring Forecast

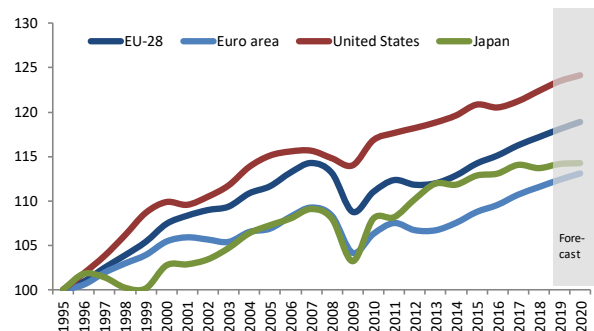
Source: Commission Services' AMECO database

[Click here to download chart.](#)

Chart 3.2

### TFP grows more slowly than before the crisis

TFP between 1995 and 2020, 1995=100



Note: Includes the Commission's Spring Forecast

Source: Commission services AMECO database

[Click here to download chart.](#)

**However, TFP growth slowed down worldwide during the crisis.** During the crisis productivity declined sharply. In the EU, the main reason was the hoarding of labour that took place as short-term work arrangements were used to smooth out the economic downturn.<sup>(166)</sup> Despite the economic recovery since 2013, the rate of growth of TFP is not back up to its pre-crisis level (Chart 3.2).<sup>(167)</sup>

This chapter is devoted to assessing recent developments in productivity growth with a particular focus on TFP. It looks at convergence over time and across regions and explores the determinants of TFP, making use of regional growth accounting data and firm-level information.

## 2. PRODUCTIVITY IN THE REGIONS: DEVELOPMENT AND DRIVERS

### 2.1. Strong differences across regions

#### TFP growth comes from higher efficiency.

According to its conventional residual calculation, TFP-growth is the part of output growth that is not due to increased input of the productive factors of labour and

<sup>(166)</sup> People stayed employed but did not actively work. See Arpaia et al (2010), p. 12.

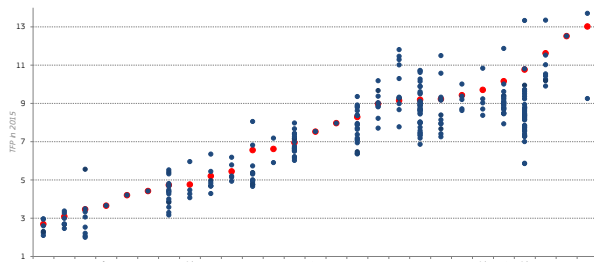
<sup>(167)</sup> See Majumdar (2017).  
<https://www2.deloitte.com/insights/us/en/economy/behind-the-numbers/decoding-declining-stagnant-productivity-growth.html>

capital (see the technical details in *Annex 1*). The following analysis takes into account information about 274 European regions at NUTS-2 territorial level<sup>(168)</sup> for the period between 1995 and 2015.<sup>(169)</sup> *Chart 3.3* outlines major differences in current regional TFP performances in 2015: a number of peripheral regions, especially in Eastern Europe, are still lagging significantly behind. There is also wide variation within countries.

Chart 3.3

### TFP: Eastern European regions lag behind. Strong variation within countries

Total factor productivity per NUTS-2 region



Note: Each blue dot represents one region. Red dots represent averages per country (weighted by regional gross value added). Data for Croatia not available. Inner London is not reported to improve visualisation.

Source: Commission services

[Click here to download chart.](#)

## 2.2. Significant, yet uneven and decelerating growth of TFP within the EU

**Eastern Europe has grown comparably fast in terms of TFP.** *Chart 3.4* reveals that the last 20 years have seen Eastern Europe grow relatively fast. The strong TFP growth rates boosted convergence in this region especially between the 1990s and 2008.<sup>(170)</sup>

<sup>(168)</sup> Regions are categorised according to the Nomenclature of Territorial Units for Statistics (NUTS). NUTS-2 stands for 'basic regions for the application of regional policies'. See Eurostat at <https://ec.europa.eu/eurostat/web/nuts/background>. Croatian regions and a number of outermost Spanish, French and Portuguese regions are excluded from the analysis for technical reasons.

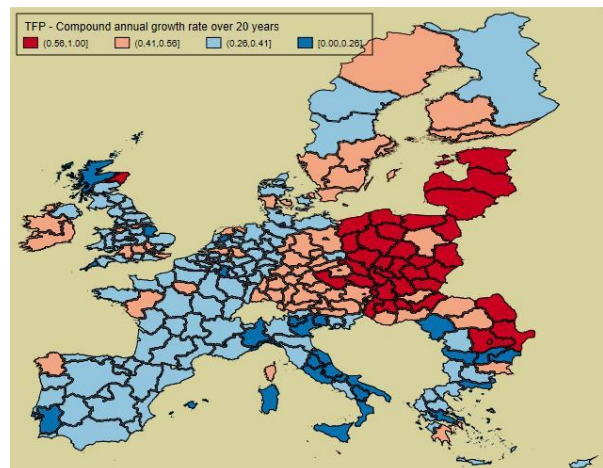
<sup>(169)</sup> Data on regional output and labour came from a regional database built by Cambridge Econometrics and publicly available on the website of the Commission's Joint Research Centre. The authors are grateful to Ben Gardiner (director at Cambridge Econometrics), who provided the time series of regional capital stocks for the period up to 2008 (see Gardiner et al, 2011). These time series were extended by using data on regional gross fixed capital formation from Eurostat and national capital stocks from EU-KLEMS database, see <http://www.euklems.net/>. Main missing information, i.e. national capital stock for Belgium and Portugal, was filled using official national statistics.

<sup>(170)</sup> International Monetary Fund (2016), p. 3.

Chart 3.4

### Faster TFP growth in Eastern Europe regions during the last two decades supported convergence

Growth of TFP from 1995 to 2015 (standardised values)



Note: Index (standardised values). Data for Croatia not available.

Source: Commission services

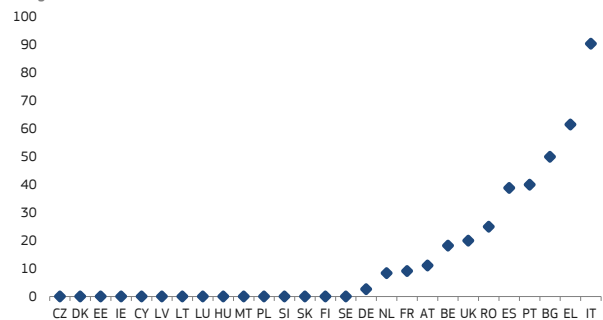
[Click here to download chart.](#)

**In many Southern European regions TFP performance has been low.** This is the case for Italy in particular. 19 out of 21 Italian NUTS-2 regions appear to have shown negative TFP growth.<sup>(171)</sup> The Commission's 2019 Country Report on Italy sees structural obstacles as the main reason for low TFP growth, noting that 'they hamper an efficient allocation of production factors across the economy' and a faster diffusion of new technologies'.<sup>(172)</sup>

Chart 3.5

### The South of Europe is over-represented amongst regions with negative TFP growth

Percentage of NUTS-2 regions where TFP growth between 1995 and 2015 was negative.



Source: Commission services

[Click here to download chart.](#)

**While TFP growth has slowed down, regions tend to converge.** The overall increase in TFP between 1995 and 2015 was around 0.5% per year, while in the first ten years of the period (1995 to 2005) it was significantly higher (0.75%)<sup>(173)</sup> However, despite slowing TFP growth there has been regional convergence of TFP throughout the entire period. *Chart 3.6* shows the link between regions' starting level of

<sup>(171)</sup> Given the measurement errors included in the calculation of TFP and the small magnitude of some negative changes, however, the finding should be considered as evidence of no growth in TFP especially in the South of Europe.

<sup>(172)</sup> European Commission, Country Report Italy 2019, p. 8.

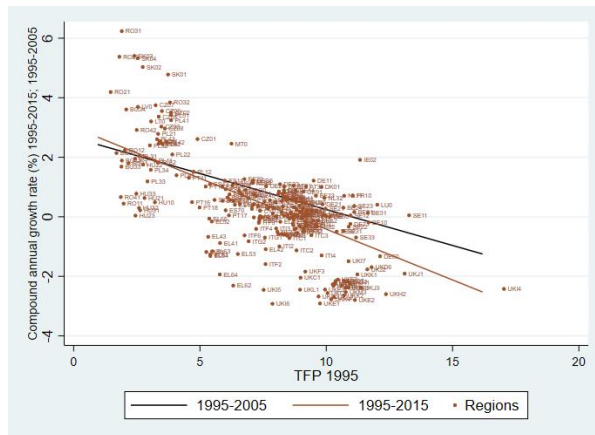
<sup>(173)</sup> During the period 2005-2015 it was lower than 0.3%.

TFP in 1995 and their growth rate until 2005 and 2015, resp. In both periods the link is negative: regions where productivity levels were low at the beginning tended to experience faster TFP growth.

Chart 3.6

### TFP: Lagging regions tend to converge

TFP: 1995 levels (horizontal axis) and changes in percent (vertical)



Note: Levels: 1995 and changes: 1995-2015. The curve has a negative slope. A lower level of TFP would imply higher TFP growth. Lagging regions thus tend to catch up (convergence).

Source: Commission services

[Click here to download chart.](#)

## 2.3. The drivers of regional TFP development

**Absorbing benchmark technology is key for regions to catch up.** The further a region lags behind the technological frontier, the higher its TFP growth potential may be, provided it is able to adopt the benchmark technology. Understanding the drivers behind the processes of convergence and technological diffusion is of paramount importance. One argument supporting the hypothesis of convergence is that the differences that still exist between regions increase the potential of low-performance locations to catch up (convergence thesis). A study on the convergence of TFP across German states (*Länder*) finds a significant role for what they call the 'technological frontier' for a region's TFP performance. The frontier is here a certain region considered as a technology benchmark. The capacity of a lagging region to absorb cutting-edge technology which has been developed in a benchmark region helps the lagging region to catch up (i.e. reduce the distance to the benchmark) faster. <sup>(174)</sup>

**Human capital and R&D are key drivers of TFP performance.** Circumstances in which the TFP of lagging regions converges towards the technology frontier have been extensively investigated in the literature. The main challenge for European regions' labour productivity growth is that regions are not making the most of their human capital and innovation potential. In addition, the level of knowledge resources <sup>(175)</sup> within a region is the key to benefiting from dissemination of technological

knowledge external to the region. <sup>(176)</sup> Also, institutions seem to have a strong impact on a region's innovation potential and thus on its productivity growth. <sup>(177)</sup>

**The convergence thesis tested: a regression model.** The analysis in this section tests examines these inter-relationships using a TFP-catch-up framework for European regions <sup>(178)</sup>, for which a complete cross-regional database has been built covering the period 1995-2015.

A region's stock of human capital is proxied here by the average years of schooling in each region. Its 'absorptive capacity' is its ability to learn, or more accurately, its 'ability to identify, assimilate, and exploit knowledge from the environment'. <sup>(179)</sup> The model tests whether a region's absorptive capacity is a function of both the stock of human capital and R&D expenditure. <sup>(180)</sup> Both factors are thus seen as potential reasons for differences in the speed with which follower regions catch up with more developed regions that represent the technology frontier. *Annex 2* outlines the technical explanation of the model adopted.

<sup>(176)</sup> See also Thum-Thysen and Raciborski (2017) who find that "spill-overs stemming, for instance, from technology adoption or imitation and also by the global impact of the economic crisis" (p. 41) are important drivers of TFP-convergence of EU countries towards the US.

<sup>(177)</sup> Rodríguez-Pose and Ganau (2018) support this view in a presentation given at ECFIN Annual Research Conference "The productivity challenge: Jobs and incomes in the dawning era of intelligent robots", Brussels, November 2018.

<sup>(178)</sup> The model uses the approach of Benhabib and Spiegel (2005).

<sup>(179)</sup> Cohen, W. M., Levinthal, D. A., *Innovation and Learning: The two Phases of R&D*, *The Economic Journal*, 99, September 1989, p. 569.

<sup>(180)</sup> Eurostat regional data are used here.

<sup>(174)</sup> Burda and Severgnini (2018). Earlier literature has identified this as the main "advantage of the latecomer." See, for instance, Mathews (2002).

<sup>(175)</sup> Vogel (2013) finds R&D would facilitate the imitation of technologies from geographically close regions.

Table 3.1

**Human capital, R&D and the gap to the benchmark strongly determine TFP**

Regression coefficients with TFP as dependent variable

<i>Dependent variable: TFP growth</i>	Model A1	Model A2	Model A3	Model B1	Model C1	Model D1
Human Capital	0.057***	0.016***	0.080***	0.070***	0.070***	0.016
Human Capital*gap	-0.030***	-0.028***	-0.031***	-0.035***	-0.033***	
R&D				0.003***	0.003***	0.005***
KSI					0.013***	0.01
Human Capital*R&D*gap						-0.011***
Constant	-0.093***		-0.146***	-0.122***	-0.128***	-0.037
Dummies countries			yes	yes	yes	yes
Dummies years			yes	yes	yes	yes
Observations	4172	4172	4172	4172	4172	4172
Regions	263	263	263	263	263	263

Note: 'Gap' is defined as a region's TFP divided by the TFP of the technological frontier. If the distance between the two is high, 'gap' will be low.

Source: Commission services

[Click here to download table.](#)

### Well-educated workers and high research activity strongly favour TFP growth.

The results of various model specifications are shown in *Table 3.1*. They can be summarised as follows: <sup>(181)</sup>

- There is a strongly significant and positive link between human capital and TFP in all model specifications: Better-educated workers increase production efficiency.
- A region's high expenditure on R&D improves its TFP performance significantly.
- A high TFP gap vis-a-vis the benchmark region tends to trigger a region's TFP growth because "more" technology is available for being potentially absorbed. This finding broadly confirms the convergence thesis. However, the higher a region's TFP gap the more important become human capital and R&D for the process of absorbing benchmark technologies. Both research-orientation and the availability of qualified labour facilitate a region's capacity to absorb technology from other regions.
- Industrial specialisation ("Krugman Specialisation Index" <sup>(182)</sup>) in certain products tends to increase TFP as learning effects may be stronger and help to improve efficiency in production.

**Quality of institutions seems to favour TFP.** For the years from 2010 to 2013 <sup>(183)</sup> data makes it possible to include a variable that captures the role of quality institutions in TFP development. Therefore, a

new variable is introduced, which draws on the European Quality of Government Index (QoG) <sup>(184)</sup>, as another factor explaining the growth in TFP. Based on perceptions, it is a proxy for the quality of institutions. The composite indicator calculated from survey data (using subjective information) has three main sub-components (i) absence of corruption, (ii) the strength of 'the rule of law' and (iii) 'government effectiveness, voice and accountability' as perceived by the respondents. <sup>(185)</sup> All of these indicators illustrate the extent to which people trust governmental institutions. The results are shown in *Table 3.2* and can be summarised as follows:

<sup>(184)</sup> Comparative database provided by the Quality of Government (QoG) Institute at the University of Gothenburg; <https://qog.pol.gu.se/data>.

<sup>(185)</sup> For further details see Charron, Dijkstra and Lapuente (2014).

<sup>(181)</sup> The main results are confirmed by the panel specifications of the model and by the analyses provided in Manca and Piroli (2011) for the period 1995-2005 in a spatial approach.

<sup>(182)</sup> See Annex 2.

<sup>(183)</sup> For 2010, the EQI contains 172 regions based on a survey that was answered by 34,000 citizen respondents. For 2013 the EQI has been expanded to 206 regions based on a survey that was answered by 85,000 citizen respondents, which is the largest sub-nationally-focused survey on QoG to date.

Table 3.2

**Quality institutions are crucial for productivity**

Explaining TFP growth: the role of institutions

<i>Dependent variable: TFP growth</i>	Model A4	Model B2	Model C2	Model D2	Model E1	Model E2	Model E3
Human Capital	0.0807***	0.0938***	0.0838**	0.054	0.0803***	0.0752***	0.0719***
Human Capital*gap	-0.0230***	-0.0256***	-0.0262***		-0.0217***	-0.0234***	
R&D			0.0007	0.0028		0.0016	0.0056***
KSI			-0.0083	-0.0154			
Human Capital*R&D*gap				-0.0097**			-0.0158***
Quality of Government	0.0003***	0.0001	0.0001	0.0001			
Corruption					0.000	0.000	0.000
Rule of law					0.0003*	0.0003*	0.0002
Effectiveness, voice and accountability					0.0003*	0.0003*	0.0003*
Constant	0.0807***	0.0938***	0.0838**	0.054	0.0803***	0.0752***	0.0719***
Dummies countries		yes	yes	yes			
Dummies years		yes	yes	yes			
Observations	526	526	526	526	526	526	526
Regions	263	263	263	263	263	263	263

Note: 'Gap' is defined as a region's TFP divided by the TFP of the technological frontier. If the distance between the two is high, 'gap' will be low.

Source: Commission services

[Click here to download table.](#)

- **People's trust in high-quality governmental services supports higher productivity.** The estimated impact of the overall QoG index on TFP is highly and positively significant. This finding had already emerged from the factor analysis in Chapter 2. It is also broadly confirmed by the literature. <sup>(186)</sup>
- Though significantly correlated with each other, two of the three single sub-indices also tend to be significant in most model specifications: people's perception of the 'rule of law' and government 'effectiveness'.

<sup>(186)</sup> For example, see Annoni and Catalina-Rubianes (2016).

## 2.4. Summary

- **TFP is driven by a region's capacity to innovate:** educated workers and a strong orientation towards research and development (R&D) clearly foster efficiency.
- **The convergence thesis is largely confirmed.** The further away from the benchmark, the higher a region's TFP growth tends to be. Yet a region's TFP growth potential depends on its capacity to absorb new technologies from technological benchmark-regions. The absorption capacity, in turn, is higher the better educated the region's workers and the higher its R&D expenditure.
- **Trust in the effectiveness of government institutions favours productivity.** This finding confirms the factor analysis in Chapter 2. Those countries where institutions generate trust and project efficiency tend to have significantly higher productivity.

## 3. DRIVERS OF TFP: ANALYSIS AT FIRM LEVEL

**Some firms are more productive than others.** This chapter extends the analysis of TFP and its convergence but changes perspective: instead of regional differences, it looks at differences across firms.

The comprehensive CompNet firm-level-based dataset is used for this purpose. It is provided by the *Competitiveness Research Network* founded by the European Central Bank and offers a wide range of productivity-related indicators constructed on the basis



of firm-level information for 18 EU countries.<sup>(187)</sup> A variety of specific variables depict a firm's innovative capacity, notably its total factor productivity (TFP), which can be interpreted as a measure of efficiency in production.

This section looks first at the TFP dynamics of firms with at least 20 employees<sup>(188)</sup>, exploring whether the convergence thesis also holds at firm level. It then turns to the question of the characteristics of a firm that lead to higher (or lower) productivity.

### 3.1. Convergence at firm level

Convergence holds if a firm improves its efficiency in production over time so as to come closer to those firm(s) that represent the TFP benchmark. Using data from 2004 to 2015 this section looks at how firms' TFP performance changed over a period of four years and what the drivers of the change were. *Annex 3* provides a technical explanation of the regression model, while *Table 3.3* presents its results. They can be summarised as follows:

Table 3.3

**There is considerable TFP convergence at firm level.**

Regression coefficients, dependent variable: 4-year change of TFP of a given type of firm

	Coefficient	Std. Error	Sign.
Wage growth	.885	.000	.000
TFP distance to frontier	.397	.001	.000
Left-skewed distribution	.052	.003	.000
Crisis	-.042	.000	.000
Small Firm	-.023	.000	.000
Controlled for country	yes		
Controlled for macro-sector	yes		

*Note:* Data used: 1999–2016 (different data availability across countries)  
 TFP growth: log of TFP in t minus log of TFP in t-4; Wage growth: log of wages per worker in t minus log of wages per worker in t-4.  
 TFP distance from frontier: log of the difference between a firm type's TFP and the TFP of the benchmark firm (the latter being the firm at the 95<sup>th</sup> percentile of the TFP distribution)  
 Left-skewed distribution: dummy capturing whether the skewedness of the distribution in the firm-cluster is negative CRISIS: Dummy equal to one during the crisis years 2008–2013, zero otherwise.  
 Small Firm: Dummy equal to one if firm has less than 50 employees, zero otherwise.

*Source:* Commission services based on CompNet data

[Click here to download table.](#)

- **Faster-growing wages go hand-in-hand with higher TFP.** Wage growth correlates with TFP growth. This finding says little about the direction of causality.<sup>(189)</sup> Yet it signals that there might be a productivity dividend in wages.<sup>(190)</sup> In addition, as wages represent the price of human capital, they

reflect the human capital dimension discussed in the previous section, pointing to the fact that appropriately priced human capital favours efficient production.

- **Firms that are further away from the TFP frontier improve TFP faster – if they survive.**

For the purposes of the regression, the frontier firm can be seen as the technological benchmark. It is defined here as the one firm at the 95<sup>th</sup> percentile of the TFP distribution. In other words, 95% of firms in a sector<sup>(191)</sup> attain a TFP lower than this benchmark firm. The higher the distance between the frontier and the average TFP in that sector, the higher is the sector's TFP growth. Indeed, the least competitive firms either manage to catch up, or they need to leave the market. Convergence at firm level is therefore a result of market selection.

- **A presence of more firms with high TFP tends to trigger other firms' TFP growth potential.**

If the TFP-distribution is 'left-skewed' this implies that there are relatively few firms with low TFP in the sector concerned while a relatively large number of firms attain high TFP. There are thus many benchmark firms from which other firms could learn. The scope for transferring knowledge from firm to firm is therefore higher.

- **Small firms stand a lower chance of increasing TFP.**

This finding holds after controlling for the TFP distance to the frontier which captures a firm's relative competitiveness. However, the next section will show that there are means to overcome the size-disadvantage: those include exposure to international competition through participation in global value chains, removal of labour and product market imperfections, and access to credit.

- **The crisis has reduced TFP growth.** Data from 2004 to 2015 was used. During the years 2008 to 2013 firms' TFP growth was significantly lower.

### 3.2. Drivers of TFP-levels: a base model

The following analysis looks at differences between the *levels* of TFP across firms. It measures the determinants of a firm's innovative capability. First, it orders all firms in the dataset with respect to their TFP performance, building ten equal-sized deciles of the sample. It then performs an ordinal logistic regression to calculate a firm's chances (odds) of being in a higher TFP decile<sup>(192)</sup>, depending on an array of explanatory variables.

<sup>(187)</sup> The 6<sup>th</sup> Vintage CompNet Dataset includes firm-level information from Belgium, Croatia, Czechia, Denmark, Finland, France, Germany, Hungary, Italy, Lithuania, Netherlands, Poland, Portugal, Romania, Slovakia, Slovenia, Spain and Sweden, see CompNet (2018), p. 6.

<sup>(188)</sup> This is done in order to avoid a number of technical problems at lower firm level and have a more homogeneous sample of countries, see CompNet (2018), p. 5.

<sup>(189)</sup> There could be reversed causality: wage growth following productivity growth.

<sup>(190)</sup> The Efficiency Wage Theories suggest that wages may well drive productivity. For example, firms may pay higher wages than productivity would justify in order to increase work satisfaction and to remain attractive for qualified workers. (Katz, 1986). Higher TFP would result.

<sup>(191)</sup> The CompNet file used here looks at firms of a given sector, year and size-class.

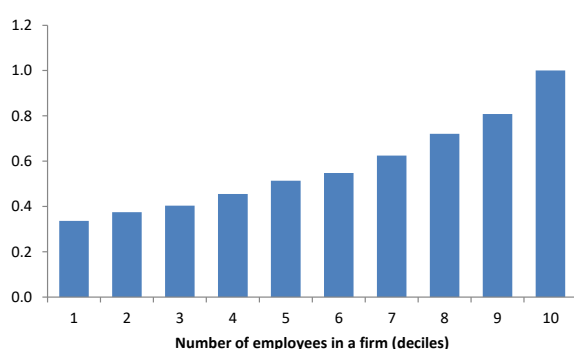
<sup>(192)</sup> The ratio of odds relates cumulative probabilities to their counter-probabilities. For example, it can be odds for a firm of being in deciles 7–10, relative to being in deciles 1–6; or: in decile 8–10, relative to 1–7. See, for example, Norušis (2012), esp. p. 75–76.



The results of a series of ordinal logistic regressions are presented in a table in *Annex 5*. The sections below give a non-technical overview. The variables included in the base model allow the following conclusions to be drawn: <sup>(193)</sup>

**Larger firm size favours the attainment of higher TFP.** The model controls for the number of employees in a firm. There is a strong positive link between firm size and the level of TFP. Like TFP, the number of employees per firm is arranged in deciles, the biggest firms being in the 10<sup>th</sup> decile. All else being equal, their chances of achieving higher TFP are more than double those of firms in the lowest (smallest-firm) decile.

Chart 3.7  
**Firm size favours efficiency**  
Odds of achieving higher firm-level TFP by firm size



Note: Logistic regression (Base model)

Source: Commission services based on the CompNet database

[Click here to download chart.](#)

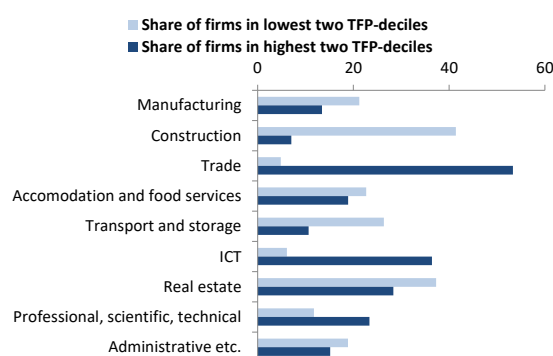
**The financial crisis had a dampening impact on productivity.** To control for the business cycle, 15 years of observation (2002-2016) are taken into account. A dummy variable assumes the value of one for the years from 2009 to 2013 – the years of the financial crisis and the subsequent recession. All else being equal, the chances of achieving higher TFP during these years are one third lower than what they were in non-crisis years.

**Different sectors are not equally capable of achieving a higher TFP.** When analysing TFP, taking into account sector-specific differences is essential. This is because a firm's capacity to achieve efficiency gains through using innovative techniques varies with the nature of its business. For example, thanks to online trading which involves customer-action and therefore requires less factor input by firms, the Trade sector achieves far-above average TFP. *Chart 3.8* shows that Trade-firms are over-represented in the highest two TFP-deciles of all firms (the 20% of firms where TFP is the highest). On the other hand, only few

Trade-firms belong to the lowest two deciles. Sectors which traditionally depend on a high input of both physical and human capital, such as Manufacturing or Construction cannot benefit from the same possibilities.

Chart 3.8  
**The nature of a firm's business is related to its TFP potential**

Share of firms of a sector in the lowest two and the highest two deciles of all firms



Source: CompNet database

[Click here to download chart.](#)

**Higher wages go hand in hand with higher TFP.**

Firms were also regrouped into deciles w. r. t. the level of labour costs per worker. *Chart 3.9* shows the statistical chances of a firm's belonging to a higher TFP-decile, depending on the labour cost decile to which that firm belongs. From the base model specification (blue) a positive (and progressively increasing) link between wages and TFP can be clearly identified. This finding holds under 'everything else being equal' conditions. That is, it holds after taking account of the fact that labour costs and TFP are different for different firm sizes, in different sectors, and in different countries. There is hence a supplement firms pay on wages for higher productivity (TFP).

### 3.3. Adding other variables to the base model

This section adds additional explanatory variables to the base model. <sup>(194)</sup> The following findings emerge:

**Firm-specific wage premiums are linked to a firm's TFP and make the wage distribution more progressive.** *Chart 3.9* shows that wages contain a supplement which is related to TFP. The CompNet-variable 'wage premium' is defined as the difference between a firm's labour cost per person from the sector median <sup>(195)</sup>. When estimating TFP, this premium can be included as another independent variable. In that case the link between labour costs and TFP changes. As the green line in *Chart 3.9* shows, the link becomes much less progressive compared with the blue line which does not include the wage premium as separate variable. In other words, the productivity-

<sup>(193)</sup> Apart from the variables mentioned in the following, country effects are also included in each regression to control for differences across countries and for statistical noise which affects firm-information in different countries differently. Firm-data from 16 EU countries is included. Belgium, Croatia, Czech Republic, Finland, France, Germany, Italy, Lithuania, The Netherlands, Poland, Portugal, Romania, Slovakia, Slovenia, Spain and Sweden.

<sup>(194)</sup> In order not to cross too many variables in one equation it is avoided that the additional variables overlap in one model. They will thus be included one by one. Each regression only controls for the variables of the base model. See Annex 5.

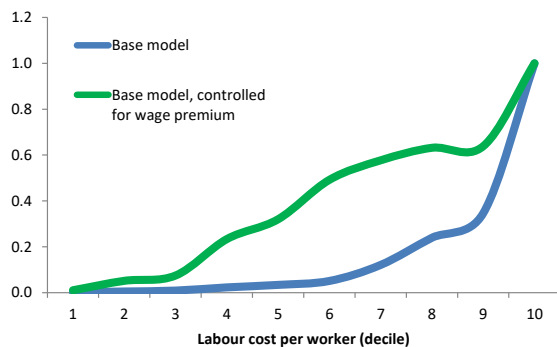
<sup>(195)</sup> CompNet (2018), p. 73.

related supplement changes the wage distribution towards workers in those firms where TFP is high (i.e., the most innovative and efficiently working firms).

Chart 3.9

### Wages bear a premium for high efficiency

Odds of achieving higher TFP by labour cost decile (highest decile=1)



Note: Ordinal logistic regression

Source: Commission services based on the CompNet database

[Click here to download chart.](#)

**The productivity-related wage premium is thus likely to cause some wage inequalities.** A number of variables can capture unequal wage distributions. It is possible to compare the wages at the top of the wage distribution with those at the bottom. How to define 'the top' and 'the bottom'? For example, one could consider 'the top' firm the one paying higher wages than 90% of firms in the respective sector. Correspondingly, wages paid by the bottom firm are lower than in 90% of all firms in the same sector. Alternatively, one could assume a threshold of 75%, instead of 90%. <sup>(196)</sup> The ratio between the top and the bottom wage would then be an indicator of wage inequality. Another indicator could be the overall skewedness of the wage distribution as explained above <sup>(197)</sup>. For all these indicators, the analysis finds that wage inequality is significantly correlated with the wage premium; higher TFP goes hand in hand with higher wage inequalities. These inequalities happen because the wage premium rewards workers in efficiently working firms for their high productivity. However, *Annex 4* reveals that there is no such link between higher TFP and *total* disposable income inequality. This is because low-wage earners may be supported by social transfers. The EU's welfare systems thus reduce inequalities through re-distribution of primary income.

**Replacing old with new capital is accompanied by efficient production.** Chart 3.10 shows the chances of achieving higher TFP by decile of firms' year-on-year investment ratio (blue) and capital growth (red). The difference between these two

<sup>(196)</sup> Outliers in the top decile of the wage distribution could skew the results.

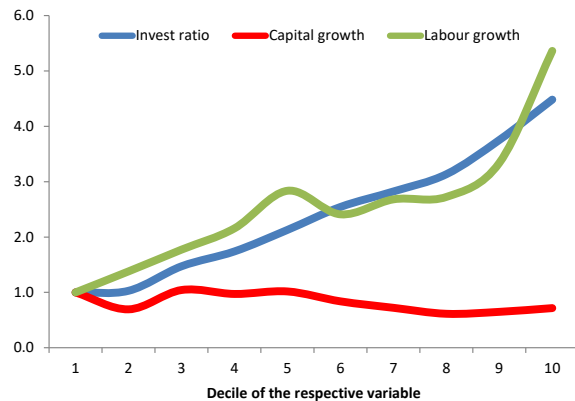
<sup>(197)</sup> The skewedness (S) measures deviation from normal distribution of wages. It is negative if high wages have a relatively high weight, positive if low wages are more numerous. In the OLS regression of TFP with skewedness as one explanatory variable, its coefficient is negative and highly significant. That is, lower S (higher share of high wages) would trigger TFP.

variables is the depreciation rate (capital consumption). Depreciation is included in the investment ratio and captures investment made not to increase the capital stock but to replace 'old with new' capital. The chart shows the ratio of chances of achieving higher TFP per decile, relative to the lowest decile for which the respective chances are normalised to a value of 1.

Chart 3.10

### Modernising the capital stock fosters high TFP

Odds of achieving higher TFP by labour growth, capital growth and investment activity (in deciles, lowest decile=1)



Note: Ordinal logistic regression

Capital growth: Growth of the capital stock / capital stock

Invest ratio: (Capital growth + depreciation) / capital stock (CompNet (2018))

Source: Commission services, based on the CompNet database

[Click here to download chart.](#)

Unlike capital growth, total investment has a strongly positive link with TFP. The replacement component in investment strongly pushes efficiency in production as replacement may be 'an important vehicle for introducing new techniques' <sup>(198)</sup> while a pure increase in the capital stock may also substitute for TFP rather than support TFP-growth. <sup>(199)</sup> These results are in line with Musso (2006) who found a strong positive impact of capital depreciation on TFP in the US. This is because higher depreciation rates can signal shorter capital life cycles and thus higher pressure to modernise a firm's productive equipment. <sup>(200)</sup>

**Exposure to international competition increases efficiency in production.** This holds true even after taking account of the size of firms <sup>(201)</sup>. It is known that "new exporters display [not only] a productivity [but also] a size advantage" <sup>(202)</sup> compared with firms that do not export. There are two major reasons why exporting firms are more productive. First, they need to be more productive in order to be able to pay the costs related to trade "so that expansion into foreign

<sup>(198)</sup> Aldcroft, D.H. and Fearon, P. (1969), "Economic Growth in Twentieth Century Britain", p. 45.

<sup>(199)</sup> Burda and Severgnini (2018) come to a similar conclusion in the context of Germany's East-West convergence.

<sup>(200)</sup> Busso, P., (2006), Capital Obsolescence, Growth Accounting and Total Factor Productivity", *Revue de l'OFCE* 2006/5 (no. 97), p. 217-233. See <https://www.cairn.info/revue-de-l-ofce-2006-5-page-217.htm#>

<sup>(201)</sup> The firm size is controlled for as part of the base model (see previous section).

<sup>(202)</sup> European Central Bank (2017), p. 86-87.

markets is profitable".<sup>(203)</sup> Second, the stronger the competition a firm faces in a market, the less flexibility it has to increase the price for its products and the more it is forced to organise its production efficiently. Firms that sell their products in the world market face global competition. Correspondingly, the regression analysis confirms that firms engaged in export activities attain higher TFP than those firms that serve only domestic markets. The box explains this result in technical terms.

#### *Export activity fosters TFP*

CompNet offers a number of variables that capture a firm's export activity. One dummy variable measures whether or not a firm is at all engaged in export activities. Those firms have a much higher chance of achieving higher TFP rates than other firms.<sup>(204)</sup> This finding is in line with the literature that sees firms in tradable sectors being more exposed to competition and therefore forced to increase efficiency in production. Therefore, productivity in tradable sectors tends to be higher.<sup>(205)</sup>

**Efficiency can go hand in hand with high quality labour.** Higher capital growth (see red line in *Chart 3.10*) seems to dampen TFP.<sup>(206)</sup> Firms cannot rely just on capital deepening to improve efficiency of production. High quality labour input is crucial as well. The green line in *Chart 3.10* shows that labour growth tends to go hand in hand with higher TFP. Rather than engaging in jobless growth based solely on capital, the most innovative firms seem to attract more workers and create jobs with innovative up-to-date capital. This finding is in line with the capital-skills-complementarity<sup>(207)</sup> found in earlier ESDE editions: well-qualified workers attract smart capital. Both high-quality labour and capital raise productivity and allow for higher wages.

**Access to capital is important for innovation.** Physical investment in a firm's capital stock, be it replacement or expansion, requires access to the capital market. CompNet takes into account whether or not firms face constraints when borrowing from the capital market. Four criteria define a credit constraint (CompNet (2018), p. 47):

- The firm reports loan applications which were rejected;
- The firm reports loan applications for which only a limited amount was granted;

<sup>(203)</sup> Ibidem, p. 87.

<sup>(204)</sup> The statistical odds for exporting firms are actually four times as high. Another variable measures whether firms belong to the respective sector's top-10-exporters. In this case the odds rate from the point of view of these top-exporters is 5:1.

<sup>(205)</sup> For example: Mano and Castillo (2015), esp. p. 23.

<sup>(206)</sup> A simple OLS regression on continuous values (rather than deciles) for TFP as dependent variable results in a significant negative coefficient for capital growth.

<sup>(207)</sup> See, European Commission (2018b), Chapter 2.

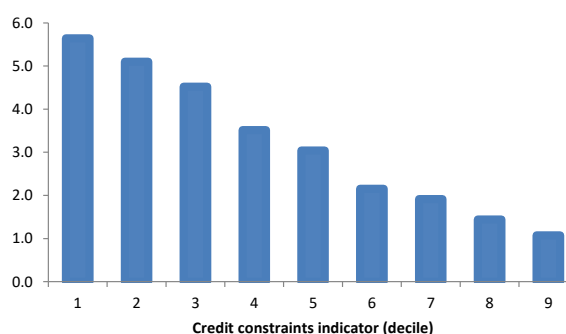
- The firm reports loan applications which were not pursued by the firms because the borrowing costs were too high;
- The firm did not apply for a loan for fear of rejection (i.e. discouraged borrowers).

Even after controlling for firm size<sup>(208)</sup> the link between credit constraints and TFP is straightforward: the higher the credit constraints the lower is their likelihood of achieving higher TFP. This finding underlines the importance of efficient credit markets that guarantee access to credit for innovative, productive firms.

Chart 3.11

#### **Access to capital is crucial for efficiency**

Odds of achieving higher TFP by credit constraint status (in deciles, highest decile=1)



Note: Ordinal logistic regression

Source: Commission services based on the CompNet database

[Click here to download chart.](#)

#### **Labour market imperfections reduce efficiency.**

The CompNet database includes an indicator for the degree of labour market imperfection at firm level.

#### *Measuring labour market imperfection*

This indicator is equal to the difference between a firm's markup<sup>(209)</sup> on intermediate products and the markup on labour input according to Dobbelaere and Mairesse (2013). This means that the 'intermediate input market can be seen as competitive benchmark'.<sup>(210)</sup> In other words, unlike labour, intermediate products can be traded, and their price tends to be a direct outcome of demand and supply. Differences between the markup of intermediate products and labour may therefore hint at imperfections in the labour market and potential market failure.

#### **Labour market imperfections have many faces.**

Imperfections imply that productive factors are not used where they are most productive. There are numerous examples:

- Discrimination against certain groups of workers may create entry barriers to the labour market.

<sup>(208)</sup> The number of employees is included in the base model, see *Chart 3.7* above.

<sup>(209)</sup> The markup is the ratio between the output (production) and the input of a certain productive factor.

<sup>(210)</sup> CompNet (2018), p. 48.

These can keep even well-qualified workers out of the market or force them to work below their qualifications (dual labour markets).

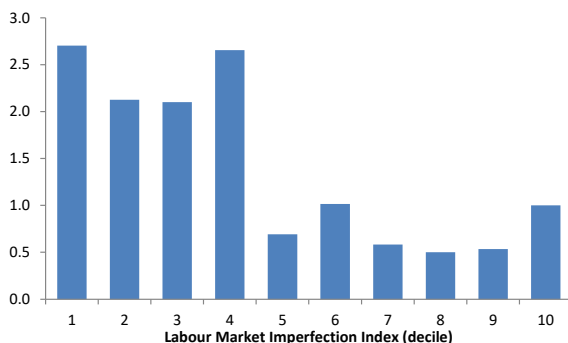
- Inflexible wage structures can keep wages from rising if there is strong labour demand or from falling during a recession.
- Market power may be unevenly distributed between firms and workers (monopolies or monopsonies).
- In all these cases, wages will not reflect workers' productivity.<sup>(211)</sup> If there is a positive wedge between wages and productivity (ie the wage is 'too high' for certain activities), workers may be motivated to pursue these activities instead of others where their productivity would be higher. As a result, labour market imperfections can lead to the inefficient allocation of productive factors. TFP will then decline, i.e., the same factor input can generate only lower output, and hence lower growth.

**Such distortions tend to weigh on TFP.** Chart 3.12 shows that firms where TFP is high tend to be those where labour market imperfections are low and vice versa. It is important to note that this finding is not related to the size of the firm, nor can it be explained by country-specific imperfections. These effects have been controlled for in the underlying regression.

Chart 3.12

#### Labour market imperfections exist at the expense of TFP

Odds of achieving higher TFP by degree of labour market imperfection (in deciles, highest decile=1)



Note: Ordinal logistic regression

Source: Commission services based on the CompNet database

[Click here to download chart.](#)

### 3.4. Summary

- **Efficient firms pay higher wages.** Efficient firms produce jobs and pay a productivity premium to their workers. There is little evidence that higher wages hamper TFP. Both go hand in hand (note that this finding holds after controlling for the size of firms).

<sup>(211)</sup> To put it as in Dobbelaere and Mairesse (2013): "... input factors' estimated marginal products are often larger than their measured payments" (p. 33, 34).

- **Modernising the capital stock increases TFP.** Rather than simply relying on more capital, highly productive firms invest in high-quality, innovative capital that makes them more competitive.
- **Exposure to global competition raises firms' TFP.** Higher efficiency enables firms to create more jobs and pay better wages to workers. For the trade within the EU this finding underlines the importance of the EU Single Market. Its proper functioning 'stimulates competition and trade, improves efficiency [and] raises quality'.<sup>(212)</sup> That is, it calls for structural reforms on product and service markets that improve their functioning by increasing fair competition amongst firms.<sup>(213)</sup>
- **Labour market imperfections go at the expense of efficiency.** Similar to product market imperfections, imperfect labour markets also tend to lower TFP. Those imperfections have many facets. Workers with non-standard contracts may be excluded from certain social protection rights or may receive wages at different level from what would be justified by their productivity. Others may not even have access to the labour market because they do not have the right skills, or, as certain categories of migrants, may not be allowed to work. These situations create dual labour markets with privileged, well protected workers on the one hand, and outsiders on the other hand. The latter may be talented. They could potentially add a lot of value to the production. Yet they are forced to stay out of the labour market or work (and paid) below the level of their skills and qualifications.
- **It is therefore important to offer equal opportunities in the labour market to all workers.** Labour market imperfections limit efficiency in production. They can be the result of discrimination or exclusion from job- or training-opportunities so that some may not have the chance to join the labour market and engage in productive activities, thus remaining idle or working in low-productivity jobs. These dynamics lead to lower growth and hinder marginalised individuals and groups from achieving their potential in the labour market and in society.
- The next section explores how policies can actively support strong productivity growth and higher wages.

<sup>(212)</sup> See European Commission on [https://ec.europa.eu/growth/single-market\\_en](https://ec.europa.eu/growth/single-market_en)

<sup>(213)</sup> Traditional Schumpetrian models had claimed that competition, by reducing monopolist rents, also reduce firm's incentive to innovate. However, this view has given way to new evidence that supports the notion of competition incentivising produce and process innovation (Nicodème and Sauner-Leroy, 2004, esp. pp. 12 and 13).

Table 3.4

**In the eyes of managers innovation, good working conditions and training help boost productivity**

Odds rate for a firm of having higher labour productivity growth

Specification:			1	2	3	4	5	6	7	8	9	10	11	12	13	14
1			Basic model													
	Establishment is part of ...	The private sector The public sector	0.74 1	0.69 1	0.73 1	0.75 1	0.69 1	0.73 1	0.76 1	0.72 1	0.74 1	0.74 1	0.73 1	0.74 1	0.74 1	0.75 1
2	Number of employees in establishment	10-49 50-249 250+	0.70 0.99 1	0.76 1.00 1	0.76 1.02 1	0.79 1.04 1	0.66 0.96 1	0.73 1.00 1	0.69 1.00 1	0.76 1.01 1	0.63 0.94 1	0.68 0.99 1	0.70 0.99 1	0.64 0.94 1	0.70 0.99 1	0.72 1.00 1
3	Establishment is a member of any employers' organisation which participates in collective	Yes No	0.98 1	1.04 1	0.97 1	0.94 1	0.99 1	0.97 1	0.92 1	0.97 1	1.01 1	0.98 1	0.97 1	1.01 1	0.98 1	0.97 1
	Country effects included		yes													
Specific tests																
4	Since the beginning of 2010, has the total number of employees has...	Increased Decreased Stayed about the same		2.71 0.56 1												
5	Since the beginning of 2010 has this establishment introduced any new or	Yes No			1.84 1											
6	Since the beginning of 2010, has this establishment introduced any new or significantly changed processes (process innovation)?	Yes No				1.93 1										
7	Percentage of employees are older than 50 years of age?	Less than 20% 20% to 39% 40% to 59% 60% to 79% 80% to 99%					1 0.89 0.79 0.61 0.40									
8	Percentage of employees working in jobs which require at least one year of on the job learning in order for the person to become proficient in his/her task (high skill requirements)?	Less than 20% 20% to 39% 40% to 59% 60% to 79% 80% to 99%					1 1.15 1.10 1.05 1.12									
9	Who decides by whom tasks are to be performed (work autonomy)	Team members decide Tasks are distributed							1.21 1							
10	In the past 12 months, what percentage of employees have received on the job training?	Less than 20% 20% to 39% 40% to 59% 60% to 79% 80% to 99%								1 1.20 1.30 1.54 1.45						
11	Since the beginning of 2010, the general work climate in this establishment...	Improved Remained about the same Worsened									7.50 2.18 1					
12	High level of sickness leave?	Yes No										0.83 1				
13	Difficulties finding employees with the required skills?	Yes No											1.11 1			
14	A need to reduce staff?	Yes No												0.41 1		
15	Collective wage agreement exists?	Yes No													1.00 1	
16	Employees Representation: A structure exists in the establishment?	Yes No														1.05 1

Source: Commission services based on Eurofound's European Company Survey 2013

[Click here to download table.](#)

## 4. SUPPLEMENTARY EVIDENCE FROM A COMPANY SURVEY

A series of regressions on data from the last available (2013) European Company Survey (ECS) <sup>(214)</sup> for all 28 Member States confirms earlier findings that a firm's success largely depends on its human capital: workers' qualifications, their access to training and their potential to innovate.

Table 3.4 presents the results of a logistic regression on ECS firm-level data. It shows the chances that a firm's manager considers labour productivity in her/his firm to have improved <sup>(215)</sup> from the beginning of 2010 until 2013, the year of the survey and in which labour markets in the EU started recovering. The table shows these for a variety of variables. For each variable, it presents the chance of perceived improvements in productivity in the form of a ratio

<sup>(214)</sup> The ECS is done every four to five years by the European Foundation for the Improvement of Living and Working Conditions. For an overview see Eurofound (2015).

<sup>(215)</sup> The possible replies were: since 2010, productivity (1) improved, (2) stayed the same, (3) worsened. The odds ratio is the odds of the manager replying (1) or (3) relative to the odds of replying (2). This ratio is assumed equal the odds of replying (2), relative to the odds of replying (3).



relative to a reference group, which is marked in red and normalised to a value of 1.

There are 14 different model specifications for alternative variables included as explanatory variables in the regression. Four variables describe the firm and, as part of the basic model, they are thus included in all 14 specifications.

#### 4.1. Main findings

**Collective bargaining and employee representation do not seem to affect managers' perceptions of labour productivity.** Whether or not an organisation participates in collective wage bargaining (row 3) does not significantly affect a firm's perceived productivity growth performance in any of the model specifications. This finding does not support the concern, often argued by managers, according to which collective bargaining, by supporting workers' bargaining power, raises labour costs and thus reduce firms' incentives to hire or retain workers. Correspondingly, whether or not workers in the firm are covered by a collective wage agreement at any level (company, sector, occupation, cross-sectoral) does not seem to impact productivity gains as managers perceive them (row 15). On the contrary, the chances of increasing productivity growth tend to be higher in firms where there is some form of employee representation (row 16) <sup>(216)</sup>. A higher training-intensity and better working conditions may contribute to this finding. Indeed, Chapter 6 finds that firms with an employee representation perform significantly better on a series of indicators that measure the quality of work.

**Good working conditions clearly support productivity.** Improving the working climate (row 11) and promoting workers' autonomy (row 9) correlate very strongly with higher productivity growth. The same is true for low sick leave incidence (row 12), an indicator that correlates strongly with good (perceived) working conditions. <sup>(217)</sup>

**Innovation boosts productivity.** Two ECS variables capture innovation: if a firm has invented new products or services since 2010, this could be considered a proxy for product innovation (row 5), or it could otherwise have introduced new processes, including organisational or production processes ('process innovation' - row 6). In both cases, an innovative firms' chance of achieving higher productivity growth is almost the double that of non-innovative firms.

**Training helps to improve productivity** as it makes workers more efficient and increases the firms' innovative capacity (row 10): the more workers have had access to training during the last 12 months, the higher a firm's labour productivity growth tends to be. This may reflect the direct effects of enhanced workers' skills and better matching, as well as indirect effects due to their contributions to product and process innovation.

**In the eyes of managers an older workforce does not support productivity growth.** In establishments where the proportion of workers aged over 50 is high, managers tend to expect lower productivity growth. The effect of ageing on productivity is controversially discussed by scholars, and research in this area is still in its infancies. <sup>(218)</sup> However, the finding confirms most recent evidence that a changing age distribution in Europe towards older ages may reduce labour productivity mainly through the channel of lower TFP growth. <sup>(219)</sup> If this result holds more broadly, increasing productivity growth in an ageing society emerges as a challenge <sup>(220)</sup> that calls for policies with a focus on training of older workers and on innovation through R&D. <sup>(221)</sup>

#### 4.2. Summary

Managers perceive productivity growth to be higher in firms where:

- Better working conditions support higher productivity (good working climate, workers' autonomy, few incidences of sick-leave).
- New products are invented or new processes introduced, confirming that innovation boosts productivity.
- Workers tend to be younger.
- Workers have regular access to training.

### 5. STRENGTHENING HUMAN CAPITAL: A MODEL-BASED ANALYSIS

The Commission's Labour Market Model (LMM) is used to describe the transmission path of productivity-enhancing policy measures in the labour market and the economy, for a given country. <sup>(222)</sup>

<sup>(218)</sup> International Labour Office (2015)

<sup>(219)</sup> Aiyar et al (2016), p. 18.

<sup>(220)</sup> The European Commission (2017b) dealt with the challenge of ageing for the fairness across generations (ESDE 2017).

<sup>(221)</sup> Ibidem, p. 19.

<sup>(222)</sup> Currently, LMM supports 15 Member States, any of which can be taken as the country where the policy measure is taken. For a description of LMM see Berger et al (2009).

<sup>(216)</sup> In firms where there is some kind of employee representation the odds of having higher labour productivity (as perceived by managers) is 5% higher. This odds ratio is significant at a level of 10%.

<sup>(217)</sup> A regression analysis based on Eurofound's 6<sup>th</sup> Working Conditions Survey (2015) reveals that job satisfaction (the dependent variable) is significantly negatively linked to the number of days on sick leave (controlled for age, gender, education, firm-size, and country-effect).

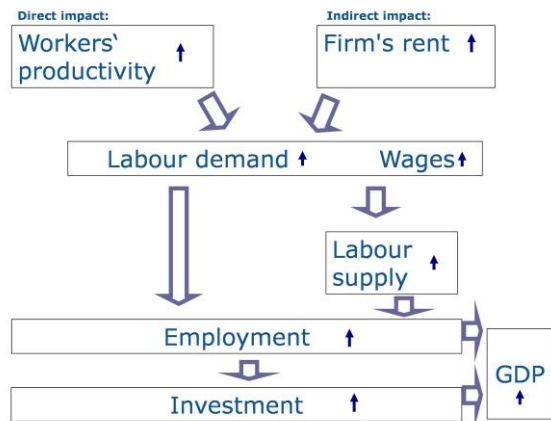
### 5.1. How a training subsidy impacts on the economy: the transmission path

The LMM is used to simulate the long-term impact of a government subsidy to firms in order to promote job-related training for workers. The subsidy tends to raise firms' incentive to offer such training to their employees and some of them will take up training. The chart depicts the transmission path of such training subsidies in LMM.

Chart 3.13

#### Training improves workers' productivity

Direct and indirect impact of a subsidy granted to firms in order to encourage them to offer training to workers



Note: Transmission path of a training subsidy into the economy

Source: Commission Services, based on EMPL's Labour Market Model (Berger et al, 2009)

[Click here to download chart.](#)

**The higher uptake of training increases workers' productivity directly.** As a result, firms have a stronger incentive to hire more workers. Labour demand thus increases, pushing up wages. Higher market wages will attract more workers who were previously unemployed or inactive to take up a job. Hence employment increases. As there are more people working, firms step up investment as they equip the additional workers with capital. Both higher employment and higher investment boost productivity and hence GDP.

**A government subsidy increases both workers' and firms' rent.** Besides the direct productivity-related impact, there is an indirect transmission path. Notwithstanding the subsidy's original purpose, it is a transfer from the government to the private sector. It thus increases (as would any other transfer to companies) the rent of a firm-worker-match. It therefore provides an additional incentive for firms to create jobs, and it makes them more conciliatory when it comes to bargaining on wages, i.e. the subsidy tends to reduce the cost of the employee-firm relationship so that they bargain less hard on wages than without the policy measure. As a result, depending on the relative bargaining power of workers and firms, part of the additional firm-worker-rent is transferred to workers in the form of higher wages.

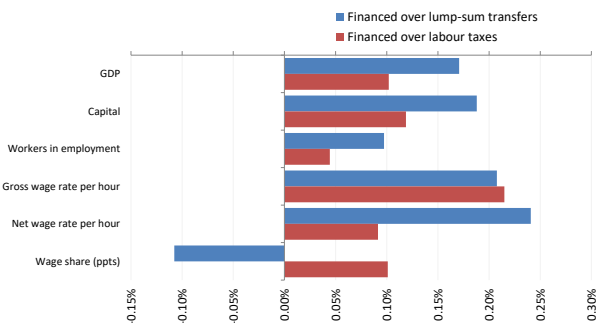
### 5.2. Labour taxes matter: beware of the impact on net wages

**A medium-sized training subsidy:** Chart 3.14 shows the long-term results of such a measure along the above-described transmission path, which is similar for all the countries the LMM covers. The results are shown for Belgium, where it is assumed that the government spent 0.1% of GDP per year on a subsidy incentivising firms to offer more training to their employees. A distinction is made as concerns the financing of the training subsidy. In order not to alter the allocation of resources between capital and workers, funding could take place through levying a lump-sum tax on all households. Alternatively, the government could raise the necessary funding through increasing labour taxes.

Chart 3.14

#### Investing in higher productivity: labour taxes matter

Grant a subsidy to firms in order to encourage them to sponsor training to workers: 0.1% of GDP, alternative funding regimes, Belgium



Source: Commission services based on EMPL's Labour Market Model

[Click here to download chart.](#)

**While higher productivity leads to higher growth, workers' take-home pay may decline.** Under both funding regimes the economy sees increases in GDP, employment, labour productivity (the difference between the two), and wages along the lines described above. However, the long-term impact on GDP is almost twice as strong in the more 'worker friendly' way of funding through lump-sum taxes. The relative impact on (gross) wages is nearly the same in both cases. However, in the case of labour-tax funding, the increase in workers' take-home pay (net wages) would be less than half as strong due to higher labour taxes.

**A positive impact on labour supply is stronger if increased labour taxes are avoided through alternative financing.** Lower net wages reduce the incentive for workers to join the labour market. For a given level of labour demand, the effect on employment is lower than would be the case if the government decided to finance the subsidy via neutral lump-sum taxes, as will be the additional investment because there are fewer workers to be endowed with new capital. Finally, with employment and net wages increasing by much less than investment, the labour-tax funded subsidy will reduce the wage share in GDP. The share of workers' rent in GDP will therefore decline while firms' share will increase.

### Investment in skills creates a win-win situation for firms and workers, yet there are nuances.

Investment in workers skills will pay out for both firms and workers. For firms the firm-worker-match will yield a higher return as productivity increases. Workers will also get their share of this welfare surplus as they will be able to bargain more successfully for higher wages than before the measure. The relative change in their improvement will however depend on the policy's distributive impact. Higher labour taxes will reduce workers' net wages which may have an impact on labour market participation.

### 5.3. Targeted training opportunities help low-qualified workers

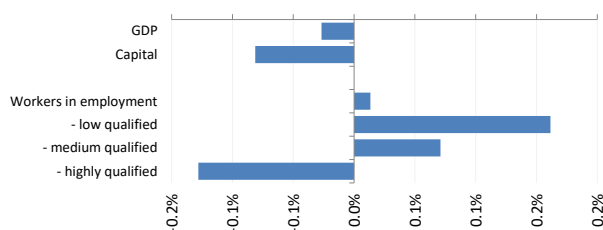
**Lower-qualified workers need more incentive to take up training.** LMM distinguishes a worker's qualification and her skills. While *qualification* refers to the formal level of education, *skills* are specific competences and abilities that are relevant for her job. The two concepts are closely linked. Indeed, the take-up of training to improve job-specific skills depends a lot on the qualification of workers. The lower the level of the qualification, the lower workers' lifelong learning activity tends to be. <sup>(223)</sup>

**Governments may offer new training opportunities.** The government may therefore consider targeting the subsidy specifically on low and medium-qualified workers because they are more likely to be in need of skills upgrades as their take-up of training is much lower than that of tertiary-educated workers. <sup>(224)</sup> Chart 3.15 shows the long-term impact on Belgium's economy and its labour market. It is assumed that the subsidy be funded via higher labour taxes (borne by all workers).

Chart 3.15

#### Training for lower-qualified workers improves their labour market performance

Grant a subsidy to firms in order to encourage them to sponsor training to workers, 0.1% of GDP, targeted to low- and medium-qualified workers, Belgium



Note: Assumption: The measure is financed through higher labour taxes.

Source: Commission services based on EMPL's Labour Market Model

[Click here to download chart.](#)

**A focus on lower-qualified workers pushes their employment.** More training granted to lower-qualified workers increases their productivity. However, workers compete with each other in the labour market. This also holds true across different qualification levels. In other words, lower-qualified workers are imperfect substitutes for better-qualified workers but if they

increase their productivity, they become more attractive to firms. The latter will thus hire more low- and medium qualified workers. As a result, their wages will increase. Attracted by higher wages, low- and medium qualified workers will feel a stronger incentive to join the labour market while highly-qualified workers' employment declines. The latter are affected by higher wage taxes while not being targeted by the measure. There is thus a structural effect on employment away from highly qualified towards lower-qualified workers. In other words, the (formal) qualification level of the workforce decreases on average because of the expansion of training for low-qualified workers in particular, pulling down average productivity.

**Capital and qualifications are complementary.** So a decrease in average qualification levels has knock-on effects. It will induce firms to invest less because capital and qualifications are complementary. In other words, firms feel less inclined to invest in innovative capital if employment of well-qualified workers declines. As highly qualified workers have higher wages, their declining number reduces the wage share of workers in GDP (despite lower investment).

### The distributional impact of training targeted on the most vulnerable remains favourable.

The training subsidy will strongly improve low-qualified workers' employment prospects, thus increasing their wages. It would thus have favourable implications for Belgium's low-qualified workers whose employment rate is currently one of the lowest in the EU. They would improve competitiveness, labour market performance and wages. However, the particular design of such targeted policy measure may come at the cost of lower productivity of the workforce as a whole. It is thus necessary to design the focus of Active Labour Market Policies, training measures carefully, in particular, keeping in mind both general economic targets as well as social objectives such as fair wages and inclusiveness.

### 5.4. How to help the most vulnerable while boosting innovation?

In this section, simulation is performed to complement the targeted training subsidy by an additional incentive for young students. The latter are granted a scholarship for the take-up of tertiary-education study. <sup>(225)</sup> As in the above example, 0.1% of GDP is spent. However, instead of spending the entire amount only on a training subsidy for low- and medium-qualified workers, it is assumed that only half of it (0.05% of GDP) will be spent on that purpose. The other half will be used to fund scholarships for incentivising the take-up of relevant tertiary-education studies.

**More highly qualified workers as a result of the scholarship.** The training component of the policy

<sup>(223)</sup> European Commission (2018a), Chapter 3.

<sup>(224)</sup> See Chart 6.4 in Chapter 6.

<sup>(225)</sup> A similar measure was simulated in last year's ESDE for the Czech Republic (European Commission (2018b), Chapter 2).

would support low and medium-qualified workers' productivity performance as described above. In addition, the study-scholarship would induce more young workers to engage in studies and thereafter work in a job that requires higher qualifications. In the long run, the share of highly qualified workers in total employment would therefore increase. This would trigger Belgium's innovative capacity and its workers' average productivity.

Chart 3.16

#### A policy mix that includes support to highly qualified

Grant a subsidy to firms in order to encourage them to sponsor training to workers, 0.1% of GDP, alternative target groups, labour-tax funded, Belgium



Source: Commission services based on LMM

[Click here to download chart.](#)

**A balanced investment strategy that also includes the best qualified serves both economic and social targets.** The less favourable impact on the workforce's average qualification that was the result of the training-only policy is avoided in the policy scenario that includes the student support. While 'training only' would reduce average productivity, in the case of 'studies included' the workforce would on average become more innovative, thus more productive than in the initial (do-nothing) situation. A higher share of highly qualified workers triggers additional capital investment so that GDP increases. A balanced investment strategy helping the most vulnerable while also fuelling innovation thus helps achieve both economic growth and social targets.

### 5.5. European Social Fund+ (ESF+) : an EU policy instrument promoting growth in the EU – a simulation exercise

**New and old challenges call for policies that improve access to training.** The findings so far reveal that higher productivity calls for adapted education and training systems. Everyone should have access to training in order to avoid labour market imperfections in the form of segmented labour markets. The employment situation in the EU has improved since 2013. Yet in many regions the levels of long-term and youth unemployment are still significant. In addition, too often jobs fail to pull people out of severe low-income conditions. Despite recent improvement, the proportion of employed people at risk of poverty and social exclusion still stands at 12%.<sup>(226)</sup> These factors produce outsiders largely cut off from opportunities in the labour market, thus undermining the foundations for present and

future growth and ultimately challenging the sustainability of Europe's social model.

**ESF+ is investment for socially sustainable growth.** Established in 1958, the European Social Fund (ESF) is one of the EU's main financial instruments for supporting national policies that seek to increase employment, improve quality and productivity at work, and reduce social exclusion and regional employment disparities.<sup>(227)</sup> In May 2018, the Commission adopted a proposal for a European Social Fund Plus (ESF+) for the next programming period 2021-2027.<sup>(228)</sup> The Commission's proposal aims at helping Member States achieve (i) a skilled and resilient workforce, (ii) high employment levels, and (iii) fair social protection (see Art. 3 of the ESF+ Regulation). *Table 3.5* gives an overview over the respective investment plan. In line with these three general objectives, the ESF+ will concentrate its investment in three main areas: education, employment and social inclusion and health. The proposal foresees a total investment of EUR 88.6 billion in today's prices (EUR 101.2 billion in current prices). According to the Commission's proposal, more than half of the funds (62%) would be allocated to Less Developed Regions<sup>(229)</sup>.

Table 3.5

#### ESF+: almost €89 billion in today's prices to be spent between 2021 and 2027

Commitment appropriations for the ESF+ by region type for 2021-2027, million Euro in 2018 prices

	Investment in education	Investment in employment	Investment in social inclusion
Less Developed Regions	22056.1	25206.9	15754.3
Transition Regions	5100.9	5829.6	3643.5
More Developed Regions	3869.2	4421.9	2763.7

Source: Commission Services

[Click here to download table.](#)

This section attempts to provide further evidence on the potential impacts of this ESF+ investment.<sup>(230)</sup>

#### 5.5.1. Distinguishing structural from demand effects

**Estimating the long-term economic impact of ESF-spending is challenging.** Projecting the effect of regional investment on the EU's economy, its society and the environment is extremely complex. First, regions are closely intertwined in economic terms, whether within a sector or across various

<sup>(227)</sup> Available at:

[https://ec.europa.eu/regional\\_policy/en/policy/what/glossary/e/european-social-fund](https://ec.europa.eu/regional_policy/en/policy/what/glossary/e/european-social-fund)

<sup>(228)</sup> European Commission (2018c).

<sup>(229)</sup> In Less Developed Regions, GDP per capita is less than 75% of the EU average; Transition Regions have a GDP per capita between 75% and 90% of the EU average, while in More Developed Regions GDP per capita is above 90% of the EU average.

<sup>(230)</sup> A detailed description of the analysis presented in this section with all the assumptions and sensitivity analysis will be provided in the JRC report Kancs, D. and Piroli G., "Economic Impacts of the European Social Fund Plus: A Model-based Assessment", JRC Working Papers Joint Research Centre, European Commission, (forthcoming).

<sup>(226)</sup> Eurostat EU SILC (series ilc\_peps02) for 2017.



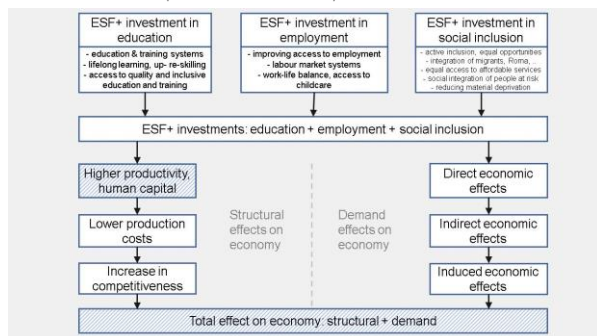
sectors. Second, there may be a long time-lag between the investment being made and its return flowing back. This is typically the case with the support of training or education. Three types of potential economic effects of ESF+ investments are of particular interest in the context of the 2021-2027 measures: (i) demand effects (e.g. hiring of workers and teachers); (ii) structural effects (e.g. productivity and human capital growth); and (iii) macroeconomic effects (e.g. on GDP and employment). In line with the focus of this chapter, the main emphasis of the analysis is on structural effects, especially the impact on productivity.

**The immediate effects of ESF+ spending on aggregate demand tend to be measurable.** When the ESF+ invests in education and training, the observable effects include the number of teachers or the number of administrative staff required for training new students and trainees, additional textbooks needed, or costs of school utilities and maintenance. In *Chart 3.17* these directly measurable effects are referred to as the *demand effect on the economy*.

Chart 3.17

### Demand and structural effects of ESF+ spending on the economy

Mechanics of ESF+ impact on the EU's economy



Source: Commission Services (Joint Research Centre)

[Click here to download chart.](#)

### Structural effects are not directly measurable.

Measuring how many new firms are created by newly educated or trained workers or the impact of their post-training professional activities on their productivity is more difficult. In *Chart 3.17* these not directly measurable effects are referred to as the *structural effect on the economy*. These structural effects are overlain by other simultaneous developments and policies, making it extremely challenging to establish a causal link to ESF+ investments. Given that it is very difficult to measure them on a case-by-case basis, another model-based scenario analysis is provided for simulating how GDP and productivity would evolve with and without the ESF+ investment. <sup>(231)</sup>

**Causal effects of ESF+ spending are difficult to measure.** This section undertakes a model-based tentative endeavour to quantify how macro-variables may react in the future with and without ESF+ interventions. <sup>(232)</sup> It then draws conclusions from the differences between the two scenarios.

Total effects of ESF+ investments on the economy, as shown in *Chart 3.17*, are referred to as the sum of structural and demand effects. Providing evidence for a causal effect of European Cohesion Policy measures on the economy is challenging. Important magnitudes such as output, consumption, trade, employment or GDP may be observable. Yet the impact of increased ESF+ spending on these variables is blurred by various coincidental effects that may neutralise or confound each other.

### 5.5.2. Simulation results: productivity increases while unit labour costs decline

The impact of ESF+ investment as shown in *Table 3.5* is estimated for labour productivity.

**ESF+ increases labour productivity, and lowers unit labour costs.** *Chart 3.18* shows, on the vertical axis, the simulated impact of ESF+ spending on unit labour costs (left panel) and labour productivity (right panel). <sup>(233)</sup> This strand of impact was referred to as *structural effects on the economy* (*Chart 3.17*). *Chart 3.18* shows the estimated impact, which depends on how much is actually spent on the ESF+ measures. Therefore, the horizontal axes of *Chart 3.18* show the intensity of the 'treatment' (the level of ESF+ investment). There is a certain error probability in these estimations. To capture the degree of uncertainty, the dashed lines in *Chart 3.18* frame the estimation in what is called a confidence interval. <sup>(234)</sup>

<sup>(232)</sup> The analysis is not to be interpreted as a forecast, nor is it a fully-fledged in-depth impact assessment of ESF+ spending.

<sup>(233)</sup> The simulation uses data from the previous programming period 2014 to 2020. It follows a non-parametric approach explained in Kancs and Siliverstovs (2016 and 2019).

<sup>(234)</sup> The estimation of the impact is based on a sample. It is therefore not known for sure that it is the true parameter. The significance level is assumed at 95%: Imagine one draws 100 such samples. In this case the impact as calculated from the samples will be 95 times within the corridor as framed by the dashed lines in the chart.

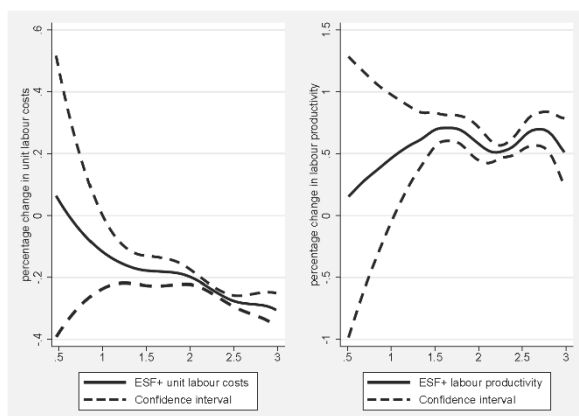
<sup>(231)</sup> The spending under the ESF+ programme for the period 2021 to 2027 may overlap with measures under the previous ESF programming period (2014 to 2020). This modelling exercise looks only at the potential impact of future (ESF+) spending, notwithstanding any other measures that may have been implemented in addition to ESF+.



Chart 3.18

**ESF+ supports labour productivity**

Results: estimated impact of ESF+ on unit costs (left) and productivity (right)



Source: Commission Services (Joint Research Centre)

[Click here to download chart.](#)

The following results emerge:

- ESF+ spending tends to support labour productivity and lower unit labour costs. Unit labour cost is the ratio between labour costs and productivity. Hence, part of the decline in unit labour costs is due to higher productivity. ESF+ will therefore improve the EU's competitiveness.
- This result becomes more uncertain the lower the assumed ESF+ spending intensity is. Indeed, the confidence intervals (dashed lines) suggest that at low ESF+ intensities the estimated policy impact is not significantly different from zero. Only when a certain critical mass is reached does the ESF have a statistically significant impact on unit labour costs and productivity.

**The impact of ESF+ on productivity is non-linear.**

However, the estimated impact is not a straight line. In other words, it cannot be assumed that increases in the intensity (the level of expenditure) will change productivity or unit labour costs in a linear manner. This is because there are two margins of adjustment to such a policy shock: the increasing headcount of workers and the improvement of their skills and qualifications.

**ESF+ programmes help disadvantaged workers to improve their labour market performance.**

Both effects may work in the opposite direction. The reason has already been outlined in the previous section. Where training incentives are improved (only) for lower-qualified workers, ESF+ spending may change the structure of the workforce towards more lower-qualified workers. For example, the social inclusion strand of ESF+ also includes support for people from disadvantaged communities, such as migrants and Roma, in order to increase their labour market participation. These workers typically have lower-than average qualification profiles.

**5.5.3. GDP increases, especially for Less Developed Regions****The impact on Less Developed Regions is higher.**

The estimated ESF+ impact on labour productivity is used as input into a macroeconomic model<sup>(235)</sup> to simulate the impact on GDP (to which *Chart 3.17* has referred as *total effect on economy*). The resulting change of GDP, relative to the baseline, is shown in *Chart 3.19* for Less Developed, More Developed and Transit Regions. The aggregate impact of ESF+ investment on GDP is positive for all three groups of regions. However, the impact is higher the lower the level of the regions' development. This finding can be explained by the fact that ESF+ spending in less developed regions can be a significant proportion of overall spending.

**ESF+ triggers positive spill-over effects.** There are significant spill-over effects across regions and sectors, including on those not directly benefiting from the ESF+ investment.<sup>(236)</sup> This is due to:

- cross-border and cross-sectoral trade of goods and services. It is likely that there will be fiercer competition between firms of different regions or sectors due to the crowding-out of less competitive firms by new firms that emerge as a result of the enhanced ESF+ spending (*indirect economic effects*, see *Chart 3.17*);
- labour migration and capital flows and
- spill-overs of knowledge and the spatial diffusion of technology.

**Investment may take time before revealing its full impact.**

The full positive effect of ESF+ investment on GDP lags by several years. This is because it takes time for the impact of education and training programmes to materialise in the form of higher productivity and thus higher GDP growth. The time-lag implies that, in the first years, the program's cost (see the bars in *Chart 3.19*) is higher than its positive economic effect on GDP. Indeed, in the short-run the *demand effect* (see *Chart 3.17*) dominates as modernising classrooms, building new schools and hiring additional teachers drives government consumption immediately.

**In the long-term, structural effects support growth more strongly.**

Only when the structural effects (higher productivity growth) start materialising does the policy-induced GDP growth accelerate and eventually exceed the costs. In the long run, the effect on productivity (and GDP) will decline somewhat, assuming that no further intervention is made after

<sup>(235)</sup> The employed macroeconomic model is described in the JRC Technical Report: Ivanova, O., Kancs D., and Thissen, M. (2019): European Economic Modelling System, JRC Working Papers, Joint Research Centre, European Commission.

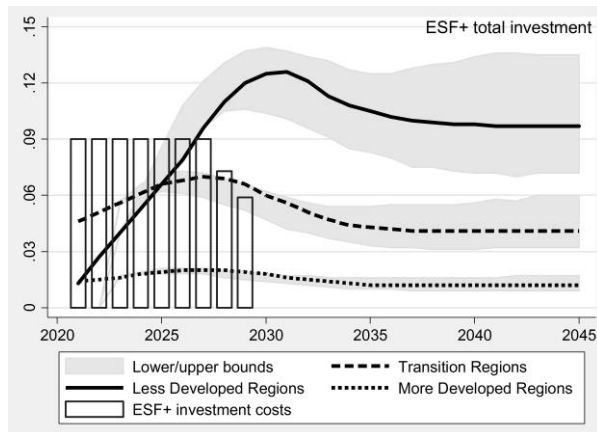
<sup>(236)</sup> See the evidence about the impact of Cohesion Policy in previous programming periods' as presented in European Commission (2017a), p. 186.

the end of the programme in 2027. However, although the measure stops in 2027, there will be a lasting positive impact on productivity and GDP which could amount to around 0.1% of GDP in Less Developed Regions

Chart 3.19

### ESF+ spending supports GDP, especially for Less Developed Regions

Simulated impact on GDP (percent increase relative to the baseline)



Source: Commission Services (Joint Research Centre)

[Click here to download chart.](#)

**The financing of ESF+ investment matters for its impact.** As shown in the previous section in the example of a training subsidy, the allocation of labour (and capital) depends on whether labour taxation finances the ESF+ investment. There is no such direct link for the funding of ESF+. Similarly to the entire EU budget, ESF+ has certain sources of financing that in the model are traced back to taxes paid by households and business in each Member State and region. Part of the required ESF+ funding comes from extra household savings, part of it comes from a borrowing abroad, and yet another part is derived from relocating existing savings that might have been invested differently.

## 5.6. Summary

The long-term macroeconomic impact of training support granted to firms has been analysed (on the example of Belgium). Firms receive a subsidy which motivates them to offer more training to their workers.

- **Training increases workers' productivity, thus labour demand and wages.** However, the way the subsidy is financed matters a lot for workers' income. If funded through an increase in labour taxes instead of neutral lump-sum levies on every household, the positive impact on workers' take-home pay is less strong. This is because higher labour taxes lower net wages. This is a disincentive for workers to join the labour market. The employment impact is therefore lower in the case of labour-tax funding.
- **Human capital investment should be well balanced across target groups.** Instead of granting support to all workers, the subsidy could

be focused on lower-qualified workers, knowing that they are mostly in need of training. In that case, their wages would increase as a result of higher productivity. However, overall productivity could decline, as more workers could feel attracted by higher wages in the low-qualification segment and would therefore not invest in higher qualifications. In that case, more low and less higher-qualified workers were in employment. The average qualification of workers of all workers would thus decline, pulling down investment because qualifications and capital investment are complementary. The effect on GDP could well, therefore, be negative.

- **Supporting higher studies boosts productivity.** The government could avoid the negative side effect of a lower average qualification level of workers by strengthening incentives to invest in higher qualifications. In addition to the training subsidy, it could support the take-up of higher studies through a scholarship. In that case, the average qualification could increase, raising the economy's investment and its innovation potential.
- **Investment in human capital through ESF+ is expected to trigger growth.** ESF+ spending as programmed for the period 2021 to 2027 is expected to boost workers' productivity and firms' competitiveness in the long run. As workers become more productive, this helps firms to reduce unit labour costs. Significant governmental cost in the short run will be followed by lasting positive GDP effects in the long run.
- **These findings underline the importance of EU initiatives in the area of skills.** The New Skills Agenda for Europe was launched in June 2016 and comprises ten concrete action plans, from adult upskilling initiatives aimed at strengthening vocational training and education (VET) to sharing best practice.<sup>(237)</sup> Reforms in these areas attract a lot of policy attention. Within the framework of the European Semester, 22 out of 28 Member States have received Country-Specific Recommendations in the area of Education and Skills, VET and Adult Learning in 2018.

## 6. MAIN FINDINGS IN BRIEF

In line with earlier ESDE analyses<sup>(238)</sup>, in a context of a serious demographic challenge and fast-changing working patterns, the EU needs to speed up its productivity growth.

**Growth should rely more on the efficient use of resources in order to be sustainable.** Given the scarcity of natural and human resources, productivity

<sup>(237)</sup> See <https://ec.europa.eu/social/main.jsp?catId=1223>.

<sup>(238)</sup> European Commission (2017b) on intergenerational fairness, see esp. Chapter 2. European Commission (2018b) on Digitalisation and the World of Work, see Chapters 2 and 3.

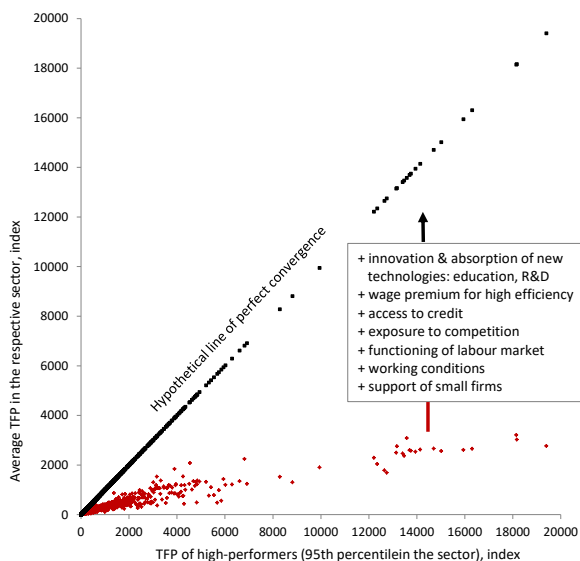
growth should rely more on the efficient use of existing productive factors than on increasing factor input.

**Are there ways to increase efficiency?** This chapter explores the driving forces of productivity, especially Total Factor Productivity (TFP), as a measure of innovation and efficiency in production. Its main findings are illustrated in *Chart 3.20*. Each point represents a sector in a given year and a given country. It shows the sector's average TFP and how far it is away from the sector's technological frontier. The chart summarises the points, which, according to this chapter's findings, promote the catching-up process.

Chart 3.20

**Factors promoting higher efficiency: human capital counts.**

Firms in CompNet by sectors: Sectoral average TFP performance (red) and the technological frontier (black)



**Note:** The technological frontiers are considered those firms that are at the 95th percentile of the sector's TFP distribution  
Data from 2004-2015.  
Each point represents a sector in a given country and a given year (n=9,190).

**Source:** Commission illustration based on CompNet data

[Click here to download chart.](#)

**In particular, the chapter finds:**

- At regional level: lagging regions catch up in terms of TFP performance under certain conditions.
- The overall growth in TFP has significantly decreased in the last two decades, especially in some regions of Southern Europe, as in Italy.
- There is a significant dispersion of regional TFP performance across Europe, although Eastern Europe has been catching up over the last 20 years.
- Investment in Research and Development and the availability of well-qualified workers have a direct positive impact on regions' innovation potential.
- TFP-differences across regions can be considered as an opportunity for growth in those regions that still lag behind today. This is because they can absorb benchmark regions' innovative technologies. The transfer of new ideas helps them grow faster themselves. Indeed, all else being equal, the further away a region is from reaching the technology benchmark the larger its own TFP growth potential tends to be. Both research-orientation and the availability of qualified labour facilitate a region's capacity to absorb benchmark technologies from other regions.
- The perceived effectiveness of Government intervention also strengthens a regions' TFP performance, a finding that confirms the factor analysis presented in Chapter 2.
- There is a tendency for TFP performance to converge also at firm level. Similarly to regions, the further a firm lags behind the technological frontier, the higher its TFP potential growth. Within a sector, the more firms that are close to the frontier, the higher are the chances of other firms increasing their efficiency through learning and absorbing new technologies.
- Firms working efficiently pay significant wage premiums to workers for more efficiency in production. Everything else being equal, the wage premium increases progressively with increasing TFP. Reducing wage differentials would require investing in those workers who are trapped in low-productivity activities with little access to the resources necessary to improve their qualifications and job prospects.
- While the efficiency premium is significant, there is little evidence that higher TFP increases overall disposable income inequality ex post. The EU's social transfer systems seem to mitigate primary-income inequalities stemming from TFP differentials.
- There is little evidence that high wages hamper competitiveness. This has implications for employment as well. Indeed, all else being equal, highly efficient firms tend to raise employment. There is no obvious trade-off between efficiency in production and employment.
- Increasing a firms' capital stock may not necessarily increase TFP. It may also serve as a substitute for TFP-growth. On the other hand, modernising a firm's productive capital (replacing 'old by new' capital) tends to foster TFP. Innovative capital makes firms more productive.
- All else being equal, smaller firms tend to work less efficiently. It is therefore important to improve their access to resources that allow for innovative investment. In that context, insufficient access to credit has a significantly negative impact on TFP. On the other hand, this chapter has also shown that investment in training and qualifications helps to increase productivity. This is important in the context of small firms because their workers seem

to have scarcer access to training than their colleagues in larger organisations (see Chapter 6).

- All else being equal, labour market imperfections are a drag on TFP. These include segmented labour markets with groups of workers excluded from major opportunities such as decent wages or training. In those cases, outsiders may either be trapped in unemployment or motivated to search for jobs where their wages are not in line with their productivity. As a result, human resources and capital are not allocated where they are most productive. Lower TFP and lower growth are the consequence.
- In the eyes of managers, favourable working conditions (a good working climate, workers' autonomy, low sick leave incidences) as well as process- and product innovation are conducive to higher productivity.

**Furthermore, model-based policy-simulations suggest:**

- Supporting firms in their efforts to offer productivity-enhancing training to their workers yields a high and lasting return. For workers, it increases their wages and improves their job prospects. Firms enjoying higher profits through increased productivity are able to strengthen their competitiveness.
- Improving access of low-qualified workers to training increases their wages in line with higher productivity. It may thus help those workers who are most in need of support. However, as employment prospects of low-qualified workers improve, their numbers may increase, so that the average qualification level of workers may decline, pulling down overall productivity. Therefore, incentivising the take-up of higher level studies as part of the policy mix boosts innovation and increases overall productivity, employment and hence GDP.
- EU Cohesion Policy is expected to boost both the EU's productivity and its growth performance, especially in its Less Developed Regions. This finding is the result of a tentative simulation, based on the example of spending under the European Social Fund Plus (ESF+) programme, as foreseen for the next programming period 2021-2027. It confirms studies that have assessed the impact of the ESF in earlier programming periods. <sup>(239)</sup>

<sup>(239)</sup> See European Commission, *Supporting the Impact Assessment of Human Capital Investments (Final Report, May 2018)*, esp. p. 44.

## 7. CONCLUSIONS AND POLICY CHOICES

**Lagging regions and firms tend to catch up in terms of efficiency, but workers' qualifications are crucial in that process.** The analysis has showed that higher efficiency in production does not come only from investing in more or better capital. Workers and their qualifications also play an important role for two reasons. First, they determine the potential of firms and regions to innovate. Second, they determine their potential to absorb new high-end knowledge from the technological frontier. This is important for regions and firms lagging behind in terms of their productivity performance. These tend to grow faster, but the speed of catching up depends on the availability of human capital, notably well-educated, highly-skilled workers and on the resources devoted to Research and Development.

**Policies that focus on education and training help to boost productivity growth.** Such investment would help the most vulnerable while also fuelling innovation. It is shown to boost both employment and productivity, hence triggering further capital investment complementary to better trained, better qualified workers. In this context, the ESF+ investment plan, as proposed by the Commission for the period between 2021 and 2027, is likely to have significantly positive economic effects especially in those regions that today lag behind in economic terms. Yet, much of the expected positive impact depends on whether both firms and workers have access to the resources necessary to be innovative. For firms, this implies improving access to capital, especially for small companies. For workers, it implies opening up segmented labour markets that discriminate against outsiders by keeping them away from the labour market, away from decent working conditions and away from developing the necessary tools to upskill.



# Annex 1: The concept of Total Factor Productivity

The conventional approach for TFP considers that output is a function of labour input L, capital input K, and a factor TFP capturing the degree of efficiency at which labour and capital are used in production. The conventional Cobb-Douglas model is therefore the following:

$$Y_{r,t} = (L_{r,t})^{\alpha} \cdot (K_{r,t})^{(1-\alpha)} \cdot TFP_{r,t} \quad (1)$$

where  $Y_{r,t}$  is real output (Gross value added) in region  $r$  at time  $t$ ,  $K_{r,t}$  is the (physical) capital stock and  $L_{r,t}$  the total labour input (labour volume measured as total hours worked by workers) at the regional level.  $\alpha$  and  $(1 - \alpha)$  are the output elasticities of labour and capital input, respectively. For the regional analysis of section 2 it is assumed, in line with Behnabib and Spiegel (2005), that  $\alpha = 1/3$ .

TFP is 'the proportion of output not explained by the amount of inputs used in production'.<sup>(240)</sup> Thus, with TFP being a residual,  $\Delta TFP > 0$  would imply that an increase of production would thus not come from a mere increase of input of K and L, but would also capture a certain productivity dividend from a more 'efficient and intense' use of inputs in production.<sup>(241)</sup> For example:

- A certain amount of capital may be installed in a firm, but it may be obsolete or its capacity may not be fully used.
- A certain volume of labour may be employed, but workers could become more innovative through training.
- Re-organising work may yield higher output even with a given stock of capital and a given number of workers.

TFP is thus **a better indicator for efficiency than labour productivity**. To demonstrate, one can divide (1) by labour input L:

$$\frac{Y_{r,t}}{L_{r,t}} = \left(\frac{K_{r,t}}{L_{r,t}}\right)^{(1-\alpha)} \cdot TFP_{r,t} \quad (2)$$

The left-hand side of (2) shows labour productivity, that is: Output per unit of labour. On the right-hand side one can see that labour productivity depends on TFP, but also on the input levels K and L.<sup>(242)</sup>

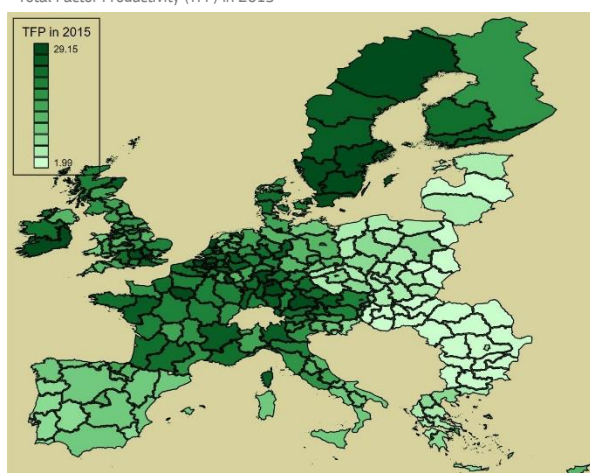
## What does TFP look like in the regions?

Figure A1.1 maps, in eleven classes, the level of TFP in 2015 for EU-regions. There is a significant difference between core and peripheral regions. The regions with the higher performance in TFP are Inner London West (29.15)<sup>(243)</sup>, Southern and Eastern Ireland (13.70), Stockholm (13.34), Inner London East (13.33), Luxembourg (12.51) and Île de France (11.86), while Severen tsentralen (2.10), in Bulgaria, Nord-Vest (2.07) and Sud-Vest Olteniaex (1.99), both in Romania, exhibit the lowest levels.

Figure A1.1

### TFP in EU regions: High dispersion

Total Factor Productivity (TFP) in 2015



Note: Data for Croatia not available

Source: Commission services based on data from Eurostat, Cambridge Econometrics, EU-KLEMS and national sources (for BE and PT)

[Click here to download figure.](#)

<sup>(243)</sup> This value should be considered as an outlier.

<sup>(240)</sup> Comin (2010), p. 260 or Lopez-Garcia et al (2015), pp. 24, 25. TFP is thus calculated as a residual. There are other methods to estimate TFP (parametric and non-parametric estimations).

<sup>(241)</sup> Ibidem.

<sup>(242)</sup> As marginal productivity of labour declines with higher labour input so would (average) labour productivity. On the other hand, more capital input would augment production per worker.



## Annex 2: Determinants of regional TFP – a regression analysis

Regional TFP estimates are used to test the existence of regional convergence in TFP on the basis of the Benhabib and Spiegel's framework <sup>(244)</sup>. The approach also takes into account a region's degree of industrial specialisation and its expenditure in Research and Development (R&D):

$$TFP_{r,t} = b_0 + b_1 \ln H_{r,t-1} + b_2 \ln H_{r,t-1} * \left( \frac{TFP_{r,t-1}}{TFP_{r^*,t-1}} \right) + e_{r,t} \quad (2)$$

where  $TFP_{r,t}$  represents the annual growth in TFP of the region  $r$  at time  $t$ .  $H_{r,t}$  is human capital, calculated as the average number of years of schooling. The final term proxies a region's the capacity to absorb technology that comes from a leader region  $r^*$ . <sup>(245)</sup> The intuition of the model is that human capital increases productivity growth of a region *per se* by fostering innovative activities as in Romer's (1990) endogenous growth model. The higher a region's level of human capital the higher will be its productivity due to its augmented innovative capacity.

However, regions also grow due to the transfers of technology and knowledge from the technology frontier. In the second part of the equation, human capital interacts with the TFP gap in order to capture the absorptive effect that human capital is expected to have on these technology transfers.

The larger the TFP gap to the technology frontier the higher is TFP growth because "more" technology is available to be absorbed from the technology frontier. However, in order to be able to benefit from this technology, the receiving region needs a certain level of absorptive capacity.

Model (2) is extended by two additional variables:

$$TFP_{r,t} = \beta_0 + \beta_1 \ln H_{r,t-1} + \beta_2 R\&D_{r,t-1} + \beta_3 KSI_{r,t-1} - \beta_4 \ln H_{r,t-1} * \left( \frac{TFP_{r,t-1}}{TFP_{r^*,t-1}} \right) + e_{r,t} \quad (3)$$

where  $KSI_{r,t}$  represents the Krugman Specialisation Index <sup>(246)</sup>, which compares the industrial structure of the region with the rest of the EU <sup>(247)</sup>. The index takes value zero if the region has an industrial structure identical to the reference region, indicating that region

is not specialized, and takes a maximum value of 2 if it has no sectors in common with the rest of the EU, reflecting strong sectoral specialization, according to the following formula for six sectors  $i$ :

$$KSI_{r,t} = \sum_{i=1}^6 ABS \left[ \frac{X_{r,i}}{X_r} - \frac{X_i - X_{r,i}}{X - X_r} \right] \quad (4)$$

$R\&D_{r,t}$  <sup>(248)</sup> is the intensity of the expenditure in Research & Development and represents a region's attitude towards innovation.

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<sup>(248)</sup> R&D is Intramural R&D expenditure (GERD) taken by Eurostat and represents the total of the regional expenditure in R&D as percentage of gross domestic product. The human capital is measured accounting the number of schooling years according to the shares in employment by three different levels educational attainment level. All data are regional specific. Missing Eurostat data in R&D and human capital are filled using simple interpolation methods depending on the specific case (proportion or average).

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<sup>(244)</sup> Benhabib and Spiegel (2005).

<sup>(245)</sup> Due to the choice of using a logistic diffusion function for the TFP catch up analysis, we expect a negative sign for the coefficient  $b_2$  meaning that higher levels of human capital interacted with the TFP gap lead to faster TFP growth. For a discussion of the different functional form which can be used in this context, see Benhabib and Spiegel (2005).

<sup>(246)</sup> The Krugman Specialisation Index (KSI) is described in Mongelli et al (2016), p. 29

<sup>(247)</sup> Usually this index is calculated using gross value added or GDP, but we prefer to use employment due to the fact that, having only data for six sectors, it shows higher variability than the index calculated by output, although being highly correlated.

## Annex 3: A model for convergence using CompNet data

A regression estimates the change of TFP over time. For TFP, the CompNet-variable used for the analysis is 'tfp\_va\_macCD'. It is based on the broader sector's value added (as opposed to firm revenue) and assumes a Cobb-Douglas production function.

Let  $d$  signal the difference of the respective variable between a given year  $t$  and  $t-4$ . Then  $d \ln(TFP)$  is the (logarithm of the) change of TFP over a four year period up to the current year  $t$ . Correspondingly,  $d \ln(w)$  is the change in wages, measured as labour costs per worker.

One could consider a sector's benchmark firm as the firm at the 95<sup>th</sup> percentile of the TFP distribution. One would then measure the distance to the benchmark as the TFP difference between that firm ( $TFP_{p95}$ ) and the average  $TFP_m$  of the respective class. A class are all firms of the same sector, same year, same size group.

The regression further controls for the skewedness of the distribution within a class, using the skewedness  $\gamma$  of its distribution. A dummy variable takes the value of one if  $\gamma < 0$ , zero otherwise. That is, if the mass of the distribution is on the right side of the distribution, this would imply that there are many firms with relatively high TFP performance in the same group of firms.

A dummy variable controls for the crisis years up to 2013. Finally a last dummy captures the firm size: it takes the value of one if the firm belongs to the 20% smallest, zero otherwise. The model specification is thus:

$$\begin{aligned} d \ln(TFP) = & \beta_1 * d \ln(w) + \beta_2 * \ln(TFP_{p95} - TFP_m) \\ & + \beta_3 * DummyRightSkew \\ & + \beta_4 * DummyCrisis \\ & + \beta_5 * DummySmallFirm \\ & + constant \end{aligned}$$

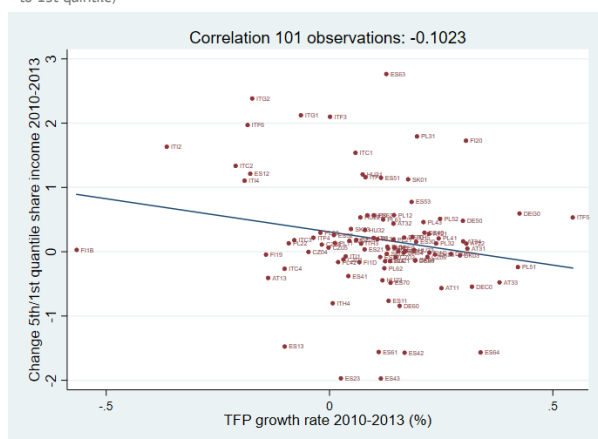
## Annex 4: TFP growth and income inequality

**TFP growth may raise wage premiums but may not necessarily raise income inequality, mainly thanks to social transfers.** Savoia (2019) found that European regions have converged to higher levels of income inequality during the period 1989–2013.<sup>(249)</sup> This study had provided two indicators of inequality that are used in the following to explore the link between income inequality and Total Factor Productivity at regional level.<sup>(250)</sup> These are:

- the share of the richest, relative to the poorest 20% of the population in total disposable income (that is, the income share of the 5<sup>th</sup> relative to the 1<sup>st</sup> income quintile);
- the Gini index of disposable household income (that measures inequality in the entire income distribution).

Chart A4.1

TFP growth between 2010 and 2013, plotted against quintile ratio change (5th relative to 1st quintile)



Source: Commission Services based on Eurostat EU SILC

[Click here to download chart.](#)

<sup>(249)</sup> The study also shows that the Cohesion Policy seems to have significantly accelerated the pace of convergence.

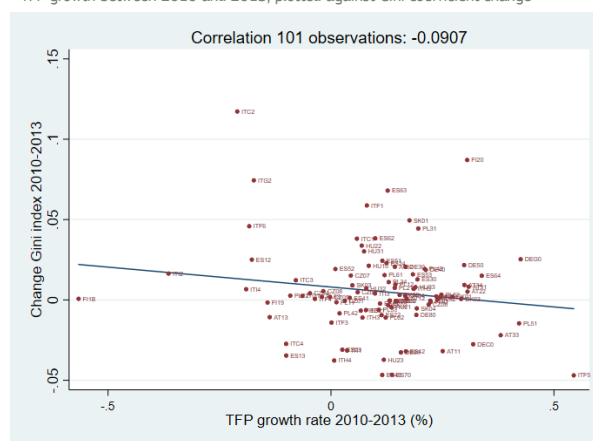
<sup>(250)</sup> Both indicators are calculated from different waves of the Luxembourg Income survey (LIS).

For the period between 2010 and 2013 the chart looks at EU regions at the level of NUTS-2. It plots the regions' change in TFP against the change in both inequality indicators and calculates the correlations: They are weak, even negative: -0.1 and -0.09, respectively.

This finding suggests that even though productivity premiums are paid on wages, an increase in productivity will not necessarily lead to higher income inequality, taking into account the effect of social transfers in balancing out part of these inequalities. Indeed, earlier Commission analyses had demonstrated that the EU's redistributive systems reduce (disposable) income inequality significantly.<sup>(251)</sup>

Chart A4.2

TFP growth between 2010 and 2013, plotted against Gini coefficient change



Source: Commission Services based on Eurostat EU SILC

[Click here to download chart.](#)

<sup>(251)</sup> See European Commission (2017b), pp. 41–42.

# Annex 5: Logistic regression on CompNet data

Table A5.1

## Logistic regression, odds rates

Model specifications for the regression on CompNET data; Independent variable: Firm-level TFP

Odds rates of being in a higher TFP decile, relative to the respective reference group (highlighted in red and normalised to a value of 1)

		Source-File in CompNet Model specif.	jd_l								jd_invest_ratio		jd_t10_exp_country (manufacturing)		jd_dummy_exp (manufacturing)	
			1	2 (Base)	3	4	5	6	7	8	9	10	11	12	13	14
[CRISIS= 00]	Crisis	No	0.9	1.5	1.2	2.1	1.6	2.1	2.1	1.1	1.3	1.1	1.4	1.8	1.4	2.6
[CRISIS=1.00]		Yes	1	1	1	1	1	1	1	1	1	1	1	1	1	1
[size2=1.00]	Firm Size (1)	Size 10-49									0.0	0.0	0.0	0.0	0.0	0.0
[size2=2.00]		Size 50-249									0.1	0.1	0.1	0.0	0.1	0.0
[size2=3.00]		Size 250+									1	1	1	1	1	1
[NoOfEmployees=1]	Firm Size (deciles)	1	0.3	0.3	0.7	0.3	0.4	0.3		0.7						
[NoOfEmployees=2]		2	0.3	0.4	0.7	0.4	0.4	0.4		0.7						
[NoOfEmployees=3]		3	0.3	0.4	0.7	0.4	0.4	0.4		0.7						
[NoOfEmployees=4]		4	0.4	0.5	0.7	0.5	0.4	0.5		0.7						
[NoOfEmployees=5]		5	0.5	0.5	0.8	0.5	0.5	0.5		0.7						
[NoOfEmployees=6]		6	0.5	0.5	0.8	0.6	0.5	0.5		0.7						
[NoOfEmployees=7]		7	0.6	0.6	0.8	0.6	0.6	0.6		0.7						
[NoOfEmployees=8]		8	0.7	0.7	0.9	0.8	0.7	0.7		0.7						
[NoOfEmployees=9]		9	0.8	0.8	0.9	0.8	0.8	0.8		0.8						
[NoOfEmployees=10]		10	1	1	1	1	1	1	1	1						
[LabCostPW= 00]	Labour costs (deciles)	1		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0
[LabCostPW=1.00]		2		0.0	0.1	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0
[LabCostPW=2.00]		3		0.0	0.1	0.0	0.0	0.0	0.0	0.0	0.0		0.1	0.0	0.1	0.0
[LabCostPW=3.00]		4		0.0	0.2	0.0	0.0	0.0	0.0	0.0	0.1		0.1	0.0	0.1	0.0
[LabCostPW=4.00]		5		0.0	0.3	0.0	0.0	0.0	0.0	0.0	0.1		0.2	0.0	0.2	0.0
[LabCostPW=5.00]		6		0.1	0.5	0.0	0.1	0.0	0.0	0.1	0.2		0.3	0.0	0.3	0.0
[LabCostPW=6.00]		7		0.1	0.6	0.1	0.1	0.0	0.0	0.1	0.3		0.3	0.0	0.5	0.0
[LabCostPW=7.00]		8		0.2	0.6	0.2	0.2	0.0	0.0	0.3	0.4		0.8	0.0	0.9	0.1
[LabCostPW=8.00]		9		0.3	0.6	0.4	0.3	0.2	0.2	0.4	0.6		1.0	0.2	1.1	0.4
[LabCostPW=9.00]		10		1	1	1	1	1	1	1	1		1	1	1	1
[WagePremium= 00]	Wage premium (deciles)	1			0.0											
[WagePremium=1.00]		2			0.1											
[WagePremium=2.00]		3			0.1											
[WagePremium=3.00]		4			0.2											
[WagePremium=4.00]		5			0.2											
[WagePremium=5.00]		6			0.2											
[WagePremium=6.00]		7			0.3											
[WagePremium=7.00]		8			0.5											
[WagePremium=8.00]		9			0.6											
[WagePremium=9.00]		10			1											
[CapGrowth1= 00]	Capital growth (deciles)	1				1.4										
[CapGrowth1=1.00]		2				1.0										
[CapGrowth1=2.00]		3				1.5										
[CapGrowth1=3.00]		4				1.4										
[CapGrowth1=4.00]		5				1.4										
[CapGrowth1=5.00]		6				1.2										
[CapGrowth1=6.00]		7				1.0										
[CapGrowth1=7.00]		8				0.9										
[CapGrowth1=8.00]		9				0.9										
[CapGrowth1=9.00]		10				1										
[CreditConstraint= 00]	Credit constraint (deciles)	1					5.6									
[CreditConstraint=1.00]		2					5.1									
[CreditConstraint=2.00]		3					4.5									
[CreditConstraint=3.00]		4					3.5									
[CreditConstraint=4.00]		5					3.0									
[CreditConstraint=5.00]		6					2.2									
[CreditConstraint=6.00]		7					1.9									
[CreditConstraint=7.00]		8					1.4									
[CreditConstraint=8.00]		9					1.1									
[CreditConstraint=9.00]		10					1									
[LMImperfection= 00]	Labour market imperfection (deciles)	1						2.7	2.2							
[LMImperfection=1.00]		2						2.1	1.8							
[LMImperfection=2.00]		3						2.1	1.7							
[LMImperfection=3.00]		4						2.7	2.3							
[LMImperfection=4.00]		5						0.7	0.6							
[LMImperfection=5.00]		6						1.0	0.8							
[LMImperfection=6.00]		7						0.6	0.5							
[LMImperfection=7.00]		8						0.5	0.4							
[LMImperfection=8.00]		9						0.5	0.5							
[LMImperfection=9.00]		10						1	1							
[LabGrowth1= 00]	Labour growth (deciles)	1								0.2						
[LabGrowth1=1.00]		2								0.3						
[LabGrowth1=2.00]		3								0.3						
[LabGrowth1=3.00]		4								0.4						
[LabGrowth1=4.00]		5								0.5						
[LabGrowth1=5.00]		6								0.4						
[LabGrowth1=6.00]		7								0.5						
[LabGrowth1=7.00]		8								0.5						
[LabGrowth1=8.00]		9								0.6						
[LabGrowth1=9.00]		10								1						
[InvestRatio=1]	Investment ratio (deciles)	1										0.2				
[InvestRatio=2]		2										0.2				
[InvestRatio=3]		3										0.3				
[InvestRatio=4]		4										0.4				
[InvestRatio=5]		5										0.5				
[InvestRatio=6]		6										0.6				
[InvestRatio=7]		7										0.6				
[InvestRatio=8]		8										0.7				
[InvestRatio=9]		9										0.8				
[InvestRatio=10]		10										1				
[Top10Exporter=0]	Top 10 exporter	No												0.2		
[Top10Exporter=1]		Yes												1		
[Dummy_exp=0]	Exporting	No														0.3
[Dummy_exp=1]		Yes														1

Note: CompNET data covering the time span between 2004 and 2016 (16 EU countries included). Example: A firm's odds of belonging to one of the higher TFP-deciles is 50% higher during non-crisis years (crisis: 2008-2013), relative to crisis-years (odds ratio: 1.5).

Source: Commission Services based on CompNET data

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Table A5.2

**Logistic regression, odds rates (continued)**

Model specifications for the regression on CompNET data; Independent variable: Firm-level TFP

Odds rates of being in a higher TFP decile, relative to the respective reference group (highlighted in red and normalised to a value of 1)

		Source-File in CompNet	jd_l								jd_invest_ ratio		jd_t10_ex p_country (manufact uring)		jd_dummy/ _exp (manufact uring)	
		Model specif.	1	2 (Base)	3	4	5	6	7	8	9	10	11	12	13	14
[mac=1]	Manufacturing		0.5	0.2	2.1	0.1	0.1	0.0	0.0	0.5	0.3	1.3	0.4	-	-	-
[mac=2]	Construction		0.2	0.1	0.4	0.0	0.1	0.0	0.0	0.1	0.1	0.6	0.2	-	-	-
[mac=3]	Wholesale and retail trade		13.6	6.9	31.9	8.7	6.3	5.8	5.4	19.6	16.7	56.6	36.6	-	-	-
[mac=4]	Accommodation and food services		0.3	0.1	0.4	0.0	0.1	0.0	0.0	0.1	0.1	0.7	0.4	-	-	-
[mac=5]	Transport and storage		0.4	0.5	3.7	2.2	1.0	1.7	1.7	1.7	0.8	1.2	1.2	-	-	-
[mac=6]	ICT		3.2	0.3	5.7	0.4	0.8	0.1	0.1	0.6	0.8	10.8	2.8	-	-	-
[mac=7]	Real estate		1.5	0.4	1.9	0.0	1.6	-	-	0.0	1.0	11.2	1.9	-	-	-
[mac=8]	Professional, scientific and technical activities		1.3	0.1	1.0	0.1	0.2	0.0	0.0	0.2	0.4	3.9	0.8	-	-	-
[mac=9]	Administrative and support service activities		1	1	1	1	1	1	1	1	1	1	1	-	-	-

Source: Commission Services based on CompNet data

[Click here to download table.](#)



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# Investing in people and social sustainability: short-term costs vs long-term benefits

## 1. INTRODUCTION <sup>(252)</sup>

**The EU and its Member States are among the most equal and inclusive societies in the world and share a strong commitment to the European social model.** From a global perspective, European countries rank very high in the fight against poverty, promoting healthy lives, gender equality, decent work and reducing inequalities. <sup>(253)</sup> The European Parliament, the Council and the Commission proclaimed in November 2017 the European Pillar of Social Rights, which sets out twenty principles in the area of equal opportunities and access to the labour market, fair working conditions and social protection and inclusion. The Pillar acts as a compass to address future challenges, reaffirming existing rights and adding new principles. Some of the issues looked at in the present chapter, such as care, housing, education and training, are explicitly addressed under the Pillar.

**To ensure high social standards not only now but also for future generations, Europe's welfare systems will need to evolve towards sustainable solutions.** While there is much diversity in national systems and policies, all Member States are facing the same challenging megatrends. These include ageing populations, major shifts in the labour market and changing life course and family patterns, as well as interlinked challenges related to climate change and technological transformation.

### **Population ageing will have a strong economic and budgetary impact.**

A growing number of elderly people and increases in life expectancy will require growing expenditure on pensions (up to 2040) and health care and long-term care (up to 2070). Despite improvements in employment rates, partly linked to pension reforms, the number of workers in Europe is expected to decrease from 2021 until at least 2070. <sup>(254)</sup> As a result, today's younger generations and future generations will bear a double burden because: 1) throughout their working lives they will pay higher contributions for their social security than today's workers; 2) the same cohorts will receive, on average, a lower pension than today's pensioners (relative to wages). <sup>(255)</sup> Because of these expected demographic changes, GDP growth will rely on improvements in productivity. <sup>(256)</sup> Social investments to facilitate increased productivity and labour force participation (such as in childcare, skills, long-term care and housing) will prove crucial in ensuring sustained increases in productivity and tax revenues.

### **Technological change and new forms of work create many new opportunities, but also challenges.**

A growing number of tasks can be performed using robots or digital technologies. Many workers benefit when repetitive aspects of their jobs are automated, reducing physical strain or allowing them to focus on more rewarding duties. However, for those who mainly perform standardised tasks, technological advances carry a risk of job loss or significant job transformation. Structural changes in

<sup>(252)</sup> This chapter was written by Alessia Fulvimari, Mide Griffin, Simone Rosini and Tim Van Rie, with contributions from Eurofound, the Joint Research Centre units on Fiscal Policy Analysis and Knowledge for Finance, Innovation and Growth, and Maeva Roulette.

<sup>(253)</sup> European Commission (2019a).

<sup>(254)</sup> European Commission and Economic Policy Committee (Ageing Working Group)(2018).

<sup>(255)</sup> European Commission (2017a).

<sup>(256)</sup> European Commission and Economic Policy Committee (Ageing Working Group) 2018:

the labour market also bring greater diversity in forms of employment. These deviate from the 'standard' open-ended full-time dependent employment for a single employer. Such developments may open new gaps in labour law, in the coverage for certain social risks, or in the financing base of social protection systems. <sup>(257)</sup>

**Europe's welfare states will need to adjust to changing household patterns.** In the past, when the male breadwinner model prevailed, women mainly performed unpaid work, including domestic tasks and care for children and frail relatives. Now that younger generations of European women are increasingly taking up paid work, they generally work more combined paid and unpaid hours than men, even if they are employed in part-time jobs. In addition to gender inequality, this gives rise to work-life balance issues, which social investment policies can help to address.

**Moreover, households are increasingly diverse, with growing numbers of single adults and lone parents, and more young people postponing household formation.** Living standards have improved steadily in the EU, but young people have benefited less from this than older generations. Poor employment prospects for younger people during and to some extent still after the economic crisis and current housing affordability issues in many European capitals appear to have had a negative impact on their economic independence and capacity to establish independent households, including having children and buying a house. Postponing household formation, homeownership and parenthood may in turn have inter-generationally adverse consequences on fertility rates and therefore also on the sustainability of pension systems. <sup>(258)</sup>

**Investing in people and social sustainability can help to address these common challenges.** Social investment refers to policies designed to strengthen people's skills and capacities and support them to participate fully in employment and social life. Such policies can not only foster individual potential and more inclusive societies but also contribute to an improved fiscal position, through higher productivity, increased employment and a broader tax base. Over the longer term, social investment can improve the demographic balance through increased fertility. These policies can also help to reduce long-term reliance on compensatory social policies, along with reductions in poverty and social exclusion. <sup>(259)</sup>

**European welfare systems provide ample proof that social investment policies are not just a cost, but can be productive as well.** Social investment policies not only promote social rights, but also contribute to economic growth. Key policy fields

of social investment include enabling services such as high quality early childhood education and care (ECEC), education and training or active labour market policies and social services. <sup>(260)</sup> In recent years, the European social model has evolved in this regard, steered by initiatives put forward by the European Union for example on work-life balance (Directive on work-life balance for parents and carers) <sup>(261)</sup>, the quality of early childhood education and care systems (Council Recommendation on High-Quality Early Childhood Education and Care Systems) <sup>(262)</sup>, skills and LifeLong Learning (such as the upskilling pathways recommendation <sup>(263)</sup> and the blueprint for sectoral cooperation on skills) and long-term care (the subject of a forthcoming report) in the overarching framework of the European Pillar of Social Rights.

**Investments in people and social sustainability also relate to housing.** Affordable, accessible and energy-efficient housing is crucial to enable people to fulfil their potential. Secure housing gives people the confidence to invest in themselves, for example, to choose a new career path in the light of major shifts in the labour market or to start a family. There is also growing attention to the synergies between different policy areas, such as the joint provision of housing and social services. In addition, policy makers and experts in Europe emphasise the complementarities between enabling services and cash benefits (including minimum income). Such benefits provide income security during transitions and may help to avoid scarring effects from job loss or other negative events. <sup>(264)</sup>

**Social investments in childcare, skills, long-term care and housing are intrinsically interlinked.** Combining multiple dimensions of social investments may have a cumulative effect, with the total being greater than its parts (the opposite effect to that of multiple dimensions of deprivation). Furthermore, they are interlinked with other dimensions of sustainability – better-educated citizens contribute not only to economic progress and fiscal stability but may also make better choices regarding environmental sustainability and climate change.

**The social investment approach emphasises investment in people, throughout their life**

<sup>(260)</sup> European Commission (2013).

<sup>(261)</sup> European Parliament and the Council reached a provisional agreement on the European Commission's proposal for a new Directive on work-life balance for parents and carers on 24 January 2019.  
<https://ec.europa.eu/social/main.jsp?langId=en&catId=1311&furtherNews=yes&newsId=9285>

<sup>(262)</sup> <https://www.council.europa.eu/en/meetings/eycs/2019/05/22-23/>

<sup>(263)</sup> [https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=OJ%3AJOC\\_2016\\_484\\_R\\_0001](https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=OJ%3AJOC_2016_484_R_0001)

<sup>(264)</sup> E.g. Hemerijck (2018) discusses the 'buffer' function of social investment, which secures income protection for individuals and (macro-)economic stabilisation. This complements the 'stock' function (strengthening skills and capacities) and the 'flow' function aiming at efficient labour allocation over the life course.

<sup>(257)</sup> European Commission (2018a).

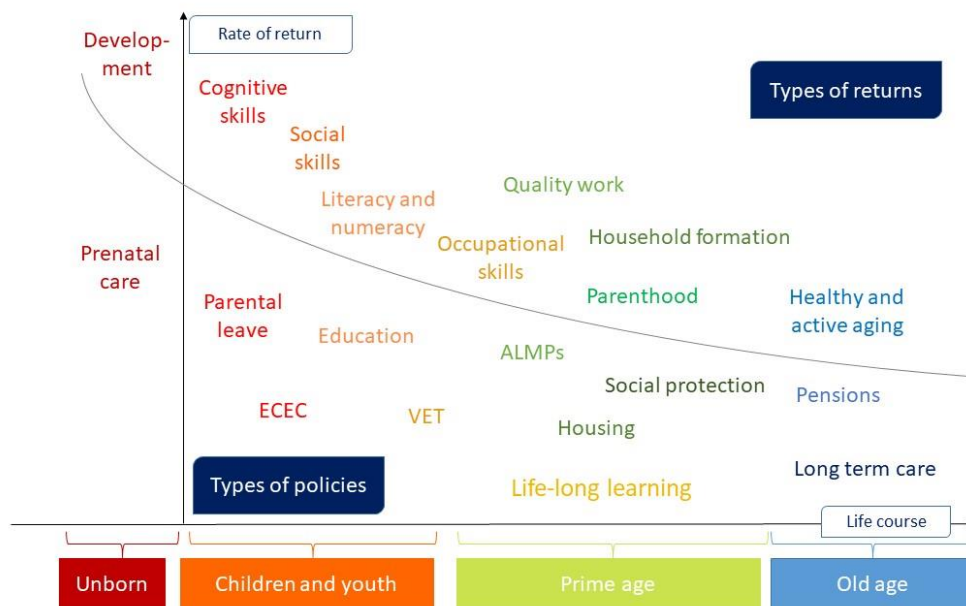
<sup>(258)</sup> European Commission (2017a).

<sup>(259)</sup> Kvist (2016).

Figure 4.1

**Returns on social investment are particularly high at early life stages**

Expected returns on social investment and rate of return, by life stage



Note: Representation of rate of return is theoretic, not empirical. Types of policies and types of returns are placed according to the moment in life in which they materialise (x-axis). Their position on the y-axis is instead random. For example, the fact that parental leave is positioned above ECEC does not mean that the former has a higher return rate than the latter.

Source: The graph in Figure 4.1 is a simplified version of Kvist (2014).

[Click here to download figure.](#)

**course.** <sup>(265)</sup> In this context social investment is subject to the so-called ‘life course multiplier’. <sup>(266)</sup> Investments at a young age (cognitive development in early childhood) provide a sound basis for investments with higher returns at later stages (further education, labour market participation, LifeLong Learning and active ageing). At young ages, the returns tend to be highest for children from disadvantaged backgrounds, implying that such investments can promote both efficiency and equity. <sup>(267)</sup> From a longer-term perspective, these investments can be transmitted from one generation to the next.

**Effective social investment policies require social investors and adequate institutional frameworks.** There is a debate on the roles of different social ‘investors’: citizens, companies, social partners and public authorities at different levels. Traditionally, many social policies in Europe have been funded through public resources or mandatory private contributions. In a context of limited fiscal space and pressing social needs, there is growing attention to the role of voluntary private investments. These aim to combine a financial return with a positive social impact (see Annex 1). In addition, social investment policies rely not only on the provision of funds, but also on adequate institutional frameworks. When measuring social investment, expenditure and monetary flows are an important yardstick. <sup>(268)</sup> However, to ensure

effective social investments, it is often equally important to consider barriers or enabling conditions. These may include statutory rights that cannot readily be monetised, or access to relevant information for beneficiaries.

**The returns on social investment materialise over different time horizons, but the gains are expected particularly over the long-term.** Certain returns on investment for social policies materialise relatively quickly: for example, a job seeker finding a new position via active labour market policies, formal long-term care resulting in social contributions (thus in tax revenues for the state and welfare provision for the individual) or a parent re-entering the labour market while the child attends day care. Other returns on social investment, however manifest themselves many years later. Young children attending high quality care may benefit immediately in terms of cognitive development. However, the productive return in terms of labour market participation will be observed only once the child enters the labour market. If the child goes on to attend higher education, this may be more than 20 years after the initial investment.

**The distributive impact of social investment policies has been subject to debate.** Analyses of specific policies have highlighted the risk that childcare, for example, may mainly benefit the (upper) middle class, while the most vulnerable groups make less use of such enabling policies. This is also known as the ‘Matthew effect’ after a passage from the gospel of Matthew which notes ‘unto everyone that

<sup>(265)</sup> European Commission (2013).

<sup>(266)</sup> Hemerijck et al. (2016).

<sup>(267)</sup> Woessmann (2008); Cunha et al. (2006); Heckman and Karapakula (2019).

<sup>(268)</sup> De Deken (2017).



hath shall be given' benefits and privileges accrue more readily to those who already possess them. There are ongoing debates on how to alleviate such effects – including providing stronger incentives to use the services – and on the long-term distributive impact of this uneven use.

This chapter focuses on specific policy areas relating to investment in people and social sustainability: investments in children and their families; skills and LifeLong Learning; long-term care and affordable and adequate housing.

## 2. INVESTING IN CHILDREN AND THEIR FAMILIES

### 2.1. Introduction

**Investing in children and their families from a life course perspective is an imperative for the EU.** The Social Investment Package (2013), the Commission Recommendation on Investing in Children (2013) and the Council Recommendation on High-Quality Early Childhood Education and Care Systems (2019) called on EU Member States to tackle child poverty and social exclusion through integrated strategies ensuring access both to adequate resources and to affordable quality services, including childcare and children's right to participate in play, recreation, sport, cultural activities and decision-making that affects their lives. The European Pillar of Social Rights includes a principle devoted to childcare and support to children. It states that “children have the right to affordable early childhood education and care of good quality” and that “children have the right to protection from poverty”.<sup>(269)</sup> In addition, “children from disadvantaged backgrounds have the right to specific measures to enhance equal opportunities”.

**Investment in children and their families can take different forms:** It starts with providing affordable quality early childhood education and care, but can also take the form of adequate income support through social transfers (i.e. family and children benefits) and balanced paid family-related leaves. The combination of in-kind and cash support in the form of integrated services has proved to be more effective than their independent use.<sup>(270)</sup> Whatever form the investment in children and their families takes, its effectiveness depends crucially on its level. Through the European Semester process the European Union encourages Member States to 1) improve the availability of affordable quality childcare, 2) to adapt tax and benefits systems to remove disincentives to work for second earners and, 3) to develop distribute paid family-related leave between women and men in a more balanced way. In 2018 eight Member States (Austria, Czechia, Germany, Estonia, Ireland, Italy, Poland and Slovakia) received a Country Specific

Recommendation on labour market participation of women.

**Returns to investment in children and their families are high not only for children and parents (especially mothers), but also for society.** This is because of their potential positive impact not only at the social level but also on fiscal sustainability and at the demographic level. First, early childhood education and care provides children with a stimulating environment where they can develop cognitive, social, language and emotional skills. This is very important for the development of children, particularly those from disadvantaged backgrounds: non-school factors (e.g. family and neighbourhood) are a major source of inequality, and high quality childcare for all social groups may help to reduce this inequality.<sup>(271)(272)</sup> Early childhood education and care helps to reduce inequality of opportunities at an early stage of life: early childhood education influences children's overall development more than other types of education<sup>(273)</sup> and can strongly increase educational mobility.<sup>(274)</sup> Children can capitalise on this investment throughout their subsequent lives. And, early interventions, particularly for the most disadvantaged children, have much higher returns than investment in later ages.<sup>(275)</sup> Secondly, the availability of quality childcare increases parents' (especially mothers') employment opportunities. This may help to reduce inactivity, unemployment and gender inequality, including career ceilings or gender pay gaps that may build up as an indirect consequence of career interruptions. Thirdly, family benefits and early childhood education and care contribute to reducing poverty levels among children. Addressing child poverty at an early age is less costly for public budgets than dealing with its possible long term consequences (e.g. unemployment, health problems, social exclusion etc) later, because early intervention can reduce the need for social protection expenditure in the future. This is important in terms of fiscal sustainability, as risk prevention tends to be less costly than risk correction. Finally, childcare is one of the measures used to reverse low birth rates. This is crucial at demographic level given the decreasing fertility rates in the EU.

**Investing in children and their families generates a high multiplier effect.**<sup>(276)</sup> The positive short-term effects on the beneficiaries of this investment can create positive long-term effects for the whole of society. Investing in children and their families activates a “life course multiplier” of productivity and growth not only during the life course of the children but also across generations. To give an example, if

<sup>(271)</sup> Downey, von Hippel et al. (2004).

<sup>(272)</sup> Esping-Andersen et al.(2002); OECD (2017); Woessmann (2008).

<sup>(273)</sup> Schleicher (2019).

<sup>(274)</sup> Burger (2012).

<sup>(275)</sup> Heckman (2006).

<sup>(276)</sup> Hemerijck et al. (2016).

<sup>(269)</sup> [https://ec.europa.eu/commission/priorities/deeper-and-fairer-economic-and-monetary-union/european-pillar-social-rights\\_en](https://ec.europa.eu/commission/priorities/deeper-and-fairer-economic-and-monetary-union/european-pillar-social-rights_en)

<sup>(270)</sup> Commission Recommendation on Investing in Children (2013).

child poverty is tackled, the same cohort will suffer less from poverty in adulthood. Thus, their children will be less likely to be born into a poor household and will face less risk of poverty themselves.

**To achieve the highest returns from investment in children and their families it is crucial to ensure equal access and use of the services.**

There seems to be a “social gradient” which results in children from disadvantaged socio-economic backgrounds using early childhood education and care services less than their counterparts. This can lead to a Matthew effect<sup>(277)</sup>, in which existing inequalities among children from different backgrounds are reinforced by the fact that disadvantaged families’ children use early childhood education and care services less than advantaged families’ children.

**There are different views on the Matthew effect in childcare use.** According to some academics a focus on Matthew effects runs the risk of underestimating the long-term benefits of investment in childcare because the use of these services will ensure better parenting and work for mothers, better human capital and securing income protection for families.<sup>(278)</sup> Other academics are more critical of this social investment and argue that the middle class benefits disproportionately from it at the expense of poorer families.<sup>(279)</sup> In this context, some questions arise: is inequality in childcare use just a temporary by-product of a switch to social investment? Or does it reinforce inequalities over the life course and long term? Does this social investment switch spending to services at the expense of the most vulnerable? Or does it free up more resources in social budgets for those who need help most? The analysis in this Chapter tries to shed light on these questions by presenting empirical evidence based on the most recent available data. In the following the focus will be on *childcare*, rather than on *early childhood education and care*. The main reason behind this choice is data driven. Indeed, the empirical evidence in the section mostly refers to childcare attendance, which can be considered as a proxy of *early childhood education and care* attendance, though is a narrower concept.<sup>(280)</sup>

## 2.2. Family expenditure and poverty reduction

**Family expenditure per potential beneficiary has on average increased since 2008.**<sup>(281)</sup> Average

<sup>(277)</sup> Pavolini and Van Lancker (2018).

<sup>(278)</sup> Hemerijck (2017).

<sup>(279)</sup> Cantillon (2011).

<sup>(280)</sup> Flisi, Meroni and Vera-Toscano (2016).

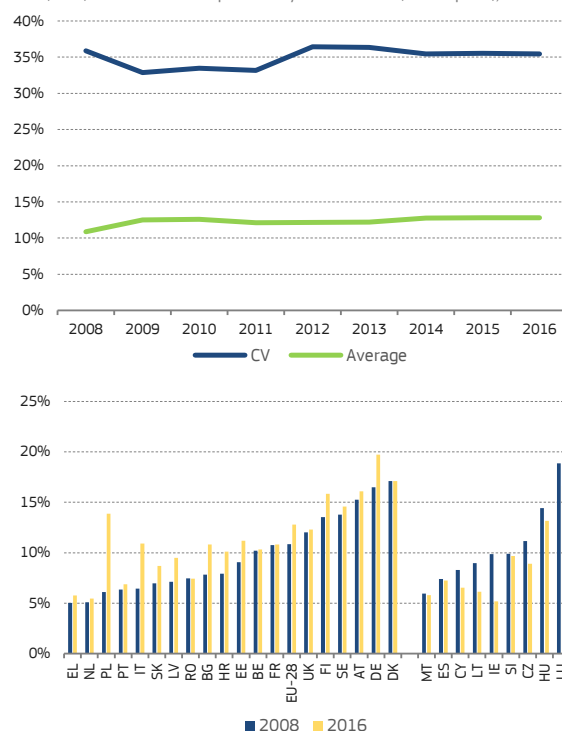
<sup>(281)</sup> The source of family expenditure is the European System of Integrated Social Protection statistics. This branch of expenditure includes both cash benefits (i.e. income maintenance benefit in the event of childbirth, birth grant, parental leave benefit, family or child allowance, other cash benefits) and benefits in kind (i.e. child day care, accommodation, home help, other benefits in kind). Both means-tested, and non means-tested benefits are included, while tax allowances are not. ESSPROS data encompasses all

family expenditure per potential beneficiary aged below 18<sup>(282)</sup> as a proportion of GDP per capita (Chart 4.1, first panel), grew in the first two years of the 2008 crisis, then decreased slightly between 2010 and 2011 and increased again between 2011 and 2016. This dynamic is likely to have been influenced by indexation mechanisms and how the indexation is smoothed over the cycle, particularly in the euro area Member States.<sup>(283)</sup>

Chart 4.1

**Family expenditure per child increased in most Member States between 2008 and 2016, although levels diverge widely across the EU**

Average and dispersion (coefficient of variation) of family expenditure per child (0-17) as a share of GDP per head in the EU (first panel), and average family expenditure per child (0-17) as a share of GDP per head by Member State (second panel), 2008-2016



Note: 2016 data are provisional.

Source: DG EMPL calculations based on ESSPROS (dataset "spr\_exp\_ffa").

[Click here to download chart.](#)

**Since 2011 expenditure per child has diverged across the EU and Member States' expenditure levels vary greatly.** At the EU level average family expenditure per child converged until 2009 and strongly diverged after 2011. This suggests an increasing difference in average family expenditure per potential beneficiary among Member States (Chart 4.1, first panel). In 2016, expenditure per child ranged from around 6% of GDP per capita in Ireland, the Netherlands, Greece and Malta to above 16% in Denmark, Luxembourg<sup>(284)</sup> and Germany (Chart 4.1., second panel). In the majority of countries expenditure

interventions from public or private bodies. At the time of drafting, 2016 ESSPROS data were available for all Member States, but only provisionally.

<sup>(282)</sup> Statistics on family expenditure define children as those aged between 0 and 17 years old.

<sup>(283)</sup> European Commission (2016b), Chapter 1.

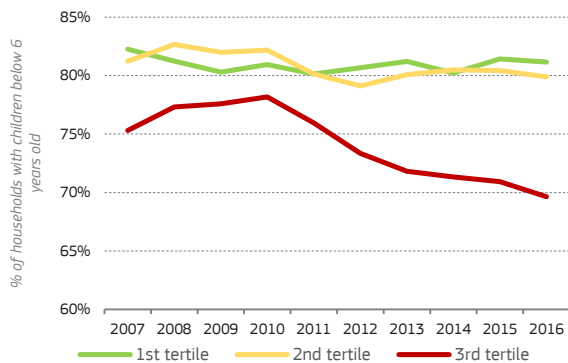
<sup>(284)</sup> To be noted that in Luxembourg a significant amount of family benefits are paid to non-residents.

per child increased between 2008 and 2016. The highest increases were registered in Poland, Italy, Bulgaria, Latvia and Croatia (more than 25%), while in Ireland and Lithuania registered sharp decreases strongly (of above 30%). Changes in family expenditure per potential beneficiary as a proportion of GDP per capita may have been driven by changes in the number of children and by dynamics in GDP per capita. While the number of children has remained fairly stable over time, GDP per capita has been more volatile. Therefore big decreases (increases) in family expenditure per potential beneficiary as a proportion of GDP per capita – as in Ireland – are probably driven by the increase (decrease) in GDP per capita between 2008 and 2016.

Chart 4.2

**Low and medium-income families are more likely to receive family benefits than high-income families. In recent years the proportion of high income families receiving family benefits has decreased**

Percentage of households with children below 6 years old receiving family benefits in the EU-28, by income group, 2007–2016



Note: All EU-28 countries are shown together (weighted average). Tertiles are based on the disposable household income distribution of households with children below 6 years old.

Source: DG EMPL calculations based on EU-SILC cross-sectional data 2007 and 2016 Users' Database.

[Click here to download chart.](#)

**It is not only the level of family expenditure that matters, but also its redistributive capacity, i.e. its power to reduce poverty and inequality.** Looking at the proportion of households with children below 6 years old receiving family benefits, <sup>(285)</sup> it seems that these benefits are to some extent targeted towards low-income and medium-income families (Chart 4.2). A considerably lower proportion of high-income households with children receive family benefits compared with low and medium-income households in the EU. Moreover, between 2010 and

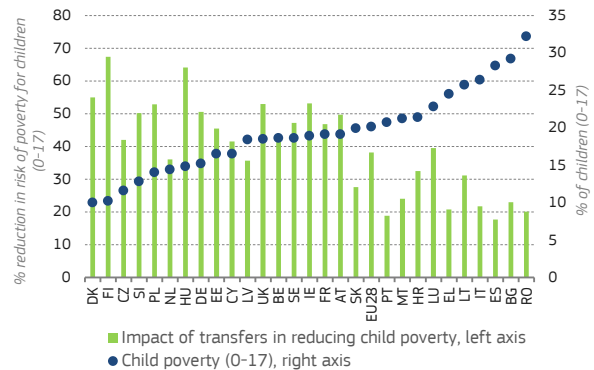
<sup>(285)</sup> The source of family benefits is the European Union Statistics on Income and Living Conditions (EU-SILC, see footnote 290 in Section 2.3). Family benefits include: 1) income maintenance benefit in the event of childbirth; 2) birth grant (i.e. benefits normally paid as a lump sum or by instalments in the case of childbirth or adoption); 3) parental leave benefit; 4) family or child allowance (i.e. periodical payments to a member of a household with dependent children to assist with the costs of raising children); 5) alimonies or supports paid by government (central or local) if the spouse for some reason does not pay the alimony/child support; 6) other cash benefits (i.e. benefits paid independently of family allowances to support households and help them meet specific costs, such as costs arising from the specific needs of lone parent families or families with handicapped children).

2016, possibly as a consequence of the policies implemented during the crisis, the proportion of high-income families with children receiving this type of benefits decreased by 8.5 pps.

Chart 4.3

**In countries with high child poverty rates, poverty reduction through social transfers is fairly limited**

Children (0-17) at-risk-of poverty and impact of social transfers (other than pensions) in reducing child poverty, 2017



Note: The indicator must be interpreted with caution for a number of reasons. First, no account is taken of other measures that can have the effect of raising the disposable incomes of households and individuals, namely transfers in-kind, tax credits and tax allowances. Second, the pre-transfer poverty risk is compared to the post-transfer risk with all other things being equal – assuming unchanged household and labour market structures, thus disregarding any possible behavioural changes that the absence of social transfers might entail.

Source: DG EMPL calculations based on EU-SILC cross-sectional data 2017 (2016 for IE and UK) Users' Database.

[Click here to download chart.](#)

**The proportion of children at-risk-of poverty varies considerably across the EU, as does the impact of social transfers on poverty reduction.**

In some Member States such as Romania, Bulgaria and Spain, more than one in every four children lives in a family at-risk-of poverty (Chart 4.3). The proportion falls to one every ten children in countries such as Denmark and Finland. Social transfers other than pensions help to reduce child poverty. The strongest poverty reduction impacts are registered in countries with low or medium levels of child poverty (e.g. Finland, Hungary, Denmark, Ireland, UK, Poland, Germany, Austria and Slovenia).

### Box 4.1: Education and training 2020 benchmark on early childhood education and care

Beyond the Barcelona targets on childcare use established in 2002, the European Council also adopted, in 2009, the early childhood education and care (ECEC) benchmark within the Education and Training 2020 strategic framework. <sup>(1)</sup> According to the benchmark, “at least 95% of children between 4 years old and the age for starting compulsory primary education should participate in childhood education”. The benchmark was adopted “with a view to increasing participation in early childhood education as a foundation for later educational success, especially in the case of those from disadvantaged backgrounds”.

While progress towards the Barcelona targets is measured with EU-SILC data, the Education and Training 2020 benchmark refers to administrative data reported by Ministries of Education or National Statistical Offices according to international standards, definitions and classifications. <sup>(2)</sup>

<sup>(1)</sup> [https://eur-lex.europa.eu/legal-content/EN/TXT/PDF/?uri=CELEX:52009XG0528\(01\)&from=EN](https://eur-lex.europa.eu/legal-content/EN/TXT/PDF/?uri=CELEX:52009XG0528(01)&from=EN)

<sup>(2)</sup> Flisi, Meroni and Vera-Toscano (2016).

## 2.3. Use of formal childcare and the Barcelona objectives

**Improving the availability and affordability of childcare services has been high on the political agenda of the EU since the Barcelona Summit of 2002.** At that summit, the European Council set objectives of providing formal childcare to “at least 90% of children between 3 years old and the mandatory school age, and to at least 33% of children below 3 years of age.” <sup>(286)</sup> The indicator used to measure the Barcelona objective for children aged under 3 has been included in the Social Scoreboard of Indicators <sup>(287)</sup> accompanying the European Pillar of Social Rights. <sup>(288)</sup>

**Formal childcare is defined as all types of care arrangements in day-care centre, whether organised and/or controlled by a public or private provider.** It does not take into account care provided by childminders without any structure between the carer and the parents (direct arrangements) <sup>(289)</sup> or care provided by family or friends. The formal childcare indicator is based on the European Union Statistics on Income and Living Conditions (EU-SILC). <sup>(290)</sup> Some of the empirical analyses in this Section and in Sections 2.4 and 2.5 are supplemented by analysis based on EU-SILC cross-

sectional data from 2007 to 2017 at the country level. EU-SILC contains information on the number of hours of childcare during a normal week. <sup>(291)</sup> The formal childcare indicators used to measure Member States’ progress towards the Barcelona objectives and also included in the Social Scoreboard uses this information in the form of a binary variable (i.e. whether the child has used the service or not). Formal childcare refers to the following EU-SILC variables: 1) education at preschool, 2) education at compulsory school, 3) childcare at centre-based services outside school hours and, 4) childcare at a day-care centre. <sup>(292)</sup>

**Half of the Member States have not reached the two Barcelona objectives.** Formal childcare use has increased from 28% in 2010 to almost 33% in 2017 across the EU for the group of children under 3. However, the objective of 33% has not yet been reached in fifteen Member States (*Chart 4.4*), while the objective of 90% among children between 3 years old and the compulsory school age remains unfulfilled by sixteen Member States. According to statistics on population projections, the number of children under 3 will fall by 1.6% in the EU-28 by 2030. In all countries which have not reached the 33% objective, except Austria, a decrease is expected in the number of children under 3. For example, the number of under-3s is projected to decrease by more than 30% in Lithuania and Latvia, by 22.6% in Greece and by more than 15% in Bulgaria, Poland and Czechia. These trends are clearly related to decreasing fertility rates and possibly to emigration and the labour mobility of the young workforce. The population projections suggest that the demand for childcare services may decrease in the future. However, the reduction in demand may be not enough to compensate for the current gaps in formal childcare. <sup>(293)</sup>

<sup>(286)</sup> [http://ec.europa.eu/invest-in-research/pdf/download\\_en/barcelona\\_european\\_council.pdf](http://ec.europa.eu/invest-in-research/pdf/download_en/barcelona_european_council.pdf)

<sup>(287)</sup> <https://ec.europa.eu/eurostat/web/european-pillar-of-social-rights/indicators/social-scoreboard-indicators>

<sup>(288)</sup> The Social Scoreboard indicator refers to the proportion of children aged less than 3 years in formal childcare.

<sup>(289)</sup> These arrangements have been excluded from the definition of “formal care” in order to take into account only childcare recognised as fulfilling certain quality patterns.

<sup>(290)</sup> the European Union Statistics on Income and Living Conditions (EU-SILC) is an EU-wide survey which collects detailed data on individuals’ and households’ income components (<https://ec.europa.eu/eurostat/web/income-and-living-conditions>). It also covers poverty, social exclusion, housing, labour, health and education. EU-SILC data of a given year reflect incomes in the previous year (except for the UK and Ireland where incomes refer to the last 12 months before the interview period), i.e. in EU-SILC 2017 income components refer to 2016. Weights are provided by Member States. At the time of drafting this chapter 2017 EU-SILC micro-data were not available for Ireland and UK.

<sup>(291)</sup> The question is asked about all household members over 12 years old.

<sup>(292)</sup> It is not possible to distinguish between public and private childcare services in EU-SILC, nor by the financing source of the service. For the EU-SILC-based analysis on childcare the cross-sectional weight for children (RLO70) has been used and the personal cross-sectional weight (RB050) was used instead if the former was missing.

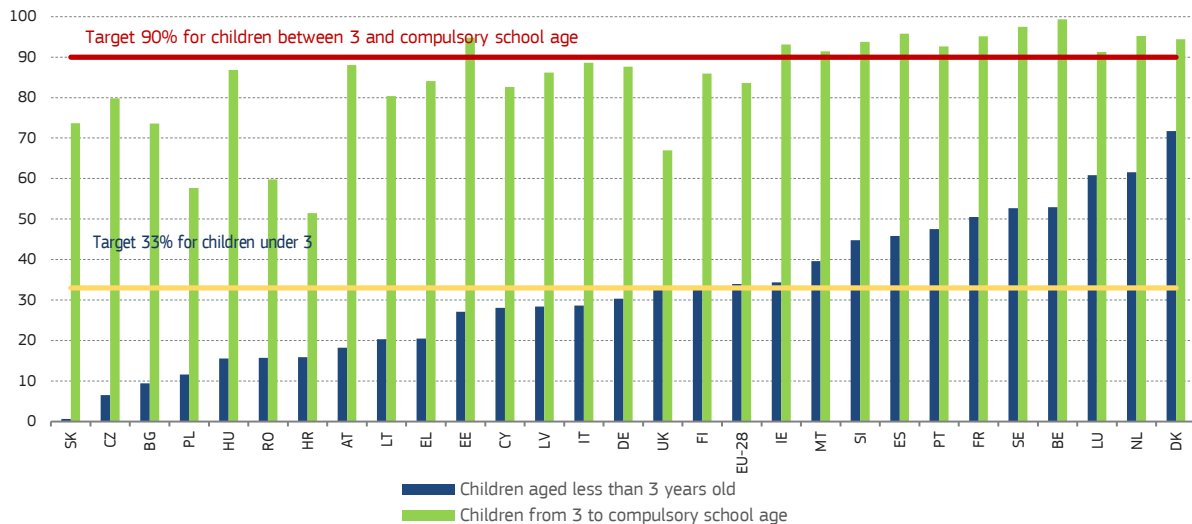
<sup>(293)</sup> European Commission (2014a).



Chart 4.4

**The Barcelona objectives are still not being reached everywhere**

Achieving Barcelona objectives - use of formal childcare, 2017



Note: 2017 values for HU is not available and 2016 is reported instead.

Source: DG EMPL elaboration based on Eurostat (variable "ilc\_caindformal").

[Click here to download chart.](#)

**Achievement of the Barcelona objectives is an important step but is not necessarily equivalent to achieving accessible and affordable childcare provision for all.** First, there is inequality in the use of the services. For most children from disadvantaged socio-economic backgrounds the Barcelona objectives are far from being reached. This issue is analysed in more detail in the following sections. Secondly, national averages very often hide existing differences in childcare availability and quality between rural and urban areas, with the former facing considerably higher gaps in childcare supply.

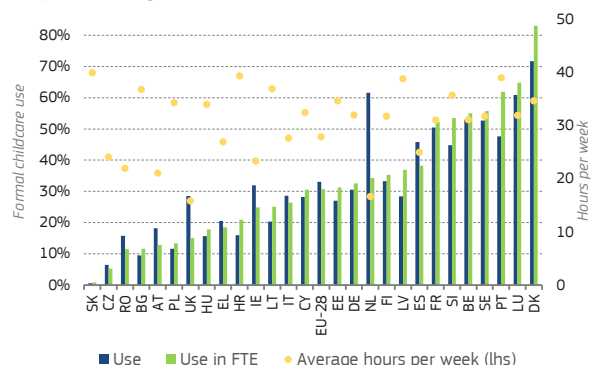
**Inequality in the intensity of childcare use can be assessed by expressing the formal childcare indicator as a full-time equivalent (FTE).** The FTE definition of formal childcare assumes that all children using formal childcare use these services for 30 hours per week. FTE correction is commonly used in the scientific literature on the topic. <sup>(294)</sup> The difference in the average number of hours of formal childcare use per week is more than 20 hours (e.g. 39 hours in Portugal against 16.7 in the Netherlands). Countries' ranking changes when the FTE indicator is applied (see *Chart 4.5*). For example, when hours are taken into account, the Netherlands moves from being in second place - after Denmark - for use of formal childcare, to just slightly above the EU-28 average. This is not entirely surprising, given the high proportion of women in the Netherlands who work part-time in order to take care of their children.

<sup>(294)</sup> Van Lancker (2013).

Chart 4.5

**Countries ranking in childcare use change when taking in to account the great variation in the average number of hours of use per week**

Formal childcare use (binary variable and use in FTE) and average hours of childcare use per week among children under 3, 2017



Note: For IE, HU, UK and EU-28 2017 data are not available (or not reliable) and 2016 data are reported instead. Data are not reported for MT and SK as not reliable due to low sample size. Full-time equivalent (FTE) formal childcare use is defined as the proportion of children using formal childcare multiplied by the average number of hours per week, expressed as a proportion of 30 hours per week.

Source: DG EMPL calculations based on EU-SILC cross-sectional data 2016 and 2017 Users' Database.

[Click here to download chart.](#)

## 2.4. Formal childcare use and costs and mothers' employment decisions

**The labour market participation of mothers of small children depends, to a considerable extent, on their access to affordable, high-quality childcare services.** There is a significant difference between the employment rates of women with children and women without them, suggesting that motherhood and related care responsibilities have a significant employment impact. In 2017, the employment rate of women with children aged 6 or less was 65% as opposed to 79% for women without children (*Chart 4.6*). In general, use of formal childcare is positively correlated with mothers' employment rate. Evidence also shows that more extensive use of

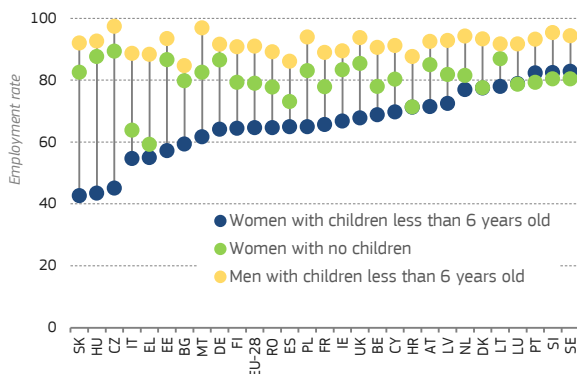


childcare for young children under 3 is strongly linked to their mothers' chances of employment (*Chart 4.7*).<sup>(295)</sup> This seems to suggest that while motherhood plays a crucial role in labour supply decisions (from the decision whether to work or not to choices of work intensity), it is the availability and affordability of childcare services that explain different levels of mothers' employment across the EU. Indeed, the countries where there is greater use of childcare usually exhibit higher employment rates of mothers. However, for the same level of childcare use, there is some variation in terms of mothers' employment rates among EU countries (*Chart 4.7*). This is the case, for example, for Hungary and Romania, for Greece and Lithuania, for Spain and Slovenia and for Belgium and Sweden. These cases (similar level of childcare use but different employment rates of mothers) show that the effect of using childcare on mothers' employment depends partly on other factors, particularly the institutional context of the countries, including family policies, labour market flexibility<sup>(296)</sup> and cultural norms.

Chart 4.6

#### The impact of motherhood on employment is quite strong in most Member States

Mothers' employment rate compared to fathers and women without children (people aged 25-49), 2017



Source: DG EMPL elaboration based on ESDE 2015 (Chapter III.2, Chart 11) and on Eurostat (variable "fst\_hheredch")

[Click here to download chart.](#)

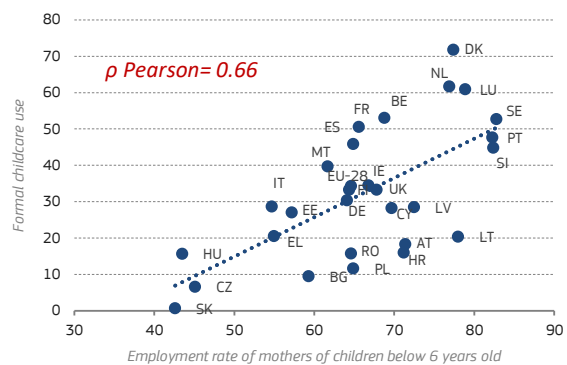
<sup>(295)</sup> European Commission (2016a), Chapter III.2.

<sup>(296)</sup> Cascio, Haider, and Nielsen (2015); Vuri (2016).

Chart 4.7

#### Employment rates of mothers tends to be higher in countries with high use of formal childcare for children under 3

Correlation between mothers' employment (aged 25-49) and use of formal childcare for children under 3, 2017



Note: 2017 value of formal childcare use is not available for HU and 2016 data is reported instead.

Source: DG EMPL elaboration based on Eurostat (variables "ilc\_caindformal" and "fst\_hheredch").

[Click here to download chart.](#)

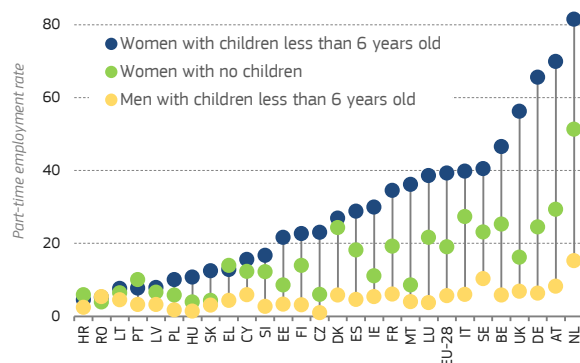
#### Mothers are much more exposed to part-time work than fathers, due to caring responsibilities.

Despite improvements in women's labour force participation, the work patterns of men and women continue to differ greatly (see Chapter 1, Section 3). Parenthood affects not only the level of mothers' employment (*Chart 4.6*), but also the intensity of their work. At EU level in 2017, almost 40% of mothers of children under 6 were in part-time work, while less than 6% of fathers (and only 19% of women with no children) worked part-time (*Chart 4.8*). There is much variation among Member States. Part-time employment rates for mothers move from below 10% in Croatia, Romania, Lithuania, Portugal and Latvia, to above 50% in UK, Germany, Austria and the Netherlands. While high part-time employment rates may be explained by cultural norms and different motherhood models, a high level of part-time work among mothers may also indicate difficulties in combining work and family life.

Chart 4.8

#### Part-time employment rates are considerably higher for mothers of young children than for women with no children

Mothers' part-time employment rate compared to that of fathers and women without children (people aged 25-49), 2017



Note: Data are not available for BG.

Source: DG EMPL elaboration based on Eurostat (variable "fst\_hhptechi").

[Click here to download chart.](#)

### Full-time use of formal childcare services is associated with high maternal work intensity.

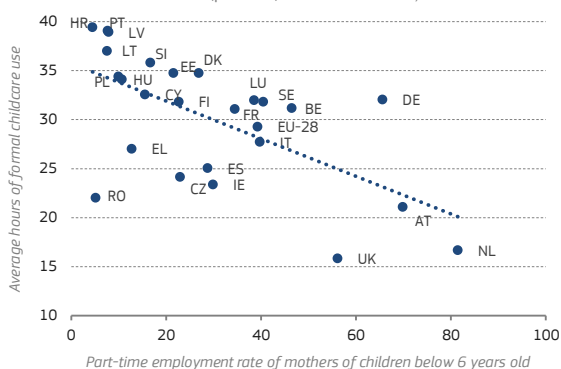
Conversely for mothers of young children, the higher the average hours of formal childcare use, the lower the part-time employment rate of mothers (*Chart 4.9*): countries where the average use of childcare exceeds 35 hours per week tend to show low part-time employment rates for mothers. This is the case in Croatia, Portugal, Latvia and Lithuania. At the opposite end of the distribution are countries such as the Netherlands and Austria, with low average hours of childcare use and very high part-time rates for mothers. There are also outliers, such as Romania, Germany and the UK, where other factors – possibly related to the institutional labour market – may be important in explaining mothers’ work intensity decisions.

**High childcare costs may affect mothers’ labour supply decisions by discouraging them from working.** Mothers’ incentives to enter employment are determined not only by the wages they receive in work, but also by the amount they lose in higher taxes and lower benefits, and by the childcare costs they may incur if they no longer care for their children themselves. Participation tax rates (PTRs) are a way of measuring the disincentive to take up work: they represent the proportion of mothers’ additional earnings which are lost in higher taxes or lower benefits, and to childcare costs, if any (<sup>(297)</sup>).

Chart 4.9

#### The average number of hours of formal childcare use is lower in countries with a higher part-time employment rate for mothers

Correlation between part-time employment rate of mothers (aged 25–49) and average hours of formal childcare use (per week) for children under 3, 2017



**Note:** Data on part-time employment rate of mothers are not available for BG. As concerns data on hours of formal childcare use, these are not available (or not reliable) for IE, HU, UK and EU-28 for 2017 and 2016 data are reported instead. Data not reported for MT and SK as not reliable due to low sample size.

**Source:** DG EMPL elaboration based on Eurostat (variables "lfst\_hhptechi") and on EU-SILC cross-sectional data 2016 and 2017 Users' Database.

[Click here to download chart.](#)

**Mothers’ disincentives to take up a job differ considerably across countries, and depend heavily on whether or not childcare costs are considered.** The OECD tax-benefit model (TaxBEN) (<sup>(298)</sup>) makes it possible to analyse the PTR of the second adult in a household taking up a job, accounting for childcare costs and abstracting from them (*Chart 4.10*). The higher the participation tax rate, the greater the disincentive to work. Disincentives to work are considerably higher when childcare costs are considered. This is true of all countries in the EU.

**The disincentives to entering employment are generally higher for low-income families, particularly when the income lost to childcare costs is taken into account** (*Chart 4.10*, first panel).

This suggests that childcare costs can be significant in creating disincentives to work and indicates the importance of affordable and high-quality childcare services provision in enabling parents to balance work and family life. The biggest difference in disincentives to taking-up a job with and without childcare costs are found in the UK, Ireland and Slovakia, which suggests that, for mothers of young children, the biggest disincentives to entering employment are found in the countries with the highest childcare costs.

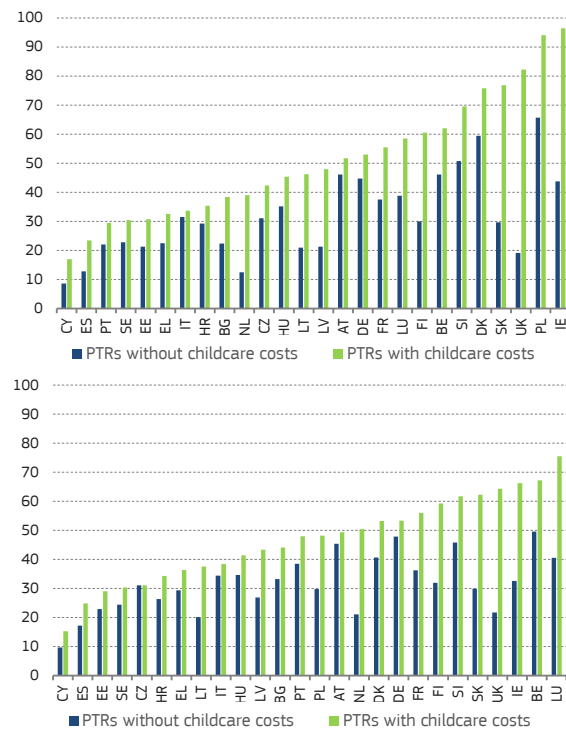
(<sup>(298)</sup>) The OECD tax-benefit model (TaxBEN) calculates childcare costs for the years for the years 2004, 2008, 2012, 2015 and 2018. It provides a "unified framework for estimating the cost of childcare to parents in a consistent way across countries, taking into account both the gross childcare fee amounts and entitlements to fee subsidies and childcare benefits and tax credits". These entitlements are calculated for specific family types, accounting for interactions with other taxes and benefits. Malta and Romania are excluded from the analysis due to data constraints. For details on childcare see Browne and Neumann (2017).

(<sup>(297)</sup>) PTRs are defined as follows: "fraction of additional gross earnings lost to either higher taxes, lower benefits or childcare fees when a parent with preschool children enters employment and uses centre-based childcare services" (OECD 2018, <http://www.oecd.org/social/benefits-and-wages/data/>). The OECD tax-benefit model calculates PTRs either accounting for additional income lost to childcare costs or abstracting from childcare costs entirely (i.e. assuming no childcare-related costs, benefits or tax reductions).

Chart 4.10

### Incentives to work differ for low and high-income families and are highly dependent on whether or not childcare costs are taken into account

Participation Tax Rates (PTRs) for low- (first panel) and high-income families (second panel) with and without childcare costs across the EU, 2018



Note: PTRs are defined as the fraction of additional gross earnings lost to either higher taxes, lower benefits and/or childcare fees. A low-income family has a primary earner with gross earnings at the 50th percentile of the earnings distribution and the secondary earner with earnings at the 20th percentile upon entering work. A high-income family has a primary earner with gross earnings at the 80th percentile of the earnings distribution and the secondary earner with earnings at the 50th percentile upon entering work. Malta and Romania are excluded due to data constraints.

Source: OECD tax-benefit model

[Click here to download chart.](#)

**Investing in childcare policies by lowering childcare costs has a positive effect on the use of childcare as well as on the labour market participation of women.** EUROMOD microsimulations shows the impact of a reduction of childcare costs in a selection of countries (Annex 2). Two pairs of countries are analysed: a pair which is still far away from the 33% Barcelona target for children under 3, namely Hungary and Lithuania, and other pair which has reached that target, Finland and the Netherlands. The analysis shows that decreasing childcare costs increases the use of childcare and mothers' employment in countries where childcare costs are currently high (Finland and the Netherlands). In countries where these costs are low (i.e. Hungary and Lithuania), other policies focused on increasing availability might work better in enhancing childcare use and the labour supply of women.

**When considering childcare use in the context of mothers' employment, it can be difficult to disentangle the impact of policies versus preferences.** Policies can, of course, shape personal preferences and vice versa. Parental leave policies (as distinct from maternity leave) and public childcare provision are seen as the most important instruments

in facilitating female employment <sup>(299)</sup>. And while some countries may display consistency across family policy domains, many do not. Denmark is generous across all the three important areas (leave policies, childcare subsidies and preschool programmes) while Spain has generous childcare subsidies and universal preschool <sup>(300)</sup>, but (until recently) had a limited leave policy. <sup>(301)</sup> There is evidence<sup>(302)</sup> that countries which make the most effort to foster the employment of mothers through paid leave and public provision of childcare are also those with high female employment rates and high ratios of female earnings to household incomes.

**There is some debate over the most effective policies to support working mothers.** Redistribution and investment in public services benefit women more than men, because women earn less than men on average and tend to make more use of services, especially childcare and the infrastructure surrounding the unpaid care economy<sup>(303)</sup>. Social investment e.g. early childhood spending is likely to be more beneficial for female work outcomes than extended maternity benefits and leave<sup>(304)</sup>. Critics of conventional social policies to reduce gender inequality emphasise how they can have the effect of segregating women in family-friendly workplaces such as the public sector, leaving other workplaces unchanged, and of easing work-family conflicts without challenging the gendered allocation of household labour <sup>(305)</sup>. Also a more progressive tax system with targeted tax expenditures may be beneficial for working mothers.

## 2.5. Inequality in childcare use

**To be effective, childcare services need to be of high quality and provided for all social groups, but particularly for the most vulnerable.**<sup>(306)</sup>

There may be financial barriers to accessing childcare especially in countries where public childcare services are fairly limited, but parents may also decide voluntarily to reduce working time to stay at home with their children. Such decisions may be influenced by cultural norms on motherhood in their country <sup>(307)</sup>, and these norms may differ between poorer and richer families, with, for example, poorer families having a lower preference for using childcare services. When childcare costs are high, incentives to work may be insufficient for some parents, leading them to stay at home with the children and not use childcare service. However, households with a high work intensity typically do use childcare services. Barriers in access to childcare will be analysed in the following section,

<sup>(299)</sup> Blum (2016); Daly and Rake (2004).

<sup>(300)</sup> Cascio, Haider, and Nielsen (2015).

<sup>(301)</sup> Spain has adopted in 2018 a new law extending the right of fathers to paid paternity leave from 4 to 5 weeks.

<sup>(302)</sup> European Commission (2016a).

<sup>(303)</sup> Himmelweit (2002); Mengyesi and Kalaverzou (2014).

<sup>(304)</sup> Olivetti and Petrongolo (2017).

<sup>(305)</sup> See Korpi, Ferrarini and Englund (2013), for an overview.

<sup>(306)</sup> Esping-Andersen et al. (2002).

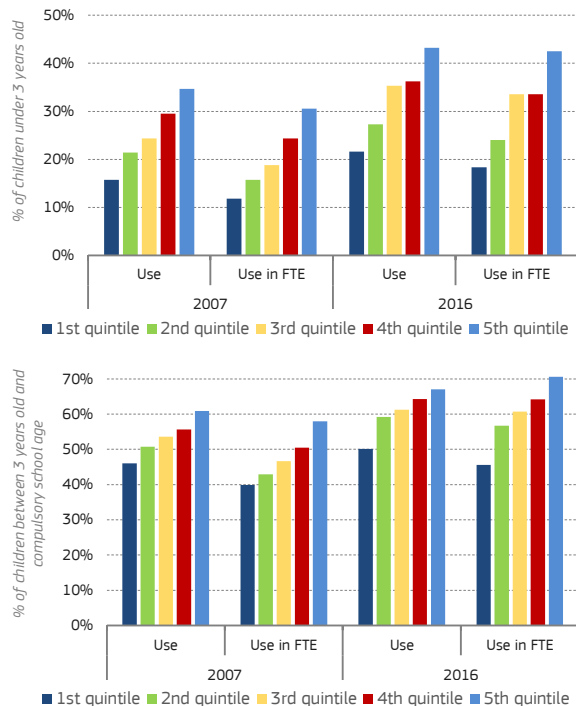
<sup>(307)</sup> Pavolini and Van Lancker (2018).

while this section focuses on existing differences in the use of childcare services between families from different socio-economic backgrounds.

Chart 4.11

### Children from low-income families use childcare less than those from medium- and high-income families

Formal childcare use (binary variable and use in FTE) among children under 3 (first panel) and children between 3 years old and compulsory school age (second panel), by income quintiles, 2007–2016, EU-28



**Note:** All EU-28 countries are shown together (weighted average). Quintiles are based on the disposable household income distribution of households with children below 6 years old (first quintile has the lowest income). Full-time equivalent (FTE) formal childcare use is defined as the proportion of children using formal childcare care multiplied by the average number of hours per week expressed as proportion of 30 hours per week.

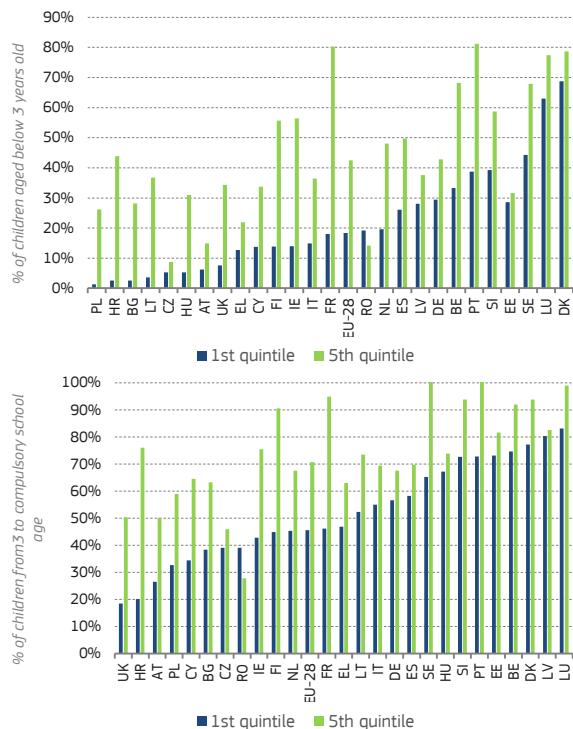
**Source:** DG EMPL calculations based on EU-SILC cross-sectional data 2007 and 2016 Users' Database.

[Click here to download chart.](#)

Chart 4.12

### Across almost all countries childcare use is lower for children from low-income families than for children from high-income families

Formal childcare use in FTE among children under 3 (first panel) and children between 3 years old and compulsory school age (second panel), in the first and fifth quintile of the income distribution, 2017



**Note:** Quintiles are based on the disposable household income distribution of households with children below 6 years old (first quintile has the lowest income). For EE, IE, HU, UK and EU-28 2017 data are not available (or not reliable) and 2016 data are reported instead. Data not reported for MT and SK as not reliable due to low sample size. Full-time equivalent (FTE) formal childcare use is defined as the proportion of children using formal childcare care multiplied by the average number of hours per week expressed as proportion of 30 hours per week.

**Source:** DG EMPL calculations based on EU-SILC cross-sectional data 2016 and 2017 Users' Database.

[Click here to download chart.](#)

**In the EU there is considerable inequality in the use of childcare services, with low-income families more likely to forego childcare services than high-income families.** This carries risks, as it reinforces existing inequalities and contributes to accumulating both serial and multiple disadvantages. While over time the use of formal childcare has increased among all income groups, both for children under 3 (*Chart 4.11*, first panel) and for those aged between 3 and compulsory school age (*Chart 4.11*, second panel), inequality in its use has not declined. Inequality in childcare use is considerably higher for children under 3 than for older ones. Correcting for FTE increases the inequality in childcare use, suggesting higher intensity of childcare use by richer families. Inequality in childcare use is particularly high in some countries (*Chart 4.12*), such as Croatia, UK, France and Finland, where differences in the use of childcare services between families in the first and fifth quintiles are equal or above 100%, both for children under 3 (*Chart 4.12*, first panel) and for those between 3 and compulsory school age (*Chart 4.12*, second panel). Among very young children (under 3) the difference in childcare use between first and fifth quintiles is also very high in Bulgaria, Lithuania and the Netherlands.

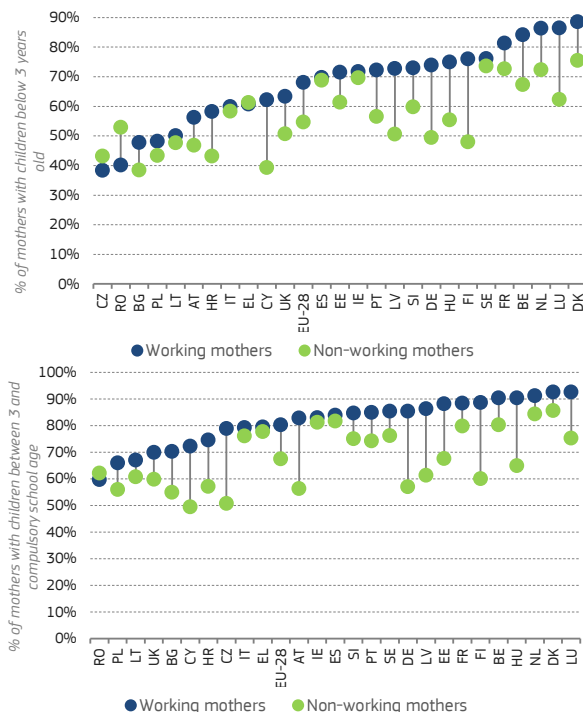
### Children with non-working mothers attend childcare less than those with working mothers.

Unsurprisingly, and in line with the macro evidence presented in a previous section, parents are more likely to revert to childcare services if the mother works. This reinforces the evidence that childcare services are less likely to be used for children from disadvantaged socio-economic backgrounds. The disparity in the use of childcare services according to the labour market status of mothers exists both among very young children (*Chart 4.13*, first panel) and among the group between 3 and compulsory school age (*Chart 4.13*, second panel), but it is slightly higher in the first group. There are, however, countries where there is no or little difference in childcare use between children of non-working and working mothers. In these cases it is possible that children are being taken care of informally, by other family members. For very young children, this is the case in some of the Southern countries - Italy, Greece and Spain – and in Ireland, Lithuania and Sweden; for older children, this is the case in Italy, Greece, Spain, Ireland, and Romania. The reasons may depend on motherhood norms, but the (lack of) availability of high-quality childcare services is probably also relevant.

Chart 4.13

#### Childcare used more for children with working mothers than for children of mothers who do not work in most Member States

Formal childcare use (binary variable) among children under 3 (first panel) and children between 3 years old and compulsory school age (second panel), by working status of the mother, 2017



Note: For EE, IE, HU, UK and EU-28 2017 data are not available (or not reliable) and 2016 data are reported instead. Data not reported for MT and SK as not reliable due to low sample size.

Source: DG EMPL calculations based on EU-SILC cross-sectional data 2016 and 2017 Users' Database.

[Click here to download chart.](#)

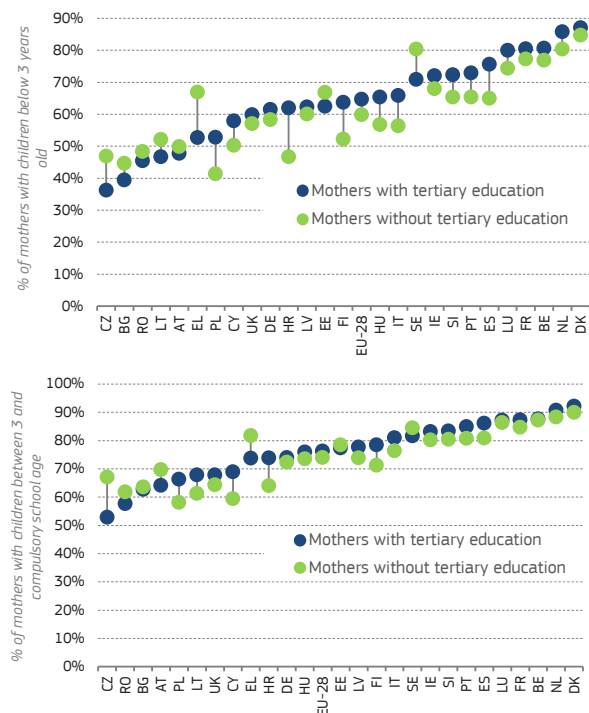
### Young children of mothers with a high level of education are more likely to attend childcare than those whose mothers have a low level of

education (*Chart 4.14*). This is linked to evidence that a high education level is strongly correlated with having a job. However, the level of maternal education does not seem to play a strong role in determining the extent of childcare use for older children.

Chart 4.14

#### Highly educated mothers of children under 3 use childcare slightly more than less highly educated counterparts

Formal childcare use (binary variable) among children under 3 (first panel) and children between 3 and compulsory school age (second panel), by education level of the mother, 2017



Note: For EE, IE, HU, UK and EU-28 2017 data are not available (or not reliable) and 2016 data are reported instead. Data not reported for MT and SK as not reliable due to low sample size.

Source: DG EMPL calculations based on EU-SILC cross-sectional data 2016 and 2017 Users' Database.

[Click here to download chart.](#)

## 2.6. Barriers in access to childcare

**Access to childcare can be difficult for different reasons, ranging from affordability and availability to proximity, opening hours and quality.** <sup>(308)</sup> Not only costs and availability but also preferences and social norms may drive childcare choices. <sup>(309)</sup> Scientific research <sup>(310)</sup> seems to indicate that preferences and cultural norms on motherhood (demand-side factors) alone are not good predictors of childcare use. However, affordability and availability (supply-side factors) are structural constraints to childcare use that matter everywhere. There are other less obvious barriers to accessing childcare which may affect poorer families more – travel costs, the added pressure of caring for larger families, difficulty in applying for childcare subsidies or concerns about eligibility particularly for immigrant families. <sup>(311)</sup> Low-

<sup>(308)</sup> Eurofound (2017).

<sup>(309)</sup> Vuri (2016).

<sup>(310)</sup> Abrassart and Bonoli (2015); Pavolini and Van Lancker (2018).

<sup>(311)</sup> Austin et al. (2005).



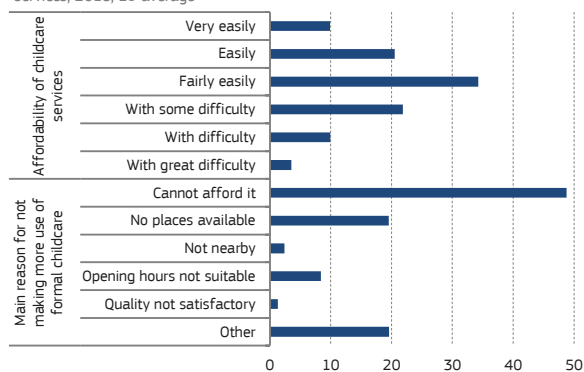
income families working under non-standard contracts and/or working non-standard hours not only face reduced income and employment predictability necessary to maintain childcare use, but also may not work the regular hours that are essential for dropping children off and collecting them from childcare centres.<sup>(312)</sup> Low-wage earners often have to contend with less accommodating and family-friendly policies despite arguably being those most in need of them, because they are more likely to have health care needs, to be single parents and caregivers and to have longer commutes.<sup>(313)</sup> Low-wage employees are also at greater risk than high-wage earners if they lose their jobs because of conflicting work and family commitments (e.g. if they have to leave work to care for a sick child and their employer uses this as grounds for dismissal).

**One third of Europeans have some difficulty in affording childcare services, according to the 2016 EU-SILC ad hoc module on access to services** (Chart 4.15). The main reasons for not using more formal childcare (when needed) is affordability (almost 50%), while in second place are reasons linked to the availability of the service (around 20%). From this evidence it seems clear that higher childcare subsidies would increase childcare use.

Chart 4.15

#### More than 30% of families with young children using formal childcare find it difficult to afford it

Barriers to childcare access among families with children under 3 using childcare services, 2016, EU average



Source: DG EMPL calculations based on EU-SILC ad-hoc module 2016 Users' Database.  
[Click here to download chart.](#)

**High childcare costs for low-income families, and the low progressivity of these costs, are likely to be a major cause of the existing inequality in childcare use.** Given that lack of affordability is the main reason for parents not making more use of formal childcare, it is worth analysing how the net costs of childcare (taking into account tax deductions) differ between low-income, medium-income and high-income families.

**Out-of-pocket childcare costs are higher for low-income families than higher-income families across the EU, although there is considerable variation in these costs** (Chart 4.17). The OECD tax-benefit model facilitates a cross-country comparison of net childcare costs for specific family types at various earning levels<sup>(314)</sup>. In many countries, low-income families pay higher net childcare costs as a percentage of their disposable income, though there are some notably progressive exceptions (Luxembourg, Netherlands, and to a lesser extent Belgium and France). Countries with low net childcare costs (e.g. Italy, Austria, Croatia, Portugal, Cyprus, Estonia, Sweden, Hungary, Germany, Spain and Greece) tend to show very small differences between poorer and richer families in the effect of these costs on disposable income. However, in countries where childcare costs consume a much higher share of families' net income (e.g. the UK, Ireland, Slovakia, Poland, Lithuania and Latvia), there are much bigger differences between income groups in net childcare costs as a percentage of disposable income. The cross-country disparities for low-income families are particularly striking. High-income families in Luxembourg, the Netherlands and Ireland all spend a similar proportion of income on childcare (circa 21%) but low-income families are paying drastically different amounts, with costs in Luxembourg at 8% of disposable income compared with 35% in Ireland.

<sup>(314)</sup> Net childcare costs refer to cost of full-time centre-based care for a two-parent two-child family, where both parents are in full-time employment and the children are aged 2 and 3. Net childcare costs are comprised of gross fees minus childcare benefits/rebates and tax deductions, plus any resulting changes in other benefits received following the use of childcare and/or change in family income). See footnote 298 (Section 2.4) for details on the OECD tax-benefit model.

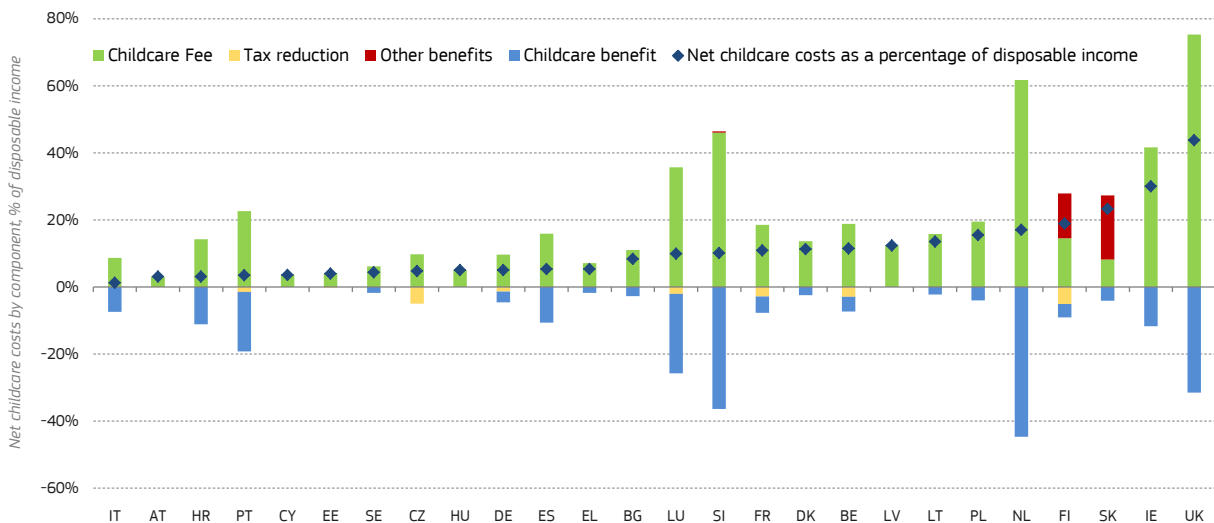
<sup>(312)</sup> National Women's Law Center (2014). Literature on this topic suggests that flexible working impacts parents' childcare choices (Han (2004)). Parents who work non-standard hours spend longer in paid work with less time to spend on childcare and flexible working further entrenches gender inequalities in childcare burdens (Craig and Powell (2011)).

<sup>(313)</sup> <https://psmag.com/economics/work-life-balance-benefits-low-wage-workers-employers-35733>

Chart 4.16

### There is considerable cross-country variation, not only in the level of net childcare costs but also in how these costs are determined

Net childcare costs by component for a low-income family as a percentage of disposable income, 2018



Note: Net childcare costs refer to cost of full-time centre-based care for a two-parent two-child family, where both parents are in full-time employment and the children are aged 2 and 3. Net childcare costs are comprised of gross fees minus childcare benefits/rebates and tax deductions, plus any resulting changes in other benefits received following the use of childcare and/or change in family income). A low-income family has a primary earner with gross earnings at the 50th percentile of the distribution and a secondary earner at the 20th percentile.

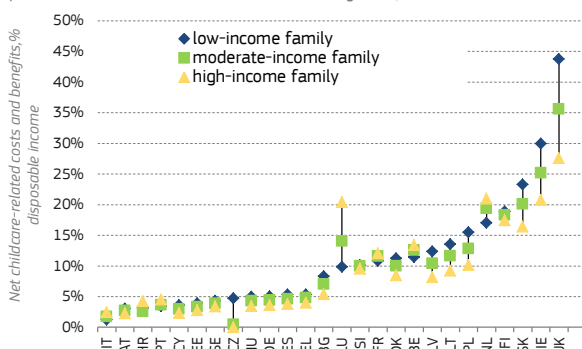
Source: OECD tax-benefit model.

[Click here to download chart.](#)

Chart 4.17

### Net childcare costs are in general higher for low-income families than for medium-income and high-income families

Net childcare-related costs and benefits as a percentage of disposable income for two-parent families with two children at various earning levels, 2018



Note: Net childcare costs are as defined in footnote 314 (Section 2.6). A low-income family has a primary earner with gross earnings at the 50th percentile of the distribution and a secondary earner at the 20th percentile; a moderate-income family has two earners at the 50th percentile, and a high-income family has a primary earner with earnings at the 80th percentile and a secondary earner at the 50th percentile.

Source: OECD tax-benefit model.

[Click here to download chart.](#)

**In terms of the composition of net childcare costs, there is considerable cross-country variation in how fees are determined (Chart 4.16).** Some countries have low initial fees, often with subsidies going directly to providers (e.g. Italy, Austria), others have high fees but high childcare benefits (Luxembourg, Slovenia) while others use a mix of childcare benefits and other benefits to reduce net childcare costs.

**The majority of countries with low childcare costs achieve this by virtue of low initial costs, as opposed to high costs balanced by high**

**benefits.** The potential for inequalities in childcare access supports the case for measures which keep out of pocket fees low and offer free provision in the first instance.

**The ways in which out-of-pocket costs are determined can have distributional impacts.** Tax reductions for childcare use may, for example, benefit only families with incomes high enough to pay taxes. Universal free provision is becoming increasingly common, offering at least partial coverage (e.g. Ireland<sup>(315)</sup> and in some cases full-time care (e.g. Berlin, Germany<sup>(316)</sup>). These examples show a strong commitment to the provision of childcare as an important public service/investment and as a social right in line with the European Pillar of Social Rights. However, such measures are not targeted and may require high public expenditure. Other measures may be needed to ensure that low-income families can supplement the hours provided for free or at a reasonable cost.

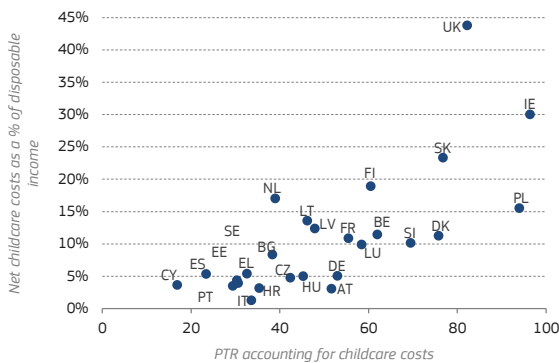
<sup>(315)</sup> <https://www.dcy.gov.ie/viewdoc.asp?DocID=4786&ad=1>

<sup>(316)</sup> <https://www.dw.com/en/berlin-first-in-germany-to-scrap-child-day-care-fees/a-44883019>

Chart 4.18

### Countries where families spend more on childcare tend to show greater disincentives to work

Scatter plot between participation tax rates (PTR) accounting for childcare costs and net childcare costs as a percentage of disposable income across EU countries for low-income families, 2018



Note: PTRs are defined as the fraction of additional gross earnings lost to either higher taxes, lower benefits and/or childcare fees. Net childcare costs are as defined in footnote 314 (Section 2.6). A low-income family has a primary earner with gross earnings at the 50th percentile of the earnings distribution, and a secondary earner at the 20th percentile when in employment.

Source: OECD tax-benefit model.

[Click here to download chart.](#)

**Barriers in access to childcare are also barriers to employment** (as discussed in Section 2.4). The higher the proportion of their income that low-earning families spend on out-of-pocket childcare costs, the lower their incentives to take up employment. While this is simply a correlation and not evidence of a causal relationship (*Chart 4.18*), it seems natural that more affordable childcare should make it easier for those caring for young children (in many cases mothers) to enter employment. This is true in particular, but not only, for low-income households.

## 3. INVESTING IN SKILLS AND LIFELONG LEARNING <sup>(317)</sup>

### 3.1. Introduction

**The European social model aims to strengthen the skills base so as to boost employment and competitiveness as well as better living conditions.** Efforts to strengthen human capital have been made throughout the history of European Union. In the Europe 2020 strategy for smart, sustainable and inclusive growth,<sup>(318)</sup> investment in skills was seen as a way to improve competitiveness and productivity, while helping to achieve the Europe 2020 target of 75% of the adult population in employment by 2020.<sup>(319)</sup> More recently, the European effort to promote

skills was considered “crucial” in the European Commission communication in the assessment of progress on structural reforms in the 2019 European Semester, where the need to strengthen and modernise the education and training system is seen as the main route to tackling skills shortages and mismatches.<sup>(320)</sup> At the same time, upskilling and reskilling policies should boost the resilience of individuals, especially those belonging to disadvantaged groups.<sup>(321)</sup>

### 3.2. The education and training system: positive effects and resources allocated

**Investment in education and training yield significant returns for workers, the economy and society.** Education and training have several beneficial effects justifying investment. In this section the focus will be on three main dimensions: workers, the economy, and the society. The advantages for workers start in the labour market where higher levels of formal education are associated with higher employment rates (*Chart 4.19*), lower unemployment, better matching between jobs and workers, and higher wages.<sup>(322)</sup> Moreover, having a job is a prerequisite for access to insurance-based social benefits. As regards the effect on the economy, a high stock of human capital has two main advantages. First, economic theory<sup>(323)</sup> shows that education and training have a positive effect on workers’ capital, and total factor productivity through their skills and ultimately in terms of economic growth.<sup>(324)</sup> Secondly, given the effects on participation and employment, investment in human capital leads to lower expenditure in unemployment benefits, and higher revenues from tax and social contributions. As for the positive effects for

cooperation in education and training (“ET 2020”) in the following targets, among others:

fewer than 15% of 15-year-olds should be under-skilled in reading, mathematics and science;

the rate of early leavers from education and training aged 18-24 should be below 10%;

at least 40% of people aged 30-34 should have completed some form of higher education;

at least 15% of adults should participate in learning;

at least 20% of higher education graduates and 6% of 18-34 year-olds with an initial vocational qualification should have spent some time studying or training abroad;

<sup>(320)</sup> In the context of the European Semester, the Commission also made a proposal on the framework to benchmark adult skills and learning, which was endorsed in the Employment Committee (EMCO).

<sup>(321)</sup> [https://ec.europa.eu/info/sites/info/files/file\\_import/2019-european-semester-communication-country-reports\\_en\\_0.pdf](https://ec.europa.eu/info/sites/info/files/file_import/2019-european-semester-communication-country-reports_en_0.pdf)

<sup>(322)</sup> There are also differences between general and vocational qualification levels. For instance, for what concerns employment rate in 2018: young people (defined as aged 20-34) having completed education 1-3 years before the survey with a medium-level qualification diploma (ISCED levels 3 and 4) reveal a difference of 13 pp in terms of employment rate: 66,3% for those having obtained a degree with general orientation, 79,5% for those with a vocational orientation degree.

<sup>(323)</sup> Among others, worth mentioning are: Mincer (1958); Becker (1964); Mincer (1974).

<sup>(324)</sup> Woessmann (2016).

<sup>(317)</sup> This section will not cover childcare, even if it is a topic covered by the title, since it has been discussed in the previous pages.

<sup>(318)</sup> [https://ec.europa.eu/info/business-economy-euro/economic-and-fiscal-policy-coordination/eu-economic-governance-monitoring-prevention-correction/european-semester/framework/europe-2020-strategy\\_en](https://ec.europa.eu/info/business-economy-euro/economic-and-fiscal-policy-coordination/eu-economic-governance-monitoring-prevention-correction/european-semester/framework/europe-2020-strategy_en)

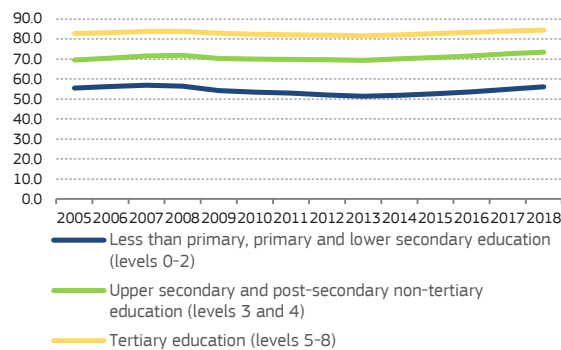
<sup>(319)</sup> The centrality of investment in education and training in the European Social Model is confirmed by the fact that two of the other Europe 2020 targets were on education, namely: “rates of early school leavers below 10%”, and “at least 40% of people aged 30-34 having completed higher education”. These were supported by the strategic framework for European

society, evidence from the European Union shows that being employed, or in education or training, is associated with a higher level of institutional trust and of engagement with society and participatory democracy.<sup>(325)</sup> Moreover, it helps people to fulfil their potential as human beings and citizens. For instance, the modernisation and digitalisation of the welfare state, while reducing expenditure and increasing efficiency, requires a minimum level of digital skills. Individuals not equipped with those skills may face significant barriers.

Chart 4.19

### Higher level of formal qualifications are linked with higher employment rates

Employment rate by educational attainment level (ISCED), population aged 20-64



**Note:** There are large and persistent differences across formal qualification groups. The results hold for all age groups. In the 55-64 age bracket, there is an upward trend in this period, probably driven by a cohort effect and by higher female labour market participation.

**Source:** Eurostat [tepsr\_wc120]

[Click here to download chart.](#)

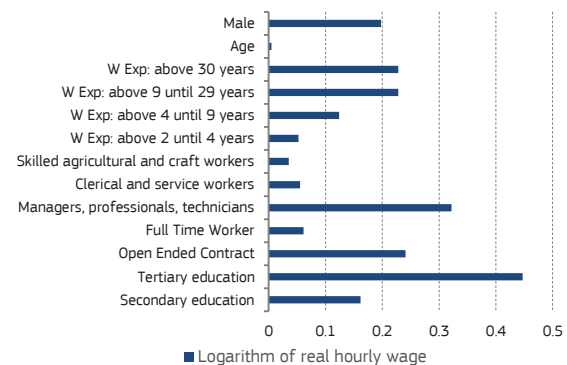
**Upper secondary and tertiary formal qualifications are associated with a higher level of income in an important and statistically significant way.** <sup>(326)</sup> The positive link with education goes beyond employment status, and is also evident in levels of income <sup>(327)</sup>. Using EU-SILC data<sup>(328)</sup>, it is possible to show the position for EU Member States at the present time. *Chart 4.20* shows the correlation (regression coefficients) between a number of conditions and the real hourly wage<sup>(329)</sup> <sup>(330)</sup> for employees. The “effect” <sup>(331)</sup> of secondary and tertiary

education is shown in the first two columns. The results of the regression indicates that, all other things being equal, secondary education in the EU-28 is associated with a higher level of real hourly wage (+16.2%). This is even more true for tertiary education (+44.7%), after controlling for factors including contract type, working hours, occupation, work experience, age and gender. These results are in line with other studies on this topic <sup>(332)</sup>. Tertiary education in particular is the factor with the biggest correlation, followed by being employed in a “high-skilled white collar” cluster of occupations (managers, professionals, technicians), and having an open-ended contract. Seniority is also positively correlated with higher salary, as is being male.

Chart 4.20

### Secondary and, most of all, tertiary education are correlated with significantly higher income for employees

Regression coefficients of the logarithm of real hourly wage of employees aged 25-64, years 2009-2017.



**Note:** All estimated coefficients in the chart are statistically significant at 1%. The variables names starting with the expression “W Exp” refer to years of working experience. The base categories for the dummy variables refer to: primary or below primary education, in Germany, non-standard contract, person in the clustered occupation group of plant machine operators and elementary occupation, with less than two years of experience, and female as gender. Control variables have been included for all MS. Employees in the armed forces have been omitted from the analyses.

**Source:** DG EMPL calculations based on EU-SILC cross-sectional data from 2009 to 2017.

[Click here to download chart.](#)

**Results hold broadly true for every Member State, though with some differences in the relative effect of secondary and tertiary education.** The analysis shown in *Chart 4.20* was conducted for every year of the sample and for every Member State. The positive effects of secondary and tertiary education hold in every country. *Chart 4.21* shows only the coefficients for secondary and tertiary education for all Member States. The ratio between the two coefficients illustrates some remarkable differences across Member States, the smallest difference being in Sweden (where secondary education raises the real hourly wage by 17.5% and

the literature as the endogeneity problem or ability bias. From a theoretical perspective, high ability people should pursue higher qualifications to signal their ability to the labour market. With the regressions presented in this section it is only possible to acknowledge this link.

<sup>(332)</sup> Blundell, Deardar and Sianesi (2005), for example, find an average return of 18-24% to secondary schooling and of 48% to tertiary education. More recent analysis by the OECD (2018), Psacharopoulos (2014) and Glocker and Steiner (2011) also find high returns, including in the EU.

<sup>(325)</sup> Eurofound (2015).

<sup>(326)</sup> For all the section, we would use upper secondary for ISCED levels 3-4 and tertiary for ISCED levels 5-8.

<sup>(327)</sup> Becker (1964); Mincer (1974).

<sup>(328)</sup> See footnote 290 (Section 2.3) for information on EU-SILC.

<sup>(329)</sup> The wage information in EU-SILC is available with a reference period of 1 year. Hourly wages are calculated as annual wages divided by annual hours worked. Annual gross wages are available in the survey (variable PY010G), while annual hours worked are derived as total number of months spent at full-time work as employee (variables PLO73 and PLO74) multiplied by number of hours usually worked per week in a job (variable PLO60). Given the discrepancy in EU-SILC between the income reference year (e.g. 2015 in EU-SILC 2016) and hours worked and employment status (2015 in EU-SILC 2016), hourly wages are calculated only for those employees who maintained their labour market status for seven or more months during the income reference year.

<sup>(330)</sup> The logarithm of real hourly wage on employees was used.

<sup>(331)</sup> The word ‘effect’ should not be interpreted in a causal way. The figures reported in this section refer to correlation, which does not imply causation. The lack of a causal link is referred to in

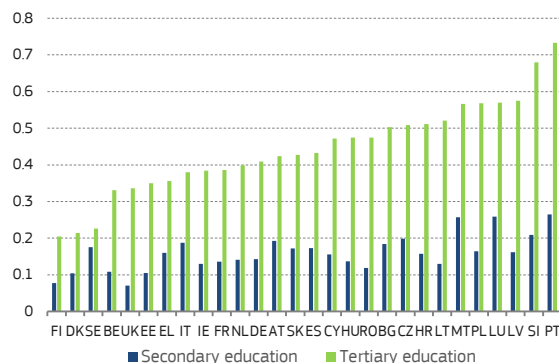


tertiary education by 22.6%), the highest in the United Kingdom (where the estimated coefficients are 7% and 33.6% respectively). Among the other results of the regressions not shown in graph 4.21, seniority is also linked with a statistically significant positive effect. The same holds true for being male and for people having an open standard contracts. The other coefficients broadly hold, but each of them turns out to have a statistically insignificant effect in at least one other Member State.

Chart 4.21

### Secondary and tertiary qualifications are correlated with higher employees' income in each Member State

Regression coefficients of on the logarithm of real hourly wage of employees aged 25-64, years 2008-2017.



Note: All estimated coefficients shown in the graph are statistically significant at 1%. The variables named starting with the expression "W Exp" refer to years of working experience. The omitted variables refer to: primary or below primary education, non-standard contract, person in the clustered occupation group of plant machine operators and elementary occupation, with less than two years of experience, female gender. Control variables have been included for all MS. Employees in the armed forces have been omitted from the analyses.

Source: EU-SILC, own calculations

[Click here to download chart.](#)

**Investment in skills and training have remained stable in recent years, and an investment gap remains.** Expenditure on education and training in the EU is mostly by governments (80.9% in 2015), with some differences across Member States. In the UK, 71% of the expenditure comes from public finances while in Slovakia the figure is 96%. In this section the focus is on public expenditure, leaving private spending for the 'Investment in education, training and sustainability' section. On average, public expenditure, expressed as a percentage of GDP, decreased from 2008 to 2017, while real expenditure remained broadly stable. This trend was coupled with an increase in the number of students in national education systems.<sup>(333)</sup> <sup>(334)</sup> Chart 4.22 shows that overall in the period 2008-2017 real expenditure per student decreased slightly.<sup>(335)</sup> Yet, according to the analysis conducted by the High-Level Task Force on investing in social infrastructure in Europe,<sup>(336)</sup> there is

<sup>(333)</sup> The figure refers to all students together, from early childhood to doctoral degree.

<sup>(334)</sup> In 2017 there were 2.5 million more students in the EU than in 2008, though 13 Member States registered a reduction.

<sup>(335)</sup> The average hides substantial differences. As can be seen in Chart 4.23, while the UK experienced an 18% increase in the number of students coupled with a drop in real expenditure of 14 pp, Slovakia saw a decrease in the number of students by 17% paired with an increase in real expenditure of 35 pp.

<sup>(336)</sup> Following an initiative promoted by the European Association of Long-Term Investors, in close consultation with the European

an investment gap in the domain of education and training. This amounts to EUR 15 bn per year, a significant figure given that total investment in social infrastructure is EUR 65 bn (Fransen et al., 2018)<sup>(337)</sup>. Social infrastructure<sup>(338)</sup> is mostly outside the remit of this report.

Chart 4.22

### While the number of students increased over the last decade, real expenditure per student did not

Number of students and real expenditure on education per student in the period 2008-2017



Note: Number of students (in thousands) on the right, and real average expenditure (in EUR) by student on the left. Students' figure refers to all enrolled pupils and students, from early childhood to doctoral degree. For countries where number of enrolled students was not available for 2017, the same figure as 2016 were used instead.

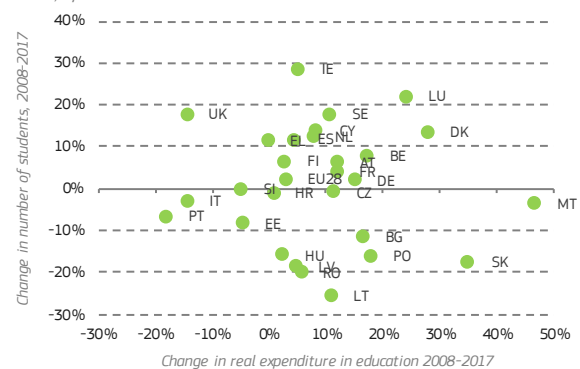
Source: EMPL calculations based on the following Eurostat data codes: [gov\_10a\_exp], [educ\_enr1tl], [nama\_10\_gdp] and [educ\_uoe\_enra02].

[Click here to download chart.](#)

Chart 4.23

### Member States trends in numbers of students and expenditure on education differ substantially

Changes in numbers of students and real expenditure on education in the period 2008-2017, by Member States



Source: EMPL calculations based on the following Eurostat data codes: [gov\_10a\_exp], [educ\_enr1tl], [nama\_10\_gdp] and [educ\_uoe\_enra02].

[Click here to download chart.](#)

Commission, a High-Level Task Force on investing in social infrastructure in Europe was established in February 2017. This was chaired by Romano Prodi and Christian Sautter.

<sup>(337)</sup> The calculations refer to 2015, and are based on national accounts' data from Eurostat.

<sup>(338)</sup> The report defines social infrastructure in the education and LifeLong Learning domain as tangible (including kindergartens, childcare centres, schools, vocational colleges, universities, laboratories, ICT equipment & related Cloud infrastructure, student accommodation, adjacent supporting infrastructure) and intangible (including facility maintenance, energy efficiency/low carbon, student lending, R&D programmes, education software development).



**The number of underachieving students in maths is slowly decreasing, while the opposite is true for science.** While analysing social investment, it is important to keep in mind that expenditure on education alone does not guarantee improvements in student performance. Nevertheless, better results in tests for mathematical and scientific skills, as well as cognitive skills more generally, show a consistent and strong link with economic growth. <sup>(339)</sup> *Chart 4.24* and *Chart 4.25* show the evolution in the number of underachievers <sup>(340)</sup> in PISA tests in mathematics and science. <sup>(341)</sup> On average, EU countries have shown some modest improvements in mathematics and some uneven trends in science across the latest three surveys (in 2009, 2012 and 2015). Internationally, these developments led to Europe outperforming the US in terms of reducing the proportion of low achievers, and moving the EU closer to South Korea. However, countries such as Russia showed marked improvements over the same timespan, and Japan managed to reduce further their already low proportion of low achievers. This may indicate further potential for improvements in Europe, and the need to devise better strategies to tackle underachievement and improve the efficiency and effectiveness of education spending. <sup>(342)</sup> Recent evidence also shows that non-traditional competences such as effort and perseverance, measured through PISA test log-files, correlate positively with traditional skills <sup>(343)</sup> strengthening the case for further attention to education and training.

<sup>(339)</sup> Hanushek and Kimko (2000); Hanushek and Woessmann (2015); Hanushek and Woessmann (2017).

<sup>(340)</sup> The indicator measures the share of 15-year-old students failing to reach level 2 ('basic skills level') on the PISA scale for the three core school subjects of reading, mathematics and science (here only the last two are presented). The data stem from the Programme for International Student Assessment (PISA), which is a triennial international survey which aims to evaluate education systems by testing the skills and knowledge of 15-year-old students.

<sup>(341)</sup> The focus is on PISA tests since data are easily available. Moreover, it has been estimated that an increase of 50 points in the educational achievements in these test lead to an increase of around 1 pp in the economy (see Woessmann, 2016).

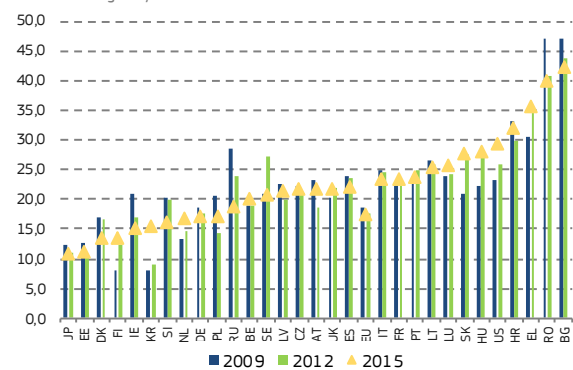
<sup>(342)</sup> Canton et al. (2018).

<sup>(343)</sup> European Commission (2019b).

Chart 4.24

**Europe showed small average improvements in reducing the proportion of students underperforming in mathematics**

Underachieving 15-year-old students in mathematics



Note: No complete time series for CY and MT. EU is unweighted average. RU=Russia; US = United States; JP=Japan; KR= South Korea.

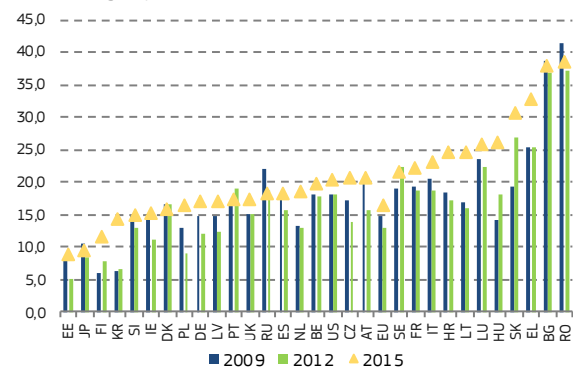
Source: OECD PISA survey [educ\_outc\_pisa]

[Click here to download chart.](#)

Chart 4.25

**Conversely, the proportion of students underperforming in science increased**

Underachieving 15-year-old students in science



Note: No complete time series for CY and MT. EU is unweighted average. RU=Russia; US = United States; JP=Japan; KR= South Korea.

Source: OECD PISA survey [educ\_outc\_pisa]

[Click here to download chart.](#)

### 3.3. The role of work experience during studies

**Work experience during secondary and tertiary education is positively linked with employment, but with strong differences at country level.**

In the 1960s, academic literature discovered a negative correlation between educational attainment and unemployment. <sup>(344)</sup> European labour markets have evolved substantially since then, and in the 2010s policymakers undertook several rounds of reforms of education systems, often with the aim of improving the matching between education systems and labour market needs and outcomes. These reforms were accelerated during the crisis, with the aim of to facilitating the integration of younger cohorts in the labour market.<sup>(345)</sup> The LFS<sup>(346)</sup> ad-hoc module 2016

<sup>(344)</sup> Becker (1964).

<sup>(345)</sup> ETUC (2016).

<sup>(346)</sup> The EU Labour Force Survey (EU-LFS) is the largest European household sample survey, covering 35 countries (EU28, three

(<sup>347</sup>) on “Young people on the labour market” allows estimation of the effect of work experience, both paid and unpaid, during studies. (<sup>348</sup>) *Chart 4.26* shows that for people in the age bracket 25–34 the likelihood of being employed increases substantially when they have had work experience, especially if they had paid work experience. Nevertheless, there is great variation between Member States in the employment status of those who have had work experience (both paid and unpaid) at the highest educational attainment level and those who have not. The discrepancy ranges from 2 pp in Czechia and Romania, to 23 p.p. in Bulgaria and Italy (*Chart 4.27*).

Chart 4.26

#### For people aged 25–34, work experience during studies is correlated with higher employment rate (EU)

Labour status during reference week based on work experience during studies



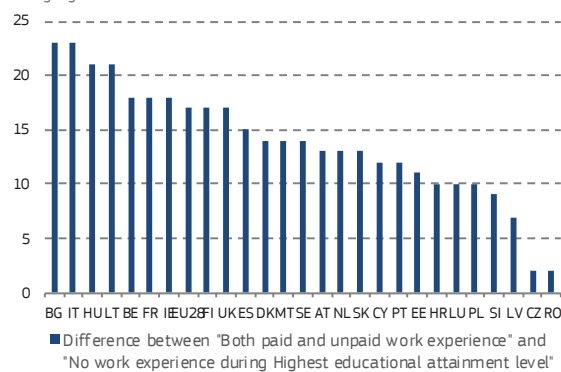
Source: LFS AHM 2016 – Young people on the labour market – microdata. DE was excluded due to errors in coding the replies which were not yet corrected at writing.

[Click here to download chart.](#)

Chart 4.27

#### For people aged 25–34, work experience during studies is correlated with higher employment rate

Difference between “Both paid and unpaid work experience” and “No work experience during highest educational attainment level”



Note: All estimated coefficients reported in the graph are statistically significant. DE was excluded due to errors in coding the replies which were not yet corrected at writing.

Source: LFS AHM 2016 – Young people on the labour market – microdata

[Click here to download chart.](#)

**This positive correlation of work experience during education with being in employment afterwards holds after controlling for a number of factors such as age, gender and education level.** In order to isolate the effect of having work experience, both paid and unpaid, at the highest educational attainment level, a more sophisticated type of analysis is needed, keeping a focus on the possibility of being employed for individuals undertaking training. (<sup>349</sup>) In these series of charts, we will only consider working experience included in the curriculum, often targeted by policy recommendations and regulated by policymakers. (<sup>350</sup>) *Chart 4.28* shows the outcome for all EU Member States pooled together. Almost all the relationships estimated are statistically significant, (<sup>351</sup>) the exceptions being those referring to as EU-15 mover (<sup>352</sup>) and European migrant (the box in the following page presents more detailed evidence on labour mobility and return mobility). Both the paid and unpaid work experience have a positive effect on the possibility of being employed, other factors being equal. Paid work experience (raising the probability of having a job by 9.7pp) has the fifth biggest effect on employment levels, and is third among the positive effects, trailing only the presence of tertiary and secondary qualifications. Vocational curricula are also linked with a higher employment rate. (<sup>353</sup>) Conversely, all else being equal, being a woman or being an immigrant is linked with a lower probability of being employed.

(<sup>349</sup>) The methodology chosen was logistic regression. Logistic (or logit) regression is a type of regression analysis that estimates the parameters of a logistic model, and it is a type of binomial regression. From an econometric point of view, the dependent variable can only have two possible values. In this case the values are: being employed or not.

(<sup>350</sup>) For the interested reader, including the individuals who are working outside of the curriculum has barely any effect on the results. The main two are that BG, EL, and UK coefficients of the regressors linked with unpaid working experience gain significance. This is mostly due to the fact that removing students working outside the curriculum reduces the sample size.

(<sup>351</sup>) At 1%.

(<sup>352</sup>) Following the intra EU labour mobility report, EU-15 movers are EU citizens coming from EU-15 who reside in an EU-28 country other than their country of citizenship. EU-13 movers are the same but coming EU-13.

(<sup>353</sup>) For the interested reader, a comprehensive description of VET systems in Europe by country can be found at the CEDEFOP website: <http://www.cedefop.europa.eu/en/events-and-projects/projects/vet-europe>

EFTA countries and four candidate countries). Its main statistical aim is to classify the population aged 15 years and over into: employed persons, unemployed persons, and economically inactive persons

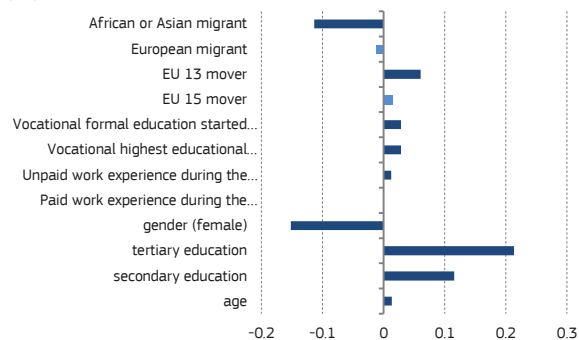
(<sup>347</sup>) LFS ad hoc modules are yearly models dealing with a particular labour market topic. They complement the standard sets of LFS questions with supplementary sets of variables.

(<sup>348</sup>) ‘During studies’ refers to the studies that led to the highest educational attainment level.

Chart 4.28

### Work experience during the highest educational level is positively correlated with the probability of being employed in a statistically significant way

Average Marginal Effects from logit regression based on LFS AHM 2016 on young people in the LM (25-34)



**Note:** Students excluded from analyses. EU15 mover is lighter blue because not statistically significant. DE was excluded due to errors in coding the replies which were not yet corrected at writing. Complete name fifth regressor: "Vocational formal education started after reaching highest level of education". Complete name sixth regressor: "Vocational highest educational attainment". Complete name seventh regressor: "Unpaid work experience during the highest level of education". Complete name eighth regressor: "Paid work experience during the highest level of education".

**Source:** LFS AHM 2016 - Young people on the labour market - microdata.  
[Click here to download chart.](#)

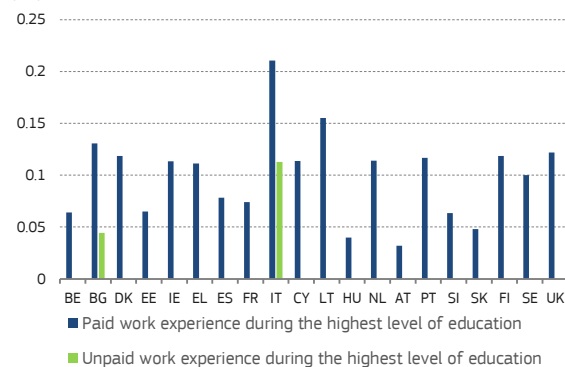
**These effects tend to be confirmed at national level, with some important differences between Member States.** Chart 4.29 shows the effects of paid and - where this is statistically significant - unpaid working experience during the highest level of education in different Member States. The country where the effect is highest is Italy, where previous paid work experience increases the probability of employment by 21pp. <sup>(354)</sup>

<sup>(354)</sup> IT has more unpaid than paid working experience (15% against 11%) and is above average in terms of unpaid working experience (15% against an EU average of 10%). Yet it does not rank in the EU top five in terms of diffusion of unpaid working experience (these are FR, HU, LT, PL, SK). With the exception of FR, also in these other countries unpaid working experience is more common than paid working experience.

Chart 4.29

### The positive correlation between employment and working experience during studies is positive and statistically significant for most Member States

Average Marginal Effects from logit regression based on LFS AHM 2016 on young people in the LM (25-34)



**Note:** CZ, HR, LV, LU, MT, PL, RO did not have statistically significant coefficients of the regressors estimated for neither paid nor unpaid working experience during highest educational attainment. DE was excluded due to errors in coding the replies which were not yet corrected at writing.

**Source:** LFS AHM 2016 - Young people on the labour market - microdata.  
[Click here to download chart.](#)

The effect is lower than 5pp in only three countries. Unpaid work experience alone is less significant in most Member States, mainly due to its lower incidence (10% of the overall sample, against 29% for paid work experience). The negative correlation with being a woman is confirmed and statistically significant in every Member State, with a negative effect of 15% on average on the probability of being employed, varying from 3% to 25%.

### Diverse institutional settings are the most likely drivers of the differences in the coefficients.

Chart 4.30 illustrates Spain and Denmark, which are characterised by different institutional settings: a social democratic welfare state regime in the case of Denmark, and a Southern welfare model in the case of Spain. The countries reacted differently to the crisis: while in Denmark the employment rate was close to 80% at the beginning of the crisis and decreased by less than 4 pp at its peak, Spain experienced a drop of 11pp in the employment rate between 2007 and 2013 (from 69.7 to 58.6). <sup>(355)</sup> The situation was particularly serious for younger cohorts, who tend to suffer disproportionately from negative economic shocks. Youth unemployment in Spain tripled between 2007 and 2013, moving from 18.1% in 2007 to 55.1% in 2013, <sup>(356)</sup> particularly as a result of job losses in the construction sector. <sup>(357)</sup> Analyses carried out on these two countries reflect these differences. In the Spanish case, the magnitude of the estimated coefficients linked with secondary and tertiary education are smaller than in the EU case, possibly reflecting the decision of younger people to undertake further classes and raise their human capital rather than becoming NEETs, even at the risk of over-education. In the Danish case, the results are different. The positive

<sup>(355)</sup> Eurostat, [lfsi\_emp\_a].

<sup>(356)</sup> Eurostat, [une\_rt\_a].

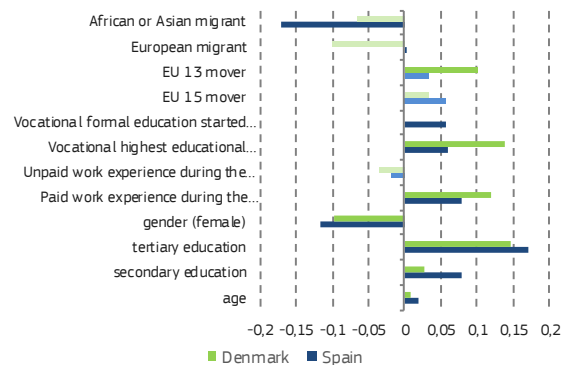
<sup>(357)</sup> A phenomenon described already in Wölfl and Mora-Sanguinetti (2011).

impact of tertiary education is also lower than the EU average, but the vocational nature of the highest educational attainment is the second largest estimated coefficient, emphasising the importance of vocational curricula in Denmark (the proportion of students involved is four times higher than in Spain). Having had paid work experience during the programme leading to their highest educational attainment remains positively and significantly correlated with being employed subsequently.

Chart 4.30

#### Institutional settings play a role in explaining the differences at country level

Average Marginal Effects from logit regression based on LFS AHM 2016 on young people in the LM: the Spanish and Danish cases (25-34 years old)



Note: Lighter colour means that the result is not statistically significant. Vocational formal education started is significant at 5% rather than 1%. Complete name fifth regressor: "Vocational formal education started after reaching highest level of education". Complete name sixth regressor: "Vocational highest educational attainment". Complete name seventh regressor: "Unpaid work experience during the highest level of education". Complete name eighth regressor: "Paid work experience during the highest level of education". DE was excluded due to errors in coding the replies which were not yet corrected at writing.

Source: LFS AHM 2016 - Young people on the labour market - microdata.

[Click here to download chart.](#)

### 3.4. Adult learning: participation and positive effects

**Participation in adult learning has spread through Europe over the last decade thanks to non-formal training, while participation in formal training is decreasing.** Over the last 25 years, human capital policies have increasingly widened their focus from younger cohorts to older ones, leading most countries to adopt "LifeLong Learning" policies.<sup>(358)(359)</sup> Among the first formal steps was the Delors report (Delors et al., 1996),<sup>(360)</sup> and since then adult policies have only expanded,

<sup>(358)</sup> European Commission (2006).

<sup>(359)</sup> The change of focus has been accompanied by a change in the data source. While previous results were based on the LFS ad hoc module 2016, focusing on "young people on the labour market". This module contains rich data in terms of granularity, but covers only people aged 15-34, and most of the analyses keep the focus on the 25-34 age bracket. This section intends to focus its analysis on adults. It is therefore necessary to use another data source, the Adult Education Survey (AES). AES covers adults' (defined as people aged 25-64) participation in education and training during the last 12 months.

<sup>(360)</sup> The Delors report introduced a vision of education based on two main concepts: learning throughout life and the so-called "four Pillars of Education" (learning to know, learning to do, learning to be, and learning to live together).

particularly in the EU.<sup>(361)</sup> In this section the analysis will cover adults (defined as people aged 25-64), and more specifically their participation in education and training during the last 12 months. So far Eurostat has categorised learning activities<sup>(362)</sup> in three main typologies:

**Formal learning:** learning that occurs in an organised and structured environment (such as in an education or training institution or on the job) and is explicitly labelled as learning (in terms of objectives, minimum duration and resources). The programme must be recognised by the relevant national education or equivalent authorities, and will normally have specific requirements (in terms of admission and registration) and lead to certification.

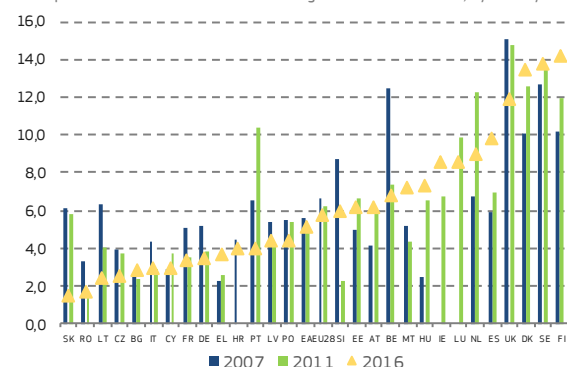
**Non-formal learning:** learning embedded in planned activities which are institutionalised but outside a recognised programme. Non-formal learning does not have not explicit learning objectives, minimum duration or learning support).

**Informal learning:** learning resulting from daily activities related to work, family or leisure. It is not organised or structured in terms of objectives, time or learning support.<sup>(363)</sup>

Chart 4.31

#### Participation in formal education and training increased in the last decade in only nine Member States

Participation in formal education and training in the last 12 months, by country.



Source: AES database [trng\_aes\_100]

[Click here to download chart.](#)

<sup>(361)</sup> Adult education is also a second chance education for people who never completed, or underperformed in, secondary and tertiary education when they were younger. Many migrants or people with a migrant background depend on this type of education for their future careers.

<sup>(362)</sup> Learning activities are defined as "any activities of an individual organised with the intention to improve his/her knowledge, skills and competences". Source: Eurostat (2016:1).

<sup>(363)</sup> Ibid.

## Box 4.2: Intra-EU labour mobility and return flows

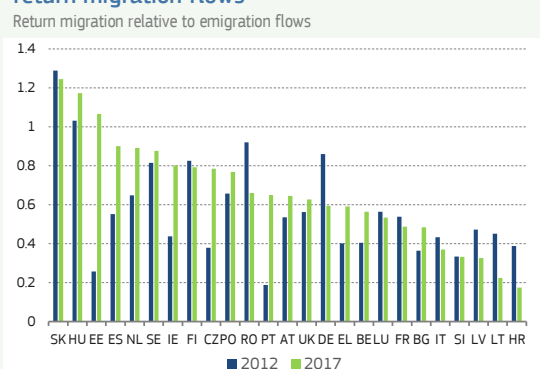
**Intra-EU labour mobility helps the allocation of productive factors.** The free movement of workers is one of the four fundamental freedoms of the EU, along with those of capital, services, and goods. As such, it is enshrined in Article 45 of the TFEU. From an economic perspective, freedom of movement for workers allows improvements in efficiency of factor allocations (Borjas, 1995). Reducing barriers to movement should indeed improve the matching of supply and demand, leading to lower unemployment, higher growth and tax revenues in the receiving country (Boswell and Geddes, 2011). From an inequality perspective, the effect of mobility depends on the skillset of the movers: inflows of skilled workers should raise their relative supply and increase competition among them (Boeri and Van Ours, 2013), while empirical evidence found little evidence of effect on natives' wages (Peri, 2014).

**Sending countries may benefit from mobility in the short term, especially if they have a high level of unemployment, but may also face skill shortages, tax erosion and lower returns from social investment.** Thus, while weighing on the capacity of sending countries to support adequate investment and social protection (CEPS, 2019), intra-EU labour mobility can act as a shock absorber in asymmetric crises (Barslund and Busse, 2016). Outflows of unemployed people can reduce the strain on public finances through lower expenditure on unemployment benefits and social assistance. In the long term, sending countries may suffer from emigration, especially if emigrants were high skilled workers, thus potentially affecting country productivity and tax revenues (Mohapatra et al., 2012). They can also represent a loss in terms of social investment, since the sending country incurs a cost whose benefits are reaped by the receiving country.

**EU movers tend to be better educated and skilled and there is evidence of over-qualification** (European Commission 2015). 17.5 million EU citizens were living abroad in 2018. Mobility is a growing phenomenon (it has increased by more than 20% since 2014), and affects mostly men (55% vs 45%). The two main movement patterns are from Eastern countries to Western ones, and from Southern to Northern ones. On average, EU movers have a higher employment rate (74%, as against 69% for natives) <sup>(1)</sup> Moreover, the skillset of EU movers is correlated with their country of origin. In particular, people coming from the EU15 are more likely to have tertiary education than natives of the receiving country (38% against 25%), while those from the EU13 are less likely (22%): more of them have primary education only. Also, EU15 movers are more often in high skilled occupations, while EU13 movers are more frequently in low skilled ones. More specifically, EU15 movers are more likely than natives

to be occupied as managers, professionals and technicians (+8% on average), while being underrepresented among clerical and service workers (-3%) and skilled agricultural and craft workers (-5%). EU13 movers, however, are more heavily represented than natives among plant machine operators and elementary occupations (+20%), less heavily represented among managers, professionals and technicians (-23%) and skilled agricultural and craft workers (-3%). While the above patterns provide some evidence of brain drain, particularly for EU13 countries, and while return rates are generally lower for countries with significant emigration rates, there is also evidence that return rates to some traditional emigration countries are increasing (*Chart 1*). This is especially the case for Member States that have returned to economic growth after the crisis (e.g. Spain, Ireland, Portugal) as well as for Member States with low unemployment rates (e.g. Czech Republic, Poland, Estonia). Such return migration shows that intra-EU labour mobility can be beneficial for both individuals and sending and receiving countries.

Chart 1  
**Several Member States affected by high outflows during the crisis are registering high and/or growing return migration flows**



Note: CY, DK, MT excluded from the analysis. All countries registered return rates higher than 100% in both years.

Source: Eurostat: [migr\_imm1ctz] and [migr\_emi1ctz].

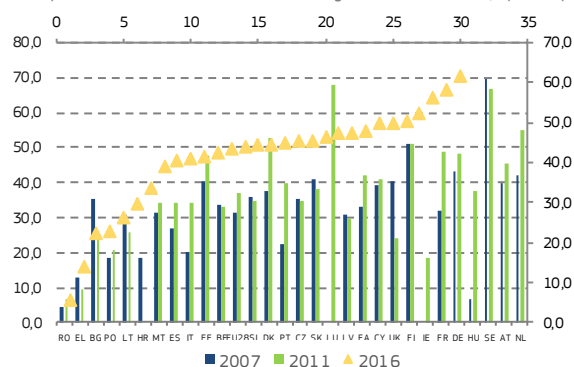
<sup>(1)</sup> This is true also for younger cohorts, for both EU 15 and EU13 movers. The regression carried out in section 3.3 of this chapter confirms this findings: while removing the country dummies in the regression, both coefficients (signalling citizenship of another EU Member States, either EU15 or EU13, become statistically significant.



This section will focus on formal and non-formal learning, since these tend to be easier to monitor than informal learning and can provide clearer messages for policymakers. Overall participation in education and training has continued to grow in Europe: 35.2% of adults took part in education and training in 2007, but that rose to 40.3% in 2011 and 45.2% in 2016. Women tend to report slightly lower outcomes at EU level. At country level, Scandinavian and Baltic Member States have a higher presence of men in formal education and training while the opposite is true in most Southern and Eastern European countries. The overall increase in participation in education and training has been driven solely by non-formal education and training (an increase of one third in the share of participants in that period), as shown in *Chart 4.32*. On the other hand, participation in formal programmes declined by more than 10% in the EU as a whole over the same time span (*Chart 4.31*).

Chart 4.32  
**Participation in non-formal education and training rose in all but five countries in the last decade**

Participation in non-formal education and training in the last 12 months, by country.



Source: AES database [trng\_aes\_100]

[Click here to download chart.](#)

**Formal and non-formal education and training have positive effects on work performance, though formal programmes more often lead to promotions and higher salaries.** AES respondents stressed that formal and non-formal training both have a beneficial effect, particularly in (self-reported) better performance, achievement of personal objectives and ability to undertake new tasks.<sup>(364)</sup> Formal training is generally associated with slightly better outcomes and better performance. Almost three out of ten respondents stressed that formal education helped them in getting a new job while almost two out of ten said that it led to a higher salary. More than 10% of respondents reported a promotion. Non-formal training also yields positive results, although normally with a slightly reduced effect. The relation between participation figures, trends and reported outcomes may seem contradictory. However, other

considerations may play a role in the decision of companies and participants to undertake training, including costs and the time needed. Outcomes decreased between 2011 and the 2016 survey across the board *Chart 4.34* shows the results of both forms of training by Member State, including a breakdown by sex, where a small but clear gap in favour of men is observed.

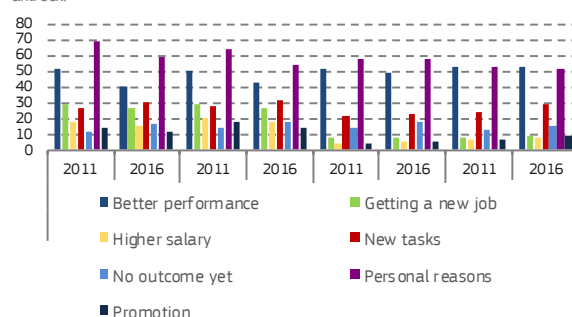
### **Workers undertaking non-formal learning report an increase in their performances more often than those participating in formal training.**

Formal training has a stronger impact than non-formal training in almost all categories. The only exception is work performance, as reported by the training participants. *Chart 4.33* shows that this trend holds in the great majority of Member States. This may help to explain why non-formal training has increased substantially in recent years. While participants may be more willing to undertake formal training, which is more easily recognisable in the labour market and leads more frequently to higher salaries and promotions, companies are more interested in improved performance by their employees, and may want to limit the risk that investment in training an employee may lead to their losing that employee to another employer who is prepared to offer a higher position and salary.

Chart 4.33

### **Outcomes of adult training are similar across gender**

Outcomes of education and training by type of education and training, type of outcomes and sex.



Note: The four groups of columns on the left are on formal training, while the four on the right are non non-formal training. The first, the second, the fifth and the sixth groups of columns refer to women, the other four to men.

Source: AES database, extraction.

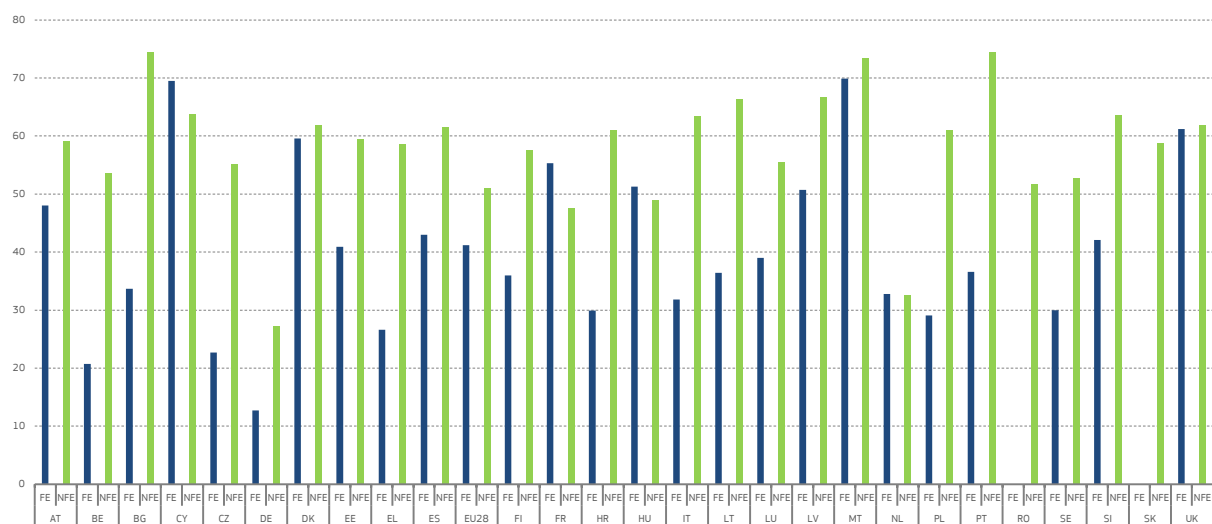
[Click here to download chart.](#)

<sup>(364)</sup> As shown in the charts, the survey asks for outcomes in terms of: better performance, salary, promotion, getting a new job, personal reasons. No outcome yet is also a possible answer.

Chart 4.34

**Non-Formal training is associated with a stronger positive effect on better performances in all but four MS**

Percentage of workers reporting better performance as outcome as effect of formal and non-formal training, in 2016.



Note: LU, SE, UK low reliability. Formal education for BG, CZ, DE, EL, HR, LT low reliability. Missing values for RO and SK corresponds to not publishable values because of low reliability.

Source: AES database, extraction.

[Click here to download chart.](#)

### 3.5. Investment in education and sustainability

**Investment in education and training is mainly public.** Public finances are the main contributor to expenditure in education and training in Europe, accounting for slightly more than 80% of the total (Chart 4.35). This acknowledges the importance that European welfare systems give to education, and the role of this expenditure as an investment that helps long term sustainability. Recent estimates show that the investment has a remarkable payoff: the public costs of enabling a person to attain tertiary education are offset by a public return three times as high by the time the person retires.<sup>(365)</sup>

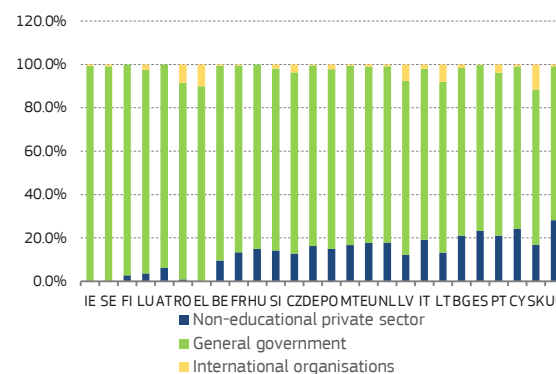
**Investment in education and training can improve the long-term sustainability of public finances in several ways.** Several beneficial effects stemming from this public finance item justify the heavy involvement of states in this field. Section 3.2 showed that higher education attainment is correlated with a higher employment rate and income levels. Therefore, efficient spending can lead to a broader tax base and a decrease in welfare expenditure (e.g. unemployment benefits and social assistance). Moreover, since ageing costs are a long-term determinant of fiscal sustainability,<sup>(366)</sup> investment in education and training may be worthwhile in order to extend working lives. This in turn will help to tackle workforce decline, support the sustainability of pension systems and, ultimately, also sustain public finances.<sup>(367)</sup> Finally, expenditure on education has been shown to reduce inequalities in Europe over the

medium-term.<sup>(368)</sup> Inequalities weaken aggregate demand because of the higher consumption propensity of poorer people,<sup>(369)</sup> and because they lead to lower productivity,<sup>(370)</sup> and misallocation of resources.<sup>(371)</sup> Nevertheless, while investment in education and training supports fiscal sustainability, such investment may only pay off in the longer term. In the short term, governments tend to be discouraged from investing by high levels of public debt, which can lead to a sub-optimal level of spending on this budget item.<sup>(372)</sup>

Chart 4.35

**More than 80% of educational expenditure in EU comes from general government**

Funding on education by sector, excluding early childhood educational development, 2015



Note: Subsidies to households and students from other non-educational private entities are excluded. Denmark, Estonia, and Croatia not available. EU based on average of available data.

Source: Eurostat, [educ\_uoe\_fine01]

[Click here to download chart.](#)

<sup>(368)</sup> European Commission (2017).

<sup>(369)</sup> Galor and Zeira (1993).

<sup>(370)</sup> Stiglitz (2012).

<sup>(371)</sup> Alesina and Perotti (1996).

<sup>(372)</sup> Estimates from the European Commission (2017) show that an increase in the debt-to GDP ratio by 1 pp can lead to a reduction in investment of around 0.1%.

<sup>(365)</sup> OECD (2015).

<sup>(366)</sup> European Commission (2015).

<sup>(367)</sup> European Commission (2017) ESDE 2017, Intergenerational fairness and solidarity in Europe.

## Box 4.3: ESF education and training

**The European Social Fund (ESF) is the main EU instrument to invest in people** <sup>(1)</sup>. As a budgetary instrument, its strategy is determined jointly by EU governments, the European Parliament and the Commission; and as one of the Structural Funds, it aims to support economic and social development in the EU and to reduce disparities within and between Member States and regions.

**The ESF's mission is to promote high levels of employment - investments in education and training today are key for tomorrow's employability.** To this end, in the period from 2014 to 2020, one-third of the Fund's total EU budget has been allocated to education and training investments (EUR 27.3 billion out of EUR 84 billion).

**The Fund supports the entire education cycle from early childhood education to life-long learning, and includes higher education and vocational education and training (VET)** to make sure that people get the right knowledge and skills at all stages of life. The ESF places a particular focus on equal access for disadvantaged groups. As such, the Fund supports the implementation of important EU policy initiatives such as the New Skills Agenda for Europe.

**Member States have used the ESF to enhance the basic skills of low-qualified adults, to strengthen professional skills and to help inactive people get back into work.** Member States have also invested in bridging the gap between education and work by supporting traineeships or internships, in updating curricula to create closer links between the education sector and industry, and in promoting particular curricula and industries to certain demographics (for example, to attract more women into STEM sectors).

Examples of progress made thanks to the ESF by the end of 2017 include the following:

- **4.5 million participants received education and/or training support;**
- **One million participants gained a qualification;** and
- **583 000 participants were in education or training;**

In addition, 1.8 million students will benefit from European Regional Development Fund projects investing in school infrastructure.

The examples below highlight how the ESF functions in practice by investing in people:

The examples below highlight how the ESF functions by investing in people.

The “Second Chance” School in Gijón, Spain, offers vulnerable young people (low-skilled, early school leavers (ESL), those who lack socio-familial support, have health problems, etc) practical and tailor-made training that focuses on skills and abilities to help them reintegrate into/remain in education or find a job. The school also offers educational support and career guidance, as well as artistic, health-related and citizen participation activities. Between 2009 and 2017, 1,379 people took part in this project, which won a prize at the Global Junior Challenge in Rome in October 2017 in the category “Technologies and work with young people from education and training in order to promote innovation and inclusion”.

In Latvia, an ESF project focuses on the participation of VET students in work-based learning and work placements in enterprises. The aim of the ESF support is to increase the number of qualified VET students through participation in work-based learning (WBL) and placements (or traineeships) in enterprises. Work-based learning constitutes at least 25% of the curriculum. A tripartite agreement is signed between the student, the school and the enterprise to create an individualised plan, which sets out what has to be covered during the work-based learning. By May 2018, 1,400 enterprises, 34 vocational education establishments and 2,916 VET students were involved, with 641 students in work-based learning and 2,275 in traineeships.

**Looking forward, the Commission has proposed a European Social Fund Plus (ESF+) for the 2021-2027 period, which Member States can use to build on what they have already achieved.** The ESF+ will continue to provide support for improving the quality, effectiveness and labour market relevance of education and training systems. Moreover, the Fund will promote equal access to education and training at all levels, in particular for disadvantaged groups. Finally, the ESF+ will promote flexible upskilling and reskilling opportunities for all, to facilitate career transitions and help workers adjust to change.

<sup>(1)</sup> The ESF is complemented by other funds which also contribute to investing in people albeit on a lower budgetary scale, such as Erasmus+ which supports education, training, youth and sport, with a budget of EUR 14.7 billion for 2014-2020, and InvestEU which will further boost investment, innovation and job creation for the 2021-2027 period with a budget of EUR 15.2 billion.

**Although public funding remains the main financing source for tertiary education and training, children of tertiary-educated parents have a higher probability of having tertiary education themselves.** *Chart 4.36* shows that having a parent (especially a mother) with tertiary education is correlated with a higher probability of attaining tertiary educational qualification. It is not surprising that tertiary-educated parents encourage their children to take advantage of the opportunities tertiary education affords. This is line with research evidence on the topic, <sup>(373)</sup> resulting in a Matthew effect (see Introduction) on tertiary education attendance. While the database used for *Chart 4.36* does not contain detailed information on the income of students' families, a good proxy is the educational attainment of both parents of the individuals. Higher educational attainments is correlated with both higher income, and with higher probability of having children attaining tertiary qualifications. Consequently, public expenditure in tertiary education may benefit disproportionately people with higher income. Yet, public investment in tertiary education remains particularly advisable in a period of fast technological change, <sup>(374)</sup> when a growing share of future vacancies requires higher educational attainment. <sup>(375)</sup>

**Living in more densely populated areas is associated with a higher chance of having tertiary education.** Living in a city rather than in a scarcely populated area may lower the costs of attending university or other institutions providing tertiary education (in terms of reduced transport fees, lower time and opportunity costs for commuting students and less need to rent a room for those living near or willing to move close to tertiary education institutions, which are mostly located in cities). Yet this finding may also reflect the fact that many people from rural areas decide to move to the city after obtaining a tertiary education degree: cities tend to have higher productivity and salary levels for those with stronger cognitive skills, also due to agglomeration economies (Behrens et al, 2014; Bacolod et al, 2009).

<sup>(373)</sup> See, among others: European Commission: ESDE 2018 on the changing world of work; Blossfeld & von Maurice, 2011.

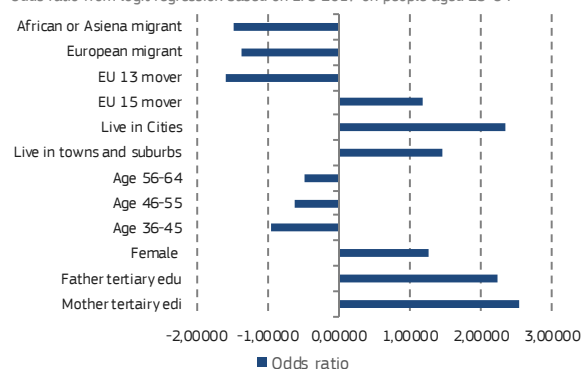
<sup>(374)</sup> Nelson, R.R., Phepls E.S., 1966.; <https://www.oecd.org/education/benefits-of-university-education-remain-high-but-vary-widely-across-fields-of-study.htm>

<sup>(375)</sup> <https://skills Panorama.cedefop.europa.eu/en>

Chart 4.36

#### Having a parent with tertiary education is associated with higher probability gaining tertiary qualifications

Odds ratio from logit regression based on LFS 2017 on people aged 25-64



Source: LFS microdata 2017.

[Click here to download chart.](#)

## 4. INVESTING IN LONG-TERM CARE

### 4.1. Introduction

**Long-term care encompasses a range of services and support for people who depend on help in their daily living.** Needs for long-term care result from mental or physical frailty (often but not always due to old age) or disability. The support needed includes assistance with basic 'activities of daily living' <sup>(376)</sup>, 'instrumental activities of daily living' <sup>(377)</sup>, or permanent nursing care.

**Long-term care takes many different forms.** People reliant on long-term care usually need both personal care and help with household activities. Care recipients may be living at home <sup>(378)</sup> or in a residential care institution. Relatives, friends or acquaintances provide informal care, as opposed to formal care by health or social care professionals. Depending on specific care needs, formal and informal care can be combined.

**Adequate provision of affordable long-term care is a key principle of the European Pillar of Social Rights.** In November 2017, the European Parliament, Council of the European Union and the European Commission affirmed the principle that *"Everyone has the right to affordable long-term care services of good quality, in particular home-care and community-based services."*

<sup>(376)</sup> Self-care activities that a person must perform every day such as bathing, dressing, eating, getting in and out of bed or a chair, moving around, using the toilet, and controlling bladder and bowel functions.

<sup>(377)</sup> Activities related to independent living, such as preparing meals, managing money, shopping for groceries or personal items, performing light or heavy housework, or using a telephone.

<sup>(378)</sup> In community-based care, recipients continue live at home, but use services provided by the community.

## 4.2. Public expenditure on long-term care

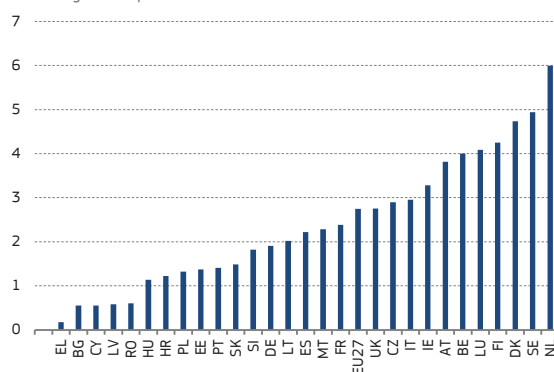
**The provision of formal long-term care is uneven across Member States and unequal within countries.** In those Member States with a relatively low GDP per capita, there is very little use of formal home-care; among richer Member States there is greater diversity. <sup>(379)</sup> Older people with low income or few assets are much more likely to use informal care than peers with more financial resources. <sup>(380)</sup> As regards formal care, there are some indications that providing users with allowances to purchase care (as in Italy or Germany) may be associated with more unequal use than direct service provision (as in France or Denmark). <sup>(381)</sup>

**Public expenditure on long-term care is expected to increase strongly over the next few decades.** Due to population ageing, public spending on long-term care in the EU under existing national policies is projected to increase from 1.6% of GDP on average in 2016 to 2.7% in 2070 (Figure 4.3). Expenditure may increase even more, particularly if Member States with low levels of coverage extend the availability of their services and shift provision from informal to formal care. Labour costs in the sector may increase due to staff shortages. The public cost of long-term care will also depend on increases in life expectancy and on the number of additional life years spent in good health. <sup>(382)</sup>

Chart 4.37

**In the long run (to 2070) public expenditure on long-term care is expected to increase considerably**

Public long-term expenditure as % of GDP



Source: European Commission, Ageing Report 2018.

[Click here to download chart.](#)

## 4.3. Policies to promote healthy ageing and employment opportunities for carers

**Policies to promote healthy ageing and to ensure accessible products, services and infrastructure can play an important role in reducing reliance**

<sup>(379)</sup> Eurofound (2019, forthcoming).

<sup>(380)</sup> Ilinca, Rodrigues and Schmidt (2017).

<sup>(381)</sup> Albertini and Pavolini (2015).

<sup>(382)</sup> European Commission and Economic Policy Committee (Ageing Working Group)(2018).

**on long-term care.** Health promotion can strengthen the autonomy of people with health limitations and thereby reduce long-term care needs. For anyone who has experienced a health incident (such as a stroke or fracture), rehabilitation policies can help avoid frailty setting in. Frail and disabled people can benefit from a broad range of policies and services, which improve their opportunities for independent living. Those with disabilities may need accessible transport, adequate – and in some cases adapted – housing <sup>(383)</sup>, and accessible products and services. <sup>(384)</sup>

**Innovations in long-term care provision can help to contain cost growth, while improving care recipients' quality of life.** Adequate home-care and community-based care can be more cost-effective than residential care for low level needs, while responding to many users' wishes to remain in their home. Greater integration of health care and social care (for example through single points of access or case and care managers) can lead to both efficiency gains for care providers and improved user-experiences for persons with care needs.

**Formal care and work-life balance arrangements, such as flexible work organisation and care leaves, enable people with caring responsibilities to stay in employment.**

Women are the main providers of informal long-term care, as for many other forms of unpaid work (including informal childcare). Providing care, especially at a high-intensity, is associated with lower outside employment and a deterioration in carers' health. <sup>(385)</sup> Because of caring responsibilities for parents or frail relatives, many women reduce their working hours, interrupt their careers or retire early. For the carers in question, this may have a very negative impact on their income and pension entitlements. <sup>(386)</sup> At a broader societal level, there may be major costs in terms of reduced employment and productivity, foregone tax revenues and social security contributions.

**Integration in the labour market is a challenge not only for those providing informal care, but also for former carers.** The age group 50-64 is over-represented among informal carers. At this age, it is particularly hard to find work when care commitments decrease or cease. Access to a wide range of flexible long-term care options, adjustable to preferences and needs, would at least allow carers to remain employed part-time while providing informal care and make it easier for them to return to full-time employment.

<sup>(383)</sup> Eurofound (2019, forthcoming).

<sup>(384)</sup> European Accessibility Act. Most recent text (March 2019) [https://eur-lex.europa.eu/legal-content/EN/TXT/PDF/?uri=CONSIL:ST\\_7174\\_2019\\_INIT&from=EN](https://eur-lex.europa.eu/legal-content/EN/TXT/PDF/?uri=CONSIL:ST_7174_2019_INIT&from=EN)

<sup>(385)</sup> Kolodziej, Reichert and Schmitz (2018); Bauer and Sousa-Poza (2015); Colombo et al. (2011).

<sup>(386)</sup> Social Protection Committee and European Commission (2018).



**The provision of formal care and the policy context matter for employment outcomes.** The employment rate among frequent carers in countries where formal long-term care is least common is 10 percentage points below that of other people. In countries where formal care is most common, this informal care employment gap is about three times lower: 3 percentage points. Multiple explanations are possible. People in employment are less likely to provide frequent informal care in countries with wider formal care availability if this implies loss of employment, as there is an alternative. In these countries, formal care is also more effectively combined with informal care in preventing loss of employment.<sup>(387)</sup> It is thus important for increased provision of flexible long-term care options to be combined with measures which facilitate flexible work options, such as reversible partial retirement schemes. As women continue to perform most of the informal care and housework, it is important to complement such policy measures with general policies to stimulate gender equality.

**Political attention to long-term care is increasing as, despite significant differences in national systems, the challenges are similar across the EU.** Analytical work is ongoing to help deepen the understanding of these challenges, including the adequacy of social protection for long-term care, the long-term care workforce, the quality and efficiency of long-term care and the economic value of informal care. To enable monitoring of the situation across the EU, the Commission together with Member States is developing a common portfolio of indicators for long-term care at EU level, which should help future analyses. These efforts will feed into a report on long-term care to be produced jointly by the European Commission and the Social Protection Committee in 2020.

## 5. INVESTING IN AFFORDABLE AND ADEQUATE HOUSING

### 5.1. Introduction

Housing as a sector and policy field is clearly distinct from social policies which aim to invest directly in people's skills and employability. Nonetheless, affordable and adequate housing is often an important factor in social investment.

**Housing is closely linked to the life course, and is of particular concern to young adults.** While securing and maintaining adequate housing is important for all age groups, young adults in particular consider lack of availability of accommodation as an immediate short-term risk to themselves and their families.<sup>(388)</sup> Early adulthood is a period when major transitions tend to follow in close succession or to

coincide: studying, beginning a career, starting a family and having children. Such changes in professional and private life may trigger a need to find new accommodation. Later in life, new housing needs may also arise after a separation or job loss.

**Housing may be a decisive factor in accessing enabling public services.**<sup>(389)</sup> Where public services are conditional on out-of-pocket-payments, very high housing costs may become a factor limiting access. The distance or time needed to travel from home can be an obstacle to accessing public services. In some cases (e.g. schools or childcare centres) priority in the allocation of places may be given to people living near the facility.

**Inadequate housing can have adverse long-term effects on health and social inclusion.** Where there is a lack of affordable accommodation, households may need to share a dwelling that is not adapted to the number of people living there (in terms of rooms or available living space). Homes with major structural problems such as leaks or damp may have long-term adverse consequences on their occupants' health.

### 5.2. Housing affordability: concepts and main facts

**Accommodation is a basic need.** Since housing is a fundamental need, households' accommodation-linked expenses are to some extent 'inelastic'. If the cost of housing increases, households cannot reduce their demand indefinitely. In most European countries, the cost of covering basic needs, including housing, rose more strongly than the cost of other goods and services between 2001 and 2015. Low-income households typically spend a larger share of their income on such basic needs than do medium or high-income households. As a consequence, inequalities in 'disposable' income tend to increase after factoring in these costs.<sup>(390)</sup>

**The cost of housing is a major expense for most households and for many it is a burden.** On average, households in the EU spend more than one fifth of their disposable income on housing. One in ten Europeans live in a household that spends 40% or more of its income on housing costs. If housing expenses are deducted from the households' disposable income, the population at risk of poverty in 2017 increases from 17% to 32%. Almost one third of the EU population considers housing costs to be a very heavy financial burden on their household.

<sup>(389)</sup> Omic (2018).

<sup>(390)</sup> Gürer and Weichenrieder (2018).

<sup>(387)</sup> Eurofound (2019, forthcoming); Walsh and Murphy (2018).

<sup>(388)</sup> OECD (2019a).

## Box 4.4: Housing cost affordability indicators

**Housing costs** in the EU-SILC survey include the monthly costs connected with the household's right to live in the accommodation. For homeowners, this includes any mortgage payments for the main dwelling (net of tax relief). For tenants, rental payments (gross of housing allowances) are included. For all types of occupant, the costs of utilities (water, electricity, gas and heating) resulting from the actual use of the accommodation are included. Where applicable, housing costs include taxes on the dwelling, structural insurance, mandatory services and charges (sewage removal, refuse removal, etc.), regular maintenance and repairs (including all those undertaken regularly to keep the home in good working order, but excluding those which change its performance, capacity or expected service life).

**Housing cost burden** is defined as total housing costs (net of housing allowances) as a percentage of total disposable household income (net of housing allowances).

**The housing cost overburden rate** is the percentage of the population living in a household where the housing cost burden is higher than 40%.

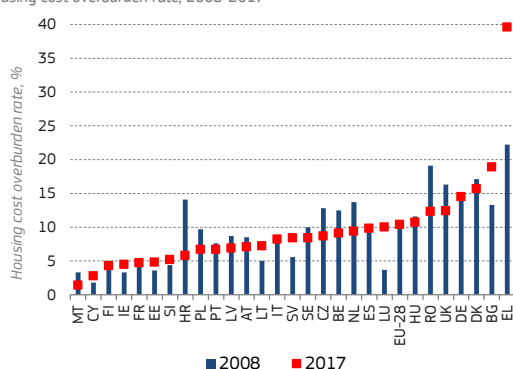
**The at-risk-of-poverty rate after housing expenses** is the percentage of the population living in a household whose equivalised disposable income minus housing costs is below the poverty threshold (set at 60% of median equivalised disposable income).

**Self-reported heavy burden of total housing cost** indicates the percentage of the population living in a household where the person responsible for accommodation considers their total housing cost to be a heavy financial burden (as opposed to either a slight burden, or no burden at all).

Chart 4.38

**One in ten Europeans live in a household that spends 40% or more of its income on housing costs, with large differences across Member States**

Housing cost overburden rate, 2008-2017



Note: Percentage of the population living in a household where total housing costs (net of housing allowances) represent more than 40% of the total disposable household income (net of housing allowances).

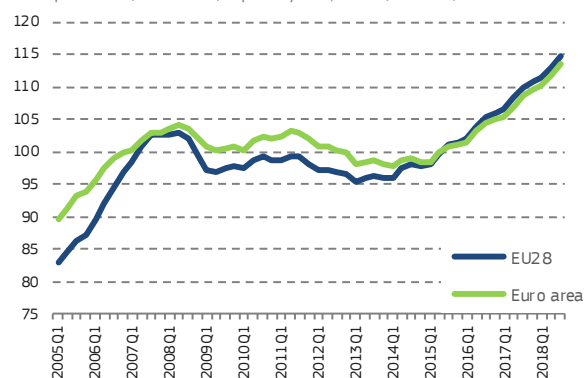
Source: Eurostat, EU-SILC (ilc\_lvho07a)

[Click here to download chart.](#)

Chart 4.39

**House prices in the EU have increased markedly since the start of the economic recovery**

House price index (2015 = 100) - quarterly data, 2005 Q1-2018 Q4



Source: Eurostat (prc\_hpi\_q)

[Click here to download chart.](#)

**Recent improvements in the affordability of housing expenses contrast with dynamic increases in house prices.** House prices in the EU have increased steadily since the start of the economic recovery and have accelerated recently. In a growing number of countries, house price trends are showing signs of possible overvaluation. At the same time, prices in countries where house overvaluation was most pressing have recently seen a moderation, linked to policy interventions, or affordability issues. <sup>(391)</sup>

**House prices and housing costs reflect different aspects of affordability.** The housing costs that are the focus of this section cover the current accommodation expenses households must meet to continue to live in their dwellings, along with costs for the use, including utilities (See Box 4.4). For the affordability of housing costs, income pooling and cost sharing at the household level can play an important role. House prices, by contrast, reflect the value of real estate transactions for houses including land. Such transactions include not only houses acquired as a main dwelling, but also second homes, holiday homes or dwellings used for investment. House prices provide an indication of the state of the housing market and they are monitored <sup>(392)</sup> to identify potential housing bubbles, when prices move beyond fundamentals. <sup>(393)</sup>

House prices can provide an indication of affordability for prospective buyers. They do not convey direct information on the current affordability of housing costs for substantial categories of the population, including tenants paying reduced rent or current

<sup>(391)</sup> European Commission (2019c).

<sup>(392)</sup> Indicator in the Macro-Economic Imbalance Procedure: year-on-year changes in house prices relative to a Eurostat consumption deflator, with a threshold of 6%.

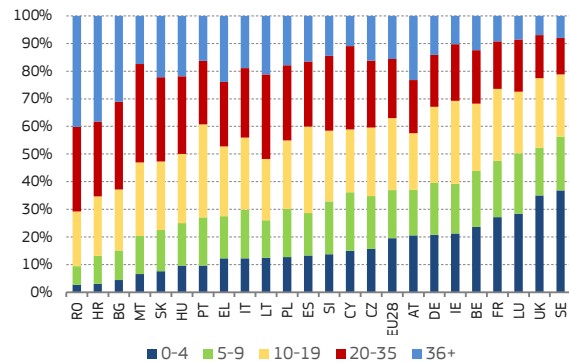
<sup>(393)</sup> Trends in house prices can be benchmarked against trends in income, rent, population, real housing investment and real long-term interest rates. Philipponnet and Turrini (2017).

homeowners. For tenants in the private sector, increases in house prices may only become a factor in the rent after a time lag, for example, when a new lease is signed. <sup>(394)</sup>

Chart 4.40

### The degree of housing mobility varies greatly across Member States

Population by number of years since household's installation in current dwelling, %, 2016



Note: No information for DK, EE, FI, LV, NL.

Source: DG EMPL calculations based on EU-SILC Users' database 2016

[Click here to download chart.](#)

**The link between house prices and households' current housing expenses depends crucially on mobility.** There are major differences between Member States in terms of how long households have lived in a dwelling since acquiring their home or starting or renewing their lease. Housing mobility is linked to differences in housing markets, patterns of household formation and policies such as taxes on housing transactions. Just one fifth of homeowners with a mortgage had acquired their property in the previous 5 years. Private tenants tend to be most mobile, but even among this category more than half have lived in their current dwelling for 5 years or more. This implies that households' decisions regarding housing and relevant policies typically have effects over the long-term.

**High transaction costs on properties may limit mobility on the housing market.** Many Member States still levy transaction taxes on immovable property. Tax rates and revenue vary substantially across Member States <sup>(395)</sup>. Transaction taxes tend to discourage property sales and purchases. As such, these taxes can reduce volatility of house prices and likelihood of bubbles, which have a major impact on housing affordability. However, they may also restrict workers' mobility and add to imperfections in the labour market. In such cases, a shift away from transaction taxes towards recurrent property taxes would maintain a constant level of revenue while reducing the distortions caused by transaction taxes. <sup>(396)</sup>

<sup>(394)</sup> Le Roux and Roma (2018).

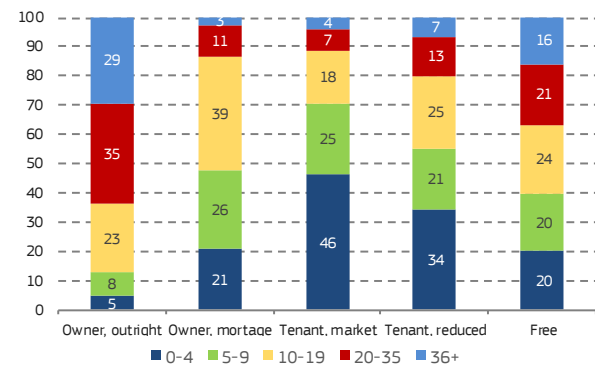
<sup>(395)</sup> European Commission (2018b).

<sup>(396)</sup> European Commission (2015).

Chart 4.41

### Tenants are the most mobile, whereas owners without a mortgage are the least

Population by number of years since household's installation in current dwelling and tenure status, %, EU, 2016



Note: No information for DK, EE, FI, LV, NL.

Source: DG EMPL calculations, based on EU SILC Users' database

[Click here to download chart.](#)

## 5.3. Housing cost affordability by tenure status

**There are major differences between European Member states in terms of housing tenure.** Across the EU, 43% of the population own their homes outright, living in a dwelling on which there is no outstanding mortgage or home loan. Several Central and Eastern European Member States have exceptionally high rates of outright homeownership. This is a legacy from the transition to a market economy. Many of these countries adopted a policy of privatisation of formerly public housing, often selling homes to tenants at relatively low prices. Private mortgage markets in these countries started to develop mainly in the 2000s, in some cases quite dynamically. <sup>(397)</sup> EU-wide, 26% are homeowners with an outstanding mortgage or home loan. In Sweden and the Netherlands, there are many households with mortgages, which are at least partly linked to generous systems of mortgage tax relief in these countries. Across the EU, approximately one fifth of the population are tenants paying rent at private market rates. In Germany and Austria, the proportion of tenants is relatively large. These Member States each have a large and relatively strongly-regulated private rental sector. A further 6.5% of the EU population are tenants paying rent at a reduced rate, either renting social housing, or renting at a reduced rate from an employer, or renting accommodation where the rent is fixed by law. The UK, Malta, Ireland, France and Finland have relatively large proportions of reduced-rent tenants. Finally, a relatively small minority EU-wide live in accommodation that is provided rent-free, either by an employer or another private source.

<sup>(397)</sup> Hegedus, Horvath and Somogyi (2017).

Table 4.1

**Tenants generally have more difficulties with housing cost affordability than homeowners**

Selected housing cost affordability indicators and poverty indicators, by tenure status, 2016

	Median housing cost (%income)	Housing cost overburden (>40% income)	At-risk-of-poverty (AROP, income)	AROP (income after housing expenses)	Self-reported heavy burden of housing cost
Owner, outright	12	7	16	27	32
Owner, mortgage	15	8	8	16	29
Tenant, market	30	28	27	56	35
Tenant, reduced	23	16	30	59	36
Free	12	9	29	30	39

Note: Shading applied by column, to highlight tenure status with most favourable outcomes (green) or least favourable (red)

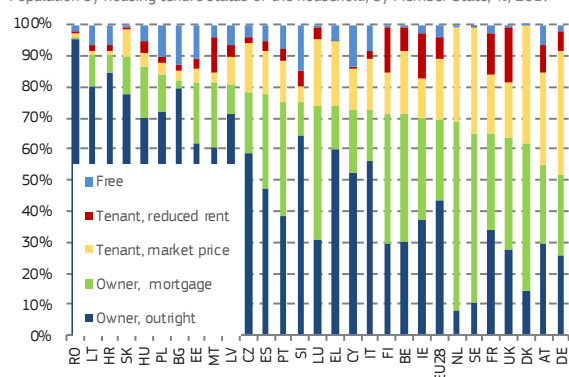
Source: DG EMPL calculations, based on EU SILC Users' database.

[Click here to download table.](#)

Chart 4.42

**The majority of Europeans are homeowners, but the rates differ strongly across countries**

Population by housing tenure status of the household, by Member State, %, 2017



Note: In the Netherlands, Denmark and Sweden, tenants paying rents at reduced rates are included under the category 'Tenant, market price'.

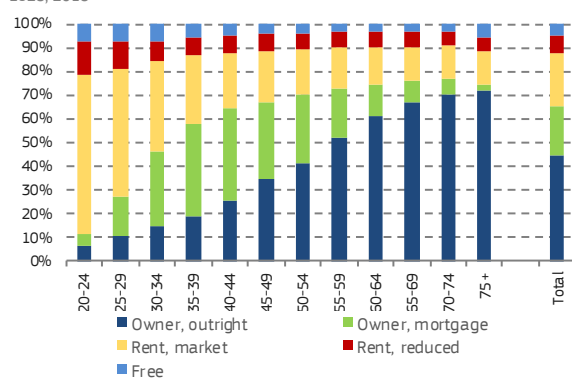
Source: DG EMPL calculations based on EU-SILC Users' database 2016)

[Click here to download chart.](#)

Chart 4.43

**Housing tenure is closely linked to the life course**

Tenure status by age category of the oldest person in charge of accommodation, %, EU28, 2016



Note: The data refer only to the oldest person in charge of accommodation in the household (not including any other household members living in their dwelling).

Source: DG EMPL calculations based on EU-SILC Users' database 2016

[Click here to download chart.](#)

**Housing tenure is closely linked to the life course.** For households headed by young householders (including single person households), renting on the private market is the most common tenure status. Rental housing does provide flexibility, which may fit well the certain demands of a mobile workforce and in some cases reflect tenants' own preferences. <sup>(398)</sup> For tenants, rent paid to a landlord is

essentially housing 'consumption', in the sense that its cost only contributes to meeting current needs. For many households, however, homeownership plays an important role in wealth accumulation. Acquiring a home can be considered an investment, in the sense that it contributes to a right to future use of the dwelling. However, in view of strong increases in house prices, there are concerns that homeownership may become unattainable for lower income groups and for younger cohorts. <sup>(399)</sup>

**Across the EU, homeowners with mortgages tend to face relatively few issues with housing cost affordability.** At least part of the explanation is a selection effect: the conditions for accessing such loans may include a steady income, while credit is often capped to reflect the borrower's ability to service debts.

In addition, for owners with more mature loans, the recent macro-economic context has been favourable, with low interest rates allowing some renegotiation of existing loans. <sup>(400)</sup> Also, several Member States apply mortgage interest deductibility, which reduces the cost of debt-financed housing. In general, tax relief for homeowners tends to benefit higher income households, thereby generating an inequality-increasing effect, which may be offset by caps. <sup>(401)</sup> Outright homeowners generally have lower housing costs than owners with a mortgage, but more low-income households are in this category: owners without mortgages include many elderly people, who may have relatively low income from pensions.

**Taxation of housing in many countries still favours homeownership.** Since 2009, property taxes on real estate have increased quite substantially as a share of total revenue (6.6% in 2017 vs. 5.6% in 2009).

This is mainly due to the increased use of recurrent property taxes. These are considered to be the revenue source least detrimental to growth, while the immobility and visibility of its tax base makes evasion difficult. <sup>(402)</sup> In all EU Member States, owner-occupied housing is taxed in a favourable way. Except in the Netherlands, the return on investment of owner-occupied housing (i.e. imputed rent) is not included in

<sup>(399)</sup> OECD (2019b).<sup>(400)</sup> Le Roux and Roma (2018).<sup>(401)</sup> World Bank (2018).<sup>(402)</sup> European Commission (2018b).<sup>(398)</sup> Haffner, Hegedus and Knorr-Siedow (2018).



the personal income tax base. Nevertheless, in several Member States owner-occupiers can, fully or partly, deduct mortgage interest payments from their income for tax purposes. In addition, capital gains from the sale of a primary residence are typically exempt from capital gains tax. Moreover, recurrent property taxes, which are a kind of user charge to finance locally rendered public services, are often based on outdated housing values (for example in Luxembourg, France, Ireland and Latvia). This favourable tax treatment of owner-occupied housing produces a tax bias towards homeownership in all EU Member States. In 2017, Denmark introduced a reform to re-align property taxes with actual property values, which will come into force in 2021.

**Preferential tax treatment of owner-occupied housing tends to be regressive.** Favourable taxation of owner-occupied housing is mainly justified by positive spillover effects on society, such as wealth accumulation and more stable neighbourhoods. Neutrality and efficiency, however, would call for removing the preferential tax treatment of homeownership. There are also distributional reasons in favour of taxing net imputed rent to ensure the equal treatment of homeowners and renters.<sup>(403)</sup> Mortgage interest deductibility tends to benefit high-income earners disproportionately, as the advantage often depends on the taxpayer's marginal tax rate.<sup>(404)</sup> Correction for this homeownership bias and taxing net imputed rent in the personal income tax system has been shown to have no adverse effects on income inequality.<sup>(405)</sup> Other factors, like the distribution of homeownership across the population, contribute to the distributional impact of taxing imputed rent.<sup>(406)</sup>

**Tax expenditures for homebuyers and homeowners represent substantial amounts in certain Member States.** Tax expenditures include exclusions, deductions, credits and reduced rates for specific activities or for specific groups of taxpayers. While they can be justified in some cases, they narrow the tax base and are costly in terms of revenue foregone. Moreover, they make the tax system complex, increase tax governance costs and are often not means-tested. Therefore, they do not necessarily have a positive impact on income distribution and may even be regressive.<sup>(407)</sup> As such, these benefits are considered by some as part of 'the hidden welfare state'.<sup>(408)</sup> In certain countries, including Belgium, Italy, Luxembourg and the Netherlands, the monetary value of these expenditures is larger than that of housing

allowances (cash transfers for tenants or owners) and housing development combined.<sup>(409)</sup>

**Tenants on the private market are a vulnerable group when it comes to affordability of housing expenses.** Their median housing cost burden is the highest of all categories considered, with half of private tenants spending at least 30% of their disposable income on housing, and more than a quarter spending 40% or more. Private tenants also make up a relatively large proportion (over one quarter) of the households that are at risk of poverty based on their income. In combination with housing costs, private tenants become particularly vulnerable.

**Several Member States are reforming the regulation of the private rental market, to stimulate its development and foster mobility.** In countries with high rates (and subsidisation) of homeownership, and/or a large social rent sector (such as the Netherlands), there may be limited supply in the private rental sector. The Dutch government has submitted a draft law to Parliament to increase the supply of mid-priced private rental housing. In other Member States, weak protection of landlords is seen as a factor behind low investment in rental housing. In Latvia, for example, the government is trying to address such issues via a draft rental law. Regulation of rent can also result in below-market levels (particularly in urban areas), with strong incentives for sitting tenants to remain in their accommodation, and difficulties for new entrants to access the market. In this regard, the Swedish government announced plans to introduce a more flexible rent-setting system for newly constructed housing.

**The role of housing allowances varies considerably across Member States.** While housing allowances tend to have a progressive design, favouring lower income groups, their inequality-reducing impact relies crucially on coverage, which is generally quite low.<sup>(410)</sup>

**Tenants paying reduced rent are vulnerable in terms of low income, and still sizeable housing costs.** This is a fairly diverse group, including occupants of social housing along with tenants paying regulated rent. Ceilings related to income or wealth may apply to target the most needy. This may explain why this category has the highest risk of income poverty (if not housing cost burden, which is higher for tenants paying rent at private market rates).

**In many countries, the demand for social housing far exceeds the supply, even despite recent initiatives.** Several Member States have recently increased the supply of social housing (Germany, France Ireland), but still face sizeable waiting lists. In light of such shortages, there are debates in several

<sup>(403)</sup> See for an overview of costs and benefits of homeownership, Andrews and Caldera Sánchez (2011); Harding and Marten (2018).

<sup>(404)</sup> European Commission (2019, forthcoming).

<sup>(405)</sup> Figari et al. (2017) analyse the distributional effect of removing income tax provisions favouring homeownership in Belgium, Germany, Greece, Italy, the Netherlands and the United Kingdom.

<sup>(406)</sup> European Commission (2019, forthcoming).

<sup>(407)</sup> European Commission (2014b).

<sup>(408)</sup> Howard (1999).

<sup>(409)</sup> World Bank (2018).

<sup>(410)</sup> Fatica and Prammer (2017); Figari et al. (2016); World Bank (2018).



Member States on allocation mechanisms, as well as rules regarding duration or succession rights. In France, the recently adopted ELAN law aims to target social housing better to those in need. The situation of tenants in high demand areas will be re-evaluated every 3 years, and a generalised scoring system will apply in large urban areas.

#### 5.4. Housing cost affordability by degree of urbanisation

**There are increasing concerns that housing in cities is becoming either unaffordable or a very large burden for low-income groups.** <sup>(411)</sup> The high cost of housing in cities can be linked to growing demand (due to urbanisation), and limitations to expanding supply (constraints on providing new dwellings in densely built areas, including planning permissions).

**Over the past decade, house price increases have been particularly strong in capital cities.** During the upturn in the early 2000s and up to 2009, house prices in capital cities moved broadly in line with national aggregates. They started to diverge around 2010. <sup>(412)</sup> In several Member States – and particularly in their capital cities – foreign investment in housing is substantial. Foreign investments in capital cities are part of a broad pattern of looser global financial conditions, whereby prices in major cities may become more sensitive to international conditions and prices. In some cases, these effects are mitigated by exchange rate flexibility or macro-prudential tools intended to protect the stability of the financial system, for example capital conditions banks to provide mortgages. <sup>(413)</sup> As discussed earlier, the impact of house prices on housing expenses may be limited to certain population groups, indirect and subject to a lag. Given higher rates of housing mobility (but also more private tenants) in cities, the effects may be seen more quickly there.

**Short-term rentals via on-line platforms may have an impact on private rental markets, particularly in popular tourist destinations.** For homeowners seeking to rent out their property, offering accommodation to tourists and travellers via peer-to-peer platforms may be a lucrative alternative to long-term rents. There is a wide degree of variation in the offers online: some are available year-round, whereas others are only rented for a few months. Some accommodation offers refer to entire properties, others are for rooms or shared rooms. The displacement of long-term rents by peer-to-peer short-term accommodation may be particularly strong where local incomes and wages are below what is offered on the international market for short-term accommodation for example in Southern and Central

and Eastern Europe, <sup>(414)</sup> while regulation also plays a role. However, the supply of short-term lets tends to be particularly concentrated in historic city centres. <sup>(415)</sup>, which implies that its broader impact remains to be seen.

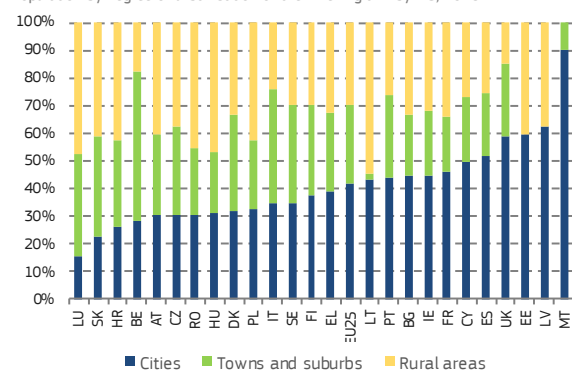
**The affordability of housing costs in cities is subject to an urban 'paradox'.** Cities are hubs of innovation, productivity and employment, with opportunities for education and training and high income. Urban areas are often the destination of choice for young adults. However, in many cities unemployment rates are higher than in towns, suburbs or rural areas, <sup>(416)</sup> while inequalities are larger.

The housing cost overburden tends to be highest in cities (13% EU-wide), compared with towns and suburbs and rural areas. Income poverty tends to be highest in rural areas, where overall income and living standards may be somewhat lower. To some extent, these two factors tend to cancel each other out when the risk of poverty after housing expenses is calculated, the risk is similar in cities and rural areas, and slightly lower in towns and suburbs.

Chart 4.44

#### About two fifths of the population lives in cities, with major differences across Member States

Population by degree of urbanisation of the dwelling and by MS, 2016



Note: No data for DE, NL, SI.

Source: DG EMPL calculations, based on EU SILC Users' database

[Click here to download chart.](#)

<sup>(414)</sup> Adamiak (2018).

<sup>(415)</sup> Artioli (2018).

<sup>(416)</sup> Nevertheless, cities have potentially more job opportunities and allow for wider job choices. See Eurostat (2017).

<sup>(411)</sup> Grabka, Goebel and Liebig (2019).

<sup>(412)</sup> European Central Bank (2017), data for the Eurozone.

<sup>(413)</sup> Alter et al (2018).

Table 4.2

**Housing cost affordability and poverty are subject to an 'urban' paradox**

Selected housing cost affordability and poverty indicators, by degree of urbanisation of the dwelling, EU25, 2016

	Median housing cost (%income)	Housing cost overburden (>40% income)	At-risk-of-poverty (AROP, income)	AROP (income after housing expenses)	Self-reported heavy burden of housing cost
Cities	16	13	16	31	36
Towns and suburbs	15	10	16	30	37
Rural areas	14	9	21	33	37

Note: No data for DE, NL, SI. Shading applied by column, to highlight which areas have most favourable outcomes (green) or least favourable (red)

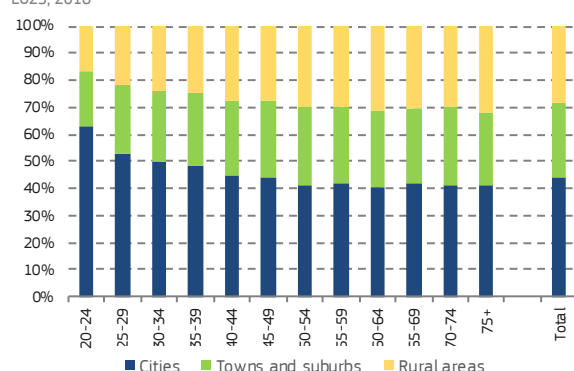
Source: DG EMPL calculations, based on EU SILC Users' database

[Click here to download table.](#)

Chart 4.45

**Households headed by young adults are more likely to be in the cities**

Tenure status by age category of the oldest person in charge of accommodation, %, EU25, 2016



Note: No data for DE, NL, SI.

Source: DG EMPL calculations, based on EU SILC Users' database

[Click here to download chart.](#)

**A lack of affordable housing in areas with many job opportunities may hamper labour mobility, or lead to long commutes and traffic congestion.** In certain countries (including Finland) regional differences in housing costs are larger than the respective wage premiums. This may hinder mobility to the regions with the highest demand and largest job opportunities. Limited supply of rental housing may also be a factor limiting mobility within a country, even leading some jobseekers to move abroad instead (e.g. Latvia). In other cases, a high housing cost relative to income may provide incentives to commute across the border rather than to take up residence there (e.g. Luxembourg).

## 5.5. Housing cost affordability by household type

**There are large differences between Member States in the structure of households.** This applies particularly to single person households, which account for more than one fifth of the population in Denmark, Sweden or Germany, but less than one tenth in several Member States, including Cyprus, Slovakia and Poland. There are also major differences in the prevalence of households with three or more adults. This is linked both to children continuing to cohabit with their

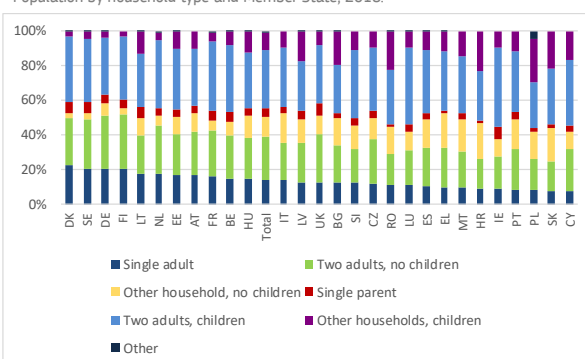
parents into young adulthood and to elderly persons residing with their children.

**In terms of housing cost affordability, cohabiting can have advantages.** On the cost side, it allows for economies of scale: the required living space or consumption of utilities may increase as more people live in a dwelling, but the increase is not proportional to the number of persons in the household. On the income side, having several adults in a household can help to pool and diversify income.

Chart 4.46

**Diversity of household types in EU Member States**

Population by household type and Member State, 2016.



Note: Children refer household members aged 17 or less or household members aged between 18 and 24; economically inactive and living with at least one parent.

Source: DG EMPL calculations, based on EU SILC Users' database

[Click here to download chart.](#)

**One possible effect of limited availability of affordable housing is overcrowding.** The overcrowding rate takes into account the number of rooms available to the household and the number of household members (see Box 4.5). The proportion of people living in overcrowded households has declined gradually, from 18.7% in 2007 to 15.5% in 2017 (EU27, not including Croatia). Bulgaria, Croatia, Hungary, Poland and Romania still have overcrowding rates of 40% or more. Not only the number of rooms, but also the size of dwellings differs strongly across Member States, and is closely related to overall living standards. Whereas an overcrowded household in Italy had a median living space of 20m<sup>2</sup> per household member in 2012, the equivalent in Romania was only 10m<sup>2</sup>.

Table 4.3

### Single adults, and particularly single parents, tend to be most vulnerable to poverty and problems with housing expenses

Selected housing cost affordability and poverty indicators, by household type, EU28, 2016

	Median housing cost (%income)	Housing cost overburden (>40% income)	At-risk-of-poverty (AROP, income)	AROP (income after housing expenses)	Self-reported heavy burden of housing cost
Single adult	26	26	26	50	28
Two adults, no children	16	9	12	19	24
Other, no children	11	6	11	32	38
Single parent	23	21	34	63	43
Two adults, children	16	10	17	30	32
Other, children	13	6	20	31	47

Note: Shading applied by column, to highlight which household types have the most favourable outcomes (green) or least favourable (red)

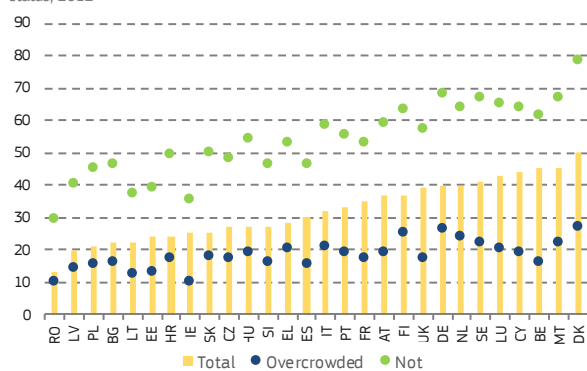
Source: DG EMPL calculations, based on EU SILC Users' database

[Click here to download table.](#)

Chart 4.47

### Dwelling size varies considerably across countries, including for overcrowded households

Median average living space (m<sup>2</sup>) per household member, by country and overcrowding status, 2012



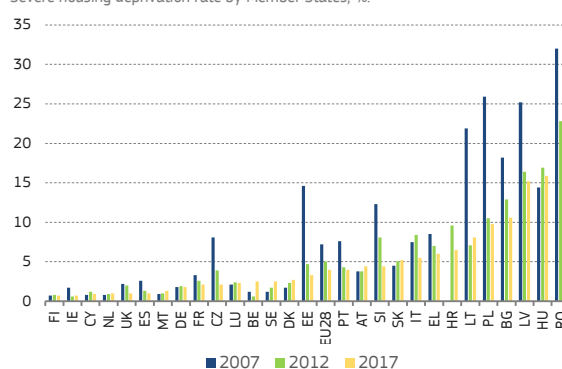
Source: DG EMPL calculations, based on EU SILC Users' database

[Click here to download chart.](#)

Chart 4.48

### Fewer Europeans experience severe housing deprivation than ten years ago

Severe housing deprivation rate by Member States, %



Note: EU28 refers to EU27 (-HR) for 2007

Source: Eurostat, EU-SILC [ilc\_mdho06a]

[Click here to download chart.](#)

## 5.6. Housing deprivation

The quality of housing, in terms of the properties of the dwellings in which Europeans live, varies considerably across Member States, as well as within countries. Some aspects of housing quality are closely linked to the overall living standards of the country or households, whereas others can be seen as providing possible indications of the energy-efficiency of the building.

**Severe housing deprivation rates have been declining in Europe over the past ten years.** The strongest progress was recorded between 2007 and 2012 in all the Central and Eastern European Member States, followed by a period of relative stability in several countries, and a renewed decline shown in the most recent data. A few countries with low rates of deprivation have seen minor increases, such as Belgium, Sweden and Denmark, although it remains to be seen whether this is a robust trend.

### Homes that lack basic plumbing installations are concentrated in certain Central and Eastern European Member States.

In Romania, Latvia, Lithuania and Bulgaria, more than 10% of the population live in a dwelling that is not equipped with either a shower or a bath (compared with 2% in the EU28). A similar proportion of households does not have an indoor flushing toilet for the sole use of the household. In fact, dwellings that lack one tend to lack the other as well. One exception is Bulgaria, where nearly twice as many homes lack an indoor flushing toilet as lack a shower or bath. While major improvements have been observed, in line with current trends, these issues will only be fully resolved by 2040.

### Box 4.5: Housing deprivation indicators

The **severe housing deprivation** rate is the percentage of population living in a dwelling considered to be overcrowded which also exhibits at least one of the housing deprivation measures.

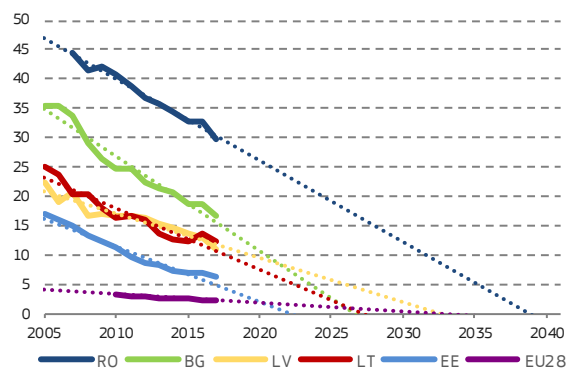
**Housing deprivation** is a measure of poor amenities, referring to households whose dwellings have a leaking roof, have no bath/shower and no indoor toilet, or are considered too dark.

**An overcrowded household** is one which does not have at least: one room for the household; one room per couple in the household; one room per single person aged 18 or more; one room per pair of single people of the same gender aged 12-17; one room per single person aged 12-17 and not included in the previous category; and one room per pair of children aged under 12.

Chart 4.49

#### Homes which lack basic plumbing facilities are becoming rarer, with the remaining ones concentrated in a few Member States

Population not having indoor flushing toilet for the sole use of their household, %.



Note: Dotted lines represent linear extrapolation of trend 2005-2017 (2008 for RO, 2010 for EU)

Source: Eurostat, EU-SILC survey [ilc\_mdho03].

[Click here to download chart.](#)

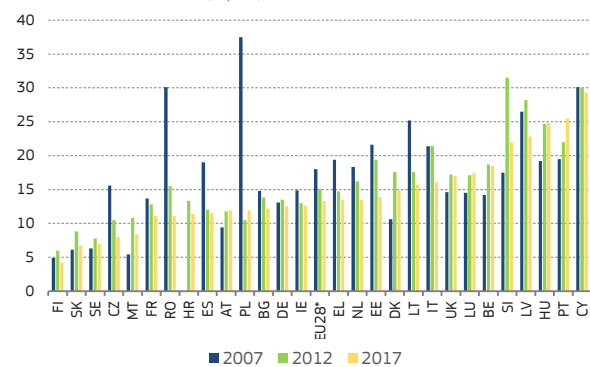
**Damp living conditions are relatively widespread across EU Member States.** Approximately one in seven Europeans lives in a dwelling that has a leaking roof, or has walls, floors or foundations which are damp, or has rot in window frames or the floor. These deficiencies may have a negative impact not only on the occupants' comfort, but also on their health.<sup>(417)</sup> Those living in rented accommodation, and particularly those with reduced rent are especially affected by these issues. Damp living conditions may also indicate poor insulation or ventilation of the home and be considered as a proxy for low energy efficiency.

<sup>(417)</sup> Eurofound (2016).

Chart 4.50

#### Damp living conditions are generally on the decline, but remain widespread in the EU

Population living in a dwelling with a leaking roof, damp walls, floors or foundation, or rot in window frames or floor, by MS, %



Note: For 2007, EU28 refers to EU27 (-HR).

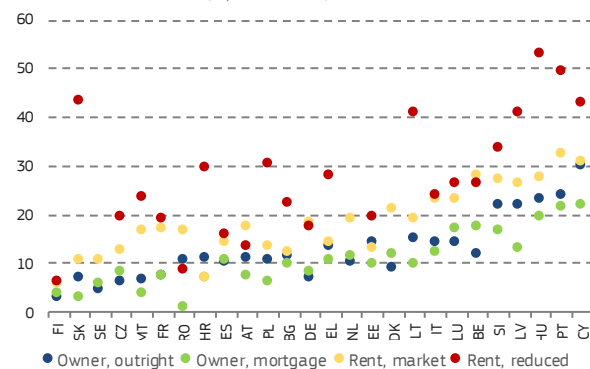
Source: Eurostat, EU-SILC survey [ilc\_mdho01]

[Click here to download chart.](#)

Chart 4.51

#### Tenants are most likely to have damp living conditions

Population living in a dwelling with a leaking roof, damp walls, floors or foundation, or rot in window frames or floor, by tenure status, 2016



Source: DG EMPL calculations, based on EU SILC Users' database

[Click here to download chart.](#)

## 6. CONCLUSIONS AND POLICY CHOICES

**Given major demographic and technological shifts, there is a broad consensus in Europe on the need to invest in people and social sustainability.** Such investments help to prevent and mitigate social risks by enabling citizens to acquire new skills and be active on the labour market and by providing them with support during critical life course transitions (such as re-entering the labour market after studies, childbirth, unemployment or inactivity).

**Investing in children and their families through affordable and quality childcare services and income support is an effective investment for the development of children and for parents' (especially mothers') employment.** Despite increases in family expenditure per capita, and increases in the use of formal childcare in most Member States after 2008, there is still room for improvement.

**More efforts are needed to avoid vicious cycles which could reinforce existing inequalities between children from disadvantaged and advantaged backgrounds.** At present, the disadvantaged are less likely than the advantaged to use childcare services. While childcare choices are influenced by factors ranging from affordability and availability to proximity, opening hours, quality, preferences and social norms, the data analysed in this Chapter show that lack of affordability is the main reason for not making more use of formal childcare. High childcare costs for low-income families, and low progressivity in these costs, are likely to be a major cause of the existing inequality in childcare use. The analysis in this Chapter also shows that reducing childcare costs in countries where these costs are relatively high has a positive effect on the use of childcare, and, allows mothers to work more if they wish to. In countries where these costs are low, other policies focused on increasing availability might work better in enhancing childcare use and employment of mothers.

**Education and training remain very important in the European Social Model.** Expenditure on education and training has continued to grow over the last decade in absolute terms, although less than GDP. There is a statistically significant relationship between higher educational attainment levels on the one hand, and higher employment likelihood and higher salaries on the other. Unsurprisingly, work experience during studies has an analogous (if smaller) effect on the probability of a student becoming employed. This probability is stronger if the work experience is paid. These relationships are linked with the transformation affecting European labour markets, which increases the demand for highly qualified and experienced individuals. Thus further investment in education and training systems is recommended. Yet a signalling effect is likely to play a role in wages and employment

differentials, and across Member States there are signs of overqualification. Moreover, tertiary qualification attainments are significantly correlated across generations, which raises the issue of public investment in education and training having a 'Matthew effect'.

**Adult education training is increasing in EU, a positive sign likely to be linked with the spread of upskilling and reskilling policies.** However, this increase is primarily driven by non-formal training, whereas formal training is reported to have higher positive outcomes in terms of better performance, salaries, tasks, promotion and the chances of finding a new job.

**An increase in formal long-term care can lead to advantages both for carers and for the state.** Formal long-term care reduces burdens on family or informal carers, allowing them to stay in paid employment, and so increases tax revenues. Paid carers make social contributions, thereby supporting the financial sustainability of social protection systems, while giving these workers access to insurance-based benefits and pension entitlements. Better data and indicators on this important policy area would allow further investigations and, ultimately, better policies.

**Access to affordable and adequate housing is an important factor enabling Europeans to fulfil their potential in the labour market.** There are concerns that housing is becoming less affordable, due to dynamic house prices, particularly in capital cities, which are major centres of productivity. This may limit opportunities for workers, particularly at the start of their careers. Very high housing costs may also prevent some households from investing in skills or making use of childcare. Affordability of housing costs has generally improved in recent years. However, there remain many Europeans who face difficulties in meeting the monthly cost of accommodation. These include in particular tenants (both on the private market and paying reduced rent) and single persons, particularly single parents. Likewise, severe housing deprivation is generally declining in Europe, but specific groups remain at high risk (including tenants in the private rented sector). The increase in homelessness (Chapter 1) that has been observed in many countries points to severe forms of exclusion. Many Member States provide extensive support for homeowners, but there may be scope to further developing policies for more vulnerable groups.



## Annex 1: Social impact investment

Social impact investment<sup>(418)</sup> is the use of capital flows to generate both social and financial returns, offering a way to help social organisations access suitable financing and improve their ability to deliver impact. In other words, social impact investment refers to «investments made into companies, organisations, and funds with the intention to generate a measurable, beneficial social or environmental impact alongside a financial return».

Decisions on capital investments typically take two variables into consideration: risk and financial return on investment. When the risk increases, the return required by investors generally increases as well. Social impact investment adds a new variable into the investment decisions: impact, defined as the creation of value for society. The correlation between variables is not necessarily negative – the impact and the financial returns are not mutually exclusive.

Social impact investment can be used to finance the day-to-day delivery of a specific programme, such as upfront funding to deliver an outcomes-based contract, or it can be used to help enterprises realise their mission over the long term by helping them develop their strategy and service model and expand their operations. Since the inception of the concept in 2007, its practice has spread across the globe and the interest has grown at scale. Its growth was accompanied by a decade of evolutions in the field: social impact investment emerged amid other concepts such as sustainable finance, responsible investment, and philanthropy or strategic giving.

Through the involvement of additional capital flows, social impact investment allows distributing the financial and political costs of possible failures of highly innovative social policies or initiatives. Outcome-based contracts tie at least a portion of a contractor's payment, contract extensions or contract renewals to the achievement of specific outcomes that are measurable and predictable. Under these contracts, social service providers need liquidity to operate until they generate revenues. Outcome-based contracts require a focus on the consequences of a given set of activities and outputs. The focus is on the outcome to be achieved and not on the service or good provided. This triggers innovation along the process, changing the set of behavioural incentives and driving efficiency and effectiveness.

The most representative practices of European social impact investment differ significantly from the global perspective. The latter seems to be focused on new strategies in asset identification and creation, as well as the reallocation of capital supply in favour of these

socially impactful investment targets. The European perspective builds on the political and institutional concept of additionality and falls within the scope of the (participatory) re-engineering of public finance and a new generation of social policies.

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<sup>(418)</sup> This Annex provides a summary of the JRC – Science for policy report “Social impact investment in the EU.” by Maduro et al. (2018).

## Annex 2: Euromod simulations of the impact of the reduction of childcare costs on the use of the service and on the mothers' labour supply decisions

The aim of Annex 2 is to provide empirical evidence on how childcare costs affect the usage of formal childcare among children under 3, and the labour supply of mothers. The analysis below shows the impact of a reduction of childcare costs in a selection of countries. Two groups of countries are analysed: a group still far away from the 33% Barcelona target for children below 3 years of age, namely Hungary and Lithuania, and another group who have reached it, Finland and the Netherlands. Despite important cross-country differences, results show that decreasing childcare costs increases the use of childcare and mothers' employment

### A2.1.1. Methodology

To analyse the effect a reduction of childcare costs on the use of childcare and on mothers' labour supply, the microsimulation model EUROMOD and a simplified version of the micro-econometric model is used.<sup>(419)</sup> In the micro-econometric model mothers of children under 3 years old are allowed to choose from a set of childcare alternatives and a set of labour supply alternatives. The three childcare alternatives refer to formal childcare, informal childcare (which is care provided by grandparents or other family members and is free of payment), and maternal care. In the simulations formal childcare corresponds to subsidised childcare, although in general formal childcare includes both subsidised and non-subsidised facilities. For all countries full-time childcare attendance (30 hours/week) is simulated, except for the Netherlands (20 hours/week).<sup>(420)</sup> Rationing of childcare availability and grandparents is not modelled due to the lack of information in the data. The labour supply alternatives consist of a non-market alternative, part-time and full-time working arrangements. Additionally, mothers receiving a self-employment income, pension or disability benefits are dropped to exclude other factors such as disability status, early retirement, entrepreneurship and professional choice that can affect labour supply decisions of mothers but cannot be controlled in the modelling.

The disposable income and the childcare costs faced by the selected households at each alternative of the choice set are derived using EUROMOD. EUROMOD is a multi-country European wide tax-benefit microsimulation model that simulates tax liabilities (direct taxes and social insurance contributions) and cash benefit entitlements for the household

populations of EU Member States in a comparable way across countries on the basis of the tax-benefit rules in place and information available in the underlying datasets. Market incomes and income components which are not simulated due to lack of information (on e.g. previous employment and contribution history) are taken directly from the data. Simulations are based on 2015 policy rules and 2016 EU-SILC microdata (referring to 2015 incomes). For the simulation of parental fees for subsidised childcare a EUROMOD extension was added to the model. Childcare fees are estimated according to the rules in place in each country taking into account the family characteristics and financial situation. For Finland and the Netherlands income related parental fees are simulated, while for Hungary and Lithuania a daily cost including for example food, is simulated.<sup>(421)</sup> For the Netherlands net childcare costs are simulated, taking into account the childcare allowance for children in subsidised childcare slots.

### A2.1.2. Results

The results show the effect of a reduction of the childcare costs by 50% on the use of formal childcare for four countries: Hungary, Lithuania, Finland and Netherlands. *Table A2.1* and *Table A2.2* present the change in childcare use and mothers' labour supply (respectively) for the unrestricted sample and the restricted sample. The restricted sample is limited to mothers whose partner works full-time. This selection shows the pure mothers' labour supply behaviour, while considering the behaviour of the father as exogenous.<sup>(422)</sup>

*Table A2.1* shows the share of formal, informal and maternal care for the restricted and unrestricted sample of mothers in the baseline and the reform scenario (the reduction in childcare costs by 50%). The unrestricted sample refers to all selected mothers (under the above-mentioned rules). Restricted sample refers to the selected mothers whose partner is working full time. Both the use of childcare and the mothers' labour supply is higher in Finland and the Netherlands compared to Hungary and Lithuania. Finland and the Netherlands are also characterised by relatively higher childcare costs and a higher availability of childcare services. In general, the use of formal childcare is slightly higher in the restricted sample than in the unrestricted sample. A reduction of

<sup>(419)</sup> As described in Figari and Narazani (2017).

<sup>(420)</sup> The Netherlands has a very low average number of hours of childcare use in a usual week (below 20) compared to the EU average. Therefore, it is unrealistic to assume full-time childcare attendance.

<sup>(421)</sup> For more information, see Hufkens and Verbist (2017); Hufkens et al. (2016).

<sup>(422)</sup> Endogenising the father's labour supply would imply a larger choice set which complicates the estimation procedure but without significant improvement given that the majority of fathers is in full time employment.

Table A2.1

The average working hours and labour participation in the unrestricted (on the left) and restricted (on the right) sample

Finland				Finland			
	Baseline	Reform	Diff		Baseline	Reform	Diff
Mother care	0.187	0.154	-0.179	Mother care	0.178	0.134	-0.044
Formal care	0.450	0.548	0.098	Formal care	0.467	0.598	0.132
Informal care	0.363	0.299	-0.065	Informal care	0.355	0.268	-0.088

Netherlands				Netherlands			
	Baseline	Reform	Diff		Baseline	Reform	Diff
Mother care	0.079	0.070	-0.009	Mother care	0.068	0.066	-0.002
Formal care	0.529	0.590	0.061	Formal care	0.535	0.551	0.016
Informal care	0.392	0.340	-0.051	Informal care	0.397	0.383	-0.014

Lithuania				Lithuania			
	Baseline	Reform	Diff		Baseline	Reform	Diff
Mother care	0.365	0.359	-0.006	Mother care	n/a	n/a	n/a
Formal care	0.278	0.290	0.012	Formal care	n/a	n/a	n/a
Informal care	0.357	0.350	-0.006	Informal care	n/a	n/a	n/a

Hungary				Hungary			
	Baseline	Reform	Diff		Baseline	Reform	Diff
Mother care	0.439	0.437	-0.002	Mother care	0.429	0.427	-0.002
Formal care	0.241	0.245	0.004	Formal care	0.274	0.278	0.004
Informal care	0.320	0.318	-0.002	Informal care	0.296	0.294	-0.002

Source: European Commission, Joint Research Centre, based on the EUROMOD model.

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childcare cost by 50% triggers an increase in the use of formal childcare for countries where the childcare costs are relatively high (Finland and Netherlands), while in countries with relatively low childcare cost (Hungary and Lithuania) the increase in formal childcare use is very small.

The reduction of childcare costs also impacts the labour supply decisions of mothers. The table below shows the average weekly working hours and labour participation rates of the restricted and the unrestricted sample of mothers. A reduction of

childcare costs by 50% leads to a significant increase in average working hours and participation rates in Netherlands and Finland but a small effect for Lithuania and Hungary. This increase ranges from around 1.7% (unrestricted sample) in the Netherlands to 3.3% (unrestricted sample) in Finland. However, these countries start from different labour market situations, and different compositions of part-time and full-time workforce. Although participation rates are around 80% both in Finland and the Netherlands, the average working hours are higher in Finland than in the Netherlands, a country where women are more

Table A2.2

The average working hours and labour participation in the unrestricted (on the left) and restricted (on the right) sample.

Finland					Netherlands				
All sample			Restricted		All sample			Restricted	
Hours	% Participation		Hours	% Participation	Hours	% Participation		Hours	% Participation
Baseline	26.09	0.77	27.33	0.79	Baseline	22.22	0.87	22.87	0.89
Reform	26.96	0.80	28.19	0.83	Reform	22.60	0.89	22.98	0.89
% change	3.32%	4.26%	3.17%	4.78%	% change	1.71%	1.34%	0.51%	0.21%

Lithuania					Hungary				
All sample			Restricted		All sample			Restricted (N=263)	
Hours	% Participation		Hours	% Participation	Hours	% Participation		Hours	% Participation
Baseline	18.42	0.49	n/a	n/a	Baseline	6.88	0.19	7.02	0.20
Reform	18.48	0.49	n/a	n/a	Reform	6.94	0.19	7.07	0.20
% change	0.34%	0.39%	n/a	n/a	% change	0.90%	0.89%	0.78%	0.76%

Source: European Commission, Joint Research Centre, based on the EUROMOD model.

[Click here to download table.](#)

likely to work part-time. In Hungary and Lithuania the change in supplied labour in absolute terms is less than 1 pp.

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# Towards a greener future: employment and social impacts of climate change policies

## 1. INTRODUCTION AND MAIN CHALLENGES <sup>(423)</sup>

**Environmental sustainability is one of the main dimensions of sustainable development and, for many, is the essence of sustainability.** It plays an important role in research and in raising awareness of sustainability as a whole, and it is often used as the primary yardstick for assessing and ranking sustainability performance overall. While the environmental dimension is a broad concept, this chapter focuses on the main linkages, complementarities and trade-offs between climate change policies and social sustainability including the role of social policies to ensure just transition to climate-neutral economy.

**Environmental and social sustainability are interlinked, as environmental and climate change risks and related economic activities and policy measures affect regions, sectors, workers and population groups in different ways.** While job gains can be expected across many sectors and regions, adverse employment impacts will be concentrated in regions depending on sectors that will have to undergo extensive transformations to enhance environmental protection and achieve climate neutrality. <sup>(424)</sup> Through its impact on natural

ecosystems, water quality and quantity and infrastructure, climate change has a particularly significant impact on agriculture, fisheries and food production, as well as on global transport routes and activities. In November 2018, the Commission put forward a strategic long-term vision for a competitive, prosperous and climate neutral economy by 2050. This is a necessary contribution of the EU to the Paris Climate Agreement objectives.

**Attention to social and environmental inequalities and distributional impacts of climate action is important for ensuring that the burden is fairly distributed across individuals, groups, sectors and regions.** <sup>(425)</sup> The right to a safe and healthy environment is a crucial element of well-being. However, access to natural resources and the impacts of climate change and pollution (air, water, noise, chemicals) are generally distributed unequally and are likely to affect low-skilled workers and vulnerable, low-income households more than others. These population groups may also be disproportionately subject to the effects of more frequent extreme weather events, partly because they have fewer resources with which to take precautionary or evasion measures. Furthermore, though these groups probably contribute less to overall emissions, they may be more affected by the direct or indirect costs of climate action, such as environmental taxes when these are regressive, rising energy bills, changing mobility costs and new product standards or targeted regulatory bans of certain goods, products or technologies as well as harmful consumption patterns.

<sup>(423)</sup> This chapter was written by Míde Griffin, Endre György, Katarina Jakšić and Frank Siebern-Thomas, with contributions from Stefano Filauro and Tim van Rie as well as Eurofound, Cambridge Econometrics, the Social Situation Monitor and the Joint Research Centre unit on Economics of Climate Change, Energy and Transport.

<sup>(424)</sup> i.e. a level of greenhouse gas emission that does not surpass the absorption level, sometimes also referred to as net-zero GHG emissions.

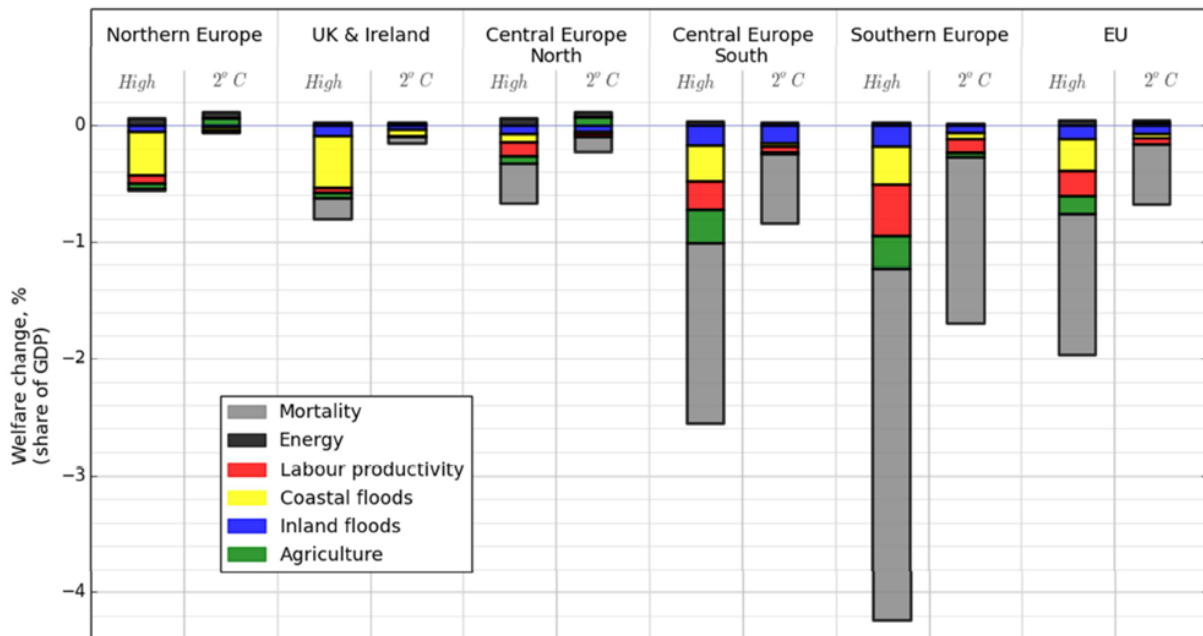
<sup>(425)</sup> For a broader discussion of the interplay between socio-economic and environmental inequalities, see in particular Alvaredo et al. (2019).



Chart 5.1

**Climate inaction would have significant socio-economic costs for Europe, particularly southern Europe**

Welfare losses (% of GDP) for two climate inaction scenarios (high warming scenario and 2 °C scenario)



Source: European Commission, PESETA III studies, Joint Research Centre, Sevilla

[Click here to download chart.](#)

**Inaction on environmental degradation and climate change has significant economic and social costs.** In its PESETA III study,<sup>(426)</sup> the Commission provides a detailed assessment of six specific climate impacts in Europe for two scenarios – a high-warming scenario and a 2 degrees scenario. The impacts are significant, and risk annual welfare losses of up to 2% of GDP in the EU, and of more than 4% of GDP in southern Europe. The strongest impacts are on mortality, coastal floods and labour productivity, and Southern Europe is most affected (Chart 5.1). Similarly, for the US, the costs of past extreme events<sup>(427)</sup> since 1980 are estimated at above \$1.1 trillion. Future economy-wide direct damages, interpreted as costs of inaction, are estimated to reach up to 1.2% of GDP per year per 1°C, of global warming and up to around 20% of total income in the regions most affected, thereby increasing inequalities between regions and potentially social conflict.<sup>(428)</sup>

**Since there are evident synergies between environmental sustainability and economic performance, tackling climate change can be an opportunity for EU businesses.**<sup>(429)</sup> By greening

production and consumption patterns and promoting green jobs<sup>(430)</sup>, climate action not only has an impact on labour markets, job quality and health and safety at the workplace<sup>(431)</sup>, but also fosters innovation and productivity and enhances opportunities for green, climate-smart growth.<sup>(432)</sup> Putting a price on environmental harm such as waste and pollution, either by environmental taxation or by a cap-and-trade system such as the Emissions Trading System (ETS), can help in this regard. Such measures can help internalise social and environmental externalities, prevent ‘pollution havens’, encourage reallocation of resources and re-orient global value chains towards low energy-intensive and low carbon production. The revenue generated can contribute to the financing of social policies and of targeted, growth-enhancing social investments, e.g. education and reskilling, or it can fund temporary support for the transition to new activities and other accompanying or compensatory measures.<sup>(433)</sup>

**Broad social acceptance of environmental protection and climate action measures is vital for their effective implementation and for**

<sup>(426)</sup> European Commission (2018g).<sup>(427)</sup> such as “simultaneous heat and drought, wildfires associated with hot and dry conditions, or flooding associated with high precipitation on top of snow or waterlogged ground” (USGCRP (2018))<sup>(428)</sup> See USGCRP (2018).<sup>(429)</sup> “There can be no greater return on investment than a clean planet, reduced energy import dependency, sustainable economic growth and an increased uptake of clean energy and efficiency solutions. European companies are among the leaders in the world as regards clean tech. This makes climate

change not only a challenge, but also a business opportunity if addressed in the right manner.” (European Commission, 2019c).

<sup>(430)</sup> See in particular Cambridge Econometrics et al. (2011), Cedefop (2010, 2013), European Commission (2011, 2014), OECD (2010), and OECD and Cedefop (2014).<sup>(431)</sup> See in particular Eurofound (2013), EU-OSHA (2011) and ILO (2018a, 2018b, 2018c).<sup>(432)</sup> See e.g. Dechezleprêtre and Sato (2018), European Commission (2012a, 2014), Koźłuki and Timiliotis (2016), OECD (2012a), Stern (2007, 2015) and World Bank (2014).<sup>(433)</sup> See e.g. Abdullah and Morley (2014), Chancel (2017), Chancel and Voituriez (2015), Dechezleprêtre et al. (2018), Vandyck (2013), and Vandyck and Van Regemorter (2014).

**making progress towards the Sustainable Development Goals.** Societal trends have a strong impact on the environment, through changing preferences and consumption choices, including e.g. dietary changes or changes in travel behaviour. Social networks and social movements such as the school climate strikers contribute to raising awareness, changing perceptions and re-framing political and public debates. The debate is also intensifying among academics and policy makers, recognising the need to improve the understanding and modelling of social and distributional aspects of environmental degradation and climate change and related policy action; to take better account of social concerns and social acceptance; and to design and implement policies to promote necessary behavioural changes, including mitigating measures or compensatory actions where relevant. These elements are recognised in the Commission's Reflection Paper 'Towards a Sustainable Europe by 2030' putting forward three scenarios for the discussion on how to implement the SDGs.

**This environmental-social intersection is at the heart of the Commission's proposed strategic long-term vision** for a prosperous, modern, competitive and climate-neutral economy by 2050, 'A Clean Planet for All'.<sup>(434)</sup> The strategy shows how Europe can lead the way to climate neutrality by investing in realistic technological solutions, by empowering citizens and aligning actions in key areas such as industrial policy, finance or research, while ensuring social fairness for a just transition. The strategy covers many EU policies; it is in line with the Paris Agreement objective to keep the global temperature increase to well below 2°C and to pursue efforts to keep it to 1.5°C.

**However, the intended transition to an environmentally sustainable, climate-neutral economy is not socially inclusive by default.** Employment and social policies therefore are key to supporting a just transition. The Commission Communication mentioned above recognises that the transition is likely to have significant employment and social impacts and could result in regional disparities if not well managed. It also recognises the vital role that social acceptance and social policy will play in the success of any climate action, notably for making growth green and inclusive at the same time.<sup>(435)</sup> It calls on the EU and Member States to take the social implications of the transition into account from the outset, and to deploy all relevant policies to mitigate the risks, particularly for those on low incomes. It

further stipulates that social issues are generally better addressed through social policy and welfare systems, the financing of which could benefit from tax shifts and revenue recycling.<sup>(436)</sup> The European Council discussed the Long Term Strategy on several occasions and the conclusions of the 20-21 June meeting stressed that the transition to a climate-neutral EU should be just and socially balanced, taking into account Member States' national circumstances.

**The EU budget and employment and social policies, as well as cohesion policies, have a key role to play in this context.**<sup>(437)</sup> Support for a just transition can be provided in accordance with the principles of the European Pillar of Social Rights, notably to support transitions, adequate social protection systems and inclusive education, training and lifelong learning. Social partners need to be involved in the design and implementation of transition measures. With a budget of EUR 100 billion in the 2020-2027 period, the ESF+ programme will help to ensure that Europeans have the right skills and will be proactive in supporting the most vulnerable in the EU. It will contribute to achieving a greener, climate-neutral Europe through the improvement of education and training systems necessary for the upskilling and reskilling of the workforce, and it will support job creation in sectors related to the environment, climate and energy and the bioeconomy.<sup>(438)</sup>

**This chapter focuses on three aspects of environmental and social sustainability in the EU:** first, the taxonomy and development of green jobs and occupations in the EU economy; secondly, the key findings of recent climate action scenarios on the expected impacts of the transition to a climate-neutral economy on employment, skills, income and task structures at disaggregated levels; and thirdly, energy poverty and the link between climate action, air pollution and human health.

**Building on recent climate action scenarios and related impact assessments, the chapter presents an additional focus on social outcomes.** It does so by presenting additional detail on the impacts of the transition to a climate-neutral economy by 2050 on employment, skills and tasks and by focussing on distributional impacts and links to income and poverty. It also highlights synergies between environmental and social goals, for example in relation to job creation, skills acquisition, energy efficiency and reduced health expenditure.

<sup>(434)</sup> "Making the transformation towards a net-zero greenhouse gas economy happen is not just about technologies and jobs. It is about people and their daily lives, about the way Europeans work, transport themselves and live together. Moving towards a net-zero greenhouse gas economy can only be successful with citizens that embrace change, get engaged and experience it as beneficial for their lives and that of their children." (European Commission, 2018a).

<sup>(435)</sup> See also Global Green Growth Initiative (2018), Jha et al. (2018) and OECD (2017 a,b).

<sup>(436)</sup> European Commission (2018a).

<sup>(437)</sup> See in particular European Commission (2005), Eurofound (2013), ILO (2016) and OECD (2011, 2012b).

<sup>(438)</sup> European Commission (2018c). For additional funds that are relevant in this regard, see the conclusions and discussions of policy choices in section 6.

## 2. TOWARDS A TAXONOMY OF GREEN JOBS AND OCCUPATIONS

**The labour market potential of green jobs and eco-industries has long been recognised.** In 2009, the European Commission <sup>(439)</sup> emphasised the scope for creation of green jobs and the greening of existing jobs. However, due to the challenges surrounding the definition and measurement of such jobs the estimates of the scale of green jobs varied greatly, from 2.4 to 36.4 million in 2000. The definition of green jobs has evolved, from initially focussing only on direct jobs <sup>(440)</sup> to introducing indirect jobs, and subsequently a broader understanding of varying degrees of "greenness" and a spectrum of green jobs <sup>(441)</sup>, covering occupations with green(ing) tasks and/or jobs in circular economy value chains more generally. Irrespective of the definition, the overall net employment effect of the transition to a green economy as assessed by the European Commission was expected to be neutral or slightly positive, at least in the long term. <sup>(442)</sup>

**In its 2014 Communication on the Green Employment Initiative, the European Commission put forward a framework for a job-rich recovery.** This was in response to the job creation potential of the green economy, which had been well anticipated notably in the 2013 and 2014 Annual Growth Surveys (see *Box 5.1* for further detail on green and inclusive growth). There has in fact been considerable, above average job creation in the environmental goods and services sector (EGSS) since 2000, including during the economic crisis <sup>(443)</sup>, highlighting the resilience of green jobs. In 2016, there were 4.5 million people (full-time equivalent) employed in the environmental economy in the EU, up from 3.2 million in 2000. To exploit the job potential in these areas more fully during the recovery, the Communication emphasised the need to bridge skill gaps, anticipate change, secure

transitions and promote mobility as well as support further job creation. It also recommended improving data quality and recognised the need to address existing bottlenecks and challenges, for example: regions with energy-intensive, high-carbon industries and poor economic diversification could suffer; older and low-skilled workers would be more vulnerable to change; and job quality and health and safety should not be neglected in the transition.

**While the transition to a greener, circular and climate-neutral economy is expected to have a slightly positive impact on total employment levels, its sector-specific employment and skills impact will be significant** (e.g. in the construction and renewable energy sectors). <sup>(444)</sup> The roll-out of increasingly ambitious climate action will coincide with other megatrends, such as automation and digitalisation that are likely to have major impacts on future skill needs. Preparing workers for new occupations and tasks in a green economy is important. While these changes are expected to affect a minority of European workers, they will be substantial for specific occupations and sectors. <sup>(445)</sup> In general, developing specific new green skills may be less important for the overall transition to a greener economy than the continuous improvement of existing transversal and specific skills, including digital skills. <sup>(446)</sup>

**Measures to address the skills challenge can help to harness the employment potential of the green economy for the benefit of all skill levels.** The impacts of greening across the skills and income distribution will be balanced to some degree.. Initially high-skilled labour may benefit more than lower-skilled labour but as the green economy develops, many traditionally lower-skilled sectors will see increased demand too, notably waste management and sectors related to the circular economy, making it possible to harness the employment potential of the green economy in a way that could benefit all skill levels in society. <sup>(447)</sup> In turn, these sectors can be expected to also employ more sophisticated technologies and become more capital intensive, thus demanding higher skills.

<sup>(439)</sup> European Commission (2009).

<sup>(440)</sup> See in particular the European Commission/Eurostat statistics on employment in the environmental goods and services (EGSS) sector which comprises two broad groups of activities and products: (1) environmental protection, i.e. activities whose primary purpose is the prevention, reduction and elimination of pollution and any other degradation of the environment; and (2) resource management, i.e. activities whose primary purpose is preserving and maintaining the stock of natural resources and hence safeguarding against depletion. Latest data are available for 2016 (released in June 2019). For further detail, see Eurostat (2018). For a definition of and for monitoring green jobs at global level, see also ILO (2015) and <http://www.ilo.org/greenjobs>.

<sup>(441)</sup> See in particular Bowen et al. (2018), Eurofound (2012, 2013), OECD and Cedefop (2014) and Vona et al. (2017), as well as Rivkin et al. (2009) and UNEP/ILO/IOE/ITUC (2008). Full detail on the broad taxonomy of green economy sectors and occupational categories developed by the US Department of Labor, as well as projections on the expected evolution of green skills occupations, are available at the O-NET Resource Center under <http://www.onetcenter.org/initiatives.html#green-occupations>.

<sup>(442)</sup> European Commission (2016b).

<sup>(443)</sup> European Commission (2014).

<sup>(444)</sup> See section 3.

<sup>(445)</sup> See e.g. OECD and Cedefop (2014) and Cedefop and OECD (2015).

<sup>(446)</sup> See also European Commission (2012b). Transversal skills are not specifically related to a particular job, task, or discipline, while specific skills are.

<sup>(447)</sup> European Commission (2012a)

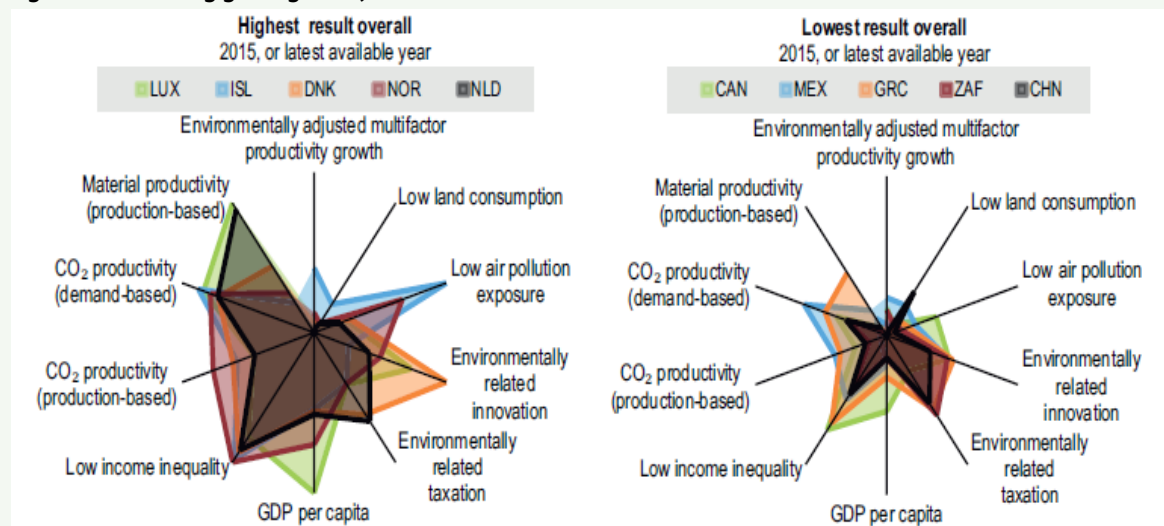
## Box 5.1: Measuring and monitoring green and inclusive growth

**Several measurement initiatives for green growth have been developed in recent years.** The Global Green Growth Institute is currently developing the Green Growth Potential Assessment and the Green Growth Performance Measurement, which offer country-specific indicators and simulation tools to help highlight the potential benefits of green policies and investments. Its Green Growth Index is based on more than 35 indicators that represent green growth dimensions including socioeconomic resilience, green economic opportunities and social inclusion. Meanwhile the Global Green Economy Index <sup>(1)</sup> measures the green economy performance of 130 countries using quantitative and qualitative indicators on four key dimensions. It is used to benchmark performance, communicate areas that need improvement, and help diverse stakeholder promote progress in these areas.

**The OECD Green Growth Indicators facilitate better monitoring of green growth. <sup>(2)</sup>** They enable the monitoring of progress towards four primary objectives: "establishing a low-carbon, resource-efficient economy; maintaining the natural asset base; improving people's quality of life; and implementing appropriate policy to realise the economic opportunities of green growth". <sup>(3)</sup> Indicators that reflect how environmental conditions and risks interact with people's well-being are included. These also demonstrate the role of amenities in supporting well-being and show the extent to which income growth is matched by improvements to well-being (or not). Such indicators, along with other well-being indicators such as those of the OECD Better Life Index <sup>(4)</sup> are crucial to understanding the interplay between economic, social and environmental sustainability. OECD analysis indicates that while several EU countries are global leaders at the forefront of the transition towards green growth (including Luxembourg, Denmark and the Netherlands), others lag behind, notably Greece, among the five weakest performers. These measures account for multiple dimensions of green growth, but often even high performers make progress on one aspect while standing still on others.

**Several EU initiatives exist to support green growth.** In the European Semester exercise, annexes to Country Reports include a green growth table containing several intensity indicators reflecting the relative decoupling of environmental pressure from GDP growth. A monitoring framework has been developed in the context of the circular economy action plan <sup>(5)</sup> as well as key indicators for each dimension of the Energy Union for both the EU and each Member State. <sup>(6)</sup>

**Figure 1: Monitoring green growth, relative to the leaders**



Source: OECD 2017

<sup>(1)</sup> <http://dualcitizeninc.com/global-green-economy-index/>

<sup>(2)</sup> <http://www.oecd.org/greengrowth/green-growth-indicators/>

<sup>(3)</sup> OECD (2017a)

<sup>(4)</sup> OECD (2017b)

<sup>(5)</sup> COM/2018/029, <https://eur-lex.europa.eu/legal-content/EN/TXT/?qid=1516265440535&uri=COM:2018:29:FIN>

<sup>(6)</sup> [https://ec.europa.eu/commission/sites/beta-political/files/swd-energy-union-key-indicators\\_en.pdf](https://ec.europa.eu/commission/sites/beta-political/files/swd-energy-union-key-indicators_en.pdf)



## 2.1. Broadening the scope of the green economy

**The increased importance of the service sector and its lower carbon intensity can help to drive the EU towards a low-carbon future.** The EU has been experiencing a structural shift to the service economy, with lower value added and employment shares of traditional 'brown' sectors and higher shares of employment in intrinsically 'green' sectors. Employment and value generation are taking place increasingly in business sectors that are relatively low in carbon emissions and material inputs (see *Chart 5.2*).

**Most of the employment in the EU is not in carbon intensive sectors** (*Chart 5.2*). More than 70% of the workforce works in sectors which produce less than 10% of all CO<sub>2</sub> emissions. Construction, wholesale and retail trade and other services sectors together create more than 70% of gross value added and employ more than 75% of the workforce, while producing less than 12% of all CO<sub>2</sub> emissions. Employment also grows most strongly in these sectors. On the other hand, electricity production, transport <sup>(448)</sup>, manufacturing, agriculture and mining sectors together produce close to 90% of all CO<sub>2</sub> emissions in the EU, while they account for 25% of gross value added and less than 25% of employment. If well managed, the shift towards a climate-neutral economy can provide employment opportunities for all skill levels.

**Progress is not automatic, and targeted policies are needed to accompany, steer and accelerate the ongoing process of decarbonisation.** Although the increasing share of services in the economy contributes to reducing the carbon intensity of output, parallel action is needed to decarbonise the energy-intensive activities. Moreover, some service sectors rely on heavy use of electricity (especially those associated with fintech, data servers or block chain technologies). <sup>(449)</sup> As long as electricity is produced through carbon-rich methods, the growing energy demands in these sectors remain problematic and hence shifts towards sustainable energy production are necessary. Moreover, shifts towards increasingly integrated global value chains bring with them increased demands for transport of intermediate and final goods. This can significantly increase the

ecological footprint of final goods production. <sup>(450)</sup> Furthermore, given the global nature of the greenhouse effect, the risk of the most polluting activities being outsourced to other parts of the world needs to be addressed. Lastly, with workers' and consumers' behavioural responses to shifting rules and opportunities, there are potentially important second-round effects of the transition towards a low-carbon economy. In this perspective, 'greening the economy' does not simply mean doing the same things with lower CO<sub>2</sub> emissions and material inputs, but doing fundamentally different things, with knock-on effects on incentives and wages and economic policymaking.

**Circular economy policies and new business and work organisation models are related to climate action and have labour market implications.** New forms of work organisation that allow for more flexible, telework can reduce the need for commuting and thus have an impact on traffic and related emissions. Moreover, processes that make the economy increasingly circular through more efficient use of raw materials contribute to total factor productivity improvements and hence to economic growth and job creation. It has been shown that a set of mainly technological changes to improve resource efficiency in five key sectors (food, motor vehicles, construction, electronics and waste management) can potentially create an additional 700,000 jobs in the EU by 2030, compared with a business-as-usual scenario. <sup>(451)</sup> This favourable impact is mainly driven by job creation in the waste management sector, but an overall shift from capital-intensive towards more labour-intensive activities also plays a role. However, some of the emerging activities could be automated.

**A narrow definition of 'green jobs' leads to underestimating the potential labour market impact of the transition towards a climate-neutral economy.** Based on the Eurostat definition, there are currently (2016) 4.5 million jobs in the EU in the so-called environmental goods and services sectors, up from 3.2 million in 2000. These include jobs in areas such as waste management, environmental protection and energy preservation, usually jobs in easily-identifiable industries that are clearly shaped by environmental regulation. However, focusing on existing jobs in existing industries (such as the environmental goods and services sectors) risks missing larger and more diffuse developments associated with low-carbon and environmentally sustainable activities in the economy and the labour

<sup>(448)</sup> Not all sub-sectors contribute equally (e.g. rail transport is far less polluting than some other forms of transport).

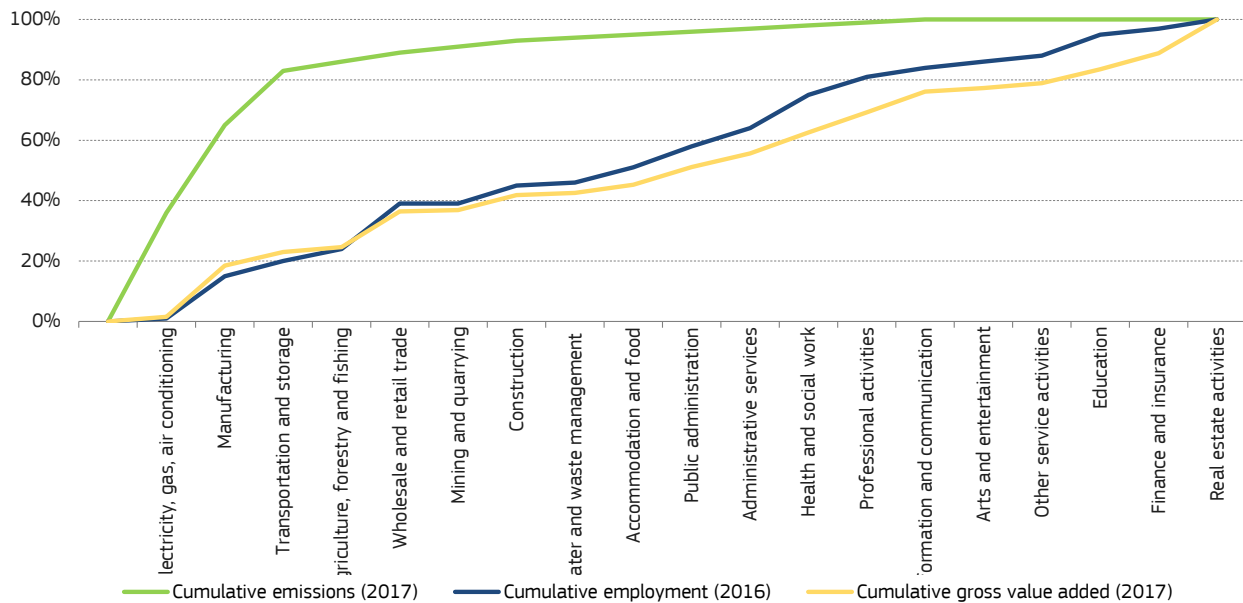
<sup>(449)</sup> See in particular International Energy Agency and OECD (2017), as well as Krause and Tolaymat (2018) and Vranken (2017). According to estimates, the annual energy consumption of Bitcoin could be at the 43<sup>rd</sup> place of country rankings, just after Switzerland and before Colombia, hence exceeding the total energy consumption levels of 159 countries in the world. Its consumption would be equivalent to e.g. 20% of the total energy consumption of Italy, or 45% of that of the Netherlands. For a critical discussion of these estimates, see e.g. Digiconomist (2018).

<sup>(450)</sup> See e.g. Timmer et al. (2014) who show, based on a decomposition of value chains using the World Input-Output Database (WIOD), the increasing fragmentation of value chains e.g. in car manufacturing where the proportion of foreign components in cars increased from 21% in 1995 to 34% in 2008. This increase is likely to be associated with an increase in CO<sub>2</sub> emissions, given the repeated and long-haul transport of intermediate goods involved. For a specific example of the importance of intra-EU value chain integration, see also <http://www.theguardian.com/business/2017/mar/03/brexit-uk-car-industry-mini-britain-eu>

<sup>(451)</sup> See in particular European Commission (2018e).



Chart 5.2

**More than 70% of jobs are in sectors that emit less and grow faster**CO<sub>2</sub> emissions, employment and Gross Value Added (GVA) across industries in the EU, 2016-17

Note: Cumulative employment, emissions and GVA in % of total, with sectors (NACE 08) ordered by decreasing share of CO<sub>2</sub> emissions.

Source: Eurostat, and calculations by Bowen and Hancké (forthcoming).

[Click here to download chart.](#)

market, and ignores significant changes in occupational profiles, task structures and skill requirements.

**For a better assessment of the potential and impact on jobs of the transition towards the green economy, broader typologies of green(able) activities need to be considered.** This has been recognised in particular in the European Commission's recent action plan on financing sustainable growth.<sup>(452)</sup> Under the plan, the EU Technical Expert Group on Sustainable Finance presented a Technical Report setting out the basis for an EU Taxonomy for sustainable activities.<sup>(453)</sup> The Taxonomy considers three kinds of activities that can make a substantial contribution to climate change mitigation. These are:

- Activities that are already low carbon (e.g. zero emissions transport);

- Activities that contribute to a transition (e.g. cars with emissions below 50g CO<sub>2</sub>/kWh);
- Activities that enable those above (e.g. manufacture of wind turbines).
- The suggested taxonomy will be subject to stakeholder consultation and further negotiation with the EU legislators.

## 2.2. The potential of green(able) jobs in the EU

**In this section, we explore a taxonomy of 'greenable' jobs in the EU, based on the taxonomy proposed for the US under the O\*NET programme.** Such a taxonomy could help to identify the potential for 'greening' activities or tasks within existing jobs, their evolution over time and the scope for handling the distributive costs of the transition through job redesign, retraining, labour reallocation and wage formation. The taxonomy is based on a broad definition of greenable jobs as all jobs/occupations that will be affected by greening, i.e. reducing fossil fuel usage and addressing environmental degradation and greenhouse gas emissions, recycling materials, increasing energy efficiency and developing renewable energy sources. The term does not necessarily describe the actual current amount of green jobs today, but rather the potential of 'green and greenable' jobs in the sector or the economy.<sup>(454)</sup>

<sup>(452)</sup> European Commission (2018d). In this Action Plan, 'sustainable finance' is defined as "the process of taking due account of environmental and social considerations in investment decision-making, leading to increased investments in longer-term and sustainable activities. More specifically, environmental considerations refer to climate change mitigation and adaptation, as well as the environment more broadly and related risks (e.g. natural disasters). Social considerations may refer to issues of inequality, inclusiveness, labour relations, investment in human capital and communities. Environmental and social considerations are often intertwined, especially as climate change can exacerbate existing systems of inequality. The governance of public and private institutions, including management structures, employee relations and executive remuneration, plays a fundamental role in ensuring the inclusion of social and environmental considerations in the decision-making process."

<sup>(453)</sup> EU Technical Expert Group on Sustainable Finance (2019).

<sup>(454)</sup> Other definitions have been suggested in the literature. See in particular ILO (2015) and European Commission (2012a).

**In terms of ‘greenness’, the following five categories of jobs can be identified.** <sup>(455)</sup>

**1. Green Increased Demand (Green ID) jobs** are existing jobs that are expected to be in high demand due to greening, but do not require significant changes in tasks, skills or knowledge. These jobs are considered indirectly green because they support green economic activity, but do not involve any specifically green tasks (e.g. bus drivers as key actors in public transport, counted in the occupational category ‘bus drivers, transit and intercity’, as well as e.g. renewable energy engineers, sales and marketing professionals, organic agriculture farmers, etc).

**2. Green Enhanced Skills (Green ES) jobs** are existing jobs that require substantial changes in tasks, skills and knowledge as a result of greening (e.g. electric vehicle electricians, counted in the occupational category ‘automotive speciality technicians’, but also construction workers, architects, urban planners, teachers, human resource professionals, etc).

**3. Green New and Emerging (Green NE) jobs** are unique jobs (as defined by worker requirements) created to meet the new needs of the green economy. (e.g. fuel cell engineers, counted in the occupational category ‘engineering professionals’ as well as e.g. sustainability auditors and sustainable finance experts).

**4. Green Rival Jobs** are non-green jobs that are ‘similar’ to one of the three ‘green’ job categories, either because they involve very similar tasks or (in the case of new employees) because they require

similar skills and other worker attributes. They are likely to be affected by the greening of the economy because of their similarity to existing green occupations (e.g. lorry drivers, industrial engineers in fossil-fuel-based production or investment managers concentrating on non-green economic sectors and criteria other than sustainability).

**5. Other Non-Green Jobs** are non-green jobs that are less likely to be affected (at least in the short term) by the greening of the economy, because of their lack of similarity to green occupations (including perhaps occupations such as notaries, medical doctors and pharmacists or nurses).

**According to this taxonomy, European labour markets have a significant green potential and job growth over the past decade has been green to some extent.** Many occupations have a significant green component, and their number has grown, both in absolute terms and as a proportion of total employment (*Table 5.1*). Across all industries, by 2006 more than 75 million jobs, i.e. around a third of all jobs, were green(able) by the above definition based on the task content of occupations. Since then, net job creation has added more than 6.5 million jobs in the EU (equivalent to 3.2% overall job growth). The rise in the number of green(able) jobs between 2006 and 2016 was more striking, and exceeding 12 million jobs. Consequently, the proportion of jobs (across all categories) that have the potential to be affected by greening increased from 35% to 40% of all jobs.

Table 5.1

**Many occupations have a significant green component**

Green jobs in total in the EU, 2006–2016

	2016		2006	
	Employment (million persons)	Proportion of total employment (%)	Employment (million persons)	Proportion of total employment (%)
<b>Total</b>	219.0	100	212.3	100
<b>Green Increased Demand</b>	51.3	23.4	49.7	23.4
<b>Green Enhanced Skills</b>	43.9	20	34.8	16.3
<b>Green New and Emerging</b>	38.2	17.4	22.9	10.8
<b>Green Total</b>	87.6	40	75.4	35.5

*Note:* Total in millions, and share in % of total employment (15–64) in the respective category. Green Total adjusted to correct for potential ‘double-counting’: the figures for the different categories of green jobs (G-ID, G-ES and G-NE) cannot be added up as some occupations at 3-digit ISCO level contain green jobs (defined in O-NET at a more disaggregated level) of more than one type. For a detailed explanation, see Bowen and Hancké (forthcoming).

*Source:* Eurostat (LFS) and own calculations; based on Bowen and Hancké (forthcoming)  
[Click here to download table.](#)

<sup>(455)</sup> See Bowen et al. (2018) and Bowen and Hancké (forthcoming). Based on a first approximation of the International Standard Classification of Occupations (ISCO) used by Eurostat with the detailed occupational classification proposed by O-NET for the US (which suggests a detailed classification of occupational categories in line with their degree and potential of ‘greenness’), Bowen and Hancké (forthcoming) have developed a taxonomy of the EU labour market that takes into account the ongoing shift towards environmentally sustainable economic activities. They have also provided first estimates of the number of occupations and employment shares that are likely to be affected by the systematic decarbonisation of the economy. The authors note, however, that the correspondence between occupations and sectors in the EU and the US is not perfect, and they make the case for an EU-wide study to verify the assumption that occupations and tasks are structured broadly in the same way in the EU and the US economies.

The taxonomy proposed under the O\*NET programme counts any occupation that will be affected by greening as a greenable job, and defines three subcategories of greenable jobs according to the effect that greening will have on the tasks, skills, and knowledge required for the job, namely changing skill green occupations (e.g. construction workers and farmers); higher demand green occupations (e.g. bus and train drivers and renewable energy engineers); and new green occupations (e.g. energy and sustainability auditors and sustainable finance managers).

The US occupational classification maps directly onto the international classification ISCO used by Eurostat. Therefore, the authors could relate the job titles provided by O\*NET for the US to the job titles used to provide ISCO codes in order to identify green jobs in the EU Labour Force Survey.

**Employment in such green(able) jobs has increased for all categories, but most strongly in occupations requiring new green skills and retraining in response to new activities and technologies.** The largest sub-category of green(able) jobs remain Green Increased Demand (G-ID) jobs, with almost 50 million jobs in 2016, or 22.5% of total employment. The fastest employment growth, however, was recorded in Green Enhanced Skills (G-ES) jobs and in Green New Emerging (G-NE) jobs that saw their employment shares rise to 20% and 17% (up by 4 and 6 pp), respectively. While the largest number of

Table 5.2

**Highest job growth in occupations with new or enhanced green skills**

Employment composition and change in selected sectors in the EU, by green job typology 2016

	Total economy		Total green jobs		G-ID		G-ES		G-NE		Green rival	
Sectors	2016 (in thousands)	share 2016	change 2006-2016	share 2016	change 2006-2016	share 2016	change 2006-2016	share 2016	change 2006-2016	share 2016	change 2006-2016	
Agriculture, forestry and fishing	8737	25.9	4.22	18.64	0.13	8.5	4.89	8.35	4.32	53.17	-8.31	
Mining and quarrying	757	54.36	17.2	33.47	4.46	31.66	12.89	29.56	18.32	41.25	-1.57	
Manufacturing	34157	52.23	-1.36	34.18	-1.53	22.5	-0.29	15.55	1.4	28.91	-6.33	
Energy and water supply and waste managment	3236	58.01	3.78	29.75	1.6	33.87	2.33	29.8	3.27	23.52	-5.69	
Construction	14716	73.32	6.33	58.67	9.52	36.74	-2.88	19.46	9.14	22.74	-8.77	
Wholesale and retail trade and repair	30712	33.87	-0.26	17.62	-3.92	20.11	6.01	14.93	-1.75	45.18	-7.61	
Accommodation and food service activities	10567	21.83	-4.5	17.47	-5.05	5.05	1.8	5.18	-3.71	19.52	0.61	
Transportation, storage and ICT	18180	60.7	9.83	36.63	2.1	30.09	8.49	21.01	11.1	38.41	-2.95	
Financial and insurance activities	6476	36.79	14.85	12.96	1.56	23.69	10.56	42.21	32.81	55.81	2.42	
Professional, scientific, technical and administrative activities	22994	51.55	8.06	25.38	4.37	29.12	1.68	35.48	13.44	35.67	-6.51	
Public administration	15176	45.28	7.92	28.9	2.09	18.07	3.86	22.72	16.99	40.38	-5.96	
Education	16639	15.31	9.32	5.53	1.34	4.28	2.09	6.93	5.12	39.92	-0.79	
Human health and social work activities	23820	21.41	10.03	9.68	3.09	15.62	9.38	11.34	8.01	21.96	-5.47	

Note: See definitions and comments for Table 5.1.

Source: Eurostat and own calculations; based on Bowen and Hancké (forthcoming)

[Click here to download table.](#)

jobs potentially affected by greening can be found in manufacturing and construction sectors, there was important growth in green(able) jobs in some (large) service sectors such as transport and communication, as well as in the financial sector, including carbon credit trading, and in health and social work. However, some of these service sectors, especially the financial sector (above 50%), still record relatively high levels of non-green jobs (e.g. when concentrating on financing activities based on fossil fuels rather than supporting activities promoted in the Sustainable Finance Action Plan).<sup>(456)</sup> Furthermore, the proportion of Green Rival Jobs declined significantly across all industries between 2006 and 2016, suggesting that the divide between green and other jobs is becoming more pronounced.

**Skill requirements and education levels are increasing fast in the green economy, faster than in the economy overall.** Educational attainment levels rose in all categories of green jobs between 2006 and 2016 (*Chart 5.3*), most strongly for green new and emerging jobs (G-NE) of which more than 40% in 2016 were held by people with tertiary education (more than 6pp above the average, and more than 12pp higher than ten years before). The proportion of middle-skilled jobs, while stagnating or even declining in the economy overall<sup>(457)</sup>, increased in all categories of the green economy, particularly for green enhanced skills (G-ES) jobs. The proportion of workers with low skills declined twice as much in green jobs as in the economy overall, and by up to 18pp for green enhanced skills (G-ES) and green new emerging (G-NE) jobs, compared with an average decline of 7pp in the economy overall.

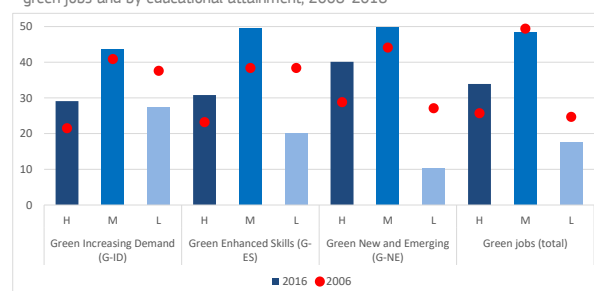
**The sectors supporting a transition towards green jobs are mainly construction, transport, manufacturing and services sectors.** The highest proportions of employment in green(able) jobs are

found in construction (73%), transport (61%) and in manufacturing, energy and waste management and professional service activities (*Table 5.2*). The highest proportions of employment in 'green rival' jobs, on the other hand, are found in the financial sector, wholesale and retail trade and mining, and interestingly also in agriculture. 'Other non-green' jobs, i.e. jobs with tasks and activities very different from those required by green jobs as defined in the taxonomy, are most prevalent in accommodation and food services as well as in education and health and social work. Employment trends differ significantly across these categories: proportions of new and emerging green jobs have increased in all sectors except accommodation and food services, while proportions of green rival jobs have decreased. This suggests that change towards green(er) occupational profiles and activities is underway across the economy, supported by retraining and upskilling. However some high-emission sectors, notably manufacturing, have not seen an increase in green(able) jobs in the period 2006-2016.

Chart 5.3

**Skills requirements increase fast in green(able) jobs**

Proportion of green jobs in the EU as a share of total employment in %, by category of green jobs and by educational attainment, 2006-2016



Note: Shares of employment, total and by qualification level, in a given green job category in % of total employment (15-64), correcting for potential inclusion of certain ISCO occupational categories in more than one of the proposed green job categories. H denotes 'Tertiary education' (ISCED11 levels 5-8), M denotes 'Upper secondary and post-secondary non-tertiary education' (ISCED11 levels 3 and 4) and L denotes 'Less than primary, primary and lower secondary education' (ISCED11 levels 0-2).

Source: Eurostat and own calculations; based on Bowen and Hancké (forthcoming).

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**Change is also driven by the services sector.** Job creation due to increased demand is positive in all service sectors, often leading to relatively high

<sup>(456)</sup> European Commission (2018d) and EU Technical Expert Group on Sustainable Finance (2019).

<sup>(457)</sup> See e.g. European Commission (2018f) and OECD (2019).

Table 5.3

**Need for significant upskilling for new emerging green jobs, particularly in manufacturing, construction and transport**

Skill composition of green new and emerging (G-NE) and non-green jobs in selected sectors in the EU, 2016

Sectors	G-NE			Green rival		
	H	M	L	H	M	L
Agriculture, forestry and fishing	31.6	38.9	29.5	23.7	33.0	43.3
Mining and quarrying	24.1	51.8	24.1	15.4	38.3	46.3
Manufacturing	38.8	52.2	9.0	32.5	46.9	20.6
Energy and water supply and waste management	41.9	49.3	8.8	30.3	49.9	19.9
Construction	40.8	49.5	9.7	25.2	48.5	26.3
Wholesale and retail trade and repair	23.1	65.5	11.4	18.5	52.5	29.0
Accommodation and food service activities	28.1	48.0	23.9	21.3	48.1	30.6
Transportation, storage and ICT	41.8	48.5	9.7	25.1	50.3	24.6
Financial and insurance activities	49.5	46.3	4.2	38.6	52.6	8.8
Professional, scientific, technical and administrative activities	42.8	42.8	14.4	33.8	45.9	20.4
Public administration	41.8	50.5	7.8	27.4	49.2	23.3
Education	55.4	41.0	3.6	42.4	46.0	11.7
Human health and social work activities	44.9	51.8	3.4	35.5	42.8	21.6

Note: See legend and comments for Table 5.1.

Source: Eurostat and own calculations; based on Bowen and Hancké (forthcoming)

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proportions of jobs with green characteristics. More interestingly, the service sectors also create a high number of new jobs with a significant green task component. These could be energy auditors, sustainability officers, compliance managers, carbon credit traders and analysts, sustainable finance investment underwriters, climate change analysts or others.

**There is further scope for greening public services, notably education.** Significant increases in green jobs and tasks, as defined in the taxonomy, took place in some parts of public administration, notably in health and social work. However the education sector, one of the largest civil sectors in public administration, stands out as having a particularly low percentage of jobs potentially affected by greening, and growth in these jobs has also been weak. On the other hand, the sector obviously has a fundamental role in shaping environmental awareness, consumer behaviour and new skills of current and future generations, and encouraging the transition to a green and climate-neutral economy and society overall.

**As regards skills development, there has been relatively less upskilling in the EU's traditional industrial sectors.** In most traditional sectors, such as agriculture, mining, manufacturing, water and energy, the demand for skills has barely increased. Construction is the exception, probably because of increasing demand for renovation and upgrading of the building stock, including insulation and more efficient heating, electricity or plumbing. In addition, the construction sector has undergone a rapid technological change in its production methods, such as pre-fabricated housing and greening of materials. This increased demand mainly results from policy changes and related shifts in relative prices for energy and other natural resources. By contrast, the relative

stability of skill profiles and employment in manufacturing may indicate a need to accelerate adjustments to production processes and training provision in order to respond to current ecological pressures and opportunities.

**Given the pace at which new and emerging green jobs require increasingly high skill levels, people employed in non-green jobs may well need transition support.** Table 5.3 shows the contrast in skill composition between new and emerging green jobs on the one hand and non-green 'green rival' jobs on the other. This contrast is significant for all sectors, notably manufacturing, construction and transport, which have high proportions of workers in low-skilled employment in non-green jobs. This illustrates the skills challenges of the transition to the green economy and the need for significant upskilling in these sectors. The skills profile of new and emerging green jobs, the fastest growing category, can be seen as a proxy for future skill needs in these sectors.

**Going forward, the transition to a green economy is expected to accelerate and to involve large segments of the workforce.** It has to be recognised that there is no dichotomy, and certainly no normative distinction, between green and non-green jobs as defined above. Their task structures and occupational content may differ substantially and warrant a different 'green' or 'non-green' categorisation. Yet they may have an important role to play in supporting the transition to a climate-neutral economy. A case in point is that of teachers, who are vital for educating and training future generations of green jobholders and responsible consumers. This said, the low green growth figures for several large service sectors, such as education and health and social work,



as well as the relative stagnation of the skills profile of large sectors such as manufacturing, suggest that much more can be done. In the UK, for example, government research estimates that 21% of all jobs will see a shifting skill requirement, where "around 10% of workers have skills that could be in more demand, while 10% are more likely to need reskilling".<sup>(458)</sup> If anything, the taxonomy of green jobs and occupations and the related trends presented in this section probably show that such estimates may be too conservative.

**While the transition to the green economy is well underway, novel green occupations are not limited to the production of narrowly-defined environmental goods and services.** In addition, some of the high-emission sectors have not shown any significant increase in green jobs over time. There is considerable potential for new green jobs and greener jobs in all sectors of the economy, and substantial need to speed up adjustment processes, notably in agriculture, manufacturing and public services. Means of achieving this include regulation, financial incentives, training support, active labour market policies and education sector reforms.

### 3. EMPLOYMENT AND SKILLS IN THE TRANSITION TO A CLIMATE-NEUTRAL ECONOMY

**This section projects the main economic and employment impacts of climate action until 2050.** It builds on the most recent available scenarios and simulations, notably the in-depth analysis and modelling of impacts of various pathways at EU level underpinning the Commission's proposal for a long-term vision up to 2050 for a prosperous, modern, competitive and climate neutral economy (European Commission, 2018a, 2018b). It is also based on additional assessments with shorter time horizon, including the impact assessments for related individual initiatives, such as the ETS revision or the review of the Energy Efficiency Directive, which make it possible to identify the impact of specific initiatives by 2030. Moreover, the section discusses the available evidence on the expected impact of climate action on skills and task structures by 2030 (based in particular on Eurofound (2019)).

**Climate action has gained considerable momentum in recent years at a global and EU level.** The Paris Agreement was adopted in December 2015, aiming to keep the rise in global temperature well below 2 degrees Celsius above pre-industrial levels and pursue efforts to keep it at 1.5 degrees Celsius, through Nationally Determined Contributions (NDCs), with enhanced support for developing countries to achieve this. Since then, the European Commission has outlined in its

Communication and associated analyses<sup>(459)</sup> its long-term vision for climate neutrality, highlighting opportunities ahead and the need for a socially just transition to a green economy. Member States also need to prepare National Energy and Climate Plans, a requirement under the Energy Union Governance Regulation. At the Katowice Climate Change Conference (UNFCCC COP 24) of December 2018, 196 countries worked together to agree the Katowice Rulebook, implementing the Paris agreement. Parties agreed to revise and enhance their NDCs and to detail financial support for developing countries and a consensus was found on how to carry out a "global stocktake" and assess progress.

**In the current section, 'climate action' is understood to be the set of policy measures that either disincentivise greenhouse gas emissions or promote investment in low-emission structures or technologies.** The first category of policies are disincentive measures including regulatory standards and price mechanisms (such as the ETS and environmental taxation) that penalise emissions. The second category includes investment projects, subsidies, loans etc. to encourage low-emission methods of producing capital goods (notably buildings and power generation equipment), and promoting research and development in climate-neutral energy generation, energy efficiency and the like. Climate action also needs to be supported by training, reskilling, upskilling and other measures that help to address the need for labour reallocation across sectors, occupations and regions, as well as other social and distributional impacts of climate change.

**Economic, social and employment impacts of climate action arise from an aggregate of policy components, with some interventions having a stimulus effect and others acting as a drag.** First, investment projects, such as the building of energy efficient structures and the refurbishment of existing structures, have a generally positive economic impact.<sup>(460)</sup> However, assumptions about financing and crowding out are crucial i.e. if investments with the sole purpose of improving energy efficiency could only be carried out by redirecting resources from other productive uses, the balance may be negative. Second, with energy as an important input to production, policies that increase energy prices in order to reflect the full environmental and social costs may have a negative impact on the macro-economy in the near term, as well as lead to increases in household expenditure and energy poverty. Third, in the European context, a shift from imported fossil fuels to domestically sourced renewables improves trade balances and creates new employment in the EU. Fourth, developments in the price of capital, triggered by investment policies, can lead to a reallocation of factors of production, including labour, between sectors that differ in capital intensity. Fifth, a

<sup>(458)</sup> Grantham Research Institute (2019).

<sup>(459)</sup> European Commission (2018a; 2018b)

<sup>(460)</sup> See European Commission (2016a), pp 106-106.



comparative advantage in the production of environmentally sustainable goods can translate into a boost in economic activity, particularly if partner economies increasingly demand such goods. Sixth, carbon revenue recycling to cut labour taxation, including labour taxation for vulnerable groups or to finance social investment and social protection systems, can lead to a boost in employment and strengthen the welfare state.

**Assessing such impacts with the help of macroeconomic simulations requires a baseline scenario.** The long-term strategy models both 2°C and 1.5°C scenarios, the latter achieved through carbon neutrality in the EU by 2050. The economic and social impacts are expressed as differences compared with a baseline scenario that includes all policies of the so-called 2030 climate package (see section 3.3). Implementing these policies by 2030 presents a significant challenge, for which social acceptance and public support will be important (see also section 3.7). With regard to employment, the baseline assumes a slightly decreasing employment figure in the EU until 2050, which mainly reflects a small decline in working-age population.

### 3.1. Main economic and social impacts of long-term climate change scenarios

**Overall, the economic and employment impacts of deep transformations – notably technological change <sup>(461)</sup> and climate change – are expected to be positive.** These transformations will require significant additional investment in all sectors of the economy as well as a significant reallocation of labour across certain sectors and regions and changing skill requirements. Simulations based on two global macroeconomic models (JRC-GEM-E3 and E3ME) <sup>(462)</sup> provided detailed results for sectoral employment under ambitious climate policies (1.5°C scenarios, implying zero net emissions by 2050, and 2°C scenarios implying an 80% reduction in emissions compared with 1990 levels). <sup>(463)</sup> In terms of total employment in 2050, the 1.5°C scenarios point to potential gains of 0.6% to 0.9%, or about 1.5 to 2 million jobs, compared with the baseline. <sup>(464)</sup>

**Employment impacts will differ significantly across sectors and regions.** Job gains in construction, agriculture and forestry and renewable energy sectors could be partly offset by a contraction in sectors such as fossil fuel-related mining and quarrying. Furthermore, some sectors such as steel, cement and chemicals will have to transform themselves as part of the low-carbon transition. Car manufacturers, too, will see a shift to new production

processes with new skills required. Moreover, the regions most affected will be those where economies depend on sectors that are expected to decline or be transformed in the future. Many of these are located in Central and Eastern Europe but some are in Germany.

**The biggest projected winners are the agriculture, power generation, construction and consumer goods sectors** (see Table 5.1). In *absolute* terms, agriculture, forestry and construction combined could add up to 2.4 million jobs to their baseline levels (depending on the specification, see below). The power sector could gain up to 250,000 jobs. In *relative* terms, some of the biggest expected winners are power generation and agriculture, with almost 25% of job gains in electricity supply. The range is also positive under all scenarios for the construction sector, while agriculture and forestry could gain significantly under some scenarios. Gains in agriculture and forestry are explained by a higher biomass demand, while gains in the power sector are driven by increased electrification of the economy in all climate scenarios. The positive employment developments in construction result from a predicted investment hike driven by the increased demand for energy-efficient structures. In relative terms the biggest job-losing sectors are fossil fuel extractive industries, which could experience a loss of up to 60% of their jobs. On the other hand, small relative gains in the services sector could translate into an additional 1.5 million jobs, though some scenarios also see job losses of up to 3 million in this sector due to reallocation of the labour force across the economy and potential impacts on GDP developments.

**The model specifications underlying these simulations differ in their assumptions, first as regards climate policies implemented by global partners, and secondly as regards market behaviour.** Some specifications (labelled 'Fragmented') assume that Europe alone would be implementing measures aiming at zero net emissions by 2050 – an 80% reduction in emissions – while the rest of the world does no more than maintain current ambitions set out in Nationally Determined Contributions under the Paris Agreement. Other specifications (labelled 'Global') are based on the assumption of a worldwide take-up. They assume that the rest of the world reduces emissions by 2050 by 46% to 72%, compared to 1990 levels, respectively in line with global pathways to limit climate change well below 2°C and to 1.5°C.

**Global demand is determined by choices made by trading partners through three principal channels.** First, according to the JRC-GEM-E3 model, stepping up climate policies worldwide could lower moderately the economic growth of the trading partners, leading to a subdued demand for exports to these economies. By contrast, the E3ME model assumes that higher climate ambition boosts investment and increases economic growth. Secondly,

<sup>(461)</sup> See European Commission (2018f).

<sup>(462)</sup> JRC-GEM-E3 is a general equilibrium model with neo-classical underpinnings; E3ME is a macro-econometric model with neo-Keynesian underpinnings.

<sup>(463)</sup> See European Commission (2018b).








<sup>(464)</sup> The scenarios do not include simulations of the labour market impact of digitalisation and similar technological trends.

demand for environmentally friendly products originating in Europe would be stronger as trading partners increasingly import energy-efficient products. Thirdly, more ambitious climate action by global competitors would give a competitive advantage to European industry which is already more carbon-efficient than other regions. On balance, the 'Global' specifications show more EU employment in traded goods sectors including energy intensive goods, consumer goods and agricultural products, but a negative employment impact related to declining EU exports in other sectors, including business services.

Table 5.4

### Long-term employment impacts differ significantly across sectors

Sectoral employment impact, difference from baseline in 2050, %

Sector	Share of total jobs in 2015	Range of change in jobs by 2050, compared to
Construction	6.7%	+0.3% to +2.8% 
Services	71.7%	-2.0% to +0.9% 
Agriculture	4.5%	-0.7% to +7.9% 
Mining and extraction	0.5%	-62.6% to -2.9% 
Power generation	0.7%	+3.6% to +22.3% 
Manufacturing (Energy intensive industries)	2.0%	-2.6% to +1.8% 
Other manufacturing	13.3%	-1.4% to +1.1% 

Note: Employment effects from JRC-GEM-E3 and E3ME. Ranges of estimated changes in jobs in 2050 depend on the underlying model and modelling assumptions.

Source: Adapted from European Commission (2018a) pp. 227-229

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**The second dimension in which the JRC-GEM-E3 model differs concerns the assumptions on the behaviour of European product and labour markets and the use of carbon revenues.** The 'revenue recycling' scenarios assume imperfect wage adjustment in the labour market, the use of carbon revenues to reduce labour taxation and market-share-maximising firm behaviour. 'Lump-sum transfer' scenarios, on the other hand, are based on the absence of wage rigidities in the labour markets and the lump-sum redistribution of carbon revenues to households and profit-maximisation by firms. In these scenarios, labour market changes are captured by the wage channel only, assuming an unchanged overall employment level in the EU relative to the baseline, while allowing for structural changes that imply a reallocation of jobs between sectors.

**Policies will have significant impacts on labour market outcomes.** The scenario modelling using the JRC-GEM-E3 model points to an important policy conclusion: that using revenue from environmental taxes, including carbon pricing, to generate a tax shift away from labour taxation, generates employment gains as it reduces labour costs overall. This finding is as valid for the fragmented specification as it is for the global specification and does not depend on the level of ambition (1.5° or 2°C).

**The various model runs all show an increase in total employment relative to the baseline.** The baseline scenario implies a moderate reduction in EU total employment between 2015 and 2050, including as a result of falling total population and population ageing. The 1.5°C scenarios as simulated under the JRC-GEM-E3 and E3ME models would lead to an employment increase over the baseline scenario of up to 1.5 to 2 million jobs, equivalent to an increase of 0.6% - 0.9%. By contrast, the JRC-GEM-E3 and E3ME models differ in their conclusions on GDP. The former indicates that a small negative impact on output could be expected as a result of crowding out of investment in other sectors. The latter, which assumes only partial crowding out, foresees a small positive impact on real GDP, following an increase in total investment.

## 3.2. Regional impacts

**In the transition to a carbon-neutral society certain regions will need to undergo significant adjustments.** Fossil fuel extraction and mining industries will decline, which will mostly affect the few regions with a high proportion of employment in these sectors: North Eastern Scotland (11.3%), Silesia in Poland (5.3%) and Sud-Vest Oltenia in Romania (1.8%). (See Box 5.2 for details on transitions in coal and carbon-intensive regions in the EU).

### Box 5.2: EU and regional initiatives for coal and carbon-intensive regions

The decline of coal production and use in the EU and a slowdown in global coal demand growth are well under way. Phasing out coal is seen as a low hanging fruit of climate policy, with coal-based energy accounting for a substantial amount of greenhouse gas emission, yet a low share of total employment. <sup>(1)</sup> However, such activities appear in 41 EU regions, with most of the jobs in coal sector concentrated in a handful of those regions, where they are a cornerstone of livelihoods and the overall economy. While the environmental impacts of a reduced coal sector will benefit all, the social and employment will affect some regions more than others. Ensuring a just transition to a greener economy for these regions is crucial.

The low-carbon economy will go some way to filling gaps which arise from a move away from coal, but may not appear in the right places at the right time and these structural imbalances must be tackled head on. Forward-looking policies that consult workers, provide timely information, recognise the needs of different workers (retirement, reskilling), individualised active labour market policies and personalised guidance are ways to make the transition work for all.

#### **The role of the EU in the just transition away from coal**

The EU aims to help Member States achieve EU 2030 energy and climate targets through National Energy and Climate Plans. These were submitted by all Member States by early 2019 and the Commission will help Member States to hone and implement these plans. The importance of a just transition will be reflected in these documents. The European Commission has also formally endorsed the Silesia Declaration on Solidarity and Just Transition at COP 24 in Katowice.

The EU has a number of funds available to help coal-dependent regions transition to a green economy. In terms of EU Cohesion policy, the European Structural and Investment Funds (ESIF), the Cohesion Fund (CF), the European Social Fund (ESF) and the European Regional Development Fund (ERDF) can all contribute. The EU's LIFE Fund can support projects regarding EU environmental legislation such as the ecological restoration of old mining sites. <sup>(2)</sup> The Modernisation Fund of the EU Emissions Trading System can support employment transition and reskilling and the European Investment Bank (EIB) and the European Institute of Innovation and Technology (EIT) promote the development of clean energy technologies.

#### **EU Initiative for coal and carbon-intensive regions in transition**

The coal sector provides direct jobs to an estimated 180,000 workers in coal and lignite mining and an additional 60, 000 in coal- and lignite-fired power plants across the EU. <sup>(3)</sup> The EU Initiative for Coal and Carbon-Intensive Regions in Transition assists in mitigating the social consequences of the low carbon transition, and helps 41 coal regions across 12 Member States to define low-carbon transition strategies and address potential negative socio-economic impacts. The Initiative consists of a series of Countries Teams to support pilot coal regions in their transition efforts and a dedicated Platform for Coal Regions in Transition for the exchange of best practices, and discussion of strategies and projects to kick-start the transition process.

The platform has facilitated a broad range of activities, including working group sessions and regular trilateral meetings with EU Member State Governments and coal regions. Within the platform, over 120 project ideas were proposed by 10 coal regions in Germany, Poland and Czechia, including proposals for infrastructure and renewable energy investments, as well as the development of tourism and agricultural activities.

In the context of the EU's Cohesion Policy, over 120 smart specialisation strategies for the 2014-2020 period have been developed with more than EUR 40 billion allocated to regions through the European Regional Development Fund. <sup>(4)</sup> Interregional smart specialisation partnerships focus on industrial modernisation, energy and agrifood.

<sup>(1)</sup> Galgóczi (2019)

<sup>(2)</sup> *ibid.*

<sup>(3)</sup> <https://ec.europa.eu/energy/en/topics/oil-gas-and-coal/coal-regions-in-transition>

<sup>(4)</sup> [https://ec.europa.eu/clima/sites/clima/files/docs/pages/initiative\\_5\\_support\\_en\\_1.pdf](https://ec.europa.eu/clima/sites/clima/files/docs/pages/initiative_5_support_en_1.pdf)

*(Continued on the next page)*

*Box (continued)*

Examples of regional transition strategies are being developed in coal regions in Greece, Slovakia and Romania which benefit from technical assistance delivered by the European Commission Structural Reform Support Service. For the EU's largest coal region, Silesia, EUR 100 million have been ring-fenced under the Regional Operational Programme to support projects in urban infrastructure, clean air and redeveloping former mining sites. In addition, 12 pilot industrial transition regions are offered region-specific support by the Commission for boosting innovation (including Wallonie (BE), Piemonte (IT) and Cantabria (ES)).

### **Phasing out coal extraction in Germany**

The German Commission on Growth, Structural Change and Employment (or so-called "coal commission") presented its final report <sup>(5)</sup> on Germany's strategy to phase out coal by 2038 at the latest. States traditionally reliant on coal (North Rhine-Westphalia, Brandenburg, Saxony and Saxony-Anhalt) will receive considerable help to transform their industries. EUR 1.3 billion will be set aside over the course of 20 years as well as EUR 700 million a year to related particular projects. The report estimates that 60,000 jobs are directly or indirectly dependent on brown coal. An adjustment fund and compensation for pension deficits will apply for those aged 58 or older. This has an expected cost of up to EUR 5 billion for the German federal government and firms. Education and training investments will foster younger workers' employment opportunities.

### **Phasing out coal extraction in Poland**

The role of hard coal in electricity production in Poland will decrease over time, according to the National Energy and Climate Plan (NECP) for 2021-2030, however, coal will remain the most important source of electricity production in 2030. The NECP will be subject to revision and input from the Commission during 2019 and there will be both support and pressure for greater reduction in carbon intensity in Poland. The expected rise in demand for electricity will be covered mostly by gas, wind and solar and later also by nuclear generation.

<sup>(5)</sup> [https://www.handelsblatt.com/downloads/23912864/3/190126\\_abschlussbericht\\_kommission-wachstum-strukturwandel-und-beschaeftigung\\_beschluss.pdf?ticket=ST-1651747-mabuNGf03qQtr0Etjcy-ap1](https://www.handelsblatt.com/downloads/23912864/3/190126_abschlussbericht_kommission-wachstum-strukturwandel-und-beschaeftigung_beschluss.pdf?ticket=ST-1651747-mabuNGf03qQtr0Etjcy-ap1),

### **Energy intensive industries and automotive manufacturing will also have to be transformed.**

Almost all Member States have a region with a higher than 1% share of employment in these sectors, but only in 25 regions this share is higher than 5%, requiring a large scale adjustment. In Slovakia and Czechia almost all regions are expected to undergo this transformation, while in Germany at least eight regions are affected. In Hungary, Poland and Romania the transformation will mostly affect regions with a higher than average national GDP per capita (excluding the capital region) and an impact on the national economy as a whole.

### **The tertiary education level in all of the above regions is far below the EU average, as is adult participation in training**

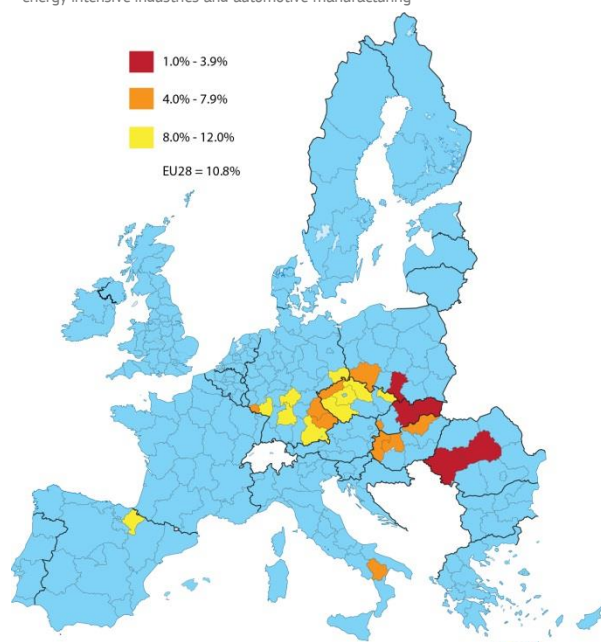
(ranging from 1.1% - 7.5% in 2016 compared with the EU average of 10.8%), posing an additional challenge to the adjustment process (see *Figure 5.1*). Similarly, some affected German regions have a lower than national and EU average level of participation of adults in training coupled with a relatively low-educated adult population (especially in lower Bavaria and Saarland). This may be a constraint on adjustment but the traditionally strong engagement of social partners in training provision should help. The Spanish region of Navarra stands out: it is a region with relatively high GDP per capita, an above-average tertiary education

attainment level and an above-average rate of participation in adult training (11.8% in 2016). Moreover, it is also a leader in renewable energy, mostly wind turbines.

Figure 5.1

### Most regions with a high proportion of employment in energy-intensive industries and automotive manufacturing have low participation rates in adult training (2016)

Percentages of adults participating in training, in regions with >5% of employment in energy intensive industries and automotive manufacturing



Note: Sectors considered are the following: C20, C23, C24 and C29 in line with European Commission (2018a)

Source: Eurostat, trng\_lfse\_04. No data on sectors at the NUTS 2 level in some regions, e.g. Braunschweig. The latter has a participation rate of adults in training below the EU average and would fall into the yellow category.

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**At the same time, many regions are likely to benefit from the transition to a green economy, including those that are or could be involved in the production of renewable energy.** <sup>(465)</sup> The potential for producing renewable energy depends on the geo-physical characteristics of the regions as well as on the strategy and policy choices and their effective implementation at national and regional levels. Coastal regions have a high potential for producing wind energy, especially those along the shores of the North and Baltic Seas and some Mediterranean islands. Other regions are better placed to invest in the production of solar energy, hydroelectricity or biomass. Yet others may decide to pilot and champion the development of the bio-economy or the circular economy, and develop new ways of combining rural and urban planning, traffic, production and waste management.

**Comprehensive strategies and effective policies are needed at regional and local level, to avoid hysteresis effects and multiple, persistent disadvantage.** This is especially important as repeated restructuring and multiple disadvantage at regional level are one of the main drivers – perhaps the most important driver – of political discontent and democratic backlash. <sup>(466)</sup> Those may in turn reduce public support for climate action and related policies,

<sup>(465)</sup> See in particular European Commission (2018b).

<sup>(466)</sup> See e.g. Dijkstra et al (2018).

thereby compromising the effective transition to a green, more circular and climate-neutral economy.

### 3.3. Medium-term adjustment costs and benefits: simulations up to 2030

**The employment impacts described above are relative to a baseline scenario that assumes full implementation of all adopted policy initiatives.** They incorporate the effects of climate policies that are part of the 2030 EU climate and energy framework already adopted ('the 2030 package', key elements of which are listed in *Table 5.5*), against the backdrop of the 'Paris Agreement' and subsequent 'Katowice roadmap'. <sup>(467)</sup> Impacts by 2050 compound the effect of measures to 2030 that have already been adopted, and therefore are reflected in the baseline for the long-term scenarios presented above, and the net-zero GHG objective. The full impacts of climate action by 2050 can be derived by aggregating the impacts of the existing climate policies included in the 2030 package and those of the assumed post-2030 policies.

Table 5.5

#### Employment impacts of elements of the 2030 package are mostly positive but modest

Employment impacts of selected elements of the 2030 climate package

Legislative act	Impact Assessment	Methodology	Employment impact
Energy efficiency directive revision	SWD(2016)405	E3ME + GEM-E3	+2% and -1.5%
Renewable energy directive recast	SWD(2016)418	E3ME + GEM-E3	- 0.2 to 0.2%
Energy performance of buildings directive	SWD(2016)414	E3ME	+ 0.1 to 0.25%
Emission performance standards for LDVs	SWD(2017)650	E3ME + GEM-E3; sectoral results	Small positive
Amendment to the ETS directive	SWD(2015)135	Sector-specific effects, based on elasticities	Negligible positive
Emission standards for heavy duty vehicles	SWD(2018)185	Macro-model: EXIOMOD	Negligible

Source: European Commission, impact assessments (references included in the table).

**The employment impacts of the various elements of the 2030 package are often positive, yet modest, with sectoral differences.** In order to obtain a more complete picture, it is important to review the estimated labour market impacts of the 2030 package. The analysis related to the revision of

<sup>(467)</sup> The full implementation of the package requires action at both EU and Member State level. National Climate and Energy Plans (<https://ec.europa.eu/energy/en/topics/energy-strategy-and-energy-union/governance-energy-union/national-energy-climate-plans>) are the framework within which the Commission aims to help Member States achieve their NDCs. These and other EU regulations e.g. on CO<sub>2</sub> emission performance standards for new heavy-duty vehicles (COM(2018)0284, adopted 18th April 2019) are subject to implementation at national level.



the Energy Efficiency Directive (European Commission (2016a)) in particular employs the same two models as the European Commission (2018a) and presents similar sector-specific conclusions.

**As various elements of the policies interact, there is no straightforward way to produce an estimate of the aggregate effects.** Some elements may reinforce one another, while other measures may overlap. Moreover, as the table indicates, the methodologies applied in various impact assessments are different, with some of the impact assessments relying on general equilibrium or similar models, and others presenting partial effects on the markets directly affected. Baselines, too, are defined in different ways across the impact assessments, in line with the fact that the studies were prepared over the course of several years. With each study incorporating the most recent macroeconomic scenario available at the time of writing, the baselines differ across the studies. Hence the same percentage effect in two assessments may indicate different absolute effects. Subject to these caveats, it is possible to state the following conclusion: the available studies point to small, and overall positive <sup>(468)</sup>, economy-wide impacts on the 2030 horizon. Those that include sectoral breakdowns present significant impacts for some sectors, and an important re-structuring across sectors.

**Implementation issues have been identified in the impact assessments related to the policy initiatives included in the 2030 package** and have been analysed in further detail in Eurofound (2019). While adopted at EU level and implied in the baseline for the long-term simulations, these policy initiatives require effective implementation and follow-up at the national level, including policy choices with potential impacts on specific sectors, groups or regions over the coming years. <sup>(469)</sup> These will be discussed in further detail in the next section.

### 3.4. Short- to medium-term impacts on sectors, skills, tasks and wages

**This section builds on the main results of the so-called ‘energy scenario’ developed under the Future of Manufacturing in Europe (FOME) pilot project (Eurofound, 2019).** <sup>(470)</sup> The scenario

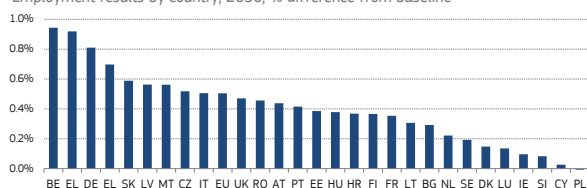
projects detailed employment impacts (for EU aggregates and by country and sector) of the implementation of the Paris Agreement, with an additional focus on skills, tasks and wages. These are not available in the long-term scenarios described in section 3.1 or in the individual impact assessments listed in Table 5.4.

**The scenario investigates the employment impacts in the EU of the policies <sup>(471)</sup> necessary to meet the 2°C limit by 2050.** It analyses the impacts across sectors and occupations, with particular focus on manufacturing and industry-related services. The analysis is carried out using the E3ME macro-sectoral model, which provides information on sectoral impacts, in combination with the Warwick Labour Market Extension model for occupational analysis and Eurofound’s European Jobs Monitor.

**The results show that EU GDP and employment effects in 2030 are expected to be significant and positive (+1.1% employment and +0.5% GDP growth).** This amounts to an additional 1.2 million jobs in the EU by 2030, on top of 12 million jobs expected to be created under the baseline (from 2015 to 2030). The positive impact on GDP and the number employed is largely due to the investment activity required to achieve such a transition, together with the impact of lower spending on the import of fossil fuels. Lower consumer prices, notably of solar photovoltaic electricity, further boost disposable incomes, consumer expenditure and consequently the demand for consumer services, which are all generally labour-intensive.

Chart 5.4  
Employment implications of the Paris Climate Agreement in EU Member States, 2030

Employment results by country, 2030, % difference from baseline



Note: Deviation in 2030 from the baseline in %

Source: Eurofound (2019)

[Click here to download chart.](#)

**Employment impacts, however, vary considerably between sectors and countries** (see Chart 5.4 and Table 5.5). To give some examples, GDP effects are expected to be highest in Latvia, given its strong dependency on fossil fuel imports, yet employment effects are likely to be moderate. The employment impacts of climate action policies would be positive

forecast. For the full mandate and set of deliverables, see: <https://www.eurofound.europa.eu/observatories/emcc/fome>.

<sup>(471)</sup> These include: a carbon emission price set at global level, public programmes to fund energy efficiency, subsidies for the investment in and uptake of renewables across a range of technologies, subsidies and feed-in-tariffs to guarantee the price received by renewable electricity producers, taxes on registrations of vehicles related to their carbon emissions, and regulation to phase out the least fuel-efficient vehicles.

<sup>(468)</sup> See press release issued at the launch of the package in 2016, that includes an estimate 900,000 new jobs created. [http://europa.eu/rapid/press-release\\_IP-16-4009\\_en.htm](http://europa.eu/rapid/press-release_IP-16-4009_en.htm), where

<sup>(469)</sup> See in particular the (draft) National Energy and Climate Plans in which Member States lay out their strategies for the next decade and provide further detail on the policy measures, thereby providing clarity and predictability for businesses and the financial sector to stimulate necessary private investments, and the Commission’s assessments and recommendations.

<sup>(470)</sup> The pilot project ran from April 2015 to April 2019 and was mandated by the European Parliament. It was implemented by the European Commission (DG GROW) through delegation to Eurofound, in consultation with the European social partners. The energy scenario has been developed by Eurofound and Cambridge Econometrics, with inputs from Cedefop and Warwick University. The baseline is that of the CEDEFOP skills

and substantial in Belgium, Spain and Germany, where employment increases by up to 1% of total employment (equivalent to some 60,000 additional jobs in Belgium, 200,000 in Spain and 350,000 in Germany). By contrast, impacts on GDP and employment are would be insignificant in Denmark as it is already well advanced in the uptake of renewables and energy efficiency, and the additional investment required to meet the CO<sub>2</sub> emissions reduction target is hence small. The impact on Poland's GDP and overall employment growth would also be small but for a different reason, as job losses in the country's substantial coal production sector are expected to offset gains in other sectors.

**Employment is expected to increase in manufacturing sectors producing renewable technologies or related to construction and the circular economy, as well as in service sectors.**

Unsurprisingly, though, employment is projected to decrease in most Member States in mining and oil & gas sectors (as a result of declining activity in the energy extracting sectors) as well as in electricity and gas supply (due to higher energy efficiency measures) and in motor vehicles (because of demand for electric cars). Sectors expected to see increases in employment include: manufacturing sectors producing renewable technologies and those in their supply chains, including basic metals, non-metallic minerals, mechanical engineering, computer, optical and electronic equipment; sectors supplying goods and services to the construction sector; and service sectors generally (benefitting from increased economic activity). The sectoral shift in favour of production of new construction materials and the expected increases in construction activity overall should lead to employment gains among workers in building and related trades and metal, machinery and related trades, while no major changes are expected for other occupational groups.

Table 5.6

**Employment implications of the Paris Climate Agreement at sectoral level, 2030**

Employment results for the EU by sector, 2030

Sector	percent	thousands
Agriculture	0.5	40
Mining	-16.6	-93
Manufacturing	0.7	209
Utilities	-2.4	-72
Construction	1.1	160
Distribution, retail, horeca	0.6	305
Transport, communications	0.5	64
Business services	0.7	473
Education, health, government	0.3	142
Total	0.5	1228

Note: Deviation in 2030 from the baseline in % and in thousands of persons

Source: Eurofound (2019)

[Click here to download table.](#)

**Implementing climate action policies will lead to significant labour reallocation across sectors and regions.** In the stylised Eurofound modelling, most economic sectors would see net employment gains by 2030, notably business services and distribution as well transport, manufacturing and

construction. Two sectors would see net employment reductions overall in the short- to medium-term: mining and extractive industries, and the utilities sectors. In the former, employment would decline as a direct consequence of reduced fossil fuel extraction and coal mining. For the latter, employment is expected to decrease only limitedly, and only temporarily as a consequence of energy efficiency gains. Increased energy efficiency in buildings and households in particular would lead to lower production activity and output in the electricity and gas supply sectors, compared to the baseline. However on the 2050 horizon, (see *Table 5.4*), demand for electricity, and thus employment, is projected to grow strongly, as industry, transport and other services become increasingly electrified leading to employment gains in that sector. Despite these patterns being common across Member States, the extent of job gains and losses in the various sectors and the expected ensuing labour market transitions between sectors may vary across countries.

**Job creation due to climate change policies could further mitigate job polarisation in the economy, which is expected to widen under the baseline scenario.**

Future job creation is expected to increase job polarisation overall, as it will be driven by digitalisation and further integration in global production networks and value chains. Yet job creation due to climate change policies, albeit smaller in volume, is expected to mitigate these tendencies by adding middle-skilled, middle-paying jobs, notably in the construction sector and in services sectors more generally (*Chart 5.5 and Chart 5.6*). Climate action is expected to lead to job gains in all sectors except mining and extraction, and to the creation of middle-skill, middle-paying jobs notably in construction and industry. Overall, much of the expected employment creation is found at the bottom and the middle of the wage distribution. These jobs will be filled by employees with lower levels of education performing less complex tasks, to a greater extent than in the baseline forecast.

**As for employment effects overall, the skill composition of job creation due to climate action, and hence its impact on job polarisation, varies significantly across EU Member States .**

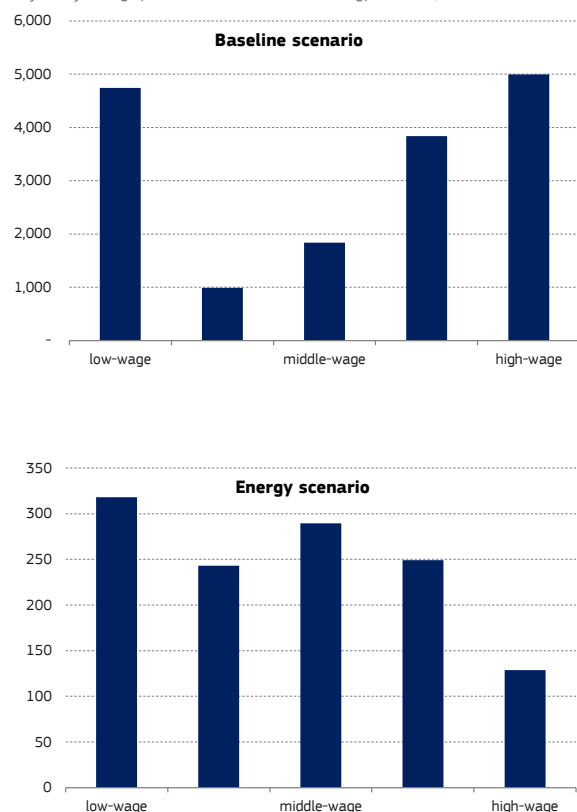
Overall, climate action favours job creation for all skill groups, notably for middle-skilled and also for low-skilled (see *Chart 5.7*). In Germany, job creation due to climate action is expected to be relatively balanced across job-wage quintiles, against overall very polarised employment projections. In Spain, Ireland, Estonia, Lithuania and Slovakia, climate action is expected to mitigate job polarisation somewhat by creating middle-skilled, middle-paying jobs, though not necessarily large numbers of them. In Cyprus, Greece, Austria, Romania and the UK, on the other hand, climate action is more likely to support low skilled job creation.

**The Eurofound simulations above depend on modelling assumptions, some of which have important policy implications.** First, the model assumes no labour market frictions. This includes the assumption that the labour force adapts to the structural change in skill requirements associated with the transition to a low-carbon economy. However, the faster the change happens, the more likely it is that there will be frictions that leave some workers unemployed and some demands for new skills unmet, preventing the full potential benefits from being realised. Moreover, it is assumed that there are no barriers to accessing the finance necessary for the investments needed to support the transition. It is also assumed, with a view to modelling future production patterns and trade flows, that countries which currently have a lead in certain sectors will be able to maintain that lead when switching to new technologies. For example, it is assumed that the main manufacturers of conventional cars and trucks become the main manufacturers of electric vehicles.

Chart 5.5

#### Climate action favours the creation of middle-skilled, middle-paying jobs and mitigates job polarisation

Projected job wage profiles in the baseline and energy scenario, 2015-2030



Note: In thousands; deviations from 2015 for the baseline scenario; from the baseline for the energy scenario, by wage quintile.

Source: Eurofound (2019)

[Click here to download chart.](#)

Chart 5.6

#### Climate action favours job creation in services, as well as middle-paying jobs in construction and industry

Projected job wage profiles in the energy scenario by sector, 2015-2030



Note: In thousands; deviations from the baseline by wage quintile

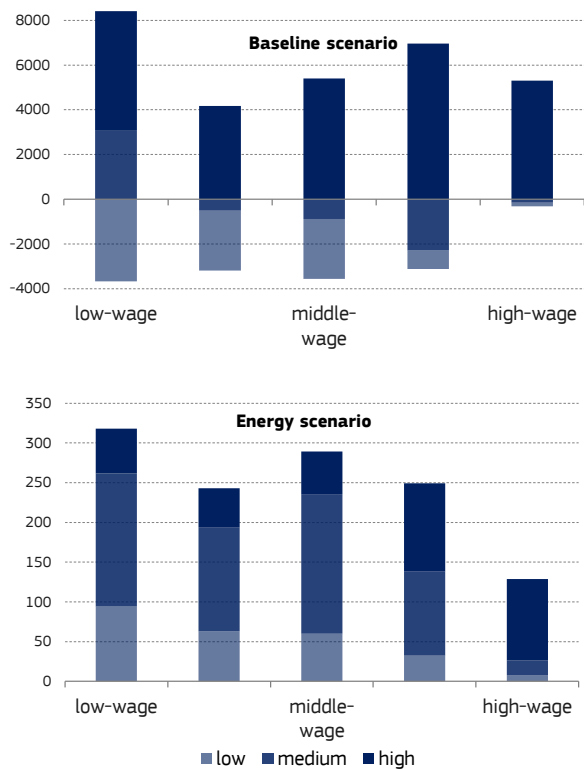
Source: Eurofound (2019)

[Click here to download chart.](#)

Chart 5.7

#### Climate action favours job creation for all skill groups, notably for middle-skilled and also for low-skilled

Projected job wage profiles in the baseline and energy scenarios, 2015-2030



Note: In thousands; deviations from 2015 for the baseline scenario; from the baseline for the energy scenario, by wage quintile.

Source: Eurofound (2019)

[Click here to download chart.](#)

**Finally, the modelling results assume implementation of certain policy measures** affecting household expenditure, production costs and/or fiscal sustainability.<sup>(472)</sup> These measures include:

<sup>(472)</sup> For full detail of underlying assumptions see Eurofound (2019), section 2 "Policies implemented in the 2-degree scenario".

- a carbon emission price set at global level but applied on a national bases through cap-and-trade systems and/or carbon taxes;
- public programmes to fund improvements in the efficiency of energy consumption in households, industry and commerce and support for the uptake of electric vehicles in the public sector;
- direct subsidies to cover significant parts of the additional investment cost and to incentivise the uptake of renewables across a range of technologies;
- subsidies and feed-in-tariffs (FiTs) to guarantee the price received by renewable electricity producers;
- taxes on the registration of vehicles related to their carbon emissions per kilometre, plus higher road fuel taxes; and
- regulation from 2018 to phase out the least fuel-efficient vehicles as they reach the end of their natural life.

**All of these measures have impacts and costs for the public budget and potentially for households, and may require accompanying or compensatory measures.** They also presuppose effective uptake and behavioural changes by a range of stakeholders, including firms, investors, households, consumers and local administrations. Additional tax revenues stemming from the implementation of some of the measures could be used to mitigate the effects on stakeholders and compensate them where necessary.

### 3.5. Health and safety risks in growing green sectors and the circular economy

**Care must be taken to ensure that the necessary sectoral shifts are accompanied by policies to ensure high job quality in a climate-neutral circular economy.** While some high-risk sectors such as fossil fuel extraction will decrease in size, others will increase, necessitating new occupational health and safety policy priorities (see *Chart 5.8*).<sup>(473)</sup> A recent report by EU-OSHA notes that the accelerating pace of technology change and potential moves towards a green economy mean it is increasingly important to anticipate new and emerging risks.<sup>(474)</sup> However, the transition also provides an opportunity to anticipate risks, improve standards and build workers' health and safety into the design of green jobs, including in sectors with currently high risk exposure such as waste management and construction.

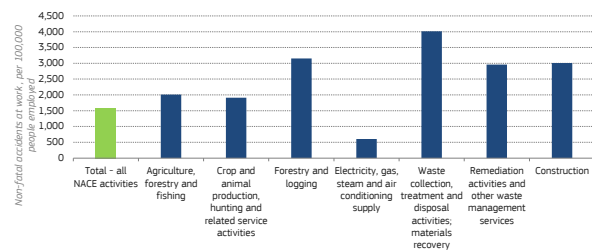
<sup>(473)</sup> This analysis may represent an upper bound if the sectors covered are less likely to under-report compared other sectors, but they may represent a lower bound if they are more likely to under-report.

<sup>(474)</sup> EU-OSHA (2013).

Chart 5.8

#### Importance of anticipating new and emerging health and safety at work risks

Non-fatal accidents at work: incidence rates for 2016



*Note:* Categories correspond to NACE REV 2 (Statistical classification of economic activities). "All NACE activities" refers to the average across all categories shown. Non-fatal accidents are defined as those that imply at least four full calendar days of absence from work. Statistics on accidents at work can reflect under-coverage (the appropriate population is not covered by the data source i.e. a sector is excluded) or under-reporting (an accident that took place is not reported despite the sector being included).

Source: Eurostat [hsw\_n2\_03]

[Click here to download chart.](#)

### 3.6. Recycling carbon revenues

**Another important aspect of managing the transition to a green, climate-neutral economy is the use of revenues generated from climate policy measures.** Carbon taxes and the revenue from auctioning emission permits (as under the ETS) generate resources which enable governments to fund programmes to support upskilling and reallocation of the workforce or to mitigate some of the negative impacts of higher energy prices. The design of such programmes needs to take into account equity and efficiency considerations, and also the interplay between economic inequality and other forms of inequality, including environmental injustice, at both global and EU levels.<sup>(475)</sup> From the efficiency point of view, what needs to be mitigated is the negative impact of higher energy prices on production, including its employment aspects. Equity considerations focus on the impact of higher energy prices on consumer budgets. As explained below, the two considerations motivate diverging policy measures.

**The two main types of carbon-revenue-funded expenditure programmes discussed in the literature are lump-sum transfers and cuts in labour taxation.** The main advantage of lump-sum transfers is that they can compensate for the losses suffered by lower-income households as they face higher energy prices (Bruegel 2018). On a per-income basis, the transfer could be proportionately larger for low-income households than for high-income ones. In that way it can be seen as a measure to address equity concerns. Such measures could be means-tested in order to concentrate the subsidy on households that need that form of compensation, and not to 'waste' the funds on wealthier households.

**Labour tax cuts, by contrast, may provide higher efficiency gains.** While they may be problematic in terms of equity considerations, labour tax cuts are accompanied by efficiency gains, according to a range

<sup>(475)</sup> See e.g. Chancel and Piketty (2015).



of simulation exercises. Lowering taxes on labour improves work incentives in general, and particularly for low wage earners. In the particular case of a compensating measure that accompanies raising carbon revenue, it can be thought of as a way to enhance employers' incentives to maintain their workforce while production costs increase. As noted above, the incentive effect of labour tax cuts is the reason why two of the four JRC-GEM-E3 scenarios show positive employment outcomes even though the GDP impact of climate policies is slightly negative.

**Other simulation exercises have confirmed this effect.** Chateau et al. (2018) directly compared various revenue recycling policies in their study analysing the introduction of a hypothetical worldwide carbon tax. They find that the best total employment outcomes are achieved in the case of wage income tax cuts, whereas from a distributional standpoint disadvantaged categories of workers fare relatively better under a lump-sum programme. Barrios et al. (2013) compare the efficiency impacts of raising funds through green taxes and labour taxes, and find that green taxes produce fewer distortions. That result also suggests that efficiency gains can be achieved by spending carbon revenue on labour tax cuts, taking into account that carbon unit price is adjustable. A group of leading economists, by contrast, argue for returning carbon tax revenue to the public in the form of a lump-sum transfer, which would constitute a 'carbon dividend' (Climate leadership council, 2019). Their argument rests on 'fairness and political viability' considerations, noting that the majority of US families would get more from the transfer than they would lose in increased energy prices.

**Last, evidence from behavioural science indicates that increasing the salience of benefits from carbon taxation can enhance its acceptability.** For example, a design feature underlying public support for a carbon tax in the Canadian province of British Columbia is that part of the revenue is redistributed to taxpayers in the form of cheques, instead of tax cuts which would be less visible. <sup>(476)</sup>

**Under EU legislation, part of the revenue from ETS is spent on just transition measures.** In the period of 2021-2030, a Modernisation Fund will operate in the EU, supporting low-carbon investments in 10 lower income EU Member States. <sup>(477)</sup> The size of the Fund is 2% of the total allowances for the period. Priority areas covered under the Fund, collectively benefitting from at least 70% of subsidies, include support of just transition by redeployment, re-skilling and up-skilling programmes (alongside green energy-specific items such as renewable electricity generation, improvement of energy efficiency and modernisation

of energy networks). Additionally, according to the European Commission's legislative proposal, assistance in the case of unexpected major restructuring events caused by the transition to a climate-neutral economy will be a specific objective of the European Globalisation Adjustment Fund in the 2021-2027 period. <sup>(478)</sup>

### 3.7. Public perceptions of climate change and the social acceptance of climate action

**Achieving EU climate targets presents a significant challenge and social acceptance of climate action is crucial to its success.** Tensions are rising on this topic across urban and rural divides, high and low-income groups, and younger and older generations. A younger generation of climate strikers is pushing policy-makers to further climate action. Their message is driven by a narrative of sustainability: climate action is seen as an urgent global imperative for a world fit for future generations. This view is increasingly gaining acceptance among all EU citizens. <sup>(479)</sup>

**Across the EU, the vast majority of the public accept that climate change is happening (Chart 5.9).** In EU countries for which survey data are available, <sup>(480)</sup> 95% of respondents believe climate change is happening either 'definitely' or 'probably'; 61% believe this 'definitely'. This belief is held across all education levels (Chart 5.9 Panel A) and age groups (Panel B), and in most countries (Panel C).

**Furthermore, many feel a high level of personal responsibility to reduce climate change across EU countries (Chart 5.10).** 40% of respondents rank their sense of responsibility as at least 7 on a scale of 0 (not at all) to 10 (a great deal). The highest levels of personal responsibility to reduce climate change were obtained in France, where 64% ranked this at 7 or above and 13% at 10.

<sup>(478)</sup> See COM/2018/380 final, Article 3.

<sup>(479)</sup> <http://www.europarl.europa.eu/news/en/press-room/20190417IPR41755/support-for-eu-remains-at-historically-high-level-despite-sceptics>

<sup>(480)</sup> These countries are Austria, Belgium, Czechia, Estonia, Finland, France, Germany, Hungary, Ireland, Italy, Lithuania, Netherlands, Poland, Portugal, Slovenia, Spain, Sweden, United Kingdom. Educational categories are defined as follows: Lower-educated refers to ISCED I and II (lower secondary or less); Medium-educated refers to ISCED IIIb, IIIa and IV (upper secondary, advanced vocational); Highly educated refers to ISCED V1 and V2 (tertiary).

<sup>(476)</sup> See Klenert et al. (2018). See also the next section which discusses the issue of social acceptability in more detail.

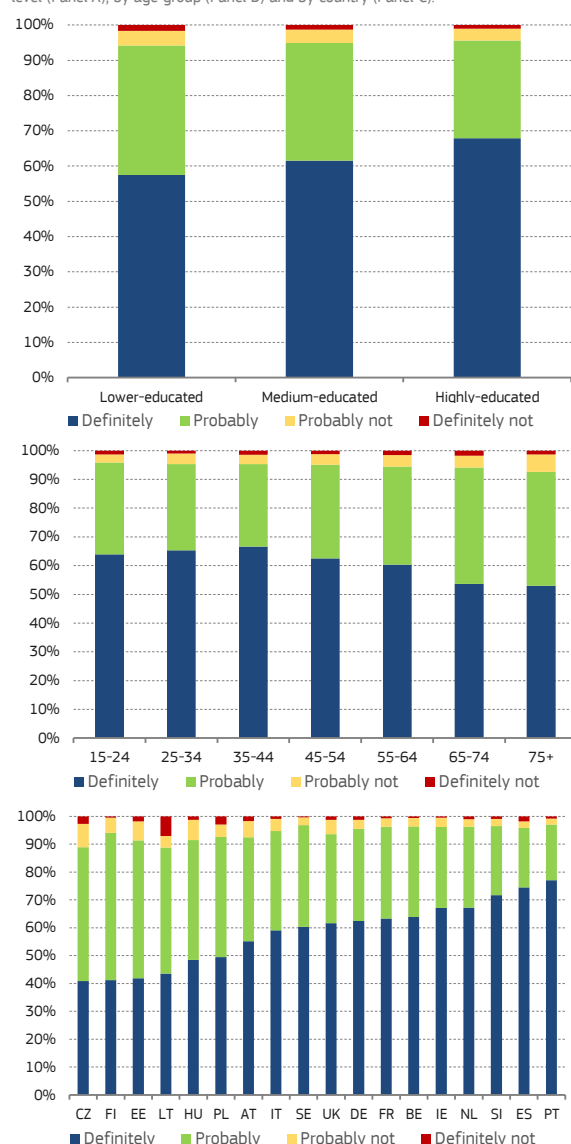
<sup>(477)</sup> See Articles 10 and 10d of the ETS Directive (consolidated version of Directive 2003/87/EC of the European Parliament and of the Council)



Chart 5.9

### The vast majority believe climate change is taking place, across education levels, age groups and countries

Responses to the question "Do you think the world's climate is changing?" by education level (Panel A), by age group (Panel B) and by country (Panel C).



Note: Categories "Refusal to answer" and "Don't know" excluded.

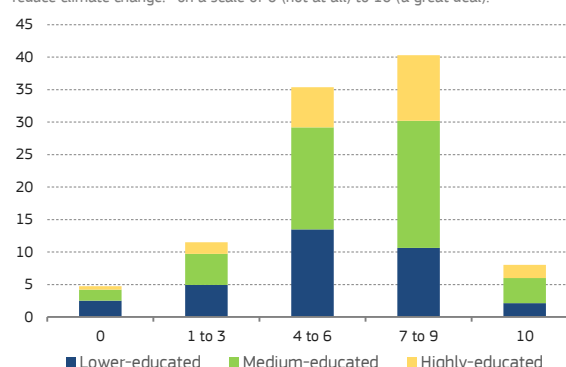
Source: European Social Survey data (2016)

[Click here to download chart.](#)

Chart 5.10

### Many feel a strong sense of personal responsibility to tackle climate change, with the more educated tending to display a greater sense of this

Responses to the question "To what extent do you feel a personal responsibility to try to reduce climate change?" on a scale of 0 (not at all) to 10 (a great deal).



Note: Categories "Refusal to answer" and "Don't know" excluded.

Source: European Social Survey data (2016).

[Click here to download chart.](#)

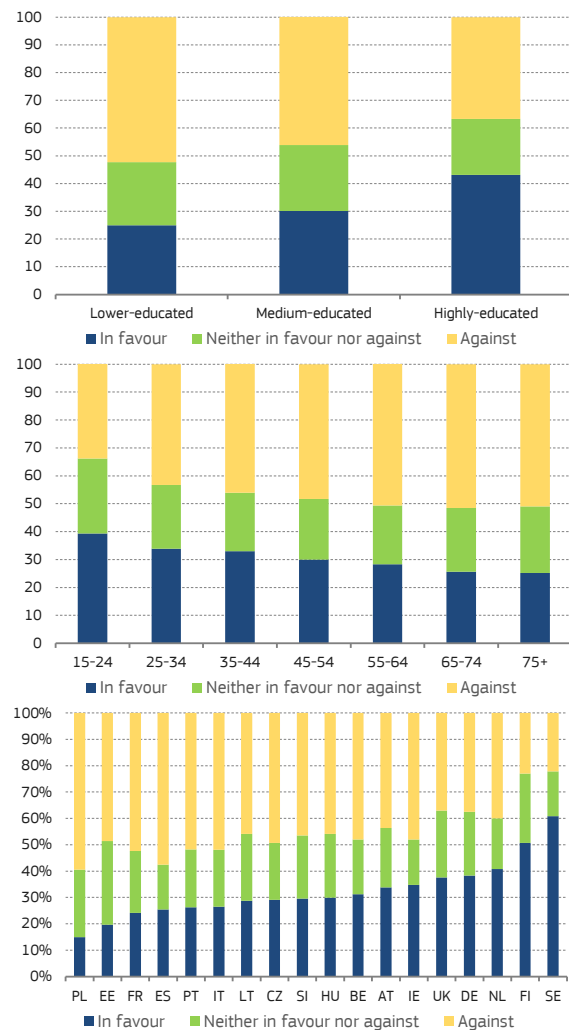
**Despite widespread awareness of climate change and of the responsibility and urgency to act, support for climate action is mixed, and stronger for standards than taxation.** On average, only 31% of respondents are strongly or somewhat in favour of taxes on fossil fuels to reduce climate change. Those with higher levels of education display higher levels of support (*Chart 5.11* Panel A) as do younger cohorts (*Chart 5.11* Panel B). While these can be interpreted only as correlations, literature on the topic suggests that such traits play an important role in climate action support (see below). Across countries, the picture is mixed, with those in favour of such taxes ranging from 15% in Poland to 61% in Sweden (*Chart 5.11* Panel C). Citizens in western and northern Europe, with the exception of France, are more in favour of such taxes than Southern and Eastern Member States.

**Energy prices present a challenge for achieving a just transition and citizens are concerned that these costs are too high** (*Chart 5.12*). The proportion of people extremely or very worried amounts to 71% in Spain and 68% in Portugal. Energy costs impact people's ability to heat their homes (see Section 4) and to incur the transport costs necessary to work and participate in society. When such costs become unaffordable, they may have a strong adverse impact on public support for climate action.

Chart 5.11

### Support for fossil fuel taxes exists but varies across different groups

Responses to the question "To what extent are you in favour of or against taxes on fossil fuels to reduce climate change?" by education level (Panel A), by age group (Panel B) and by country (Panel C).



Note: "In favour" refers to those who responded either strongly or somewhat in favour, "against" refers to either strongly or somewhat against. Categories "Refusal to answer" and "Don't know" excluded.

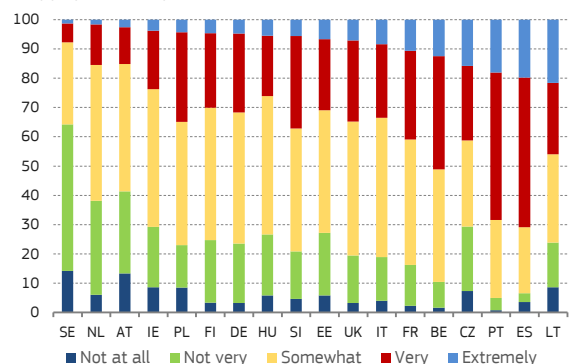
Source: European Social Survey data (2016).

[Click here to download chart.](#)

Chart 5.12

### Citizens are concerned about high energy prices

Responses to the question "How worried are you that energy may be too expensive for many people in [country]?"



Note: Categories "Refusal to answer" and "Don't know" excluded.

Source: European Social Survey data (2016).

[Click here to download chart.](#)

Some research suggests that perceived costs and perceived climate benefits are the strongest predictors of support for climate action, but that political affiliation also plays an important role.<sup>(481)</sup> Other research finds that, in the Norwegian context, support for fuel taxation is in fact best predicted by beliefs about environmental consequences, not by self-interest.<sup>(482)</sup> There is evidence of a strong impact of culture on policy support as well as complex, non-linear relationships between information, beliefs and public policy opinion formation.<sup>(483)</sup> Understanding the reasons for support for and resistance to climate action will be crucial to policy formation.

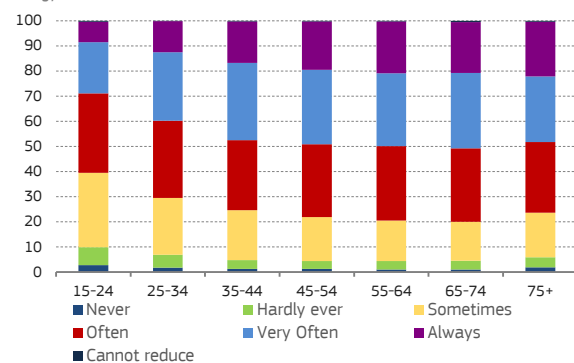
### There is also a growing movement calling for changes to consumption patterns and consumer behaviour.

In a list of the most effective climate change mitigation actions, a move towards plant-based diets is ranked at number four out of 80, with potential to reduce emissions by over 66 gigatons.<sup>(484)</sup> Initiatives such as 'Meatless Mondays' and 'VB6' (Vegan before six pm) are helping to challenge norms and habits around meat and protein consumption. A significant shift towards plant-based foods is occurring, driven by younger generations. However, all age groups are making considerable efforts to reduce energy consumption, with greater efforts among older cohorts (Chart 5.13). Support for banning sales of inefficient household appliances and increasing the likelihood of buying efficient appliances is also strong across countries (Chart 5.14 and Chart 5.15), although hypothetical situations may reflect aspirations more than actual behaviour.

Chart 5.13

### Efforts are made to reduce energy consumption by all age groups, particularly by older respondents

Responses to the question "In your daily life, how often do you do things to reduce your energy use?"



Note: Categories "Refusal to answer" and "Don't know" excluded.

Source: European Social Survey data (2016).

[Click here to download chart.](#)

<sup>(481)</sup> Tobler, Visschers and Siegrist (2012)

<sup>(482)</sup> Kallbekken and Sælen (2011)

<sup>(483)</sup> Shwom et al. (2010), Todd et al. (2017)

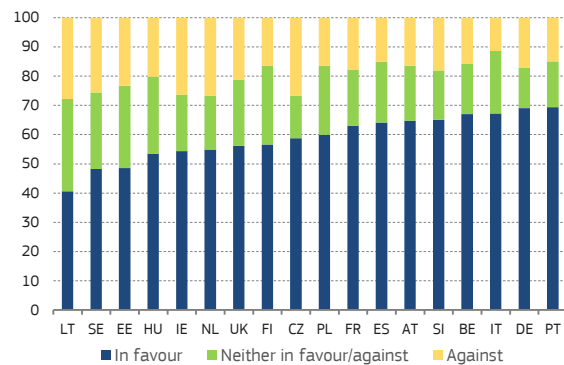
<sup>(484)</sup> See Hawken (2018). "Drawdown" is a collaborative plan to reverse global warming edited by Paul Hawken; it ranks potential contributions in to climate mitigation emission reduction capacity.

**Evidence on the determinants of support for climate action is complex and country-specific.**

Chart 5.14

### There is support for the banning of inefficient appliances to tackle climate change across all countries

Response to the question "To what extent are you in favour of/against banning sales of the least energy-efficient household appliances to reduce climate change?"



Note: "In favour" refers to those who responded either strongly or somewhat in favour, "against" refers to either strongly or somewhat against. Categories "Refusal to answer" and "Don't know" excluded.

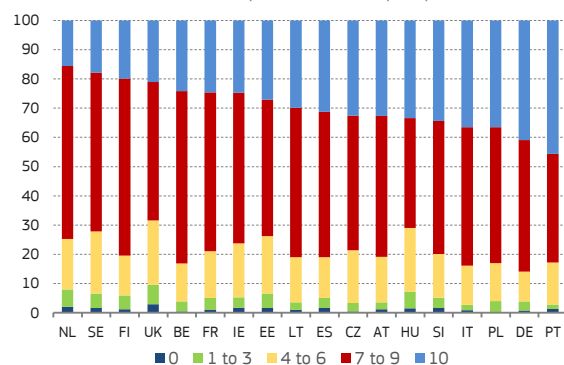
Source: European Social Survey data (2016).

[Click here to download chart.](#)

Chart 5.15

### A large majority of people are at least somewhat likely to buy energy-efficient appliances, with between 15% and 45% saying they are extremely likely to do so

Response to the question "If you were to buy a large electrical appliance for your home, how likely is it that you would buy one of the most energy-efficient ones?" (On a scale of 0 to 10 where 0 is not at all likely and 10 is extremely likely).



Note: Categories "Refusal to answer" and "Don't know" omitted.

Source: European Social Survey data (2016).

[Click here to download chart.](#)

**Citizens are increasingly aware of their power as both consumers and citizens to tackle climate change.** Citizens can reduce their individual climate footprint but also pressure business and government through consumption and participation to respond to popular demand. Grassroots initiatives against single-use plastic have led, for example, to fast-food chains abandoning plastic straws, as well as to changes at governmental level such as the EU Single Use Plastics Directive.

**The European Commission has been trying for some time to encourage sustainable purchasing and consumption.** The 2012 Communication on consumer empowerment included proposals to improve awareness on environmental and sustainability aspects.<sup>(485)</sup> Housing and transport are other areas where more can be done to encourage consumers to act on their feelings of personal

responsibility to address climate change e.g. by insulating their homes, and choosing to walk or cycle to work. Moreover, the 2014 Public Procurement directive enables national and local authorities to make better use of strategic procurement, with particular consideration to social and environmental objectives.<sup>(486)</sup>

**Greener supply is as important as greener demand and the EU is helping to foster this.** The Eco-design Directive<sup>(487)</sup> provides a framework for improving the environmental performance of energy-related goods and for product bans and phase-outs of inefficient products such as incandescent lightbulbs. EU energy labels can increase green demand for energy-related products. For other categories of products, various ecolabelling schemes sometimes coexist and trust in eco-labelling must be maintained. As the "greenwashing" of environmentally or socially irresponsible companies is considered a potential problem, there is a clear rationale for government to regulate and create incentives to ensure that signals and markets operate effectively.

**Trends in green consumption and consumers' willingness to alter their behaviour offer much scope for exploration.** Research suggests that green consumption and green citizenship are in fact distinct concepts and that their determinants are complex.<sup>(488)</sup> Many factors play a role, including individuals' habits, trust and values, perceived consumer effectiveness, as well as product availability, social norms, brand image and eco-labelling, with the consumer's environmental concern and the product's functional attributes emerging as the two major determinants.<sup>(489)</sup> Gaps between attitudes and behaviour and inadequate information can be major barriers to the purchase of eco-friendly products, e.g. the lack of awareness and misunderstandings around refurbished mobile phones.<sup>(490)</sup>

**Behavioural interventions show how consumer habits and defaults can be "nudged" in a green direction and how societal norms can be changed and exploited.** Synergies can achieve win-win outcomes in the public and private interest, for example reducing plate sizes and providing social cues can reduce food waste in hotels, with benefits for both

<sup>(486)</sup> By using their purchasing power to choose socially responsible goods, public authorities can set a positive example and encourage enterprises to make wider use of social standards in the management, production and provision of services. Moreover, public authorities can also spur eco-innovation by using new award criteria in contract notices that place more emphasis on environmental considerations. For an overview of the legal rules and implementation see: [http://ec.europa.eu/growth/single-market/public-procurement/rules-implementation\\_en](http://ec.europa.eu/growth/single-market/public-procurement/rules-implementation_en).

<sup>(487)</sup> <https://eur-lex.europa.eu/legal-content/en/TXT/PDF/?uri=CELEX:32009L0125&from=EN>

<sup>(488)</sup> Guckian, De Young and Harbo (2017)

<sup>(489)</sup> Joshi and Rahman (2015)

<sup>(490)</sup> Young et al. (2010), van Weelden, Mugge, Bakker (2016)

<sup>(485)</sup> SWD(2012) 132 final

the environment and business.<sup>(491)</sup> Low-cost interventions can exploit social norms to reduce excessive energy consumption.<sup>(492)</sup>

**Reducing food waste is crucial to tackling climate change.** One third of food raised or prepared does not make it “from farm or factory to fork”, and this food waste contributes 4.4. gigatons of carbon dioxide equivalent into the atmosphere every year.<sup>(493)</sup> In terms of climate change mitigation, reducing food waste is ranked at number three out of 80, with potential to reduce emissions by over 70 gigatons. This seems a particularly pertinent problem in a world where nearly 800 million people go hungry and resources are increasingly under pressure. The Sustainable Development Goals call for the halving of per capita global food waste at the retail and consumer level by 2030, as well as reducing food losses along production and supply chains. Key to this is firstly pre-empting food waste before it happens, and then reallocating unwanted food. Standardising date labelling to focus on safety as opposed to optimal taste is important, as is consumer education, and campaigns such as “Feeding the 5000”.<sup>(494)</sup> France and Italy have passed laws requiring supermarkets to pass on unsold food to charities, animal feed or composting companies instead. Food waste is one of the horizontal principles that applies to the design and implementation of the Fund for European Aid to the Most Deprived. This Fund supports EU Member States’ action to provide food and/or basic material assistance to the most deprived.<sup>(495)</sup>

**Food waste prevention is an integral part of the Commission’s Circular Economy Package and it will also foster competitiveness, sustainable growth and employment.** The Revised EU Waste Legislation, adopted on May 30<sup>th</sup> 2018, requires Member States to reduce food waste at each stage of the supply chain, to monitor food waste levels and to report on progress made. An EU methodology to measure food waste and a multi-stakeholder platform (EU Platform on Food Losses and Food Waste<sup>(496)</sup>) will help with this, which includes a dedicated sub-group working on simplifying and promoting better use and understanding of date-marking.

## 4. CLIMATE ACTION AND ENERGY POVERTY

**Energy poverty is a multi-dimensional concept which lacks a uniform definition.** Its measurement poses practical and conceptual challenges. Defining

energy poverty needs to take into account the necessary domestic energy services needed to guarantee basic standards of living in the relevant national context, existing social policy and other relevant policies. At a basic level it can be described as conditions where “individuals or households are not able to adequately heat or provide other required energy services in their homes at affordable costs”.<sup>(497)</sup> A limited number of Member States have defined energy poverty at the national level (e.g. the UK, FR, CY, SK, IE) while almost all have identified vulnerable consumers in the context of retail gas and electricity markets with a view to protecting them. In most cases, these are recipients of social benefits (e.g. unemployment benefit or social assistance) or specific socio-economic groups based on income, age and/or health characteristics.<sup>(498)</sup>

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<sup>(497)</sup> Thomson and Bouzarovski (2018)

<sup>(498)</sup> Ibid.

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<sup>(491)</sup> Kallbekken and Saelen (2013)

<sup>(492)</sup> Allcott (2011)

<sup>(493)</sup> Hawken (2018).

<sup>(494)</sup> A public event where a free lunch is provided to 5000 people using ingredients that would otherwise be thrown away.

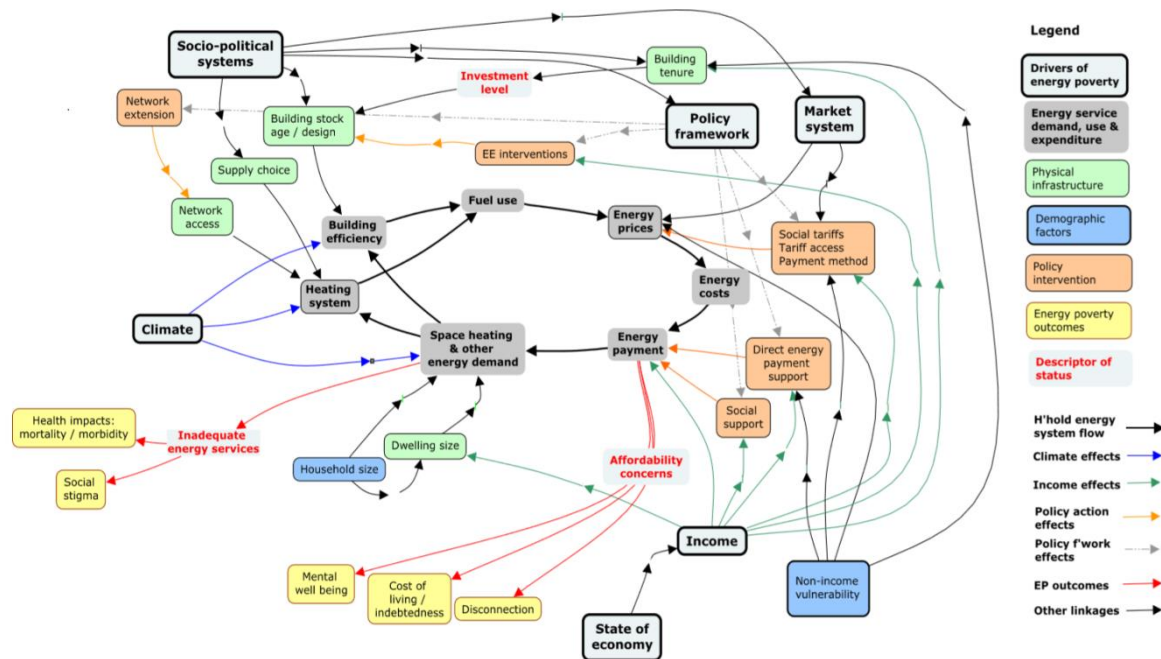
<sup>(495)</sup> <https://ec.europa.eu/social/main.jsp?catId=1089#navItem-1>

<sup>(496)</sup> See [https://ec.europa.eu/food/safety/food\\_waste/eu\\_actions/eu-platform\\_en](https://ec.europa.eu/food/safety/food_waste/eu_actions/eu-platform_en) and [https://ec.europa.eu/info/law/better-regulation/initiatives/ares-2018-705329\\_en](https://ec.europa.eu/info/law/better-regulation/initiatives/ares-2018-705329_en)

Figure 5.2

**Energy poverty is a multifaceted phenomenon**

Drivers and effects of energy poverty



Source: Rademakers, K et al (2016).

[Click here to download figure.](#)**Energy poverty has a number of drivers.**

Household income is clearly important, but energy prices, and energy efficiency also play a role. Affordability of energy-efficient housing contributes to the reduction of energy poverty and improves environmental outcomes (see Figure 5.2). Socio-political systems also influence the energy market system, its degree of liberalisation and level of competition, as well as the energy mix, thereby determining energy prices. Another important driver is the local natural environment, which influences the demand for heating or cooling. The local climate also affects the quality of dwelling stock in terms of how insulation and provision of heating systems.

**Energy poverty has an indirect effect on many policy areas, including health, environment and productivity.** Adequate warmth, cooling, lighting and the energy to power appliances are essential for ensuring a decent standard of living and citizens' health. These services also enable citizens to fulfil their potential and enhance social inclusion. Therefore addressing energy poverty has the potential to bring multiple benefits, including lower spending on health, reduced air pollution (by replacing unfit heating sources), better comfort and wellbeing, improved household budgets and increased economic activity. <sup>(499)</sup>

**4.1. Trends in energy poverty indicators**

**It is now widely acknowledged that energy poverty is a distinct form of deprivation.** It is estimated to affect almost 50 million people in the

EU. <sup>(500)</sup> Indicators of energy poverty, encompassing the inability to keep a person's home adequately warm and being in arrears on utility bills <sup>(501)</sup>, has followed a similar trend to being at risk of poverty or social exclusion in the last decade, albeit at a significantly lower level; they were increasing between 2009 and 2013, when they reached their peak. Since the onset of the recovery, they have been decreasing to below pre-crisis levels. Energy poverty has multiple drivers, so it does not fully overlap with monetary poverty or being at risk of poverty or social exclusion (see Chart 5.16).

<sup>(500)</sup> Thomson and Bouzarovski (2018)

<sup>(501)</sup> Measurement of energy poverty is complex. The EU Energy Poverty Observatory proposed several indicators to capture different aspects of the phenomenon. In this section, we use the "Inability to keep home adequately warm" and "arrears on utility bills" as proxies to describe the trends and spread of energy poverty in the absence of an agreed definition. The main drawback of these two indicators is their subjective nature. In addition, the latter does not cover only energy-related utility bills but also others. See also: [energypoverty.eu](http://energypoverty.eu)

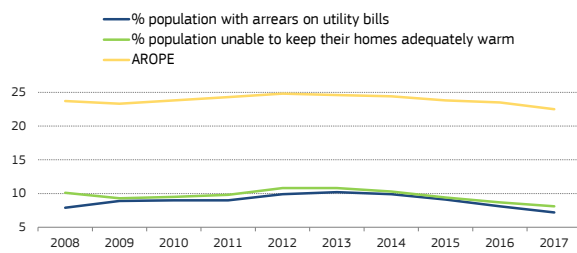
<sup>(499)</sup> Energy poverty observatory: <https://www.energypoverty.eu/about/what-energy-poverty>



Chart 5.16

### Indicators of energy poverty do not fully overlap with being at risk of poverty or social exclusion

Population with arrears on utility bills, unable to keep home adequately warm and being at risk of poverty and social exclusion in the EU, 2008-2017



Source: Eurostat, ilc\_mdcs07, ilc\_mdcs01, ilc\_mdcs01.

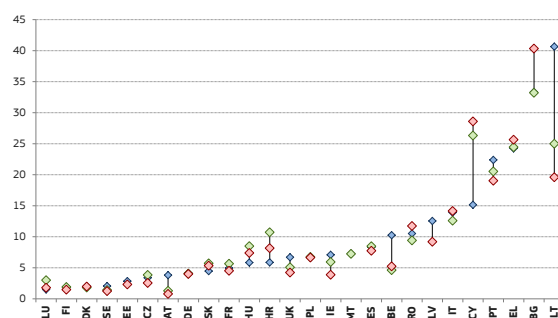
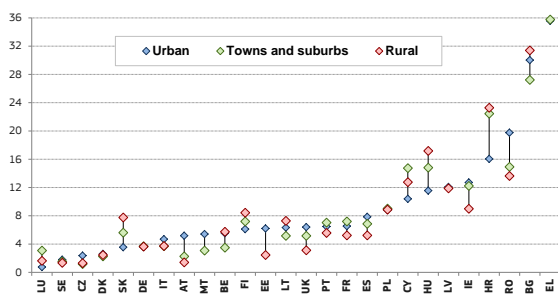
[Click here to download chart.](#)

**Although decreasing to pre-crisis levels overall, important differences in indicators of energy poverty between Member States remain.** Between 2008 and 2017 the proportion of people who found it difficult to warm their homes adequately increased in Greece, Spain, Italy, Lithuania and Malta. Similarly, the proportion of those with arrears in utility bills decreased overall, but increased in Cyprus, Greece, Spain, Portugal, Ireland, Lithuania, Latvia and Slovakia.

Chart 5.17

### Indicators of energy poverty in cities less spread than in rural areas and towns in most Member States

Proportion of individuals reporting arrears on utility bills (panel A) and inability to keep home adequately warm (panel B) per degree of urbanisation (2017)



Note: 2014 instead of 2017 for DE, 2017 instead of 2017 for IE and UK. No degree of urbanisation reported for NL and SI

Source: EU-SILC

[Click here to download chart.](#)

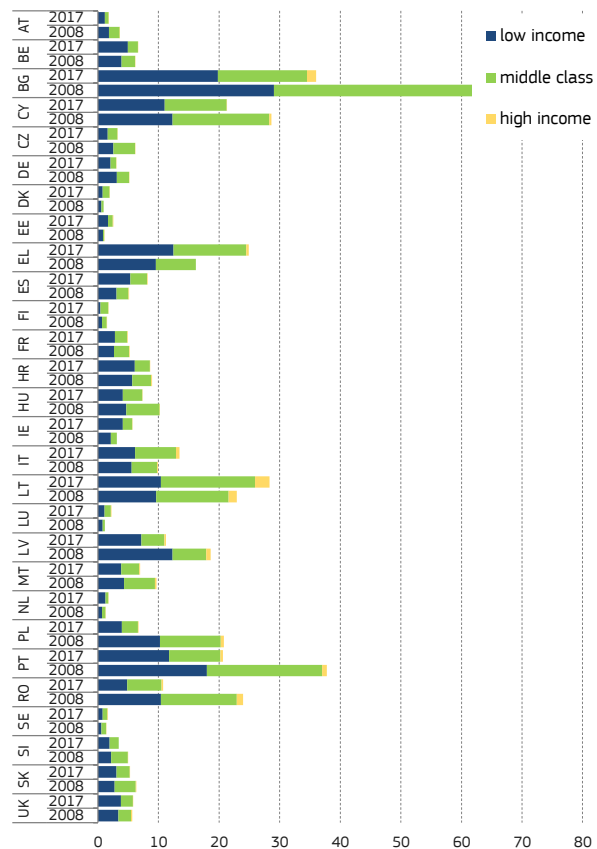
**In most Member States, people living in cities show lower indicators of energy poverty, but there are some notable exceptions.** Households in cities are less able to keep their houses warm in Lithuania, Latvia, Belgium, Austria and to some extent in Portugal, Ireland and the UK. In Romania, Estonia,

Malta and Austria, households in cities are more likely to be in arrears on utility bills. <sup>(502)</sup>

Chart 5.18

### Significant proportions of those who cannot keep their home adequately warm belong to the middle class

Proportion of individuals reporting inability to keep home adequately warm by income group (2017 and 2008)



Note: 2010 instead of 2008 for HR and 2016 instead of 2017 for the UK and IE

Source: EU-SILC

[Click here to download chart.](#)

**A significant proportion of households unable to keep their homes warm or with arrears in utility bills belong to the middle income group.** More than half of those who are unable to keep their home warm in Finland, Romania, Slovenia, Denmark and Greece belong to the middle class <sup>(503)</sup>, while out of this group Greece (25.7%) and Romania (11.3%) report higher proportions of people unable to keep their homes warm than the EU average of 7.8%. In Greece, Finland, Denmark, Latvia, Romania, Czechia and Italy more than half of households with arrears in utility bills belong to the middle income group. This is an issue particularly in Greece and Romania, which record higher proportions of the total population reporting inability to pay their utility expenses (see *Chart 5.18*).

<sup>(502)</sup> When interpreting the results by degree of urbanisation, the number and sizes of cities, particularly in smaller member states, should be kept in mind (See Chapter 1).

<sup>(503)</sup> See chapter 1 for the discussion on the middle class. Individuals belonging to the middle class are defined as those with income between 75% and 200% of the national median. The size of the middle class in a specific Member State varies across time, which should be taken into account.

### In more than a quarter of Member States the proportion of people reporting arrears in utility bills has increased over the last decade.

Arrears are an increasing problem, both for those on low incomes and for the middle class. This development coincides with the increase in energy prices over the period (total household electricity prices rose at a 2% annual rate from 2008 to 2017) <sup>(504)</sup> and to the fall in real household disposable income in some Member States. In Greece the middle class contributed significantly to the rising proportion of people with arrears in utility bills – particularly worrying in a country where the proportion of people unable to keep their house warm was increasing up to 2016. The situation has improved somewhat in the last two years, but remains considerably worse than pre-crisis.

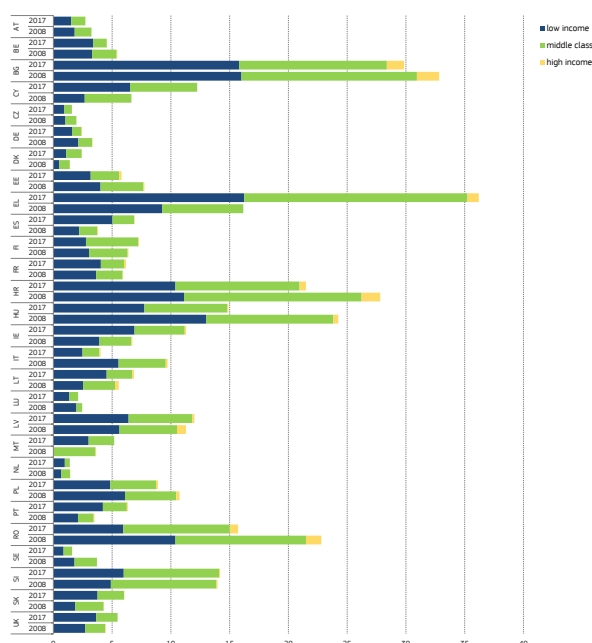
### In almost all Member States where the proportion of people reporting they are unable to keep their homes warm increased in the last decade, this has become more of an issue for the middle class.

While most Member States recorded a decrease in the proportion of individuals reporting being unable to warm their homes, the proportion has increased in Greece, Italy and Latvia, particularly among the middle income group. In Spain, however, the increase was more significant among people with low incomes.

Chart 5.19

### In many Member States the middle class is less troubled by arrears on utility bills than a decade ago

Proportion of individuals reporting as being in arrears on utility bills, per income group (2017 and 2008)



Note: 2010 instead of 2008 for HR, HU, IT, MT and 2016 instead of 2017 for the UK and IE.

Source: EU-SILC.

[Click here to download chart.](#)

## 4.2. Energy prices, expenditure and energy poverty

**Energy prices, one of the key drivers of energy poverty, have increased substantially over the last two decades, putting additional pressure on those with lower incomes.** The price increases were driven by the combined impact of steadily growing network charges and taxes. <sup>(505)</sup> This development, coupled with unfavourable trends in real gross disposable household income during the crisis, increased the pressure on households in general. Without matching improvements in energy efficiency this reduces available income for consumption on other goods, putting additional pressure in particular on those with lower incomes.

**While spending more in absolute terms, higher income households use a smaller proportion of their income on energy.** In 2015 <sup>(506)</sup>, households in the lowest income decile spent 10.4% of their total consumption expenditure on energy. <sup>(507)</sup> For low-income households, the proportion of energy costs in total consumption expenditure varies between Member States from 3% in Sweden to 23% in Slovakia, with almost all Central and Eastern Member States displaying significantly higher shares than others. Middle-income households <sup>(508)</sup> spend more in absolute terms but use proportionately less of their total expenditure on energy products (7.1% compared to 10.4%). Middle-income households in Central and Eastern Member States spend much more of their total consumption expenditure on energy than middle-income households in North and Western Member States (10-15% compared to 4-8%). Large variations across Member States are driven mostly by the variations in household disposable income, but energy prices and energy efficiency, particularly of buildings, also play a role.

<sup>(505)</sup> European Commission (2019b).

<sup>(506)</sup> The most recent available data.

<sup>(507)</sup> Energy expenditure covers electricity, gas, liquid and solid fuels and central heating.

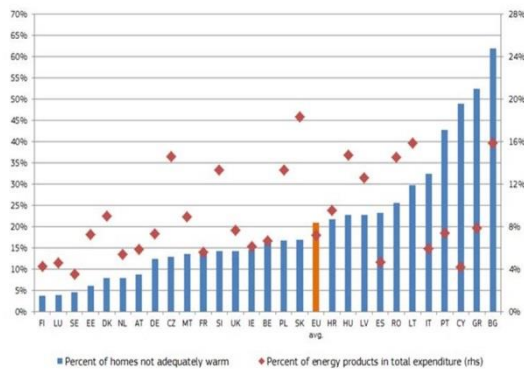
<sup>(508)</sup> These are households in the third to fifth decile and in some cases second to third decile.

<sup>(504)</sup> European Commission (2019)

Chart 5.20

### Complex picture when comparing ability to warm home to the proportion of energy expenditure in total expenditure

% of households at risk of poverty whose homes are not being kept adequately warm; energy expenditure as % of total expenditure for households in the third decile



Source: European Commission (2019).  
[Click here to download chart.](#)

**For households below the poverty threshold, there is no strong correlation between the proportion of their total spending on energy, and their perception of their ability to keep their homes warm.** In most Mediterranean Member States, with their warmer climates, the share of energy expenditure in total consumer expenditure is lower than the average (see *Chart 5.20*). However, this is not reflected in people's perception of their ability to keep their homes adequately warm. In part this is because energy performance standards in the warmer Member States tend to be lower than in those with colder weather. This, coupled with often inadequate heating systems in dwellings in warmer climates, results in the exposure of households to cold during those months when the temperatures fall below the level considered comfortable. <sup>(509)</sup>

**Although transport fuel use and expenditure are not captured by energy poverty indicators, they have important implications for the transition to a climate-neutral society and its social acceptance.** Unlike household energy use, the proportion of expenditure on transport fuels within total expenditure increases as household income increases. In 2015, households in the first income decile spent 3.1% of their total expenditure on transport fuel, while households in the fifth decile spent 4.3%. Higher income households rely more on private transport and therefore they spend proportionately more on diesel than low income households. However, diminishing differences in excise duties on petrol and diesel, environmental legislation and public acceptance (see *Chart 5.13*) are expected to reverse this trend in the future. <sup>(510)</sup>

**Both social policy measures and energy policy measures can help mitigate energy poverty.** The

first type of policy measures tackle energy poverty indirectly through social protection systems. Social benefits in different forms (e.g. unemployment benefit, minimum income support) can contribute to tackling energy poverty indirectly by increasing the disposable income of low-income households. Social housing systems in some countries in Northern and Western Europe often provide low-income households with relatively energy-efficient housing, thereby decreasing their energy bills. Energy bill support and social tariffs providing (targeted) financial support to households to pay their energy bills also reduce immediate pressures on the energy poor. However, they do not address the underlying drivers of energy poverty in the same manner as measures to improve building insulation of housing or replace heating systems. <sup>(511)</sup>

### 4.3. Energy efficiency measures

**Measures to improve the energy efficiency of buildings and appliances can decrease total residential energy consumption.** Lower consumption levels result in reduced energy import dependence, which makes households more resilient and less vulnerable to oil and gas price fluctuations, particularly in winter. Heating-related energy use represents approximately two thirds of the total energy consumption of households. In the period up to 2015 significant decreases could be observed in EU household energy consumption (a 5.7% fall between 2008 and 2016). This was largely due to decreasing heating-related consumption through building refurbishments and more efficient heating systems (e.g. replacing boilers which had low energy efficiency). <sup>(512)</sup>

**Bringing residential buildings up to energy-efficiency norms requires investment in renovation.** In 2012 (latest data available) poorly equipped or insulated homes were still identified as a major reason for households facing difficulties to keep their homes warm during wintertime (see *Chart 5.21*). According to the High-Level Task Force on Investing in Social Infrastructure in Europe <sup>(513)</sup>, the funding gap for social infrastructure in housing is approximately 450,000-500,000 new homes plus 800,000 homes requiring renovation. Belgium has relatively old building stock, and major needs for renovation and retro-fitting of dwellings to improve energy efficiency. Reaching the targets of the 2030 Climate and Energy Framework and a low-carbon economy by 2050 would require a doubling of the current annual renovation rate, from 0.7% to 1.3%. In Ireland, the cost of upgrading the housing stock to energy rating B3 would require an investment of EUR 35 billion. Hungary (despite recent improvements), Lithuania and Romania face similar issues of low energy efficiency in residential buildings. France has introduced ambitious plans to retro-fit social and private housing, but

<sup>(511)</sup> Thomson and Bouzarovski (2018).

<sup>(512)</sup> European Commission (2019b).

<sup>(513)</sup> Fransen et al (2018).

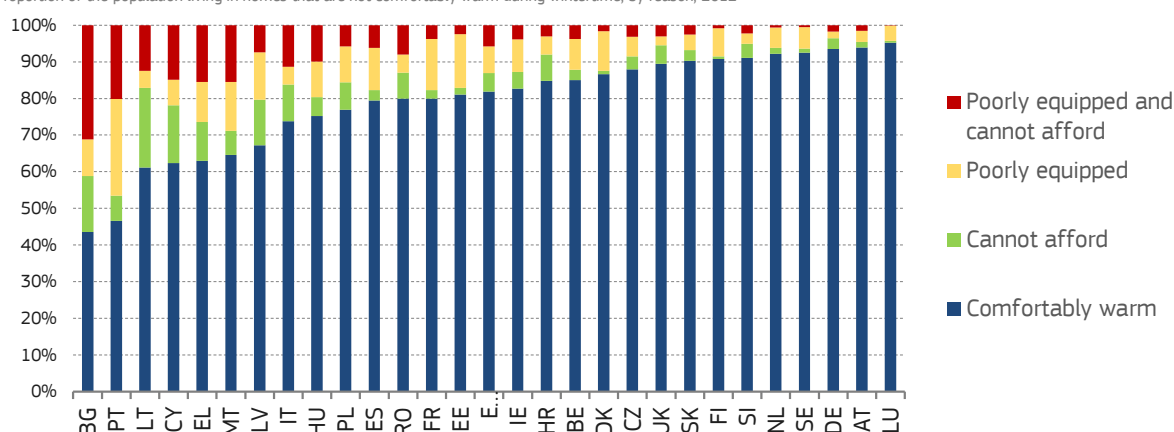
<sup>(509)</sup> Rademaekers (2016).

<sup>(510)</sup> European Commission (2019).

Chart 5.21

### In addition to the cost of energy, another major reason for households experiencing cold in winter is poorly equipped homes

Proportion of the population living in homes that are not comfortably warm during wintertime, by reason, 2012



Note: 'Cannot afford' refers to a lack of financial resources to keep the home adequately warm during wintertime. 'Poorly equipped' refers to a dwelling where the heating system is insufficiently effective, or where the home is insufficiently insulated against the cold.

Source: Authors' calculations based on EU-SILC 2012 User Database, ad hoc module 2012 on housing conditions.

[Click here to download chart.](#)

unlocking private investment remains a major challenge.<sup>(514)</sup> Seeking new sources of efficiency improvements in other areas, such as the use of electricity appliances, will also be crucial to reaching the targets.

**Several factors hold back investment in the energy efficiency of homes, including informational barriers, financial constraints and misaligned incentives.** Many households remain unaware of the return on investment from greater energy efficiency. Some may find it difficult to access information on the improvements needed for their specific dwelling. Households may also lack understanding of the grants or loans they could access to support their investment.<sup>(515)</sup> Other important impediments to investments in energy efficiency and renewable energy are low income, limited wealth or lack of access to credit.<sup>(516)</sup> Among home-owners there is a consistent pattern across Member States of those on lower incomes being less likely to adopt retro-fitting improvements to the energy efficiency of their homes, despite government support measures.<sup>(517)</sup> For rented homes, the costs and benefits of energy efficiency measures are often split between landlords and tenants. Whereas the cost of renovation or improvements in energy efficiency are typically financed by landlords (at least initially), the benefits in terms of reduced energy bills typically go to the tenant.<sup>(518)</sup> Proliferation of rentals may hold back investment in energy efficiency in old buildings in city centres where it is most needed. Improving energy efficiency for vulnerable households may therefore require policies that are adapted to the specific

situations of private tenants, social tenants or precarious homeowners.<sup>(519)</sup>

**In the medium run, energy poverty may increase in the absence of policy change, if energy costs rise faster than total disposable household income.** Long-term simulations confirm that, regardless of the scenario chosen, energy expenditure (including fuel costs and energy equipment expenditure) is projected to increase in the medium term (with an increase between 2015 and 2030 of 21%). Given expected increases in household income, overall energy expenditure is projected to stay at a similar share of household disposable income in 2015 and 2030, amounting to 7.3%. After 2030 energy expenditure tend to continue to increase in absolute terms but varies considerably between the scenarios (see section 3.1.), with some of the lowest levels of increase under the energy efficiency scenario and the highest in the scenarios based on the implementation of high tech solutions with focus on an increased circular economy or changes in consumer preferences.<sup>(520)</sup> But more important these scenarios see energy expenditure increase less fast after 2030 than household income, resulting in a decreasing share of household disposable income after 2030, underlining the long term benefits of a transition to a more resource and energy efficient economy.

## 5. CLIMATE CHANGE AND AIR POLLUTION: AIR QUALITY IMPACTS ON LOCAL HEALTH

**Climate change and air pollution are intrinsically related.** Carbon dioxide is the largest driver of climate change but other non-CO<sub>2</sub> 'climate forcers' also

<sup>(514)</sup> Respective 2019 Semester country reports.

<sup>(515)</sup> Ugarte et al. (2016).

<sup>(516)</sup> Ameli and Brandt (2015).

<sup>(517)</sup> Schleich (2019).

<sup>(518)</sup> See Burlinson et al., Economidou (2014), Vanhille et al. (2017) and Zachmann et al. (2018).

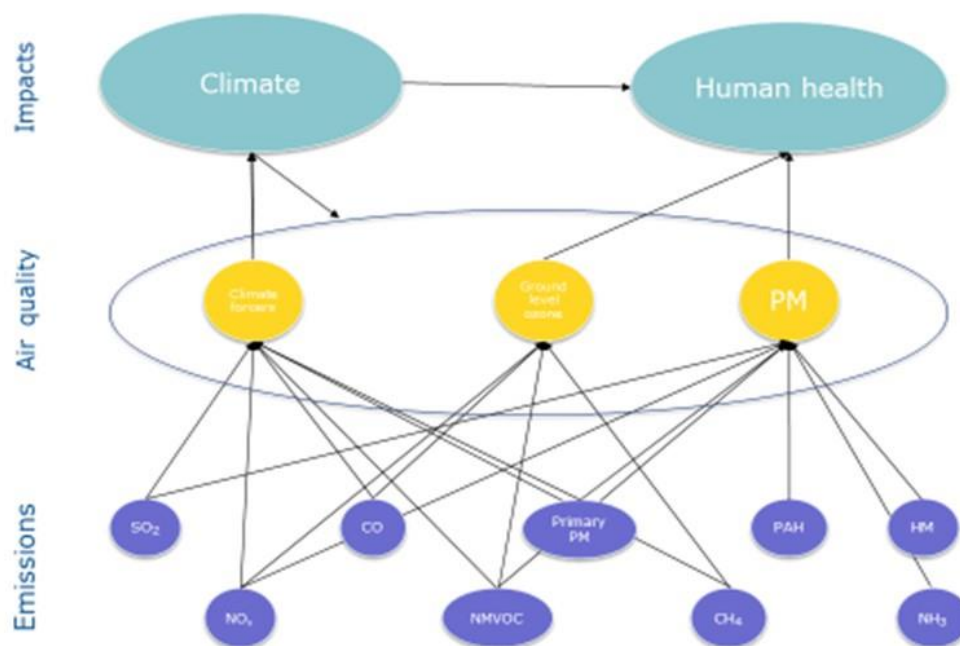
<sup>(519)</sup> See Vanhille et al. (2017) and CEPI/UIPI (2010).

<sup>(520)</sup> Impact assessment on Long-term greenhouse gas emissions reduction strategy.

Figure 5.3

**Air pollution affects human health and climate change**

Interaction between emissions, quality of air and impacts on human health and climate



Source: Based on European Environment Agency – Air quality in Europe 2010. For illustration purposes only.  
[Click here to download figure.](#)

contribute to global warming (see *Figure 5.3*). Ground level ozone ( $O_3$ ), one of the key air pollutants that has a significant impact on human health, can also be worsened by global warming. Fine particulate matter (PM), another major air pollutant, contains black carbon, which has a warming effect, while sulphur oxides may, in some cases, contribute to cooling the climate. While most of the measures to cut emissions have the win-win effect of reducing air pollution and contributing to climate change mitigation, certain measures lead to trade-off effects between air quality and climate change. <sup>(521)</sup>

**Air pollution is the greatest environmental health risk in the EU and it has a direct impact on individuals' quality of life.** Chronic exposure to air pollutants increases the risk of heart disease, stroke and pulmonary and respiratory diseases, including lung cancer. Each year, air pollutants such as particulate matter, nitrogen dioxide and ground level ozone are responsible for around 400,000 premature deaths in the EU. Air pollution also has a considerable economic impact, cutting lives short, increasing medical costs and reducing productivity across the economy through working days lost due to ill health or dragging down the productivity of those working. <sup>(522)</sup>

The related total health costs of air pollution have been estimated at EUR 330 - 940 billion annually, including EUR 15 billion in lost workdays. <sup>(523)</sup> Air pollution also has a negative impact on ecosystems, damaging soil, forests, lakes and rivers and reducing agricultural yields.

**People from lower socio-economic backgrounds, children, older people and those with pre-existing health problems are the most vulnerable to the negative effects of air pollution.** People from lower socio-economic backgrounds tend to be more affected by air pollution than the general population, as the negative effects of pollution aggravate the effects of poor diet, unhealthy lifestyles and inadequate healthcare. Air pollution can also have a detrimental effect on children's development and health. The occurrence of bronchitis, pneumonia and sinusitis in children has been linked to air pollution. Children's delayed neural and cognitive development can sometimes be attributed to air pollution. It can have a negative impact on their early school performance and subsequently their educational attainment, employability and income.

<sup>(521)</sup> EEA (2012).

<sup>(522)</sup> Graff et al (2012).

<sup>(523)</sup> European Commission (2013).



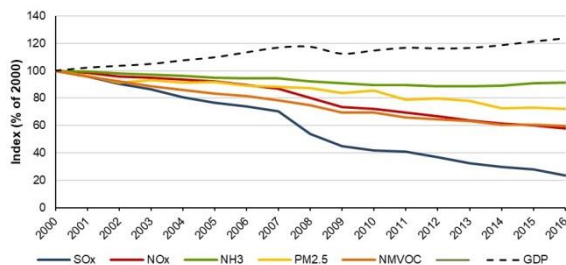
Long-term exposure to air pollution is associated with stress, anxiety, cardiovascular and respiratory diseases in older people, who are also more likely to suffer from frailty and reduced lung function. Finally, air pollution can exacerbate the already poor health of those with a pre-existing health condition. <sup>(524)</sup>

**Emissions of the main air pollutants have been decreasing in the EU, showing a significant absolute decoupling from economic activity.** Despite this positive trend (see *Chart 5.22*), the levels of air pollution <sup>(525)</sup> still exceed the EU limits in zones and agglomerations across the EU. Road transport is one of Europe's main sources of air pollution, especially for harmful pollutants such as nitrogen dioxide and particulate matter. Emissions from agriculture, energy production, industry and households also contribute to air pollution.

Chart 5.22

#### Emissions in the EU have been decreasing...

Development in EU28 emissions, 2000-2016 (% of 2000 levels), main air pollutants



Note: GDP expressed in chain-linked volumes (2010), % of 2000 level

Source: EEA: Air Quality in Europe 2018

[Click here to download chart.](#)

#### Those living in cities are more exposed to the detrimental effects of air pollution on health.

Although emissions of air pollutants have decreased considerably since 1990, air pollutant concentrations in specific localities still remain high, with urban areas being the most affected. Up to 96% of EU citizens living in urban areas were exposed to O<sub>3</sub> concentrations above the levels set in the World Health Organisation guidelines in the 2014-2016 period. The proportion of the EU-28 urban population exposed to PM<sub>2.5</sub> and PM<sub>10</sub> levels above WHO guidelines was the lowest since 2000, but still reached 42-52% and 74-85% respectively. <sup>(526)</sup>

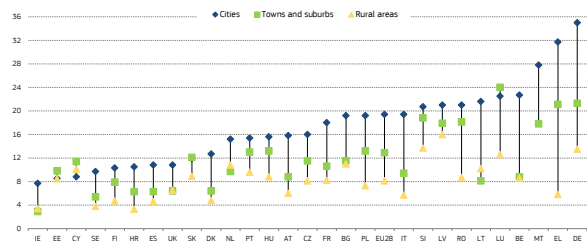
**Urban dwellers also report to suffer more than others from air pollution and other environmental problems.** In 2017, almost one fifth of the EU 28 population living in cities reported suffering from pollution, grime or other environmental problems. This problem was most severe in German

and Greek cities, while less than 10% of city dwellers in Sweden, Cyprus, Ireland and Estonia reported suffering from these conditions. <sup>(527)</sup> People living in towns and suburbs (12.9%) and those living in rural areas (8.1%) are less likely to report this problem (see *Chart 5.23*). Air pollutants tend to concentrate more in urban areas due to factors such as higher density of economic activity, population and the built environment.

Chart 5.23

#### People in cities report being more exposed to pollution and other environmental problems than those living in rural areas

Proportion of people living in an area with problems related to pollution, grime or other environmental problems, by degree of urbanisation, 2017



Note: Low reliability of data for MT rural areas; 2016 for the UK.

Source: Eurostat, ilc\_mddw05.

[Click here to download chart.](#)

**The proportion of people who report being exposed to problems related to pollution, grime and other environmental problems has been decreasing, although it varies widely across Member States.** This encouraging trend, in line with the overall reduction in air pollution, can be observed in most Member States, with the exception of Austria, Germany, Hungary, Lithuania and Luxembourg. However the proportion of those reporting environmental problems in areas where they live is still above 20% in Germany and Malta.

**The evidence on vulnerable groups being more exposed to air pollution is mixed.** Social, economic, political and environmental factors contribute to how environmental risks are distributed in a society. People from lower socio-economic backgrounds are more likely to live in more affordable, densely built-up and populated city centres with higher traffic concentration and thus suffer higher exposure to air pollution than those living in suburbs, for example. A number of local studies confirm that people from less privileged socio-economic backgrounds live in areas more exposed to air pollutants. These studies were conducted in Germany, Czechia, France, Belgium and the Netherlands. <sup>(528)</sup> However, *Chart 5.24* shows that, despite a decrease in the last decade in most Member States, a relatively high proportion of those reporting environmental problems in areas where they live belong to the middle class (the proportion with high income is relatively small.) Evidence is similarly mixed as regards specific age groups, such as the elderly and children.

<sup>(524)</sup> EEA (2018a).

<sup>(525)</sup> EEA (2018b).

<sup>(526)</sup> Ibid.

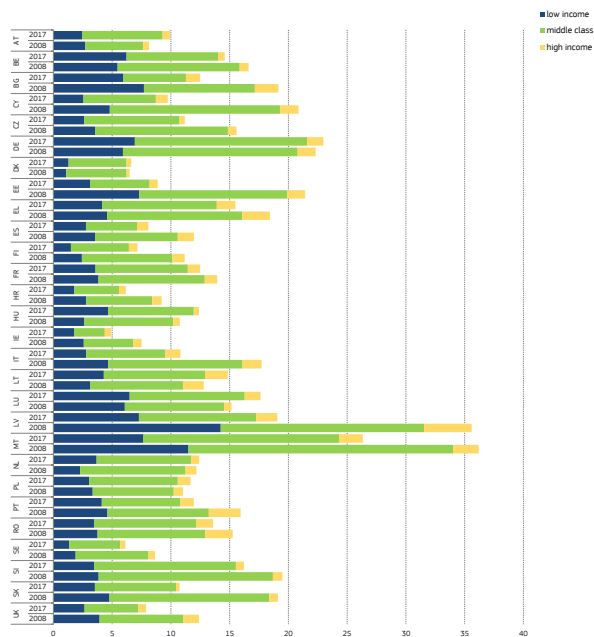
<sup>(527)</sup> A number of factors influence these results: city size, geographical/weather characteristics and human activity.

<sup>(528)</sup> EEA (2018a). The evidence refers to spacial correlation.

Chart 5.24

### A relatively high proportion of individuals reporting pollution, grime and other environmental problems belong to the middle class

Proportion of people living in an area with problems related to pollution, grime or other environmental problems by income group, 2008 and 2017



Note: 2010 instead of 2008 for HR, 2016 instead of 2017 for IE and the UK.

Source: EU-SILC.

[Click here to download chart.](#)

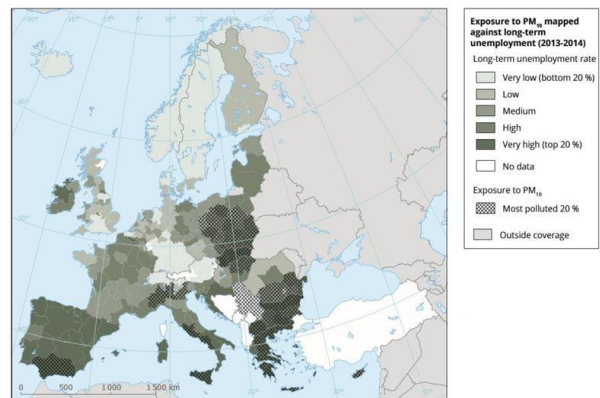
**The correlation between the level of regional development and air pollution is not straightforward.** In general, less developed regions, as measured in terms of unemployment, educational level and household income, are more exposed to pollutants such as PM<sub>2.5</sub> and PM<sub>10</sub> (see *Figure 5.4*). More densely populated areas or those with higher levels of industrialisation such as those in northern Italy, western Germany and the UK suffer more from NO<sub>2</sub> pollution (see *Figure 5.5*). However, a more granular assessment shows that within these regions, those with lower socio-economic status are often more exposed. <sup>(529)</sup>

<sup>(529)</sup> For example, almost half of the most deprived neighbourhoods in London suffer from NO<sub>2</sub> exposure above EU limits compared to 2% of the least deprived ones (Aether 2017).

Figure 5.4

### Less developed regions tend to be more exposed to pollutants

Exposure to fine particulate matter mapped against long-term unemployment



Note: Exposure is expressed as population-weighted concentrations; mapped for NUTS 2 regions

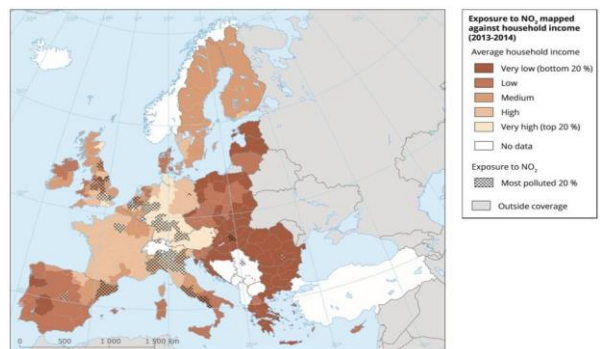
Source: EEA (2018)

[Click here to download figure.](#)

Figure 5.5

### The link between regional development and air pollution is weak

Exposure to NO<sub>2</sub> mapped against household income (2013-2014)



Note: Exposure is expressed as population-weighted concentrations; mapped for NUTS 2 regions

Source: EEA (2018)

[Click here to download figure.](#)

**Climate change action has the potential to improve air quality (and therefore human health) and vice versa.** Policies aimed at mitigating climate change reduce greenhouse gases and local air pollutants when these have the same underlying source, which is often the case. Transition to the energy systems necessary to reach the targets agreed in the context of the Paris Agreement on climate change can help to improve air quality and consequently human health through reduced use of fossil fuels. The impact can be even stronger if more ambitious policies than those limiting global warming to 2.0 degrees Celsius are implemented, and accompanied by gradual diffusion of air pollution control measures or even full adoption of the best available air pollution abatement technologies by 2030. Compared with 2010, pollution-related premature mortality in the EU is projected to increase by roughly a quarter by 2050 if additional climate change mitigation measures and air pollution measures are not taken. Under the most ambitious scenario in terms of climate and air pollution action,

roughly one third of premature deaths can be avoided.<sup>(530)</sup>

**Climate action therefore has the potential to gather further political support by focusing on the co-benefits of air pollution reduction and avoiding the few trade-offs.**<sup>(531)</sup> This is the case because the benefits of air pollution are local and visible in the short term, compared with the longer term and global effects of climate mitigation action.

## 6. CONCLUSIONS AND ECO-SOCIAL POLICY CHOICES

**The transition to a low-carbon economy is expected to have small but positive effects on GDP, and employment.** GDP and employment effects by 2030 are expected to be respectively up to 1.1% and 0.5% higher than they would be without climate action necessary for meeting the 2 degrees target under the Paris Agreement. This amounts to an additional 1.2 million jobs in the EU by 2030, on top of the 12 million additional jobs expected to be created on the baseline scenario. Simulations of pathways towards a climate-neutral (i.e. net zero greenhouse gas emissions) EU economy by 2050, consistent with the EU contribution to limiting global warming to 1.5 degrees, also show a positive net overall employment impact of 1.5 to 2 million extra jobs by 2050, with a small GDP impact which is either positive or negative, depending on modelling specifications.

**The transition to a climate-neutral economy is expected to provide additional jobs in growing, green(ing) sectors both in industry and services, including construction, waste management and sustainable finance.** The positive impact on GDP and employment is largely due to the investment activity required to achieve such a transition, together with the impact of lower spending on the import of fossil fuels. Furthermore, lower consumer prices, notably of solar photovoltaic electricity, boost disposable incomes, consumer expenditure and consequently the demand for consumer services, which are generally labour-intensive. The design of revenue recycling is a major driver of economic and employment outcomes. The impacts, however, will vary considerably between sectors and countries, ranging from slightly negative employment impacts in Poland to additional job creation of up to 1% of the total workforce in Belgium, Spain and Germany.

**Moving to a climate-neutral economy may also help to mitigate further job polarisation resulting from digitalisation, by creating jobs in the middle of the wage and skill distributions.** Targeted support is needed for retraining and upskilling of the workforce, in response to new

emerging tasks and skill requirements. The costs for these measures need to be shared fairly. The positive health effects of reduced pollution in general, and of changed sourcing and production processes relating to the circular economy, should also be borne in mind.

**However, the transition will require significant reskilling and labour reallocation, and hence raises questions about potential costs and risks in the employment and social domain and their distribution.** The measures and reforms necessary to reach the climate targets will have substantial impacts on people and regions, including significant labour reallocation across sectors and occupations. They will particularly affect workers and families whose livelihoods have so far been dependent on work in energy-intensive sectors: these workers will need support for the transition, including retraining, reskilling and possible job search, as well as income support and compensatory measures where appropriate.

**The measures and reforms will further affect those lower and middle-income households already at greater risk of disproportionately high spending on energy and mobility and even energy poverty.** Their hardship would be deepened by regulatory or fiscal measures which potentially have regressive effects, whereas progressive measures could help to mitigate these negative effects.

**Careful design and adequate funding sources to support the necessary accompanying or compensatory measures are essential for a just transition.** Options include tax shifts from labour to energy consumption, waste and pollution, as well as the use of revenues from climate policies to finance social transfers ensuring a fair burden sharing. Revenue recycling schemes which use revenues from carbon taxation for the financing of subsidies to taxpayers have been shown to enhance the acceptability of climate action measures overall. Climate action has also potential to gather further social acceptance by bringing forward the co-benefits with air quality.

**Progress towards Sustainable Europe 2030 and the ambitious vision defined in the Communication “A Clean Planet for All” of November 2018 entails a broad policy mix.** It requires effective and timely implementation of a whole range of policy measures and fundamental reforms at EU, national and regional levels, including in areas such as energy and transport, taxation, research, industrial and competition policy as well as employment and social policies.

**The Commission has put in place an enabling framework of policies and programmes** that are of key relevance in this context. In addition to the

<sup>(530)</sup> Vandyck et al (2018).

<sup>(531)</sup> Which can occur in the case of biomass burning, often detrimental for air quality.

many energy- and climate-related initiatives <sup>(532)</sup>, and the overall commitment for climate mainstreaming across all EU programme, with a target of 25% of EU expenditure contributing to climate objectives, they include in particular:

- the European Pillar of Social Rights, which declares among other things a right of access to good quality essential services such as water, sanitation, energy and transport, and indicates that support for access to such services should be available for those in need. It also declares a right to quality and inclusive education, training and life-long learning and a right to adequate social protection – all crucial elements of a fair and just transition.
- the European Structural and Investment Funds, notably the European Social Fund and the European Regional Development Fund, which offer financial support for infrastructure investments and for reskilling, upskilling, retraining and transition support.
- the European Globalisation Adjustment Fund, which supports workers made redundant as a result of major structural change caused by globalisation, the continuation of the crisis, or the transition to low-carbon economy.
- the InvestEU programme, which provides an EU budget guarantee to support investment and access to finance in the EU for sustainable infrastructure, research, innovation and digitalisation, SMEs and social investment and skills.
- economic policy coordination under the European Semester which, among other things, helps to promote progress towards the Europe 2020 targets. These include lifting Europeans out of energy poverty, identifying investment needs and promoting reforms in support of a more circular, low-carbon economy, including tax shifts away from labour towards environmental taxes.
- the Initiative for Coal and Carbon-Intensive Regions in Transition, which helps to mitigate the social consequences of the low carbon transition and assists the regions concerned to define low-carbon transition strategies and address potential negative socio-economic impacts.
- the Modernisation Fund, which supports low-carbon investments in 10 lower income EU Member States, including support of just transition by redeployment, re-skilling and up-skilling programmes.

the involvement of stakeholders, notably social partners, in the design and implementation of these policies and initiatives.

**For the EU's climate and energy strategy to succeed, it is of key importance to integrate the social dimension from the outset and not as an afterthought.** As indicated in the long-term strategy for a climate neutral EU economy by 2050, this will help to ensure a socially fair, just transition and, eventually, social acceptance and public support for reform. Social concerns and impacts need to be taken into account from the outset in policy design and implementation. Where needed, mitigating or compensatory measures need to be part of the reforms. This approach reflects the importance of the environmental-social nexus in the EU development model.

<sup>(532)</sup> e.g. Clean Energy for All package, ETS, ESR, LULUCF, emission standards for cars and vans, eco-design, etc..

## Annex 1: Studies on the 'greenness' of occupations

**Despite the generally accepted view on the significant effects that the transition to a climate-neutral economy would bring for skills and tasks, only relatively few studies have assessed this issue in detail.** There are surprisingly few reliable statistics on the nature, number, and sectoral concentration of the jobs affected and relatively less effort has been expended on assessing the 'greenness' of different occupations. Among the few exceptions in the literature are Ast and Margontier (2012) and Eurofound (2012) for France, Bowen et al. (2018) for the US and Marin and Vona (2018) for the EU:<sup>(533)</sup>

- **Ast and Margontier (2012)** and **Eurofound (2012)** provide a taxonomy of green and 'greenable' occupations in France. They estimate the number of people in green occupations in France in 2008 at 136 000, and that of people in 'greenable' occupations at 3.5 million. They find that green occupations are concentrated in traditional activities such as waste management, treatment of pollution, energy production and distribution, and protection of the environment, and predominantly held by male employees in stable jobs. By contrast, they found 'greenable' occupations to be much more diverse, with two thirds of them in activities unrelated to the environment.
- In a study for the US Department of Labor, **Bowen et al. (2018)** identify occupations subject to 'greening' on the basis of the tasks that the workers in these occupations performed, and identified the ensuing skills needs for the main economic sectors. Based on this typology, they estimate the share of jobs in the US that would benefit from a transition to the green economy, and present different measures for the ease with which workers are likely to be able to move from non-green to green jobs. Using the US O\*NET database and its definition of green jobs,<sup>(534)</sup> they find that 19.4% of US workers can be considered being part of the green economy in a broad sense. A large proportion of this 'green employment', however, would be 'indirectly' green, comprising existing jobs that are expected to be in high demand due to greening but do not require significant changes in tasks, skills, or knowledge. They further analyse the task content of jobs and conclude that green jobs vary in their degree of 'greenness,' with very few jobs consisting of green tasks only. They find that non-green jobs generally differ from their green counterparts in only a few skill-specific aspects, suggesting that most re-training can happen on-the-job and that greening of the economy holds important growth potential.
- In **Bowen and Hancké (forthcoming)**, the authors are exploring the results when transferring the taxonomy to the EU economy. This is ongoing work the results of which are presented below.
- **Marin and Vona (2018)**, by contrast, examine the impact of different climate change policies on skills in 15 industrial sectors in 14 European countries, based on a taxonomy of economic sectors according to their exposure to climate policies. They conclude that climate policies, proxied by energy prices, have a very small negative impact on total employment, while favouring skilled workers (e.g. technicians and managers) against manual workers. Climate policies also have a pronounced bias towards technical occupations (e.g. physical and engineering science technicians, process control technicians).

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<sup>(533)</sup> Jacob et al. (2015) further provide a sector-based typology and analysis of green jobs and their impacts with particular focus on emerging and developing economies.

<sup>(534)</sup> See Rivkin et al (2009) and <https://www.onetcenter.org/overview.html>.



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# Sustainability and governance: the role of social dialogue

## 1. INTRODUCTION <sup>(535)</sup>

**Sustainability requires balancing economic, social and environmental objectives and striking compromises between different stakeholders.** It challenges the governance system. Objective criteria, such as the foreseeable costs and benefits of policy options should play an important role for decision making. However, finding compromises between different stakeholders will require negotiations between parties with different interests, so to arrive at a common understanding of the issues at stake and of how a compromise could look like. Social dialogue provides arrangements for such negotiations and can therefore help finding compromises to deliver on sustainable development, especially in case of reforms. This chapter will start with linking sustainability and the Sustainable Development Goals (SDGs) to the areas where social dialogue contributes. It identifies four areas of social partners' actions: (1) equality at work, working conditions and workers' rights, (2) inclusiveness, (3) ecologically sustainable economic activity and (4) governance and participation. The chapter will show how social dialogue has contributed so far regarding the social, economic and environmental components of sustainability.

### 1.1. Sustainability is a topic for social dialogue

**Social dialogue can facilitate the transition towards a more sustainable economy by developing a joint understanding of the challenges and the way to address them.** Chapter

2 has shown that both investment and effective institutions are necessary for productivity growth. Accordingly, investments, for instance in skills and infrastructure, can be reinforced by well-functioning institutions that ensure proper management and implementation. Independently of how it is organised, social dialogue helps to create a shared understanding, paving the way for joint actions.

**By bringing together workers and employers, social dialogue has the additional advantage of representing a large part of society.** Social partners are therefore considered key actors when it comes to reforming and modernising societies and economies. High trade union density and collective bargaining coverage tend to coincide with higher investment in social welfare and stronger trust in public institutions. Moreover, transitions at various levels tend to be managed better if discussed and agreed by the social partners. This is one explanation for associating functioning social dialogue with a perception of stronger governmental effectiveness and accountability.

**Sustainability requires compromises which go beyond the topics social partners have focused on so far.** Social dialogue traditionally aims at compromises, which directly affect those represented in the negotiations. Sustainability, and in particular its environmental component, aims at compromises for which the consequences are less immediate and where also interests of parties not or less directly represented at the negotiation table (e.g. future generations or workers in third countries) need to be taken into account to avoid negative external effects.

**Social partners have gradually broadened their approach and included environmental and social**

<sup>(535)</sup> This chapter was written by Sigried Caspar, Joé Rieff and Evi Roelen.



**inclusion aspects into their discussions and negotiations.** While the Annual Review of Working Life in 2017 explicitly recognises that there was not much national cross-industry social dialogue on greening the economy or environmental topics, it shows that social partners discuss issues, which are not traditional key domains of social dialogue. <sup>(536)</sup> Attention to these topics, however, differs very much over time. <sup>(537)</sup> Recent examples of top-level national social dialogue on broader themes are reforms of social security systems, including pension schemes, and increasing employability. In most instances, the discussions also involved third parties, such as the government or training providers. Further examples for broader topics are activation measures for the unemployed in Finland or Poland, the integration of refugees and migrants in Denmark and Sweden, quotas for foreign workers in the Czech Republic and Estonia. <sup>(538)</sup>

**Broadening the scope of negotiations requires new partnerships and new strategies.** The new approaches can generally be divided into two categories:

- Social partners incorporate sustainability aspects more than so far in their programme. They do so for several reasons. Some aspects (e.g. pollution) might have an influence on the quality of life for their members or their members' children or they might negatively impact on the possibility to continue with a certain business model in the longer run. In other cases they might be motivated by solidarity with poorly paid and exploited workers in third countries and – linked to that – a negative reputation when not taking into account all dimensions of sustainability, can motivate a broader scope of social dialogue.
- Social partners cooperate with other stakeholders, such as environmental organisations or organisations promoting fair trade, which bring on board the necessary knowledge on these relatively new issues.

## 1.2. Conceptual framework

**This chapter links social dialogue to the 17 UN Sustainable Developments Goals (SDGs) by clustering the SDGs into four groups.** The SDGs, build on other strategic documents such as the '2020 Energy Strategy' of the EU, with which the European Union had committed in 2010 to reduce greenhouse gas emissions until 2020 by 20%, to increase the use of renewable energy to 20% of the energy consumption and to achieve energy savings of at least 20%. <sup>(539)</sup> These SDGs have been taken up in the Reflection Paper towards a Sustainable Europe by

2030 <sup>(540)</sup> and provide a comprehensive framework for sustainable development, which aims at world-wide recognition, so to allow for a global discourse on the topics included. Social partners can contribute to most of the SDGs, as identified in an issues paper jointly published by the International Labour Organisation (ILO) and the International Trade Union Confederation (ITUC). <sup>(541)</sup> Building on this work, the chapter will be structured around four clusters, defining areas in which social dialogue and social partners' activities impact the SDGs (see *Table 6.1*). These clusters cover the following areas:

- conditions, rights and equality of work, encompassing the key activities of collective bargaining;
- the inclusiveness of working life and society, which includes the integration of groups at risk of marginalisation into the labour market and the link between the area covered by collective bargaining and the bordering areas of social security coverage;
- a resource efficient and environmentally sustainable economic performance, smooth transitions in case of restructuring and
- governance and participation, taking into account the contribution to fostering a democratic society.

<sup>(540)</sup> European Commission (2019).

<sup>(541)</sup> ILO-ITUC (2017).

<sup>(536)</sup> Eurofound (2018a).

<sup>(537)</sup> European Commission (2013).

<sup>(538)</sup> Eurofound (2018a), p. 29.

<sup>(539)</sup> European Commission, COM (2010) 639.

Table 6.1

**Areas where social partners could contribute**

Potential for social partners' involvement in Sustainable Development Goals

	Equality of work, working conditions and rights	Inclusiveness	Ecologically sustainable economic activity	Governance and participation
GOAL 1: No Poverty	x	x		
GOAL 2: Zero Hunger				
GOAL 3: Good Health and Well-being		x		
GOAL 4: Quality Education		x		
GOAL 5: Gender Equality	x			
GOAL 6: Clean Water and Sanitation			(x)	
GOAL 7: Affordable and Clean Energy			(x)	
GOAL 8: Decent Work and Economic Growth	x		x	
GOAL 9: Industry, Innovation and Infrastructure			x	
GOAL 10: Reduced Inequality	x			
GOAL 11: Sustainable Cities and Communities			(x)	
GOAL 12: Responsible Consumption and Production			x	
GOAL 13: Climate Action			x	
GOAL 14: Life Below Water			(x)	
GOAL 15: Life on Land			(x)	
GOAL 16: Peace, Justice and Strong Institutions				x
GOAL 17: Partnerships to achieve the Goal				x

Note: Comment: x indicates that the respective cluster contributes directly to the SDG, (x) indicates an indirect contribution of the respective cluster towards the SDG.

Source: <http://www.un.org/development/desa/disabilities/envision2030-goal4.html>

**Cluster 1, on equality at work, working conditions and rights, contributes to:**

- No poverty (SDG 1) – e.g. by ensuring minimum wages and better working conditions, including the protection from arbitrary decisions of management and no arbitrary lay-offs;
- Gender Equality (SDG 5) – e.g. by trade unions promoting equal pay and ensuring transparent and fair treatment of all workers and by employers' considering a well-developed 'diversity

management' as a factor increasing creativity and longer term competitiveness;

- Decent Work and Economic Growth (SDG 8) – e.g. by concluding collective agreements, which include health and safety or working time provisions; by the anticipation of changing skill needs and the timely adaptation of workers to new requirements;
- Reduced inequality (SDG 10) – e.g. by negotiating pay schemes which work for different groups of employees.

**Cluster 2, ‘inclusiveness’**, has an impact on:

- No Poverty (SDG 1) – e.g. by helping the unemployed finding their way back to the labour market, by training employed to remain part of the working population, by organising – with public support – job creation companies, by supporting transitions in case of mass redundancies or social partner actions to ensure decent pensions;
- Good Health and Well-being (SDG 3) – e.g. by involvement of social partners in the financing and design of the health insurance;
- Quality Education (SDG 4) – e.g. by providing training, which ensures the employability of workers;
- These first two clusters are closely linked to the 20 principles of the European Pillar of Social Rights which was jointly proclaimed by European Parliament, the Commission and the Council at the Social Summit in Gothenburg in November 2017.

**Cluster 3, ecologically sustainable economic activity**, makes a direct contribution to:

- Decent Work and Economic Growth (SDG 8) – e.g. by maintaining the competitiveness of the economy, promoting decent work and a safe work environment;
- Industry, Innovation and Infrastructure (SDG 9) – e.g. by negotiating the transition towards more environmentally friendly and efficient use of resources. This will allow the industry to implement innovations without leaving people behind;
- Climate Action (SDG 13) – e.g. the transition towards new technologies, such as the transition to low carbon technologies, requires that social partners agree on operational steps and understand the need for joint efforts. The absence of such jointly agreed strategy causes friction and reduces the social acceptance of such transitions; <sup>(542)</sup>
- Furthermore, functioning social dialogue can indirectly contribute to find better solutions for the SDGs 6, 7, 11, 14 and 15.

**Finally, cluster 4, governance and participation**, contributes to:

- Peace, Justice and Strong Institutions (SDG 16) – e.g. social dialogue can provide a platform for the mediation of conflicts. Different from the new social movements, social partners have well-defined mandates and represent a clearly defined group;

- Partnerships to achieve the goal (SDG 17) – e.g. bringing together different interest groups, finding compromises within and between each side of industry and beyond.

Cluster 4 is distinct from the others, since it emphasizes next to the results of social dialogue also the negotiation process. The benefits of social dialogue are not only in the decisions taken, but also in the negotiations per se.

The chapter will deal with the four clusters mentioned above. Especially, cluster 1 and cluster 3 will rely on data produced for the factor analysis, explained more in detail in chapter 2 of this publication. For social dialogue and collective bargaining, the factor analysis relies mostly on data from the database on institutional characteristics of trade unions, wage setting, state intervention and social pacts (ICTWSS). <sup>(543)</sup>

## 2. ACHIEVEMENTS OF SOCIAL DIALOGUE

The following section of the chapter will discuss social partners’ contributions to each of the clusters. The promotion of social dialogue is enshrined in the Treaty on the Functioning of the EU. The ‘New Start for Social Dialogue’ initiative recognized the importance of social dialogue for recovery and competitiveness. <sup>(544)</sup> This section will provide different examples for the effectiveness of social dialogue and explain how social partners can add to the performance of national economies.

### 2.1. Equality at work, working conditions, workers’ rights

**Equality at work, working conditions and workers’ rights are core topics for social dialogue and link to the SDGs in the economic and social sphere.** They are part of collective agreements and efforts of trade unions are immediately directed at improving the situation on these aspects.

**Reducing wage dispersion and ensuring a sufficient income for workers are core objectives of trade unions.** Dispersion of labour earnings is an important reason for inequality; it accounts for 88% of income inequality (2015) in the EU. <sup>(545)</sup> Collective bargaining allows workers to secure a share in economic growth and contributes to adequate working conditions. <sup>(546)</sup> Workers covered by a collective

<sup>(543)</sup> Visser (2016).

<sup>(544)</sup> Initiative started with a high level conference on 5 March 2015 and was supported by a quadripartite declaration of 27 June 2016 (Social Partners, the Netherlands Presidency of the Council of the European Union, the Commission) <https://ec.europa.eu/social/main.jsp?newsId=2562&langId=en&cattId=89&furtherNews=yes&>

<sup>(545)</sup> European Commission (2018b), p.115.

<sup>(546)</sup> Visser (2016).

<sup>(542)</sup> ILO ACTRAV (2018).

agreement tend to have higher wages than other workers. <sup>(547)</sup>

**New technologies will lead to the automation of tasks, thus making it necessary to prepare for transitions.** Timely and regular updating of skills helps workers to adapt to changing requirements and preparing for new tasks; thus facilitating transitions. Workers with higher skills levels have so far been less at risk of being replaced by machines than low skilled workers. Routine tasks, which require only a low level of skills, are more likely to be automated. <sup>(548)</sup> However, a recent study by Eurofound <sup>(549)</sup> suggests that the transition towards a green economy could lead to jobs being created at the bottom and middle range of the wage distribution. This might mitigate the polarisation of the labour market due to automation.

**Technological change and globalisation tend to reduce the bargaining power of trade unions.** They appear to put pressure on the labour income share. <sup>(550)</sup> Globalisation, in particular the threat of off-shoring, reduces the bargaining power of trade unions. <sup>(551)</sup> Thus it has contributed to the decline of the labour income share over the last decades. <sup>(552)</sup> Considering these trends, a well-functioning social dialogue plays an important role and remains essential for guaranteeing appropriate wages for workers.

**Social dialogue can help to stabilise or increase the wage share.** In Germany, Spain and Italy, for example, trade unions have been successful in that respect. <sup>(553)</sup> The effectiveness is linked to the bargaining structure, such as the degree of centralisation (i.e. whether decisions are taken at company, sectoral or cross-industry, at regional or national level) and the coverage by collective agreements, but also to less measurable factors, such as tradition and the interaction of these different elements. <sup>(554)</sup> In general, higher bargaining power of trade unions increases the labour income share. <sup>(555)</sup>

**Collective bargaining improves social sustainability by reducing wage dispersion.** <sup>(556)</sup> A central objective of collective bargaining is to negotiate wages and working conditions. While the final income distribution is affected by a large number of factors, some patterns can be observed when looking at the distribution of gross earnings and the share of workers covered by collective agreements

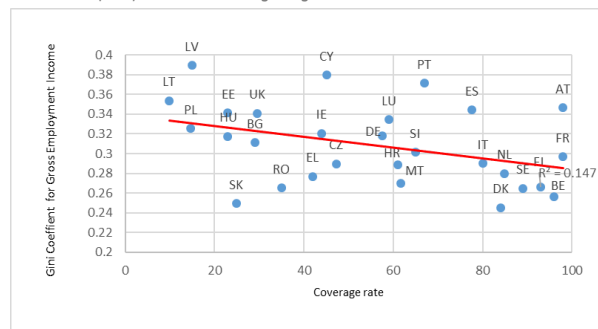
(Chart 6.1). A rather high wage dispersion coinciding with a low coverage of collective agreements can be observed in countries like Latvia, Lithuania, Poland, Estonia, United Kingdom, Hungary and Bulgaria. On the other end, for France, Belgium, Denmark, the Netherlands, Italy, Sweden and Finland high coverage rates coincide with low wage dispersion. There is a third group of intermediate coverage rates with moderate wage dispersion, formed by Slovenia, Malta, Croatia, Germany, Luxembourg, Czech Republic, Greece and Ireland, and, finally, there are six Member States, Slovakia, Romania, Cyprus, Portugal, Spain and Austria showing values which cannot be explained in this context. The extent to which collective bargaining reduces wage dispersion depends on the structure of collective bargaining, i.e. on the degree to which bargaining is coordinated among different national sectors and on the number of workers covered by a collective agreement.

**Social partners influence the setting of minimum wages and the financing of the social security system.** 22 Member States have minimum wages. Adjustments to these wages, which are important for the lower income households, often involve social partners. <sup>(557)</sup> The ability of social partners to influence these decisions largely differs between Member States and over time. Following the crisis, employers successfully argued for wage moderation. With the improved economic situation, in 2018 a number of countries substantially increased the minimum wage. Via their influence in tripartite structures, social partners have substantial impact on who pays how much into the social security schemes.

Chart 6.1

### Gross income inequality tends to be lower for higher coverage rates

Income inequality and collective bargaining



Source: Coverage rate: ICTWSS & GINI-Coefficient DG-EMPL calculations, EU-SILC UDB.

[Click here to download chart](#)

**The level at which bargaining predominantly takes place matters.** Collective bargaining agreements signed at higher levels cover a larger number of workers, than those at lower levels. Generally, the more inclusive the bargaining agreement, i.e. the higher the wage bargaining

<sup>(557)</sup>

<https://www.eurofound.europa.eu/publications/article/2019/minimum-wages-in-2019-first-findings>

<sup>(547)</sup> European Commission (2018a), p. 109; Blanchflower and Bryson (2003); Felbermayer et al. (2014).

<sup>(548)</sup> European Commission (2018b).

<sup>(549)</sup> Eurofound (2019).

<sup>(550)</sup> OECD (2018).

<sup>(551)</sup> Dumont (2006) and IMF (2017a).

<sup>(552)</sup> IMF (2017a; 2017b) and European Commission (2018a).

<sup>(553)</sup> Guschanski and Onaran (2018).

<sup>(554)</sup> Empirical evidence is not clear-cut; see Guschanski and Onaran (2018) and Pak and Schwellnuss (2019).

<sup>(555)</sup> IMF (2017b).

<sup>(556)</sup> OECD (2018).

coverage, the larger its impact on the wage distribution<sup>(558)</sup>. Company level bargaining allows taking into account individual characteristics and firm specificities. Thus, remuneration to individual educational level is higher in decentralised wage bargaining setting.<sup>(559)</sup> The level of centralisation of wage bargaining differs from one country to another and sometimes also between different areas of an economy. Indicatively four approaches to collective bargaining can be distinguished: (a) centralised collective bargaining, where binding norms or ceilings are established at central or cross-industry level; (b) collective bargaining which alternates between central and industry or sector level; (c) collective bargaining oscillating between sectoral or industry and company level and (d) fully decentralised collective bargaining (i.e. company level only). Centralised wage bargaining involves a levelling of different situations and implies more solidarity between different employment situations. The higher the level of centralisation the less differences of productivity between enterprises can be taken into account but the more employees are likely to get comparable and fair wages. In terms of solidarity between groups of employees: collectively negotiated wages tend to be associated with a lower age premium and lower benefits of higher education<sup>(560)</sup> than salaries negotiated individually.

Chart 6.2

### Higher Centralisation of Wage Bargaining is associated with lower gross income inequality

Income inequality and centralisation of wage bargaining



Source: Centralisation of Wage Bargaining: Visser (2016) & GINI-Coefficient : DG-EMPL calculations, EU-SILC UDB.

[Click here to download chart.](#)

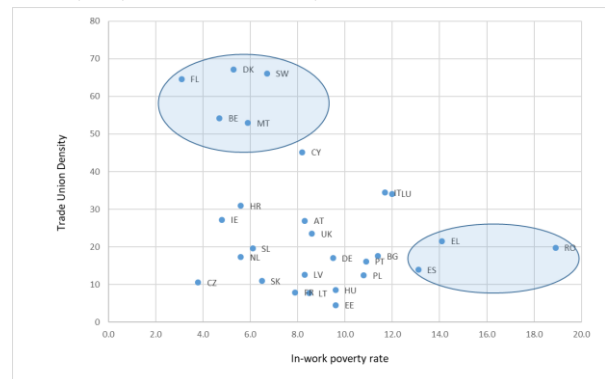
**The EU Member States with the highest trade union density show below average rates of in-work poverty**, whereas the three countries with the highest in-work poverty rates show an average or below average rate of union membership (see *Chart 6.3*). The most obvious reason for in-work poverty is receiving a low salary. Other explanations are low work intensity or high needs, due to a high number of dependent children for example<sup>(561)</sup>. With their involvement in welfare and social security policies, as

well as through wage negotiation, social partners can contribute to a reduction of in-work poverty and to social sustainability.

Chart 6.3

### Countries with a high trade union density have lower poverty rates

In-work poverty rate and trade union density



Source: In-work poverty: EU-SILC (2016) survey [ilc\_iw01]. Trade unions density: OECD - ICTWSS database and Visser (2016).

[Click here to download chart.](#)

**Workers represented by a trade union or works council are more likely to consider their pay as appropriate** (*Chart 6.4*). The company level thereby matters, because it allows for a complementary individualised assessment of each worker's situation. This additional possibility of raising concerns and being involved in the process of wage determination increases the chances that an outcome is considered fair.<sup>(562)</sup>

**Going beyond wages, collective agreements deal also with working conditions and workers' rights in a broader sense.** They regulate, for example, the organization of work, such as foreseen working hours, or access to continued training. It is an instrument to help adapting to economic and technological changes, cyclical downturns or international competition.<sup>(563)</sup> At the company level, social dialogue improves the working environment. *Chart 6.4* shows that workers are more likely to overall report good working conditions, if a workers' representation is ensured in the company, as opposed to companies with no representation. Hence, social dialogue adds to good health and dignified working conditions, which are important aspects of social sustainability.

<sup>(562)</sup> Cloutier et al. (2012).

<sup>(563)</sup> TUAC (2018).

<sup>(558)</sup> Bosch (2015).

<sup>(559)</sup> Dahl et al. (2013) and OECD (2018).

<sup>(560)</sup> OECD (2018).

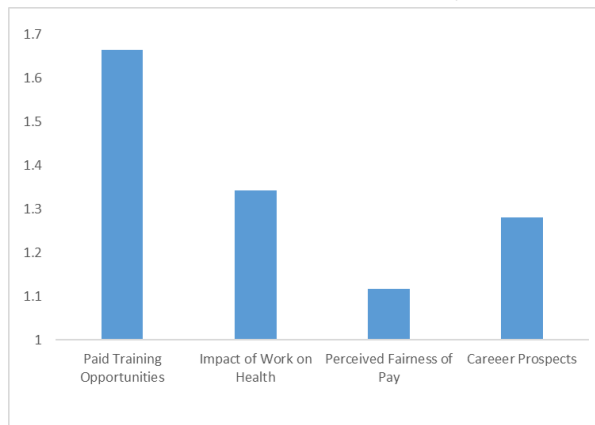
<sup>(561)</sup> Eurofound (2017).



Chart 6.4

**Employee representation improves the quality of work environment**

Chances (odds) for workers of enjoying good working conditions (four different indicators) in firms where there is a works councils/trade union representation.



Note: The odds are expressed relative to workers in firms without a works councils/trade union representation (for which it is normalised to a value of 1).

Source: Own Calculations based on EWCS (2015).

[Click here to download chart.](#)

**Trade union and work councils are positive for training opportunities:** where a trade union or works council represents employees, the chances of receiving paid training are 66% higher (*Chart 6.4*).<sup>(564)</sup> Social partners' involvement in professional training are manifold. For instance, in Finland, they are – in close cooperation with national authorities – running campaigns to increase the attractiveness of VET and they contribute to new training and education curricula in the national training and education committee.<sup>(565)</sup> Technological change and greening of the economy require workers to participate in lifelong learning in order to improve their skills to be able to keep up with the changes in the labour market.

**The probability of taking up vocational training differs according to firm size and skills levels.**

Different socio-economic factors, such as the type of company, age or educational background, affect the likelihood of taking up paid training. In general, workers that are older, low-skilled, working on temporary contracts or in smaller firms are less likely to undergo training. This is presented in *Chart 6.5*, *Chart 6.6* and *Chart 6.7*. Accordingly, individuals working in jobs requiring only low skills are less likely to participate in lifelong learning, as compared to those working in high skill occupations. Beyond that, firm size is an important determinant. However, when taking into account the presence of trade union or works council representation, firm size becomes a less important determinant for taking up paid training (*Chart 6.6*).<sup>(566)</sup>

**Trade union presence helps less skilled to access training.** The impact of trade unions or works councils (*Chart 6.7*) appears to be strongest for service and sales workers, followed by workers in elementary occupations. Other groups benefit as well, however, the impact is less pronounced.<sup>(567)</sup>

Chart 6.5

**Less skilled workers in smaller companies are less likely to receive training**

Chances (odds) for different groups of employees of recently having received training, relative to a reference group (grey bar), 2016



Note: For the respective reference group the odds are normalised to a value of 1.

Source: Commission's calculations based on LFS, 2016. The baseline level is in grey.

[Click here to download chart.](#)

**Company level social dialogue has a significant impact on the perception of individual career prospects** *Chart 6.4*. The chances that employees are of the view having a job with better career prospects are 28% higher, if a trade union or works council is present in the company or organization. This links with the better training opportunities, but also to unions requiring management to implement transparent and fair human resource development strategies.<sup>(568)</sup> This will be dealt with later on in the chapter. A finding of the analysis is thereby that trade unions have a positive impact irrespective of the sector or the occupation. Thus, trade unions have the potential to improve career prospects for all workers, independent of their skill-level.

**Where trade unions and works councils are present, workers have a more positive perception of the impact of their work on health.**

The chances that a worker perceives that his or her health is not negatively impacted by work, is 34% higher if (s)he is represented by a works council or trade union. This goes, however, along with an increased awareness of the health risks incurred with the job. In many countries, social partners are key actors in supervising, monitoring and implementing regulations relating to health and safety at the workplace.<sup>(569)</sup> In Sweden, for example, trade unions organize a system of regional safety representatives, who monitor health and safety issues at work. Furthermore, a safety committee needs to be set up in

<sup>(564)</sup> OECD (2018).

<sup>(565)</sup> Cedefop (2014).

<sup>(566)</sup> In *Chart 6.4*, the estimations are for all Member-States and occupations. The graph represents the odds of receiving training when working in a company of 250+ employees or a company with 10 to 249 employees respectively, as compared to working in a company of 2 to 9 employees. The regressions correct for gender; type of contract (no contract, traineeship, temporary employment agency contract, contract of limited

duration, contract of unlimited duration); education (ISCED levels 1- 6); age; country effects and occupation (ISCO, one digit). The dependent variable is whether or not a worker took up paid training in the last 12 months.

<sup>(567)</sup> ILO (2012), associating the International Standard Classification of Occupations (ISCO) with the skills needed within the respective occupation to carry out the main tasks.

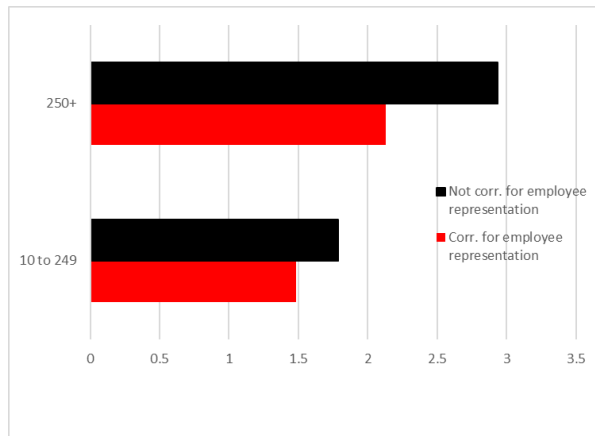
<sup>(568)</sup> Peters et al. (2017).

<sup>(569)</sup> Eurofound (2009).

companies with more than 50 employees. In Austria, social partners are directly involved in public accident insurance, which is autonomously managed by social partners. <sup>(570)</sup> In France, companies with more than 50 employees are required to have Workplace Health and Safety Committees (Comité d'hygiène, de sécurité et

Chart 6.6  
**Smaller firms' training disadvantage diminishes with employee representation**

Chances (odds) of having recently undergone training by size of the workplace



Note: Odds are normalised to a value of 1 for small workplaces with less than 10 workers. Red bars control for the existence of an employee representation.

Source: Own calculations, based on EWCS (2015).

[Click here to download chart.](#)

des conditions de travail). <sup>(571)</sup> These committees are formed by workers' representations together with the heads of the companies and they monitor health and safety issues at work. Employee participation appears to be particularly relevant in designing and implementing measures to prevent psychosocial risks. A recent survey indicates that on average (EU-28), 63% percent of the companies report that employees were involved in addressing the different risks. <sup>(572)</sup> On average, respondents in larger companies are more likely to respond that their work is impacting their health positively.

<sup>(570)</sup>

<https://www.auva.at/cdscontent/?contentid=10007.671280&viewmode=content>

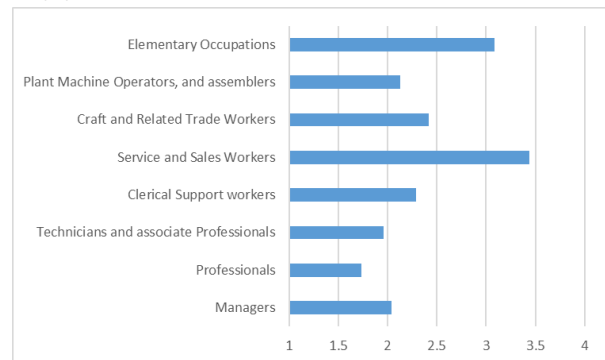
<sup>(571)</sup> See <https://travail-emploi.gouv.fr/sante-au-travail/les-acteurs-et-interlocuteurs-de-la-sante-au-travail/comite-d-hygiene-de-securite-et-des-conditions-de-travail/qu-est-ce-qu-un-chsct/article/le-comite-d-hygiene-de-securite-et-des-conditions-de-travail-chsct>.

<sup>(572)</sup> EU-OSHA (2016).

Chart 6.7

### Low-skilled workers are less likely to participate in training

Effect of Trade Union presence on paid training opportunities for different groups of employees



Source: Own calculations based on EWCS (2015). In order to analyse whether the effect of trade unions on paid training opportunities differs across different occupations, separate regression have been run for the separate occupations. Due to a low number of observations, occupations related to skilled agricultural, forestry and fishery work were not retained.

[Click here to download chart.](#)

### Gender equality is an important aspect of equality at work and for social dialogue.

It is as such a SDG goal (SDG 5). Jointly social partners set rules and fight stereotypes. The activities thereby range from equal pay for equal work, similar career perspectives for both sexes to advertising parental leave for fathers and mothers etc. From an employer perspective, the benefits are the better use of the labour force potential, more diversity and an overall better work-life-balance with related lower levels of sickness. At the European level, this has been on the agenda since many years. The cross-industry social partners concluded a framework of actions on gender equality in 2005. <sup>(573)</sup> This agreement was followed by further more concrete action plans in specific sectors at the EU level, such as in central and local and regional government administration. For local and regional government administration also a joint initiative to close the gender pay gap has been recorded. Social partners from the transport sectors cooperate to attract women to their sectors (e.g. in rail, urban public transport and Shipping) and have joined the "Women in Transport – EU Platform for Change" <sup>(574)</sup> which was launched by the European Commission. Also at the national level social partners – sometimes encouraged by the legislator – are taking initiatives to promote gender equality at the work place.

### Overall collective bargaining contributes to fairer and more sustainable wage structures.

However, sometimes specific professional groups advocate successfully a rather segmental interest, thus creating the perception of unfairness and non-sustainable solutions being promoted by social partners. In general, such problems are less relevant if unions represent a broader membership, since they are then required to balance the expectations on collective

<sup>(573)</sup> <https://ec.europa.eu/social/main.jsp?catId=521&langId=en&agreementId=1171>

<sup>(574)</sup> [https://ec.europa.eu/transport/themes/social/women-transport-eu-platform-change\\_en](https://ec.europa.eu/transport/themes/social/women-transport-eu-platform-change_en)

agreements for different professional groups already internally. This suggests that a certain level of centralisation and coordination of collective bargaining increases its social dimension.

## 2.2. Inclusiveness

**A lack of inclusiveness is perceived as a major threat to our societies.** Over two hundred years ago, the father of modern economic theory, Adam Smith, asserted that “no society can surely be flourishing and happy, of which the far greater part of the members are poor and miserable”. <sup>(575)</sup> The European Commission states the need for active inclusion, and defines that this means enabling every citizen, notably the most disadvantaged, to fully participate in society, including having a job. <sup>(576)</sup> In practical terms, this includes adequate income support, inclusive labour markets and access to quality services. Also in this area, which reaches beyond traditional social partners’ activities, they can make a crucial contribution to the SDGs.

**Well-functioning social protection systems are recognised as a key element of sustainable development.** Social protection links to the SDG 3 ‘Good Health and Well-being’. A Council Recommendation on access to social protection for workers and self-employed encourages Member States to provide everyone who works with access to social protection schemes. <sup>(577)</sup> Since such schemes are often financed through contributions of employees, jobless and also self-employed find themselves frequently excluded from social protection. ETUC has argued for the importance of providing protection for all <sup>(578)</sup> and employers have also been active in this respect.

**Sectoral social partners have taken initiatives to strengthen and extend social protection at the European and national level.** For instance, Italian railway workers went on general strike several times in 2018 defending the extension of social protection rights and working conditions to all workers in the sector, including those sub-contracted <sup>(579)</sup>, clearly striving for more inclusiveness. ETUC is arguing to include platform workers into social protection schemes. <sup>(580)</sup> Also initiatives of platform workers, such as Uber-drivers or Deliveroo-riders to benefit from workers’ rights and the inclusion in social protection schemes have been registered. <sup>(581)</sup> The European Network of Agricultural Social Protection Systems (ENASP) is active in six Member States, Austria, Finland, France, Germany, Greece and Poland, with altogether 12.3 million beneficiaries, a budget of EUR

46.79 billion per year and covers all aspects of social protection of the rural population, with independent farmers and their families as main beneficiaries. <sup>(582)</sup> Further examples can be found in the live performance and audio-visual sectors, where trade unions advocate the “access to social protection to all workers, including genuinely self-employed workers and those in non-standard forms of employment, and no matter the duration of the employment relationship” <sup>(583)</sup>.

**Trade unions support inclusiveness, beyond the borders of their membership.** For example, in the European agriculture sector, where around 4 million people work across borders on a part-time, often seasonal, basis and some have no written employment contracts, trade unions take initiatives. The European Federation of Food, Agriculture and Tourism Trade Unions (EFFAT) together with its national affiliates help these temporary workers by informing them about their rights, reducing problems related to social insurance and representing them before national authorities and courts. Many of these temporary workers are not members of a trade union, neither in their country of origin, nor in their country of destination. <sup>(584)</sup>

**Social partners also foster inclusiveness beyond Europe.** There are a few Transnational Company Agreements (TCAs), such as the Bangladesh accord, the framework agreement between Vinci-QDVC and BWI (Builders and Woodworkers international) and the framework agreement on living wages, which was signed by IndustriAll and garment companies. These agreements focus on social sustainability, defined as certain minimum working conditions for workers in developing countries. These agreements react mainly to very specific problems on which European media had reported widely, namely the fire in the garment factory in Bangladesh, the mistreatment of construction workers to prepare Qatar for the football championships in 2022 and the poor pay in some countries with a strong textile sector. Also company-level agreements ensure certain minimum standards in countries outside Europe. For example, the framework agreement between Acciona S.A., Building and Wood Workers’ International and CCOO Construction and Services and MCA-UGT, which aims at promoting the principles defined in the Universal Declaration of Human Rights, the ILO Tripartite Declaration, the OECD Guidelines for Multinational Enterprises and the United Nations Global Compact. <sup>(585)</sup> The Global Agreement on Environmental and Social Responsibility between Auchan Retail International and UniGlobal and UniCommerce establishes a forum for information and dialogue between the signatories and confirms the

<sup>(575)</sup> Smith (1776), Chapter 8.

<sup>(576)</sup> <https://ec.europa.eu/social/main.jsp?langId=en&catId=1059&>

<sup>(577)</sup> <https://ec.europa.eu/social/BlobServlet?docId=20982&langId=en>

<sup>(578)</sup> <https://www.etuc.org/en/theme/social-protection-policy-social-inclusion>

<sup>(579)</sup> <https://www.etf-europe.org/etf-backs-italian-railway-workers-in-strike-action/>

<sup>(580)</sup> Prassl (2018).

<sup>(581)</sup> European Parliament (2017).

<sup>(582)</sup> ENASP (2015).

<sup>(583)</sup> Debate on the application of the anti-cartel provisions of Art 101 TFEU to the self-employed.

<sup>(584)</sup> EFFAT (2018)

<sup>(585)</sup>

<https://ec.europa.eu/social/main.jsp?catId=978&langId=en&agreementId=258>

importance of following best business, environmental and social practices, wherever the company is present. <sup>(586)</sup>

**Social partners contribute to the design of inclusive education and training.** Good quality education and training is important to succeed in the labour market. In many European countries social partners participate in designing vocational education and training programs, also reaching out to groups, which are difficult to integrate into the labour market. The involvement of social partners in the governance of VET systems ensures the relevance of the curriculum and provides in-work training opportunities, facilitating the transition into employment. It is a factor underpinning the success of these systems. <sup>(587)</sup> In Denmark, a council appointed by the social partners is responsible for making recommendations on new initial vocational training programs, before being approved by the Ministry of Education. Lithuania and Slovakia have advisory bodies in which the social partners advise the government on vocational education and training. <sup>(588)</sup> In Austria and Germany, social partners are a central stakeholder in the development of apprenticeship schemes. They are represented on the regional and federal boards, providing opinions on new apprenticeships schemes. Furthermore, they prepare the training regulations and training standards and are represented in examination boards. <sup>(589)</sup> In Luxembourg, employers and employees are organised in five professional chambers, which are consulted on all major decisions related to VET. These chambers are involved in the identification of training and qualification needs, the revision and elaboration of training curricula frameworks, the organisation of initial and vocational education and training in secondary schools and training companies and they assess the quality of the VET system. In 2008, the legal framework for the VET in Luxembourg was decided in partnership between the employers' and employees' chambers as well as the government. <sup>(590)</sup>

### 2.3. Ecologically sustainable economic activity

Maintaining welfare, growth and social cohesion, while using natural resources in a sustainable way, avoiding pollution and limiting greenhouse gases are the key elements of the ecological dimension of sustainability.

**Trade unions are working on the subject of ecological sustainability since many years at international, European and national level.** In

2010, ITUC adopted a 'Resolution on combating climate change through sustainable development and just transition', developing the concept of just transition. This has become a key concept, which recognises that ecological questions are social questions.

**The approach of trade unions towards ecological topics has evolved over time and is still heterogeneous.** Already in 1996, the German trade union association DGB included the achievement of an ecologically sustainable development into its policy objectives. <sup>(591)</sup> Research on the subject with substantial involvement of trade unions, dates back many years. <sup>(592)</sup> For the Austrian trade unions, a shift has been observed from non-activity on ecological issues towards their active support. For instance, in the period 1970-1990s, Austrian trade unions were on several occasions unfavourable towards ecological concerns and they were much more inclined to take on board economic considerations. In doing so, they positioned themselves as opponents of environmental movements. As from the year 2000 onwards, however, their position has changed. The 'job versus environment dilemma' was replaced by a more ecological approach. <sup>(593)</sup> Contributions from trade unions reflect thereby also an internal debate. One position suggests that the transition to a green economy should be seen as an evolutionary process, requiring the economic and social system to undergo major reforms. However, the fundamental rules should remain in place. The alternative position suggests the need for a more radical approach, prominently advocated by the De-growth movement. This position questions the existing socio-economic model's capacity to reach the sustainability goals and demands an overhaul of the current focus on economic growth towards broader environmental and social objectives. <sup>(594)</sup>

**Enterprises and their representatives increasingly position themselves towards the sustainability goals in general and the emission reduction targets in particular.** A recent BusinessEurope position paper supports the EU ambition of net-zero greenhouse gas emissions (climate neutrality) to reach the objectives of the Paris Agreement but it asks for attention to the framework conditions. <sup>(595)</sup> In the position paper on expectations from COP24, BusinessEurope stressed the need to adopt a strong rulebook, putting emphasis on monitoring, verification and accounting rules. A major concern is the absence of equally strong positive actions from some major Non-EU economies. <sup>(596)</sup> The

<sup>(586)</sup> <https://ec.europa.eu/social/main.jsp?catId=978&langId=en&agreementId=289>

<sup>(587)</sup> ILO (2018a).

<sup>(588)</sup> European Commission (2016).

<sup>(589)</sup> <https://www.apprenticeship-toolbox.eu/social-partners-companies/involvement-of-social-partners/12-involvement-of-social-partners-in-austria>.

<sup>(590)</sup> <https://www.apprenticeship-toolbox.eu/social-partners-companies/involvement-of-social-partners/38-involvement-of-social-partners-in-luxembourg>.

<sup>(591)</sup> DGB (1996) (still valid).

<sup>(592)</sup> Blazejczak et al. (1998).

<sup>(593)</sup> Soder (2018).

<sup>(594)</sup> e.g. Pochet, P. (2017).

<sup>(595)</sup> BusinessEurope, 29 April 2019: <https://www.busesseurope.eu/publications/european-business-views-competitive-energy-climate-strategy>

<sup>(596)</sup> BusinessEurope: Our expectations from COP24, Position paper of 30/11/2018



report on European Business' Views on a Competitive Energy and Climate Strategy states in the foreword that 'the strategy is not the end of the road, but rather the beginning of a new chapter', suggesting that there are also internal discussions ongoing in BusinessEurope.<sup>(597)</sup> The other cross-industry employer organisations, representing small and medium sized enterprises (SMEUnited) and the European Centre of Employers and Enterprises providing Public Services and Services of general interest (CEEP) follow a similar approach.<sup>(598)</sup> SMEUnited stresses that SMEs are key to fight climate change, while also stating the need to support SMEs in this transition.<sup>(599)</sup> The energy intensive industries, which will have to go through significant transformation, have become very active in the debate on how they can transition towards carbon neutrality asking recognition on the framework conditions that they see as necessary.<sup>(600)</sup>

**The diversity of organisations affiliated to the cross-industry employer organisations makes determined action difficult.** The cleavage on the side of the organised employers is not about whether sustainability requires substantial reforms or a paradigm shift, but more whether substantial reforms with strong governmental intervention are needed, or whether this could be left largely to the markets and to cost-efficient innovation processes. Organisations such as 'The Prince of Wales's Corporate Leaders Group' follow a distinct 'green' agenda and could mark the start of a trend.<sup>(601)</sup> Table 6.2 shows that most economic activities are likely to benefit from the transition towards a low-carbon economy. A positive approach increases the probability of being able to shape the policies and restructuring, imminent or already under way.

**Social partners understand the need for action to avoid global warming of more than 2°C.** For instance, EU cross-industry social partners have agreed on a statement 'Tapping the potential from greening the economy for jobs creation' (30/05/2017), in which they recognise that achieving the Sustainable Development Goals 'requires further efforts, in particular a greener and more sustainable growth' and that this implies considerable investment and skills-related initiatives. Furthermore, they promise to support this transition process, without, however, going into details what sort of commitment they are willing to take.

[https://www.buinessseurope.eu/sites/buseur/files/media/position\\_papers/iaco/buinessseurope\\_cop24\\_statement.pdf](https://www.buinessseurope.eu/sites/buseur/files/media/position_papers/iaco/buinessseurope_cop24_statement.pdf)

<sup>(597)</sup> BusinessEurope, 29 April 2019:

<https://www.buinessseurope.eu/publications/european-business-views-competitive-energy-climate-strategy>

<sup>(598)</sup> For CEEP see the CEEP Opinion on the Commission Proposal for a "Clean Energy for all Europeans" Package from 16 June 2017

<sup>(599)</sup> <https://smeunited.eu/news/smes-are-fundamental-for-sustainability>

<sup>(600)</sup> VUB-IES (2018), Industrial Value Chain. A bridge towards a carbon neutral Europe, [https://www.ies.be/files/Industrial\\_Value\\_Chain\\_25sept\\_0.pdf](https://www.ies.be/files/Industrial_Value_Chain_25sept_0.pdf)

<sup>(601)</sup> <https://www.corporateleadersgroup.com/about>

## **Measurable progress towards embracing the ecological challenges has been slow so far.**

Already in the report Industrial Relations in Europe 2012 the situation is summarised as 'The role of the social partners in the transition to green and greener jobs has been gradually increasing in recent years. However, more needs to be done to build a lasting and sustainable social dialogue that can help to meet the challenges posed by the move to a competitive, low-carbon and resource efficient economy.' Comparing this with the statement of EU cross-industry social partners of 2017, progress during these five years was slow. Surveys, undertaken in Germany in 2006 and similarly in 2017, show, that over this period the importance attributed to the responsibility towards future generations has declined.<sup>(602)</sup>

## **Results of social dialogue at national cross-industry level with direct ecological implications concern mainly reactions to governmental initiatives.**

That was the case, e.g. in Bulgaria, where social partners reacted to the energy directive, in Croatia, where the strategic development planning act was under discussion. An example of bipartite action provided the Belgian social partners. They agreed to develop a mobility budget for employees, including the option for employees to exchange their company car for more sustainable alternatives.<sup>(603)</sup>

## **Some national social dialogue structures are better prepared to negotiate agreements on innovative topics such as 'green issues'.**

Factors which facilitate innovative agreements on green topics are trust between the social partners, high level of competence of the parties negotiating, a cooperative mindset of the parties involved (as opposed to a competitive mindset) and the ability to keep the conflict at the task level, thus avoiding – to the extent possible – that it becomes categorical or personal. Managers from 11 European countries were asked for their views about the cooperation with employees' representatives. For Germany, the Netherlands and Estonia they responded that employee representatives had considerable impact. These are countries where the relations between the social partners are characterised by high mutual trust and a strong cooperative mindset. In two countries with traditionally strong social dialogue structures, Italy and France, managers found the impact of employee representatives rather moderate. For France this was supported by the observation that industrial relations are more categorical (touching on the relationship between the negotiators) than in other countries and that the parties have a remarkably low willingness to approach negotiations with a cooperative mindset. For Italy, remarkably little deviations from the European mean have been found suggesting that further institutional components, such

<sup>(602)</sup> Hilmer et al. (2017).

<sup>(603)</sup> Eurofound (2018a).

<sup>(604)</sup> e.g. García et al. (2015).










as labour management regulations, might need to be looked at.

**The impact of climate change on industries differs across sectors.** In terms of employment, an increase in jobs is expected in the construction, agriculture and power generation sectors, whereas the mining and extraction industry is expected to be negatively affected, especially due to the decline in fossil fuel-related mining. Nevertheless, the energy sector as a whole is expected to experience job gains. This is shown in *Table 6.2*.

Table 6.2

**Long-term employment impacts differ significantly across sectors**

Sectoral employment impact, difference from baseline in 2050, %

Sector	Share of total jobs in 2015	Range of change in jobs by 2050, compared to baseline
Construction	6.7%	+0.3% to +2.8% 
Services	71.7%	-2.0% to +0.9% 
Agriculture	4.5%	-0.7% to +7.9% 
Mining and extraction	0.5%	-62.6% to -2.9% 
Power generation	0.7%	+3.6% to +22.3% 
Manufacturing (Energy intensive industries)	2.0%	-2.6% to +1.8% 
Other manufacturing	13.3%	-1.4% to +1.1% 

Note: Employment effects from JRC-GEM-E3 and E3ME. Ranges of estimated changes in jobs in 2050 depend on the underlying model and modelling assumptions.

Source: Adapted from European Commission (2018a) pp. 227-229

[Click here to download table.](#)

**At the sectoral level, social partners have discussed this transition in various ways.** For instance, in 2016, social partners in the extractive industries agreed on a joint position regarding the review of the EU Emission Trading System (ETS) for the post-2020 period. They are in particular concerned about the competitiveness of their sector. Beyond the more defensive aspects of reducing the economic pressure on the sector by suggesting the allocation of free emission rights and stressing the problem of carbon leakage, the social partners also asked for reliable framework conditions and to jointly work on a 'just transition' <sup>(605)</sup>, fostering a transition to a low carbon economy that is sustainable and fair for those who might be most affected. The chemical sector commits to the COP21 objective and aims at further greening the sector. Also social partners in the electricity sector developed joint positions on COP21 and measures to mitigate social impacts and on the new energy market design. In 2016, the social partners in urban public transport adopted a joint statement

'Towards sustainable urban mobility' <sup>(606)</sup>. The construction sector is elaborating guidelines to improve workers skills for building low energy consuming houses. The metal sector carried out a project aiming at anticipating the consequences of the environmental sustainability agenda on employment and skills in the machine tool & robotics sector. In sum, social partners have adopted a number of documents to deal with the transition to a low-carbon economy. The focus is on reducing the environmental damage caused by the industry and to develop more sustainable practices, in particular in case the economic and employment impact is expected to be positive for the sector.

**Greening the economy will have an impact on the structure and organisation of the sectors and on the skills needed to retain employment.** Beyond changing skill requirements within companies, greening of the economy might also mean that new companies will emerge and others will disappear and that there might be adjustments between regions. A report from 2012 for example already confirms that a more intensive use of renewables might increase the number of SMEs which often operate in more remote areas, thus making unionisation far more difficult. <sup>(607)</sup> Another prominent case in that respect is the 'Kohlekompromiss', which was negotiated in early 2019 in Germany. This compromise provides a pathway to phase out within the next 20 years the production of electricity from lignite. The commission that negotiated the compromise consisted of 31 people, representing politics, industry, the regions with substantial lignite mining, trade unions, environmental organisations and scientists. To moderate negative consequences of this phase-out, it was agreed to provide structural support of around 40 billion Euro throughout the process and to facilitate the necessary transitions for the employees. While this compromise has been criticised as particularly costly, considering the 20000 jobs at stake <sup>(608)</sup>, others praise the ability to find a compromise. <sup>(609)</sup>

**Sustainability might require a change in mindset in some sectors.** Sectors with a particular responsibility towards sustainability are agriculture and seafisheries (SDG 14 and 15). These sectors influence directly the natural resources and experience the tension between short-term output maximisation and long-term sustainability. In the agricultural sector, discussions on the future of farming are ongoing. However, much of the transition towards biological farming so far has taken place outside the established sectoral representation structures, indicating that also in the near future progress will depend on the framework conditions. In the seafisheries sector, social partners appreciate the fact that overexploitation of

<sup>(605)</sup> IndustriAll, IMA Europe, APEP, euromines, Euracoal, UEPG: Position of the Social Dialogue Committee of the extractive industry with regards to the revision of the EU ETS directive for the post 2020 period, September 2016.

<sup>(606)</sup> ETF and UITP (Social partners in the local public transport): Towards sustainable urban mobility, March 2016.

<sup>(607)</sup> Eurofound (2012).

<sup>(608)</sup> Hermann et al (2018),

<sup>(609)</sup> e.g. Mattheß (2019).

fish stocks has been reduced.<sup>(610)</sup> Other sectors, with a particular responsibility for the transition towards a more sustainable economy are the provision of public utilities, such as water, waste management, or urban development (SDG 6, 7 and 11).

**Governments and the European Commission are increasingly involving social partners in climate policies.** Since the New Start for Social Dialogue the European Commission has organised three dedicated high level meetings to discuss issues related to the greening of the economy with the European social partners. In some countries, social partners are involved in national industry strategies for the transition to green economy. In some cases, specific consultative bodies have been created. In the Netherlands and Poland, for example, the social partners are involved in the development of Low Carbon Strategies at regional level<sup>(611)</sup>. In November 2016, the German government approved its Climate Action Plan 2050, setting out a strategy for becoming greenhouse-gas neutral by 2050. This plan includes for the first time the sectoral targets for the proportional reduction of greenhouse gases, with reductions of respectively 67-66% in construction, 62-61% in energy, 51-49 in industry, 42-40% in transport and 34-31% in agriculture by 2030. A comprehensive impact assessment of these targets has been carried out in the course 2018, the results of which have been discussed with the social partners<sup>(612)</sup>. The Belgian Federal Council for Sustainable Development, established in 1997, advises the Belgian federal government on its policies towards sustainable development. It focusses in particular on issues linked to climate, environment and biodiversity. Members of the Council are social partners, representing 50 percent of its members with voting right, environmental, development and consumer organisation representatives and scientists.<sup>(613)</sup>

**Social dialogue and tripartite structures support the skills adaptations necessary for a greener economy.** Greening the economy changes the production of goods and services. It requires the use of new technologies and therefore changes the demand for skills.<sup>(614)</sup> At the company level, social partners improve the prospects of participating in training as discussed in section 2.1. At the sectoral and national level, social partners are active in anticipating skills and restructuring needs. In France, social partners are members of strategic committees identifying further skills needs and jointly manage related training programs.<sup>(615)</sup> Similarly, in Spain, social partners take part in the process of skills need identification through membership of joint committees within the State

Foundation for Training and Employment (FUNDAE). This allows to constantly update training provision in the framework of active labour market policies, to keep up with the needs of the greening the economy.<sup>(616)</sup> Through these efforts, social partners smoothen the transition towards a more digitalised and more sustainable economy.

**Next to the inclusion of green topics into existing structures, new formats of dialogue are developed.** Social partners cooperate with other stakeholders, thus creating bipartite+ or tripartite+ partnerships. At European level, the involvement of BusinessEurope and ETUC and sectoral social partner organisations such as the food processing industry, the agricultural and the education sector in the SDGs' Multi-Stakeholder Platform<sup>(617)</sup> is a concrete example where social partners work next to other organisations to prepare for a sustainable development. The other NGOs involved in the process concern, for example the social platform, the European Environmental Bureau, the World Wildlife Fund, and the Fair Trade Advocacy Office. This Platform has provided a contribution to the Reflection Paper 'Towards a sustainable Europe by 2030' (October 2018). The contribution of the platform to the reflection paper concludes that the platform should continue and 'should liaise with and not duplicate any other regular sectoral or topical dialogues with stakeholders at European level'<sup>(618)</sup>. Agreeing to that means that social partners have accepted that sustainability is an issue for social dialogue but goes beyond industrial relations into a broader social sphere, so that social partner organisations have to work with other stakeholder representatives on most aspects of sustainability. At national level, in Belgium, the Citizen Initiative 'Sign For My Future', a petition launched by civil society, NGOs, universities, employer organisations and company leaders and also supported by trade unions in Belgium was launched on 5 February 2019. The petition requests for a law on climate to become climate-neutral by 2050; an investment plan for climate that enters into force in 2022 at the latest; and the establishment of an independent council on climate to supervise climate policy in Belgium, entitled to make recommendations<sup>(619)</sup> <sup>(620)</sup>. The 'Sign For My Future' campaign was launched after several weeks of climate protests by students and the general public. A global strike for the climate took place on 15 March 2019.<sup>(621)</sup> In Spain, la Alianza por el clima, which

<sup>(610)</sup> [Europêche press release of 17 September 2018.](#)

<sup>(611)</sup> ETUC (2016): ETUC Project Industrial Regions and climate policies: Towards a Just Transition? A guide for Trade Unions.

<sup>(612)</sup> [https://www.bmu.de/fileadmin/Daten\\_BMU/Download\\_PDF/Klimaschutz/klimaschutzplan\\_2050\\_kurz\\_f\\_en\\_bf.pdf](https://www.bmu.de/fileadmin/Daten_BMU/Download_PDF/Klimaschutz/klimaschutzplan_2050_kurz_f_en_bf.pdf)

<sup>(613)</sup> FRDO, De Raad, <https://www.frdo-cfdd.be/nl>

<sup>(614)</sup> ILO (2018b).

<sup>(615)</sup> Cedefop (2018a).

<sup>(616)</sup> Cedefop (2018b).

<sup>(617)</sup> [https://ec.europa.eu/info/strategy/international-strategies/global-topics/sustainable-development-goals/multi-stakeholder-platform-sdgs/platform-members\\_en](https://ec.europa.eu/info/strategy/international-strategies/global-topics/sustainable-development-goals/multi-stakeholder-platform-sdgs/platform-members_en)

<sup>(618)</sup> SDG Multi-Stakeholder Platform to the Reflection Paper p. 47 [https://ec.europa.eu/info/sites/info/files/sdg\\_multi-stakeholder\\_platform\\_input\\_to\\_reflection\\_paper\\_sustainable\\_europe2.pdf](https://ec.europa.eu/info/sites/info/files/sdg_multi-stakeholder_platform_input_to_reflection_paper_sustainable_europe2.pdf)

<sup>(619)</sup> [https://www.rtbf.be/info/societe/detail\\_sign-for-my-future-300-patrons-academiques-associations-pour-le-climat?id=10137487](https://www.rtbf.be/info/societe/detail_sign-for-my-future-300-patrons-academiques-associations-pour-le-climat?id=10137487)

<sup>(620)</sup> <https://arbeidenmilieu.be/>

<sup>(621)</sup> EPSU, EPSU Newsletter 20 February 2019, <https://www.epsu.org/newsletter/epsu-newsletter-20-february>

became active in recent years, is a broad cooperation representing amongst others the environmental movement, trade unions, farmers and consumer organisations, aiming at promoting an energy model that is renewable, sustainable, efficient and fair. The Italian Coalizione Clima, set-up in 2015, represents organisations from the public sector, trade unions and businesses, schools, universities and citizens. They cooperate on the fight against climate change and aim for a binding agreement to keep the level of global warming below 2 degrees <sup>(622)</sup>.

## 2.4. Governance and participation

**Social dialogue and employee participation can contribute to good corporate governance, to social cohesion and to equality.** <sup>(623)</sup> Principle 8 of the European Pillar of Social Rights affirms social dialogue and the involvement of workers constitutes principle 8 of the European Pillar of Social Rights. A recent study based on a sample of 14000 European workers finds that employees with greater levels of individual autonomy and voice at work, are significantly more engaged in pro-democratic behaviour and have more trust in democracy. The report concludes that 'the organisation of work has non-economic implications beyond the workplace'. <sup>(624)</sup> The possibility to actually influence working conditions and the protection provided by a trade union at the enterprise level, are effective means to reduce the feeling of powerlessness and the appeal of right-wing populism. <sup>(625)</sup> At European level, the report 'Benchmarking Working Europe 2019' shows positive correlations between democracy at work on the one side and employee productivity, employment rate and income equality on the other side. <sup>(626)</sup>

**Social dialogue structures change over time.** For 2017, Eurofound registers in eleven Member States changes affecting collective bargaining. <sup>(627)</sup> Some of these changes encourage decentralised collective bargaining, others feature a more centralised, sector-level bargaining. Altogether, there is no clear trend visible. For the period 2000-2013, Eurofound identified in 18 Member States legal reforms that affected collective bargaining negotiations and processes. <sup>(628)</sup> These reforms range from new laws on collective agreements (Slovenia, 2006) to extending the scope of collective bargaining in public services (France, 2010) or a new social dialogue act, abolishing/weakening collective bargaining processes above company level (Romania, 2010). The aims of these reforms range from strengthening social dialogue and adapting it to new contextual conditions to giving more powers to the government, thus

weakening the role of social partners. During the same period in most Member States also deviation clauses and practices, i.e. the possibilities to deviate from higher level collective agreements, were revised. Often this took place to find a new balance between more centralised forms, such as sectoral collective bargaining, and more decentralised forms of wage bargaining. Only for three countries, Belgium, Malta and the Netherlands neither of these two types of changes took place in the period 2000-2013.

### Tripartite structures also change over time.

These changes happen in various forms and on various occasions. One example comes from Luxemburg, where the government, in discussion with the social partners, decided to abandon the distinction between workers and employees, moving to a so-called single [employment] status. <sup>(629)</sup> In line with this transition, also a single chamber of employees was created, bringing together two previously existing chambers. <sup>(630)</sup> Trade unions welcomed the reform as it reduced the cleavage between white and blue-collar workers. <sup>(631)</sup> The newly created chamber of employees represents 496000 workers in Luxemburg. The chamber is governed by a board, which is appointed in democratic elections by all those represented by the chamber. Similar processes of merging or assimilating different traditional employment status (worker, employee and sometimes also official) can be found in many Member States. A specificity of Luxemburg and a few other Member States, such as Austria, is the existence of a specific chamber of employees, with a general mandate on all issues related to employment and elected by all employees.

**Coordinated systems of collective bargaining are linked to higher employment and lower unemployment than fully decentralised or centralised systems,** <sup>(632)</sup> thus indicating that the more sustainable solutions are probably not at the extremes of the coordination spectrum. Finding the right balance between coordination and decentralisation is important, as the organisational power of trade unions and employer organisations has seen a long-term decline. This decline has halted in the recent past, but it might be too early to talk of a turnaround.

**There is a growing gap between countries, where social dialogue plays a substantial role and countries where this is not the case.** In particular in Central and Eastern European countries, membership density of trade unions and employer organisations has declined, leading to a weakening of

<sup>(622)</sup> ETUC (2018), p.40-45.

<sup>(623)</sup> Eurofound (2015a), p. 48.

<sup>(624)</sup> Budd et al. (2018).

<sup>(625)</sup> Hilmer, et al. (2017).

<sup>(626)</sup> ETUI (2019), chapter 4.

<sup>(627)</sup> Eurofound (2018b), p. 19.

<sup>(628)</sup> Eurofound (2015b), p. 23 and 33.

<sup>(629)</sup> Law of 13 May 2008 on the introduction of a single status, Memorial A, Number 60, 15 May 2008.

<sup>(630)</sup> This single chamber of employees was preceded by two separate chambers for workers and for employees.

<sup>(631)</sup> See: [http://www.ogbl.lu/wp-content/uploads/2011/10/statut\\_unique\\_fr.pdf](http://www.ogbl.lu/wp-content/uploads/2011/10/statut_unique_fr.pdf) (last accessed: 06.05.2018).

<sup>(632)</sup> OECD (2018), Chapter 3.

social dialogue also in its tripartite forms and lower influence on governmental reforms. On the other side, in the countries with a (rather) stable situation social dialogue has seen a broadening of the collective bargaining agenda. <sup>(633)</sup>

**Efforts are made to close this gap.** Responding to these developments, the European Commission encourages for the next Multiannual Financial Framework, that countries with weak social dialogue structures help their social partners to use European Social Fund Plus (ESF+) support to strengthen their structures. This goes along with the political support and attention provided to national social partners in the context of the European Semester.

**The benefits of social dialogue lie also in the partnerships created.** This adds to sustainability and more precisely to SDG 17 'partnerships to achieve a goal'. Particularly when dealing with the environmental component, social partners often opt for new partnerships, for instance with environmental organisations. In doing so, they represent not only the interests of workers and employers. Instead, they go beyond, representing an even larger part of society.

**Social partner organisations are well advised to include environmental topics in their programmes.** High levels of economic development, low levels of unemployment, together with the presence of tangible environmental issues are important factors to increase support for Green topics. <sup>(634)</sup> Under these conditions environmental topics are gaining attractiveness. However the transition towards an environmentally sustainable economy has significant distributional impacts, which require to be managed. <sup>(635)</sup>

**A sustainable governance system needs to build on evidence-based and inclusive decisions, requiring the involvement of social partners.** Considering the environmental challenges, ambitious changes are urgently needed. This will require the players to go beyond what they consider as their core interests and to show mutual trust in order to be able to make the necessary concessions. Social dialogue allows to produce such compromises. Social partners are key actors when it comes to reforming and modernising societies and economies as they allow anchoring the sustainability project in the society and agreeing on realistic steps. Reaching sustainability without or against them will be even more difficult. Hence, it pays off to involve social partners in restructuring processes and allowing them to manage these processes. <sup>(636)</sup>

<sup>(633)</sup> Eurofound (2015b), p. 55.

<sup>(634)</sup> Grant and Tilley (2019),

<sup>(635)</sup> e.g. Strasser (2019).

<sup>(636)</sup> ETUC (2016).

**The role of social partners for a well-functioning governance system** can be summarised in four points:

- **Social dialogue can help to absorb sudden shocks.** Member States with strong and cooperative social dialogue structures have overall resisted better to the economic crisis than others. <sup>(637)</sup>
- **Transitions, involving social partners, are overall smoother.** Major initiatives to include social partners and to moderate transitions, like the just transition discussion <sup>(638)</sup>, cause in general less friction because of the negotiation between the relevant stakeholders allows to find the best possible solution. This way of managing transitions stresses cooperation between the government, social partners and experts.
- **Social partner organisations allow for bundling and voicing interests,** which might not be heard otherwise. This is in particular true for, interests of SMEs and for employees. By representing those groups in decision-making processes, social partners allow for more democratic decisions in every day live.
- **Social partner organisations coordinate internal discussions.** They do not only act towards the other side of the industry or the political decision makers, they also have internal discussions to form their opinion and to balance different, often conflicting, internal views. These internal discussions are necessary to identify the necessary changes and create acceptance for them with the membership. However, sometimes those discussions do not take place or they do not have a sufficient level of openness. In those cases, the respective organisations risk to lose relevance.

### 3. CONCLUSIONS

**Social dialogue contributes to more sustainable societies.** However, in order to reach their full potential, social partner organisations and social dialogue need to change further. There is a risk to focus on competitive disadvantages rather than on the potential gains of a more sustainable management.

**So far the contribution of social dialogue to sustainability seems to be most effective and important in the core areas of social dialogue,** linked to the economic and social sustainability. The chapter finds that social dialogue is an important means to find compromises and where the dialogue functions well, these compromises create a framework to further develop and to ensure that the economy develops in a way that workers are not left behind.

<sup>(637)</sup> European Commission (2015), p.209.

<sup>(638)</sup> ETUC (2016).



**Public authorities set the framework for social partners' negotiations.** As sustainability requires to go beyond the direct concerns of social partners, their negotiations are most productive if public authorities provide guidance concerning the objectives to be achieved. Social partners can contribute very effectively to develop transitions once sufficient clear framework conditions have been defined.

**A key characteristic of well-functioning social dialogue is mutual respect and trust between the social partners,** while acknowledging diverging views and keeping in mind common interests. There are strong indications that these governance related aspects will be critical for developing the innovative solutions needed for a more sustainable society. This comes together with the development of new alliances, such as the involvement of environmental organisations and other groups constituting the civil society.

**Well-functioning social dialogue fosters social fairness by improving working conditions without damaging the longer-term economic performance.** Collective bargaining tends to reduce wage dispersion, and higher centralisation of wage bargaining is associated with lower income inequality. Employee representation in general improves the quality of the work environment.

**Trade unions and employers cooperate on social themes beyond the workplace.** They reach out to groups, such as people at the margin of the labour market not necessarily being in a situation of standard or even formal employment.

**Climate change and global warming are increasingly on the agenda of social partner organisations and of tripartite discussions.** Following a phase in which both employers and workers considered this discussion more ideological there are now signs that both trade union organisations and employer organisations are more pro-active, accepting the necessity to manage this transition. However, concrete achievements – beyond the management of well-defined transitions – are not easy to find.

**Social partners strengthen the democratic elements in our society.** They allow workers and employees to have a say on different issues linked to their working life and beyond, and in doing so, to be more in control. Furthermore, in particular trade unions are actively involved in the public debate. They provide platforms to discuss new technological developments and what to do to address the environmental challenges, thereby creating new partnerships.



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# Statistical annex

## 1. COUNTRY PROFILES

### European Union 28

European Union 28		2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018
Macro Economic Indicators (Annual % growth)	Real GDP	3.1	0.5	-4.3	2.1	1.8	-0.4	0.3	1.8	2.3	2.0	2.5	2.0
	Total employment	1.9	1.0	-1.7	-0.7	0.1	-0.4	-0.3	1.0	1.1	1.3	1.6	1.3
	Labour productivity	1.2	-0.5	-2.6	2.8	1.6	0.0	0.6	0.7	1.2	0.7	0.9	0.6
	Annual average hours worked per person employed	0.1	-0.2	-1.3	-0.3	0.2	-1.0	-0.4	0.1	-0.1	0.3	-0.4	-0.2
	Real productivity per hour worked	1.1	-0.3	-1.4	3.1	1.5	0.9	1.0	0.7	1.3	0.5	1.3	0.8
	Harmonized CPI	2.4	3.7	1.0	2.1	3.1	2.6	1.5	0.6	0.1	0.2	1.7	1.9
	Price deflator GDP	2.8	0.1	-1.5	2.0	1.2	2.4	0.6	1.7	3.0	-1.1	0.4	1.2
	Nominal compensation per employee	3.3	0.5	-1.0	3.8	1.9	2.9	0.9	1.8	3.2	-0.5	1.0	2.4
	Real compensation per employee (GDP deflator)	0.5	0.4	0.5	1.7	0.7	0.4	0.4	0.1	0.2	0.6	0.7	1.2
	Real compensation per employee (private consumption deflator)	0.9	-3.1	-2.0	1.7	-1.2	0.2	-0.6	1.3	3.1	-0.7	-0.7	0.5
	Nominal unit labour costs	2.1	1.0	1.7	1.0	0.2	2.9	0.4	1.1	1.9	-1.2	0.1	1.8
	Real unit labour costs	-0.8	0.9	3.2	-1.0	-0.9	0.5	-0.2	-0.6	-1.0	-0.1	-0.2	0.5
Labour Market Indicators - Total	Total population (000)	498301	500297 b	502090	503171 b	502965 b	504048 b	505163	507235 b	508520 b	510182	511373 b	512379
	Population aged 15-64 (000)	334546	335847	336478	336350	335459 b	334945	334154	333971 b	333201 b	333004	332290 b	331526
	Total employment (000)	220165	222731	218793	216084	216258	215857	215484	218397	220940	224322	227655	230433
	Employment aged 15-64 (000)	216355	218769	214811	212049	212070	211394	210846	213486	215821	218992	221995	224408
	Employment rate (% population aged 20-64)	69.8	70.2	68.9	68.5	68.6	68.4	68.4	69.2	70.1	71.1	72.2	73.2
	Employment rate (% population aged 15-64)	65.2	65.7	64.4	64.1	64.2	64.1	64.1	64.8	65.7	66.7	67.7	68.6
	Employment rate (% population aged 15-24)	37.1	37.2	34.7	33.8	33.3	32.6	32.2	32.5	33.2	33.9	34.7	35.4
	Employment rate (% population aged 25-54)	78.9	79.4	78.0	77.7	77.7	77.3	76.9	77.5	78.1	78.8	79.7	80.5
	Employment rate (% population aged 55-64)	44.4	45.4	45.8	46.2	47.2	48.7	50.1	51.8	53.3	55.3	57.1	58.7
	FTE employment rate (% population aged 20-64)	64.5	65.0	63.5	63.1	62.9	62.7	62.5	63.3	64.1	65.1	66.2	67.2
	Self-employed (% total employment)	15.1	14.9	15.0	15.3	15.2	15.2	15.1	14.9	14.8	14.5	14.3	
	Part-time employment (% total employment)	17.4	17.5	18.0	18.5	18.8	19.2	19.6	19.6	19.6	19.5	19.4	19.2
	Temporary employment (% total employment)	12.2	11.9	11.4	11.7	11.8	11.5	11.5	11.7	11.9	12.1	12.2	12.1
	Employment in Services (% total employment)		67.7 b	69.1	69.9	70.2	70.6	71.1	71.3	71.6	71.9	71.9	72.1
	Employment in Industry (% total employment)		27.6 b	26.2	25.4	25.2	24.8	24.4	24.3	24.2	24.1	24.2	24.2
	Employment in Agriculture (% total employment)		4.7 b	4.7	4.8	4.6	4.6	4.5	4.4	4.2	4.0	3.9	3.7
	Activity rate (% population aged 15-64)	70.3	70.7	70.8	71.0	71.1	71.7	72.0	72.3	72.6	73.0	73.4	73.7
	Activity rate (% population aged 15-24)	44.1	44.2	43.5	42.9	42.6	42.4	42.1	41.7	41.6	41.7	41.7	41.7
	Activity rate (% population aged 25-54)	84.2	84.6	84.7	85.0	85.0	85.4	85.4	85.5	85.5	85.5	85.7	85.9
	Activity rate (% population aged 55-64)	46.9	47.8	48.8	49.5	50.6	52.5	54.3	55.9	57.3	59.1	60.6	62.0
	Total unemployment (000)	16998	16768	21385	23011	23154	25293	26334	24832	22900	20943	18774	16887
	Unemployment rate (% labour force)	7.2	7.0	9.0	9.6	9.7	10.5	10.9	10.2	9.4	8.6	7.6	6.8
	Youth unemployment rate (% labour force 15-24)	15.8	15.9	20.3	21.4	21.8	23.3	23.8	22.2	20.3	18.7	16.8	15.2
	Long term unemployment rate (% labour force)	3.1	2.6	3.0	3.8	4.1	4.6	5.1	5.0	4.5	4.0	3.4	2.9
	Share of long term unemployment (% of total unemployment)	42.5	36.9	33.1	39.7	42.8	44.3	47.1	49.3	48.1	46.4	44.7	43.0
	Youth unemployment ratio (% population aged 15-24)	6.9	7.0	8.8	9.1	9.2	9.8	10.0	9.3	8.5	7.8	7.0	6.3
	Employment rate for low skilled 25-64 (ISCED 0-2)	57.0	56.5	54.6	53.8	53.4	52.7	52.0	52.5 b	53.2	54.3	55.6	56.8
	Employment rate for medium skilled 25-64 (ISCED 3-4)	74.4	74.7	73.4	73.0	73.1	72.9	72.7	73.4 b	73.9	74.8	75.7	76.4
	Employment rate for high skilled 25-64 (ISCED 5-8)	85.1	85.1	84.3	83.9	83.7	83.5	83.4	83.7 b	84.1	84.8	85.3	85.8
	Employment rate (Nationals aged 15-64)	65.4	65.9	64.7	64.4	64.5	64.5	64.5	65.2	66.0	67.1	68.1	69.0
	Employment rate (Other EU28 aged 15-64)	69.6	69.6	67.7	67.6	68.0	67.9	68.2	69.2	70.5	71.8	72.9	73.9
	Employment rate (Other than EU28 aged 15-64)	58.0	59.0	55.2	55.0	54.7	53.4	52.6	53.3	53.6	53.7	54.6	56.7
	Employment rate (Born in the same country aged 15-64)	65.4	65.9	64.7	64.4	64.5	64.4	64.4	65.2	66.0	67.0	68.1	69.0
	Employment rate (Born in other EU28 aged 15-64)	69.1	68.7	66.8	66.7	66.6	66.1	66.6	67.5	68.8	69.9	72.8	73.9
	Employment rate (Born outside EU28 aged 15-64)	62.7	63.1	59.4	58.8	58.0	57.0	56.1	57.0	57.6	58.7	60.6	62.3
	Underemployment (% of labour force aged 15-74)		3.2	3.5	3.7	3.7	3.9	4.3	4.2	4.1	3.9	3.7	3.4
	Seeking but not available (% of labour force aged 15-74)	1.2	1.1	1.0	1.0	1.0	1.0	0.9	0.9	0.9	0.9	0.9	0.9
	Discouraged, available but not seeking (% of labour force aged 15-74)	3.2	3.1	3.4	3.5	3.6	3.7	4.0	3.9	3.8	3.6	3.3	3.1

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European Union 28		2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018
Labour Market Indicators - Male	Total population (000)	242934	243991 b	244912	245500 b	245185 b	245753 b	246382	247511 b	248219 b	249295	249969 b	250547
	Population aged 15-64(000)	167334	168007	168307	168234	167556 b	167295	166917	166886 b	166553 b	166657	166372 b	166052
	Total employment (000)	122069	123013	119709	117961	117773	117213	116701	118131	119479	121329	123050	124442
	Employment aged 15-64 (000)	119691	120544	117264	115491	115195	114446	113820	115072	116287	117999	119541	120732
	Employment rate (% population aged 20-64)	77.6	77.8	75.7	75.1	75.0	74.6	74.3	75.0	75.9	76.9	78.0	79.0
	Employment rate (% population aged 15-64)	72.4	72.6	70.6	70.1	70.0	69.6	69.4	70.1	70.9	71.9	73.0	73.9
	Employment rate (% population aged 15-24)	40.2	40.1	36.7	35.9	35.4	34.5	34.0	34.3	35.0	35.6	36.4	37.4
	Employment rate (% population aged 25-54)	86.7	86.8	84.6	84.1	83.9	83.3	82.6	83.2	83.8	84.6	85.6	86.3
	Employment rate (% population aged 55-64)	53.6	54.7	54.5	54.4	54.9	56.2	57.4	58.8	60.2	62.0	63.7	65.4
	FTE employment rate (% population aged 20-64)	76.1	76.2	74.0	73.3	72.9	72.4	72.0	72.7	73.4	74.4	75.5	76.5
	Self-employed (% total employment)	19.1	18.8	19.1	19.4	19.2	19.3	19.2	19.1	18.8	18.5	18.2	17.9
	Part-time employment (% total employment)	6.9	7.0	7.4	7.8	8.0	8.4	8.7	8.8	8.9	8.8	8.8	8.7
	Temporary employment (% total employment)	11.2	10.8	10.3	10.7	10.9	10.6	10.6	10.9	11.2	11.3	11.3	11.2
	Employment in Services (% total employment)		56.3 b	57.6	58.4	58.9	59.4	59.9	60.2	60.4	60.6	60.8	61.0
	Employment in Industry (% total employment)		38.5 b	37.0	36.1	35.8	35.3	34.8	34.6	34.5	34.5	34.4	34.4
	Employment in Agriculture (% total employment)		5.3 b	5.4	5.5	5.3	5.4	5.3	5.2	5.1	5.0	4.8	4.6
	Activity rate (% population aged 15-64)	77.5	77.8	77.6	77.6	77.5	77.8	78.0	78.1	78.3	78.6	78.9	79.2
	Activity rate (% population aged 15-24)	47.5	47.7	46.7	46.0	45.5	45.3	44.9	44.4	44.2	44.1	44.1	44.3
	Activity rate (% population aged 25-54)	91.8	91.9	91.7	91.8	91.6	91.8	91.5	91.5	91.5	91.4	91.6	91.7
	Activity rate (% population aged 55-64)	56.7	57.7	58.3	58.7	59.3	61.0	62.5	63.9	65.0	66.6	67.8	69.1
	Total unemployment (000)	8632	8682	11755	12587	12473	13641	14182	13281	12249	11066	9844	8802
	Unemployment rate (% labour force)	6.6	6.6	9.0	9.7	9.6	10.4	10.8	10.1	9.3	8.4	7.4	6.6
	Youth unemployment rate (% labour force 15-24)	15.6	16.0	21.4	22.2	22.4	24.0	24.4	22.8	21.1	19.4	17.4	15.7
	Long term unemployment rate (% labour force)	2.8	2.4	2.8	3.9	4.1	4.6	5.1	5.0	4.5	3.9	3.3	2.8
	Share of long term unemployment (% of total unemployment)	42.7	36.6	31.8	40.3	43.4	44.6	47.4	49.7	48.6	46.6	45.1	43.1
	Youth unemployment ratio (% population aged 15-24)	7.3	7.6	9.9	10.1	10.2	10.8	10.9	10.1	9.3	8.5	7.7	7.0
	Employment rate for low skilled 25-64 (ISCED 0-2)	70.1	69.7	66.6	65.2	64.3	63.0	61.9	62.5 b	63.5	64.9	66.3	67.6
	Employment rate for medium skilled 25-64 (ISCED 3-4)	81.0	81.4	79.6	79.1	79.2	79.0	78.7	79.3 b	79.8	80.7	81.6	82.5
	Employment rate for high skilled 25-64 (ISCED 5-8)	88.7	88.9	87.8	87.4	87.3	87.3	87.1	87.3 b	87.9	88.6	89.2	89.5
	Employment rate (Nationals aged 15-64)	72.3	72.6	70.8	70.2	70.1	69.8	69.6	70.2	71.0	72.0	73.1	73.9
	Employment rate (Other EU28 aged 15-64)	78.1	78.2	74.9	74.7	74.8	74.6	74.9	76.2	77.3	78.6	80.1	81.3
	Employment rate (Other than EU28 aged 15-64)	69.8	69.8	63.9	64.5	64.5	62.8	61.9	62.6	63.4	63.6	64.5	67.3
	Employment rate (Born in the same country aged 15-64)	72.2	72.5	70.6	70.1	69.9	69.6	69.4	70.1	70.9	71.8	72.9	73.7
	Employment rate (Born in other EU28 aged 15-64)	78.4	77.7	74.1	73.6	73.4	72.7	73.0	73.9	75.2	76.6	79.7	81.0
	Employment rate (Born outside EU28 aged 15-64)	73.7	73.1	67.6	67.2	66.5	65.4	64.3	65.3	66.2	68.2	69.6	71.5
	Underemployment (% of labour force aged 15-74)		1.7	1.9	2.1	2.2	2.4	2.6	2.6	2.6	2.5	2.3	2.1
	Seeking but not available (% of labour force aged 15-74)	0.9	0.8	0.8	0.8	0.8	0.8	0.7	0.7	0.7	0.8	0.8	0.8
	Discouraged, available but not seeking (% of labour force aged 15-74)	2.2	2.1	2.5	2.7	2.9	2.9	3.1	3.1	3.0	2.9	2.7	2.5
Labour Market Indicators - Female	Total population (000)	255366	256306 b	257178	257671 b	257780 b	258295 b	258781	259724 b	260301 b	260886	261404 b	261832
	Population aged 15-64(000)	167211	167841	168171	168116	167903 b	167649	167237	167085 b	166648 b	166347	165918 b	165474
	Total employment (000)	98096	99718	99084	98123	98485	98644	98782	100266	101461	102993	104606	105991
	Employment aged 15-64 (000)	96663	98225	97547	96558	96875	96948	97025	98414	99534	100993	102454	103676
	Employment rate (% population aged 20-64)	62.0	62.7	62.2	62.1	62.2	62.4	62.6	63.5	64.3	65.3	66.5	67.4
	Employment rate (% population aged 15-64)	58.1	58.8	58.3	58.2	58.4	58.6	58.8	59.6	60.4	61.4	62.5	63.4
	Employment rate (% population aged 15-24)	34.0	34.3	32.7	31.7	31.2	30.6	30.3	30.6	31.3	32.1	33.0	33.4
	Employment rate (% population aged 25-54)	71.2	72.0	71.4	71.3	71.4	71.3	71.1	71.7	72.3	73.0	73.8	74.7
	Employment rate (% population aged 55-64)	35.7	36.6	37.6	38.5	40.0	41.7	43.3	45.2	46.9	48.9	50.9	52.4
	FTE employment rate (% population aged 20-64)	53.6	54.4	53.7	53.6	53.6	53.6	53.7	54.5	55.4	56.3	57.4	58.5
	Self-employed (% total employment)	10.2	10.1	10.1	10.3	10.3	10.4	10.3	10.4	10.4	10.3	10.2	10.1
	Part-time employment (% total employment)	30.4	30.3	30.7	31.3	31.5	31.9	32.4	32.2	32.1	31.9	31.7	31.3
	Temporary employment (% total employment)	13.4	13.2	12.8	12.8	12.8	12.5	12.5	12.6	12.8	13.0	13.2	13.1
	Employment in Services (% total employment)		81.8 b	82.9	83.6	83.7	83.9	84.3	84.4	84.8	85.0	84.9	85.1
	Employment in Industry (% total employment)		14.2 b	13.1	12.6	12.6	12.5	12.3	12.3	12.1	12.1	12.3	12.3
	Employment in Agriculture (% total employment)		4.0 b	4.0	3.9	3.7	3.6	3.4	3.3	3.1	2.9	2.8	2.7
	Activity rate (% population aged 15-64)	63.1	63.6	64.0	64.4	64.8	65.5	66.1	66.6	66.8	67.4	67.9	68.3
	Activity rate (% population aged 15-24)	40.5	40.7	40.3	39.7	39.5	39.4	39.3	38.9	38.9	39.1	39.2	39.0
	Activity rate (% population aged 25-54)	76.6	77.2	77.7	78.2	78.4	79.0	79.2	79.5	79.5	79.6	79.8	80.1
	Activity rate (% population aged 55-64)	37.8	38.5	39.9	41.0	42.6	44.6	46.5	48.4	50.0	52.0	53.8	55.2
	Total unemployment (000)	8366	8085	9630	10424	10681	11653	12151	11551	10651	9877	8930	8084
	Unemployment rate (% labour force)	7.9	7.5	8.9	9.6	9.8	10.6	10.9	10.3	9.5	8.8	7.9	7.1
	Youth unemployment rate (% labour force 15-24)	16.2	15.8	19.0	20.4	21.0	22.4	23.0	21.4	19.5	17.9	16.1	14.5
	Long term unemployment rate (% labour force)	3.3	2.8	3.1	3.7	4.1	4.6	5.1	5.0	4.5	4.0	3.5	3.0
	Share of long term unemployment (% of total unemployment)	42.4	37.1	34.7	39.0	42.0	44.0	46.8	48.7	47.6	46.1	44.3	42.8
	Youth unemployment ratio (% population aged 15-24)	6.5	6.4	7.6	8.0	8.3	8.8	9.0	8.3	7.6	7.0	6.3	5.7
	Employment rate for low skilled 25-64 (ISCED 0-2)	45.2	44.7	43.7	43.3	43.2	43.1	42.6	43.0 b	43.2	43.8	44.9	45.6
	Employment rate for medium skilled 25-64 (ISCED 3-4)	67.3	67.5	66.9	66.5	66.6	66.5	66.4	67.1 b	67.7	68.5	69.3	69.9
	Employment rate for high skilled 25-64 (ISCED 5-8)	81.7	81.5	81.0	80.6	80.3	80.1	80.1	80.4 b	80.8	81.5	82.0	82.6
	Employment rate (Nationals aged 15-64)	58.5	59.2	58.8	58.7	58.9	59.2	59.4	60.2	61.1	62.1	63.2	64.1
	Employment rate (Other EU28 aged 15-64)	61.2	61.3	60.8	60.9	61.8	61.6	61.9	62.7	64.0	65.1	66.0	66.8
	Employment rate (Other than EU28 aged 15-64)	46.3	48.1	46.6	45.9	45.3	44.5	43.9	44.5	44.5	44.0	45.0	46.3
	Employment rate (Born in the same country aged 15-64)	58.5	59.2	58.8	58.7	58.9	59.2	59.4	60.2	61.1	62.2	63.3	64.2
	Employment rate (Born in other EU28 aged 15-64)	60.9	60.7	60.4	60.6	60.8	60.5	61.0	62.1	63.2	64.1	66.5	67.4
	Employment rate (Born outside EU28 aged 15-64)	52.2	53.5	51.5	51.0	50.1	49.2	48.6	49.5	49.8	50.1	52.2	53.6
	Underemployment (% of labour force aged 15-74)		5.1	5.3	5.5	5.4	5.7	6.2	6.1	5.9	5.5	5.2	4.8
	Seeking but not available (% of labour force aged 15-74)	1.5	1.4	1.2	1.2	1.2	1.2	1.1	1.1	1.1	1.1	1.1	1.1
	Discouraged, available but not seeking (% of labour force aged 15-74)	4.5	4.3	4.5	4.5	4.6	4.7	4.9	4.9	4.7	4.4	4.1	3.8

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European Union 28			2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018
Social Indicators	All	At-risk-of-poverty or social exclusion (% of total population)				23.8	24.3	24.8	24.6	24.4	23.8	23.5	22.4	
		At-risk-of-poverty (% of total population)				16.5	16.9	16.8	16.7	17.2	17.3	17.3	16.9	
		At-risk-of-poverty threshold (PPS single person)												
		Poverty gap (%)				22.9	23.0	23.4	23.8	24.6	24.8	25.0	24.1	
		Persistent at-risk-of-poverty (% of total population)				10.0 e	9.8 e	10.3 e	10.0	10.3	10.9	11.0 e	11.3 e	
		At-risk-of-poverty before social transfers excl. pensions (% of total population)				26.1	26.4	25.8	26.0	26.1	26.1	25.9	25.6	
		Impact of social transfers (excl. pensions) in reducing poverty (%)				36.8	36.0	34.9	35.8	34.1	33.7	33.2	34.0	
		Severe Material Deprivation (% of total population)				8.4	8.8	9.9	9.6	8.9	8.1	7.5	6.6	6.2 e
		Share of people living in low work intensity households (% of people aged 0-59)				10.3	10.5	10.6	11.0	11.3	10.7	10.5	9.5	
		Real Gross Household Disposable income (growth %)	2.1	1.0	0.9	-0.5	-0.5	-0.8	0.0	1.0	2.3	2.2	1.1	
		Income quintile share ratio S80/S20				4.9	5.0	5.0	5.0	5.2	5.2	5.2	5.1	
		GINI coefficient				30.5	30.8	30.5	30.5	31.0	31.0	30.8	30.7	
		Early leavers from education and training (% of population aged 18-24)	14.9	14.7	14.2	13.9	13.4	12.7	11.9	11.2 b	11.0	10.7	10.6	10.6
		NEET: Young people neither in employment nor in education and training (% of total population aged 15-24)	11.1	10.9	12.4	12.8	12.9	13.2	13.0	12.4	12.0	11.5	10.9	10.4
	Male	At-risk-of-poverty or social exclusion (% of male population)				22.7	23.2	23.8	23.7	23.6	23.1	22.5	21.6	
		At-risk-of-poverty (% of male population)				15.8	16.1	16.2	16.2	16.7	16.9	16.6	16.3	
		Poverty gap (%)				23.6	24.0	24.2	24.6	25.6	25.8	26.1	24.9	
		Persistent at-risk-of-poverty (% of male population)				9.3 e	9.3 e	9.7 e	9.6	9.9	10.4	10.4 e	10.8 e	
		Severe Material Deprivation (% of male population)				8.2	8.6	9.7	9.4	8.8	8.0	7.3	6.4	6.0 e
		Share of people living in low work intensity households (% of males aged 0-59)				9.6	9.9	10.0	10.5	10.9	10.2	10.0	9.1	
		Life expectancy at birth (years)				76.9 e	77.4	77.4	77.8 e	78.1	77.9 b	78.2	78.3	
		Healthy life years at birth (years) - men				61.8 e	61.7	61.5	61.4 e	61.4	62.6 b	63.5	63.3	
		Early leavers from education and training (% of males aged 18-24)	17.0	16.7	16.1	15.8	15.3	14.5	13.6	12.7 b	12.4	12.2	12.1	12.2
		NEET: Young people neither in employment nor in education and training (% of males aged 15-24)	9.9	9.7	12.0	12.4	12.6	13.0	12.8	12.2	11.7	11.2	10.6	10.0
	Female	At-risk-of-poverty or social exclusion (% of female population)				24.8	25.4	25.8	25.5	25.2	24.5	24.4	23.3	
		At-risk-of-poverty (% of female population)				17.2	17.6	17.4	17.2	17.7	17.7	17.9	17.6	
		Poverty gap (%)				22.1	22.1	22.5	23.2	23.8	23.9	24.1	23.4	
		Persistent at-risk-of-poverty (% of female population)				10.7 e	10.3 e	11.0 e	10.5	10.7	11.3	11.5 e	11.6 e	
		Severe Material Deprivation (% of female population)				8.6	9.1	10.2	9.8	9.0	8.2	7.7	6.8	6.4 e
		Share of people living in low work intensity households (% of females aged 0-59)				11.0	11.2	11.2	11.5	11.7	11.2	11.0	9.9	
		Life expectancy at birth (years)				82.8 e	83.2	83.1	83.3 e	83.6	83.3 b	83.6	83.5	
		Healthy life years at birth (years) - women				62.6 e	62.1	62.1	61.5 e	61.8	63.3 b	64.2	63.1	
		Early leavers from education and training (% of females aged 18-24)	12.8	12.7	12.3	11.9	11.5	10.9	10.2	9.6 b	9.5	9.2	8.9	8.9
		NEET: Young people neither in employment nor in education and training (% of females aged 15-24)	12.3	12.1	12.9	13.2	13.3	13.4	13.2	12.6	12.3	11.8	11.1	10.8
	Children (0-17)	At-risk-of-poverty or social exclusion of children (% of people aged 0-17)				27.6	27.3	28.1	27.9	27.8	27.1	26.4	24.9	
		At-risk-of-poverty (% of Children population)				21.0	20.7	20.6	20.5	21.1	21.2	21.0	20.2	
		Severe Material Deprivation (% of Children population)				9.9	10.1	11.8	11.1	10.4	9.6	8.5	7.1	6.9 e
		Share of children living in low work intensity households (% of Children population)				9.4	9.3	9.2	9.6	9.9	9.4	9.3	8.2	
		Risk of poverty of children in households at work (Working Intensity > 0.2)				15.8	15.6	15.7	15.7	16.0	16.1	15.9	15.6	
		Impact of social transfers (excl. pensions) in reducing poverty (0-17) (%)				40.5	41.0	39.8	41.1	39.4	38.9	38.6	40.4	
	Working age (18-64)	At-risk-of-poverty or social exclusion (% of working age population)				23.6	24.5	25.4	25.5	25.4	24.7	24.2	23.0	
		At-risk-of-poverty (% of Working age population)				15.3	16.0	16.4	16.5	17.1	17.1	17.0	16.5	
		Severe Material Deprivation (% of Working age population)				8.4	8.9	10.0	10.0	9.2	8.4	7.8	6.8	6.4 e
		Very low work intensity (18-59)				10.6	10.9	11.0	11.4	11.7	11.1	10.9	10.0	
		In-work at-risk-of poverty rate (% of persons employed 18-64)				8.3	8.8	8.9	9.0	9.5	9.5	9.6	9.4	
		Impact of social transfers (excl. pensions) in reducing poverty (18-64) (%)				38.8	37.7	35.7	36.3	34.7	34.5	34.1	34.8	
	Elderly (65+)	At-risk-of-poverty or social exclusion of elderly (% of people aged 65+)				20.1	20.4	19.2	18.2	17.8	17.4	18.2	18.2	
		At-risk-of-poverty (% of Elderly population)				16.0	15.9	14.5	13.7	13.7	14.1	14.6	15.0	
		Severe Material Deprivation (% of Elderly population)				6.7	7.3	7.4	7.0	6.3	5.6	5.8	5.3	5.0 e
		Relative median income of elderly (ratio with median income of people younger than 65)				0.88	0.90	0.92	0.93	0.94	0.93	0.93	0.92	
		Aggregate replacement ratio (ratio)				0.52	0.53	0.54	0.56	0.56	0.57	0.58	0.58	
Expenditure in social protection indicators (% of GDP)		Sickness/Health care	7.3	8.0	8.0	8.0 p	8.0 p	8.0 p	8.1 p	8.1 p	8.1 p	8.0 p		
		Disability	1.9	2.0	2.0	2.0 p	2.0 p	2.0 p	2.0 p	2.0 p	2.0 p	2.0 p		
		Old age and survivors	11.3	12.3	12.3	12.3 p	12.6 p	12.7 p	12.6 p	12.6 p	12.5 p	12.4 p		
		Family/Children	2.1	2.4	2.4	2.3 p	2.3 p	2.3 p	2.3 p	2.3 p	2.4 p	2.4 p		
		Unemployment	1.2	1.7	1.6	1.6 p	1.5 p	1.5 p	1.4 p	1.3 p	1.3 p	1.3 p		
		Housing and Social exclusion n.e.c.	1.0	1.1	1.1	1.1 p	1.1 p	1.1 p	1.1 p	1.1 p	1.1 p	1.1 p		
		Total (including Admin and Other expenditures)	25.9	28.7	28.6	28.3 p	28.7 p	28.9 p	28.7 p	28.4 p	28.1 p	28.1 p		
		of which: Means tested benefits	2.9	3.3	3.3	3.3 p	3.3 p	3.3 p	3.3 p	3.3 p	3.3 p	3.3 p		

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## Euro Area 19

Euro Area 19		2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018
Macro Economic Indicators (Annual % growth)	Real GDP	3.1	0.5	-4.5	2.1	1.6	-0.9	-0.2	1.4	2.1	1.9	2.4	1.9
	Total employment	1.9	0.8	-1.9	-0.6	0.1	-0.4	-0.6	0.6	1.0	1.4	1.6	1.5
	Labour productivity	1.2	-0.4	-2.7	2.7	1.5	-0.4	0.4	0.8	1.0	0.6	0.8	0.4
	Annual average hours worked per person employed	0.2	-0.1	-1.7	0.0	0.0	-1.2	-0.7	-0.1	0.1	0.0	-0.4	0.1
	Real productivity per hour worked	1.0	-0.3	-1.0	2.6	1.5	0.7	1.1	0.8	0.9	0.5	1.2	0.3
	Harmonized CPI	2.2	3.3	0.3	1.6	2.7	2.5	1.3	0.4	0.2	0.2	1.5	1.8
	Price deflator GDP	2.5	2.0	1.0	0.7	1.0	1.3	1.2	0.9	1.4	0.9	1.1	1.4
	Nominal compensation per employee	2.6	3.4	1.7	2.0	2.1	1.5	1.5	1.3	1.4	1.3	1.6	2.2
	Real compensation per employee (GDP deflator)	0.1	1.3	0.7	1.3	1.0	0.2	0.3	0.4	0.0	0.4	0.5	0.8
	Real compensation per employee (private consumption deflator)	0.4	0.0	1.3	0.4	-0.7	-1.0	0.2	0.9	1.2	1.0	0.0	0.5
	Nominal unit labour costs	1.4	3.8	4.4	-0.6	0.5	1.9	1.2	0.6	0.3	0.7	0.8	1.8
	Real unit labour costs	-1.0	1.7	3.4	-1.3	-0.5	0.7	-0.2	-0.3	-1.0	-0.2	-0.3	0.5
Labour Market Indicators - Total	Total population (000)	331205	333097 b	334470	335266	334573 b	335289 b	336045	337764 b	338562 b	339788	340535 b	341153
	Population aged 15-64 (000)	220686	221860	222290	222222	221221 b	220959	220573	220795 b	220388 b	220550	220237 b	219918
	Total employment (000)	145155	146615	143661	142160	142335	141502	140732	142142	143665	146182	148341	150355
	Employment aged 15-64 (000)	143051	144419	141455	139966	140040	139026	138171	139422	140774	143151	145056	146817
	Employment rate (% population aged 20-64)	69.8	70.1	68.7	68.3	68.4	68.0	67.7	68.2	69.0	70.0	71.0	72.0
	Employment rate (% population aged 15-64)	65.4	65.8	64.3	64.0	64.1	63.7	63.5	63.9	64.6	65.5	66.5	67.4
	Employment rate (% population aged 15-24)	37.5	37.3	34.6	33.3	33.0	31.7	31.0	30.7	31.0	31.5	32.4	33.4
	Employment rate (% population aged 25-54)	79.0	79.3	77.7	77.3	77.3	76.5	75.9	76.1	76.7	77.5	78.2	79.1
	Employment rate (% population aged 55-64)	43.1	44.2	45.0	45.7	47.0	48.6	50.0	51.7	53.3	55.3	57.2	58.8
	FTE employment rate (% population aged 20-64)												
	Self-employed (% total employment)	15.1	14.9	15.0	15.1	15.0	15.0	15.0	14.9	14.8	14.6	14.3	14.1
	Part-time employment (% total employment)	18.6	18.6	19.2	19.7	20.1	20.7	21.5	21.5	21.6	21.6	21.6	21.3
	Temporary employment (% total employment)	13.8	13.6	12.9	13.0	13.2	12.7	12.6	12.8	13.1	13.3	13.7	13.9
	Employment in Services (% total employment)		69.4 b	70.6	71.4	71.8	72.2	72.8	73.1	73.2	73.4	73.5	73.6
	Employment in Industry (% total employment)		27.2 b	26.0	25.3	25.0	24.6	24.1	23.8	23.8	23.6	23.7	23.6
	Employment in Agriculture (% total employment)		3.3 b	3.4	3.4	3.3	3.2	3.2	3.1	3.0	3.0	2.9	2.8
	Activity rate (% population aged 15-64)	70.7	71.2	71.2	71.3	71.5	72.0	72.2	72.4	72.5	72.9	73.1	73.5
	Activity rate (% population aged 15-24)	44.2	44.3	43.4	42.2	41.9	41.4	41.0	40.2	39.8	39.7	39.9	40.1
	Activity rate (% population aged 25-54)	84.6	85.0	85.0	85.2	85.2	85.6	85.5	85.5	85.4	85.5	85.5	85.7
	Activity rate (% population aged 55-64)	46.0	47.0	48.3	49.3	50.7	52.8	54.6	56.4	58.0	59.8	61.3	62.7
	Total unemployment (000)	11731	11967	15258	16178	16216	18219	19271	18662	17472	16258	14748	13386
	Unemployment rate (% labour force)	7.5	7.6	9.6	10.2	10.2	11.4	12.0	11.6	10.9	10.0	9.1	8.2
	Youth unemployment rate (% labour force 15-24)	15.5	16.1	20.7	21.5	21.4	23.6	24.4	23.7	22.3	20.9	18.8	16.9
	Long term unemployment rate (% labour force)	3.2	2.9	3.4	4.3	4.6	5.2	5.9	6.0	5.5	5.0	4.4	3.8
	Share of long term unemployment (% of total unemployment)	43.6	38.6	35.0	42.1	45.0	46.2	49.4	52.2	51.1	49.7	48.5	46.3
	Youth unemployment ratio (% population aged 15-24)	6.8	7.0	8.8	8.9	8.9	9.7	9.9	9.5	8.9	8.3	7.5	6.8
	Employment rate for low skilled 25-64 (ISCED 0-2)	57.4	57.1	55.0	54.3	54.0	53.0	52.1	52.2 b	53.0	53.9	55.1	56.1
	Employment rate for medium skilled 25-64 (ISCED 3-4)	75.0	75.5	74.3	74.1	74.0	73.7	73.3	73.7 b	74.1	74.9	75.5	76.2
	Employment rate for high skilled 25-64 (ISCED 5-8)	84.5	84.7	83.8	83.4	83.5	83.1	82.7	82.7 b	83.2	84.0	84.6	85.1
	Employment rate (Nationals aged 15-64)	65.8	66.1	64.9	64.6	64.7	64.4	64.1	64.4	65.1	66.1	67.1	67.9
	Employment rate (Other EU28 aged 15-64)	68.1	67.9	65.7	65.6	65.9	65.7	65.9	66.5	67.7	69.4	70.4	71.3
	Employment rate (Other than EU28 aged 15-64)	57.7	58.6	54.5	54.3	54.0	52.6	51.5	52.1	52.5	52.4	53.5	55.7
	Employment rate (Born in the same country aged 15-64)	65.7	66.1	64.9	64.5	64.6	64.2	64.0	64.4	65.1	66.1	67.0	67.8
	Employment rate (Born in other EU28 aged 15-64)	67.3	66.5	64.2	64.1	63.6	62.9	63.0	63.4	64.3	65.4	70.5	71.7
	Employment rate (Born outside EU28 aged 15-64)	63.2	63.3	58.7	58.0	56.9	55.4	53.9	54.5	55.1	55.9	58.9	60.7
	Underemployment (% of labour force aged 15-74)		3.5	3.7	3.8	3.8	4.0	4.6	4.6	4.5	4.3	4.1	3.8
	Seeking but not available (% of labour force aged 15-74)	1.4	1.2	1.1	1.1	1.1	1.1	1.0	1.0	1.0	1.0	1.0	1.0
	Discouraged, available but not seeking (% of labour force aged 15-74)	3.2	3.3	3.5	3.6	3.7	3.9	4.2	4.4	4.3	4.1	3.8	3.6

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Euro Area 19		2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018
Labour Market Indicators - Male	Total population (000)	161550	162517 b	163200	163564	162976 b	163337 b	163743	164650 b	165083 b	165899	166304 b	166649
	Population aged 15-64(000)	110616	111180	111344	111235	110489 b	110342	110128	110252 b	110064 b	110304	110165 b	110025
	Total employment (000)	81241	81572	79049	77828	77654	76873	76173	76786	77575	78964	80128	81111
	Employment aged 15-64 (000)	79866	80142	77630	76427	76172	75264	74506	75007	75716	77022	78041	78888
	Employment rate (% population aged 20-64)	78.1	78.0	75.7	75.0	74.9	74.1	73.4	73.8	74.6	75.6	76.6	77.6
	Employment rate (% population aged 15-64)	73.1	73.1	70.8	70.2	70.1	69.3	68.7	69.0	69.7	70.6	71.6	72.6
	Employment rate (% population aged 15-24)	40.8	40.3	36.6	35.3	35.0	33.6	32.8	32.4	32.6	33.1	34.0	35.3
	Employment rate (% population aged 25-54)	87.6	87.3	84.7	84.0	83.8	82.7	81.7	81.9	82.5	83.3	84.1	84.9
	Employment rate (% population aged 55-64)	52.1	53.2	53.3	53.6	54.3	55.6	56.7	58.0	59.6	61.6	63.3	65.0
	FTE employment rate (% population aged 20-64)												
	Self-employed (% total employment)	18.9	18.6	18.9	19.1	19.0	19.1	19.0	18.8	18.6	18.2	17.8	17.6
	Part-time employment (% total employment)	6.7	6.8	7.3	7.6	8.0	8.4	8.9	9.1	9.3	9.3	9.4	9.2
	Temporary employment (% total employment)	12.6	12.3	11.5	11.8	12.1	11.7	11.6	11.9	12.3	12.5	12.9	13.0
	Employment in Services (% total employment)		57.6 b	58.8	59.6	60.2	60.7	61.4	61.7	61.8	62.0	62.2	62.3
	Employment in Industry (% total employment)		38.4 b	37.2	36.2	35.8	35.3	34.6	34.3	34.3	34.1	34.1	34.0
	Employment in Agriculture (% total employment)		4.0 b	4.1	4.1	4.0	4.1	4.1	4.0	3.9	3.9	3.8	3.7
	Activity rate (% population aged 15-64)	78.4	78.5	78.2	78.1	77.9	78.2	78.1	78.1	78.1	78.3	78.5	78.8
	Activity rate (% population aged 15-24)	47.7	47.7	46.5	45.2	44.6	44.1	43.5	42.7	42.2	42.0	42.1	42.7
	Activity rate (% population aged 25-54)	92.9	92.9	92.5	92.4	92.2	92.2	91.8	91.6	91.4	91.4	91.4	91.5
	Activity rate (% population aged 55-64)	55.4	56.3	57.2	58.1	58.8	60.7	62.4	63.8	65.3	66.9	68.1	69.3
	Total unemployment (000)	5784	6052	8255	8728	8637	9753	10316	9929	9276	8484	7640	6894
	Unemployment rate (% labour force)	6.7	6.9	9.5	10.1	10.0	11.2	11.9	11.5	10.7	9.7	8.7	7.9
	Youth unemployment rate (% labour force 15-24)	14.8	15.9	21.6	22.1	21.7	24.0	24.8	24.2	23.0	21.4	19.4	17.5
	Long term unemployment rate (% labour force)	2.9	2.6	3.1	4.2	4.5	5.2	5.9	6.0	5.5	4.8	4.2	3.6
	Share of long term unemployment (% of total unemployment)	43.5	37.8	33.3	42.2	45.3	46.2	49.5	52.3	51.3	49.6	48.6	46.1
	Youth unemployment ratio (% population aged 15-24)	6.9	7.5	9.9	9.9	9.6	10.5	10.7	10.3	9.7	9.0	8.1	7.5
	Employment rate for low skilled 25-64 (ISCED 0-2)	71.7	70.9	67.4	66.0	65.2	63.3	61.9	62.1 b	63.1	64.3	65.8	67.1
	Employment rate for medium skilled 25-64 (ISCED 3-4)	81.9	82.1	80.2	79.8	79.8	79.4	78.8	79.0 b	79.4	80.3	80.9	81.6
	Employment rate for high skilled 25-64 (ISCED 5-8)	88.5	88.6	87.5	87.1	87.1	86.8	86.3	86.3 b	86.9	87.7	88.4	88.8
	Employment rate (Nationals aged 15-64)	73.2	73.2	71.2	70.5	70.3	69.7	69.1	69.2	69.9	70.8	71.8	72.6
	Employment rate (Other EU28 aged 15-64)	76.8	76.6	72.8	72.8	72.8	72.2	72.5	73.4	74.8	76.1	77.5	78.9
	Employment rate (Other than EU28 aged 15-64)	69.6	69.4	63.1	63.7	63.7	61.6	60.7	61.1	62.2	62.4	63.4	66.3
	Employment rate (Born in the same country aged 15-64)	73.1	73.1	71.0	70.3	70.2	69.4	68.9	69.1	69.7	70.7	71.6	72.4
	Employment rate (Born in other EU28 aged 15-64)	77.2	75.8	71.7	71.5	70.8	69.2	69.2	69.5	70.9	71.8	77.5	79.1
	Employment rate (Born outside EU28 aged 15-64)	74.2	73.2	66.6	66.1	65.0	63.1	61.6	62.0	63.3	65.3	67.7	70.0
	Underemployment (% of labour force aged 15-74)		1.6	1.8	1.9	2.1	2.2	2.6	2.7	2.7	2.6	2.5	2.2
	Seeking but not available (% of labour force aged 15-74)	1.0	1.0	0.9	0.9	0.9	0.9	0.8	0.8	0.8	0.9	0.8	0.8
	Discouraged, available but not seeking (% of labour force aged 15-74)	2.1	2.1	2.4	2.6	2.8	2.8	3.2	3.3	3.3	3.2	3.0	2.9
Labour Market Indicators - Female	Total population (000)	169655	170580 b	171270	171702	171597 b	171952 b	172302	173114 b	173479 b	173889	174231 b	174504
	Population aged 15-64(000)	110070	110681	110946	110987	110732 b	110617	110445	110543 b	110324 b	110245	110072 b	109893
	Total employment (000)	63914	65043	64612	64332	64681	64629	64559	65356	66090	67218	68213	69244
	Employment aged 15-64 (000)	63185	64277	63826	63539	63868	63762	63666	64415	65058	66129	67015	67929
	Employment rate (% population aged 20-64)	61.5	62.3	61.8	61.8	62.0	62.0	62.0	62.7	63.4	64.4	65.4	66.4
	Employment rate (% population aged 15-64)	57.7	58.5	58.0	57.9	58.3	58.2	58.2	58.8	59.5	60.4	61.3	62.2
	Employment rate (% population aged 15-24)	34.0	34.2	32.4	31.2	30.9	29.7	29.2	28.9	29.3	29.8	30.7	31.4
	Employment rate (% population aged 25-54)	70.5	71.3	70.6	70.6	70.7	70.4	70.1	70.4	70.9	71.6	72.3	73.2
	Employment rate (% population aged 55-64)	34.6	35.7	37.1	38.2	40.0	41.9	43.6	45.7	47.4	49.4	51.4	52.9
	FTE employment rate (% population aged 20-64)												
	Self-employed (% total employment)	10.3	10.2	10.2	10.2	10.1	10.3	10.3	10.3	10.3	10.3	10.1	10.0
	Part-time employment (% total employment)	33.5	33.4	33.7	34.3	34.6	35.3	36.1	36.0	36.0	35.9	35.7	35.3
	Temporary employment (% total employment)	15.3	15.2	14.6	14.5	14.5	14.0	13.8	13.8	14.1	14.3	14.8	14.9
	Employment in Services (% total employment)		84.2 b	85.0	85.4	85.6	85.8	86.1	86.3	86.5	86.7	86.6	86.6
	Employment in Industry (% total employment)		13.3 b	12.5	12.1	12.1	11.9	11.7	11.6	11.5	11.4	11.6	11.6
	Employment in Agriculture (% total employment)		2.5 b	2.5	2.4	2.3	2.2	2.1	2.1	2.0	1.9	1.9	1.8
	Activity rate (% population aged 15-64)	63.1	63.8	64.3	64.6	65.1	65.9	66.3	66.7	66.9	67.5	67.8	68.1
	Activity rate (% population aged 15-24)	40.6	40.7	40.2	39.2	39.1	38.6	38.4	37.6	37.3	37.3	37.5	37.4
	Activity rate (% population aged 25-54)	76.4	77.2	77.6	78.1	78.3	79.0	79.3	79.4	79.3	79.6	79.6	79.9
	Activity rate (% population aged 55-64)	37.1	38.1	39.8	41.1	43.0	45.3	47.3	49.5	51.2	53.1	54.9	56.3
	Total unemployment (000)	5947	5915	7002	7450	7579	8467	8954	8732	8196	7774	7108	6492
	Unemployment rate (% labour force)	8.5	8.4	9.8	10.4	10.5	11.6	12.2	11.8	11.0	10.4	9.5	8.6
	Youth unemployment rate (% labour force 15-24)	16.4	16.3	19.6	20.7	21.0	23.1	23.9	23.2	21.6	20.3	18.1	16.3
	Long term unemployment rate (% labour force)	3.7	3.3	3.6	4.3	4.7	5.3	6.0	6.1	5.6	5.1	4.5	4.0
	Share of long term unemployment (% of total unemployment)	43.6	39.4	37.0	41.9	44.8	46.3	49.4	52.2	50.9	49.8	48.4	46.6
	Youth unemployment ratio (% population aged 15-24)	6.6	6.5	7.7	8.0	8.2	8.9	9.1	8.7	8.1	7.6	6.8	6.1
	Employment rate for low skilled 25-64 (ISCED 0-2)	44.0	44.1	43.2	43.1	43.2	42.9	42.4	42.4 b	42.9	43.4	44.1	44.8
	Employment rate for medium skilled 25-64 (ISCED 3-4)	68.0	68.7	68.3	68.1	68.0	67.9	67.7	68.3 b	68.6	69.5	70.0	70.7
	Employment rate for high skilled 25-64 (ISCED 5-8)	80.4	80.8	80.3	79.9	80.1	79.7	79.3	79.4 b	79.8	80.7	81.2	81.8
	Employment rate (Nationals aged 15-64)	58.3	59.1	58.7	58.7	59.0	59.1	59.2	59.6	60.4	61.4	62.3	63.2
	Employment rate (Other EU28 aged 15-64)	59.6	59.5	58.9	58.8	59.5	59.7	59.7	60.0	60.9	62.8	63.5	63.9
	Employment rate (Other than EU28 aged 15-64)	45.8	47.6	45.9	45.3	44.8	44.0	42.9	43.7	43.4	42.7	43.7	45.2
	Employment rate (Born in the same country aged 15-64)	58.3	59.1	58.7	58.6	59.0	59.0	59.1	59.6	60.4	61.5	62.4	63.3
	Employment rate (Born in other EU28 aged 15-64)	58.9	58.4	57.7	57.7	57.6	57.8	57.8	58.3	58.8	60.1	64.2	65.0
	Employment rate (Born outside EU28 aged 15-64)	52.7	53.8	51.2	50.5	49.4	48.3	46.8	47.7	47.6	47.5	50.6	52.0
	Underemployment (% of labour force aged 15-74)		5.9	5.9	6.1	5.8	6.1	6.9	6.8	6.7	6.3	6.0	5.5
	Seeking but not available (% of labour force aged 15-74)	1.8	1.6	1.4	1.4	1.4	1.4	1.2	1.1	1.1	1.1	1.2	1.2
	Discouraged, available but not seeking (% of labour force aged 15-74)	4.7	4.7	4.7	4.7	4.9	5.1	5.5	5.6	5.5	5.1	4.8	4.5

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Euro Area 19			2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	
Social Indicators	All	At-risk-of-poverty or social exclusion (% of total population)	21.9	21.7	21.6	22.0	22.9	23.3	23.1	23.5	23.1	23.1	22.1		
		At-risk-of-poverty (% of total population)	16.1	16.1	16.2	16.3	16.8	16.9	16.7	17.1	17.2	17.4	17.0		
		At-risk-of-poverty threshold (PPS single person)													
		Poverty gap (%)	22.2	21.4	21.9	22.5	22.8	23.2	24.0	24.8	24.9	24.8	24.3		
		Persistent at-risk-of-poverty (% of total population)		9.0	9.7	10.3	10.0	10.4	10.4	10.6	11.5	11.2 e	11.5 e		
		At-risk-of-poverty before social transfers excl. pensions (% of total population)	24.6	24.2	24.4	25.2	25.7	25.2	25.5	25.8	25.7	25.7	25.0		
		Impact of social transfers (excl. pensions) in reducing poverty (%)	34.6	33.5	33.6	35.3	34.6	32.9	34.5	33.7	33.1	32.3	32.0		
		Severe Material Deprivation (% of total population)	5.6	5.9	6.0	6.1	6.9	7.8	7.5	7.4	7.0	6.6	5.9	5.4 e	
		Share of people living in low work intensity households (% of people aged 0-59)	9.7	9.3	9.1	10.4	11.0	10.7	11.2	11.9	11.2	11.1	10.2		
		Real Gross Household Disposable income (growth %)	1.6	0.7	0.3	-0.6	-0.3	-1.7	-0.6	1.1	1.7	1.9	1.2		
		Income quintile share ratio S80/S20	4.8	4.9	4.9	4.9	5.0	5.0	5.1	5.2	5.2	5.2	5.1		
		GINI coefficient	30.0	30.5	30.3	30.3	30.6	30.5	30.7	31.0	30.8	30.7	30.5		
		Early leavers from education and training (% of population aged 18-24)	16.7	16.3	15.8	15.4	14.6	13.8	12.8	11.8 b	11.6	11.1	11.0	11.0	
		NEET: Young people neither in employment nor in education and training (% of total population aged 15-24)	10.9	11.0	12.6	12.8	12.7	13.1	12.9	12.5	12.1	11.6	11.1	10.5	
	Male	At-risk-of-poverty or social exclusion (% of male population)	20.2	20.2	20.3	20.9	21.8	22.2	22.2	22.6	22.3	22.1	21.2		
		At-risk-of-poverty (% of male population)	15.1	15.0	15.2	15.5	16.0	16.1	16.1	16.5	16.8	16.7	16.3		
		Poverty gap (%)	22.8	22.2	22.4	23.0	23.8	23.9	24.7	25.7	25.8	25.6	25.1		
		Persistent at-risk-of-poverty (% of male population)		8.2	8.8	9.5	9.4	9.7	10.0	10.2	11.1	10.5 e	10.9 e		
		Severe Material Deprivation (% of male population)	5.2	5.7	5.8	5.9	6.6	7.5	7.3	7.2	7.0	6.4	5.7	5.3 e	
		Share of people living in low work intensity households (% of males aged 0-59)	8.7	8.4	8.3	9.7	10.3	10.1	10.7	11.4	10.8	10.7	9.8		
		Life expectancy at birth (years)													
		Healthy life years at birth (years) - men													
		Early leavers from education and training (% of males aged 18-24)	19.4	18.9	18.3	17.9	16.9	15.9	14.7	13.6 b	13.2	12.8	12.9	12.9	
		NEET: Young people neither in employment nor in education and training (% of males aged 15-24)	9.9	10.2	12.6	12.8	12.6	13.2	13.0	12.6	12.2	11.6	11.2	10.6	
		Female	At-risk-of-poverty or social exclusion (% of female population)	23.5	23.2	22.9	23.1	24.0	24.4	24.0	24.3	23.8	24.0	23.0	
			At-risk-of-poverty (% of female population)	17.1	17.1	17.1	17.1	17.6	17.6	17.3	17.7	17.7	18.1	17.7	
			Poverty gap (%)	21.6	20.9	21.5	22.1	22.1	22.6	23.5	24.2	24.1	24.2	23.7	
			Persistent at-risk-of-poverty (% of female population)		9.7	10.6	11.0	10.6	11.2	10.9	11.0	11.9	11.9 e	12.0 e	
	Severe Material Deprivation (% of female population)		6.0	6.2	6.2	6.2	7.2	8.0	7.7	7.5	7.1	6.9	6.1	5.5 e	
	Share of people living in low work intensity households (% of females aged 0-59)		10.7	10.2	9.9	11.1	11.6	11.4	11.6	12.3	11.6	11.6	10.6		
	Life expectancy at birth (years)														
	Healthy life years at birth (years) - women														
	Early leavers from education and training (% of females aged 18-24)		13.9	13.6	13.2	12.8	12.3	11.5	10.9	10.0 b	9.9	9.3	9.0	9.0	
	NEET: Young people neither in employment nor in education and training (% of females aged 15-24)		11.9	11.8	12.6	12.8	12.9	13.0	12.8	12.3	12.0	11.6	10.9	10.5	
	Children (0-17)		At-risk-of-poverty or social exclusion of children (% of people aged 0-17)	23.0	23.7	24.3	25.4	25.5	25.6	25.2	25.7	25.4	25.3	24.3	
			At-risk-of-poverty (% of Children population)	18.4	19.0	19.6	20.7	20.5	20.4	19.9	20.4	20.7	20.8	20.4	
			Severe Material Deprivation (% of Children population)	6.2	7.1	7.2	7.2	7.8	9.0	8.4	8.4	8.1	7.2	6.3	5.5 e
			Share of children living in low work intensity households (% of Children population)	7.4	7.0	7.1	8.6	9.0	8.3	8.7	9.4	8.7	9.0	8.1	
		Risk of poverty of children in households at work (Working Intensity > 0.2)	14.3	15.1	15.6	15.7	15.2	15.3	14.9	15.0	15.4	15.6	15.5		
		Impact of social transfers (excl. pensions) in reducing poverty (0-17) (%)	41.8	39.9	39.1	38.9	39.2	37.8	40.1	38.6	38.0	37.7	37.4		
	Working age (18-64)	At-risk-of-poverty or social exclusion (% of working age population)	21.7	21.5	21.5	22.3	23.5	24.3	24.5	25.1	24.6	24.3	23.1		
		At-risk-of-poverty (% of Working age population)	14.6	14.6	14.8	15.3	16.2	16.6	16.8	17.4	17.4	17.4	16.9		
		Severe Material Deprivation (% of Working age population)	5.7	6.0	6.1	6.2	7.1	8.0	7.9	7.8	7.5	7.0	6.2	5.8 e	
		Very low work intensity (18-59)	10.4	10.0	9.7	11.0	11.6	11.5	12.0	12.7	12.0	11.8	10.9		
		In-work at-risk-of poverty rate (% of persons employed 18-64)	7.9	8.1	8.2	8.0	8.5	8.6	8.7	9.4	9.4	9.5	9.4		
		Impact of social transfers (excl. pensions) in reducing poverty (18-64) (%)	37.1	36.5	36.5	38.1	36.7	34.7	35.4	34.3	34.3	33.6	33.5		
	Elderly (65+)	At-risk-of-poverty or social exclusion of elderly (% of people aged 65+)	21.5	20.4	19.5	17.6	18.2	17.6	16.5	16.2	15.9	17.3	17.1		
At-risk-of-poverty (% of Elderly population)		19.1	18.2	17.4	15.2	15.1	14.1	13.3	13.3	13.5	14.2	14.3			
Severe Material Deprivation (% of Elderly population)		4.9	4.5	4.3	4.2	5.4	5.7	5.2	4.9	4.5	5.1	4.6	4.2 e		
Relative median income of elderly (ratio with median income of people younger than 65)		0.85	0.86	0.88	0.90	0.91	0.93	0.95	0.95	0.95	0.94	0.94			
Aggregate replacement ratio (ratio)		0.49	0.49	0.51	0.52	0.54	0.54	0.56	0.57	0.58	0.58	0.59			
Expenditure in social protection indicators (% of GDP)	Sickness/Health care	7.2	7.5	8.3	8.3	8.1 p	8.2 p	8.3 p	8.3 p	8.2 p	8.2 p				
	Disability	1.8	1.8	2.0	2.0	1.9 p	2.0 p	2.0 p	2.0 p	2.0 p	2.0 p				
	Old age and survivors	11.4	11.6	12.6	12.6	12.6 p	12.9 p	13.1 p	13.0 p	13.0 p	12.9 p				
	Family/Children	2.0	2.0	2.2	2.2	2.2 p	2.2 p	2.2 p	2.2 p	2.3 p	2.3 p				
	Unemployment	1.5	1.5	2.0	1.9	1.8 p	1.8 p	1.8 p	1.7 p	1.6 p	1.6 p				
	Housing and Social exclusion n.e.c.	0.8	0.8	0.9	0.9	0.9 p	0.9 p	0.9 p	0.9 p	0.9 p	1.0 p				
	Total (including Admin and Other expenditures)	25.8	26.5	29.3	29.2	29.0 p	29.4 p	29.7 p	29.7 p	29.3 p	29.2 p				
	of which: Means tested benefits	2.5	2.6	2.9	2.9	2.9 p	2.9 p	3.0 p	3.0 p	3.1 p	3.1 p				

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## Belgium

Belgium		2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018
Macro Economic Indicators (Annual % growth)	Real GDP	3.4	0.8	-2.3	2.7	1.8	0.2	0.2	1.3	1.7	1.5	1.7	1.4
	Total employment	1.7	1.8	-0.2	0.6	1.4	0.4	-0.3	0.4	0.9	1.3	1.4	1.3
	Labour productivity	1.8	-1.0	-2.1	2.1	0.4	-0.2	0.5	0.8	0.8	0.2	0.3	0.1
	Annual average hours worked per person employed	0.3	-0.4	-1.4	-0.2	0.9	0.0	-0.1	-0.2	-0.5	0.0	0.1	0.2
	Real productivity per hour worked	1.5	-0.6	-0.7	2.2	-0.5	-0.2	0.7	1.0	1.4	0.2	0.2	-0.1
	Harmonized CPI	1.8	4.5	0.0	2.3	3.4	2.6	1.2	0.5	0.6	1.8	2.2	2.3
	Price deflator GDP	2.0	1.9	0.8	1.9	2.0	2.0	1.0	0.7	1.0	1.8	1.7	1.1
	Nominal compensation per employee	3.6	3.7	1.1	1.4	3.1	3.2	2.6	0.9	0.0	0.5	1.9	1.7
	Real compensation per employee (GDP deflator)	1.5	1.7	0.3	-0.5	1.1	1.2	1.5	0.2	-1.0	-1.3	0.3	0.6
	Real compensation per employee (private consumption deflator)	1.7	-0.8	1.1	-0.9	-0.2	0.5	1.3	0.4	-0.6	-1.3	-0.3	-0.6
	Nominal unit labour costs	1.7	4.7	3.2	-0.7	2.7	3.4	2.0	0.1	-0.8	0.3	1.6	1.6
	Real unit labour costs	-0.3	2.8	2.4	-2.5	0.7	1.3	1.0	-0.6	-1.8	-1.4	-0.1	0.4
Labour Market Indicators - Total	Total population (000)	10585	10667	10753	10840	11001 b	11076 b	11138	11181	11237	11311	11352	11399
	Population aged 15-64 (000)	6977	7047	7101	7148	7250	7270	7287	7286	7296	7327	7329	7334
	Total employment (000)	4380	4446	4421	4489	4509 b	4524	4530	4544	4552	4587	4638 b	4755
	Employment aged 15-64 (000)	4348	4414	4389	4451	4471 b	4479	4485	4497	4499	4541	4587 b	4699
	Employment rate (% population aged 20-64)	67.7	68.0	67.1	67.6	67.3	67.2	67.2	67.3	67.2	67.7	68.5 b	69.7
	Employment rate (% population aged 15-64)	62.0	62.4	61.6	62.0	61.9	61.8	61.8	61.9	61.8	62.3	63.1 b	64.5
	Employment rate (% population aged 15-24)	27.5	27.4	25.3	25.2	26.0	25.3	23.6	23.2	23.4	22.7	22.7 b	25.0
	Employment rate (% population aged 25-54)	79.7	80.5	79.8	80.0	79.3	79.3	79.0	79.1	78.5	79.1	79.5 b	80.4
	Employment rate (% population aged 55-64)	34.4	34.5	35.3	37.3	38.7	39.5	41.7	42.7	44.0	45.4	48.3 b	50.3
	FTE employment rate (% population aged 20-64)	61.8	62.0	61.0	61.4	60.6 b	60.7	60.7	61.2	60.8	61.3	62.2 b	63.5
	Self-employed (% total employment)	13.5	13.0	13.5	13.4	13.2 b	13.5	14.2	13.7	14.3	14.0	13.6 b	13.2
	Part-time employment (% total employment)	21.9	22.4	23.2	23.7	24.7	24.7	24.3	23.7	24.3	24.7	24.5 b	24.5
	Temporary employment (% total employment)	7.4	7.1	7.0	7.0	7.7	7.0	6.9	7.4	7.7	7.8	9.0 b	9.3
	Employment in Services (% total employment)		73.8 b	75.0	75.2 u	75.5 bu	77.1	76.9 u	77.4	77.4 u	77.5 u	78.1 bu	77.9 u
	Employment in Industry (% total employment)		24.7 b	23.6	23.5 u	23.3 bu	21.8	21.8 u	21.5	21.5 u	21.4 u	20.9 bu	21.2 u
	Employment in Agriculture (% total employment)		1.5 b	1.4	1.3	1.2 b	1.1	1.3	1.1	1.1	1.2	1.1 b	0.9
	Activity rate (% population aged 15-64)	67.1	67.1	66.9	67.7	66.7	66.9	67.5	67.7	67.6	67.6	68.0 b	68.6
	Activity rate (% population aged 15-24)	33.9	33.4	32.4	32.5	32.0	31.5	31.0	30.2	30.0	28.5	28.1 b	29.6
	Activity rate (% population aged 25-54)	85.3	85.7	85.6	86.3	84.7	85.0	85.3	85.6	85.1	85.1	84.8 b	85.0
	Activity rate (% population aged 55-64)	35.9	36.1	37.2	39.2	40.3	41.4	44.1	45.1	46.6	48.1	51.3 b	52.6
	Total unemployment (000)	353	333	380	406	347	369	417	423	422	390	354 b	301
	Unemployment rate (% labour force)	7.5	7.0	7.9	8.3	7.2	7.6	8.4	8.5	8.5	7.8	7.1 b	6.0
	Youth unemployment rate (% labour force 15-24)	18.8	18.0	21.9	22.4	18.7	19.8	23.7	23.2	22.1	20.1	19.3 b	15.8
	Long term unemployment rate (% labour force)	3.8	3.3	3.5	4.0	3.5	3.4	3.9	4.3	4.4	4.0	3.5 b	2.9
	Share of long term unemployment (% of total unemployment)	50.2	47.4	44.2	48.7	48.3	44.6	46.0	49.9	51.7	51.6	48.6 b	48.7
	Youth unemployment ratio (% population aged 15-24)	6.4	6.0	7.1	7.3	6.0 b	6.2	7.3	7.0	6.6	5.7	5.4 b	4.7
	Employment rate for low skilled 25-64 (ISCED 0-2)	49.8	49.4 b	48.0	48.9	47.7 b	47.6	47.8	47.5 b	46.6	46.4	46.5 b	46.5
	Employment rate for medium skilled 25-64 (ISCED 3-4)	74.2	74.7 b	74.0	74.5	74.0 b	73.5	73.6	72.8 b	72.2	73.0	73.3 b	74.1
	Employment rate for high skilled 25-64 (ISCED 5-8)	84.9	84.7 b	84.2	84.0	84.2 b	84.6	84.1	84.7 b	84.6	85.2	85.2 b	86.1
	Employment rate (Nationals aged 15-64)	62.9	63.1	62.5	62.8	63.0 b	63.0	62.9	62.9	62.8	63.3	64.1 b	65.4
	Employment rate (Other EU28 aged 15-64)	61.2	62.3	59.6	62.4	62.2 b	62.0	60.6	62.5	63.1	64.4	65.0 b	65.7
	Employment rate (Other than EU28 aged 15-64)	38.1	39.9	38.8	38.0	37.4 b	36.2	37.6	38.0	39.9	39.3	39.5 b	41.4
	Employment rate (Born in the same country aged 15-64)	63.5	63.8	63.2	63.6	63.7 b	63.8	63.6	63.8	63.6	64.1	64.7 b	66.0
	Employment rate (Born in other EU28 aged 15-64)	57.8	60.8	58.7	61.2	62.1 b	61.5	62.1	62.6	63.2	65.2	65.8 b	67.2
	Employment rate (Born outside EU28 aged 15-64)	45.2	48.1	47.1	46.5	45.8 b	45.4	46.0	45.7	46.2	46.8	50.0 b	52.0
	Underemployment (% of labour force aged 15-74)		0.8	0.8	0.8	0.8	3.2 b	3.3	3.1	3.4	3.3	3.4 b	3.4
	Seeking but not available (% of labour force aged 15-74)	1.8	1.5	1.6	1.7	1.4 b	1.2	1.2	1.0	1.1	1.1	1.3 b	1.4
	Discouraged, available but not seeking (% of labour force aged 15-74)	0.8	0.7	0.7	0.7	2.2 b	2.0	2.1	2.0	1.7	1.6	2.1 b	2.3

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Belgium		2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018
Labour Market Indicators - Male	Total population (000)	5181	5224	5269	5312	5402 b	5440 b	5473	5494	5524	5569	5589	5614
	Population aged 15-64(000)	3508	3543	3570	3592	3650	3659	3667	3665	3669	3690	3689	3691
	Total employment (000)	2444	2461	2429	2458	2462 b	2466	2451	2435	2434	2466	2496 b	2531
	Employment aged 15-64 (000)	2421	2439	2406	2433	2435 b	2433	2420	2403	2397	2433	2461 b	2495
	Employment rate (% population aged 20-64)	75.0	74.7	73.2	73.5	73.0	72.7	72.3	71.6	71.3	72.3	73.4 b	73.9
	Employment rate (% population aged 15-64)	68.7	68.6	67.2	67.4	67.1	66.9	66.4	65.8	65.5	66.5	67.5 b	68.2
	Employment rate (% population aged 15-24)	29.9	29.7	27.4	27.3	27.7	27.8	25.3	24.5	25.0	24.0	24.4 b	26.4
	Employment rate (% population aged 25-54)	87.0	87.0	85.7	85.5	84.9	84.5	84.0	83.2	82.5	83.8	84.4 b	84.5
	Employment rate (% population aged 55-64)	42.9	42.8	42.9	45.6	46.0	46.0	47.7	48.4	48.9	50.7	53.8 b	55.1
	FTE employment rate (% population aged 20-64)	73.6	73.2	71.5	71.8	70.9 b	70.9	70.2	70.0	69.2	70.1	71.2 b	72.0
	Self-employed (% total employment)	17.1	16.6	17.2	17.0	17.0 b	17.2	18.4	17.5	18.3	18.0	17.0 b	16.4
	Part-time employment (% total employment)	7.1	7.5	8.2	8.4	9.2	9.0	8.7	8.4	9.3	9.5	10.2 b	10.0
	Temporary employment (% total employment)	5.7	5.5	5.4	5.6	6.4	5.9	5.9	6.3	6.8	6.9	8.0 b	8.2
	Employment in Services (% total employment)		61.7 bu	63.3	63.8 u	63.8 bu	65.6	65.2 u	65.6 u	65.5 u	65.7 u	67.1 bu	66.5 u
	Employment in Industry (% total employment)		36.4 bu	34.9	34.6 u	34.7 bu	32.9	33.1 u	33.0 u	33.0 u	32.8 u	31.5 bu	32.3 u
	Employment in Agriculture (% total employment)		1.9 b	1.8	1.7	1.6 b	1.5	1.7	1.4	1.5	1.5	1.5 b	1.2
	Activity rate (% population aged 15-64)	73.6	73.3	72.8	73.4	72.3	72.5	72.7	72.4	72.2	72.3	72.8 b	72.8
	Activity rate (% population aged 15-24)	36.1	36.0	34.9	35.2	34.1	35.0	33.7	32.3	32.8	30.7	30.6 b	31.4
	Activity rate (% population aged 25-54)	92.5	92.3	91.8	92.2	90.7	90.7	90.9	90.7	89.9	90.4	90.0 b	89.6
	Activity rate (% population aged 55-64)	44.4	44.4	45.2	47.6	47.8	47.9	50.5	51.3	52.2	53.6	56.9 b	57.9
	Total unemployment (000)	174	170	204	217	188	204	232	241	243	216	191 b	170
	Unemployment rate (% labour force)	6.7	6.5	7.8	8.1	7.1	7.7	8.7	9.0	9.1	8.1	7.1 b	6.3
	Youth unemployment rate (% labour force 15-24)	17.1	17.3	21.5	22.4	18.7	20.4	24.7	24.0	23.8	21.7	20.2 b	16.2
	Long term unemployment rate (% labour force)	3.3	3.0	3.4	4.0	3.4	3.5	4.0	4.7	4.8	4.2	3.6 b	3.2
	Share of long term unemployment (% of total unemployment)	49.3	47.0	43.5	49.5	47.1	46.0	46.5	51.8	52.5	52.2	50.9 b	50.9
	Youth unemployment ratio (% population aged 15-24)	6.2	6.2	7.5	7.9	6.4 b	7.1	8.3	7.7	7.8	6.7	6.2 b	5.1
	Employment rate for low skilled 25-64 (ISCED 0-2)	61.9	60.6 b	58.7	59.2	57.9 b	57.5	56.9	56.1 b	54.4	54.6	55.2 b	55.0
	Employment rate for medium skilled 25-64 (ISCED 3-4)	82.0	81.9 b	80.5	81.6	80.7 b	79.8	79.4	78.1 b	77.6	79.5	79.8 b	79.8
	Employment rate for high skilled 25-64 (ISCED 5-8)	88.2	88.2 b	87.2	86.7	86.9 b	87.2	87.2	87.2 b	86.8	87.5	88.3 b	88.3
	Employment rate (Nationals aged 15-64)	69.2	68.9	67.7	68.0	67.8 b	67.8	67.3	66.5	66.0	67.1	68.0 b	68.6
	Employment rate (Other EU28 aged 15-64)	69.4	70.4	67.3	68.5	68.3 b	67.1	65.5	67.3	69.0	68.4	70.0 b	71.0
	Employment rate (Other than EU28 aged 15-64)	52.4	54.1	51.3	50.0	49.3 b	45.3	47.1	48.4	49.0	49.9	53.0 b	53.8
	Employment rate (Born in the same country aged 15-64)	69.7	69.2	68.1	68.5	68.2 b	68.2	67.5	66.9	66.5	67.4	68.0 b	68.8
	Employment rate (Born in other EU28 aged 15-64)	65.5	69.5	66.8	67.6	68.1 b	67.4	67.5	67.6	68.8	70.3	72.1 b	73.1
	Employment rate (Born outside EU28 aged 15-64)	57.2	60.1	57.1	56.5	56.7 b	55.2	55.5	55.0	54.8	56.6	61.1 b	60.7
	Underemployment (% of labour force aged 15-74)		0.4	0.5	0.5	0.6	1.6 b	1.6	1.6	1.8	1.7	2.0 b	2.1
	Seeking but not available (% of labour force aged 15-74)	1.4	1.1	1.2	1.4	0.9 b	0.9	0.9	0.8	0.9	0.9	1.0 b	1.1
	Discouraged, available but not seeking (% of labour force aged 15-74)	0.6	0.5	0.7	0.6	2.0 b	1.9	2.0	1.8	1.6	1.6	2.0 b	2.0
Labour Market Indicators - Female	Total population (000)	5403	5443	5484	5528	5599 b	5636 b	5665	5687	5713	5742	5762	5784
	Population aged 15-64(000)	3468	3503	3532	3556	3600	3611	3620	3622	3627	3637	3640	3643
	Total employment (000)	1937	1985	1991	2031	2047 b	2058	2080	2108	2118	2121	2142 b	2224
	Employment aged 15-64 (000)	1927	1975	1984	2018	2036 b	2046	2065	2095	2102	2108	2126 b	2204
	Employment rate (% population aged 20-64)	60.3	61.3	61.0	61.6	61.5	61.7	62.1	62.9	63.0	63.0	63.6 b	65.5
	Employment rate (% population aged 15-64)	55.3	56.2	56.0	56.5	56.7	56.8	57.2	57.9	58.0	58.1	58.7 b	60.7
	Employment rate (% population aged 15-24)	25.0	25.0	23.2	23.1	24.2	22.6	21.9	21.8	21.7	21.4	20.9 b	23.5
	Employment rate (% population aged 25-54)	72.3	73.8	73.8	74.4	73.8	73.9	74.0	74.9	74.5	74.3	74.6 b	76.2
	Employment rate (% population aged 55-64)	26.0	26.3	27.7	29.2	31.6	33.1	35.8	37.0	39.3	40.2	42.8 b	45.6
	FTE employment rate (% population aged 20-64)	50.6	51.5	51.1	51.7	51.2 b	51.5	52.1	53.3	53.4	53.3	54.2 b	55.8
	Self-employed (% total employment)	9.1	8.6	9.1	9.0	8.6 b	9.1	9.2	9.4	9.7	9.4	9.6 b	9.5
	Part-time employment (% total employment)	40.5	40.8	41.4	42.1	43.3	43.5	42.5	41.2	41.4	42.1	41.2 b	41.0
	Temporary employment (% total employment)	9.6	9.2	9.0	8.6	9.2	8.3	8.2	8.7	8.6	9.0	10.0 b	10.5
	Employment in Services (% total employment)												
	Employment in Industry (% total employment)												
	Employment in Agriculture (% total employment)		1.0 b	1.0	0.9	0.8 b	0.7	0.8	0.8	0.7	0.7	0.7 b	0.6
	Activity rate (% population aged 15-64)	60.4	60.8	60.9	61.8	61.1	61.3	62.3	63.0	63.0	62.9	63.2 b	64.3
	Activity rate (% population aged 15-24)	31.6	30.8	29.9	29.8	29.8	27.9	28.2	28.1	27.1	26.2	25.4 b	27.7
	Activity rate (% population aged 25-54)	78.0	79.0	79.2	80.4	78.7	79.1	79.7	80.6	80.2	79.8	79.6 b	80.3
	Activity rate (% population aged 55-64)	27.5	27.9	29.3	30.9	33.0	34.9	37.8	39.0	41.2	42.8	45.8 b	47.4
	Total unemployment (000)	179	163	176	189	158	165	185	182	178	173	163 b	131
	Unemployment rate (% labour force)	8.5	7.6	8.1	8.5	7.2	7.4	8.2	7.9	7.8	7.6	7.1 b	5.6
	Youth unemployment rate (% labour force 15-24)	20.9	18.7	22.5	22.4	18.7	18.9	22.5	22.3	20.0	18.2	18.0 b	15.3
	Long term unemployment rate (% labour force)	4.3	3.6	3.6	4.1	3.6	3.2	3.7	3.8	3.9	3.8	3.2 b	2.6
	Share of long term unemployment (% of total unemployment)	51.2	47.9	44.9	47.6	49.7	42.9	45.4	47.3	50.6	50.8	46.0 b	45.9
	Youth unemployment ratio (% population aged 15-24)	6.6	5.8	6.7	6.7	5.6 b	5.3	6.3	6.3	5.4	4.7	4.6 b	4.2
	Employment rate for low skilled 25-64 (ISCED 0-2)	37.7	38.1 b	37.0	38.2	37.0 b	36.9	37.9	38.1 b	38.1	37.5	37.2 b	37.3
	Employment rate for medium skilled 25-64 (ISCED 3-4)	65.4	66.8 b	66.8	66.7	66.7 b	66.5	67.1	66.9 b	66.0	65.5	65.9 b	67.5
	Employment rate for high skilled 25-64 (ISCED 5-8)	81.9	81.5 b	81.6	81.6	81.8 b	82.3	81.5	82.6 b	82.7	83.2	82.6 b	84.2
	Employment rate (Nationals aged 15-64)	56.6	57.3	57.3	57.7	58.1 b	58.1	58.6	59.4	59.5	59.4	60.1 b	62.1
	Employment rate (Other EU28 aged 15-64)	52.0	53.5	51.2	55.8	55.9 b	56.8	55.3	57.5	57.1	60.0	59.9 b	60.4
	Employment rate (Other than EU28 aged 15-64)	24.8	26.0	26.4	26.7	25.6 b	27.1	27.8	28.1	31.4	29.5	27.0 b	29.1
	Employment rate (Born in the same country aged 15-64)	57.2	58.2	58.2	58.7	59.1 b	59.4	59.7	60.5	60.7	60.7	61.4 b	63.1
	Employment rate (Born in other EU28 aged 15-64)	50.7	52.8	50.9	55.2	56.8 b	56.5	56.9	57.9	58.2	60.4	60.0 b	61.9
	Employment rate (Born outside EU28 aged 15-64)	34.2	36.6	37.4	36.9	35.2 b	35.9	37.0	36.8	38.0	37.5	39.1 b	43.4
	Underemployment (% of labour force aged 15-74)		1.2	1.1	1.1	1.0	5.2 b	5.3	4.8	5.2	5.1	5.1 b	5.0
	Seeking but not available (% of labour force aged 15-74)	2.4	2.0	2.2	2.1	2.0 b	1.6	1.4	1.3	1.3	1.3	1.7 b	1.7
	Discouraged, available but not seeking (% of labour force aged 15-74)	1.0	1.0	0.9	0.9	2.5 b	2.2	2.3	2.3	1.9	1.6	2.3 b	2.6

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Belgium		2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018		
Social Indicators	All	At-risk-of-poverty or social exclusion (% of total population)	21.6	20.8	20.2	20.8	21.0	21.6	20.8	21.2	21.1	20.7	20.3		
		At-risk-of-poverty (% of total population)	15.2	14.7	14.6	14.6	15.3	15.3	15.1	15.5	14.9	15.5	15.9		
		At-risk-of-poverty threshold (PPS single person)	9787	10046	10501	10399	10895	11038	11738	11755	11953	12801	12566		
		Poverty gap (%)	17.8	17.2	18.1	18.0	18.6	18.7	19.2	18.8	17.4	19.4	17.7		
		Persistent at-risk-of-poverty (% of total population)	7.8	9.0	9.2	9.3	8.0	9.9	8.7	9.5	9.8	10.0	10.8		
		At-risk-of-poverty before social transfers excl. pensions (% of total population)	27.5	27.0	26.7	26.7	27.8	27.7	26.3	27.5	26.7	26.3	26.3		
		Impact of social transfers (excl. pensions) in reducing poverty (%)	44.7	45.6	45.3	45.3	45.0	44.8	42.6	43.6	44.2	41.1	39.5		
		Severe Material Deprivation (% of total population)	5.7	5.6	5.2	5.9	5.7	6.3	5.1	5.9	5.8	5.5	5.1	5.0 p	
		Share of people living in low work intensity households (% of people aged 0-59)	13.8	11.7	12.3	12.7	13.8	13.9	14.0	14.6	14.9	14.6	13.5		
		Real Gross Household Disposable income (growth %)	2.1	2.4	2.1	-1.0	-1.0	-0.1	0.3	0.5	0.3	0.9			
		Income quintile share ratio S80/S20	3.9	4.1	3.9	3.9	3.9	4.0	3.8	3.8	3.8	3.8	3.8		
		GINI coefficient	26.3	27.5	26.4	26.6	26.3	26.5	25.9	25.9	26.2	26.3	26.0		
		Early leavers from education and training (% of population aged 18-24)	12.1	12.0 b	11.1	11.9	12.3	12.0	11.0	9.8 b	10.1	8.8	8.9 b	8.6	
		NEET: Young people neither in employment nor in education and training (% of total population aged 15-24)	11.2	10.1	11.1	10.9	11.8	12.3	12.7	12.0	12.2	9.9	9.3 b	9.2	
	Male	At-risk-of-poverty or social exclusion (% of male population)	19.9	19.1	18.5	20.0	20.4	20.9	20.4	20.9	20.0	19.4	19.1		
		At-risk-of-poverty (% of male population)	14.4	13.6	13.4	13.9	14.6	14.7	14.6	15.0	14.1	14.4	14.9		
		Poverty gap (%)	19.2	18.2	18.9	18.0	19.9	18.9	20.1	19.6	17.8	19.5	18.2		
		Persistent at-risk-of-poverty (% of male population)	7.3	8.3	7.8	8.5	8.2	9.5	9.1	9.6	9.9	9.0	8.7		
		Severe Material Deprivation (% of male population)	5.2	5.2	4.9	5.7	5.9	6.3	5.5	6.2	5.5	5.3	4.8	4.6 p	
		Share of people living in low work intensity households (% of males aged 0-59)	12.6	10.3	11.1	11.9	13.2	13.4	14.0	14.2	14.1	13.1	12.6		
		Life expectancy at birth (years)	77.1	76.9	77.3	77.5	78.0	77.8	78.1	78.8	78.7	79.0	79.2		
		Healthy life years at birth (years) - men	63.5	63.4	63.9	64.0	63.4	64.2	64.0	64.5	64.4	63.7	63.5		
		Early leavers from education and training (% of males aged 18-24)	13.9	13.4 b	12.8	13.8	14.9	14.4	13.2	11.8 b	11.6	10.2	10.4 b	10.6	
		NEET: Young people neither in employment nor in education and training ( % of males aged 15-24)	10.2	9.2	10.5	10.8	11.6	12.5	13.2	12.6	12.5	10.1	10.0 b	9.4	
		Female	At-risk-of-poverty or social exclusion (% of female population)	23.1	22.4	21.8	21.7	21.5	22.3	21.2	21.5	22.2	22.0	21.4	
			At-risk-of-poverty (% of female population)	15.9	15.9	15.7	15.2	16.0	15.9	15.5	15.9	15.6	16.5	16.9	
			Poverty gap (%)	16.9	16.6	17.7	18.0	17.4	18.5	18.5	18.1	17.2	19.4	17.6	
			Persistent at-risk-of-poverty (% of female population)	8.3	9.7	10.4	10.0	7.8	10.3	8.4	9.4	9.7	11.0	12.6	
	Severe Material Deprivation (% of female population)		6.2	6.0	5.5	6.0	5.4	6.3	4.7	5.6	6.1	5.7	5.4	5.4 p	
	Share of people living in low work intensity households (% of females aged 0-59)		15.0	13.2	13.6	13.5	14.4	14.3	14.0	14.9	15.8	16.2	14.4		
	Life expectancy at birth (years)		82.6	82.6	82.8	83.0	83.3	83.1	83.2	83.9	83.4	84.0	83.9		
	Healthy life years at birth (years) - women		63.9	64.1	63.7	62.6	63.6	65.0	63.7	63.7	64.0	63.8	64.1		
	Early leavers from education and training (% of females aged 18-24)		10.3	10.6 b	9.3	10.0	9.7	9.5	8.7	7.7 b	8.6	7.4	7.3 b	6.5	
	NEET: Young people neither in employment nor in education and training ( % of females aged 15-24)		12.1	11.1	11.7	10.9	12.0	12.2	12.1	11.5	11.8	9.7	8.7 b	8.9	
	Children (0-17)	At-risk-of-poverty or social exclusion of children (% of people aged 0-17)	21.6	21.3	20.5	23.2	23.3	22.8	21.9	23.2	23.3	21.6	22.0		
		At-risk-of-poverty (% of Children population)	16.9	17.2	16.6	18.3	18.7	17.3	17.2	18.8	18.0	17.8	18.6		
		Severe Material Deprivation (% of Children population)	7.0	7.3	6.5	7.7	8.2	8.3	5.5	6.8	7.9	6.9	6.5	7.0 p	
		Share of children living in low work intensity households (% of Children population)	12.2	8.9	11.0	12.0	14.0	13.0	12.2	13.0	13.8	13.0	12.7		
		Risk of poverty of children in households at work (Working Intensity > 0.2)	9.2	11.1	8.8	10.3	8.5	8.6	9.2	10.1	9.1	8.2	8.9		
		Impact of social transfers (excl. pensions) in reducing poverty (0-17) (%)	46.2	45.6	48.6	42.5	44.7	46.6	46.6	43.9	45.1	44.2	42.2		
	Working age (18-64)	At-risk-of-poverty or social exclusion (% of working age population)	20.7	20.1	19.3	20.0	20.0	21.3	20.8	21.6	21.7	21.7	20.7		
		At-risk-of-poverty (% of Working age population)	12.6	12.2	12.1	12.1	12.9	13.5	13.4	14.2	13.7	14.7	15.0		
		Severe Material Deprivation (% of Working age population)	5.9	5.7	5.3	6.0	5.6	6.6	5.8	6.5	6.1	6.1	5.5	5.3 p	
		Very low work intensity (18-59)	14.4	12.8	12.8	12.9	13.7	14.2	14.7	15.1	15.3	15.2	13.7		
		In-work at-risk-of poverty rate (% of persons employed 18-64)	4.3	4.7	4.5	4.4	4.1	4.5	4.4	4.8	4.5	4.7	5.0		
		Impact of social transfers (excl. pensions) in reducing poverty (18-64) (%)	52.3	53.1	51.8	52.9	51.1	50.6	47.7	48.0	49.1	45.2	43.0		
	Elderly (65+)	At-risk-of-poverty or social exclusion of elderly (% of people aged 65+)	25.0	22.9	23.1	21.0	21.6	21.2	19.5	17.3	16.2	16.4	17.1		
		At-risk-of-poverty (% of Elderly population)	23.0	21.2	21.6	19.4	20.2	19.4	18.4	16.1	15.2	15.4	16.0		
		Severe Material Deprivation (% of Elderly population)	3.6	3.2	3.1	2.8	2.6	2.8	2.0	2.4	2.1	2.1	2.2	1.7 p	
		Relative median income of elderly (ratio with median income of people younger than 65)	0.74	0.74	0.74	0.75	0.74	0.74	0.76	0.77	0.79	0.76	0.79		
		Aggregate replacement ratio (ratio)	0.44	0.45	0.45	0.46	0.44	0.46	0.47	0.47	0.47	0.48	0.50		
Expenditure in social protection indicators (% of GDP)	Sickness/Health care	7.1	7.5	8.1	8.0	8.1	8.2	8.3	8.4	7.7	7.5				
	Disability	1.7	1.8	1.9	2.0	2.0	2.1	2.2	2.3	2.4	2.4				
	Old age and survivors	10.1	10.7	11.5	11.1	11.4	11.5	11.8	11.8	12.8	12.6				
	Family/Children	2.1	2.1	2.3	2.2	2.2	2.1	2.2	2.2	2.1	2.1				
	Unemployment	3.1	3.2	3.7	3.7	3.6	3.4	3.4	3.4	3.1	2.5				
	Housing and Social exclusion n.e.c.	0.9	0.9	1.0	1.0	1.0	1.0	1.0	0.9	0.9	0.9				
	Total (including Admin and Other expenditures)	26.2	27.7	30.0	29.4	29.7	29.6	30.1	30.2	30.3	29.6				
	of which: Means tested benefits	1.2	1.3	1.5	1.4	1.4	1.5	1.5	1.4	1.4	1.5				

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## Bulgaria

Bulgaria		2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018
Macro Economic Indicators (Annual % growth)	Real GDP	7.3	6.0	-3.6	1.3	1.9	0.0	0.5	1.8	3.5	3.9	3.8	3.1 p
	Total employment	3.2	2.4	-1.7	-3.9	-2.2	-2.5 p	-0.4 p	0.4 p	0.4 p	0.5 p	1.8 p	-0.1 p
	Labour productivity	4.0	3.6	-1.9	5.4	4.2	2.6 p	0.9 p	1.5 p	3.1 p	3.4 p	2.0 p	3.2 p
	Annual average hours worked per person employed	0.0	2.4	-2.8	-0.1	-0.1	0.1 p	0.0 p	-0.1 p	0.0 p	-0.1 p	0.0 p	0.1 p
	Real productivity per hour worked	4.0	1.2	0.9	5.5	4.3	2.5 p	0.9 p	1.5 p	3.1 p	3.5 p	2.0 p	3.1 p
	Harmonized CPI	7.6	12.0	2.5	3.0	3.4	2.4	0.4	-1.6	-1.1	-1.3	1.2	2.6
	Price deflator GDP	11.1	8.1	4.0	1.1	6.0	1.6	-0.7	0.5	2.2	2.2	3.4	3.6 p
	Nominal compensation per employee	12.7	16.8	8.1	9.9	6.8	7.7 p	8.8 p	5.6 p	5.6 p	5.8 p	10.5 p	5.6 p
	Real compensation per employee (GDP deflator)	1.5	8.0	3.9	8.7	0.8	6.1 p	9.6 p	5.1 p	3.4 p	3.5 p	6.9 p	1.9 p
	Real compensation per employee (private consumption deflator)	4.8	4.3	5.5	6.7	3.3	5.2 p	8.4 p	7.3 p	6.8 p	7.2 p	9.2 p	2.9 p
	Nominal unit labour costs	8.3	12.8	10.2	4.3	2.5	5.0 p	7.8 p	4.1 p	2.5 p	2.3 p	8.4 p	2.4 p
	Real unit labour costs	-2.5	4.2	5.9	3.1	-3.3	3.4 p	8.6 p	3.6 p	0.3 p	0.0 p	4.8 p	-1.2 p
	Total population (000)	7573	7518	7467	7422	7369	7327	7285	7246	7202	7154	7102	7050
	Population aged 15-64 (000)	5235	5194	5147	5097	5034	4966	4899	4832	4764	4694	4629	4564
Labour Market Indicators - Total	Total employment (000)	3253	3361 b	3254	3075 b	2965 b	2934	2935	2981	3032	3017	3150	3153
	Employment aged 15-64 (000)	3209	3306 b	3205	3037 b	2928 b	2895	2889	2927	2974	2954	3073	3069
	Employment rate (% population aged 20-64)	68.4	70.7	68.8	64.7 b	62.9 b	63.0	63.5	65.1	67.1	67.7	71.3	72.4
	Employment rate (% population aged 15-64)	61.7	64.0	62.6	59.8 b	58.4 b	58.8	59.5	61.0	62.9	63.4	66.9	67.7
	Employment rate (% population aged 15-24)	24.5	26.3	24.8	24.3 b	22.1 b	21.9	21.2	20.7	20.3	19.8	22.9	20.7
	Employment rate (% population aged 25-54)	79.4	81.3	79.2	75.1 b	73.3 b	73.1	73.3	74.5	76.1	76.2	79.4	80.1
	Employment rate (% population aged 55-64)	42.6	46.0	46.1	44.9 b	44.6 b	45.7	47.4	50.0	53.0	54.5	58.2	60.7
	FTE employment rate (% population aged 20-64)	68.1	70.6 b	68.4	64.4 b	62.5 b	62.5	63.1	64.3	66.7	67.1	70.9	71.9
	Self-employed (% total employment)	11.3	11.4 b	11.5	11.5 b	11.1 b	10.8	11.5	11.8	11.4	11.1	11.1	10.9
	Part-time employment (% total employment)	1.4	2.0	2.1	2.2 b	2.2 b	2.2	2.5	2.5	2.2	2.0	2.2	1.8
	Temporary employment (% total employment)	4.4	4.3	4.0	3.9 b	3.6 b	3.9	4.9	4.6	3.9	3.6	3.9	3.6
	Employment in Services (% total employment)		56.2 b	57.6	60.2 b	61.8 b	62.2	63.1	62.8	63.2	63.3	63.0	63.2
	Employment in Industry (% total employment)		36.8 b	35.5	33.1 b	31.6 b	31.5	30.4	30.3	30.1	30.0	30.1	30.4
	Employment in Agriculture (% total employment)		7.0 b	6.9	6.7 b	6.6 b	6.3	6.5	6.9	6.7	6.7	6.8	6.4
	Activity rate (% population aged 15-64)	66.3	67.8	67.2	66.7 b	65.9 b	67.1	68.4	69.0	69.3	68.7	71.3	71.5
	Activity rate (% population aged 15-24)	28.9	30.1	29.5	31.2 b	29.5 b	30.4	29.6	27.2	26.0	23.9	26.3	23.7
	Activity rate (% population aged 25-54)	84.5	85.5	84.3	82.9 b	81.9 b	82.3	83.1	83.3	83.2	82.0	84.3	84.3
	Activity rate (% population aged 55-64)	45.7	48.7	49.2	49.3 b	48.9 b	51.1	54.1	56.6	58.0	58.8	61.8	63.7
	Total unemployment (000)	242	202	240	352 d	376	410	436	385	305	247	207	173
	Unemployment rate (% labour force)	6.9	5.6	6.8	10.3 d	11.3	12.3	13.0	11.4	9.2	7.6	6.2	5.2
	Youth unemployment rate (% labour force 15-24)	14.1	11.9	15.1	21.9 d	25.0	28.1	28.4	23.8	21.6	17.2	12.9	12.7
	Long term unemployment rate (% labour force)	4.1	2.9	3.0	4.7 b	6.3 b	6.8	7.4	6.9	5.6	4.5	3.4	3.0
	Share of long term unemployment (% of total unemployment)	58.8	51.7	43.3	46.1 b	55.7 b	55.2	57.3	60.4	61.2	59.1	55.0	58.4
	Youth unemployment ratio (% population aged 15-24)	4.4	3.8 b	4.8	6.8 b	7.4 b	8.5	8.4	6.5	5.6	4.1	3.4	3.0
	Employment rate for low skilled 25-64 (ISCED 0-2)	44.5	47.6 b	46.4	41.0 b	38.0 b	37.4	38.1	40.0 b	40.3	40.3	45.4	47.0
	Employment rate for medium skilled 25-64 (ISCED 3-4)	75.7	77.8 b	75.4	70.7 b	69.3 b	69.1	69.3	71.1 b	73.0	73.5	77.0	78.5
	Employment rate for high skilled 25-64 (ISCED 5-8)	85.1	86.4 b	85.8	83.2 b	81.8 b	81.8	81.4	82.7 b	84.9	85.1	86.2	86.8
	Employment rate (Nationals aged 15-64)	61.7	64.0 b	62.6	59.8 b	58.5 b	58.8	59.5	61.1	62.9	63.4	66.9	67.8
	Employment rate (Other EU28 aged 15-64)												
	Employment rate (Other than EU28 aged 15-64)	60.6 u		42.7 u	42.5 bu			47.5 u	55.4 u		50.8 u	50.9 u	52.0 u
	Employment rate (Born in the same country aged 15-64)	61.7	64.0 b	62.6	59.8 b	58.5 b	58.8	59.5	61.1	62.9	63.4	66.9	67.7
	Employment rate (Born in other EU28 aged 15-64)												
	Employment rate (Born outside EU28 aged 15-64)	61.0 u	55.2 bu	51.7 u	46.6 bu	49.7 bu	54.7 u	57.9	60.3	56.7 u	61.9	61.8	64.3
	Underemployment (% of labour force aged 15-74)		0.6 b	0.6	0.8 b	0.8 b	0.8	1.0	1.0	0.8	0.7	0.8	0.6
	Seeking but not available (% of labour force aged 15-74)	0.5	0.7 b	0.6	0.7 b	0.8 b	0.8	0.9	0.7	0.7	0.6	0.6	0.6
	Discouraged, available but not seeking (% of labour force aged 15-74)	8.0	5.8 b	6.8	8.2 b	8.5 b	8.1	7.5	6.9	6.4	6.3	4.6	3.9

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Bulgaria		2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018
Labour Market Indicators - Male	Total population (000)	3687	3660	3636	3614	3589	3567	3545	3525	3502	3477	3450	3422
	Population aged 15-64(000)	2622	2604	2584	2562	2534	2501	2470	2439	2406	2373	2342	2310
	Total employment (000)	1732	1793 b	1732	1640 b	1567 b	1542	1547	1577	1608	1608	1683	1685
	Employment aged 15-64 (000)	1701	1756 b	1699	1614 b	1541 b	1517	1518	1543	1572	1569	1639	1637
	Employment rate (% population aged 20-64)	73.4	76.1	73.8	68.6 b	66.0 b	65.8	66.4	68.1	70.4	71.3	75.3	76.5
	Employment rate (% population aged 15-64)	66.0	68.5	66.9	63.3 b	61.2 b	61.3	62.1	63.9	65.9	66.7	70.6	71.5
	Employment rate (% population aged 15-24)	27.1	29.3	28.0	27.3 b	25.1 b	24.9	24.0	24.0	24.0	23.1	26.5	24.2
	Employment rate (% population aged 25-54)	82.5	84.7	82.7	77.6 b	74.7 b	74.3	75.0	76.4	78.5	79.2	82.8	83.5
	Employment rate (% population aged 55-64)	51.8	55.8	54.1	51.3 b	50.5 b	50.8	51.9	54.5	56.8	58.3	62.5	65.4
	FTE employment rate (% population aged 20-64)	73.2	76.2 b	73.5	68.3 b	65.6 b	65.2	66.0	67.4	69.8	71.1	74.7	75.9
	Self-employed (% total employment)	14.3	14.1 b	14.2	14.1 b	13.7 b	13.5	14.5	14.9	14.5	13.8	13.9	13.8
	Part-time employment (% total employment)	1.1	1.6	1.8	2.0 b	2.0 b	2.0	2.0	2.2	1.9	1.8	2.0	1.7
	Temporary employment (% total employment)	4.0	4.7	4.4	4.2 b	3.8 b	4.2	5.2	4.8	4.0	3.9	4.2	3.8
	Employment in Services (% total employment)		47.8 b	48.7	50.9 b	53.2 b	54.6	55.3	54.5	54.6	54.6	54.5	54.5
	Employment in Industry (% total employment)		43.7 b	43.0	41.0 b	38.4 b	37.2	36.2	36.5	36.5	36.6	36.6	37.2
	Employment in Agriculture (% total employment)		8.4 b	8.3	8.1 b	8.4 b	8.2	8.5	9.0	9.0	8.8	9.0	8.4
	Activity rate (% population aged 15-64)	70.6	72.5	72.0	71.1 b	69.9 b	71.0	72.2	72.9	73.2	72.7	75.4	75.9
	Activity rate (% population aged 15-24)	31.7	34.0	34.0	35.5 b	33.9 b	35.3	34.3	31.5	30.5	28.0	30.5	27.8
	Activity rate (% population aged 25-54)	87.5	88.8	88.0	86.1 b	84.5 b	84.8	85.7	86.2	86.4	85.7	88.0	88.3
	Activity rate (% population aged 55-64)	55.3	58.7	57.4	56.6 b	55.8 b	57.3	59.9	62.5	62.7	63.4	66.8	69.2
	Total unemployment (000)	123	105	132	200 d	219	241	250	221	174	142	114	102
	Unemployment rate (% labour force)	6.5	5.5	6.9	10.9 d	12.3	13.5	13.9	12.3	9.8	8.1	6.4	5.7
	Youth unemployment rate (% labour force 15-24)	13.5	12.8	16.7	23.2 d	26.0	29.5	30.2	23.8	21.2	17.4	13.3	13.2
	Long term unemployment rate (% labour force)	3.7	2.7	2.8	5.0 b	7.0 b	7.7	8.1	7.7	6.1	4.8	3.6	3.4
	Share of long term unemployment (% of total unemployment)	56.6	50.0	40.7	46.0 b	56.9 b	56.7	58.3	62.4	62.4	59.2	56.5	59.9
	Youth unemployment ratio (% population aged 15-24)	4.6	4.7 b	6.0	8.2 b	8.8 b	10.4	10.4	7.5	6.5	4.9	4.0	3.7
	Employment rate for low skilled 25-64 (ISCED 0-2)	52.2	56.9 b	54.9	47.5 b	43.7 b	42.7	43.4	45.4 b	46.6	47.7	53.8	55.8
	Employment rate for medium skilled 25-64 (ISCED 3-4)	80.9	82.7 b	80.1	75.3 b	72.7 b	72.1	72.5	74.7 b	76.8	77.6	81.2	82.5
	Employment rate for high skilled 25-64 (ISCED 5-8)	88.6	90.2 b	89.9	85.7 b	83.7 b	83.6	84.1	85.6 b	87.6	87.5	88.6	89.7
	Employment rate (Nationals aged 15-64)	66.0	68.5 b	66.9	63.4 b	61.2 b	61.3	62.1	63.9	65.9	66.7	70.6	71.5
	Employment rate (Other EU28 aged 15-64)												
	Employment rate (Other than EU28 aged 15-64)												
	Employment rate (Born in the same country aged 15-64)	66.0	68.5 b	66.9	63.4 b	61.2 b	61.3	62.1	63.8	65.9	66.7	70.6	71.5
	Employment rate (Born in other EU28 aged 15-64)												
	Employment rate (Born outside EU28 aged 15-64)	58.8 u						62.4 u	71.0 u		74.3 u	72.4 u	74.2 u
	Underemployment (% of labour force aged 15-74)		0.5 b	0.6	0.8 b	0.7 b	0.7	0.7	0.9	0.7	0.7	0.9	0.5
	Seeking but not available (% of labour force aged 15-74)	0.5	0.6 b	0.6	0.7 b	0.8 b	0.7	0.8	0.6	0.7	0.5	0.6	0.6
	Discouraged, available but not seeking (% of labour force aged 15-74)	7.6	5.4 b	6.5	8.3 b	8.8 b	8.1	7.8	7.2	6.6	6.4	4.5	3.8
Labour Market Indicators - Female	Total population (000)	3886	3858	3831	3808	3781	3760	3739	3721	3700	3677	3652	3628
	Population aged 15-64(000)	2614	2589	2563	2535	2500	2465	2429	2393	2358	2321	2287	2254
	Total employment (000)	1521	1568 b	1521	1435 b	1398 b	1392	1388	1404	1424	1409	1468	1467
	Employment aged 15-64 (000)	1508	1551 b	1506	1423 b	1386 b	1378	1372	1384	1402	1385	1435	1432
	Employment rate (% population aged 20-64)	63.5	65.4	64.0	60.8 b	59.8 b	60.2	60.7	62.0	63.8	64.0	67.3	68.3
	Employment rate (% population aged 15-64)	57.6	59.5	58.3	56.2 b	55.6 b	56.3	56.8	58.2	59.8	60.0	63.1	63.9
	Employment rate (% population aged 15-24)	21.8	23.1	21.4	21.2 b	19.0 b	18.7	18.4	17.3	16.5	16.3	19.1	17.0
	Employment rate (% population aged 25-54)	76.2	77.9	75.8	72.5 b	71.9 b	71.8	71.5	72.5	73.6	73.0	75.8	76.5
	Employment rate (% population aged 55-64)	34.5	37.7	39.2	39.2 b	39.4 b	41.3	43.4	46.0	49.5	51.0	54.3	56.4
	FTE employment rate (% population aged 20-64)	63.1	65.1 b	63.4	60.5 b	59.4 b	59.8	60.1	61.0	63.5	63.0	67.0	67.8
	Self-employed (% total employment)	7.8	8.3 b	8.3	8.6 b	8.1 b	7.7	8.1	8.3	7.9	8.1	8.0	7.6
	Part-time employment (% total employment)	1.9	2.4	2.5	2.5 b	2.4 b	2.5	3.0	2.8	2.5	2.2	2.4	2.0
	Temporary employment (% total employment)	4.8	3.9	3.7	3.5 b	3.3 b	3.6	4.6	4.4	3.7	3.3	3.6	3.4
	Employment in Services (% total employment)		65.6 bu	67.8 u	70.7 bu	71.3 bu	70.6 u	71.7 u	72.1 u	72.9 u	73.3 u	72.8 u	73.2 u
	Employment in Industry (% total employment)		28.9 bu	27.0 u	24.2 bu	24.0 bu	25.3 u	24.0 u	23.4 u	22.9 u	22.6 u	22.8 u	22.6 u
	Employment in Agriculture (% total employment)		5.5 b	5.2	5.1 b	4.7 b	4.2	4.3	4.5	4.2	4.2	4.4	4.2
	Activity rate (% population aged 15-64)	62.1	63.1	62.5	62.2 b	61.9 b	63.2	64.5	65.0	65.4	64.6	67.1	67.0
	Activity rate (% population aged 15-24)	26.0	26.1	24.8	26.6 b	24.8 b	25.3	24.7	22.7	21.2	19.6	21.8	19.3
	Activity rate (% population aged 25-54)	81.4	82.1	80.6	79.6 b	79.3 b	79.8	80.3	80.2	79.8	78.2	80.5	80.2
	Activity rate (% population aged 55-64)	37.2	40.2	42.1	42.9 b	42.8 b	45.5	49.0	51.4	53.8	54.6	57.3	58.7
	Total unemployment (000)	120	96	108	153 d	157	169	187	163	131	106	93	72
	Unemployment rate (% labour force)	7.4	5.8	6.7	9.6 d	10.1	10.8	11.8	10.4	8.4	7.0	6.0	4.7
	Youth unemployment rate (% labour force 15-24)	14.8	10.5	12.8	20.1 d	23.6	26.0	25.7	23.7	22.3	16.9	12.4	11.9
	Long term unemployment rate (% labour force)	4.5	3.1	3.1	4.4 b	5.5 b	5.8	6.6	6.0	5.0	4.1	3.2	2.6
	Share of long term unemployment (% of total unemployment)	61.0	53.5	46.4	46.2 b	54.1 b	53.0	55.9	57.6	59.6	58.9	53.1	56.3
	Youth unemployment ratio (% population aged 15-24)	4.1	3.0 b	3.4	5.3 b	5.9 b	6.6	6.3	5.4	4.7	3.3	2.7	2.3
	Employment rate for low skilled 25-64 (ISCED 0-2)	37.0	38.6 b	38.0	34.5 b	32.2 b	32.0	32.6	34.1 b	33.5	32.2	36.4	37.4
	Employment rate for medium skilled 25-64 (ISCED 3-4)	69.9	72.2 b	70.0	65.3 b	65.1 b	65.5	65.4	66.8 b	68.4	68.4	71.7	73.5
	Employment rate for high skilled 25-64 (ISCED 5-8)	82.9	84.0 b	83.2	81.6 b	80.7 b	80.6	79.7	80.8 b	83.2	83.5	84.6	84.9
	Employment rate (Nationals aged 15-64)	57.5	59.5 b	58.4	56.3 b	55.6 b	56.3	56.8	58.2	59.9	60.1	63.1	64.0
	Employment rate (Other EU28 aged 15-64)												
	Employment rate (Other than EU28 aged 15-64)												
	Employment rate (Born in the same country aged 15-64)	57.5	59.5 b	58.4	56.3 b	55.6 b	56.3	56.8	58.2	59.9	60.1	63.1	63.9
	Employment rate (Born in other EU28 aged 15-64)												
	Employment rate (Born outside EU28 aged 15-64)	63.0 u	55.7 bu	53.3 u	46.7 bu	47.9 bu	51.1 u	54.9 u	53.8 u	52.7 u	52.4 u	55.6 u	57.6 u
	Underemployment (% of labour force aged 15-74)		0.7 b	0.7	0.8 b	0.9 b	0.9	1.2	1.1	0.9	0.8	0.7	0.6
	Seeking but not available (% of labour force aged 15-74)	0.5 u	0.8 b	0.6	0.7 b	0.9 b	0.8	1.0	0.9	0.7	0.7	0.6	0.6
	Discouraged, available but not seeking (% of labour force aged 15-74)	8.4	6.3 b	7.1	8.1 b	8.2 b	8.0	7.2	6.6	6.3	6.1	4.8	4.0

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Bulgaria			2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018
Social Indicators	All	At-risk-of-poverty or social exclusion (% of total population)	60.7	44.8 b	46.2	49.2	49.1	49.3	48.0	40.1 b	41.3	40.4 b	38.9	32.8
		At-risk-of-poverty (% of total population)	22.0	21.4	21.8	20.7	22.2	21.2	21.0	21.8	22.0	22.9 b	23.4	22.0
		At-risk-of-poverty threshold (PPS single person)	1979	2859	3436	3531	3499	3418	3540	4052	4129	4045 b	4516	4343
		Poverty gap (%)	33.5	27.0	27.4	29.6	29.4	31.4	30.9	33.2	30.3	30.4 b	30.5	26.9
		Persistent at-risk-of-poverty (% of total population)			10.7	16.4	16.9	12.9	13.4	16.5	16.2	15.3 b	15.9	15.9
		At-risk-of-poverty before social transfers excl. pensions (% of total population)	25.5	27.1	26.4	27.1	27.4	25.9	26.7	27.3	28.4	27.9 b	29.2	29.5
		Impact of social transfers (excl. pensions) in reducing poverty (%)	13.7	21.0	17.4	23.6	19.0	18.2	21.4	20.2	22.5	17.9 b	19.9	25.4
		Severe Material Deprivation (% of total population)	57.6	41.2	41.9	45.7	43.6	44.1	43.0	33.1	34.2	31.9 b	30.0	20.9
		Share of people living in low work intensity households (% of people aged 0-59)	16.0	8.1 b	6.9	8.0	11.0	12.5	13.0	12.1	11.6	11.9 b	11.1	9.0
		Real Gross Household Disposable income (growth %)	4.3	14.7	1.5	-0.7	2.9	-3.0	4.8	-0.6	8.1	10.4		
		Income quintile share ratio S80/S20	7.0	6.5	5.9	5.9	6.5	6.1	6.6	6.8	7.1	7.7 b	8.2	7.7
		GINI coefficient	35.3	35.9	33.4	33.2	35.0	33.6	35.4	35.4	37.0	37.7 b	40.2	39.6
		Early leavers from education and training (% of population aged 18-24)	14.9	14.8	14.7	12.6 b	11.8	12.5	12.5	12.9 b	13.4	13.8	12.7	12.7
		NEET: Young people neither in employment nor in education and training (% of total population aged 15-24)	19.1	17.4	19.5	21.0 b	21.8 b	21.5	21.6	20.2	19.3	18.2	15.3	15.0
	Male	At-risk-of-poverty or social exclusion (% of male population)	59.4	43.0 b	44.1	47.3	47.7	47.6	46.5	38.8 b	39.5	38.5 b	37.2	30.8
		At-risk-of-poverty (% of male population)	20.9	19.8	19.8	19.0	20.8	19.5	19.7	20.9	20.0	21.7 b	21.8	20.4
		Poverty gap (%)	37.1	26.8	27.3	29.0	31.0	32.6	31.8	34.8	32.9	33.6 b	32.4	30.1
		Persistent at-risk-of-poverty (% of male population)			9.8	13.7	15.9	11.0	11.8	15.7	13.7	13.3 b	14.5	14.6
		Severe Material Deprivation (% of male population)	56.6	39.6	40.1	44.2	42.5	42.9	41.6	31.7	33.0	30.4 b	28.8	19.4
		Share of people living in low work intensity households (% of males aged 0-59)	15.6	7.8 b	7.0	7.8	11.1	12.5	12.9	12.1	11.7	11.7 b	11.4	9.2
		Life expectancy at birth (years)	69.5	69.8 b	70.1	70.3	70.7	70.9	71.3	71.1	71.2	71.3 b	71.4 b	
		Healthy life years at birth (years) - men	67.1	62.1 b	62.1	63.0	62.1	62.1	62.4	62.0	61.5	64.0 b	62.9 b	
		Early leavers from education and training (% of males aged 18-24)	15.2	14.1	13.7	12.4 b	11.2	12.1	12.3	12.8 b	13.3	13.7	12.0	12.6
		NEET: Young people neither in employment nor in education and training (% of males aged 15-24)	17.7	15.6	18.1	20.3 b	21.8 b	21.6	22.1	19.2	18.6	17.1	13.6	13.3
	Female	At-risk-of-poverty or social exclusion (% of female population)	61.9	46.4 b	48.1	50.9	50.5	50.9	49.4	41.3 b	43.0	42.1 b	40.4	34.6
		At-risk-of-poverty (% of female population)	23.0	22.9	23.7	22.3	23.6	22.8	22.2	22.6	23.8	24.1 b	24.9	23.4
		Poverty gap (%)	31.6	27.0	27.5	30.2	29.0	30.5	30.4	31.9	28.5	28.0 b	28.9	25.3
		Persistent at-risk-of-poverty (% of female population)			11.5	18.9	17.8	14.6	15.0	17.3	18.4	17.1 b	17.1	17.1
		Severe Material Deprivation (% of female population)	58.6	42.8	43.5	47.2	44.6	45.3	44.4	34.3	35.3	33.4 b	31.1	22.3
		Share of people living in low work intensity households (% of females aged 0-59)	16.4	8.3 b	6.8	8.2	11.0	12.4	13.2	12.1	11.4	12.2 b	10.8	8.7
		Life expectancy at birth (years)	76.6	77.0 b	77.4	77.4	77.8	77.9	78.6	78.0	78.2	78.5 b	78.4 b	
		Healthy life years at birth (years) - women	73.9	65.7 b	65.9	67.1	65.9	65.7	66.6	66.1	65.0	67.5 b	66.2 b	
		Early leavers from education and training (% of females aged 18-24)	14.7	15.5	15.8	12.9 b	12.6	13.0	12.7	12.9 b	13.4	13.9	13.5	12.8
		NEET: Young people neither in employment nor in education and training (% of females aged 15-24)	20.6	19.3	20.9	21.8 b	21.9 b	21.5	21.1	21.4	20.0	19.4	17.2	16.8
Children (0-17)	At-risk-of-poverty or social exclusion of children (% of people aged 0-17)	60.8	44.2 b	47.3	49.8	51.8	52.3	51.5	45.2 b	43.7	45.6 b	41.6	33.7	
	At-risk-of-poverty (% of Children population)	29.9	25.5	24.9	26.7	28.4	28.2	28.4	31.7	25.4	31.9 b	29.2	26.6	
	Severe Material Deprivation (% of Children population)	58.3	40.8	43.6	46.5	45.6	46.6	46.3	38.4	37.3	36.1 b	33.1	19.1	
	Share of children living in low work intensity households (% of Children population)	18.9	9.5 b	7.6	10.4	14.1	16.8	18.2	15.2	13.9	15.1 b	13.3	10.4	
	Risk of poverty of children in households at work (Working Intensity > 0.2)	16.6	18.2	19.3	19.3	19.0	17.0	16.6	22.5	15.3	22.1 b	19.9	19.8	
	Impact of social transfers (excl. pensions) in reducing poverty (0-17) (%)	11.8	18.0	17.3	21.7	19.3	21.5	25.5	18.5	32.1	17.8 b	23.0	29.3	
Working age (18-64)	At-risk-of-poverty or social exclusion (% of working age population)	57.9	39.5 b	40.6	45.0	45.2	45.6	44.3	36.4 b	37.4	37.2 b	34.8	28.3	
	At-risk-of-poverty (% of Working age population)	19.4	17.0	16.4	16.0	18.2	17.4	17.1	18.9	18.0	20.0 b	18.9	18.2	
	Severe Material Deprivation (% of Working age population)	54.9	36.2	37.1	42.2	40.3	40.8	39.9	29.5	31.3	29.0 b	27.0	17.3	
	Very low work intensity (18-59)	15.1	7.7 b	6.7	7.3	10.2	11.2	11.6	11.2	10.9	11.0 b	10.5	8.6	
	In-work at-risk of poverty rate (% of persons employed 18-64)	5.9	7.6	7.5	7.7	8.2	7.4	7.2	9.3	7.8	11.6	10.0	10.1	
	Impact of social transfers (excl. pensions) in reducing poverty (18-64) (%)	14.5	24.1	21.2	28.9	21.9	21.3	24.7	22.2	26.2	21.6 b	24.4	30.5	
Elderly (65+)	At-risk-of-poverty or social exclusion of elderly (% of people aged 65+)	71.1	65.5 b	66.0	63.9	61.1	59.1	57.6	47.8 b	51.8	45.9 b	48.9	45.1	
	At-risk-of-poverty (% of Elderly population)	23.9	33.8	39.3	32.2	31.2	28.2	27.9	22.6	31.7	24.3 b	32.0	29.2	
	Severe Material Deprivation (% of Elderly population)	67.2	61.0	58.4	58.1	53.7	53.2	50.7	40.3	40.9	37.5 b	36.3	32.7	
	Relative median income of elderly (ratio with median income of people younger than 65)	0.78	0.66	0.63	0.74	0.72	0.74	0.76	0.82	0.71	0.80 b	0.71	0.75	
	Aggregate replacement ratio (ratio)	0.37	0.34	0.34	0.43	0.41	0.42	0.39	0.44	0.41	0.45 b	0.37	0.41	
	Sickness/Health care	3.5	4.2	3.6	4.0	4.2	4.2	4.4	5.0	4.6	4.7			
Expenditure in social protection indicators (% of GDP)	Disability	1.1	1.1	1.3	1.3	1.2	1.3	1.4	1.4	1.3	1.3			
	Old age and survivors	6.7	7.1	8.1	8.5	8.0	8.0	8.6	8.9	8.7	8.5			
	Family/Children	1.1	1.3	1.9	1.9	1.8	1.7	1.8	1.9	1.9	1.8			
	Unemployment	0.3	0.3	0.5	0.6	0.6	0.6	0.5	0.5	0.5	0.5			
	Housing and Social exclusion n.e.c.	0.3	0.3	0.2	0.2	0.3	0.3	0.3	0.3	0.3	0.3			
	Total (including Admin and Other expenditures)	13.4	14.7	16.1	17.0	16.5	16.6	17.6	18.5	17.9	17.5			
	of which: Means tested benefits	0.6	0.7	0.7	0.7	0.7	0.7	0.7	0.8	0.7	0.6			

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## Czechia

Czechia		2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018
Macro Economic Indicators (Annual % growth)	Real GDP	5.6	2.7	-4.8	2.3	1.8	-0.8	-0.5	2.7	5.3	2.5	4.4	2.9
	Total employment	2.1	2.2	-1.8	-1.0	-0.3	0.4	0.3	0.6	1.4	1.6	1.6	1.6
	Labour productivity	3.4	0.5	-3.1	3.3	2.1	-1.2	-0.8	2.2	3.8	0.8	2.8	1.3
	Annual average hours worked per person employed	-0.8	0.3	-0.6	1.2	0.3	-1.6	-0.7	0.8	-1.2	1.3	0.3	0.5
	Real productivity per hour worked	4.3	0.2	-2.5	2.2	1.7	0.4	-0.1	1.4	5.0	-0.4	2.4	0.9
	Harmonized CPI	2.9	6.3	0.6	1.2	2.2	3.5	1.4	0.4	0.3	0.6	2.4	2.0
	Price deflator GDP	3.5	2.1	2.6	-1.4	0.0	1.5	1.4	2.5	1.2	1.3	1.4	2.1
	Nominal compensation per employee	6.1	4.1	-0.6	3.5	2.7	1.8	-0.3	2.6	3.0	4.0	6.4	7.6
	Real compensation per employee (GDP deflator)	2.5	2.0	-3.1	5.0	2.7	0.3	-1.7	0.1	1.8	2.7	4.9	5.4
	Real compensation per employee (private consumption deflator)	3.2	-2.1	-1.1	2.2	0.6	-1.8	-1.6	2.1	2.8	3.3	3.9	5.6
	Nominal unit labour costs	2.6	3.6	2.6	0.1	0.7	3.0	0.5	0.4	-0.8	3.1	3.6	6.2
	Real unit labour costs	-0.9	1.5	0.0	1.6	0.7	1.5	-0.9	-2.0	-2.0	1.8	2.2	4.0
Labour Market Indicators - Total	Total population (000)	10254	10343	10426	10462	10487	10505	10516	10512	10538	10554	10579	10610
	Population aged 15-64 (000)	7297	7358	7392	7369	7328	7263	7188	7109	7057	6998	6943	6899
	Total employment (000)	4922	5003	4934	4885	4873 b	4890	4937	4974	5042	5139	5222	5294
	Employment aged 15-64 (000)	4856	4934	4857	4810	4796 b	4810	4846	4884	4934	5016	5094	5147
	Employment rate (% population aged 20-64)	72.0	72.4	70.9	70.4	70.9 b	71.5	72.5	73.5	74.8	76.7	78.5	79.9
	Employment rate (% population aged 15-64)	66.1	66.6	65.4	65.0	65.7 b	66.5	67.7	69.0	70.2	72.0	73.6	74.8
	Employment rate (% population aged 15-24)	28.5	28.1	26.5	25.2	24.5 b	25.2	25.6	27.1	28.4	28.6	29.1	28.4
	Employment rate (% population aged 25-54)	83.5	83.8	82.5	82.2	82.8 b	82.9	83.5	83.8	84.5	85.7	86.7	87.5
	Employment rate (% population aged 55-64)	46.0	47.6	46.8	46.5	47.7 b	49.3	51.6	54.0	55.5	58.5	62.1	65.1
	FTE employment rate (% population aged 20-64)	70.9	71.3	69.8	69.1	70.2 b	70.6	71.6	72.8	73.9	75.6	77.4	78.2
	Self-employed (% total employment)	15.6	15.5	16.2	17.1	17.5 b	17.8	16.9	17.4	16.7	16.6	16.7	16.5
	Part-time employment (% total employment)	4.4	4.3	4.8	5.1	4.7 b	5.0	5.8	5.5	5.3	5.7	6.2	6.3
	Temporary employment (% total employment)	6.6	6.1	6.3	6.7	6.5 b	6.8	7.5	8.0	8.3	8.1	8.0	7.0
	Employment in Services (% total employment)		56.1 b	58.1	58.7	58.3 b	58.6	59.2	58.9	58.7	58.6	58.7	59.3
	Employment in Industry (% total employment)		40.8 b	38.8	38.3	38.7 b	38.4	37.8	38.3	38.4	38.5	38.5	38.0
	Employment in Agriculture (% total employment)		3.2 b	3.1	3.1	3.0 b	3.0	3.0	2.8	2.9	2.9	2.8	2.8
	Activity rate (% population aged 15-64)	69.9	69.7	70.1	70.2	70.5 b	71.6	72.9	73.5	74.0	75.0	75.9	76.6
	Activity rate (% population aged 15-24)	31.9	31.1	31.8	30.9	29.9 b	31.3	31.5	32.2	32.5	32.0	31.7	30.4
	Activity rate (% population aged 25-54)	87.8	87.3	87.7	87.8	88.0 b	88.4	89.1	88.8	88.6	88.9	89.1	89.3
	Activity rate (% population aged 55-64)	48.2	49.5	49.6	49.7	50.6 b	52.4	54.8	56.8	58.0	60.8	63.6	66.5
	Total unemployment (000)	276	230	352	384	351	367	370	324	268	212	155	121
	Unemployment rate (% labour force)	5.3	4.4	6.7	7.3	6.7	7.0	7.0	6.1	5.1	4.0	2.9	2.2
	Youth unemployment rate (% labour force 15-24)	10.7	9.9	16.6	18.3	18.1	19.5	18.9	15.9	12.6	10.5	7.9	6.7
	Long term unemployment rate (% labour force)	2.8	2.2	2.0	3.0	2.7 b	3.0	3.0	2.7	2.4	1.7	1.0	0.7
	Share of long term unemployment (% of total unemployment)	52.2	49.2	30.0	40.9	40.6 b	43.4	43.4	43.5	47.3	42.1	35.0	30.5
	Youth unemployment ratio (% population aged 15-24)	3.4	3.1	5.3	5.7	5.4 b	6.1	6.0	5.1	4.1	3.4	2.5	2.0
	Employment rate for low skilled 25-64 (ISCED 0-2)	45.7	46.5	43.9	43.2	42.2 b	40.4	41.8	43.0 b	41.9	45.1	50.5	52.2
	Employment rate for medium skilled 25-64 (ISCED 3-4)	76.1	76.6	75.1	74.5	75.2 b	75.9	76.6	77.6 b	78.9	80.7	82.2	83.5
	Employment rate for high skilled 25-64 (ISCED 5-8)	85.2	85.1	84.3	83.3	83.1 b	83.6	84.9	84.5 b	84.8	85.6	86.0	87.3
	Employment rate (Nationals aged 15-64)	66.0	66.5	65.3	64.9	65.6 b	66.4	67.6	68.9	70.1	71.8	73.5	74.7
	Employment rate (Other EU28 aged 15-64)	81.7	76.1	77.3	78.4	75.6 b	74.0	74.4	72.7	75.9	82.8	84.9	84.1
	Employment rate (Other than EU28 aged 15-64)	71.6	72.1	68.2	70.9	70.0 b	72.9	76.0	75.4	73.3	75.6	74.3	78.6
	Employment rate (Born in the same country aged 15-64)	66.1	66.6	65.4	64.9	65.7 b	66.5	67.7	68.9	70.2	71.9	73.5	74.6
	Employment rate (Born in other EU28 aged 15-64)	65.5	64.3	64.2	67.3	65.4 b	63.0	66.0	69.2	68.5	72.6	78.4	77.6
	Employment rate (Born outside EU28 aged 15-64)	71.3	71.3	69.4	69.3	71.9 b	73.8	75.2	75.9	74.7	75.9	76.2	81.6
	Underemployment (% of labour force aged 15-74)		0.3	0.4	0.6	0.5 b	0.5	0.7	0.7	0.6	0.5	0.4	0.4
	Seeking but not available (% of labour force aged 15-74)	0.4	0.4	0.3	0.4	0.3 b	0.3	0.3	0.3	0.3	0.3	0.2	0.3
	Discouraged, available but not seeking (% of labour force aged 15-74)	0.8	0.7	1.0	1.1	1.1 b	1.2	1.3	1.1	0.9	0.8	0.7	0.6

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Czechia		2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018
Labour Market Indicators - Male	Total population (000)	5011	5065	5117	5136	5147	5158	5164	5162	5177	5186	5201	5220
	Population aged 15-64(000)	3670	3710	3737	3727	3706	3676	3640	3601	3577	3550	3526	3509
	Total employment (000)	2806	2863	2824	2798	2778 b	2779	2794	2817	2837	2877	2916	2947
	Employment aged 15-64 (000)	2764	2820	2777	2753	2733 b	2732	2742	2764	2775	2806	2843	2862
	Employment rate (% population aged 20-64)	81.5	82.0	80.2	79.6	79.9 b	80.2	81.0	82.2	83.0	84.6	86.3	87.4
	Employment rate (% population aged 15-64)	74.8	75.4	73.8	73.5	74.0 b	74.6	75.7	77.0	77.9	79.3	80.9	81.8
	Employment rate (% population aged 15-24)	32.8	32.4	31.1	29.6	29.0 b	29.2	29.9	32.3	33.1	33.8	33.8	32.2
	Employment rate (% population aged 25-54)	91.7	92.1	90.5	90.5	90.9 b	90.9	91.2	91.5	91.9	92.7	93.7	94.4
	Employment rate (% population aged 55-64)	59.6	61.9	59.6	58.4	58.9 b	60.3	62.5	64.8	65.5	68.2	71.7	74.0
	FTE employment rate (% population aged 20-64)	81.4	81.9	79.9	79.4	80.2 b	80.7	81.4	82.6	83.5	84.7	86.6	87.0
	Self-employed (% total employment)	20.2	19.9	20.5	21.6	21.8 b	21.9	20.7	21.7	20.6	20.0	20.3	20.4
	Part-time employment (% total employment)	1.7	1.6	2.0	2.2	1.8 b	2.2	2.5	2.5	2.2	2.3	2.4	2.6
	Temporary employment (% total employment)	5.2	4.5	4.8	5.3	5.2 b	5.4	6.0	6.6	6.7	6.5	6.2	5.2
	Employment in Services (% total employment)		45.0 b	46.4	46.7	46.5 b	46.5	47.2	46.9	46.6	46.7	46.9	47.5
	Employment in Industry (% total employment)		51.2 b	49.8	49.4	49.7 b	49.7	49.1	49.5	49.5	49.5	49.6	48.9
	Employment in Agriculture (% total employment)		3.8 b	3.8	4.0	3.8 b	3.9	3.7	3.6	3.9	3.8	3.6	3.6
	Activity rate (% population aged 15-64)	78.1	78.1	78.5	78.6	78.7 b	79.5	80.5	81.2	81.4	82.2	82.9	83.3
	Activity rate (% population aged 15-24)	36.7	35.9	37.3	36.2	35.5 b	36.4	36.8	38.1	37.4	37.5	36.5	34.4
	Activity rate (% population aged 25-54)	95.0	94.8	95.1	95.5	95.5 b	95.5	95.8	95.6	95.4	95.4	95.7	95.9
	Activity rate (% population aged 55-64)	62.5	64.2	63.2	62.5	62.6 b	64.0	66.1	67.9	68.3	70.9	73.2	75.3
	Total unemployment (000)	124	103	175	191	171	178	176	151	125	101	70	54
	Unemployment rate (% labour force)	4.2	3.5	5.9	6.4	5.8	6.0	5.9	5.1	4.2	3.4	2.3	1.8
	Youth unemployment rate (% labour force 15-24)	10.6	9.8	16.6	18.2	18.2	19.9	18.7	15.0	11.3	10.0	7.4	6.4
	Long term unemployment rate (% labour force)	2.1	1.7	1.6	2.6	2.4 b	2.6	2.5	2.2	2.0	1.4	0.8	0.6
	Share of long term unemployment (% of total unemployment)	50.6	49.5	27.8	40.0	40.6 b	43.3	41.8	43.8	47.8	41.5	35.0	32.5
	Youth unemployment ratio (% population aged 15-24)	3.9	3.5	6.2	6.6	6.4 b	7.2	6.9	5.7	4.2	3.7	2.7	2.2
	Employment rate for low skilled 25-64 (ISCED 0-2)	56.3	57.4	53.6	53.1	50.7 b	48.6	52.5	53.5 b	52.6	56.6	61.7	64.0
	Employment rate for medium skilled 25-64 (ISCED 3-4)	85.2	85.9	84.0	83.3	83.5 b	84.3	84.5	85.6 b	86.3	87.6	89.2	90.3
	Employment rate for high skilled 25-64 (ISCED 5-8)	91.4	92.2	91.0	91.0	91.5 b	91.2	92.7	92.3 b	92.7	93.4	93.9	95.1
	Employment rate (Nationals aged 15-64)	74.7	75.3	73.7	73.3	73.9 b	74.4	75.5	76.8	77.7	79.1	80.7	81.5
	Employment rate (Other EU28 aged 15-64)	90.6	85.5	85.9	90.8	88.7 b	89.0	85.7	84.2	86.4	92.3	93.4	94.1
	Employment rate (Other than EU28 aged 15-64)	80.6	82.7	77.7	83.5	80.8 b	86.6	86.6	88.4	86.9	85.9	85.5	88.7
	Employment rate (Born in the same country aged 15-64)	74.8	75.4	73.8	73.4	73.9 b	74.5	75.5	76.8	77.7	79.1	80.7	81.5
	Employment rate (Born in other EU28 aged 15-64)	73.8	75.5	73.7	78.2	78.9 b	75.2	76.3	80.4	79.7	84.2	86.6	86.2
	Employment rate (Born outside EU28 aged 15-64)	83.0	82.5	76.7	80.9	82.6 b	86.7	86.5	89.4	87.2	85.9	87.5	90.5
	Underemployment (% of labour force aged 15-74)		0.1 u	0.2	0.2	0.2 b	0.2	0.3	0.3	0.3	0.2	0.2	0.2
	Seeking but not available (% of labour force aged 15-74)	0.3	0.3	0.2	0.2	0.2 b	0.2	0.2	0.2	0.2	0.2	0.1	0.2
	Discouraged, available but not seeking (% of labour force aged 15-74)	0.6	0.5	0.8	0.8	0.9 b	0.9	0.9	0.8	0.7	0.7	0.6	0.4
Labour Market Indicators - Female	Total population (000)	5244	5278	5309	5326	5340	5347	5352	5350	5361	5368	5378	5390
	Population aged 15-64(000)	3628	3648	3655	3641	3622	3587	3548	3508	3479	3447	3416	3390
	Total employment (000)	2116	2139	2111	2087	2095 b	2112	2143	2157	2205	2262	2306	2347
	Employment aged 15-64 (000)	2092	2114	2081	2057	2064 b	2079	2104	2120	2159	2210	2251	2285
	Employment rate (% population aged 20-64)	62.4	62.5	61.4	60.9	61.7 b	62.5	63.8	64.7	66.4	68.6	70.5	72.2
	Employment rate (% population aged 15-64)	57.3	57.6	56.7	56.3	57.2 b	58.2	59.6	60.7	62.4	64.4	66.2	67.6
	Employment rate (% population aged 15-24)	23.9	23.5	21.7	20.6	19.8 b	21.0	21.0	21.6	23.4	23.2	24.3	24.3
	Employment rate (% population aged 25-54)	74.9	75.2	74.1	73.4	74.3 b	74.6	75.5	75.7	76.7	78.4	79.3	80.1
	Employment rate (% population aged 55-64)	33.5	34.4	35.0	35.5	37.2 b	39.0	41.4	43.8	45.9	49.3	53.0	56.6
	FTE employment rate (% population aged 20-64)	60.5	60.7	59.6	58.8	60.2 b	60.6	61.8	62.9	64.3	66.4	68.2	69.4
	Self-employed (% total employment)	9.5	9.6	10.4	11.1	11.9 b	12.4	11.9	11.8	11.7	12.3	12.1	11.5
	Part-time employment (% total employment)	7.9	7.8	8.5	9.1	8.5 b	8.6	10.0	9.5	9.3	10.0	10.9	10.9
	Temporary employment (% total employment)	8.4	8.1	8.3	8.6	8.3 b	8.6	9.5	9.8	10.4	10.1	10.2	9.3
	Employment in Services (% total employment)		70.8 b	73.6	74.7	74.0 b	74.5	74.9	74.6	74.3	73.8	73.7	74.0 u
	Employment in Industry (% total employment)		26.9 b	24.2	24.3	24.1 b	23.6	23.1	23.8	24.1	24.5	24.5	24.3 u
	Employment in Agriculture (% total employment)		2.3 b	2.2	1.9	1.9 b	1.9	2.0	1.6	1.6	1.7	1.8	1.7
	Activity rate (% population aged 15-64)	61.5	61.0	61.5	61.5	62.2 b	63.5	65.1	65.6	66.5	67.6	68.7	69.6
	Activity rate (% population aged 15-24)	26.9	26.1	26.1	25.3	24.1 b	25.9	26.1	26.1	27.4	26.2	26.6	26.2
	Activity rate (% population aged 25-54)	80.3	79.6	79.9	79.8	80.4 b	80.9	81.9	81.6	81.4	82.1	82.1	82.3
	Activity rate (% population aged 55-64)	35.2	36.1	37.2	38.0	39.4 b	41.5	44.2	46.3	48.3	51.2	54.5	58.0
	Total unemployment (000)	153	127	177	193	180	189	194	172	143	111	86	68
	Unemployment rate (% labour force)	6.7	5.6	7.7	8.5	7.9	8.2	8.3	7.4	6.1	4.7	3.6	2.8
	Youth unemployment rate (% labour force 15-24)	11.0	9.9	16.7	18.5	18.0	19.0	19.3	17.1	14.4	11.4	8.7	7.2
	Long term unemployment rate (% labour force)	3.6	2.8	2.5	3.5	3.2 b	3.6	3.7	3.2	2.9	2.0	1.3	0.8
	Share of long term unemployment (% of total unemployment)	53.6	49.1	32.2	41.9	40.5 b	43.4	44.8	43.2	46.8	42.6	35.0	28.9
	Youth unemployment ratio (% population aged 15-24)	2.9	2.6	4.4	4.7	4.3 b	4.9	5.1	4.5	3.9	3.0	2.3	1.9
	Employment rate for low skilled 25-64 (ISCED 0-2)	40.6	41.3	39.1	38.3	38.0 b	36.1	35.7	37.1 b	35.6	37.9	43.2	44.1
	Employment rate for medium skilled 25-64 (ISCED 3-4)	66.4	66.6	65.5	65.0	66.2 b	66.8	67.9	68.7 b	70.7	73.1	74.4	75.9
	Employment rate for high skilled 25-64 (ISCED 5-8)	77.9	77.2	76.9	75.0	74.4 b	76.0	77.3	77.2 b	77.6	78.3	78.9	80.3
	Employment rate (Nationals aged 15-64)	57.2	57.5	56.6	56.2	57.2 b	58.3	59.6	60.7	62.4	64.4	66.1	67.6
	Employment rate (Other EU28 aged 15-64)	71.2	63.2	66.6	62.9	58.7 b	53.0	61.7	61.2	64.6	70.4	74.4	70.9
	Employment rate (Other than EU28 aged 15-64)	61.5	62.3	58.9	58.7	59.1 b	60.3	63.1	60.5	59.0	64.9	63.3	68.0
	Employment rate (Born in the same country aged 15-64)	57.3	57.6	56.7	56.3	57.3 b	58.3	59.6	60.7	62.5	64.5	66.1	67.5
	Employment rate (Born in other EU28 aged 15-64)	56.7	52.7	54.2	55.1	49.5 b	49.6	55.4	58.3	57.5	61.4	69.9	67.7
	Employment rate (Born outside EU28 aged 15-64)	59.7	61.1	62.4	58.0	61.5 b	61.7	62.8	61.4	61.9	65.9	65.1	72.6
	Underemployment (% of labour force aged 15-74)		0.6	0.8	1.0	0.9 b	0.9	1.2	1.1	0.9	0.9	0.7	0.6
	Seeking but not available (% of labour force aged 15-74)	0.6	0.6	0.5	0.6	0.5 b	0.5	0.5	0.5	0.4	0.4	0.4	0.4
	Discouraged, available but not seeking (% of labour force aged 15-74)	1.1	1.0	1.3	1.4	1.3 b	1.5	1.7	1.4	1.2	1.0	0.9	0.8

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Czechia			2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018
Social Indicators	All	At-risk-of-poverty or social exclusion (% of total population)	15.8	15.3	14.0	14.4	15.3	15.4	14.6	14.8	14.0	13.3	12.2	12.2
		At-risk-of-poverty (% of total population)	9.6	9.0	8.6	9.0	9.8	9.6	8.6	9.7	9.7	9.7	9.1	9.6
		At-risk-of-poverty threshold (PPS single person)	5305	5835	5666	5796	5993	6188	6481	6654	6991	7487	7579	7994
		Poverty gap (%)	18.1	18.5	18.8	21.1	17.2	19.1	16.6	18.0	19.2	19.5	16.6	15.0
		Persistent at-risk-of-poverty (% of total population)		3.9	3.7	5.5	4.2	4.3	4.1	3.4	4.5	4.3	4.4	6.3
		At-risk-of-poverty before social transfers excl. pensions (% of total population)	20.1	20.0	17.9	18.1	18.0	17.6	16.6	17.2	16.8	16.3	15.8	15.6
		Impact of social transfers (excl. pensions) in reducing poverty (%)	52.2	55.0	52.0	50.3	45.6	45.5	48.2	43.6	42.3	40.5	42.4	38.5
		Severe Material Deprivation (% of total population)	7.4	6.8	6.1	6.2	6.1	6.6	6.6	6.7	5.6	4.8	3.7	2.8
		Share of people living in low work intensity households (% of people aged 0-59)	8.6	7.2	6.0	6.4	6.6	6.8	6.9	7.6	6.8	6.7	5.5	4.5
		Real Gross Household Disposable income (growth %)	3.4	2.4	2.0	0.4	-1.5	-1.2	-0.7	2.9	4.1	3.3	1.8	
		Income quintile share ratio S80/S20	3.5	3.4	3.5	3.5	3.5	3.5	3.4	3.5	3.5	3.5	3.4	3.3
		GINI coefficient	25.3	24.7	25.1	24.9	25.2	24.9	24.6	25.1	25.0	25.1	24.5	24.0
		Early leavers from education and training (% of population aged 18-24)	5.2	5.6	5.4	4.9	4.9 b	5.5	5.4 b	5.5 b	6.2	6.6	6.7	6.2
		NEET: Young people neither in employment nor in education and training (% of total population aged 15-24)	6.9	6.7	8.5	8.8	8.3 b	8.9	9.1	8.1	7.5	7.0	6.3	5.6
	Male	At-risk-of-poverty or social exclusion (% of male population)	14.2	13.3	12.3	12.7	13.7	13.7	13.1	13.3	12.3	12.0	10.5	10.0
		At-risk-of-poverty (% of male population)	8.7	8.0	7.5	8.0	8.9	8.7	7.7	8.9	8.5	8.5	7.6	7.8
		Poverty gap (%)	19.0	21.4	22.0	23.6	19.1	20.2	17.8	18.7	20.9	22.6	18.4	16.4
		Persistent at-risk-of-poverty (% of male population)		3.5	3.1	5.1	3.8	3.4	3.3	3.4	3.9	3.4	3.3	5.5
		Severe Material Deprivation (% of male population)	7.0	6.3	5.8	5.8	5.6	6.0	5.9	6.2	5.0	4.6	3.5	2.5
		Share of people living in low work intensity households (% of males aged 0-59)	7.4	6.2	4.8	5.2	5.8	6.1	6.2	6.8	6.0	6.2	5.1	4.3
		Life expectancy at birth (years)	73.8 b	74.1	74.2	74.5	74.8	75.1	75.2	75.8	75.7	76.1	76.1	
		Healthy life years at birth (years) - men	61.4 b	61.3	61.1	62.2	62.2	62.3	62.5	63.4	62.4	62.7	60.6	
		Early leavers from education and training (% of males aged 18-24)	5.7	5.8	5.5	4.9	5.4 b	6.1	5.4 b	5.8 b	6.4	6.6	6.8	6.4
		NEET: Young people neither in employment nor in education and training ( % of males aged 15-24)	4.9	4.8	7.2	7.5	7.1 b	8.1	7.5	6.5	5.5	5.5	4.4	3.6
	Female	At-risk-of-poverty or social exclusion (% of female population)	17.4	17.2	15.7	16.0	16.9	16.9	16.1	16.3	15.6	14.6	13.9	14.3
		At-risk-of-poverty (% of female population)	10.5	10.1	9.5	10.0	10.6	10.5	9.4	10.5	11.0	10.8	10.7	11.4
		Poverty gap (%)	17.2	15.1	16.3	18.9	16.5	17.7	16.1	17.4	16.7	16.6	15.1	13.9
		Persistent at-risk-of-poverty (% of female population)		4.3	4.2	5.9	4.5	5.2	4.9	3.4	5.1	5.2	5.5	7.0
		Severe Material Deprivation (% of female population)	7.7	7.3	6.5	6.5	6.7	7.2	7.2	7.2	6.2	5.0	4.0	3.1
		Share of people living in low work intensity households (% of females aged 0-59)	9.9	8.2	7.1	7.6	7.4	7.5	7.7	8.4	7.8	7.2	5.9	4.7
		Life expectancy at birth (years)	80.2 b	80.5	80.5	80.9	81.1	81.2	81.3	82.0	81.6	82.1	82.0	
		Healthy life years at birth (years) - women	63.3 b	63.4	62.7	64.5	63.6	64.1	64.2	65.0	63.7	64.0	62.4	
		Early leavers from education and training (% of females aged 18-24)	4.7	5.4	5.2	4.8	4.4 b	4.9	5.5 b	5.2 b	6.0	6.6	6.7	6.1
NEET: Young people neither in employment nor in education and training ( % of females aged 15-24)		9.1	8.7	9.9	10.3	9.5 b	9.8	10.8	9.9	9.5	8.6	8.3	7.8	
Children (0-17)	At-risk-of-poverty or social exclusion of children (% of people aged 0-17)	21.5	18.6	17.2	18.9	20.0	18.8	16.4	19.5	18.5	17.4	14.2	13.2	
	At-risk-of-poverty (% of Children population)	16.6	13.2	13.3	14.3	15.2	13.9	11.3	14.7	14.7	14.1	11.6	11.0	
	Severe Material Deprivation (% of Children population)	10.0	8.3	7.4	8.6	8.0	8.5	7.3	9.7	7.2	6.3	4.5	3.4	
	Share of children living in low work intensity households (% of Children population)	10.0	7.6	6.2	7.0	6.9	6.7	6.2	9.4	8.2	8.3	6.2	4.6	
	Risk of poverty of children in households at work (Working Intensity > 0.2)	9.0	8.1	8.6	9.2	10.5	9.6	7.3	7.7	9.0	7.5	7.2	7.7	
	Impact of social transfers (excl. pensions) in reducing poverty (0-17) (%)	46.1	55.6	47.4	45.0	43.7	46.5	49.6	42.8	38.5	39.5	42.0	41.2	
Working age (18-64)	At-risk-of-poverty or social exclusion (% of working age population)	15.3	15.0	13.7	14.1	15.1	15.5	15.2	14.6	13.6	13.0	11.5	10.8	
	At-risk-of-poverty (% of Working age population)	8.6	8.3	7.6	8.1	9.1	9.3	8.6	9.1	9.0	8.8	7.9	7.7	
	Severe Material Deprivation (% of Working age population)	6.8	6.5	5.9	6.0	5.8	6.3	6.7	6.3	5.4	4.9	3.7	2.7	
	Very low work intensity (18-59)	8.2	7.1	5.9	6.2	6.5	6.9	7.1	7.0	6.4	6.2	5.3	4.5	
	In-work at-risk-of poverty rate (% of persons employed 18-64)	3.3	3.6	3.2	3.7	4.1	4.6	4.1	3.6	4.0	3.8	3.6	3.5	
	Impact of social transfers (excl. pensions) in reducing poverty (18-64) (%)	54.3	55.4	54.5	52.6	47.7	47.2	49.7	45.8	45.5	44.3	47.3	45.4	
Elderly (65+)	At-risk-of-poverty or social exclusion of elderly (% of people aged 65+)	10.9	12.5	11.7	10.1	10.7	10.8	10.4	10.7	10.9	10.1	12.6	15.6	
	At-risk-of-poverty (% of Elderly population)	5.5	7.4	7.2	6.8	6.6	6.0	5.8	7.0	7.4	8.1	10.7	14.2	
	Severe Material Deprivation (% of Elderly population)	6.5	6.4	5.7	4.3	5.4	6.0	5.3	5.1	4.5	3.0	2.9	2.5	
	Relative median income of elderly (ratio with median income of people younger than 65)	0.81	0.79	0.78	0.82	0.82	0.84	0.85	0.84	0.81	0.79	0.76	0.74	
	Aggregate replacement ratio (ratio)	0.51	0.51	0.51	0.54	0.53	0.55	0.56	0.55	0.51	0.50	0.51	0.50	
	Sickness/Health care	5.6	5.5	6.1	6.0	6.0	6.0	6.0	6.0	5.8	5.9			
	Disability	1.4	1.4	1.5	1.5	1.4	1.4	1.3	1.3	1.2	1.2			
	Old age and survivors	7.3	7.7	8.6	8.8	9.2	9.5	9.3	9.0	8.7	8.6			
	Family/Children	1.9	2.0	2.0	2.0	1.8	1.8	1.8	1.7	1.6	1.6			
	Unemployment	0.6	0.6	1.0	0.8	0.7	0.6	0.7	0.6	0.5	0.5			
	Housing and Social exclusion n.e.c.	0.2	0.2	0.3	0.3	0.4	0.5	0.6	0.6	0.5	0.5			
	Total (including Admin and Other expenditures)	17.6	17.9	20.1	20.0	20.1	20.4	20.2	19.7	19.0	18.9			
	of which: Means tested benefits	0.5	0.3	0.3	0.4	0.4	0.4	0.5	0.5	0.5	0.5			

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## Denmark

Denmark		2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018
Macro Economic Indicators (Annual % growth)	Real GDP	0.9	-0.5	-4.9	1.9	1.3	0.2	0.9	1.6	2.3	2.4	2.3	1.4
	Total employment	2.3	1.2	-3.1	-2.3	0.0	-0.7	0.0	0.9	1.4	1.5	1.7	1.8
	Labour productivity	-1.4	-1.7	-1.8	4.3	1.4	0.9	0.9	0.7	1.0	0.9	0.6	-0.4
	Annual average hours worked per person employed	-1.6	-0.2	-0.9	0.4	1.0	-1.0	0.2	-0.8	-0.5	0.4	-0.5	-0.9
	Real productivity per hour worked	0.2	-1.5	-0.9	3.9	0.3	1.9	0.8	1.6	1.4	0.5	1.1	0.6
	Harmonized CPI	1.7	3.6	1.0	2.2	2.7	2.4	0.5	0.4	0.2	0.0	1.1	0.7
	Price deflator GDP	2.4	4.1	0.5	3.2	0.6	2.4	0.9	1.0	0.4	0.7	1.4	0.4
	Nominal compensation per employee	3.7	3.9	2.8	3.3	1.4	1.8	1.6	1.5	1.7	1.5	1.7	2.0
	Real compensation per employee (GDP deflator)	1.3	-0.3	2.3	0.0	0.7	-0.5	0.7	0.4	1.3	0.8	0.3	1.6
	Real compensation per employee (private consumption deflator)	2.0	0.2	1.8	1.1	-1.3	-0.5	1.1	1.1	1.5	1.5	0.6	1.3
	Nominal unit labour costs	5.2	5.6	4.7	-1.0	0.0	0.9	0.7	0.7	0.8	0.6	1.1	2.4
	Real unit labour costs	2.7	1.5	4.1	-4.1	-0.6	-1.4	-0.3	-0.2	0.4	-0.1	-0.4	2.0
Labour Market Indicators - Total	Total population (000)	5447	5476	5511	5535	5561	5581	5603	5627	5660	5707	5749	5781
	Population aged 15-64 (000)	3598	3613	3628	3631	3632	3626	3625	3632	3646	3673	3692	3705
	Total employment (000)	2804	2853	2771	2706	2703	2689	2688	2714	2752	2840 b	2816 b	2868
	Employment aged 15-64 (000)	2759	2807	2724	2654	2643	2621	2622	2640	2678	2748 b	2734 b	2785
	Employment rate (% population aged 20-64)	79.0	79.7	77.5	75.8	75.7	75.4	75.6	75.9	76.5	77.4 b	76.9 b	78.2
	Employment rate (% population aged 15-64)	77.0	77.9	75.3	73.3	73.1	72.6	72.5	72.8	73.5	74.9 b	74.2 b	75.4
	Employment rate (% population aged 15-24)	65.3	66.4	62.5	58.1	57.5	55.0	53.7	53.7	55.4	58.2 b	56.3 b	57.3
	Employment rate (% population aged 25-54)	86.1	87.5	84.7	82.8	82.3	81.9	82.0	82.0	82.1	82.5 b	81.7 b	82.7
	Employment rate (% population aged 55-64)	58.9	58.4	58.2	58.4	59.5	60.8	61.7	63.2	64.7	67.8 b	68.9 b	70.7
	FTE employment rate (% population aged 20-64)	73.7 b	74.3	71.8	69.7	69.4	69.3	69.4	69.2	69.5	70.4 b	70.3 b	71.3
	Self-employed (% total employment)	8.4	8.4	9.0	8.8	8.9	8.9	8.8	8.7	8.4	8.3 b	7.8 b	7.7
	Part-time employment (% total employment)	23.0	23.8	25.2	25.6	25.1	24.8	24.7	24.6	24.7	26.4 b	25.3 b	24.8
	Temporary employment (% total employment)	8.2	7.7	7.9	7.7	8.1	7.9	8.1	7.9	8.0	12.4 b	11.9 b	10.3
	Employment in Services (% total employment)		74.5 bu	77.2 u	78.0 u	77.7 u	77.8	78.1	78.3	78.3	79.2 b	79.3 b	79.3
	Employment in Industry (% total employment)		23.2 bu	20.3 u	19.7 u	20.0 u	19.8	19.6	19.4	19.3	18.6 b	18.7 b	18.6
	Employment in Agriculture (% total employment)		2.4 b	2.5	2.3	2.2	2.4	2.3	2.3	2.4	2.3 b	2.1 b	2.1
	Activity rate (% population aged 15-64)	80.1	80.7	80.2	79.4	79.3	78.6	78.1	78.1	78.5	80.0 b	78.8 b	79.4
	Activity rate (% population aged 15-24)	70.6	72.2	70.9	67.5	67.1	64.1	61.7	61.5	62.1	66.2 b	63.3 b	63.2
	Activity rate (% population aged 25-54)	88.9	89.9	89.4	88.7	88.2	87.8	87.5	87.1	87.1	87.4 b	86.2 b	86.5
	Activity rate (% population aged 55-64)	61.0	59.9	60.8	61.8	63.2	64.4	65.0	66.4	67.6	70.6 b	71.6 b	73.3
	Total unemployment (000)	111	101	177	218	221	219	202	191	181	187	172	150
	Unemployment rate (% labour force)	3.8	3.4	6.0	7.5	7.6	7.5	7.0	6.6	6.2	6.2	5.7	5.0
	Youth unemployment rate (% labour force 15-24)	7.5	8.0	11.8	13.9	14.2	14.1	13.0	12.6	10.8	12.0	11.0	9.3
	Long term unemployment rate (% labour force)	0.6	0.5	0.6	1.5	1.8	2.1	1.8	1.7	1.7	1.4 b	1.3 b	1.1
	Share of long term unemployment (% of total unemployment)	16.1	13.5	9.5	20.2	24.4	28.0	25.5	25.2	26.9	22.3 b	22.6 b	21.1
	Youth unemployment ratio (% population aged 15-24)	5.3	5.8	8.4	9.4	9.6	9.1	8.1	7.8	6.7	7.9 b	7.0 b	5.9
	Employment rate for low skilled 25-64 (ISCED 0-2)	67.5 b	68.4	65.2	62.8	62.6	61.4	60.9	61.4 b	60.5	63.5 b	62.1 b	62.5
	Employment rate for medium skilled 25-64 (ISCED 3-4)	82.3 b	82.7	80.0	79.1	79.0	78.7	79.3	79.1 b	80.3	81.1 b	81.0 b	82.1
	Employment rate for high skilled 25-64 (ISCED 5-8)	87.2 b	88.5	86.8	85.7	85.8	86.4	86.5	86.0 b	85.9	86.0 b	85.9 b	86.9
	Employment rate (Nationals aged 15-64)	78.1	78.7	76.0	74.1	74.1	73.7	73.5	73.8	74.7	75.8 b	75.2 b	76.5
	Employment rate (Other EU28 aged 15-64)	75.0	80.8	80.2	75.4	72.4	71.7	72.3	75.7	75.9	76.4 b	75.6 b	74.9
	Employment rate (Other than EU28 aged 15-64)	54.0	57.4	58.5	54.2	53.7	52.5	56.0	54.6	54.9	59.8 b	58.8 b	59.3
	Employment rate (Born in the same country aged 15-64)	78.5	79.0	76.2	74.6	74.7	74.2	73.9	74.2	75.1	76.3 b	75.8 b	77.0
	Employment rate (Born in other EU28 aged 15-64)	75.7	78.8	77.6	73.5	71.0	71.8	73.3	76.1	75.4	76.0 b	75.6 b	75.3
	Employment rate (Born outside EU28 aged 15-64)	60.5	64.1	64.3	59.6	57.9	56.5	58.3	58.3	58.2	62.1 b	59.8 b	61.8
	Underemployment (% of labour force aged 15-74)		2.3	3.2	3.0	3.1	3.0	2.7	2.5	2.3	4.6 b	3.6 b	2.7
	Seeking but not available (% of labour force aged 15-74)	0.9	0.7	0.7	0.7	0.9	0.8	0.9	0.8	0.7	1.7 b	1.7 b	1.4
	Discouraged, available but not seeking (% of labour force aged 15-74)	1.8	1.6	1.9	2.0	2.6	2.4	2.3	1.9	1.5	3.2 b	2.1 b	1.7

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Denmark		2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018
Labour Market Indicators - Male	Total population (000)	2697	2713	2732	2743	2757	2767	2779	2792	2811	2838	2860	2876
	Population aged 15-64(000)	1816	1823	1831	1830	1830	1826	1826	1830	1839	1855	1865	1871
	Total employment (000)	1492	1517	1454	1415	1421	1413	1410	1433	1461	1503 b	1487 b	1515
	Employment aged 15-64 (000)	1460	1484	1421	1378	1381	1368	1365	1384	1408	1440 b	1431 b	1457
	Employment rate (% population aged 20-64)	83.2	83.9	80.5	78.6	79.0	78.6	78.7	79.5	80.2	80.7 b	80.2 b	81.5
	Employment rate (% population aged 15-64)	80.8	81.6	78.0	75.6	75.9	75.2	75.0	75.8	76.6	77.7 b	76.9 b	78.0
	Employment rate (% population aged 15-24)	66.5	67.4	62.2	56.7	56.6	54.6	52.3	52.7	54.6	56.5 b	55.3 b	55.8
	Employment rate (% population aged 25-54)	89.8	90.9	86.9	85.3	85.7	84.6	85.0	85.5	85.9	86.4 b	85.2 b	86.2
	Employment rate (% population aged 55-64)	64.9	65.2	64.9	63.3	63.8	65.9	66.5	68.9	69.8	71.9 b	72.8 b	74.9
	FTE employment rate (% population aged 20-64)	80.9 b	81.2	77.6	75.7	75.8	75.0	75.1	75.6	75.9	76.4 b	76.0 b	77.1
	Self-employed (% total employment)	11.9	11.9	12.6	12.2	12.3	12.2	12.0	11.7	11.3	11.1 b	10.5 b	10.3
	Part-time employment (% total employment)	12.4	13.3	14.3	14.0	14.2	14.8	14.8	15.2	15.6	16.8 b	16.2 b	15.6
	Temporary employment (% total employment)	6.8	6.7	6.9	7.2	7.4	7.0	7.2	7.3	7.1	10.7 b	10.7 b	8.9
	Employment in Services (% total employment)		63.6 bu	66.6 u	67.0 u	66.7 u	67.2	67.4	67.9	68.4	69.5 b	69.3 bu	69.2 u
	Employment in Industry (% total employment)		32.9 bu	29.7 u	29.3 u	29.7 u	29.2	29.1	28.5	28.0	27.0 b	27.6 bu	27.7 u
	Employment in Agriculture (% total employment)		3.6 b	3.7	3.7	3.5	3.7	3.6	3.6	3.5	3.5 b	3.1 b	3.1
	Activity rate (% population aged 15-64)	83.7	84.3	83.6	82.6	82.3	81.4	80.6	81.1	81.6	82.6 b	81.5 b	82.1
	Activity rate (% population aged 15-24)	72.0	72.8	71.7	67.6	67.1	64.1	61.1	61.0	61.7	65.0 b	62.5 b	62.4
	Activity rate (% population aged 25-54)	92.3	93.3	92.2	92.0	91.5	90.6	90.2	90.3	90.8	90.8 b	89.6 b	89.9
	Activity rate (% population aged 55-64)	66.9	66.9	68.1	67.8	68.3	69.9	70.2	72.6	72.7	74.9 b	75.6 b	77.7
	Total unemployment (000)	53	50	103	129	118	115	102	98	92	92	88	77
	Unemployment rate (% labour force)	3.4	3.2	6.6	8.4	7.7	7.5	6.7	6.4	5.9	5.8	5.6	4.8
	Youth unemployment rate (% labour force 15-24)	7.6	7.3	13.2	16.0	15.6	14.7	14.2	13.7	11.6	13.1	11.4	10.5
	Long term unemployment rate (% labour force)	0.5	0.5	0.6	1.8	2.0	2.1	1.6	1.7	1.6	1.3 b	1.3 b	1.0
	Share of long term unemployment (% of total unemployment)	15.6	14.2	9.3	21.9	26.2	28.5	23.5	25.9	27.5	23.0 b	23.7 b	20.5
	Youth unemployment ratio (% population aged 15-24)	5.5	5.4	9.5	10.9	10.5	9.5	8.7	8.4	7.2	8.5 b	7.1 b	6.6
	Employment rate for low skilled 25-64 (ISCED 0-2)	75.8 b	76.2	71.7	69.6	70.0	67.1	67.6	69.2 b	68.9	71.7 b	70.9 b	69.6
	Employment rate for medium skilled 25-64 (ISCED 3-4)	85.1 b	85.7	82.4	80.8	81.5	81.5	82.6	83.0 b	83.9	84.8 b	84.1 b	85.5
	Employment rate for high skilled 25-64 (ISCED 5-8)	89.6 b	90.6	88.7	87.5	88.2	89.2	88.4	89.2 b	89.4	88.7 b	88.5 b	90.5
	Employment rate (Nationals aged 15-64)	81.6	82.1	78.3	76.0	76.5	75.9	75.6	76.3	77.2	78.2 b	77.6 b	78.7
	Employment rate (Other EU28 aged 15-64)	81.5	87.6	84.8	77.5	76.9	77.0	77.8	81.5	82.4	82.1 b	79.7 b	81.3
	Employment rate (Other than EU28 aged 15-64)	61.6	64.7	63.0	61.4	59.7	57.6	61.0	61.2	62.4	64.8 b	64.0 b	66.2
	Employment rate (Born in the same country aged 15-64)	81.9	82.2	78.5	76.5	77.1	76.3	76.0	76.5	77.5	78.5 b	77.9 b	79.0
	Employment rate (Born in other EU28 aged 15-64)	83.4	84.5	82.2	72.9	73.5	77.5	78.3	82.2	82.5	80.4 b	79.6 b	80.3
	Employment rate (Born outside EU28 aged 15-64)	66.7	72.6	69.6	64.6	63.2	61.2	62.3	65.2	64.4	68.3 b	65.8 b	68.3
	Underemployment (% of labour force aged 15-74)		1.6	2.4	2.2	2.3	2.1	2.0	1.8	1.5	3.6 b	2.8 b	1.8
	Seeking but not available (% of labour force aged 15-74)	0.7	0.6	0.6	0.6	0.8	0.7	0.8	0.7	0.6	1.4 b	1.4 b	1.2
	Discouraged, available but not seeking (% of labour force aged 15-74)	1.7	1.6	2.0	1.9	2.5	2.4	2.4	1.9	1.6	3.3 b	2.2 b	1.8
Labour Market Indicators - Female	Total population (000)	2750	2763	2779	2791	2804	2814	2824	2835	2849	2869	2889	2905
	Population aged 15-64(000)	1782	1790	1797	1800	1802	1800	1799	1802	1807	1818	1827	1833
	Total employment (000)	1312	1336	1316	1292	1282	1276	1278	1282	1291	1337 b	1329 b	1353
	Employment aged 15-64 (000)	1299	1323	1303	1276	1262	1254	1257	1256	1270	1307 b	1304 b	1329
	Employment rate (% population aged 20-64)	74.7	75.5	74.5	73.0	72.4	72.2	72.4	72.2	72.6	74.0 b	73.7 b	74.8
	Employment rate (% population aged 15-64)	73.2	74.1	72.7	71.1	70.4	70.0	70.0	69.8	70.4	72.0 b	71.5 b	72.6
	Employment rate (% population aged 15-24)	64.0	65.3	62.8	59.5	58.5	55.4	55.0	54.9	56.2	60.0 b	57.3 b	58.8
	Employment rate (% population aged 25-54)	82.3	84.0	82.5	80.3	78.9	79.1	79.0	78.4	78.3	78.5 b	78.1 b	79.0
	Employment rate (% population aged 55-64)	52.9	51.5	51.7	53.6	55.3	55.8	56.8	57.6	59.6	63.6 b	65.2 b	66.4
	FTE employment rate (% population aged 20-64)	67.5 b	68.4	67.0	64.8	64.0	64.3	64.5	63.5	63.6	65.1 b	65.3 b	66.2
	Self-employed (% total employment)	4.5	4.5	4.9	5.1	5.1	5.2	5.3	5.3	5.0	5.1 b	4.8 b	4.7
	Part-time employment (% total employment)	35.1	35.6	37.2	38.1	37.0	35.8	35.3	35.0	34.7	36.9 b	35.3 b	34.8
	Temporary employment (% total employment)	9.7	8.9	9.1	8.3	8.9	8.8	9.0	8.5	8.9	14.3 b	13.2 b	11.9
	Employment in Services (% total employment)												
	Employment in Industry (% total employment)												
	Employment in Agriculture (% total employment)		1.1 b	1.1	0.8	0.8	1.0	0.9	0.9	1.0	0.9 b	0.9 b	1.0
	Activity rate (% population aged 15-64)	76.4	77.0	76.8	76.0	76.1	75.8	75.6	75.0	75.3	77.2 b	76.1 b	76.6
	Activity rate (% population aged 15-24)	69.1	71.5	70.0	67.4	67.1	64.0	62.4	62.0	62.5	67.3 b	64.1 b	64.0
	Activity rate (% population aged 25-54)	85.3	86.4	86.5	85.3	84.7	84.9	84.8	83.8	83.4	83.8 b	82.7 b	83.1
	Activity rate (% population aged 55-64)	55.1	53.0	53.5	55.9	58.0	58.9	59.9	60.3	62.6	66.4 b	67.6 b	69.0
	Total unemployment (000)	57	52	74	89	103	104	100	94	89	95	84	74
	Unemployment rate (% labour force)	4.2	3.7	5.3	6.5	7.5	7.5	7.3	6.8	6.4	6.6	5.9	5.2
	Youth unemployment rate (% labour force 15-24)	7.4	8.7	10.3	11.8	12.7	13.5	11.8	11.5	10.0	10.9	10.7	8.2
	Long term unemployment rate (% labour force)	0.7	0.5	0.5	1.1	1.7	2.1	2.0	1.7	1.7	1.4 b	1.3 b	1.1
	Share of long term unemployment (% of total unemployment)	16.6	12.7	9.8	17.8	22.3	27.5	27.5	24.4	26.2	21.6 b	21.5 b	21.8
	Youth unemployment ratio (% population aged 15-24)	5.1	6.2	7.2	7.9	8.5	8.6	7.4	7.1	6.3	7.3 b	6.8 b	5.2
	Employment rate for low skilled 25-64 (ISCED 0-2)	59.8 b	61.2	59.3	56.3	55.3	55.5	53.9	52.4 b	50.9	53.8 b	51.2 b	53.3
	Employment rate for medium skilled 25-64 (ISCED 3-4)	78.9 b	79.1	76.9	76.9	75.9	75.0	75.1	74.5 b	75.8	76.8 b	77.4 b	78.1
	Employment rate for high skilled 25-64 (ISCED 5-8)	85.1 b	86.6	85.3	84.3	83.9	84.3	85.0	83.4 b	83.3	83.8 b	83.9 b	84.2
	Employment rate (Nationals aged 15-64)	74.5	75.2	73.5	72.2	71.7	71.4	71.4	71.2	72.1	73.2 b	72.8 b	74.4
	Employment rate (Other EU28 aged 15-64)	69.9	75.1	75.2	73.4	68.3	66.7	67.2	69.1	68.3	70.4 b	70.8 b	68.1
	Employment rate (Other than EU28 aged 15-64)	47.5	51.6	55.3	49.4	49.3	48.6	52.2	49.3	49.2	55.7 b	54.0 b	52.7
	Employment rate (Born in the same country aged 15-64)	75.0	75.7	73.9	72.6	72.3	72.0	71.7	71.8	72.6	73.9 b	73.7 b	74.9
	Employment rate (Born in other EU28 aged 15-64)	69.8	73.7	73.1	74.2	68.7	66.8	69.0	69.6	68.0	71.5 b	71.2 b	70.1
	Employment rate (Born outside EU28 aged 15-64)	54.7	56.6	59.8	55.6	53.7	52.3	54.8	52.2	53.0	56.8 b	54.3 b	55.8
	Underemployment (% of labour force aged 15-74)		3.1	4.0	3.8	4.1	4.1	3.5	3.4	3.1	5.7 b	4.5 b	3.7
	Seeking but not available (% of labour force aged 15-74)	1.1	0.8	0.9	0.8	1.0	1.0	0.9	0.9	0.8	2.0 b	1.9 b	1.6
	Discouraged, available but not seeking (% of labour force aged 15-74)	1.9	1.6	1.8	2.0	2.6	2.4	2.3	2.0	1.4	3.2 b	2.1 b	1.6

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Denmark			2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018
Social Indicators	All	At-risk-of-poverty or social exclusion (% of total population)	16.8	16.3	17.6	18.3	17.6 b	17.5	18.3	17.9	17.7	16.8	17.2	17.6 p
		At-risk-of-poverty (% of total population)	11.7	11.8	13.1	13.3	12.1	12.0	11.9	12.1	12.2	11.9	12.4	12.8 p
		At-risk-of-poverty threshold (PPS single person)	10121	10561	10751	10770	11510 b	11537	11846	11992	12231	12813	12567	12874 p
		Poverty gap (%)	17.0	18.0	18.4	21.6	20.5 b	19.5	23.5	18.5	22.0	20.8	21.7	20.0 p
		Persistent at-risk-of-poverty (% of total population)	4.7	4.9	2.7	6.3	6.4	5.7	5.1	5.3	4.3	7.2	5.5	
		At-risk-of-poverty before social transfers excl. pensions (% of total population)	27.1	27.8	31.2	29.1	27.9 b	27.4	27.8	26.9	25.8	24.9	25.3	24.0 p
		Impact of social transfers (excl. pensions) in reducing poverty (%)	56.8	57.6	58.0	54.3	56.6 b	56.2	57.2	55.0	52.7	52.2	51.0	46.7 p
		Severe Material Deprivation (% of total population)	3.3	2.0	2.3	2.7	2.3	2.7	3.6	3.2	3.7	2.6	3.1	3.4 p
		Share of people living in low work intensity households (% of people aged 0-59)	10.1	8.5	8.8	10.6	10.5	10.2	11.9	12.2	11.6	10.7	10.0	11.2 p
		Real Gross Household Disposable income (growth %)	-0.3	-0.5	0.9	3.3	1.1	-0.2	1.1	0.7	3.9	4.1	2.5	
		Income quintile share ratio S80/S20	3.7	3.6	4.6	4.4 b	4.0 b	3.9	4.0	4.1	4.1	4.1	4.1	4.2 p
		GINI coefficient	25.2	25.1	26.9	26.9 b	26.6 b	26.5	26.8	27.7	27.4	27.7	27.6	27.9 p
		Early leavers from education and training (% of population aged 18-24)	12.9 b	12.5	11.3	11.0	9.6	9.1	8.0	7.8 b	7.8	7.2 b	8.8 b	10.2
		NEET: Young people neither in employment nor in education and training (% of total population aged 15-24)	4.3	4.3	5.4	6.0	6.3	6.6	6.0	5.8	6.2	5.8 b	7.0 b	6.8
	Male	At-risk-of-poverty or social exclusion (% of male population)	15.9	15.7	17.0	17.7	17.2 b	17.4	18.1	17.6	17.5	16.4	17.8	17.9 p
		At-risk-of-poverty (% of male population)	11.3	11.7	12.8	13.1	12.1	12.0	12.0	12.4	12.5	12.0	13.0	13.0 p
		Poverty gap (%)	18.8	19.3	21.9	23.3	24.1 b	21.8	25.5	24.2	23.6	22.3	24.5	21.8 p
		Persistent at-risk-of-poverty (% of male population)	4.5	5.2	4.0	5.5	6.7	6.0	4.0	5.4	3.8	7.9	7.7	
		Severe Material Deprivation (% of male population)	2.9	1.5	2.2	2.8	1.7	2.7	3.5	3.2	3.5	3.1	3.6	3.5 p
		Share of people living in low work intensity households (% of males aged 0-59)	9.1	8.4	8.2	9.7	10.3	10.5	12.2	11.8	11.1	10.4	10.6	10.4 p
		Life expectancy at birth (years)	76.2	76.5 b	76.9	77.2	77.8	78.1	78.3	78.7	78.8	79.0	79.2	
		Healthy life years at birth (years) - men	67.4	62.4 b	61.8	62.3	63.6	60.6	60.4	60.3	60.4	60.3	59.8	
		Early leavers from education and training (% of males aged 18-24)	16.2 b	15.0	14.3	14.1	12.1	10.8	9.9	9.5 b	9.7	8.5 b	11.3 b	12.5
		NEET: Young people neither in employment nor in education and training (% of males aged 15-24)	4.7	4.4	5.8	6.7	6.4	6.6	6.3	6.2	6.3	6.5 b	7.0 b	6.9
	Female	At-risk-of-poverty or social exclusion (% of female population)	17.7	17.0	18.2	19.0	18.0 b	17.5	18.6	18.2	18.0	17.2	16.6	17.4 p
		At-risk-of-poverty (% of female population)	12.0	12.0	13.4	13.4	12.0	11.9	11.8	11.8	11.9	11.9	11.7	12.7 p
		Poverty gap (%)	16.4	17.2	17.1	20.9	16.1 b	16.4	17.9	17.2	19.8	19.8	18.8	18.3 p
		Persistent at-risk-of-poverty (% of female population)	4.9	4.6	1.5	7.0	6.1	5.3	6.2	5.2	4.8	6.5	3.4	
		Severe Material Deprivation (% of female population)	3.6	2.4	2.4	2.5	2.9	2.7	3.7	3.2	3.8	2.1	2.6	3.4 p
		Share of people living in low work intensity households (% of females aged 0-59)	11.1	8.6	9.4	11.4	10.8	9.9	11.5	12.6	12.0	10.9	9.4	12.0 p
		Life expectancy at birth (years)	80.6	81.0 b	81.1	81.4	81.9	82.1	82.4	82.8	82.7	82.8	83.1	
		Healthy life years at birth (years) - women	67.4	60.8 b	60.4	61.4	59.4	61.4	59.1	61.4	57.6	60.3	59.7	
		Early leavers from education and training (% of females aged 18-24)	9.5 b	10.0	8.1	7.7	7.0	7.4	6.2	6.1 b	5.7	5.9 b	6.2 b	7.8
		NEET: Young people neither in employment nor in education and training (% of females aged 15-24)	3.8	4.2	4.9	5.4	6.1	6.7	5.8	5.4	6.1	5.1 b	6.9 b	6.7
	Children (0-17)	At-risk-of-poverty or social exclusion of children (% of people aged 0-17)	14.2	12.7	14.0	15.1	15.7 b	14.9	15.4	14.5	15.7	13.9	14.5	15.2 p
		At-risk-of-poverty (% of Children population)	9.6	9.1	10.6	10.9	10.3	10.4	9.1	9.2	10.4	9.4	10.0	10.7 p
		Severe Material Deprivation (% of Children population)	4.8	2.5	2.1	3.1	2.9	4.0	3.8	3.1	4.3	3.0	3.1	4.3 p
		Share of children living in low work intensity households (% of Children population)	6.9	4.3	5.5	7.4	7.9	5.3	7.8	7.5	7.3	6.5	6.7	7.4 p
		Risk of poverty of children in households at work (Working Intensity > 0.2)	6.2	7.6	7.9	6.8	7.7 b	7.4	6.6	6.6	8.0	6.9	6.8	6.7 p
		Impact of social transfers (excl. pensions) in reducing poverty (0-17) (%)	59.8	58.8	56.4	54.6	61.1 b	57.7	64.0	61.3	55.0	56.7	55.0	52.4 p
	Working age (18-64)	At-risk-of-poverty or social exclusion (% of working age population)	17.4	17.1	18.1	19.5	19.0 b	19.6	21.6	21.3	20.9	20.3	20.6	21.2 p
		At-risk-of-poverty (% of Working age population)	10.9	11.3	12.2	12.9	12.2	12.3	13.4	13.8	13.8	13.9	14.3	14.9 p
		Severe Material Deprivation (% of Working age population)	3.3	2.0	2.7	2.9	2.5	2.9	4.3	4.0	4.3	3.1	3.8	4.0 p
		Very low work intensity (18-59)	11.5	10.2	10.1	11.9	11.6	12.2	13.5	14.0	13.3	12.4	11.3	12.7 p
		In-work at-risk-of poverty rate (% of persons employed 18-64)	4.2	5.0	5.9	6.3	6.3 b	5.3	5.4	4.8	5.1	5.3	5.4	6.1 p
		Impact of social transfers (excl. pensions) in reducing poverty (18-64) (%)	58.9	59.4	58.9	56.1	58.5 b	58.6	57.3	55.5	53.5	52.6	52.0	46.8 p
	Elderly (65+)	At-risk-of-poverty or social exclusion of elderly (% of people aged 65+)	18.3	18.6	20.6	18.4	14.6 b	13.2	10.8	10.8	9.9	9.2	9.5	9.4 p
		At-risk-of-poverty (% of Elderly population)	17.7	18.1	20.1	17.7	13.9	12.8	10.1	9.8	9.1	8.5	8.8	8.7 p
		Severe Material Deprivation (% of Elderly population)	0.8	0.9	0.9	0.9	1.1	0.6	1.1	0.9	0.9	0.8	0.9	1.0 p
		Relative median income of elderly (ratio with median income of people younger than 65)	0.70	0.70	0.71	0.71	0.74 b	0.75	0.76	0.78	0.77	0.75	0.77	0.78 p
		Aggregate replacement ratio (ratio)	0.39	0.41	0.42	0.44	0.43 b	0.42	0.44	0.45	0.45	0.47	0.48	0.49 p
Expenditure in social protection indicators (% of GDP)		Sickness/Health care	6.0 b	6.2	6.9	6.7	6.6	6.5	6.4	6.3	6.2	6.2		
		Disability	3.8 b	3.8	4.2	4.2	4.1	4.1	4.1	4.1	4.0	3.9		
		Old age and survivors	11.9 b	11.8	13.2	12.6	12.7	12.7	13.3	14.0	13.5	12.8		
		Family/Children	3.7 b	3.8	4.2	4.0	3.8	3.7	3.6	3.5	3.5	3.4		
		Unemployment	1.2 b	1.0	1.6	1.9	1.9	1.9	1.8	1.6	1.5	1.4		
		Housing and Social exclusion n.e.c.	1.3 b	1.3	1.5	1.8	1.9	1.9	2.0	2.0	2.2	2.2		
		Total (including Admin and Other expenditures) of which: Means tested benefits	29.1 b	28.9	32.7	32.4	32.1	32.0	32.5	32.8	32.1	31.1		

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## Germany

Germany		2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018
Macro Economic Indicators (Annual % growth)	Real GDP	3.3	1.1	-5.6	4.1	3.7	0.5	0.5	2.2	1.7	2.2	2.2	1.4
	Total employment	1.7	1.3	0.1	0.3	1.4	1.2	0.6	0.8	0.9	1.3	1.4	1.3
	Labour productivity	1.5	-0.2	-5.7	3.8	2.3	-0.7	-0.1	1.3	0.8	0.9	0.7	0.1
	Annual average hours worked per person employed	0.0	-0.4	-3.2	1.3	0.2	-1.3	-0.9	0.3	0.2	-0.5	-0.2	0.1
	Real productivity per hour worked	1.5	0.2	-2.6	2.5	2.1	0.6	0.8	1.0	0.6	1.4	0.9	0.0
	Harmonized CPI	2.3	2.8	0.2	1.1	2.5	2.2	1.6	0.8	0.7	0.4	1.7	1.9
	Price deflator GDP	1.7	0.8	1.8	0.8	1.1	1.5	2.0	1.8	2.0	1.4	1.5	1.9
	Nominal compensation per employee	0.9	2.1	0.2	2.6	3.0	2.5	1.8	2.8	2.7	2.2	2.6	3.0
	Real compensation per employee (GDP deflator)	-0.8	1.3	-1.5	1.8	1.9	1.0	-0.1	1.0	0.7	0.8	1.0	1.1
	Real compensation per employee (private consumption deflator)	-1.4	-0.6	0.0	1.3	0.5	0.4	0.2	2.1	2.0	1.8	0.9	1.1
	Nominal unit labour costs	-0.6	2.3	6.3	-1.2	0.7	3.2	1.9	1.4	1.9	1.3	1.8	2.8
	Real unit labour costs	-2.3	1.5	4.5	-1.9	-0.4	1.6	0.0	-0.3	-0.1	-0.1	0.4	1.0
Labour Market Indicators - Total	Total population (000)	82315	82218	82002	81802	80222 b	80328	80524	80767	81198	82176	82522	82792
	Population aged 15-64 (000)	54574	54417	54134	53878	52762 b	52951	53126	53272	53422	53994	53963	53911
	Total employment (000)	37989	38542	38471	37993 b	38787 b	39127	39531	39871	40211	41267	41664	41915
	Employment aged 15-64 (000)	37397	37902	37808	37337 b	38045 b	38321	38640	38908	39176	40165	40482	40636
	Employment rate (% population aged 20-64)	72.9	74.0	74.2	75.0 b	76.5 b	76.9	77.3	77.7	78.0	78.6	79.2	79.9
	Employment rate (% population aged 15-64)	69.0	70.1	70.3	71.3 b	72.7 b	73.0	73.5	73.8	74.0	74.7	75.2	75.9
	Employment rate (% population aged 15-24)	45.4	46.6	46.0	46.2 b	47.9 b	46.6	46.9	46.1	45.3	45.7	46.5	47.2
	Employment rate (% population aged 25-54)	80.3	80.9	80.8	81.6 b	83.0 b	83.3	83.4	83.5	83.7	83.9	84.2	84.9
	Employment rate (% population aged 55-64)	51.3	53.7	56.1	57.8 b	60.0 b	61.6	63.6	65.6	66.2	68.6	70.1	71.4
	FTE employment rate (% population aged 20-64)	63.0	64.0	64.1	65.4 b	66.2 b	66.5 b	66.8	67.3	67.5	68.3	68.8	69.5
	Self-employed (% total employment)	11.0	10.8	11.0	11.0 b	11.1 b	11.0	10.7	10.5	10.4	10.0	9.8	9.6
	Part-time employment (% total employment)	25.4	25.1	25.3	25.6 b	25.9 b	25.8	26.6	26.5	26.8	26.7	26.9	26.8
	Temporary employment (% total employment)	13.0	13.1	13.0	13.0 b	13.0 b	12.3	12.0	11.8	11.8	11.9	11.7	11.5
	Employment in Services (% total employment)		68.8 b	69.5	70.0 b	70.1 b	70.2	70.7	70.4	70.8	71.1	71.1	71.2
	Employment in Industry (% total employment)		29.5 b	29.0	28.5 b	28.4 b	28.4	28.0	28.3	27.9	27.6	27.7	27.6
	Employment in Agriculture (% total employment)		1.7 b	1.6	1.5 b	1.5 b	1.5	1.3	1.3	1.3	1.2	1.2	1.2
	Activity rate (% population aged 15-64)	75.6	75.9	76.3	76.7 b	77.3 b	77.2	77.6	77.7	77.6	77.9	78.2	78.6
	Activity rate (% population aged 15-24)	51.5	52.2	51.8	51.3 b	52.4 b	50.7	50.8	49.9	48.8	49.2	49.9	50.3
	Activity rate (% population aged 25-54)	87.2	87.0	87.1	87.3 b	87.7 b	87.7	87.7	87.6	87.6	87.3	87.3	87.7
	Activity rate (% population aged 55-64)	57.2	58.7	61.0	62.6 b	64.1 b	65.4	67.5	69.1	69.4	71.3	72.6	73.6
	Total unemployment (000)	3473	3018	3098	2821	2399	2224	2182	2090	1950	1774	1621	1468
	Unemployment rate (% labour force)	8.5	7.4	7.6	7.0	5.8	5.4	5.2	5.0	4.6	4.1	3.8	3.4
	Youth unemployment rate (% labour force 15-24)	11.8	10.4	11.1	9.8	8.5	8.0	7.8	7.7	7.2	7.1	6.8	6.2
	Long term unemployment rate (% labour force)	4.9	3.9	3.5	3.3 b	2.8 b	2.4	2.3	2.2	2.0	1.7	1.6	1.4
	Share of long term unemployment (% of total unemployment)	56.0	51.8	44.9	46.8 b	47.6 b	45.1	44.4	44.0	43.6	40.8	41.7	40.9
	Youth unemployment ratio (% population aged 15-24)	6.1	5.5	5.8	5.0 b	4.5 b	4.1	4.0	3.9	3.5	3.5	3.4	3.1
	Employment rate for low skilled 25-64 (ISCED 0-2)	54.6	55.3	54.9	55.4 b	56.7 b	57.6	58.1	58.0 b	58.7	59.4	60.1	61.0
	Employment rate for medium skilled 25-64 (ISCED 3-4)	74.4	75.3	75.5	76.3 b	77.6 b	78.2	78.9	79.7 b	79.9	81.0	81.6	82.3
	Employment rate for high skilled 25-64 (ISCED 5-8)	85.5	85.8	86.4	87.0 b	88.0 b	88.0	87.9	88.1 b	88.1	88.3	88.6	88.9
	Employment rate (Nationals aged 15-64)	70.5	71.7	71.9	72.7 b	74.0 b	74.2	74.8	75.1	75.4	76.5	77.3	77.8
	Employment rate (Other EU28 aged 15-64)	67.2	68.1	67.8	68.4 b	71.0 b	71.9	72.4	73.4	73.9	75.7	76.4	77.3
	Employment rate (Other than EU28 aged 15-64)	48.4	50.0	50.6	51.6 b	53.8 b	55.0	54.9	54.7	54.2	51.4	52.3	55.0
	Employment rate (Born in the same country aged 15-64)	70.7	71.7	71.9	72.5 b	73.8 b	74.0	74.5	74.9	75.2	76.2	77.0	77.5
	Employment rate (Born in other EU28 aged 15-64)											77.6	78.6
	Employment rate (Born outside EU28 aged 15-64)											62.6	64.2
	Underemployment (% of labour force aged 15-74)		5.9	5.4	5.4 b	4.6 b	4.3	4.2	3.9	3.7	3.4	3.2	2.8
	Seeking but not available (% of labour force aged 15-74)	2.2	2.0	1.4	1.3 b	1.2 b	1.2	1.2	1.1	1.1	1.2	1.1	1.0
	Discouraged, available but not seeking (% of labour force aged 15-74)	1.4	1.4	1.6	1.3 b	1.4 b	1.3	1.3	1.2	1.3	1.3	1.2	1.1

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Germany		2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018
Labour Market Indicators - Male	Total population (000)	40301	40274	40184	40104	39125 b	39230	39381	39557	39835	40514	40697	40844
	Population aged 15-64(000)	27629	27541	27386	27249	26509 b	26631	26745	26847	26968	27415	27400	27376
	Total employment (000)	20745	21033	20816	20423 b	20802 b	21019	21143	21301	21454	22065	22289	22395
	Employment aged 15-64 (000)	20378	20631	20401	20019 b	20338 b	20512	20584	20698	20808	21375	21552	21608
	Employment rate (% population aged 20-64)	79.1	80.1	79.6	80.4 b	81.7 b	82.1	82.1	82.2	82.3	82.7	83.1	83.9
	Employment rate (% population aged 15-64)	74.7	75.8	75.4	76.3 b	77.6 b	77.9	78.0	78.1	78.0	78.4	78.9	79.7
	Employment rate (% population aged 15-24)	47.2	48.7	47.5	47.9 b	49.7 b	48.6	48.4	47.7	46.5	46.9	47.4	48.8
	Employment rate (% population aged 25-54)	86.4	87.1	86.1	86.8 b	88.0 b	88.4	88.2	88.0	88.1	88.1	88.4	89.0
	Employment rate (% population aged 55-64)	59.4	61.7	63.8	65.2 b	67.1 b	68.6	69.9	71.4	71.3	73.7	75.0	76.1
	FTE employment rate (% population aged 20-64)	76.0	76.9	76.6	77.8 b	78.4 b	78.6 b	78.6	78.7	78.7	79.1	79.4	80.2
	Self-employed (% total employment)	13.9	13.6	14.0	14.0 b	14.1 b	14.0	13.6	13.3	13.1	12.6	12.3	12.0
	Part-time employment (% total employment)	8.5	8.3	8.6	8.5 b	8.9 b	8.9	9.1	9.2	9.3	9.4	9.7	9.6
	Temporary employment (% total employment)	12.7	12.8	12.5	12.4 b	12.5 b	11.9	11.6	11.4	11.5	11.7	11.5	11.4
	Employment in Services (% total employment)		56.4 b	56.9	57.4 b	57.4 b	57.5	58.1	57.7	58.0	58.7	58.7	58.9
	Employment in Industry (% total employment)		41.6 b	41.2	40.7 b	40.7 b	40.7	40.2	40.7	40.3	39.8	39.8	39.6
	Employment in Agriculture (% total employment)		2.1 b	1.9	1.9 b	1.9 b	1.8	1.7	1.7	1.7	1.6	1.5	1.5
	Activity rate (% population aged 15-64)	81.7	82.0	82.2	82.4 b	82.7 b	82.6	82.6	82.5	82.1	82.2	82.4	82.9
	Activity rate (% population aged 15-24)	54.0	54.7	54.3	53.7 b	54.8 b	53.2	52.9	52.0	50.5	50.9	51.3	52.5
	Activity rate (% population aged 25-54)	93.8	93.5	93.2	93.2 b	93.2 b	93.1	92.9	92.6	92.5	91.9	91.9	92.3
	Activity rate (% population aged 55-64)	65.8	67.2	69.3	70.8 b	71.8 b	73.1	74.5	75.5	75.3	76.9	77.9	78.7
	Total unemployment (000)	1855	1609	1747	1611	1336	1236	1231	1188	1123	1028	957	883
	Unemployment rate (% labour force)	8.4	7.3	8.0	7.4	6.1	5.6	5.5	5.3	5.0	4.5	4.1	3.8
	Youth unemployment rate (% labour force 15-24)	12.4	10.8	12.2	10.6	9.2	8.7	8.5	8.3	7.9	7.8	7.6	7.1
	Long term unemployment rate (% labour force)	4.8	3.9	3.6	3.5 b	3.0 b	2.6	2.5	2.4	2.3	1.9	1.8	1.6
	Share of long term unemployment (% of total unemployment)	56.1	52.5	43.9	47.5 b	49.0 b	46.5	45.0	45.8	45.3	42.6	43.5	42.6
	Youth unemployment ratio (% population aged 15-24)	6.8	6.0	6.8	5.8 b	5.0 b	4.6	4.5	4.3	4.0	4.0	3.9	3.7
	Employment rate for low skilled 25-64 (ISCED 0-2)	65.5	66.3	64.9	65.7 b	67.0 b	67.8	67.8	67.4 b	68.0	68.4	68.5	69.6
	Employment rate for medium skilled 25-64 (ISCED 3-4)	80.0	81.0	80.3	81.0 b	82.3 b	82.9	83.1	83.5 b	83.5	84.4	85.0	85.7
	Employment rate for high skilled 25-64 (ISCED 5-8)	89.1	89.4	89.7	90.3 b	91.1 b	91.4	91.3	91.3 b	91.3	91.3	91.7	92.1
	Employment rate (Nationals aged 15-64)	75.8	76.8	76.5	77.1 b	78.3 b	78.5	78.6	78.7	78.7	79.7	80.3	80.9
	Employment rate (Other EU28 aged 15-64)	74.6	76.0	74.5	75.8 b	78.5 b	79.6	80.4	81.5	81.5	83.0	84.1	84.5
	Employment rate (Other than EU28 aged 15-64)	59.2	61.6	61.1	63.1 b	66.0 b	66.3	66.5	65.4	64.8	59.2	59.8	63.8
	Employment rate (Born in the same country aged 15-64)	75.7	76.7	76.3	76.8 b	77.9 b	78.1	78.1	78.3	78.2	79.2	79.9	80.4
	Employment rate (Born in other EU28 aged 15-64)											84.8	85.0
	Employment rate (Born outside EU28 aged 15-64)											69.2	71.9
	Underemployment (% of labour force aged 15-74)		2.8	2.7	2.7 b	2.4 b	2.2	2.1	2.0	1.9	1.7	1.8	1.6
	Seeking but not available (% of labour force aged 15-74)	1.9	1.7	1.2	1.2 b	1.1 b	1.1	1.1	1.1	1.1	1.1	1.1	1.0
	Discouraged, available but not seeking (% of labour force aged 15-74)	1.0	1.0	1.2	1.0 b	1.1 b	1.0	1.0	1.0	1.1	1.1	1.1	1.0
Labour Market Indicators - Female	Total population (000)	42014	41944	41818	41699	41097 b	41098	41143	41211	41362	41662	41825	41949
	Population aged 15-64(000)	26945	26877	26748	26629	26253 b	26321	26381	26425	26454	26579	26564	26534
	Total employment (000)	17244	17509	17655	17571 b	17986 b	18108	18389	18570	18757	19203	19375	19520
	Employment aged 15-64 (000)	17019	17271	17407	17318 b	17708 b	17809	18056	18210	18368	18790	18929	19028
	Employment rate (% population aged 20-64)	66.7	67.8	68.7	69.7 b	71.3 b	71.6	72.5	73.1	73.6	74.5	75.2	75.8
	Employment rate (% population aged 15-64)	63.2	64.3	65.2	66.2 b	67.8 b	68.1	69.0	69.5	69.9	70.8	71.5	72.1
	Employment rate (% population aged 15-24)	43.5	44.5	44.4	44.5 b	46.1 b	44.5	45.2	44.3	44.0	44.5	45.5	45.4
	Employment rate (% population aged 25-54)	74.0	74.7	75.4	76.4 b	77.9 b	78.2	78.6	78.8	79.2	79.7	80.0	80.6
	Employment rate (% population aged 55-64)	43.4	46.0	48.6	50.7 b	53.2 b	54.9	57.6	60.0	61.2	63.5	65.4	66.9
	FTE employment rate (% population aged 20-64)	50.8	51.8	52.2	53.9 b	54.8 b	55.2 b	55.8	56.7	57.1	58.1	58.7	59.4
	Self-employed (% total employment)	7.5	7.3	7.4	7.6 b	7.6 b	7.6	7.4	7.3	7.2	7.1	7.0	6.8
	Part-time employment (% total employment)	45.6	45.2	44.9	45.3 b	45.4 b	45.3	46.7	46.3	46.6	46.5	46.4	46.3
	Temporary employment (% total employment)	13.4	13.5	13.6	13.6 b	13.6 b	12.7	12.4	12.2	12.2	12.3	12.0	11.5
	Employment in Services (% total employment)		83.7 b	84.2	84.5 b	84.6 b	84.7	85.0	84.8	85.2	85.3	85.3	85.2
	Employment in Industry (% total employment)		15.1 b	14.6	14.4 b	14.3 b	14.2	14.1	14.3	13.9	13.8	13.9	14.0
	Employment in Agriculture (% total employment)		1.2 b	1.2	1.1 b	1.1 b	1.0	0.9	0.9	0.9	0.9	0.8	0.8
	Activity rate (% population aged 15-64)	69.4	69.7	70.4	70.9 b	71.9 b	71.9	72.6	72.9	73.1	73.6	74.0	74.3
	Activity rate (% population aged 15-24)	49.0	49.5	49.2	48.8 b	50.0 b	48.0	48.7	47.7	47.1	47.4	48.3	47.8
	Activity rate (% population aged 25-54)	80.6	80.5	81.0	81.3 b	82.1 b	82.3	82.4	82.5	82.5	82.6	82.5	82.9
	Activity rate (% population aged 55-64)	48.9	50.5	52.9	54.6 b	56.8 b	58.2	60.8	62.9	63.8	65.9	67.5	68.6
	Total unemployment (000)	1618	1409	1350	1210	1063	989	951	902	827	746	664	585
	Unemployment rate (% labour force)	8.7	7.6	7.2	6.5	5.6	5.2	4.9	4.6	4.2	3.8	3.3	2.9
	Youth unemployment rate (% labour force 15-24)	11.0	9.9	9.7	8.8	7.8	7.3	7.1	7.1	6.5	6.1	5.8	5.1
	Long term unemployment rate (% labour force)	4.9	3.9	3.4	3.0 b	2.6 b	2.2	2.1	1.9	1.7	1.4	1.3	1.1
	Share of long term unemployment (% of total unemployment)	55.8	51.1	46.3	46.0 b	45.8 b	43.4	43.5	41.6	41.3	38.2	39.0	38.4
	Youth unemployment ratio (% population aged 15-24)	5.4	4.9	4.8	4.3 b	3.9 b	3.5	3.5	3.4	3.0	2.9	2.8	2.4
	Employment rate for low skilled 25-64 (ISCED 0-2)	47.3	47.7	48.0	48.3 b	49.5 b	50.4	51.1	50.9 b	51.5	52.0	52.9	53.5
	Employment rate for medium skilled 25-64 (ISCED 3-4)	68.9	69.8	70.7	71.8 b	73.0 b	73.6	74.6	76.0 b	76.5	77.7	78.3	79.0
	Employment rate for high skilled 25-64 (ISCED 5-8)	80.6	81.1	82.2	82.9 b	84.2 b	83.9	84.0	84.0 b	84.1	84.6	84.7	85.0
	Employment rate (Nationals aged 15-64)	65.2	66.4	67.2	68.2 b	69.7 b	69.9	70.9	71.5	72.1	73.3	74.1	74.7
	Employment rate (Other EU28 aged 15-64)	59.4	59.8	60.7	61.0 b	63.5 b	63.9	63.9	64.4	65.3	67.2	67.5	68.9
	Employment rate (Other than EU28 aged 15-64)	37.4	38.4	40.2	40.7 b	42.5 b	44.2	44.0	44.5	43.7	42.9	43.8	45.3
	Employment rate (Born in the same country aged 15-64)	65.6	66.7	67.4	68.2 b	69.7 b	69.8	70.8	71.4	72.1	73.2	74.1	74.6
	Employment rate (Born in other EU28 aged 15-64)											70.3	71.8
	Employment rate (Born outside EU28 aged 15-64)											55.7	56.0
	Underemployment (% of labour force aged 15-74)		9.6	8.5	8.5 b	7.3 b	6.7	6.6	6.1	5.7	5.2	4.8	4.2
	Seeking but not available (% of labour force aged 15-74)	2.6	2.4	1.5	1.5 b	1.4 b	1.3	1.3	1.2	1.2	1.2	1.2	1.1
	Discouraged, available but not seeking (% of labour force aged 15-74)	1.9	2.0	2.2	1.6 b	1.8 b	1.7	1.6	1.5	1.5	1.4	1.4	1.2

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Germany			2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018
Social Indicators	All	At-risk-of-poverty or social exclusion (% of total population)	20.6	20.1	20.0	19.7	19.9	19.6	20.3	20.6	20.0	19.7	19.0	
		At-risk-of-poverty (% of total population)	15.2	15.2	15.5	15.6	15.8	16.1	16.1	16.7	16.7	16.5	16.1	
		At-risk-of-poverty threshold (PPS single person)	10395	10804	10770	10544	11037	11525	11687	11530	12219	12691	12750	
		Poverty gap (%)	23.2	22.2	21.5	20.7	21.4	21.1	20.4	23.2	22.0	20.7	20.9	
		Persistent at-risk-of-poverty (% of total population)		7.2	8.1	9.1	10.4	10.4	10.6	9.5	11.3	10.5	11.6	
		At-risk-of-poverty before social transfers excl. pensions (% of total population)	24.8	24.2	24.1	24.2	25.1	24.3	24.4	25.0	25.1	25.3	24.1	
		Impact of social transfers (excl. pensions) in reducing poverty (%)	38.7	37.2	35.7	35.5	37.1	33.7	34.0	33.2	33.5	34.8	33.2	
		Severe Material Deprivation (% of total population)	4.8	5.5	5.4	4.5	5.3	4.9	5.4	5.0	4.4	3.7	3.4	3.4 p
		Share of people living in low work intensity households (% of people aged 0-59)	11.5	11.7	10.9	11.2	11.2	9.9	9.9	10.0	9.8	9.6	8.7	
		Real Gross Household Disposable income (growth %)	0.4	0.8	-0.4	0.4	1.0	1.1	0.5	1.6	2.0	2.3		
		Income quintile share ratio S80/S20	4.9	4.8	4.5	4.5	4.5	4.3	4.6	5.1	4.8	4.6	4.5	
		GINI coefficient	30.4	30.2	29.1	29.3	29.0	28.3	29.7	30.7	30.1	29.5	29.1	
		Early leavers from education and training (% of population aged 18-24)	12.5	11.8 b	11.1	11.8 b	11.6	10.5	9.8	9.5 b	10.1	10.3	10.1	10.3
		NEET: Young people neither in employment nor in education and training (% of total population aged 15-24)	9.3	8.4	8.8	8.3 b	7.5 b	7.1	6.3	6.4	6.2	6.7	6.3	5.9
	Male	At-risk-of-poverty or social exclusion (% of male population)	18.8	18.5	18.8	18.6	18.5	18.1	18.8	19.5	18.8	18.1	17.6	
		At-risk-of-poverty (% of male population)	14.1	14.2	14.7	14.9	14.9	14.9	15.0	15.9	15.9	15.2	15.0	
		Poverty gap (%)	24.4	23.7	22.3	21.5	22.6	21.8	20.9	24.0	22.8	22.0	22.6	
		Persistent at-risk-of-poverty (% of male population)		6.6	7.0	9.0	10.0	9.9	10.0	9.5	11.3	9.6	10.9	
		Severe Material Deprivation (% of male population)	4.3	5.3	5.3	4.4	5.0	4.5	5.2	4.8	4.2	3.4	2.9	3.3 p
		Share of people living in low work intensity households (% of males aged 0-59)	10.5	10.9	10.5	10.7	10.5	9.2	9.4	9.8	9.5	9.1	8.4	
		Life expectancy at birth (years)	77.4	77.6 b	77.8	78.0	78.4	78.6	78.6	78.7	78.3 b	78.6	78.7	
		Healthy life years at birth (years) - men	59.0	56.4 b	57.1	57.9	57.9	57.4	57.8	56.4	65.3 b	65.3		
		Early leavers from education and training (% of males aged 18-24)	13.1	12.4 b	11.5	12.5 b	12.5	11.1	10.2	10.0 b	10.4	11.0	11.1	11.5
		NEET: Young people neither in employment nor in education and training ( % of males aged 15-24)	8.4	7.4	8.2	7.6 b	6.7 b	6.3	5.5	5.5	5.4	6.1	5.8	5.4
	Female	At-risk-of-poverty or social exclusion (% of female population)	22.3	21.6	21.2	20.9	21.3	21.1	21.9	21.8	21.1	21.2	20.3	
		At-risk-of-poverty (% of female population)	16.3	16.2	16.3	16.4	16.8	17.2	17.2	17.4	17.4	17.8	17.1	
		Poverty gap (%)	22.4	21.1	20.8	19.6	20.6	20.6	20.1	22.6	21.5	19.5	19.5	
		Persistent at-risk-of-poverty (% of female population)		7.7	9.0	9.2	10.8	10.9	11.1	9.5	11.3	11.4	12.4	
		Severe Material Deprivation (% of female population)	5.3	5.6	5.4	4.7	5.7	5.2	5.6	5.1	4.6	4.0	3.9	3.5 p
		Share of people living in low work intensity households (% of females aged 0-59)	12.6	12.4	11.3	11.7	11.9	10.7	10.5	10.2	10.1	10.2	9.0	
		Life expectancy at birth (years)	82.7	82.7 b	82.8	83.0	83.2	83.3	83.2	83.6	83.1 b	83.5	83.4	
Healthy life years at birth (years) - women		58.6	57.7 b	58.1	58.7	58.7	57.9	57.0	56.5	67.5 b	67.3			
Early leavers from education and training (% of females aged 18-24)		11.9	11.2 b	10.7	11.0 b	10.7	9.9	9.3	8.9 b	9.8	9.5	9.0	9.1	
NEET: Young people neither in employment nor in education and training ( % of females aged 15-24)		10.2	9.5	9.4	9.0 b	8.3 b	7.9	7.0	7.2	7.0	7.4	6.7	6.5	
Children (0-17)	At-risk-of-poverty or social exclusion of children (% of people aged 0-17)	19.7	20.1	20.4	21.7	19.9	18.4	19.4	19.6	18.5	19.3	18.0		
	At-risk-of-poverty (% of Children population)	14.1	15.2	15.0	17.5	15.6	15.2	14.7	15.1	14.6	15.4	15.2		
	Severe Material Deprivation (% of Children population)	5.4	6.9	7.1	5.2	5.4	4.8	5.6	5.0	4.7	3.6	3.3	2.8 p	
	Share of children living in low work intensity households (% of Children population)	9.2	9.1	9.0	8.9	8.6	6.8	6.9	7.0	7.1	8.3	6.8		
	Risk of poverty of children in households at work (Working Intensity > 0.2)	9.2	9.6	9.7	11.7	10.5	10.8	11.3	11.8	10.6	11.1	11.4		
	Impact of social transfers (excl. pensions) in reducing poverty (0-17) (%)	53.6	50.3	50.8	46.7	52.7	50.7	51.7	50.0	53.4	52.8	50.7		
Working age (18-64)	At-risk-of-poverty or social exclusion (% of working age population)	21.9	21.5	21.1	20.8	21.3	21.2	22.0	22.0	21.3	20.2	19.6		
	At-risk-of-poverty (% of Working age population)	15.2	15.4	15.8	15.6	16.4	16.6	16.9	17.2	17.3	16.4	16.0		
	Severe Material Deprivation (% of Working age population)	5.5	6.1	5.8	5.2	6.0	5.5	6.0	5.6	5.0	4.0	3.8	3.7 p	
	Very low work intensity (18-59)	12.3	12.4	11.4	11.9	12.0	10.8	10.8	10.9	10.6	10.0	9.3		
	In-work at-risk-of poverty rate (% of persons employed 18-64)	7.4	7.1	6.8	7.1	7.7	7.7	8.6	9.9	9.6	9.5	9.0		
	Impact of social transfers (excl. pensions) in reducing poverty (18-64) (%)	40.4	38.2	36.3	37.4	37.2	34.1	33.7	33.9	33.5	35.4	34.2		
Elderly (65+)	At-risk-of-poverty or social exclusion of elderly (% of people aged 65+)	16.8	15.5	16.0	14.8	15.3	15.8	16.0	17.4	17.2	18.3	17.7		
	At-risk-of-poverty (% of Elderly population)	16.2	14.9	15.0	14.1	14.2	15.0	14.9	16.3	16.5	17.6	17.0		
	Severe Material Deprivation (% of Elderly population)	2.2	2.1	2.5	2.1	3.2	2.8	3.2	3.2	2.4	2.7	2.2	2.7 p	
	Relative median income of elderly (ratio with median income of people younger than 65)	0.87	0.87	0.88	0.89	0.90	0.88	0.89	0.90	0.87	0.84	0.85		
	Aggregate replacement ratio (ratio)	0.46	0.44	0.47	0.49	0.51	0.47	0.47	0.45	0.46	0.46	0.46		
Expenditure in social protection indicators (% of GDP)	Sickness/Health care	7.7	8.1	9.5	9.3	9.2	9.4	9.7	9.7	9.8 p	9.8 p			
	Disability	2.0	2.1	2.2	2.2	2.1	2.2	2.2	2.2	2.2 p	2.3 p			
	Old age and survivors	11.1	11.1	11.8	11.5	11.0	11.0	10.9	10.9	10.9 p	10.9 p			
	Family/Children	2.7	2.8	3.1	3.1	3.1	3.1	3.1	3.1	3.2 p	3.2 p			
	Unemployment	1.5	1.4	1.8	1.6	1.3	1.1	1.1	1.1	1.0 p	1.0 p			
	Housing and Social exclusion n.e.c.	0.8	0.7	0.8	0.8	0.8	0.7	0.8	0.8	0.8 p	1.0 p			
	Total (including Admin and Other expenditures)	26.8	27.2	30.6	29.9	28.7	28.8	29.1	29.0	29.2 p	29.4 p			
	of which: Means tested benefits	3.2	3.1	3.5	3.4	3.3	3.3	3.3	3.4	3.5 p	3.7 p			

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## Estonia

Estonia		2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018
Macro Economic Indicators (Annual % growth)	Real GDP	7.7	-5.4	-14.7	2.3	7.6	4.3	1.9	2.9	1.9	3.5	4.9	3.9
	Total employment	0.2	-0.2	-10.2	-4.9	6.5	1.6	1.2	0.8	2.9	0.3	2.7	1.2
	Labour productivity	7.5	-5.2	-5.0	7.6	1.0	2.6	0.7	2.1	-0.9	3.2	2.1	2.6
	Annual average hours worked per person employed	-0.1	-1.5	-6.9	2.3	2.4	-1.7	-1.1	-0.3	-0.4	0.2	0.1	-2.5
	Real productivity per hour worked	7.7	-3.7	2.0	5.1	-1.3	4.4	1.8	2.5	-0.5	3.0	2.0	5.2
	Harmonized CPI	6.7	10.6	0.2	2.7	5.1	4.2	3.2	0.5	0.1	0.8	3.7	3.4
	Price deflator GDP	11.5	7.5	0.4	1.7	5.3	3.2	3.6	3.0	1.0	1.5	3.9	4.6
	Nominal compensation per employee	25.6	10.6	-3.0	2.7	0.8	7.8	4.8	6.5	3.3	6.3	6.9	8.8
	Real compensation per employee (GDP deflator)	12.6	2.9	-3.4	0.9	-4.3	4.5	1.2	3.4	2.2	4.7	2.9	4.0
	Real compensation per employee (private consumption deflator)	17.6	0.0	-3.1	-0.1	-4.1	3.4	1.5	6.0	3.2	5.4	3.1	5.2
	Nominal unit labour costs	16.8	16.7	2.2	-4.6	-0.2	5.0	4.1	4.3	4.3	3.0	4.7	6.1
	Real unit labour costs	4.7	8.5	1.8	-6.2	-5.2	1.8	0.5	1.3	3.3	1.5	0.8	1.4
Labour Market Indicators - Total	Total population (000)	1343	1338	1336	1333	1330	1325	1320	1316	1315 b	1316	1316	1319
	Population aged 15-64 (000)	911	906	903	899	894	885	875	866	859 b	854	848	846
	Total employment (000)	658	656	594	568	603	615	621	625	641	645	659	665
	Employment aged 15-64 (000)	632	632	574	548	582	591	597	600	613	612	626	630
	Employment rate (% population aged 20-64)	76.9	77.1	70.0	66.8	70.6	72.2	73.3	74.3	76.5	76.6	78.7	79.5
	Employment rate (% population aged 15-64)	69.8	70.1	63.8	61.2	65.3	67.1	68.5	69.6	71.9	72.1	74.1	74.8
	Employment rate (% population aged 15-24)	34.1	35.9	28.3	25.3	31.1	32.3	32.4	33.3	36.3	37.5	40.5	41.7
	Employment rate (% population aged 25-54)	84.8	83.9	76.5	74.9	78.2	79.5	80.4	80.9	83.0	82.6	83.9	84.2
	Employment rate (% population aged 55-64)	59.9	62.3	60.3	53.8	57.5	60.5	62.6	64.0	64.5	65.2	68.1	68.9
	FTE employment rate (% population aged 20-64)	75.1	75.5	68.0	64.8	68.6	70.1	71.4	72.5	74.3	74.5	76.4	77.0
	Self-employed (% total employment)	8.9	7.7	8.2	8.3	8.5	8.6	8.9	8.9	9.2	9.4	10.0	10.5
	Part-time employment (% total employment)	7.1	6.4	9.4	9.8	9.3	9.2	8.9	8.3	9.5	9.9	9.5	11.1
	Temporary employment (% total employment)	2.0	2.3	2.2	3.4	4.1	3.2	3.2	2.8	3.1	3.4	2.8	3.1
	Employment in Services (% total employment)		60.4 bu	64.3 u	65.1 u	62.7	63.9	64.9	65.6	65.0	65.9	66.2	66.5
	Employment in Industry (% total employment)		35.8 bu	31.6 u	30.9 u	33.1	31.7	30.8	30.5	31.1	30.3	30.4	30.3
	Employment in Agriculture (% total employment)		3.9 b	4.0	4.1	4.2	4.4	4.3	3.9	3.9	3.9	3.4	3.2
	Activity rate (% population aged 15-64)	73.2	74.2	74.0	73.9	74.7	74.8	75.1	75.2	76.7	77.5	78.8	79.1
	Activity rate (% population aged 15-24)	37.9	40.8	39.0	37.8	40.0	40.8	39.8	39.2	41.8	43.3	46.1	47.3
	Activity rate (% population aged 25-54)	88.5	88.2	87.8	88.3	88.4	87.8	87.6	87.1	87.9	87.8	88.6	88.3
	Activity rate (% population aged 55-64)	62.2	65.0	66.5	64.3	65.1	65.1	66.6	67.7	68.7	71.0	72.2	72.9
	Total unemployment (000)	32	38 d	93	114	85	68	59	50	42	47	40	38
	Unemployment rate (% labour force)	4.6	5.5 d	13.5	16.7	12.3	10.0	8.6	7.4	6.2	6.8	5.8	5.4
	Youth unemployment rate (% labour force 15-24)	10.1	12.0 d	27.4	32.9	22.4	20.9	18.7	15.0	13.1	13.4	12.1	11.9
	Long term unemployment rate (% labour force)	2.3	1.7	3.7	7.6	7.1	5.5	3.8	3.3	2.4	2.1	1.9	1.3
	Share of long term unemployment (% of total unemployment)	49.8	31.1	27.3	45.3	57.3	54.7	44.5	45.3	38.3	31.6	33.5	24.9
	Youth unemployment ratio (% population aged 15-24)	3.8	4.9	10.7	12.4	9.0	8.5	7.4	5.9	5.5	5.8	5.6	5.6
	Employment rate for low skilled 25-64 (ISCED 0-2)	56.8	58.1	47.5	45.2	48.5	50.3	58.2	60.6 b	58.6	62.7	66.1	65.5
	Employment rate for medium skilled 25-64 (ISCED 3-4)	79.4	79.6	71.6	68.8	74.0	74.4	74.5	75.3 b	77.7	76.9	78.8	80.0
	Employment rate for high skilled 25-64 (ISCED 5-8)	87.3	85.8	82.7	79.7	79.9	82.3	83.0	84.0 b	85.7	84.9	85.7	85.1
	Employment rate (Nationals aged 15-64)	69.7	69.8	64.3	62.2	65.8	67.9	69.0	70.3	72.5	72.9	74.7	75.3
	Employment rate (Other EU28 aged 15-64)	64.0 u	80.4 u	69.2 u	62.6 u	58.8 u	59.3 u	63.2 u	77.5	57.8	70.4	78.6	72.2
	Employment rate (Other than EU28 aged 15-64)	70.3	71.1	61.3	56.1	62.6	63.4	65.4	64.8	68.4	67.2	70.6	71.7
	Employment rate (Born in the same country aged 15-64)	69.0	69.3	63.2	61.5	65.5	67.1	68.5	69.8	72.1	72.3	74.4	75.3
	Employment rate (Born in other EU28 aged 15-64)	76.2	77.2	74.0	61.4	61.9	59.2	62.6	71.7	66.8	71.8	76.4	68.6
	Employment rate (Born outside EU28 aged 15-64)	74.3	74.9	67.6	59.3	64.3	67.6	68.8	67.6	70.5	70.3	71.1	70.3
	Underemployment (% of labour force aged 15-74)		0.7	1.8	1.8	1.8	1.5	1.2	1.0	1.2	1.2	0.7	1.0
	Seeking but not available (% of labour force aged 15-74)				0.3 u	0.2 u	0.4 u	0.3 u	0.4 u	0.4	0.6	0.7	0.8
	Discouraged, available but not seeking (% of labour force aged 15-74)	4.2	3.4	5.4	6.0	6.4	6.0	5.1	4.8	4.1	4.7	4.2	4.4

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Estonia		2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018
Labour Market Indicators - Male	Total population (000)	624	622	621	621	620	618	616	615	615 b	617	618	621
	Population aged 15-64(000)	444	442	441	440	438	434	430	427	424 b	423	421	422
	Total employment (000)	335	334	291	278	303	309	315	320	328	329	338	342
	Employment aged 15-64 (000)	324	323	282	269	295	300	305	309	317	317	324	328
	Employment rate (% population aged 20-64)	81.4	81.5	71.0	67.8	73.5	75.1	76.7	78.3	80.5	80.8	82.4	83.4
	Employment rate (% population aged 15-64)	73.5	73.7	64.3	61.7	67.8	69.7	71.4	73.0	75.3	75.7	77.4	78.1
	Employment rate (% population aged 15-24)	38.2	38.9	30.0	26.5	33.1	34.2	34.0	33.4	39.4	38.8	42.8	43.5
	Employment rate (% population aged 25-54)	89.6	88.2	77.4	75.8	81.6	83.1	84.7	85.6	87.7	87.9	88.5	89.5
	Employment rate (% population aged 55-64)	59.0	64.7	59.3	51.9	57.2	59.2	61.4	65.1	63.1	63.7	66.6	65.9
	FTE employment rate (% population aged 20-64)	80.6	80.9	69.8	66.6	72.9	74.3	75.7	77.1	79.4	79.7	81.2	82.0
	Self-employed (% total employment)	12.5	10.6	11.4	11.5	11.9	12.3	12.1	12.2	11.9	12.1	13.6	14.2
	Part-time employment (% total employment)	3.9	3.6	6.2	6.1	5.0	5.1	5.5	5.7	6.0	6.8	6.0	7.2
	Temporary employment (% total employment)	2.4	3.1	2.7	4.4	5.0	4.1	3.6	2.9	3.4	3.4	2.9	3.1
	Employment in Services (% total employment)		46.5 bu		50.8 u	47.7 u	48.8 u	50.5 u	52.4 u	51.5 u	52.7 u	52.9 u	53.6
	Employment in Industry (% total employment)		48.2 bu		43.7 u	46.2 u	44.9 u	43.3 u	42.3 u	43.5 u	41.7 u	42.1 u	41.8
	Employment in Agriculture (% total employment)		5.4 b	5.6	5.6	6.1	6.3	6.2	5.3	5.1	5.6	5.0	4.6
	Activity rate (% population aged 15-64)	77.8	78.4	77.7	76.8	78.2	78.4	78.6	79.3	80.4	81.9	82.7	82.6
	Activity rate (% population aged 15-24)	43.5	44.5	43.8	41.2	43.4	44.3	41.4	41.4	45.7	46.1	49.7	49.6
	Activity rate (% population aged 25-54)	93.5	92.8	91.9	91.8	92.1	92.3	92.2	92.6	93.7	93.7	93.3	93.4
	Activity rate (% population aged 55-64)	63.4	68.3	67.3	64.3	67.0	65.3	66.9	69.1	67.7	70.4	72.0	70.9
	Total unemployment (000)	19	20 d	58	66	45	38	31	27	22	26	22	20
	Unemployment rate (% labour force)	5.4	5.8 d	16.7	19.3	13.1	10.9	9.1	7.9	6.2	7.4	6.2	5.4
	Youth unemployment rate (% labour force 15-24)	12.2	12.6 d	31.6	35.6	23.8	22.8	17.7	19.3	13.8	15.8	13.9	12.4
	Long term unemployment rate (% labour force)	2.9	2.0	4.4	9.3	7.9	6.1	4.2	3.9	2.5	2.4	2.2	1.5
	Share of long term unemployment (% of total unemployment)	53.3	35.5	26.6	48.3	60.5	55.5	46.6	50.2	40.8	32.8	36.0	27.2
	Youth unemployment ratio (% population aged 15-24)	5.3	5.6	13.8	14.7	10.3	10.1	7.3	8.0	6.3	7.3	6.9	6.1
	Employment rate for low skilled 25-64 (ISCED 0-2)	63.9	65.6	51.7	46.5	53.2	54.1	62.5	66.1 b	63.4	68.1	71.2	69.7
	Employment rate for medium skilled 25-64 (ISCED 3-4)	84.7	83.8	72.8	71.9	78.1	79.1	79.4	81.3 b	82.9	81.8	83.0	84.5
	Employment rate for high skilled 25-64 (ISCED 5-8)	91.5	92.4	87.3	81.1	84.3	86.2	87.6	89.5 b	91.0	91.3	91.1	90.6
	Employment rate (Nationals aged 15-64)	72.6	73.2	65.1	62.5	67.9	69.6	71.5	72.9	75.4	75.8	77.3	78.6
	Employment rate (Other EU28 aged 15-64)		93.1 u	66.1 u	59.8 u	54.9 u	68.6 u		83.2 u	76.5 u	89.0	83.1	75.0
	Employment rate (Other than EU28 aged 15-64)	77.3	75.8	61.2	58.1	67.7	69.8	70.6	72.7	74.9	74.5	77.5	76.2
	Employment rate (Born in the same country aged 15-64)	72.9	72.8	63.8	61.9	67.5	69.5	71.3	72.8	75.3	75.5	77.4	78.6
	Employment rate (Born in other EU28 aged 15-64)	88.2 u	94.2 u	75.5 u	58.8 u	51.6 u	58.2 u	52.9 u	73.6	73.9	79.3	77.6	70.8
	Employment rate (Born outside EU28 aged 15-64)	77.1	79.6	68.1	60.7	71.0	71.8	73.1	74.7	75.8	76.5	77.5	74.5
	Underemployment (% of labour force aged 15-74)		0.6 u	1.7	1.3	1.0	1.1	1.0	0.9	0.8	1.0	0.5 u	1.0
	Seeking but not available (% of labour force aged 15-74)									0.4 u	0.6 u	0.6 u	0.6 u
	Discouraged, available but not seeking (% of labour force aged 15-74)	4.3	3.5	5.5	5.7	6.1	6.0	4.7	4.3	3.5	4.5	3.9	4.1
Labour Market Indicators - Female	Total population (000)	719	716	714	712	710	707	704	701	700 b	699	698	698
	Population aged 15-64(000)	467	464	462	459	456	451	445	439	435 b	431	426	424
	Total employment (000)	323	322	303	290	301	306	307	305	313	315	321	322
	Employment aged 15-64 (000)	309	309	292	279	287	291	292	291	296	295	302	302
	Employment rate (% population aged 20-64)	72.6	72.9	69.0	65.9	67.8	69.4	70.1	70.6	72.6	72.6	75.1	75.6
	Employment rate (% population aged 15-64)	66.2	66.6	63.2	60.8	63.0	64.7	65.7	66.3	68.5	68.6	70.9	71.4
	Employment rate (% population aged 15-24)	29.8	32.9	26.7	24.1	29.0	30.3	30.7	33.3	33.1	36.1	38.2	39.9
	Employment rate (% population aged 25-54)	80.1	79.7	75.7	74.0	75.0	75.8	76.1	76.1	78.2	77.2	79.2	78.7
	Employment rate (% population aged 55-64)	60.7	60.5	61.1	55.3	57.8	61.5	63.6	63.1	65.7	66.5	69.3	71.5
	FTE employment rate (% population aged 20-64)	70.1	70.6	66.3	63.3	64.7	66.3	67.3	68.1	69.5	69.6	71.9	72.1
	Self-employed (% total employment)	5.2	4.7	5.1	5.2	5.0	4.8	5.6	5.5	6.4	6.6	6.3	6.6
	Part-time employment (% total employment)	10.6	9.4	12.6	13.4	13.8	13.3	12.4	11.2	13.4	13.3	13.3	15.3
	Temporary employment (% total employment)	1.5	1.4	1.8	2.5	3.3	2.3	2.7	2.8	2.8	3.3	2.7	3.1
	Employment in Services (% total employment)												
	Employment in Industry (% total employment)												
	Employment in Agriculture (% total employment)		2.3 b	2.6	2.6	2.3	2.5	2.3	2.3	2.6		1.8	1.6
	Activity rate (% population aged 15-64)	68.9	70.3	70.6	71.1	71.5	71.4	71.8	71.3	73.0	73.2	75.1	75.6
	Activity rate (% population aged 15-24)	32.1	37.1	34.1	34.3	36.5	37.2	38.2	37.0	37.7	40.4	42.4	45.0
	Activity rate (% population aged 25-54)	83.6	83.7	83.8	84.8	84.7	83.5	82.9	82.0	83.0	81.8	83.7	83.0
	Activity rate (% population aged 55-64)	61.2	62.4	66.0	64.3	63.5	65.0	66.5	66.5	69.4	71.4	72.4	74.6
	Total unemployment (000)	13	17 d	35	48	39	31	27	22	20	20	18	18
	Unemployment rate (% labour force)	3.8	5.1 d	10.3	14.1	11.6	9.1	8.2	6.8	6.1	6.1	5.3	5.3
	Youth unemployment rate (% labour force 15-24)	7.2	11.3 d	21.8	29.5	20.7	18.5	19.8	10.0	12.2	10.6	10.0	11.3
	Long term unemployment rate (% labour force)	1.7	1.3	2.9	5.8	6.2	4.9	3.4	2.7	2.2	1.8	1.6	1.2
	Share of long term unemployment (% of total unemployment)	44.4	26.1	28.6	41.1	53.7	53.6	42.1	39.4	35.7	30.1	30.3	22.5
	Youth unemployment ratio (% population aged 15-24)	2.3	4.2	7.4	10.1	7.5	6.9	7.5	3.7	4.6	4.3	4.2	5.1
	Employment rate for low skilled 25-64 (ISCED 0-2)	47.3	48.9	41.4	43.3	41.3	44.3	50.7	50.0 b	50.7	52.6	56.3	57.7
	Employment rate for medium skilled 25-64 (ISCED 3-4)	73.5	74.8	70.2	65.1	69.3	68.8	68.7	68.4 b	71.3	70.8	73.5	74.1
	Employment rate for high skilled 25-64 (ISCED 5-8)	84.7	82.0	80.2	78.9	77.3	80.0	80.3	80.8 b	82.7	81.1	82.5	81.8
	Employment rate (Nationals aged 15-64)	67.0	66.9	63.5	62.0	63.9	66.2	66.8	67.9	69.8	70.2	72.2	72.3
	Employment rate (Other EU28 aged 15-64)							59.3 u	70.6 u			71.0 u	68.0 u
	Employment rate (Other than EU28 aged 15-64)	62.5	65.5	61.4	53.9	56.7	55.8	59.2	55.7	60.3	58.7	61.4	64.9
	Employment rate (Born in the same country aged 15-64)	65.2	66.1	62.6	61.2	63.5	64.8	65.7	66.8	68.9	69.1	71.5	72.0
	Employment rate (Born in other EU28 aged 15-64)	67.9 u			65.6 u	75.5 u	60.3 u	69.7 u	69.8	60.4 u	61.1 u	74.9	65.9 u
	Employment rate (Born outside EU28 aged 15-64)	72.1	70.8	67.1	58.2	58.9	64.6	65.7	61.9	65.8	65.4	65.4	66.6
	Underemployment (% of labour force aged 15-74)		0.8 u	1.9	2.3	2.6	1.9	1.4	1.1	1.7	1.5	0.8	1.1
	Seeking but not available (% of labour force aged 15-74)				0.5 u	0.3 u	0.6 u	0.4 u	0.5 u	0.5 u	0.7 u	0.9	1.0
	Discouraged, available but not seeking (% of labour force aged 15-74)	4.0	3.2	5.3	6.2	6.7	6.0	5.5	5.2	4.6	5.1	4.6	4.7

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Estonia			2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018
Social Indicators	All	At-risk-of-poverty or social exclusion (% of total population)	22.0	21.8	23.4	21.7	23.1	23.4	23.5	26.0 b	24.2	24.4	23.4	
		At-risk-of-poverty (% of total population)	19.4	19.5	19.7	15.8	17.5	17.5	18.6	21.8	21.6	21.7	21.0	
		At-risk-of-poverty threshold (PPS single person)	3895	4538	4861	4448	4491	4734	5164	5545 b	6259	7120	7501	
		Poverty gap (%)	20.2	20.3	17.0	23.2	26.0	23.8	21.5	22.0 b	21.0	20.5	20.7	
		Persistent at-risk-of-poverty (% of total population)	11.1	13.6	12.9	9.9	10.5	12.0	9.3	11.2 b	13.1	13.5	16.1	
		At-risk-of-poverty before social transfers excl. pensions (% of total population)	25.2	24.7	25.9	24.9	24.9	24.8	25.4	28.4 b	27.8	28.9	28.9	
		Impact of social transfers (excl. pensions) in reducing poverty (%)	23.0	21.1	23.9	36.6	29.7	29.4	26.8	23.2 b	22.3	24.9	27.3	
		Severe Material Deprivation (% of total population)	5.6	4.9	6.2	9.0	8.7	9.4	7.6	6.2	4.5	4.7	4.1	3.8 p
		Share of people living in low work intensity households (% of people aged 0-59)	6.2	5.3	5.6	9.0	10.0	9.1	8.4	7.6 b	6.6	5.8	5.8	
		Real Gross Household Disposable income (growth %)	11.1	4.6	-8.9	-4.0	3.0	3.1	2.5	4.2	5.5	4.0		
		Income quintile share ratio S80/S20	5.5	5.0	5.0	5.0	5.3	5.4	5.5	6.5 b	6.2	5.6	5.4	
		GINI coefficient	33.4	30.9	31.4	31.3	31.9	32.5	32.9	35.6 b	34.8	32.7	31.6	
		Early leavers from education and training (% of population aged 18-24)	14.4	14.0	13.5 b	11.0	10.6	10.3	9.7	12.0 b	12.2	10.9	10.8	11.3
		NEET: Young people neither in employment nor in education and training (% of total population aged 15-24)	9.4	9.1	14.5	14.0	11.6	12.2	11.3	11.7	10.8	9.1	9.4	9.8
	Male	At-risk-of-poverty or social exclusion (% of male population)	19.4	18.9	21.1	21.5	23.2	22.3	22.5	24.5 b	22.2	21.9	21.0	
		At-risk-of-poverty (% of male population)	16.7	16.5	17.5	15.4	17.6	16.8	17.2	20.1	19.6	19.2	18.4	
		Poverty gap (%)	24.2	23.8	20.7	25.9	27.9	27.6	27.4	29.4 b	28.3	26.3	26.9	
		Persistent at-risk-of-poverty (% of male population)	9.5	10.1	11.5	7.8	9.9	11.6	8.6	11.0 b	11.5	11.4	13.5	
		Severe Material Deprivation (% of male population)	5.4	4.8	6.2	9.3	8.8	9.5	8.1	6.2	4.3	4.6	3.6	3.7 p
		Share of people living in low work intensity households (% of males aged 0-59)	6.6	6.0	6.5	9.7	10.9	9.6	9.5	8.6 b	7.3	6.6	6.6	
		Life expectancy at birth (years)	67.5	68.9 b	69.8	70.9	71.4	71.4	72.8	72.4	73.2	73.3	73.8	
		Healthy life years at birth (years) - men	49.8	53.1 b	55.0	54.2	54.3	53.1	53.9	53.2	53.8	54.4	54.7	
		Early leavers from education and training (% of males aged 18-24)	21.4	19.8	17.9 b	14.4	12.8	13.3	13.6	16.0 b	14.2	14.3	14.2	16.1
		NEET: Young people neither in employment nor in education and training (% of males aged 15-24)	8.8	8.5	14.4	14.6	11.8	11.2	10.8	11.7	9.0	6.8	8.4	10.8
	Female	At-risk-of-poverty or social exclusion (% of female population)	24.2	24.3	25.5	22.0	22.9	24.4	24.4	27.3 b	26.0	26.7	25.6	
		At-risk-of-poverty (% of female population)	21.7	22.0	21.6	16.2	17.4	18.1	19.9	23.3	23.3	24.0	23.3	
		Poverty gap (%)	18.4	19.3	15.5	20.0	24.0	21.8	16.9	17.5 b	16.9	18.0	18.9	
		Persistent at-risk-of-poverty (% of female population)	12.5	16.5	13.9	11.7	11.0	12.3	9.9	11.4 b	14.4	15.5	18.4	
		Severe Material Deprivation (% of female population)	5.8	4.9	6.3	8.7	8.6	9.3	7.1	6.2	4.7	4.8	4.5	3.8 p
		Share of people living in low work intensity households (% of females aged 0-59)	5.8	4.7	4.8	8.3	9.2	8.6	7.3	6.5 b	5.9	5.0	4.8	
		Life expectancy at birth (years)	78.9	79.5 b	80.2	80.8	81.3	81.5	81.7	81.9	82.2	82.2	82.6	
		Healthy life years at birth (years) - women	54.9	57.5 b	59.2	58.2	57.9	57.2	57.1	57.1	56.2	59.0	57.2	
Early leavers from education and training (% of females aged 18-24)		7.2	8.3	9.1 b	7.6	8.4	7.3	5.8	7.9 b	10.0	7.4	7.3	6.4	
NEET: Young people neither in employment nor in education and training (% of females aged 15-24)		10.1	9.7	14.5	13.5	11.4	13.2	11.8	11.6	12.8	11.6	10.5	8.9	
Children (0-17)	At-risk-of-poverty or social exclusion of children (% of people aged 0-17)	20.1	19.4	24.5	24.0	24.8	22.4	22.3	23.8 b	22.5	21.2	18.8		
	At-risk-of-poverty (% of Children population)	18.2	17.1	20.6	17.3	19.5	17.0	18.1	19.7	20.0	18.6	16.5		
	Severe Material Deprivation (% of Children population)	4.1	5.3	7.0	10.7	9.1	9.2	7.0	5.7	3.9	4.0	3.4	3.5 p	
	Share of children living in low work intensity households (% of Children population)	4.6	3.8	4.5	8.4	9.2	6.9	6.6	6.5 b	5.2	3.8	4.0		
	Risk of poverty of children in households at work (Working Intensity > 0.2)	14.4	14.3	17.8	12.1	13.7	12.8	13.4	16.1 b	16.6	16.2	14.1		
	Impact of social transfers (excl. pensions) in reducing poverty (0-17) (%)	35.5	35.0	30.6	44.4	35.9	40.6	34.2	30.9 b	31.0	38.6	45.6		
Working age (18-64)	At-risk-of-poverty or social exclusion (% of working age population)	19.1	17.5	19.9	21.8	24.2	24.2	22.7	24.0 b	21.0	20.3	19.2		
	At-risk-of-poverty (% of Working age population)	16.1	15.0	15.8	15.6	18.0	17.7	17.3	19.4	17.9	17.1	16.2		
	Severe Material Deprivation (% of Working age population)	5.5	4.5	6.1	9.1	9.3	10.0	8.0	6.3	4.4	4.7	3.7	3.6 p	
	Very low work intensity (18-59)	6.8	5.8	5.9	9.1	10.3	9.8	9.0	7.9 b	7.0	6.5	6.4		
	In-work at-risk-of poverty rate (% of persons employed 18-64)	7.9	7.4	8.3	6.7	8.2	8.5	7.7	11.8 b	10.3	9.9	9.7		
	Impact of social transfers (excl. pensions) in reducing poverty (18-64) (%)	25.1	24.6	28.2	37.6	30.2	28.9	28.8	25.7 b	26.3	29.6	32.5		
Elderly (65+)	At-risk-of-poverty or social exclusion of elderly (% of people aged 65+)	35.4	40.9	35.6	19.0	17.0	21.8	28.0	35.0 b	37.0	41.4	42.0		
	At-risk-of-poverty (% of Elderly population)	33.2	39.0	33.9	15.1	13.1	17.2	24.4	32.6	35.8	40.2	41.2		
	Severe Material Deprivation (% of Elderly population)	7.9	5.8	5.6	6.6	5.8	7.1	6.3	6.4	5.2	5.4	6.0	4.4 p	
	Relative median income of elderly (ratio with median income of people younger than 65)	0.65	0.62	0.66	0.73	0.75	0.72	0.69	0.63 b	0.62	0.60	0.59		
	Aggregate replacement ratio (ratio)	0.47	0.45	0.52	0.55	0.54	0.50	0.50	0.47 b	0.43	0.45	0.45		
	Sickness/Health care	4.0	4.7	5.3	4.7	4.3	4.2	4.1	4.3	4.5	4.9			
Expenditure in social protection indicators (% of GDP)	Disability	1.1	1.4	1.8	1.9	1.8	1.7	1.8	1.7	1.8	1.9			
	Old age and survivors	5.2	6.2	7.9	7.7	6.8	6.6	6.6	6.5	7.0	6.9			
	Family/Children	1.4	1.7	2.2	2.2	1.9	1.7	1.6	1.6	2.0	2.1			
	Unemployment	0.1	0.3	1.2	0.7	0.5	0.5	0.5	0.4	0.4	0.5			
	Housing and Social exclusion n.e.c.	0.1	0.1	0.1	0.2	0.2	0.2	0.1	0.1	0.1	0.2			
	Total (including Admin and Other expenditures)	12.0	14.7	18.8	17.6	15.6	15.0	14.8	14.9	16.1	16.6			
	of which: Means tested benefits	0.1	0.1	0.1	0.1	0.2	0.1	0.1	0.1	0.1	0.2			

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## Ireland

Ireland		2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018
Macro Economic Indicators (Annual % growth)	Real GDP	5.3	-4.4	-5.0	1.9	3.7	0.2	1.3	8.8	25.1	5.0	7.2	6.7
	Total employment	4.4	-0.6	-7.8	-4.5	-1.9 b	-0.5	3.0	2.7	3.5	3.8	2.9	3.5
	Labour productivity	0.9	-3.8	3.1	6.7	5.8 b	0.7	-1.6	6.0	20.9	1.2	4.2	3.0
	Annual average hours worked per person employed	-0.7	-1.1	-1.7	-6.4	0.5 b	0.4 b	0.2	0.7	0.5	-0.1	0.2	2.7
	Real productivity per hour worked	1.6	-2.7	4.9	14.0	5.2 b	0.3	-1.8	5.3	20.2	1.3	4.0	0.3
	Harmonized CPI	2.9	3.1	-1.7	-1.6	1.2	1.9	0.5	0.3	0.0	-0.2	0.3	0.7
	Price deflator GDP	1.2	-0.4	-4.6	-3.3	-1.6	2.2	1.3	-0.2	7.4	-0.8	0.4	1.5
	Nominal compensation per employee	5.8	3.9	-1.1	-2.0	0.3 b	1.0 b	-0.5	0.6	2.6	2.1	0.9	2.9
	Real compensation per employee (GDP deflator)	4.5	4.4	3.7	1.3	1.9 b	-1.2 b	-1.8	0.9	-4.5	2.9	0.5	1.3
	Real compensation per employee (private consumption deflator)	2.8	0.7	0.6	-0.4	-1.0 b	-0.9 b	-1.0	0.3	2.6	2.3	0.6	2.2
	Nominal unit labour costs	4.8	8.0	-4.1	-8.2	-5.2 b	0.3	1.1	-5.1	-15.2	0.9	-3.2	-0.2
	Real unit labour costs	3.6	8.4	0.6	-5.1	-3.6 b	-1.8 b	-0.2	-4.9	-21.1	1.8	-3.6	-1.6
Labour Market Indicators - Total	Total population (000)	4340	4458	4521	4549	4571	4589	4610	4638	4678	4726	4784	4830
	Population aged 15-64 (000)	2992	3070	3094	3086	3072	3058	3053	3057	3071	3097	3129	3155
	Total employment (000)	2221 b	2199	2015	1926	1888	1881	1938	1989	2057	2132	2194 b	2258
	Employment aged 15-64 (000)	2177 b	2152	1970	1879	1840	1831	1885	1933	1995	2066	2125 b	2180
	Employment rate (% population aged 20-64)	75.1 b	73.5	68.0	65.5	64.6	64.5	66.5	68.1	69.9	71.4	73.0	74.1
	Employment rate (% population aged 15-64)	71.7 b	69.7	63.6	61.0	60.0	59.9	61.7	63.1	64.8	66.4	67.7	68.6
	Employment rate (% population aged 15-24)	63.0 b	57.1	45.3	38.7	36.2	34.8	36.6	36.8	37.8	42.0	40.0	40.3
	Employment rate (% population aged 25-54)	78.6 b	77.3	72.2	70.2	69.1	69.4	71.3	73.1	74.7	75.8	78.0	79.2
	Employment rate (% population aged 55-64)	53.8 b	53.8	51.2	50.2	50.1	49.3	51.2	52.6	55.4	56.8	58.4	60.4
	FTE employment rate (% population aged 20-64)	69.5 b	67.7	61.6	58.7	57.6	57.4	59.4	61.2	63.1	64.6	66.5 b	67.6
	Self-employed (% total employment)	15.5 b	16.0	16.6	16.3	16.1	16.0	16.2	16.0	15.7	15.4	14.8 b	14.5
	Part-time employment (% total employment)	17.9 b	18.7	21.3	22.4	23.3	23.7	23.7	23.0	22.2	21.9	20.1	19.5
	Temporary employment (% total employment)	7.8 b	7.8	7.9	8.5	9.1	9.1	9.0	8.6	8.1	7.6	7.8 b	8.6
	Employment in Services (% total employment)		72.0 b	75.2	76.8	77.5	77.9	77.6	77.9	77.2	76.8	76.8 b	77.2
	Employment in Industry (% total employment)		23.5 b	20.0	18.2	17.7	17.2	17.5	17.6	18.4	18.8	19.0 b	19.0
	Employment in Agriculture (% total employment)		4.5 b	4.8	5.0	4.9	4.9	4.9	4.6	4.5	4.4	4.2 b	3.8
	Activity rate (% population aged 15-64)	75.6 b	74.8	73.0	71.6	71.2	71.1	71.8	71.8	72.1	72.7	72.7	72.9
	Activity rate (% population aged 15-24)	69.4 b	66.0	60.1	53.9	51.4	50.3	49.9	48.1	47.4	50.5	46.7	46.7
	Activity rate (% population aged 25-54)	82.1 b	82.0	81.2	80.7	80.5	80.7	81.3	81.8	82.0	82.0	82.9	83.2
	Activity rate (% population aged 55-64)	55.2 b	55.7	54.8	55.1	55.5	55.1	57.4	58.2	60.2	60.7	62.0	63.3
	Total unemployment (000)	116	160	291	327	343	344	309	268	226	195	158	137
	Unemployment rate (% labour force)	5.0	6.8	12.6	14.6	15.4	15.5	13.8	11.9	10.0	8.4	6.7	5.8
	Youth unemployment rate (% labour force 15-24)	9.2	13.5	24.5	28.1	29.6	30.8	26.7	23.4	20.2	16.8	14.4	13.8
	Long term unemployment rate (% labour force)	1.4 b	1.7	3.5	6.9	8.8	9.2	8.0	6.6	5.3	4.2	3.0	2.1
	Share of long term unemployment (% of total unemployment)	28.2 b	25.0	27.9	47.3	56.8	59.3	57.7	55.1	53.6	50.5	44.9	36.3
	Youth unemployment ratio (% population aged 15-24)	6.4 b	8.9	14.7	15.2	15.2	15.5	13.3	11.3	9.6	8.5	6.7 b	6.4
	Employment rate for low skilled 25-64 (ISCED 0-2)	58.1 b	56.5	50.2	47.3	45.4	43.7	46.5	47.0 b	49.3	49.9	51.3 b	52.3
	Employment rate for medium skilled 25-64 (ISCED 3-4)	76.4 b	74.8	68.8	65.5	63.9	64.4	65.2	67.0 b	68.1	70.1	71.5 b	73.6
	Employment rate for high skilled 25-64 (ISCED 5-8)	86.9 b	85.5	82.4	81.2	80.8	80.5	80.8	81.1 b	82.5	82.9	84.7 b	85.0
	Employment rate (Nationals aged 15-64)	71.1 b	69.1	63.4	61.0	59.9	59.8	61.5	63.0	64.7	66.1	67.1 b	67.9
	Employment rate (Other EU28 aged 15-64)	78.9 b	75.1	66.8	63.5	63.1	63.8	66.3	67.3	68.7	72.0	73.8 b	75.5
	Employment rate (Other than EU28 aged 15-64)	66.9 b	66.5	59.1	54.7	55.6	53.1	53.2	52.9	54.1	58.7	60.6 b	64.8
	Employment rate (Born in the same country aged 15-64)	71.1 b	69.1	63.6	61.1	60.0	59.9	61.6	63.1	64.7	66.2	67.2 b	68.0
	Employment rate (Born in other EU28 aged 15-64)	77.2 b	73.6	65.4	62.4	61.7	62.1	64.8	65.9	67.8	70.8	72.2 b	74.0
	Employment rate (Born outside EU28 aged 15-64)	67.3 b	67.3	59.5	55.8	56.0	55.4	56.4	57.2	58.5	60.5	62.4 b	64.2
	Underemployment (% of labour force aged 15-74)			4.9	5.1	6.3	6.8	6.8	5.9	5.1	4.6	4.5	4.8
	Seeking but not available (% of labour force aged 15-74)	0.3 b	0.3	0.4	0.5	0.5	0.5	0.7	0.7	0.6	0.5	0.5	0.5
	Discouraged, available but not seeking (% of labour force aged 15-74)	0.5 b	0.6	1.4	1.7	1.9	1.9	1.7	1.3	1.0	0.9	2.6 b	4.5

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Ireland		2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018
Labour Market Indicators - Male	Total population (000)	2173	2227	2253	2261	2269	2274	2283	2296	2313	2339	2368	2392
	Population aged 15-64(000)	1514	1548	1553	1542	1532	1521	1517	1517	1521	1535	1550	1564
	Total employment (000)	1265 b	1232	1091	1032	1009	1003	1045	1077	1116	1153	1187 b	1221
	Employment aged 15-64 (000)	1232 b	1197	1058	998	975	967	1007	1038	1072	1108	1137 b	1167
	Employment rate (% population aged 20-64)	84.2 b	81.4	73.1	69.9	68.9	68.8	71.8	74.1	76.1	77.5	79.1	80.3
	Employment rate (% population aged 15-64)	80.4 b	77.0	68.2	64.9	63.8	63.7	66.4	68.4	70.3	71.8	73.0	74.1
	Employment rate (% population aged 15-24)	66.8 b	58.5	42.9	36.5	34.2	32.5	36.0	36.9	38.3	42.2	40.2	41.2
	Employment rate (% population aged 25-54)	87.8 b	85.6	77.9	75.2	74.1	74.6	77.0	79.4	81.1	82.3	84.5	85.7
	Employment rate (% population aged 55-64)	67.6 b	66.1	60.8	57.8	56.7	55.4	58.8	60.9	64.6	65.1	66.6	68.6
	FTE employment rate (% population aged 20-64)	83.0 b	79.9	70.5	66.8	65.4	65.0	68.0	70.3	72.6	74.0	76.1 b	77.2
	Self-employed (% total employment)	22.4 b	23.2	24.7	24.2	23.9	23.7	23.5	23.3	22.6	22.0	21.2 b	20.5
	Part-time employment (% total employment)	7.4 b	8.2	10.9	12.0	13.0	13.9	14.0	13.7	12.9	12.9	10.9	10.6
	Temporary employment (% total employment)	6.2 b	6.2	6.4	7.3	8.0	8.1	8.3	7.7	7.4	6.7	7.0 b	7.7
	Employment in Services (% total employment)	58.7 b	58.7 b	63.1	65.4	66.5	67.3	67.2	67.4	66.1	65.7	65.4 b	65.8
	Employment in Industry (% total employment)	34.4 b	29.3	26.6	25.6	24.7	25.0	25.3	26.8	27.2	28.0 b	28.1	
	Employment in Agriculture (% total employment)	6.9 b	7.6	7.9	8.0	8.0	7.9	7.2	7.1	7.1	6.6 b	6.0	
	Activity rate (% population aged 15-64)	84.7 b	83.5	80.7	78.7	78.0	77.8	78.3	78.6	79.0	79.2	78.8	78.8
	Activity rate (% population aged 15-24)	74.5 b	70.0	62.7	56.0	53.6	51.9	51.6	50.2	50.1	52.6	47.8	48.4
	Activity rate (% population aged 25-54)	91.6 b	91.3	89.7	88.9	88.3	88.6	88.8	89.5	89.6	89.4	90.1	90.0
	Activity rate (% population aged 55-64)	69.2 b	68.6	65.7	64.3	64.1	63.6	66.8	68.0	70.7	70.1	70.8	72.1
	Total unemployment (000)	67	101	194	212	217	215	182	156	134	114	90	75
	Unemployment rate (% labour force)	5.0	7.6	15.1	17.2	17.8	17.8	14.9	12.7	10.8	9.1	7.1	5.8
	Youth unemployment rate (% labour force 15-24)	10.2	16.5	31.6	34.8	36.1	37.4	30.3	26.6	23.6	19.7	16.1	14.8
	Long term unemployment rate (% labour force)	1.7 b	2.2	4.7	9.0	11.2	11.7	9.6	7.8	6.4	5.1	3.5	2.3
	Share of long term unemployment (% of total unemployment)	33.1 b	28.4	31.0	52.5	62.9	65.9	64.4	61.0	59.3	56.3	48.7	40.1
	Youth unemployment ratio (% population aged 15-24)	7.6 b	11.5	19.8	19.5	19.4	19.4	15.6	13.3	11.8	10.3	7.7 b	7.2
	Employment rate for low skilled 25-64 (ISCED 0-2)	72.6 b	69.2	60.3	56.5	53.8	52.1	56.3	58.5 b	61.6	61.6	62.9 b	64.6
	Employment rate for medium skilled 25-64 (ISCED 3-4)	88.7 b	86.3	76.7	72.6	71.0	71.7	73.1	75.8 b	77.2	79.5	81.3 b	82.9
	Employment rate for high skilled 25-64 (ISCED 5-8)	91.9 b	90.8	86.8	85.0	84.9	84.8	85.6	85.9 b	87.3	87.7	89.4 b	89.7
	Employment rate (Nationals aged 15-64)	79.7 b	76.4	67.8	64.6	63.3	63.2	65.8	67.8	69.7	70.9	72.0 b	72.8
	Employment rate (Other EU28 aged 15-64)	86.9 b	82.3	72.2	68.7	68.2	68.8	72.7	74.6	77.3	80.2	81.0 b	82.7
	Employment rate (Other than EU28 aged 15-64)	76.6 b	76.2	66.7	61.6	63.4	60.4	61.5	61.9	62.3	69.3	70.8 b	76.5
	Employment rate (Born in the same country aged 15-64)	79.7 b	76.3	67.8	64.6	63.5	63.2	65.7	67.8	69.8	70.9	72.1 b	72.8
	Employment rate (Born in other EU28 aged 15-64)	85.7 b	81.4	70.8	67.3	66.0	66.6	71.4	72.5	75.2	78.2	78.6 b	80.5
	Employment rate (Born outside EU28 aged 15-64)	76.8 b	76.3	67.1	62.8	63.3	62.9	64.1	66.2	65.7	70.0	71.6 b	74.2
	Underemployment (% of labour force aged 15-74)			3.8	4.0	5.0	5.5	5.5	5.0	4.4	3.9	3.5	3.8
	Seeking but not available (% of labour force aged 15-74)	0.3 b	0.3	0.4	0.6	0.6	0.6	0.7	0.7	0.6	0.5	0.4	0.5
	Discouraged, available but not seeking (% of labour force aged 15-74)	0.5 b	0.7	1.7	2.2	2.3	2.1	1.9	1.4	1.0	1.0	2.3 b	3.9
Labour Market Indicators - Female	Total population (000)	2167	2231	2269	2288	2301	2315	2326	2342	2364	2387	2416	2438
	Population aged 15-64(000)	1478	1522	1541	1544	1540	1537	1536	1540	1550	1562	1579	1591
	Total employment (000)	956 b	967	925	894	880	878	893	911	941	979	1008 b	1036
	Employment aged 15-64 (000)	945 b	955	912	881	866	864	878	895	923	959	988 b	1013
	Employment rate (% population aged 20-64)	65.8 b	65.4	62.9	61.1	60.2	60.2	61.3	62.3	63.8	65.4	67.0	68.1
	Employment rate (% population aged 15-64)	62.9 b	62.2	59.0	57.1	56.3	56.2	57.1	58.0	59.3	61.1	62.4	63.3
	Employment rate (% population aged 15-24)	59.1 b	55.6	47.8	40.9	38.2	37.1	37.1	36.7	37.3	41.7	39.7	39.3
	Employment rate (% population aged 25-54)	69.2 b	69.0	66.5	65.2	64.3	64.4	65.7	67.0	68.5	69.6	71.7	72.9
	Employment rate (% population aged 55-64)	39.9 b	41.2	41.5	42.6	43.4	43.1	43.7	44.4	46.4	48.5	50.3	52.3
	FTE employment rate (% population aged 20-64)	56.7 b	56.3	53.6	51.6	50.8	50.9	51.7	53.1	54.8	56.3	58.1 b	59.0
	Self-employed (% total employment)	6.4 b	6.9	7.0	7.3	7.2	7.1	7.5	7.5	7.5	7.7	7.3 b	7.3
	Part-time employment (% total employment)	31.6 b	31.8	33.4	34.2	35.0	34.7	34.9	33.7	33.1	32.4	30.6	29.9
	Temporary employment (% total employment)	9.9 b	9.8	9.6	9.9	10.3	10.2	9.8	9.6	8.9	8.5	8.7 b	9.6
	Employment in Services (% total employment)												
	Employment in Industry (% total employment)												
	Employment in Agriculture (% total employment)		1.6 b	1.5	1.7	1.4	1.5	1.5	1.5	1.4	1.3	1.4 b	1.2
	Activity rate (% population aged 15-64)	66.2 b	66.0	65.3	64.5	64.4	64.5	65.4	65.2	65.2	66.3	66.6	67.1
	Activity rate (% population aged 15-24)	64.2 b	61.9	57.4	51.7	49.1	48.6	48.1	45.8	44.6	48.3	45.5	45.0
	Activity rate (% population aged 25-54)	72.4 b	72.5	72.6	72.6	72.7	73.0	74.1	74.4	74.6	74.9	75.9	76.7
	Activity rate (% population aged 55-64)	40.9 b	42.5	43.8	45.7	46.8	46.7	48.2	48.5	49.7	51.4	53.4	54.6
	Total unemployment (000)	50	58	97	115	126	128	127	111	92	81	68	63
	Unemployment rate (% labour force)	4.9	5.7	9.5	11.4	12.5	12.8	12.4	10.9	8.9	7.6	6.3	5.7
	Youth unemployment rate (% labour force 15-24)	7.9	10.1	16.8	20.9	22.3	23.6	22.8	19.8	16.3	13.6	12.6	12.6
	Long term unemployment rate (% labour force)	1.1 b	1.1	2.1	4.3	5.8	6.1	6.0	5.1	4.0	3.2	2.5	1.8
	Share of long term unemployment (% of total unemployment)	21.7 b	19.2	21.8	37.7	46.4	48.1	48.2	46.8	45.2	42.3	39.8	31.6
	Youth unemployment ratio (% population aged 15-24)	5.1 b	6.2	9.6	10.8	11.0	11.5	11.0	9.1	7.3	6.5	5.7 b	5.7
	Employment rate for low skilled 25-64 (ISCED 0-2)	40.5 b	40.6	37.7	35.9	35.1	33.3	34.1	32.2 b	33.6	34.3	35.3 b	35.4
	Employment rate for medium skilled 25-64 (ISCED 3-4)	64.4 b	63.6	61.2	58.5	56.9	57.1	57.1	58.1 b	58.6	60.6	61.9 b	64.1
	Employment rate for high skilled 25-64 (ISCED 5-8)	82.5 b	80.9	78.6	78.1	77.4	76.9	76.9	77.2 b	78.6	79.0	80.8 b	81.2
	Employment rate (Nationals aged 15-64)	62.4 b	61.8	59.1	57.4	56.5	56.4	57.3	58.3	59.8	61.3	62.4 b	63.1
	Employment rate (Other EU28 aged 15-64)	69.7 b	67.2	61.3	58.3	57.9	58.9	59.8	60.1	60.3	63.9	66.6 b	68.3
	Employment rate (Other than EU28 aged 15-64)	57.0 b	56.6	51.3	47.7	47.9	45.9	45.0	43.8	45.8	48.1	50.2 b	52.8
	Employment rate (Born in the same country aged 15-64)	62.4 b	61.8	59.3	57.5	56.6	56.5	57.5	58.5	59.7	61.5	62.5 b	63.2
	Employment rate (Born in other EU28 aged 15-64)	68.0 b	65.7	60.0	57.6	57.5	57.8	58.5	59.4	60.7	63.7	66.0 b	67.7
	Employment rate (Born outside EU28 aged 15-64)	57.5 b	57.8	51.9	48.8	48.5	48.2	49.0	48.5	51.8	51.5	53.9 b	54.7
	Underemployment (% of labour force aged 15-74)			6.3	6.4	7.8	8.3	8.3	6.9	6.0	5.5	5.7	6.1
	Seeking but not available (% of labour force aged 15-74)	0.4 b	0.4	0.3	0.4	0.5	0.5	0.8	0.6	0.6	0.6	0.6	0.6
	Discouraged, available but not seeking (% of labour force aged 15-74)	0.6 b	0.5	1.0	1.2	1.4	1.6	1.4	1.2	0.9	0.8	3.0 b	5.2

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Ireland		2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018
Social Indicators	All	At-risk-of-poverty or social exclusion (% of total population)	23.1	23.7	25.7	27.3	29.4	30.3	29.9	27.7	26.0	24.4	22.7
		At-risk-of-poverty (% of total population)	17.2	15.5	15.0	15.2	15.2	16.6	15.7	16.4	16.3	16.8	15.6
		At-risk-of-poverty threshold (PPS single person)	10633	10901	10386	10102	9999	9962	10039	9939	10622	11038	10912
		Poverty gap (%)	17.6	17.7	16.2	15.5	17.5	20.0	17.5	18.9	18.5	18.5	18.3
		Persistent at-risk-of-poverty (% of total population)	11.6				8.8	13.2	9.1	10.7	9.4	10.8	9.3
		At-risk-of-poverty before social transfers excl. pensions (% of total population)	33.1	34.0	37.5	39.9	39.6	39.5	38.3	37.1	36.2	34.6	32.9
		Impact of social transfers (excl. pensions) in reducing poverty (%)	48.0	54.4	60.0	61.9	61.6	58.0	59.0	55.8	55.0	51.5	52.6
		Severe Material Deprivation (% of total population)	4.5	5.5	6.1	5.7	7.8	9.8	9.9	8.4	7.5	6.7	5.2
		Share of people living in low work intensity households (% of people aged 0-59)	14.3	13.7	20.0	22.9	24.2	23.4	23.9	21.0	19.2	17.8	16.2
		Real Gross Household Disposable income (growth %)	4.9	4.2	-1.0	-2.0	-4.0	2.2	-1.9	-0.4	3.4	3.0	
		Income quintile share ratio S80/S20	4.8	4.4	4.2	4.7	4.6	4.8	4.7	4.9	4.5	4.4	4.6
		GINI coefficient	31.3	29.9	28.8	30.7	29.8	30.5	30.7	31.1	29.8	29.6	30.6
		Early leavers from education and training (% of population aged 18-24)	12.0 b	11.7	11.8	11.9	11.1	9.9	8.7	6.7 b	6.8	6.0	5.0 b
		NEET: Young people neither in employment nor in education and training (% of total population aged 15-24)	10.1 b	12.5	18.3	19.4	19.1	19.2	16.4	15.2	14.2	12.6	10.9
													10.1
	Male	At-risk-of-poverty or social exclusion (% of male population)	21.6	22.7	25.0	26.5	29.0	30.0	29.4	27.4	25.4	23.3	21.8
		At-risk-of-poverty (% of male population)	16.0	14.5	14.9	14.6	15.4	16.4	15.7	16.2	16.1	16.2	14.7
		Poverty gap (%)	17.7	18.9	17.1	15.5	18.7	21.7	17.9	18.4	19.0	18.3	16.9
		Persistent at-risk-of-poverty (% of male population)	11.6				10.1	11.7	8.8	9.9	9.9	10.7	9.9
		Severe Material Deprivation (% of male population)	4.0	5.3	5.5	5.5	7.4	9.7	9.2	8.1	7.2	6.3	5.0
		Share of people living in low work intensity households (% of males aged 0-59)	13.7	13.1	18.8	21.4	23.4	23.2	23.6	21.4	18.6	17.2	15.2
		Life expectancy at birth (years)	77.3	77.9	77.7	78.5	78.6	78.7	79.0	79.3	79.6	79.9	80.4
		Healthy life years at birth (years) - men	62.9	63.5	63.9	65.9	66.1	65.9	65.8	66.3	66.6	67.3	
		Early leavers from education and training (% of males aged 18-24)	16.1 b	15.8	15.7	14.5	13.8	12.0	10.7	8.3 b	8.6	7.7	6.1 b
		NEET: Young people neither in employment nor in education and training (% of males aged 15-24)	9.8 b	13.6	21.5	22.2	21.7	21.9	17.7	15.8	15.6	13.5	11.4
													10.2
	Female	At-risk-of-poverty or social exclusion (% of female population)	24.6	24.7	26.4	28.1	29.8	30.7	30.5	28.1	26.6	25.5	23.5
		At-risk-of-poverty (% of female population)	18.5	16.4	15.1	15.8	14.9	16.9	15.7	16.7	16.4	17.5	16.5
		Poverty gap (%)	17.1	17.4	14.9	15.5	16.6	18.7	16.8	19.1	18.2	18.6	19.0
		Persistent at-risk-of-poverty (% of female population)	11.7				7.4	14.5	9.3	11.6	8.9	10.9	8.8
		Severe Material Deprivation (% of female population)	4.9	5.8	6.8	5.9	8.3	10.0	10.6	8.6	7.8	7.1	5.4
		Share of people living in low work intensity households (% of females aged 0-59)	15.0	14.3	21.2	24.5	25.1	23.5	24.1	20.6	19.7	18.5	17.1
		Life expectancy at birth (years)	82.1	82.4	82.7	83.1	83.0	83.2	83.1	83.5	83.4	83.6	84.0
		Healthy life years at birth (years) - women	65.6	65.1	65.2	66.9	68.3	68.5	68.0	67.5	67.9	69.8	
		Early leavers from education and training (% of females aged 18-24)	7.9 b	7.5	7.9	9.3	8.3	7.8	6.6	5.1 b	4.9	4.3	3.9 b
		NEET: Young people neither in employment nor in education and training (% of females aged 15-24)	10.3 b	11.4	15.0	16.7	16.6	16.4	15.1	14.7	12.9	11.6	10.5
													9.9
	Children (0-17)	At-risk-of-poverty or social exclusion of children (% of people aged 0-17)	26.2	26.6	31.4	34.1	34.1	33.5	34.4	30.4	28.8	27.3	25.2
		At-risk-of-poverty (% of Children population)	19.2	18.0	18.8	18.9	17.1	19.3	18.2	18.3	17.9	18.8	17.0
		Severe Material Deprivation (% of Children population)	7.6	6.8	8.4	8.2	10.0	12.4	13.4	10.1	8.9	9.3	6.8
		Share of children living in low work intensity households (% of Children population)	15.8	15.1	23.4	25.6	26.0	22.8	24.2	21.4	19.8	19.3	17.9
		Risk of poverty of children in households at work (Working Intensity > 0.2)	10.1	11.0	7.5	9.3	6.3	7.3	7.3	7.1	7.7	6.6	6.9
		Impact of social transfers (excl. pensions) in reducing poverty (0-17) (%)	50.6	55.2	59.7	62.9	65.2	58.0	59.5	58.1	57.7	52.8	56.2
	Working age (18-64)	At-risk-of-poverty or social exclusion (% of working age population)	20.7	22.6	24.8	27.2	30.5	32.0	31.3	29.5	26.8	24.6	23.0
		At-risk-of-poverty (% of Working age population)	14.4	13.4	13.2	14.6	15.1	16.2	15.7	16.7	16.0	16.0	15.3
		Severe Material Deprivation (% of Working age population)	3.7	5.6	5.8	5.4	7.9	10.1	9.6	8.7	7.8	6.5	5.2
		Very low work intensity (18-59)	13.7	13.1	18.4	21.7	23.4	23.6	23.7	20.8	18.9	17.1	15.4
		In-work at-risk-of poverty rate (% of persons employed 18-64)	5.5	6.3	4.9	5.5	5.3	5.6	5.0	5.4	4.8	5.1	5.2
		Impact of social transfers (excl. pensions) in reducing poverty (18-64) (%)	50.3	56.6	61.4	61.8	61.4	59.2	59.6	55.6	54.4	52.2	51.3
	Elderly (65+)	At-risk-of-poverty or social exclusion of elderly (% of people aged 65+)	28.7	22.5	17.9	11.3	13.8	15.2	13.7	13.9	16.5	18.1	16.2
		At-risk-of-poverty (% of Elderly population)	28.3	21.1	16.2	9.9	11.0	12.8	10.6	11.4	14.2	16.6	14.8
		Severe Material Deprivation (% of Elderly population)	1.2	2.2	2.6	1.5	3.0	2.8	3.6	2.9	3.1	2.4	2.0
		Relative median income of elderly (ratio with median income of people younger than 65)	0.69	0.74	0.78	0.85	0.86	0.86	0.91	0.89	0.87	0.85	0.84
		Aggregate replacement ratio (ratio)	0.49	0.49	0.48	0.47	0.43	0.42	0.37	0.38	0.38	0.35	0.33
Expenditure in social protection indicators (% of GDP)	Expenditure in social protection indicators (% of GDP)	Sickness/Health care	6.8	7.7	8.6	8.7	8.5 p	8.4 p	7.9 p	7.4 p	5.7 p	5.8 p	
		Disability	0.9	1.0	1.2	1.2	1.1	1.1	1.1	1.1	0.8	0.8	
		Old age and survivors	5.0	5.6	6.7	6.9	6.7	6.9	6.8	6.3	4.9	5.1	
		Family/Children	2.0	2.4	2.8	2.5	2.3	2.2	2.1	1.8	1.4	1.3	
		Unemployment	1.4	1.8	3.0	3.7	3.5	3.2	2.9	2.5	1.8	1.5	
		Housing and Social exclusion n.e.c.	0.7	0.9	0.9	1.0	1.0	1.0	0.9	0.8	0.6	0.6	
		Total (including Admin and Other expenditures)	17.6	20.2	24.1	24.8	24.2	23.6	22.6	20.6	15.8	15.8	
		of which: Means tested benefits	4.1	4.9	6.2	7.0	7.2	7.1	6.9	6.2	4.5	4.3	

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## Greece

Greece		2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018
Macro Economic Indicators (Annual % growth)	Real GDP	3.3	-0.3	-4.3	-5.5	-9.1 p	-7.3 p	-3.2 p	0.7 p	-0.4 p	-0.2 p	1.5 p	1.9 p
	Total employment	1.3	1.3	-0.6	-2.6	-6.9 p	-6.3 p	-2.6 p	0.9 p	0.7 p	0.5 p	1.5 p	1.7 p
	Labour productivity	1.9	-1.6	-3.8	-3.0	-2.4 p	-1.1 p	-0.6 p	-0.2 p	-1.2 p	-0.7 p	0.0 p	0.2 p
	Annual average hours worked per person employed	-0.7	-0.2	-1.2	-3.0	0.9 p	0.9 p	0.2 p	-1.9 p	0.5 p	-0.1 p	0.8 p	0.0 p
	Real productivity per hour worked	2.6	-1.4	-2.6	0.0	-3.3 p	-1.9 p	-0.8 p	1.7 p	-1.7 p	-0.6 p	-0.8 p	0.3 p
	Harmonized CPI	3.0	4.2	1.3	4.7	3.1	1.0	-0.9	-1.4	-1.1	0.0	1.1	0.8
	Price deflator GDP	3.4	4.3	2.6	0.7	0.8 p	-0.4 p	-2.4 p	-1.8 p	-0.3 p	-0.2 p	0.6 p	0.5 p
	Nominal compensation per employee	4.6	3.7	3.1	-2.0	-3.8 p	-3.0 p	-7.5 p	-2.0 p	-2.4 p	-0.9 p	0.5 p	1.3 p
	Real compensation per employee (GDP deflator)	1.1	-0.7	0.5	-2.6	-4.5 p	-2.7 p	-5.3 p	-0.2 p	-2.1 p	-0.7 p	-0.1 p	0.8 p
	Real compensation per employee (private consumption deflator)	1.5	-0.6	1.7	-6.4	-6.7 p	-4.0 p	-6.7 p	-0.6 p	-1.3 p	-1.0 p	-0.6 p	0.5 p
	Nominal unit labour costs	2.6	5.3	7.1	1.0	-1.4 p	-2.0 p	-6.9 p	-1.8 p	-1.3 p	-0.3 p	0.6 p	1.1 p
	Real unit labour costs	-0.8	1.0	4.5	0.3	-2.2 p	-1.6 p	-4.7 p	0.1 p	-1.0 p	0.0 p	0.0 p	0.5 p
Labour Market Indicators - Total	Total population (000)	11036	11061	11095	11119	11123	11086	11004	10927	10858	10784	10768	10741
	Population aged 15-64 (000)	7357	7378	7388	7382	7349	7280	7180	7088	7011	6934	6894	6854
	Total employment (000)	4564	4611	4556 b	4390	4054	3695	3513	3536	3611	3674	3753	3828
	Employment aged 15-64 (000)	4476	4523	4469 b	4306	3979	3636	3459	3480	3548	3610	3683	3751
	Employment rate (% population aged 20-64)	65.8	66.3	65.6 b	63.8	59.6	55.0	52.9	53.3	54.9	56.2	57.8	59.5
	Employment rate (% population aged 15-64)	60.9	61.4	60.8 b	59.1	55.1	50.8	48.8	49.4	50.8	52.0	53.5	54.9
	Employment rate (% population aged 15-24)	24.0	23.5	22.8 b	20.1	16.1	13.0	11.8	13.3	13.0	13.0	14.1	14.0
	Employment rate (% population aged 25-54)	75.4	76.0	75.3 b	73.2	68.8	63.9	61.3	62.4	64.5	66.0	67.4	68.9
	Employment rate (% population aged 55-64)	42.7	43.0	42.4 b	42.4	39.5	36.5	35.6	34.0	34.3	36.3	38.3	41.1
	FTE employment rate (% population aged 20-64)	64.7	65.3	64.5 b	62.4	58.0	53.1	50.8	51.1	52.6	53.7	55.3	57.2
	Self-employed (% total employment)	29.0	29.1	29.4 b	29.9	30.7	31.6	32.1	31.3	30.6	30.2	30.1	29.8
	Part-time employment (% total employment)	5.4	5.4	5.9 b	6.3	6.7	7.7	8.4	9.3	9.4	9.8	9.7	9.1
	Temporary employment (% total employment)	7.2	7.7	8.1 b	8.3	7.6	6.5	6.5	7.5	7.9	7.5	7.6	7.6
	Employment in Services (% total employment)		67.1 b	67.6 b	68.5	70.5	70.8	71.0	71.9	72.6	72.8	73.0	72.9
	Employment in Industry (% total employment)		22.5 b	21.4 b	19.8	17.9	16.7	15.7	15.1	15.1	15.4	15.6	15.4
	Employment in Agriculture (% total employment)		10.5 b	11.1 b	11.7	11.7	12.5	13.3	13.0	12.3	11.7	11.5	11.7
	Activity rate (% population aged 15-64)	66.5	66.7	67.4 b	67.8	67.3	67.5	67.5	67.4	67.8	68.2	68.3	68.2
	Activity rate (% population aged 15-24)	31.0	30.1	30.7 b	30.0	29.1	29.1	28.4	28.0	26.0	24.6	25.0	23.3
	Activity rate (% population aged 25-54)	81.8	81.9	82.8 b	83.2	83.1	83.7	83.9	84.3	85.4	85.5	85.0	85.0
	Activity rate (% population aged 55-64)	44.2	44.4	44.4 b	45.2	43.1	42.1	42.4	41.1	41.6	44.9	46.7	48.5
	Total unemployment (000)	418	388	485	639	882	1195	1330	1274	1197	1131	1027	915
	Unemployment rate (% labour force)	8.4	7.8	9.6	12.7	17.9	24.5	27.5	26.5	24.9	23.6	21.5	19.3
	Youth unemployment rate (% labour force 15-24)	22.7	21.9	25.7	33.0	44.7	55.3	58.3	52.4	49.8	47.3	43.6	39.9
	Long term unemployment rate (% labour force)	4.2	3.7	3.9 b	5.7	8.8	14.5	18.5	19.5	18.2	17.0	15.6	13.6
	Share of long term unemployment (% of total unemployment)	49.7	47.1	40.4 b	44.6	49.3	59.1	67.1	73.5	73.1	72.0	72.8	70.3
	Youth unemployment ratio (% population aged 15-24)	7.0	6.6	7.9 b	9.9	13.0	16.1	16.5	14.7	12.9	11.7	10.9	9.3
	Employment rate for low skilled 25-64 (ISCED 0-2)	59.9	60.2	59.8 b	58.1	53.9	48.4	46.3	46.9 b	48.5	48.4	49.5	50.3
	Employment rate for medium skilled 25-64 (ISCED 3-4)	69.5	69.9	68.5 b	66.5	62.0	57.2	54.1	54.5 b	56.4	58.1	59.3	60.9
	Employment rate for high skilled 25-64 (ISCED 5-8)	83.0	83.0	82.5 b	80.0	75.1	71.4	69.1	68.5 b	68.7	70.4	71.8	74.1
	Employment rate (Nationals aged 15-64)	60.4	60.8	60.3 b	58.6	54.7	51.0	49.0	49.3	50.8	52.0	53.6	55.1
	Employment rate (Other EU28 aged 15-64)	62.2	61.6	63.0 b	64.3	61.7	53.7	49.7	51.9	54.0	50.9	53.6	50.8
	Employment rate (Other than EU28 aged 15-64)	68.4	69.9	67.2 b	63.9	58.0	47.9	45.4	50.0	50.4	52.3	51.5	52.0
	Employment rate (Born in the same country aged 15-64)	60.4	60.8	60.3 b	58.5	54.8	50.9	48.9	49.3	50.6	51.9	53.6	55.1
	Employment rate (Born in other EU28 aged 15-64)	62.7	62.4	62.6 b	64.3	60.6	53.3	50.6	53.3	56.2	54.6	54.4	52.1
	Employment rate (Born outside EU28 aged 15-64)	67.0	68.4	66.2 b	63.4	57.5	48.7	46.6	49.5	51.5	53.5	52.4	53.0
	Underemployment (% of labour force aged 15-74)		2.0	2.4 b	2.7	3.2	3.9	4.4	5.0	5.1	5.6	5.4	5.2
	Seeking but not available (% of labour force aged 15-74)	0.5	0.4	0.4 b	0.3	0.5	0.7	0.9	0.9	0.9	0.8	0.8	0.8
	Discouraged, available but not seeking (% of labour force aged 15-74)	0.8	0.9	1.1 b	1.1	1.3	1.9	2.0	1.9	2.1	2.3	2.4	2.3

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Greece		2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018
Labour Market Indicators - Male	Total population (000)	5442	5448	5456	5461	5453	5424	5366	5313	5268	5224	5221	5210
	Population aged 15-64(000)	3704	3709	3707	3697	3673	3629	3564	3504	3456	3410	3395	3377
	Total employment (000)	2777	2787	2722 b	2601	2390	2168	2065	2056	2086	2129	2181	2238
	Employment aged 15-64 (000)	2713	2722	2660 b	2542	2338	2126	2027	2017	2048	2092	2138	2189
	Employment rate (% population aged 20-64)	80.1	80.1	78.5 b	76.0	70.8	65.0	62.7	62.6	64.0	65.8	67.7	70.1
	Employment rate (% population aged 15-64)	74.2	74.4	73.0 b	70.3	65.4	60.1	57.9	58.0	59.3	61.0	62.7	64.7
	Employment rate (% population aged 15-24)	29.1	28.3	27.3 b	24.2	19.4	16.1	14.6	15.8	15.2	14.7	15.9	15.9
	Employment rate (% population aged 25-54)	90.1	90.1	88.3 b	85.3	79.9	73.9	71.4	71.8	73.7	76.0	77.5	79.6
	Employment rate (% population aged 55-64)	59.1	59.2	57.8 b	56.5	52.3	47.7	46.0	44.0	44.9	46.2	49.6	53.3
	FTE employment rate (% population aged 20-64)	80.2	80.4	78.6 b	75.7	70.0	63.9	61.3	60.9	62.2	63.9	66.0	68.5
	Self-employed (% total employment)	34.6	34.5	35.1 b	35.5	36.2	37.3	37.7	37.0	35.9	34.9	35.1	34.8
	Part-time employment (% total employment)	2.5	2.6	2.9 b	3.5	4.3	4.7	5.4	6.5	6.7	6.9	6.6	6.1
	Temporary employment (% total employment)	5.8	6.3	6.7 b	6.9	6.6	5.4	5.6	6.7	7.0	6.5	6.3	6.1
	Employment in Services (% total employment)		58.9 b	59.2 b	60.5	63.5	65.2	66.0	67.0	67.1	67.2	67.1	67.1
	Employment in Industry (% total employment)		31.1 b	30.0 b	28.0	25.1	23.2	21.5	20.5	20.2	20.6	20.8	20.8
	Employment in Agriculture (% total employment)		10.1 b	10.9 b	11.5	11.4	12.5	13.3	13.5	12.8	12.3	12.0	12.1
	Activity rate (% population aged 15-64)	78.4	78.4	78.5 b	78.3	77.2	76.9	76.9	76.0	75.9	76.2	76.4	76.6
	Activity rate (% population aged 15-24)	34.4	34.0	33.9 b	33.0	31.7	31.2	31.6	30.0	27.7	26.4	26.2	25.1
	Activity rate (% population aged 25-54)	94.6	94.4	94.4 b	94.2	93.5	93.6	93.6	93.1	93.1	93.2	93.0	93.2
	Activity rate (% population aged 55-64)	60.9	61.0	60.2 b	60.2	57.3	55.2	55.0	53.4	54.9	57.3	59.8	61.4
	Total unemployment (000)	154	151	204	290	426	595	669	635	579	528	473	407
	Unemployment rate (% labour force)	5.3	5.1	7.0	10.1	15.2	21.6	24.5	23.7	21.8	19.9	17.8	15.4
	Youth unemployment rate (% labour force 15-24)	15.5	16.9	19.5	26.8	38.8	48.5	53.8	47.4	45.2	44.3	39.3	36.4
	Long term unemployment rate (% labour force)	2.2	2.1	2.4 b	3.9	6.8	12.2	16.2	17.2	15.8	14.1	12.6	10.5
	Share of long term unemployment (% of total unemployment)	41.6	40.0	33.9 b	38.3	44.7	56.4	66.0	72.8	72.7	71.1	70.8	68.1
	Youth unemployment ratio (% population aged 15-24)	5.3	5.7	6.6 b	8.9	12.3	15.1	17.0	14.2	12.5	11.7	10.3	9.1
	Employment rate for low skilled 25-64 (ISCED 0-2)	79.9	80.0	78.1 b	74.7	68.5	61.5	58.2	58.6 b	60.2	60.7	62.7	64.4
	Employment rate for medium skilled 25-64 (ISCED 3-4)	85.6	85.5	83.0 b	80.6	75.6	69.5	66.8	67.0 b	68.9	70.7	72.1	74.3
	Employment rate for high skilled 25-64 (ISCED 5-8)	87.9	87.7	87.3 b	84.8	80.1	76.4	74.5	72.5 b	73.1	76.4	78.1	81.0
	Employment rate (Nationals aged 15-64)	73.4	73.3	72.1 b	69.7	64.9	60.3	58.1	57.8	59.2	60.8	62.6	64.6
	Employment rate (Other EU28 aged 15-64)	77.2	77.5	74.8 b	77.6	71.2	61.1	57.3	59.5	64.0	63.9	66.0	66.0
	Employment rate (Other than EU28 aged 15-64)	86.8	88.3	82.7 b	76.7	70.3	56.8	55.1	59.3	59.6	64.1	64.1	67.6
	Employment rate (Born in the same country aged 15-64)	73.3	73.3	72.1 b	69.6	64.9	60.3	58.0	57.9	59.1	60.6	62.6	64.5
	Employment rate (Born in other EU28 aged 15-64)	78.8	77.1	74.5 b	78.0	71.2	61.6	56.7	61.8	68.8	69.9	67.9	66.9
	Employment rate (Born outside EU28 aged 15-64)	85.2	86.4	81.2 b	76.0	69.5	57.4	55.9	58.2	59.7	63.9	64.5	68.0
	Underemployment (% of labour force aged 15-74)		1.2	1.4 b	1.9	2.6	2.8	3.3	4.0	4.2	4.6	4.3	4.2
	Seeking but not available (% of labour force aged 15-74)	0.3	0.3	0.3 b	0.3	0.3	0.5	0.6	0.6	0.7	0.6	0.5	0.5
	Discouraged, available but not seeking (% of labour force aged 15-74)	0.4	0.3	0.4 b	0.5	0.6	1.0	1.1	0.9	1.1	1.3	1.2	1.2
Labour Market Indicators - Female	Total population (000)	5594	5613	5639	5658	5670	5663	5637	5614	5590	5560	5547	5531
	Population aged 15-64(000)	3653	3669	3682	3684	3676	3651	3617	3584	3555	3524	3499	3477
	Total employment (000)	1787	1824	1834 b	1789	1664	1527	1448	1480	1524	1544	1572	1590
	Employment aged 15-64 (000)	1763	1801	1809 b	1765	1641	1510	1432	1463	1500	1519	1545	1562
	Employment rate (% population aged 20-64)	51.7	52.6	52.9 b	51.8	48.7	45.2	43.3	44.3	46.0	46.8	48.0	49.1
	Employment rate (% population aged 15-64)	47.7	48.6	48.9 b	48.0	45.0	41.7	39.9	41.1	42.5	43.3	44.4	45.3
	Employment rate (% population aged 15-24)	18.8	18.7	18.3 b	16.1	12.9	10.0	9.1	10.9	10.9	11.3	12.4	12.0
	Employment rate (% population aged 25-54)	60.9	62.0	62.3 b	61.1	57.8	53.9	51.4	53.1	55.4	55.9	57.2	58.2
	Employment rate (% population aged 55-64)	27.0	27.5	27.8 b	29.1	27.5	26.1	26.0	25.0	24.7	27.2	28.0	30.0
	FTE employment rate (% population aged 20-64)	49.4	50.4	50.5 b	49.5	46.4	42.7	40.7	41.6	43.2	43.8	44.9	46.1
	Self-employed (% total employment)	20.2	21.0	21.0 b	21.9	22.9	23.6	24.2	23.4	23.3	23.7	23.3	22.9
	Part-time employment (% total employment)	9.9	9.8	10.2 b	10.3	10.1	11.8	12.6	13.0	13.1	13.7	14.1	13.2
	Temporary employment (% total employment)	9.3	9.7	10.1 b	10.2	9.1	8.1	7.7	8.7	9.0	8.8	9.6	9.8
	Employment in Services (% total employment)		79.4 bu				79.9 u						
	Employment in Industry (% total employment)		9.5 bu				7.5 u						
	Employment in Agriculture (% total employment)		11.1 b	11.3 b	12.1	12.1	12.6	13.1	12.4	11.6	11.0	10.7	11.1
	Activity rate (% population aged 15-64)	54.8	55.0	56.5 b	57.5	57.5	58.3	58.3	59.0	59.9	60.4	60.3	59.9
	Activity rate (% population aged 15-24)	27.5	26.1	27.4 b	27.1	26.6	27.0	25.3	26.1	24.3	22.9	23.9	21.5
	Activity rate (% population aged 25-54)	69.2	69.5	71.1 b	72.4	72.8	74.0	74.3	75.6	77.7	77.7	77.0	76.7
	Activity rate (% population aged 55-64)	28.2	28.7	29.5 b	31.1	29.9	30.0	31.0	29.9	29.5	33.6	34.9	36.9
	Total unemployment (000)	265	237	281	349	456	600	661	639	618	603	554	508
	Unemployment rate (% labour force)	12.9	11.5	13.3	16.4	21.5	28.2	31.4	30.2	28.9	28.1	26.1	24.2
	Youth unemployment rate (% labour force 15-24)	31.7	28.3	33.3	40.3	51.6	63.1	63.8	58.1	55.0	50.7	48.2	43.9
	Long term unemployment rate (% labour force)	7.0	5.9	6.0 b	8.1	11.6	17.4	21.4	22.4	21.2	20.5	19.4	17.5
	Share of long term unemployment (% of total unemployment)	54.4	51.6	45.1 b	49.8	53.7	61.7	68.2	74.2	73.5	72.7	74.4	72.1
	Youth unemployment ratio (% population aged 15-24)	8.7	7.4	9.1 b	10.9	13.7	17.0	16.1	15.2	13.4	11.6	11.5	9.4
	Employment rate for low skilled 25-64 (ISCED 0-2)	39.2	39.5	40.3 b	40.1	38.0	34.4	33.6	34.4 b	35.6	35.0	35.4	35.5
	Employment rate for medium skilled 25-64 (ISCED 3-4)	55.1	55.7	55.2 b	53.7	49.8	46.0	42.5	42.9 b	44.6	45.7	46.5	47.5
	Employment rate for high skilled 25-64 (ISCED 5-8)	77.9	78.2	77.9 b	75.4	70.3	66.7	63.9	64.8 b	64.7	65.2	66.4	68.0
	Employment rate (Nationals aged 15-64)	47.6	48.6	48.8 b	47.8	44.8	41.8	40.1	41.0	42.5	43.5	44.7	45.7
	Employment rate (Other EU28 aged 15-64)	52.7	51.4	55.5 b	56.8	56.1	48.9	44.3	46.8	48.1	42.9	46.1	42.5
	Employment rate (Other than EU28 aged 15-64)	46.8	47.3	48.7 b	48.6	44.0	38.1	35.2	40.0	40.9	39.5	39.0	37.6
	Employment rate (Born in the same country aged 15-64)	47.6	48.5	48.7 b	47.7	44.8	41.8	40.0	40.9	42.3	43.3	44.6	45.8
	Employment rate (Born in other EU28 aged 15-64)	52.8	53.0	55.0 b	56.4	54.3	48.3	46.9	48.1	48.2	45.8	47.0	43.6
	Employment rate (Born outside EU28 aged 15-64)	47.3	47.4	49.1 b	49.2	44.4	39.5	37.0	40.8	43.6	43.1	41.2	39.5
	Underemployment (% of labour force aged 15-74)		3.2	3.7 b	3.8	4.1	5.3	5.8	6.2	6.2	6.8	6.8	6.4
	Seeking but not available (% of labour force aged 15-74)	0.7	0.6	0.6 b	0.5	0.6	1.0	1.3	1.2	1.1	1.0	1.1	1.1
	Discouraged, available but not seeking (% of labour force aged 15-74)	1.5	1.7	2.0 b	2.0	2.3	2.9	3.3	3.2	3.3	3.5	3.8	3.8

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Greece			2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018
Social Indicators	All	At-risk-of-poverty or social exclusion (% of total population)	28.3	28.1	27.6	27.7	31.0	34.6	35.7	36.0	35.7	35.6	34.8	
		At-risk-of-poverty (% of total population)	20.3	20.1	19.7	20.1	21.4	23.1	23.1	22.1	21.4	21.2	20.2	
		At-risk-of-poverty threshold (PPS single person)	6873	7219	7521	7559	6976	6038	5427	5204	5281	5429	5411	
		Poverty gap (%)	26.0	24.7	24.1	23.4	26.1	29.9	32.7	31.3	30.6	31.9	30.3	
		Persistent at-risk-of-poverty (% of total population)	13.1	13.0	16.1	17.6	10.5	13.8	12.4	14.5	13.3	15.2	14.0	
		At-risk-of-poverty before social transfers excl. pensions (% of total population)	23.7	23.3	22.7	23.8	24.8	26.8	28.0	26.0	25.5	25.2	24.0	
		Impact of social transfers (excl. pensions) in reducing poverty (%)	14.4	13.7	13.2	15.6	13.7	13.8	17.5	15.0	16.1	15.9	15.8	
		Severe Material Deprivation (% of total population)	11.5	11.2	11.0	11.6	15.2	19.5	20.3	21.5	22.2	22.4	21.1	16.7 p
		Share of people living in low work intensity households (% of people aged 0-59)	8.1	7.5	6.6	7.6	12.0	14.2	18.2	17.2	16.8	17.2	15.6	
		Real Gross Household Disposable income (growth %)	2.9	1.1	0.9	-11.1	-10.6	-8.9	-6.8	1.7	-2.2	-1.3		
		Income quintile share ratio S80/S20	6.0	5.9	5.8	5.6	6.0	6.6	6.6	6.5	6.5	6.6	6.1	
		GINI coefficient	34.3	33.4	33.1	32.9	33.5	34.3	34.4	34.5	34.2	34.3	33.4	
		Early leavers from education and training (% of population aged 18-24)	14.3	14.4 b	14.2 b	13.5	12.9	11.3	10.1	9.0 b	7.9	6.2	6.0	4.7
		NEET: Young people neither in employment nor in education and training (% of total population aged 15-24)	11.3	11.4	12.4 b	14.8	17.4	20.2	20.4	19.1	17.2	15.8	15.3	14.1
	Male	At-risk-of-poverty or social exclusion (% of male population)	26.8	26.3	26.1	26.0	29.6	33.9	34.6	35.3	34.8	34.4	33.9	
		At-risk-of-poverty (% of male population)	19.6	19.6	19.1	19.3	20.9	22.5	22.4	22.2	21.5	21.2	20.2	
		Poverty gap (%)	25.6	24.4	24.4	23.4	27.2	29.9	32.9	32.1	32.9	33.6	30.9	
		Persistent at-risk-of-poverty (% of male population)	12.4	11.3	15.6	16.3	10.4	14.0	11.7	13.5	13.2	14.9	13.8	
		Severe Material Deprivation (% of male population)	10.6	10.1	10.2	10.9	14.9	19.9	20.3	21.2	22.1	22.2	21.0	16.4 p
		Share of people living in low work intensity households (% of males aged 0-59)	6.5	6.0	5.3	6.5	11.0	12.9	17.5	16.0	15.5	15.8	14.2	
		Life expectancy at birth (years)	76.9	77.5 b	77.8	78.0	78.0	78.0	78.7	78.9	78.5	78.9	78.8	
		Healthy life years at birth (years) - men	66.0	65.6 b	66.1	66.1	66.2	64.8	64.7	64.1	63.9	63.8	64.4	
		Early leavers from education and training (% of males aged 18-24)	18.2	18.0 b	17.9 b	16.4	15.9	13.7	12.7	11.5 b	9.4	7.1	7.1	5.7
		NEET: Young people neither in employment nor in education and training (% of males aged 15-24)	8.1	8.8	9.5 b	12.7	16.1	19.0	20.9	18.7	17.1	15.9	15.0	14.2
	Female	At-risk-of-poverty or social exclusion (% of female population)	29.9	29.8	29.0	29.3	32.3	35.2	36.8	36.7	36.6	36.6	35.7	
		At-risk-of-poverty (% of female population)	20.9	20.7	20.2	20.9	21.9	23.6	23.8	22.0	21.2	21.2	20.2	
		Poverty gap (%)	26.3	25.0	24.1	23.4	25.6	29.1	32.6	30.8	28.3	30.8	29.8	
		Persistent at-risk-of-poverty (% of female population)	13.8	14.7	16.6	18.7	10.6	13.5	13.0	15.5	13.3	15.5	14.3	
		Severe Material Deprivation (% of female population)	12.3	12.2	11.7	12.2	15.4	19.1	20.3	21.8	22.2	22.6	21.2	17.0 p
		Share of people living in low work intensity households (% of females aged 0-59)	9.8	9.0	8.0	8.6	13.0	15.6	18.9	18.4	18.0	18.6	17.0	
		Life expectancy at birth (years)	82.5	83.0 b	82.7	83.3	83.6	83.4	84.0	84.1	83.7	84.0	83.9	
		Healthy life years at birth (years) - women	67.6	66.2 b	66.8	67.7	66.9	64.9	65.1	64.8	64.1	64.7	65.1	
		Early leavers from education and training (% of females aged 18-24)	10.3	10.6 b	10.5 b	10.6	10.0	8.9	7.5	6.6 b	6.4	5.3	4.9	3.6
NEET: Young people neither in employment nor in education and training (% of females aged 15-24)		14.5	14.1	15.2 b	16.9	18.7	21.3	20.0	19.6	17.2	15.7	15.5	14.0	
Children (0-17)	At-risk-of-poverty or social exclusion of children (% of people aged 0-17)	28.2	28.7	30.0	28.7	30.4	35.4	38.1	36.7	37.8	37.5	36.2		
	At-risk-of-poverty (% of Children population)	23.3	23.0	23.7	23.0	23.7	26.9	28.8	25.5	26.6	26.3	24.5		
	Severe Material Deprivation (% of Children population)	9.7	10.4	12.2	12.2	16.4	20.9	23.3	23.8	25.7	26.7	23.8	18.6 p	
	Share of children living in low work intensity households (% of Children population)	4.6	3.9	2.7	3.9	7.2	7.6	13.8	10.2	10.6	10.9	9.4		
	Risk of poverty of children in households at work (Working Intensity > 0.2)	21.3	21.4	22.8	21.6	19.2	22.1	20.4	20.6	21.2	20.1	19.2		
	Impact of social transfers (excl. pensions) in reducing poverty (0-17) (%)	14.0	10.9	6.0	10.9	10.6	9.7	18.2	17.7	18.4	20.3	20.7		
Working age (18-64)	At-risk-of-poverty or social exclusion (% of working age population)	27.8	27.9	27.1	27.7	31.6	37.7	39.1	40.1	39.4	39.7	38.6		
	At-risk-of-poverty (% of Working age population)	18.7	18.7	18.1	19.0	20.0	23.8	24.1	23.5	22.5	22.7	21.7		
	Severe Material Deprivation (% of Working age population)	10.2	10.4	10.3	11.2	15.4	20.7	21.6	22.9	23.5	23.7	22.1	17.3 p	
	Very low work intensity (18-59)	9.2	8.6	7.8	8.7	13.5	16.3	19.6	19.4	18.7	19.2	17.6		
	In-work at-risk of poverty rate (% of persons employed 18-64)	14.1	14.2	13.7	13.9	11.9	15.1	13.0	13.2	13.4	14.0	12.8		
	Impact of social transfers (excl. pensions) in reducing poverty (18-64) (%)	13.4	13.8	13.0	14.4	13.0	14.4	16.3	14.5	14.8	14.7	14.2		
Elderly (65+)	At-risk-of-poverty or social exclusion of elderly (% of people aged 65+)	30.6	28.1	26.8	26.7	29.3	23.5	23.1	23.0	22.8	22.0	22.8		
	At-risk-of-poverty (% of Elderly population)	22.9	22.3	21.4	21.3	23.6	17.2	15.1	14.9	13.7	12.4	12.4		
	Severe Material Deprivation (% of Elderly population)	17.4	14.8	12.1	12.4	13.1	14.3	13.7	15.5	15.2	15.2	15.8	13.6 p	
	Relative median income of elderly (ratio with median income of people younger than 65)	0.83	0.86	0.86	0.84	0.81	1.01	1.04	1.0	1.04	1.07	1.04		
	Aggregate replacement ratio (ratio)	0.40	0.41	0.41	0.42	0.45	0.52	0.60	0.60	0.62	0.64	0.62		
Expenditure in social protection indicators (% of GDP)	Sickness/Health care	5.8	6.3	6.6	6.8	6.2	6.0	5.4	4.7	4.9	5.3 p			
	Disability	1.3	1.4	1.5	1.6	1.7	1.8	1.6	1.6	1.6	1.5 p			
	Old age and survivors	11.7	12.6	13.7	14.3	16.0	17.3	16.2	16.7	17.0	16.8 p			
	Family/Children	0.9	0.9	1.0	1.0	1.1	1.0	1.1	1.1	1.1	1.0 p			
	Unemployment	1.0	1.2	1.4	1.6	1.7	1.4	1.3	1.1	1.0	1.0 p			
	Housing and Social exclusion n.e.c.	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.3	0.2	0.2 p			
	Total (including Admin and Other expenditures)	21.3	22.8	24.8	25.9	27.3	28.1	26.4	26.0	26.1	26.2 p			
	of which: Means tested benefits	0.8	0.8	0.8	0.9	0.9	0.9	1.2	1.5	1.4	1.3 p			

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## Spain

Spain		2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018
Macro Economic Indicators (Annual % growth)	Real GDP	3.8	1.1	-3.6	0.0	-1.0	-2.9	-1.7	1.4	3.6	3.2 p	3.0 p	2.6 p
	Total employment	3.3	0.2	-6.3	-1.7	-2.7	-4.0	-2.6	1.0	2.8	2.6 p	2.6 p	2.1 p
	Labour productivity	0.5	0.9	2.9	1.8	1.7	1.1	0.9	0.4	0.8	0.6 p	0.4 p	0.4 p
	Annual average hours worked per person employed	-0.7	0.5	0.4	-0.5	0.3	-0.8	-0.5	0.1	0.3	0.1 p	-0.7 p	0.6 p
	Real productivity per hour worked	1.2	0.4	2.5	2.3	1.4	2.0	1.4	0.3	0.5	0.5 p	1.1 p	-0.2 p
	Harmonized CPI	2.8	4.1	-0.2	2.0	3.0	2.4	1.5	-0.2	-0.6	-0.3	2.0	1.7
	Price deflator GDP	3.3	2.1	0.3	0.2	0.0	0.1	0.4	-0.2	0.5	0.3 p	1.2 p	1.0 p
	Nominal compensation per employee	4.6	6.7	4.5	0.2	0.7	-1.4	0.3	0.1	1.4	-0.2 p	0.6 p	1.4 p
	Real compensation per employee (GDP deflator)	1.3	4.5	4.3	0.0	0.7	-1.5	0.0	0.3	0.9	-0.5 p	-0.6 p	0.4 p
	Real compensation per employee (private consumption deflator)	1.7	2.5	4.8	-1.9	-2.3	-3.8	-1.2	0.3	2.0	0.2 p	-1.4 p	-0.4 p
	Nominal unit labour costs	4.1	5.7	1.6	-1.6	-1.0	-2.6	-0.6	-0.3	0.6	-0.7 p	0.2 p	0.9 p
	Real unit labour costs	0.7	3.5	1.3	-1.7	-1.0	-2.6	-1.0	-0.1	0.1	-1.0 p	-1.1 p	-0.1 p
Labour Market Indicators - Total	Total population (000)	44785	45669	46239	46487	46667	46818	46728	46512	46450	46440	46528	46658
	Population aged 15-64 (000)	30852	31480	31746	31742	31670	31613	31376	31005	30808	30721	30700	30720
	Total employment (000)	20580	20470	19107	18725	18421	17633	17139	17344	17866	18342	18825	19328
	Employment aged 15-64 (000)	20437	20317	18958	18574	18271	17477	17002	17211	17718	18183	18649	19136
	Employment rate (% population aged 20-64)	69.7	68.5	64.0	62.8	62.0	59.6	58.6	59.9	62.0	63.9	65.5	67.0
	Employment rate (% population aged 15-64)	65.8	64.5	60.0	58.8	58.0	55.8	54.8	56.0	57.8	59.5	61.1	62.4
	Employment rate (% population aged 15-24)	39.2	36.0	28.0	25.0	22.0	18.4	16.8	16.7	17.9	18.4	20.5	21.7
	Employment rate (% population aged 25-54)	77.1	75.6	71.0	70.0	69.1	66.7	65.8	67.4	69.4	71.5	73.2	74.7
	Employment rate (% population aged 55-64)	44.5	45.5	44.0	43.5	44.5	43.9	43.2	44.3	46.9	49.1	50.5	52.2
	FTE employment rate (% population aged 20-64)	66.6	65.1	60.3	59.4	58.1	55.5	54.0	55.5	57.6	59.7	61.3	62.8
	Self-employed (% total employment)	16.4	16.5	15.9 b	15.9	15.6	16.6	17.2	17.0	16.7	16.5	16.0	15.6
	Part-time employment (% total employment)	11.4	11.6	12.4	12.9	13.5	14.4	15.7	15.8	15.6	15.1	14.9	14.5
	Temporary employment (% total employment)	26.2	24.1	21.1	20.7	21.1	19.5	19.1	19.9	20.9	21.8	22.4	22.7
	Employment in Services (% total employment)		68.1 b	71.3	72.8	74.1	75.1	75.9	76.3	75.9	76.1	75.5	75.4
	Employment in Industry (% total employment)		27.9 b	24.7	23.1	21.9	20.7	19.8	19.5	20.0	19.7	20.1	20.4
	Employment in Agriculture (% total employment)		4.0 b	4.1	4.2	4.1	4.2	4.3	4.2	4.1	4.2	4.3	4.2
	Activity rate (% population aged 15-64)	71.8	72.7	73.1	73.5	73.9	74.3	74.3	74.2	74.3	74.2	73.9	73.7
	Activity rate (% population aged 15-24)	47.9	47.7	45.0	42.7	40.9	39.0	37.8	35.7	34.7	33.0	33.3	33.0
	Activity rate (% population aged 25-54)	83.1	84.0	84.8	85.7	86.2	86.9	87.2	87.3	87.4	87.4	87.0	86.9
	Activity rate (% population aged 55-64)	47.4	49.1	50.0	50.7	52.4	53.5	54.1	55.4	57.6	59.2	59.6	60.5
	Total unemployment (000)	1846	2596	4154	4640	5013	5811	6051	5610	5056	4481	3917	3479
	Unemployment rate (% labour force)	8.2	11.3	17.9	19.9	21.4	24.8	26.1	24.5	22.1	19.6	17.2	15.3
	Youth unemployment rate (% labour force 15-24)	18.1	24.5	37.7	41.5	46.2	52.9	55.5	53.2	48.3	44.4	38.6	34.3
	Long term unemployment rate (% labour force)	1.7	2.0	4.3	7.3	8.9	11.0	13.0	12.9	11.4	9.5	7.7	6.4
	Share of long term unemployment (% of total unemployment)	20.4	18.0	23.8	36.6	41.6	44.4	49.7	52.8	51.6	48.4	44.5	41.7
	Youth unemployment ratio (% population aged 15-24)	8.7	11.7	17.0	17.7	18.9	20.6	21.0	19.0	16.8	14.7	12.9	11.3
	Employment rate for low skilled 25-64 (ISCED 0-2)	60.6	59.1	54.1	53.0	52.3	49.3	48.3	49.4 b	51.6	53.9	55.5	57.4
	Employment rate for medium skilled 25-64 (ISCED 3-4)	76.6	75.5	71.0	69.3	67.9	66.3	64.5	65.9 b	67.7	69.2	70.2	70.9
	Employment rate for high skilled 25-64 (ISCED 5-8)	84.7	83.9	81.4	80.1	79.2	77.5	76.4	77.2 b	78.5	79.8	80.9	81.6
	Employment rate (Nationals aged 15-64)	65.3	64.3	60.5	59.3	58.7	56.5	55.6	56.6	58.3	59.9	61.4	62.8
	Employment rate (Other EU28 aged 15-64)	69.2	65.9	60.8	58.0	55.6	54.7	55.2	55.6	59.5	61.8	63.4	64.6
	Employment rate (Other than EU28 aged 15-64)	69.1	65.3	55.1	55.4	52.8	48.7	46.4	48.1	51.3	53.7	55.7	56.6
	Employment rate (Born in the same country aged 15-64)	65.1	64.1	60.3	59.2	58.7	56.5	55.6	56.6	58.3	59.9	61.4	62.6
	Employment rate (Born in other EU28 aged 15-64)	70.0	67.0	62.2	58.7	56.5	56.0	56.1	56.6	60.3	62.0	64.1	65.8
	Employment rate (Born outside EU28 aged 15-64)	69.6	66.1	56.8	56.7	54.2	50.6	48.5	50.5	53.2	55.8	57.9	60.0
	Underemployment (% of labour force aged 15-74)		3.5	4.3	4.8	5.3	6.0	6.7	6.9	6.6	6.2	6.0	5.6
	Seeking but not available (% of labour force aged 15-74)	1.3	1.1	1.0	1.0	1.0	1.0	1.0	1.0	1.0	0.9	1.0	1.1
	Discouraged, available but not seeking (% of labour force aged 15-74)	3.3	3.3	4.0	4.2	4.1	4.6	5.0	4.7	4.1	3.9	3.7	3.4

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Spain		2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018
Labour Market Indicators - Male	Total population (000)	22119	22591	22881	22982	23049	23099	23018	22877	22827	22807	22835	22882
	Population aged 15-64(000)	15632	15977	16112	16089	16033	15979	15824	15611	15495	15437	15412	15405
	Total employment (000)	12067	11805	10733	10424	10153	9608	9316	9443	9760	10001	10266	10532
	Employment aged 15-64 (000)	11968	11708	10643	10338	10068	9520	9237	9364	9676	9910	10162	10420
	Employment rate (% population aged 20-64)	80.6	77.9	71.0	69.2	67.7	64.6	63.4	65.0	67.6	69.6	71.5	73.1
	Employment rate (% population aged 15-64)	76.1	73.3	66.5	64.8	63.4	60.3	59.2	60.7	62.9	64.8	66.5	67.9
	Employment rate (% population aged 15-24)	44.2	39.3	29.4	25.6	22.1	18.5	17.3	17.4	18.6	19.4	21.2	22.7
	Employment rate (% population aged 25-54)	87.5	84.2	77.3	75.9	74.6	71.3	70.4	72.5	75.1	77.4	79.2	80.8
	Employment rate (% population aged 55-64)	59.6	60.5	56.4	54.5	53.8	52.1	50.5	51.2	54.0	55.7	57.8	59.7
	FTE employment rate (% population aged 20-64)	80.4	77.1	70.2	68.5	66.4	63.1	61.4	63.2	65.7	68.1	69.7	71.5
	Self-employed (% total employment)	19.7	20.1	19.4 b	19.5	19.3	20.6	21.3	21.0	20.6	20.1	19.7	19.1
	Part-time employment (% total employment)	3.9	4.0	4.7	5.2	5.8	6.4	7.7	7.7	7.8	7.6	7.2	6.7
	Temporary employment (% total employment)	24.4	21.8	18.9	18.9	19.3	17.5	17.4	18.6	19.9	20.6	20.9	21.1
	Employment in Services (% total employment)		54.8 b	58.6	60.7	62.2	63.9	64.7	65.4	64.9	65.1	64.4	64.3
	Employment in Industry (% total employment)		40.2 b	36.1	33.8	32.4	30.5	29.3	28.8	29.3	29.0	29.5	29.8
	Employment in Agriculture (% total employment)		5.0 b	5.4	5.5	5.4	5.7	6.0	5.9	5.8	5.9	6.1	5.9
	Activity rate (% population aged 15-64)	81.4	81.6	80.8	80.6	80.4	80.1	79.8	79.5	79.5	79.2	78.9	78.8
	Activity rate (% population aged 15-24)	52.2	51.5	48.2	45.0	42.6	40.3	39.6	37.3	36.2	34.7	35.1	35.1
	Activity rate (% population aged 25-54)	92.5	92.4	92.2	92.4	92.5	92.6	92.4	92.6	92.6	92.5	92.0	91.9
	Activity rate (% population aged 55-64)	62.8	64.7	63.6	63.7	63.5	63.6	63.3	64.3	66.2	67.0	67.9	68.4
	Total unemployment (000)	826	1320	2300	2536	2706	3131	3206	2916	2559	2213	1906	1675
	Unemployment rate (% labour force)	6.4	10.1	17.7	19.6	21.1	24.6	25.6	23.6	20.8	18.1	15.7	13.7
	Youth unemployment rate (% labour force 15-24)	15.2	23.6	39.1	43.1	48.2	54.1	56.2	53.4	48.6	44.0	39.5	35.2
	Long term unemployment rate (% labour force)	1.1	1.4	3.7	7.1	8.6	10.7	12.5	12.3	10.5	8.4	6.7	5.4
	Share of long term unemployment (% of total unemployment)	17.4	14.1	21.1	36.0	40.8	43.5	48.9	52.0	50.4	46.1	42.5	39.6
	Youth unemployment ratio (% population aged 15-24)	7.9	12.1	18.8	19.4	20.5	21.8	22.3	20.0	17.6	15.3	13.9	12.4
	Employment rate for low skilled 25-64 (ISCED 0-2)	77.4	73.8	65.5	63.2	61.6	57.0	55.8	57.4 b	60.5	63.1	65.1	67.4
	Employment rate for medium skilled 25-64 (ISCED 3-4)	85.4	83.6	77.1	75.9	74.4	71.9	69.9	71.6 b	73.9	75.9	77.0	77.8
	Employment rate for high skilled 25-64 (ISCED 5-8)	89.2	87.9	84.6	83.3	82.3	80.7	79.9	80.8 b	82.4	83.5	85.0	85.6
	Employment rate (Nationals aged 15-64)	75.8	73.5	67.7	65.7	64.4	61.3	60.2	61.4	63.4	64.9	66.6	68.0
	Employment rate (Other EU28 aged 15-64)	79.0	75.7	65.4	63.1	60.4	58.7	58.3	60.3	65.2	67.8	70.1	71.6
	Employment rate (Other than EU28 aged 15-64)	78.2	70.9	56.9	57.1	54.8	50.4	48.7	51.4	55.9	61.0	63.3	64.6
	Employment rate (Born in the same country aged 15-64)	75.6	73.4	67.6	65.6	64.4	61.4	60.3	61.5	63.4	65.0	66.6	67.8
	Employment rate (Born in other EU28 aged 15-64)	79.7	76.6	67.4	64.7	62.3	60.2	59.7	61.6	66.5	68.5	71.2	73.5
	Employment rate (Born outside EU28 aged 15-64)	78.6	71.6	58.7	58.5	56.4	52.4	50.6	53.5	57.4	61.7	63.6	66.4
	Underemployment (% of labour force aged 15-74)		1.4	2.0	2.4	2.8	3.2	3.9	4.0	4.0	3.8	3.5	3.1
	Seeking but not available (% of labour force aged 15-74)	0.9	0.7	0.8	0.7	0.8	0.8	0.8	0.8	0.7	0.7	0.8	0.8
	Discouraged, available but not seeking (% of labour force aged 15-74)	1.5	1.7	2.3	2.5	2.4	2.8	3.0	3.0	2.6	2.4	2.3	2.1
Labour Market Indicators - Female	Total population (000)	22666	23077	23359	23504	23618	23719	23710	23635	23623	23633	23693	23777
	Population aged 15-64(000)	15220	15504	15634	15653	15638	15634	15552	15395	15314	15283	15288	15315
	Total employment (000)	8513	8665	8374	8301	8269	8025	7823	7902	8106	8341	8559	8796
	Employment aged 15-64 (000)	8469	8608	8314	8236	8203	7957	7765	7847	8042	8273	8487	8717
	Employment rate (% population aged 20-64)	58.6	58.9	56.8	56.3	56.1	54.6	53.8	54.8	56.4	58.1	59.6	61.0
	Employment rate (% population aged 15-64)	55.3	55.4	53.3	52.8	52.6	51.2	50.3	51.2	52.7	54.3	55.7	56.9
	Employment rate (% population aged 15-24)	34.0	32.6	26.7	24.3	22.0	18.3	16.3	16.0	17.3	17.2	19.7	20.5
	Employment rate (% population aged 25-54)	66.3	66.5	64.4	63.9	63.4	62.0	61.2	62.3	63.7	65.6	67.1	68.6
	Employment rate (% population aged 55-64)	30.2	31.2	32.1	33.1	35.6	36.0	36.3	37.8	40.2	42.8	43.5	44.9
	FTE employment rate (% population aged 20-64)	52.9	53.2	50.6	50.6	50.0	48.1	46.9	48.1	49.7	51.6	53.2	54.5
	Self-employed (% total employment)	11.8	11.8	11.5 b	11.3	11.2	11.8	12.3	12.2	12.1	12.1	11.6	11.4
	Part-time employment (% total employment)	22.1	21.9	22.3	22.6	22.8	23.9	25.2	25.5	25.1	24.1	24.1	23.9
	Temporary employment (% total employment)	28.6	27.2	23.8	23.0	23.3	21.8	21.1	21.4	22.1	23.2	24.3	24.6
	Employment in Services (% total employment)		86.2 bu	87.5 u	88.0 u	88.7 u	88.5 u	89.3 u	89.3 u	89.2 u	89.4 u	88.8 u	88.7 u
	Employment in Industry (% total employment)		11.3 bu	10.1 u	9.6 u	9.0 u	9.1 u	8.5 u	8.5 u	8.7 u	8.5 u	8.9 u	9.2 u
	Employment in Agriculture (% total employment)		2.5 b	2.4	2.4	2.4	2.4	2.2	2.2	2.1	2.1	2.3	2.2
	Activity rate (% population aged 15-64)	61.9	63.6	65.1	66.3	67.3	68.4	68.7	68.8	69.0	69.2	68.8	68.6
	Activity rate (% population aged 15-24)	43.4	43.7	41.7	40.2	39.2	37.6	35.9	34.0	33.2	31.3	31.5	30.8
	Activity rate (% population aged 25-54)	73.3	75.3	77.2	78.8	79.7	81.1	81.8	82.0	82.0	82.3	82.0	81.8
	Activity rate (% population aged 55-64)	32.7	34.2	37.1	38.4	41.8	43.9	45.2	46.9	49.4	51.7	51.8	52.9
	Total unemployment (000)	1020	1276	1854	2104	2307	2680	2846	2694	2497	2268	2011	1805
	Unemployment rate (% labour force)	10.7	12.8	18.1	20.2	21.8	25.1	26.7	25.4	23.6	21.4	19.0	17.0
	Youth unemployment rate (% labour force 15-24)	21.7	25.5	36.1	39.6	44.0	51.4	54.6	52.9	48.0	44.9	37.4	33.3
	Long term unemployment rate (% labour force)	2.4	2.8	4.9	7.6	9.3	11.4	13.5	13.7	12.4	10.8	8.8	7.4
	Share of long term unemployment (% of total unemployment)	22.8	22.0	27.1	37.3	42.6	45.3	50.5	53.8	52.8	50.6	46.4	43.7
	Youth unemployment ratio (% population aged 15-24)	9.4	11.2	15.1	15.9	17.2	19.4	19.6	18.0	15.9	14.0	11.8	10.2
	Employment rate for low skilled 25-64 (ISCED 0-2)	43.2	43.8	41.9	42.1	42.3	40.8	40.1	40.7 b	41.7	43.5	44.7	46.0
	Employment rate for medium skilled 25-64 (ISCED 3-4)	67.2	67.1	64.7	62.5	61.4	60.8	59.2	60.1 b	61.3	62.5	63.4	64.3
	Employment rate for high skilled 25-64 (ISCED 5-8)	80.4	79.9	78.4	77.1	76.4	74.5	73.2	74.0 b	75.2	76.7	77.5	78.2
	Employment rate (Nationals aged 15-64)	54.6	54.9	53.1	52.7	52.8	51.6	50.8	51.8	53.1	54.8	56.2	57.5
	Employment rate (Other EU28 aged 15-64)	59.4	56.1	56.1	52.9	51.2	51.1	52.3	51.2	54.3	56.2	57.1	58.0
	Employment rate (Other than EU28 aged 15-64)	60.2	59.5	53.4	53.7	50.8	47.2	44.3	45.1	47.0	47.0	49.0	49.5
	Employment rate (Born in the same country aged 15-64)	54.3	54.5	52.8	52.5	52.7	51.4	50.7	51.7	53.0	54.7	55.9	57.1
	Employment rate (Born in other EU28 aged 15-64)	60.4	57.6	57.0	52.9	51.4	52.3	52.8	51.8	54.6	56.0	57.4	58.7
	Employment rate (Born outside EU28 aged 15-64)	60.8	60.6	55.0	54.9	52.1	49.0	46.7	47.9	49.5	50.7	53.1	54.4
	Underemployment (% of labour force aged 15-74)		6.4	7.4	7.8	8.3	9.3	10.0	10.3	9.7	8.9	8.9	8.5
	Seeking but not available (% of labour force aged 15-74)	1.8	1.5	1.4	1.3	1.3	1.3	1.2	1.2	1.2	1.2	1.3	1.4
	Discouraged, available but not seeking (% of labour force aged 15-74)	5.7	5.6	6.2	6.3	6.1	6.7	7.2	6.8	5.9	5.6	5.2	4.9

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Spain		2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018
Social Indicators	All	At-risk-of-poverty or social exclusion (% of total population)	23.3	23.8 b	24.7	26.1	26.7	27.2	27.3	29.2	28.6	27.9	26.6
		At-risk-of-poverty (% of total population)	19.7	19.8	20.4	20.7	20.6	20.8	20.4	22.2	22.1	22.3	21.6
		At-risk-of-poverty threshold (PPS single person)	7614	9026 b	9338	8967	8655	8582	8550	8517	8678	9208	9305
		Poverty gap (%)	25.9	25.6 b	25.7	26.8	27.4	30.6	30.9	31.6	33.8	31.4	32.4
		Persistent at-risk-of-poverty (% of total population)	10.2	11.0	12.5	11.6	12.7 b	13.3	12.1	14.3	15.8	14.8	14.7
		At-risk-of-poverty before social transfers excl. pensions (% of total population)	23.7	25.7 b	26.9	28.8	30.0	29.1	30.0	31.1	30.1	29.5	28.4
		Impact of social transfers (excl. pensions) in reducing poverty (%)	16.9	23.0 b	24.2	28.1	31.3	28.5	32.0	28.6	26.6	24.4	23.9
		Severe Material Deprivation (% of total population)	3.5	3.6	4.5	4.9	4.5	5.8	6.2	7.1	6.4	5.8	5.1
		Share of people living in low work intensity households (% of people aged 0-59)	6.8	6.6	7.6	10.8	13.4	14.3	15.7	17.1	15.4	14.9	12.8
		Real Gross Household Disposable income (growth %)	0.7	1.8	2.8	-3.4	-1.5	-5.7	-1.9	1.0	2.4	2.0	
		Income quintile share ratio S80/S20	5.5	5.6 b	5.9	6.2	6.3	6.5	6.3	6.8	6.9	6.6	6.6
		GINI coefficient	31.9	32.4 b	32.9	33.5	34.0	34.2	33.7	34.7	34.6	34.5	34.1
		Early leavers from education and training (% of population aged 18-24)	30.8	31.7	30.9	28.2	26.3	24.7	23.6	21.9 b	20.0	19.0	18.3
		NEET: Young people neither in employment nor in education and training (% of total population aged 15-24)	12.0	14.3	18.1	17.8	18.2	18.6	18.6	17.1	15.6	14.6	13.3
													12.4
	Male	At-risk-of-poverty or social exclusion (% of male population)	21.9	22.4 b	23.8	25.5	26.1	27.3	27.9	29.4	29.0	28.0	26.0
		At-risk-of-poverty (% of male population)	18.6	18.4	19.4	20.1	19.9	20.7	20.9	22.4	22.5	22.6	21.0
		Poverty gap (%)	26.0	27.1 b	26.1	27.4	27.9	30.7	31.4	31.7	34.5	31.0	32.4
		Persistent at-risk-of-poverty (% of male population)	9.6	10.1	11.7	11.1	11.4 b	12.9	12.6	14.2	16.3	15.3	14.1
		Severe Material Deprivation (% of male population)	3.5	3.7	4.6	4.7	4.5	6.2	6.3	7.0	6.6	5.3	4.9
		Share of people living in low work intensity households (% of males aged 0-59)	6.5	6.1	7.2	10.6	12.9	13.8	15.9	17.0	15.8	14.9	12.4
		Life expectancy at birth (years)	77.9	78.3 b	78.7	79.2	79.5	79.5	80.2	80.4	80.1	80.5	80.6
		Healthy life years at birth (years) - men	63.5	64.0 b	63.1	64.5	65.4	64.8	64.7	65.0	63.9	65.9	69.0
		Early leavers from education and training (% of males aged 18-24)	36.6	38.0	37.4	33.6	31.0	28.9	27.2	25.6 b	24.0	22.7	21.8
		NEET: Young people neither in employment nor in education and training (% of males aged 15-24)	10.4	13.9	19.4	18.8	19.2	19.6	19.4	18.0	16.4	15.1	13.8
													13.0
	Female	At-risk-of-poverty or social exclusion (% of female population)	24.6	25.1 b	25.6	26.7	27.4	27.2	26.7	28.9	28.3	27.9	27.1
		At-risk-of-poverty (% of female population)	20.8	21.2	21.3	21.3	21.4	20.9	19.9	22.1	21.8	22.1	22.2
		Poverty gap (%)	25.1	24.2 b	25.0	26.4	26.7	30.3	30.3	31.4	32.6	31.8	32.6
		Persistent at-risk-of-poverty (% of female population)	10.9	11.9	13.3	12.2	14.0 b	13.7	11.6	14.4	15.2	14.3	15.3
		Severe Material Deprivation (% of female population)	3.6	3.5	4.4	5.1	4.6	5.5	6.1	7.1	6.3	6.2	5.3
		Share of people living in low work intensity households (% of females aged 0-59)	7.1	7.0	8.0	11.0	13.8	14.8	15.4	17.2	15.1	14.8	13.2
		Life expectancy at birth (years)	84.4	84.6 b	84.9	85.5	85.6	85.5	86.1	86.2	85.8	86.3	86.1
		Healthy life years at birth (years) - women	63.2	63.7 b	62.1	63.8	65.6	65.8	63.9	65.0	64.1	66.5	69.9
		Early leavers from education and training (% of females aged 18-24)	24.7	25.1	24.1	22.6	21.5	20.5	19.8	18.1 b	15.8	15.1	14.5
		NEET: Young people neither in employment nor in education and training (% of females aged 15-24)	13.7	14.6	16.7	16.8	17.3	17.6	17.8	16.2	14.9	14.1	12.8
													11.9
	Children (0-17)	At-risk-of-poverty or social exclusion of children (% of people aged 0-17)	28.6	30.1 b	32.0	33.3	32.2	32.4	32.6	35.8	34.4	32.9	31.3
		At-risk-of-poverty (% of Children population)	26.2	27.3	29.0	29.3	27.5	27.9	27.5	30.5	29.6	29.7	28.3
		Severe Material Deprivation (% of Children population)	4.4	5.5	6.7	7.4	5.2	7.6	8.3	9.5	9.1	7.1	6.5
		Share of children living in low work intensity households (% of Children population)	5.0	4.2	6.2	9.5	11.6	12.3	13.8	14.2	12.0	11.6	9.8
		Risk of poverty of children in households at work (Working Intensity > 0.2)	23.7	25.4 b	25.8	24.1	21.3	20.4	19.3	22.6	22.9	22.8	22.1
		Impact of social transfers (excl. pensions) in reducing poverty (0-17) (%)	14.1	18.3 b	18.1	21.9	25.9	23.4	27.6	22.4	21.1	17.5	17.7
	Working age (18-64)	At-risk-of-poverty or social exclusion (% of working age population)	20.8	21.5 b	22.7	24.9	26.7	28.6	29.2	31.8	31.2	30.4	28.2
		At-risk-of-poverty (% of Working age population)	16.4	16.5	17.2	18.1	19.0	20.4	20.4	22.9	22.8	22.9	21.7
		Severe Material Deprivation (% of Working age population)	3.3	3.5	4.5	4.9	4.8	6.1	6.5	7.6	6.9	6.4	5.6
		Very low work intensity (18-59)	7.3	7.3	8.0	11.2	13.9	14.9	16.3	18.0	16.5	15.9	13.7
		In-work at-risk-of poverty rate (% of persons employed 18-64)	10.2	11.3 b	11.7	10.8	10.9	10.8	10.6	12.6	13.2	13.1	13.1
		Impact of social transfers (excl. pensions) in reducing poverty (18-64) (%)	20.8	28.3 b	30.1	33.2	35.8	31.8	34.6	30.8	29.0	27.1	26.9
	Elderly (65+)	At-risk-of-poverty or social exclusion of elderly (% of people aged 65+)	27.8	26.2 b	24.9	22.9	21.2	16.5	14.5	12.9	13.7	14.4	16.4
		At-risk-of-poverty (% of Elderly population)	26.1	25.5	23.8	21.8	19.8	14.8	12.7	11.4	12.3	13.0	14.8
		Severe Material Deprivation (% of Elderly population)	3.6	1.9	2.3	2.2	2.7	2.9	2.7	2.4	2.2	2.5	2.4
		Relative median income of elderly (ratio with median income of people younger than 65)	0.79	0.83 b	0.87	0.88	0.91	0.96	1.0	1.03	1.01	1.01	0.98
		Aggregate replacement ratio (ratio)	0.48	0.42 b	0.45	0.47	0.51	0.55	0.60	0.60	0.66	0.66	0.69
Expenditure in social protection indicators (% of GDP)		Sickness/Health care	6.2	6.6	7.1	7.0	6.9	6.6	6.5	6.5	6.6 p	6.6 p	
		Disability	1.5	1.5	1.7	1.7	1.8	1.8	1.9	1.8	1.7 p	1.7 p	
		Old age and survivors	8.5	8.8	9.8	10.3	10.8	11.4	12.0	12.3	12.0 p	12.0 p	
		Family/Children	1.2	1.3	1.5	1.5	1.4	1.3	1.4	1.3	1.3 p	1.3 p	
		Unemployment	2.0	2.3	3.5	3.2	3.6	3.4	3.3	2.7	2.2 p	1.9 p	
		Housing and Social exclusion n.e.c.	0.4	0.4	0.4	0.4	0.4	0.4	0.3	0.4	0.3 p	0.4 p	
		Total (including Admin and Other expenditures) of which: Means tested benefits	20.3	21.4	24.4	24.6	25.3	25.5	25.8	25.4	24.6 p	24.3 p	
			2.7	2.8	3.3	3.6	4.0	3.7	3.7	3.5	3.2 p	3.1 p	

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## France

France		2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018
Macro Economic Indicators (Annual % growth)	Real GDP	2.4	0.3	-2.9	1.9	2.2	0.3	0.6	1.0	1.1	1.1	2.3 p	1.7 p
	Total employment	1.4	0.5	-1.1	0.1	0.8	0.3	0.2	0.5	0.2	0.6	1.0 p	1.0 p
	Labour productivity	1.0	-0.3	-1.8	1.8	1.4	0.0	0.4	0.4	0.9	0.5	1.3 p	0.7 p
	Annual average hours worked per person employed	1.4	0.4	-0.7	0.6	0.4	-0.4	-1.0	-0.5	0.1	0.2	-1.1 p	-0.7 p
	Real productivity per hour worked	-0.5	-0.6	-1.0	1.3	1.0	0.3	1.4	1.0	0.8	0.3	2.4 p	1.4 p
	Harmonized CPI	1.6	3.2	0.1	1.7	2.3	2.2	1.0	0.6	0.1	0.3	1.2	2.1
	Price deflator GDP	2.6	2.4	0.1	1.1	0.9	1.2	0.8	0.6	1.1	0.5	0.5 p	0.8 p
	Nominal compensation per employee	2.5	2.6	1.6	2.9	2.3	2.2	1.8	1.2	1.1	1.2	1.9 p	1.8 p
	Real compensation per employee (GDP deflator)	-0.1	0.2	1.5	1.8	1.4	1.0	1.0	0.6	-0.1	0.7	1.4 p	1.0 p
	Real compensation per employee (private consumption deflator)	0.9	-0.5	1.5	1.1	0.0	0.0	0.8	0.6	1.0	0.9	0.7 p	-0.3 p
	Nominal unit labour costs	1.5	2.9	3.4	1.0	0.9	2.2	1.4	0.7	0.2	0.7	0.6 p	1.0 p
	Real unit labour costs	-1.0	0.4	3.4	-0.1	-0.1	1.0	0.7	0.1	-0.9	0.2	0.1 p	0.2 p
Labour Market Indicators - Total	Total population (000)	63645	64007	64350	64659	64979	65277 b	65600	66166 b	66458	66638	66804	66926
	Population aged 15-64 (000)	41469	41683	41809	41912	42033	41959	41883	41954 b	41878	41788	41739	41655
	Total employment (000)	25587	25926	25674	25731	25759	25805	25785	26377 b	26424	26584	26880	27122
	Employment aged 15-64 (000)	25459	25793	25545	25581	25564	25568	25546	26109 b	26119	26243	26512	26745
	Employment rate (% population aged 20-64)	69.9	70.5	69.5	69.3	69.2	69.4	69.5	69.7	70.0	70.4	71.0	71.8
	Employment rate (% population aged 15-64)	64.3	64.9	64.1	64.0	63.9	64.0	64.0	64.1	64.3	64.6	65.2	65.9
	Employment rate (% population aged 15-24)	31.2	31.4	30.5	30.1	29.6	28.6	28.4	28.1	28.4	28.2	29.1	30.4
	Employment rate (% population aged 25-54)	82.1	83.2	82.1	82.0	81.5	80.9	80.6	80.4	79.9	80.3	80.6	81.2
	Employment rate (% population aged 55-64)	38.2	38.2	38.9	39.7	41.4	44.5	45.6	47.0	48.8	49.9	51.4	52.3
	FTE employment rate (% population aged 20-64)	65.6	66.0	64.7	64.6	64.5	64.6	64.8	64.5 b	64.6	64.8	65.4	66.5
	Self-employed (% total employment)	10.3	10.0	10.3	10.9	11.1	11.0	10.8	11.2 b	11.2	11.4	11.3	11.4
	Part-time employment (% total employment)	17.2	16.8	17.2	17.6	17.6	17.7	18.1	18.5	18.3	18.2	18.2	17.9
	Temporary employment (% total employment)	13.4	13.5	12.9	13.4	13.6	13.5	13.7	13.4	14.1	14.1	14.8	14.7
	Employment in Services (% total employment)		74.1 b	74.5	74.9	75.0	75.4	75.7	76.8 b	77.1	77.0	77.1	77.5
	Employment in Industry (% total employment)		23.2 b	22.6	22.2	22.2	21.8	21.3	20.4 b	20.3	20.2	20.4	20.1
	Employment in Agriculture (% total employment)		2.7 b	2.9	2.9	2.8	2.8	3.0	2.8 b	2.7	2.8	2.5	2.4
	Activity rate (% population aged 15-64)	69.3 e	69.4 e	69.8 e	69.8 e	69.7 e	70.3 e	70.7 e	71.0	71.3	71.4	71.5	71.9
	Activity rate (% population aged 15-24)	38.4	38.5	39.6	38.9	37.9	37.4	37.4	36.6	37.3	37.2	37.2	38.0
	Activity rate (% population aged 25-54)	87.9	88.5	88.6	88.7	88.2	88.2	88.3	88.2	87.8	87.8	87.7	88.1
	Activity rate (% population aged 55-64)	40.0	39.8	41.2	42.2	43.9	47.4	49.0	50.7	52.6	53.7	54.9	56.0
	Total unemployment (000)	2268	2121	2622	2680	2665	2855	3026	3026	3054	2972	2788	2700
	Unemployment rate (% labour force)	8.0	7.4	9.1	9.3	9.2	9.8	10.3	10.3	10.4	10.1	9.4	9.1
	Youth unemployment rate (% labour force 15-24)	19.5	19.0	23.6	23.3	22.6	24.4	24.9	24.2	24.7	24.6	22.3	20.7
	Long term unemployment rate (% labour force)	3.3 e	2.9 e	3.3 e	3.9 e	4.0 e	4.1 e	4.4 e	4.5	4.6	4.6	4.2	3.8
	Share of long term unemployment (% of total unemployment)	39.2	36.6	34.5	39.5	40.7	39.6	40.2	42.5	42.6	44.2	43.8	40.2
	Youth unemployment ratio (% population aged 15-24)	7.2	7.1	9.1	8.8	8.3	8.8	9.0	8.8 b	9.1	9.1	8.2	7.8
	Employment rate for low skilled 25-64 (ISCED 0-2)	57.9	57.7	56.4	55.8	55.9	55.7	54.2 b	53.2 b	52.2	51.3	52.7	52.9
	Employment rate for medium skilled 25-64 (ISCED 3-4)	75.7	75.8	74.9	74.6	73.7	73.6	73.2 b	72.5 b	72.6	72.9	73.0	73.5
	Employment rate for high skilled 25-64 (ISCED 5-8)	83.4	84.6	83.5	83.6	83.8	84.3	84.3 b	83.8 b	83.9	85.0	85.2	84.9
	Employment rate (Nationals aged 15-64)	65.0	65.5	64.8	64.7	64.6	64.8	64.8	64.5 b	64.8	65.2	65.8	66.2
	Employment rate (Other EU28 aged 15-64)	66.1	66.0	64.8	67.0	68.0	65.1	67.6	66.7 b	65.4	66.4	67.2	69.7
	Employment rate (Other than EU28 aged 15-64)	46.1	50.2	46.3	46.3	45.7	46.4	46.0	44.9 b	44.2	44.3	45.2	48.7
	Employment rate (Born in the same country aged 15-64)	65.2	65.6	65.0	64.8	64.8	65.0	65.1	64.8 b	65.1	65.6	66.0	66.5
	Employment rate (Born in other EU28 aged 15-64)	64.4	64.4	64.8	67.1	67.6	65.8	67.7	66.9 b	65.8	65.5	67.5	69.1
	Employment rate (Born outside EU28 aged 15-64)	55.7	58.3	55.3	54.8	54.1	54.8	53.4	52.9 b	52.5	52.2	53.5	55.5
	Underemployment (% of labour force aged 15-74)		4.5 b	4.7	5.0	4.7	4.7	5.4 b	5.5	5.7	5.5	5.3	5.0
	Seeking but not available (% of labour force aged 15-74)	1.6	1.5	1.6	1.7	1.9	1.9	1.0 b	1.1	1.1	1.2	1.2	1.2
	Discouraged, available but not seeking (% of labour force aged 15-74)	1.3	1.3	1.4	1.4	1.4	1.2		2.3	2.4	2.3	2.2	2.2

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France		2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018
Labour Market Indicators - Male	Total population (000)	30803	30980	31148	31302	31463	31605 b	31773	32045 b	32174	32247	32319	32371
	Population aged 15-64(000)	20521	20616	20669	20715	20771	20725	20685	20710 b	20660	20603	20571	20523
	Total employment (000)	13545	13692	13485	13520	13531	13508	13434	13661 b	13658	13761	13948	14031
	Employment aged 15-64 (000)	13468	13612	13406	13427	13415	13369	13294	13501 b	13478	13562	13746	13817
	Employment rate (% population aged 20-64)	75.1	75.6	74.3	74.0	74.0	73.9	73.6	73.5	73.6	74.2	75.0	75.7
	Employment rate (% population aged 15-64)	69.2	69.7	68.4	68.3	68.2	68.1	67.8	67.5	67.5	68.0	68.9	69.4
	Employment rate (% population aged 15-24)	34.2	34.4	32.6	33.2	32.5	31.0	31.1	30.1	30.3	30.2	31.5	32.9
	Employment rate (% population aged 25-54)	88.4	89.3	87.7	87.4	86.8	86.0	85.2	84.8	84.1	84.7	85.5	85.8
	Employment rate (% population aged 55-64)	40.5	40.6	41.5	42.3	44.1	47.5	48.4	48.9	50.8	51.6	52.8	54.1
	FTE employment rate (% population aged 20-64)	74.1	74.2	72.6	72.4	72.4	72.2	71.8	71.3 b	71.2	71.5	72.3	72.7
	Self-employed (% total employment)	13.9	13.2	14.0	14.7	14.9	14.6	14.3	14.6 b	14.6	14.8	14.3	14.6
	Part-time employment (% total employment)	5.5	5.6	5.8	6.4	6.5	6.4	6.7	7.3	7.3	7.4	7.6	7.7
	Temporary employment (% total employment)	12.0	11.9	11.2	12.0	12.5	12.2	12.6	12.2	13.0	13.3	13.8	13.7
	Employment in Services (% total employment)		62.4 b	62.4	63.0	63.6	63.9	64.4	65.7 b	65.9	65.7	66.4	66.6
	Employment in Industry (% total employment)		34.2 b	33.8	33.2	32.7	32.3	31.5	30.5 b	30.4	30.4	30.2	30.0
	Employment in Agriculture (% total employment)		3.5 b	3.8	3.9	3.7	3.8	4.1	3.8 b	3.7	3.9	3.5	3.4
	Activity rate (% population aged 15-64)	74.7	74.7	75.0	74.9	74.6	75.3	75.5	75.3	75.5	75.6	75.9	76.1
	Activity rate (% population aged 15-24)	41.9	42.2	42.9	42.6	41.3	40.8	40.8	39.9	40.5	40.0	40.6	41.5
	Activity rate (% population aged 25-54)	94.1	94.4	94.3	94.2	93.7	93.6	93.3	93.1	92.7	92.7	92.9	92.7
	Activity rate (% population aged 55-64)	42.5	42.4	44.0	45.0	46.8	50.8	52.3	53.0	55.1	56.1	56.8	58.2
	Total unemployment (000)	1132	1057	1360	1372	1344	1492	1590	1608	1654	1571	1456	1390
	Unemployment rate (% labour force)	7.6	7.0	9.0	9.0	8.9	9.8	10.4	10.5	10.8	10.3	9.5	9.0
	Youth unemployment rate (% labour force 15-24)	19.0	19.2	24.7	22.9	22.0	24.8	24.6	25.1	25.8	25.1	23.1	21.4
	Long term unemployment rate (% labour force)	2.9	2.6	3.0	3.6	3.5	3.8	4.1	4.5	4.6	4.6	4.2	3.6
	Share of long term unemployment (% of total unemployment)	39.3	38.0	34.8	41.1	41.5	40.4	40.6	43.8	43.6	46.1	45.5	41.6
	Youth unemployment ratio (% population aged 15-24)	7.7	7.8	10.3	9.4	8.8	9.8	9.7	10.0 b	10.4	10.0	9.3	8.8
	Employment rate for low skilled 25-64 (ISCED 0-2)	65.3	65.9	64.1	62.9	63.0	63.3	61.8 b	60.4 b	58.9	58.6	60.7	61.1
	Employment rate for medium skilled 25-64 (ISCED 3-4)	80.5	80.3	79.1	78.8	78.1	77.6	76.7 b	76.1 b	76.2	76.3	76.8	77.1
	Employment rate for high skilled 25-64 (ISCED 5-8)	86.9	88.1	86.9	87.0	87.2	87.6	87.3 b	86.4 b	86.7	88.1	88.3	87.9
	Employment rate (Nationals aged 15-64)	69.5	69.9	68.8	68.5	68.4	68.4	68.0	67.5 b	67.6	68.0	68.9	69.1
	Employment rate (Other EU28 aged 15-64)	73.0	72.5	71.7	74.8	74.2	70.7	73.3	71.5 b	70.0	69.6	70.2	74.5
	Employment rate (Other than EU28 aged 15-64)	59.5	62.8	56.8	60.6	58.9	60.3	60.0	56.5 b	55.2	57.7	58.5	63.2
	Employment rate (Born in the same country aged 15-64)	69.4	69.8	68.8	68.5	68.6	68.4	68.1	67.6 b	67.8	68.2	68.9	69.1
	Employment rate (Born in other EU28 aged 15-64)	71.1	70.4	70.6	73.1	72.9	70.9	73.3	70.8 b	69.6	68.3	69.7	73.2
	Employment rate (Born outside EU28 aged 15-64)	66.2	68.3	63.8	64.5	63.4	64.6	64.0	61.5 b	61.0	62.2	64.3	66.4
	Underemployment (% of labour force aged 15-74)		1.8 b	1.9	2.2	2.2	2.2	2.5 b	2.7	3.0	3.0	2.8	2.7
	Seeking but not available (% of labour force aged 15-74)	1.1	1.1	1.2	1.3	1.4	1.5	0.9 b	0.9	0.9	1.0	0.9	0.9
	Discouraged, available but not seeking (% of labour force aged 15-74)	1.0	1.0	1.0	1.1	1.1	1.0		2.0	2.2	2.2	2.0	2.0
Labour Market Indicators - Female	Total population (000)	32842	33027	33202	33357	33516	33672 b	33828	34121 b	34284	34391	34485	34556
	Population aged 15-64(000)	20948	21067	21139	21197	21262	21234	21198	21244 b	21218	21185	21168	21132
	Total employment (000)	12042	12234	12189	12211	12228	12297	12351	12715 b	12766	12823	12932	13091
	Employment aged 15-64 (000)	11992	12181	12139	12154	12149	12199	12252	12607 b	12640	12682	12766	12927
	Employment rate (% population aged 20-64)	64.9	65.5	65.0	64.9	64.7	65.1	65.5	66.1	66.5	66.8	67.2	68.1
	Employment rate (% population aged 15-64)	59.6	60.3	59.9	59.8	59.7	60.1	60.4	60.8	61.1	61.4	61.7	62.5
	Employment rate (% population aged 15-24)	28.1	28.5	28.3	27.1	26.7	26.1	25.7	25.9	26.4	26.3	26.8	27.7
	Employment rate (% population aged 25-54)	76.0	77.3	76.7	76.8	76.2	76.0	76.2	76.1	75.9	75.9	75.8	76.8
	Employment rate (% population aged 55-64)	36.0	35.9	36.5	37.3	38.9	41.6	43.0	45.3	47.0	48.3	50.1	50.5
	FTE employment rate (% population aged 20-64)	58.3	58.8	57.8	57.8	57.7	58.0	58.7	58.7 b	59.0	58.9	59.4	61.2
	Self-employed (% total employment)	6.3	6.4	6.3	6.7	6.9	7.0	7.0	7.5 b	7.6	7.8	8.0	7.9
	Part-time employment (% total employment)	30.3	29.4	29.9	30.0	29.9	30.0	30.4	30.6	30.1	29.8	29.6	28.8
	Temporary employment (% total employment)	15.0	15.2	14.8	14.9	14.8	14.9	14.8	14.6	15.1	15.1	15.8	15.7
	Employment in Services (% total employment)							88.1 u	88.7 bu	89.0 u	89.2 u	88.6 u	89.1 u
	Employment in Industry (% total employment)							10.1 u	9.7 bu	9.4 u	9.3 u	9.9 u	9.6 u
	Employment in Agriculture (% total employment)		1.8 b	1.9	1.8	1.8	1.8	1.8	1.6 b	1.6	1.6	1.5	1.3
	Activity rate (% population aged 15-64)	64.9	65.2	65.7	65.8	65.7	66.3	66.9	67.4	67.6	67.9	67.9	68.5
	Activity rate (% population aged 15-24)	34.9	34.7	36.2	35.2	34.5	34.0	33.9	33.4	34.2	34.3	33.7	34.4
	Activity rate (% population aged 25-54)	82.0	82.8	83.1	83.4	83.0	83.0	83.5	83.4	83.0	83.1	82.8	83.6
	Activity rate (% population aged 55-64)	37.6	37.3	38.5	39.5	41.2	44.2	46.0	48.6	50.4	51.5	53.1	54.0
	Total unemployment (000)	1135	1064	1262	1308	1321	1363	1436	1417	1400	1402	1332	1310
	Unemployment rate (% labour force)	8.5	7.9	9.2	9.5	9.6	9.8	10.2	10.0	9.9	9.9	9.3	9.1
	Youth unemployment rate (% labour force 15-24)	20.1	18.8	22.3	23.7	23.3	23.8	25.2	23.1	23.3	24.1	21.3	19.9
	Long term unemployment rate (% labour force)	3.2	2.6	3.0	3.4	3.6	3.6	3.9	3.9	3.9	4.0	3.8	3.4
	Share of long term unemployment (% of total unemployment)	39.0	35.3	34.3	37.7	39.9	38.7	39.8	40.9	41.5	42.0	42.1	38.6
	Youth unemployment ratio (% population aged 15-24)	6.8	6.3	7.8	8.1	7.8	7.9	8.3	7.7 b	7.9	8.2	7.1	6.8
	Employment rate for low skilled 25-64 (ISCED 0-2)	51.5	50.4	49.6	49.7	49.6	48.9	47.5 b	47.0 b	46.2	44.7	45.5	45.5
	Employment rate for medium skilled 25-64 (ISCED 3-4)	70.4	70.9	70.2	70.0	69.0	69.3	69.4 b	68.4 b	68.6	69.2	68.9	69.6
	Employment rate for high skilled 25-64 (ISCED 5-8)	80.3	81.7	80.6	80.8	80.8	81.5	81.7 b	81.6 b	81.6	82.3	82.6	82.5
	Employment rate (Nationals aged 15-64)	60.7	61.3	60.9	61.0	60.9	61.4	61.7	61.5 b	62.0	62.4	62.8	63.4
	Employment rate (Other EU28 aged 15-64)	59.4	59.8	57.8	59.1	61.4	59.0	61.6	62.2 b	61.0	63.4	64.2	65.0
	Employment rate (Other than EU28 aged 15-64)	33.8	38.0	36.5	33.7	34.2	34.2	33.9	35.4 b	34.7	32.7	34.1	36.3
	Employment rate (Born in the same country aged 15-64)	61.0	61.6	61.2	61.2	61.1	61.7	62.2	62.0 b	62.5	63.0	63.3	63.9
	Employment rate (Born in other EU28 aged 15-64)	58.9	59.2	59.5	61.6	62.7	61.0	62.5	63.6 b	62.3	63.0	65.5	65.5
	Employment rate (Born outside EU28 aged 15-64)	45.9	48.8	47.4	45.8	45.9	45.9	43.9	45.5 b	45.0	43.6	44.0	46.0
	Underemployment (% of labour force aged 15-74)		7.5 b	7.7	8.1	7.5	7.5	8.5 b	8.5	8.7	8.3	7.9	7.6
	Seeking but not available (% of labour force aged 15-74)	2.2	1.9	2.1	2.1	2.3	2.3	1.2 b	1.3	1.2	1.4	1.4	1.4
	Discouraged, available but not seeking (% of labour force aged 15-74)	1.7	1.7	1.7	1.7	1.7	1.5		2.5	2.5	2.4	2.4	2.3

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France			2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018
Social Indicators	All	At-risk-of-poverty or social exclusion (% of total population)	19.0	18.5 b	18.5	19.2	19.3	19.1	18.1	18.5	17.7	18.2	17.1	
		At-risk-of-poverty (% of total population)	13.1	12.5	12.9	13.3	14.0	14.1	13.7	13.3	13.6	13.6	13.3	
		At-risk-of-poverty threshold (PPS single person)	9089	10496 b	10644	10669	10897	11271	11516	11584	11931	12373	12268	
		Poverty gap (%)	17.9	14.5 b	18.2	19.5	17.1	16.2	16.8	16.6	15.7	16.6	16.9	
		Persistent at-risk-of-poverty (% of total population)	6.4					7.0	8.3	7.9	8.5	8.0	8.0	
		At-risk-of-poverty before social transfers excl. pensions (% of total population)	26.4	23.5 b	24.0	24.9	24.7	23.8	24.4	24.0	23.9	23.6	24.1	
		Impact of social transfers (excl. pensions) in reducing poverty (%)	50.4	46.8 b	46.3	46.6	43.3	40.8	43.9	44.6	43.1	42.4	44.8	
		Severe Material Deprivation (% of total population)	4.7	5.4	5.6	5.8	5.2	5.3	4.9	4.8	4.5	4.4	4.1	4.7 p
		Share of people living in low work intensity households (% of people aged 0-59)	9.6	8.8	8.4	9.9	9.4	8.4	8.1	9.6	8.6	8.4	8.1	
		Real Gross Household Disposable income (growth %)	3.0	0.4	1.7	1.3	0.2	-0.8	-0.3	1.2	0.8	1.9		
		Income quintile share ratio S80/S20	3.9	4.4 b	4.4	4.4	4.6	4.5	4.5	4.3	4.3	4.3	4.4	
		GINI coefficient	26.6	29.8 b	29.9	29.8	30.8	30.5	30.1	29.2	29.2	29.3	29.3	
		Early leavers from education and training (% of population aged 18-24)	12.8	11.8	12.4	12.7	12.3	11.8	9.7 b	8.8 b	9.2	8.8	8.9	8.9
		NEET: Young people neither in employment nor in education and training (% of total population aged 15-24)	10.7	10.5	12.7	12.7	12.3	12.5	11.2	10.7	11.4	11.5	11.0	10.6
	Male	At-risk-of-poverty or social exclusion (% of male population)	18.0	17.3 b	17.1	18.4	18.6	18.4	17.3	17.5	17.1	17.3	16.6	
		At-risk-of-poverty (% of male population)	12.8	11.7	11.9	12.7	13.5	13.6	13.1	12.6	13.2	12.8	12.9	
		Poverty gap (%)	18.0	14.7 b	18.8	19.5	17.8	16.3	16.7	17.1	15.7	16.8	16.4	
		Persistent at-risk-of-poverty (% of male population)	5.9					6.3	8.3	7.5	7.8	6.9	7.9	
		Severe Material Deprivation (% of male population)	4.4	5.1	5.2	5.7	5.1	5.1	4.5	4.5	4.4	4.2	3.9	4.5 p
		Share of people living in low work intensity households (% of males aged 0-59)	8.6	8.1	7.6	9.2	9.0	8.4	7.5	8.9	8.3	8.0	7.8	
		Life expectancy at birth (years)	77.6	77.8	78.0	78.2	78.7	78.7	79.0	79.5	79.2	79.5	79.6	
		Healthy life years at birth (years) - men	62.8	62.8	62.8	61.8	62.7	62.6	63.0	63.4	62.6	62.6		
		Early leavers from education and training (% of males aged 18-24)	15.2	13.8	14.5	15.3	14.1	13.7	10.7 b	9.9 b	10.1	10.1	10.5	10.8
		NEET: Young people neither in employment nor in education and training (% of males aged 15-24)	10.0	10.4	13.3	12.7	12.0	12.9	11.0	11.1	11.9	11.6	11.6	11.2
	Female	At-risk-of-poverty or social exclusion (% of female population)	20.0	19.7 b	19.7	19.9	19.9	19.6	18.9	19.5	18.2	19.1	17.6	
		At-risk-of-poverty (% of female population)	13.4	13.3	13.8	13.9	14.5	14.6	14.3	14.1	13.9	14.4	13.6	
		Poverty gap (%)	17.7	14.4 b	18.0	19.7	16.4	16.2	16.8	16.1	15.7	16.5	17.1	
		Persistent at-risk-of-poverty (% of female population)	6.9					7.7	8.4	8.3	9.1	9.0	8.1	
		Severe Material Deprivation (% of female population)	5.0	5.7	5.9	5.8	5.4	5.5	5.4	5.1	4.7	4.6	4.4	4.9 p
		Share of people living in low work intensity households (% of females aged 0-59)	10.6	9.6	9.1	10.5	9.7	8.5	8.6	10.4	8.8	8.8	8.3	
		Life expectancy at birth (years)	84.8	84.8	85.0	85.3	85.7	85.4	85.6	86.0	85.5	85.7	85.6	
		Healthy life years at birth (years) - women	64.4	64.5	63.5	63.4	63.6	63.8	64.4	64.2	64.6	64.1		
		Early leavers from education and training (% of females aged 18-24)	10.5	9.9	10.3	10.2	10.4	10.0	8.6 b	7.8 b	8.4	7.5	7.2	6.9
NEET: Young people neither in employment nor in education and training (% of females aged 15-24)		11.3	10.7	12.1	12.6	12.6	12.1	11.4	10.3	11.0	11.3	10.4	9.9	
Children (0-17)	At-risk-of-poverty or social exclusion of children (% of people aged 0-17)	19.6	21.2 b	21.2	22.9	23.0	23.2	20.8	21.6	21.2	22.6	22.3		
	At-risk-of-poverty (% of Children population)	15.3	15.6	16.8	18.1	18.8	19.0	17.6	17.7	18.7	19.1	19.1		
	Severe Material Deprivation (% of Children population)	5.4	6.6	6.5	7.0	7.0	7.2	5.6	5.7	5.4	5.3	5.1	5.7 p	
	Share of children living in low work intensity households (% of Children population)	7.7	7.4	6.6	8.8	8.2	7.2	6.3	8.1	7.4	7.6	7.5		
	Risk of poverty of children in households at work (Working Intensity > 0.2)	10.6	11.5	12.8	12.7	13.6	14.3	13.5	12.6	13.3	14.8	14.6		
	Impact of social transfers (excl. pensions) in reducing poverty (0-17) (%)	58.5	55.3 b	51.5	50.0	47.5	44.3	48.1	48.4	45.2	44.5	46.8		
Working age (18-64)	At-risk-of-poverty or social exclusion (% of working age population)	19.7	18.8 b	18.9	19.9	20.1	19.8	19.3	19.9	19.0	19.2	17.7		
	At-risk-of-poverty (% of Working age population)	12.3	11.6	11.8	12.7	13.5	13.7	13.7	13.2	13.4	13.3	12.9		
	Severe Material Deprivation (% of Working age population)	4.8	5.5	5.9	6.0	5.2	5.4	5.4	5.2	5.0	4.6	4.3	5.0 p	
	Very low work intensity (18-59)	10.4	9.4	9.1	10.3	9.8	8.9	8.8	10.3	9.0	8.7	8.3		
	In-work at-risk-of poverty rate (% of persons employed 18-64)	6.4	6.5 b	6.6	6.5	7.6	8.0	7.8	8.0	7.5	8.0	7.4		
	Impact of social transfers (excl. pensions) in reducing poverty (18-64) (%)	50.4	47.3 b	47.8	48.0	43.8	41.0	43.9	45.2	44.6	43.9	46.5		
Elderly (65+)	At-risk-of-poverty or social exclusion of elderly (% of people aged 65+)	15.2	14.1 b	13.4	11.8	11.5	11.1	10.8	10.1	9.3	10.0	9.5		
	At-risk-of-poverty (% of Elderly population)	13.1	11.9	11.9	9.4	9.7	9.4	9.1	8.6	8.0	8.2	7.8		
	Severe Material Deprivation (% of Elderly population)	3.4	3.3	3.2	3.4	2.9	2.4	2.6	2.4	1.9	2.9	2.5	2.8 p	
	Relative median income of elderly (ratio with median income of people younger than 65)	0.91	0.95 b	0.96	0.98	1.01	1.0	1.03	1.02	1.04	1.02	1.05		
	Aggregate replacement ratio (ratio)	0.60	0.65 b	0.66	0.65	0.64	0.65	0.66	0.69	0.69	0.68	0.68		
Expenditure in social protection indicators (% of GDP)	Sickness/Health care	8.4	8.4	9.0	8.9	8.8	8.9	9.0	9.1	9.1	9.2			
	Disability	1.8	1.8	1.9	1.9	2.0	2.0	2.0	2.1	2.0	2.1			
	Old age and survivors	12.6	12.9	13.9	13.9	14.0	14.3	14.6	14.6	14.6	14.6			
	Family/Children	2.4	2.4	2.6	2.5	2.5	2.5	2.5	2.5	2.5	2.4			
	Unemployment	1.6	1.5	1.9	1.9	1.9	2.0	2.0	2.0	2.0	2.0			
	Housing and Social exclusion n.e.c.	1.5	1.6	1.8	1.7	1.7	1.7	1.7	1.8	1.8	1.8			
	Total (including Admin and Other expenditures)	30.4	30.8	33.2	33.2	33.0	33.8	34.2	34.5	34.2	34.3			
	of which: Means tested benefits	3.2	3.1	3.5	3.4	3.4	3.4	3.5	3.5	3.5	3.5			

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## Croatia

Croatia		2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018
Macro Economic Indicators (Annual % growth)	Real GDP	5.3	2.0	-7.3	-1.5	-0.3	-2.3	-0.5	-0.1	2.4	3.5	2.9	2.6
	Total employment	3.2 p	2.1 d	-0.7 d	-3.8 d	-3.9 d	-3.6 d	-2.6 d	2.7 d	1.2 d	0.3 d	2.2 d	
	Labour productivity	2.1 p	-0.1 d	-6.6 d	2.4 d	3.7 d	1.4 d	2.2 d	-2.7 d	1.1 d	3.2 d	0.7 d	
	Annual average hours worked per person employed	0.1 p	0.1 dp	-0.2 d	0.7 d	-0.1 d	-0.9 d	-0.7 d	-0.9 d	-3.4 d	0.4 d	-0.6 d	
	Real productivity per hour worked	1.9 p	-0.2 d	-6.4 d	1.6 d	3.8 d	2.3 d	2.9 d	-1.8 d	4.7 d	2.8 d	1.3 d	
	Harmonized CPI	2.7	5.8	2.2	1.1	2.2	3.4	2.3	0.2	-0.3	-0.6	1.3	1.6
	Price deflator GDP	4.1	5.7	2.8	0.8	1.7	1.5	0.8	0.0	0.0	-0.1	1.1	1.7
	Nominal compensation per employee	5.3 p	5.1 dp	-0.2 d	1.9 d	3.7 d	0.4 d	-0.9 d	-5.2 d	0.4 d	1.3 d	-1.1 d	
	Real compensation per employee (GDP deflator)	1.1 p	-0.6 dp	-2.9 d	1.0 d	2.0 d	-1.2 d	-1.7 d	-5.3 d	0.3 d	1.4 d	-2.2 d	
	Real compensation per employee (private consumption deflator)	2.5 p	-0.7 dp	-2.4 d	0.8 d	1.4 d	-2.9 d	-3.2 d	-5.4 d	0.6 d	2.0 d	-2.3 d	
	Nominal unit labour costs	3.1 p	5.2 d	6.8 d	-0.5 d	0.0 d	-1.0 d	-3.1 d	-2.6 d	-0.8 d	-1.8 d	-1.8 d	
	Real unit labour costs	-1.0 p	-0.5 dp	3.9 d	-1.3 d	-1.6 d	-2.5 d	-3.8 d	-2.6 d	-0.9 d	-1.8 d	-2.8 d	
Labour Market Indicators - Total	Total population (000)	4314	4312	4310	4303	4290	4276	4262	4247	4225	4191	4154	4105
	Population aged 15-64 (000)	2879	2875	2875	2875	2874	2865	2852	2836	2809	2774	2737	2686
	Total employment (000)	1734	1771	1757	1690	1625	1566	1524	1566	1585	1590	1625	1655
	Employment aged 15-64 (000)	1694	1725	1708	1649	1584	1528	1494	1542	1559	1567	1603	1630
	Employment rate (% population aged 20-64)	63.9	64.9	64.2	62.1	59.8	58.1	57.2	59.2	60.6	61.4	63.6	65.2
	Employment rate (% population aged 15-64)	59.0	60.0	59.4	57.4	55.2	53.5	52.5	54.6	56.0	56.9	58.9	60.6
	Employment rate (% population aged 15-24)	27.4	28.0	27.1	24.2	20.6	17.4	14.9	18.3	19.1	25.6	25.9	25.6
	Employment rate (% population aged 25-54)	74.5	76.0	74.7	72.6	70.6	69.2	68.3	71.2	72.3	72.4	74.9	77.0
	Employment rate (% population aged 55-64)	36.6	37.1	39.4	39.1	38.2	37.5	37.8	36.2	39.2	38.1	40.3	42.8
	FTE employment rate (% population aged 20-64)	62.6	63.6	62.8	60.5	58.2	56.9	56.0	58.1	59.3	60.0	62.3	63.9
	Self-employed (% total employment)	18.5	18.7	18.5	19.2	19.0	17.4	16.5	14.1 b	13.7	12.5	11.1	10.8
	Part-time employment (% total employment)	6.1	6.5	6.5	7.0	7.2	5.6	5.4	5.3	6.0	5.6	4.8	5.2
	Temporary employment (% total employment)	10.7	10.0	9.7	10.2	10.8	10.9	12.1	14.4	17.2	19.3	18.2	17.6
	Employment in Services (% total employment)		57.5 bu	58.9 u	59.4	58.6	61.0 u	62.4 u	64.1 u	64.7 u	66.0 u	66.9 u	66.8 u
	Employment in Industry (% total employment)		31.6 bu	29.8 u	28.0	28.6	28.5 u	28.1 u	27.2 u	27.0 u	27.2 u	26.7 u	27.7 u
	Employment in Agriculture (% total employment)		10.9 b	11.4	12.5	12.9	10.6	9.6	8.7	8.3	6.8	6.4	5.6
	Activity rate (% population aged 15-64)	65.7	65.8	65.6	65.1	64.1	63.9	63.7	66.1	66.9	65.6	66.4	66.3
	Activity rate (% population aged 15-24)	36.6	36.6	36.3	35.9	32.5	30.1	29.9	33.6	33.2	37.2	35.7	33.5
	Activity rate (% population aged 25-54)	81.6	81.9	81.2	80.8	80.6	80.9	80.8	84.1	84.5	82.0	83.3	83.4
	Activity rate (% population aged 55-64)	39.0	39.3	41.8	41.8	41.4	41.8	41.9	41.0	44.3	42.2	43.6	44.8
	Total unemployment (000)	190	166	180	224	256	292	320	325	304	245	202	154
	Unemployment rate (% labour force)	9.9	8.6	9.3	11.8	13.7	15.8	17.4	17.2	16.1	13.4	11.0	8.5
	Youth unemployment rate (% labour force 15-24)	25.4	23.6	25.4	32.3	36.6	42.2	49.9	44.9	42.3	31.8	27.2	23.8
	Long term unemployment rate (% labour force)	6.0	5.3	5.1	6.6	8.4	10.2	11.0	10.1	10.2	6.6	4.6	3.4
	Share of long term unemployment (% of total unemployment)	60.0	62.3	55.7	56.3	61.3	63.7	63.6	58.3	63.1	50.7	41.0	40.2
	Youth unemployment ratio (% population aged 15-24)	9.2	8.7	9.2	11.6	11.9	12.7	14.9	15.3	14.0	11.6	9.8	7.9
	Employment rate for low skilled 25-64 (ISCED 0-2)	45.7	47.8	48.9	46.7 b	43.5	41.2	39.3	38.3 b	39.7	38.1	34.9	37.5
	Employment rate for medium skilled 25-64 (ISCED 3-4)	70.0	70.3	68.4	66.2 b	64.7	62.5	61.4	62.6 b	63.9	63.5	66.9	68.5
	Employment rate for high skilled 25-64 (ISCED 5-8)	83.0	83.9	82.9	81.0 b	78.9	77.9	77.7	80.5 b	80.9	82.1	83.8	83.8
	Employment rate (Nationals aged 15-64)	59.0	60.0	59.6	57.5	55.2	53.5	52.5	54.6	56.0	57.0	59.0	60.6
	Employment rate (Other EU28 aged 15-64)					76.1 u	71.8 u	63.4 u			43.1 u	55.3 u	69.5 u
	Employment rate (Other than EU28 aged 15-64)	47.2 u	42.1 u	28.1 u	28.2 u	39.2 u	28.9 u	35.3 u	35.2 u	32.3 u	30.3 u	37.0 u	52.0 u
	Employment rate (Born in the same country aged 15-64)	59.4	60.3	59.6	57.7	55.5	54.0	53.1	54.7	55.9	57.1	59.0	60.4
	Employment rate (Born in other EU28 aged 15-64)	61.4	64.8	70.8	63.9	59.5	56.2	52.9	57.1	61.0	64.5	70.6	71.6
	Employment rate (Born outside EU28 aged 15-64)	55.4	56.8	56.7	53.6	51.4	47.8	46.6	52.5	55.8	54.3	56.9	60.6
	Underemployment (% of labour force aged 15-74)		1.7	1.9	2.4	2.4	1.9	1.8	1.8	2.3	1.9	1.7	1.5
	Seeking but not available (% of labour force aged 15-74)	0.7	0.6	0.6	0.8	0.9	0.7	0.6	0.9	0.6	0.9	0.7	0.7
	Discouraged, available but not seeking (% of labour force aged 15-74)	5.8	5.2	5.7	5.9	6.9	8.2	10.8	8.7	8.4	10.0	7.7	6.9

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Croatia		2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018
Labour Market Indicators - Male	Total population (000)	2076	2077	2077	2075	2069	2062	2056	2050	2039	2023	2005	1982
	Population aged 15-64(000)	1435	1435	1436	1436	1436	1432	1426	1419	1405	1388	1369	1343
	Total employment (000)	970	988	962	920	894	856	821	849	855	860	881	894
	Employment aged 15-64 (000)	951	966	937	899	872	835	803	836	841	845	868	879
	Employment rate (% population aged 20-64)	72.1	72.9	70.5	67.9	66.1	63.7	61.6	64.2	65.4	66.2	68.9	70.3
	Employment rate (% population aged 15-64)	66.5	67.3	65.2	62.7	60.9	58.5	56.5	59.1	60.3	61.4	63.8	65.4
	Employment rate (% population aged 15-24)	32.4	34.2	32.3	27.9	23.8	20.0	17.4	21.2	22.4	28.8	29.8	30.5
	Employment rate (% population aged 25-54)	81.0	82.2	79.3	76.4	75.1	73.0	71.6	74.5	75.4	76.3	78.7	80.4
	Employment rate (% population aged 55-64)	49.5	48.9	49.6	50.5	49.6	48.0	45.0	45.8	48.2	45.1	49.0	51.0
	FTE employment rate (% population aged 20-64)	71.3	72.3	69.8	66.9	65.0	62.9	60.7	63.5	64.4	65.2	67.9	69.4
	Self-employed (% total employment)	21.0	21.2	21.2	21.2	21.3	20.0	19.4	17.6 b	17.4	15.9	13.3	12.9
	Part-time employment (% total employment)	4.6	4.9	4.9	5.1	5.6	4.6	4.6	4.2	4.8	4.4	3.8	3.8
	Temporary employment (% total employment)	10.0	9.6	8.8	9.3	10.4	10.7	12.0	13.7	16.8	18.4	17.8	16.8
	Employment in Services (% total employment)		47.8 bu	48.7 u	49.5 u	49.5 u	51.4 u	50.8 u	53.0 u	53.2 u	53.5 u	54.4 u	55.3 u
	Employment in Industry (% total employment)		41.9 bu	40.4 u	38.7 u	38.2 u	37.9 u	38.8 u	37.1 u	37.1 u	38.0 u	37.7 u	38.2 u
	Employment in Agriculture (% total employment)		10.3 b	10.9	11.8	12.4	10.7	10.4	10.0	9.8	8.5	7.9	6.5
	Activity rate (% population aged 15-64)	73.0	72.5	71.0	70.6	70.7	69.8	68.9	70.9	71.6	70.3	71.5	70.9
	Activity rate (% population aged 15-24)	41.6	43.1	42.4	40.7	37.8	34.6	34.7	38.5	38.2	41.9	40.9	37.9
	Activity rate (% population aged 25-54)	87.4	86.9	84.5	84.1	85.4	85.2	84.7	86.6	86.9	85.2	86.7	86.4
	Activity rate (% population aged 55-64)	53.2	52.1	52.7	54.4	54.2	53.9	51.0	52.1	55.0	50.7	52.8	53.4
	Total unemployment (000)	92	76	84	116	140	159	175	168	158	125	101	76
	Unemployment rate (% labour force)	8.7	7.1	8.1	11.2	13.6	15.8	17.6	16.6	15.6	12.7	10.3	7.8
	Youth unemployment rate (% labour force 15-24)	22.6	20.7	23.8	31.8	36.7	42.2	49.5	44.5	41.5	31.4	26.5	20.3
	Long term unemployment rate (% labour force)	5.0	4.2	3.9	5.9	8.4	10.2	11.3	9.6	10.1	6.8	4.7	3.1
	Share of long term unemployment (% of total unemployment)	56.5	59.5	49.7	53.4	61.3	63.6	63.8	58.2	64.8	54.0	43.8	40.3
	Youth unemployment ratio (% population aged 15-24)	9.2	8.9	10.1	12.8	14.0	14.6	17.3	17.3	15.8	13.1	11.1	7.4
	Employment rate for low skilled 25-64 (ISCED 0-2)	59.2	61.3	60.5	58.1 b	54.2	51.2	49.8	47.0 b	49.1	47.6	44.8	46.7
	Employment rate for medium skilled 25-64 (ISCED 3-4)	76.4	76.8	73.6	71.1 b	70.6	67.7	65.0	67.7 b	68.6	68.4	72.4	74.1
	Employment rate for high skilled 25-64 (ISCED 5-8)	84.6	84.6	83.3	80.7 b	78.4	78.3	78.6	80.9 b	81.3	83.3	84.7	83.9
	Employment rate (Nationals aged 15-64)	66.5	67.3	65.4	62.8	60.8	58.4	56.4	59.1	60.4	61.4	63.9	65.4
	Employment rate (Other EU28 aged 15-64)					80.1 u	89.1 u	85.8 u				57.9 u	70.6 u
	Employment rate (Other than EU28 aged 15-64)	60.1 u						90.0 u	43.3 u			42.7 u	66.5 u
	Employment rate (Born in the same country aged 15-64)	66.4	67.1	65.1	62.8	61.1	59.1	57.0	59.1	60.0	61.0	63.5	64.8
	Employment rate (Born in other EU28 aged 15-64)	74.0 u	71.9 u	71.3 u	70.6 u	59.7 u	59.4	50.3 u	63.8 u	65.8	71.8	73.5	71.9
	Employment rate (Born outside EU28 aged 15-64)	66.8	68.7	65.6	60.9	58.7	52.3	52.4	59.0	62.7	63.0	65.3	69.8
	Underemployment (% of labour force aged 15-74)		1.7	2.0	2.3	2.2	1.8	1.9	1.4	2.1	1.8	1.6	1.2
	Seeking but not available (% of labour force aged 15-74)	0.5 u	0.3 u	0.4 u	0.6 u	0.4 u	0.4 u	0.3 u	0.7 u	0.5 u	0.7 u	0.6 u	0.5 u
	Discouraged, available but not seeking (% of labour force aged 15-74)	3.7	3.6	4.5	4.5	4.6	6.0	8.2	7.4	7.0	7.7	5.2	4.9
Labour Market Indicators - Female	Total population (000)	2237	2235	2233	2228	2221	2214	2206	2197	2186	2168	2149	2124
	Population aged 15-64(000)	1444	1440	1439	1438	1438	1434	1426	1418	1404	1386	1368	1343
	Total employment (000)	764	783	795	770	731	710	703	717	731	730	744	761
	Employment aged 15-64 (000)	743	759	772	749	711	693	690	706	719	721	735	751
	Employment rate (% population aged 20-64)	55.9	57.0	58.0	56.4	53.6	52.6	52.8	54.2	55.9	56.6	58.3	60.1
	Employment rate (% population aged 15-64)	51.6	52.7	53.7	52.1	49.5	48.5	48.5	50.0	51.6	52.4	54.0	55.9
	Employment rate (% population aged 15-24)	22.3	21.4	21.7	20.4	17.2	14.7	12.4	15.3	15.8	22.2	21.8	20.3
	Employment rate (% population aged 25-54)	67.9	69.7	70.1	68.8	66.1	65.2	64.9	67.9	69.3	68.5	71.1	73.5
	Employment rate (% population aged 55-64)	25.0	26.4	30.0	28.5	27.7	27.7	31.0	27.3	30.7	31.6	32.3	35.2
	FTE employment rate (% population aged 20-64)	54.0	55.0	56.0	54.1	51.5	50.9	51.4	52.7	54.2	54.9	56.7	58.5
	Self-employed (% total employment)	15.3	15.6	15.2	16.9	16.2	14.3	13.0	10.1 b	9.5	8.5	8.3	8.3
	Part-time employment (% total employment)	8.1	8.4	8.5	9.4	9.2	6.9	6.4	6.7	7.3	7.1	6.0	6.8
	Temporary employment (% total employment)	11.7	10.4	10.9	11.4	11.3	11.3	12.2	15.1	17.7	20.2	18.7	18.6
	Employment in Services (% total employment)				71.3 u	69.8 u			77.4 u	78.3 u			80.2 u
	Employment in Industry (% total employment)				15.3 u	16.8 u			15.5 u	15.3 u			15.3 u
	Employment in Agriculture (% total employment)		11.6 b	12.0	13.4	13.5	10.5	8.6	7.1	6.5	4.8	4.6	4.4
	Activity rate (% population aged 15-64)	58.4	59.0	60.3	59.6	57.6	58.0	58.5	61.3	62.3	60.9	61.4	61.7
	Activity rate (% population aged 15-24)	31.5	29.9	30.0	30.7	26.9	25.3	24.8	28.5	28.0	32.3	30.2	28.8
	Activity rate (% population aged 25-54)	75.7	76.9	77.8	77.4	75.8	76.6	76.8	81.5	82.1	78.8	79.9	80.3
	Activity rate (% population aged 55-64)	26.1	27.6	31.8	30.2	29.6	30.6	33.4	30.6	34.4	34.2	35.0	36.7
	Total unemployment (000)	98	90	96	108	116	133	146	157	146	120	101	78
	Unemployment rate (% labour force)	11.4	10.4	10.8	12.4	13.8	15.8	17.2	18.0	16.7	14.2	11.9	9.3
	Youth unemployment rate (% labour force 15-24)	29.2	28.0	27.8	33.1	36.3	42.3	50.4	45.4	43.5	32.2	28.3	28.8
	Long term unemployment rate (% labour force)	7.2	6.7	6.5	7.3	8.5	10.2	10.6	10.7	10.4	6.5	4.5	3.8
	Share of long term unemployment (% of total unemployment)	63.5	64.7	60.9	59.3	61.4	63.7	63.2	58.3	61.3	47.2	38.1	40.1
	Youth unemployment ratio (% population aged 15-24)	9.2	8.5	8.2	10.3	9.7	10.6	12.4	13.2	12.2	10.1	8.4	8.5
	Employment rate for low skilled 25-64 (ISCED 0-2)	37.0	38.5	40.7	39.0 b	36.5	34.5	32.0	32.3 b	33.3	31.2	27.5	30.5
	Employment rate for medium skilled 25-64 (ISCED 3-4)	62.4	62.6	62.2	60.3 b	57.6	56.4	57.2	56.6 b	58.3	57.8	60.6	62.0
	Employment rate for high skilled 25-64 (ISCED 5-8)	81.6	83.2	82.6	81.3 b	79.3	77.5	77.0	80.2 b	80.5	81.2	83.1	83.8
	Employment rate (Nationals aged 15-64)	51.6	52.8	53.7	52.2	49.6	48.6	48.6	50.0	51.7	52.5	54.1	55.9
	Employment rate (Other EU28 aged 15-64)												69.0 u
	Employment rate (Other than EU28 aged 15-64)			33.8 u	39.2 u					30.8 u	32.4 u	32.1 u	39.1 u
	Employment rate (Born in the same country aged 15-64)	52.4	53.4	54.1	52.6	49.9	49.0	49.2	50.3	51.8	53.1	54.4	56.1
	Employment rate (Born in other EU28 aged 15-64)	51.0 u	59.8	70.5	60.5	59.3	52.7 u	55.7 u	51.8 u	56.1 u	56.5 u	67.3	71.4
	Employment rate (Born outside EU28 aged 15-64)	43.8	45.7	48.6	46.9	44.4	43.4	41.0	46.7	49.2	45.4	48.8	51.6
	Underemployment (% of labour force aged 15-74)		1.8	1.9	2.4	2.6	1.9	1.7	2.3	2.4	2.1	1.8	1.9
	Seeking but not available (% of labour force aged 15-74)	1.0 u	1.0 u	0.8 u	1.0 u	1.4	1.0 u	0.8 u	1.2	0.8 u	1.1 u	0.7 u	0.9 u
	Discouraged, available but not seeking (% of labour force aged 15-74)	8.3	7.2	7.1	7.6	9.6	10.9	13.8	10.2	10.1	12.6	10.6	9.3

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Croatia			2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018		
Social Indicators	All	At-risk-of-poverty or social exclusion (% of total population)				31.1	32.6	32.6	29.9	29.3	29.1	27.9	26.4			
		At-risk-of-poverty (% of total population)				20.6	20.9	20.4	19.5	19.4	20.0	19.5	20.0			
		At-risk-of-poverty threshold (PPS single person)				4567 b	4454	4417	4448	4644	4952	5391	5682			
		Poverty gap (%)				27.6	27.9	31.0	28.1	27.9	26.4	28.2	26.0			
		Persistent at-risk-of-poverty (% of total population)							13.2		14.7	14.5	15.2			
		At-risk-of-poverty before social transfers excl. pensions (% of total population)				30.0 b	30.7	30.6	29.7	29.9	31.0	27.3	26.6			
		Impact of social transfers (excl. pensions) in reducing poverty (%)				31.3 b	31.9	33.3	34.3	35.1	35.5	28.6	24.8			
		Severe Material Deprivation (% of total population)				14.3	15.2	15.9	14.7	13.9	13.7	12.5	10.3	8.6 p		
		Share of people living in low work intensity households (% of people aged 0-59)				13.9	15.9	16.8	14.8	14.7	14.4	13.0	12.2			
		Real Gross Household Disposable income (growth %)	3.0	2.7	-2.0	-0.7	-0.1	-2.7		5.3	5.1	5.2	5.0	5.0		
		Income quintile share ratio S80/S20				5.5 b	5.6	5.4		5.3	5.1	5.2	5.0	5.0		
		GINI coefficient				31.6	31.2	30.9	30.9	30.2	30.4	29.8	29.9			
		Early leavers from education and training (% of population aged 18-24)	4.5	4.4	5.2	5.2 b	5.0	5.1	4.5	2.8 bu	2.8 u	2.8 u	3.1	3.3		
		NEET: Young people neither in employment nor in education and training (% of total population aged 15-24)	12.9	11.6	13.4	15.7	16.2	16.6	19.6	19.3	18.1	16.9	15.4	13.6		
	Male	At-risk-of-poverty or social exclusion (% of male population)				30.1	31.7	31.8	29.6	28.6	28.4	27.3	25.5			
		At-risk-of-poverty (% of male population)				19.7	19.7	19.4	18.8	18.7	19.3	18.6	18.9			
		Poverty gap (%)				28.6	28.2	32.3	28.8	28.0	27.8	30.2	27.0			
		Persistent at-risk-of-poverty (% of male population)							13.1		14.9	14.8	14.6			
		Severe Material Deprivation (% of male population)				14.5	15.4	15.7	14.9	13.6	13.9	12.8	10.2	8.4 p		
		Share of people living in low work intensity households (% of males aged 0-59)				13.8	16.0	16.9	14.9	14.4	14.4	13.0	12.3			
		Life expectancy at birth (years)	72.2	72.3	73.0	73.4	73.8	73.9 b	74.5 b	74.7	74.4	75.0	74.9			
		Healthy life years at birth (years) - men				57.4	59.8	61.9 b	57.6 b	58.6	55.3	57.1				
		Early leavers from education and training (% of males aged 18-24)	6.1	5.1 u	5.5	6.5 b	5.9	5.7	5.5 u	3.1 bu	3.5 u	3.5 u	3.8 u	3.5 u		
		NEET: Young people neither in employment nor in education and training ( % of males aged 15-24)	12.4	11.2	13.4	17.1	17.8	17.9	20.6	21.9	20.5	19.0	15.4	13.2		
		Female	At-risk-of-poverty or social exclusion (% of female population)				32.1	33.4	33.3	30.2	29.9	29.6	28.6	27.2		
			At-risk-of-poverty (% of female population)				21.4	22.1	21.3	20.3	20.1	20.6	20.4	20.9		
			Poverty gap (%)				26.9	26.2	30.0	27.3	27.6	26.3	26.6	25.3		
			Persistent at-risk-of-poverty (% of female population)							13.4		14.5	14.1	15.7		
	Severe Material Deprivation (% of female population)					14.2	15.0	16.1	14.5	14.3	13.6	12.2	10.4	8.7 p		
	Share of people living in low work intensity households (% of females aged 0-59)					14.0	15.8	16.6	14.7	15.0	14.4	13.0	12.1			
	Life expectancy at birth (years)		79.2	79.7	79.7	79.9	80.4	80.6 b	81.0 b	81.0	80.5	81.3	81.0			
	Healthy life years at birth (years) - women					60.4	61.7	64.2 b	60.4 b	60.0	56.8	58.7				
	Early leavers from education and training (% of females aged 18-24)		2.9 u	3.7 u	4.8 u	3.8 bu	4.0 u	4.4 u	3.4 u	2.5 bu	2.0 u	2.0 u	2.2 u	3.1 u		
	NEET: Young people neither in employment nor in education and training ( % of females aged 15-24)		13.3	12.0	13.5	14.1	14.6	15.2	18.6	16.7	15.6	14.6	15.3	14.0		
	Children (0-17)	At-risk-of-poverty or social exclusion of children (% of people aged 0-17)				29.4	31.1	34.8	29.3	29.0	28.2	26.6	25.8			
		At-risk-of-poverty (% of Children population)				19.6	21.1	23.3	21.8	21.1	20.9	20.4	21.4			
		Severe Material Deprivation (% of Children population)				14.8	14.4	18.1	13.7	13.1	13.4	11.6	8.8	7.6 p		
		Share of children living in low work intensity households (% of Children population)				11.5	13.8	15.7	11.4	12.9	12.7	10.8	10.7			
		Risk of poverty of children in households at work (Working Intensity > 0.2)				11.5	13.0	14.0	14.8	13.3	12.3	13.0	13.8			
		Impact of social transfers (excl. pensions) in reducing poverty (0-17) (%)				37.0 b	37.2	34.4	37.2	40.1	41.9	38.0	32.5			
	Working age (18-64)	At-risk-of-poverty or social exclusion (% of working age population)				29.9	32.0	31.8	29.6	29.3	28.5	26.9	24.6			
		At-risk-of-poverty (% of Working age population)				18.2	18.6	18.1	17.8	17.9	17.9	17.2	16.9			
		Severe Material Deprivation (% of Working age population)				13.8	15.2	15.4	14.4	13.9	13.6	12.1	9.7	7.9 p		
		Very low work intensity (18-59)				14.7	16.6	17.1	15.9	15.3	15.0	13.7	12.6			
		In-work at-risk-of poverty rate (% of persons employed 18-64)				6.2	6.5	6.1	6.2	5.7	5.8	5.5	5.8			
		Impact of social transfers (excl. pensions) in reducing poverty (18-64) (%)				32.6 b	33.8	35.8	34.8	34.9	35.8	31.2	29.3			
	Elderly (65+)	At-risk-of-poverty or social exclusion of elderly (% of people aged 65+)				37.5	36.4	33.1	31.9	29.7	31.8	32.8	32.7			
		At-risk-of-poverty (% of Elderly population)				30.5	29.4	25.6	23.4	23.1	26.3	26.5	28.6			
		Severe Material Deprivation (% of Elderly population)				15.7	16.3	15.5	16.9	14.7	14.5	14.5	13.6	11.6 p		
		Relative median income of elderly (ratio with median income of people younger than 65)				0.78 b	0.82	0.84	0.88	0.88	0.85	0.84	0.82			
		Aggregate replacement ratio (ratio)				0.32 b	0.36	0.36	0.37	0.40	0.40	0.39	0.41			
		Expenditure in social protection indicators (% of GDP)	Sickness/Health care	6.2	7.0	7.0	7.0	7.0	7.4	6.9	6.8	7.1	7.0			
	Disability		2.5	2.8	2.9	2.8	2.8	2.7	2.7	2.6	2.5	2.3				
	Old age and survivors		7.6	8.4	8.5	8.5	8.5	8.7	9.0	9.3	9.1	9.0				
	Family/Children		1.5	1.6	1.6	1.6	1.6	1.6	1.6	1.9	1.9	1.8				
	Unemployment		0.2	0.4	0.5	0.5	0.5	0.5	0.5	0.5	0.6	0.5				
	Housing and Social exclusion n.e.c.		0.2	0.3	0.2	0.2	0.2	0.2	0.2	0.3	0.3	0.3				
	Total (including Admin and Other expenditures)		18.8	21.0	21.3	21.0	21.6	21.4	21.8	21.8	21.8	21.3				
of which: Means tested benefits	1.0		1.0	1.0	1.0	1.1	1.1	1.1	1.1	1.1	1.0					

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## Italy

Italy		2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018
Macro Economic Indicators (Annual % growth)	Real GDP	1.5	-1.1	-5.5	1.7	0.6	-2.8	-1.7	0.1	0.9	1.1	1.7	0.9
	Total employment	1.2	0.2	-1.7	-0.6	0.3	-0.3	-1.8	0.1	0.7	1.3	1.2	0.9
	Labour productivity	0.2	-1.3	-3.9	2.3	0.3	-2.5	0.1	0.0	0.3	-0.2	0.5	0.0
	Annual average hours worked per person employed	0.3	-0.6	-1.7	0.1	-0.2	-2.2	-0.9	-0.1	0.1	0.2	-0.2	0.2
	Real productivity per hour worked	-0.1	-0.7	-2.2	2.2	0.5	-0.3	0.9	0.2	0.2	-0.4	0.7	-0.2
	Harmonized CPI	2.0	3.5	0.8	1.6	2.9	3.3	1.2	0.2	0.1	-0.1	1.3	1.2
	Price deflator GDP	2.4	2.5	2.0	0.3	1.5	1.4	1.2	1.0	0.9	1.2	0.5	0.8
	Nominal compensation per employee	2.2	2.8	0.5	2.3	1.0	-1.1	0.8	0.2	1.0	0.5	0.1	2.0
	Real compensation per employee (GDP deflator)	-0.2	0.4	-1.4	2.0	-0.5	-2.5	-0.4	-0.8	0.1	-0.7	-0.4	1.2
	Real compensation per employee (private consumption deflator)	0.2	-0.7	-0.2	0.6	-1.9	-4.2	-0.5	0.0	0.9	0.6	-1.3	0.8
	Nominal unit labour costs	2.0	4.2	4.6	0.0	0.7	1.4	0.7	0.1	0.7	0.7	-0.4	2.0
	Real unit labour costs	-0.5	1.7	2.5	-0.3	-0.8	0.0	-0.4	-0.9	-0.2	-0.5	-0.9	1.3
Labour Market Indicators - Total	Total population (000)	58224	58653	59001	59190	59365	59394	59685	60783	60796	60666	60589	60484
	Population aged 15-64 (000)	38307	38553	38715	38764	38841	38698	38697	39320	39193	39014	38878	38759
	Total employment (000)	22894	23090	22699	22527	22598	22566	22191	22279	22465	22758	23023	23215
	Employment aged 15-64 (000)	22517	22699	22324	22152	22215	22149	21755	21810	21973	22241	22444	22586
	Employment rate (% population aged 20-64)	62.7	62.9	61.6	61.0	61.0	60.9	59.7	59.9	60.5	61.6	62.3	63.0
	Employment rate (% population aged 15-64)	58.6	58.6	57.4	56.8	56.8	56.6	55.5	55.7	56.3	57.2	58.0	58.5
	Employment rate (% population aged 15-24)	24.5	24.2	21.5	20.2	19.2	18.5	16.3	15.6	15.6	16.6	17.1	17.7
	Employment rate (% population aged 25-54)	73.4	73.4	71.8	71.1	71.1	70.4	68.5	67.9	68.2	68.8	69.4	69.8
	Employment rate (% population aged 55-64)	33.7	34.3	35.6	36.5	37.8	40.3	42.7	46.2	48.2	50.3	52.2	53.7
	FTE employment rate (% population aged 20-64)	59.0	59.0	57.9	57.1	57.0	56.4	55.0	55.1	55.6	56.5	57.3	57.9
	Self-employed (% total employment)	24.3	23.7	23.4	23.7	23.5	23.5	23.4	23.3	23.0	22.6	21.9	21.7
	Part-time employment (% total employment)	13.4	14.1	14.1	14.8	15.2	16.8	17.6	18.1	18.3	18.5	18.5	18.4
	Temporary employment (% total employment)	9.9	10.0	9.5	9.6	10.1	10.5	10.1	10.4	10.8	10.9	12.1	13.4
	Employment in Services (% total employment)		66.5 b	67.1	67.6	68.0	68.7	69.4	69.5	69.6	69.9	70.1	70.0
	Employment in Industry (% total employment)		30.0 b	29.4	28.8	28.5	27.8	27.2	27.1	26.8	26.4	26.3	26.4
	Employment in Agriculture (% total employment)		3.5 b	3.5	3.6	3.5	3.5	3.4	3.5	3.6	3.7	3.6	3.6
	Activity rate (% population aged 15-64)	62.4	62.9	62.3	62.0	62.1	63.5	63.4	63.9	64.0	64.9	65.4	65.6
	Activity rate (% population aged 15-24)	30.8	30.7	28.8	28.1	27.1	28.6	27.1	27.1	26.2	26.6	26.2	26.1
	Activity rate (% population aged 25-54)	77.5	78.1	77.2	76.9	76.9	77.8	77.1	77.0	76.8	77.5	77.9	77.9
	Activity rate (% population aged 55-64)	34.5	35.4	36.9	37.9	39.3	42.5	45.3	48.9	51.1	53.4	55.4	57.0
	Total unemployment (000)	1481	1664	1907	2056	2061	2691	3069	3236	3032	3012	2907	2755
	Unemployment rate (% labour force)	6.1	6.7	7.7	8.4	8.4	10.7	12.1	12.7	11.9	11.7	11.2	10.6
	Youth unemployment rate (% labour force 15-24)	20.4	21.2	25.3	27.9	29.2	35.3	40.0	42.7	40.3	37.8	34.7	32.2
	Long term unemployment rate (% labour force)	2.9	3.0	3.4	4.0	4.3	5.6	6.9	7.7	6.9	6.7	6.5	6.2
	Share of long term unemployment (% of total unemployment)	46.9	45.2	44.3	48.0	51.4	52.6	56.4	60.8	58.1	57.4	57.8	58.1
	Youth unemployment ratio (% population aged 15-24)	6.3	6.5	7.3	7.8	7.9	10.1	10.9	11.6	10.6	10.0	9.1	8.4
	Employment rate for low skilled 25-64 (ISCED 0-2)	52.6	52.2	51.0	50.2	50.5	50.6	49.5	49.6 b	50.2	51.2	51.8	52.5
	Employment rate for medium skilled 25-64 (ISCED 3-4)	74.4	74.3	73.1	72.5	71.9	71.0	69.7	69.8 b	70.1	70.6	70.9	70.9
	Employment rate for high skilled 25-64 (ISCED 5-8)	80.2	80.7	79.4	78.4	79.2	78.8	78.1	77.8 b	78.5	79.8	80.6	81.1
	Employment rate (Nationals aged 15-64)	58.1	58.1	56.8	56.2	56.3	56.3	55.2	55.4	56.0	57.0	57.7	58.2
	Employment rate (Other EU28 aged 15-64)	70.2	69.5	68.5	68.1	66.5	65.6	63.3	62.6	63.3	63.3	63.8	63.5
	Employment rate (Other than EU28 aged 15-64)	66.1	66.0	62.6	60.8	60.5	58.5	56.1	56.7	56.9	57.8	59.1	60.1
	Employment rate (Born in the same country aged 15-64)	57.9	58.0	56.8	56.2	56.2	56.2	55.2	55.3	55.9	56.9	57.6	58.1
	Employment rate (Born in other EU28 aged 15-64)	65.3	64.5	63.9	63.8	62.7	61.8	60.1	60.1	60.8	61.0	61.3	61.6
	Employment rate (Born outside EU28 aged 15-64)	66.1	65.3	62.1	60.8	60.8	59.2	57.2	57.6	57.6	58.4	59.4	60.6
	Underemployment (% of labour force aged 15-74)		1.6	1.6	1.7	1.8	2.3	2.5	2.9	2.9	2.9	2.8	2.6
	Seeking but not available (% of labour force aged 15-74)	0.6	0.6	0.5	0.5	0.5	0.4	0.4	0.4	0.4	0.4	0.5	0.4
	Discouraged, available but not seeking (% of labour force aged 15-74)	10.3	10.5	10.5	11.1	11.6	11.7	12.1	13.2	13.6	12.6	11.6	11.2

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Italy		2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018
Labour Market Indicators - Male	Total population (000)	28212	28411	28570	28649	28715	28727	28890	29485	29502	29456	29446	29428
	Population aged 15-64(000)	19095	19198	19260	19262	19273	19211	19218	19566	19511	19432	19387	19354
	Total employment (000)	13812	13820	13541	13375	13340	13194	12914	12945	13085	13233	13349	13447
	Employment aged 15-64 (000)	13515	13513	13252	13088	13050	12873	12584	12590	12718	12853	12934	13007
	Employment rate (% population aged 20-64)	75.7	75.3	73.7	72.7	72.5	71.5	69.7	69.7	70.6	71.7	72.3	72.9
	Employment rate (% population aged 15-64)	70.6	70.1	68.5	67.5	67.3	66.3	64.7	64.7	65.5	66.5	67.1	67.6
	Employment rate (% population aged 15-24)	29.4	29.0	25.9	24.0	22.8	21.8	18.7	18.2	18.6	19.2	20.1	20.8
	Employment rate (% population aged 25-54)	87.4	86.8	84.7	83.6	83.4	81.7	79.2	78.2	78.6	79.3	79.9	80.3
	Employment rate (% population aged 55-64)	45.0	45.3	46.6	47.6	48.2	50.4	52.8	56.5	59.3	61.7	62.8	64.2
	FTE employment rate (% population aged 20-64)	74.4	74.0	72.5	71.4	70.9	69.6	67.6	67.5	68.3	69.3	69.9	70.6
	Self-employed (% total employment)	28.8	28.4	28.2	28.7	28.6	28.5	28.5	28.2	27.7	27.1	26.7	26.3
	Part-time employment (% total employment)	4.6	4.8	4.7	5.1	5.4	6.6	7.4	7.8	8.0	8.2	8.3	8.0
	Temporary employment (% total employment)	7.9	8.2	7.7	8.1	8.7	9.3	8.9	9.5	9.9	9.9	11.1	12.4
	Employment in Services (% total employment)		56.5 b	56.5	56.9	57.5	58.0	58.8	58.7	59.0	59.3	59.3	59.4
	Employment in Industry (% total employment)		39.5 b	39.3	38.9	38.4	37.7	37.0	37.1	36.6	36.1	36.1	36.1
	Employment in Agriculture (% total employment)		4.0 b	4.1	4.3	4.2	4.3	4.2	4.3	4.5	4.6	4.6	4.5
	Activity rate (% population aged 15-64)	74.3	74.3	73.5	73.1	72.8	73.7	73.3	73.6	74.1	74.8	75.0	75.1
	Activity rate (% population aged 15-24)	36.0	35.7	33.8	32.8	31.2	32.9	30.7	31.0	30.4	30.2	30.0	29.9
	Activity rate (% population aged 25-54)	91.0	91.0	90.0	89.4	89.2	89.4	88.3	87.7	87.7	88.2	88.5	88.4
	Activity rate (% population aged 55-64)	46.2	46.8	48.4	49.5	50.5	53.6	56.6	60.2	63.3	65.9	67.0	68.6
	Total unemployment (000)	708	804	976	1084	1084	1434	1674	1742	1670	1617	1539	1452
	Unemployment rate (% labour force)	4.9	5.5	6.7	7.5	7.5	9.8	11.5	11.9	11.3	10.9	10.3	9.7
	Youth unemployment rate (% labour force 15-24)	18.4	18.8	23.2	26.9	27.1	33.7	39.0	41.3	38.8	36.5	33.0	30.4
	Long term unemployment rate (% labour force)	2.2	2.4	2.8	3.5	3.8	5.0	6.5	7.1	6.6	6.2	6.1	5.6
	Share of long term unemployment (% of total unemployment)	44.9	43.2	41.8	46.8	50.9	51.2	56.2	59.6	58.1	57.1	58.6	57.5
	Youth unemployment ratio (% population aged 15-24)	6.6	6.7	7.8	8.8	8.5	11.1	12.0	12.8	11.8	11.0	9.9	9.1
	Employment rate for low skilled 25-64 (ISCED 0-2)	71.4	70.5	69.0	67.8	67.7	66.5	64.4	64.1 b	64.9	66.0	66.8	67.7
	Employment rate for medium skilled 25-64 (ISCED 3-4)	84.2	83.9	82.4	81.8	81.2	80.3	79.1	79.1 b	79.8	80.7	81.0	80.8
	Employment rate for high skilled 25-64 (ISCED 5-8)	86.5	86.6	85.0	84.3	85.0	84.2	83.4	83.2 b	84.5	85.7	85.7	86.1
	Employment rate (Nationals aged 15-64)	69.8	69.4	67.8	66.8	66.6	65.9	64.3	64.3	65.1	66.0	66.5	67.0
	Employment rate (Other EU28 aged 15-64)	85.9	83.1	81.2	79.5	77.0	74.1	71.4	71.0	71.2	70.9	72.0	74.6
	Employment rate (Other than EU28 aged 15-64)	83.0	81.7	76.5	74.9	75.0	70.6	66.9	67.0	68.7	70.9	72.6	73.4
	Employment rate (Born in the same country aged 15-64)	69.6	69.2	67.6	66.6	66.3	65.6	64.2	64.1	64.9	65.7	66.3	66.7
	Employment rate (Born in other EU28 aged 15-64)	81.9	80.5	78.2	77.1	75.6	72.5	69.2	69.3	70.3	70.5	71.0	73.5
	Employment rate (Born outside EU28 aged 15-64)	82.6	81.1	76.9	75.6	75.6	72.2	68.4	68.5	69.9	72.1	73.0	74.0
	Underemployment (% of labour force aged 15-74)		0.9	0.9	0.9	1.1	1.4	1.6	2.0	2.0	2.0	2.0	1.8
	Seeking but not available (% of labour force aged 15-74)	0.4	0.5	0.4	0.4	0.4	0.3	0.3	0.3	0.3	0.3	0.4	0.4
	Discouraged, available but not seeking (% of labour force aged 15-74)	5.9	6.2	6.6	7.3	7.9	7.6	8.3	9.2	9.4	8.9	8.4	8.1
Labour Market Indicators - Female	Total population (000)	30012	30242	30431	30541	30649	30668	30796	31298	31294	31209	31144	31056
	Population aged 15-64(000)	19212	19354	19455	19501	19568	19488	19479	19753	19682	19582	19492	19405
	Total employment (000)	9083	9270	9158	9152	9258	9372	9276	9334	9380	9525	9674	9768
	Employment aged 15-64 (000)	9002	9186	9072	9064	9165	9276	9171	9220	9255	9388	9510	9579
	Employment rate (% population aged 20-64)	49.9	50.6	49.7	49.5	49.9	50.5	49.9	50.3	50.6	51.6	52.5	53.1
	Employment rate (% population aged 15-64)	46.6	47.2	46.4	46.1	46.5	47.1	46.5	46.8	47.2	48.1	48.9	49.5
	Employment rate (% population aged 15-24)	19.5	19.2	16.9	16.3	15.5	15.0	13.7	12.8	12.4	13.7	13.9	14.3
	Employment rate (% population aged 25-54)	59.6	60.2	59.1	58.8	59.0	59.2	58.0	57.6	57.9	58.5	59.0	59.4
	Employment rate (% population aged 55-64)	23.0	23.9	25.3	26.1	28.1	30.8	33.2	36.6	37.9	39.7	42.3	43.9
	FTE employment rate (% population aged 20-64)	44.4	44.9	44.1	43.7	44.0	44.1	43.2	43.4	43.7	44.4	45.4	46.1
	Self-employed (% total employment)	17.4	16.8	16.3	16.3	16.1	16.3	16.2	16.5	16.5	16.3	15.4	15.3
	Part-time employment (% total employment)	26.8	27.7	27.8	28.8	29.1	30.9	31.7	32.1	32.4	32.7	32.5	32.4
	Temporary employment (% total employment)	12.8	12.6	12.0	11.8	12.0	12.2	11.7	11.6	12.0	12.1	13.4	14.8
	Employment in Services (% total employment)		81.3 b	82.5	83.2	83.1	83.6	83.9	84.2	84.3	84.5	84.8	84.5
	Employment in Industry (% total employment)		15.9 b	14.9	14.2	14.4	13.9	13.8	13.5	13.4	13.0	12.9	13.2
	Employment in Agriculture (% total employment)		2.8 b	2.6	2.7	2.6	2.5	2.4	2.3	2.4	2.5	2.3	2.3
	Activity rate (% population aged 15-64)	50.6	51.6	51.1	51.1	51.4	53.4	53.6	54.4	54.1	55.2	55.9	56.2
	Activity rate (% population aged 15-24)	25.4	25.5	23.7	23.1	22.8	24.0	23.4	23.1	21.7	22.8	22.1	21.9
	Activity rate (% population aged 25-54)	64.1	65.3	64.6	64.5	64.7	66.5	66.1	66.4	65.9	66.8	67.3	67.4
	Activity rate (% population aged 55-64)	23.4	24.6	26.0	26.9	28.8	32.2	34.7	38.3	39.6	41.7	44.5	46.1
	Total unemployment (000)	773	861	930	972	977	1257	1394	1494	1362	1395	1368	1304
	Unemployment rate (% labour force)	7.8	8.5	9.2	9.6	9.5	11.8	13.1	13.8	12.7	12.8	12.4	11.8
	Youth unemployment rate (% labour force 15-24)	23.3	24.7	28.5	29.4	32.1	37.6	41.5	44.7	42.5	39.6	37.3	34.8
	Long term unemployment rate (% labour force)	3.8	4.0	4.3	4.7	5.0	6.4	7.4	8.6	7.4	7.4	7.1	6.9
	Share of long term unemployment (% of total unemployment)	48.7	47.1	46.9	49.4	51.9	54.2	56.5	62.1	58.0	57.7	57.0	58.7
	Youth unemployment ratio (% population aged 15-24)	5.9	6.3	6.8	6.8	7.3	9.0	9.7	10.3	9.2	9.0	8.2	7.6
	Employment rate for low skilled 25-64 (ISCED 0-2)	33.5	33.5	32.8	32.4	32.9	34.0	34.0	34.1 b	34.5	35.1	35.5	35.9
	Employment rate for medium skilled 25-64 (ISCED 3-4)	64.5	64.6	63.6	63.2	62.7	61.9	60.4	60.6 b	60.4	60.6	60.8	60.8
	Employment rate for high skilled 25-64 (ISCED 5-8)	75.0	76.0	74.8	73.6	74.5	74.7	73.9	73.7 b	73.9	75.5	77.0	77.5
	Employment rate (Nationals aged 15-64)	46.3	46.8	45.9	45.7	46.1	46.6	46.1	46.4	46.9	47.9	48.8	49.4
	Employment rate (Other EU28 aged 15-64)	59.9	59.8	59.5	59.5	59.0	60.0	57.8	56.9	57.8	58.1	58.2	56.0
	Employment rate (Other than EU28 aged 15-64)	48.7	50.1	48.6	47.2	47.0	47.0	45.8	46.7	45.6	45.1	45.9	46.9
	Employment rate (Born in the same country aged 15-64)	46.2	46.8	45.9	45.7	46.1	46.7	46.1	46.4	46.9	48.0	48.8	49.4
	Employment rate (Born in other EU28 aged 15-64)	54.2	53.7	54.4	54.4	53.8	54.9	54.1	53.9	54.3	54.7	54.9	53.9
	Employment rate (Born outside EU28 aged 15-64)	50.1	50.2	48.1	47.3	47.5	47.4	46.9	47.4	46.1	45.6	46.7	48.2
	Underemployment (% of labour force aged 15-74)		2.6	2.8	2.8	2.8	3.5	3.6	4.2	4.2	4.0	3.9	3.7
	Seeking but not available (% of labour force aged 15-74)	0.9	0.9	0.7	0.7	0.6	0.6	0.6	0.5	0.6	0.5	0.6	0.6
	Discouraged, available but not seeking (% of labour force aged 15-74)	16.8	16.7	15.9	16.6	16.7	17.2	17.4	18.6	19.3	17.6	16.0	15.4

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			2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	
Social Indicators	All	At-risk-of-poverty or social exclusion (% of total population)	26.0	25.5	24.9	25.0	28.1	29.9	28.5	28.3	28.7	30.0	28.9		
		At-risk-of-poverty (% of total population)	19.5	18.9	18.4	18.7	19.8	19.5	19.3	19.4	19.9	20.6	20.3		
		At-risk-of-poverty threshold (PPS single person)	8698	9158	9140	9135	9466	9297	9189	9152	9237	9742	9904		
		Poverty gap (%)	22.7	23.2	23.1	24.8	26.6	26.0	28.2	28.2	29.3	31.6	28.1		
		Persistent at-risk-of-poverty (% of total population)	14.6	12.7	13.0	11.6	11.8	13.1	13.2	12.9	14.3	14.5	13.9		
		At-risk-of-poverty before social transfers excl. pensions (% of total population)	23.7	23.5	23.3	23.7	24.6	24.5	24.6	24.7	25.4	26.2	25.2		
		Impact of social transfers (excl. pensions) in reducing poverty (%)	17.7	19.6	21.0	21.1	19.5	20.4	21.6	21.5	21.7	21.4	19.4		
		Severe Material Deprivation (% of total population)	7.0	7.5	7.3	7.4	11.1	14.5	12.3	11.6	11.5	12.1	10.1	8.4 p	
		Share of people living in low work intensity households (% of people aged 0-59)	10.2	10.4	9.2	10.6	10.5	10.6	11.3	12.1	11.7	12.8	11.8		
		Real Gross Household Disposable income (growth %)	1.4	-1.2	-2.0	-1.5	-0.3	-5.3	-0.8	0.3	1.3	1.1	0.6		
		Income quintile share ratio S80/S20	5.4	5.2	5.3	5.4	5.7	5.6	5.8	5.8	5.8	6.3	5.9		
		GINI coefficient	32.0	31.2	31.8	31.7	32.5	32.4	32.8	32.4	32.4	33.1	32.7		
		Early leavers from education and training (% of population aged 18-24)	19.5	19.6	19.1	18.6	17.8	17.3	16.8	15.0 b	14.7	13.8	14.0	14.5	
		NEET: Young people neither in employment nor in education and training (% of total population aged 15-24)	16.1	16.6	17.5	19.0	19.6	20.9	22.1	22.0	21.3	19.8	20.0	19.2	
	Male	At-risk-of-poverty or social exclusion (% of male population)	23.8	23.5	22.9	23.1	26.3	27.8	27.1	27.0	27.7	29.1	27.8		
		At-risk-of-poverty (% of male population)	18.1	17.4	16.9	17.3	18.4	18.1	18.3	18.4	19.0	19.9	19.4		
		Poverty gap (%)	23.3	23.0	22.8	25.2	28.1	27.3	29.3	29.4	30.4	32.3	29.2		
		Persistent at-risk-of-poverty (% of male population)	13.4	11.5	11.8	9.9	10.9	11.4	11.7	12.0	12.7	13.2	13.4		
		Severe Material Deprivation (% of male population)	6.7	7.2	7.0	7.2	10.7	13.9	12.3	11.7	11.7	12.1	10.3	8.5 p	
		Share of people living in low work intensity households (% of males aged 0-59)	8.8	8.8	7.7	9.1	9.2	9.2	10.3	11.4	10.7	12.2	11.2		
		Life expectancy at birth (years)	78.8 b	78.9	79.4		80.1	79.8	80.3	80.7	80.3	81.0 b	80.8 b		
		Healthy life years at birth (years) - men	63.4 b	62.9	63.4		63.5	62.1	61.8	62.5	62.6	67.6 b			
		Early leavers from education and training (% of males aged 18-24)	22.6	22.4	21.8	21.8	20.6	20.2	20.0	17.7 b	17.5	16.1	16.6	16.5	
		NEET: Young people neither in employment nor in education and training (% of males aged 15-24)	15.1	15.2	17.0	18.9	19.4	21.1	22.8	22.7	21.8	20.0	20.2	19.0	
		Female	At-risk-of-poverty or social exclusion (% of female population)	28.0	27.4	26.7	26.8	29.8	31.9	29.8	29.5	29.6	30.8	29.8	
			At-risk-of-poverty (% of female population)	20.9	20.4	19.9	20.0	21.1	20.8	20.3	20.5	20.8	21.4	21.1	
			Poverty gap (%)	22.2	23.2	23.3	24.6	25.8	24.9	27.6	27.7	28.1	30.8	27.5	
			Persistent at-risk-of-poverty (% of female population)	15.6	13.7	14.1	13.3	12.7	14.8	14.6	13.7	15.7	15.7	14.4	
	Severe Material Deprivation (% of female population)		7.4	7.8	7.6	7.5	11.4	15.0	12.4	11.5	11.2	12.1	10.0	8.3 p	
	Share of people living in low work intensity households (% of females aged 0-59)		11.7	12.0	10.7	12.1	11.8	12.0	12.3	12.8	12.7	13.5	12.5		
	Life expectancy at birth (years)		84.2 b	84.2	84.6		85.3	84.8	85.2	85.6	84.9	85.6 b	85.2 b		
	Healthy life years at birth (years) - women		62.6 b	61.8	62.6		62.7	61.5	60.9	62.3	62.7	67.2 b			
	Early leavers from education and training (% of females aged 18-24)		16.4	16.7	16.2	15.3	14.9	14.3	13.6	12.2 b	11.8	11.3	11.2	12.3	
	NEET: Young people neither in employment nor in education and training (% of females aged 15-24)		17.2	18.0	18.1	19.0	19.9	20.8	21.4	21.4	20.8	19.5	19.7	19.4	
	Children (0-17)	At-risk-of-poverty or social exclusion of children (% of people aged 0-17)	28.6	28.4	28.7	29.5	31.5	34.1	32.0	32.1	33.5	33.2	32.1		
		At-risk-of-poverty (% of Children population)	24.6	24.2	24.1	25.2	25.9	26.2	25.2	25.1	26.8	26.7	26.4		
		Severe Material Deprivation (% of Children population)	7.8	8.6	8.5	8.6	12.1	16.8	13.5	13.7	13.0	12.4	9.8	8.1 p	
		Share of children living in low work intensity households (% of Children population)	6.7	7.0	6.1	7.5	7.5	7.1	8.0	9.3	8.6	9.3	8.2		
		Risk of poverty of children in households at work (Working Intensity > 0.2)	20.5	20.0	20.9	20.6	21.6	22.1	20.6	19.5	21.6	21.5	21.9		
		Impact of social transfers (excl. pensions) in reducing poverty (0-17) (%)	20.9	21.9	24.2	23.2	21.0	22.0	25.4	23.9	22.1	24.2	21.7		
	Working age (18-64)	At-risk-of-poverty or social exclusion (% of working age population)	25.3	25.0	24.4	25.3	28.5	30.4	29.7	30.0	30.4	31.5	30.5		
		At-risk-of-poverty (% of Working age population)	17.2	16.8	16.5	17.5	19.0	18.7	19.1	19.7	19.8	20.9	20.3		
		Severe Material Deprivation (% of Working age population)	7.0	7.4	7.4	7.4	10.9	14.4	12.7	12.0	12.2	12.3	10.5	9.0 p	
		Very low work intensity (18-59)	11.3	11.5	10.2	11.5	11.5	11.7	12.4	13.0	12.7	13.9	12.9		
		In-work at-risk-of poverty rate (% of persons employed 18-64)	9.4	9.1	10.2	9.7	11.1	11.1	11.2	11.1	11.6	11.8	12.3		
		Impact of social transfers (excl. pensions) in reducing poverty (18-64) (%)	20.0	21.9	23.3	22.6	21.2	22.4	22.7	22.4	23.9	22.6	21.6		
	Elderly (65+)	At-risk-of-poverty or social exclusion of elderly (% of people aged 65+)	25.5	24.4	22.9	20.4	24.0	24.7	22.0	20.2	19.9	23.2	22.0		
		At-risk-of-poverty (% of Elderly population)	22.2	20.9	19.6	16.7	17.0	16.1	15.0	14.2	14.7	15.3	15.6		
		Severe Material Deprivation (% of Elderly population)	6.5	6.7	5.9	6.3	10.8	12.7	10.3	8.8	8.2	11.1	9.4	7.0 p	
		Relative median income of elderly (ratio with median income of people younger than 65)	0.86	0.88	0.89	0.92	0.92	0.96	0.97	0.99	0.99	1.01	1.02		
	Expenditure in social protection indicators (% of GDP)	Aggregate replacement ratio (ratio)	0.49	0.51	0.51	0.53	0.55	0.59	0.62	0.64	0.66	0.69	0.71		
Sickness/Health care		6.4	6.7	7.0	7.0	6.8	6.8	6.8	6.8 p	6.6 p	6.6 p				
Disability		1.4	1.4	1.6	1.6	1.5	1.6	1.7	1.7 p	1.7 p	1.7 p				
Old age and survivors		14.5	14.9	15.9	16.3	16.2	16.7	17.0	16.8 p	16.8 p	16.4 p				
Family/Children		1.1	1.1	1.3	1.1	1.2	1.2	1.2	1.6 p	1.7 p	1.8 p				
Unemployment		1.1	1.1	1.5	1.5	1.5	1.6	1.8	1.7 p	1.7 p	1.7 p				
Housing and Social exclusion n.e.c.		0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.3 p	0.3 p	0.3 p				
Total (including Admin and Other expenditures)		25.7	26.7	28.8	28.9	28.5	29.3	29.8	29.9 p	29.9 p	29.5 p				
of which: Means tested benefits		1.5	1.5	1.8	1.6	1.6	1.6	1.6	2.1 p	2.2 p	2.3 p				

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## Cyprus

Cyprus		2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018
Macro Economic Indicators (Annual % growth)	Real GDP	5.1	3.6	-2.0	1.3	0.4	-2.9	-5.8	-1.3	2.0	4.8	4.5 p	3.9 p
	Total employment	4.4	3.5	0.0	0.5	0.0	-3.2	-5.9	-1.8	1.5	4.6	4.3 p	4.0 p
	Labour productivity	0.6	0.1	-2.0	0.9	0.4	0.3	0.1	0.5	0.5	0.2	0.2 p	-0.1 p
	Annual average hours worked per person employed	1.6	1.1	-0.7	-0.8	-0.8	-0.4	-1.6	-0.5	-0.1	0.1	-0.2 p	-0.4 p
	Real productivity per hour worked	-0.9	-1.0	-1.4	1.6	1.2	0.7	1.8	1.0	0.5	0.1	0.4 p	0.2 p
	Harmonized CPI	2.2	4.4	0.2	2.6	3.5	3.1	0.4	-0.3	-1.5	-1.2	0.7	0.8
	Price deflator GDP	4.1	4.7	0.3	2.0	1.8	1.7	-1.2	-1.6	-1.2	-0.6	1.7 p	1.6 p
	Nominal compensation per employee	1.9	3.2	5.7	0.7	2.1	1.7	-5.4	-3.5	-1.3	-1.1	0.7 p	0.1 p
	Real compensation per employee (GDP deflator)	-2.2	-1.4	5.4	-1.3	0.2	0.0	-4.2	-1.9	-0.1	-0.5	-1.0 p	-1.4 p
	Real compensation per employee (private consumption deflator)	-0.3	-1.1	5.5	-1.9	-1.4	-1.3	-5.7	-3.3	0.3	0.1	0.1 p	-0.6 p
	Nominal unit labour costs	1.2	3.1	7.9	-0.2	1.7	1.4	-5.5	-4.0	-1.7	-1.4	0.6 p	0.3 p
	Real unit labour costs	-2.8	-1.5	7.7	-2.2	-0.1	-0.3	-4.4	-2.4	-0.6	-0.7	-1.2 p	-1.2 p
Labour Market Indicators - Total	Total population (000)	758	776	797	819	840	862	866	858	847	848	855	864
	Population aged 15-64 (000)	521	539	557	576	592	609	610	599	584	581	582	587
	Total employment (000)	378	383	383 b	395	398	385	365	363	358	363	380	401
	Employment aged 15-64 (000)	368	371	371 b	382	386	375	357	355	350	354	370	390
	Employment rate (% population aged 20-64)	76.8	76.5	75.3 b	75.0	73.4	70.2	67.2	67.6	67.9	68.7	70.8	73.9
	Employment rate (% population aged 15-64)	71.0	70.9	69.0 b	68.9	67.6	64.6	61.7	62.1	62.7	63.7	65.6	68.6
	Employment rate (% population aged 15-24)	37.4	38.0	34.8 b	33.8	30.1	28.1	23.5	25.8	25.5	26.4	27.6	31.3
	Employment rate (% population aged 25-54)	83.8	83.7	82.3 b	82.2	81.3	78.4	75.5	76.2	76.5	76.6	78.4	80.4
	Employment rate (% population aged 55-64)	55.9	54.8	55.7 b	56.3	54.8	50.7	49.6	46.9	48.5	52.2	55.3	60.9
	FTE employment rate (% population aged 20-64)	75.2	74.9	73.3 b	72.4	70.6	67.1	63.2	63.1	63.5	64.1	66.5	70.2
	Self-employed (% total employment)	18.6	18.1	17.4 b	16.5	16.1	14.8	15.9	16.1	13.6	13.0	12.4	12.6
	Part-time employment (% total employment)	6.4	6.8	7.5 b	8.3	9.0	9.7	11.9	13.5	13.0	13.4	12.2	10.8
	Temporary employment (% total employment)	10.8	11.4	11.3 b	11.7	11.9	12.9	14.7	15.8	15.9	14.4	13.5	12.2
	Employment in Services (% total employment)			75.2 bu	76.5 u	76.0 u	77.4 u	79.8 u		80.1 u	79.7 u	80.7 u	
	Employment in Industry (% total employment)			22.0 bu	20.7 u	21.1 u	20.3 u	17.7 u		16.3 u	17.1 u	17.2 u	
	Employment in Agriculture (% total employment)		3.1 b	2.8 b	2.8	2.9	2.3	2.5	3.9	3.6	3.2	2.1	1.8
	Activity rate (% population aged 15-64)	73.9	73.6	73.0 b	73.6	73.5	73.6	74.3	73.9	73.4	73.9	75.0	
	Activity rate (% population aged 15-24)	41.7	41.7	40.4 b	40.6	38.8	38.9	38.4	40.3	37.9	37.2	36.6	39.2
	Activity rate (% population aged 25-54)	86.7	86.5	86.3 b	86.9	87.3	87.6	87.7	88.4	87.9	86.8	87.5	87.2
	Activity rate (% population aged 55-64)	57.7	56.6	58.2 b	59.1	57.6	56.1	56.6	56.0	57.4	59.0	60.0	64.7
	Total unemployment (000)	15	15	22	26	34	52	69	70	63	54	47	37
	Unemployment rate (% labour force)	3.9	3.7	5.4	6.3	7.9	11.9	15.9	16.1	15.0	13.0	11.1	8.4
	Youth unemployment rate (% labour force 15-24)	10.2	9.0	13.8	16.6	22.4	27.7	38.9	36.0	32.8	29.1	24.7	20.2
	Long term unemployment rate (% labour force)	0.7	0.5	0.6 b	1.3	1.6	3.6	6.1	7.7	6.8	5.8	4.5	2.7
	Share of long term unemployment (% of total unemployment)	18.6	13.6	10.4 b	20.4	20.8	30.1	38.3	47.7	45.6	44.4	40.6	31.7
	Youth unemployment ratio (% population aged 15-24)	4.2	3.8	5.6 b	6.7	8.7	10.8	14.9	14.5	12.4	10.8	9.0	7.9
	Employment rate for low skilled 25-64 (ISCED 0-2)	66.1	63.6	64.3 b	66.1	64.8	57.9	55.5	54.5 b	55.3	56.9	57.8	62.0
	Employment rate for medium skilled 25-64 (ISCED 3-4)	79.3	79.5	77.8 b	77.1	75.9	73.3	69.7	69.6 b	69.3	69.8	73.0	76.0
	Employment rate for high skilled 25-64 (ISCED 5-8)	87.6	87.6	86.2 b	84.7	83.3	80.8	79.0	79.7 b	80.2	80.0	80.7	82.1
	Employment rate (Nationals aged 15-64)	70.9	70.5	68.8 b	68.1	66.5	63.3	60.7	60.8	61.6	63.2	65.2	68.8
	Employment rate (Other EU28 aged 15-64)	66.4	73.0	71.2 b	72.1	70.8	67.0	61.2	63.0	64.0	67.1	69.4	68.6
	Employment rate (Other than EU28 aged 15-64)	76.7	72.4	67.8 b	71.8	73.4	73.4	73.1	75.3	72.9	63.6	63.5	65.9
	Employment rate (Born in the same country aged 15-64)	70.8	70.4	68.6 b	68.0	66.6	63.2	60.3	60.4	61.3	63.2	65.0	68.9
	Employment rate (Born in other EU28 aged 15-64)	67.1	71.7	69.9 b	72.3	71.3	68.0	64.2	65.6	65.4	67.1	69.6	67.7
	Employment rate (Born outside EU28 aged 15-64)	75.2	73.4	70.6 b	70.6	69.7	69.3	67.8	70.7	69.2	63.5	65.1	67.7
	Underemployment (% of labour force aged 15-74)		1.9	2.3 b	2.7	3.8	4.7	6.2	7.8	7.8	7.8	7.0	5.4
	Seeking but not available (% of labour force aged 15-74)	0.3 u	0.5	0.6 b	0.8	0.4	0.8	0.8	0.8	0.6	0.9	1.4	1.6
	Discouraged, available but not seeking (% of labour force aged 15-74)	1.5	1.2	1.4 b	2.3	3.4	3.5	4.6	4.6	4.6	3.6	2.5	1.8

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Cyprus		2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018
Labour Market Indicators - Male	Total population (000)	372	380	390	400	409	419	421	418	412	413	417	422
	Population aged 15-64(000)	256	264	272	280	288	296	296	291	283	282	284	286
	Total employment (000)	210	212	205 b	209	209	202	190	185	184	188	198	210
	Employment aged 15-64 (000)	202	203	196 b	199	200	194	184	180	178	182	191	201
	Employment rate (% population aged 20-64)	86.4	85.2	82.8 b	81.7	79.6	76.1	72.6	71.6	72.3	73.8	75.7	79.3
	Employment rate (% population aged 15-64)	80.0	79.2	76.3 b	75.3	73.7	70.4	67.0	66.0	66.7	68.6	70.0	73.3
	Employment rate (% population aged 15-24)	39.1	39.4	36.4 b	34.4	31.8	30.5	24.0	25.8	24.0	26.5	24.2	27.3
	Employment rate (% population aged 25-54)	92.4	91.4	89.2 b	88.3	86.4	83.3	80.4	79.6	80.6	81.7	83.6	86.2
	Employment rate (% population aged 55-64)	72.5	70.9	71.2 b	70.5	69.2	63.5	61.1	57.1	57.8	61.0	64.9	70.3
	FTE employment rate (% population aged 20-64)	86.5	85.2	82.5 b	80.5	78.0	74.1	70.0	68.3	68.5	69.6	72.2	76.5
	Self-employed (% total employment)	25.2	24.7	23.4 b	22.1	21.8	20.5	21.9	21.6	16.9	16.7	15.2	15.5
	Part-time employment (% total employment)	3.0	3.4	4.0 b	5.1	6.1	6.4	8.4	10.3	10.3	11.3	9.1	7.5
	Temporary employment (% total employment)	5.8	6.3	5.9 b	5.6	5.6	7.3	8.1	10.3	11.0	9.8	10.3	9.0
	Employment in Services (% total employment)			63.6 bu		63.4 u	65.7 u				67.8 u		
	Employment in Industry (% total employment)			33.1 bu		32.8 u	31.3 u				27.2 u		
	Employment in Agriculture (% total employment)		3.9 b	3.3 b	3.7	3.8	3.0	3.7	5.9	5.2	4.9	3.3	2.5
	Activity rate (% population aged 15-64)	82.9	82.0	80.7 b	80.4	80.4	80.7	80.6	80.0	78.8	78.7	78.8	79.9
	Activity rate (% population aged 15-24)	43.9	43.1	42.1 b	40.9	41.4	42.8	40.8	41.2	36.8	35.8	33.2	36.5
	Activity rate (% population aged 25-54)	95.0	94.0	93.5 b	93.4	93.1	93.8	94.0	93.5	92.6	92.2	92.9	92.7
	Activity rate (% population aged 55-64)	74.8	73.0	74.4 b	74.3	72.9	71.2	71.2	69.9	70.0	70.5	71.6	75.2
	Total unemployment (000)	7	7	11	14	18	29	38	38	33	27	24	18
	Unemployment rate (% labour force)	3.4	3.2	5.3	6.2	8.1	12.6	16.6	17.1	15.1	12.7	10.9	8.1
	Youth unemployment rate (% labour force 15-24)	11.0	8.7	13.6	15.9	23.3	28.8	41.1	37.4	34.7	25.8	27.0	25.0
	Long term unemployment rate (% labour force)	0.8	0.5 u	0.6 bu	1.3	1.7	3.9	6.5	8.3	7.4	6.4	5.0	2.6
	Share of long term unemployment (% of total unemployment)	23.0	16.1 u	10.4 bu	20.9	21.4	31.4	39.1	48.6	49.2	50.5	45.5	31.6
	Youth unemployment ratio (% population aged 15-24)	4.8	3.7	5.7 b	6.5	9.6	12.3	16.8	15.4	12.8	9.2	9.0	9.1
	Employment rate for low skilled 25-64 (ISCED 0-2)	84.7	80.2	78.4 b	76.2	74.4	67.2	62.2	59.9 b	61.8	64.3	67.2	73.0
	Employment rate for medium skilled 25-64 (ISCED 3-4)	88.4	88.8	86.9 b	86.2	84.4	79.5	77.7	75.1 b	75.3	77.9	80.0	82.6
	Employment rate for high skilled 25-64 (ISCED 5-8)	92.0	90.9	89.2 b	88.8	87.0	85.5	82.9	83.8 b	84.4	83.6	85.1	87.4
	Employment rate (Nationals aged 15-64)	80.6	80.6	78.0 b	76.2	74.2	70.4	66.9	65.7	65.9	68.4	69.7	73.5
	Employment rate (Other EU28 aged 15-64)	80.5	80.9	78.4 b	79.9	77.0	72.9	67.2	67.5	70.8	73.9	77.3	76.1
	Employment rate (Other than EU28 aged 15-64)	67.8	58.5	48.3 b	53.2	58.4	63.0	68.7	68.3	70.2	59.8	60.9	66.2
	Employment rate (Born in the same country aged 15-64)	80.5	80.3	78.0 b	76.0	74.0	70.2	66.4	65.3	65.8	68.2	69.6	73.4
	Employment rate (Born in other EU28 aged 15-64)	80.6	82.1	76.8 b	81.6	80.5	77.1	73.9	72.8	73.5	73.9	77.5	75.7
	Employment rate (Born outside EU28 aged 15-64)	74.6	68.3	61.7 b	62.7	62.6	62.2	63.6	65.1	65.9	64.5	65.1	70.0
	Underemployment (% of labour force aged 15-74)		1.2	1.7 b	2.0	3.2	3.9	5.0	6.5	7.0	7.8	6.3	4.7
	Seeking but not available (% of labour force aged 15-74)	0.2 u	0.3 u	0.5 bu	0.6 u	0.4 u	0.8	0.7	0.8	0.6 u	0.8	1.0	1.3
	Discouraged, available but not seeking (% of labour force aged 15-74)	0.7 u	0.7 u	1.0 b	2.1	2.7	2.6	3.3	3.4	3.5	2.6	2.1	1.4
Labour Market Indicators - Female	Total population (000)	386	396	407	420	431	443	445	440	435	436	438	443
	Population aged 15-64(000)	265	275	284	295	304	314	314	308	301	299	299	300
	Total employment (000)	169	171	178 b	187	189	184	175	178	175	175	182	191
	Employment aged 15-64 (000)	166	168	175 b	183	186	181	173	176	172	172	179	188
	Employment rate (% population aged 20-64)	67.7	68.2	68.3 b	68.8	67.7	64.8	62.2	63.9	64.0	64.1	66.2	68.9
	Employment rate (% population aged 15-64)	62.4	62.9	62.3 b	63.0	62.1	59.4	56.9	58.6	59.0	59.3	61.4	64.2
	Employment rate (% population aged 15-24)	36.0	36.7	33.3 b	33.3	28.7	26.1	23.0	25.9	26.8	26.2	30.7	35.0
	Employment rate (% population aged 25-54)	75.5	76.2	76.2 b	76.7	76.7	74.0	71.1	73.1	72.7	72.0	73.5	75.0
	Employment rate (% population aged 55-64)	40.3	39.4	40.6 b	42.5	40.8	38.2	38.3	36.9	39.5	43.7	46.2	51.9
	FTE employment rate (% population aged 20-64)	64.6	65.0	64.8 b	65.1	63.9	60.7	57.1	58.5	58.9	59.1	61.4	64.5
	Self-employed (% total employment)	10.5	9.9	10.6 b	10.2	9.7	8.7	9.4	10.3	10.2	9.1	9.3	9.5
	Part-time employment (% total employment)	10.4	10.8	11.5 b	11.8	12.1	13.1	15.6	16.8	15.8	15.6	15.6	14.4
	Temporary employment (% total employment)	16.8	17.6	17.5 b	18.3	18.6	18.9	21.7	21.5	20.9	19.2	16.9	15.5
	Employment in Services (% total employment)												
	Employment in Industry (% total employment)												
	Employment in Agriculture (% total employment)		2.1 b	2.2 b	1.9	1.8	1.4	1.3	1.8	1.9	1.4	0.8	1.0
	Activity rate (% population aged 15-64)	65.4	65.7	66.0 b	67.4	67.4	66.9	67.2	69.1	69.4	68.5	69.3	70.4
	Activity rate (% population aged 15-24)	39.7	40.5	38.8 b	40.2	36.6	35.5	36.3	39.5	38.9	38.5	39.8	41.8
	Activity rate (% population aged 25-54)	78.7	79.1	79.8 b	81.0	82.0	82.0	82.0	83.9	83.8	81.8	82.5	82.1
	Activity rate (% population aged 55-64)	41.6	41.0	42.3 b	44.3	42.7	41.3	42.3	42.5	45.3	47.8	48.9	54.6
	Total unemployment (000)	8	8	10	13	16	23	31	32	30	27	23	18
	Unemployment rate (% labour force)	4.6	4.3	5.5	6.4	7.7	11.1	15.2	15.1	14.8	13.4	11.3	8.8
	Youth unemployment rate (% labour force 15-24)	9.4	9.4	14.0	17.2	21.5	26.7	36.8	34.6	31.1	31.8	22.9	16.2
	Long term unemployment rate (% labour force)	0.7 u	0.5 u	0.6 bu	1.3	1.5	3.1	5.6	7.0	6.2	5.1	4.0	2.8
	Share of long term unemployment (% of total unemployment)	14.6 u	11.3 u	10.4 bu	19.7	20.0	28.4	37.2	46.6	41.8	38.3	35.5	31.9
	Youth unemployment ratio (% population aged 15-24)	3.7	3.8	5.4 b	6.9	7.9	9.5	13.3	13.7	12.1	12.2	9.1	6.8
	Employment rate for low skilled 25-64 (ISCED 0-2)	49.6	49.1	52.4 b	57.4	56.0	50.2	49.7	49.5 b	49.3	49.7	48.9	50.8
	Employment rate for medium skilled 25-64 (ISCED 3-4)	69.9	69.2	68.6 b	68.1	67.1	66.8	61.4	63.7 b	62.9	61.1	65.1	68.5
	Employment rate for high skilled 25-64 (ISCED 5-8)	83.4	84.5	83.6 b	81.1	80.5	76.9	75.7	76.5 b	76.8	77.2	77.3	78.0
	Employment rate (Nationals aged 15-64)	61.2	60.4	60.1 b	60.2	59.1	56.5	54.5	56.1	57.3	58.3	60.9	64.3
	Employment rate (Other EU28 aged 15-64)	54.0	65.6	64.2 b	64.7	64.5	61.2	55.8	58.7	57.8	60.6	61.9	62.2
	Employment rate (Other than EU28 aged 15-64)	81.2	81.1	79.2 b	81.3	80.2	77.4	74.6	78.1	74.0	65.8	65.2	65.7
	Employment rate (Born in the same country aged 15-64)	60.7	60.3	59.4 b	60.0	59.3	56.1	54.1	55.4	56.7	58.2	60.4	64.2
	Employment rate (Born in other EU28 aged 15-64)	57.5	63.2	64.0 b	64.6	63.2	60.0	56.5	60.1	58.7	61.2	62.9	61.7
	Employment rate (Born outside EU28 aged 15-64)	75.5	77.0	76.4 b	75.3	73.8	72.9	69.8	73.5	70.7	62.9	65.1	66.0
	Underemployment (% of labour force aged 15-74)		2.7	3.1 b	3.5	4.5	5.5	7.5	9.1	8.7	7.8	7.7	6.1
	Seeking but not available (% of labour force aged 15-74)	0.4 u	0.6 u	0.7 bu	1.0	0.5 u	0.7 u	0.8	0.8	0.7 u	1.0	1.9	2.0
	Discouraged, available but not seeking (% of labour force aged 15-74)	2.4	1.8	2.0 b	2.6	4.2	4.5	6.0	5.9	5.9	4.6	3.0	2.2

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Cyprus		2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018		
Social Indicators	All	At-risk-of-poverty or social exclusion (% of total population)	25.2	23.3 b	23.5	24.6	24.6	27.1	27.8	27.4	28.9	27.7	25.2		
		At-risk-of-poverty (% of total population)	15.5	15.9	15.8	15.6	14.8	14.7	15.3	14.4	16.2	16.1	15.7		
		At-risk-of-poverty threshold (PPS single person)	10951	10945 b	11256	10816	11497	11444	10299	9457	9188	9704	9886		
		Poverty gap (%)	19.7	15.3 b	17.2	18.0	19.0	19.0	17.7	18.5	19.8	17.3	15.1		
		Persistent at-risk-of-poverty (% of total population)		9.9	10.1	9.2	8.6	8.3	10.0	7.3	7.3	7.6	6.6		
		At-risk-of-poverty before social transfers excl. pensions (% of total population)	21.0	22.9 b	23.6	23.5	23.5	23.5	24.3	24.6	25.4	25.0	24.5		
		Impact of social transfers (excl. pensions) in reducing poverty (%)	26.2	30.6 b	33.1	33.6	37.0	37.5	37.0	41.5	36.2	35.6	35.9		
		Severe Material Deprivation (% of total population)	13.3	9.1	9.5	11.2	11.7	15.0	16.1	15.3	15.4	13.6	11.5	10.5 p	
		Share of people living in low work intensity households (% of people aged 0-59)	3.7	4.5 b	4.0	4.9	4.9	6.5	7.9	9.7	10.9	10.6	9.4		
		Real Gross Household Disposable income (growth %)	3.2	6.7	-2.7	1.2	-0.6	-4.0	-4.7	-8.2	1.7	6.0			
		Income quintile share ratio S80/S20	4.4	4.3 b	4.4	4.5	4.3	4.7	4.9	5.4	5.2	4.9	4.6		
		GINI coefficient	29.8	29.0 b	29.5	30.1	29.2	31.0	32.4	34.8	33.6	32.1	30.8		
		Early leavers from education and training (% of population aged 18-24)	12.5	13.7	11.7 b	12.7	11.3	11.4	9.1	6.8 b	5.2	7.6	8.5	7.8	
		NEET: Young people neither in employment nor in education and training (% of total population aged 15-24)	9.0	9.7	9.9 b	11.7	14.6	16.0	18.7	17.0	15.3	16.0	16.1	13.2	
	Male	At-risk-of-poverty or social exclusion (% of male population)	22.7	20.5 b	20.9	22.8	22.8	25.1	26.8	26.0	28.1	26.6	24.0		
		At-risk-of-poverty (% of male population)	13.5	13.7	13.7	13.8	12.9	12.9	14.1	13.1	15.3	15.0	14.6		
		Poverty gap (%)	18.3	14.0 b	14.6	16.6	17.9	18.3	17.4	18.0	21.3	18.9	15.6		
		Persistent at-risk-of-poverty (% of male population)		8.2	7.4	7.3	7.5	6.3	8.7	5.7	6.2	6.7	5.2		
		Severe Material Deprivation (% of male population)	12.5	9.0	9.1	11.5	12.0	15.1	16.6	15.6	15.9	14.0	11.7	11.2 p	
		Share of people living in low work intensity households (% of males aged 0-59)	2.9	3.3 b	3.0	4.2	4.2	5.8	7.6	8.9	10.3	9.9	8.6		
		Life expectancy at birth (years)	77.6	78.2	78.6	79.2	79.3	78.9	80.1	80.9	79.9	80.5	80.2		
		Healthy life years at birth (years) - men	63.1	63.9	64.8	65.1	61.6	63.4	64.3	66.1	63.1	67.5			
		Early leavers from education and training (% of males aged 18-24)	19.5	19.0	15.2 b	16.2	15.1	16.5	14.8	11.2 b	7.7	11.4	9.4	9.9	
		NEET: Young people neither in employment nor in education and training ( % of males aged 15-24)	8.3	8.2	8.6 b	10.4	15.1	17.8	20.6	19.0	15.9	15.0	16.2	14.8	
		Female	At-risk-of-poverty or social exclusion (% of female population)	27.6	25.9 b	26.0	26.3	26.4	29.0	28.8	28.8	29.8	28.7	26.4	
			At-risk-of-poverty (% of female population)	17.4	18.1	17.8	17.2	16.6	16.4	16.5	15.6	17.2	17.2	16.8	
			Poverty gap (%)	20.5	16.3 b	19.3	20.1	19.7	19.4	17.8	18.9	18.7	16.4	15.0	
			Persistent at-risk-of-poverty (% of female population)		11.5	12.6	10.9	9.6	10.3	11.2	8.9	8.2	8.6	8.0	
	Severe Material Deprivation (% of female population)		14.0	9.3	9.8	10.9	11.4	14.9	15.6	15.1	15.0	13.3	11.4	9.8 p	
	Share of people living in low work intensity households (% of females aged 0-59)		4.5	5.7 b	5.0	5.5	5.5	7.1	8.2	10.5	11.4	11.2	10.1		
	Life expectancy at birth (years)		82.1	82.9	83.6	83.9	83.1	83.4	85.0	84.7	83.7	84.9	84.2		
	Healthy life years at birth (years) - women		62.8	64.5	65.3	64.2	61.0	64.0	65.0	66.3	63.4	68.8			
	Early leavers from education and training (% of females aged 18-24)		6.8	9.5	8.7 b	9.8	8.1	7.0	4.2	2.9 bu	3.1 u	4.3 u	7.7	6.0	
	NEET: Young people neither in employment nor in education and training ( % of females aged 15-24)		9.6	10.9	11.1 b	12.8	14.2	14.4	17.0	15.3	14.7	16.9	16.0	11.7	
	Children (0-17)		At-risk-of-poverty or social exclusion of children (% of people aged 0-17)	20.8	21.5 b	20.2	21.8	23.4	27.5	27.7	24.7	28.9	29.6	25.5	
			At-risk-of-poverty (% of Children population)	12.4	14.0	12.3	12.6	12.8	13.9	15.5	12.8	16.7	17.1	16.5	
			Severe Material Deprivation (% of Children population)	11.7	9.7	9.3	12.5	14.8	18.1	18.7	15.6	17.2	17.7	13.6	13.3 p
			Share of children living in low work intensity households (% of Children population)	2.8	3.4 b	3.1	3.6	3.2	5.0	6.4	7.3	9.4	9.0	7.7	
		Risk of poverty of children in households at work (Working Intensity > 0.2)	10.5	12.5 b	10.6	10.6	11.2	11.6	11.8	9.1	11.8	12.3	12.6		
		Impact of social transfers (excl. pensions) in reducing poverty (0-17) (%)	37.7	44.0 b	51.4	49.6	47.1	45.5	43.6	52.9	44.7	41.4	41.5		
	Working age (18-64)	At-risk-of-poverty or social exclusion (% of working age population)	21.1	18.9 b	19.9	22.1	22.1	25.8	28.2	28.3	30.5	28.1	25.3		
		At-risk-of-poverty (% of Working age population)	10.1	10.8	11.2	11.9	11.5	12.2	14.4	13.4	15.9	15.1	14.2		
		Severe Material Deprivation (% of Working age population)	12.7	8.6	9.5	11.5	11.6	15.5	16.7	16.7	16.8	14.1	12.4	11.1 p	
		Very low work intensity (18-59)	4.0	5.0 b	4.4	5.3	5.5	6.9	8.4	10.6	11.4	11.1	9.9		
		In-work at-risk-of poverty rate (% of persons employed 18-64)	6.3	6.3 b	6.8	7.4	7.3	8.0	9.0	7.8	9.2	8.4	8.0		
		Impact of social transfers (excl. pensions) in reducing poverty (18-64) (%)	34.0	36.5 b	38.1	37.4	42.5	41.9	38.2	43.7	36.7	37.9	39.8		
	Elderly (65+)	At-risk-of-poverty or social exclusion of elderly (% of people aged 65+)	55.6	49.3 b	48.6	42.6	39.8	33.4	26.1	27.2	20.8	22.9	24.6		
		At-risk-of-poverty (% of Elderly population)	50.6	46.3	46.4	39.9	35.5	29.3	20.1	22.4	17.3	19.5	21.6		
		Severe Material Deprivation (% of Elderly population)	19.4	10.9	9.5	7.3	7.1	7.5	9.0	7.4	5.1	5.4	4.8	3.7 p	
		Relative median income of elderly (ratio with median income of people younger than 65)	0.57	0.59 b	0.61	0.65	0.67	0.70	0.77	0.75	0.80	0.79	0.80		
		Aggregate replacement ratio (ratio)	0.29	0.33 b	0.37	0.37	0.39	0.39	0.40	0.39	0.43	0.44	0.43		
Expenditure in social protection indicators (% of GDP)		Sickness/Health care	4.1	4.0	4.6	3.6	3.6	3.5	3.7	3.3	3.4	3.5			
	Disability	0.6	0.6	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.8				
	Old age and survivors	7.5	7.6	8.4	8.9	9.6	10.7	11.5	11.2	11.1	10.5				
	Family/Children	1.7	1.9	2.0	2.0	1.9	1.5	1.5	1.4	1.4	1.3				
	Unemployment	0.8	0.9	0.9	1.0	1.2	1.6	2.0	1.5	1.2	1.0				
	Housing and Social exclusion n.e.c.	1.4	1.7	2.3	2.4	2.3	1.8	1.4	1.4	1.6	1.6				
	Total (including Admin and Other expenditures)	16.4	17.6	19.1	18.8	20.2	20.9	22.8	20.0	19.9	19.1				
	of which: Means tested benefits	1.7	2.0	2.5	2.7	2.6	2.9	2.7	2.6	2.8	2.8				

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## Latvia

Latvia		2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018
Macro Economic Indicators (Annual % growth)	Real GDP	10.0	-3.5	-14.4	-3.9	6.4	4.0	2.4	1.9	3.0	2.1	4.6	4.8
	Total employment	3.8	-0.8	-14.3	-6.7	1.5	1.4	2.3	-1.3	1.4	-0.3	0.0	1.6
	Labour productivity	5.9	-2.7	-0.1	2.9	4.8	2.5	0.1	3.3	1.5	2.4	4.7	3.1
	Annual average hours worked per person employed	-1.5	6.6	-2.5	-0.9	0.9	-0.9	-0.3	0.6	-1.9	0.0	-0.8	0.3
	Real productivity per hour worked	7.6	-8.8	2.5	3.8	3.9	3.5	0.5	2.7	3.5	2.3	5.6	2.8
	Harmonized CPI	10.1	15.3	3.3	-1.2	4.2	2.3	0.0	0.7	0.2	0.1	2.9	2.6
	Price deflator GDP	20.1	11.8	-9.7	-0.8	6.4	3.6	1.6	1.8	0.0	0.9	3.2	4.2
	Nominal compensation per employee	34.9	17.7	-10.9	-6.6	2.4	7.7	5.5	8.6	7.7	7.3	8.0	7.8
	Real compensation per employee (GDP deflator)	12.3	5.3	-1.4	-5.9	-3.8	3.9	3.8	6.7	7.7	6.4	4.6	3.4
	Real compensation per employee (private consumption deflator)	22.5	2.1	-13.8	-5.5	-1.7	5.3	5.5	7.8	7.5	7.2	4.9	5.1
	Nominal unit labour costs	27.3	21.0	-10.9	-9.3	-2.3	5.0	5.3	5.2	6.1	4.8	3.1	4.5
	Real unit labour costs	6.0	8.3	-1.4	-8.5	-8.2	1.4	3.7	3.4	6.1	3.9	0.0	0.3
Labour Market Indicators - Total	Total population (000)	2209	2192	2163	2121	2075	2045	2024	2001	1986	1969	1950	1934
	Population aged 15-64 (000)	1511	1499	1473	1436	1399	1373	1352	1325	1303	1282	1259	1240
	Total employment (000)	1057	1055	909	851	862	876	894	885	896	893	895	909
	Employment aged 15-64 (000)	1016	1009	877	829	841	852	867	859	868	862	862	873
	Employment rate (% population aged 20-64)	75.2	75.4	66.6	64.3	66.3	68.1	69.7	70.7	72.5	73.2	74.8	76.8
	Employment rate (% population aged 15-64)	68.1	68.2	60.3	58.5	60.8	63.0	65.0	66.3	68.1	68.7	70.1	71.8
	Employment rate (% population aged 15-24)	38.1	37.0	27.5	25.4	25.8	28.7	30.2	32.5	34.5	32.8	33.0	33.1
	Employment rate (% population aged 25-54)	82.1	82.2	74.1	72.6	75.0	76.3	77.9	78.2	79.2	79.7	81.2	82.7
	Employment rate (% population aged 55-64)	58.0	59.1	52.5	47.8	50.5	52.8	54.8	56.4	59.4	61.4	62.3	65.4
	FTE employment rate (% population aged 20-64)	75.3	75.4	65.6	62.8	64.9	66.8	68.7	69.8	71.6	72.0	73.7	75.5
	Self-employed (% total employment)	9.3	8.9	10.0	10.1	10.2	10.5	10.7	10.7	11.8	12.0	11.9	11.0
	Part-time employment (% total employment)	5.6	5.9	8.2	9.3	8.8	8.9	7.5	6.8	7.2	8.5	7.7	7.2
	Temporary employment (% total employment)	3.7	3.0	3.8	6.3	5.9	4.2	3.8	2.9	3.3	3.2	2.6	2.4
	Employment in Services (% total employment)		62.7 b	67.0	68.3	68.3 u	68.2	68.0	68.7	68.4	68.0	69.6	69.1
	Employment in Industry (% total employment)		29.6 b	24.5	23.4	23.0 u	23.6	24.2	24.1	23.9	24.4	23.5	23.9
	Employment in Agriculture (% total employment)		7.7 b	8.5	8.3	8.7	8.1	7.8	7.3	7.7	7.6	6.9	7.0
	Activity rate (% population aged 15-64)	72.6	74.2	73.5	73.0	72.8	74.4	74.0	74.6	75.7	76.3	77.0	77.7
	Activity rate (% population aged 15-24)	42.6	42.8	41.2	39.7	37.5	40.1	39.4	40.4	41.3	39.7	39.7	37.7
	Activity rate (% population aged 25-54)	87.1	88.7	88.4	88.6	88.0	88.4	87.6	87.2	87.6	87.8	88.6	89.0
	Activity rate (% population aged 55-64)	60.7	63.0	60.9	56.9	59.4	61.8	61.3	62.6	65.5	67.6	67.9	70.8
	Total unemployment (000)	68	88	193	206	167	155	120	108	98	95	85	73
	Unemployment rate (% labour force)	6.1	7.7	17.5	19.5	16.2	15.0	11.9	10.8	9.9	9.6	8.7	7.4
	Youth unemployment rate (% labour force 15-24)	10.6	13.6	33.3	36.2	31.0	28.5	23.2	19.6	16.3	17.3	17.0	12.2
	Long term unemployment rate (% labour force)	1.6	1.9	4.5	8.8	8.8	7.8	5.7	4.6	4.5	4.0	3.3	3.1
	Share of long term unemployment (% of total unemployment)	27.0	24.1	25.8	45.0	54.5	52.1	48.4	42.9	45.3	41.4	37.6	41.6
	Youth unemployment ratio (% population aged 15-24)	4.5	5.8	13.7	14.4	11.6	11.5	9.1	7.9	6.7	6.9	6.8	4.6
	Employment rate for low skilled 25-64 (ISCED 0-2)	59.3	57.4	48.1	47.1	48.5	51.8	50.9	51.3 b	53.2	56.7	58.4	58.2
	Employment rate for medium skilled 25-64 (ISCED 3-4)	77.5	77.7	68.2	65.1	66.8	66.9	69.7	70.9 b	71.7	71.1	72.9	75.0
	Employment rate for high skilled 25-64 (ISCED 5-8)	87.8	87.4	83.5	80.7	84.4	86.2	85.2	84.2 b	85.8	87.2	87.6	89.1
	Employment rate (Nationals aged 15-64)	68.1	68.1 b	61.0	59.5	61.4	64.0	66.0	67.0	68.8	69.6	70.9	72.7
	Employment rate (Other EU28 aged 15-64)	80.8		63.2 u			76.7 u	76.6 u	78.9 u	77.4	79.0 u	61.2 u	66.2 u
	Employment rate (Other than EU28 aged 15-64)	64.2	69.1 b	56.6	53.3	57.5	57.6	59.2	61.6	63.4	63.3	64.4	65.9
	Employment rate (Born in the same country aged 15-64)	67.4	67.9	60.3	58.4	60.7	63.2	65.4	66.5	68.5	69.2	70.5	72.1
	Employment rate (Born in other EU28 aged 15-64)	67.0	59.3	48.5	53.7	57.2	53.0	59.1	62.3	62.1	75.7	63.8	56.8
	Employment rate (Born outside EU28 aged 15-64)	73.5	71.7	62.0	60.0	62.2	62.2	62.3	64.4	64.2	63.0	66.9	70.6
	Underemployment (% of labour force aged 15-74)		2.0	4.2	5.1	4.3	4.2	3.2	2.7	2.7	3.2	2.9	2.4
	Seeking but not available (% of labour force aged 15-74)	0.6	0.6	0.4	0.5	0.8	0.6	0.5	0.6	0.5	0.5	0.5	0.7
	Discouraged, available but not seeking (% of labour force aged 15-74)	6.1	4.7	7.7	8.1	7.6	6.4	6.1	5.0	4.4	4.1	4.1	3.0

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Latvia		2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018
Labour Market Indicators - Male	Total population (000)	1014	1007	993	971	948	935	927	917	911	904	896	890
	Population aged 15-64(000)	728	725	712	693	674	663	654	642	633	623	612	604
	Total employment (000)	540	531	435	403	416	428	441	439	444	438	441	449
	Employment aged 15-64 (000)	519	508	420	393	407	417	428	427	431	425	428	435
	Employment rate (% population aged 20-64)	80.5	79.3	66.8	64.0	67.5	70.0	71.9	73.1	74.6	74.7	77.0	79.0
	Employment rate (% population aged 15-64)	72.7	71.5	60.3	57.9	61.5	64.4	66.8	68.4	69.9	70.0	71.9	73.6
	Employment rate (% population aged 15-24)	43.8	42.1	29.5	26.5	28.3	31.8	33.3	36.5	37.1	34.0	35.0	35.5
	Employment rate (% population aged 25-54)	86.0	84.9	73.7	71.7	75.1	77.7	79.9	80.4	81.2	81.4	83.5	84.6
	Employment rate (% population aged 55-64)	64.3	62.8	51.8	46.9	51.7	53.2	55.2	56.3	60.1	61.3	62.4	66.3
	FTE employment rate (% population aged 20-64)	81.0	79.6	66.1	62.8	66.5	69.2	71.4	72.8	74.5	74.2	76.4	78.3
	Self-employed (% total employment)	11.3	11.4	12.9	12.4	12.6	12.8	12.8	13.3	14.8	15.0	14.0	12.8
	Part-time employment (% total employment)	4.1	4.3	6.8	7.6	7.0	6.7	5.6	4.7	4.5	6.1	4.8	4.7
	Temporary employment (% total employment)	4.9	4.2	5.1	8.1	6.9	5.5	4.5	3.7	3.9	3.9	3.1	2.6
	Employment in Services (% total employment)		48.7 b	54.3 u	54.7 u	55.0 u	54.7 u	54.2 u	54.5	54.3	54.1	56.4 u	55.3
	Employment in Industry (% total employment)		41.3 b	34.4 u	33.8 u	32.5 u	33.4 u	34.8 u	35.1	35.0	35.5	34.0 u	34.7
	Employment in Agriculture (% total employment)		10.0 b	11.3	11.5	12.5	11.8	11.1	10.4	10.7	10.4	9.7	10.1
	Activity rate (% population aged 15-64)	77.9	78.3	76.6	75.3	75.8	77.1	76.6	77.8	78.9	78.8	79.8	80.5
	Activity rate (% population aged 15-24)	49.2	49.0	46.4	42.2	41.1	44.0	42.6	45.3	45.2	43.3	42.8	40.5
	Activity rate (% population aged 25-54)	91.6	92.0	91.1	91.0	90.8	91.2	90.6	90.5	90.6	90.2	91.8	92.1
	Activity rate (% population aged 55-64)	67.6	68.2	62.8	58.5	62.5	63.2	62.2	63.7	68.0	69.4	69.1	72.5
	Total unemployment (000)	38	49	115	119	95	83	64	59	55	54	48	41
	Unemployment rate (% labour force)	6.5	8.4	20.9	22.7	18.6	16.2	12.6	11.8	11.1	10.9	9.8	8.4
	Youth unemployment rate (% labour force 15-24)	11.0	14.0	36.4	37.3	31.3	27.8	21.8	19.4	18.0	21.4	18.3	12.5
	Long term unemployment rate (% labour force)	1.9	1.9	5.4	10.9	11.0	8.7	6.5	5.3	5.4	4.9	3.9	3.8
	Share of long term unemployment (% of total unemployment)	29.9	23.1	25.9	48.0	59.0	53.5	51.9	44.7	48.5	44.9	39.9	45.1
	Youth unemployment ratio (% population aged 15-24)	5.4	6.9	16.9	15.8	12.9	12.2	9.3	8.8	8.2	9.2	7.8	5.1
	Employment rate for low skilled 25-64 (ISCED 0-2)	68.2	64.8	50.4	49.5	53.6	59.0	56.8	58.3 b	60.8	62.7	64.7	63.9
	Employment rate for medium skilled 25-64 (ISCED 3-4)	83.9	82.1	69.7	66.1	70.0	70.5	73.4	74.8 b	75.4	74.9	76.9	79.5
	Employment rate for high skilled 25-64 (ISCED 5-8)	89.8	90.7	85.8	81.9	84.2	87.7	88.7	86.6 b	88.9	88.7	89.9	90.6
	Employment rate (Nationals aged 15-64)	72.7	71.2 b	60.6	58.6	61.3	64.9	67.3	69.1	70.3	70.2	72.2	73.8
	Employment rate (Other EU28 aged 15-64)	85.6 u								88.2 u			81.2 u
	Employment rate (Other than EU28 aged 15-64)	69.2	72.8 b	58.5	54.4	62.0	61.6	63.5	64.0	67.1	68.3	69.8	72.0
	Employment rate (Born in the same country aged 15-64)	71.8	71.1	60.0	57.7	61.0	64.5	66.6	68.4	70.0	70.0	71.9	73.4
	Employment rate (Born in other EU28 aged 15-64)	68.7	70.0	58.8	52.1	58.1	58.2	68.1	61.8	60.4	82.2	68.7	62.5
	Employment rate (Born outside EU28 aged 15-64)	80.4	75.0	63.1	60.4	65.9	64.2	68.0	69.1	70.2	67.7	72.9	77.2
	Underemployment (% of labour force aged 15-74)		1.7	3.9	4.1	3.8	3.3	2.6	2.0	1.8	2.8	2.0	1.8
	Seeking but not available (% of labour force aged 15-74)	0.4	0.4	0.4 u		0.7	0.6	0.4 u	0.4 u	0.3 u	0.5	0.4 u	0.7
	Discouraged, available but not seeking (% of labour force aged 15-74)	5.2	3.9	7.0	8.0	7.0	6.1	5.7	4.9	4.3	4.1	3.8	2.8
Labour Market Indicators - Female	Total population (000)	1195	1185	1170	1150	1127	1110	1097	1084	1075	1065	1054	1045
	Population aged 15-64(000)	783	775	761	743	725	710	698	683	670	659	647	636
	Total employment (000)	517	524	474	448	445	447	453	446	452	455	454	461
	Employment aged 15-64 (000)	497	501	456	436	434	435	438	432	437	437	434	439
	Employment rate (% population aged 20-64)	70.3	71.9	66.5	64.5	65.3	66.4	67.7	68.5	70.5	71.8	72.7	74.8
	Employment rate (% population aged 15-64)	63.9	65.2	60.4	59.0	60.2	61.7	63.4	64.3	66.4	67.6	68.4	70.1
	Employment rate (% population aged 15-24)	32.2	31.7	25.4	24.3	23.4	25.4	27.0	28.3	31.9	31.6	30.9	30.6
	Employment rate (% population aged 25-54)	78.4	79.6	74.5	73.5	74.8	75.0	76.1	76.0	77.3	78.1	79.0	80.7
	Employment rate (% population aged 55-64)	53.4	56.3	53.0	48.4	49.7	52.5	54.6	56.4	58.9	61.4	62.1	64.7
	FTE employment rate (% population aged 20-64)	70.1	71.6	65.1	62.8	63.5	64.7	66.2	67.2	69.0	70.1	71.3	73.0
	Self-employed (% total employment)	7.1	6.3	7.4	8.0	8.0	8.3	8.7	8.2	8.9	9.2	10.0	9.3
	Part-time employment (% total employment)	7.1	7.6	9.4	10.9	10.4	11.0	9.4	8.9	10.0	10.8	10.6	9.8
	Temporary employment (% total employment)	2.5	1.9	2.7	4.7	5.0	3.0	3.1	2.2	2.7	2.6	2.1	2.2
	Employment in Services (% total employment)												
	Employment in Industry (% total employment)												
	Employment in Agriculture (% total employment)		5.5 b	5.9	5.4	5.1	4.6	4.6	4.2	4.8	4.8	4.2	3.9
	Activity rate (% population aged 15-64)	67.8	70.3	70.7	70.8	70.1	72.0	71.6	71.6	72.8	74.0	74.3	75.1
	Activity rate (% population aged 15-24)	35.8	36.5	35.9	37.2	33.7	36.1	36.0	35.3	37.1	35.9	36.5	34.7
	Activity rate (% population aged 25-54)	82.8	85.6	85.9	86.3	85.3	85.7	84.8	84.0	84.6	85.5	85.4	86.0
	Activity rate (% population aged 55-64)	55.7	59.2	59.5	55.7	57.1	60.8	60.5	61.7	63.5	66.1	66.9	69.4
	Total unemployment (000)	30	40	78	87	71	73	57	49	43	42	38	32
	Unemployment rate (% labour force)	5.6	7.1	14.1	16.3	13.8	14.0	11.1	9.8	8.6	8.4	7.7	6.4
	Youth unemployment rate (% labour force 15-24)	10.0	13.1	29.2	34.8	30.6	29.5	24.9	20.0	14.2	12.1	15.4	11.8
	Long term unemployment rate (% labour force)	1.3	1.8	3.6	6.7	6.7	7.0	5.0	4.0	3.6	3.1	2.7	2.4
	Share of long term unemployment (% of total unemployment)	23.5	25.3	25.6	41.0	48.5	50.4	44.4	40.6	41.2	37.0	34.6	37.0
	Youth unemployment ratio (% population aged 15-24)	3.6	4.8	10.5	12.9	10.3	10.6	9.0	7.0	5.3	4.4	5.6	4.1
	Employment rate for low skilled 25-64 (ISCED 0-2)	46.9	47.1	44.7	43.1	40.3	40.0	41.0	39.1 b	39.9	47.2	48.0	48.5
	Employment rate for medium skilled 25-64 (ISCED 3-4)	71.6	73.4	66.7	64.1	63.6	63.1	65.8	66.9 b	67.7	66.7	68.2	70.0
	Employment rate for high skilled 25-64 (ISCED 5-8)	86.7	85.7	82.3	80.0	84.5	85.4	83.3	83.0 b	84.3	86.4	86.3	88.2
	Employment rate (Nationals aged 15-64)	64.0	65.3 b	61.4	60.2	61.5	63.1	64.7	65.1	67.4	68.9	69.7	71.6
	Employment rate (Other EU28 aged 15-64)												
	Employment rate (Other than EU28 aged 15-64)	58.8	65.0 b	54.7	52.2	52.6	53.1	54.7	59.2	59.6	58.5	58.9	59.7
	Employment rate (Born in the same country aged 15-64)	63.3	64.8	60.7	59.0	60.4	62.0	64.2	64.8	67.2	68.5	69.1	70.8
	Employment rate (Born in other EU28 aged 15-64)	65.3	51.8	39.5	55.1	56.4	48.4	50.8	62.7	63.1	69.4	57.1	51.5
	Employment rate (Born outside EU28 aged 15-64)	68.2	69.1	61.1	59.7	59.3	60.6	57.9	60.7	60.0	59.7	62.6	65.4
	Underemployment (% of labour force aged 15-74)		2.4	4.6	6.0	4.7	5.2	3.7	3.3	3.5	3.6	3.7	3.1
	Seeking but not available (% of labour force aged 15-74)	0.8	0.8	0.4 u	0.6 u	0.9	0.6	0.6	0.8	0.7	0.6	0.6	0.7
	Discouraged, available but not seeking (% of labour force aged 15-74)	7.0	5.5	8.4	8.3	8.1	6.8	6.6	5.0	4.5	4.0	4.5	3.1

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Latvia			2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	
Social Indicators	All	At-risk-of-poverty or social exclusion (% of total population)	35.1	34.2 b	37.9	38.2	40.1	36.2	35.1	32.7	30.9	28.5	28.2	28.4	
		At-risk-of-poverty (% of total population)	21.2	25.9	26.4	20.9	19.0	19.2	19.4	21.2	22.5	21.8	22.1	23.3	
		At-risk-of-poverty threshold (PPS single person)	3352	4283	4279	3525	3566	3661	3868	4392	4855	5554	5534	6045	
		Poverty gap (%)	24.8	28.6	29.0	28.9	31.7	28.6	27.5	23.6	25.5	24.0	25.3	27.8	
		Persistent at-risk-of-poverty (% of total population)		12.6	15.6	10.5	9.3	12.6 b	12.1	10.8	10.1	15.2	14.9	15.5	
		At-risk-of-poverty before social transfers excl. pensions (% of total population)	27.5	30.2	31.0	28.5	26.8	25.7	26.0	27.0	27.3	27.8	28.3	28.8	
		Impact of social transfers (excl. pensions) in reducing poverty (%)	22.9	14.2	14.8	26.7	29.1	25.3	25.4	21.5	17.6	21.6	21.9	19.1	
		Severe Material Deprivation (% of total population)	24.0	19.3	22.1	27.6	31.0	25.6	24.0	19.2	16.4	12.8	11.3	9.5	
		Share of people living in low work intensity households (% of people aged 0-59)	6.2	5.4	7.4	12.6	12.6	11.7	10.0	9.6	7.8	7.2	7.8	7.6	
		Real Gross Household Disposable income (growth %)	10.6	3.6	-15.0	-5.3	-5.8	3.6	4.2	2.5	6.6	3.7			
		Income quintile share ratio S80/S20	6.4	7.3	7.4	6.8	6.5	6.5	6.3	6.5	6.5	6.2	6.3	6.8	
		GINI coefficient	35.4	37.5	37.5	35.9	35.1	35.7	35.2	35.5	35.4	34.5	34.5	35.6	
		Early leavers from education and training (% of population aged 18-24)	15.6	15.5	14.3	12.9	11.6	10.6	9.8	8.5 b	9.9	10.0	8.6	8.3	
		NEET: Young people neither in employment nor in education and training (% of total population aged 15-24)	11.9	11.8	17.5	17.8	16.0	14.9	13.0	12.0	10.5	11.2	10.3	7.8	
	Male	At-risk-of-poverty or social exclusion (% of male population)	32.3	31.4 b	36.0	37.6	39.9	35.5	34.2	30.6	27.9	26.0	24.9	25.2	
		At-risk-of-poverty (% of male population)	18.7	23.3	24.4	21.4	19.8	19.3	18.9	19.5	19.7	19.4	19.1	20.4	
		Poverty gap (%)	27.7	26.7	31.7	31.5	34.0	31.8	30.3	28.3	30.5	26.7	28.9	29.0	
		Persistent at-risk-of-poverty (% of male population)		10.7	13.2	10.6	9.4	13.4 b	12.7	10.1	8.6	13.4	12.8	12.5	
		Severe Material Deprivation (% of male population)	22.1	17.6	21.3	26.9	30.4	24.7	23.1	18.1	15.4	12.1	10.7	8.9	
		Share of people living in low work intensity households (% of males aged 0-59)	5.9	5.7	7.9	13.8	13.3	12.6	10.4	10.2	8.2	7.2	7.9	7.8	
		Life expectancy at birth (years)	65.3	66.5	68.1	67.9	68.6	68.9	69.3 b	69.1	69.7	69.8	69.8		
		Healthy life years at birth (years) - men	51.4	51.6	52.6	53.1	53.6	54.6	51.7 b	51.5	51.8	52.3	50.6		
		Early leavers from education and training (% of males aged 18-24)	20.6	20.0	17.6	16.7	15.8	14.7	13.6	11.7 b	13.4	13.7	12.0	11.4	
		NEET: Young people neither in employment nor in education and training ( % of males aged 15-24)	9.5	10.2	18.6	18.7	16.1	15.1	12.6	11.3	9.4	12.6	11.0	8.1	
		Female	At-risk-of-poverty or social exclusion (% of female population)	37.4	36.6 b	39.4	38.6	40.3	36.8	35.9	34.4	33.4	30.6	31.1	31.1
			At-risk-of-poverty (% of female population)	23.4	28.1	28.0	20.4	18.3	19.1	19.8	22.5	24.8	23.9	24.6	25.8
	Poverty gap (%)		24.1	29.3	27.4	25.9	28.7	25.7	25.8	21.2	22.4	22.9	24.1	27.6	
	Persistent at-risk-of-poverty (% of female population)			14.1	17.7	10.5	9.2	11.9 b	11.6	11.4	11.3	16.7	16.6	18.0	
	Severe Material Deprivation (% of female population)		25.6	20.6	22.8	28.3	31.5	26.5	24.7	20.1	17.3	13.4	11.8	10.0	
	Share of people living in low work intensity households (% of females aged 0-59)		6.5	5.2	7.0	11.4	12.0	10.8	9.6	9.1	7.4	7.2	7.6	7.4	
	Life expectancy at birth (years)		76.2	77.5	78.0	78.0	78.8	78.9	78.9 b	79.4	79.5	79.6	79.7		
	Healthy life years at birth (years) - women		54.8	54.3	56.0	56.4	56.6	59.0	54.2 b	55.3	54.1	54.9	52.2		
	Early leavers from education and training (% of females aged 18-24)		10.5	10.8	11.0	9.0	7.5	6.3	5.8	5.1 b	6.2	6.2	5.0	5.0	
	NEET: Young people neither in employment nor in education and training ( % of females aged 15-24)		14.4	13.5	16.3	16.9	16.0	14.6	13.4	12.8	11.7	9.7	9.5	7.6	
	Children (0-17)		At-risk-of-poverty or social exclusion of children (% of people aged 0-17)	32.8	32.4 b	38.4	42.2	44.1	40.0	38.4	35.3	31.3	24.7	23.9	22.5
			At-risk-of-poverty (% of Children population)	19.8	23.6	26.3	26.3	24.7	24.4	23.4	24.3	23.2	18.6	18.4	17.5
		Severe Material Deprivation (% of Children population)	20.5	19.2	24.6	30.7	32.4	27.3	25.4	19.9	17.0	11.9	10.3	8.3	
		Share of children living in low work intensity households (% of Children population)	5.5	4.6	6.9	12.4	12.6	10.4	9.2	9.6	7.4	6.3	6.4	5.9	
		Risk of poverty of children in households at work (Working Intensity > 0.2)	16.7	20.1	21.3	18.5	17.4	18.3	18.5	18.4	18.4	13.9	13.0	12.9	
		Impact of social transfers (excl. pensions) in reducing poverty (0-17) (%)	33.1	22.9	22.0	28.5	32.3	28.5	28.2	27.5	24.4	35.9	35.7	34.2	
	Working age (18-64)	At-risk-of-poverty or social exclusion (% of working age population)	31.4	28.0 b	32.8	37.4	41.1	35.9	34.0	30.0	27.3	25.0	24.5	23.5	
		At-risk-of-poverty (% of Working age population)	17.7	19.4	20.5	20.4	20.2	19.3	18.8	18.4	18.6	17.7	17.5	17.8	
		Severe Material Deprivation (% of Working age population)	21.8	16.7	20.5	26.8	31.2	25.0	22.9	18.2	15.7	12.4	11.2	9.2	
		Very low work intensity (18-59)	6.4	5.7	7.6	12.6	12.6	12.1	10.2	9.6	7.9	7.5	8.2	8.2	
		In-work at-risk-of poverty rate (% of persons employed 18-64)	9.5	10.7	11.2	9.7	9.6	8.9	9.1	8.3	9.4	8.5	9.0	8.2	
		Impact of social transfers (excl. pensions) in reducing poverty (18-64) (%)	25.3	17.5	18.0	27.1	28.9	25.2	25.4	23.0	20.2	23.7	25.5	23.3	
	Elderly (65+)	At-risk-of-poverty or social exclusion of elderly (% of people aged 65+)	51.4	58.8 b	55.5	36.8	33.0	33.7	36.1	39.3	42.1	43.1	43.9	49.0	
At-risk-of-poverty (% of Elderly population)		35.6	52.0	47.6	17.2	9.1	13.9	17.6	27.6	34.6	38.1	39.9	45.7		
Severe Material Deprivation (% of Elderly population)		35.8	28.7	25.3	27.5	28.9	26.4	26.6	22.0	18.2	14.9	12.7	11.7		
Relative median income of elderly (ratio with median income of people younger than 65)		0.64	0.53	0.57	0.78	0.86	0.80	0.77	0.71	0.65	0.63	0.61	0.58		
Aggregate replacement ratio (ratio)		0.38	0.30	0.34	0.47	0.53	0.49	0.47	0.44	0.42	0.42	0.43	0.40		
Sickness/Health care		3.3	3.6	4.0	3.9	3.4	3.3	3.4	3.5	3.6 p	3.7 p				
Expenditure in social protection indicators (% of GDP)	Disability	0.7	0.9	1.3	1.4	1.3	1.2	1.2	1.3	1.4 p	1.4 p				
	Old age and survivors	4.7	5.3	7.8	9.5	8.2	7.8	7.7	7.4	7.4 p	7.3 p				
	Family/Children	1.1	1.3	1.7	1.5	1.1	1.0	1.2	1.3	1.6 p	1.6 p				
	Unemployment	0.4	0.5	1.6	1.3	0.7	0.5	0.6	0.6	0.6 p	0.7 p				
	Housing and Social exclusion n.e.c.	0.2	0.3	0.3	0.4	0.4	0.3	0.3	0.2	0.2 p	0.2 p				
	Total (including Admin and Other expenditures)	10.6	12.1	16.8	18.3	15.3	14.4	14.6	14.5	14.9 p	15.1 p				
	of which: Means tested benefits	0.2	0.2	0.3	0.7	0.7	0.4	0.3	0.2	0.2 p	0.2 p				

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## Lithuania

Lithuania		2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018
Macro Economic Indicators (Annual % growth)	Real GDP	11.1	2.6	-14.8	1.6	6.0	3.8	3.5	3.5	2.0	2.4	4.1	3.5
	Total employment	2.0	-1.3	-7.7	-5.3	0.5	1.8	1.3	2.0	1.3	2.0	-0.5	1.1
	Labour productivity	8.9	4.0	-7.7	7.3	5.5	2.0	2.1	1.5	0.7	0.4	4.7	2.4
	Annual average hours worked per person employed	1.6	1.6	-3.7	1.2	-1.4	-0.1	-0.9	-0.4	1.4	1.4	-2.2	0.5
	Real productivity per hour worked	7.2	2.4	-4.2	6.1	7.0	2.1	3.0	1.9	-0.7	-1.0	7.0	1.9
	Harmonized CPI	5.8	11.1	4.2	1.2	4.1	3.2	1.2	0.2	-0.7	0.7	3.7	2.5
	Price deflator GDP	8.6	9.7	-3.3	2.4	5.2	2.7	1.3	1.0	0.3	1.4	4.3	3.3
	Nominal compensation per employee	14.1	14.1	-9.3	-0.1	6.4	4.2	5.4	4.7	5.9	6.8	8.7	8.0
	Real compensation per employee (GDP deflator)	5.1	4.0	-6.2	-2.5	1.1	1.5	4.0	3.7	5.5	5.3	4.2	4.5
	Real compensation per employee (private consumption deflator)	7.8	2.7	-12.9	-1.3	2.1	1.1	4.1	4.5	6.6	6.0	4.8	5.3
	Nominal unit labour costs	4.8	9.7	-1.7	-7.0	0.8	2.2	3.2	3.2	5.1	6.4	3.8	5.4
	Real unit labour costs	-3.4	-0.1	1.7	-9.1	-4.2	-0.5	1.8	2.2	4.7	5.0	-0.5	2.0
Labour Market Indicators - Total	Total population (000)	3250	3213	3184	3142	3053	3004	2972	2943	2921	2889	2848	2809
	Population aged 15-64 (000)	2188	2169	2154	2127	2053	2016	1993	1971	1949	1916	1876	1836
	Total employment (000)	1452	1427	1317	1248	1254	1276	1293	1319	1335	1361	1355	1375
	Employment aged 15-64 (000)	1423	1397	1290	1224	1226	1244	1264	1288	1301	1318	1306	1324
	Employment rate (% population aged 20-64)	72.7	72.0	67.0	64.3	66.9	68.5	69.9	71.8	73.3	75.2	76.0	77.8
	Employment rate (% population aged 15-64)	65.0	64.4	59.9	57.6	60.2	62.0	63.7	65.7	67.2	69.4	70.4	72.4
	Employment rate (% population aged 15-24)	24.8	26.0	20.6	18.3	19.0	21.5	24.6	27.6	28.3	30.2	30.4	32.4
	Employment rate (% population aged 25-54)	82.2	80.9	75.9	73.6	76.9	78.5	79.6	80.8	81.6	82.7	83.3	84.6
	Employment rate (% population aged 55-64)	53.2	53.0	51.2	48.3	50.2	51.7	53.4	56.2	60.4	64.6	66.1	68.5
	FTE employment rate (% population aged 20-64)	71.8	71.4	65.9	63.4	65.8	67.3	68.9	70.8	72.1	74.0	74.7	76.5
	Self-employed (% total employment)	12.6	10.2	10.4	9.3	9.2	9.7	10.6	10.8	11.1	11.4	11.1	10.9
	Part-time employment (% total employment)	8.6	6.5	7.9	7.8	8.3	8.9	8.4	8.6	7.6	7.1	7.6	7.1
	Temporary employment (% total employment)	3.2	2.1	2.0	2.2	2.4	2.3	2.4	2.4	1.8	1.7	1.5	1.4
	Employment in Services (% total employment)							65.8 u	66.0 u	65.8 u	66.8 u	67.1 u	67.0 u
	Employment in Industry (% total employment)							25.9 u	25.1 u	25.4 u	25.5 u	25.5 u	26.0 u
	Employment in Agriculture (% total employment)		8.0 b	8.9	8.7	8.3	8.8	8.4	9.0	8.8	7.7	7.4	7.0
	Activity rate (% population aged 15-64)	67.9	68.4	69.6	70.2	71.4	71.8	72.4	73.7	74.1	75.5	75.9	77.3
	Activity rate (% population aged 15-24)	27.1	30.0	29.3	28.4	28.2	29.3	31.5	34.2	33.8	35.3	35.0	36.5
	Activity rate (% population aged 25-54)	85.6	85.4	87.0	88.4	89.8	89.7	89.5	89.7	89.3	89.3	89.3	89.6
	Activity rate (% population aged 55-64)	55.3	55.4	57.2	56.5	58.0	58.7	60.1	63.0	66.2	70.0	71.3	73.8
	Total unemployment (000)	64	88	211	270	228	197	172	158	134	116	103	90
	Unemployment rate (% labour force)	4.3	5.8	13.8	17.8	15.4	13.4	11.8	10.7	9.1	7.9	7.1	6.2
	Youth unemployment rate (% labour force 15-24)	8.4	13.3	29.6	35.7	32.6	26.7	21.9	19.3	16.3	14.5	13.3	11.1
	Long term unemployment rate (% labour force)	1.4 u	1.3 u	3.3	7.4	8.0	6.6	5.1	4.8	3.9	3.0	2.7	2.0
	Share of long term unemployment (% of total unemployment)	32.4 u	21.6 u	23.7	41.7	52.1	49.2	42.9	44.7	42.9	38.3	37.6	32.2
	Youth unemployment ratio (% population aged 15-24)	2.3	4.0	8.7	10.2	9.2	7.8	6.9	6.6	5.5	5.1	4.6	4.1
	Employment rate for low skilled 25-64 (ISCED 0-2)	48.6	41.9	37.9	31.6	32.9	36.0	38.9	43.2 b	45.0	44.8	46.1	48.3
	Employment rate for medium skilled 25-64 (ISCED 3-4)	75.6	73.9	67.7	63.4	66.0	67.5	68.4	69.4 b	70.8	72.1	73.2	75.1
	Employment rate for high skilled 25-64 (ISCED 5-8)	89.2	88.8	86.7	86.7	88.3	88.2	88.6	89.4 b	89.6	91.0	90.7	91.0
	Employment rate (Nationals aged 15-64)	65.0	64.4	59.9	57.6	60.3	62.0	63.7	65.6	67.2	69.4	70.4	72.4
	Employment rate (Other EU28 aged 15-64)							84.7 u				95.2 u	95.3 u
	Employment rate (Other than EU28 aged 15-64)	65.2 u	73.8 u	52.6 u	54.5 u	53.3 u	62.8 u	70.2	72.9	70.5	68.9	68.1	70.1
	Employment rate (Born in the same country aged 15-64)	64.8	64.1	59.7	57.4	60.1	61.9	63.6	65.6	67.2	69.4	70.4	72.5
	Employment rate (Born in other EU28 aged 15-64)							82.7 u	76.7 u	57.2	66.9	72.6	70.2
	Employment rate (Born outside EU28 aged 15-64)	69.8	70.6	63.6	62.6	62.4	64.5	67.5	68.6	69.3	69.2	69.8	71.2
	Underemployment (% of labour force aged 15-74)		1.2 u	2.1	2.3	2.5	2.5	2.4	2.1	1.5	1.3	1.1	0.9
	Seeking but not available (% of labour force aged 15-74)	1.2 u	1.8	0.8	0.9	0.5	0.5 u	0.8	0.8	0.7	0.8	0.9	0.9
	Discouraged, available but not seeking (% of labour force aged 15-74)	1.9	2.4	2.7	1.9	1.2	1.1	0.9	0.6	0.9	1.1	1.0	0.6

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Lithuania	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018
Labour Market Indicators - Male	Total population (000)	1507	1487	1473	1450	1407	1384	1369	1356	1346	1330	1297
	Population aged 15-64(000)	1054	1046	1040	1024	990	972	962	953	944	928	895
	Total employment (000)	736	720	630	591	604	618	636	647	654	663	679
	Employment aged 15-64 (000)	719	703	616	579	590	603	620	632	637	643	655
	Employment rate (% population aged 20-64)	76.6	75.6	66.8	63.5	67.2	69.1	71.2	73.1	74.6	76.2	79.0
	Employment rate (% population aged 15-64)	68.2	67.2	59.3	56.5	60.1	62.2	64.7	66.5	68.0	70.0	73.3
	Employment rate (% population aged 15-24)	29.4	30.1	21.2	19.1	20.9	22.8	27.6	31.0	30.8	32.5	34.1
	Employment rate (% population aged 25-54)	84.2	82.6	74.2	71.1	75.7	77.7	79.8	80.7	81.8	82.6	85.2
	Employment rate (% population aged 55-64)	60.7	60.2	55.5	52.1	54.1	55.9	56.1	58.8	62.4	66.2	70.5
	FTE employment rate (% population aged 20-64)	76.2	75.5	66.1	62.8	66.5	68.5	70.9	72.9	74.0	75.5	78.4
	Self-employed (% total employment)	16.2	13.4	13.5	11.8	11.3	12.1	13.1	12.9	13.7	14.5	14.1
	Part-time employment (% total employment)	7.0	4.8	6.7	6.4	6.7	6.9	6.4	6.4	5.5	5.4	5.2
	Temporary employment (% total employment)	4.3	2.6 u	2.6	2.9	3.2	3.0	3.0	3.1	2.1	1.9	1.5
	Employment in Services (% total employment)							53.5 u	54.4 u	54.2 u	54.2 u	55.2 u
	Employment in Industry (% total employment)							35.7 u	34.1 u	34.5 u	35.6 u	35.3 u
	Employment in Agriculture (% total employment)		10.1 b	11.4	11.2	10.5	11.4	10.8	11.5	11.4	10.3	9.5
	Activity rate (% population aged 15-64)	71.3	71.6	71.7	72.0	73.5	73.7	74.7	76.0	75.8	77.1	78.9
	Activity rate (% population aged 15-24)	31.6	34.6	32.7	31.3	32.1	32.4	35.8	38.6	36.7	38.7	38.8
	Activity rate (% population aged 25-54)	87.7	87.3	88.0	89.0	90.7	90.5	90.6	90.8	90.4	90.2	91.0
	Activity rate (% population aged 55-64)	63.3	62.9	63.3	62.6	64.3	64.6	65.2	68.2	69.8	73.6	76.2
	Total unemployment (000)	32	46	130	159	132	111	96	90	73	66	50
	Unemployment rate (% labour force)	4.2	6.0	17.1	21.2	17.9	15.2	13.1	12.2	10.1	9.1	6.9
	Youth unemployment rate (% labour force 15-24)	7.0	13.0	35.1	39.0	34.9	29.7	23.0	19.6	16.0	15.9	12.0
	Long term unemployment rate (% labour force)	1.5 u	1.1 u	3.7	9.0	9.4	7.4	5.5	5.4	4.4	3.4	2.3
	Share of long term unemployment (% of total unemployment)	34.9 u	17.6 u	21.7	42.6	52.4	48.9	42.2	44.3	43.6	37.7	33.5
	Youth unemployment ratio (% population aged 15-24)	2.2	4.5	11.4	12.2	11.2	9.6	8.2	7.6	5.9	6.1	4.6
	Employment rate for low skilled 25-64 (ISCED 0-2)	56.3	49.6	39.5	33.8	36.1	39.9	43.6	46.1 b	49.1	49.1	51.3
	Employment rate for medium skilled 25-64 (ISCED 3-4)	80.9	78.4	69.4	64.7	68.8	71.2	72.1	72.4 b	73.7	75.2	78.7
	Employment rate for high skilled 25-64 (ISCED 5-8)	90.5	91.4	86.3	86.5	88.0	87.8	89.6	91.2 b	92.0	92.6	92.6
	Employment rate (Nationals aged 15-64)	68.1	67.2	59.3	56.5	60.2	62.2	64.7	66.5	68.0	69.9	70.6
	Employment rate (Other EU28 aged 15-64)											100.0 u
	Employment rate (Other than EU28 aged 15-64)	78.3 u						68.9 u	71.7 u	73.9 u	72.8 u	70.1 u
	Employment rate (Born in the same country aged 15-64)	67.9	66.9	59.1	56.2	59.9	62.1	64.5	66.3	67.9	69.8	70.6
	Employment rate (Born in other EU28 aged 15-64)							81.7 u	87.6 u	61.0 u	77.7 u	74.6 u
	Employment rate (Born outside EU28 aged 15-64)	76.2	76.0	66.2	63.9	66.4	68.0	71.3	71.6	72.8	72.4	71.2
	Underemployment (% of labour force aged 15-74)		0.9 u	2.0	1.8	2.1	2.0	2.0	1.7	1.1	0.9 u	0.7 u
	Seeking but not available (% of labour force aged 15-74)	1.1 u	1.6 u	0.8 u	0.9 u				0.7 u	0.6 u	0.8 u	0.8 u
	Discouraged, available but not seeking (% of labour force aged 15-74)	1.7 u	2.4 u	3.2	2.2	1.4	1.5	1.1 u	0.8 u	1.1	1.3	1.2
Labour Market Indicators - Female	Total population (000)	1743	1725	1711	1692	1645	1620	1603	1587	1575	1559	1512
	Population aged 15-64(000)	1134	1123	1115	1103	1063	1044	1031	1017	1004	988	940
	Total employment (000)	715	707	687	657	650	658	657	672	681	698	696
	Employment aged 15-64 (000)	703	694	674	646	636	642	644	656	663	674	669
	Employment rate (% population aged 20-64)	69.1	68.7	67.2	65.0	66.6	67.9	68.6	70.6	72.2	74.3	75.5
	Employment rate (% population aged 15-64)	62.0	61.8	60.4	58.5	60.2	61.8	62.8	64.9	66.5	68.8	70.2
	Employment rate (% population aged 15-24)	20.0	21.8	20.1	17.4	17.0	20.1	21.5	24.1	25.7	27.8	30.6
	Employment rate (% population aged 25-54)	80.2	79.4	77.5	75.9	78.1	79.1	79.4	80.9	81.4	82.9	83.6
	Employment rate (% population aged 55-64)	47.5	47.4	47.8	45.5	47.2	48.5	51.2	54.3	58.8	62.8	66.9
	FTE employment rate (% population aged 20-64)	67.7	67.7	65.8	63.9	65.1	66.2	67.2	69.0	70.5	72.8	73.7
	Self-employed (% total employment)	9.0	7.0	7.5	7.0	7.3	7.5	8.2	8.9	8.6	8.4	8.3
	Part-time employment (% total employment)	10.2	8.3	9.1	8.9	9.9	10.7	10.2	10.6	9.7	8.8	9.4
	Temporary employment (% total employment)	2.2 u	1.6 u	1.5	1.5	1.7	1.7	1.7	1.8	1.6	1.6	1.3
	Employment in Services (% total employment)											
	Employment in Industry (% total employment)											
	Employment in Agriculture (% total employment)		5.8 b	6.5	6.4	6.3	6.3	6.1	6.6	6.4	5.2	5.1
	Activity rate (% population aged 15-64)	64.9	65.5	67.6	68.6	69.4	70.1	70.3	71.6	72.5	73.9	74.6
	Activity rate (% population aged 15-24)	22.3	25.3	25.9	25.4	24.1	26.1	27.0	29.6	30.8	31.9	32.2
	Activity rate (% population aged 25-54)	83.6	83.6	86.0	87.8	88.9	89.0	88.4	88.7	88.2	88.5	88.1
	Activity rate (% population aged 55-64)	49.2	49.7	52.4	51.7	53.1	54.2	56.1	58.9	63.3	67.2	69.6
	Total unemployment (000)	32	42	81	112	96	86	77	68	61	50	40
	Unemployment rate (% labour force)	4.3	5.6	10.5	14.5	12.9	11.6	10.5	9.2	8.2	6.7	5.7
	Youth unemployment rate (% labour force 15-24)	10.4	13.9	22.4	31.6	29.4	22.7	20.4	18.7	16.6	12.6	11.7
	Long term unemployment rate (% labour force)	1.3 u	1.5 u	2.8	5.9	6.7	5.8	4.6	4.2	3.4	2.6	2.1
	Share of long term unemployment (% of total unemployment)	29.9 u	25.9 u	27.0	40.3	51.7	49.6	43.8	45.3	42.1	39.1	37.4
	Youth unemployment ratio (% population aged 15-24)	2.3	3.5	5.8	8.0	7.1	5.9	5.5	5.5	5.1	4.0	3.8
	Employment rate for low skilled 25-64 (ISCED 0-2)	39.2	32.9	36.0	29.2	29.3	30.9	32.7	39.1 b	38.8	37.9	41.4
	Employment rate for medium skilled 25-64 (ISCED 3-4)	70.4	69.3	65.8	62.0	63.0	63.6	64.3	66.2 b	67.6	68.6	70.0
	Employment rate for high skilled 25-64 (ISCED 5-8)	88.3	87.1	86.9	86.8	88.5	88.5	88.0	88.2 b	88.1	90.0	90.2
	Employment rate (Nationals aged 15-64)	62.1	61.8	60.5	58.6	60.3	61.8	62.8	64.8	66.5	68.9	70.2
	Employment rate (Other EU28 aged 15-64)											
	Employment rate (Other than EU28 aged 15-64)							72.1 u	74.3 u	66.7 u	63.9 u	65.5 u
	Employment rate (Born in the same country aged 15-64)	61.9	61.6	60.4	58.5	60.3	61.8	62.7	64.8	66.5	69.0	70.3
	Employment rate (Born in other EU28 aged 15-64)							83.7 u	66.5 u	53.7 u	56.4 u	70.3 u
	Employment rate (Born outside EU28 aged 15-64)	64.4	65.7	61.6	61.6	58.9	61.8	64.4	66.0	66.4	66.5	68.5
	Underemployment (% of labour force aged 15-74)		1.5 u	2.2	2.9	2.9	2.9	2.8	2.5	2.0	1.6	1.4
	Seeking but not available (% of labour force aged 15-74)	1.4 u	2.0 u	0.7 u	0.9 u		0.7 u	1.0 u	1.0 u	0.8 u	0.8 u	0.9 u
	Discouraged, available but not seeking (% of labour force aged 15-74)	2.1 u	2.4 u	2.2	1.5	1.1 u	0.7 u	0.7 u		0.6 u	0.9 u	0.8 u

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Lithuania		2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018
Social Indicators	All	At-risk-of-poverty or social exclusion (% of total population)	28.7	28.3	29.6	34.0	33.1	32.5	30.8	27.3	29.3	30.1	29.6
		At-risk-of-poverty (% of total population)	19.1	20.9	20.3	20.5	19.2	18.6	20.6	19.1	22.2	21.9	22.9
		At-risk-of-poverty threshold (PPS single person)	3428	4111	4289	3611	3641	4034	4369	4557	4951	5618	5872
		Poverty gap (%)	25.7	25.6	23.8	32.6	29.0	22.6	24.8	22.7	26.0	28.0	28.0
		Persistent at-risk-of-poverty (% of total population)		10.9	11.4	7.4	7.7 b	12.3	10.2	16.0	14.3	13.5	16.1
		At-risk-of-poverty before social transfers excl. pensions (% of total population)	25.5	27.4	28.6	31.3	30.2	28.4	30.3	27.5	28.6	27.9	29.8
		Impact of social transfers (excl. pensions) in reducing poverty (%)	25.1	23.7	29.0	34.5	36.4	34.5	32.0	30.6	22.4	21.5	23.2
		Severe Material Deprivation (% of total population)	16.6	12.5	15.6	19.9	19.0	19.8	16.0	13.6	13.9	13.5	12.4
		Share of people living in low work intensity households (% of people aged 0-59)	6.4	6.1	7.2	9.5	12.7	11.4	11.0	8.8	9.2	10.2	9.7
		Real Gross Household Disposable income (growth %)	2.0	7.5	-11.7	-0.4	1.1	0.3	4.7	1.8	3.8	4.5	
		Income quintile share ratio S80/S20	5.9	6.1	6.4	7.3	5.8	5.3	6.1	6.1	7.5	7.1	7.3
		GINI coefficient	33.8	34.5	35.9	37.0	33.0	32.0	34.6	35.0	37.9	37.0	37.6
		Early leavers from education and training (% of population aged 18-24)	7.8	7.5	8.7	7.9	7.4	6.5	6.3	5.9 b	5.5	4.8	5.4
		NEET: Young people neither in employment nor in education and training (% of total population aged 15-24)	7.1	8.8	12.1	13.2	11.8	11.2	11.1	9.9	9.2	9.4	9.1
													8.0
	Male	At-risk-of-poverty or social exclusion (% of male population)	26.3	25.9	27.5	33.7	33.0	31.4	28.3	25.5	28.2	28.5	27.5
		At-risk-of-poverty (% of male population)	16.7	18.5	18.9	21.2	19.1	18.1	19.4	17.8	21.8	20.4	21.4
		Poverty gap (%)	28.2	28.4	29.0	36.6	29.1	24.3	25.2	26.0	27.7	30.5	31.5
		Persistent at-risk-of-poverty (% of male population)		10.2	9.1	6.7	9.1 b	12.5	9.9	15.5	12.5	11.5	14.0
		Severe Material Deprivation (% of male population)	15.8	11.9	15.0	19.9	18.7	19.0	14.2	12.8	13.4	13.2	11.5
		Share of people living in low work intensity households (% of males aged 0-59)	6.5	6.5	7.7	10.0	12.9	11.8	10.9	9.2	9.3	11.3	10.6
		Life expectancy at birth (years)	64.5	65.9	67.5	67.6	68.1	68.4	68.5	69.2	69.2	69.5	70.7
		Healthy life years at birth (years) - men	53.3	54.5	57.2	57.4	57.0	56.6	56.8	57.6	54.1	56.2	
		Early leavers from education and training (% of males aged 18-24)	10.1 u	10.2 u	11.6	9.8	10.0	8.1	7.8	7.0 b	6.9	6.0 u	7.0
		NEET: Young people neither in employment nor in education and training (% of males aged 15-24)	6.3 u	8.6 u	13.7	14.7	13.1	12.8	11.6	9.5	9.1	10.0	9.1
													8.4
	Female	At-risk-of-poverty or social exclusion (% of female population)	30.9	30.4	31.4	34.2	33.3	33.4	33.0	28.8	30.4	31.5	31.3
		At-risk-of-poverty (% of female population)	21.2	23.0	21.6	20.0	19.3	19.0	21.6	20.3	22.5	23.1	24.2
		Poverty gap (%)	23.5	24.1	20.3	28.6	29.0	22.0	23.5	20.8	24.5	26.1	25.3
		Persistent at-risk-of-poverty (% of female population)		11.5	13.3	8.0	6.5 b	12.2	10.4	16.4	15.9	15.1	17.9
		Severe Material Deprivation (% of female population)	17.3	13.0	16.2	19.8	19.3	20.5	17.6	14.3	14.4	13.8	13.1
		Share of people living in low work intensity households (% of females aged 0-59)	6.4	5.7	6.8	8.9	12.5	11.0	11.1	8.4	9.2	9.2	8.8
		Life expectancy at birth (years)	77.2	77.6	78.7	78.9	79.3	79.6	79.6	80.1	79.7	80.1	80.5
		Healthy life years at birth (years) - women	58.1	59.6	61.2	62.3	62.0	61.6	61.6	61.7	58.8	59.4	
		Early leavers from education and training (% of females aged 18-24)	5.5 u	4.7 u	5.8	6.0	4.6 u	4.6 u	4.7 u	4.6 bu	4.0 u	3.6 u	3.0 u
		NEET: Young people neither in employment nor in education and training (% of females aged 15-24)	7.9 u	9.1 u	10.5	11.6	10.4	9.5	10.6	10.3	9.3	8.8	9.2
													7.6
	Children (0-17)	At-risk-of-poverty or social exclusion of children (% of people aged 0-17)	29.9	29.1	30.8	35.8	34.6	31.9	35.4	28.9	32.7	32.4	31.6
		At-risk-of-poverty (% of Children population)	22.1	23.3	23.3	24.8	25.2	20.8	26.9	23.5	28.9	25.6	25.7
		Severe Material Deprivation (% of Children population)	15.9	11.8	15.8	20.0	16.7	16.9	18.5	13.7	13.8	11.5	13.0
		Share of children living in low work intensity households (% of Children population)	6.4	4.7	5.4	5.7	11.7	9.3	9.8	6.9	8.5	9.8	9.9
		Risk of poverty of children in households at work (Working Intensity > 0.2)	17.3	20.5	20.1	21.9	18.5	15.5	21.2	18.8	23.0	19.6	18.7
		Impact of social transfers (excl. pensions) in reducing poverty (0-17) (%)	24.3	26.0	36.3	43.1	37.3	41.1	33.9	32.7	21.9	25.2	31.1
	Working age (18-64)	At-risk-of-poverty or social exclusion (% of working age population)	25.8	25.0	27.7	34.6	33.3	31.7	29.3	25.6	26.4	27.3	25.7
		At-risk-of-poverty (% of Working age population)	15.6	17.5	18.4	22.2	20.2	17.9	19.0	17.6	19.5	19.1	18.8
		Severe Material Deprivation (% of Working age population)	15.8	11.5	14.7	18.7	18.0	19.5	14.6	12.3	12.7	13.0	11.0
		Very low work intensity (18-59)	6.4	6.6	7.8	10.6	13.1	12.0	11.4	9.4	9.4	10.3	9.6
		In-work at-risk-of poverty rate (% of persons employed 18-64)	8.1	9.5	10.5	12.7	9.6	7.7	9.2	8.4	10.2	8.7	8.8
		Impact of social transfers (excl. pensions) in reducing poverty (18-64) (%)	30.4	28.3	30.8	32.3	37.3	36.3	35.4	33.8	25.6	24.8	27.7
	Elderly (65+)	At-risk-of-poverty or social exclusion of elderly (% of people aged 65+)	39.1	39.9	35.3	29.8	30.9	35.7	31.7	31.9	36.0	37.4	40.3
		At-risk-of-poverty (% of Elderly population)	29.8	31.0	23.9	9.6	9.7	18.7	19.4	20.1	25.0	27.7	33.4
		Severe Material Deprivation (% of Elderly population)	20.8	17.1	18.8	24.0	25.1	24.1	18.4	17.8	18.2	17.3	16.2
		Relative median income of elderly (ratio with median income of people younger than 65)	0.69	0.70	0.73	0.93	0.90	0.78	0.81	0.77	0.73	0.71	0.69
		Aggregate replacement ratio (ratio)	0.40	0.43	0.48	0.58	0.52	0.45	0.48	0.45	0.46	0.45	0.43
		Sickness/Health care	4.3	4.6	5.4	4.8	4.5	4.2	4.1	4.1	4.4	4.6 p	
Expenditure in social protection indicators (% of GDP)		Disability	1.4	1.6	2.0	1.8	1.6	1.5	1.4	1.4	1.4	1.4 p	
		Old age and survivors	6.4	6.9	8.9	7.9	7.1	7.2	6.9	7.1	7.0	6.7 p	
		Family/Children	1.2	1.8	2.8	2.2	1.7	1.4	1.1	1.1	1.1	1.1 p	
		Unemployment	0.4	0.4	0.9	0.8	0.6	0.4	0.4	0.3	0.5	0.5 p	
		Housing and Social exclusion n.e.c.	0.2	0.2	0.4	0.7	0.8	0.8	0.6	0.5	0.4	0.3 p	
		Total (including Admin and Other expenditures) of which: Means tested benefits	14.2	15.9	21.0	19.1	17.0	16.3	15.4	15.3	15.6	15.4 p	
			0.2	0.3	0.5	1.0	1.0	0.9	0.8	0.6	0.5	0.4 p	

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## Luxembourg

Luxembourg		2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018
Macro Economic Indicators (Annual % growth)	Real GDP	8.4	-1.3	-4.4	4.9	2.5	-0.4	3.7	4.3	3.9	2.4	1.5	2.6
	Total employment	4.4	4.8	1.0	1.8	3.0	2.4	1.8	2.6	2.6	3.0	3.4	3.7
	Labour productivity	3.8	-5.8	-5.4	3.0	-0.4	-2.7	1.8	1.7	1.3	-0.6	-1.8	-1.1
	Annual average hours worked per person employed	0.9	0.0	-3.2	0.0	-0.1	-0.5	-0.4	0.2	0.5	0.0	-0.5	0.0
	Real productivity per hour worked	2.9	-5.8	-2.2	3.0	-0.3	-2.3	2.2	1.5	0.8	-0.6	-1.3	-1.1
	Harmonized CPI	2.7	4.1	0.0	2.8	3.7	2.9	1.7	0.7	0.1	0.0	2.1	2.0
	Price deflator GDP	1.5	3.9	1.4	3.6	4.8	2.6	1.7	2.7	-0.4	0.9	2.2	3.8
	Nominal compensation per employee	4.2	2.8	1.7	1.9	1.9	1.8	2.3	3.5	1.6	0.9	3.3	2.2
	Real compensation per employee (GDP deflator)	2.6	-1.1	0.3	-1.7	-2.7	-0.7	0.6	0.8	2.0	0.0	1.1	-1.6
	Real compensation per employee (private consumption deflator)	1.5	-1.3	1.7	-0.9	-1.8	-1.1	0.6	2.8	1.6	0.9	1.2	0.1
	Nominal unit labour costs	0.4	9.1	7.4	-1.0	2.3	4.6	0.5	1.8	0.3	1.5	5.2	3.3
	Real unit labour costs	-1.1	5.1	6.0	-4.5	-2.4	2.1	-1.2	-0.9	0.8	0.5	3.1	-0.5
Labour Market Indicators - Total	Total population (000)	476	484	494	502	512	525 b	537	550	563	576	591 b	602
	Population aged 15-64 (000)	322	328	336	343	351	362	371	380	389	399	411 b	419
	Total employment (000)	203 b	202	217 b	221	225	236	239	246	258 b	261	272	280
	Employment aged 15-64 (000)	203 b	202	215 b	219	222	234	236	243	255 b	259	270	278
	Employment rate (% population aged 20-64)	69.6 b	68.8	70.4 b	70.7	70.1	71.4	71.1	72.1	70.9 b	70.7	71.5	72.1
	Employment rate (% population aged 15-64)	64.2 b	63.4	65.2 b	65.2	64.6	65.8	65.7	66.6	66.1 b	65.6	66.3	67.1
	Employment rate (% population aged 15-24)	22.5 b	23.8	26.7 b	21.2	20.7	21.7	21.9	20.4	29.1 b	24.9	25.8	28.4
	Employment rate (% population aged 25-54)	81.9 b	80.0	81.2 b	82.3	82.0	83.1	82.9	83.7	82.6 b	82.5	83.7	83.9
	Employment rate (% population aged 55-64)	32.0 b	34.1	38.2 b	39.6	39.3	41.0	40.5	42.5	38.4 b	39.6	39.8	40.5
	FTE employment rate (% population aged 20-64)	63.9 b	63.2	64.5 b	65.4	64.5	66.0	65.4	66.4	66.5 b	65.7	66.4	67.3
	Self-employed (% total employment)	7.1 b	6.3	8.1 b	7.8	8.1	8.4	8.4	8.3	8.9 b	9.2	9.1	7.7
	Part-time employment (% total employment)	17.8	17.9	17.6	17.4	18.0	18.5	18.7	18.4	18.4	19.2	19.5	17.7
	Temporary employment (% total employment)	6.3	5.8	6.6	6.5	6.5	6.9	6.4	7.3	9.1	7.9	8.1	8.9
	Employment in Services (% total employment)												
	Employment in Industry (% total employment)												
	Employment in Agriculture (% total employment)		1.7 b	1.3 b	1.0	1.1	1.2	1.4	1.3	0.9 b	0.9	1.2	0.9
	Activity rate (% population aged 15-64)	66.9 b	66.8	68.7 b	68.2	67.9	69.4	69.9	70.8	70.9 b	70.0	70.2	71.1
	Activity rate (% population aged 15-24)	26.5 b	29.0	32.3 b	24.7	24.9	26.8	25.9	26.3	35.2 b	30.7	30.5	33.1
	Activity rate (% population aged 25-54)	84.7 b	83.4	84.8 b	85.7	85.6	87.0	87.5	88.0	87.7 b	87.2	88.0	88.4
	Activity rate (% population aged 55-64)	32.7 b	35.1	39.4 b	40.6	40.4	41.9	42.5	44.5	40.3 b	41.6	41.1	42.0
	Total unemployment (000)	9	10	12	11	11	13	15	16	18	18	16	16
	Unemployment rate (% labour force)	4.2	4.9	5.1	4.6	4.8	5.1	5.9	6.0	6.5	6.3	5.6	5.4
	Youth unemployment rate (% labour force 15-24)	15.6	17.3	16.5	15.8	16.4	18.0	16.9	22.3	16.6	19.1	15.5	13.5
	Long term unemployment rate (% labour force)	1.2	1.6	1.2	1.3	1.4	1.6	1.8	1.6	1.9	2.2	2.1	1.4
	Share of long term unemployment (% of total unemployment)	28.7	32.4	23.1	29.3	28.8	30.3	30.4	27.4	28.4	34.8	38.1	24.7
	Youth unemployment ratio (% population aged 15-24)	4.0 b	5.2	5.5 b	3.5	4.2	5.0	4.0	6.0	6.1 b	5.8	4.7	4.7
	Employment rate for low skilled 25-64 (ISCED 0-2)	62.3 b	61.1	61.6 b	61.9	62.0	63.0	61.8	60.9 b	60.8 b	58.7	58.8	60.8
	Employment rate for medium skilled 25-64 (ISCED 3-4)	73.9 b	70.7	70.2 b	72.1	70.4	71.9	70.8	72.1 b	70.9 b	70.5	73.5	72.8
	Employment rate for high skilled 25-64 (ISCED 5-8)	84.5 b	84.7	85.1 b	85.0	85.0	84.8	84.9	84.6 b	84.5 b	85.7	85.6	84.9
	Employment rate (Nationals aged 15-64)	60.6 b	60.8	62.8 b	62.5	61.5	62.6	62.8	63.7	63.9 b	63.3	63.2	63.2
	Employment rate (Other EU28 aged 15-64)	69.9 b	69.1	69.6 b	69.5	69.7	70.9	70.0	71.4	70.1 b	69.8	71.3	73.3
	Employment rate (Other than EU28 aged 15-64)	55.2 b	37.1	53.2 b	56.6	55.1	56.7	58.7	53.5	54.5 b	50.2	54.5	52.6
	Employment rate (Born in the same country aged 15-64)	59.2 b	59.4	61.9 b	60.7	59.5	60.7	60.3	61.5	62.6 b	61.8	61.2	61.8
	Employment rate (Born in other EU28 aged 15-64)	73.0 b	72.2	71.1 b	72.2	72.5	73.6	73.6	74.0	71.8 b	71.7	73.6	74.6
	Employment rate (Born outside EU28 aged 15-64)	59.9 b	48.5	59.9 b	62.9	59.9	60.9	62.0	62.4	60.3 b	57.5	60.1	58.7
	Underemployment (% of labour force aged 15-74)		0.7	2.1 b	1.7	1.6	2.1	1.8	1.8	2.3 b	2.1	1.9	1.6
	Seeking but not available (% of labour force aged 15-74)	0.3 u	0.7	0.7	0.7	0.6	0.6	0.6	0.7	2.7 b	2.5	2.0	2.2
	Discouraged, available but not seeking (% of labour force aged 15-74)		0.4 u	5.1	4.7	4.9	5.1	5.9	5.8	5.1	4.4	4.0	3.7

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Luxembourg		2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018
Labour Market Indicators - Male	Total population (000)	236	240	245	249	255	262 b	268	275	282	289	297 b	303
	Population aged 15-64(000)	163	166	170	174	178	184	189	194	199	204	210 b	214
	Total employment (000)	114 b	116	124 b	125	127	132	134	136	141 b	143	146	150
	Employment aged 15-64 (000)	114 b	115	122 b	124	126	130	132	134	140 b	142	145	149
	Employment rate (% population aged 20-64)	78.3 b	77.2	79.0 b	79.2	78.1	78.5	78.0	78.4	76.7 b	76.1	75.4	76.0
	Employment rate (% population aged 15-64)	72.3 b	71.5	73.2 b	73.1	72.1	72.5	72.1	72.6	71.3 b	70.5	69.9	70.6
	Employment rate (% population aged 15-24)	26.5 b	27.0	29.1 b	22.1	22.8	23.4	24.2	21.9	29.4 b	24.4	27.0	28.4
	Employment rate (% population aged 25-54)	92.2 b	90.2	90.8 b	92.0	90.8	91.0	90.1	90.5	89.3 b	88.5	87.4	88.0
	Employment rate (% population aged 55-64)	35.6 b	38.7	46.5 b	47.7	47.0	47.4	48.3	49.8	43.0 b	46.4	45.4	45.5
	FTE employment rate (% population aged 20-64)	77.7 b	76.6	77.9 b	78.6	77.0	77.2	76.4	77.0	75.7 b	74.8	74.2	75.0
	Self-employed (% total employment)	8.1 b	6.6	9.8 b	9.0	9.2	9.2	9.3	9.5	10.0 b	10.5	10.1	8.8
	Part-time employment (% total employment)	2.6	2.7	4.5	3.4	4.3	4.7	5.1	4.7	5.6	6.2	6.0	5.7
	Temporary employment (% total employment)	5.7	5.5	5.7	5.6	5.7	6.5	5.1	6.4	9.1	7.8	7.8	8.1
	Employment in Services (% total employment)												
	Employment in Industry (% total employment)												
	Employment in Agriculture (% total employment)		2.0 b	1.6 b	1.3	1.4	1.5	1.9	1.8	1.2 b	1.2	1.7	1.3
	Activity rate (% population aged 15-64)	75.0 b	74.7	76.6 b	76.0	75.0	75.9	76.3	77.2	76.0 b	75.1	74.0	74.7
	Activity rate (% population aged 15-24)	30.6 b	30.9	34.9 b	26.8	26.3	28.8	29.8	29.6	36.2 b	30.4	32.6	33.9
	Activity rate (% population aged 25-54)	94.9 b	93.7	94.1 b	94.8	93.9	94.6	94.4	94.9	93.9 b	93.1	91.8	92.2
	Activity rate (% population aged 55-64)	36.4 b	39.7	47.7 b	48.8	48.4	48.3	50.5	52.1	45.5 b	49.1	46.8	47.5
	Total unemployment (000)	4	5	6	5	5	6	8	8	9	9	9	8
	Unemployment rate (% labour force)	3.4	4.1	4.5	3.8	3.9	4.5	5.6	5.8	5.9	6.1	5.6	5.1
	Youth unemployment rate (% labour force 15-24)	13.8	13.4	15.0	17.2	15.1	18.6	18.8	25.1	18.0	21.3	17.2	15.1
	Long term unemployment rate (% labour force)	1.3	1.3	0.9	1.2	1.3	1.3	1.6	1.6	1.9	2.2	2.3	1.3
	Share of long term unemployment (% of total unemployment)	35.4	29.4	19.9	32.2	33.1	28.8	30.3	26.7	31.0	37.3	41.3	23.7
	Youth unemployment ratio (% population aged 15-24)	4.1 b	3.9	5.8 b	4.7	3.5	5.4	5.6	7.7	6.8 b	6.0	5.6	5.5
	Employment rate for low skilled 25-64 (ISCED 0-2)	75.7 b	75.2	74.9 b	74.6	74.9	73.1	72.8	70.0 b	69.6 b	69.3	67.2	68.2
	Employment rate for medium skilled 25-64 (ISCED 3-4)	82.4 b	78.3	79.2 b	81.1	79.0	79.3	78.6	79.8 b	77.3 b	76.2	75.3	76.0
	Employment rate for high skilled 25-64 (ISCED 5-8)	87.9 b	88.9	90.6 b	90.7	89.8	90.1	89.3	88.9 b	88.7 b	89.1	89.0	88.9
	Employment rate (Nationals aged 15-64)	68.7 b	69.4	70.7 b	70.2	67.9	68.7	68.3	69.5	67.8 b	67.5	66.0	66.3
	Employment rate (Other EU28 aged 15-64)	77.5 b	76.5	76.8 b	76.9	76.8	76.9	77.0	76.7	75.3 b	74.8	74.9	76.3
	Employment rate (Other than EU28 aged 15-64)	67.6 b	44.1	68.7 b	72.5	76.0	72.6	68.1	65.7	70.4 b	60.8	63.1	62.7
	Employment rate (Born in the same country aged 15-64)	67.3 b	68.2	69.2 b	68.4	65.9	66.3	65.3	66.6	66.7 b	65.9	63.4	64.8
	Employment rate (Born in other EU28 aged 15-64)	80.3 b	78.7	78.8 b	79.6	79.9	80.0	80.7	80.4	76.3 b	76.9	77.1	77.7
	Employment rate (Born outside EU28 aged 15-64)	72.7 b	57.4	74.3 b	74.7	73.5	74.7	72.1	70.7	71.7 b	65.3	69.0	65.8
	Underemployment (% of labour force aged 15-74)			1.0 b	0.6 u	0.8	0.7 u	0.6 u	0.7	1.1 b	1.1	0.7	0.6 u
	Seeking but not available (% of labour force aged 15-74)		0.6 u	0.6 u					0.5 u	2.0 b	1.7	1.7	1.9
	Discouraged, available but not seeking (% of labour force aged 15-74)			3.5	3.2	3.0	3.4	4.1	3.9	4.4	3.6	3.3	3.1
Labour Market Indicators - Female	Total population (000)	240	244	249	253	257	263 b	269	275	281	287	294 b	299
	Population aged 15-64(000)	159	162	166	169	173	178	182	186	191	195	201 b	205
	Total employment (000)	89 b	87	93 b	96	98	104	105	110	116 b	118	126	130
	Employment aged 15-64 (000)	89 b	87	93 b	95	97	103	105	109	115 b	117	125	129
	Employment rate (% population aged 20-64)	61.0 b	60.1	61.5 b	62.0	61.9	64.1	63.9	65.5	65.0 b	65.1	67.5	68.0
	Employment rate (% population aged 15-64)	56.1 b	55.1	57.0 b	57.2	56.9	59.0	59.1	60.5	60.8 b	60.4	62.5	63.4
	Employment rate (% population aged 15-24)	18.4 b	20.6	24.2 b	20.3	18.5	20.1	19.4	18.8	28.8 b	25.4	24.5	28.4
	Employment rate (% population aged 25-54)	71.7 b	69.5	71.4 b	72.6	72.9	75.0	75.5	76.8	75.7 b	76.4	79.8	79.7
	Employment rate (% population aged 55-64)	28.6 b	29.3	29.4 b	31.3	31.3	34.3	32.4	35.0	33.7 b	32.4	33.9	35.2
	FTE employment rate (% population aged 20-64)	50.8 b	50.2	51.8 b	52.7	52.7	55.3	55.0	56.3	57.9 b	57.1	59.1	60.1
	Self-employed (% total employment)	5.7 b	5.9	5.8 b	6.1	6.7	7.4	7.3	6.8	7.7 b	7.6	8.0	6.6
	Part-time employment (% total employment)	37.1	38.2	34.8	35.6	35.8	35.9	35.8	35.3	33.9	34.8	35.1	31.6
	Temporary employment (% total employment)	7.2	6.2	7.8	7.7	7.5	7.5	8.0	8.5	9.2	8.1	8.5	9.8
	Employment in Services (% total employment)												
	Employment in Industry (% total employment)												
	Employment in Agriculture (% total employment)		1.2 b	0.8 bu	0.6 u	0.7 u	0.9 u	0.9 u	0.7 u	0.7 bu	0.5 u	0.6 u	0.5 u
	Activity rate (% population aged 15-64)	58.9 b	58.7	60.7 b	60.3	60.7	62.8	63.2	64.2	65.6 b	64.7	66.2	67.4
	Activity rate (% population aged 15-24)	22.3 b	27.1	29.5 b	22.7	23.4	24.7	21.8	23.0	34.1 b	31.0	28.3	32.3
	Activity rate (% population aged 25-54)	74.7 b	72.9	75.3 b	76.4	77.1	79.2	80.5	80.9	81.3 b	81.1	84.0	84.4
	Activity rate (% population aged 55-64)	29.1 b	30.3	30.6 b	32.0	32.1	35.2	34.2	36.5	35.0 b	33.9	35.1	36.2
	Total unemployment (000)	5	5	6	6	6	6	7	7	9	8	7	8
	Unemployment rate (% labour force)	5.1	5.9	5.9	5.5	6.0	5.8	6.2	6.4	7.1	6.5	5.6	5.7
	Youth unemployment rate (% labour force 15-24)	18.2	22.0	18.2	14.3	17.9	17.3	14.2	18.7	15.2	16.8	13.4	11.7
	Long term unemployment rate (% labour force)	1.0 u	2.1	1.6	1.3	1.6	1.9	1.9	1.6	1.9	2.1	1.9	1.5
	Share of long term unemployment (% of total unemployment)	22.3 u	35.2	26.1	26.5	25.4	31.8	30.4	28.2	25.8	32.1	34.5	25.8
	Youth unemployment ratio (% population aged 15-24)	3.9 b	6.5	5.2 b	2.3	4.9	4.6	2.4	4.2	5.3 b	5.6	3.7	3.8
	Employment rate for low skilled 25-64 (ISCED 0-2)	51.4 b	49.5	51.2 b	52.1	50.9	54.3	51.7	53.5 b	51.9 b	48.6	50.6	53.2
	Employment rate for medium skilled 25-64 (ISCED 3-4)	64.8 b	62.2	60.9 b	63.2	61.8	64.6	62.8	64.2 b	64.2 b	64.2	71.5	69.2
	Employment rate for high skilled 25-64 (ISCED 5-8)	80.8 b	79.9	78.6 b	77.9	79.4	78.5	80.0	79.7 b	80.0 b	82.0	82.3	80.9
	Employment rate (Nationals aged 15-64)	52.7 b	51.9	54.8 b	54.5	54.9	56.4	57.2	58.0	60.0 b	59.1	60.4	60.1
	Employment rate (Other EU28 aged 15-64)	61.9 b	61.4	62.0 b	62.0	62.1	64.3	62.6	65.6	64.5 b	64.5	67.4	70.2
	Employment rate (Other than EU28 aged 15-64)	46.4 b	29.5	39.8 b	44.4	38.1	45.2	50.7	44.4	39.5 b	40.2	46.3	42.6
	Employment rate (Born in the same country aged 15-64)	51.3 b	50.4	54.4 b	52.8	53.0	54.9	55.0	56.1	58.4 b	57.5	58.9	58.7
	Employment rate (Born in other EU28 aged 15-64)	65.4 b	65.3	63.1 b	64.5	64.3	66.8	65.9	67.3	66.9 b	66.2	69.7	71.2
	Employment rate (Born outside EU28 aged 15-64)	50.1 b	39.8	46.5 b	52.7	49.7	50.1	54.2	55.3	49.3 b	50.3	52.5	51.3
	Underemployment (% of labour force aged 15-74)		1.4	3.5	3.1	2.6	3.9	3.4	3.2	3.8	3.4	3.3	2.8
	Seeking but not available (% of labour force aged 15-74)		0.8 u	1.0 u	1.0 u	1.0	1.0	0.9	1.0	3.6	3.3	2.3	2.5
	Discouraged, available but not seeking (% of labour force aged 15-74)		0.7 u	7.1	6.6	7.3	7.3	8.3	8.2	5.9	5.3	4.8	4.4

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Luxembourg			2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018
Social Indicators	All	At-risk-of-poverty or social exclusion (% of total population)	15.9	15.5	17.8	17.1	16.8	18.4	19.0	19.0	18.5	19.8 b	21.5	
		At-risk-of-poverty (% of total population)	13.5	13.4	14.9	14.5	13.6	15.1	15.9	16.4	15.3	16.5 b	18.7	
		At-risk-of-poverty threshold (PPS single person)	16108	16166	16265	15961	15961	15948	16818	16962	17571	17198 b	17604	
		Poverty gap (%)	18.8	16.6	17.6	18.6	15.7	15.0	17.5	16.3	17.4	23.2 b	21.8	
		Persistent at-risk-of-poverty (% of total population)	8.9	8.4	8.8	6.0	6.5	7.1	9.2	8.7	12.0	9.7 b	10.1	
		At-risk-of-poverty before social transfers excl. pensions (% of total population)	23.4	23.6	27.0	29.1	27.2	29.0	29.4	27.6	27.2	27.1 b	29.0	
		Impact of social transfers (excl. pensions) in reducing poverty (%)	42.3	43.2	44.8	50.2	50.0	47.9	45.9	40.6	43.8	39.1 b	35.5	
		Severe Material Deprivation (% of total population)	0.8	0.7	1.1	0.5	1.2	1.3	1.8	1.4	2.0	1.6 b	1.2	
		Share of people living in low work intensity households (% of people aged 0-59)	5.0	4.7	6.3	5.5	5.8	6.1	6.6	6.1	5.7	6.6 b	6.9	
		Real Gross Household Disposable income (growth %)	4.2	2.1	3.7	2.6	-0.7	3.8	1.7	3.1	2.8	2.9		
		Income quintile share ratio S80/S20	4.0	4.1	4.3	4.1	4.0	4.1	4.6	4.4	4.3	5.0 b	5.0	
		GINI coefficient	27.4	27.7	29.2	27.9	27.2	28.0	30.4	28.7	28.5	31.0 b	30.9	
		Early leavers from education and training (% of population aged 18-24)	12.5 b	13.4	7.7 b	7.1	6.2	8.1	6.1	6.1 b	9.3 b	5.5	7.3	6.3
		NEET: Young people neither in employment nor in education and training (% of total population aged 15-24)	5.7	6.2	5.8	5.1	4.7	5.9	5.0	6.3	6.2	5.4	5.9	5.3
	Male	At-risk-of-poverty or social exclusion (% of male population)	15.0	14.2	16.0	16.5	15.6	17.3	18.6	18.5	17.7	18.7 b	20.3	
		At-risk-of-poverty (% of male population)	12.9	12.5	13.8	14.6	12.7	14.7	15.7	16.3	15.0	15.6 b	17.9	
		Poverty gap (%)	19.1	15.4	16.9	18.6	15.7	14.9	18.0	17.5	18.7	22.4 b	20.8	
		Persistent at-risk-of-poverty (% of male population)	7.9	7.7	7.7	5.2	5.6	6.4	8.5	7.2	11.3	9.9 b	9.4	
		Severe Material Deprivation (% of male population)	0.8	0.6	0.9	0.4	1.3	1.3	1.5	1.4	1.8	1.7 b	1.1	
		Share of people living in low work intensity households (% of males aged 0-59)	4.3	3.8	4.9	4.8	5.1	5.1	6.5	5.6	5.5	6.4 b	5.9	
		Life expectancy at birth (years)	76.7	78.1	78.1	77.9	78.5	79.1	79.8	79.4	80.0	80.1 b	79.9 b	
		Healthy life years at birth (years) - men	62.3	64.8	65.1	64.4	65.8	65.8	63.8	64.0	63.7	61.4 b		
		Early leavers from education and training (% of males aged 18-24)	16.6 b	15.8	8.9 b	8.0	7.6	10.7	8.4	8.3 b	10.5 b	6.8	9.8	6.8
		NEET: Young people neither in employment nor in education and training (% of males aged 15-24)	4.7	4.6	6.0	5.6	4.6	6.3	5.9	7.8	6.6	5.1	6.1	4.6
		Female	At-risk-of-poverty or social exclusion (% of female population)	16.9	16.7	19.6	17.7	18.0	19.4	19.4	19.5	19.3	20.9 b	22.8
	At-risk-of-poverty (% of female population)		14.1	14.3	16.0	14.4	14.5	15.6	16.0	16.6	15.7	17.5 b	19.4	
	Poverty gap (%)		18.7	17.6	19.2	18.8	15.9	15.5	17.4	15.8	16.8	23.5 b	22.4	
	Persistent at-risk-of-poverty (% of female population)		9.8	9.2	9.9	6.9	7.5	7.8	9.8	10.3	12.6	9.6 b	10.8	
	Severe Material Deprivation (% of female population)		0.8	0.7	1.3	0.7	1.1	1.3	2.0	1.4	2.1	1.5 b	1.2	
	Share of people living in low work intensity households (% of females aged 0-59)		5.8	5.5	7.8	6.3	6.6	7.2	6.6	6.6	5.8	6.9 b	8.0	
	Life expectancy at birth (years)		82.2	83.1	83.3	83.5	83.6	83.8	83.9	85.2	84.7	85.4 b	84.4 b	
	Healthy life years at birth (years) - women		64.6	64.2	65.9	66.4	67.1	66.4	62.9	63.5	60.6	58.9 b		
Early leavers from education and training (% of females aged 18-24)	8.4 b		10.9	6.6 b	6.0	4.8 u	5.5	3.7 u	3.7 bu	8.1 b	4.2 u	4.6 u	5.9	
NEET: Young people neither in employment nor in education and training (% of females aged 15-24)	6.6		7.8	5.5	4.7	4.9	5.5	4.0	4.6	5.7	5.7	5.7	6.0	
Children (0-17)	At-risk-of-poverty or social exclusion of children (% of people aged 0-17)	21.2	20.9	23.7	22.3	21.7	24.6	26.0	26.4	23.0	22.7 b	23.6		
	At-risk-of-poverty (% of Children population)	19.9	19.8	22.3	21.4	20.3	22.6	23.9	25.4	21.5	21.8 b	22.8		
	Severe Material Deprivation (% of Children population)	0.7	0.9	1.2	0.2	1.2	1.7	2.4	1.8	3.0	1.2 b	1.2		
	Share of children living in low work intensity households (% of Children population)	3.5	3.2	4.1	3.2	2.9	4.0	4.5	4.2	2.6	3.4 b	3.8		
	Risk of poverty of children in households at work (Working Intensity > 0.2)	18.1	18.2	20.3	19.7	19.0	20.8	21.6	22.6	20.0	19.4 b	20.6		
	Impact of social transfers (excl. pensions) in reducing poverty (0-17) (%)	40.1	41.3	43.7	50.4	50.0	50.7	46.3	40.4	43.1	43.1 b	39.5		
Working age (18-64)	At-risk-of-poverty or social exclusion (% of working age population)	16.0	15.8	18.2	17.5	17.6	18.8	19.0	19.4	19.2	21.0 b	22.8		
	At-risk-of-poverty (% of Working age population)	12.7	12.9	14.2	13.9	13.1	14.5	15.0	15.8	14.9	16.3 b	18.8		
	Severe Material Deprivation (% of Working age population)	0.9	0.7	1.3	0.7	1.4	1.4	1.7	1.5	2.0	2.0 b	1.4		
	Very low work intensity (18-59)	5.6	5.2	7.1	6.4	6.9	6.8	7.4	6.8	6.7	7.7 b	7.9		
	In-work at-risk-of poverty rate (% of persons employed 18-64)	9.3	9.4	10.1	10.6	9.8	10.3	11.2	11.1	11.6	12.0 b	13.7		
	Impact of social transfers (excl. pensions) in reducing poverty (18-64) (%)	44.8	44.9	46.2	50.5	50.8	47.3	46.8	41.3	45.2	39.4 b	36.5		
Elderly (65+)	At-risk-of-poverty or social exclusion of elderly (% of people aged 65+)	7.2	5.4	6.2	6.1	4.7	6.1	7.0	6.4	8.2	9.1 b	11.8		
	At-risk-of-poverty (% of Elderly population)	7.2	5.4	6.0	5.9	4.7	6.1	6.2	6.3	7.9	9.0 b	11.8		
	Severe Material Deprivation (% of Elderly population)	0.6	0.0	0.2	0.1	0.0	0.0	0.9	0.1	0.3	0.2 b	0.1		
	Relative median income of elderly (ratio with median income of people younger than 65)	0.96	0.97	1.01	1.05	1.05	1.10	1.13	1.11	1.08	1.22 b	1.15		
	Aggregate replacement ratio (ratio)	0.61	0.58	0.62	0.68	0.74	0.79	0.78	0.85	0.80	0.88 b	0.86		
	Expenditure in social protection indicators (% of GDP)	Sickness/Health care	5.0	5.2	5.8	5.6	5.4	5.7	5.8	5.6	5.4	5.3		
Disability		2.4	2.4	2.6	2.5	2.5	2.5	2.5	2.5	2.4	2.3			
Old age and survivors		7.1	7.4	8.3	8.0	8.0	8.5	8.5	8.3	8.5	8.5			
Family/Children		3.2	4.1	4.1	3.9	3.5	3.6	3.6	3.5	3.4	3.3			
Unemployment		0.9	0.9	1.3	1.2	1.1	1.3	1.5	1.4	1.4	1.3			
Housing and Social exclusion n.e.c.		0.6	0.6	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.8			
Total (including Admin and Other expenditures)		19.5	20.9	23.4	22.5	21.8	22.7	23.1	22.5	22.3	21.9			
of which: Means tested benefits		0.6	0.6	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.8			

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## Hungary

Hungary		2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018
Macro Economic Indicators (Annual % growth)	Real GDP	0.4	0.9	-6.6	0.7	1.7	-1.6	2.1	4.2	3.5	2.3	4.1	4.9
	Total employment	0.1	-2.0	-2.5	-1.1	0.0	0.2	1.1	4.8	2.4	3.1	2.0	2.2
	Labour productivity	0.3	2.9	-4.2	1.8	1.7	-1.8	1.0	-0.6	1.1	-0.7	2.1	2.7
	Annual average hours worked per person employed	-0.2	0.2	-0.9	-9.5 b	-0.4 b	-1.1	-0.3	0.4	-0.2	0.7	-1.1	-1.6
	Real productivity per hour worked	0.5	2.7	-3.3	12.4 b	2.1	-0.7	1.3	-1.0	1.3	-1.4	3.2	4.4
	Harmonized CPI	7.9	6.0	4.0	4.7	3.9	5.7	1.7	0.0	0.1	0.4	2.4	2.9
	Price deflator GDP	5.4	5.0	4.0	2.4	2.3	3.4	2.9	3.4	1.9	0.9	3.8	4.5
	Nominal compensation per employee	5.2	7.3	-1.4	1.5	3.4	1.7	1.8	0.6	-1.5	4.4	6.2	9.6
	Real compensation per employee (GDP deflator)	-0.2	2.2	-5.3	-0.9	1.1	-1.6	-1.1	-2.6	-3.4	3.5	2.3	4.9
	Real compensation per employee (private consumption deflator)	-2.5	1.2	-5.3	-3.1	-0.5	-3.7	0.1	0.6	-1.6	4.0	3.8	6.5
	Nominal unit labour costs	4.9	4.3	2.9	-0.3	1.7	3.6	0.8	1.2	-2.6	5.2	4.1	6.7
	Real unit labour costs	-0.5	-0.7	-1.1	-2.6	-0.6	0.2	-2.0	-2.1	-4.4	4.3	0.3	2.1
Labour Market Indicators - Total	Total population (000)	10066	10045	10031	10014	9986	9932 b	9909	9877	9856	9830	9798	9778
	Population aged 15-64 (000)	6931	6913	6898	6874	6857	6816	6776	6720	6664	6609	6546	6504
	Total employment (000)	3902	3848	3748	3732	3759	3827	3893	4101	4211	4352	4421	4470
	Employment aged 15-64 (000)	3873	3818	3717	3701	3724	3793	3860	4070	4176	4309	4373	4411
	Employment rate (% population aged 20-64)	62.3	61.5	60.1	59.9	60.4	61.6	63.0	66.7	68.9	71.5	73.3	74.4
	Employment rate (% population aged 15-64)	57.0	56.4	55.0	54.9	55.4	56.7	58.1	61.8	63.9	66.5	68.2	69.2
	Employment rate (% population aged 15-24)	21.1	20.2	18.1	18.3	18.0	18.4	20.1	23.5	25.7	28.1	29.0	29.0
	Employment rate (% population aged 25-54)	74.7	74.5	72.9	72.5	73.0	74.6	75.7	79.2	80.6	82.2	83.7	84.1
	Employment rate (% population aged 55-64)	32.2	30.9	31.9	33.6	35.3	36.1	37.9	41.7	45.3	49.8	51.7	54.4
	FTE employment rate (% population aged 20-64)	61.6	60.8	59.2	58.9	59.2	60.5	62.2	65.3	67.4	70.3	72.5	73.4
	Self-employed (% total employment)	12.0	11.9	12.2	12.0	11.7	11.4	10.9	10.6	10.6	10.4	10.1	10.2
	Part-time employment (% total employment)	3.9	4.3	5.2	5.5	6.4	6.7	6.4	6.0	5.7	4.8	4.3	4.2
	Temporary employment (% total employment)	6.4	6.9	7.4	8.5	8.0	8.5	9.7	9.6	10.1	8.7	7.9	6.5
	Employment in Services (% total employment)		63.3 b	64.2	64.7	64.2	65.1	65.3	64.9	64.7	64.5	63.3	62.7
	Employment in Industry (% total employment)		32.4 b	31.3	30.8	31.0	29.9	30.0	30.5	30.4	30.6	31.7	32.6
	Employment in Agriculture (% total employment)		4.3 b	4.6	4.5	4.9	5.0	4.7	4.6	4.9	5.0	5.0	4.8
	Activity rate (% population aged 15-64)	61.6	61.2	61.2	61.9	62.4	63.7	64.7	67.0	68.6	70.1	71.2	71.9
	Activity rate (% population aged 15-24)	25.7	25.1	24.7	24.8	24.3	25.7	27.4	29.5	31.0	32.3	32.4	32.3
	Activity rate (% population aged 25-54)	80.1	80.3	80.3	80.9	81.3	82.9	83.3	85.0	85.8	86.1	86.9	87.0
	Activity rate (% population aged 55-64)	33.7	32.6	34.1	36.5	38.8	39.5	41.2	44.6	48.1	52.1	53.6	55.8
	Total unemployment (000)	312	326 d	418	469	466	473	441	343	308	235	192	172
	Unemployment rate (% labour force)	7.4	7.8 d	10.0	11.2	11.0	11.0	10.2	7.7	6.8	5.1	4.2	3.7
	Youth unemployment rate (% labour force 15-24)	18.1	19.5 d	26.4	26.4	26.0	28.2	26.6	20.4	17.3	12.9	10.7	10.2
	Long term unemployment rate (% labour force)	3.5	3.6	4.2	5.5	5.2	5.0	4.9	3.7	3.1	2.4	1.7	1.4
	Share of long term unemployment (% of total unemployment)	46.7	46.2	41.5	48.9	47.6	45.3	48.6	47.5	45.6	46.5	40.4	38.5
	Youth unemployment ratio (% population aged 15-24)	4.6	4.9	6.5	6.6	6.3	7.2	7.3	6.0	5.4	4.2	3.5	3.3
	Employment rate for low skilled 25-64 (ISCED 0-2)	37.7	38.2	36.9	37.0	37.3	38.1	39.2	45.3 b	48.1	51.7	55.1	57.0
	Employment rate for medium skilled 25-64 (ISCED 3-4)	69.9	68.3	66.5	65.8	65.9	67.3	68.5	71.8 b	73.7	76.1	77.6	78.3
	Employment rate for high skilled 25-64 (ISCED 5-8)	80.3	79.5	78.4	78.2	79.3	79.5	80.0	81.8 b	83.0	85.0	85.1	85.8
	Employment rate (Nationals aged 15-64)	57.0	56.3	55.0	54.9	55.4	56.6	58.0	61.7	63.9	66.5	68.2	69.3
	Employment rate (Other EU28 aged 15-64)	63.5	64.5	65.9	67.9	61.7	62.2	65.1	71.6	67.0	67.7	57.9	65.8
	Employment rate (Other than EU28 aged 15-64)	65.6	71.6	61.7	49.7	51.2	59.4	63.5	69.9	68.9	62.4	63.5	53.9
	Employment rate (Born in the same country aged 15-64)	56.9	56.2	54.8	54.8	55.3	56.4	57.9	61.6	63.8	66.4	68.1	69.2
	Employment rate (Born in other EU28 aged 15-64)	64.4	64.0	65.3	67.1	64.1	66.5	67.8	72.5	70.5	76.9	76.4	74.3
	Employment rate (Born outside EU28 aged 15-64)	63.3	66.0	62.5	59.0	59.0	66.6	67.6	64.3	72.5	67.3	68.6	66.5
	Underemployment (% of labour force aged 15-74)		0.1	1.3	1.4	1.6	2.0	2.1	1.8	1.5	1.0	0.8	0.7
	Seeking but not available (% of labour force aged 15-74)	0.3	0.3	0.3	0.3	0.3	0.3	0.2	0.2	0.2	0.2	0.2	0.2
	Discouraged, available but not seeking (% of labour force aged 15-74)	3.8	4.1	4.6	4.8	5.2	5.2	5.2	3.9	3.2	2.8	2.6	2.2

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Hungary		2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018
Labour Market Indicators - Male	Total population (000)	4779	4770	4763	4757	4744	4725 b	4716	4703	4696	4689	4675	4672
	Population aged 15-64(000)	3408	3403	3398	3391	3385	3367	3351	3327	3303	3282	3256	3242
	Total employment (000)	2129	2094	2025	1993	2021	2049	2104	2221	2284	2363	2417	2446
	Employment aged 15-64 (000)	2112	2076	2007	1975	2001	2029	2085	2203	2264	2337	2390	2412
	Employment rate (% population aged 20-64)	69.8	68.7	66.5	65.5	66.4	67.3	69.3	73.5	75.8	78.6	81.0	82.1
	Employment rate (% population aged 15-64)	63.7	62.7	60.7	59.9	60.7	61.6	63.7	67.8	70.3	73.0	75.2	76.3
	Employment rate (% population aged 15-24)	24.4	23.3	20.0	19.9	19.7	19.8	23.0	26.4	28.1	31.5	32.9	33.4
	Employment rate (% population aged 25-54)	81.6	81.3	79.1	78.0	79.5	80.2	81.4	85.3	86.8	88.2	90.1	90.4
	Employment rate (% population aged 55-64)	40.1	37.7	38.7	38.6	39.3	41.4	44.8	49.6	54.4	59.7	62.6	65.5
	FTE employment rate (% population aged 20-64)	69.5	68.3	66.0	65.0	65.7	66.7	69.0	72.6	74.8	78.0	80.7	81.7
	Self-employed (% total employment)	14.9	15.0	15.2	15.0	15.0	14.1	13.6	13.4	13.0	12.7	11.9	12.1
	Part-time employment (% total employment)	2.5	3.0	3.6	3.7	4.4	4.3	4.2	4.1	4.0	3.1	2.7	2.5
	Temporary employment (% total employment)	6.5	7.3	7.7	8.6	8.2	9.0	9.9	9.7	10.1	8.2	7.3	5.9
	Employment in Services (% total employment)		52.2 b	52.4	53.2	52.8	53.8	54.2	53.6	53.2	53.1	51.8	50.6
	Employment in Industry (% total employment)		41.9 b	41.3	40.4	40.4	39.2	39.3	40.1	40.0	40.1	41.4	42.9
	Employment in Agriculture (% total employment)		6.0 b	6.3	6.5	6.8	7.0	6.6	6.3	6.8	6.8	6.8	6.5
	Activity rate (% population aged 15-64)	68.6	68.0	67.7	67.8	68.4	69.6	71.0	73.4	75.3	76.9	78.2	79.1
	Activity rate (% population aged 15-24)	29.5	28.7	27.7	27.5	27.0	27.9	31.0	33.0	34.4	36.1	36.5	37.1
	Activity rate (% population aged 25-54)	87.2	87.3	87.1	87.3	88.2	89.4	89.5	91.2	92.0	92.4	93.3	93.3
	Activity rate (% population aged 55-64)	42.1	39.8	41.5	42.2	43.7	45.4	49.0	53.2	57.8	62.4	64.5	67.1
	Total unemployment (000)	164	174 d	232	262	252	262	239	182	162	128	96	88
	Unemployment rate (% labour force)	7.1	7.7 d	10.3	11.6	11.1	11.3	10.2	7.6	6.6	5.1	3.8	3.5
	Youth unemployment rate (% labour force 15-24)	17.6	18.9 d	27.9	27.8	27.0	29.1	25.6	20.0	18.3	12.9	9.7	9.8
	Long term unemployment rate (% labour force)	3.3	3.6	4.3	5.7	5.2	5.2	5.0	3.6	3.1	2.3	1.5	1.4
	Share of long term unemployment (% of total unemployment)	46.3	47.3	41.4	49.3	47.3	45.5	48.6	48.0	47.1	45.8	40.6	40.6
	Youth unemployment ratio (% population aged 15-24)	5.1	5.4	7.7	7.6	7.3	8.1	7.9	6.6	6.3	4.7	3.5	3.6
	Employment rate for low skilled 25-64 (ISCED 0-2)	46.0	46.9	45.1	44.0	45.8	46.8	47.2	54.7 b	58.5	62.2	66.0	68.2
	Employment rate for medium skilled 25-64 (ISCED 3-4)	76.6	74.9	72.6	71.1	71.5	72.3	74.2	78.2 b	80.5	82.9	84.8	85.6
	Employment rate for high skilled 25-64 (ISCED 5-8)	86.2	84.6	83.3	82.8	84.7	85.7	86.8	88.4 b	89.8	91.2	92.4	92.8
	Employment rate (Nationals aged 15-64)	63.6	62.6	60.6	59.8	60.7	61.5	63.6	67.7	70.2	73.0	75.3	76.4
	Employment rate (Other EU28 aged 15-64)	78.8	78.8	76.4	72.6	75.1	80.4	83.0	84.0	76.1	74.6	66.1	79.1
	Employment rate (Other than EU28 aged 15-64)	75.0	80.8	72.0 u	56.9 u	60.6	69.0	77.9	92.5 u	77.5 u	69.7	60.9	57.0
	Employment rate (Born in the same country aged 15-64)	63.5	62.5	60.5	59.7	60.5	61.4	63.4	67.6	70.0	72.8	75.1	76.2
	Employment rate (Born in other EU28 aged 15-64)	75.3	71.7	73.2	70.8	72.5	72.5	78.1	83.8	82.8	85.9	84.1	84.5
	Employment rate (Born outside EU28 aged 15-64)	72.1	76.1	74.1	64.3	69.0	75.7	79.1	79.4	81.3	76.2	70.7	68.7
	Underemployment (% of labour force aged 15-74)		0.1 u	1.0	1.1	1.3	1.4	1.6	1.5	1.2	0.8	0.6	0.5
	Seeking but not available (% of labour force aged 15-74)	0.2 u	0.2 u	0.3	0.2 u	0.2	0.2 u	0.2	0.2 u	0.2 u	0.1 u	0.1 u	0.1 u
	Discouraged, available but not seeking (% of labour force aged 15-74)	3.7	3.8	4.4	4.5	5.0	4.9	4.9	3.6	3.0	2.6	2.3	1.9
Labour Market Indicators - Female	Total population (000)	5287	5276	5268	5257	5242	5207 b	5193	5174	5160	5142	5122	5107
	Population aged 15-64(000)	3523	3510	3500	3483	3473	3449	3425	3393	3361	3328	3290	3263
	Total employment (000)	1773	1755	1723	1740	1738	1778	1789	1880	1927	1989	2004	2023
	Employment aged 15-64 (000)	1761	1742	1711	1726	1723	1764	1776	1867	1912	1972	1984	1999
	Employment rate (% population aged 20-64)	55.2	54.8	54.0	54.6	54.7	56.2	56.9	60.2	62.1	64.6	65.7	66.8
	Employment rate (% population aged 15-64)	50.7	50.3	49.6	50.2	50.3	51.9	52.6	55.9	57.8	60.2	61.3	62.3
	Employment rate (% population aged 15-24)	17.7	17.1	16.2	16.6	16.2	17.0	17.0	20.5	23.1	24.6	24.8	24.3
	Employment rate (% population aged 25-54)	67.9	67.9	66.9	67.0	66.6	69.0	70.0	73.2	74.4	76.2	77.2	77.7
	Employment rate (% population aged 55-64)	25.8	25.3	26.3	29.4	31.9	31.7	32.1	35.2	37.7	41.5	42.4	44.9
	FTE employment rate (% population aged 20-64)	54.2	53.7	52.7	53.2	53.0	54.6	55.6	58.3	60.3	62.9	64.5	65.3
	Self-employed (% total employment)	8.5	8.1	8.7	8.5	7.9	8.2	7.8	7.4	7.7	7.8	7.8	7.8
	Part-time employment (% total employment)	5.5	5.9	7.1	7.7	8.7	9.4	9.0	8.3	7.7	6.8	6.3	6.3
	Temporary employment (% total employment)	6.2	6.4	7.1	8.4	7.7	7.8	9.6	9.5	10.2	9.3	8.7	7.3
	Employment in Services (% total employment)												
	Employment in Industry (% total employment)												
	Employment in Agriculture (% total employment)		2.3 b	2.6	2.3	2.6	2.8	2.6	2.6	2.6	2.8	2.8	2.7
	Activity rate (% population aged 15-64)	54.9	54.7	55.0	56.3	56.6	58.0	58.6	60.7	62.2	63.5	64.2	64.9
	Activity rate (% population aged 15-24)	21.8	21.4	21.5	22.0	21.5	23.4	23.6	25.9	27.5	28.3	28.2	27.2
	Activity rate (% population aged 25-54)	73.2	73.4	73.6	74.6	74.4	76.5	77.1	78.8	79.6	79.8	80.4	80.7
	Activity rate (% population aged 55-64)	26.9	26.6	28.1	31.7	34.8	34.5	34.7	37.4	39.9	43.5	44.3	46.3
	Total unemployment (000)	148	153 d	186	208	214	211	202	162	146	107	96	84
	Unemployment rate (% labour force)	7.7	8.0 d	9.7	10.7	11.0	10.6	10.1	7.9	7.0	5.1	4.6	4.0
	Youth unemployment rate (% labour force 15-24)	18.6	20.4 d	24.5	24.7	24.7	27.1	27.9	20.9	16.0	12.9	12.1	10.7
	Long term unemployment rate (% labour force)	3.6	3.6	4.1	5.2	5.3	4.8	4.9	3.7	3.1	2.4	1.8	1.5
	Share of long term unemployment (% of total unemployment)	47.2	45.0	41.6	48.4	47.9	45.0	48.5	46.8	44.0	47.3	40.1	36.4
	Youth unemployment ratio (% population aged 15-24)	4.1	4.4	5.3	5.4	5.3	6.3	6.6	5.4	4.4	3.6	3.4	2.9
	Employment rate for low skilled 25-64 (ISCED 0-2)	32.1	32.3	31.4	32.2	31.5	31.8	33.4	38.1 b	39.9	43.6	46.9	48.1
	Employment rate for medium skilled 25-64 (ISCED 3-4)	62.6	61.1	59.5	59.8	59.6	61.6	62.0	64.6 b	66.1	68.2	69.3	69.9
	Employment rate for high skilled 25-64 (ISCED 5-8)	75.6	75.6	74.8	74.8	75.3	75.0	75.1	77.0 b	78.0	80.5	79.6	80.6
	Employment rate (Nationals aged 15-64)	50.7	50.3	49.6	50.2	50.4	51.9	52.6	55.9	57.8	60.2	61.3	62.4
	Employment rate (Other EU28 aged 15-64)	49.9	49.4	55.2	64.3	51.3	48.3	48.2	57.3	55.4	59.1	46.9 u	52.4
	Employment rate (Other than EU28 aged 15-64)	57.2 u	64.0	54.0 u	40.9 u	40.8 u	47.5 u		50.9 u	58.6 u	50.7 u	67.6 u	47.7 u
	Employment rate (Born in the same country aged 15-64)	50.6	50.2	49.4	50.0	50.2	51.7	52.5	55.8	57.7	60.1	61.1	62.3
	Employment rate (Born in other EU28 aged 15-64)	55.3	57.5	59.0	64.3	57.8	61.4	58.8	62.1	59.5	68.8	69.2	65.3
	Employment rate (Born outside EU28 aged 15-64)	55.8	59.3	55.4	53.8	48.6	57.5	57.0	52.4	65.1	58.5	66.3	63.7
	Underemployment (% of labour force aged 15-74)		0.2 u	1.6	1.8	2.0	2.7	2.7	2.2	1.8	1.3	1.0	0.8
	Seeking but not available (% of labour force aged 15-74)	0.4	0.4	0.4	0.3	0.3	0.3	0.3	0.3	0.2	0.2 u	0.2 u	0.3
	Discouraged, available but not seeking (% of labour force aged 15-74)	3.9	4.4	4.9	5.1	5.5	5.5	5.6	4.3	3.4	3.0	3.0	2.6

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Hungary			2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018
Social Indicators	All	At-risk-of-poverty or social exclusion (% of total population)	29.4	28.2	29.6	29.9	31.5	33.5	34.8	31.8	28.2	26.3	25.6	19.6
		At-risk-of-poverty (% of total population)	12.3	12.4	12.4	12.3	14.1	14.3	15.0	15.0	14.9	14.5	13.4	12.8
		At-risk-of-poverty threshold (PPS single person)	3894	3958	4097	4025	4281	4563	4366	4535	4751	4960	4984	5164
		Poverty gap (%)	19.8	17.3	16.3	16.5	18.2	20.9	21.0	22.3	21.8	18.8	16.7	24.1
		Persistent at-risk-of-poverty (% of total population)		7.7	8.6	5.7	8.3	7.6	7.3	8.6	7.2	7.9	5.8	5.7
		At-risk-of-poverty before social transfers excl. pensions (% of total population)	29.3	30.4	28.9	28.4	29.0	27.3	27.0	26.6	25.7	25.8	25.0	25.0
		Impact of social transfers (excl. pensions) in reducing poverty (%)	58.0	59.2	57.1	56.7	51.4	47.6	44.4	43.6	42.0	43.8	46.4	48.8
		Severe Material Deprivation (% of total population)	19.9	17.9	20.3	21.6	23.4	26.3	27.8	24.0	19.4	16.2	14.5	10.1
		Share of people living in low work intensity households (% of people aged 0-59)	11.3	12.0	11.3	11.9	12.8	13.5	13.6	12.8	9.4	8.2	6.6	5.7
		Real Gross Household Disposable income (growth %)	-2.9	-2.3	-4.2	-2.5	3.8	-3.2	1.8	3.9	2.0			
		Income quintile share ratio S80/S20	3.7	3.6	3.5	3.4	3.9	4.0	4.3	4.3	4.3	4.3	4.3	4.4
		GINI coefficient	25.6	25.2	24.7	24.1	26.9	27.2	28.3	28.6	28.2	28.2	28.1	28.7
		Early leavers from education and training (% of population aged 18-24)	11.4	11.7	11.5	10.8	11.4	11.8	11.9	11.4 b	11.6 b	12.4	12.5	12.5
		NEET: Young people neither in employment nor in education and training (% of total population aged 15-24)	11.5	11.5	13.6	12.6	13.2	14.8	15.5	13.6	11.6	11.0	11.0	10.7
	Male	At-risk-of-poverty or social exclusion (% of male population)	28.6	27.3	29.1	29.4	31.1	32.9	34.4	31.4	28.0	26.0	24.9	18.9
		At-risk-of-poverty (% of male population)	12.3	12.4	12.8	12.6	14.5	14.8	15.5	15.5	15.6	14.4	13.1	11.9
		Poverty gap (%)	20.5	17.9	16.3	16.9	18.9	21.6	23.1	22.8	21.7	18.8	17.9	25.5
		Persistent at-risk-of-poverty (% of male population)		7.8	9.2	6.2	8.4	7.7	7.9	9.1	7.7	8.9	6.7	5.5
		Severe Material Deprivation (% of male population)	19.6	17.3	20.2	21.5	23.0	25.8	27.7	23.7	19.1	16.1	14.3	9.9
		Share of people living in low work intensity households (% of males aged 0-59)	10.8	11.1	10.6	11.3	12.5	13.2	13.7	12.3	8.7	8.1	6.3	5.9
		Life expectancy at birth (years)	69.4	70.0	70.3	70.7	71.2	71.6	72.2	72.3	72.3	72.6	72.5	
		Healthy life years at birth (years) - men	55.1	54.8	55.9	56.3	57.6	59.2	59.1	58.9	58.2	59.5	59.6	
		Early leavers from education and training (% of males aged 18-24)	12.5	12.4	12.2	11.5	12.3	12.3	12.5	12.5 b	12.0 b	12.9	12.0	12.6
		NEET: Young people neither in employment nor in education and training ( % of males aged 15-24)	9.9	10.1	12.7	11.7	12.1	13.6	13.6	12.0	10.4	8.9	7.9	7.6
		Female	At-risk-of-poverty or social exclusion (% of female population)	30.1	29.0	30.0	30.3	32.0	34.0	35.2	32.3	28.4	26.5	26.1
	At-risk-of-poverty (% of female population)		12.3	12.4	12.1	12.0	13.7	14.0	14.5	14.5	14.4	14.5	13.7	13.6
	Poverty gap (%)		18.9	17.0	16.3	15.6	17.9	19.8	20.2	21.6	22.0	18.8	16.0	22.6
	Persistent at-risk-of-poverty (% of female population)			7.5	8.1	5.4	8.3	7.5	6.8	8.2	6.9	7.1	5.0	5.8
	Severe Material Deprivation (% of female population)		20.1	18.4	20.4	21.6	23.7	26.8	27.8	24.4	19.6	16.3	14.7	10.3
	Share of people living in low work intensity households (% of females aged 0-59)		11.8	12.9	12.0	12.5	13.2	13.7	13.6	13.3	10.2	8.3	6.8	5.4
	Life expectancy at birth (years)		77.8	78.3	78.4	78.6	78.7	78.7	79.1	79.4	79.0	79.7	79.3	
	Healthy life years at birth (years) - women		57.8	58.2	58.2	58.6	59.1	60.5	60.1	60.8	60.1	60.2	60.8	
	Early leavers from education and training (% of females aged 18-24)		10.2	11.0	10.8	10.1	10.6	11.2	11.4	10.3 b	11.2 b	11.8	13.0	12.3
	NEET: Young people neither in employment nor in education and training ( % of females aged 15-24)		13.0	12.9	14.5	13.4	14.3	16.0	17.4	15.3	12.8	13.3	14.3	14.0
	Children (0-17)	At-risk-of-poverty or social exclusion of children (% of people aged 0-17)	34.1	33.4	37.2	38.7	40.4	41.9	43.9	41.8	36.1	33.6	31.6	23.8
		At-risk-of-poverty (% of Children population)	18.8	19.7	20.6	20.3	23.7	22.9	23.8	25.0	22.7	19.9	14.8	13.8
		Severe Material Deprivation (% of Children population)	24.4	21.5	25.5	28.8	30.4	34.1	35.6	31.9	24.9	21.1	19.2	15.2
		Share of children living in low work intensity households (% of Children population)	10.0	11.1	11.9	13.9	14.8	16.4	15.1	15.2	11.2	9.2	7.5	4.8
		Risk of poverty of children in households at work (Working Intensity > 0.2)	12.6	13.3	14.1	12.4	15.0	12.5	14.0	15.2	16.0	15.6	12.7	10.8
		Impact of social transfers (excl. pensions) in reducing poverty (0-17) (%)	57.8	57.7	55.5	57.2	51.3	47.7	45.7	45.2	48.1	54.4	64.1	66.1
	Working age (18-64)	At-risk-of-poverty or social exclusion (% of working age population)	29.8	29.1	30.2	30.5	32.2	34.0	36.0	32.4	28.9	27.2	26.3	20.4
		At-risk-of-poverty (% of Working age population)	11.6	12.0	11.9	11.9	13.8	14.0	15.2	14.9	15.5	15.0	14.2	13.4
		Severe Material Deprivation (% of Working age population)	19.0	17.6	20.1	21.3	23.3	26.1	28.1	23.8	19.2	16.5	14.7	10.1
		Very low work intensity (18-59)	11.8	12.3	11.1	11.3	12.3	12.6	13.2	12.1	8.9	7.9	6.3	6.0
		In-work at-risk-of poverty rate (% of persons employed 18-64)	5.8	5.8	6.2	5.4	6.2	5.7	7.0	6.7	9.3	9.7	10.2	8.5
		Impact of social transfers (excl. pensions) in reducing poverty (18-64) (%)	59.3	60.3	58.0	57.0	51.9	48.5	44.1	43.6	39.7	41.0	42.0	44.9
	Elderly (65+)	At-risk-of-poverty or social exclusion of elderly (% of people aged 65+)	21.1	17.5	17.5	16.8	19.0	22.0	20.2	19.0	17.1	15.1	16.8	13.3
		At-risk-of-poverty (% of Elderly population)	6.1	4.3	4.6	4.1	4.9	6.3	4.6	4.5	4.6	6.8	9.1	9.8
		Severe Material Deprivation (% of Elderly population)	17.2	14.4	14.6	14.1	16.2	18.6	17.8	16.5	14.2	10.2	9.4	5.6
		Relative median income of elderly (ratio with median income of people younger than 65)	0.97	1.0	1.02	1.01	0.99	0.96	1.03	1.05	1.01	1.01	0.98	0.97
		Aggregate replacement ratio (ratio)	0.58	0.61	0.62	0.60	0.60	0.58	0.62	0.62	0.65	0.67	0.64	0.59
Sickness/Health care		5.6	5.5	5.6	5.6	5.4	5.0	4.9	4.8	5.1 b	5.2 p			
Disability		2.1	2.1	2.0	1.8	1.7	1.6	1.5	1.4	1.3 b	1.2 p			
Old age and survivors		9.5	9.9	10.1	10.2	10.3	10.9	10.8	10.2	9.6 b	9.4 p			
Family/Children		2.7	2.7	2.9	2.9	2.7	2.6	2.5	2.3	2.3 b	2.2 p			
Unemployment		0.7	0.8	0.9	0.9	0.8	0.6	0.5	0.4	0.4 b	0.3 p			
Expenditure in social protection indicators (% of GDP)	Housing and Social exclusion n.e.c.	1.0	0.8	0.8	0.6	0.5	0.4	0.4	0.4	0.4 b	0.5 p			
	Total (including Admin and Other expenditures)	22.1	22.3	22.7	22.5	21.6	21.3	20.8	19.8	19.3 b	19.1 p			
	of which: Means tested benefits	1.4	1.2	1.2	1.1	1.0	0.9	0.9	0.7	0.8 b	0.7 p			

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## Malta

Malta		2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018
Macro Economic Indicators (Annual % growth)	Real GDP	4.0	3.3	-2.5	3.5	1.3	2.8	4.6	8.7	10.8	5.6	6.8	6.7
	Total employment	2.2	2.5	0.0	1.7	2.9	2.8	3.8	5.4	4.1	4.3	8.1	5.3
	Labour productivity	1.7	0.8	-2.5	1.8	-1.6	0.0	0.8	3.2	6.5	1.3	-1.2	1.3
	Annual average hours worked per person employed	-0.4	0.5	0.3	-2.7	-3.0	-1.7	-1.2	-2.2	-0.4	3.2	-5.1	0.0
	Real productivity per hour worked	2.2	0.3	-2.7	4.6	1.5	1.8	2.0	5.5	7.0	-1.8	4.1	1.3
	Harmonized CPI	0.7	4.7	1.8	2.0	2.5	3.2	1.0	0.8	1.2	0.9	1.3	1.7
	Price deflator GDP	2.8	3.0	2.7	3.8	2.2	2.1	2.0	2.4	2.4	1.4	2.4	2.2
	Nominal compensation per employee	3.7	4.1	3.0	2.0	3.3	3.3	2.1	1.4	5.5	2.9	-0.5	2.1
	Real compensation per employee (GDP deflator)	0.9	1.0	0.3	-1.8	1.1	1.2	0.1	-1.0	3.0	1.5	-2.8	-0.1
	Real compensation per employee (private consumption deflator)	3.0	-0.6	1.1	-0.1	0.8	0.0	1.1	0.6	4.3	2.0	-1.7	0.3
	Nominal unit labour costs	2.0	3.2	5.6	0.2	5.0	3.3	1.3	-1.7	-1.0	1.6	0.7	0.7
	Real unit labour costs	-0.9	0.3	2.8	-3.5	2.8	1.2	-0.7	-3.9	-3.4	0.2	-1.7	-1.4
Labour Market Indicators - Total	Total population (000)	406	408	411	414	415	418	423	429	440	450	460	476
	Population aged 15-64 (000)	282	286	288	289	288	287	289	291	297	303	309	320
	Total employment (000)	155	159	160	163	167	173	182	191	198	208	221	234
	Employment aged 15-64 (000)	155	158	158	161	164	171	179	187	194	205	217	230
	Employment rate (% population aged 20-64)	58.6	59.2	59.0	60.1	61.6	63.9	66.2	67.9	69.0	71.1	73.0	75.0
	Employment rate (% population aged 15-64)	55.0	55.5	55.3	56.2	57.9	59.9	62.2	63.9	65.1	67.2	69.2	71.4
	Employment rate (% population aged 15-24)	46.8	46.6	44.1	44.2	45.0	44.5	46.7	46.7	45.6	46.2	47.3	50.4
	Employment rate (% population aged 25-54)	66.2	67.2	68.1	68.6	70.6	73.5	75.6	77.2	78.2	79.9	81.8	83.0
	Employment rate (% population aged 55-64)	29.5	30.1	29.1	31.9	33.2	34.7	37.1	39.5	42.3	45.8	47.2	49.7
	FTE employment rate (% population aged 20-64)	56.9	57.4	57.1	58.1	59.3	61.3	63.2	64.2	65.6	67.6	69.7	71.6
	Self-employed (% total employment)	14.2	13.7	13.8	14.4	13.5	13.3	13.7	13.5	13.8	14.0	14.8	14.2
	Part-time employment (% total employment)	10.6	11.1	11.0	11.6	12.6	13.2	14.0	15.3	14.3	13.9	13.7	13.3
	Temporary employment (% total employment)	4.4	3.6	4.2	4.5	5.7	6.0	6.6	6.7	6.5	6.6	5.1	6.7
	Employment in Services (% total employment)			73.4 u	73.0				78.0 u				
	Employment in Industry (% total employment)			25.2 u	25.7				20.9 u				
	Employment in Agriculture (% total employment)		1.8 b	1.4	1.3	1.1	0.9	1.2	1.1	1.3	1.1	0.9	0.9
	Activity rate (% population aged 15-64)	58.8	59.1	59.4	60.4	61.8	63.9	66.3	67.8	68.8	70.6	72.2	74.2
	Activity rate (% population aged 15-24)	54.1	52.7	51.6	50.9	51.9	51.7	53.5	52.9	51.6	51.8	52.9	55.5
	Activity rate (% population aged 25-54)	69.8	70.7	71.9	72.9	74.7	77.3	79.5	81.0	81.7	83.2	84.5	85.6
	Activity rate (% population aged 55-64)	30.6	31.4	30.9	33.3	34.2	36.2	39.1	42.1	44.6	47.5	48.4	51.4
	Total unemployment (000)	11	10	12	12	11	11	12	12	11	10	9	9
	Unemployment rate (% labour force)	6.5	6.0	6.9	6.8	6.4	6.2	6.1	5.7	5.4	4.7	4.0	3.7
	Youth unemployment rate (% labour force 15-24)	13.5	11.7	14.5	13.2	13.3	13.8	12.7	11.7	11.6	10.7	10.6	9.2
	Long term unemployment rate (% labour force)	2.7	2.6	2.9	3.1	3.0	3.0	2.8	2.7	2.4	1.9	1.6	1.1
	Share of long term unemployment (% of total unemployment)	41.3	42.7	42.0	44.9	47.3	48.8	45.9	47.5	44.2	39.7	40.1	30.8
	Youth unemployment ratio (% population aged 15-24)	7.3	6.1	7.5	6.7	6.9	7.2	6.8	6.2	6.0	5.5	5.6	5.1
	Employment rate for low skilled 25-64 (ISCED 0-2)	47.3	47.9	47.2	47.6	49.1 b	50.2	52.0	53.8 b	55.4	57.7	58.6	60.9
	Employment rate for medium skilled 25-64 (ISCED 3-4)	81.4	79.8	79.8	79.5	77.6 b	81.4	81.6	82.6 b	82.7	83.6	85.2	84.9
	Employment rate for high skilled 25-64 (ISCED 5-8)	86.8	87.0	85.6	86.5	88.2 b	89.4	89.7	89.1 b	89.6	90.6	91.7	91.8
	Employment rate (Nationals aged 15-64)	55.1	55.6	55.3	56.2	57.9	58.9	60.8	62.7	64.2	66.0	67.9	70.1
	Employment rate (Other EU28 aged 15-64)	49.2	51.6	48.8	55.6	53.0	74.3	77.1	74.9	74.3	78.5	80.5	78.8
	Employment rate (Other than EU28 aged 15-64)	52.1	54.6	57.3	59.6	61.2	78.0	82.7	77.3	70.2	73.4	70.6	75.8
	Employment rate (Born in the same country aged 15-64)	54.8	55.3	55.0	56.0	57.7	58.9	60.8	62.6	64.0	65.7	67.7	69.7
	Employment rate (Born in other EU28 aged 15-64)	54.5	54.9	53.7	57.0	54.1	72.7	75.1	75.9	75.8	78.7	79.7	79.3
	Employment rate (Born outside EU28 aged 15-64)	59.1	63.7	62.3	63.3	65.1	78.8	78.0	74.5	69.5	73.7	72.4	78.1
	Underemployment (% of labour force aged 15-74)		1.8	1.9	2.5	2.4	2.2	2.7	2.4	2.1	1.8	1.3	1.5
	Seeking but not available (% of labour force aged 15-74)	0.8			0.2 u		0.3 u		0.2 u			0.3 u	0.3 u
	Discouraged, available but not seeking (% of labour force aged 15-74)	1.5	1.3	1.1	1.1	2.2	2.4	1.9	1.2	1.1	0.7	0.7	0.9

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Malta		2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018
Labour Market Indicators - Male	Total population (000)	202	203	205	206	206	208	210	215	220	226	232	241
	Population aged 15-64(000)	143	145	147	147	146	146	147	149	153	156	159	166
	Total employment (000)	105	106	106	107	108	109	112	116	121	126	133	139
	Employment aged 15-64 (000)	105	105	104	105	106	107	110	113	118	123	129	136
	Employment rate (% population aged 20-64)	79.0	78.5	77.5	78.2	79.0	79.4	80.3	81.1	82.1	83.5	84.7	85.7
	Employment rate (% population aged 15-64)	73.5	72.9	71.9	72.5	73.8	74.0	75.1	75.7	77.0	78.9	80.1	81.2
	Employment rate (% population aged 15-24)	48.9	48.0	45.8	45.9	48.0	47.1	48.2	46.1	46.6	48.9	48.5	48.9
	Employment rate (% population aged 25-54)	90.3	89.5	89.3	89.1	90.0	90.0	90.2	90.9	91.5	92.3	93.2	93.3
	Employment rate (% population aged 55-64)	47.4	47.9	46.3	50.0	51.5	52.5	55.2	57.0	59.6	62.8	64.5	67.2
	FTE employment rate (% population aged 20-64)	79.7	78.9	77.6	78.3	78.8	79.0	79.7	80.0	81.2	82.6	83.9	84.6
	Self-employed (% total employment)	17.7	17.5	17.5	18.7	17.6	17.3	18.4	17.7	18.0	19.2	19.2	18.3
	Part-time employment (% total employment)	3.9	4.1	4.6	4.9	5.4	5.7	6.5	6.9	6.4	6.0	6.3	6.5
	Temporary employment (% total employment)	3.1	2.8	3.1	3.4	4.6	5.2	5.5	5.2	5.3	5.4	4.3	5.9
	Employment in Services (% total employment)				65.8				70.6 u				
	Employment in Industry (% total employment)				32.3				27.9 u				
	Employment in Agriculture (% total employment)		2.5 b	1.9	1.9	1.6	1.3	1.6	1.6	2.0	1.7	1.4	1.3
	Activity rate (% population aged 15-64)	78.0	77.2	77.0	77.8	78.6	78.5	80.0	80.8	81.5	82.5	83.4	84.5
	Activity rate (% population aged 15-24)	57.5	55.3	54.6	53.6	55.7	54.4	56.6	53.4	53.7	54.4	54.5	55.1
	Activity rate (% population aged 25-54)	94.4	93.8	93.9	94.5	94.9	94.4	94.8	95.5	99.4	95.8	96.2	96.3
	Activity rate (% population aged 55-64)	48.8	49.5	48.9	52.3	53.0	54.4	58.2	61.4	63.4	65.1	66.1	69.2
	Total unemployment (000)	6	6	7	8	7	6	7	8	7	6	5	6
	Unemployment rate (% labour force)	5.8	5.6	6.5	6.7	6.0	5.6	6.1	6.1	5.4	4.4	3.8	3.8
	Youth unemployment rate (% labour force 15-24)	15.0	13.1	16.2	14.4	13.7	13.3	14.7	13.7	13.2	10.2	11.1	11.3
	Long term unemployment rate (% labour force)	2.8	2.7	3.1	3.4	3.3	3.3	3.2	3.3	2.9	2.0	1.6	1.4
	Share of long term unemployment (% of total unemployment)	48.2	47.7	47.8	49.9	55.5	58.7	51.8	53.4	54.5	44.5	42.5	36.0
	Youth unemployment ratio (% population aged 15-24)	8.6	7.2	8.8	7.7	7.6	7.2	8.3	7.3	7.1	5.5	6.1	6.2
	Employment rate for low skilled 25-64 (ISCED 0-2)	74.6	73.5	72.7	73.2	74.5 b	73.2	74.3	75.3 b	77.4	78.7	80.0	81.1
	Employment rate for medium skilled 25-64 (ISCED 3-4)	90.8	90.2	88.6	88.7	87.4 b	90.4	89.5	90.7 b	90.7	92.0	92.0	91.6
	Employment rate for high skilled 25-64 (ISCED 5-8)	92.2	92.8	91.9	91.5	92.5 b	93.3	93.8	92.9 b	93.0	93.8	94.4	94.9
	Employment rate (Nationals aged 15-64)	73.7	72.8	72.1	72.6	73.9	73.1	74.1	74.8	76.1	77.6	79.4	80.9
	Employment rate (Other EU28 aged 15-64)	59.0 u	71.5	58.9	69.3	71.4	90.0	87.6	87.0	84.5	83.9	85.2	85.3
	Employment rate (Other than EU28 aged 15-64)	72.2	76.7	72.2	69.7	69.2	87.9	89.1	85.0	85.6	88.7	81.9	79.4
	Employment rate (Born in the same country aged 15-64)	73.5	72.5	71.8	72.3	73.8	73.2	74.1	74.9	75.8	77.3	79.2	80.2
	Employment rate (Born in other EU28 aged 15-64)	66.4	74.9	68.0	69.6	74.7	87.0	85.3	85.3	87.1	85.7	84.6	86.8
	Employment rate (Born outside EU28 aged 15-64)	76.5	83.2	79.9	82.5	76.8	87.3	85.7	81.5	83.7	88.0	83.6	84.3
	Underemployment (% of labour force aged 15-74)		1.0	1.4	1.7	1.5	1.4	1.8	1.6	1.5	1.4	1.1	1.2
	Seeking but not available (% of labour force aged 15-74)												
	Discouraged, available but not seeking (% of labour force aged 15-74)	0.6 u	0.5 u	0.5 u	0.4 u	1.0	1.2	1.0	0.7 u	0.6 u	0.4 u	0.5 u	0.6 u
Labour Market Indicators - Female	Total population (000)	204	205	206	208	209	210	212	215	219	224	229	235
	Population aged 15-64(000)	139	141	142	142	141	141	142	142	145	147	150	154
	Total employment (000)	50	53	54	56	58	64	69	74	77	82	88	95
	Employment aged 15-64 (000)	50	53	54	56	58	64	69	74	76	81	87	95
	Employment rate (% population aged 20-64)	37.7	39.4	40.0	41.6	43.8	48.0	51.7	54.3	55.3	58.0	60.6	63.4
	Employment rate (% population aged 15-64)	36.0	37.7	38.0	39.5	41.5	45.3	48.8	51.6	52.5	55.0	57.6	60.8
	Employment rate (% population aged 15-24)	44.5	45.0	42.2	42.4	41.8	41.8	45.0	47.3	44.6	43.3	46.1	52.0
	Employment rate (% population aged 25-54)	41.3	44.1	45.9	47.5	50.8	56.4	60.3	62.9	64.0	66.7	69.5	71.8
	Employment rate (% population aged 55-64)	12.1	12.7	12.2	14.1	15.1	17.0	18.9	22.1	25.1	28.9	29.9	32.1
	FTE employment rate (% population aged 20-64)	34.0	35.6	36.1	37.7	39.9	43.7	46.8	48.3	49.8	52.3	54.9	58.1
	Self-employed (% total employment)	7.0	6.2	6.7	6.1	6.0	6.5	6.2	6.9	7.1	6.1	8.3	8.1
	Part-time employment (% total employment)	24.6	25.1	23.4	24.4	25.8	25.8	25.8	28.1	26.5	25.9	24.6	23.0
	Temporary employment (% total employment)	7.2	5.4	6.4	6.6	7.6	7.3	8.3	9.0	8.3	8.4	6.4	7.8
	Employment in Services (% total employment)												
	Employment in Industry (% total employment)												
	Employment in Agriculture (% total employment)												
	Activity rate (% population aged 15-64)	39.1	40.4	41.2	42.5	44.7	48.9	52.0	54.3	55.5	58.0	60.2	63.1
	Activity rate (% population aged 15-24)	50.5	50.0	48.3	48.1	48.0	48.9	50.3	52.3	49.4	48.9	51.1	55.9
	Activity rate (% population aged 25-54)	44.3	46.7	48.9	50.6	54.0	59.7	63.6	65.7	67.2	69.7	72.0	74.0
	Activity rate (% population aged 55-64)	12.8	13.6	13.2	14.6	15.6	18.2	20.1	22.8	26.0	29.9	30.6	33.4
	Total unemployment (000)	4	4	4	4	4	5	5	4	4	4	4	4
	Unemployment rate (% labour force)	7.9	6.8	7.6	7.1	7.1	7.2	6.1	5.1	5.4	5.2	4.3	3.6
	Youth unemployment rate (% labour force 15-24)	11.8	10.0	12.5	11.8	12.9	14.5	10.4	9.5	9.8	11.4	9.9	6.9
	Long term unemployment rate (% labour force)	2.5	2.3	2.5	2.6	2.5	2.6	2.2	1.9	1.5	1.7	1.6	0.8 u
	Share of long term unemployment (% of total unemployment)	31.1	34.6	32.5	36.1	34.6	36.1	36.4	36.4	28.2	33.5	36.8	22.7 u
	Youth unemployment ratio (% population aged 15-24)	6.0	5.0	6.1	5.7	6.2	7.1	5.2	5.0	4.9	5.6	5.1	3.9
	Employment rate for low skilled 25-64 (ISCED 0-2)	22.6	24.2	23.2	23.6	24.6 b	28.0	29.7	31.7 b	32.0	35.0	35.8	39.2
	Employment rate for medium skilled 25-64 (ISCED 3-4)	65.3	64.2	66.4	66.3	66.3 b	70.6	72.5	73.8 b	73.7	74.7	78.0	76.8
	Employment rate for high skilled 25-64 (ISCED 5-8)	80.6	80.4	79.3	81.5	83.6 b	85.4	85.8	85.1 b	86.5	87.6	88.9	88.7
	Employment rate (Nationals aged 15-64)	35.9	37.7	37.9	39.1	41.3	44.4	47.0	49.9	51.6	54.0	55.9	58.3
	Employment rate (Other EU28 aged 15-64)	42.0 u	35.1 u	40.0	45.7	39.9	53.3	62.1	61.3	63.3	71.1	74.6	71.5
	Employment rate (Other than EU28 aged 15-64)	37.3	38.7	43.9	51.1	53.4	67.2	77.7	71.2	56.2	56.0	57.9	72.7
	Employment rate (Born in the same country aged 15-64)	35.6	37.3	37.7	39.0	41.1	44.2	46.9	49.5	51.5	53.8	55.7	58.2
	Employment rate (Born in other EU28 aged 15-64)	44.6	39.8	40.1	46.4	38.7	55.2	60.4	65.1	64.3	69.7	74.0	70.8
	Employment rate (Born outside EU28 aged 15-64)	42.5	46.3	46.3	47.4	54.1	69.3	71.6	68.7	55.4	57.7	59.3	72.2
	Underemployment (% of labour force aged 15-74)		3.2	2.9	4.0	4.2	3.6	4.3	3.7	3.1	2.4	1.7	1.8
	Seeking but not available (% of labour force aged 15-74)	1.6 u							0.5 u				0.5 u
	Discouraged, available but not seeking (% of labour force aged 15-74)	3.4	3.0	2.3	2.4	4.5	4.5	3.2	2.1	2.0	1.3	1.0	1.3

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Malta			2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018
Social Indicators	All	At-risk-of-poverty or social exclusion (% of total population)	19.7	20.1	20.3	21.2	22.1	23.1	24.6	23.9	23.0	20.3	19.3	
		At-risk-of-poverty (% of total population)	15.1	15.3	14.9	15.5	15.6	15.1	15.8	15.8	16.6	16.5	16.7	
		At-risk-of-poverty threshold (PPS single person)	7465	7958	8146	8023	8417	8760	9149	9412	10052	10358	10722	
		Poverty gap (%)	18.1	20.3	16.2	17.3	17.7	16.1	18.9	17.9	17.5	15.9	17.5	
		Persistent at-risk-of-poverty (% of total population)		7.7	7.7	9.1	11.4	9.7	8.5	10.6	12.7	11.3	10.7	
		At-risk-of-poverty before social transfers excl. pensions (% of total population)	21.5	22.9	22.9	23.5	23.2	24.0	23.4	23.7	23.8	23.8	23.9	
		Impact of social transfers (excl. pensions) in reducing poverty (%)	29.8	33.2	34.9	34.0	32.8	37.1	32.5	33.3	30.3	30.7	30.1	
		Severe Material Deprivation (% of total population)	4.4	4.3	5.0	6.5	6.6	9.2	10.2	10.3	8.5	4.4	3.3	3.0 p
		Share of people living in low work intensity households (% of people aged 0-59)	9.6	8.6	9.2	9.2	8.9	9.0	9.1	9.9	9.2	7.3	7.1	
		Real Gross Household Disposable income (growth %)												
		Income quintile share ratio S80/S20	3.9	4.3	4.0	4.3	4.0	3.9	4.1	4.0	4.1	4.2	4.2	
		GINI coefficient	26.3	28.1	27.4	28.6	27.2	27.1	28.0	27.7	28.1	28.6	28.2	
		Early leavers from education and training (% of population aged 18-24)	30.2	27.2	25.7	23.8	22.7 b	21.7	20.8	20.9 b	20.2	19.2	17.7 b	17.5
		NEET: Young people neither in employment nor in education and training (% of total population aged 15-24)	11.5	8.3	9.9	9.5	10.2	10.8	9.9	10.3	10.5	8.8	8.6	7.3
	Male	At-risk-of-poverty or social exclusion (% of male population)	18.6	18.7	19.1	20.1	20.9	21.9	23.8	23.1	22.2	20.2	18.5	
		At-risk-of-poverty (% of male population)	14.7	13.9	14.3	14.8	15.0	14.4	15.4	15.7	16.3	16.5	16.1	
		Poverty gap (%)	16.7	21.7	15.9	17.7	17.1	16.7	18.8	18.4	18.6	16.5	17.7	
		Persistent at-risk-of-poverty (% of male population)		7.7	6.3	8.4	10.2	10.0	7.2	10.6	13.6	10.9	11.2	
		Severe Material Deprivation (% of male population)	4.0	4.1	4.8	6.3	6.4	8.6	10.1	9.9	8.5	4.5	3.2	2.7 p
		Share of people living in low work intensity households (% of males aged 0-59)	8.2	6.9	7.3	7.4	7.0	7.6	7.8	8.9	8.6	7.2	6.4	
		Life expectancy at birth (years)	77.5	77.1	77.9	79.3	78.6	78.6	79.6	79.8	79.7	80.6	80.2	
		Healthy life years at birth (years) - men	69.2	68.8	69.4	70.1	69.9	71.5	71.6	72.3	72.6	71.1	71.9	
		Early leavers from education and training (% of males aged 18-24)	34.8	31.1	30.1	29.9	28.8 b	26.4	23.3	22.5 b	23.3	23.1	20.9 b	19.4
		NEET: Young people neither in employment nor in education and training ( % of males aged 15-24)	11.9	6.8	9.4	8.2	9.7	10.2	9.7	8.8	9.3	6.9	8.4	6.8
		Female	At-risk-of-poverty or social exclusion (% of female population)	20.9	21.5	21.6	22.4	23.2	24.3	25.5	24.7	23.8	20.4	20.2
	At-risk-of-poverty (% of female population)		15.5	16.7	15.5	16.2	16.1	15.8	16.1	16.0	16.9	16.5	17.3	
	Poverty gap (%)		18.7	19.0	16.6	16.6	19.1	16.0	19.1	17.2	16.3	14.8	17.1	
	Persistent at-risk-of-poverty (% of female population)			7.8	9.0	9.7	12.6	9.5	9.8	10.7	11.8	11.7	10.2	
	Severe Material Deprivation (% of female population)		4.8	4.6	5.2	6.6	6.9	9.7	10.3	10.6	8.5	4.3	3.4	3.4 p
	Share of people living in low work intensity households (% of females aged 0-59)		11.1	10.4	11.3	11.0	10.9	10.5	10.4	10.9	9.8	7.5	7.9	
	Life expectancy at birth (years)		82.2	82.3	82.7	83.6	83.0	83.0	84.0	84.2	84.0	84.4	84.6	
	Healthy life years at birth (years) - women		71.1	72.1	71.0	71.3	70.7	72.2	72.7	74.3	74.6	72.4	73.6	
Early leavers from education and training (% of females aged 18-24)	25.3		23.2	21.1	17.4	16.3 b	16.9	18.1	19.2 b	16.9	15.0	14.3 b	15.5	
NEET: Young people neither in employment nor in education and training ( % of females aged 15-24)	11.2		9.8	10.4	10.9	10.7	11.5	10.1	11.9	11.9	10.8	8.8	7.8	
Children (0-17)	At-risk-of-poverty or social exclusion of children (% of people aged 0-17)		23.9	25.0	26.5	26.7	27.8	31.0	33.0	31.8	28.4	24.0	23.0	
	At-risk-of-poverty (% of Children population)	19.8	20.4	21.2	22.1	23.0	23.1	24.5	24.6	23.4	20.9	21.2		
	Severe Material Deprivation (% of Children population)	6.4	6.3	7.2	7.7	7.7	12.3	12.7	14.1	10.6	6.1	5.1	4.0 p	
	Share of children living in low work intensity households (% of Children population)	10.0	9.8	10.4	9.7	10.0	10.4	11.0	12.4	10.5	7.6	7.6		
	Risk of poverty of children in households at work (Working Intensity > 0.2)	13.6	14.1	15.9	16.0	16.9	17.0	18.4	17.0	16.2	15.6	15.5		
	Impact of social transfers (excl. pensions) in reducing poverty (0-17) (%)	31.0	33.6	35.0	31.4	29.9	36.0	28.6	25.2	24.5	27.4	25.6		
Working age (18-64)	At-risk-of-poverty or social exclusion (% of working age population)	17.8	17.5	18.1	19.6	20.7	21.1	23.2	21.8	21.1	17.7	16.4		
	At-risk-of-poverty (% of Working age population)	12.6	12.0	12.1	13.1	13.1	12.4	13.5	13.1	13.4	13.3	13.2		
	Severe Material Deprivation (% of Working age population)	4.0	4.0	4.6	6.4	6.8	8.9	10.3	9.7	8.8	4.2	3.1	2.8 p	
	Very low work intensity (18-59)	9.4	8.2	8.9	9.0	8.6	8.6	8.5	9.1	8.8	7.3	7.0		
	In-work at-risk of poverty rate (% of persons employed 18-64)	4.6	5.1	5.4	5.8	6.1	5.2	5.8	5.5	5.5	5.8	5.8		
	Impact of social transfers (excl. pensions) in reducing poverty (18-64) (%)	33.0	37.8	38.3	36.7	35.8	40.1	32.5	34.5	32.3	32.5	32.0		
Elderly (65+)	At-risk-of-poverty or social exclusion of elderly (% of people aged 65+)	22.8	26.0	22.2	21.7	21.0	22.3	20.9	23.5	24.3	26.0	26.2		
	At-risk-of-poverty (% of Elderly population)	20.3	24.3	19.7	18.2	17.6	17.3	14.9	17.0	21.3	23.9	24.9		
	Severe Material Deprivation (% of Elderly population)	3.1	3.1	4.1	5.0	4.7	6.4	7.1	8.1	5.0	3.6	2.2	3.0 p	
	Relative median income of elderly (ratio with median income of people younger than 65)	0.78	0.73	0.77	0.81	0.79	0.80	0.80	0.77	0.75	0.72	0.71		
Expenditure in social protection indicators (% of GDP)	Aggregate replacement ratio (ratio)	0.47	0.41	0.45	0.44	0.48	0.46	0.56	0.56	0.54	0.54	0.56		
	Sickness/Health care	5.5	5.7	6.3	5.9	5.8	5.9	6.0	5.9	5.5	5.4			
	Disability	1.1	0.9	0.9	0.8	0.8	0.7	0.7	0.7	0.6	0.6			
	Old age and survivors	8.9	9.1	9.9	10.2	10.0	10.2	9.8	9.2	8.5	8.5			
	Family/Children	1.0	1.2	1.2	1.2	1.2	1.1	1.2	1.3	1.1	1.0			
	Unemployment	0.5	0.5	0.6	0.5	0.5	0.5	0.6	0.5	0.5	0.4			
	Housing and Social exclusion n.e.c.	0.6	0.6	0.6	0.5	0.5	0.4	0.4	0.4	0.5	0.4			
	Total (including Admin and Other expenditures)	17.8	18.2	19.6	19.3	18.9	19.1	18.9	18.2	16.8	16.4			
	of which: Means tested benefits	3.0	2.4	2.5	2.5	2.5	2.4	2.4	2.3	2.2	1.9			

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## Netherlands

Netherlands		2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018
Macro Economic Indicators (Annual % growth)	Real GDP	3.8	2.2	-3.7	1.3	1.6	-1.0	-0.1	1.4	2.0	2.2	2.9 p	2.7 p
	Total employment	2.9	1.6	-0.9	-0.7	0.9	-0.2	-1.2	-0.1	1.0	1.1 p	2.2 p	2.5 p
	Labour productivity	0.8	0.5	-2.8	2.0	0.7	-0.8	1.1	1.5	1.0	1.1 p	0.7 p	0.1 p
	Annual average hours worked per person employed	-0.1	0.0	-0.6	0.0	0.0	-0.7	0.3	0.8	0.0	0.9 p	-0.2 p	-0.1 p
	Real productivity per hour worked	0.9	0.6	-2.3	2.1	0.6	-0.1	0.8	0.7	1.0	0.2 p	0.9 p	0.3 p
	Harmonized CPI	1.6	2.2	1.0	0.9	2.5	2.8	2.6	0.3	0.2	0.1	1.3	1.6
	Price deflator GDP	2.1	2.3	0.2	0.9	0.2	1.4	1.3	0.3	0.8	0.5	1.2 p	2.2 p
	Nominal compensation per employee	2.8	4.0	2.5	0.7	1.9	2.0	1.8	1.7	-0.3	1.7 p	1.2 p	2.2 p
	Real compensation per employee (GDP deflator)	0.7	1.7	2.3	-0.3	1.7	0.5	0.5	1.4	-1.1	1.2 p	0.1 p	0.0 p
	Real compensation per employee (private consumption deflator)	1.2	1.8	1.5	-0.3	-0.6	-0.9	-0.7	1.3	-0.5	1.6 p	-0.1 p	0.6 p
	Nominal unit labour costs	2.0	3.5	5.5	-1.3	1.2	2.8	0.8	0.1	-1.3	0.6 p	0.5 p	2.1 p
	Real unit labour costs	0.0	1.1	5.2	-2.2	1.0	1.3	-0.5	-0.2	-2.0	0.1 p	-0.7 p	-0.1 p
Labour Market Indicators - Total	Total population (000)	16358	16405	16486	16575	16656	16730	16780	16829	16901	16979	17082	17181
	Population aged 15-64 (000)	11031	11055	11091	11124	11154	11117	11077	11060	11066	11094	11140	11179
	Total employment (000)	8187	8378	8383	8290	8291	8345	8285	8236	8319	8427	8605	8798
	Employment aged 15-64 (000)	8057	8241	8220	8145	8152	8175	8104	8029	8116	8223	8376	8543
	Employment rate (% population aged 20-64)	75.5	76.9	76.8	76.2	76.4	76.6	75.9	75.4	76.4	77.1	78.0	79.2
	Employment rate (% population aged 15-64)	73.5	74.9	74.6	73.9	74.2	74.4	73.6	73.1	74.1	74.8	75.8	77.2
	Employment rate (% population aged 15-24)	63.1	64.3	62.9	60.7	61.3	61.1	60.1	58.8	60.8	60.8	62.3	63.9
	Employment rate (% population aged 25-54)	83.9	85.5	85.0	84.4	84.0	83.6	82.2	81.7	82.2	82.9	83.5	84.6
	Employment rate (% population aged 55-64)	47.8	50.0	51.8	52.9	55.2	57.6	59.2	59.9	61.7	63.5	65.7	67.7
	FTE employment rate (% population aged 20-64)	60.7	62.1	61.6	60.7	60.9	60.2	59.8	60.8	61.7	62.9	64.0	64.0
	Self-employed (% total employment)	13.5	13.9	14.3	14.5	14.5	14.8	15.6	16.1	16.3	16.4	16.4	16.4
	Part-time employment (% total employment)	45.7	46.1	47.0	48.1	48.3	49.0	49.8	49.6	50.0	49.7	49.8	50.1
	Temporary employment (% total employment)	15.3	15.4	15.5	15.4	15.4	16.2	17.0	17.7	16.7	17.2	18.1	17.8
	Employment in Services (% total employment)		79.0 b	80.1	81.3	82.2	82.0	82.9 b	82.9	82.7	82.7	83.0	83.5
	Employment in Industry (% total employment)		18.2 b	17.2	16.2	15.4	15.6	15.3 b	15.1	15.4	15.3	15.0	14.7
	Employment in Agriculture (% total employment)		2.8 b	2.7	2.6	2.4	2.4	1.8 b	2.0	2.0	2.0	1.9	1.8
	Activity rate (% population aged 15-64)	76.7	77.8	78.1	77.9	78.1	79.0	79.4	79.0	79.6	79.7	79.7	80.3
	Activity rate (% population aged 15-24)	69.6	70.3	70.0	68.3	68.1	69.2	69.2	67.4	68.5	68.2	68.3	68.9
	Activity rate (% population aged 25-54)	86.6	87.7	87.8	87.8	87.4	87.6	87.4	87.1	87.1	86.9	86.7	87.0
	Activity rate (% population aged 55-64)	49.9	52.1	53.8	55.3	57.9	60.8	63.5	64.9	67.1	68.4	69.5	70.9
	Total unemployment (000)	355	318	381	435	434	516	647	660	614	538	438	350
	Unemployment rate (% labour force)	4.2	3.7	4.4	5.0	5.0	5.8	7.3	7.4	6.9	6.0	4.9	3.8
	Youth unemployment rate (% labour force 15-24)	9.4	8.6	10.2	11.1	10.0	11.7	13.2	12.7	11.3	10.8	8.9	7.2
	Long term unemployment rate (% labour force)	1.5	1.2	1.1	1.3	1.6	1.9	2.5	2.9	3.0	2.5	1.9	1.4
	Share of long term unemployment (% of total unemployment)	37.2	33.7	25.1	26.8	32.3	32.9	34.9	39.2	42.9	41.5	39.5	36.6
	Youth unemployment ratio (% population aged 15-24)	6.5	6.0	7.1	7.6	6.8	8.1	9.1	8.6	7.7	7.4	6.1	4.9
	Employment rate for low skilled 25-64 (ISCED 0-2)	59.8	62.2	62.0	61.0	61.7	61.7	60.3 b	58.8 b	60.0	60.7	61.3	62.6
	Employment rate for medium skilled 25-64 (ISCED 3-4)	78.9	80.4	80.4	79.9	79.6	79.6	77.8 b	77.9 b	78.2	79.4	80.1	81.2
	Employment rate for high skilled 25-64 (ISCED 5-8)	86.7	87.3	87.1	86.8	87.0	87.3	87.6 b	87.7 b	88.2	88.4	88.8	89.6
	Employment rate (Nationals aged 15-64)	74.2	75.5	75.3	74.6	74.8	75.0	74.4	73.9	74.9	75.6	76.7	78.1
	Employment rate (Other EU28 aged 15-64)	72.8	75.3	72.5	72.5	73.4	75.4	72.6	73.0	72.0	74.8	76.1	75.1
	Employment rate (Other than EU28 aged 15-64)	47.1	54.2	52.9	51.0	50.6	51.6	48.4	49.1	48.9	49.3	50.0	54.0
	Employment rate (Born in the same country aged 15-64)	75.2	76.4	76.3	75.4	75.8	76.1	75.5	75.0	76.1	76.9	78.0	79.2
	Employment rate (Born in other EU28 aged 15-64)	69.9	71.4	68.1	71.1	72.4	73.1	71.9	72.4	71.5	74.0	75.4	74.7
	Employment rate (Born outside EU28 aged 15-64)	58.9	63.5	62.0	61.7	60.7	60.5	58.2	58.0	57.8	58.1	59.1	61.6
	Underemployment (% of labour force aged 15-74)		1.1	1.3	1.4	1.4	1.7	6.6	6.7	6.3	5.7	5.0	4.2
	Seeking but not available (% of labour force aged 15-74)	0.8	0.7	0.7	0.9	1.2	1.3	1.5	1.6	1.8	1.7	1.6	1.7
	Discouraged, available but not seeking (% of labour force aged 15-74)	3.3	3.0	3.2	3.6	3.3	3.6	3.9	4.1	3.9	3.6	3.0	2.5

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Netherlands		2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018
Labour Market Indicators - Male	Total population (000)	8089	8112	8156	8203	8243	8283	8307	8334	8373	8417	8475	8527
	Population aged 15-64(000)	5563	5572	5589	5605	5616	5595	5571	5561	5563	5578	5604	5622
	Total employment (000)	4531	4612	4584	4501	4475	4501	4459	4460	4482	4536	4617	4705
	Employment aged 15-64 (000)	4438	4518	4471	4399	4377	4376	4324	4305	4336	4383	4449	4524
	Employment rate (% population aged 20-64)	83.2	84.4	83.6	82.5	82.4	82.3	81.1	81.1	81.9	82.6	83.3	84.3
	Employment rate (% population aged 15-64)	80.4	81.7	80.7	79.5	79.3	79.3	78.2	78.1	79.0	79.6	80.4	81.6
	Employment rate (% population aged 15-24)	63.9	64.8	62.5	59.8	60.0	59.7	59.2	58.7	59.9	59.6	61.0	62.8
	Employment rate (% population aged 25-54)	91.5	92.6	91.7	90.4	89.8	89.1	86.8	86.9	87.5	88.1	88.4	89.2
	Employment rate (% population aged 55-64)	58.6	61.6	62.6	63.3	64.5	66.9	68.9	69.4	71.1	72.8	74.8	76.6
	FTE employment rate (% population aged 20-64)	77.9	79.0	77.6	76.5	76.1	76.0	74.6	74.2	75.3	76.1	76.7	77.4
	Self-employed (% total employment)	16.6	16.9	17.3	17.9	17.9	18.2	19.1	19.7	19.5	19.7	19.6	19.6
	Part-time employment (% total employment)	22.2	22.5	23.3	24.0	23.9	24.6	26.0	26.1	26.5	26.2	27.0	27.5
	Temporary employment (% total employment)	13.6	13.6	13.4	13.8	13.9	14.8	15.5	16.4	15.2	15.6	16.5	16.1
	Employment in Services (% total employment)	69.1 b	70.5	72.0	73.3	72.9	73.8 b	74.0	73.6	73.5	74.1	74.9	
	Employment in Industry (% total employment)	27.2 b	26.0	24.6	23.5	23.9	23.8 b	23.4	23.8	23.8	23.4	22.8	
	Employment in Agriculture (% total employment)	3.7 b	3.5	3.4	3.2	3.1	2.5 b	2.6	2.6	2.7	2.5	2.4	
	Activity rate (% population aged 15-64)	83.2	84.2	84.1	83.3	83.2	83.9	84.3	84.2	84.6	84.4	84.2	84.7
	Activity rate (% population aged 15-24)	70.6	71.4	70.5	67.9	67.0	67.7	68.4	67.0	67.5	67.2	67.0	68.0
	Activity rate (% population aged 25-54)	93.2	93.9	93.9	93.3	93.0	93.0	92.3	92.2	92.1	91.7	91.3	91.7
	Activity rate (% population aged 55-64)	61.2	63.9	64.8	66.2	67.5	70.6	74.2	75.5	77.6	78.2	79.0	80.0
	Total unemployment (000)	154	141	184	213	216	260	346	343	313	268	216	182
	Unemployment rate (% labour force)	3.3	3.0	3.9	4.5	4.6	5.5	7.2	7.2	6.5	5.6	4.5	3.7
	Youth unemployment rate (% labour force 15-24)	9.4	9.3	11.4	12.0	10.5	11.8	13.5	12.4	11.3	11.4	9.0	7.7
	Long term unemployment rate (% labour force)	1.3	1.1	0.9	1.2	1.6	1.8	2.6	2.8	3.0	2.4	1.8	1.3
	Share of long term unemployment (% of total unemployment)	38.6	35.6	23.8	26.3	33.7	33.5	35.5	39.8	45.6	42.3	39.1	35.6
	Youth unemployment ratio (% population aged 15-24)	6.7	6.6	8.0	8.1	7.0	8.0	9.2	8.3	7.7	7.6	6.0	5.2
	Employment rate for low skilled 25-64 (ISCED 0-2)	75.9	77.6	76.9	74.8	74.4	74.1	71.7 b	70.9 b	71.8	72.9	73.5	74.6
	Employment rate for medium skilled 25-64 (ISCED 3-4)	85.0	86.8	86.2	85.4	84.9	84.6	82.9 b	83.0 b	83.7	84.8	85.4	86.3
	Employment rate for high skilled 25-64 (ISCED 5-8)	89.6	90.0	89.7	89.3	89.7	90.0	89.7 b	90.3 b	91.1	91.3	91.7	92.3
	Employment rate (Nationals aged 15-64)	80.9	82.0	81.1	80.0	79.9	79.7	78.8	78.6	79.5	80.2	81.0	82.2
	Employment rate (Other EU28 aged 15-64)	81.4	81.7	79.9	79.4	78.0	80.5	79.7	80.7	79.5	80.5	82.6	83.4
	Employment rate (Other than EU28 aged 15-64)	62.3	69.5	66.8	63.1	62.7	64.0	57.9	60.1	61.2	60.3	59.9	63.8
	Employment rate (Born in the same country aged 15-64)	81.7	82.6	81.9	80.6	80.6	80.5	79.5	79.4	80.3	81.1	81.9	82.8
	Employment rate (Born in other EU28 aged 15-64)	79.5	77.1	73.8	77.0	79.1	79.1	79.8	80.6	79.0	81.1	81.8	81.6
	Employment rate (Born outside EU28 aged 15-64)	68.8	74.2	72.0	70.3	69.1	69.3	66.0	66.7	68.1	66.5	67.5	70.9
	Underemployment (% of labour force aged 15-74)		0.6	0.8	0.9	1.0	1.2	4.5	4.5	4.1	3.8	3.3	2.8
	Seeking but not available (% of labour force aged 15-74)	0.5	0.5	0.5	0.6	0.9	1.0	1.1	1.2	1.4	1.3	1.3	1.3
	Discouraged, available but not seeking (% of labour force aged 15-74)	2.6	2.5	2.8	3.3	3.1	3.3	3.6	3.5	3.3	3.2	2.7	2.3
Labour Market Indicators - Female	Total population (000)	8269	8293	8329	8372	8412	8447	8472	8495	8528	8562	8606	8654
	Population aged 15-64(000)	5468	5483	5502	5519	5538	5522	5506	5499	5503	5516	5536	5557
	Total employment (000)	3655	3766	3800	3789	3816	3845	3827	3776	3836	3891	3988	4093
	Employment aged 15-64 (000)	3620	3723	3750	3746	3775	3799	3780	3724	3779	3841	3927	4020
	Employment rate (% population aged 20-64)	67.7	69.4	69.9	69.8	70.4	71.0	70.6	69.7	70.8	71.6	72.8	74.2
	Employment rate (% population aged 15-64)	66.5	68.1	68.5	68.3	68.9	69.4	69.0	68.1	69.2	70.1	71.3	72.8
	Employment rate (% population aged 15-24)	62.2	63.8	63.3	61.7	62.6	62.5	61.0	58.8	61.7	62.1	63.6	65.2
	Employment rate (% population aged 25-54)	76.4	78.4	78.4	78.4	78.1	78.1	77.5	76.5	77.0	77.7	78.6	79.9
	Employment rate (% population aged 55-64)	36.8	38.3	41.0	42.4	45.9	48.3	49.5	50.4	52.4	54.2	56.6	58.8
	FTE employment rate (% population aged 20-64)	45.3	46.8	47.3	46.4	47.3	47.2	47.2	47.3	48.2	48.9	50.4	52.2
	Self-employed (% total employment)	9.7	10.2	10.7	10.4	10.6	10.8	11.5	11.9	12.5	12.5	12.7	12.6
	Part-time employment (% total employment)	74.5	74.7	75.1	76.3	76.6	77.0	77.1	76.7	76.9	76.4	75.8	75.6
	Temporary employment (% total employment)	17.4	17.7	17.9	17.4	17.2	17.9	18.6	19.2	18.4	19.0	19.9	19.9
	Employment in Services (% total employment)			91.6 u						93.1 u	93.1 u		93.2 u
	Employment in Industry (% total employment)			6.8 u						5.6 u	5.7 u		5.7 u
	Employment in Agriculture (% total employment)		1.7 b	1.7	1.6	1.5	1.5	1.1 b	1.2	1.3	1.3	1.3	1.1
	Activity rate (% population aged 15-64)	70.1	71.3	72.0	72.3	72.9	74.0	74.4	73.8	74.7	75.0	75.2	75.8
	Activity rate (% population aged 15-24)	68.5	69.2	69.6	68.6	69.2	70.8	70.0	67.7	69.4	69.2	69.7	69.8
	Activity rate (% population aged 25-54)	79.9	81.4	81.7	82.2	81.8	82.3	82.6	81.9	82.1	82.2	82.0	82.4
	Activity rate (% population aged 55-64)	38.5	40.1	42.7	44.4	48.2	51.0	52.8	54.3	56.7	58.6	60.2	61.8
	Total unemployment (000)	201	176	197	222	218	255	301	317	301	271	221	169
	Unemployment rate (% labour force)	5.2	4.5	4.9	5.5	5.4	6.2	7.3	7.8	7.3	6.5	5.3	4.0
	Youth unemployment rate (% labour force 15-24)	9.3	7.8	9.0	10.1	9.5	11.6	12.9	13.1	11.2	10.3	8.8	6.6
	Long term unemployment rate (% labour force)	1.9	1.4	1.3	1.5	1.7	2.0	2.5	3.0	2.9	2.7	2.1	1.5
	Share of long term unemployment (% of total unemployment)	36.2	32.3	26.2	27.2	31.0	32.3	34.3	38.5	40.2	40.7	39.9	37.6
	Youth unemployment ratio (% population aged 15-24)	6.4	5.4	6.2	7.0	6.6	8.2	9.0	8.9	7.8	7.1	6.1	4.6
	Employment rate for low skilled 25-64 (ISCED 0-2)	46.0	48.7	48.7	48.7	50.3	50.4	50.0 b	47.8 b	49.0	49.3	49.5	51.0
	Employment rate for medium skilled 25-64 (ISCED 3-4)	72.7	73.9	74.4	74.4	74.3	74.5	72.6 b	72.5 b	72.6	73.8	74.6	75.8
	Employment rate for high skilled 25-64 (ISCED 5-8)	83.5	84.1	84.2	84.0	84.1	84.5	85.4 b	84.9 b	85.3	85.5	86.0	87.0
	Employment rate (Nationals aged 15-64)	67.4	68.9	69.3	69.1	69.8	70.2	69.9	69.0	70.3	71.0	72.3	73.9
	Employment rate (Other EU28 aged 15-64)	65.4	70.0	66.5	66.8	69.5	71.1	66.7	66.6	65.9	70.2	70.9	68.3
	Employment rate (Other than EU28 aged 15-64)	32.8	40.5	40.5	40.0	39.8	40.4	39.6	39.2	38.0	39.5	41.0	44.7
	Employment rate (Born in the same country aged 15-64)	68.6	70.0	70.6	70.1	71.0	71.6	71.4	70.4	71.9	72.6	73.9	75.5
	Employment rate (Born in other EU28 aged 15-64)	62.5	67.0	63.9	66.5	67.5	68.8	66.0	66.4	65.9	68.7	70.5	69.1
	Employment rate (Born outside EU28 aged 15-64)	49.6	53.3	52.6	53.7	52.8	52.2	51.1	49.9	48.5	50.6	51.3	53.4
	Underemployment (% of labour force aged 15-74)		1.6	1.8	1.8	1.9	2.2	9.1	9.4	8.9	7.9	7.0	5.7
	Seeking but not available (% of labour force aged 15-74)	1.1	1.0	1.0	1.2	1.6	1.5	2.0	2.0	2.1	2.0	2.0	2.0
	Discouraged, available but not seeking (% of labour force aged 15-74)	4.1	3.6	3.8	4.0	3.6	3.8	4.4	4.8	4.5	4.0	3.4	2.7

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Netherlands			2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	
Social Indicators	All	At-risk-of-poverty or social exclusion (% of total population)	15.7	14.9	15.1	15.1	15.7	15.0	15.9	16.5	16.4	16.7 b	17.0		
		At-risk-of-poverty (% of total population)	10.2	10.5	11.1	10.3	11.0	10.1	10.4	11.6	11.6	12.7 b	13.2		
		At-risk-of-poverty threshold (PPS single person)	10522	11485	11618	11288	11300	11387	11536	11283	11632	12713 b	12710		
		Poverty gap (%)	17.0	14.9	16.5	16.2	15.5	17.3	16.5	16.9	16.8	17.3 b	17.8		
		Persistent at-risk-of-poverty (% of total population)		6.4	4.7	8.2	7.7	5.8	6.5	7.7	7.3	7.2 b	5.6		
		At-risk-of-poverty before social transfers excl. pensions (% of total population)	20.6	19.9	20.5	21.1	20.9	20.6	20.8	21.3	22.3	22.1 b	21.9		
		Impact of social transfers (excl. pensions) in reducing poverty (%)	50.5	47.2	45.9	51.2	47.4	51.0	50.0	45.5	48.0	42.5 b	39.7		
		Severe Material Deprivation (% of total population)	1.7	1.5	1.4	2.2	2.5	2.3	2.5	3.2	2.6	2.6 b	2.6	2.4 p	
		Share of people living in low work intensity households (% of people aged 0-59)	9.7	8.2	8.5	8.4	8.9	8.9	9.3	10.2	10.2	9.7 b	9.5		
		Real Gross Household Disposable income (growth %)	1.9	0.8	1.5	-1.2	0.2	-0.8	-1.1	1.1	1.2	2.5	1.6		
		Income quintile share ratio S80/S20	4.0	4.0	4.0	3.7	3.8	3.6	3.6	3.8	3.8	3.9 b	4.0		
		GINI coefficient	27.6	27.6	27.2	25.5	25.8	25.4	25.1	26.2	26.7	26.9 b	27.1		
		Early leavers from education and training (% of population aged 18-24)	11.9	11.4	11.3	10.1	9.2	8.9	9.3 b	8.7 b	8.2	8.0	7.1	7.3	
		NEET: Young people neither in employment nor in education and training (% of total population aged 15-24)	4.3	3.9	5.0	4.8	4.3	4.9	5.6	5.5	4.7	4.6	4.0	4.2	
	Male	At-risk-of-poverty or social exclusion (% of male population)	14.6	14.3	14.3	14.1	14.9	13.6	14.9	15.8	15.9	16.1 b	16.7		
		At-risk-of-poverty (% of male population)	9.6	10.5	10.8	9.7	10.8	9.5	10.2	11.3	11.8	12.8 b	13.2		
		Poverty gap (%)	17.5	14.6	16.9	15.1	15.3	17.3	15.1	17.7	15.5	17.7 b	19.4		
		Persistent at-risk-of-poverty (% of male population)		6.9	5.4	6.8	8.1	4.8	6.3	6.6	6.8	6.9 b	6.0		
		Severe Material Deprivation (% of male population)	1.7	1.5	1.4	2.3	2.4	2.3	2.4	2.7	2.5	2.3 b	2.5	2.5 p	
		Share of people living in low work intensity households (% of males aged 0-59)	8.6	7.0	7.6	7.4	8.0	7.8	8.3	9.6	9.6	8.8 b	9.3		
		Life expectancy at birth (years)	78.1	78.4 b	78.7	78.9	79.4	79.3	79.5	80.0	79.9	80.0 b	80.2 b		
		Healthy life years at birth (years) - men	66.1	62.5 b	61.7	61.3	64.0	63.5	61.4	63.3	61.1	62.8 b	62.3 b		
		Early leavers from education and training (% of males aged 18-24)	14.5	13.8	13.6	12.4	11.1	10.5	11.2 b	10.6 b	9.9	10.1	9.4	9.3	
		NEET: Young people neither in employment nor in education and training ( % of males aged 15-24)	3.9	3.6	5.0	5.1	4.4	4.6	5.6	5.2	4.6	4.7	4.2	4.2	
		Female	At-risk-of-poverty or social exclusion (% of female population)	16.9	15.5	15.9	16.0	16.6	16.3	16.9	17.2	16.9	17.3 b	17.3	
			At-risk-of-poverty (% of female population)	10.7	10.4	11.3	10.8	11.1	10.6	10.6	11.9	11.5	12.7 b	13.3	
	Poverty gap (%)		16.9	17.0	16.3	16.4	16.5	17.1	17.2	16.2	17.8	17.1 b	16.2		
	Persistent at-risk-of-poverty (% of female population)			5.8	4.1	9.5	7.3	6.8	6.7	8.7	7.7	7.5 b	5.2		
	Severe Material Deprivation (% of female population)		1.7	1.6	1.5	2.2	2.6	2.4	2.6	3.6	2.6	2.9 b	2.7	2.3 p	
	Share of people living in low work intensity households (% of females aged 0-59)		10.8	9.4	9.3	9.3	9.7	10.0	10.4	10.9	10.9	10.5 b	9.7		
	Life expectancy at birth (years)		82.5	82.5 b	82.9	83.0	83.1	83.0	83.2	83.5	83.2	83.2 b	83.4 b		
	Healthy life years at birth (years) - women		64.3	59.9 b	60.1	60.2	59.0	58.9	57.5	59.0	57.2	57.8 b	57.5 b		
	Early leavers from education and training (% of females aged 18-24)		9.2	8.9	9.0	7.7	7.2	7.2	7.4 b	6.8 b	6.4	5.8	4.6	5.3	
NEET: Young people neither in employment nor in education and training ( % of females aged 15-24)	4.6	4.2	4.9	4.5	4.2	5.1	5.7	5.9	4.7	4.4	3.8	4.2			
Children (0-17)	At-risk-of-poverty or social exclusion of children (% of people aged 0-17)	17.2	15.5	17.5	16.9	18.0	16.9	17.0	17.1	16.8	17.6 b	16.6			
	At-risk-of-poverty (% of Children population)	14.0	12.9	15.4	13.7	15.5	13.2	12.6	13.7	14.0	14.8 b	14.4			
	Severe Material Deprivation (% of Children population)	1.9	2.2	1.5	2.0	2.9	3.3	2.3	3.7	2.6	2.5 b	2.4	2.3 p		
	Share of children living in low work intensity households (% of Children population)	6.2	5.1	5.4	5.8	6.3	6.4	6.4	7.3	6.5	7.9 b	6.6			
	Risk of poverty of children in households at work (Working Intensity > 0.2)	11.3	10.1	12.2	11.2	11.8	10.1	10.1	10.0	10.5	9.8 b	10.1			
	Impact of social transfers (excl. pensions) in reducing poverty (0-17) (%)	43.6	43.9	38.9	45.6	36.2	44.5	47.3	43.2	43.8	38.1 b	36.0			
Working age (18-64)	At-risk-of-poverty or social exclusion (% of working age population)	16.5	15.8	15.9	16.5	17.0	16.5	18.0	18.9	19.1	18.4 b	19.0			
	At-risk-of-poverty (% of Working age population)	8.9	9.9	10.3	10.1	10.5	10.1	10.9	12.4	12.5	13.2 b	13.8			
	Severe Material Deprivation (% of Working age population)	1.9	1.6	1.6	2.7	2.8	2.4	3.0	3.6	3.1	3.0 b	3.2	2.7 p		
	Very low work intensity (18-59)	11.0	9.5	9.7	9.4	9.8	9.9	10.5	11.4	11.7	10.4 b	10.6			
	In-work at-risk of poverty rate (% of persons employed 18-64)	4.5	4.7	5.0	5.1	5.4	4.6	4.5	5.3	5.1	5.6 b	6.1			
	Impact of social transfers (excl. pensions) in reducing poverty (18-64) (%)	55.3	50.0	49.3	53.5	51.6	53.7	51.3	46.8	49.8	43.1 b	40.5			
Elderly (65+)	At-risk-of-poverty or social exclusion of elderly (% of people aged 65+)	9.8	9.7	8.1	6.2	6.9	6.2	6.1	6.9	6.1	10.0 b	10.6			
	At-risk-of-poverty (% of Elderly population)	9.5	9.4	7.7	5.9	6.5	5.5	5.5	5.9	5.6	9.0 b	10.0			
	Severe Material Deprivation (% of Elderly population)	0.7	0.4	0.4	0.3	0.4	0.7	0.8	1.0	0.5	1.2 b	0.9	1.6 p		
	Relative median income of elderly (ratio with median income of people younger than 65)	0.83	0.84	0.86	0.87	0.87	0.90	0.90	0.89	0.89	0.82 b	0.81			
	Aggregate replacement ratio (ratio)	0.43	0.43	0.44	0.47	0.46	0.47	0.47	0.50	0.52	0.50 b	0.52			
Expenditure in social protection indicators (% of GDP)	Sickness/Health care	8.4	8.6	9.6	9.9	10.0	10.3	10.1	9.9	9.3	9.2				
	Disability	2.2	2.2	2.4	2.3	2.3	2.3	2.3	2.2	2.7	2.6				
	Old age and survivors	10.3	10.1	10.9	11.1	11.5	11.9	12.1	12.2	11.9	11.9				
	Family/Children	0.9	1.1	1.2	1.1	1.1	1.0	0.9	0.9	1.1	1.1				
	Unemployment	1.0	0.9	1.1	1.3	1.3	1.4	1.6	1.6	1.5	1.3				
	Housing and Social exclusion n.e.c.	1.4	1.5	1.7	1.6	1.7	1.7	1.9	1.8	1.7	1.8				
	Total (including Admin and Other expenditures)	25.9	26.1	29.0	29.3	29.9	30.6	30.8	30.6	29.9	29.5				
	of which: Means tested benefits	3.0	3.1	3.5	3.6	3.7	3.7	3.9	3.7	4.1	4.1				

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## Austria

Austria		2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018
Macro Economic Indicators (Annual % growth)	Real GDP	3.7	1.5	-3.8	1.8	2.9	0.7	0.0	0.7	1.1	2.0	2.6	2.7
	Total employment	1.8	1.9	-0.5	0.8	1.6	1.0	0.3	1.0	0.6	1.3	1.7	1.7
	Labour productivity	1.9	-0.4	-3.3	1.1	1.3	-0.4	-0.3	-0.3	0.5	0.7	0.8	1.0
	Annual average hours worked per person employed	-0.6	-0.4	-2.6	-0.4	0.4	-1.4	-1.0	-0.6	-1.0	0.8	-0.1	0.0
	Real productivity per hour worked	2.5	0.0	-0.7	1.5	1.0	1.1	0.6	0.4	1.6	0.0	0.9	1.0
	Harmonized CPI	2.2	3.2	0.4	1.7	3.6	2.6	2.1	1.5	0.8	1.0	2.2	2.1
	Price deflator GDP	2.2	2.0	1.9	0.9	1.8	2.1	1.6	2.2	2.2	1.4	1.3	1.6
	Nominal compensation per employee	3.0	3.3	1.6	1.1	2.1	2.7	2.2	1.9	2.0	2.4	1.5	2.5
	Real compensation per employee (GDP deflator)	0.7	1.3	-0.2	0.2	0.2	0.6	0.6	-0.3	-0.2	1.0	0.2	0.9
	Real compensation per employee (private consumption deflator)	0.8	0.1	1.2	-0.6	-1.5	0.1	0.1	0.4	1.1	1.4	-0.8	0.4
	Nominal unit labour costs	1.1	3.7	5.1	0.0	0.7	3.1	2.5	2.2	1.4	1.6	0.6	1.5
	Real unit labour costs	-1.2	1.8	3.1	-0.9	-1.1	1.0	0.9	0.0	-0.8	0.2	-0.6	-0.1
Labour Market Indicators - Total	Total population (000)	8283	8308	8335	8352	8375	8408	8452	8508	8585	8700	8773	8822
	Population aged 15-64 (000)	5589	5607	5625	5633	5663	5688	5705	5732	5775	5849	5884	5902
	Total employment (000)	3924 b	3994	3982	4017	4052	4085	4105	4113	4148	4220	4260	4319
	Employment aged 15-64 (000)	3864 b	3929	3909	3944	3982	4013	4030	4034	4068	4143	4185	4241
	Employment rate (% population aged 20-64)	72.8 b	73.8	73.4	73.9	74.2	74.4	74.6	74.2	74.3	74.8	75.4	76.2
	Employment rate (% population aged 15-64)	69.9 b	70.8	70.3	70.8	71.1	71.4	71.4	71.1	71.1	71.5	72.2	73.0
	Employment rate (% population aged 15-24)	53.8 b	54.4	53.1	52.8	53.9	53.7	53.1	52.1	51.3	51.0	50.6	51.3
	Employment rate (% population aged 25-54)	82.9 b	83.4	82.9	83.3	84.1	84.3	84.0	83.4	83.5	83.6	84.1	84.6
	Employment rate (% population aged 55-64)	36.0 b	38.8	39.4	41.2	39.9	41.6	43.8	45.1	46.3	49.2	51.3	54.0
	FTE employment rate (% population aged 20-64)	65.1 b	65.7	64.9	65.1	65.3	65.4	65.5	64.7	64.7	65.1	65.8	66.6
	Self-employed (% total employment)	11.3 b	11.2	11.5	11.7	11.3	11.2	11.4	11.3	11.4	11.2	10.9	10.8
	Part-time employment (% total employment)	22.0 b	22.7	23.9	24.4	24.5	25.2	26.0	26.9	27.3	27.8	27.9	27.3
	Temporary employment (% total employment)	7.7 b	7.8	7.9	8.2	8.4	8.2	8.1	8.1	8.0	7.9	8.1	8.1
	Employment in Services (% total employment)		68.9 b	70.1	70.1	69.3	69.5	69.8	69.7 u	69.9	70.3	71.4	71.0
	Employment in Industry (% total employment)		26.5 b	25.3	25.2	26.3	26.4	26.2	26.1 u	26.1	25.9	25.2	25.7
	Employment in Agriculture (% total employment)		4.6 b	4.6	4.7	4.4	4.2	4.0	4.3	4.0	3.9	3.5	3.3
	Activity rate (% population aged 15-64)	73.5 b	73.9	74.3	74.4	74.6	75.1	75.5	75.4	75.5	76.2	76.4	76.8
	Activity rate (% population aged 15-24)	59.4 b	59.5	59.5	58.3	59.2	59.2	58.8	58.0	57.4	57.5	56.1	56.7
	Activity rate (% population aged 25-54)	86.5 b	86.5	87.0	87.1	87.6	88.1	88.3	88.0	88.0	88.4	88.7	88.5
	Activity rate (% population aged 55-64)	37.2 b	39.7	40.5	42.2	41.4	43.1	45.5	46.9	48.6	51.7	53.6	56.2
	Total unemployment (000)	200	172	223	203	194	209	231	245	252	270	248	220
	Unemployment rate (% labour force)	4.9	4.1	5.3	4.8	4.6	4.9	5.4	5.6	5.7	6.0	5.5	4.9
	Youth unemployment rate (% labour force 15-24)	9.4	8.5	10.7	9.5	8.9	9.4	9.7	10.3	10.6	11.2	9.8	9.4
	Long term unemployment rate (% labour force)	1.3 b	1.0	1.2	1.2	1.2	1.2	1.3	1.5	1.7	1.9	1.8	1.4
	Share of long term unemployment (% of total unemployment)	27.2 b	24.3	21.7	25.4	26.3	24.9	24.6	27.2	29.2	32.3	33.4	28.9
	Youth unemployment ratio (% population aged 15-24)	5.6 b	5.1	6.4	5.5	5.3	5.6	5.7	6.0	6.1	6.5	5.5	5.3
	Employment rate for low skilled 25-64 (ISCED 0-2)	56.1 b	55.4	54.0	54.8	55.1	54.7	54.1	53.0 b	52.9	53.9	54.1	55.3
	Employment rate for medium skilled 25-64 (ISCED 3-4)	75.4 b	76.9	76.3	77.0	76.8	77.1	77.5	75.9 b	75.7	75.9	76.6	77.6
	Employment rate for high skilled 25-64 (ISCED 5-8)	86.0 b	85.6	85.8	85.3	85.9	86.7	86.0	85.3 b	85.4	86.2	86.4	86.3
	Employment rate (Nationals aged 15-64)	70.9 b	71.9	71.6	71.9	72.2	72.6	72.7	72.3	72.5	73.3	73.8	74.4
	Employment rate (Other EU28 aged 15-64)	69.7 b	70.6	68.2	69.8	69.6	71.2	71.9	73.0	72.5	72.8	74.5	73.9
	Employment rate (Other than EU28 aged 15-64)	56.5 b	56.5	55.5	57.0	58.2	57.0	55.2	54.2	53.7	52.6	54.3	58.6
	Employment rate (Born in the same country aged 15-64)	71.2 b	72.3	71.9	72.0	72.3	72.7	72.8	72.6	72.8	73.4	74.0	74.5
	Employment rate (Born in other EU28 aged 15-64)	67.0 b	67.5	67.2	69.5	69.9	71.1	72.2	72.7	72.7	73.7	74.7	74.6
	Employment rate (Born outside EU28 aged 15-64)	61.2 b	61.3	60.3	62.4	63.0	62.0	60.7	59.5	59.0	58.4	59.1	63.1
	Underemployment (% of labour force aged 15-74)		3.2	3.5	2.9	3.1	3.4	3.8	3.9	4.2	4.2	4.0	3.3
	Seeking but not available (% of labour force aged 15-74)	0.7 b	0.9	0.9	0.9	0.9	1.0	0.9	1.0	0.9	1.1	1.1	1.2
	Discouraged, available but not seeking (% of labour force aged 15-74)	3.8 b	3.5	3.7	3.7	3.4	3.5	3.3	3.6	3.7	3.3	3.0	2.5

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Austria		2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018
Labour Market Indicators - Male	Total population (000)	4030	4042	4057	4066	4079	4098	4124	4155	4200	4273	4312	4339
	Population aged 15-64(000)	2799	2807	2814	2818	2831	2844	2854	2869	2896	2944	2964	2972
	Total employment (000)	2138 b	2164	2134	2148	2162	2171	2180	2175	2194	2234	2254	2296
	Employment aged 15-64 (000)	2100 b	2122	2087	2104	2120	2129	2134	2126	2145	2187	2209	2248
	Employment rate (% population aged 20-64)	79.5 b	80.1	78.7	79.0	79.2	79.3	79.1	78.3	78.4	78.7	79.4	80.7
	Employment rate (% population aged 15-64)	76.3 b	76.8	75.5	76.0	76.2	76.2	76.0	75.2	75.1	75.4	76.2	77.4
	Employment rate (% population aged 15-24)	57.0 b	57.6	55.8	56.6	58.0	57.1	56.4	54.3	54.0	52.9	52.1	53.9
	Employment rate (% population aged 25-54)	89.0 b	88.9	87.4	87.7	88.4	88.3	87.5	86.6	86.6	86.6	87.2	87.8
	Employment rate (% population aged 55-64)	46.0 b	48.9	49.1	49.9	48.2	50.2	52.8	54.3	54.1	57.6	60.1	63.5
	FTE employment rate (% population aged 20-64)	78.1 b	78.2	76.6	76.6	77.0	77.0	76.6	75.5	75.5	75.6	76.4	77.7
	Self-employed (% total employment)	13.6 b	13.6	13.9	14.2	13.7	13.5	13.8	13.8	13.8	13.7	13.4	13.1
	Part-time employment (% total employment)	6.2 b	7.0	7.5	8.0	7.8	8.0	9.0	9.6	9.8	10.5	10.6	10.0
	Temporary employment (% total employment)	7.4 b	7.5	7.8	8.3	8.3	7.9	8.1	7.9	7.8	7.7	8.0	7.7
	Employment in Services (% total employment)	56.9 b	58.1	58.2	57.1	57.2	58.0 u	57.7 u	57.4	57.4	57.7	59.0 u	58.6 u
	Employment in Industry (% total employment)	38.6 b	37.3	37.1	38.3	38.4	37.8 u	37.9 u	38.5	38.2	37.4 u	37.8 u	
	Employment in Agriculture (% total employment)	4.5 b	4.6	4.8	4.5	4.4	4.2	4.4	4.1	4.1	4.1	3.6	3.6
	Activity rate (% population aged 15-64)	80.0 b	80.0	80.0	80.0	79.9	80.2	80.4	80.0	80.1	80.7	81.0	81.6
	Activity rate (% population aged 15-24)	62.9 b	62.9	62.9	62.6	63.6	63.1	62.3	60.7	60.7	60.2	58.4	59.5
	Activity rate (% population aged 25-54)	92.5 b	92.1	91.9	91.9	92.0	92.3	92.1	91.5	91.6	91.8	92.3	92.1
	Activity rate (% population aged 55-64)	47.6 b	49.9	50.5	51.4	50.4	52.2	55.1	56.8	57.4	61.2	63.0	66.0
	Total unemployment (000)	100	88	124	113	103	113	124	135	142	153	142	121
	Unemployment rate (% labour force)	4.5	3.9	5.5	5.0	4.6	5.0	5.4	5.9	6.1	6.5	5.9	5.0
	Youth unemployment rate (% labour force 15-24)	9.3	8.4	11.2	9.6	8.8	9.6	9.4	10.6	11.1	12.1	10.8	9.4
	Long term unemployment rate (% labour force)	1.2 b	1.0	1.2	1.4	1.3	1.3	1.4	1.7	1.9	2.2	2.0	1.5
	Share of long term unemployment (% of total unemployment)	26.9 b	26.0	22.0	27.9	27.8	26.0	25.9	28.2	31.8	34.3	33.7	29.0
	Youth unemployment ratio (% population aged 15-24)	5.8 b	5.3	7.0	6.0	5.6	6.0	5.8	6.4	6.7	7.3	6.3	5.6
	Employment rate for low skilled 25-64 (ISCED 0-2)	65.8 b	65.0	62.8	62.8	63.6	62.3	61.2	59.1 b	59.3	60.5	60.6	62.9
	Employment rate for medium skilled 25-64 (ISCED 3-4)	81.0 b	81.9	80.2	80.6	80.4	80.5	80.9	79.8 b	79.1	79.4	80.4	81.5
	Employment rate for high skilled 25-64 (ISCED 5-8)	89.1 b	88.7	88.6	88.8	89.0	89.6	88.6	87.2 b	87.4	88.5	89.2	89.3
	Employment rate (Nationals aged 15-64)	76.9 b	77.4	76.4	76.7	76.8	76.8	76.8	76.2	76.0	76.7	77.3	78.2
	Employment rate (Other EU28 aged 15-64)	80.6 b	80.1	75.8	75.7	76.2	77.3	77.3	77.5	78.2	77.1	80.8	80.3
	Employment rate (Other than EU28 aged 15-64)	66.3 b	67.9	64.1	66.5	68.5	67.4	65.7	62.1	62.0	60.9	61.4	67.3
	Employment rate (Born in the same country aged 15-64)	77.1 b	77.7	76.5	76.7	76.8	76.8	76.7	76.2	76.0	76.6	77.2	78.0
	Employment rate (Born in other EU28 aged 15-64)	77.4 b	75.4	75.5	75.1	77.0	77.5	79.4	78.6	78.9	78.5	81.0	80.5
	Employment rate (Born outside EU28 aged 15-64)	70.1 b	71.2	67.8	70.6	71.4	71.2	69.0	66.4	67.1	66.1	66.7	71.8
	Underemployment (% of labour force aged 15-74)		1.2	1.7	1.4	1.5	1.6	1.9	1.9	2.1	2.4	2.2	1.8
	Seeking but not available (% of labour force aged 15-74)	0.6 b	0.7	0.9	0.8	0.7	0.8	0.8	0.9	0.8	1.0	1.1	1.0
	Discouraged, available but not seeking (% of labour force aged 15-74)	3.1 b	2.9	3.0	3.2	3.2	3.2	3.0	3.4	3.5	3.0	2.8	2.3
Labour Market Indicators - Female	Total population (000)	4253	4266	4278	4285	4296	4310	4328	4352	4385	4428	4460	4484
	Population aged 15-64(000)	2790	2800	2811	2816	2832	2844	2852	2863	2879	2905	2920	2930
	Total employment (000)	1786 b	1831	1849	1869	1890	1913	1925	1938	1954	1986	2006	2024
	Employment aged 15-64 (000)	1763 b	1807	1822	1840	1862	1885	1897	1908	1923	1956	1977	1993
	Employment rate (% population aged 20-64)	66.2 b	67.6	68.2	68.8	69.2	69.6	70.0	70.1	70.2	70.9	71.4	71.7
	Employment rate (% population aged 15-64)	63.5 b	64.8	65.2	65.7	66.1	66.7	66.9	66.9	67.1	67.7	68.2	68.6
	Employment rate (% population aged 15-24)	50.6 b	51.3	50.5	48.9	49.8	50.3	49.8	49.9	48.7	49.0	49.0	48.7
	Employment rate (% population aged 25-54)	76.7 b	77.8	78.4	78.9	79.8	80.4	80.5	80.3	80.3	80.6	81.0	81.3
	Employment rate (% population aged 55-64)	26.5 b	29.3	30.3	33.0	32.2	33.5	35.2	36.4	38.8	41.1	42.8	44.8
	FTE employment rate (% population aged 20-64)	53.2 b	54.4	54.3	54.9	55.0	55.1	55.6	55.1	55.1	55.8	56.6	56.8
	Self-employed (% total employment)	8.6 b	8.4	8.6	8.8	8.5	8.4	8.6	8.5	8.7	8.4	8.2	8.1
	Part-time employment (% total employment)	40.8 b	41.2	42.6	43.2	43.5	44.6	45.1	46.3	46.8	47.1	47.2	46.9
	Temporary employment (% total employment)	8.0 b	8.1	8.1	8.0	8.5	8.4	8.2	8.3	8.2	8.2	8.4	8.6
	Employment in Services (% total employment)												
	Employment in Industry (% total employment)												
	Employment in Agriculture (% total employment)		4.7 b	4.7	4.6	4.3	3.9	3.8	4.1	3.9	3.6	3.3	3.0
	Activity rate (% population aged 15-64)	67.1 b	67.8	68.7	68.9	69.3	70.0	70.7	70.8	70.9	71.7	71.8	72.0
	Activity rate (% population aged 15-24)	56.0 b	56.2	56.2	54.0	54.8	55.4	55.3	55.4	54.1	54.6	53.7	53.8
	Activity rate (% population aged 25-54)	80.5 b	80.9	82.1	82.4	83.2	84.0	84.5	84.5	84.4	84.9	85.0	84.8
	Activity rate (% population aged 55-64)	27.5 b	30.1	31.1	33.6	33.0	34.5	36.4	37.5	40.2	42.7	44.5	46.6
	Total unemployment (000)	100	84	99	91	91	96	108	110	110	117	106	99
	Unemployment rate (% labour force)	5.3	4.4	5.1	4.6	4.6	4.8	5.3	5.4	5.3	5.6	5.0	4.7
	Youth unemployment rate (% labour force 15-24)	9.6	8.6	10.1	9.4	9.1	9.2	10.0	9.9	10.0	10.2	8.7	9.4
	Long term unemployment rate (% labour force)	1.5 b	1.0	1.1	1.0	1.1	1.1	1.2	1.4	1.4	1.7	1.7	1.3
	Share of long term unemployment (% of total unemployment)	27.6 b	22.6	21.3	22.4	24.5	23.7	23.1	25.9	25.9	29.7	33.1	28.7
	Youth unemployment ratio (% population aged 15-24)	5.4 b	4.8	5.7	5.1	5.0	5.1	5.5	5.5	5.4	5.6	4.7	5.0
	Employment rate for low skilled 25-64 (ISCED 0-2)	51.0 b	50.2	49.4	50.5	50.3	50.5	49.9	49.5 b	49.1	49.9	49.9	50.6
	Employment rate for medium skilled 25-64 (ISCED 3-4)	69.2 b	71.4	72.1	73.0	73.0	73.3	73.9	71.6 b	72.0	72.0	72.5	73.4
	Employment rate for high skilled 25-64 (ISCED 5-8)	81.8 b	81.5	82.4	81.0	82.2	83.2	82.9	83.3 b	83.1	83.8	83.6	83.1
	Employment rate (Nationals aged 15-64)	64.9 b	66.4	66.8	67.1	67.6	68.3	68.6	68.5	69.0	69.9	70.3	70.5
	Employment rate (Other EU28 aged 15-64)	60.4 b	62.8	61.6	64.5	63.9	66.0	67.4	69.1	67.3	68.9	68.6	68.1
	Employment rate (Other than EU28 aged 15-64)	45.9 b	44.8	47.0	47.5	47.8	46.7	44.9	46.4	45.5	44.7	46.8	49.9
	Employment rate (Born in the same country aged 15-64)	65.4 b	66.9	67.2	67.3	67.8	68.5	68.9	68.9	69.5	70.2	70.8	70.8
	Employment rate (Born in other EU28 aged 15-64)	59.0 b	61.5	60.8	65.2	64.4	66.3	66.6	67.9	67.6	69.8	69.4	69.6
	Employment rate (Born outside EU28 aged 15-64)	52.5 b	51.6	52.6	54.3	54.8	53.1	52.7	52.7	51.2	50.8	51.4	54.5
	Underemployment (% of labour force aged 15-74)		5.6	5.6	4.6	5.0	5.4	6.0	6.1	6.4	6.3	6.1	5.1
	Seeking but not available (% of labour force aged 15-74)	0.8 b	1.1	1.0	1.0	1.0	1.2	1.0	1.1	1.0	1.1	1.2	1.3
	Discouraged, available but not seeking (% of labour force aged 15-74)	4.7 b	4.2	4.4	4.2	3.8	3.8	3.8	3.9	3.9	3.7	3.1	2.8

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Austria		2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	
Social Indicators	All	At-risk-of-poverty or social exclusion (% of total population)	16.7	20.6 b	19.1	18.9	19.2	18.5	18.8	19.2	18.3	18.0	18.1	17.5
		At-risk-of-poverty (% of total population)	12.0	15.2	14.5	14.7	14.5	14.4	14.4	14.1	13.9	14.1	14.4	14.3
		At-risk-of-poverty threshold (PPS single person)	10686	11359 b	11683	11710	12255	12361	12542	12997	13189	13842	14006	13913
		Poverty gap (%)	17.0	19.9 b	19.2	21.8	19.1	20.1	21.3	20.1	20.5	19.8	22.4	21.7
		Persistent at-risk-of-poverty (% of total population)	5.5	5.6	6.2	6.5	9.8 b	8.7	8.9	8.5	8.8	8.1	9.1	10.2
		At-risk-of-poverty before social transfers excl. pensions (% of total population)	24.7	25.9 b	25.3	26.0	27.1	25.8	25.9	25.4	25.6	26.3	24.9	25.2
		Impact of social transfers (excl. pensions) in reducing poverty (%)	51.4	41.3 b	42.7	43.5	46.5	44.2	44.4	44.5	45.7	46.4	42.2	43.3
		Severe Material Deprivation (% of total population)	3.3	5.9	4.6	4.3	4.0	4.0	4.2	4.0	3.6	3.0	3.7	2.8
		Share of people living in low work intensity households (% of people aged 0-59)	8.2	7.4 b	7.1	7.8	8.6	7.7	7.8	9.1	8.2	8.1	8.3	7.3
		Real Gross Household Disposable income (growth %)	2.2	1.0	-0.2	-0.8	-0.5	1.5	-1.8	0.3	0.3	2.5		
		Income quintile share ratio S80/S20	3.8	4.2 b	4.2	4.3	4.1	4.2	4.1	4.1	4.0	4.1	4.3	4.0
		GINI coefficient	26.2	27.7 b	27.5	28.3	27.4	27.6	27.0	27.6	27.2	27.2	27.9	26.8
		Early leavers from education and training (% of population aged 18-24)	10.8	10.2	8.8	8.3	8.5	7.8	7.5	7.0 b	7.3	6.9	7.4	7.3
		NEET: Young people neither in employment nor in education and training (% of total population aged 15-24)	7.4 b	7.4	8.2	7.4	7.3	6.8	7.3	7.7	7.5	7.7	6.5	6.8
	Male	At-risk-of-poverty or social exclusion (% of male population)	14.5	18.9 b	17.6	17.3	17.9	17.3	17.4	17.7	17.5	16.9	16.8	16.2
		At-risk-of-poverty (% of male population)	10.6	14.2	13.8	13.4	14.0	13.5	13.5	13.3	13.5	13.5	13.5	13.3
		Poverty gap (%)	18.7	21.0 b	19.1	22.2	19.1	20.4	22.7	19.9	20.8	20.6	22.8	22.5
		Persistent at-risk-of-poverty (% of male population)	3.5	4.9	4.4	5.8	8.5 b	7.5	7.9	6.6	8.1	8.0	7.8	9.4
		Severe Material Deprivation (% of male population)	3.1	5.5	4.2	3.9	3.6	3.8	4.3	3.8	3.8	2.9	3.6	2.7
		Share of people living in low work intensity households (% of males aged 0-59)	6.6	6.1 b	5.5	6.7	7.5	6.7	7.0	7.8	7.3	7.5	7.5	6.9
Life expectancy at birth (years)		77.4	77.7 b	77.6	77.8	78.3	78.4	78.6	79.1	78.8	79.3	79.4		
Healthy life years at birth (years) - men		58.7	58.5 b	59.5	59.4	59.5	60.2	59.7	57.6	57.9	57.0	57.4		
Early leavers from education and training (% of males aged 18-24)		11.5	10.4	8.6	8.4	9.0	8.0	7.9	7.6 b	7.8	7.7	9.0	8.9	
NEET: Young people neither in employment nor in education and training ( % of males aged 15-24)		7.0 b	6.8	7.7	7.2	7.3	6.6	7.2	8.0	7.7	8.0	7.0	6.6	
Female	At-risk-of-poverty or social exclusion (% of female population)	18.9	22.3 b	20.5	20.5	20.3	19.6	20.1	20.5	19.1	18.9	19.3	18.7	
	At-risk-of-poverty (% of female population)	13.3	16.1	15.3	15.8	15.0	15.3	15.2	14.9	14.3	14.6	15.3	15.2	
	Poverty gap (%)	15.9	18.7 b	19.2	21.6	19.1	20.0	20.7	20.1	19.6	18.7	22.1	20.9	
	Persistent at-risk-of-poverty (% of female population)	7.3	6.3	7.9	7.1	11.0 b	9.9	10.0	10.4	9.6	8.2	10.4	11.0	
	Severe Material Deprivation (% of female population)	3.5	6.3	4.9	4.6	4.4	4.2	4.2	4.2	3.3	3.1	3.9	2.9	
	Share of people living in low work intensity households (% of females aged 0-59)	9.8	8.6 b	8.7	8.9	9.7	8.7	8.5	10.5	9.1	8.8	9.2	7.8	
	Life expectancy at birth (years)	83.1	83.3 b	83.2	83.5	83.8	83.6	83.8	84.0	83.7	84.1	84.0		
	Healthy life years at birth (years) - women	61.4	59.9 b	60.8	60.8	60.1	62.5	60.2	57.8	58.1	57.1	56.8		
	Early leavers from education and training (% of females aged 18-24)	10.2	9.9	8.9	8.3	8.0	7.6	7.1	6.5 b	6.8	6.0	5.8	5.7	
	NEET: Young people neither in employment nor in education and training ( % of females aged 15-24)	7.9 b	8.0	8.7	7.7	7.2	7.0	7.4	7.4	7.3	7.4	6.0	7.1	
Children (0-17)	At-risk-of-poverty or social exclusion of children (% of people aged 0-17)	18.5	22.9 b	20.8	22.4	22.1	20.9	22.9	23.3	22.3	20.0	23.0	21.6	
	At-risk-of-poverty (% of Children population)	14.8	18.1	17.1	19.0	17.8	17.5	18.6	18.2	17.8	16.5	19.1	19.2	
	Severe Material Deprivation (% of Children population)	3.7	6.7	5.0	5.6	5.8	5.8	6.4	6.0	4.2	3.5	5.3	3.6	
	Share of children living in low work intensity households (% of Children population)	6.3	5.5 b	5.7	5.9	7.0	6.1	7.2	8.6	7.5	6.5	7.6	6.1	
	Risk of poverty of children in households at work (Working Intensity > 0.2)	11.6	15.6 b	14.2	15.4	14.4	14.1	15.3	13.6	14.7	13.5	14.7	15.1	
	Impact of social transfers (excl. pensions) in reducing poverty (0-17) (%)	59.0	51.0 b	52.1	49.7	54.8	52.7	52.9	51.7	54.2	57.4	49.7	49.6	
Working age (18-64)	At-risk-of-poverty or social exclusion (% of working age population)	16.7	19.8 b	18.7	18.3	18.8	18.4	18.3	18.9	18.4	18.6	18.0	17.1	
	At-risk-of-poverty (% of Working age population)	10.6	13.3	13.0	12.9	13.1	13.3	12.9	12.9	13.0	13.6	13.5	13.0	
	Severe Material Deprivation (% of Working age population)	3.4	6.0	4.9	4.5	4.0	4.1	4.3	4.0	4.0	3.4	4.0	3.1	
	Very low work intensity (18-59)	8.8	8.0 b	7.5	8.4	9.1	8.2	7.9	9.3	8.4	8.7	8.6	7.7	
	In-work at-risk of poverty rate (% of persons employed 18-64)	6.1	8.5 b	8.2	7.5	7.6	8.2	7.9	7.2	7.8	8.3	7.7	8.0	
	Impact of social transfers (excl. pensions) in reducing poverty (18-64) (%)	54.5	44.1 b	45.2	47.1	48.6	45.5	46.3	46.9	47.6	47.5	43.8	45.6	
Elderly (65+)	At-risk-of-poverty or social exclusion of elderly (% of people aged 65+)	15.1	21.2 b	18.6	17.4	17.4	16.2	16.2	15.7	14.0	13.7	13.4	14.5	
	At-risk-of-poverty (% of Elderly population)	14.0	18.9	17.4	16.8	16.2	15.1	15.4	14.2	13.2	13.2	12.9	13.9	
	Severe Material Deprivation (% of Elderly population)	2.1	4.4	2.8	1.9	2.1	1.9	1.8	2.0	1.4	1.2	1.4	1.0	
	Relative median income of elderly (ratio with median income of people younger than 65)	0.93	0.88 b	0.89	0.90	0.92	0.93	0.95	0.95	0.98	0.97	0.97	0.95	
	Aggregate replacement ratio (ratio)	0.62	0.61 b	0.56	0.57	0.59	0.58	0.59	0.60	0.62	0.62	0.64	0.62	
Expenditure in social protection indicators (% of GDP)	Sickness/Health care	6.8	7.0	7.4	7.3	7.2	7.3	7.3	7.3	7.4	7.4			
	Disability	2.0	2.0	2.1	2.1	2.1	2.1	2.1	2.0	1.9	1.8			
	Old age and survivors	12.7	13.0	14.0	14.1	13.9	14.2	14.5	14.7	14.7	14.5			
	Family/Children	2.8	2.9	3.1	3.1	2.8	2.8	2.8	2.7	2.8	2.8			
	Unemployment	1.4	1.3	1.6	1.6	1.5	1.5	1.6	1.6	1.6	1.7			
	Housing and Social exclusion n.e.c.	0.5	0.5	0.5	0.5	0.5	0.5	0.6	0.6	0.7	0.9			
	Total (including Admin and Other expenditures)	27.0	27.6	29.6	29.6	28.8	29.2	29.6	29.8	29.8	29.9			
	of which: Means tested benefits	2.0	2.1	2.3	2.4	2.3	2.3	2.4	2.5	2.6	2.8			

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## Poland

Poland		2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018
Macro Economic Indicators (Annual % growth)	Real GDP	7.0	4.2	2.8	3.6	5.0	1.6	1.4	3.3	3.8	3.1	4.8	5.1
	Total employment	4.5	3.8	0.4	-2.7 b	0.6	0.1	-0.1	1.7	1.5	0.8	1.3	0.3 p
	Labour productivity	2.4	0.4	2.4	6.4 b	4.4	1.5	1.5	1.6	2.3	2.2	3.4	4.8 p
	Annual average hours worked per person employed	-0.1	-0.4	-0.8	-0.3 b	-0.3 b	-0.3	-0.2	0.3	0.4	0.1	-1.1	-1.4 p
	Real productivity per hour worked	2.6	0.8	3.2	6.7 b	4.7	1.8	1.6	1.2	1.9	2.1	4.6	6.2 p
	Harmonized CPI	2.6	4.2	4.0	2.6	3.9	3.7	0.8	0.1	-0.7	-0.2	1.6	1.2
	Price deflator GDP	3.7	3.9	3.8	1.7	3.2	2.3	0.3	0.5	0.8	0.3	2.0	1.1
	Nominal compensation per employee	5.7	8.3	3.4	8.9 b	5.3 b	3.6	1.7	2.2	1.7	4.8	5.8	7.8 p
	Real compensation per employee (GDP deflator)	2.0	4.2	-0.4	7.2 b	2.0 b	1.2	1.4	1.7	0.9	4.5	3.7	6.6 p
	Real compensation per employee (private consumption deflator)	3.1	3.9	-0.6	6.1 b	1.4 b	-0.1	0.9	2.1	2.4	5.0	4.1	6.5 p
	Nominal unit labour costs	3.2	7.8	0.9	2.4 b	0.8	2.0	0.2	0.6	-0.6	2.5	2.3	2.8 p
	Real unit labour costs	-0.5	3.8	-2.7	0.7 b	-2.4 b	-0.3	-0.1	0.1	-1.3	2.2	0.3	1.7 p
Labour Market Indicators - Total	Total population (000)	38125	38116	38136	38023 b	38063	38064	38063	38018	38006	37967	37973	37977
	Population aged 15-64 (000)	26987	27083	27160	27044	27077	26986	26843	26639	26431	26199	25957	25693
	Total employment (000)	15241	15800	15868	15473 b	15562	15591	15568	15862	16084	16197	16423	16484
	Employment aged 15-64 (000)	14997	15557	15630	15233 b	15313	15340	15313	15591	15812	15902	16079	16133
	Employment rate (% population aged 20-64)	62.7	65.0	64.9	64.3 b	64.5	64.7	64.9	66.5	67.8	69.3	70.9	72.2
	Employment rate (% population aged 15-64)	57.0	59.2	59.3	58.9 b	59.3	59.7	60.0	61.7	62.9	64.5	66.1	67.4
	Employment rate (% population aged 15-24)	25.8	27.3	26.8	26.4 b	24.9	24.7	24.2	25.8	26.0	28.4	29.6	31.0
	Employment rate (% population aged 25-54)	74.9	77.5	77.6	77.2 b	77.3	77.2	77.0	78.4	79.5	80.3	81.4	82.4
	Employment rate (% population aged 55-64)	29.7	31.6	32.3	34.1 b	36.9	38.7	40.6	42.5	44.3	46.2	48.3	48.9
	FTE employment rate (% population aged 20-64)	61.7	64.1	64.0	63.4 b	63.7	64.0	64.2	65.8	67.0	68.6	70.2	71.4
	Self-employed (% total employment)	19.2	18.8	18.8	19.1 b	19.1	18.9	18.5	18.3	18.3	18.1	17.8	17.9
	Part-time employment (% total employment)	8.5	7.7	7.7	7.7 b	7.3	7.2	7.1	7.1	6.8	6.4	6.6	6.4
	Temporary employment (% total employment)	21.8	20.9	20.6	21.1 b	20.9	20.9	21.1	22.4	22.2	21.9	20.9	19.5
	Employment in Services (% total employment)		54.4 b	55.8	56.8 b	56.6	57.1	57.5	58.0	58.0	58.0	58.2	58.7
	Employment in Industry (% total employment)		32.3 b	31.4	30.6 b	31.0	30.7	30.8	30.8	30.7	31.6	31.8	31.9
	Employment in Agriculture (% total employment)		13.3 b	12.7	12.6 b	12.4	12.2	11.7	11.2	11.3	10.4	10.0	9.4
	Activity rate (% population aged 15-64)	63.2	63.8	64.7	65.3 b	65.7	66.5	67.0	67.9	68.1	68.8	69.6	70.1
	Activity rate (% population aged 15-24)	33.0	33.1	33.8	34.6 b	33.5	33.6	33.3	33.9	32.8	34.5	34.8	35.1
	Activity rate (% population aged 25-54)	81.7	82.5	83.4	84.1 b	84.2	84.6	84.6	85.1	85.1	84.9	84.9	85.2
	Activity rate (% population aged 55-64)	31.8	33.3	34.5	36.7 b	39.6	41.8	44.0	45.6	46.9	48.3	50.1	50.3
	Total unemployment (000)	1579	1165	1359 d	1650	1659	1749	1793	1567	1304	1063	844	659
	Unemployment rate (% labour force)	9.6	7.1	8.1 d	9.7	9.7	10.1	10.3	9.0	7.5	6.2	4.9	3.9
	Youth unemployment rate (% labour force 15-24)	21.6	17.2	20.6 d	23.7	25.8	26.5	27.3	23.9	20.8	17.7	14.8	11.7
	Long term unemployment rate (% labour force)	4.9	2.4	2.5	3.0 b	3.6	4.1	4.4	3.8	3.0	2.2	1.5	1.0
	Share of long term unemployment (% of total unemployment)	51.3	33.5	30.3	31.1 b	37.2	40.3	42.5	42.7	39.3	35.0	31.0	26.9
	Youth unemployment ratio (% population aged 15-24)	7.1	5.7	7.0	8.2 b	8.6	8.9	9.1	8.1	6.8	6.1	5.2	4.1
	Employment rate for low skilled 25-64 (ISCED 0-2)	41.0	43.0	41.6	39.9 b	39.7	39.8	38.5	39.3 b	40.8	40.7	41.8	43.1
	Employment rate for medium skilled 25-64 (ISCED 3-4)	65.2	67.1	66.3	65.4 b	65.8	65.4	65.2	66.1 b	67.2	68.5	69.6	70.4
	Employment rate for high skilled 25-64 (ISCED 5-8)	84.5	85.1	85.3	84.6 b	84.6	84.7	84.8	86.3 b	87.1	87.5	88.1	88.7
	Employment rate (Nationals aged 15-64)	57.0	59.2	59.3	58.9 b	59.3	59.7	60.0	61.7	62.9	64.5	66.1	67.4
	Employment rate (Other EU28 aged 15-64)	70.8 u	85.3 u	73.3 u	58.8 bu	75.3 u	74.5 u	70.7 u	73.9 u	79.0 u	64.3 u	79.8	86.4
	Employment rate (Other than EU28 aged 15-64)	62.6	63.5	61.9	60.5 b	57.1	61.9	56.7	62.4	57.4	59.4	68.9	72.1
	Employment rate (Born in the same country aged 15-64)	57.1	59.3	59.4	59.0 b	59.3	59.7	60.0	61.7	62.9	64.5	66.1	67.3
	Employment rate (Born in other EU28 aged 15-64)	34.2	40.3	34.2 u	41.9 bu	54.6 u	62.4 u	62.0 u	64.2	69.7	61.4 u	67.8	70.6
	Employment rate (Born outside EU28 aged 15-64)	38.7	45.5	51.7	54.8 b	55.6	61.6	58.0	62.5	58.0	63.0	70.3	73.5
	Underemployment (% of labour force aged 15-74)		1.5	1.7	1.8 b	1.8	2.0 b	2.1	2.2	1.9	1.6	1.4	1.1
	Seeking but not available (% of labour force aged 15-74)	0.8	0.6 b	0.6	0.7 b	0.6	0.6	0.5	0.6	0.6	0.6	0.5	0.4
	Discouraged, available but not seeking (% of labour force aged 15-74)	4.8	3.8	3.8	3.7 b	3.7	3.7	3.9	3.7	3.2	2.8	2.5	2.3

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Poland		2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018
Labour Market Indicators - Male	Total population (000)	18427	18412	18415	18412 b	18430	18427	18426	18404	18397	18377	18378	18380
	Population aged 15-64(000)	13406	13449	13485	13482	13496	13454	13388	13293	13196	13086	12974	12849
	Total employment (000)	8403	8718	8722	8566 b	8648	8651	8641	8778	8867	8933	9066	9077
	Employment aged 15-64 (000)	8258	8573	8578	8418 b	8496	8498	8486	8607	8690	8737	8842	8853
	Employment rate (% population aged 20-64)	70.2	73.0	72.6	71.3 b	71.9	72.0	72.1	73.6	74.7	76.4	78.2	79.4
	Employment rate (% population aged 15-64)	63.6	66.3	66.1	65.3 b	66.0	66.3	66.6	68.2	69.2	71.0	72.8	74.0
	Employment rate (% population aged 15-24)	29.2	31.0	30.4	30.5 b	29.6	29.2	28.6	30.0	30.5	32.8	33.9	34.7
	Employment rate (% population aged 25-54)	81.1	84.0	83.7	82.5 b	83.0	82.9	82.7	83.9	84.9	86.1	87.3	88.1
	Employment rate (% population aged 55-64)	41.4	44.1	44.3	45.2 b	47.8	49.3	51.3	53.1	54.2	55.7	58.3	59.8
	FTE employment rate (% population aged 20-64)	70.3	73.3	72.8	71.6 b	72.1	72.4	72.6	74.1	75.0	76.8	78.7	79.9
	Self-employed (% total employment)	22.7	22.3	22.4	22.8 b	22.8	22.6	22.4	22.3	22.2	22.2	22.3	22.1
	Part-time employment (% total employment)	5.8	5.1	5.0	5.0 b	4.7	4.5	4.5	4.4	4.2	3.7	3.7	3.8
	Temporary employment (% total employment)	21.4	19.9	19.9	20.6 b	20.7	20.6	20.7	21.8	21.4	21.0	19.7	18.0
	Employment in Services (% total employment)		42.8 b	43.9	44.9 b	44.5	44.7	44.9	45.6	45.5	45.1	45.2	45.8
	Employment in Industry (% total employment)		43.8 b	43.3	42.2 b	42.5	42.4	42.6	42.2	42.3	43.6	43.7	43.8
	Employment in Agriculture (% total employment)		13.4 b	12.8	12.9 b	13.0	12.9	12.5	12.2	12.3	11.4	11.1	10.4
	Activity rate (% population aged 15-64)	70.0	70.9	71.8	72.1 b	72.6	73.3	73.9	74.6	74.8	75.7	76.6	77.0
	Activity rate (% population aged 15-24)	36.5	36.5	38.1	39.3 b	38.7	38.5	38.4	38.8	38.4	39.8	39.7	39.2
	Activity rate (% population aged 25-54)	87.9	88.8	89.4	89.6 b	89.7	90.0	90.0	90.5	90.6	90.8	91.1	91.0
	Activity rate (% population aged 55-64)	44.7	46.8	47.5	48.9 b	51.6	53.5	55.9	57.2	57.5	58.6	60.8	61.9
	Total unemployment (000)	817	583	716 d	881	856	900	927	815	701	581	464	363
	Unemployment rate (% labour force)	9.0	6.4	7.8 d	9.4	9.0	9.4	9.7	8.5	7.3	6.1	4.9	3.9
	Youth unemployment rate (% labour force 15-24)	20.0	15.2	20.2 d	22.4	23.6	24.1	25.4	22.7	20.7	17.4	14.6	11.5
	Long term unemployment rate (% labour force)	4.6	2.0	2.2	2.9 b	3.3	3.7	4.0	3.7	2.9	2.2	1.6	1.0
	Share of long term unemployment (% of total unemployment)	50.8	31.8	27.9	30.8 b	36.3	39.0	41.5	42.9	39.6	35.8	31.9	27.0
	Youth unemployment ratio (% population aged 15-24)	7.3	5.6	7.7	8.8 b	9.1	9.3	9.7	8.8	7.9	6.9	5.8	4.5
	Employment rate for low skilled 25-64 (ISCED 0-2)	51.8	55.0	53.4	49.5 b	49.2	49.6	49.0	49.7 b	51.5	51.9	52.9	54.0
	Employment rate for medium skilled 25-64 (ISCED 3-4)	73.9	76.1	75.1	74.0 b	74.7	74.3	74.2	75.2 b	76.1	77.5	78.9	80.0
	Employment rate for high skilled 25-64 (ISCED 5-8)	88.3	89.2	89.9	88.6 b	88.9	89.1	89.5	90.9 b	91.5	92.1	93.2	93.4
	Employment rate (Nationals aged 15-64)	63.6	66.3	66.1	65.3 b	66.0	66.3	66.6	68.2	69.2	71.0	72.8	74.0
	Employment rate (Other EU28 aged 15-64)	77.2 u	89.0 u	82.0 u		83.3 u	84.7 u	83.6 u	82.3 u	84.6 u	71.6 u	84.5 u	93.0 u
	Employment rate (Other than EU28 aged 15-64)	68.1 u	66.0 u	68.3 u	75.4 bu	70.5 u	73.7 u	71.8 u	70.2 u	70.2	72.3	74.7	77.4
	Employment rate (Born in the same country aged 15-64)	63.7	66.4	66.2	65.3 b	66.0	66.3	66.6	68.2	69.2	71.0	72.8	74.0
	Employment rate (Born in other EU28 aged 15-64)	43.4 u	50.6 u	43.3 u	44.8 bu	59.8 u	69.8 u	73.9 u	72.4 u	71.7 u	61.6 u	73.2 u	79.4 u
	Employment rate (Born outside EU28 aged 15-64)	51.9 u	51.9	60.9 u	68.4 bu	65.0 u	72.0 u	66.8	71.9	73.7	76.5	75.5	78.6
	Underemployment (% of labour force aged 15-74)		1.1	1.2	1.3 b	1.3	1.4 b	1.4	1.4	1.3	1.1	0.9	0.8
	Seeking but not available (% of labour force aged 15-74)	0.6	0.5 b	0.5	0.5 b	0.5	0.5	0.4	0.4	0.5	0.5	0.4	0.3
	Discouraged, available but not seeking (% of labour force aged 15-74)	3.8	3.0	3.0	3.0 b	3.0	3.0	3.2	3.0	2.6	2.3	2.2	2.0
Labour Market Indicators - Female	Total population (000)	19699	19704	19721	19611 b	19633	19636	19636	19614	19608	19590	19595	19596
	Population aged 15-64(000)	13580	13634	13675	13562	13580	13531	13455	13346	13235	13112	12983	12843
	Total employment (000)	6838	7082	7147	6908 b	6914	6940	6927	7084	7217	7264	7357	7407
	Employment aged 15-64 (000)	6738	6984	7052	6815 b	6817	6842	6828	6984	7121	7165	7237	7281
	Employment rate (% population aged 20-64)	55.5	57.3	57.6	57.3 b	57.2	57.5	57.6	59.4	60.9	62.2	63.6	65.0
	Employment rate (% population aged 15-64)	50.6	52.4	52.8	52.6 b	52.7	53.1	53.4	55.2	56.6	58.1	59.5	60.8
	Employment rate (% population aged 15-24)	22.4	23.7	23.2	22.1 b	20.0	19.9	19.5	21.3	21.3	23.7	25.2	27.0
	Employment rate (% population aged 25-54)	68.8	71.0	71.6	71.7 b	71.5	71.5	71.2	72.7	73.9	74.5	75.3	76.5
	Employment rate (% population aged 55-64)	19.4	20.7	21.9	24.2 b	27.2	29.2	31.0	32.9	35.5	37.6	39.3	39.1
	FTE employment rate (% population aged 20-64)	53.6	55.4	55.7	55.4 b	55.5	55.8	56.0	57.6	59.2	60.5	61.8	63.2
	Self-employed (% total employment)	15.0	14.5	14.3	14.5 b	14.6	14.2	13.7	13.3	13.4	13.0	12.3	12.7
	Part-time employment (% total employment)	11.7	10.9	10.9	10.9 b	10.5	10.6	10.4	10.3	9.9	9.7	10.0	9.7
	Temporary employment (% total employment)	22.3	22.2	21.4	21.8 b	21.1	21.3	21.6	23.2	23.1	23.1	22.5	21.2
	Employment in Services (% total employment)		68.7 b	70.4	71.6 b	71.6	72.5	73.2	73.4	73.3	73.8	74.0	74.3
	Employment in Industry (% total employment)		18.1 b	17.0	16.2 b	16.7	16.2	16.2	16.6	16.5	16.9	17.3	17.5
	Employment in Agriculture (% total employment)		13.2 b	12.6	12.2 b	11.8	11.3	10.6	10.0	10.2	9.3	8.7	8.2
	Activity rate (% population aged 15-64)	56.5	57.0	57.8	58.5 b	58.9	59.7	60.1	61.1	61.4	62.0	62.6	63.3
	Activity rate (% population aged 15-24)	29.3	29.6	29.4	29.6 b	28.1	28.4	27.9	28.7	28.9	28.9	29.7	30.7
	Activity rate (% population aged 25-54)	75.6	76.3	77.5	78.6 b	78.6	79.1	79.1	79.6	79.6	79.0	78.7	79.3
	Activity rate (% population aged 55-64)	20.6	21.6	23.2	25.9 b	29.0	31.3	33.3	35.2	37.3	39.0	40.5	39.9
	Total unemployment (000)	763	582	644 d	769	802	850	866	752	603	482	380	296
	Unemployment rate (% labour force)	10.3	7.9	8.6 d	10.0	10.4	10.9	11.1	9.6	7.7	6.2	4.9	3.9
	Youth unemployment rate (% labour force 15-24)	23.7	19.7	21.1 d	25.4	28.8	30.0	30.1	25.5	20.9	18.0	15.1	12.1
	Long term unemployment rate (% labour force)	5.4	2.8	2.9	3.2 b	4.0	4.6	4.8	4.1	3.0	2.1	1.5	1.0
	Share of long term unemployment (% of total unemployment)	51.8	35.1	33.0	31.5 b	38.2	41.8	43.5	42.6	38.8	34.0	30.0	26.7
	Youth unemployment ratio (% population aged 15-24)	7.0	5.9	6.2	7.5 b	8.1	8.5	8.4	7.3	5.6	5.2	4.5	3.7
	Employment rate for low skilled 25-64 (ISCED 0-2)	31.6	32.4	31.1	30.8 b	30.7	30.2	28.3	29.0 b	29.8	29.3	30.4	31.5
	Employment rate for medium skilled 25-64 (ISCED 3-4)	56.1	57.4	56.9	56.0 b	55.8	55.4	55.0	55.9 b	57.1	58.0	58.7	59.0
	Employment rate for high skilled 25-64 (ISCED 5-8)	81.7	82.2	82.1	81.8 b	81.6	81.5	81.6	83.0 b	84.1	84.3	84.6	85.5
	Employment rate (Nationals aged 15-64)	50.6	52.4	52.7	52.6 b	52.7	53.1	53.4	55.2	56.6	58.1	59.4	60.8
	Employment rate (Other EU28 aged 15-64)											72.1 u	
	Employment rate (Other than EU28 aged 15-64)	58.2 u	61.4 u	57.9 u	49.2 bu	47.3 u	49.9 u	40.4 u	55.1 u	46.0 u	48.2	63.4	65.9
	Employment rate (Born in the same country aged 15-64)	50.7	52.4	52.8	52.6 b	52.7	53.1	53.4	55.2	56.6	58.1	59.4	60.8
	Employment rate (Born in other EU28 aged 15-64)		28.2 u								61.2 u	59.4 u	56.9 u
	Employment rate (Born outside EU28 aged 15-64)	29.4 u	39.8 u	45.8	45.6 bu	48.7 u	53.2 u	49.9 u	55.3	46.7	51.5	65.6	67.9
	Underemployment (% of labour force aged 15-74)		2.0	2.1	2.3 b	2.4	2.8 b	2.9	3.1	2.6	2.2	2.0	1.5
	Seeking but not available (% of labour force aged 15-74)	0.9	0.8 b	0.8	0.8 b	0.8	0.7	0.7	0.7	0.7	0.7	0.7	0.6
	Discouraged, available but not seeking (% of labour force aged 15-74)	6.1	4.8	4.7	4.5 b	4.4	4.5	4.8	4.7	4.0	3.4	3.0	2.6

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Poland		2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018
Social Indicators	All	At-risk-of-poverty or social exclusion (% of total population)	34.4	30.5 b	27.8	27.8	27.2	26.7	25.8	24.7	23.4	21.9	19.5
		At-risk-of-poverty (% of total population)	17.3	16.9	17.1	17.6	17.7	17.1	17.3	17.0	17.6	17.3	15.0
		At-risk-of-poverty threshold (PPS single person)	3365	4039	4417	4547	4993	5181	5495	5736	5970	6519	6635
		Poverty gap (%)	24.0	20.6	22.7	22.2	21.4	22.2	22.6	23.2	22.3	24.4	23.6
		Persistent at-risk-of-poverty (% of total population)		10.4	10.2	10.5	10.1	10.7	9.0	10.7	10.1	9.7	9.1
		At-risk-of-poverty before social transfers excl. pensions (% of total population)	26.5	25.1	23.6	24.4	24.1	22.9	23.0	23.1	22.9	22.9	24.0
		Impact of social transfers (excl. pensions) in reducing poverty (%)	34.7	32.7	27.5	27.9	26.6	25.3	24.8	26.4	23.1	24.5	37.5
		Severe Material Deprivation (% of total population)	22.3	17.7	15.0	14.2	13.0	13.5	11.9	10.4	8.1	6.7	5.9
		Share of people living in low work intensity households (% of people aged 0-59)	10.1	8.0	6.9	7.3	6.9	6.9	7.2	7.3	6.9	6.4	5.7
		Real Gross Household Disposable income (growth %)	5.1	4.4	5.9	2.1	0.4	1.1	1.4	2.9	3.7	6.0	
		Income quintile share ratio S80/S20	5.3	5.1	5.0	5.0	5.0	4.9	4.9	4.9	4.8	4.6	
		GINI coefficient	32.2	32.0	31.4	31.1	31.1	30.9	30.7	30.8	30.6	29.8	29.2
		Early leavers from education and training (% of population aged 18-24)	5.0	5.0 b	5.3	5.4 b	5.6	5.7	5.6 b	5.4 b	5.3	5.2	5.0
		NEET: Young people neither in employment nor in education and training (% of total population aged 15-24)	10.6	9.0	10.1	10.8 b	11.5	11.8	12.2	12.0	11.0	10.5	9.5
													8.7
	Male	At-risk-of-poverty or social exclusion (% of male population)	33.5	29.9 b	27.0	27.0	26.6	26.1	25.5	24.7	23.7	21.6	19.3
		At-risk-of-poverty (% of male population)	17.6	17.0	16.9	17.4	17.8	17.1	17.3	17.2	18.1	17.1	15.1
		Poverty gap (%)	25.4	21.5	23.7	23.3	22.8	23.3	23.4	24.4	24.1	25.6	25.5
		Persistent at-risk-of-poverty (% of male population)		10.7	10.4	10.2	10.4	10.4	9.1	10.8	10.0	9.7	9.7
		Severe Material Deprivation (% of male population)	21.9	17.6	14.6	14.1	12.9	13.2	11.8	10.6	8.5	6.7	5.8
		Share of people living in low work intensity households (% of males aged 0-59)	9.5	7.3	6.4	6.7	6.4	6.5	6.9	7.1	6.8	6.1	5.5
		Life expectancy at birth (years)	71.0	71.3	71.5	72.2	72.6	72.6	73.0	73.7	73.5	73.9	73.9
		Healthy life years at birth (years) - men	57.6	58.6	58.3	58.5	59.1	59.1	59.2	59.8	60.1	61.3	60.6
		Early leavers from education and training (% of males aged 18-24)	6.2	6.1 b	6.6	7.2 b	7.4	7.8	7.9 b	7.3 b	7.2	6.4	6.0
		NEET: Young people neither in employment nor in education and training (% of males aged 15-24)	9.3	7.3	9.4	10.5 b	11.2	11.5	12.1	12.0	11.2	10.0	8.3
													7.3
	Female	At-risk-of-poverty or social exclusion (% of female population)	35.1	31.2 b	28.6	28.5	27.7	27.3	26.2	24.7	23.2	22.2	19.6
		At-risk-of-poverty (% of female population)	17.1	16.7	17.4	17.7	17.6	17.1	17.3	16.8	17.2	17.4	14.9
		Poverty gap (%)	22.8	20.0	21.8	21.0	20.3	21.2	21.9	22.3	21.1	22.9	22.1
		Persistent at-risk-of-poverty (% of female population)		10.2	10.1	10.7	9.9	11.0	9.0	10.6	10.2	9.7	8.7
		Severe Material Deprivation (% of female population)	22.7	17.9	15.3	14.4	13.2	13.8	12.0	10.2	7.8	6.6	6.0
		Share of people living in low work intensity households (% of females aged 0-59)	10.7	8.6	7.4	8.0	7.4	7.2	7.4	7.5	7.1	6.8	5.8
		Life expectancy at birth (years)	79.8	80.0	80.1	80.7	81.1	81.2	81.7	81.6	82.0	81.8	
		Healthy life years at birth (years) - women	61.5	63.0	62.5	62.3	63.3	62.8	62.7	63.2	64.6	63.5	
		Early leavers from education and training (% of females aged 18-24)	3.8	3.9 b	3.9	3.5 b	3.7	3.5	3.2 b	3.3 b	3.2	3.9	3.9
		NEET: Young people neither in employment nor in education and training (% of females aged 15-24)	11.9	10.8	10.8	11.0 b	11.8	12.2	12.3	12.0	10.8	11.1	10.7
													10.1
	Children (0-17)	At-risk-of-poverty or social exclusion of children (% of people aged 0-17)	37.1	32.9 b	31.0	30.8	29.8	29.3	29.8	28.2	26.6	24.2	17.9
		At-risk-of-poverty (% of Children population)	24.2	22.4	23.0	22.5	22.0	21.5	23.2	22.3	22.4	21.1	14.0
		Severe Material Deprivation (% of Children population)	22.5	17.5	15.3	14.9	13.2	13.7	11.8	10.2	7.9	5.8	4.6
		Share of children living in low work intensity households (% of Children population)	6.6	5.0	4.7	4.8	4.1	4.6	5.0	5.1	5.0	4.9	4.1
		Risk of poverty of children in households at work (Working Intensity > 0.2)	20.8	19.8	20.3	19.4	19.7	18.8	20.3	19.5	19.5	18.2	11.8
		Impact of social transfers (excl. pensions) in reducing poverty (0-17) (%)	29.9	31.1	23.6	26.7	26.9	25.6	22.4	24.2	20.6	24.6	52.9
	Working age (18-64)	At-risk-of-poverty or social exclusion (% of working age population)	34.9	30.6 b	27.3	27.6	27.0	26.7	26.1	25.2	24.1	22.7	20.4
		At-risk-of-poverty (% of Working age population)	17.2	16.3	16.0	16.9	17.1	16.5	16.7	16.7	17.6	17.3	15.6
		Severe Material Deprivation (% of Working age population)	21.9	17.2	14.4	13.6	12.5	13.2	12.0	10.5	8.2	7.1	6.2
		Very low work intensity (18-59)	11.2	8.9	7.6	8.1	7.8	7.6	7.8	8.0	7.6	6.9	6.2
		In-work at-risk-of poverty rate (% of persons employed 18-64)	11.7	11.5	11.0	11.5	11.2	10.4	10.8	10.7	11.3	10.9	9.9
		Impact of social transfers (excl. pensions) in reducing poverty (18-64) (%)	36.5	34.5	30.4	29.9	28.2	27.0	26.8	28.3	24.8	26.1	35.5
	Elderly (65+)	At-risk-of-poverty or social exclusion of elderly (% of people aged 65+)	27.3	26.9 b	25.8	24.4	24.7	23.4	19.7	18.2	17.0	16.1	17.4
		At-risk-of-poverty (% of Elderly population)	7.8	11.7	14.4	14.2	14.7	14.0	12.3	11.7	12.1	12.8	13.8
		Severe Material Deprivation (% of Elderly population)	23.7	20.8	17.3	16.5	15.4	14.8	11.5	9.7	7.9	5.9	6.2
		Relative median income of elderly (ratio with median income of people younger than 65)	1.04	0.97	0.92	0.93	0.94	0.95	0.98	0.99	0.99	0.97	0.93
		Aggregate replacement ratio (ratio)	0.58	0.56	0.56	0.57	0.55	0.58	0.60	0.63	0.62	0.62	0.62
Expenditure in social protection indicators (% of GDP)		Sickness/Health care	3.9 p	4.4 p	4.6 p	4.4 p	4.2	4.1	4.4	4.3	4.5	4.6	
		Disability	1.8 p	1.7 p	1.6 p	1.7 p	1.6	1.6	1.6	1.5	1.5	1.3	
		Old age and survivors	10.7 p	10.9 p	11.7 p	11.1 p	10.6	10.9	11.3	11.2	11.1	11.1	
		Family/Children	0.9 p	1.2 p	1.3 p	1.3 p	1.3	1.3	1.4	1.4	1.5	2.5	
		Unemployment	0.4 p	0.4 p	0.4 p	0.4 p	0.3	0.3	0.3	0.2	0.2	0.2	
		Housing and Social exclusion n.e.c.	0.3 p	0.2 p	0.2 p	0.3 p	0.2	0.2	0.2	0.2	0.2	0.2	
		Total (including Admin and Other expenditures)	18.4 p	19.3 p	20.3 p	19.7 p	18.7	18.9	19.6	19.3	19.4	20.3	
		of which: Means tested benefits	0.9 p	0.8 p	0.7 p	0.7 p	0.6	0.7	0.8	0.7	0.7	0.9	

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## Portugal

Portugal		2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018
Macro Economic Indicators (Annual % growth)	Real GDP	2.5	0.2	-3.0	1.9	-1.8	-4.0	-1.1	0.9	1.8	1.9	2.8 p	2.1 e
	Total employment	0.0	0.4	-2.7	-1.4	-1.9	-4.1	-2.9	1.4	1.4	1.6	3.3 p	2.3 e
	Labour productivity	2.5	-0.2	-0.3	3.4	0.1	0.1	1.8	-0.5	0.4	0.3	-0.5 p	-0.2 e
	Annual average hours worked per person employed	0.9	-0.7	0.0	0.1	-1.2	-0.9	0.6	0.4	0.4	0.2	0.1 p	-0.3 ep
	Real productivity per hour worked	1.6	0.5	-0.3	3.2	1.4	1.0	1.2	-0.9	0.0	0.1	-0.6 p	0.1 e
	Harmonized CPI	2.4	2.7	-0.9	1.4	3.6	2.8	0.4	-0.2	0.5	0.6	1.6	1.2
	Price deflator GDP	3.0	1.7	1.1	0.6	-0.3	-0.4	2.3	0.8	2.0	1.8	1.5 p	1.4 e
	Nominal compensation per employee	3.5	2.6	2.4	2.1	-1.9	-3.1	3.6	-1.8	0.4	1.7	1.6 p	2.0 ep
	Real compensation per employee (GDP deflator)	0.5	0.9	1.3	1.4	-1.6	-2.7	1.3	-2.5	-1.6	0.0	0.1 p	0.6 ep
	Real compensation per employee (private consumption deflator)	1.0	0.0	3.3	0.7	-5.2	-5.7	3.2	-1.6	-0.1	1.1	0.0 p	0.8 ep
	Nominal unit labour costs	1.0	2.8	2.7	-1.2	-2.0	-3.2	1.8	-1.3	0.0	1.4	2.1 p	2.2 e
	Real unit labour costs	-2.0	1.1	1.6	-1.9	-1.7	-2.8	-0.5	-2.0	-2.0	-0.3	0.5 p	0.7 ep
Labour Market Indicators - Total	Total population (000)	10533	10553	10563	10573	10573	10542	10487	10427	10375	10341	10310	10291
	Population aged 15-64 (000)	7028	7039	7034	7025	7001	6962	6904	6836	6779	6740	6691	6654
	Total employment (000)	5093	5117	4969	4898	4740 b	4547	4429	4500	4549	4605	4757	4867
	Employment aged 15-64 (000)	4756	4786	4645	4577	4453 b	4256	4158	4255	4309	4371	4515	4615
	Employment rate (% population aged 20-64)	72.5	73.1	71.1	70.3	68.8 b	66.3	65.4	67.6	69.1	70.6	73.4	75.4
	Employment rate (% population aged 15-64)	67.6	68.0	66.1	65.3	63.8 b	61.4	60.6	62.6	63.9	65.2	67.8	69.7
	Employment rate (% population aged 15-24)	34.4	34.1	30.8	27.9	26.6 b	23.0	21.7	22.4	22.8	23.9	25.9	27.2
	Employment rate (% population aged 25-54)	80.9	81.6	79.7	79.2	77.8 b	75.5	74.6	77.4	78.8	80.2	82.5	84.3
	Employment rate (% population aged 55-64)	51.0	50.7	49.7	49.5	47.8 b	46.5	46.9	47.8	49.9	52.1	56.2	59.2
	FTE employment rate (% population aged 20-64)	70.5	71.3	69.3	68.4	65.9 b	63.0	62.3	64.8	66.3	68.1	71.0	73.3
	Self-employed (% total employment)	23.7	23.4	23.2	22.2	20.9 b	21.4	21.3	19.2	17.9	17.1	16.5	16.2
	Part-time employment (% total employment)	8.9	8.8	8.5	8.5	10.3 b	11.2	11.1	10.1	9.8	9.5	8.9	8.1
	Temporary employment (% total employment)	17.8	18.3	17.7	18.6	18.2 b	16.9	17.6	18.0	18.7	19.1	19.0	19.0
	Employment in Services (% total employment)		62.1 b	63.3	64.1	65.3 b	66.7	68.5	69.6	69.9	70.2	70.4	70.5
	Employment in Industry (% total employment)		30.7 b	29.5	28.8	28.2 b	26.5	24.9	24.9	25.3	25.4	25.6	25.7
	Employment in Agriculture (% total employment)		7.2 b	7.3	7.1	6.5 b	6.8	6.6	5.5	4.8	4.5	4.0	3.8
	Activity rate (% population aged 15-64)	73.9	73.9	73.4	73.7	73.6 b	73.4	73.0	73.2	73.4	73.7	74.7	75.1
	Activity rate (% population aged 15-24)	41.3	40.9	38.7	36.1	38.2 b	37.1	35.0	34.3	33.5	33.2	34.0	34.2
	Activity rate (% population aged 25-54)	87.7	88.0	87.8	88.7	88.4 b	88.5	88.3	88.6	88.8	89.1	89.6	89.8
	Activity rate (% population aged 55-64)	54.6	54.3	53.8	54.3	53.6 b	53.3	54.4	55.3	57.0	58.5	61.5	63.4
	Total unemployment (000)	494	476	574	645	688	835	855	729	648	571	465	363
	Unemployment rate (% labour force)	9.1	8.8	10.7	12.0	12.9	15.8	16.4	14.1	12.6	11.2	9.0	7.0
	Youth unemployment rate (% labour force 15-24)	21.4	21.6	25.3	28.2	30.2	38.0	38.1	34.7	32.0	28.2	23.8	20.3
	Long term unemployment rate (% labour force)	3.8	3.6	4.2	5.7	6.2 b	7.7	9.3	8.4	7.2	6.2	4.5	3.1
	Share of long term unemployment (% of total unemployment)	47.1	47.3	44.0	52.0	48.4 b	48.8	56.4	59.6	57.4	55.4	49.9	43.7
	Youth unemployment ratio (% population aged 15-24)	6.9	6.8	7.9	8.2	11.5 b	14.1	13.3	11.9	10.7	9.3	8.1	6.9
	Employment rate for low skilled 25-64 (ISCED 0-2)	71.4	71.6	68.9	68.1	65.7 b	62.9	61.6	63.0 b	64.3	65.5	68.4	70.0
	Employment rate for medium skilled 25-64 (ISCED 3-4)	80.0	80.7	80.2	79.9	79.3 b	76.0	75.8	77.6 b	78.7	79.4	81.8	83.7
	Employment rate for high skilled 25-64 (ISCED 5-8)	86.0	86.7	86.6	85.4	83.6 b	82.1	80.5	82.7 b	83.7	85.1	86.8	88.4
	Employment rate (Nationals aged 15-64)	67.5	67.8	66.1	65.3	63.8 b	61.5	60.8	62.7	64.0	65.3	67.8	69.7
	Employment rate (Other EU28 aged 15-64)	71.1	79.0	70.7	64.2	70.0 b	63.6	56.7	60.7	70.2	68.0	70.9	75.1
	Employment rate (Other than EU28 aged 15-64)	71.5	72.0	65.7	65.4	62.4 b	57.5	54.4	59.0	58.9	64.3	67.5	66.1
	Employment rate (Born in the same country aged 15-64)	67.2	67.5	65.7	64.9	63.4 b	60.9	60.4	62.2	63.5	64.7	67.2	69.1
	Employment rate (Born in other EU28 aged 15-64)	70.8	73.9	73.0	71.6	75.6 b	71.3	67.2	73.8	75.1	76.7	80.3	80.9
	Employment rate (Born outside EU28 aged 15-64)	73.4	73.9	68.8	68.0	66.5 b	64.9	61.1	64.2	65.5	68.1	72.0	73.1
	Underemployment (% of labour force aged 15-74)		1.8	1.7	1.8	4.0 b	4.8	5.0	4.8	4.7	4.4	3.9	3.3
	Seeking but not available (% of labour force aged 15-74)	0.2	0.2	0.2	0.2	0.6 b	0.5	0.5	0.5	0.5	0.4	0.5	0.4
	Discouraged, available but not seeking (% of labour force aged 15-74)	1.4	1.3	1.3	1.3	3.2 b	4.3	5.3	5.3	5.1	4.6	4.1	3.6

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Portugal		2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018
Labour Market Indicators - Male	Total population (000)	5064	5070	5066	5064	5054	5030	4996	4958	4924	4902	4882	4868
	Population aged 15-64(000)	3446	3450	3442	3435	3419	3395	3361	3321	3286	3262	3236	3216
	Total employment (000)	2725	2725	2612	2569	2487 b	2357	2288	2320	2334	2361	2442	2486
	Employment aged 15-64 (000)	2539	2542	2436	2390	2306 b	2177	2116	2164	2182	2210	2286	2327
	Employment rate (% population aged 20-64)	79.1	79.4	76.4	75.4	73.2 b	69.8	68.7	71.3	72.6	74.2	77.3	78.9
	Employment rate (% population aged 15-64)	73.6	73.8	70.8	69.8	67.7 b	64.5	63.5	65.8	66.9	68.3	71.1	72.7
	Employment rate (% population aged 15-24)	38.5	37.7	32.5	29.7	28.7 b	24.8	22.9	22.9	24.1	25.5	27.6	29.3
	Employment rate (% population aged 25-54)	87.2	87.6	84.7	84.1	81.7 b	78.6	77.1	80.6	81.8	83.0	85.6	87.5
	Employment rate (% population aged 55-64)	58.7	58.3	57.5	55.8	54.2 b	51.6	53.5	54.3	56.0	58.5	63.0	64.5
	FTE employment rate (% population aged 20-64)	78.9	79.6	76.3	74.8	71.5 b	67.6	66.6	69.3	70.8	72.6	76.0	77.9
	Self-employed (% total employment)	25.8	25.2	25.7	24.9	25.0 b	25.6	25.6	23.9	22.3	21.3	20.6	20.3
	Part-time employment (% total employment)	4.7	4.1	4.4	5.0	7.1 b	8.4	8.2	7.6	7.1	6.8	6.1	5.7
	Temporary employment (% total employment)	16.9	16.9	16.2	17.5	17.3 b	16.3	16.7	17.4	18.3	18.5	18.5	18.3
	Employment in Services (% total employment)		51.2 b	52.1	52.8	53.6 b	55.0	57.9	59.1	59.3	59.3	59.4	59.4
	Employment in Industry (% total employment)		42.2 b	40.8	39.7	39.2 b	37.1	34.1	34.0	34.7	34.9	35.2	35.4
	Employment in Agriculture (% total employment)		6.6 b	7.1	7.4	7.2 b	7.9	8.0	7.0	6.0	5.7	5.4	5.2
	Activity rate (% population aged 15-64)	79.2	79.2	78.2	77.8	78.0 b	77.3	76.5	76.7	76.7	77.2	77.9	78.1
	Activity rate (% population aged 15-24)	44.7	43.6	40.1	38.0	40.4 b	39.2	36.2	34.8	34.2	35.0	35.6	36.6
	Activity rate (% population aged 25-54)	92.9	93.2	92.5	92.7	92.4 b	92.1	91.1	91.6	91.7	91.9	92.3	92.6
	Activity rate (% population aged 55-64)	63.2	62.9	62.6	62.0	61.6 b	60.4	62.7	64.0	65.0	66.9	69.3	69.0
	Total unemployment (000)	249	246	309	331	349	434	436	363	324	289	225	174
	Unemployment rate (% labour force)	8.7	8.6	11.0	11.9	12.6	15.9	16.3	13.8	12.4	11.1	8.6	6.6
	Youth unemployment rate (% labour force 15-24)	18.9	19.0	24.6	27.3	29.0	36.7	36.7	33.9	29.7	27.4	22.5	19.7
	Long term unemployment rate (% labour force)	3.2	3.2	3.7	5.1	6.1 b	7.8	9.4	8.4	7.3	6.4	4.3	3.0
	Share of long term unemployment (% of total unemployment)	47.5	48.5	40.6	51.4	48.0 b	48.9	57.6	60.8	58.8	57.3	50.5	45.5
	Youth unemployment ratio (% population aged 15-24)	6.2	5.9	7.7	8.2	11.7 b	14.4	13.3	11.9	10.1	9.5	8.0	7.2
	Employment rate for low skilled 25-64 (ISCED 0-2)	80.0	79.8	76.5	75.4	72.7 b	68.9	67.2	69.1 b	70.7	71.8	75.9	77.2
	Employment rate for medium skilled 25-64 (ISCED 3-4)	82.5	83.9	83.8	83.5	81.2 b	77.8	77.9	81.1 b	81.1	82.1	84.0	85.8
	Employment rate for high skilled 25-64 (ISCED 5-8)	89.3	90.3	87.6	86.1	83.7 b	82.6	82.7	85.5 b	85.2	86.8	87.9	89.6
	Employment rate (Nationals aged 15-64)	73.4	73.5	70.8	69.7	67.7 b	64.6	63.7	65.9	66.8	68.2	71.0	72.6
	Employment rate (Other EU28 aged 15-64)	83.0	88.6	85.3	72.2	72.2 b	71.8	66.5	66.9	72.4	70.0	76.8	78.2
	Employment rate (Other than EU28 aged 15-64)	78.0	78.3	70.2	71.7	66.8 b	56.4	54.9	59.4	67.9	70.2	73.0	74.9
	Employment rate (Born in the same country aged 15-64)	73.2	73.2	70.5	69.4	67.5 b	64.2	63.4	65.4	66.5	67.8	70.4	72.1
	Employment rate (Born in other EU28 aged 15-64)	78.7	83.9	79.9	78.2	77.4 b	76.9	73.0	77.7	76.0	80.0	82.6	83.1
	Employment rate (Born outside EU28 aged 15-64)	79.2	79.3	73.1	72.8	68.6 b	65.4	61.2	66.6	69.8	71.1	76.1	78.5
	Underemployment (% of labour force aged 15-74)		0.9	0.9	0.9	2.8 b	3.6	3.7	3.6	3.4	3.3	2.8	2.3
	Seeking but not available (% of labour force aged 15-74)		0.2			0.4 b	0.5	0.4	0.5	0.4	0.4	0.3	0.4
	Discouraged, available but not seeking (% of labour force aged 15-74)	0.9	0.8	1.1	1.0	2.4 b	3.5	4.5	4.4	4.2	4.1	3.5	3.1
Labour Market Indicators - Female	Total population (000)	5468	5484	5497	5510	5519	5512	5492	5469	5451	5440	5427	5423
	Population aged 15-64(000)	3582	3589	3591	3590	3582	3567	3544	3515	3493	3477	3454	3438
	Total employment (000)	2367	2391	2357	2329	2253 b	2190	2141	2180	2214	2244	2314	2381
	Employment aged 15-64 (000)	2217	2243	2209	2187	2147 b	2079	2042	2091	2127	2161	2229	2288
	Employment rate (% population aged 20-64)	66.3	67.1	66.1	65.6	64.6 b	63.0	62.3	64.2	65.9	67.4	69.8	72.1
	Employment rate (% population aged 15-64)	61.8	62.5	61.5	61.0	60.1 b	58.5	57.9	59.6	61.1	62.4	64.8	66.9
	Employment rate (% population aged 15-24)	30.1	30.3	29.2	26.0	24.5 b	21.2	20.4	21.9	21.5	22.3	24.1	25.1
	Employment rate (% population aged 25-54)	74.8	75.8	74.9	74.5	74.1 b	72.5	72.2	74.3	76.1	77.6	79.7	81.4
	Employment rate (% population aged 55-64)	44.3	44.0	42.8	43.8	42.0 b	42.0	41.0	42.1	44.5	46.3	50.2	54.6
	FTE employment rate (% population aged 20-64)	62.7	63.4	62.8	62.4	60.6 b	58.7	58.3	60.5	62.2	63.9	66.5	69.0
	Self-employed (% total employment)	21.4	21.5	20.4	19.2	16.5 b	16.9	16.7	14.3	13.3	12.7	12.2	12.0
	Part-time employment (% total employment)	13.7	14.1	13.2	12.4	13.8 b	14.2	14.0	12.6	12.5	12.1	11.7	10.5
	Temporary employment (% total employment)	18.8	19.7	19.3	19.7	19.1 b	17.5	18.5	18.6	19.1	19.6	19.4	19.8
	Employment in Services (% total employment)												
	Employment in Industry (% total employment)												
	Employment in Agriculture (% total employment)		7.9 b	7.5	6.8	5.7 b	5.7	5.2	4.1	3.5	3.2	2.6	2.3
	Activity rate (% population aged 15-64)	68.7	68.9	68.9	69.7	69.5 b	69.7	69.8	70.0	70.3	70.5	71.6	72.4
	Activity rate (% population aged 15-24)	37.8	38.1	37.2	34.2	35.9 b	34.9	33.8	33.8	32.8	31.2	32.3	31.7
	Activity rate (% population aged 25-54)	82.7	82.9	83.3	84.9	84.5 b	85.0	85.5	85.8	86.0	86.6	87.0	87.3
	Activity rate (% population aged 55-64)	47.0	46.7	46.0	47.4	46.4 b	47.0	46.9	47.5	49.9	51.0	54.6	58.4
	Total unemployment (000)	245	229	264	314	339	400	419	366	324	282	239	190
	Unemployment rate (% labour force)	9.6	9.0	10.3	12.2	13.2	15.6	16.6	14.5	12.9	11.3	9.5	7.4
	Youth unemployment rate (% labour force 15-24)	24.6	24.6	26.1	29.2	31.5	39.4	39.7	35.5	34.4	29.1	25.3	21.0
	Long term unemployment rate (% labour force)	4.5	4.1	4.8	6.3	6.4 b	7.6	9.1	8.5	7.2	6.0	4.7	3.2
	Share of long term unemployment (% of total unemployment)	46.7	46.3	47.3	52.4	48.7 b	48.6	55.0	58.5	56.1	53.4	49.4	42.0
	Youth unemployment ratio (% population aged 15-24)	7.7	7.7	8.1	8.2	11.4 b	13.7	13.4	12.0	11.3	9.0	8.3	6.6
	Employment rate for low skilled 25-64 (ISCED 0-2)	62.7	63.2	61.1	60.4	58.4 b	56.6	55.6	56.4 b	57.5	58.8	60.3	62.1
	Employment rate for medium skilled 25-64 (ISCED 3-4)	77.6	77.6	76.8	76.5	77.5 b	74.4	74.0	74.4 b	76.4	76.8	79.8	81.8
	Employment rate for high skilled 25-64 (ISCED 5-8)	83.9	84.4	85.9	85.1	83.4 b	81.8	79.1	80.9 b	82.8	84.0	86.2	87.7
	Employment rate (Nationals aged 15-64)	61.7	62.3	61.5	61.0	60.1 b	58.5	58.1	59.7	61.3	62.5	64.8	67.0
	Employment rate (Other EU28 aged 15-64)	59.7	69.7	59.2	59.0	68.3 b	57.6	48.8	54.9	68.3	66.5	66.2	72.5
	Employment rate (Other than EU28 aged 15-64)	65.5	66.2	61.6	60.1	58.7 b	58.3	54.0	58.7	52.7	59.9	63.4	59.3
	Employment rate (Born in the same country aged 15-64)	61.4	61.9	61.1	60.7	59.4 b	57.9	57.6	59.1	60.7	61.9	64.1	66.4
	Employment rate (Born in other EU28 aged 15-64)	63.6	65.4	67.9	66.4	74.1 b	66.0	62.1	70.5	74.3	74.0	78.5	79.2
	Employment rate (Born outside EU28 aged 15-64)	68.0	68.9	65.0	63.7	64.7 b	64.4	61.1	62.3	62.1	65.7	68.6	68.5
	Underemployment (% of labour force aged 15-74)		2.7	2.6	2.7	5.4 b	6.0	6.3	6.0	6.0	5.6	5.1	4.4
	Seeking but not available (% of labour force aged 15-74)	0.2	0.3	0.3	0.3	0.8 b	0.6	0.6	0.6	0.5	0.4	0.6	0.4
	Discouraged, available but not seeking (% of labour force aged 15-74)	1.9	1.7	1.6	1.7	4.0 b	5.2	6.2	6.3	6.0	5.3	4.8	4.1

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Portugal			2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018
Social Indicators	All	At-risk-of-poverty or social exclusion (% of total population)	25.0	26.0	24.9	25.3	24.4	25.3	27.5	27.5	26.6	25.1	23.3	
		At-risk-of-poverty (% of total population)	18.1	18.5	17.9	17.9	18.0	17.9	18.7	19.5	19.5	19.0	18.3	
		At-risk-of-poverty threshold (PPS single person)	5349	5702	5655	5837	5773	5877	5892	6075	6190	6483	6475	
		Poverty gap (%)	24.3	23.2	23.6	22.7	23.2	24.1	27.4	30.3	29.0	26.7	27.0	
		Persistent at-risk-of-poverty (% of total population)	14.1	13.1	9.8	13.2	13.6	11.4	11.7	12.0	13.6	11.5	14.2	
		At-risk-of-poverty before social transfers excl. pensions (% of total population)	24.2	24.9	24.3	26.4	25.4	25.3	25.5	26.7	26.4	25.0	23.6	
		Impact of social transfers (excl. pensions) in reducing poverty (%)	25.2	25.7	26.3	32.2	29.1	29.3	26.7	27.0	26.1	24.0	22.5	
		Severe Material Deprivation (% of total population)	9.6	9.7	9.1	9.0	8.3	8.6	10.9	10.6	9.6	8.4	6.9	6.0 p
		Share of people living in low work intensity households (% of people aged 0-59)	7.2	6.3	7.0	8.6	8.3	10.1	12.2	12.2	10.9	9.1	8.0	
		Real Gross Household Disposable income (growth %)	1.4	1.2	1.5	1.0	-5.3	-5.3	-1.0	-0.5	2.5	2.7	1.6	
		Income quintile share ratio S80/S20	6.5	6.1	6.0	5.6	5.7	5.8	6.0	6.2	6.0	5.9	5.7	
		GINI coefficient	36.8	35.8	35.4	33.7	34.2	34.5	34.2	34.5	34.0	33.9	33.5	
		Early leavers from education and training (% of population aged 18-24)	36.5	34.9	30.9	28.3	23.0 b	20.5	18.9	17.4 b	13.7	14.0	12.6	11.8
		NEET: Young people neither in employment nor in education and training (% of total population aged 15-24)	11.2	10.2	11.2	11.4	12.6 b	13.9	14.1	12.3	11.3	10.6	9.3	8.4
	Male	At-risk-of-poverty or social exclusion (% of male population)	24.0	25.0	24.0	24.8	23.8	24.6	27.5	26.7	25.9	24.1	22.5	
		At-risk-of-poverty (% of male population)	17.2	17.9	17.3	17.3	17.6	17.5	18.8	18.9	18.8	18.2	17.8	
		Poverty gap (%)	24.3	22.5	24.9	23.1	23.4	25.3	28.4	31.2	30.1	27.1	27.4	
		Persistent at-risk-of-poverty (% of male population)	13.1	12.0	9.2	13.0	13.3	10.9	12.1	12.0	14.0	11.2	13.6	
		Severe Material Deprivation (% of male population)	9.2	9.5	8.9	9.2	7.8	8.3	10.9	10.1	9.5	7.9	6.5	6.0 p
		Share of people living in low work intensity households (% of males aged 0-59)	6.7	5.8	6.6	8.4	7.9	9.9	12.3	11.9	10.6	8.8	7.9	
		Life expectancy at birth (years)	75.9	76.2	76.5	76.8	77.3	77.3 b	77.6	78.0 b	78.1	78.1	78.4	
		Healthy life years at birth (years) - men	58.5	59.2	58.3	59.3	60.7	64.5 b	63.9	58.3 b	58.2	59.9	60.1	
		Early leavers from education and training (% of males aged 18-24)	42.8	41.4	35.8	32.4	28.1 b	26.9	23.4	20.7 b	16.4	17.4	15.3	14.7
		NEET: Young people neither in employment nor in education and training (% of males aged 15-24)	9.8	8.9	10.6	10.4	12.2 b	14.6	14.2	12.3	10.4	10.8	9.2	8.4
		At-risk-of-poverty or social exclusion (% of female population)	26.0	26.8	25.8	25.8	25.1	25.9	27.4	28.1	27.3	26.0	24.0	
	Female	At-risk-of-poverty (% of female population)	19.0	19.1	18.4	18.4	18.4	18.2	18.7	20.0	20.1	19.6	18.7	
		Poverty gap (%)	24.2	23.6	23.0	22.6	23.0	23.2	27.0	29.3	28.7	26.5	26.5	
		Persistent at-risk-of-poverty (% of female population)	15.0	14.1	10.4	13.5	13.8	11.9	11.4	12.0	13.2	11.8	14.8	
		Severe Material Deprivation (% of female population)	9.9	9.9	9.2	8.8	8.7	8.9	11.0	11.1	9.7	8.8	7.2	5.9 p
		Share of people living in low work intensity households (% of females aged 0-59)	7.8	6.8	7.3	8.9	8.6	10.3	12.1	12.4	11.1	9.4	8.2	
		Life expectancy at birth (years)	82.5	82.7	82.6	83.2	83.8	83.6 b	84.0	84.4 b	84.3	84.3	84.6	
		Healthy life years at birth (years) - women	57.9	57.6	56.4	56.7	58.6	62.6 b	62.2	55.4 b	55.0	57.4	57.0	
		Early leavers from education and training (% of females aged 18-24)	30.0	28.2	25.8	24.0	17.7 b	14.0	14.3	14.1 b	11.0	10.5	9.7	8.7
		NEET: Young people neither in employment nor in education and training (% of females aged 15-24)	12.6	11.6	11.8	12.5	12.9 b	13.2	13.9	12.3	12.2	10.3	9.5	8.4
		At-risk-of-poverty or social exclusion of children (% of people aged 0-17)	26.9	29.5	28.7	28.7	28.6	27.8	31.7	31.4	29.6	27.0	24.2	
	Children (0-17)	At-risk-of-poverty (% of Children population)	20.9	22.8	22.9	22.4	22.4	21.8	24.4	25.6	24.8	22.4	20.7	
		Severe Material Deprivation (% of Children population)	11.8	11.8	10.5	10.8	11.3	10.3	13.9	12.9	11.0	9.6	7.4	5.7 p
		Share of children living in low work intensity households (% of Children population)	5.1	5.9	6.2	8.0	7.2	8.5	9.7	9.8	8.7	6.4	5.9	
		Risk of poverty of children in households at work (Working Intensity > 0.2)	17.6	19.5	19.3	17.1	18.3	16.4	18.2	19.9	19.8	19.1	17.2	
		Impact of social transfers (excl. pensions) in reducing poverty (0-17) (%)	22.9	24.3	25.4	30.4	27.5	26.4	23.0	23.8	20.8	21.7	18.8	
	Working age (18-64)	At-risk-of-poverty or social exclusion (% of working age population)	23.1	24.5	23.5	24.1	23.2	25.6	28.5	28.3	27.4	25.6	23.9	
		At-risk-of-poverty (% of Working age population)	15.2	16.3	15.8	15.7	16.2	16.9	18.4	19.1	18.8	18.2	18.1	
		Severe Material Deprivation (% of Working age population)	8.6	8.9	8.3	8.3	7.6	8.2	10.7	10.3	9.6	8.6	6.6	6.0 p
		Very low work intensity (18-59)	7.9	6.5	7.2	8.8	8.6	10.6	13.0	12.9	11.6	10.0	8.7	
		In-work at-risk-of poverty rate (% of persons employed 18-64)	9.3	11.3	10.3	9.6	10.2	9.9	10.4	10.7	10.9	10.8	10.7	
		Impact of social transfers (excl. pensions) in reducing poverty (18-64) (%)	30.9	30.3	30.7	37.7	33.6	34.0	30.0	30.3	30.4	27.8	25.8	
	Elderly (65+)	At-risk-of-poverty or social exclusion of elderly (% of people aged 65+)	30.0	27.7	26.0	26.1	24.5	22.2	20.3	21.1	21.7	21.8	20.7	
		At-risk-of-poverty (% of Elderly population)	25.5	22.3	20.1	21.0	20.0	17.4	14.6	15.1	17.0	18.3	17.0	
		Severe Material Deprivation (% of Elderly population)	10.7	10.1	10.6	9.6	7.7	8.4	9.0	9.8	8.4	6.7	7.2	6.2 p
		Relative median income of elderly (ratio with median income of people younger than 65)	0.80	0.83	0.85	0.82	0.87	0.92	0.94	0.94	0.92	0.91	0.92	
		Aggregate replacement ratio (ratio)	0.47	0.51	0.50	0.53	0.56	0.58	0.59	0.63	0.62	0.64	0.67	
Expenditure in social protection indicators (% of GDP)		Sickness/Health care	6.2	6.2	7.0	6.7	6.1	6.2	6.2	6.1	6.0	6.0		
		Disability	2.2	2.1	2.0	2.0	2.0	1.8	2.0	1.9	1.8	1.7		
		Old age and survivors	10.9	11.5	12.4	12.6	13.4	13.7	14.6	14.7	14.4	13.9		
		Family/Children	1.1	1.2	1.4	1.3	1.2	1.2	1.2	1.2	1.2	1.2		
		Unemployment	1.1	1.0	1.3	1.4	1.3	1.7	1.8	1.5	1.1	0.9		
		Housing and Social exclusion n.e.c.	0.3	0.3	0.3	0.3	0.3	0.3	0.2	0.2	0.2	0.2		
		Total (including Admin and Other expenditures) of which: Means tested benefits	23.0	23.4	25.8	25.8	25.8	26.4	27.6	26.9	25.7	25.1		

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## Romania

Romania		2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018
Macro Economic Indicators (Annual % growth)	Real GDP	7.2	9.3	-5.5	-3.9	2.0	2.1	3.5	3.4	3.9	4.8	7.0 p	4.1 p
	Total employment	0.4	0.0	-2.0	-0.3	-0.8	-4.8 b	-0.9	0.8	-1.3	-1.1	2.6 p	0.2 p
	Labour productivity	6.8	9.3	-3.6	-3.6	2.8	7.2 b	4.4	2.6	5.2	6.0	4.3 p	3.9 p
	Annual average hours worked per person employed	0.5	0.0	-0.6	-0.4	1.8	-4.3 b	-0.3 b	-0.8	-0.4	1.3	0.1 p	0.1 p
	Real productivity per hour worked	6.3	9.3	-3.1	-3.3	1.0	12.1 b	4.7	3.4	5.6	4.6	4.2 p	3.8 p
	Harmonized CPI	4.9	7.9	5.6	6.1	5.8	3.4	3.2	1.4	-0.4	-1.1	1.1	4.1
	Price deflator GDP	15.8	16.0	4.1	3.5	3.8	4.0	3.4	1.7	2.6	2.5	4.7 p	5.9 p
	Nominal compensation per employee	8.6	33.9	-3.2	8.2	-4.1	8.9 b	4.1 b	6.9	2.0	15.0	12.6 p	18.4 p
	Real compensation per employee (GDP deflator)	-6.3	15.5	-7.0	4.5	-7.6	4.7 b	0.7 b	5.1	-0.6	12.2	7.6 p	11.8 p
	Real compensation per employee (private consumption deflator)	3.5	24.1	-8.3	2.0	-9.4	5.3 b	0.9 b	5.4	2.4	16.2	11.4 p	13.7 p
	Nominal unit labour costs	1.6	22.5	0.5	12.3	-6.7	1.5 b	-0.3	4.2	-3.1	8.5	8.0 p	14.0 p
	Real unit labour costs	-12.3	5.6	-3.5	8.5	-10.1	-2.4 b	-3.6 b	2.4	-5.5	5.8	3.2 p	7.7 p
Labour Market Indicators - Total	Total population (000)	21131	20635	20440	20295	20199	20096	20020	19947	19871	19761	19644	19531
	Population aged 15-64 (000)	14452	14076	13919	13814	13745	13669	13622	13556	13414	13258	13092	12928
	Total employment (000)	9353	9369	9244	8713 b	8528	8605	8549	8614	8535	8449	8671	8689
	Employment aged 15-64 (000)	8843	8882	8805	8307 b	8139	8222	8179	8254	8235	8166	8363	8382
	Employment rate (% population aged 20-64)	64.4	64.4	63.5	64.8 b	63.8	64.8	64.7	65.7	66.0	66.3	68.8	69.9
	Employment rate (% population aged 15-64)	58.8	59.0	58.6	60.2 b	59.3	60.2	60.1	61.0	61.4	61.6	63.9	64.8
	Employment rate (% population aged 15-24)	24.4	24.8	24.5	24.3 b	23.4	23.7	22.9	22.5	24.5	22.3	24.5	24.7
	Employment rate (% population aged 25-54)	74.6	74.4	73.7	76.8 b	75.8	76.6	76.3	77.1	77.4	77.6	79.9	80.6
	Employment rate (% population aged 55-64)	41.4	43.1	42.6	40.7 b	39.9	41.6	41.8	43.1	41.1	42.8	44.5	46.3
	FTE employment rate (% population aged 20-64)	63.7	63.5	62.6	63.5 b	62.5	63.5	63.3	64.2	64.3	64.9	67.5	68.5
	Self-employed (% total employment)	21.2	20.8	20.8	22.6 b	20.9	21.2	21.1	20.5	19.4	18.1	18.1	17.3
	Part-time employment (% total employment)	8.6	8.6	8.5	9.9 b	9.5	9.3	9.0	8.7	8.8	7.4	6.8	6.5
	Temporary employment (% total employment)	1.1	0.9	0.7	0.7 b	1.0	1.1	1.0	1.1	1.0	1.0	0.9	0.9
	Employment in Services (% total employment)		41.7 b	42.8	42.6 b	44.1	43.9	44.3	44.5	47.5	48.5	48.6	49.2
	Employment in Industry (% total employment)		33.3 b	31.5	29.7 b	29.9	29.5	29.5	30.1	29.4	30.8	31.1	31.1
	Employment in Agriculture (% total employment)		25.0 b	25.7	27.7 b	26.0	26.6	26.2	25.4	23.1	20.7	20.3	19.8
	Activity rate (% population aged 15-64)	63.0	62.9	63.1	64.9 b	64.1	64.8	64.9	65.7	66.1	65.6	67.3	67.8
	Activity rate (% population aged 15-24)	30.5	30.4	30.9	31.2 b	30.7	30.5	30.1	29.6	31.3	28.0	30.0	29.5
	Activity rate (% population aged 25-54)	79.0	78.3	78.5	81.9 b	80.9	81.5	81.5	82.1	82.5	81.9	83.4	83.6
	Activity rate (% population aged 55-64)	42.4	44.2	43.9	42.1 b	41.4	43.0	43.4	44.6	42.7	44.2	46.0	47.5
	Total unemployment (000)	634	549	624	652	659	627	653	629	624	530	449	380
	Unemployment rate (% labour force)	6.4	5.6	6.5	7.0	7.2	6.8	7.1	6.8	6.8	5.9	4.9	4.2
	Youth unemployment rate (% labour force 15-24)	19.3	17.6	20.0	22.1	23.9	22.6	23.7	24.0	21.7	20.6	18.3	16.2
	Long term unemployment rate (% labour force)	3.2	2.4	2.2	2.4 b	2.9	3.0	3.2	2.8	3.0	3.0	2.0	1.8
	Share of long term unemployment (% of total unemployment)	50.0	41.3	31.6	34.5 b	41.0	44.2	45.2	41.1	43.9	50.0	41.4	44.1
	Youth unemployment ratio (% population aged 15-24)	6.1	5.7	6.4	6.9 b	7.3	6.9	7.1	7.1	6.8	5.8	5.5	4.8
	Employment rate for low skilled 25-64 (ISCED 0-2)	53.8	54.6	54.7	55.8 b	51.9	53.5	54.0	55.5 b	53.7	52.8	54.9	55.6
	Employment rate for medium skilled 25-64 (ISCED 3-4)	70.1	69.5	68.5	69.6 b	69.2	69.7	68.8	70.4 b	69.7	70.3	72.5	73.7
	Employment rate for high skilled 25-64 (ISCED 5-8)	86.9	86.9	86.0	85.8 b	85.9	85.4	85.8	86.0 b	86.9	87.8	89.2	89.7
	Employment rate (Nationals aged 15-64)	58.8	59.0	58.6	60.2 b	59.3	60.2	60.1	61.0	61.4	61.6	63.9	64.8
	Employment rate (Other EU28 aged 15-64)												
	Employment rate (Other than EU28 aged 15-64)	64.3	58.7	60.8 u									74.3 u
	Employment rate (Born in the same country aged 15-64)	58.8	59.0	58.6	60.2 b	59.3	60.2	60.1	61.0	61.4	61.6	63.9	64.8
	Employment rate (Born in other EU28 aged 15-64)												
	Employment rate (Born outside EU28 aged 15-64)	62.4 u	64.5 u	74.3 u			69.4 u	61.7 u	53.9 u			69.5 u	74.9 u
	Underemployment (% of labour force aged 15-74)		2.2	2.0	2.4 b	2.3	2.3	2.5	2.6	2.9	2.4	2.3	2.2
	Seeking but not available (% of labour force aged 15-74)												
	Discouraged, available but not seeking (% of labour force aged 15-74)	3.5	2.9	3.8	4.4 b	4.9	4.5	4.4	4.1	3.9	3.8	3.0	2.6

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Romania		2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018
Labour Market Indicators - Male	Total population (000)	10290	10049	9952	9880	9833	9777	9761	9746	9707	9650	9603	9553
	Population aged 15-64(000)	7185	7024	6967	6914	6879	6838	6839	6830	6764	6689	6622	6551
	Total employment (000)	5116	5157	5101	4881 b	4734	4800	4791	4844	4848	4806	4893	4941
	Employment aged 15-64 (000)	4863	4925	4890	4689 b	4555	4622	4621	4677	4704	4668	4744	4792
	Employment rate (% population aged 20-64)	71.0	71.6	70.7	73.1 b	71.5	72.8	72.8	74.0	74.7	75.0	77.3	78.9
	Employment rate (% population aged 15-64)	64.8	65.7	65.2	67.9 b	66.3	67.6	67.6	68.7	69.5	69.7	71.8	73.2
	Employment rate (% population aged 15-24)	28.3	29.1	28.3	28.5 b	26.8	27.5	27.0	26.6	29.4	27.2	28.4	28.9
	Employment rate (% population aged 25-54)	80.6	80.9	80.5	84.8 b	83.1	84.1	83.8	84.6	85.2	85.5	87.6	88.7
	Employment rate (% population aged 55-64)	50.3	53.0	52.3	49.9 b	48.6	51.2	51.4	53.2	51.2	53.0	55.3	57.9
	FTE employment rate (% population aged 20-64)	70.5	70.9	70.1	72.0 b	70.5	71.8	71.6	72.7	73.1	73.7	76.1	77.7
	Self-employed (% total employment)	27.5	26.8	26.9	29.2 b	26.6	26.9	26.6	26.0	24.4	23.0	23.0	21.7
	Part-time employment (% total employment)	8.3	8.1	8.0	9.8 b	8.8	8.7	8.6	8.2	8.5	7.3	6.7	6.2
	Temporary employment (% total employment)	1.1	0.9	0.7	0.8 b	1.1	1.3	1.2	1.2	1.2	1.3	1.1	0.9
	Employment in Services (% total employment)		36.2 b	37.1	36.5 b	38.0	37.9	38.1	38.2	40.6	40.9	41.2	42.0
	Employment in Industry (% total employment)		39.7 b	38.1	36.3 b	36.9	36.0	36.0	36.6	35.9	37.6	37.7	37.6
	Employment in Agriculture (% total employment)		24.1 b	24.8	27.2 b	25.1	26.1	25.9	25.2	23.6	21.6	21.2	20.4
	Activity rate (% population aged 15-64)	70.1	70.6	70.9	73.7 b	72.1	73.2	73.4	74.3	75.3	74.8	76.2	76.9
	Activity rate (% population aged 15-24)	35.9	35.9	35.9	36.5 b	35.3	35.3	35.1	34.8	37.0	33.9	34.6	34.6
	Activity rate (% population aged 25-54)	85.9	85.8	86.3	90.9 b	89.0	89.9	90.0	90.5	91.6	91.0	92.2	92.5
	Activity rate (% population aged 55-64)	52.1	55.1	54.5	52.3 b	51.3	53.6	53.9	55.4	53.8	55.1	57.4	59.7
	Total unemployment (000)	405	362	398	399	397	381	400	384	395	339	290	244
	Unemployment rate (% labour force)	7.2	6.5	7.3	7.6	7.7	7.4	7.7	7.3	7.5	6.6	5.6	4.7
	Youth unemployment rate (% labour force 15-24)	20.3	17.7	20.5	22.1	24.0	22.2	23.2	23.6	20.6	19.9	18.1	16.3
	Long term unemployment rate (% labour force)	3.6	2.9	2.5	2.8 b	3.2	3.3	3.4	3.1	3.3	3.3	2.4	2.2
	Share of long term unemployment (% of total unemployment)	49.9	42.9	32.2	36.7 b	41.8	44.2	44.1	41.8	43.8	50.1	43.6	47.1
	Youth unemployment ratio (% population aged 15-24)	7.6	6.8	7.6	8.1 b	8.5	7.9	8.1	8.2	7.6	6.7	6.3	5.6
	Employment rate for low skilled 25-64 (ISCED 0-2)	66.3	67.2	67.2	70.0 b	62.9	65.2	66.7	67.9 b	69.0	68.6	71.2	72.2
	Employment rate for medium skilled 25-64 (ISCED 3-4)	75.2	75.7	75.2	77.2 b	76.7	77.7	76.7	78.5 b	77.5	78.2	80.7	82.4
	Employment rate for high skilled 25-64 (ISCED 5-8)	87.6	87.8	86.5	86.8 b	87.5	87.4	87.8	88.0 b	89.5	90.5	90.8	91.8
	Employment rate (Nationals aged 15-64)	64.8	65.6	65.2	67.9 b	66.3	67.6	67.6	68.7	69.5	69.7	71.8	73.2
	Employment rate (Other EU28 aged 15-64)												
	Employment rate (Other than EU28 aged 15-64)	71.6 u	72.3 u										
	Employment rate (Born in the same country aged 15-64)	64.8	65.6	65.2	67.9 b	66.3	67.6	67.6	68.7	69.5	69.7	71.8	73.2
	Employment rate (Born in other EU28 aged 15-64)												
	Employment rate (Born outside EU28 aged 15-64)												80.4 u
	Underemployment (% of labour force aged 15-74)		2.6	2.4	3.0 b	2.8	2.7	2.9	3.0	3.4	2.7	2.6	2.5
	Seeking but not available (% of labour force aged 15-74)												
	Discouraged, available but not seeking (% of labour force aged 15-74)	1.8	1.0	1.8	3.0 b	4.1	3.9	3.9	3.7	3.0	3.1	2.3	2.0
Labour Market Indicators - Female	Total population (000)	10841	10586	10488	10414	10366	10319	10259	10201	10164	10111	10042	9977
	Population aged 15-64(000)	7267	7053	6952	6900	6866	6832	6783	6726	6650	6570	6470	6377
	Total employment (000)	4237	4212	4143	3832 b	3794	3805	3758	3770	3687	3643	3777	3748
	Employment aged 15-64 (000)	3980	3958	3915	3618 b	3584	3600	3558	3577	3531	3499	3620	3590
	Employment rate (% population aged 20-64)	57.9	57.3	56.3	56.5 b	56.2	56.7	56.5	57.3	57.2	57.4	60.2	60.6
	Employment rate (% population aged 15-64)	52.8	52.5	52.0	52.5 b	52.3	52.8	52.6	53.3	53.2	53.3	55.8	56.2
	Employment rate (% population aged 15-24)	20.2	20.2	20.6	19.9 b	19.7	19.6	18.6	18.0	19.3	17.1	20.4	20.3
	Employment rate (% population aged 25-54)	68.5	67.8	66.9	68.6 b	68.3	68.9	68.6	69.3	69.2	69.2	71.8	72.1
	Employment rate (% population aged 55-64)	33.6	34.4	34.1	32.6 b	32.2	33.1	33.2	34.2	32.1	33.6	34.9	35.7
	FTE employment rate (% population aged 20-64)	56.9	56.0	55.1	55.1 b	54.5	55.2	55.0	55.7	55.4	56.0	58.8	59.2
	Self-employed (% total employment)	13.5	13.4	13.3	14.2 b	13.8	14.0	13.9	13.5	12.8	11.7	11.8	11.5
	Part-time employment (% total employment)	8.9	9.3	9.1	10.0 b	10.3	10.0	9.6	9.5	9.2	7.7	6.9	6.9
	Temporary employment (% total employment)	1.1	0.8	0.7	0.6 b	0.8	0.8	0.8	0.8	0.8	0.7	0.7	0.7
	Employment in Services (% total employment)		48.6 b	50.1	50.5 b	51.8 u	51.7 u	52.3 u	52.6 u	56.8	58.6 u	58.3 u	58.7 u
	Employment in Industry (% total employment)		25.4 b	23.2	21.1 b	21.0 u	21.1 u	21.2 u	21.8 u	20.9	21.8 u	22.6 u	22.3 u
	Employment in Agriculture (% total employment)		26.0 b	26.7	28.4 b	27.2	27.2	26.5	25.6	22.4	19.6	19.1	19.0
	Activity rate (% population aged 15-64)	56.0	55.2	55.4	56.4 b	56.1	56.4	56.3	56.9	56.7	56.2	58.2	58.3
	Activity rate (% population aged 15-24)	24.9	24.7	25.8	25.6 b	25.8	25.5	24.7	24.0	25.2	21.8	25.0	24.2
	Activity rate (% population aged 25-54)	72.0	70.7	70.6	72.7 b	72.6	72.9	72.7	73.3	72.9	72.4	74.2	74.2
	Activity rate (% population aged 55-64)	33.9	34.7	34.7	33.1 b	32.7	33.7	34.1	35.0	32.8	34.4	35.7	36.4
	Total unemployment (000)	229	187	226	252	262	246	253	245	229	191	159	135
	Unemployment rate (% labour force)	5.2	4.4	5.4	6.2	6.5	6.1	6.3	6.1	5.8	5.0	4.0	3.5
	Youth unemployment rate (% labour force 15-24)	17.6	17.3	19.2	22.1	23.7	23.0	24.6	24.7	23.4	21.8	18.6	16.2
	Long term unemployment rate (% labour force)	2.7	1.8	1.8	1.9 b	2.6	2.7	3.0	2.4	2.6	2.5	1.5	1.3
	Share of long term unemployment (% of total unemployment)	50.2	38.4	30.6	31.1 b	39.8	44.1	46.8	40.0	44.1	49.8	37.5	38.6
	Youth unemployment ratio (% population aged 15-24)	4.7	4.5	5.2	5.7 b	6.1	5.9	6.1	5.9	5.9	4.8	4.7	3.9
	Employment rate for low skilled 25-64 (ISCED 0-2)	45.8	46.1	46.0	45.8 b	44.0	45.1	44.5	45.2 b	41.1	39.5	41.0	41.1
	Employment rate for medium skilled 25-64 (ISCED 3-4)	64.3	62.6	61.0	60.9 b	60.6	60.5	59.7	61.2 b	60.9	61.4	63.3	63.8
	Employment rate for high skilled 25-64 (ISCED 5-8)	86.1	86.1	85.4	84.9 b	84.4	83.5	83.8	84.1 b	84.5	85.3	87.8	87.8
	Employment rate (Nationals aged 15-64)	52.7	52.5	52.0	52.5 b	52.3	52.8	52.6	53.3	53.2	53.3	55.8	56.2
	Employment rate (Other EU28 aged 15-64)												
	Employment rate (Other than EU28 aged 15-64)	56.3 u											
	Employment rate (Born in the same country aged 15-64)	52.8	52.5	52.0	52.5 b	52.3	52.8	52.6	53.3	53.2	53.3	55.8	56.2
	Employment rate (Born in other EU28 aged 15-64)												
	Employment rate (Born outside EU28 aged 15-64)												
	Underemployment (% of labour force aged 15-74)		1.7	1.5	1.6 b	1.7	1.8	1.9	2.0	2.3	1.9	1.8	1.9
	Seeking but not available (% of labour force aged 15-74)												
	Discouraged, available but not seeking (% of labour force aged 15-74)	5.5	5.2	6.4	6.1 b	5.8	5.3	5.0	4.5	5.0	4.8	4.0	3.4

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Romania		2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018		
Social Indicators	All	At-risk-of-poverty or social exclusion (% of total population)	47.0	44.2	43.0	41.5	40.9	43.2	41.9	40.3	37.4	38.8	35.7	32.5	
		At-risk-of-poverty (% of total population)	24.6	23.6	22.1	21.6	22.3	22.9	23.0	25.1	25.4	25.3	23.6	23.5	
		At-risk-of-poverty threshold (PPS single person)	1670	1837	2066	2122	2186	2226	2332	2408	2614	2835	3182	3745	
		Poverty gap (%)	36.6	32.3	31.4	31.3	31.4	31.1	33.6	34.6	38.2	36.2	34.5	35.2	
		Persistent at-risk-of-poverty (% of total population)				18.0	17.5	18.7	17.1	19.5	19.3	20.2	19.1		
		At-risk-of-poverty before social transfers excl. pensions (% of total population)	31.5	30.8	28.7	27.8	29.2	28.8	28.2	28.8	29.3	29.5	28.3	28.0	
		Impact of social transfers (excl. pensions) in reducing poverty (%)	21.9	23.4	23.0	22.3	23.6	20.5	18.4	12.9	13.3	14.2	16.6	16.1	
		Severe Material Deprivation (% of total population)	38.0	32.7	32.1	30.5	29.5	31.1	29.8	25.9	22.7	23.8	19.7	16.8	
		Share of people living in low work intensity households (% of people aged 0-59)	9.9	8.5	8.1	7.7	7.3	7.9	7.6	7.2	7.9	8.2	6.9	7.4	
		Real Gross Household Disposable income (growth %)	14.5	18.0	-2.4	-1.5	-3.0	-3.8	6.1	2.7	1.9	10.3			
		Income quintile share ratio S80/S20	8.1	7.0	6.5	6.1	6.2	6.6	6.8	7.2	8.3	7.2	6.5	7.2	
		GINI coefficient	38.3 b	35.9	34.5	33.5	33.5	34.0	34.6	35.0	37.4	34.7	33.1	35.1	
		Early leavers from education and training (% of population aged 18-24)	17.3	15.9	16.6	19.3 b	18.1	17.8	17.3	18.1 b	19.1	18.5	18.1	16.4	
		NEET: Young people neither in employment nor in education and training (% of total population aged 15-24)	13.3	11.6	13.9	16.6 b	17.5	16.8	17.0	17.0	18.1	17.4	15.2	14.5	
	Male	At-risk-of-poverty or social exclusion (% of male population)	46.1	43.0	41.8	40.5	39.9	42.5	41.3	40.0	36.5	37.8	34.9	31.0	
		At-risk-of-poverty (% of male population)	24.1	22.8	21.2	21.0	21.9	23.1	23.0	25.3	25.1	24.8	22.9	22.5	
		Poverty gap (%)	36.6	32.9	31.7	31.9	33.5	31.8	35.1	38.3	39.1	37.6	35.1	37.2	
		Persistent at-risk-of-poverty (% of male population)				17.3	17.4	18.4	16.8	19.3	19.5	20.2	18.5		
		Severe Material Deprivation (% of male population)	37.6	32.2	31.7	30.0	29.3	31.3	30.3	26.6	23.1	23.8	19.7	16.3	
		Share of people living in low work intensity households (% of males aged 0-59)	8.8	7.3	6.7	6.5	6.1	6.5	6.3	6.4	6.9	7.2	6.2	6.6	
		Life expectancy at birth (years)	69.5	69.7	69.8	70.0 b	71.1	70.9	71.6	71.4	71.5	71.7	71.7		
		Healthy life years at birth (years) - men	60.5	60.0	59.8	57.3 b	57.4	57.6	58.6	59.0	59.0	59.8	59.2		
		Early leavers from education and training (% of males aged 18-24)	17.1	15.9	16.1	19.5 b	19.1	18.5	18.7	19.5 b	19.5	18.4	18.0	16.7	
		NEET: Young people neither in employment nor in education and training ( % of males aged 15-24)	11.6	8.8	11.2	14.2 b	16.3	15.2	15.3	15.3	15.0	14.1	12.1	11.4	
		Female	At-risk-of-poverty or social exclusion (% of female population)	48.0	45.3	44.2	42.4	41.9	43.8	42.5	40.7	38.2	39.8	36.5	33.9
			At-risk-of-poverty (% of female population)	25.1	24.3	23.0	22.1	22.6	22.8	22.9	24.9	25.7	25.7	24.2	24.5
			Poverty gap (%)	36.9	31.5	31.0	30.5	29.0	29.3	32.5	32.6	37.1	34.8	33.7	34.4
			Persistent at-risk-of-poverty (% of female population)				18.7	17.7	19.0	17.3	19.7	19.2	20.2	19.8	
	Severe Material Deprivation (% of female population)		38.4	33.2	32.5	30.9	29.8	30.9	29.3	25.2	22.4	23.7	19.7	17.2	
	Share of people living in low work intensity households (% of females aged 0-59)		11.0	9.8	9.5	8.9	8.6	9.3	8.9	8.0	8.9	9.2	7.7	8.2	
	Life expectancy at birth (years)		76.8	77.5	77.4	77.7 b	78.2	78.1	78.7	78.7	78.7	79.1	79.1		
	Healthy life years at birth (years) - women		62.5	62.9	61.7	57.5 b	57.0	57.7	57.9	59.0	59.4	59.0	58.3		
	Early leavers from education and training (% of females aged 18-24)		17.4	16.0	17.2	19.0 b	17.2	16.9	15.9	16.7 b	18.5	18.7	18.1	16.1	
	NEET: Young people neither in employment nor in education and training ( % of females aged 15-24)		15.1	14.5	16.8	19.2 b	18.7	18.5	18.7	18.8	21.4	20.8	18.4	17.8	
	Children (0-17)		At-risk-of-poverty or social exclusion of children (% of people aged 0-17)	51.8	50.9	50.6	48.1	49.2	52.5	51.4	50.7	46.8	49.2	41.7	38.1
			At-risk-of-poverty (% of Children population)	33.0	33.3	31.9	32.1	33.0	33.3	34.7	39.3	38.1	37.2	32.2	32.0
			Severe Material Deprivation (% of Children population)	42.3	38.5	39.1	35.8	35.7	38.8	36.4	31.0	28.9	30.2	21.5	19.7
			Share of children living in low work intensity households (% of Children population)	8.6	6.1	5.3	4.7	4.7	5.6	6.1	6.1	7.5	8.5	5.8	7.0
		Risk of poverty of children in households at work (Working Intensity > 0.2)	28.1	29.9	28.9	30.8	31.0	31.0	32.4	36.3	34.2	32.6	29.4	27.1	
		Impact of social transfers (excl. pensions) in reducing poverty (0-17) (%)	23.4	23.6	22.0	19.6	22.9	20.0	18.0	10.3	12.6	16.4	20.1	20.2	
		Working age (18-64)	At-risk-of-poverty or social exclusion (% of working age population)	42.9	40.8	40.7	39.9	39.7	42.3	40.7	38.7	35.7	37.0	34.6	30.7
	At-risk-of-poverty (% of Working age population)		20.7	19.8	19.4	19.5	20.9	21.9	21.7	23.4	23.3	23.3	21.9	21.2	
	Severe Material Deprivation (% of Working age population)		33.8	29.4	29.6	28.5	27.8	29.4	28.2	24.3	21.2	22.1	18.9	15.7	
	Very low work intensity (18-59)		10.4	9.3	9.0	8.7	8.2	8.7	8.1	7.6	8.0	8.1	7.3	7.5	
	In-work at-risk-of poverty rate (% of persons employed 18-64)		16.5	16.9	17.2	17.6	18.9	18.9	18.1	19.7	18.6	18.6	17.1	15.0	
	Impact of social transfers (excl. pensions) in reducing poverty (18-64) (%)		23.6	26.4	25.7	25.3	26.2	21.8	19.9	14.6	14.3	15.0	18.0	16.5	
	Elderly (65+)		At-risk-of-poverty or social exclusion of elderly (% of people aged 65+)	57.9	49.4	43.3	40.1	36.2	35.4	35.8	35.0	33.3	34.0	33.2	32.8
		At-risk-of-poverty (% of Elderly population)	29.4	26.5	21.4	17.6	14.8	14.4	14.5	15.7	19.4	19.1	20.0	22.8	
		Severe Material Deprivation (% of Elderly population)	50.1	39.0	34.0	32.4	29.2	28.5	28.4	26.5	21.5	22.5	20.6	17.4	
		Relative median income of elderly (ratio with median income of people younger than 65)	0.76	0.85	0.93	0.97	1.01	1.03	1.04	1.04	1.0	0.97	0.95	0.90	
		Aggregate replacement ratio (ratio)	0.44	0.50	0.56	0.64	0.67	0.67	0.68	0.65	0.63	0.66	0.61	0.51	
		Sickness/Health care	3.4	3.4	3.9	4.4	4.0	4.0	3.9	3.9	3.8	3.9			
Disability		1.2	1.3	1.5	1.6	1.5	1.2	1.1	1.1	1.1	1.0				
Old age and survivors		5.9	6.8	8.3	8.8	8.7	8.3	8.0	8.0	7.9	7.9				
Family/Children		1.7	1.5	1.6	1.7	1.7	1.3	1.2	1.2	1.3	1.4				
Unemployment		0.3	0.2	0.4	0.6	0.3	0.2	0.2	0.1	0.1	0.1				
Housing and Social exclusion n.e.c.		0.4	0.3	0.3	0.3	0.3	0.2	0.2	0.2	0.2	0.2				
Total (including Admin and Other expenditures)		13.3	13.7	16.2	17.5	16.6	15.4	14.9	14.7	14.6	14.6				
of which: Means tested benefits		0.8	0.7	0.9	1.2	0.8	0.6	0.6	0.6	0.6	0.5				
Expenditure in social protection indicators (% of GDP)															

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## Slovenia

Slovenia		2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018
Macro Economic Indicators (Annual % growth)	Real GDP	6.9	3.3	-7.8	1.2	0.6	-2.7	-1.1	3.0	2.3	3.1	4.9	4.5
	Total employment	3.4	2.6	-1.8	-2.1	-1.7	-0.9	-1.1	0.4	1.3	1.8	2.9	3.0
	Labour productivity	3.5	0.7	-6.1	3.4	2.4	-1.8	0.0	2.5	1.0	1.2	1.9	1.5
	Annual average hours worked per person employed	-0.8	1.1	0.3	0.1	-1.0	-1.1	1.1	1.2	0.4	-2.1	-1.9	-1.2
	Real productivity per hour worked	4.3	-0.4	-6.4	3.3	3.4	-0.6	-1.1	1.4	0.6	3.4	3.8	2.6
	Harmonized CPI	3.8	5.5	0.8	2.1	2.1	2.8	1.9	0.4	-0.8	-0.2	1.6	1.9
	Price deflator GDP	4.2	4.5	3.4	-1.0	1.1	0.5	1.6	0.8	1.0	0.8	1.6	2.3
	Nominal compensation per employee	6.2	7.2	1.8	4.0	1.5	-1.0	0.5	1.3	1.3	3.0	3.2	4.0
	Real compensation per employee (GDP deflator)	1.9	2.6	-1.5	5.1	0.4	-1.4	-1.1	0.5	0.3	2.3	1.5	1.7
	Real compensation per employee (private consumption deflator)	2.3	1.6	1.0	1.9	-0.5	-3.7	-1.4	0.9	2.1	3.2	1.6	2.0
	Nominal unit labour costs	2.6	6.4	8.5	0.6	-0.8	0.8	0.5	-1.2	0.3	1.8	1.3	2.5
	Real unit labour costs	-1.5	1.8	5.0	1.6	-1.9	0.4	-1.1	-2.1	-0.6	1.0	-0.3	0.2
Labour Market Indicators - Total	Total population (000)	2010	2010 b	2032	2047	2050	2055	2059	2061	2063	2064	2066	2067
	Population aged 15-64 (000)	1410	1403	1414	1421	1420	1416	1409	1400	1389	1378	1367	1355
	Total employment (000)	985	996	981	966	936	924	906	917	917	915	959	981
	Employment aged 15-64 (000)	957	975	955	942	915	907	888	893	902	903	944	962
	Employment rate (% population aged 20-64)	72.4	73.0	71.9	70.3	68.4	68.3	67.2	67.7	69.1	70.1	73.4	75.4
	Employment rate (% population aged 15-64)	67.8	68.6	67.5	66.2	64.4	64.1	63.3	63.9	65.2	65.8	69.3	71.1
	Employment rate (% population aged 15-24)	37.6	38.4	35.3	34.1	31.5	27.3	26.5	26.8	29.6	28.6	34.7	35.2
	Employment rate (% population aged 25-54)	85.3	86.8	84.8	83.7	83.1	83.3	81.9	81.9	82.9	83.5	86.1	87.5
	Employment rate (% population aged 55-64)	33.5	32.8	35.6	35.0	31.2	32.9	33.5	35.4	36.6	38.5	42.7	47.0
	FTE employment rate (% population aged 20-64)	71.0	71.6	69.9	68.1	66.4	66.4	65.2	65.7	66.9	67.7	70.9	73.1
	Self-employed (% total employment)	11.1	9.9	10.7	12.4	12.6	12.2	12.1	12.7	12.5	11.8	11.8	12.5
	Part-time employment (% total employment)	8.1	8.1	9.5	10.3	9.5	9.0	9.3	10.0	10.1	9.3	10.3	9.7
	Temporary employment (% total employment)	15.8	15.1	13.9	14.5	15.2	14.4	13.8	13.7	15.1	14.6	15.2	13.5
	Employment in Services (% total employment)		57.5 bu	59.1	59.9	60.9	61.7	61.5	60.8 u	62.1 u	62.5 u	61.9 u	62.0 u
	Employment in Industry (% total employment)		35.6 bu	33.8	33.2	32.2	31.3	31.4	31.5 u	32.1 u	33.3 u	33.4 u	33.6 u
	Employment in Agriculture (% total employment)		6.9 b	7.1	7.0	6.9	7.0	7.2	7.7	5.8	4.2	4.6	4.4
	Activity rate (% population aged 15-64)	71.3	71.8	71.8	71.5	70.3	70.4	70.5	70.9	71.8	71.6	74.2	75.0
	Activity rate (% population aged 15-24)	41.8	42.9	40.9	39.9	37.4	34.4	33.8	33.6	35.3	33.7	39.1	38.6
	Activity rate (% population aged 25-54)	89.3	90.1	89.6	90.0	90.1	90.8	90.7	90.3	90.8	90.5	91.9	92.0
	Activity rate (% population aged 55-64)	34.6	34.2	36.9	36.5	33.3	35.1	36.0	38.4	39.7	41.2	45.6	49.5
	Total unemployment (000)	50	46	61	75	83	90	102	98	90	80	67	53
	Unemployment rate (% labour force)	4.9	4.4	5.9	7.3	8.2	8.9	10.1	9.7	9.0	8.0	6.6	5.1
	Youth unemployment rate (% labour force 15-24)	10.1	10.4	13.6	14.7	15.7	20.6	21.6	20.2	16.3	15.2	11.2	8.8
	Long term unemployment rate (% labour force)	2.2	1.9	1.8	3.2	3.6	4.3	5.2	5.3	4.7	4.3	3.1	2.2
	Share of long term unemployment (% of total unemployment)	45.7	42.2	30.1	43.3	44.2	47.9	51.0	54.5	52.3	53.3	47.5	42.9
	Youth unemployment ratio (% population aged 15-24)	4.2	4.5	5.6	5.9	5.9	7.1	7.3	6.8	5.8	5.1	4.4	3.4
	Employment rate for low skilled 25-64 (ISCED 0-2)	56.2	55.0	53.7	51.1	46.7	47.2	45.5	48.5 b	49.0	46.1	49.7	51.3
	Employment rate for medium skilled 25-64 (ISCED 3-4)	75.1	76.4	74.6	73.0	70.6	70.7	69.5	69.5 b	69.7	71.0	73.6	75.9
	Employment rate for high skilled 25-64 (ISCED 5-8)	87.7	87.9	88.4	87.3	86.4	85.1	83.8	83.2 b	84.4	85.2	87.1	88.9
	Employment rate (Nationals aged 15-64)	67.8	68.6	67.7	66.3	64.4	64.1	63.5	64.2	65.2	65.8	69.3	71.3
	Employment rate (Other EU28 aged 15-64)	82.7 u	76.8 u	70.5 u	59.8 u	58.9 u	73.1	57.3 u	60.4	60.3	64.3	73.0	81.2
	Employment rate (Other than EU28 aged 15-64)	60.3	65.3	52.2	59.3	65.4	60.9	56.5	54.1	67.2	66.7	68.6	67.3
	Employment rate (Born in the same country aged 15-64)	67.8	68.6	67.7	66.3	64.7	64.1	63.5	64.5	65.7	66.2	69.6	71.7
	Employment rate (Born in other EU28 aged 15-64)	65.2	66.8	66.9	63.9	57.7	60.6	59.3	56.9	60.0	59.7	65.4	69.7
	Employment rate (Born outside EU28 aged 15-64)	69.2	69.0	65.7	65.8	63.4	64.9	61.0	58.6	61.7	63.2	66.6	66.4
	Underemployment (% of labour force aged 15-74)		1.3	1.8	1.9	1.9	1.8	2.3	2.5	3.1	2.8	2.8	2.1
	Seeking but not available (% of labour force aged 15-74)	0.4	0.4	0.5	0.5	0.4	0.4 u	0.4 u	0.3 u	0.4 u	0.4 u	0.4 u	0.4
	Discouraged, available but not seeking (% of labour force aged 15-74)	2.1	1.4	2.0	1.7	1.8	1.8	2.5	3.4	2.5	1.9	1.3	1.1

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Slovenia		2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018
Labour Market Indicators - Male	Total population (000)	987	987 b	1004	1014	1015	1017	1019	1021	1022	1023	1025	1027
	Population aged 15-64(000)	719	715	727	733	731	728	724	720	714	708	703	698
	Total employment (000)	540	543	531	524	506	500	495	499	501	491	516	530
	Employment aged 15-64 (000)	525	532	516	509	495	490	484	486	492	484	506	519
	Employment rate (% population aged 20-64)	77.5	77.4	75.6	74.0	71.8	71.8	71.2	71.6	73.3	73.3	76.9	79.0
	Employment rate (% population aged 15-64)	72.7	72.7	71.0	69.6	67.7	67.4	67.1	67.5	69.2	68.9	72.5	74.5
	Employment rate (% population aged 15-24)	43.2	43.0	39.1	37.6	35.7	30.4	29.7	29.5	32.0	31.1	38.6	38.9
	Employment rate (% population aged 25-54)	88.1	88.6	86.4	85.2	84.8	85.4	84.3	84.6	86.1	85.6	88.5	90.0
	Employment rate (% population aged 55-64)	45.3	44.7	46.4	45.5	39.5	40.7	41.8	41.8	42.6	43.6	48.0	52.2
	FTE employment rate (% population aged 20-64)	77.0	76.8	74.6	72.9	70.7	71.0	70.3	70.9	72.2	72.2	75.8	78.3
	Self-employed (% total employment)	14.9	13.3	14.8	16.2	16.3	16.1	15.9	16.7	16.2	15.5	14.9	15.9
	Part-time employment (% total employment)	6.5	6.2	7.4	7.4	7.1	6.3	6.5	6.8	7.0	6.0	6.7	5.9
	Temporary employment (% total employment)	13.7	13.0	12.4	12.5	13.4	12.8	12.7	12.9	14.0	13.3	13.8	12.0
	Employment in Services (% total employment)		46.6 bu	49.1 u	49.3 u	48.9	50.2 u	50.5 u	49.6 u	50.7 u	49.7 u	49.0 u	50.4 u
	Employment in Industry (% total employment)		46.2 bu	43.7 u	43.6 u	43.6	42.2 u	42.1 u	42.6 u	43.6 u	45.3 u	45.8 u	44.8 u
	Employment in Agriculture (% total employment)		7.2 b	7.2	7.2	7.5	7.6	7.4	7.7	5.8	5.0	5.2	4.7
	Activity rate (% population aged 15-64)	75.8	75.8	75.6	75.4	73.9	73.7	74.2	74.3	75.4	74.5	77.1	78.2
	Activity rate (% population aged 15-24)	47.6	47.7	45.4	44.4	42.0	38.1	37.1	36.6	38.9	36.8	42.9	42.4
	Activity rate (% population aged 25-54)	91.3	91.6	91.3	91.7	91.8	92.4	92.6	92.2	92.9	92.0	93.4	94.0
	Activity rate (% population aged 55-64)	46.7	46.4	48.2	47.5	42.7	43.6	45.1	45.7	46.4	47.1	51.8	55.1
	Total unemployment (000)	22	23	33	42	45	46	51	49	44	40	32	26
	Unemployment rate (% labour force)	4.0	4.0	5.9	7.5	8.2	8.4	9.5	9.0	8.1	7.5	5.8	4.6
	Youth unemployment rate (% labour force 15-24)	9.4	9.9	13.8	15.2	15.0	20.3	20.1	19.4	17.7	15.6	9.9	8.3
	Long term unemployment rate (% labour force)	1.8	1.7	1.7	3.4	3.7	4.1	4.9	4.9	4.1	4.1	3.1	2.0
	Share of long term unemployment (% of total unemployment)	45.3	41.4	28.3	45.0	45.1	48.8	51.9	55.0	50.7	54.1	52.7	44.0
	Youth unemployment ratio (% population aged 15-24)	4.5	4.7	6.2	6.8	6.3	7.7	7.5	7.1	6.9	5.8	4.3	3.5
	Employment rate for low skilled 25-64 (ISCED 0-2)	65.4	63.4	62.5	60.8	55.5	56.1	55.1	55.6 b	56.9	53.7	59.0	61.9
	Employment rate for medium skilled 25-64 (ISCED 3-4)	80.2	80.8	78.0	76.1	74.0	74.5	73.9	73.5 b	74.2	74.9	77.5	79.4
	Employment rate for high skilled 25-64 (ISCED 5-8)	88.9	88.7	90.3	89.6	87.4	87.4	86.3	86.5 b	88.3	86.5	89.1	91.6
	Employment rate (Nationals aged 15-64)	72.6	72.4	70.9	69.6	67.4	66.9	66.7	67.3	68.6	68.2	72.1	74.1
	Employment rate (Other EU28 aged 15-64)	92.3 u	88.9 u	89.1 u	70.4 u	67.3 u	85.2 u	79.2 u	70.5 u	72.1 u	81.4 u	78.4 u	82.5 u
	Employment rate (Other than EU28 aged 15-64)	76.5	87.8	75.1	73.5	83.6	84.9	78.0	75.1	83.8	82.1	82.2	82.0
	Employment rate (Born in the same country aged 15-64)	72.6	72.6	71.0	69.6	67.6	67.0	66.6	67.6	69.2	68.8	72.5	74.4
	Employment rate (Born in other EU28 aged 15-64)	71.5	73.3	70.7	70.9	64.9	64.1	66.1	63.4	65.2	61.2	67.4	74.2
	Employment rate (Born outside EU28 aged 15-64)	75.4	74.3	70.9	70.0	69.7	73.3	72.9	67.8	70.0	71.1	74.2	75.9
	Underemployment (% of labour force aged 15-74)		0.9	1.4	1.3	1.4	1.5	1.8	1.9	2.1	1.7	1.7	1.3
	Seeking but not available (% of labour force aged 15-74)	0.4 u	0.4 u	0.4 u	0.4 u	0.4 u	0.2 u	0.3 u	0.3 u	0.3 u	0.4 u	0.4 u	0.3 u
	Discouraged, available but not seeking (% of labour force aged 15-74)	1.8	1.1	1.7	1.5	1.5	1.5	2.3	3.0	2.1	1.6	1.3	1.0
Labour Market Indicators - Female	Total population (000)	1023	1024 b	1028	1033	1036	1039	1040	1040	1041	1041	1041	1040
	Population aged 15-64(000)	691	687	687	688	690	688	685	680	675	670	664	657
	Total employment (000)	446	453	450	443	430	424	411	418	417	424	443	450
	Employment aged 15-64 (000)	432	443	439	432	420	416	404	407	410	419	437	443
	Employment rate (% population aged 20-64)	67.1	68.5	67.9	66.5	64.8	64.6	63.0	63.6	64.7	66.7	69.7	71.7
	Employment rate (% population aged 15-64)	62.6	64.2	63.8	62.6	60.9	60.5	59.2	60.0	61.0	62.6	65.8	67.5
	Employment rate (% population aged 15-24)	31.4	33.2	31.0	30.0	26.9	23.7	23.0	24.0	27.1	26.1	30.4	31.1
	Employment rate (% population aged 25-54)	82.4	84.8	83.2	82.1	81.3	81.0	79.3	79.1	79.5	81.2	83.5	84.8
	Employment rate (% population aged 55-64)	22.2	21.1	24.8	24.5	22.7	25.0	25.2	29.0	30.5	33.4	37.5	41.9
	FTE employment rate (% population aged 20-64)	64.9	66.1	65.1	63.1	61.9	61.6	59.9	60.3	61.4	63.2	65.9	67.7
	Self-employed (% total employment)	6.6	5.9	5.9	7.8	8.1	7.6	7.5	8.0	8.0	7.6	8.2	8.5
	Part-time employment (% total employment)	10.0	10.4	12.1	13.6	12.2	12.2	12.6	13.7	13.7	13.1	14.5	14.3
	Temporary employment (% total employment)	18.4	17.7	15.7	16.8	17.3	16.4	15.0	14.7	16.4	16.2	16.8	15.3
	Employment in Services (% total employment)			71.0 u									
	Employment in Industry (% total employment)			22.1 u									
	Employment in Agriculture (% total employment)		6.5 b	6.9	6.7	6.3	6.4	6.8	7.6	5.9	3.3	4.0	3.9
	Activity rate (% population aged 15-64)	66.6	67.5	67.9	67.4	66.5	66.9	66.6	67.2	67.9	68.6	71.2	71.7
	Activity rate (% population aged 15-24)	35.4	37.4	35.8	34.8	32.3	30.0	30.2	30.4	31.7	30.6	34.9	34.3
	Activity rate (% population aged 25-54)	87.3	88.5	87.9	88.1	88.4	89.1	88.7	88.3	88.6	88.9	90.3	89.9
	Activity rate (% population aged 55-64)	23.1	22.2	25.6	25.5	23.7	26.5	27.0	31.1	32.9	35.2	39.5	43.9
	Total unemployment (000)	28	23	28	33	38	44	50	49	46	40	36	27
	Unemployment rate (% labour force)	5.9	4.8	5.8	7.1	8.2	9.4	10.9	10.6	10.1	8.6	7.5	5.7
	Youth unemployment rate (% labour force 15-24)	11.2	11.3	13.4	13.8	16.8	21.0	23.7	21.3	14.6	14.7	13.0	9.6
	Long term unemployment rate (% labour force)	2.7	2.1	1.9	2.9	3.5	4.4	5.5	5.7	5.4	4.5	3.2	2.4
	Share of long term unemployment (% of total unemployment)	46.1	43.0	32.1	41.2	43.1	47.0	50.0	54.0	53.8	52.5	42.8	41.9
	Youth unemployment ratio (% population aged 15-24)	4.0	4.2	4.8	4.8	5.4	6.3	7.1	6.5	4.6	4.5	4.5	3.3
	Employment rate for low skilled 25-64 (ISCED 0-2)	48.9	47.9	46.4	43.0	39.5	39.3	36.4	42.2 b	42.0	39.6	41.4	41.4
	Employment rate for medium skilled 25-64 (ISCED 3-4)	68.6	71.0	70.3	68.9	66.0	65.7	63.8	64.0 b	63.4	65.7	68.2	71.1
	Employment rate for high skilled 25-64 (ISCED 5-8)	86.7	87.3	87.1	85.7	85.7	83.5	82.0	80.8 b	81.7	84.3	85.7	86.9
	Employment rate (Nationals aged 15-64)	62.8	64.5	64.3	62.9	61.3	61.1	60.0	60.9	61.6	63.3	66.3	68.3
	Employment rate (Other EU28 aged 15-64)		61.8 u	48.1 u	45.0 u	41.9 u	60.4 u	34.8 u	48.4 u	50.1 u	53.1 u	67.4 u	80.1 u
	Employment rate (Other than EU28 aged 15-64)	35.3 u	26.9 u	23.4 u	40.8 u	40.0	30.5 u	29.8	27.8	42.4	44.2	51.8	49.8
	Employment rate (Born in the same country aged 15-64)	62.7	64.4	64.1	62.8	61.6	61.0	60.3	61.2	61.9	63.5	66.6	68.7
	Employment rate (Born in other EU28 aged 15-64)	59.0	60.8	63.5	57.5	50.0	57.3	53.6	51.0	55.8	58.6	63.5	65.4
	Employment rate (Born outside EU28 aged 15-64)	62.2	62.7	59.8	60.8	55.9	54.5	46.9	48.4	51.9	54.1	58.7	56.2
	Underemployment (% of labour force aged 15-74)		1.8	2.2	2.5	2.4	2.2	2.9	3.3	4.3	4.1	4.0	3.0
	Seeking but not available (% of labour force aged 15-74)	0.5 u	0.5 u	0.6 u	0.7 u	0.5 u	0.5 u	0.6 u	0.4 u	0.4 u	0.4 u	0.3 u	0.5 u
	Discouraged, available but not seeking (% of labour force aged 15-74)	2.4	1.7	2.3	2.0	2.0	2.1	2.8	3.8	3.1	2.3	1.5	1.2

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Slovenia			2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018
Social Indicators	All	At-risk-of-poverty or social exclusion (% of total population)	17.1	18.5	17.1	18.3	19.3	19.6	20.4	20.4	19.2	18.4	17.1	
		At-risk-of-poverty (% of total population)	11.5	12.3	11.3	12.7	13.6	13.5	14.5	14.5	14.3	13.9	13.3	
		At-risk-of-poverty threshold (PPS single person)	7753	8287	8599	8009	8364	8563	8527	8597	9061	9150	9130	
		Poverty gap (%)	19.4	19.3	20.2	20.2	19.9	19.1	20.4	22.0	20.3	20.2	19.6	
		Persistent at-risk-of-poverty (% of total population)		7.7	7.0	6.9	7.5	6.1	7.5	9.5	8.1	8.5	8.2	
		At-risk-of-poverty before social transfers excl. pensions (% of total population)	23.1	23.0	22.0	24.2	24.2	25.2	25.3	25.1	24.8	24.3	24.0	
		Impact of social transfers (excl. pensions) in reducing poverty (%)	50.2	46.5	48.6	47.5	43.8	46.4	42.7	42.2	42.3	42.8	44.6	
		Severe Material Deprivation (% of total population)	5.1	6.7	6.1	5.9	6.1	6.6	6.7	6.6	5.8	5.4	4.6	3.7 p
		Share of people living in low work intensity households (% of people aged 0-59)	7.3	6.7	5.6	7.0	7.6	7.5	8.0	8.7	7.4	7.4	6.2	
		Real Gross Household Disposable income (growth %)	4.5	2.7	-0.4	-0.5	0.1	-4.2	-1.9	1.6	2.0	4.8		
		Income quintile share ratio S80/S20	3.3	3.4	3.2	3.4	3.5	3.4	3.6	3.7	3.6	3.6	3.4	
		GINI coefficient	23.2	23.4	22.7	23.8	23.8	23.7	24.4	25.0	24.5	24.4	23.7	
		Early leavers from education and training (% of population aged 18-24)	4.1	5.1	5.3	5.0	4.2	4.4	3.9	4.4 b	5.0	4.9	4.3	4.2
		NEET: Young people neither in employment nor in education and training (% of total population aged 15-24)	6.7	6.5	7.5	7.1	7.1	9.3	9.2	9.4	9.5	8.0	6.5	6.6
	Male	At-risk-of-poverty or social exclusion (% of male population)	15.0	16.6	15.1	16.5	17.4	18.3	19.4	19.3	17.5	16.9	15.8	
		At-risk-of-poverty (% of male population)	10.0	11.0	9.8	11.3	12.2	12.5	13.5	13.7	13.0	12.5	12.0	
		Poverty gap (%)	19.2	20.8	21.1	20.9	20.1	19.8	20.9	23.2	21.4	21.9	20.5	
		Persistent at-risk-of-poverty (% of male population)		6.3	5.8	5.6	5.9	4.9	5.7	8.5	7.0	7.5	6.2	
		Severe Material Deprivation (% of male population)	4.9	6.4	5.9	5.6	5.8	6.8	6.6	6.7	5.4	5.2	4.3	3.4 p
		Share of people living in low work intensity households (% of males aged 0-59)	6.4	6.2	4.8	6.0	6.7	6.8	7.4	7.7	6.5	6.7	5.7	
		Life expectancy at birth (years)	74.6	75.5	75.9	76.4 b	76.8	77.1	77.2	78.2	77.8	78.2	78.2	
		Healthy life years at birth (years) - men	58.7	59.4	60.6	53.4 b	54.0	56.5	57.6	57.8	58.5	58.7	55.3	
		Early leavers from education and training (% of males aged 18-24)	5.8	7.2	7.2	6.4	5.7	5.4	5.0	6.0 b	6.4	6.7	5.8	5.3 u
		NEET: Young people neither in employment nor in education and training ( % of males aged 15-24)	6.8	6.7	7.9	8.1	7.8	9.7	9.8	9.7	9.9	9.1	6.7	6.1
	Female	At-risk-of-poverty or social exclusion (% of female population)	19.2	20.3	19.1	20.1	21.1	20.8	21.4	21.5	20.8	19.9	18.3	
		At-risk-of-poverty (% of female population)	12.9	13.6	12.8	14.1	15.0	14.6	15.4	15.2	15.6	15.2	14.5	
		Poverty gap (%)	19.7	18.7	20.2	19.1	19.5	18.4	20.1	20.8	19.4	19.6	19.1	
		Persistent at-risk-of-poverty (% of female population)		9.0	8.1	8.0	9.1	7.3	9.2	10.5	9.1	9.5	10.2	
		Severe Material Deprivation (% of female population)	5.3	6.9	6.3	6.3	6.4	6.5	6.7	6.6	6.2	5.5	4.8	3.9 p
		Share of people living in low work intensity households (% of females aged 0-59)	8.2	7.3	6.5	8.0	8.6	8.3	8.5	9.8	8.3	8.2	6.8	
		Life expectancy at birth (years)	82.0	82.6	82.7	83.1 b	83.3	83.3	83.6	84.1	83.9	84.3	84.0	
		Healthy life years at birth (years) - women	62.3	60.9	61.5	54.6 b	53.8	55.6	59.5	59.6	57.7	57.9	54.6	
		Early leavers from education and training (% of females aged 18-24)	2.2 u	2.6 u	3.2 u	3.3 u	2.5 u	3.2 u	2.6 u	2.7 bu	3.4 u	3.1 u	2.5 u	3.0 u
		NEET: Young people neither in employment nor in education and training ( % of females aged 15-24)	6.6	6.2	6.9	6.0	6.3	8.8	8.6	9.2	9.1	6.9	6.3	7.2
	Children (0-17)	At-risk-of-poverty or social exclusion of children (% of people aged 0-17)	14.7	15.3	15.1	15.2	17.3	16.4	17.5	17.7	16.6	14.9	15.1	
		At-risk-of-poverty (% of Children population)	11.3	11.6	11.2	12.6	14.7	13.5	14.7	14.8	14.2	11.9	12.8	
		Severe Material Deprivation (% of Children population)	4.4	5.2	5.4	5.1	5.3	5.9	6.0	4.9	4.7	4.5	3.1	2.2 p
		Share of children living in low work intensity households (% of Children population)	4.5	3.7	2.5	3.4	4.4	3.2	4.0	4.6	3.7	3.4	3.2	
		Risk of poverty of children in households at work (Working Intensity > 0.2)	8.4	9.0	9.5	9.9	11.3	11.1	11.4	11.0	11.2	9.4	10.5	
		Impact of social transfers (excl. pensions) in reducing poverty (0-17) (%)	54.8	50.4	53.7	51.4	45.4	47.7	45.2	46.2	45.8	50.0	50.2	
	Working age (18-64)	At-risk-of-poverty or social exclusion (% of working age population)	16.6	18.0	16.2	18.1	18.7	19.7	20.6	21.3	19.7	19.1	17.3	
		At-risk-of-poverty (% of Working age population)	9.8	10.5	9.2	11.0	11.7	12.2	13.0	13.7	13.6	13.4	12.6	
		Severe Material Deprivation (% of Working age population)	5.0	6.9	6.2	6.1	6.2	6.9	6.8	7.1	6.0	5.5	4.8	3.7 p
		Very low work intensity (18-59)	8.1	7.7	6.5	8.0	8.6	8.8	9.2	10.1	8.6	8.7	7.2	
		In-work at-risk of poverty rate (% of persons employed 18-64)	4.7	5.1	4.8	5.3	6.0	6.5	7.1	6.4	6.7	6.1	6.6	
		Impact of social transfers (excl. pensions) in reducing poverty (18-64) (%)	53.3	49.0	52.1	49.8	45.8	49.0	44.9	42.7	43.1	43.2	44.3	
	Elderly (65+)	At-risk-of-poverty or social exclusion of elderly (% of people aged 65+)	22.4	24.4	23.3	22.8	24.2	22.8	23.0	20.1	20.2	19.9	18.3	
At-risk-of-poverty (% of Elderly population)		19.4	21.3	20.0	20.2	20.9	19.6	20.5	17.1	17.2	17.6	16.4		
Severe Material Deprivation (% of Elderly population)		6.6	7.4	6.5	6.3	6.8	6.6	6.7	6.7	6.1	5.8	5.4	5.1 p	
Relative median income of elderly (ratio with median income of people younger than 65)		0.87	0.84	0.86	0.87	0.87	0.87	0.87	0.91	0.90	0.89	0.88		
Aggregate replacement ratio (ratio)		0.44	0.44	0.45	0.45	0.47	0.47	0.46	0.45	0.46	0.47	0.46		
Sickness/Health care		6.6	6.9	7.6	7.7	7.6	7.9	7.5	7.2	7.5	7.6 p			
Expenditure in social protection indicators (% of GDP)	Disability	1.7	1.6	1.7	1.7	1.7	1.6	1.5	1.4	1.3	1.2 p			
	Old age and survivors	9.6	9.4	10.7	11.1	11.3	11.5	11.9	11.5	11.3	11.0 p			
	Family/Children	1.7	1.7	2.1	2.1	2.1	2.1	1.9	1.8	1.8	1.7 p			
	Unemployment	0.4	0.4	0.6	0.7	0.8	0.7	0.8	0.7	0.6	0.6 p			
	Housing and Social exclusion n.e.c.	0.5	0.4	0.5	0.6	0.6	0.7	0.7	0.7	0.8	0.7 p			
	Total (including Admin and Other expenditures)	20.9	21.0	23.7	24.4	24.5	24.9	24.7	23.9	23.7	23.3 p			
	of which: Means tested benefits	1.8	1.7	2.0	2.0	2.0	1.9	1.8	1.8	1.8	1.8 p			

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## Slovakia

Slovakia		2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018
Macro Economic Indicators (Annual % growth)	Real GDP	10.8	5.6	-5.4	5.0	2.8	1.7	1.5	2.8	4.2	3.1	3.2	4.1
	Total employment	2.1	3.2	-2.0	-1.5	1.8	0.1	-0.8	1.4	2.0	2.4	2.2	2.0
	Labour productivity	8.5	2.3	-3.5	6.7	1.0	1.6	2.3	1.3	2.2	0.7	1.0	2.1
	Annual average hours worked per person employed	0.9	0.1	-0.7	1.4	-0.7	-0.2	-1.0	-0.7	-0.3	-0.8	-1.5	-0.9
	Real productivity per hour worked	7.5	2.2	-2.8	5.2	1.7	1.8	3.3	2.0	2.5	1.5	2.5	3.0
	Harmonized CPI	1.9	3.9	0.9	0.7	4.1	3.7	1.5	-0.1	-0.3	-0.5	1.4	2.5
	Price deflator GDP	1.1	2.8	-1.2	0.5	1.6	1.3	0.5	-0.2	-0.2	-0.5	1.2	2.1
	Nominal compensation per employee	8.7	6.6	2.6	5.4	2.0	2.6	2.6	1.8	3.5	2.1	5.2	5.5
	Real compensation per employee (GDP deflator)	7.5	3.7	3.8	4.9	0.3	1.3	2.1	2.0	3.6	2.6	3.9	3.3
	Real compensation per employee (private consumption deflator)	6.7	2.6	1.6	4.7	-2.0	-1.1	1.1	1.9	3.8	2.6	3.8	2.8
	Nominal unit labour costs	0.2	4.2	6.3	-1.1	1.0	1.0	0.3	0.5	1.3	1.3	4.2	3.3
	Real unit labour costs	-1.0	1.3	7.7	-1.7	-0.6	-0.4	-0.2	0.7	1.4	1.8	2.9	1.2
Labour Market Indicators - Total	Total population (000)	5373	5376	5382	5390	5392	5404	5411	5416	5421	5426	5435	5443
	Population aged 15-64 (000)	3857	3871	3884	3885	3882	3881	3870	3853	3834	3810	3780	3749
	Total employment (000)	2358	2434	2366	2318	2315 b	2329	2329	2363	2424	2492	2531	2567
	Employment aged 15-64 (000)	2351	2423	2357	2307	2303 b	2317	2318	2349	2405	2472	2502	2533
	Employment rate (% population aged 20-64)	67.2	68.8	66.4	64.6	65.0 b	65.1	65.0	65.9	67.7	69.8	71.1	72.4
	Employment rate (% population aged 15-64)	60.7	62.3	60.2	58.8	59.3 b	59.7	59.9	61.0	62.7	64.9	66.2	67.6
	Employment rate (% population aged 15-24)	27.6	26.2	22.8	20.6	20.0 b	20.1	20.4	21.8	23.3	25.2	26.9	27.5
	Employment rate (% population aged 25-54)	78.0	80.1	77.8	75.8	76.5 b	76.4	76.0	76.8	78.1	80.0	80.0	81.2
	Employment rate (% population aged 55-64)	35.6	39.2	39.5	40.5	41.3 b	43.1	44.0	44.8	47.0	49.0	53.0	54.2
	FTE employment rate (% population aged 20-64)	66.7	68.2	65.6	63.8	63.9 b	64.0	63.8	64.4	65.8	68.0	69.4	71.0
	Self-employed (% total employment)	12.8	13.7	15.5	15.8	15.9 b	15.4	15.5	15.3	15.0	15.3	15.2	14.7
	Part-time employment (% total employment)	2.5	2.5	3.4	3.8	4.0 b	4.0	4.5	5.1	5.8	5.8	5.8	4.9
	Temporary employment (% total employment)	4.3	3.9	3.6	4.7	5.5 b	5.7	5.8	7.4	8.9	8.4	8.0	6.9
	Employment in Services (% total employment)		55.9 b	58.4 b	59.6	59.3 b	59.1	60.8	61.0	60.6	60.6	60.0	61.0
	Employment in Industry (% total employment)		40.2 b	38.0 b	37.2	37.6 b	37.6	35.9	35.5	36.2	36.6	37.4	36.8
	Employment in Agriculture (% total employment)		3.9 b	3.6 b	3.2	3.1 b	3.3	3.3	3.5	3.2	2.9	2.7	2.3
	Activity rate (% population aged 15-64)	68.3	68.8	68.4	68.7	68.7 b	69.4	69.9	70.3	70.9	71.9	72.1	72.4
	Activity rate (% population aged 15-24)	34.6	32.4	31.4	31.1	30.1 b	30.5	30.8	31.0	31.7	32.4	33.2	32.3
	Activity rate (% population aged 25-54)	86.9	87.8	87.2	86.9	87.0 b	87.1	87.2	87.3	87.3	87.6	86.6	86.5
	Activity rate (% population aged 55-64)	38.8	41.9	42.8	45.1	46.0 b	48.5	49.5	50.1	51.8	53.9	56.4	57.2
	Total unemployment (000)	293	254	321	386	363 d	378	386	359	314	267	224	180
	Unemployment rate (% labour force)	11.2	9.6	12.1	14.5	13.7 d	14.0	14.2	13.2	11.5	9.7	8.1	6.5
	Youth unemployment rate (% labour force 15-24)	20.6	19.3	27.6	33.9	33.7 d	34.0	33.7	29.7	26.5	22.2	18.9	14.9
	Long term unemployment rate (% labour force)	8.3	6.6	6.5	9.2	9.2 b	9.4	10.0	9.3	7.6	5.8	5.1	4.0
	Share of long term unemployment (% of total unemployment)	74.2	69.6	54.0	64.0	67.9 b	67.3	70.2	70.2	65.8	60.2	62.4	61.8
	Youth unemployment ratio (% population aged 15-24)	7.0	6.2	8.6	10.4	10.1 b	10.4	10.4	9.2	8.4	7.2	6.3	4.8
	Employment rate for low skilled 25-64 (ISCED 0-2)	29.1	32.3	30.3	29.7	30.3 b	30.7	31.3	32.7 b	34.4	37.2	38.8	37.9
	Employment rate for medium skilled 25-64 (ISCED 3-4)	73.2	74.8	72.0	69.9	70.1 b	70.3	69.9	71.0 b	72.6	74.3	75.3	76.9
	Employment rate for high skilled 25-64 (ISCED 5-8)	84.2	85.6	83.2	82.2	81.5 b	80.1	79.5	80.0 b	80.3	81.3	82.0	82.6
	Employment rate (Nationals aged 15-64)	60.7	62.2	60.1	58.8	59.3 b	59.7	59.9	60.9	62.7	64.9	66.2	67.6
	Employment rate (Other EU28 aged 15-64)	61.0 u	77.4	70.9	63.7	64.6 bu	70.1	78.6	80.3	76.7	77.5	79.2	67.2
	Employment rate (Other than EU28 aged 15-64)								78.8 u		60.3 u	67.1 u	73.5
	Employment rate (Born in the same country aged 15-64)	60.7	62.2	60.2	58.8	59.3 b	59.7	59.8	60.9	62.8	64.9	66.2	67.5
	Employment rate (Born in other EU28 aged 15-64)	67.4	70.8	58.8	54.3	54.7 b	64.2	65.7	64.4	55.5	62.3	68.3	69.3
	Employment rate (Born outside EU28 aged 15-64)	60.9 u	59.5	67.9	64.2	69.3 b	62.5	68.2	70.3	66.7	64.9	68.6	80.8
	Underemployment (% of labour force aged 15-74)		0.7	0.9	1.3	1.4 b	1.4	1.6	1.7	2.1	2.3	2.1	1.6
	Seeking but not available (% of labour force aged 15-74)	0.4	0.3	0.5	0.5	0.5 b	0.5	0.6	0.6	0.5	0.4	0.5	0.4
	Discouraged, available but not seeking (% of labour force aged 15-74)	2.2	1.8	1.7	1.7	1.6 b	1.5	1.8	1.7	2.0	1.6	1.7	1.5

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Slovakia		2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018
Labour Market Indicators - Male	Total population (000)	2611	2614	2618	2624	2625	2632	2636	2639	2642	2646	2652	2657
	Population aged 15-64(000)	1923	1932	1941	1943	1944	1945	1941	1934	1926	1916	1903	1889
	Total employment (000)	1322	1364	1326	1285	1292 b	1304	1295	1316	1349	1378	1385	1414
	Employment aged 15-64 (000)	1319	1357	1320	1279	1285 b	1296	1288	1308	1337	1367	1370	1395
	Employment rate (% population aged 20-64)	76.0	77.4	74.6	71.9	72.5 b	72.8	72.2	73.2	75.0	76.9	77.5	79.2
	Employment rate (% population aged 15-64)	68.4	70.0	67.6	65.2	66.1 b	66.7	66.4	67.6	69.5	71.4	72.0	73.9
	Employment rate (% population aged 15-24)	30.9	30.8	26.8	23.8	24.8 b	24.1	24.4	26.8	28.4	31.9	32.4	34.0
	Employment rate (% population aged 25-54)	85.0	86.4	84.2	81.4	82.5 b	83.0	82.2	83.2	85.1	86.3	86.3	87.9
	Employment rate (% population aged 55-64)	52.5	56.7	54.9	54.0	52.5 b	53.6	53.3	53.1	53.6	55.1	56.6	58.4
	FTE employment rate (% population aged 20-64)	75.9	77.2	74.0	71.2	71.7 b	71.9	71.2	72.0	73.6	75.5	76.2	78.3
	Self-employed (% total employment)	17.2	18.4	20.2	21.2	20.8 b	19.8	20.1	19.7	18.9	19.2	19.1	18.8
	Part-time employment (% total employment)	1.0	1.3	2.6	2.6	2.7 b	2.8	3.3	3.7	4.0	4.1	4.0	3.2
	Temporary employment (% total employment)	4.0	3.6	3.6	4.3	5.0 b	5.1	5.3	7.2	8.0	7.8	7.3	6.1
	Employment in Services (% total employment)		42.1 b	44.8 b	45.5	45.1 b	44.7	46.2	47.2	46.8	46.9	45.7	47.0
	Employment in Industry (% total employment)		52.6 b	50.4 b	50.1	50.5 b	50.8	49.2	47.9	48.6	49.0	50.5	49.8
	Employment in Agriculture (% total employment)		5.3 b	4.8 b	4.4	4.4 b	4.5	4.6	4.9	4.6	4.1	3.8	3.2
	Activity rate (% population aged 15-64)	75.9	76.4	76.3	76.1	76.6 b	77.1	77.2	77.6	77.5	78.3	78.2	78.7
	Activity rate (% population aged 15-24)	38.9	37.8	37.1	36.4	37.2 b	37.1	37.6	38.0	38.3	39.8	39.6	39.7
	Activity rate (% population aged 25-54)	93.1	93.4	93.6	92.9	93.5 b	93.8	93.6	94.0	93.6	93.5	93.1	93.2
	Activity rate (% population aged 55-64)	57.0	59.9	58.7	59.7	58.8 b	60.3	59.5	58.9	58.4	60.1	60.0	61.1
	Total unemployment (000)	144	124	169	211	203 d	204	210	194	155	133	119	92
	Unemployment rate (% labour force)	10.0	8.4	11.5	14.3	13.7 d	13.5	14.0	12.8	10.3	8.8	7.9	6.1
	Youth unemployment rate (% labour force 15-24)	20.6	18.6	27.9	34.8	33.3 d	35.0	34.9	29.5	25.8	19.8	18.1	14.3
	Long term unemployment rate (% labour force)	7.4	5.8	5.8	9.0	9.4 b	9.3	10.0	9.4	6.9	5.5	5.2	4.0
	Share of long term unemployment (% of total unemployment)	75.2	69.1	50.9	63.2	69.2 b	68.8	71.7	72.9	66.9	62.3	65.7	65.2
	Youth unemployment ratio (% population aged 15-24)	7.9	7.0	10.3	12.6	12.3 b	13.0	13.1	11.2	9.9	7.9	7.2	5.7
	Employment rate for low skilled 25-64 (ISCED 0-2)	33.6	39.1	39.0	37.0	35.3 b	36.0	36.9	37.0 b	39.8	43.6	45.0	46.7
	Employment rate for medium skilled 25-64 (ISCED 3-4)	82.1	82.9	80.0	77.2	77.5 b	78.2	76.9	78.1 b	79.4	80.7	80.9	82.5
	Employment rate for high skilled 25-64 (ISCED 5-8)	89.9	91.7	89.5	88.1	87.1 b	85.9	85.7	87.4 b	88.2	87.4	88.6	89.8
	Employment rate (Nationals aged 15-64)	68.4	69.9	67.5	65.2	66.1 b	66.7	66.3	67.6	69.4	71.3	71.9	73.8
	Employment rate (Other EU28 aged 15-64)		90.3 u	93.5 u	82.0 u	75.4 bu		84.0 u	100.0	87.9 u	87.2 u	89.5	89.3 u
	Employment rate (Other than EU28 aged 15-64)												
	Employment rate (Born in the same country aged 15-64)	68.4	69.9	67.5	65.2	66.1 b	66.7	66.3	67.6	69.5	71.4	72.0	73.7
	Employment rate (Born in other EU28 aged 15-64)	75.0	79.5	73.7	71.1	67.8 b	64.5	67.9	77.5	65.9	70.2	76.7	88.9
	Employment rate (Born outside EU28 aged 15-64)		60.8 u		87.8 u	84.2 bu	75.8 u	85.7 u	81.6 u		69.8	80.9	95.4 u
	Underemployment (% of labour force aged 15-74)		0.5	0.8	1.2	1.2 b	1.3	1.4	1.6	1.8	2.1	1.7	1.3
	Seeking but not available (% of labour force aged 15-74)	0.2	0.2 u	0.3	0.4	0.4 b	0.4	0.4	0.4	0.4	0.3	0.4	0.2 u
	Discouraged, available but not seeking (% of labour force aged 15-74)	1.7	1.6	1.4	1.3	1.3 b	1.1	1.5	1.3	1.6	1.3	1.5	1.3
Labour Market Indicators - Female	Total population (000)	2763	2762	2764	2767	2767	2773	2775	2777	2779	2780	2784	2787
	Population aged 15-64(000)	1935	1939	1942	1941	1939	1937	1929	1919	1908	1895	1877	1860
	Total employment (000)	1036	1070	1040	1033	1023 b	1026	1034	1047	1075	1114	1146	1153
	Employment aged 15-64 (000)	1032	1066	1036	1029	1018 b	1021	1029	1041	1068	1105	1132	1138
	Employment rate (% population aged 20-64)	58.7	60.3	58.2	57.4	57.4 b	57.3	57.8	58.6	60.3	62.7	64.7	65.5
	Employment rate (% population aged 15-64)	53.0	54.6	52.8	52.3	52.5 b	52.7	53.4	54.3	55.9	58.3	60.3	61.2
	Employment rate (% population aged 15-24)	24.1	21.5	18.7	17.4	15.0 b	15.9	16.2	16.5	18.0	18.2	21.1	20.6
	Employment rate (% population aged 25-54)	71.0	73.7	71.2	70.1	70.4 b	69.6	69.6	70.2	70.9	73.5	73.4	74.4
	Employment rate (% population aged 55-64)	21.2	24.2	26.1	28.7	31.4 b	33.6	35.7	37.2	41.0	43.5	49.6	50.4
	FTE employment rate (% population aged 20-64)	57.8	59.4	57.3	56.4	56.1 b	56.0	56.3	56.9	58.0	60.5	62.5	63.7
	Self-employed (% total employment)	7.2	7.7	9.6	9.2	9.7 b	9.8	9.7	9.8	10.1	10.5	10.4	9.7
	Part-time employment (% total employment)	4.3	4.1	4.5	5.2	5.6 b	5.5	6.2	6.8	8.0	7.9	8.0	7.0
	Temporary employment (% total employment)	4.7	4.3	3.7	5.2	6.1 b	6.4	6.3	7.7	10.1	9.1	8.8	7.9
	Employment in Services (% total employment)												
	Employment in Industry (% total employment)												
	Employment in Agriculture (% total employment)		2.2 b	2.0 b	1.8	1.4 b	1.7	1.7	1.7	1.3	1.4	1.3	1.1
	Activity rate (% population aged 15-64)	60.8	61.3	60.6	61.3	60.8 b	61.7	62.5	62.9	64.3	65.4	65.9	65.9
	Activity rate (% population aged 15-24)	30.2	26.7	25.4	25.5	22.7 b	23.6	23.7	23.6	24.9	24.7	26.5	24.5
	Activity rate (% population aged 25-54)	80.7	82.1	80.7	80.9	80.4 b	80.4	80.5	80.4	80.8	81.5	79.8	79.7
	Activity rate (% population aged 55-64)	23.3	26.4	29.0	32.3	34.6 b	38.0	40.4	42.1	45.8	48.2	53.0	53.7
	Total unemployment (000)	149	130	152	175	160 d	174	176	165	159	134	105	87
	Unemployment rate (% labour force)	12.8	11.0	12.9	14.7	13.7 d	14.5	14.5	13.6	12.9	10.8	8.4	7.0
	Youth unemployment rate (% labour force 15-24)	20.7	20.3	27.1	32.6	34.3 d	32.5	31.6	30.1	27.5	26.3	20.2	16.1
	Long term unemployment rate (% labour force)	9.3	7.7	7.4	9.5	9.0 b	9.5	10.0	9.1	8.3	6.2	4.9	4.1
	Share of long term unemployment (% of total unemployment)	73.3	70.0	57.4	65.1	66.3 b	65.4	68.5	67.1	64.7	58.1	58.7	58.2
	Youth unemployment ratio (% population aged 15-24)	6.1	5.3	6.7	8.1	7.7 b	7.7	7.5	7.1	6.8	6.5	5.3	4.0
	Employment rate for low skilled 25-64 (ISCED 0-2)	26.4	28.5	25.2	24.9	27.1 b	27.3	27.7	29.6 b	30.5	32.5	34.1	30.9
	Employment rate for medium skilled 25-64 (ISCED 3-4)	63.7	66.2	63.5	62.1	62.1 b	61.4	62.2	63.3 b	64.8	67.0	68.9	70.3
	Employment rate for high skilled 25-64 (ISCED 5-8)	79.0	79.7	77.7	77.5	76.9 b	75.6	74.4	73.9 b	74.2	76.7	77.1	77.2
	Employment rate (Nationals aged 15-64)	53.0	54.6	52.8	52.4	52.5 b	52.7	53.3	54.3	55.9	58.3	60.3	61.2
	Employment rate (Other EU28 aged 15-64)											68.7 u	
	Employment rate (Other than EU28 aged 15-64)												
	Employment rate (Born in the same country aged 15-64)	53.0	54.6	52.8	52.4	52.6 b	52.7	53.3	54.3	56.0	58.3	60.3	61.3
	Employment rate (Born in other EU28 aged 15-64)	61.0	61.0	45.4	37.2	42.1 bu	64.0	63.6	52.3	46.6	55.5	62.8	50.9 u
	Employment rate (Born outside EU28 aged 15-64)		58.2 u	69.2 u					60.8 u	69.7 u	59.3 u	57.8 u	
	Underemployment (% of labour force aged 15-74)		0.9	1.0	1.4	1.6 b	1.5	1.9	1.8	2.5	2.7	2.4	2.0
	Seeking but not available (% of labour force aged 15-74)	0.5	0.5	0.7	0.7	0.6 b	0.6	0.9	0.8	0.6	0.5	0.6	0.6
	Discouraged, available but not seeking (% of labour force aged 15-74)	2.7	2.1	2.1	2.2	1.9 b	2.0	2.2	2.1	2.5	2.0	1.9	1.8

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Slovakia		2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018
Social Indicators	All	At-risk-of-poverty or social exclusion (% of total population)	21.4	20.6	19.6	20.6	20.5	19.8	18.4	18.4	18.1	16.3	
		At-risk-of-poverty (% of total population)	10.6	10.9	11.0	12.0	13.0	13.2	12.8	12.3	12.7	12.4	
		At-risk-of-poverty threshold (PPS single person)	3365	4058	4694	5016	5385	5879	5743	5883	6132	6280	6344
		Poverty gap (%)	19.2	18.1	23.2	25.7	22.8	20.5	24.1	29.0	28.9	26.0	
		Persistent at-risk-of-poverty (% of total population)		4.9	5.4	6.0	7.8	8.6	7.1	9.8	7.4	7.7	
		At-risk-of-poverty before social transfers excl. pensions (% of total population)	18.2	18.4	17.1	19.8	19.5	20.0	20.1	19.6	19.0	18.4	17.5
		Impact of social transfers (excl. pensions) in reducing poverty (%)	41.8	40.8	35.7	39.4	33.3	34.0	36.3	35.7	35.3	31.0	29.1
		Severe Material Deprivation (% of total population)	13.7	11.8	11.1	11.4	10.6	10.5	10.2	9.9	9.0	8.2	7.0
		Share of people living in low work intensity households (% of people aged 0-59)	6.4	5.2	5.6	7.9	7.7	7.2	7.6	7.1	7.1	6.5	5.4
		Real Gross Household Disposable income (growth %)	9.2	4.9	1.4	0.5	-1.9	-0.6	0.1	2.6	4.2	3.2	
		Income quintile share ratio S80/S20	3.5	3.4	3.6	3.8	3.8	3.7	3.6	3.9	3.5	3.6	3.5
		GINI coefficient	24.5	23.7	24.8	25.9	25.7	25.3	24.2	26.1	23.7	24.3	23.2
		Early leavers from education and training (% of population aged 18-24)	6.5	6.0	4.9	4.7	5.1 b	5.3	6.4	6.7 b	6.9	7.4	9.3
		NEET: Young people neither in employment nor in education and training (% of total population aged 15-24)	12.5	11.1	12.5	14.1	13.8 b	13.8	13.7	12.8	13.7	12.3	12.1
													10.2
	Male	At-risk-of-poverty or social exclusion (% of male population)	19.4	18.9	18.0	19.6	19.5	19.7	19.3	18.1	18.1	18.1	16.3
		At-risk-of-poverty (% of male population)	9.9	10.1	10.1	11.7	12.8	13.2	12.8	12.7	12.1	12.7	12.4
		Poverty gap (%)	22.4	21.0	24.7	28.0	24.5	20.5	25.5	30.7	32.6	27.8	28.8
		Persistent at-risk-of-poverty (% of male population)		4.6	5.1	4.6	7.6	8.5	6.7	10.3	7.2	7.4	
		Severe Material Deprivation (% of male population)	12.8	11.1	10.5	11.1	10.1	10.1	10.0	9.7	8.9	8.1	7.2
		Share of people living in low work intensity households (% of males aged 0-59)	5.7	4.5	5.1	7.4	7.5	7.0	7.2	7.2	7.4	6.6	5.3
		Life expectancy at birth (years)	70.6	70.9 b	71.4	71.8	72.3	72.5	72.9	73.3	73.1	73.8	73.8
		Healthy life years at birth (years) - men	55.6	52.1 b	52.4	52.4	52.1	53.4	54.5	55.5	54.8	56.4	55.6
		Early leavers from education and training (% of males aged 18-24)	7.2	7.1	5.7	4.6	5.4 b	6.0	6.7	6.9 b	6.9	7.6	8.5
		NEET: Young people neither in employment nor in education and training (% of males aged 15-24)	11.0	9.6	12.2	13.8	13.9 b	14.5	14.2	12.8	13.3	10.9	10.5
													8.4
	Female	At-risk-of-poverty or social exclusion (% of female population)	23.1	22.0	21.1	21.6	21.7	21.3	20.2	18.7	18.6	18.2	16.2
		At-risk-of-poverty (% of female population)	11.2	11.5	11.8	12.2	13.1	13.3	12.9	12.6	12.4	12.8	12.3
		Poverty gap (%)	17.2	16.5	21.8	24.3	21.0	20.6	23.0	26.1	25.5	24.3	23.9
		Persistent at-risk-of-poverty (% of female population)		5.2	5.6	7.3	8.0	8.7	7.4	9.4	7.7	8.0	
		Severe Material Deprivation (% of female population)	14.5	12.3	11.6	11.8	11.0	10.8	10.5	10.0	9.1	8.3	6.8
		Share of people living in low work intensity households (% of females aged 0-59)	7.2	5.9	6.0	8.4	7.8	7.5	7.9	7.0	6.9	6.3	5.4
		Life expectancy at birth (years)	78.4	79.0 b	79.1	79.3	79.8	79.9	80.1	80.5	80.2	80.7	80.7
		Healthy life years at birth (years) - women	56.1	52.5 b	52.6	52.0	52.3	53.1	54.3	54.6	55.1	57.0	55.6
		Early leavers from education and training (% of females aged 18-24)	5.8	4.9	4.1	4.9	4.6 b	4.6	6.1	6.6 b	6.8	7.2	10.3
		NEET: Young people neither in employment nor in education and training (% of females aged 15-24)	14.1	12.5	12.9	14.4	13.7 b	13.1	13.1	12.8	14.2	13.7	13.8
													12.0
	Children (0-17)	At-risk-of-poverty or social exclusion of children (% of people aged 0-17)	25.8	24.3	23.7	25.3	26.0	26.6	25.5	23.6	24.9	24.4	22.5
		At-risk-of-poverty (% of Children population)	17.2	16.7	16.8	18.8	21.2	21.9	20.3	19.2	20.1	20.8	19.9
		Severe Material Deprivation (% of Children population)	16.3	12.6	12.7	13.5	12.4	11.9	13.0	12.1	11.2	9.7	9.1
		Share of children living in low work intensity households (% of Children population)	5.5	4.4	5.4	8.1	7.3	7.2	8.4	8.1	8.0	8.2	7.1
		Risk of poverty of children in households at work (Working Intensity > 0.2)	13.0	13.7	12.7	13.0	16.1	16.4	13.4	12.7	14.2	14.6	14.2
		Impact of social transfers (excl. pensions) in reducing poverty (0-17) (%)	36.5	38.2	30.3	35.8	28.6	29.8	33.7	36.2	37.6	28.8	27.6
	Working age (18-64)	At-risk-of-poverty or social exclusion (% of working age population)	20.1	19.3	18.5	20.2	20.6	19.9	19.4	18.1	17.8	17.6	15.5
		At-risk-of-poverty (% of Working age population)	9.3	9.5	9.6	11.2	12.4	12.3	12.1	12.3	11.6	12.0	11.5
		Severe Material Deprivation (% of Working age population)	12.3	10.8	10.6	11.0	10.3	10.1	9.7	9.4	8.4	7.9	6.5
		Very low work intensity (18-59)	6.7	5.4	5.6	7.9	7.8	7.2	7.3	6.9	6.9	6.0	4.8
		In-work at-risk-of poverty rate (% of persons employed 18-64)	4.9	5.8	5.2	5.7	6.3	6.2	5.8	5.7	6.1	6.5	6.4
		Impact of social transfers (excl. pensions) in reducing poverty (18-64) (%)	45.3	43.5	39.2	41.4	34.7	35.6	37.3	35.6	34.5	31.8	30.3
	Elderly (65+)	At-risk-of-poverty or social exclusion of elderly (% of people aged 65+)	22.1	21.9	19.7	16.7	14.5	16.3	13.6	13.4	12.8	12.3	12.1
		At-risk-of-poverty (% of Elderly population)	8.5	9.9	10.8	7.7	6.3	7.8	6.0	6.2	5.6	5.7	6.9
		Severe Material Deprivation (% of Elderly population)	17.7	15.3	11.7	11.1	9.7	10.8	9.2	9.2	9.2	8.0	6.9
		Relative median income of elderly (ratio with median income of people younger than 65)	0.81	0.79	0.81	0.83	0.86	0.81	0.90	0.91	0.91	0.91	0.89
		Aggregate replacement ratio (ratio)	0.54	0.54	0.55	0.61	0.62	0.56	0.61	0.62	0.62	0.62	0.62
Expenditure in social protection indicators (% of GDP)	Expenditure in social protection indicators (% of GDP)	Sickness/Health care	4.6	5.0	5.6	5.4	5.3	5.3	5.5	5.6	5.5	5.8 p	
		Disability	1.3	1.4	1.5	1.5	1.5	1.6	1.6	1.6	1.6	1.6 p	
		Old age and survivors	6.6	6.5	7.6	7.6	7.5	7.7	7.9	8.2	8.1	8.0 p	
		Family/Children	1.5	1.4	1.7	1.7	1.7	1.7	1.7	1.7	1.6	1.6 p	
		Unemployment	0.5	0.6	1.0	1.0	0.8	0.7	0.6	0.5	0.5	0.5 p	
		Housing and Social exclusion n.e.c.	0.5	0.4	0.5	0.5	0.5	0.5	0.4	0.4	0.4	0.3 p	
		Total (including Admin and Other expenditures)	15.7	15.7	18.5	18.2	17.8	18.0	18.3	18.5	18.2	18.3 p	
		of which: Means tested benefits	1.0	0.8	0.9	0.9	0.9	0.9	0.9	0.9	0.8	0.7 p	

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## Finland

Finland		2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018
Macro Economic Indicators (Annual % growth)	Real GDP	5.2	0.7	-8.3	3.0	2.6	-1.4	-0.8	-0.6	0.5	2.8	2.7	2.3
	Total employment	2.1	2.2	-2.4	-0.7	1.3	0.9	-0.7	-0.5	-0.1	0.5	1.2	2.7
	Labour productivity	3.0	-1.5	-6.0	3.7	1.3	-2.3	0.0	-0.2	0.6	2.3	1.5	-0.3
	Annual average hours worked per person employed	-0.1	-0.4	-1.4	0.4	-0.3	-0.7	-0.7	-0.2	0.1	-0.2	-0.2	-0.1
	Real productivity per hour worked	3.1	-1.1	-4.7	3.3	1.6	-1.6	0.6	0.0	0.6	2.5	1.7	-0.3
	Harmonized CPI	1.6	3.9	1.6	1.7	3.3	3.2	2.2	1.2	-0.2	0.4	0.8	1.2
	Price deflator GDP	2.8	3.1	1.9	0.4	2.6	3.0	2.6	1.7	1.7	0.1	0.9	1.9
	Nominal compensation per employee	3.3	4.3	2.0	2.2	3.6	2.8	1.4	1.0	1.5	1.1	-1.2	1.2
	Real compensation per employee (GDP deflator)	0.6	1.2	0.1	1.9	1.0	-0.2	-1.2	-0.7	-0.2	0.9	-2.2	-0.7
	Real compensation per employee (private consumption deflator)	1.7	0.3	0.4	0.5	0.3	-0.4	-0.9	-0.3	1.6	0.7	-2.1	0.1
	Nominal unit labour costs	0.3	5.8	8.5	-1.4	2.3	5.2	1.4	1.1	0.8	-1.2	-2.7	1.6
	Real unit labour costs	-2.5	2.7	6.5	-1.7	-0.3	2.2	-1.1	-0.6	-0.8	-1.4	-3.6	-0.3
Labour Market Indicators - Total	Total population (000)	5277	5300	5326	5351	5375	5401	5427	5451	5472	5487	5503	5513
	Population aged 15-64 (000)	3507	3531	3543	3553	3547	3533	3517	3500	3484	3468	3459	3443
	Total employment (000)	2492	2531 b	2457	2448	2474	2483	2457	2447	2437	2448	2473	2540
	Employment aged 15-64 (000)	2459	2497 b	2423	2410	2429	2431	2403	2386	2368	2380	2403	2465
	Employment rate (% population aged 20-64)	74.8	75.8	73.5	73.0	73.8	74.0	73.3	73.1	72.9	73.4	74.2	76.3
	Employment rate (% population aged 15-64)	70.3	71.1	68.7	68.1	69.0	69.4	68.9	68.7	68.5	69.1	70.0	72.1
	Employment rate (% population aged 15-24)	44.6	44.7	39.6	38.8	40.4	41.8	41.5	41.4	40.5	41.7	42.5	44.0
	Employment rate (% population aged 25-54)	83.4	84.3	82.4	81.6	82.3	82.0	81.0	80.5	80.0	79.9	80.6	82.5
	Employment rate (% population aged 55-64)	55.0	56.5	55.5	56.2	57.0	58.2	58.5	59.1	60.0	61.4	62.5	65.4
	FTE employment rate (% population aged 20-64)	71.5 b	72.5 b	70.4	69.6	70.5	70.4	70.1	69.8	69.1	69.8	70.1	72.7
	Self-employed (% total employment)	12.0	12.3 b	13.1	12.8	12.9	13.1	13.0	13.5	13.8	13.5	12.8	12.8
	Part-time employment (% total employment)	13.4	12.7	13.3	13.8	14.1	14.1	14.0	14.1	14.1	14.9	15.0	15.1
	Temporary employment (% total employment)	14.0	13.1	12.6	13.4	13.6	13.5	13.4	13.4	13.1	13.6	13.9	14.2
	Employment in Services (% total employment)		70.6 b	71.7	72.5	73.0	73.3	73.2	74.2	74.4	74.3	74.3	74.3
	Employment in Industry (% total employment)		25.2 b	24.0	23.3	23.0	22.9	22.9	22.0	21.8	22.3	22.3	22.4
	Employment in Agriculture (% total employment)		4.2 b	4.3	4.1	4.0	3.8	3.8	3.9	3.8	3.5	3.4	3.3
	Activity rate (% population aged 15-64)	75.6	76.0	75.0	74.5	74.9	75.2	75.2	75.4	75.8	75.9	76.7	77.9
	Activity rate (% population aged 15-24)	53.4	53.5	50.4	49.4	50.5	51.6	51.8	52.1	52.2	52.2	53.2	53.1
	Activity rate (% population aged 25-54)	88.0	88.6	88.2	87.5	87.7	87.3	86.8	86.6	86.6	86.3	86.8	87.8
	Activity rate (% population aged 55-64)	58.8	59.7	59.1	60.2	60.9	62.3	62.9	63.8	65.2	66.4	67.8	70.3
	Total unemployment (000)	183	172	221	224	209	207	219	232	252	237	234	202
	Unemployment rate (% labour force)	6.9	6.4	8.2	8.4	7.8	7.7	8.2	8.7	9.4	8.8	8.6	7.4
	Youth unemployment rate (% labour force 15-24)	16.5	16.5	21.5	21.4	20.1	19.0	19.9	20.5	22.4	20.1	20.1	17.0
	Long term unemployment rate (% labour force)	1.5	1.2	1.4	2.0	1.7	1.6	1.7	1.9	2.3	2.3	2.1	1.6
	Share of long term unemployment (% of total unemployment)	22.6	18.2	16.7	23.8	22.0	21.2	20.6	22.1	24.4	25.7	24.2	21.8
	Youth unemployment ratio (% population aged 15-24)	8.8	8.8 b	10.9	10.6	10.1	9.8	10.3	10.7	11.7	10.5	10.7	9.0
	Employment rate for low skilled 25-64 (ISCED 0-2)	58.6	59.3 b	56.8	55.0	55.5	55.2	54.1	53.5 b	53.1	54.3	53.2	55.4
	Employment rate for medium skilled 25-64 (ISCED 3-4)	76.2	77.3 b	74.8	74.1	74.7	74.6	73.6	73.2 b	72.7	73.0	73.4	75.3
	Employment rate for high skilled 25-64 (ISCED 5-8)	85.2	85.6 b	84.4	84.1	84.3	84.4	83.8	83.5 b	83.1	83.0	84.5	86.3
	Employment rate (Nationals aged 15-64)	70.5	71.3 b	68.9	68.5	69.4	69.7	69.2	69.2	69.0	69.7	70.5	72.7
	Employment rate (Other EU28 aged 15-64)	73.9	76.2 b	72.0	70.7	70.8	73.8	69.5	70.7	70.4	71.3	72.8	72.3
	Employment rate (Other than EU28 aged 15-64)	49.4	51.6 b	51.5	46.9	47.4	48.8	50.9	47.6	45.9	44.1	48.0	48.2
	Employment rate (Born in the same country aged 15-64)	70.5	71.3 b	68.9	68.5	69.4	69.6	69.2	69.2	69.2	69.8	70.6	72.8
	Employment rate (Born in other EU28 aged 15-64)	74.7	75.9 b	72.9	71.6	71.9	75.5	74.0	72.4	70.1	71.2	71.5	71.9
	Employment rate (Born outside EU28 aged 15-64)	55.8	58.3 b	57.9	53.5	54.1	55.9	56.3	54.0	52.7	51.2	54.1	57.0
	Underemployment (% of labour force aged 15-74)		2.7	3.0	3.0	2.9	2.8	3.0	3.4	3.7	3.8	3.5	3.7
	Seeking but not available (% of labour force aged 15-74)	2.3	2.1	2.1	2.3	2.4	2.3	2.3	2.4	2.4	2.4	2.5	2.5
	Discouraged, available but not seeking (% of labour force aged 15-74)	3.0	2.8	3.4	3.7	3.7	4.1	4.6	5.1	5.3	5.7	5.2	4.6

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Finland		2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018
Labour Market Indicators - Male	Total population (000)	2584	2597	2612	2625	2638	2653	2667	2680	2692	2701	2712	2719
	Population aged 15-64(000)	1773	1785	1791	1796	1793	1787	1779	1771	1763	1757	1755	1748
	Total employment (000)	1290	1315 b	1255	1259	1278	1277	1261	1254	1249	1267	1282	1317
	Employment aged 15-64 (000)	1268	1291 b	1233	1234	1249	1244	1228	1215	1206	1225	1238	1270
	Employment rate (% population aged 20-64)	77.2	78.4	74.7	74.5	75.6	75.5	74.7	74.0	73.9	75.0	75.9	78.2
	Employment rate (% population aged 15-64)	72.1	73.1	69.5	69.4	70.6	70.5	69.9	69.5	69.3	70.5	71.4	73.5
	Employment rate (% population aged 15-24)	44.5	44.3	37.7	37.7	39.5	41.0	39.1	39.8	38.1	40.1	41.4	42.6
	Employment rate (% population aged 25-54)	86.0	87.3	84.3	83.9	84.8	84.4	83.9	82.7	82.5	83.0	83.3	85.3
	Employment rate (% population aged 55-64)	55.1	57.1	54.6	55.6	56.8	56.6	56.5	56.8	57.4	59.8	61.7	64.3
	FTE employment rate (% population aged 20-64)	75.3 b	76.6 b	73.0	72.4	73.4	73.5	72.8	72.5	71.5	72.6	73.5	76.0
	Self-employed (% total employment)	16.0	16.1 b	17.3	17.0	17.1	17.4	17.3	17.9	18.2	17.8	16.5	16.4
	Part-time employment (% total employment)	8.3	7.9	8.3	8.9	9.4	9.1	8.8	9.2	9.7	10.0	9.9	10.0
	Temporary employment (% total employment)	10.3	9.4	8.7	10.2	10.5	10.5	10.2	10.2	10.2	10.7	10.9	11.1
	Employment in Services (% total employment)		55.4 b	56.7	58.3	58.4	58.5	58.4	59.7	60.1	60.2	60.0	60.2
	Employment in Industry (% total employment)		39.0 b	37.5	36.2	36.1	36.1	36.2	34.9	34.4	35.0	35.3	35.2
	Employment in Agriculture (% total employment)		5.7 b	5.8	5.5	5.5	5.4	5.4	5.5	5.5	4.9	4.7	4.6
	Activity rate (% population aged 15-64)	77.2	77.9	76.4	76.4	77.2	77.1	76.8	76.8	77.2	77.7	78.5	79.5
	Activity rate (% population aged 15-24)	53.3	53.4	49.7	49.4	50.5	51.2	50.8	51.5	51.1	51.2	52.3	51.5
	Activity rate (% population aged 25-54)	90.4	91.2	90.6	90.5	90.9	90.4	90.1	89.5	89.6	89.7	89.8	90.8
	Activity rate (% population aged 55-64)	59.1	60.6	58.7	60.1	61.4	61.6	61.5	61.9	63.2	65.1	67.5	69.7
	Total unemployment (000)	90	85	122	126	117	115	122	129	137	126	125	106
	Unemployment rate (% labour force)	6.5	6.1	8.9	9.1	8.4	8.3	8.8	9.3	9.9	9.0	8.9	7.4
	Youth unemployment rate (% labour force 15-24)	16.4	17.1	24.1	23.8	21.8	19.9	22.9	22.8	25.4	21.8	20.9	17.3
	Long term unemployment rate (% labour force)	1.7	1.2	1.6	2.5	2.2	2.1	2.0	2.2	2.7	2.5	2.4	1.8
	Share of long term unemployment (% of total unemployment)	26.0	20.3	18.2	27.6	26.0	24.9	23.2	24.1	27.8	28.2	27.0	24.5
	Youth unemployment ratio (% population aged 15-24)	8.8	9.2 b	12.0	11.8	11.0	10.2	11.6	11.7	13.0	11.2	11.0	8.9
	Employment rate for low skilled 25-64 (ISCED 0-2)	62.7	63.5 b	60.0	59.1	60.3	59.0	58.2	58.1 b	58.4	61.2	59.5	62.0
	Employment rate for medium skilled 25-64 (ISCED 3-4)	79.1	80.4 b	76.6	76.1	77.3	76.9	76.3	75.0 b	75.1	75.6	76.3	78.3
	Employment rate for high skilled 25-64 (ISCED 5-8)	87.5	88.8 b	86.9	86.8	87.2	86.9	86.3	85.6 b	84.8	85.4	87.2	88.8
	Employment rate (Nationals aged 15-64)	72.2	73.2 b	69.6	69.5	70.7	70.7	70.1	69.6	69.5	70.7	71.5	73.7
	Employment rate (Other EU28 aged 15-64)	78.1	79.9 b	72.0	74.1	77.0	76.8	70.9	73.0	73.6	77.7	79.0	78.5
	Employment rate (Other than EU28 aged 15-64)	60.7	61.3 b	60.4	56.8	57.5	58.1	60.8	60.1	58.6	56.1	61.5	59.0
	Employment rate (Born in the same country aged 15-64)	72.2	73.2 b	69.6	69.5	70.8	70.6	70.0	69.7	69.6	70.8	71.5	73.7
	Employment rate (Born in other EU28 aged 15-64)	78.6	76.7 b	71.5	73.1	74.7	78.5	75.4	72.6	73.7	75.5	74.3	76.4
	Employment rate (Born outside EU28 aged 15-64)	62.0	66.7 b	65.0	61.6	61.1	62.2	64.4	62.1	59.7	60.5	64.7	65.9
	Underemployment (% of labour force aged 15-74)		1.6	2.0	2.0	1.9	1.9	2.0	2.4	2.7	2.7	2.6	2.6
	Seeking but not available (% of labour force aged 15-74)	2.0	1.8	1.9	1.9	2.0	2.0	2.1	2.1	2.1	2.1	2.1	2.2
	Discouraged, available but not seeking (% of labour force aged 15-74)	3.0	2.8	3.7	3.9	3.9	4.4	4.9	5.5	5.6	6.0	5.3	4.9
Labour Market Indicators - Female	Total population (000)	2693	2704	2715	2726	2737	2749	2760	2771	2780	2786	2791	2794
	Population aged 15-64(000)	1734	1746	1752	1757	1753	1746	1738	1729	1720	1711	1705	1695
	Total employment (000)	1202	1216 b	1202	1188	1196	1206	1195	1193	1188	1182	1191	1223
	Employment aged 15-64 (000)	1191	1206 b	1191	1176	1179	1187	1176	1171	1162	1154	1165	1195
	Employment rate (% population aged 20-64)	72.5	73.1	72.4	71.5	71.9	72.5	71.9	72.1	71.8	71.7	72.4	74.5
	Employment rate (% population aged 15-64)	68.5	69.0	67.9	66.9	67.4	68.2	67.8	68.0	67.7	67.6	68.5	70.6
	Employment rate (% population aged 15-24)	44.7	45.1	41.5	39.9	41.2	42.7	43.9	43.0	42.8	43.3	43.7	45.5
	Employment rate (% population aged 25-54)	80.6	81.2	80.5	79.2	79.6	79.4	78.1	78.1	77.3	76.7	77.9	79.5
	Employment rate (% population aged 55-64)	55.0	55.8	56.3	56.9	57.2	59.7	60.5	61.4	62.5	63.0	63.4	66.5
	FTE employment rate (% population aged 20-64)	68.1 b	68.7 b	68.1	67.1	67.8	67.6	67.6	67.4	66.8	67.4	66.9	69.7
	Self-employed (% total employment)	7.8	8.2 b	8.6	8.5	8.5	8.5	8.5	9.0	9.1	8.9	8.7	8.8
	Part-time employment (% total employment)	18.8	17.8	18.5	19.0	19.0	19.4	19.4	19.3	18.7	20.2	20.5	20.6
	Temporary employment (% total employment)	17.8	17.1	16.7	16.8	16.8	16.7	16.8	16.6	16.2	16.6	17.1	17.5
	Employment in Services (% total employment)												
	Employment in Industry (% total employment)												
	Employment in Agriculture (% total employment)		2.6 b	2.7	2.7	2.3	2.2	2.2	2.2	2.1	1.9	2.0	2.0
	Activity rate (% population aged 15-64)	73.8	73.9	73.5	72.5	72.7	73.4	73.4	73.9	74.4	74.1	74.9	76.3
	Activity rate (% population aged 15-24)	53.6	53.5	51.2	49.3	50.5	52.0	52.9	52.6	53.3	53.1	54.2	54.7
	Activity rate (% population aged 25-54)	85.6	85.9	85.7	84.4	84.3	84.1	83.3	83.6	83.6	82.8	83.6	84.6
	Activity rate (% population aged 55-64)	58.4	58.8	59.5	60.3	60.4	62.9	64.3	65.5	67.2	67.6	68.2	70.8
	Total unemployment (000)	93	87	99	98	91	92	97	103	115	111	109	96
	Unemployment rate (% labour force)	7.2	6.7	7.6	7.6	7.1	7.1	7.5	8.0	8.8	8.6	8.4	7.3
	Youth unemployment rate (% labour force 15-24)	16.6	15.8	19.0	19.0	18.4	18.0	17.1	18.4	19.7	18.6	19.3	16.8
	Long term unemployment rate (% labour force)	1.4	1.1	1.1	1.4	1.2	1.2	1.3	1.6	1.8	2.0	1.8	1.4
	Share of long term unemployment (% of total unemployment)	19.3	16.1	14.8	18.9	16.8	16.5	17.3	19.6	20.3	22.9	20.9	18.8
	Youth unemployment ratio (% population aged 15-24)	8.9	8.4 b	9.7	9.4	9.3	9.4	9.0	9.7	10.5	9.9	10.5	9.2
	Employment rate for low skilled 25-64 (ISCED 0-2)	53.5	53.7 b	52.5	49.4	48.9	49.8	48.3	46.5 b	44.8	43.7	42.7	44.2
	Employment rate for medium skilled 25-64 (ISCED 3-4)	72.8	73.5 b	72.7	71.6	71.6	71.8	70.4	70.9 b	69.7	69.6	69.8	71.4
	Employment rate for high skilled 25-64 (ISCED 5-8)	83.4	83.3 b	82.6	82.1	82.2	82.5	82.0	81.9 b	81.9	81.3	82.6	84.5
	Employment rate (Nationals aged 15-64)	68.9	69.3 b	68.3	67.4	68.0	68.6	68.4	68.7	68.6	68.6	69.4	71.6
	Employment rate (Other EU28 aged 15-64)	68.8	71.5 b	71.9	67.4	64.2	70.4	68.0	68.1	66.9	64.3	65.4	64.5
	Employment rate (Other than EU28 aged 15-64)	39.8	42.3 b	42.7	37.7	37.8	39.3	40.4	33.9	34.3	33.3	35.0	38.5
	Employment rate (Born in the same country aged 15-64)	68.9	69.3 b	68.2	67.5	68.0	68.6	68.4	68.8	68.7	68.8	69.7	71.9
	Employment rate (Born in other EU28 aged 15-64)	70.3	74.9 b	74.4	70.0	69.0	72.7	72.7	72.3	66.6	67.1	68.5	66.6
	Employment rate (Born outside EU28 aged 15-64)	50.5	50.8 b	51.4	46.4	48.0	49.9	48.9	46.4	46.5	43.5	45.2	49.4
	Underemployment (% of labour force aged 15-74)		3.9	4.0	4.0	3.8	3.7	4.0	4.5	4.7	5.0	4.5	4.9
	Seeking but not available (% of labour force aged 15-74)	2.6	2.5	2.4	2.6	2.8	2.8	2.6	2.7	2.7	2.7	2.9	2.7
	Discouraged, available but not seeking (% of labour force aged 15-74)	3.1	2.8	3.1	3.5	3.5	3.8	4.2	4.6	4.9	5.3	5.1	4.3

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Finland			2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018
Social Indicators	All	At-risk-of-poverty or social exclusion (% of total population)	17.4	17.4	16.9	16.9	17.9	17.2	16.0	17.3	16.8	16.6	15.7	16.5
		At-risk-of-poverty (% of total population)	13.0	13.6	13.8	13.1	13.7	13.2	11.8	12.8	12.4	11.6	11.5	12.0
		At-risk-of-poverty threshold (PPS single person)	9145	9933	10421	10327	10760	11146	11507	11550	11658	11998	11882	12031
		Poverty gap (%)	14.1	15.7	15.1	13.8	13.5	15.0	15.0	13.9	13.2	13.9	13.7	14.2
		Persistent at-risk-of-poverty (% of total population)	7.6	6.8	6.5	7.7	7.5	7.4	7.0	7.0	8.3	6.0	6.0	5.2
		At-risk-of-poverty before social transfers excl. pensions (% of total population)	28.9	27.3	26.2	27.0	27.4	26.9	26.4	27.6	26.8	27.0	26.7	25.9
		Impact of social transfers (excl. pensions) in reducing poverty (%)	55.0	50.2	47.3	51.5	50.0	50.9	55.3	53.6	53.7	57.0	56.9	53.7
		Severe Material Deprivation (% of total population)	3.6	3.5	2.8	2.8	3.2	2.9	2.5	2.8	2.2	2.2	2.1	2.8
		Share of people living in low work intensity households (% of people aged 0-59)	8.8	7.5	8.4	9.3	10.0	9.3	9.0	10.0	10.8	11.4	10.7	10.8
		Real Gross Household Disposable income (growth %)	3.8	2.4	0.8	2.5	1.1	0.1	0.4	-0.7	1.4	1.2	0.9	
		Income quintile share ratio S80/S20	3.7	3.8	3.7	3.6	3.7	3.7	3.6	3.6	3.6	3.6	3.5	3.6
		GINI coefficient	26.2	26.3	25.9	25.4	25.8	25.9	25.4	25.6	25.2	25.4	25.3	25.9
		Early leavers from education and training (% of population aged 18-24)	9.1	9.8	9.9	10.3	9.8	8.9	9.3	9.5 b	9.2	7.9	8.2	8.3
		NEET: Young people neither in employment nor in education and training (% of total population aged 15-24)	7.1	7.9	9.8	9.0	8.4	8.6	9.3	10.2	10.6	9.9	9.4	8.5
	Male	At-risk-of-poverty or social exclusion (% of male population)	15.8	15.9	15.8	16.0	17.3	17.0	15.7	16.9	16.8	16.6	15.6	16.2
		At-risk-of-poverty (% of male population)	12.1	12.7	12.9	12.4	13.2	12.9	11.3	12.3	12.2	11.7	11.5	11.7
		Poverty gap (%)	14.7	17.1	16.6	14.7	15.2	16.4	17.2	15.3	15.3	15.1	14.5	16.1
		Persistent at-risk-of-poverty (% of male population)	6.5	6.2	5.1	7.4	6.8	6.6	6.5	6.6	7.6	5.5	5.9	4.5
		Severe Material Deprivation (% of male population)	3.0	3.2	2.9	2.6	3.2	3.0	2.5	2.7	2.1	2.0	2.0	2.9
		Share of people living in low work intensity households (% of males aged 0-59)	8.6	7.3	8.7	9.6	10.4	10.2	10.0	11.0	11.9	12.4	11.7	11.7
		Life expectancy at birth (years)	76.0 b	76.5	76.6	76.9	77.3	77.7		78.4	78.7	78.6	78.9	
		Healthy life years at birth (years) - men	56.8 b	58.6	58.2	58.5	57.7	57.3		58.7	59.4	59.1	58.3	
		Early leavers from education and training (% of males aged 18-24)	11.2	12.1	10.7	11.6	11.2	9.8	10.4	11.9 b	10.6	9.0	9.5	9.2
		NEET: Young people neither in employment nor in education and training ( % of males aged 15-24)	6.3	7.8	10.5	9.4	8.7	8.5	10.6	11.8	11.5	10.7	10.0	8.7
	Female	At-risk-of-poverty or social exclusion (% of female population)	19.0	18.9	17.9	17.7	18.5	17.4	16.2	17.6	16.8	16.6	15.7	16.7
		At-risk-of-poverty (% of female population)	13.8	14.5	14.7	13.8	14.2	13.6	12.3	13.3	12.6	11.6	11.4	12.3
		Poverty gap (%)	13.5	14.1	14.6	12.9	12.4	13.9	13.2	13.0	12.3	12.5	13.0	13.0
		Persistent at-risk-of-poverty (% of female population)	8.5	7.4	7.7	8.1	8.1	8.1	7.4	7.3	8.9	6.5	6.2	5.8
		Severe Material Deprivation (% of female population)	4.1	3.8	2.7	3.1	3.2	2.9	2.5	2.9	2.3	2.4	2.2	2.8
		Share of people living in low work intensity households (% of females aged 0-59)	9.0	7.6	8.0	9.0	9.5	8.3	8.0	9.0	9.6	10.4	9.7	9.8
		Life expectancy at birth (years)	83.1 b	83.3	83.5	83.5	83.8	83.7		84.1	84.4	84.4	84.5	
		Healthy life years at birth (years) - women	58.0 b	59.5	58.6	57.9	58.3	56.2		57.5	56.3	57.0	56.4	
		Early leavers from education and training (% of females aged 18-24)	7.2	7.7	9.0	9.0	8.4	8.1	8.3	7.2 b	7.9	6.9	6.9	7.4
NEET: Young people neither in employment nor in education and training ( % of females aged 15-24)		7.9	8.1	9.2	8.6	8.2	8.6	8.1	8.5	9.6	9.2	8.8	8.4	
Children (0-17)	At-risk-of-poverty or social exclusion of children (% of people aged 0-17)	15.1	15.1	14.0	14.2	16.1	14.9	13.0	15.6	14.9	14.7	15.1	16.0	
	At-risk-of-poverty (% of Children population)	10.9	12.0	12.1	11.4	11.8	11.1	9.3	10.9	10.0	9.3	10.2	11.1	
	Severe Material Deprivation (% of Children population)	3.4	3.1	2.5	2.3	3.2	2.8	1.8	2.0	2.0	1.8	1.8	2.7	
	Share of children living in low work intensity households (% of Children population)	6.0	4.9	5.8	5.9	7.6	5.9	6.1	6.6	7.2	8.2	8.7	8.6	
	Risk of poverty of children in households at work (Working Intensity > 0.2)	8.2	9.1	7.9	7.6	7.5	7.7	6.3	8.5	7.2	6.0	6.2	6.8	
	Impact of social transfers (excl. pensions) in reducing poverty (0-17) (%)	65.3	59.6	56.5	61.6	60.9	63.0	68.2	66.3	67.3	69.6	67.4	63.5	
Working age (18-64)	At-risk-of-poverty or social exclusion (% of working age population)	16.8	16.5	16.2	17.1	18.0	17.3	16.7	17.9	18.1	18.2	16.7	17.5	
	At-risk-of-poverty (% of Working age population)	11.5	11.8	12.2	12.3	12.8	12.4	11.3	12.5	12.7	12.2	11.6	11.9	
	Severe Material Deprivation (% of Working age population)	3.9	3.7	3.1	3.3	3.5	3.4	3.1	3.4	2.6	2.5	2.5	3.4	
	Very low work intensity (18-59)	9.8	8.4	9.3	10.6	10.9	10.6	10.1	11.3	12.1	12.6	11.6	11.6	
	In-work at-risk of poverty rate (% of persons employed 18-64)	5.0	5.1	3.7	3.7	3.9	3.8	3.8	3.7	3.5	3.1	2.7	3.1	
	Impact of social transfers (excl. pensions) in reducing poverty (18-64) (%)	58.2	54.1	50.8	53.8	52.9	53.4	57.8	54.9	54.5	57.2	58.6	55.4	
Elderly (65+)	At-risk-of-poverty or social exclusion of elderly (% of people aged 65+)	23.1	23.9	23.1	19.5	19.8	19.5	16.8	17.0	14.5	13.6	13.2	14.0	
	At-risk-of-poverty (% of Elderly population)	21.6	22.5	22.1	18.3	18.9	18.4	16.1	16.0	13.8	12.3	12.3	13.2	
	Severe Material Deprivation (% of Elderly population)	2.6	3.2	2.2	1.7	2.1	1.5	1.1	1.7	1.2	1.7	1.1	1.3	
	Relative median income of elderly (ratio with median income of people younger than 65)	0.74	0.72	0.73	0.78	0.78	0.78	0.78	0.79	0.81	0.83	0.84	0.82	
	Aggregate replacement ratio (ratio)	0.47	0.49	0.48	0.50	0.50	0.49	0.49	0.51	0.52	0.53	0.53	0.54	
Expenditure in social protection indicators (% of GDP)	Sickness/Health care	6.2	6.5	7.2	7.2	7.2	7.4	7.5	7.5	7.4	7.1			
	Disability	3.0	3.1	3.4	3.4	3.3	3.4	3.4	3.4	3.2	3.1			
	Old age and survivors	9.1	9.2	10.9	11.2	11.2	11.9	12.5	13.0	13.4	13.6			
	Family/Children	2.8	2.8	3.2	3.2	3.1	3.2	3.3	3.2	3.2	3.1			
	Unemployment	1.8	1.7	2.3	2.3	2.0	2.0	2.3	2.6	2.7	2.6			
	Housing and Social exclusion n.e.c.	0.8	1.0	1.2	1.3	1.3	1.4	1.5	1.5	1.6	1.9			
	Total (including Admin and Other expenditures)	24.5	25.1	29.0	29.3	28.9	30.1	31.1	31.9	32.0	31.9			
	of which: Means tested benefits	1.1	1.0	1.2	1.2	1.3	1.5	1.6	1.8	1.9	2.0			

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## Sweden

Sweden		2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018
Macro Economic Indicators (Annual % growth)	Real GDP	3.4	-0.6	-5.2	6.0	2.7	-0.3	1.2	2.6	4.5	2.7	2.1	2.4
	Total employment	2.3	0.9	-2.4	1.0	2.1	0.7	1.0	1.4	1.5	1.9	2.3	1.8
	Labour productivity	1.1	-1.4	-2.8	5.0	0.5	-1.0	0.3	1.2	2.9	0.8	-0.2	0.5
	Annual average hours worked per person employed	0.8	0.3	-0.5	1.6	-0.2	-0.9	-0.6	0.0	0.0	0.8	-0.8	0.3
	Real productivity per hour worked	0.3	-1.8	-2.4	3.3	0.7	-0.2	0.9	1.1	2.9	0.1	0.6	0.2
	Harmonized CPI	1.7	3.3	1.9	1.9	1.4	0.9	0.4	0.2	0.7	1.1	1.9	2.0
	Price deflator GDP	2.9	3.3	2.4	1.0	1.2	1.1	1.1	1.8	2.1	1.6	2.3	2.2
	Nominal compensation per employee	5.3	3.7	2.7	2.2	3.2	3.1	1.9	2.2	2.7	2.5	2.0	3.4
	Real compensation per employee (GDP deflator)	2.4	0.3	0.3	1.2	2.0	2.0	0.9	0.4	0.7	0.9	-0.3	1.2
	Real compensation per employee (private consumption deflator)	3.6	0.3	0.8	0.3	1.8	2.1	1.5	2.0	2.0	1.4	0.1	1.4
	Nominal unit labour costs	4.2	5.2	5.7	-2.6	2.6	4.1	1.7	1.0	-0.2	1.7	2.2	2.9
	Real unit labour costs	1.4	1.7	3.3	-3.6	1.4	3.1	0.5	-0.7	-2.3	0.1	0.0	0.7
Labour Market Indicators - Total	Total population (000)	9113	9183	9256	9341	9416	9483	9556	9645	9747	9851	9995	10120
	Population aged 15-64 (000)	5982	6033	6069	6100	6113	6114	6116	6127	6152	6187	6257	6319
	Total employment (000)	4541	4593	4499	4524	4626	4657	4705	4772	4837	4910	5022	5113
	Employment aged 15-64 (000)	4453	4494	4391	4403	4498	4510	4554	4598	4660	4736	4834	4921
	Employment rate (% population aged 20-64)	80.1	80.4	78.3	78.1	79.4	79.4	79.8	80.0	80.5	81.2	81.8	82.6
	Employment rate (% population aged 15-64)	74.2	74.3	72.2	72.1	73.6	73.8	74.4	74.9	75.5	76.2	76.9	77.5
	Employment rate (% population aged 15-24)	42.2	42.2	38.3	38.8	40.9	40.2	41.7	42.8	43.9	44.5	44.9	45.1
	Employment rate (% population aged 25-54)	86.1	86.5	84.5	84.0	85.1	85.2	85.4	85.4	85.6	85.9	86.3	86.8
	Employment rate (% population aged 55-64)	70.0	70.1	70.0	70.4	72.0	73.0	73.6	74.0	74.5	75.5	76.4	77.9
	FTE employment rate (% population aged 20-64)	74.0	74.3	72.6	72.2	73.6	73.9	74.3	74.7	75.2	75.9	76.7	77.5
	Self-employed (% total employment)	10.3	10.2	10.5	10.7	10.2	10.2	10.4	10.1	10.0	9.7	9.6	9.4
	Part-time employment (% total employment)	23.5	25.7	26.0	25.8	25.2	25.0	24.7	24.5	24.3	23.9	23.3	22.7
	Temporary employment (% total employment)	15.5	14.3	13.5	14.4	14.9	14.4	14.7	15.2	15.1	14.7	14.7	14.3
	Employment in Services (% total employment)		76.7 b	77.8	78.2	78.2	78.5	78.9	79.6	79.9	80.1	80.2	80.3
	Employment in Industry (% total employment)		21.4 b	20.3	20.0	20.0	19.8	19.3	18.8	18.4	18.2	18.3	18.3
	Employment in Agriculture (% total employment)		1.9 b	1.9	1.8	1.8	1.8	1.8	1.7	1.7	1.6	1.5	1.5
	Activity rate (% population aged 15-64)	79.1	79.3	78.9	79.1	79.9	80.3	81.1	81.5	81.7	82.1	82.5	82.9
	Activity rate (% population aged 15-24)	52.2	52.8	51.0	51.6	53.0	52.6	54.5	55.4	55.1	54.8	54.7	54.2
	Activity rate (% population aged 25-54)	90.0	90.4	90.0	89.8	90.3	90.6	90.9	90.8	90.9	90.9	91.3	91.6
	Activity rate (% population aged 55-64)	72.8	72.8	73.9	74.8	76.0	77.0	77.5	78.2	78.7	79.7	80.5	81.6
	Total unemployment (000)	298	305	408	425	390	403	411	411	387	366	358	344
	Unemployment rate (% labour force)	6.1	6.2	8.3	8.6	7.8	8.0	8.0	7.9	7.4	6.9	6.7	6.3
	Youth unemployment rate (% labour force 15-24)	19.2	20.2	25.0	24.8	22.8	23.7	23.6	22.9	20.4	18.9	17.8	16.8
	Long term unemployment rate (% labour force)	0.8	0.8	1.1	1.6	1.5	1.5	1.4	1.4	1.5	1.3	1.2	1.2
	Share of long term unemployment (% of total unemployment)	13.6	12.3	13.1	18.1	19.0	18.3	17.7	18.2	19.6	18.3	18.5	18.6
	Youth unemployment ratio (% population aged 15-24)	10.1	10.7	12.8	12.8	12.1	12.4	12.8	12.7	11.2	10.4	9.8	9.1
	Employment rate for low skilled 25-64 (ISCED 0-2)	68.0	67.6	65.2	64.7	65.8	65.4	63.8	63.6 b	63.3	63.3	64.0	64.0
	Employment rate for medium skilled 25-64 (ISCED 3-4)	84.2	84.4	82.6	82.4	83.9	84.1	84.4	84.5 b	84.9	85.1	85.9	86.6
	Employment rate for high skilled 25-64 (ISCED 5-8)	88.5	89.1	88.1	87.7	88.3	88.7	89.2	89.0 b	89.3	89.5	89.5	90.2
	Employment rate (Nationals aged 15-64)	75.0	75.1	73.0	73.1	74.8	75.1	75.8	76.2	77.0	78.0	78.6	79.6
	Employment rate (Other EU28 aged 15-64)	69.9	73.0	74.4	73.1	72.3	71.8	72.6	73.9	75.4	75.2	77.7	80.2
	Employment rate (Other than EU28 aged 15-64)	49.9	50.3	47.1	44.6	44.1	44.2	46.3	47.8	46.8	47.9	50.2	49.1
	Employment rate (Born in the same country aged 15-64)	76.2	76.3	74.2	74.4	76.0	76.2	77.2	77.7	78.5	79.3	79.9	80.8
	Employment rate (Born in other EU28 aged 15-64)	72.4	72.2	73.1	72.7	73.4	73.9	74.7	74.9	75.7	76.5	77.7	79.6
	Employment rate (Born outside EU28 aged 15-64)	58.9	60.5	57.4	56.6	58.2	58.6	58.5	59.5	60.2	61.2	62.7	62.7
	Underemployment (% of labour force aged 15-74)		4.4	4.8	4.6	4.5	4.7	4.9	4.6	4.1	3.4	3.2	2.8
	Seeking but not available (% of labour force aged 15-74)	1.9	1.8	1.8	2.0	2.0	2.0	2.0	2.0	2.1	2.0	2.0	1.8
	Discouraged, available but not seeking (% of labour force aged 15-74)	2.2	2.1	2.8	2.7	2.4	2.6	2.8	2.6	2.4	2.1	1.8	1.7

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Sweden		2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018
Labour Market Indicators - Male	Total population (000)	4524	4564	4604	4649	4690	4727	4766	4814	4872	4931	5013	5083
	Population aged 15-64(000)	3040	3067	3084	3100	3107	3107	3108	3114	3131	3152	3195	3230
	Total employment (000)	2390	2422	2359	2394	2438	2442	2468	2502	2530	2562	2629	2680
	Employment aged 15-64 (000)	2333	2357	2291	2312	2355	2350	2373	2391	2420	2457	2515	2564
	Employment rate (% population aged 20-64)	83.1	83.5	80.9	81.1	82.1	81.9	82.2	82.2	82.5	83.0	83.8	84.7
	Employment rate (% population aged 15-64)	76.5	76.7	74.2	74.6	75.8	75.6	76.3	76.5	77.0	77.5	78.3	79.0
	Employment rate (% population aged 15-24)	42.0	42.2	37.7	38.5	40.8	38.8	40.5	41.6	42.4	43.1	43.9	43.6
	Employment rate (% population aged 25-54)	89.1	89.4	86.9	87.0	87.9	87.8	88.0	87.8	87.9	88.1	88.5	89.1
	Employment rate (% population aged 55-64)	72.9	73.4	73.2	74.0	75.2	76.3	76.9	76.5	76.8	77.5	78.4	80.0
	FTE employment rate (% population aged 20-64)	80.7	81.1	78.6	78.6	79.7	79.6	79.9	80.0	80.1	80.7	81.4	82.2
	Self-employed (% total employment)	14.6	14.2	14.6	14.7	14.2	14.3	14.3	13.9	13.7	13.3	13.3	13.0
	Part-time employment (% total employment)	10.3	11.9	12.6	12.7	12.3	12.5	12.8	12.8	13.2	13.0	13.1	13.0
	Temporary employment (% total employment)	12.7	11.5	10.9	12.2	12.6	12.0	12.2	12.9	13.1	12.8	12.8	12.3
	Employment in Services (% total employment)		63.8 b	65.4	66.1	66.1	66.6	67.5	68.2	68.5	68.9	69.3	69.4
	Employment in Industry (% total employment)		33.3 b	31.8	31.2	31.3	30.8	29.9	29.4	29.1	28.8	28.6	28.5
	Employment in Agriculture (% total employment)		2.9 b	2.8	2.7	2.6	2.6	2.5	2.4	2.3	2.2	2.2	2.1
	Activity rate (% population aged 15-64)	81.4	81.7	81.4	81.9	82.4	82.6	83.3	83.6	83.5	83.9	84.3	84.6
	Activity rate (% population aged 15-24)	51.8	52.6	51.1	52.0	53.2	51.8	53.9	54.9	53.8	54.2	54.1	53.1
	Activity rate (% population aged 25-54)	92.9	93.1	92.8	92.9	93.2	93.5	93.6	93.5	93.3	93.3	93.6	93.9
	Activity rate (% population aged 55-64)	76.2	76.5	77.8	79.3	79.9	80.9	81.6	81.5	81.8	82.5	83.2	84.4
	Total unemployment (000)	149	152	222	227	207	218	220	222	206	202	195	182
	Unemployment rate (% labour force)	5.9	5.9	8.6	8.7	7.8	8.2	8.2	8.2	7.5	7.3	6.9	6.4
	Youth unemployment rate (% labour force 15-24)	18.7	19.7	26.3	25.9	23.3	25.0	24.8	24.3	21.3	20.5	18.7	18.0
	Long term unemployment rate (% labour force)	0.9	0.8	1.2	1.7	1.6	1.7	1.6	1.6	1.7	1.4	1.4	1.3
	Share of long term unemployment (% of total unemployment)	15.5	13.9	13.6	20.1	21.0	20.1	19.5	19.5	21.9	19.5	20.7	20.7
	Youth unemployment ratio (% population aged 15-24)	9.7	10.4	13.4	13.4	12.4	13.0	13.3	13.3	11.4	11.1	10.2	9.6
	Employment rate for low skilled 25-64 (ISCED 0-2)	74.6	74.6	71.6	72.6	73.1	72.8	71.5	71.0 b	71.1	70.5	70.9	72.0
	Employment rate for medium skilled 25-64 (ISCED 3-4)	87.3	87.3	85.1	85.5	86.8	86.9	87.2	87.1 b	87.3	87.4	88.2	89.3
	Employment rate for high skilled 25-64 (ISCED 5-8)	89.3	90.2	89.2	88.8	89.4	89.7	90.4	90.2 b	90.2	90.4	90.4	90.9
	Employment rate (Nationals aged 15-64)	77.1	77.2	74.7	75.1	76.6	76.6	77.3	77.5	78.1	78.9	79.5	80.6
	Employment rate (Other EU28 aged 15-64)	73.0	77.0	78.2	79.1	78.0	76.3	76.5	78.6	81.9	79.0	81.4	83.8
	Employment rate (Other than EU28 aged 15-64)	57.6	59.3	55.4	54.9	53.9	52.5	54.0	55.6	53.1	55.3	59.2	56.5
	Employment rate (Born in the same country aged 15-64)	78.0	77.9	75.6	76.0	77.5	77.4	78.3	78.5	79.3	79.8	80.4	81.5
	Employment rate (Born in other EU28 aged 15-64)	76.1	77.3	76.1	76.8	77.1	77.7	77.6	78.2	79.8	79.2	79.9	82.0
	Employment rate (Born outside EU28 aged 15-64)	64.8	66.5	62.8	63.3	63.9	63.7	63.8	64.7	63.9	65.4	67.6	67.1
	Underemployment (% of labour force aged 15-74)		2.2	2.8	2.7	2.6	2.9	3.2	3.0	2.8	2.4	2.3	2.0
	Seeking but not available (% of labour force aged 15-74)	1.7	1.6	1.6	1.7	1.7	1.8	1.7	1.7	1.9	1.8	1.7	1.6
	Discouraged, available but not seeking (% of labour force aged 15-74)	1.9	2.0	2.6	2.5	2.2	2.5	2.7	2.5	2.3	2.1	1.8	1.7
Labour Market Indicators - Female	Total population (000)	4590	4619	4653	4692	4725	4756	4790	4831	4875	4920	4982	5038
	Population aged 15-64(000)	2943	2966	2985	3001	3007	3007	3008	3012	3021	3034	3062	3089
	Total employment (000)	2150	2171	2140	2130	2188	2215	2237	2270	2307	2348	2393	2433
	Employment aged 15-64 (000)	2121	2137	2101	2092	2143	2160	2181	2207	2240	2278	2319	2358
	Employment rate (% population aged 20-64)	77.1	77.2	75.7	75.0	76.5	76.8	77.2	77.6	78.3	79.2	79.8	80.4
	Employment rate (% population aged 15-64)	71.8	71.8	70.2	69.7	71.3	71.8	72.5	73.1	74.0	74.8	75.4	76.0
	Employment rate (% population aged 15-24)	42.3	42.1	38.9	39.2	41.0	41.6	42.9	44.0	45.5	45.9	46.0	46.8
	Employment rate (% population aged 25-54)	83.0	83.5	81.9	80.9	82.2	82.5	82.7	82.8	83.3	83.7	84.1	84.3
	Employment rate (% population aged 55-64)	67.0	66.7	66.7	66.9	68.9	69.6	70.3	71.5	72.1	73.5	74.4	75.8
	FTE employment rate (% population aged 20-64)	68.5	68.7	67.5	66.8	68.4	69.1	69.6	70.2	70.9	71.8	72.5	73.2
	Self-employed (% total employment)	5.5	5.6	6.0	6.2	5.8	5.7	6.0	6.0	6.0	5.8	5.5	5.4
	Part-time employment (% total employment)	38.0	40.8	40.5	40.3	39.3	38.6	37.7	37.2	36.3	35.6	34.4	33.3
	Temporary employment (% total employment)	18.6	17.5	16.3	16.8	17.5	17.0	17.5	17.8	17.2	16.7	16.8	16.4
	Employment in Services (% total employment)				91.5 u	91.6 u	91.3 u	91.3 u	91.9 u	92.2 u	92.2	92.0 u	92.1 u
	Employment in Industry (% total employment)				7.6 u	7.6 u	7.8 u	7.8 u	7.3 u	6.9 u	6.9	7.2 u	7.1 u
	Employment in Agriculture (% total employment)			0.9	0.9	0.8	0.9	0.9	0.8	0.9	0.9	0.9	0.8
	Activity rate (% population aged 15-64)	76.8	76.9	76.4	76.2	77.3	77.9	78.8	79.3	79.9	80.2	80.7	81.2
	Activity rate (% population aged 15-24)	52.7	53.1	51.0	51.3	52.8	53.4	55.2	56.0	56.5	55.5	55.4	55.4
	Activity rate (% population aged 25-54)	87.1	87.6	87.1	86.6	87.3	87.6	88.1	88.0	88.4	88.5	88.8	89.2
	Activity rate (% population aged 55-64)	69.4	69.0	69.9	70.2	72.1	73.0	73.4	74.9	75.5	76.9	77.8	78.8
	Total unemployment (000)	148	152	186	198	184	185	191	189	180	165	163	162
	Unemployment rate (% labour force)	6.5	6.6	8.0	8.5	7.7	7.7	7.9	7.7	7.3	6.5	6.4	6.3
	Youth unemployment rate (% labour force 15-24)	19.8	20.8	23.7	23.6	22.2	22.3	22.3	21.5	19.5	17.2	16.8	15.5
	Long term unemployment rate (% labour force)	0.8	0.7	1.0	1.3	1.3	1.2	1.2	1.3	1.2	1.1	1.0	1.0
	Share of long term unemployment (% of total unemployment)	11.7	10.8	12.5	15.8	16.7	16.0	15.5	16.5	17.0	16.9	15.9	16.2
	Youth unemployment ratio (% population aged 15-24)	10.4	11.0	12.1	12.1	11.8	11.9	12.3	12.0	11.1	9.6	9.4	8.6
	Employment rate for low skilled 25-64 (ISCED 0-2)	61.4	60.5	58.7	56.7	58.2	57.3	55.2	55.2 b	54.0	55.0	56.1	54.4
	Employment rate for medium skilled 25-64 (ISCED 3-4)	80.4	80.7	79.3	78.4	80.2	80.4	80.9	81.1 b	81.8	82.1	82.8	82.9
	Employment rate for high skilled 25-64 (ISCED 5-8)	87.9	88.4	87.2	86.8	87.4	88.0	88.3	88.0 b	88.6	88.9	88.8	89.6
	Employment rate (Nationals aged 15-64)	72.7	72.8	71.3	71.1	72.9	73.5	74.1	74.9	75.9	77.0	77.6	78.5
	Employment rate (Other EU28 aged 15-64)	67.1	69.0	70.5	67.1	66.4	67.1	68.6	69.3	69.1	71.2	73.7	76.1
	Employment rate (Other than EU28 aged 15-64)	42.3	41.8	39.4	35.2	34.5	36.1	38.4	40.0	40.2	39.9	40.3	40.4
	Employment rate (Born in the same country aged 15-64)	74.3	74.5	72.8	72.8	74.4	75.0	75.9	76.8	77.7	78.8	79.4	80.1
	Employment rate (Born in other EU28 aged 15-64)	69.4	67.8	70.5	69.1	70.1	70.5	72.1	72.1	72.2	74.2	75.8	77.5
	Employment rate (Born outside EU28 aged 15-64)	53.3	55.1	52.5	50.5	52.9	53.7	53.2	54.4	56.7	57.1	57.9	58.2
	Underemployment (% of labour force aged 15-74)		6.8	7.0	6.8	6.6	6.7	6.7	6.4	5.5	4.6	4.2	3.7
	Seeking but not available (% of labour force aged 15-74)	2.2	2.0	2.1	2.2	2.3	2.2	2.3	2.4	2.3	2.2	2.2	2.0
	Discouraged, available but not seeking (% of labour force aged 15-74)	2.4	2.3	3.0	2.9	2.7	2.8	3.0	2.8	2.4	2.1	1.9	1.7

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Sweden		2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018
Social Indicators	All	At-risk-of-poverty or social exclusion (% of total population)	13.9	16.7 b	17.8	17.7	18.5	17.7	18.3	18.2	18.6	18.3	17.7
		At-risk-of-poverty (% of total population)	10.5	13.5 b	14.4	14.8	15.4	15.2	16.0	15.6	16.3	16.2	15.8
		At-risk-of-poverty threshold (PPS single person)	9545	10495 b	10885	10535	10819	11366	12017	11718	12092	12573	12095
		Poverty gap (%)	20.3	18.0 b	19.2	19.9	20.3	22.7	19.2	21.7	19.9	21.1	21.2
		Persistent at-risk-of-poverty (% of total population)	2.1	2.6	3.7	4.9	4.1	7.2 b	7.6	6.6	7.0 b	6.1	7.1
		At-risk-of-poverty before social transfers excl. pensions (% of total population)	27.5	30.0 b	28.8	29.0	29.8	29.0	28.9	30.0	29.8	29.9	29.3
		Impact of social transfers (excl. pensions) in reducing poverty (%)	61.8	55.0 b	50.0	49.0	48.3	47.6	44.6	48.0	45.3	45.8	46.1
		Severe Material Deprivation (% of total population)	2.2	1.8 b	2.0	1.9	1.7	1.8	1.9	1.0	1.1	0.8	1.1
		Share of people living in low work intensity households (% of people aged 0-59)	6.0	7.0 b	8.5	8.5	9.4	8.1	9.4	9.0	8.7	8.5	8.8
		Real Gross Household Disposable income (growth %)	5.5	3.3	1.8	2.6	3.2	3.5	2.2	2.8	2.6	3.4	2.2
		Income quintile share ratio S80/S20	3.3	3.7 b	4.0	3.8	4.0	4.0	4.2	4.1	4.3	4.3	4.3
		GINI coefficient	23.4	25.1 b	26.3	25.5	26.0	26.0	26.0	26.9	26.7	27.6	28.0
		Early leavers from education and training (% of population aged 18-24)	8.0 b	7.9 b	7.0	6.5	6.6	7.5	7.1	6.7 b	7.0	7.4	7.7
		NEET: Young people neither in employment nor in education and training (% of total population aged 15-24)	7.5	7.8	9.6	7.7	7.5	7.8	7.4	7.2	6.7	6.5	6.1
	Male	At-risk-of-poverty or social exclusion (% of male population)	13.6	15.8 b	16.6	16.6	16.9	16.8	16.9	17.2	17.4	17.0	17.0
		At-risk-of-poverty (% of male population)	10.5	12.9 b	13.6	13.9	14.2	14.4	14.7	14.8	15.3	15.2	15.4
		Poverty gap (%)	22.7	20.0 b	20.4	22.3	20.5	25.1	20.3	23.8	21.9	24.3	22.2
		Persistent at-risk-of-poverty (% of male population)	1.9	2.5	3.1	4.4	2.9	6.1 b	6.9	5.2	5.8 b	6.3	6.7
		Severe Material Deprivation (% of male population)	2.2	1.6 b	2.0	1.8	1.7	1.9	1.8	1.1	1.1	0.9	1.0
		Share of people living in low work intensity households (% of males aged 0-59)	5.6	6.7 b	8.3	8.3	9.4	8.1	9.3	8.8	8.0	8.3	8.5
		Life expectancy at birth (years)	79.0	79.2 b	79.4	79.6 b	79.9		80.2	80.4 b	80.4	80.6	80.8
		Healthy life years at birth (years) - men	67.7	69.4 b	70.7	67.0 b	67.0		66.9	73.6 b	74.0	73.0	73.2
		Early leavers from education and training (% of males aged 18-24)	9.5 b	9.0 b	8.0	7.5	7.8	8.5	7.9	7.3 b	7.6	8.2	8.2
		NEET: Young people neither in employment nor in education and training (% of males aged 15-24)	7.5	7.5	9.7	7.8	7.6	7.9	7.7	7.5	6.9	6.9	6.1
													6.2
	Female	At-risk-of-poverty or social exclusion (% of female population)	14.2	17.7 b	19.0	18.8	20.0	18.7	19.6	19.2	19.8	19.5	18.3
		At-risk-of-poverty (% of female population)	10.6	14.1 b	15.2	15.6	16.6	16.1	17.2	16.4	17.3	17.3	16.2
		Poverty gap (%)	18.3	16.9 b	17.5	18.8	19.9	20.1	18.4	20.5	18.4	18.9	19.1
		Persistent at-risk-of-poverty (% of female population)	2.2	2.7	4.3	5.2	5.2	8.2 b	8.2	8.0	8.3 b	5.8	7.4
		Severe Material Deprivation (% of female population)	2.1	1.9 b	2.1	2.0	1.8	1.7	2.0	0.9	1.2	0.7	1.3
		Share of people living in low work intensity households (% of females aged 0-59)	6.4	7.4 b	8.7	8.7	9.5	8.1	9.5	9.2	9.4	8.8	9.2
		Life expectancy at birth (years)	83.1	83.3 b	83.5	83.6 b	83.8		83.8	84.2 b	84.1	84.1	84.1
		Healthy life years at birth (years) - women	66.8	69.0 b	69.6	66.4 b	65.5		66.0	73.6 b	73.8	73.3	71.9
		Early leavers from education and training (% of females aged 18-24)	6.5 b	6.8 b	6.0	5.5	5.4	6.3	6.2	6.0 b	6.4	6.4	7.2
		NEET: Young people neither in employment nor in education and training (% of females aged 15-24)	7.4	8.2	9.4	7.6	7.5	7.8	7.1	6.8	6.5	6.1	6.2
													6.1
	Children (0-17)	At-risk-of-poverty or social exclusion of children (% of people aged 0-17)	14.9	17.3 b	18.8	19.2	20.3	19.4	20.2	20.5	19.8	19.9	19.4
		At-risk-of-poverty (% of Children population)	12.0	15.1 b	16.0	17.1	17.9	17.7	19.0	18.2	18.1	18.7	18.6
		Severe Material Deprivation (% of Children population)	3.2	2.2 b	2.2	2.1	2.2	2.1	2.6	1.5	1.4	0.7	0.9
		Share of children living in low work intensity households (% of Children population)	5.5	5.7 b	7.2	7.8	8.1	7.6	9.2	8.8	8.7	8.2	8.2
		Risk of poverty of children in households at work (Working Intensity > 0.2)	8.4	10.7 b	10.7	10.7	11.8	11.6	10.9	11.9	11.4	12.2	11.7
		Impact of social transfers (excl. pensions) in reducing poverty (0-17) (%)	64.7	57.6 b	52.8	50.4	47.5	48.3	43.8	50.5	45.8	47.5	47.2
	Working age (18-64)	At-risk-of-poverty or social exclusion (% of working age population)	14.5	16.8 b	17.8	18.1	18.5	17.6	18.6	18.8	18.9	18.1	17.5
		At-risk-of-poverty (% of Working age population)	10.2	12.4 b	13.3	14.1	14.4	14.2	15.3	15.4	15.8	15.1	14.8
		Severe Material Deprivation (% of Working age population)	2.2	1.8 b	2.3	2.1	1.9	2.1	2.1	1.1	1.3	1.0	1.4
		Very low work intensity (18-59)	6.2	7.5 b	9.1	8.7	9.9	8.2	9.4	9.1	8.7	8.7	9.1
		In-work at-risk-of poverty rate (% of persons employed 18-64)	6.5	7.4 b	7.5	7.8	7.5	7.3	7.6	7.7	8.1	6.8	6.9
		Impact of social transfers (excl. pensions) in reducing poverty (18-64) (%)	61.8	57.2 b	51.8	50.7	50.7	49.3	46.7	48.3	46.3	47.6	47.5
	Elderly (65+)	At-risk-of-poverty or social exclusion of elderly (% of people aged 65+)	10.4	15.9 b	16.5	14.8	16.4	16.2	15.2	13.7	16.2	17.0	16.1
		At-risk-of-poverty (% of Elderly population)	9.9	15.3 b	16.2	14.2	15.9	15.9	15.0	13.6	15.9	16.8	15.8
		Severe Material Deprivation (% of Elderly population)	0.6	0.9 b	0.8	1.0	0.7	0.4	0.3	0.2	0.5	0.3	0.6
		Relative median income of elderly (ratio with median income of people younger than 65)	0.81	0.76 b	0.76	0.79	0.77	0.78	0.79	0.82	0.79	0.77	0.78
		Aggregate replacement ratio (ratio)	0.63	0.61 b	0.60	0.59	0.57	0.55	0.56	0.59	0.57	0.57	0.57
Expenditure in social protection indicators (% of GDP)	Expenditure in social protection indicators (% of GDP)	Sickness/Health care	7.1	7.1	7.5	7.0	7.1	7.3	7.5	7.5	7.5	7.5 p	
		Disability	4.1	4.0	4.2	3.8	3.6	3.6	3.6	3.5	3.3	3.2 p	
		Old age and survivors	10.9	11.5	12.7	12.1	12.1	12.6	13.1	12.8	12.6	12.6 p	
		Family/Children	2.8	2.9	3.0	2.9	2.9	3.0	3.1	3.1	3.0	3.0 p	
		Unemployment	1.0	0.8	1.2	1.3	1.1	1.2	1.3	1.1	1.0	1.0 p	
		Housing and Social exclusion n.e.c.	1.0	1.0	1.1	1.1	1.1	1.1	1.2	1.2	1.4	1.8 p	
		Total (including Admin and Other expenditures) of which: Means tested benefits	27.4	27.9	30.2	28.8	28.5	29.5	30.2	29.8	29.4	29.6 p	
			0.7	0.7	0.8	0.8	0.8	0.8	0.8	0.8	0.7	0.7 p	

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## United Kingdom

United Kingdom		2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018
Macro Economic Indicators (Annual % growth)	Real GDP	2.5	-0.3	-4.2	1.7	1.6	1.4	2.0	2.9	2.3	1.8	1.8	1.4
	Total employment	0.8	0.8	-1.6	0.2	0.5	1.1	1.2	2.4	1.7	1.5	1.0	1.2
	Labour productivity	1.7	-1.2	-2.7	1.5	1.1	0.4	0.9	0.6	0.6	0.3	0.8	0.2
	Annual average hours worked per person employed	0.1	-1.3	-0.3	-0.7	0.8	0.9	0.6	0.4	-1.0	0.9	-0.1	-0.3
	Real productivity per hour worked	1.6	0.1	-2.4	2.2	0.3	-0.5	0.3	0.2	1.7	-0.6	0.9	0.5
	Harmonized CPI	2.3	3.6	2.2	3.3	4.5	2.8	2.6	1.5	0.0	0.7	2.7	2.5
	Price deflator GDP	2.5	2.8	1.6	1.5	1.9	1.6	1.9	1.7	0.4	2.1	2.2	1.9
	Nominal compensation per employee	5.4	0.6	2.4	3.0	1.1	1.9	2.7	0.6	1.1	2.8	3.1	2.7
	Real compensation per employee (GDP deflator)	2.8	-2.2	0.7	1.5	-0.8	0.3	0.8	-1.1	0.7	0.7	0.9	0.8
	Real compensation per employee (private consumption deflator)	3.0	-2.8	0.1	-0.2	-3.3	-1.0	0.2	-0.9	1.1	2.1	0.4	0.3
	Nominal unit labour costs	3.7	1.8	5.2	1.6	-0.1	1.5	1.8	0.0	0.5	2.5	2.2	2.5
	Real unit labour costs	1.2	-1.1	3.6	0.0	-2.0	-0.1	0.0	-1.7	0.1	0.4	0.1	0.6
Labour Market Indicators - Total	Total population (000)	61073	61572	62042	62510	63023	63495	63905	64351	64853	65379	65844	66274
	Population aged 15-64 (000)	40498	40842	41100	41325	41577	41681	41659	41725	41875	42063	42200	42310
	Total employment (000)	29261 b	29520 b	29059	29125	29282	29596	29954	30671	31197	31648	31965	32354
	Employment aged 15-64 (000)	28622 b	28827 b	28319	28290	28404	28650	28917	29559	30020	30444	30786	31112
	Employment rate (% population aged 20-64)	75.2 b	75.2 b	73.9	73.5	73.5	74.1	74.8	76.2	76.8	77.5	78.2	78.7
	Employment rate (% population aged 15-64)	71.5 b	71.5 b	69.9	69.4	69.3	69.9	70.5	71.9	72.7	73.5	74.1	74.7
	Employment rate (% population aged 15-24)	52.6 b	52.0 b	47.9	46.8	45.8	46.2	46.3	48.0	50.0	50.8	50.7	50.6
	Employment rate (% population aged 25-54)	81.3 b	81.3 b	80.1	79.8	80.1	80.5	80.8	82.1	82.4	82.9	83.8	84.3
	Employment rate (% population aged 55-64)	57.4 b	58.0 b	57.5	57.2	56.7	58.1	59.8	61.0	62.2	63.4	64.1	65.3
	FTE employment rate (% population aged 20-64)	66.4 b	66.9 b	65.2	64.7	64.5	64.9	65.7	67.1	68.1	68.5	69.2	69.8
	Self-employed (% total employment)	13.0 b	13.0 b	13.3	13.7	13.8	14.3	14.2	14.9	14.7	15.1	15.0	14.8
	Part-time employment (% total employment)	24.1 b	24.1 b	24.9	25.6	25.5	25.9	25.6	25.3	25.2	25.2	24.8	24.6
	Temporary employment (% total employment)	5.0 b	4.6 b	4.7	5.1	5.2	5.3	5.2	5.3	5.2	5.1	4.8	4.7
	Employment in Services (% total employment)		77.0 b	79.4	79.8	79.8	80.0	80.3	80.0	80.4	80.6	80.8	81.0
	Employment in Industry (% total employment)		22.0 b	19.6	19.2	19.2	19.0	18.8	18.9	18.6	18.5	18.3	18.1
	Employment in Agriculture (% total employment)		1.0 b	1.0	1.1	1.1	1.0	0.9	1.1	1.0	1.0	1.0	0.9
	Activity rate (% population aged 15-64)	75.5 b	75.8 b	75.7	75.4	75.5	76.1	76.4	76.7	76.9	77.3	77.6	77.9
	Activity rate (% population aged 15-24)	61.4 b	61.2 b	59.2	58.4	58.2	58.6	58.3	57.8	58.5	58.4	57.6	57.1
	Activity rate (% population aged 25-54)	84.5 b	84.8 b	85.0	84.9	85.3	85.5	85.7	86.0	85.8	86.1	86.5	86.9
	Activity rate (% population aged 55-64)	59.3 b	59.8 b	60.3	60.0	59.7	61.1	62.8	63.5	64.4	65.8	66.4	67.5
	Total unemployment (000)	1624	1757	2369	2459	2559	2533	2437	1996	1746	1599	1447	1347
	Unemployment rate (% labour force)	5.3	5.6	7.6	7.8	8.1	7.9	7.5	6.1	5.3	4.8	4.3	4.0
	Youth unemployment rate (% labour force 15-24)	14.3	15.0	19.1	19.9	21.3	21.2	20.7	17.0	14.6	13.0	12.1	11.3
	Long term unemployment rate (% labour force)	1.3 b	1.4 b	1.9	2.5	2.7	2.7	2.7	2.2	1.6	1.3	1.1	1.1
	Share of long term unemployment (% of total unemployment)	23.7 b	24.1 b	24.5	32.5	33.4	34.7	36.1	35.8	30.7	27.1	25.9	26.2
	Youth unemployment ratio (% population aged 15-24)	8.8 b	9.2 b	11.3	11.6	12.4	12.4	12.1	9.8	8.6	7.6	7.0	6.4
	Employment rate for low skilled 25-64 (ISCED 0-2)	64.2 b	59.4 b	57.8	56.0 b	56.4 b	57.4	57.5	59.6 b	60.1	62.8	64.3	65.7
	Employment rate for medium skilled 25-64 (ISCED 3-4)	81.1 b	79.2 b	77.3	76.7 b	77.6 b	77.3	77.8	78.8 b	79.1	79.4	80.0	80.2
	Employment rate for high skilled 25-64 (ISCED 5-8)	88.0 b	86.0 b	85.4	85.1 b	83.8 b	84.1	84.9	85.3 b	85.5	85.6	85.7	86.1
	Employment rate (Nationals aged 15-64)	71.9 b	71.8 b	70.2	69.7	69.6	70.2	70.9	72.2	72.9	73.7	74.3	74.8
	Employment rate (Other EU28 aged 15-64)	76.2 b	77.0 b	75.6	74.9	75.7	75.7	76.5	77.9	78.8	78.6	80.0	82.0
	Employment rate (Other than EU28 aged 15-64)	60.4 b	61.7 b	60.0	60.1	59.7	58.9	59.0	60.0	60.9	61.3	61.1	62.9
	Employment rate (Born in the same country aged 15-64)	72.2 b	72.1 b	70.5	70.0	69.8	70.6	71.1	72.4	73.2	73.9	74.5	74.9
	Employment rate (Born in other EU28 aged 15-64)	75.9 b	76.8 b	75.5	74.6	75.5	74.7	75.9	77.9	79.1	79.2	79.8	81.5
	Employment rate (Born outside EU28 aged 15-64)	62.8 b	63.5 b	61.9	62.3	62.0	62.4	63.4	65.0	65.5	67.1	67.8	68.9
	Underemployment (% of labour force aged 15-74)		4.1 b	5.0	5.4	5.6	6.0	6.0	5.6	5.3	4.9	4.5	4.3
	Seeking but not available (% of labour force aged 15-74)	1.0 b	0.9 b	1.0	1.1	1.0	1.1	1.0	1.1	1.1	1.1	1.1	1.1
	Discouraged, available but not seeking (% of labour force aged 15-74)	2.1 b	2.3 b	2.5	2.7	2.5	2.5	2.4	2.1	2.1	1.9	1.8	1.6

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United Kingdom		2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018
Labour Market Indicators - Male	Total population (000)	29895	30164	30417	30669	30951	31206	31424	31663	31934	32226	32480	32710
	Population aged 15-64(000)	20137	20312	20441	20556	20694	20752	20741	20780	20866	20977	21057	21120
	Total employment (000)	15790 b	15890 b	15483	15527	15618	15808	15953	16325	16614	16854	16950	17147
	Employment aged 15-64 (000)	15385 b	15447 b	15037	15027	15089	15233	15322	15661	15897	16117	16229	16390
	Employment rate (% population aged 20-64)	82.2 b	81.9 b	79.7	79.3	79.3	80.0	80.4	81.9	82.5	83.1	83.4	83.7
	Employment rate (% population aged 15-64)	77.6 b	77.4 b	74.9	74.4	74.3	75.0	75.4	76.8	77.6	78.3	78.6	79.1
	Employment rate (% population aged 15-24)	54.0 b	53.3 b	47.9	47.6	46.3	46.4	46.4	48.2	50.3	50.5	50.5	51.4
	Employment rate (% population aged 25-54)	88.2 b	87.7 b	85.7	85.4	85.9	86.6	86.7	88.0	88.3	89.0	89.6	89.8
	Employment rate (% population aged 55-64)	66.2 b	67.2 b	66.1	65.1	64.1	65.4	66.8	67.8	68.6	69.6	69.3	70.3
	FTE employment rate (% population aged 20-64)	79.3 b	79.2 b	76.7	75.8	75.6	76.0	76.8	78.3	78.9	79.3	79.9	80.2
	Self-employed (% total employment)	17.5 b	17.6 b	17.8	18.1	18.3	18.6	18.5	19.1	18.7	19.1	18.9	18.5
	Part-time employment (% total employment)	9.3 b	9.7 b	10.3	11.0	10.9	11.6	11.5	11.2	11.2	11.3	11.1	11.1
	Temporary employment (% total employment)	4.2 b	3.8 b	4.1	4.6	4.6	4.6	4.6	4.7	4.6	4.4	4.2	4.2
	Employment in Services (% total employment)		65.8 b	68.5	68.9	69.0	69.6	70.1	69.9	70.3	70.5	70.9	71.1
	Employment in Industry (% total employment)		33.0 b	30.1	29.6	29.5	29.0	28.7	28.6	28.4	28.1	27.7	27.6
	Employment in Agriculture (% total employment)		1.3 b	1.4	1.5	1.5	1.4	1.3	1.5	1.3	1.4	1.4	1.3
	Activity rate (% population aged 15-64)	82.2 b	82.4 b	82.0	81.5	81.5	82.0	82.1	82.2	82.2	82.5	82.3	82.6
	Activity rate (% population aged 15-24)	64.2 b	64.3 b	61.3	60.9	60.7	60.9	60.2	59.5	60.0	59.3	58.3	58.5
	Activity rate (% population aged 25-54)	91.6 b	91.6 b	91.7	91.4	91.7	92.0	92.0	92.2	91.9	92.2	92.4	92.5
	Activity rate (% population aged 55-64)	68.9 b	69.8 b	70.3	69.2	68.4	69.5	70.6	70.9	71.4	72.6	72.2	72.7
	Total unemployment (000)	921	1026	1437	1455	1477	1434	1377	1109	958	873	786	723
	Unemployment rate (% labour force)	5.5	6.1	8.5	8.6	8.7	8.3	8.0	6.4	5.5	5.0	4.5	4.1
	Youth unemployment rate (% labour force 15-24)	15.8	17.1	21.9	22.0	23.8	23.9	23.0	18.9	16.2	14.8	13.5	12.2
	Long term unemployment rate (% labour force)	1.6 b	1.7 b	2.3	3.2	3.3	3.2	3.2	2.6	1.9	1.5	1.3	1.2
	Share of long term unemployment (% of total unemployment)	28.4 b	28.4 b	26.6	37.1	37.8	38.0	39.5	40.2	34.3	30.3	28.7	29.4
	Youth unemployment ratio (% population aged 15-24)	10.2 b	11.0 b	13.4	13.4	14.4	14.6	13.9	11.3	9.7	8.8	7.9	7.2
	Employment rate for low skilled 25-64 (ISCED 0-2)	70.8 b	70.5 b	68.3	66.3 b	66.9 b	67.8	68.0	70.3 b	70.3	73.0	73.6	74.8
	Employment rate for medium skilled 25-64 (ISCED 3-4)	85.1 b	85.0 b	82.4	81.8 b	82.4 b	82.8	83.5	84.5 b	85.0	85.5	85.6	86.2
	Employment rate for high skilled 25-64 (ISCED 5-8)	89.9 b	89.7 b	88.8	88.6 b	87.9 b	88.7	88.9	89.4 b	89.7	89.7	90.0	89.7
	Employment rate (Nationals aged 15-64)	77.6 b	77.3 b	74.8	74.4	74.2	74.8	75.3	76.6	77.4	77.9	78.2	78.6
	Employment rate (Other EU28 aged 15-64)	84.3 b	85.7 b	83.9	81.9	81.8	83.1	83.9	85.5	84.5	86.1	87.6	89.0
	Employment rate (Other than EU28 aged 15-64)	72.2 b	73.2 b	69.4	70.4	70.2	70.8	69.0	71.8	71.5	72.5	72.4	75.1
	Employment rate (Born in the same country aged 15-64)	77.6 b	77.3 b	74.8	74.4	74.1	74.7	75.2	76.4	77.3	77.7	77.8	78.4
	Employment rate (Born in other EU28 aged 15-64)	84.1 b	85.2 b	82.9	80.7	81.3	82.1	83.4	84.6	84.4	86.0	87.0	87.8
	Employment rate (Born outside EU28 aged 15-64)	74.7 b	74.6 b	72.1	72.3	72.7	74.1	73.6	76.2	76.2	78.0	79.0	79.5
	Underemployment (% of labour force aged 15-74)		2.4 b	3.1	3.5	3.7	4.1	4.2	3.8	3.6	3.4	3.0	2.8
	Seeking but not available (% of labour force aged 15-74)	0.8 b	0.7 b	0.8	0.8	0.8	0.9	0.8	0.8	0.8	1.0	0.9	0.9
	Discouraged, available but not seeking (% of labour force aged 15-74)	1.8 b	1.9 b	2.2	2.4	2.2	2.1	2.2	1.9	1.9	1.7	1.6	1.5
Labour Market Indicators - Female	Total population (000)	31178	31407	31626	31841	32071	32289	32481	32688	32919	33153	33364	33564
	Population aged 15-64(000)	20361	20530	20659	20769	20883	20928	20917	20944	21010	21085	21143	21190
	Total employment (000)	13471 b	13630 b	13576	13598	13664	13788	14001	14346	14583	14794	15015	15208
	Employment aged 15-64 (000)	13237 b	13380 b	13281	13263	13315	13417	13595	13898	14123	14327	14556	14722
	Employment rate (% population aged 20-64)	68.4 b	68.8 b	68.2	67.9	67.8	68.4	69.3	70.6	71.3	72.1	73.1	73.8
	Employment rate (% population aged 15-64)	65.5 b	65.7 b	64.9	64.5	64.4	64.9	65.8	67.1	67.9	68.8	69.7	70.3
	Employment rate (% population aged 15-24)	51.3 b	50.7 b	47.9	46.1	45.3	46.0	46.2	47.8	49.7	51.1	50.9	49.9
	Employment rate (% population aged 25-54)	74.6 b	75.1 b	74.6	74.3	74.4	74.5	75.1	76.2	76.6	77.0	78.1	78.8
	Employment rate (% population aged 55-64)	48.8 b	49.0 b	49.2	49.5	49.5	51.0	53.0	54.4	56.0	57.4	59.1	60.6
	FTE employment rate (% population aged 20-64)	54.9 b	55.9 b	55.1	54.9	54.7	55.1	55.9	57.2	58.6	58.9	59.9	60.6
	Self-employed (% total employment)	7.8 b	7.7 b	8.2	8.6	8.8	9.2	9.3	10.1	10.0	10.4	10.6	10.5
	Part-time employment (% total employment)	41.3 b	40.9 b	41.5	42.2	42.1	42.2	41.4	41.2	40.9	40.8	40.2	39.7
	Temporary employment (% total employment)	5.8 b	5.5 b	5.4	5.8	5.8	6.0	5.9	6.1	5.9	5.8	5.5	5.2
	Employment in Services (% total employment)		89.9 b	91.8	92.1	91.9	91.8	91.8	91.4	91.8	91.9	91.8	92.1
	Employment in Industry (% total employment)		9.5 b	7.7	7.4	7.5	7.6	7.7	8.0	7.7	7.6	7.7	7.4
	Employment in Agriculture (% total employment)		0.7 b	0.5	0.5	0.6	0.6	0.5	0.6	0.5	0.5	0.5	0.5
	Activity rate (% population aged 15-64)	68.9 b	69.3 b	69.5	69.3	69.6	70.2	70.9	71.3	71.7	72.2	72.9	73.2
	Activity rate (% population aged 15-24)	58.6 b	58.2 b	57.1	55.9	55.7	56.3	56.4	56.1	57.0	57.5	56.9	55.6
	Activity rate (% population aged 25-54)	77.5 b	78.2 b	78.6	78.6	79.0	79.2	79.5	79.9	79.8	80.1	80.8	81.3
	Activity rate (% population aged 55-64)	49.9 b	50.2 b	50.6	51.1	51.3	53.0	55.3	56.4	57.7	59.2	60.9	62.5
	Total unemployment (000)	703	731	931	1004	1082	1100	1060	887	788	726	661	624
	Unemployment rate (% labour force)	5.0	5.1	6.4	6.9	7.4	7.4	7.1	5.8	5.1	4.7	4.2	4.0
	Youth unemployment rate (% labour force 15-24)	12.5	12.7	16.1	17.6	18.5	18.2	18.1	14.8	12.9	11.1	10.6	10.3
	Long term unemployment rate (% labour force)	0.9 b	0.9 b	1.4	1.8	2.0	2.2	2.2	1.8	1.3	1.1	1.0	0.9
	Share of long term unemployment (% of total unemployment)	17.6 b	18.1 b	21.4	25.9	27.6	30.3	31.6	30.2	26.3	23.3	22.5	22.4
	Youth unemployment ratio (% population aged 15-24)	7.4 b	7.4 b	9.2	9.8	10.3	10.3	10.2	8.3	7.4	6.4	6.0	5.7
	Employment rate for low skilled 25-64 (ISCED 0-2)	58.8 b	51.0 b	49.7	48.0 b	48.0 b	48.6	48.2	50.4 b	50.9	53.0	55.1	56.2
	Employment rate for medium skilled 25-64 (ISCED 3-4)	76.1 b	72.6 b	71.6	71.0 b	72.2 b	71.2	71.5	72.5 b	72.8	72.8	73.9	73.9
	Employment rate for high skilled 25-64 (ISCED 5-8)	86.1 b	82.4 b	82.1	81.8 b	79.9 b	79.8	81.3	81.5 b	81.7	81.8	82.0	82.9
	Employment rate (Nationals aged 15-64)	66.2 b	66.5 b	65.6	65.1	65.0	65.7	66.4	67.8	68.5	69.5	70.5	70.9
	Employment rate (Other EU28 aged 15-64)	67.9 b	68.5 b	67.9	68.3	70.3	69.0	69.8	71.3	73.5	71.6	72.8	75.6
	Employment rate (Other than EU28 aged 15-64)	48.8 b	50.6 b	50.9	50.2	49.2	47.7	49.7	48.5	50.8	50.9	51.3	52.0
	Employment rate (Born in the same country aged 15-64)	66.9 b	67.0 b	66.2	65.6	65.6	66.5	67.1	68.4	69.1	70.1	71.2	71.4
	Employment rate (Born in other EU28 aged 15-64)	67.9 b	68.9 b	69.0	69.0	70.5	68.1	69.5	72.0	74.3	72.8	73.2	75.8
	Employment rate (Born outside EU28 aged 15-64)	51.4 b	52.8 b	52.1	52.7	51.9	51.5	53.6	54.3	55.5	56.9	57.7	59.3
	Underemployment (% of labour force aged 15-74)		6.0 b	7.1	7.5	7.8	8.2	8.0	7.7	7.2	6.6	6.3	5.8
	Seeking but not available (% of labour force aged 15-74)	1.1 b	1.1 b	1.2	1.3	1.2	1.2	1.3	1.3	1.4	1.3	1.3	1.3
	Discouraged, available but not seeking (% of labour force aged 15-74)	2.6 b	2.7 b	2.9	3.0	2.8	2.9	2.7	2.4	2.3	2.1	2.0	1.8

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United Kingdom			2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018
Social Indicators	All	At-risk-of-poverty or social exclusion (% of total population)	22.6	23.2	22.0	23.2	22.7	24.1 b	24.8	24.1	23.5	22.2	22.0 b	
		At-risk-of-poverty (% of total population)	18.6	18.7	17.3	17.1	16.2	16.0	15.9	16.8	16.6	15.9	17.0 b	
		At-risk-of-poverty threshold (PPS single person)	11267	11126	10091	9521	9466	9868 b	10060	10138	10669	10378	10826 b	
		Poverty gap (%)	22.4	21.0	20.6	21.4	21.3	20.9 b	19.6	19.4	20.4	22.4	20.1 b	
		Persistent at-risk-of-poverty (% of total population)		8.5	8.0	7.4	6.9	8.6	7.8	6.5	7.3	9.4	7.8	
		At-risk-of-poverty before social transfers excl. pensions (% of total population)	29.7	28.9	30.4	31.0	30.5	29.7 b	30.1	29.4	29.3	28.1	29.2 b	
		Impact of social transfers (excl. pensions) in reducing poverty (%)	37.4	35.3	43.1	44.8	46.9	46.1 b	47.2	42.9	43.3	43.4	41.8 b	
		Severe Material Deprivation (% of total population)	4.2	4.5	3.3 u	4.8	5.1	7.8	8.3	7.4	6.1	5.2	4.1 b	4.6 p
		Share of people living in low work intensity households (% of people aged 0-59)	10.4	10.4	12.7	13.2	11.5	13.0 b	13.2	12.3	11.9	11.3	10.1 b	
		Real Gross Household Disposable income (growth %)	3.0	-0.4	1.7	-0.5	-1.9	2.8	1.3	1.1	5.2	0.0	-0.6	
		Income quintile share ratio S80/S20	5.3	5.6	5.3	5.4	5.3	5.0 b	4.6	5.1	5.2	5.1	5.4 b	
		GINI coefficient	32.6	33.9	32.4	32.9	33.0	31.3 b	30.2	31.6	32.4	31.5	33.1 b	
		Early leavers from education and training (% of population aged 18-24)	16.6 b	16.9 b	15.7	14.8 b	14.9 b	13.4	12.4	11.8 b	10.8	11.2	10.6	10.7
		NEET: Young people neither in employment nor in education and training (% of total population aged 15-24)	11.9 b	12.1 b	13.2	13.6	14.2	13.9	13.2	11.9	11.1	10.9	10.3	10.4
	Male	At-risk-of-poverty or social exclusion (% of male population)	21.1	21.7	21.1	22.1	21.4	23.4 b	23.6	22.9	22.5	21.1	21.0 b	
		At-risk-of-poverty (% of male population)	17.6	17.4	16.7	16.4	14.8	15.8	15.4	16.0	16.1	15.2	16.1 b	
		Poverty gap (%)	22.9	21.1	20.9	23.0	22.2	21.9 b	19.9	19.6	20.7	23.6	20.1 b	
		Persistent at-risk-of-poverty (% of male population)		7.7	7.6	7.0	6.1	8.1	7.0	5.7	6.3	8.9	6.7	
		Severe Material Deprivation (% of male population)	3.9	4.3	3.4 u	4.8	5.0	7.5	8.0	7.3	5.8	5.2	3.9 b	4.2 p
		Share of people living in low work intensity households (% of males aged 0-59)	9.6	9.7	12.0	12.5	10.8	12.5 b	12.5	11.9	11.2	10.7	9.6 b	
		Life expectancy at birth (years)	77.6	77.7	78.3	78.6	79.0	79.1	79.2	79.5	79.2	79.4	79.5	
		Healthy life years at birth (years) - men	64.6	65.0	65.0	64.9	65.2	64.6	64.4	63.4	63.7	63.0		
		Early leavers from education and training (% of males aged 18-24)	17.6 b	18.2 b	16.9	15.6 b	16.1 b	14.5	13.6	12.9 b	11.7	12.7	12.1	12.2
		NEET: Young people neither in employment nor in education and training ( % of males aged 15-24)	10.1 b	10.1 b	11.9	12.1	13.1	12.8	12.1	10.7	9.7	10.3	10.2	9.7
	Female	At-risk-of-poverty or social exclusion (% of female population)	24.1	24.7	22.8	24.2	24.1	24.9 b	25.8	25.2	24.4	23.2	23.0 b	
		At-risk-of-poverty (% of female population)	19.6	20.0	17.8	17.8	17.6	16.3	16.4	17.6	17.2	16.5	17.9 b	
Poverty gap (%)		21.9	20.9	20.5	19.3	20.5	19.5 b	19.2	19.4	19.9	21.5	20.1 b		
Persistent at-risk-of-poverty (% of female population)			9.2	8.3	7.7	7.8	9.1	8.6	7.2	8.2	9.9	8.8		
Severe Material Deprivation (% of female population)		4.4	4.8	3.2 u	4.9	5.1	8.1	8.6	7.5	6.4	5.2	4.3 b	5.1 p	
Share of people living in low work intensity households (% of females aged 0-59)		11.1	11.2	13.4	13.9	12.3	13.6 b	14.0	12.7	12.7	11.9	10.6 b		
Life expectancy at birth (years)		81.8	81.8	82.5	82.6	83.0	82.8	82.9	83.2	82.8	83.0	83.1		
Healthy life years at birth (years) - women		66.0	66.3	66.1	65.6	65.2	64.5	64.8	64.2	63.3	63.1			
Early leavers from education and training (% of females aged 18-24)		15.6 b	15.6 b	14.5	13.9 b	13.8 b	12.2	11.1	10.8 b	9.8	9.5	9.0	9.1	
NEET: Young people neither in employment nor in education and training ( % of females aged 15-24)		13.7 b	14.1 b	14.5	15.1	15.4	15.0	14.4	13.1	12.4	11.5	10.4	11.2	
Children (0-17)	At-risk-of-poverty or social exclusion of children (% of people aged 0-17)	27.6	29.6	27.4	29.7	26.9	31.2 b	32.6	31.2	30.3	27.2	27.4 b		
	At-risk-of-poverty (% of Children population)	23.0	24.0	20.7	20.4	18.0	18.0	18.9	19.7	19.9	18.5	21.3 b		
	Severe Material Deprivation (% of Children population)	6.3	6.5	4.4 u	7.3	7.1	12.5	12.3	10.8	9.6	7.5	5.8 b	7.0 p	
	Share of children living in low work intensity households (% of Children population)	13.8	13.9	16.1	17.1	14.1	16.3 b	16.7	15.1	14.8	13.0	10.9 b		
	Risk of poverty of children in households at work (Working Intensity > 0.2)	14.7	16.2	12.2	12.7	12.1	13.2 b	14.8	15.1	14.7	13.2	16.7 b		
	Impact of social transfers (excl. pensions) in reducing poverty (0-17) (%)	43.6	39.6	51.6	54.2	57.6	57.0 b	57.2	53.8	53.8	53.1	49.2 b		
Working age (18-64)	At-risk-of-poverty or social exclusion (% of working age population)	19.6	19.7	19.8	21.2	21.4	23.7 b	24.1	23.2	22.8	21.8	21.3 b		
	At-risk-of-poverty (% of Working age population)	15.1	14.7	14.8	14.9	14.1	15.3	14.7	15.6	15.6	14.6	15.5 b		
	Severe Material Deprivation (% of Working age population)	4.0	4.7	3.6 u	5.0	5.5	8.0	8.7	7.9	6.3	5.6	4.4 b	4.8 p	
	Very low work intensity (18-59)	9.1	9.2	11.4	11.7	10.6	11.9 b	12.0	11.3	10.9	10.7	9.8 b		
	In-work at-risk-of poverty rate (% of persons employed 18-64)	7.9	8.0	6.3	6.7	7.8	8.7 b	8.2	8.8	8.2	8.6	9.0 b		
	Impact of social transfers (excl. pensions) in reducing poverty (18-64) (%)	38.9	38.0	44.4	45.2	48.0	44.0 b	46.6	41.4	41.1	43.6	41.3 b		
Elderly (65+)	At-risk-of-poverty or social exclusion of elderly (% of people aged 65+)	27.9	28.5	23.1	22.3	22.7	17.3 b	18.1	19.0	17.9	18.0	18.0 b		
	At-risk-of-poverty (% of Elderly population)	26.5	27.3	22.3	21.3	21.8	16.4	16.6	17.7	16.5	17.1	16.9 b		
	Severe Material Deprivation (% of Elderly population)	1.9	1.4	1.2 u	1.3	1.3	1.4	2.1	1.9	1.6	1.2	1.4 b	1.4 p	
	Relative median income of elderly (ratio with median income of people younger than 65)	0.74	0.74	0.80	0.81	0.81	0.88 b	0.87	0.87	0.88	0.89	0.89 b		
	Aggregate replacement ratio (ratio)	0.44	0.43	0.44	0.48	0.48	0.50 b	0.53	0.51	0.50	0.53	0.54 b		
	Expenditure in social protection indicators (% of GDP)	Sickness/Health care	7.1	7.2	8.0	8.2	8.7	8.7	8.8	8.6	9.0	8.5 p		
		Disability	1.8	1.8	2.0	1.9	1.9	1.8	1.6	1.6	1.7	1.7 p		
		Old age and survivors	10.0	10.5	11.6	11.7	11.8	12.1	11.9	11.7	11.7	11.0 p		
		Family/Children	2.4	2.6	3.0	3.1	3.1	3.1	2.9	2.8	2.8	2.6 p		
		Unemployment	0.5	0.6	0.8	0.7	0.7	0.7	0.6	0.4	0.4	0.4 p		
		Housing and Social exclusion n.e.c.	1.9	2.1	2.4	2.4	2.3	2.3	2.2	2.1	2.0	1.9 p		
		Total (including Admin and Other expenditures)	24.6	25.7	28.4	28.8	28.9	28.9	28.3	27.5	27.6	26.2 p		
of which: Means tested benefits		4.8	5.2	5.9	6.0	5.9	5.8	5.4	5.1	4.9	4.6 p			

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## 2. SELECTED INDICATORS

### Real GDP (yearly growth)

	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018
European Union 28		3.1	0.5	-4.3	2.1	1.8	-0.4	0.3	1.8	2.3	2.0	2.5	2.0
Euro Area 19		3.1	0.5	-4.5	2.1	1.6	-0.9	-0.2	1.4	2.1	1.9	2.4	1.9
Belgium		3.4	0.8	-2.3	2.7	1.8	0.2	0.2	1.3	1.7	1.5	1.7	1.4
Bulgaria		7.3	6.0	-3.6	1.3	1.9	0.0	0.5	1.8	3.5	3.9	3.8	3.1 p
Czechia		5.6	2.7	-4.8	2.3	1.8	-0.8	-0.5	2.7	5.3	2.5	4.4	2.9
Denmark		0.9	-0.5	-4.9	1.9	1.3	0.2	0.9	1.6	2.3	2.4	2.3	1.4
Germany		3.3	1.1	-5.6	4.1	3.7	0.5	0.5	2.2	1.7	2.2	2.2	1.4
Estonia		7.7	-5.4	-14.7	2.3	7.6	4.3	1.9	2.9	1.9	3.5	4.9	3.9
Ireland		5.3	-4.4	-5.0	1.9	3.7	0.2	1.3	8.8	25.1	5.0	7.2	6.7
Greece		3.3	-0.3	-4.3	-5.5	-9.1 p	-7.3 p	-3.2 p	0.7 p	-0.4 p	-0.2 p	1.5 p	1.9 p
Spain		3.8	1.1	-3.6	0.0	-1.0	-2.9	-1.7	1.4	3.6	3.2 p	3.0 p	2.6 p
France		2.4	0.3	-2.9	1.9	2.2	0.3	0.6	1.0	1.1	1.1	2.3 p	1.7 p
Croatia		5.3	2.0	-7.3	-1.5	-0.3	-2.3	-0.5	-0.1	2.4	3.5	2.9	2.6
Italy		1.5	-1.1	-5.5	1.7	0.6	-2.8	-1.7	0.1	0.9	1.1	1.7	0.9
Cyprus		5.1	3.6	-2.0	1.3	0.4	-2.9	-5.8	-1.3	2.0	4.8	4.5 p	3.9 p
Latvia		10.0	-3.5	-14.4	-3.9	6.4	4.0	2.4	1.9	3.0	2.1	4.6	4.8
Lithuania		11.1	2.6	-14.8	1.6	6.0	3.8	3.5	3.5	2.0	2.4	4.1	3.5
Luxembourg		8.4	-1.3	-4.4	4.9	2.5	-0.4	3.7	4.3	3.9	2.4	1.5	2.6
Hungary		0.4	0.9	-6.6	0.7	1.7	-1.6	2.1	4.2	3.5	2.3	4.1	4.9
Malta		4.0	3.3	-2.5	3.5	1.3	2.8	4.6	8.7	10.8	5.6	6.8	6.7
Netherlands		3.8	2.2	-3.7	1.3	1.6	-1.0	-0.1	1.4	2.0	2.2	2.9 p	2.7 p
Austria		3.7	1.5	-3.8	1.8	2.9	0.7	0.0	0.7	1.1	2.0	2.6	2.7
Poland		7.0	4.2	2.8	3.6	5.0	1.6	1.4	3.3	3.8	3.1	4.8	5.1
Portugal		2.5	0.2	-3.0	1.9	-1.8	-4.0	-1.1	0.9	1.8	1.9	2.8 p	2.1 e
Romania		7.2	9.3	-5.5	-3.9	2.0	2.1	3.5	3.4	3.9	4.8	7.0 p	4.1 p
Slovenia		6.9	3.3	-7.8	1.2	0.6	-2.7	-1.1	3.0	2.3	3.1	4.9	4.5
Slovakia		10.8	5.6	-5.4	5.0	2.8	1.7	1.5	2.8	4.2	3.1	3.2	4.1
Finland		5.2	0.7	-8.3	3.0	2.6	-1.4	-0.8	-0.6	0.5	2.8	2.7	2.3
Sweden		3.4	-0.6	-5.2	6.0	2.7	-0.3	1.2	2.6	4.5	2.7	2.1	2.4
United Kingdom		2.5	-0.3	-4.2	1.7	1.6	1.4	2.0	2.9	2.3	1.8	1.8	1.4

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### Employment rate (% population aged 20-64)

	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018
European Union 28	68.8	69.8	70.2	68.9	68.5	68.6	68.4	68.4	69.2	70.1	71.1	72.2	73.2
Euro Area 19	68.8	69.8	70.1	68.7	68.3	68.4	68.0	67.7	68.2	69.0	70.0	71.0	72.0
Belgium	66.5	67.7	68.0	67.1	67.6	67.3	67.2	67.2	67.3	67.2	67.7	68.5 b	69.7
Bulgaria	65.1	68.4	70.7	68.8	64.7 b	62.9 b	63.0	63.5	65.1	67.1	67.7	71.3	72.4
Czechia	71.2	72.0	72.4	70.9	70.4	70.9 b	71.5	72.5	73.5	74.8	76.7	78.5	79.9
Denmark	79.4	79.0	79.7	77.5	75.8	75.7	75.4	75.6	75.9	76.5	77.4 b	76.9 b	78.2
Germany	71.1	72.9	74.0	74.2	75.0 b	76.5 b	76.9	77.3	77.7	78.0	78.6	79.2	79.9
Estonia	75.9	76.9	77.1	70.0	66.8	70.6	72.2	73.3	74.3	76.5	76.6	78.7	79.5
Ireland	74.7	75.1 b	73.5	68.0	65.5	64.6	64.5	66.5	68.1	69.9	71.4	73.0	74.1
Greece	65.6	65.8	66.3	65.6 b	63.8	59.6	55.0	52.9	53.3	54.9	56.2	57.8	59.5
Spain	69.0	69.7	68.5	64.0	62.8	62.0	59.6	58.6	59.9	62.0	63.9	65.5	67.0
France	69.4	69.9	70.5	69.5	69.3	69.2	69.4	69.5	69.7	70.0	70.4	71.0	71.8
Croatia	60.6 e	63.9	64.9	64.2	62.1	59.8	58.1	57.2	59.2	60.6	61.4	63.6	65.2
Italy	62.4	62.7	62.9	61.6	61.0	61.0	60.9	59.7	59.9	60.5	61.6	62.3	63.0
Cyprus	75.8	76.8	76.5	75.3 b	75.0	73.4	70.2	67.2	67.6	67.9	68.7	70.8	73.9
Latvia	73.2	75.2	75.4	66.6	64.3	66.3	68.1	69.7	70.7	72.5	73.2	74.8	76.8
Lithuania	71.3	72.7	72.0	67.0	64.3	66.9	68.5	69.9	71.8	73.3	75.2	76.0	77.8
Luxembourg	69.1	69.6 b	68.8	70.4 b	70.7	70.1	71.4	71.1	72.1	70.9 b	70.7	71.5	72.1
Hungary	62.6	62.3	61.5	60.1	59.9	60.4	61.6	63.0	66.7	68.9	71.5	73.3	74.4
Malta	57.9	58.6	59.2	59.0	60.1	61.6	63.9	66.2	67.9	69.0	71.1	73.0	75.0
Netherlands	73.7	75.5	76.9	76.8	76.2	76.4	76.6	75.9	75.4	76.4	77.1	78.0	79.2
Austria	71.6	72.8 b	73.8	73.4	73.9	74.2	74.4	74.6	74.2	74.3	74.8	75.4	76.2
Poland	60.1	62.7	65.0	64.9	64.3 b	64.5	64.7	64.9	66.5	67.8	69.3	70.9	72.2
Portugal	72.6	72.5	73.1	71.1	70.3	68.8 b	66.3	65.4	67.6	69.1	70.6	73.4	75.4
Romania	64.8	64.4	64.4	63.5	64.8 b	63.8	64.8	64.7	65.7	66.0	66.3	68.8	69.9
Slovenia	71.5	72.4	73.0	71.9	70.3	68.4	68.3	67.2	67.7	69.1	70.1	73.4	75.4
Slovakia	66.0	67.2	68.8	66.4	64.6	65.0 b	65.1	65.0	65.9	67.7	69.8	71.1	72.4
Finland	73.9	74.8	75.8	73.5	73.0	73.8	74.0	73.3	73.1	72.9	73.4	74.2	76.3
Sweden	78.8	80.1	80.4	78.3	78.1	79.4	79.4	79.8	80.0	80.5	81.2	81.8	82.6
United Kingdom	75.2	75.2 b	75.2 b	73.9	73.5	73.5	74.1	74.8	76.2	76.8	77.5	78.2	78.7

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## Activity rate (% population aged 15-64)

	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018
European Union 28	70.1	70.3	70.7	70.8	71.0	71.1	71.7	72.0	72.3	72.6	73.0	73.4	73.7
Euro Area 19	70.4	70.7	71.2	71.2	71.3	71.5	72.0	72.2	72.4	72.5	72.9	73.1	73.5
Belgium	66.5	67.1	67.1	66.9	67.7	66.7	66.9	67.5	67.7	67.6	67.6	68.0 b	68.6
Bulgaria	64.5	66.3	67.8	67.2	66.7 b	65.9 b	67.1	68.4	69.0	69.3	68.7	71.3	71.5
Czechia	70.3	69.9	69.7	70.1	70.2	70.5 b	71.6	72.9	73.5	74.0	75.0	75.9	76.6
Denmark	80.6	80.1	80.7	80.2	79.4	79.3	78.6	78.1	78.1	78.5	80.0 b	78.8 b	79.4
Germany	74.9	75.6	75.9	76.3	76.7 b	77.3 b	77.2	77.6	77.7	77.6	77.9	78.2	78.6
Estonia	72.8	73.2	74.2	74.0	73.9	74.7	74.8	75.1	75.2	76.7	77.5	78.8	79.1
Ireland	74.9	75.6 b	74.8	73.0	71.6	71.2	71.1	71.8	71.8	72.1	72.7	72.7	72.9
Greece	66.7	66.5	66.7	67.4 b	67.8	67.3	67.5	67.5	67.4	67.8	68.2	68.3	68.2
Spain	71.1	71.8	72.7	73.1	73.5	73.9	74.3	74.3	74.2	74.3	74.2	73.9	73.7
France	69.2 e	69.3 e	69.4 e	69.8 e	69.8 e	69.7 e	70.3 e	70.7 e	71.0	71.3	71.4	71.5	71.9
Croatia	63.0 e	65.7	65.8	65.6	65.1	64.1	63.9	63.7	66.1	66.9	65.6	66.4	66.3
Italy	62.6	62.4	62.9	62.3	62.0	62.1	63.5	63.4	63.9	64.0	64.9	65.4	65.6
Cyprus	73.0	73.9	73.6	73.0 b	73.6	73.5	73.5	73.6	74.3	73.9	73.4	73.9	75.0
Latvia	71.0	72.6	74.2	73.5	73.0	72.8	74.4	74.0	74.6	75.7	76.3	77.0	77.7
Lithuania	67.6	67.9	68.4	69.6	70.2	71.4	71.8	72.4	73.7	74.1	75.5	75.9	77.3
Luxembourg	66.7	66.9 b	66.8	68.7 b	68.2	67.9	69.4	69.9	70.8	70.9 b	70.0	70.2	71.1
Hungary	62.0	61.6	61.2	61.2	61.9	62.4	63.7	64.7	67.0	68.6	70.1	71.2	71.9
Malta	57.9	58.8	59.1	59.4	60.4	61.8	63.9	66.3	67.8	68.8	70.6	72.2	74.2
Netherlands	75.4	76.7	77.8	78.1	77.9	78.1	79.0	79.4	79.0	79.6	79.7	79.7	80.3
Austria	72.4	73.5 b	73.9	74.3	74.4	74.6	75.1	75.5	75.4	75.5	76.2	76.4	76.8
Poland	63.4	63.2	63.8	64.7	65.3 b	65.7	66.5	67.0	67.9	68.1	68.8	69.6	70.1
Portugal	73.6	73.9	73.9	73.4	73.7	73.6 b	73.4	73.0	73.2	73.4	73.7	74.7	75.1
Romania	63.6	63.0	62.9	63.1	64.9 b	64.1	64.8	64.9	65.7	66.1	65.6	67.3	67.8
Slovenia	70.9	71.3	71.8	71.8	71.5	70.3	70.4	70.5	70.9	71.8	71.6	74.2	75.0
Slovakia	68.6	68.3	68.8	68.4	68.7	68.7 b	69.4	69.9	70.3	70.9	71.9	72.1	72.4
Finland	75.2	75.6	76.0	75.0	74.5	74.9	75.2	75.2	75.4	75.8	75.9	76.7	77.9
Sweden	78.8	79.1	79.3	78.9	79.1	79.9	80.3	81.1	81.5	81.7	82.1	82.5	82.9
United Kingdom	75.7	75.5 b	75.8 b	75.7	75.4	75.5	76.1	76.4	76.7	76.9	77.3	77.6	77.9

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## Unemployment rate (% labour force)

	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018
European Union 28	8.2	7.2	7.0	9.0	9.6	9.7	10.5	10.9	10.2	9.4	8.6	7.6	6.8
Euro Area 19	8.4	7.5	7.6	9.6	10.2	10.2	11.4	12.0	11.6	10.9	10.0	9.1	8.2
Belgium	8.3	7.5	7.0	7.9	8.3	7.2	7.6	8.4	8.5	8.5	7.8	7.1 b	6.0
Bulgaria	9.0	6.9	5.6	6.8	10.3 d	11.3	12.3	13.0	11.4	9.2	7.6	6.2	5.2
Czechia	7.1	5.3	4.4	6.7	7.3	6.7	7.0	7.0	6.1	5.1	4.0	2.9	2.2
Denmark	3.9 d	3.8	3.4	6.0	7.5	7.6	7.5	7.0	6.6	6.2	6.2	5.7	5.0
Germany	10.1	8.5	7.4	7.6	7.0	5.8	5.4	5.2	5.0	4.6	4.1	3.8	3.4
Estonia	5.9	4.6	5.5 d	13.5	16.7	12.3	10.0	8.6	7.4	6.2	6.8	5.8	5.4
Ireland	4.8	5.0	6.8	12.6	14.6	15.4	15.5	13.8	11.9	10.0	8.4	6.7	5.8
Greece	9.0	8.4	7.8	9.6	12.7	17.9	24.5	27.5	26.5	24.9	23.6	21.5	19.3
Spain	8.5	8.2	11.3	17.9	19.9	21.4	24.8	26.1	24.5	22.1	19.6	17.2	15.3
France	8.8	8.0	7.4	9.1	9.3	9.2	9.8	10.3	10.3	10.4	10.1	9.4	9.1
Croatia	11.6 d	9.9	8.6	9.3	11.8	13.7	15.8	17.4	17.2	16.1	13.4	11.0	8.5
Italy	6.8	6.1	6.7	7.7	8.4	8.4	10.7	12.1	12.7	11.9	11.7	11.2	10.6
Cyprus	4.6	3.9	3.7	5.4	6.3	7.9	11.9	15.9	16.1	15.0	13.0	11.1	8.4
Latvia	7.0	6.1	7.7	17.5	19.5	16.2	15.0	11.9	10.8	9.9	9.6	8.7	7.4
Lithuania	5.8	4.3	5.8	13.8	17.8	15.4	13.4	11.8	10.7	9.1	7.9	7.1	6.2
Luxembourg	4.6 d	4.2	4.9	5.1	4.6	4.8	5.1	5.9	6.0	6.5	6.3	5.6	5.4
Hungary	7.5	7.4	7.8 d	10.0	11.2	11.0	11.0	10.2	7.7	6.8	5.1	4.2	3.7
Malta	6.8	6.5	6.0	6.9	6.8	6.4	6.2	6.1	5.7	5.4	4.7	4.0	3.7
Netherlands	5.0	4.2	3.7	4.4	5.0	5.0	5.8	7.3	7.4	6.9	6.0	4.9	3.8
Austria	5.3	4.9	4.1	5.3	4.8	4.6	4.9	5.4	5.6	5.7	6.0	5.5	4.9
Poland	13.9	9.6	7.1	8.1 d	9.7	9.7	10.1	10.3	9.0	7.5	6.2	4.9	3.9
Portugal	8.9	9.1	8.8	10.7	12.0	12.9	15.8	16.4	14.1	12.6	11.2	9.0	7.0
Romania	7.2	6.4	5.6	6.5	7.0	7.2	6.8	7.1	6.8	6.8	5.9	4.9	4.2
Slovenia	6.0	4.9	4.4	5.9	7.3	8.2	8.9	10.1	9.7	9.0	8.0	6.6	5.1
Slovakia	13.5	11.2	9.6	12.1	14.5	13.7 d	14.0	14.2	13.2	11.5	9.7	8.1	6.5
Finland	7.7	6.9	6.4	8.2	8.4	7.8	7.7	8.2	8.7	9.4	8.8	8.6	7.4
Sweden	7.1	6.1	6.2	8.3	8.6	7.8	8.0	8.0	7.9	7.4	6.9	6.7	6.3
United Kingdom	5.4	5.3	5.6	7.6	7.8	8.1	7.9	7.5	6.1	5.3	4.8	4.3	4.0

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## Youth unemployment rate (% labour force 15-24)

	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018
European Union 28	17.7	15.8	15.9	20.3	21.4	21.8	23.3	23.8	22.2	20.3	18.7	16.8	15.2
Euro Area 19	17.1	15.5	16.1	20.7	21.5	21.4	23.6	24.4	23.7	22.3	20.9	18.8	16.9
Belgium	20.5	18.8	18.0	21.9	22.4	18.7	19.8	23.7	23.2	22.1	20.1	19.3 b	15.8
Bulgaria	18.3	14.1	11.9	15.1	21.9 d	25.0	28.1	28.4	23.8	21.6	17.2	12.9	12.7
Czechia	17.5	10.7	9.9	16.6	18.3	18.1	19.5	18.9	15.9	12.6	10.5	7.9	6.7
Denmark	7.7 d	7.5	8.0	11.8	13.9	14.2	14.1	13.0	12.6	10.8	12.0	11.0	9.3
Germany	13.6	11.8	10.4	11.1	9.8	8.5	8.0	7.8	7.7	7.2	7.1	6.8	6.2
Estonia	12.1	10.1	12.0 d	27.4	32.9	22.4	20.9	18.7	15.0	13.1	13.4	12.1	11.9
Ireland	8.8	9.2	13.5	24.5	28.1	29.6	30.8	26.7	23.4	20.2	16.8	14.4	13.8
Greece	25.0	22.7	21.9	25.7	33.0	44.7	55.3	58.3	52.4	49.8	47.3	43.6	39.9
Spain	17.9	18.1	24.5	37.7	41.5	46.2	52.9	55.5	53.2	48.3	44.4	38.6	34.3
France	22.0	19.5	19.0	23.6	23.3	22.6	24.4	24.9	24.2	24.7	24.6	22.3	20.7
Croatia	28.9 d	25.4	23.6	25.4	32.3	36.6	42.2	49.9	44.9	42.3	31.8	27.2	23.8
Italy	21.8	20.4	21.2	25.3	27.9	29.2	35.3	40.0	42.7	40.3	37.8	34.7	32.2
Cyprus	10.0	10.2	9.0	13.8	16.6	22.4	27.7	38.9	36.0	32.8	29.1	24.7	20.2
Latvia	13.6	10.6	13.6	33.3	36.2	31.0	28.5	23.2	19.6	16.3	17.3	17.0	12.2
Lithuania	10.0	8.4	13.3	29.6	35.7	32.6	26.7	21.9	19.3	16.3	14.5	13.3	11.1
Luxembourg	15.5 d	15.6	17.3	16.5	15.8	16.4	18.0	16.9	22.3	16.6	19.1	15.5	13.5
Hungary	19.1	18.1	19.5 d	26.4	26.4	26.0	28.2	26.6	20.4	17.3	12.9	10.7	10.2
Malta	15.5	13.5	11.7	14.5	13.2	13.3	13.8	12.7	11.7	11.6	10.7	10.6	9.2
Netherlands	10.0	9.4	8.6	10.2	11.1	10.0	11.7	13.2	12.7	11.3	10.8	8.9	7.2
Austria	9.8	9.4	8.5	10.7	9.5	8.9	9.4	9.7	10.3	10.6	11.2	9.8	9.4
Poland	29.8	21.6	17.2	20.6 d	23.7	25.8	26.5	27.3	23.9	20.8	17.7	14.8	11.7
Portugal	21.2	21.4	21.6	25.3	28.2	30.2	38.0	38.1	34.7	32.0	28.2	23.8	20.3
Romania	20.2	19.3	17.6	20.0	22.1	23.9	22.6	23.7	24.0	21.7	20.6	18.3	16.2
Slovenia	13.9	10.1	10.4	13.6	14.7	15.7	20.6	21.6	20.2	16.3	15.2	11.2	8.8
Slovakia	27.0	20.6	19.3	27.6	33.9	33.7 d	34.0	33.7	29.7	26.5	22.2	18.9	14.9
Finland	18.7	16.5	16.5	21.5	21.4	20.1	19.0	19.9	20.5	22.4	20.1	20.1	17.0
Sweden	21.5	19.2	20.2	25.0	24.8	22.8	23.7	23.6	22.9	20.4	18.9	17.8	16.8
United Kingdom	13.9	14.3	15.0	19.1	19.9	21.3	21.2	20.7	17.0	14.6	13.0	12.1	11.3

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## Long term unemployment rate (% labour force)

	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018
European Union 28	3.7	3.1	2.6	3.0	3.8	4.1	4.6	5.1	5.0	4.5	4.0	3.4	2.9
Euro Area 19	3.8	3.2	2.9	3.4	4.3	4.6	5.2	5.9	6.0	5.5	5.0	4.4	3.8
Belgium	4.2	3.8	3.3	3.5	4.0	3.5	3.4	3.9	4.3	4.4	4.0	3.5 b	2.9
Bulgaria	5.0	4.1	2.9	3.0	4.7 b	6.3 b	6.8	7.4	6.9	5.6	4.5	3.4	3.0
Czechia	3.9	2.8	2.2	2.0	3.0	2.7 b	3.0	3.0	2.7	2.4	1.7	1.0	0.7
Denmark	0.8	0.6	0.5	0.6	1.5	1.8	2.1	1.8	1.7	1.7	1.4 b	1.3 b	1.1
Germany	5.7	4.9	3.9	3.5	3.3 b	2.8 b	2.4	2.3	2.2	2.0	1.7	1.6	1.4
Estonia	2.9	2.3	1.7	3.7	7.6	7.1	5.5	3.8	3.3	2.4	2.1	1.9	1.3
Ireland	1.4	1.4 b	1.7	3.5	6.9	8.8	9.2	8.0	6.6	5.3	4.2	3.0	2.1
Greece	4.9	4.2	3.7	3.9 b	5.7	8.8	14.5	18.5	19.5	18.2	17.0	15.6	13.6
Spain	1.8	1.7	2.0	4.3	7.3	8.9	11.0	13.0	12.9	11.4	9.5	7.7	6.4
France	3.8 e	3.3 e	2.9 e	3.3 e	3.9 e	4.0 e	4.1 e	4.4 e	4.5	4.6	4.6	4.2	3.8
Croatia	6.7	6.0	5.3	5.1	6.6	8.4	10.2	11.0	10.1	10.2	6.6	4.6	3.4
Italy	3.3	2.9	3.0	3.4	4.0	4.3	5.6	6.9	7.7	6.9	6.7	6.5	6.2
Cyprus	0.9	0.7	0.5	0.6 b	1.3	1.6	3.6	6.1	7.7	6.8	5.8	4.5	2.7
Latvia	2.4	1.6	1.9	4.5	8.8	8.8	7.8	5.7	4.6	4.5	4.0	3.3	3.1
Lithuania	2.6	1.4 u	1.3 u	3.3	7.4	8.0	6.6	5.1	4.8	3.9	3.0	2.7	2.0
Luxembourg	1.4	1.2	1.6	1.2	1.3	1.4	1.6	1.8	1.6	1.9	2.2	2.1	1.4
Hungary	3.4	3.5	3.6	4.2	5.5	5.2	5.0	4.9	3.7	3.1	2.4	1.7	1.4
Malta	2.7	2.7	2.6	2.9	3.1	3.0	3.0	2.8	2.7	2.4	1.9	1.6	1.1
Netherlands	2.1	1.5	1.2	1.1	1.3	1.6	1.9	2.5	2.9	3.0	2.5	1.9	1.4
Austria	1.5	1.3 b	1.0	1.2	1.2	1.2	1.2	1.3	1.5	1.7	1.9	1.8	1.4
Poland	7.8	4.9	2.4	2.5	3.0 b	3.6	4.1	4.4	3.8	3.0	2.2	1.5	1.0
Portugal	3.9	3.8	3.6	4.2	5.7	6.2 b	7.7	9.3	8.4	7.2	6.2	4.5	3.1
Romania	4.1	3.2	2.4	2.2	2.4 b	2.9	3.0	3.2	2.8	3.0	3.0	2.0	1.8
Slovenia	2.9	2.2	1.9	1.8	3.2	3.6	4.3	5.2	5.3	4.7	4.3	3.1	2.2
Slovakia	10.2	8.3	6.6	6.5	9.2	9.2 b	9.4	10.0	9.3	7.6	5.8	5.1	4.0
Finland	1.9	1.5	1.2	1.4	2.0	1.7	1.6	1.7	1.9	2.3	2.3	2.1	1.6
Sweden	1.0 e	0.8	0.8	1.1	1.6	1.5	1.5	1.4	1.4	1.5	1.3	1.2	1.2
United Kingdom	1.2	1.3 b	1.4 b	1.9	2.5	2.7	2.7	2.7	2.2	1.6	1.3	1.1	1.1

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## At-risk-of-poverty or social exclusion (% of total population)

	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018
European Union 28					23.8	24.3	24.8	24.6	24.4	23.8	23.5	22.4	
Euro Area 19	22.1	21.9	21.7	21.6	22.0	22.9	23.3	23.1	23.5	23.1	23.1	22.1	
Belgium	21.5	21.6	20.8	20.2	20.8	21.0	21.6	20.8	21.2	21.1	20.7	20.3	
Bulgaria	61.3	60.7	44.8 b	46.2	49.2	49.1	49.3	48.0	40.1 b	41.3	40.4 b	38.9	32.8
Czechia	18.0	15.8	15.3	14.0	14.4	15.3	15.4	14.6	14.8	14.0	13.3	12.2	12.2
Denmark	16.7	16.8	16.3	17.6	18.3	17.6 b	17.5	18.3	17.9	17.7	16.8	17.2	17.6 p
Germany	20.2	20.6	20.1	20.0	19.7	19.9	19.6	20.3	20.6	20.0	19.7	19.0	
Estonia	22.0	22.0	21.8	23.4	21.7	23.1	23.4	23.5	26.0 b	24.2	24.4	23.4	
Ireland	23.3	23.1	23.7	25.7	27.3	29.4	30.3	29.9	27.7	26.0	24.4	22.7	
Greece	29.3	28.3	28.1	27.6	27.7	31.0	34.6	35.7	36.0	35.7	35.6	34.8	
Spain	24.0	23.3	23.8 b	24.7	26.1	26.7	27.2	27.3	29.2	28.6	27.9	26.6	
France	18.8	19.0	18.5 b	18.5	19.2	19.3	19.1	18.1	18.5	17.7	18.2	17.1	
Croatia					31.1	32.6	32.6	29.9	29.3	29.1	27.9	26.4	
Italy	25.9	26.0	25.5	24.9	25.0	28.1	29.9	28.5	28.3	28.7	30.0	28.9	
Cyprus	25.4	25.2	23.3 b	23.5	24.6	24.6	27.1	27.8	27.4	28.9	27.7	25.2	
Latvia	42.2	35.1	34.2 b	37.9	38.2	40.1	36.2	35.1	32.7	30.9	28.5	28.2	28.4
Lithuania	35.9	28.7	28.3	29.6	34.0	33.1	32.5	30.8	27.3	29.3	30.1	29.6	
Luxembourg	16.5	15.9	15.5	17.8	17.1	16.8	18.4	19.0	19.0	18.5	19.8 b	21.5	
Hungary	31.4	29.4	28.2	29.6	29.9	31.5	33.5	34.8	31.8	28.2	26.3	25.6	19.6
Malta	19.5	19.7	20.1	20.3	21.2	22.1	23.1	24.6	23.9	23.0	20.3	19.3	
Netherlands	16.0	15.7	14.9	15.1	15.1	15.7	15.0	15.9	16.5	16.4	16.7 b	17.0	
Austria	17.8	16.7	20.6 b	19.1	18.9	19.2	18.5	18.8	19.2	18.3	18.0	18.1	17.5
Poland	39.5	34.4	30.5 b	27.8	27.8	27.2	26.7	25.8	24.7	23.4	21.9	19.5	
Portugal	25.0	25.0	26.0	24.9	25.3	24.4	25.3	27.5	27.5	26.6	25.1	23.3	
Romania		47.0	44.2	43.0	41.5	40.9	43.2	41.9	40.3	37.4	38.8	35.7	32.5
Slovenia	17.1	17.1	18.5	17.1	18.3	19.3	19.6	20.4	20.4	19.2	18.4	17.1	
Slovakia	26.7	21.4	20.6	19.6	20.6	20.6	20.5	19.8	18.4	18.4	18.1	16.3	
Finland	17.1	17.4	17.4	16.9	16.9	17.9	17.2	16.0	17.3	16.8	16.6	15.7	16.5
Sweden	16.3	13.9	16.7 b	17.8	17.7	18.5	17.7	18.3	18.2	18.6	18.3	17.7	
United Kingdom	23.7	22.6	23.2	22.0	23.2	22.7	24.1 b	24.8	24.1	23.5	22.2	22.0 b	

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## At-risk-of-poverty (% of total population)

	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018
European Union 28					16.5	16.9	16.8	16.7	17.2	17.3	17.3	16.9	
Euro Area 19	15.6	16.1	16.1	16.2	16.3	16.8	16.9	16.7	17.1	17.2	17.4	17.0	
Belgium	14.7	15.2	14.7	14.6	14.6	15.3	15.3	15.1	15.5	14.9	15.5	15.9	
Bulgaria	18.4	22.0	21.4	21.8	20.7	22.2	21.2	21.0	21.8	22.0	22.9 b	23.4	22.0
Czechia	9.9	9.6	9.0	8.6	9.0	9.8	9.6	8.6	9.7	9.7	9.7	9.1	9.6
Denmark	11.7	11.7	11.8	13.1	13.3	12.1	12.0	11.9	12.1	12.2	11.9	12.4	12.8 p
Germany	12.5	15.2	15.2	15.5	15.6	15.8	16.1	16.1	16.7	16.7	16.5	16.1	
Estonia	18.3	19.4	19.5	19.7	15.8	17.5	17.5	18.6	21.8	21.6	21.7	21.0	
Ireland	18.5	17.2	15.5	15.0	15.2	15.2	16.6	15.7	16.4	16.3	16.8	15.6	
Greece	20.5	20.3	20.1	19.7	20.1	21.4	23.1	23.1	22.1	21.4	21.2	20.2	
Spain	20.3	19.7	19.8	20.4	20.7	20.6	20.8	20.4	22.2	22.1	22.3	21.6	
France	13.2	13.1	12.5	12.9	13.3	14.0	14.1	13.7	13.3	13.6	13.6	13.3	
Croatia					20.6	20.9	20.4	19.5	19.4	20.0	19.5	20.0	
Italy	19.3	19.5	18.9	18.4	18.7	19.8	19.5	19.3	19.4	19.9	20.6	20.3	
Cyprus	15.6	15.5	15.9	15.8	15.6	14.8	14.7	15.3	14.4	16.2	16.1	15.7	
Latvia	23.5	21.2	25.9	26.4	20.9	19.0	19.2	19.4	21.2	22.5	21.8	22.1	23.3
Lithuania	20.0	19.1	20.9	20.3	20.5	19.2	18.6	20.6	19.1	22.2	21.9	22.9	
Luxembourg	14.1	13.5	13.4	14.9	14.5	13.6	15.1	15.9	16.4	15.3	16.5 b	18.7	
Hungary	15.9	12.3	12.4	12.4	12.3	14.1	14.3	15.0	15.0	14.9	14.5	13.4	12.8
Malta	14.2	15.1	15.3	14.9	15.5	15.6	15.1	15.8	15.8	16.6	16.5	16.7	
Netherlands	9.7	10.2	10.5	11.1	10.3	11.0	10.1	10.4	11.6	11.6	12.7 b	13.2	
Austria	12.6	12.0	15.2	14.5	14.7	14.5	14.4	14.4	14.1	13.9	14.1	14.4	14.3
Poland	19.1	17.3	16.9	17.1	17.6	17.7	17.1	17.3	17.0	17.6	17.3	15.0	
Portugal	18.5	18.1	18.5	17.9	17.9	18.0	17.9	18.7	19.5	19.5	19.0	18.3	
Romania		24.6	23.6	22.1	21.6	22.3	22.9	23.0	25.1	25.4	25.3	23.6	23.5
Slovenia	11.6	11.5	12.3	11.3	12.7	13.6	13.5	14.5	14.5	14.3	13.9	13.3	
Slovakia	11.6	10.6	10.9	11.0	12.0	13.0	13.2	12.8	12.6	12.3	12.7	12.4	
Finland	12.6	13.0	13.6	13.8	13.1	13.7	13.2	11.8	12.8	12.4	11.6	11.5	12.0
Sweden	12.3	10.5	13.5 b	14.4	14.8	15.4	15.2	16.0	15.6	16.3	16.2	15.8	
United Kingdom	19.0	18.6	18.7	17.3	17.1	16.2	16.0	15.9	16.8	16.6	15.9	17.0 b	

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## Severe Material Deprivation (% of total population)

	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018
European Union 28					8.4	8.8	9.9	9.6	8.9	8.1	7.5	6.6	6.2 e
Euro Area 19	6.0	5.6	5.9	6.0	6.1	6.9	7.8	7.5	7.4	7.0	6.6	5.9	5.4 e
Belgium	6.4	5.7	5.6	5.2	5.9	5.7	6.3	5.1	5.9	5.8	5.5	5.1	5.0 p
Bulgaria	57.7	57.6	41.2	41.9	45.7	43.6	44.1	43.0	33.1	34.2	31.9 b	30.0	20.9
Czechia	9.6	7.4	6.8	6.1	6.2	6.1	6.6	6.6	6.7	5.6	4.8	3.7	2.8
Denmark	3.1	3.3	2.0	2.3	2.7	2.3	2.7	3.6	3.2	3.7	2.6	3.1	3.4 p
Germany	5.1	4.8	5.5	5.4	4.5	5.3	4.9	5.4	5.0	4.4	3.7	3.4	3.4 p
Estonia	7.0	5.6	4.9	6.2	9.0	8.7	9.4	7.6	6.2	4.5	4.7	4.1	3.8 p
Ireland	4.8	4.5	5.5	6.1	5.7	7.8	9.8	9.9	8.4	7.5	6.7	5.2	
Greece	11.5	11.5	11.2	11.0	11.6	15.2	19.5	20.3	21.5	22.2	22.4	21.1	16.7 p
Spain	4.1	3.5	3.6	4.5	4.9	4.5	5.8	6.2	7.1	6.4	5.8	5.1	
France	5.0	4.7	5.4	5.6	5.8	5.2	5.3	4.9	4.8	4.5	4.4	4.1	4.7 p
Croatia					14.3	15.2	15.9	14.7	13.9	13.7	12.5	10.3	8.6 p
Italy	6.4	7.0	7.5	7.3	7.4	11.1	14.5	12.3	11.6	11.5	12.1	10.1	8.4 p
Cyprus	12.6	13.3	9.1	9.5	11.2	11.7	15.0	16.1	15.3	15.4	13.6	11.5	10.5 p
Latvia	31.3	24.0	19.3	22.1	27.6	31.0	25.6	24.0	19.2	16.4	12.8	11.3	9.5
Lithuania	25.3	16.6	12.5	15.6	19.9	19.0	19.8	16.0	13.6	13.9	13.5	12.4	
Luxembourg	1.1	0.8	0.7	1.1	0.5	1.2	1.3	1.8	1.4	2.0	1.6 b	1.2	
Hungary	20.9	19.9	17.9	20.3	21.6	23.4	26.3	27.8	24.0	19.4	16.2	14.5	10.1
Malta	3.9	4.4	4.3	5.0	6.5	6.6	9.2	10.2	10.3	8.5	4.4	3.3	3.0 p
Netherlands	2.3	1.7	1.5	1.4	2.2	2.5	2.3	2.5	3.2	2.6	2.6 b	2.6	2.4 p
Austria	3.6	3.3	5.9	4.6	4.3	4.0	4.0	4.2	4.0	3.6	3.0	3.7	2.8
Poland	27.6	22.3	17.7	15.0	14.2	13.0	13.5	11.9	10.4	8.1	6.7	5.9	
Portugal	9.1	9.6	9.7	9.1	9.0	8.3	8.6	10.9	10.6	9.6	8.4	6.9	6.0 p
Romania		38.0	32.7	32.1	30.5	29.5	31.1	29.8	25.9	22.7	23.8	19.7	16.8
Slovenia	5.1	5.1	6.7	6.1	5.9	6.1	6.6	6.7	6.6	5.8	5.4	4.6	3.7 p
Slovakia	18.2	13.7	11.8	11.1	11.4	10.6	10.5	10.2	9.9	9.0	8.2	7.0	
Finland	3.3	3.6	3.5	2.8	2.8	3.2	2.9	2.5	2.8	2.2	2.2	2.1	2.8
Sweden	2.1	2.2	1.8 b	2.0	1.9	1.7	1.8	1.9	1.0	1.1	0.8	1.1	
United Kingdom	4.5	4.2	4.5	3.3 u	4.8	5.1	7.8	8.3	7.4	6.1	5.2	4.1 b	4.6 p

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## Share of people living in low work intensity households (% of people aged 0-59)

	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018
European Union 28					10.3	10.5	10.6	11.0	11.3	10.7	10.5	9.5	
Euro Area 19	10.3	9.7	9.3	9.1	10.4	11.0	10.7	11.2	11.9	11.2	11.1	10.2	
Belgium	14.3	13.8	11.7	12.3	12.7	13.8	13.9	14.0	14.6	14.9	14.6	13.5	
Bulgaria	14.7	16.0	8.1 b	6.9	8.0	11.0	12.5	13.0	12.1	11.6	11.9 b	11.1	9.0
Czechia	8.9	8.6	7.2	6.0	6.4	6.6	6.8	6.9	7.6	6.8	6.7	5.5	4.5
Denmark	9.6	10.1	8.5	8.8	10.6	10.5	10.2	11.9	12.2	11.6	10.7	10.0	11.2 p
Germany	13.6	11.5	11.7	10.9	11.2	11.2	9.9	9.9	10.0	9.8	9.6	8.7	
Estonia	7.1	6.2	5.3	5.6	9.0	10.0	9.1	8.4	7.6 b	6.6	5.8	5.8	
Ireland	12.9	14.3	13.7	20.0	22.9	24.2	23.4	23.9	21.0	19.2	17.8	16.2	
Greece	8.1	8.1	7.5	6.6	7.6	12.0	14.2	18.2	17.2	16.8	17.2	15.6	
Spain	6.4	6.8	6.6	7.6	10.8	13.4	14.3	15.7	17.1	15.4	14.9	12.8	
France	9.1	9.6	8.8	8.4	9.9	9.4	8.4	8.1	9.6	8.6	8.4	8.1	
Croatia					13.9	15.9	16.8	14.8	14.7	14.4	13.0	12.2	
Italy	11.3	10.2	10.4	9.2	10.6	10.5	10.6	11.3	12.1	11.7	12.8	11.8	
Cyprus	3.8	3.7	4.5 b	4.0	4.9	4.9	6.5	7.9	9.7	10.9	10.6	9.4	
Latvia	7.1	6.2	5.4	7.4	12.6	12.6	11.7	10.0	9.6	7.8	7.2	7.8	7.6
Lithuania	8.3	6.4	6.1	7.2	9.5	12.7	11.4	11.0	8.8	9.2	10.2	9.7	
Luxembourg	5.2	5.0	4.7	6.3	5.5	5.8	6.1	6.6	6.1	5.7	6.6 b	6.9	
Hungary	13.1	11.3	12.0	11.3	11.9	12.8	13.5	13.6	12.8	9.4	8.2	6.6	5.7
Malta	9.7	9.6	8.6	9.2	9.2	8.9	9.0	9.1	9.9	9.2	7.3	7.1	
Netherlands	10.9	9.7	8.2	8.5	8.4	8.9	8.9	9.3	10.2	10.2	9.7 b	9.5	
Austria	8.1	8.2	7.4 b	7.1	7.8	8.6	7.7	7.8	9.1	8.2	8.1	8.3	7.3
Poland	12.4	10.1	8.0	6.9	7.3	6.9	6.9	7.2	7.3	6.9	6.4	5.7	
Portugal	6.6	7.2	6.3	7.0	8.6	8.3	10.1	12.2	12.2	10.9	9.1	8.0	
Romania		9.9	8.5	8.1	7.7	7.3	7.9	7.6	7.2	7.9	8.2	6.9	7.4
Slovenia	6.9	7.3	6.7	5.6	7.0	7.6	7.5	8.0	8.7	7.4	7.4	6.2	
Slovakia	6.2	6.4	5.2	5.6	7.9	7.7	7.2	7.6	7.1	7.1	6.5	5.4	
Finland	9.1	8.8	7.5	8.4	9.3	10.0	9.3	9.0	10.0	10.8	11.4	10.7	10.8
Sweden	6.8	6.0	7.0 b	8.5	8.5	9.4	8.1	9.4	9.0	8.7	8.5	8.8	
United Kingdom	12.0	10.4	10.4	12.7	13.2	11.5	13.0 b	13.2	12.3	11.9	11.3	10.1 b	

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## Income quintile share ratio S80/S20

	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018
European Union 28					4.9	5.0	5.0	5.0	5.2	5.2	5.2	5.1	
Euro Area 19	4.7	4.8	4.9	4.9	4.9	5.0	5.0	5.1	5.2	5.2	5.2	5.1	
Belgium	4.2	3.9	4.1	3.9	3.9	3.9	4.0	3.8	3.8	3.8	3.8	3.8	
Bulgaria	5.1	7.0	6.5	5.9	5.9	6.5	6.1	6.6	6.8	7.1	7.7 b	8.2	7.7
Czechia	3.5	3.5	3.4	3.5	3.5	3.5	3.5	3.4	3.5	3.5	3.5	3.4	3.3
Denmark	3.4	3.7	3.6	4.6	4.4 b	4.0 b	3.9	4.0	4.1	4.1	4.1	4.1	4.2 p
Germany	4.1	4.9	4.8	4.5	4.5	4.5	4.3	4.6	5.1	4.8	4.6	4.5	
Estonia	5.5	5.5	5.0	5.0	5.0	5.3	5.4	5.5	6.5 b	6.2	5.6	5.4	
Ireland	4.9	4.8	4.4	4.2	4.7	4.6	4.8	4.7	4.9	4.5	4.4	4.6	
Greece	6.1	6.0	5.9	5.8	5.6	6.0	6.6	6.6	6.5	6.5	6.6	6.1	
Spain	5.5	5.5	5.6 b	5.9	6.2	6.3	6.5	6.3	6.8	6.9	6.6	6.6	
France	4.0	3.9	4.4 b	4.4	4.4	4.6	4.5	4.5	4.3	4.3	4.3	4.4	
Croatia					5.5 b	5.6	5.4	5.3	5.1	5.2	5.0	5.0	
Italy	5.4	5.4	5.2	5.3	5.4	5.7	5.6	5.8	5.8	5.8	6.3	5.9	
Cyprus	4.3	4.4	4.3 b	4.4	4.5	4.3	4.7	4.9	5.4	5.2	4.9	4.6	
Latvia	7.8	6.4	7.3	7.4	6.8	6.5	6.5	6.3	6.5	6.5	6.2	6.3	6.8
Lithuania	6.3	5.9	6.1	6.4	7.3	5.8	5.3	6.1	6.1	7.5	7.1	7.3	
Luxembourg	4.2	4.0	4.1	4.3	4.1	4.0	4.1	4.6	4.4	4.3	5.0 b	5.0	
Hungary	5.5	3.7	3.6	3.5	3.4	3.9	4.0	4.3	4.3	4.3	4.3	4.3	4.4
Malta	4.0	3.9	4.3	4.0	4.3	4.0	3.9	4.1	4.0	4.1	4.2	4.2	
Netherlands	3.8	4.0	4.0	4.0	3.7	3.8	3.6	3.6	3.8	3.8	3.9 b	4.0	
Austria	3.7	3.8	4.2 b	4.2	4.3	4.1	4.2	4.1	4.1	4.0	4.1	4.3	4.0
Poland	5.6	5.3	5.1	5.0	5.0	5.0	4.9	4.9	4.9	4.9	4.8	4.6	
Portugal	6.7	6.5	6.1	6.0	5.6	5.7	5.8	6.0	6.2	6.0	5.9	5.7	
Romania		8.1	7.0	6.5	6.1	6.2	6.6	6.8	7.2	8.3	7.2	6.5	7.2
Slovenia	3.4	3.3	3.4	3.2	3.4	3.5	3.4	3.6	3.7	3.6	3.6	3.4	
Slovakia	4.1	3.5	3.4	3.6	3.8	3.8	3.7	3.6	3.9	3.5	3.6	3.5	
Finland	3.6	3.7	3.8	3.7	3.6	3.7	3.7	3.6	3.6	3.6	3.6	3.5	3.6
Sweden	3.6	3.3	3.7 b	4.0	3.8	4.0	4.0	4.0	4.2	4.1	4.3	4.3	
United Kingdom	5.4	5.3	5.6	5.3	5.4	5.3	5.0 b	4.6	5.1	5.2	5.1	5.4 b	

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## NEET: Young people neither in employment nor in education and training (% of total population aged 15-24)

	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018
European Union 28	11.4	11.1	10.9	12.4	12.8	12.9	13.2	13.0	12.4	12.0	11.5	10.9	10.4
Euro Area 19	11.4	10.9	11.0	12.6	12.8	12.7	13.1	12.9	12.5	12.1	11.6	11.1	10.5
Belgium	11.2	11.2	10.1	11.1	10.9	11.8	12.3	12.7	12.0	12.2	9.9	9.3 b	9.2
Bulgaria	22.2	19.1	17.4	19.5	21.0 b	21.8 b	21.5	21.6	20.2	19.3	18.2	15.3	15.0
Czechia	9.2	6.9	6.7	8.5	8.8	8.3 b	8.9	9.1	8.1	7.5	7.0	6.3	5.6
Denmark	3.6	4.3	4.3	5.4	6.0	6.3	6.6	6.0	5.8	6.2	5.8 b	7.0 b	6.8
Germany	10.1	9.3	8.4	8.8	8.3 b	7.5 b	7.1	6.3	6.4	6.2	6.7	6.3	5.9
Estonia	8.9	9.4	9.1	14.5	14.0	11.6	12.2	11.3	11.7	10.8	9.1	9.4	9.8
Ireland	11.8	10.1 b	12.5	18.3	19.4	19.1	19.2	16.4	15.2	14.2	12.6	10.9	10.1
Greece	12.0	11.3	11.4	12.4 b	14.8	17.4	20.2	20.4	19.1	17.2	15.8	15.3	14.1
Spain	11.8	12.0	14.3	18.1	17.8	18.2	18.6	18.6	17.1	15.6	14.6	13.3	12.4
France	11.3	10.7	10.5	12.7	12.7	12.3	12.5	11.2	10.7	11.4	11.5	11.0	10.6
Croatia	14.1	12.9	11.6	13.4	15.7	16.2	16.6	19.6	19.3	18.1	16.9	15.4	13.6
Italy	16.8	16.1	16.6	17.5	19.0	19.6	20.9	22.1	22.0	21.3	19.8	20.0	19.2
Cyprus	10.7	9.0	9.7	9.9 b	11.7	14.6	16.0	18.7	17.0	15.3	16.0	16.1	13.2
Latvia	11.5	11.9	11.8	17.5	17.8	16.0	14.9	13.0	12.0	10.5	11.2	10.3	7.8
Lithuania	8.3	7.1	8.8	12.1	13.2	11.8	11.2	11.1	9.9	9.2	9.4	9.1	8.0
Luxembourg	6.7	5.7	6.2	5.8	5.1	4.7	5.9	5.0	6.3	6.2	5.4	5.9	5.3
Hungary	12.4	11.5	11.5	13.6	12.6	13.2	14.8	15.5	13.6	11.6	11.0	11.0	10.7
Malta	10.3	11.5	8.3	9.9	9.5	10.2	10.8	9.9	10.3	10.5	8.8	8.6	7.3
Netherlands	4.9	4.3	3.9	5.0	4.8	4.3	4.9	5.6	5.5	4.7	4.6	4.0	4.2
Austria	7.8	7.4 b	7.4	8.2	7.4	7.3	6.8	7.3	7.7	7.5	7.7	6.5	6.8
Poland	12.6	10.6	9.0	10.1	10.8 b	11.5	11.8	12.2	12.0	11.0	10.5	9.5	8.7
Portugal	10.6	11.2	10.2	11.2	11.4	12.6 b	13.9	14.1	12.3	11.3	10.6	9.3	8.4
Romania	14.8	13.3	11.6	13.9	16.6 b	17.5	16.8	17.0	17.0	18.1	17.4	15.2	14.5
Slovenia	8.5	6.7	6.5	7.5	7.1	7.1	9.3	9.2	9.4	9.5	8.0	6.5	6.6
Slovakia	14.4	12.5	11.1	12.5	14.1	13.8 b	13.8	13.7	12.8	13.7	12.3	12.1	10.2
Finland	7.9	7.1	7.9	9.8	9.0	8.4	8.6	9.3	10.2	10.6	9.9	9.4	8.5
Sweden	9.3	7.5	7.8	9.6	7.7	7.5	7.8	7.4	7.2	6.7	6.5	6.1	6.1
United Kingdom	8.6	11.9 b	12.1 b	13.2	13.6	14.2	13.9	13.2	11.9	11.1	10.9	10.3	10.4

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### 3. DATA SOURCES AND DEFINITIONS

Most of the data used in this report originates from Eurostat, the Statistical Office of the European Union. The main data sources used are:

- European Union Labour Force Survey (EU-LFS)
- ESA2010 National Accounts
- EU-Statistics on Income and Living Conditions (EU-SILC)
- European System of Social integrated protection Statistics (ESSPROS)

The European Union Labour Force Survey (EU-LFS) is the EU's harmonised household survey on labour market participation. While in the early years, it was carried out as an annual survey conducted in the spring quarter in many Member States it is now a continuous quarterly survey in all EU Member States. If not mentioned otherwise, the results based on the LFS for years before the introduction of the quarterly survey refer to the spring quarter of each year. LFS data covers the population living in private households only (collective households are excluded) and refers to the place of residence (household residence concept). They are broken down by various socio-demographic categories, in particular sex and age. The EU-LFS covers all EU Member States as well as Montenegro, North Macedonia, Serbia and Turkey plus Iceland, Norway and Switzerland.

A particular data collection connected to the EU-LFS is Eurostat's 'LFS main indicators' which present a selection of the main statistics on the labour market. They encompass annual and quarterly indicators of population, activity and inactivity; employment; unemployment; education and training. Those indicators are mainly but not only based on the results of the EU-LFS, in few cases integrated with data sources like national accounts employment or registered unemployment. National accounts employment data covers all people employed in resident producer units (domestic concept), including people living in collective households. In the main indicators, these national accounts figures are broken down by sex, working-time status (full-time/part-time) and contract status (permanent/temporary) using LFS distributions. Where available, all key employment indicators in this report are based on the 'LFS main indicators'.

For the unemployment-related indicators, Eurostat's series on unemployment comprises yearly averages, quarterly and monthly data. It is based on the (annual and quarterly) EU-LFS data and monthly data on unemployment, either from the national LFS or other national sources, mainly unemployment register data. For the compilation of monthly unemployment estimates, these monthly figures from national sources are benchmarked against the quarterly EU-LFS data, and they are used to produce provisional unemployment figures for recent months which are not yet covered by quarterly EU-LFS results. Monthly unemployment by educational attainment level or duration is not available from this data collection.

Most macro-economic indicators are based on Eurostat's collection of national accounts data according to the European System of National Accounts (ESA2010 National Accounts). Data is compiled by the Member States and collected by Eurostat. The collection comprises aggregates such as GDP, from which derived measures such as productivity and real unit labour costs are calculated. In addition, national accounts also cover population and employment data, the latter expressed in persons and in hours worked and also broken down by economic activity, but not by socio-demographic categories.

The main data source for the social indicators is the EU-SILC (EU-Statistics on Income and Living Conditions). The EU-SILC instrument is the EU reference source for comparative statistics on income distribution and social inclusion at the European level. It provides two types of annual data for 28 European Union countries, Iceland, Norway, Switzerland and Turkey: Cross-sectional data pertaining to a given time or a certain time period with variables on income, poverty, social exclusion and other living conditions, and Longitudinal data pertaining to individual-level changes over time, observed periodically over a four year period. EU-SILC does not rely on a common questionnaire or a survey but on the idea of a "framework". The latter defines the harmonised lists of target primary (annual) and secondary (every four years or less frequently) variables to be transmitted to Eurostat; common guidelines and procedures; common concepts (household and income) and classifications aimed at maximising comparability of the information produced.

Data regarding social protection expenditures are from the European System of integrated Social PROtection Statistics (ESSPROS). ESSPROS is an instrument of statistical observation which enables international comparison of the administrative national data on social protection in the EU Member States. The conventional definition used for the scope of social protection definition is the following:



"Social Protection encompasses all interventions from public or private bodies intended to relieve households and individuals of the burden of a defined set of risks or needs, provided that there is neither a simultaneous reciprocal nor an individual arrangement involved. The list of risks or needs that may give rise to social protection is, by convention, as follows: Sickness/Health care, Disability, Old age, Survivors, Family/children, Unemployment, Housing and Social exclusion not elsewhere classified".

Physically, data is generally obtained from Eurobase, Eurostat's online dissemination database and open to public access. Data shown here represents availability and revision status of mid-July 2015.

### 3.1 Definitions and data sources of macro-economic indicators

1. Real GDP: Gross Domestic Product (GDP), volume, annual change (Source: Eurostat, ESA2010 National Accounts [tec00115]).
2. Total employment: Employment, total economy, annual change (Source: Eurostat, ESA2010 National Accounts [nama\_10\_a10\_e]).
3. Labour productivity: GDP volume per person employed, annual change (Source: Eurostat, ESA2010 National Accounts [nama\_10\_lp\_ulc]).
4. Annual average hours worked per person employed, annual change (Source: Eurostat, ESA2010 National Accounts and DG EMPL calculations).
5. Productivity per hour worked: GDP volume per hour worked, annual change (Source: Eurostat, ESA2010 National Accounts [nama\_10\_lp\_ulc]).
6. Harmonised CPI: harmonised consumer price index, annual change (Source: Eurostat, HCIP [prc\_hicp\_aind]).
7. Price deflator GDP: Implicit price deflator of GDP, annual change (Source: Eurostat, ESA2010 National Accounts [nama\_10\_gdp]).
8. Nominal compensation per employee, total economy, annual change (Source: Eurostat, ESA2010 National Accounts and DG EMPL calculations).
9. Real compensation per employee (GDP deflator): nominal compensation deflated with the implicit deflator of GDP, per employee, annual change (Source: Eurostat, ESA2010 National Accounts and DG EMPL calculations).
10. Real compensation per employee (private consumption deflator): nominal compensation deflated with the implicit deflator of private consumption expenditure, per employee, annual change (Source: Eurostat, ESA2010 National Accounts and DG EMPL calculations).
11. Nominal unit labour costs: Nominal compensation per employee divided by labour productivity, annual change (Source: Eurostat, ESA2010 National Accounts [nama\_10\_lp\_ulc]).
12. Real unit labour costs: Real compensation per employee divided by labour productivity, annual change (Source: Eurostat, ESA2010 National Accounts and DG EMPL calculations).

### 3.2 Definitions and data sources of key employment indicators

1. Total population in 1000s, excluding population living in institutional households (Source: Eurostat, demographics [demo\_pjanbroad]).
2. Total population aged 15-64 (the 'working age population') in 1 000s (Source: Eurostat, Demographics [demo\_pjanbroad]).
3. Total employment in 000s (Source: Eurostat, LFS [lfsa\_egan]).
4. Population in employment aged 15-64 in 1 000s (Source: Eurostat, EU-LFS [lfsa\_egan]).
- 5-9. Employment rates: calculated by the number of employed divided by the population in the corresponding age bracket (Source: Eurostat, EU-LFS [lfsi\_emp\_a]).

10. Full-time equivalent employment rate: calculated by dividing the full-time equivalent employment by the total population in the 20-64 age group. Full-time equivalent employment is defined as total hours worked on both main and second job divided by the average annual number of hours worked in full-time jobs (Source: Eurostat, EU-LFS and DG EMPL calculations).

11. Self-employed in total employment: number of self-employed as a share of total employment (Source: Eurostat, EU-LFS and DG EMPL calculations).

12. Part-time employment in total employment: number of part-time employed as a share of total employment (Source: Eurostat, EU-LFS [lfsi\_pt\_a]).

13. Fixed-term contracts in total employees: number of employees with contracts of limited duration as a share of total employees (Source: Eurostat, EU-LFS [lfsi\_pt\_a]).

14. Employment in services: employed in services (NACE Rev. 2 sections G-U) as a share of total employment (Source: Eurostat, EU-LFS and DG EMPL calculations).

15. Employment in industry: employed in industry, including construction (NACE Rev. 2 sections B-F) as a share of total employment (Source: Eurostat, EU-LFS and DG EMPL calculations).

16. Employment in agriculture: employed in agriculture, forestry and fishing (NACE Rev. 2 section A) as a share of total employment (Source: Eurostat, EU-LFS and DG EMPL calculations).

17-20. Activity rates: labour force (employed and unemployed) as a share of total population in the corresponding age group (Source: Eurostat, EU-LFS [lfsi\_emp\_a]).

21. Total unemployment in 1 000s (Source: Eurostat, EU-LFS [une\_rt\_a]).

22-23. Unemployment rates: unemployed as a share of the labour force (employed and unemployed persons) in the corresponding age group (Source: Eurostat, EU-LFS [une\_rt\_a]).

24. Long-term unemployment rate: persons unemployed for duration of 12 months or more as a share of the labour force (Source: Eurostat, EU-LFS [une\_ltu\_a]).

25. Share of long-term unemployment: persons unemployed for duration of 12 months or more as a share of the total unemployed force (Source: Eurostat, EU-LFS [une\_ltu\_a]).

26. Youth unemployment ratio: young unemployed (aged 15-24) as a share of the total population in the same age group (Source: Eurostat, EU-LFS [yth\_empl\_140]).

27-35. Employment rates: calculated by the number of employed divided by the population in the corresponding age bracket, by education attainment (based in the ISCED classification), nationality and country of birth (Source: Eurostat, EU-LFS [lfsa\_ergaed]).

36. Underemployment, persons in part-time jobs that would like to work more hours (Source: Eurostat, EU-LFS [lfsi\_sup\_a]).

37. Seeking but not available, persons seeking a job but not available to work immediately (Source: Eurostat, EU-LFS [lfsi\_sup\_a]).

38. Discouraged, available but not seeking persons available to work but not seeking job at the moment (Source: Eurostat, EU-LFS [lfsi\_sup\_a]).

### 3.3 Definitions and data sources of key social indicators

- At-risk-of-poverty or social exclusion rate. Percentage of a population representing the sum of persons who are: at risk of poverty or severely materially deprived or living in households with very low work intensity (Eurostat, EU-SILC [ilc\_peps01])
- At-risk-of-poverty rate. Share of people with an equivalised disposable income (after social transfer) below the at-risk-of-poverty threshold, which is set at 60 % of the national median equivalised disposable income after social transfers (Eurostat, EU-SILC [ilc\_li02])

- At-risk-of-poverty threshold. 60 % of the national median equivalised disposable income after social transfers (Eurostat, EU-SILC [ilc\_li01])
- Poverty gap. Difference between the median equivalised disposable income of people below the at-risk-of-poverty threshold and the at-risk-of-poverty threshold, expressed as a percentage of the at-risk-of-poverty threshold (cut-off point: 60 % of national median equivalised disposable income) (Eurostat, EU-SILC [ilc\_li11])
- Persistent at-risk-of-poverty rate. Percentage of the population living in households where the equivalised disposable income was below the at-risk-of-poverty threshold for the current year and at least two out of the preceding three years (Eurostat, EU-SILC [ilc\_li21])
- At-risk-of-poverty rate before social transfers excl. pensions. Share of people having a median equivalised disposable income before social transfers that is below the at-risk-of-poverty threshold (60% of median equivalised income after social transfers) (Eurostat, EU-SILC [ilc\_li10])
- Impact of social transfers. Computed indicator (Eurostat, EU-SILC), formula:  $100 \cdot (B-A)/B$ , where:
  - B: At-risk-of-poverty rate before social transfers excl. pensions
  - A: At-risk-of-poverty rate
- Severe Material Deprivation rate. Inability to afford some items (at least 4 on a list of 9) considered by most people to be desirable or even necessary to lead an adequate life (Eurostat, EU-SILC [ilc\_mddd11])
- Share of people living in low work intensity households. Share of persons living in a household having a work intensity below a threshold set at 0.20. The work intensity of a household is the ratio of the total number of months that all working-age household members have worked during the income reference year and the total number of months the same household members theoretically could have worked in the same period (Eurostat, EU-SILC [ilc\_lvhl11])
- Real Gross Household Disposable Income growth. The amount of money available for spending or saving. This is money left after expenditure associated with income, e.g. taxes and social contributions, property ownership and provision for future pension income (Eurostat, National Accounts and DG EMPL calculations)
- Income quintile share ratio S80/S20. Ratio of total income received by the 20 % of the population with the highest income (the top quintile) to that received by the 20 % of the population with the lowest income (the bottom quintile) (Eurostat, EU-SILC [ilc\_di11])
- GINI coefficient. The relationship of cumulative shares of the population arranged according to the level of equivalised disposable income, to the cumulative share of the equivalised total disposable income received by them (Eurostat, EU-SILC [ilc\_di12])
- Life expectancy at birth. The mean number of years a newborn child can expect to live if subjected throughout his or her life to the current mortality conditions, the probabilities of dying at each age (Eurostat [hlth\_hlye])
- Healthy life years at birth. Number of years that a person is expected to continue to live in a healthy condition (Eurostat [hlth\_hlye])
- Early leavers from education and training. Early leaver from education and training generally refers to a person aged 18 to 24 who has finished no more than a lower secondary education and is not involved in further (formal or non-formal) education or training; their number is expressed as a percentage of the total population aged 18 to 24 (Eurostat, EU-LFS [edat\_lfse\_14])
- NEET: Young people not in employment, education or training. Share of people aged 15 to 24 who have left formal education with at most lower secondary education and who are not employed (i.e. either unemployed or economically inactive) nor engaged in any kind of further (formal or non-formal) education or training (Eurostat, EU-LFS [lfsi\_neet\_a])
- Risk of poverty of children in households at work (Working Intensity > 0.2). Share of children at-risk-of-poverty living in households with work intensity bigger than very low (Eurostat, EU-SILC [ilc\_li06])
- In-work at-risk-of-poverty rate. The share of persons who are at work and have an equivalised disposable income below the risk-of-poverty threshold, which is set at 60 % of the national median equivalised disposable income (after social transfers) (Eurostat, EU-SILC [ilc\_iw01])

- Relative median income of elderly. Ratio of the median equivalised disposable income of people aged above 65 to the median equivalised disposable income of those aged below 65 (Eurostat, EU-SILC [ilc\_pnp2])
- Aggregate replacement ratio. Ratio of the median individual gross pensions of 65-74 age category relative to median individual gross earnings of 50-59 age category, excluding other social benefits (Eurostat, EU-SILC [ilc\_pnp3])
- Social indicators expenditure. Percentage of expenditure in different social protection areas in relation with the GDP (Eurostat, ESSPROS [spr\_exp\_sum, spr\_exp\_gdp])

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