



# Employment and Social Developments in Europe

*Annual Review 2016*



# Employment and Social Development in Europe 2016

**European Commission**

Directorate-General for Employment, Social Affairs and Inclusion

Directorate A

Manuscript completed in December 2016

This publication was prepared in the Directorate-General of Employment, Social Affairs and Inclusion under the supervision of Michel Servoz (Director-General), Barbara Kauffmann (Director, Employment and Social Governance) Ralf Jacob and Ana Xavier (Head and Deputy Head of Unit, Thematic Analysis) with guidance on specific chapters from Ann Branch, David-Pascal Dion, Manuela Geleng and Robert Strauss.

The main contributors were Fabienne Abadie (JRC), Federico Biagi (JRC), Olivier Bontout, Sigfried Caspar, Alessia Fulvimari, Magdalena Grzegorzewska, Katarina Jaksic, Sonia Jemmotte, Bettina Kromen, Raymond Maes, Simone Marino, Eric Meyermans, Balázs Pálvölgyi, Jörg Peschner, Giuseppe Piroli, Filip Tanay, Melissa Thomas, Maria Vaalavuo, Tim Van Rie and Ana Xavier.

David Arranz and Petrica Badea provided statistical assistance. The production of the publication was coordinated by Adrienn Csányi.

The report has benefited from comments and suggestions received from many colleagues in various Directorate-Generals of the European Commission. Our special appreciation goes out to EUROSTAT for their cooperation.

Comments on the publication are welcome and should be sent to the following email address: EMPL-A4-UNIT@ec.europa.eu.

For any use or reproduction of photos which are not under European Union copyright, permission must be sought directly from the copyright holder(s).

***Europe Direct is a service to help you find answers  
to your questions about the European Union.***

**Freephone number (\*):**

**00 800 6 7 8 9 10 11**

(\* The information given is free, as are most calls (though some operators, phone boxes or hotels may charge you).

More information on the European Union is available on the Internet (<http://europa.eu>).  
Luxembourg: Publications Office of the European Union, 2016

ISBN 978-92-79-63545-8 (print)

ISBN 978-92-79-63546-5 (web)

ISSN 1977-270X (print)

ISSN 2315-2540 (web)

doi: 10.2767/951511 (print)

doi: 10.2767/062945 (web)

© European Union, 2016

Reproduction is authorised provided the source is acknowledged.

Printed on elemental chlorine-free bleached paper (ECF)

# Foreword



Policy initiatives only make sense if they are built upon thorough analysis and supported by reliable data. This is the vocation of the Employment and Social Developments (ESDE) Review.

This year's results are encouraging and show that we are firmly on the path of recovery from the crisis. With 232 million Europeans now in work – the highest number ever measured – the EU employment rate stands at 71%, above its 2008 value. Since the second quarter of 2013, almost eight million – mostly permanent – jobs have been created, three million in the last year alone.

There are now five million fewer Europeans at risk of poverty or social exclusion than at the post-crisis peak in 2012. But this leaves still 119 million Europeans, almost a quarter of the population, suffering from low incomes, not being able to afford essential goods and services or having no access to employment.

The Review also highlights significant gaps between Member States. The employment rate varies from 81% in Sweden to 56% in Greece, and there are also wide gaps in poverty rates across Member States. Political action is needed to tackle these disparities, which threatens economic growth and social fairness, as well as the good functioning of the Economic and Monetary Union.

The importance of investment in human capital is also in the spotlight. If we succeed in integrating refugees in our labour market and societies, their talent can make a great contribution in the context of an ageing population. Whether all Europeans can enjoy better living conditions also depends on how we respond to the changing world of work, and challenges related to globalisation and digitalisation. Investment in upskilling and reskilling is therefore crucial. Also the social partners are needed to join our efforts in finding the right balance between competitiveness and fairness while dealing with new forms of employment.

The ESDE Review sheds light on the impact of previous social and employment policies, but also sets markers for future actions. Our flagship initiatives in the 2017 Commission Work Programme – on youth, on skills and the European Pillar of Social Rights – are focussed on investment in human capital and on the creation of upward social convergence. I am confident that these initiatives are a smart investment in making our labour markets and societies dynamic, fairer and more resilient.

A handwritten signature in blue ink, appearing to read 'M. Thyssen'.

**Marianne Thyssen**

Commissioner for Employment,  
Social Affairs, Skills and Labour Mobility



# Contents

Foreword.....	3
Executive Summary.....	9
Main Employment and Social Developments.....	19
<b>Introduction .....</b>	<b>19</b>
<b>1. The improving macro-economic environment.....</b>	<b>19</b>
1.1. GDP, employment and hours worked continue to recover gradually in the EU .....	19
1.2. Labour productivity growth remains subdued.....	20
1.3. Investment remains weak.....	21
1.4. Nominal unit labour costs in the euro area in recent years.....	22
<b>2. Labour market Dynamics: Structural barriers persist.....</b>	<b>23</b>
2.1. Total employment recovering but substantial differences across MS remain.....	23
2.2. Self-employment fails to keep up with the overall improvement in labour market developments of recent years.....	27
2.3. Persistently high unemployment with substantial differences across Member States.....	29
2.4. Education and skill formation: some encouraging developments.....	34
<b>3. Social cohesion remains a challenge .....</b>	<b>35</b>
3.1. Sources of household income.....	35
3.2. Disposable household income .....	37
3.3. Risk of poverty and social exclusion .....	38
3.4. Inequality .....	42

<b>4. Conclusion.....</b>	<b>44</b>
Chapter 1 Convergence and divergence in the E(M)U and the role of employment and social policies.....	45
<b>Introduction .....</b>	<b>45</b>
<b>1. convergence and divergence of socio economic outcomes in Europe.....</b>	<b>45</b>
1.1. Convergence and divergence in GDP .....	45
1.2. Convergence and divergence in employment and unemployment.....	46
1.3. Convergence and divergence in household incomes .....	47
1.4. Convergence and divergence in wages and competitiveness.....	50
1.5. Divergence is a specific challenge within the Euro area .....	51
<b>2. Convergence and divergence of policies and expected impact on socio-economic outcomes.....</b>	<b>53</b>
2.1. The impact of social protection expenditure and automatic stabilisers.....	53
2.2. Investment in human capital, access to employment and support to the jobless.....	56
2.3. Tax-benefit systems and their impact on household incomes .....	68
<b>3. Conclusion.....</b>	<b>74</b>
<b>Annex: Country groupings used.....</b>	<b>76</b>
<b>References .....</b>	<b>77</b>
Chapter 2 Employment dynamics and social implications.....	81
<b>Introduction .....</b>	<b>81</b>
<b>1. Wages and work intensity since the onset of the crisis.....</b>	<b>81</b>
1.1. How wages affect incomes and outcomes .....	81
1.2. Increasing numbers of people are living in jobless households.....	83
1.3. Part-time employment has risen – notably involuntary part-time work.....	83
<b>2. In-work poverty: interactions between wages, work and poverty.....</b>	<b>84</b>
2.1. Work protects against poverty but in-work poverty has increased.....	84
2.2. The rise in non-standard employment and links to low wages .....	85
2.3. The multiple causes of in-work poverty.....	86
2.4. Low-wage earners in the EU .....	86
2.5. Low work intensity is a cause of in-work poverty .....	87
2.6. Factors connected to being working poor .....	89
2.7. Escaping poverty through work.....	90
2.8. Factors that help unemployed people to find a job.....	93
<b>3. Hourly wages at the bottom of the wage distribution .....</b>	<b>95</b>
<b>4. The Chances of upward mobility .....</b>	<b>98</b>
4.1. Transitions between labour market statuses.....	98
4.2. Transitions to higher wages.....	100

<b>5. Conclusion.....</b>	<b>104</b>
<b>Annex: Further descriptive evidence .....</b>	<b>106</b>
<b>References .....</b>	<b>107</b>
 Chapter 3 Labour market integration of Refugees .....	 109
<b>Introduction .....</b>	<b>109</b>
<b>1. Current Refugee Flows: What We Know Thus Far .....</b>	<b>110</b>
1.1. A big recent increase in the number of asylum seekers.....	110
1.2. Germany and Sweden are the main destination countries .....	111
1.3. Education and qualification levels of recent asylum seekers/refugees.....	112
<b>2. Previous inflows of Refugees and their Labour Market integration .....</b>	<b>113</b>
2.1. Patterns of refugee inflows up to 2014.....	113
2.2. Social characteristics and outcomes of refugees.....	114
2.3. Labour Market Outcomes of Refugees.....	119
2.4. Refugee women.....	124
2.5. Family migrants joining their refugee family member(s).....	125
2.6. Regression analysis: determinants of labour market integration.....	126
<b>3. Policies to help refugees integrate .....</b>	<b>126</b>
3.1. Early labour market access helps.....	127
3.2. The role of networks and Public Employment Services (PES) in finding a job.....	129
3.3. Substantial registration with the PES and good unemployment benefit coverage.....	129
3.4. Case-study: lifelong learning for refugees in Germany .....	130
3.5. Language courses widely available but not always systematically or to a sufficient level.....	132
3.6. Main obstacles to obtaining a job suited to their qualifications .....	134
3.7. Social integration support.....	134
3.8. Awareness-raising as a key part of integration strategies .....	136
<b>4. Looking beyond our borders: The Syrian Refugee Crisis and the Labour Market Implications in Jordan and Lebanon.....</b>	<b>138</b>
<b>5. Conclusions.....</b>	<b>139</b>
<b>Annex 1: Additional labour market outcomes .....</b>	<b>141</b>
<b>Annex 2: Ordinal logistic regression .....</b>	<b>142</b>
<b>References .....</b>	<b>144</b>
 Chapter 4 The labour market implications of ICT development and digitalisation.....	 148
<b>Introduction .....</b>	<b>148</b>
<b>1. The impact of ICT development and digitalisation on employment.....</b>	<b>149</b>
1.1. The scope of the economic transformation due to ICT development and digitalisation.....	149
1.2. The substitution and compensation effect of technological progress and digitalisation .....	151
1.3. Skill-Biased Technological Change vs. Routine-Biased Technical Change: implications for wage and job polarisation.....	153
<b>2. The rise of online platforms and the collaborative economy: new opportunities and challenges.....</b>	<b>158</b>
2.1. Platforms typology and relevance .....	158

2.2. The collaborative economy, employment in the informal economy and labour law challenges....	163
<b>3. Is the EU ready to benefit from the 4th industrial revolution? .....</b>	<b>166</b>
3.1. Framework conditions for the 4th industrial revolution: ICT infrastructure and digital environment.....	166
3.2. Skills: are Europeans ready for the new opportunities? .....	168
<b>4. Conclusions.....</b>	<b>172</b>
<b>Annex: ICT as a key driver.....</b>	<b>174</b>
<b>A.1. Are ICTs triggering a fourth industrial revolution? .....</b>	<b>174</b>
<b>A.2. Is ICT accelerating the rate of change? The importance of ICT in the EU economy.....</b>	<b>175</b>
<b>A.3. Micro review of the impact of ICT on productivity .....</b>	<b>180</b>
<b>References .....</b>	<b>182</b>
Chapter 5 Capacity building for social dialogue.....	187
<b>Introduction .....</b>	<b>187</b>
<b>1. Membership and Structure of social partners' organisations .....</b>	<b>188</b>
1.1. Number of social partners' organisations.....	188
1.2. Mergers and demergers.....	189
1.3. Membership of trade unions and employers' organisations .....	189
1.4. Specific groups of workers .....	192
1.5. Observations.....	195
<b>2. Involvement of social partners in the design and implementation of policies and reforms.....</b>	<b>195</b>
2.1. Social Dialogue Institutions.....	196
2.2. Social partners' roles.....	198
2.3. Observations.....	206
<b>3. CONCLUSIONS.....</b>	<b>208</b>
<b>Annex: Additional information on aspects of social dialogue.....</b>	<b>210</b>
<b>References .....</b>	<b>213</b>
Statistical Annex.....	215
<b>1. Country profiles.....</b>	<b>215</b>
<b>2. Selected indicators .....</b>	<b>261</b>
<b>3. Data sources and definitions .....</b>	<b>267</b>
1.1. Definitions and data sources of macro-economic indicators .....	268
1.2. Definitions and data sources of key employment indicators.....	268
1.3. Definitions and data sources of key social indicators.....	269

# Executive Summary

The annual review of Employment and Social Developments in Europe (ESDE) provides analytical support for EU and national policy actions in pursuit of the Europe 2020 employment and social objectives. It considers the latest available data and provides analysis of key employment and social developments and challenges in the EU and its Member States.

It aims to contribute to the European Semester and new policy initiatives such as the New Skills Agenda, the European Agenda for the Collaborative Economy, the New Start for Social Dialogue, the Action Plan on the Integration of Third-Country Nationals and the development of a European Pillar of Social Rights. This year's edition contains in-depth analysis of:

1. Convergence and divergence in the E(M)U and the role of employment and social policies;
2. Employment dynamics and their social implications, and notably how jobs and wages can tackle poverty and inequality;
3. The labour market integration of refugees;
4. The labour market implications of ICT development and digitalisation;
5. Capacity building for social dialogue.

## MAIN EMPLOYMENT AND SOCIAL DEVELOPMENTS

The EU economy is now in its fourth year of ongoing recovery since the recent double dip recession (2009 and 2012). EU GDP has regained and surpassed its pre-crisis peak and continues to grow, albeit at a modest pace. Investment in the EU has continued to increase but remains weak and far below the 2008 levels in most Member States. Access to finance remains a major concern for businesses, especially small businesses.

## 7.9

million jobs  
created since 2013

The economic growth observed since 2013 has been accompanied by gradual improvements in labour markets and in the social situation in the EU. Employment has continued to increase and reached 232.1 million men and women in the second

*Sluggish growth and investment, but encouraging employment trends*

quarter of 2016, the highest level ever recorded. The EU employment rate (for people aged 20 to 64 years) reached 71.1% in the second quarter of 2016, which is above its 2008 value. If this trend continues, the EU could still reach its employment rate target of 75% in 2020. However, the employment rate varies significantly across Member States from 81.5% in Sweden to 56.6% in Greece. Also, the Euro area employment rate is still below the 2008 levels.

Table 1: Main Employment and Social Developments: EU28

	2007	2009	2011	2013	2015	2016Q2
<b>Real GDP growth</b>	3.0	-4.4	1.7	0.2	2.2	1.8
<b>Employment</b>						
- growth	1.9	-1.7	0.1	-0.3	1.1	1.4
- number of employed (1000)	228 831	227 202	225 969	224 533	229 277	232 046
<b>Employment rate (20-64)</b>	69.8	69.0	68.6	68.4	70.0	71.1
- men	77.6	75.7	75.0	74.3	75.8	76.9
- women	62.1	62.3	62.2	62.6	64.2	65.3
<b>Compensation per employee (annual growth)</b>	3.3	-1.0	1.9	0.8	3.0	-0.2
<b>Labour productivity (annual growth)</b>						
- per person employed	1.1	-2.7	1.5	0.5	1.1	0.6
- per hour worked	1.0	-1.4	1.4	0.9	1.2	-0.8
<b>Nominal unit labour cost (annual growth)</b>						
- per person employed	2.2	1.7	0.4	0.3	1.9	-0.8
- per hour worked	2.1	1.9	0.3	0.2	1.9	-0.8
<b>Unemployment</b>						
- rate total	7.2	9.0	9.7	10.9	9.4	8.6
- rate men	6.6	9.0	9.6	10.8	9.3	8.4
- rate women	7.9	8.9	9.8	10.9	9.5	8.9
- rate youth (aged 15-24)	15.9	20.3	21.7	23.7	20.3	18.8
- long-term unemployment rate	3.0	3.0	4.1	5.1	4.5	4.0
- very long term unemployment rate	1.8	1.5	2.2	2.9	2.8	2.6
- number of unemployed (1000)	16 988	21 358	23 126	26 299	22 887	21 120
<b>Real gross disposable household income per capita</b>	1.6	0.7	-0.7	-0.3	2.0	2.7
<b>At risk of poverty or social exclusion rate</b>	25,4*	23,3*	24.3	24.6	23.7	:
<b>Inequality (Gini coefficient of disposable income)</b>	30,6*	30,5*	30.8	30.5	31.0	:

Source: Eurostat

[Click here to download table.](#)

The steady but slow reduction in unemployment that started in 2013 continued in 2015 and in the first half of 2016. Nevertheless, about 20.1 million people in the EU in the third

## 20.1

million unemployed, half of  
them for over one year

quarter of 2016 were still without work, including almost 4.2 million young people. Nearly half of all unemployed people have been out of work for more than a year. Unemployment remains higher than in 2008 for many Member States and for the EU (8.6%) and Euro area (10.0%) as a whole. Unemployment rates vary significantly across the EU, from 4.0 % in the Czech Republic, 4.1% in Germany and 4.8% in Malta and the UK, to a high of 23.4 % in Greece. While important reductions have been observed in countries with high unemployment rates, huge differences in long-term unemployment persist: from less than 2% of the active population in Sweden to 18% in Greece.

The employment rate of women in the EU in 2015 is still significantly below that of men, but the gap had been closing since 2008. Young people are also at a disadvantage in the labour market, with an unemployment rate above 20% in the EU, but the youth unemployment

rate has continued to decline, accompanied by an increase in their employment rate and in the proportion of young people in education. Another group that is not doing well on the labour market is the low-skilled, who have an unemployment rate of more than 15%.

The number of both permanent and temporary jobs in the EU has continued to increase. Temporary employment in the EU is about 14% of total employment but varies significantly across the EU, exceeding 20% in Poland and Spain, for example.

Labour productivity in the EU continued its slow increase in 2015, maintaining the trend seen since 2013. Compensation per employee rose slightly for the EU as a whole, but there are wide differences across Member States and some have seen a reduction during the period 2013-2015. Nominal unit labour costs in the EU continued to increase slowly, but some Member States boosted their competitiveness thanks to notable reductions in the years 2013-2015.

*Weak labour productivity growth, despite better education outcomes*

Progress can be observed in the education area. In 2015, the proportion of early leavers from education and training declined further to 11%, maintaining the trend observed in previous years: it was nearly three percentage points higher in 2013. The proportion of the adult population with upper secondary or tertiary education also continued to increase in 2015, even if at a slower pace than in previous years. In 2015, 38.7% of the population aged 30-34 had fully completed tertiary studies compared with 23.6% in 2002. The situation remains uneven across Member States, though, and there is a lot of potential for catching up.

**119**

million people at risk of poverty or social exclusion

The proportion of the EU population at risk of poverty or social exclusion is estimated at 23.7% in 2015, the lowest level since 2010 (23.0% in the Euro area). This corresponds to more than 119 million people in 2015. In

*Rising household incomes overall, but little progress in reducing poverty and inequality*

some countries, poverty is still increasing, though some have also seen important declines. The proportion of people suffering from severe material deprivation in the EU decreased further in 2014, but some countries saw an increase in 2014. Estimates for 2015 suggest a stabilisation of this indicator.

In the EU, disposable household income, which measures market income adjusted for taxes and social transfers, increased again in 2015 as in 2014, benefitting from increased economic activity and improved labour market conditions. Income inequality before transfers continued to grow in the period 2013-2014, but stabilised in 2015.

The improvements in the economic and employment situation resulted in a stable or even declining proportion of GDP expenditure on social protection, although in real terms and absolute amounts this expenditure continued to increase in 2015, as it did in 2014 and 2013.

Economic growth and labour market improvements are expected to continue in most Member States in the coming years, according to the Commission Autumn Forecast, though at a modest rate overall. Despite this welcome progress and some recent convergence in the labour market and social situation within the EU, large social and employment disparities remain across Member States, and economic growth is expected to remain uneven across the EU. In spite of recent progress, a lot remains to be done to tackle the negative impact of the crisis on employment, on poverty and income inequality and on cohesion among Member States.

*Uncertain economic outlook hampers further progress in tackling Europe's employment and social challenges and fostering more cohesion*

# 1. CONVERGENCE AND DIVERGENCE IN THE E(M)U AND THE ROLE OF EMPLOYMENT AND SOCIAL POLICIES

The labour markets of Member States were not all hit to the same extent by the economic crisis which began in 2008. As a result, the convergence of economic and social performance that had been under way across the EU over the previous two decades came to a halt and in some cases was reversed. In particular, employment and unemployment rates diverged strongly from 2009 until 2013, with unemployment rates increasing sharply in Southern and Eastern Euro area Member States. The divergence began to stabilise and even reverse after 2013 with the gradual economic recovery, notably in the countries hardest hit by the crisis, many of which experienced a significant reduction in unemployment rates and an increase in employment rates.

**- 1.9**  
percentage point decline of poverty rate for the older people and +0.8 for the total population. Are we failing those in working age ?

From 2009, both poverty and income inequality increased across the EU. The proportion of people with incomes below 60% of the national median income grew in the EU as a whole from 16.5% in 2009 to 17.3% in 2014, and the

*The legacy of the crisis: a worsening situation of the working age population and increasing inequalities*

dispersion of poverty rates across Member States and population groups also increased. The incomes of working-age people have suffered more than those of people over the age of 65. Older people have seen their incomes better protected during the economic crisis: their relative income has generally improved (reaching levels close to 100% of that of the total population, compared with less than 90% in the mid-2000s) and their poverty rates fell from 16.0% in 2009 to 14.1% in 2014. By contrast, working-age adults, particularly young adults, have experienced increases in poverty and a slight decline in their relative income (from 105% to 103%). Income inequality also increased in most EU Member States. On average, the disposable income of the richest fifth of the population was 5.2 times higher in 2014 than that of the poorest fifth, up from 4.9 in 2009.

The crisis showed that lack of convergence, notably in economic outcomes, can pose a serious threat to the EMU. The post-2008 divergence reflected the exceptional size of the crisis, but also issues arising from countries' policy choices and the underlying architecture of the EMU which led to a build-up of imbalances. Some Member States had seen low productivity growth and divergent trends in nominal unit labour costs before the crisis, resulting in growing competitiveness gaps and macroeconomic imbalances. The design of tax and benefit systems in some Member States also had important weaknesses, in terms of generating revenues, fighting tax evasion or supporting those most in need, thereby failing to reduce poverty and inequality. This may also have adverse impacts on economic outcomes as more people are left behind and cannot develop their full potential.

*Restoring economic and social convergence is particularly important for the EMU*

The capacity of labour market and social protection policies and institutions to cope with shocks also differed greatly across countries. Member States with well-functioning social institutions, and those which had enacted far-reaching reforms prior to the crisis, were much less affected and absorbed shocks better. Greater resilience also supports longer-term convergence: it reduces the persistence of unemployment and prevents a temporary economic slowdown having a permanent negative impact on growth and jobs. Social investment, particularly in education and skills (but also, for instance, in childcare), is of key importance for sustainable growth.

The crisis revealed clear weaknesses in the functioning of the EMU. The lack of a Banking Union was felt very starkly and has now been remedied with mechanisms for better supervision and crisis prevention. The Euro area also lacked an appropriate degree of cross-border risk sharing (the capacity to smooth national shocks through assistance from less badly hit countries), with levels of risk sharing less than half of those in Canada or the US where capital markets are more integrated (private risk sharing) and fiscal transfers much more important (public risk sharing).

The policy response of Member States to the labour market consequences of the crisis varied significantly and produced mixed results. The increase in overall social expenditure at the outset of the crisis was the main factor in stabilising household incomes but this expenditure had declined in 2012 when EU economic performance was still weak. By contrast, other types of expenditure were maintained during the crisis, notably pension expenditure per recipient.

*Mixed evidence on convergence in policy developments over the last decade*

**5 to 10 %**  
annual reduction in spending per unemployed in the years from 2010 to 2013

Average annual unemployment expenditure for each unemployed person declined by between 5% and 10% in the years between 2010 and 2013, in part as a result of a loss or reduction in entitlement after a prolonged

period of unemployment. There were significant cross-country differences in terms of the support per unemployed person, ranging from around 5% of GDP per head to 40% or more.

Active Labour Market policies (ALMPs) have a positive effect not only in helping people to move from unemployment to employment but also in helping them to find better quality jobs and improve their skills. However, their coverage varies widely between Member States ranging from around 5% to 50% or more, and overall EU coverage has declined since 2009.

*Scope for increased investment in active labour market policy measures*

The proportion of adults engaged in lifelong learning has remained constant, although participation rates vary significantly between Member States. The proportion of the jobless poor who are not covered by any benefit did not diverge across countries, but the coverage of unemployed people by unemployment benefits did. Unemployment benefit replacement rates and minimum income benefits have declined slightly. Minimum benefit levels have converged slightly since the crisis, albeit mostly due to declines in countries with initially higher levels, with levels ranging from 25% to 125% of the poverty threshold.

While tax benefits systems significantly mitigated the increase in income inequality in the crisis, the decline in the relative incomes of the working-age population is partly associated with a weakened capacity of tax and benefit systems to prevent poverty and reduce income inequality. In some countries, policy reforms of tax-benefit systems have tended to raise poverty rates. However, even in the absence of such reforms, longer unemployment spells typically result in people losing their entitlement to unemployment benefits. Moreover, the declining work intensity of households, including involuntary part-time work, have pushed them further below the poverty threshold.

*Tax and benefit systems have tended to become less redistributive*

Policy action can reverse the trend towards increased divergence in socio-economic outcomes witnessed since the crisis and this divergence may be addressed at the national level in line with the priorities identified in the European Semester at European level. At the national level, reforms can make labour markets and social protection systems more responsive to the economic cycle. There is also room to boost longer-term employment and productivity growth by supporting human capital development and providing the right incentives for employment growth.

*Better employment and social policies for more convergent outcomes*

At the European level, upward convergence of employment and social policies is a key objective of the European pillar of social rights, which covers major policy areas where further convergence would bolster the adjustment capacity of national economies. In a long-term perspective, a well-designed fiscal capacity at the level of the EMU could also support upward convergence, especially when combined with other wide-ranging structural reforms.

## 2. EMPLOYMENT DYNAMICS AND SOCIAL IMPLICATIONS

The EU has set itself targets to increase the employment rate of people aged 20-64 years to 75% and reduce the number of people at risk of poverty or social exclusion by 20 million between 2010 and 2020. These goals are interconnected. Low employment rates are a key factor in rising inequality and poverty, but being in work is not always enough to keep people out of poverty. Indeed, in-work poverty has increased in all but five countries, pointing to problems with the quality of employment.

Overall in the EU, one in ten workers are at risk of poverty. For those on low hourly rates of pay (less than two thirds of median hourly pay), this ratio rises to one in six. The level of pay below which, according to this definition, someone is considered to be a low-wage worker ranges from around €1 per hour in Romania and Bulgaria to nearly €15 in the Netherlands and even more in Luxembourg (nearly €16) and Denmark (nearly €18).

*Low wages, inadequate work intensity and household situations explain individual risk of in-work poverty*

Poverty generally arises only when low hourly rates of pay are accompanied by low work intensity in the form of part-time or intermittent employment. Whether people in employment are at risk of poverty also depends on the employment status of other household members and on the number of dependents in the household. The strong link between in-work poverty and the size of the household underlines the need to support families with children through family benefits and facilitating the labour participation of both parents.

Women, the young and the low-skilled are most likely to be found in the bottom decile of the hourly wage distribution, while men and the highly-skilled are most likely to be found in the higher deciles. In spite of rising unemployment, which has hit the young and the low-skilled particularly hard, hourly wages earned by employees in the bottom decile actually rose between 2006 and 2013 in most Member States relative to the average hourly wage. However, this may reflect higher levels of unemployment among those with the lowest earning capacity.

The hourly low-wage threshold varies considerably across Member States and so does the prevalence of low wages. In the Nordic countries, the Netherlands, Belgium and France the proportion of workers falling into the low-wage category is below 10%, while in Lithuania and Ireland it exceeds one quarter.

*Almost half of low-wage employees improve their wage position from one year to another*

The chances of upward mobility from low wages also varied across countries and population groups. In 2013, 15.2% of employees were low-wage earners in the EU. Of those, 55.5% were still low-wage earners the following year, while 44.5 % had moved up from low-waged status. This upward mobility was frequently the result of a change of job or of achieving higher education levels, underlining the importance of investing in skills.

While many Europeans fell into poverty following the crisis, there has also been a lot of movement out of it. More than one third of the working-age poor in the EU escaped poverty each year between 2010 and 2013. More than half of the unemployed or inactive working-age poor who moved into employment also managed to escape poverty.

*One third of the working-age poor escaped poverty each year*

**1 in 8****unemployed workers found permanent full-time employment within three years**

The quality of the job in terms of work intensity (i.e. whether it is part-time or intermittent rather than full-time and permanent) and the wage level determine whether people escape poverty when they find a job. Unfortunately, during the post-

crisis years (2008-2013) only about one in eight unemployed people managed to find permanent full-time employment within three years.

### 3. LABOUR MARKET INTEGRATION OF REFUGEES

In the last few years, the EU has experienced an unprecedented inflow of asylum seekers and other migrants from outside Europe, with around 2.2 million asylum applications submitted in 2015 and the first nine months of 2016. This creates an important integration challenge.

Refugees face an array of serious obstacles to their integration. On average, refugees who had arrived prior to the most recent inflow were less well educated (16pp higher proportion with only low level of education), less economically active (-3pp), less often employed (-9pp), especially when they are women (-15pp), and they are more often exposed to poverty than their native-born peers. Naturalisation increases their chances of finding employment (12pp higher employment rate) but it does not automatically result in full integration, and challenges often persist for the children of immigrants.

*Refugees catch up over time and are on par with the native-born after 15-20 years*

However, the labour market integration of refugees improves significantly over time, even if it takes 15-20 years for them to achieve parity with the native-born. Refugees have skills that their host countries can build on, with at least one in five refugees having benefited from tertiary education.

**70 – 59 – 27****employment rates of highly educated refugees, of refugees with intermediate language skills, of refugees with low language skills**

Highly-educated refugees aged 25-64 achieve a much higher employment rate than less well-educated refugees (70% vs. 45%). Knowledge of the host-country language is a very strong determinant of

*Knowledge of the host country language and education improve employment outcomes a lot*

labour market outcomes. Refugees with an intermediate language level have an employment rate of 59%, more than twice that of those with a lower level (27%).

Education helps to improve both the labour market prospects of refugees and the contribution they can make to the economic growth of the receiving country. However, the impact of refugees' existing and newly acquired formal education remains limited unless it is combined with more comprehensive support and the removal of obstacles to their integration. Measures to facilitate their early access to the labour market and to combat discrimination, integration programmes and access to enabling services, such as high quality language training and education, recognition of qualifications, health, housing, social services and childcare, are key factors in unlocking the potential of refugees. They shorten the time it takes refugees to catch up and enable them to capitalise fully on their formal qualifications. Family members of refugees often face similar integration challenges (-12pp lower employment rate than the native-born), but usually do not benefit from the same integration programmes.

*Education needs to be combined with comprehensive support and removal of obstacles to integration*

While receiving refugees is often considered temporary, many, particularly those from dangerously unstable countries, have ended up staying. In

*Family members of refugees also need support*

particular, among the refugees who had arrived prior to 2015, 61% of those remaining in the EU have received citizenship of their host country.

If the reception of refugees and their family members is combined with effective measures to ensure their integration, the EU can capitalise on the human potential of refugees and on their strong motivation to become active members of European society.

## 4. THE LABOUR MARKET IMPLICATIONS OF ICT DEVELOPMENT AND DIGITALISATION

Previous industrial revolutions have created profound structural changes in the organisation of our societies. In the same way, the speed, scale, scope, and impact of the technological innovations associated with Information and Communication Technology (ICT) have the potential to cause a major transformation of the current social and economic systems. The transformative power of artificial intelligence, robotics, cloud computing, 3D printing, digital platforms and blockchain technologies have led some to speak of a fourth industrial revolution.

*ICT development and digitalisation will fundamentally change the world of work*

**One third**  
of GDP growth in 2005-2010 was related to ICT investment

There has been a steady increase in gross investment in ICT since 2000 in the vast majority of EU Member States. ICT investment has also increased as a proportion of total investment.

*ICT as a key driver of employment, productivity and growth in the EU*

For the 2005-2010 period, one third of all EU economic growth was related to ICT investment. Macro and micro analysis suggest that higher ICT investment and related robotisation have not led to technology replacing labour. On the contrary, most evidence shows a net increase in employment. ICT development and digitalisation have contributed directly to job creation and are expected to continue to do so. For example, over the last decade, an extra two million ICT specialist jobs have been created, one million in the last three years alone. ICT development and digitalisation and related automation/robotisation have also been found to increase productivity, as shown in the European Manufacturing Survey.

While the overall impact on employment appears to have been positive or neutral so far, this may not hold true for all sectors or occupations. ICT development and digitalisation through process innovation and organisational change can lead to capital-labour substitution, where ICT-driven innovations such as robots directly replace human labour. By contrast, technological progress in the form of product innovation, commercialisation of new products and demand for new equipment generates new jobs.

*ICT development and digitalisation will have different impacts in different occupations and sectors*

Technological change alters the skill requirements of the labour market. Computers and advanced machinery, for example, can more easily replace workers employed in jobs which involve very intensive routine tasks, either manual or cognitive. These tasks can be easily programmed and executed by machines. ICT development and digitalisation may therefore favour the highly skilled, and have a negative impact on those with lower and intermediate levels of skills in routine tasks.

**38 %**  
of companies have difficulties finding ICT professionals

In the near future nearly all jobs will require some level of digital skills, and some will require very high levels of professional ICT skills. New ways of working, including more independent and contract-based work, and more

*The digital revolution requires a new set of skills to ensure complementarity between human capital and technology*

frequent job changes will call for skills that can be used by individuals in different contexts.

38% of companies that recruited or tried to recruit ICT specialists in 2014 reported difficulties in filling vacancies. According to the PISA survey, around 20% of 15-year-olds in the EU have low reading and numeracy skills. And according to PIAAC, 20% of adults have low literacy skills while 24% have low numeracy skills. Less than a quarter of students have had an entrepreneurship experience by the time they finish school.

It is difficult to quantify the emerging 'collaborative economy', in terms of revenues or the number of individuals directly involved, but estimates indicate that it is already sizeable. In 2015, there were at least 20 platforms worth more than USD 1 billion. Uber is valued at USD 50 billion and is active in 230 cities in 60 countries. Airbnb is worth USD 20 billion, is active in 34,000 cities in 190 countries, and has had 35 million guests and 2 million listings since its launch in 2008. BlaBlaCar has expanded beyond France's borders and has now recruited 10 million members in 13 countries.

*The increasing importance of the collaborative economy*

A recent survey indicated that in the UK, 11% of the population aged 15-75 (i.e. 5 million individuals) had found work at least once on a labour platform. A recent study by the French government estimates that in France alone, 'Airbnb' activities generated a turnover of €2.5 billion and created 13,000 permanent jobs.

Platforms could play a key role in the emergence of new forms of work and job creation, with more flexible work arrangements. They can improve the matching process between labour demand and supply. At the same time, they raise concerns regarding the atypical nature of these forms of employment (which may suit some workers, though) and their limited access to social protection.

*New employment opportunities through platforms, but also new challenges*

So far, surveys only provide patchy evidence. Some suggest that those providing services in the collaborative economy tend to be relatively younger and more highly educated than the general population, but often earn below or just above minimum wages. A large proportion has no form of social insurance. Some people appear to work long hours on several platforms.

## 5. CAPACITY BUILDING FOR SOCIAL DIALOGUE

Trade unions and employers' organisations can help to find a balance between competitiveness and fairness in a social market economy. The social partners contribute to this agenda through autonomous joint actions and through their involvement in policy and law making. For social dialogue to live up to its full potential, a number of conditions need to be met.

*Social dialogue between workers' and employers' representatives is a key component of Europe's social model.*

**108 trade union and  
134 employers'  
national cross-industry  
organisations in the EU**

Across Europe, trade unions and employers' organisations have undertaken mergers and adapted the services they provide to their members to increase their membership and enhance their operational capacities. They are also reaching out to groups which tend to be underrepresented, including women, migrants, and workers in atypical employment. New forms of employment can blur the distinction between employers and workers, making the organisation of the existing structures difficult and posing a challenge to collective interest representation. As employment relationships and business activities change in the future, the role of social dialogue may become more important.

In many Member States, wage setting is at the core of social partners' bipartite activities. In line with diverse national traditions, workers' and employers' representatives conclude collective agreements at company, sector or cross-industry level. Across the EU, some 60% of employees are covered by collective (wage) agreements. In the Eurozone, this rate is nearly 75%. In many Member States, the social partners (and in some cases governments) are looking to modify wage setting systems, so as to allow flexible wage adjustments within a coordinated framework that takes account of the macro-economic situation. Where national minimum wages apply, social partners play different roles in setting this wage floor.

**115 national institutions  
across the EU where  
social partners discuss  
policies**

There is no single European blueprint for effective involvement: each Member State has at least one forum in which social partners meet to discuss policy matters but these bodies vary widely in terms of their composition, policy scope

and degree of institutionalisation. Public authorities can establish permanent secretariats and stable structures to support these bodies. Beyond the institutional context, active involvement of social partners in a specific reform depends on timely provision of relevant information. Crucially, active involvement relies on the social partners' ability to find consensus and jointly promote their solutions vis-à-vis political decision makers.

*Tripartite concertation between social partners and public authorities regularly builds on a strong bipartite social dialogue.*

*The involvement of social partners in policy and law-making requires an accommodating institutional framework and respect for their autonomy.*

# Main Employment and Social Developments

## INTRODUCTION

Following almost four years of economic recovery, total employment in the EU has risen to 232 million men and women, the highest level ever recorded <sup>(1)</sup>. However, in the second quarter of 2016, 21.1 million people in the EU were still without work, including almost 4.2 million young people. Nearly half of all unemployed people have been so for more than a year. Differences in socio-economic performance between Member States persist. Inequality within most Member States has increased in recent years and a significant part of the population is still at risk of poverty and social exclusion.

This chapter reviews recent socio-economic performance in more detail. The starting point for the analysis is that macro-economic developments have a direct impact on labour market and social outcomes, while economic and social progress can reinforce each other. Key employment developments within and between Member States are discussed (with a special focus on the most vulnerable groups). Recent developments in earnings, social protection, household income, poverty (including in-work poverty) and social exclusion are examined.

## 1. THE IMPROVING MACRO-ECONOMIC ENVIRONMENT

As the recovery reaches its fourth year, the ground has been laid for further job creation and decreases in unemployment. Nevertheless, several factors hold

back a faster recovery including among others, subdued labour productivity growth (which hinders robust real wage growth), weak investment or access to finance by small and medium enterprises.

### 1.1. GDP, employment and hours worked continue to recover gradually in the EU

*GDP and employment increased in the EU in 2015, and further growth is expected over the next years. Hours worked increased too but more slowly than employment. These positive developments accentuate the evolution observed since 2013 when the economic recovery started.*

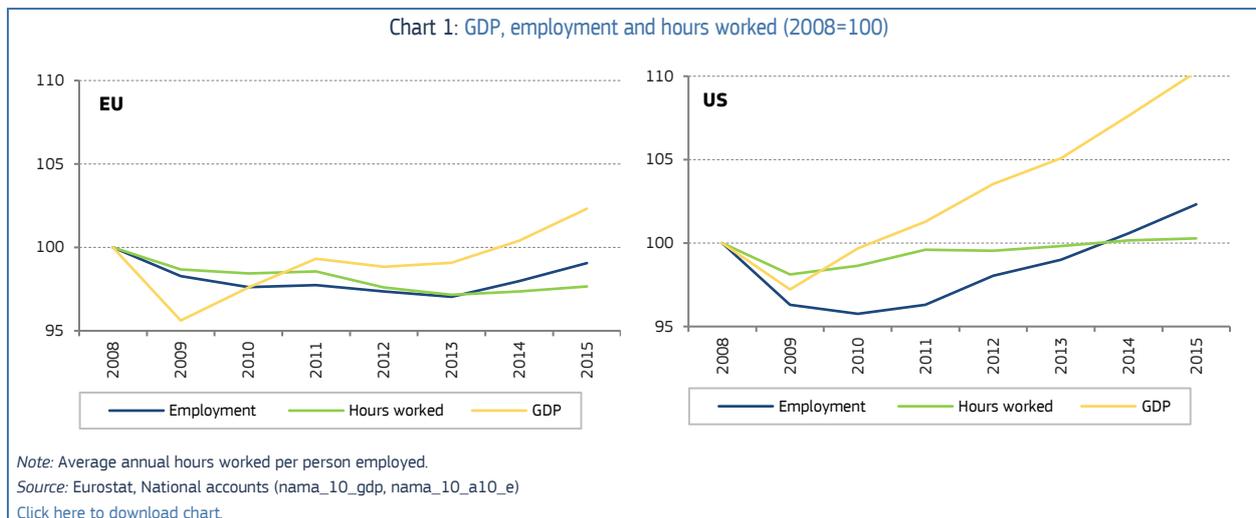
After the sharp contraction in 2009, EU GDP regained its pre-crisis peak in 2014 and has maintained growth momentum since, though at a weak pace.

According to the European Commission autumn 2016 forecast released on 9 November 2016, GDP growth over the forecast horizon is expected to remain fairly constant in the EU (euro area values in brackets) at 1.7% (1.8%) in 2016, 1.5% (1.6%) in 2017, and 1.7% (1.8%) in 2018 <sup>(2)</sup>. Over the forecast period, economic activity is set to increase further in all Member States, albeit at very different rates.

After being on a downward trend from the onset of the crisis until 2013, total employment in the EU rebounded moderately, reaching its pre-crisis peak by mid-2016 (**Chart 1**). Nevertheless, several Member States are expected to record employment levels more than 5% lower in 2016 than in 2008, most notably

<sup>(1)</sup> Source: Eurostat, National Accounts [namq\_10\_pe]; total employment domestic concept, seasonally and calendar adjusted data.

<sup>(2)</sup> More details available at [http://ec.europa.eu/economy\\_finance/eu/forecasts/2016\\_autumn\\_forecast\\_en.htm](http://ec.europa.eu/economy_finance/eu/forecasts/2016_autumn_forecast_en.htm).



Greece with GDP a quarter below its 2008 level, followed by Croatia, Cyprus, Italy and Finland.

Overall, according to the European Commission autumn 2016 forecast, employment in the Euro area and the EU is expected to grow by 1.4% this year, faster than at any time since 2008, though slack remains in the labour market. Job creation is set to continue to benefit from domestic demand-led growth, moderate wage growth, as well as fiscal policy measures and structural reforms in some Member States. Employment growth is forecast to remain relatively solid, though slightly moderating in 2017 and 2018.

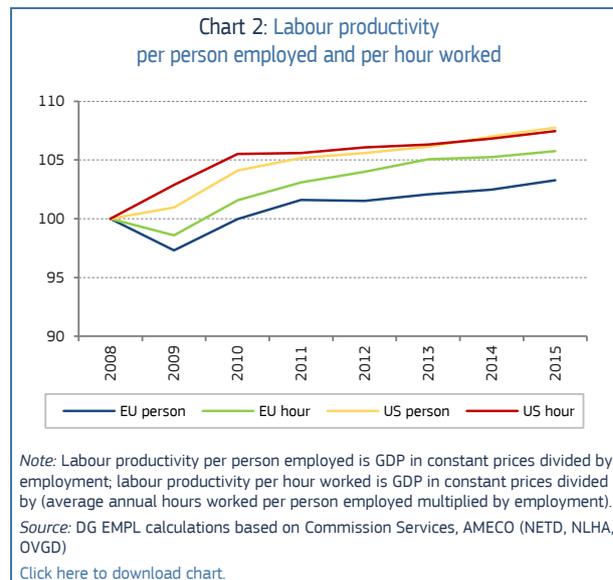
In the US, employment had already regained its pre-crisis peak in 2014 even though its initial employment contraction was stronger than in the EU despite a milder recession (**Chart 1**).

In both the EU and the US, part of the output contraction was absorbed by a decrease in average annual hours worked per person employed. However, in the EU hours worked recovered at a much slower pace than employment and were still below the pre-crisis peak in 2016, while in the US they had fully rebounded by 2014. Only Slovenia and the United Kingdom seem to have been able to increase the average annual hours worked per person employed above the 2008 level.

## 1.2. Labour productivity growth remains subdued

*Labour productivity in the EU increased in 2015, but slowly, continuing the evolution seen since 2013. Significant differences across Member States can be observed.*

These developments in GDP and employment also imply that from the onset of the crisis to 2015, labour productivity per employed person had increased more in the US (by about 8%) than in the EU (by about 3%) (**Chart 2**).



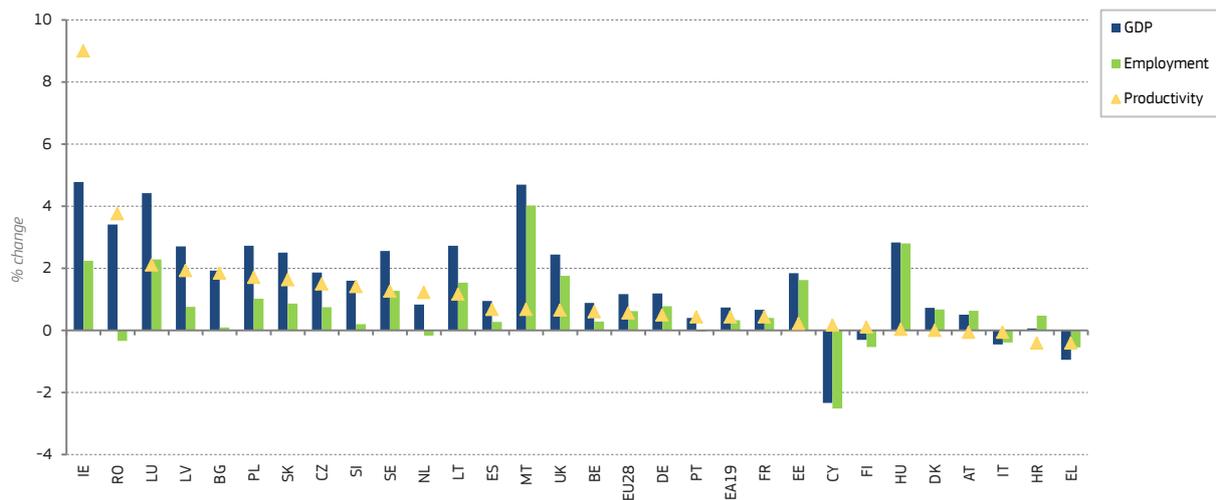
Focussing on performance at Member State level, between 2013 and 2015 labour productivity growth varied widely across Member States, with strong growth in Romania, followed by Ireland and Luxembourg, and a contraction in Croatia and Greece for example (**Chart 3**).

In the short to medium run labour productivity growth (measured as the percentage change in output per person employed) is affected by changes in output and employment <sup>(3)</sup>. In Romania between 2013 and 2015, labour productivity growth was driven by strong expansion of output combined with a small contraction in employment, while in Ireland and Luxembourg it was driven by an increase in employment matched by an even stronger increase in output <sup>(4)</sup>. In Croatia,

<sup>(3)</sup> Measuring productivity as GDP divided by the number of employed persons is an accounting rule, not a behavioural relationship that indicates causality. Causality may run from (predetermined) productivity and GDP to a (endogenous) number of employed persons, from (predetermined) productivity and number of employed persons to (endogenous) GDP, or from (predetermined) GDP and number of employed persons to (endogenous) productivity.

<sup>(4)</sup> In Ireland the strong output increase was to a large extent driven by a surge in gross capital formation, mainly reflecting the doubling (in constant prices) of intellectual property

Chart 3: Labour productivity and its components – compound annual growth 2013-2015



Note: geometric average obtained by multiplying (1+ growth rates) of 2013, 2014 and 2015 and then taking the 3rd root and subtracting 1.

Source: DG EMPL calculations based on Eurostat, National Accounts (nama\_10\_lp\_ulc, nama\_10\_gdp)

[Click here to download chart.](#)

labour productivity decreased as employment grew at a stronger pace than output, while in Greece it decreased because the decline in output was stronger than the decrease in employment. In Cyprus, labour productivity did not grow because the sharp contraction in output was matched by the slightly stronger decrease in employment <sup>(5)</sup>.

### 1.3. Investment remains weak

Investment in the EU increased in 2015 in line with the increase in investment seen in 2014. However, it remains far from 2008 levels in most Member States and is only slowly returning to its pre-crisis share of GDP. Access to finance continues to be a major concern for businesses, especially small businesses.

Low investment remains a drag on growth and job creation. Investment has been subdued in the face of poor prospects for sustained aggregate demand and the adverse legacy of the crisis, including the need for deleveraging in the context of high corporate indebtedness, financial constraints and policy uncertainty <sup>(6)</sup>. Weak investment slows economic recovery in the short term and productivity growth in

the longer term, dampening in turn the prospects for sustainable real wage increases.

So far, gross fixed capital formation has failed to emerge as a strong driver of the ongoing recovery, despite a moderate rebound in recent years. Gross fixed capital formation in the EU (excluding dwellings and measured in constant prices) bottomed out at 13% below its 2008 level in 2013, while gross fixed capital formation in dwellings in 2013 fell almost 20% below its 2008 level. However, as of 2014 gross fixed capital formation (excluding dwellings) rebounded somewhat rising in 2015 to 6% below its 2008 level, while gross fixed capital formation in dwellings settled in 2015 at 16% below its 2008 level.

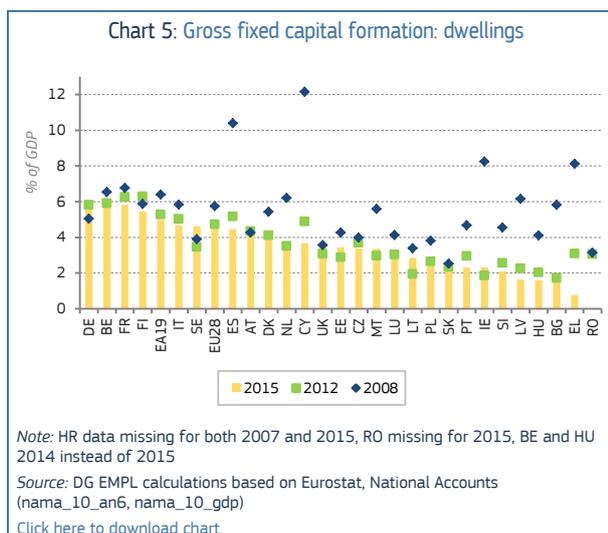
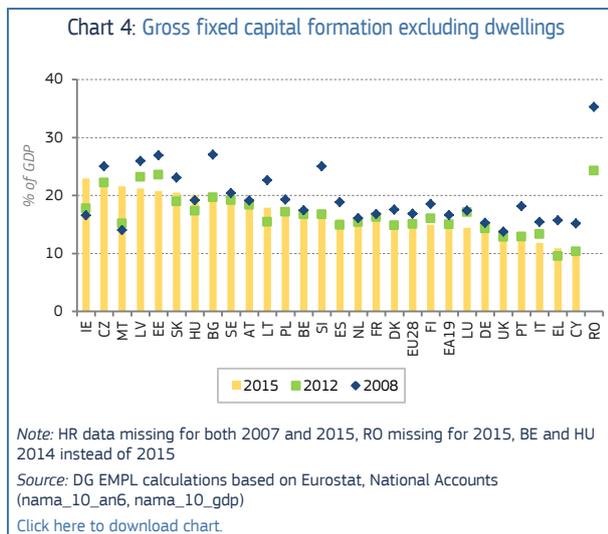
According to the European Commission autumn 2016 forecast, the investment environment is finally brightening. Investment is expected to pick up in 2016 in the EU, growing by 2.8% this year, 2.5% in 2017 and 3.1% in 2018, after having suffered from low demand growth and expectations of weak potential growth, from the ongoing corporate debt reduction in some Member States and heightened uncertainty.

Measured as percentage of GDP, gross fixed capital formation (excluding dwellings) reached 15.0% in 2016 in the EU compared with about 16.8% in 2008 and it reached 14.8% in the Euro area compared with 16.6% (Chart 4). At the same time, gross fixed capital formation in dwellings stood at 4.6% in 2015 in the EU (5.7% in 2008) and at 5.0% (6.4% 2008) in the Euro area (Chart 5).

products. For Luxembourg the notable increase in productivity partly reflects a rebound from a sharp dip in productivity in 2012.

<sup>(5)</sup> The productivity developments described above capture short-to medium-term changes in which labour productivity is the outcome of fluctuations in output and employment. In the long run, however, the labour force becomes more productive in a sustainable way if it has more productive capital at its disposal (including tangible capital such as machines and intangible capital such as software), if it becomes more skilled and motivated, if production processes become smarter thanks to technological progress, and if economic activity is at its full potential. In the long run it is productivity and employment growth that drive output growth.

<sup>(6)</sup> See, for instance, Barkbu et al; (2015), 'Investment in the Euro Area: Why Has It Been Weak?', IMF Working Paper, WP/15/32, doi: <http://www.imf.org/external/pubs/ft/wp/2015/wp1532.pdf>.

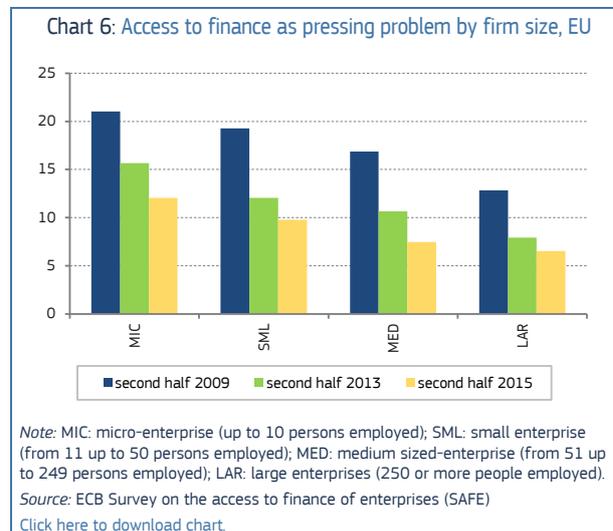


Between 2008 and 2012 the strongest decreases in gross fixed capital formation (excluding dwellings and measured as a percentage of GDP) were observed in Romania, Slovenia, Bulgaria, Cyprus, Lithuania, Greece and Portugal – down by between 5 and 11 percentage points (pps). Only Ireland and Malta recorded gross fixed capital formation in 2012 above its 2008 level.

From 2013 to 2015, gross fixed capital formation saw the strongest decrease in Estonia, down by almost 3 pps. However Malta and Ireland recorded very robust increases of about 7 pps. At the same time, investment in dwellings fell fastest in Greece, followed by Latvia and Finland, but experienced a notable rebound in Sweden, the Netherlands, Lithuania and Malta.

Although real interest rates have been at historic lows in recent years, access to finance has remained a major concern for businesses in several Member States since the onset of the crisis. This is especially the case for small businesses because they more often lack the capacity to provide collateral and may face more uncertain future earnings. However, compared with the situation at the onset of the crisis, access to finance has improved considerably (Chart 6). For example, while in the second half of 2009 getting

access to finance was for 21% of the micro-enterprises (with up to 10 persons employed) the most pressing problem, it decreased to 16% in the second half of 2013 and 12% in the second half of 2015 (7). This development (especially if combined with an improved outlook leading to higher expectations for demand) may support gross fixed capital formation and in turn job creation (8).



#### 1.4. Nominal unit labour costs in the euro area in recent years

Nominal unit labour costs in the EU as a whole increased slightly in 2013-2015. Nevertheless, outcomes varied strongly across Member States, with Ireland, Greece and Cyprus recording a notable reduction, and the Baltic Member States and Bulgaria showing strong rises. Employee compensation increased slightly for the EU but this masks wide differences across Member States including a reduction in some.

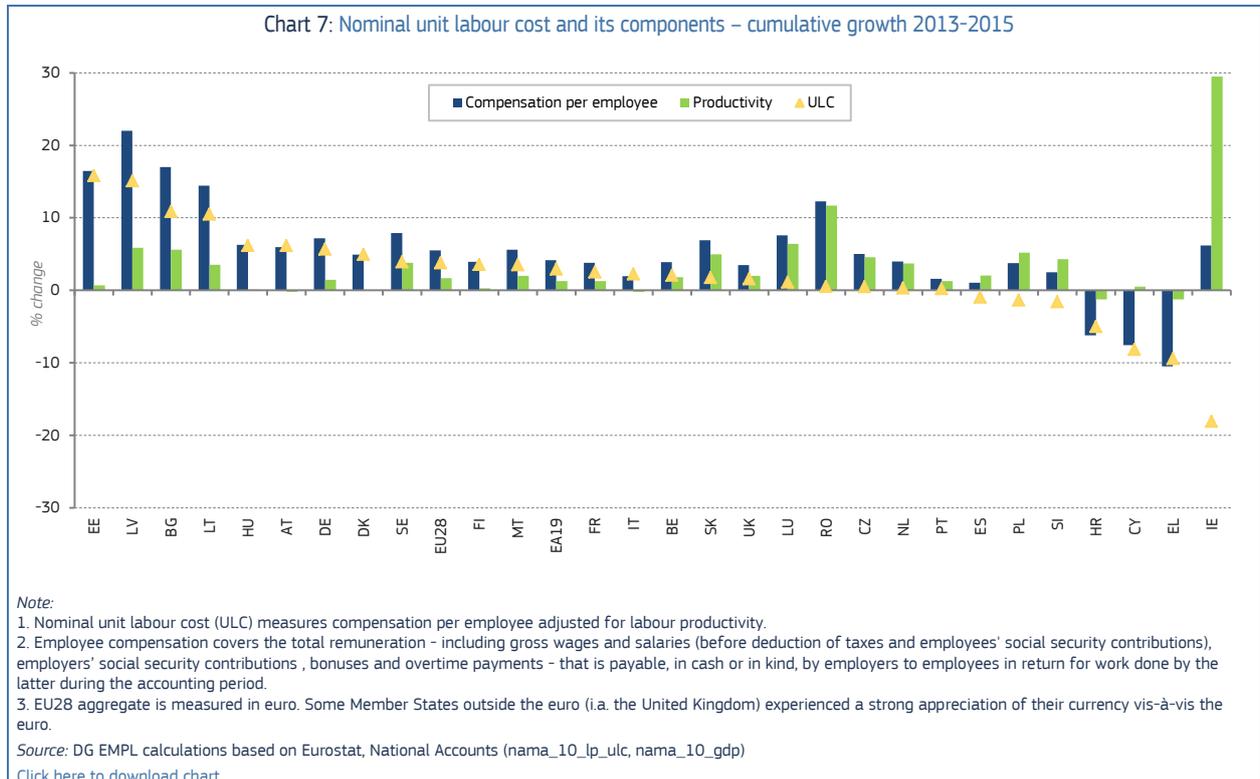
The unfavourable international cost competitiveness position of certain Member States in the period before the crisis has seen some correction in recent years – primarily via adjustments in nominal compensation per employee and employment.

From 2013 to 2015, there have been notable declines in nominal unit labour cost in Ireland, Greece, Cyprus, and Croatia (Chart 7). In Greece, Cyprus, and Croatia the reduction was primarily due to a decrease in

(7) According to the ECB Survey on the access to finance of enterprises (SAFE) available at <https://www.ecb.europa.eu/stats/money/surveys/sme/html/index.en.html>.

(8) Nevertheless, while improved access to credit at low interest rates has the potential to boost investments and other interest-sensitive expenditures such as durable consumer goods, low capital cost may also give rise to more capital-intensive production (at least if increases in interest-sensitive expenditures such as investment and durable consumption goods are not offset by increases in savings to meet people's savings targets for retirement.) As a consequence, the job prospects for the low-skilled may be less strong than those of the highly-skilled – depending on the extent to which the low-skilled are substitutes for capital and highly skilled complements as is often suggested in the literature.

Chart 7: Nominal unit labour cost and its components – cumulative growth 2013-2015



nominal compensation per employee, while in Ireland this primarily reflected a sharp increase in labour productivity. Nominal unit labour cost also decreased in Slovenia, Poland and Spain, because the growth in labour productivity was stronger than the increase in nominal compensation per employee.

In Germany, the increase in nominal unit labour cost was just below 6% between 2013 and 2015, primarily reflecting very weak productivity growth, while in Austria it slightly exceeded 6%, reflecting negative productivity growth in combination with strong growth in nominal compensation per employee. In Italy, nominal unit labour cost growth remained low despite a decrease in productivity.

The Baltic Member States and Bulgaria recorded strong increases in nominal unit labour cost from 2013 to 2015 as nominal compensation per employee increased at a much stronger pace than productivity.

## 2. LABOUR MARKET DYNAMICS: STRUCTURAL BARRIERS PERSIST

*The gradual improvement in economic and labour market conditions that started in the second quarter of 2013 lasted throughout 2015 and the first half of 2016 in both the EU and the Euro area, with a steady reduction in unemployment. Labour markets continued to recover in most Member States, but the improvements are gradual and substantial differences remain across Member States.*

Total employment in the EU reached its pre-crisis peak level in early 2016, spurred by an increase in domestic demand, mainly consumption. Employment in the Euro area as a whole remains below the 2008 level, with

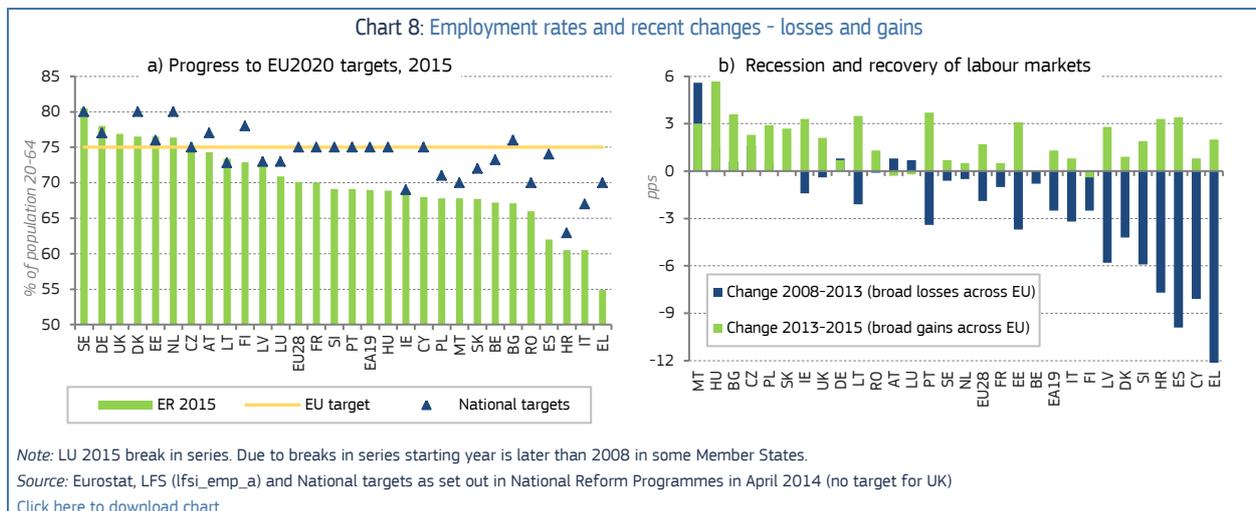
several Euro area Member States (Greece, Spain, Cyprus) expected to record employment levels in 2016 that are between 5% and 10% lower than in 2008.

Labour market participation has increased over the last decade, mainly driven by the higher participation (and employment rate) of women and older workers. This partly reflects active ageing policies, reductions in financial disincentives to work longer (e.g. in the tax or pension systems) and as women have become better educated in comparison with previous generations and higher education is correlated with higher labour market participation. Tapping the underused potential of female labour supply in some Member States as well a successful integration of migrants can further help to sustain labour supply.

The observed reduction in unemployment is mainly due to a decline in job separation rates, while job-finding rates improved but remain below the historical average. Low job-finding rates are coupled with persistently high rates of long-term unemployment (see 2016 Labour Market and Wage Developments, forthcoming).

### 2.1. Total employment recovering but substantial differences across MS remain

*Employment further increased in 2015 following the expansion seen in 2014 and 2013. As a consequence, employment is now above the 2008 levels and at the highest level ever recorded (232 million men and women in the EU, National Accounts). The EU employment rate increased in 2015, following the rises recorded in 2014. By mid-2016 it stood at 71%. It improved in nearly all EU Member States in 2015 though some Member States saw a reduction. However, the employment rate varies significantly*



across Member States from 56.3% in Greece to 81.2% in Sweden by mid-2016.

Since spring 2013, employment has expanded by 7.8 million in the EU, including by 4.3 million in the Euro area (by the second quarter of 2016). It regained its peak level of spring 2008 in the EU, and is still 0.7% lower in the Euro area, representing 1 million fewer people in employment than in spring 2008. Employment has been broadly increasing in most Member States, but employment recovery is not fully grounded in some.

Between 2008 and 2015, Malta (up by 8.6 pps) and Hungary (up by 7.4 pps) recorded the strongest increases in their employment rate, while Greece (down by 11.4 pps) and Cyprus (down by 8.6 pps) recorded the strongest decreases. Spain (-6.5 pps), Croatia (-4.4 pps) and Portugal (-4.0 pps) also experienced decreases of 4 pps or more.

Employment rates improved in nearly all EU Member States in 2014 and especially in 2015. From 2013 to 2015, all Member States except Luxembourg, Austria and Finland recorded an increase in their employment rate, with Hungary showing the strongest increase of 5.9 pps. Nevertheless, the deterioration experienced over several recession years hampered progress towards the Europe 2020 national targets in most EU Member States (Chart 8).

In 2015, about 70 percent of the total population (aged 20 to 64 years) was in employment in the EU rising to 71% in the first half of 2016. If this trend continues, the EU could still reach its employment rate target of 75% in 2020. Sweden (80.5%) and Germany (78.0%) recorded the highest employment rates in 2015, while Greece (54.9%), Italy (60.5%), Croatia (60.5%) and Spain (62%) recorded the lowest.

### 2.1.1. Rising female employment

The employment rate of women in the EU in 2015 is still significantly below that of men (64.3% compared with 75.9%) but the gap has decreased since 2008. Wide differences can be seen across Member States.

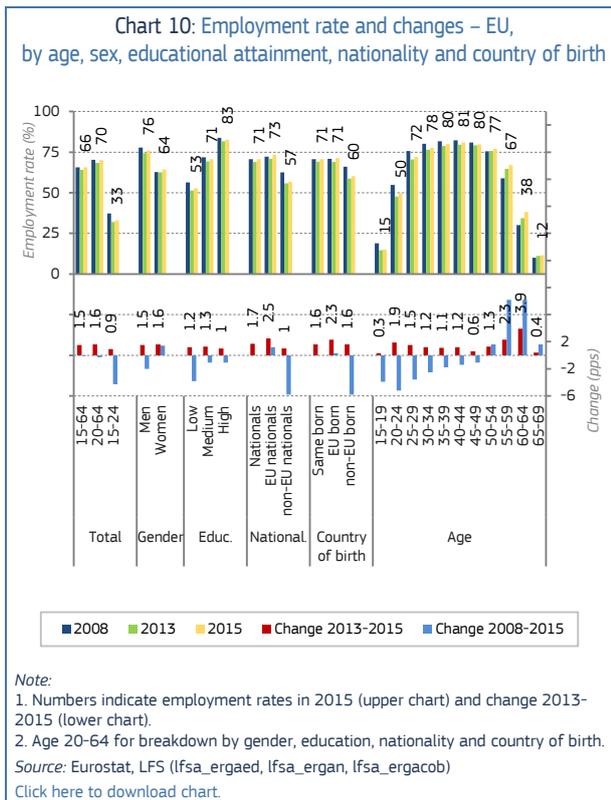
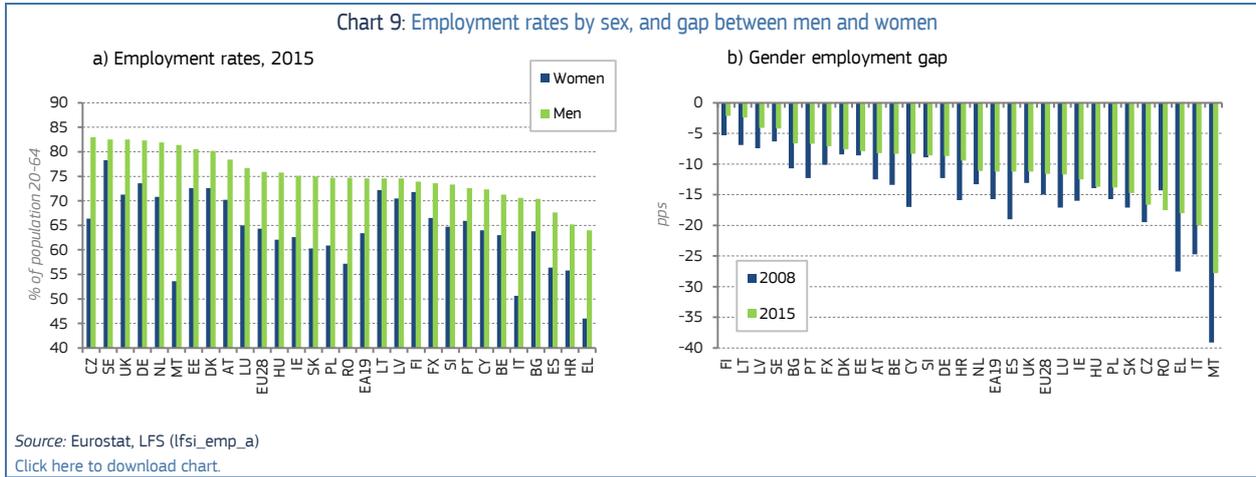
After the severe economic crisis, female employment showed positive growth in most Member States between 2008 and 2015. Nevertheless, the employment rate of women in the EU in 2015 is still significantly below that of men (64.3% compared with 75.9%), but the gap has diminished since 2008 in all Member States except Romania. Since 2011, the gap has increased in Lithuania, Latvia, Bulgaria, Denmark, Estonia, Slovenia, Hungary, Ireland and Romania: though in all of these except the last three, the gap remains smaller than the EU 28 average (Chart 9).

The biggest gap is in Malta (female employment rate 27.8 pps lower than male employment rate), followed by Italy (20 pps lower), Greece (18 pps lower), Romania (17.5 pps lower) and the Czech Republic (16.6 pps lower). The smallest difference is to be found in Finland (female rate 2.1 pps lower), Lithuania (2.4 pps lower), Latvia (4.1 pps lower) and Sweden (4.2 pps lower).

While Sweden (78.3%) and several other Member States (particularly Northern and Baltic Member States) recorded employment rates for women above 70%, Greece (46%) and several other Southern European Member States had employment rates below 60%. Nevertheless, between 2013 and 2015, all Member States (except Finland) showed increases in the employment rate of women, with the highest recorded for Hungary (+5.2 pps). Such geographical differences reflect different policy-mixes to reconcile work and family responsibilities<sup>(9)</sup>.

Furthermore, apart from these structural factors, the severe economic downturn may, for example, also have provided strong incentives for women to accept a job to offset income loss when their partner became unemployed.

<sup>(9)</sup> The latter include paid maternity leave, paternity leave, parental leave, quality and affordability of child care, elderly care and flexible working arrangements. See, for instance, ESDE 2015, chapter III.2.



**2.1.2. Increasing participation of older workers, especially women**

The labour market participation of women and especially older women continued to increase in 2015.

Female older workers are becoming the main driving force behind the employment growth of older workers, for whom the employment rate has been on a rising trend across the EU - despite the severe economic downturn.

Apart from the above-mentioned developments that affected women's labour market participation in general, this higher participation of older women reflects also that they have become better educated in comparison with previous generations, and higher education is correlated with higher labour market participation and later retirements.

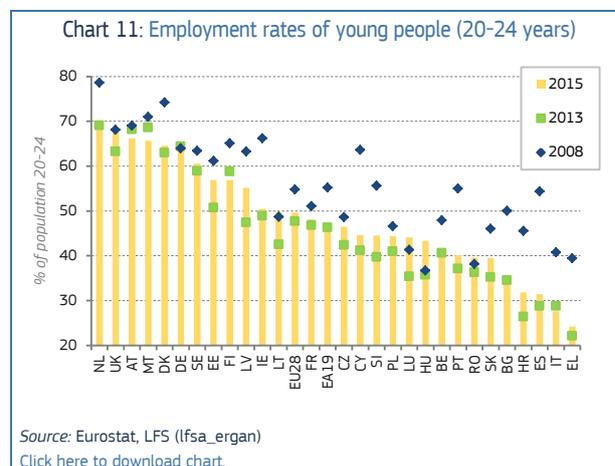
For example, in 2015 the share of higher-educated women exceeded that of higher-educated men for all age groups up to 54 years, while the gap for older cohorts diminished. Employment of medium- and higher-educated older women aged 55-74 doubled between 2005 and 2015; at 13 million in 2015 they accounted for 6.1% of total employment (compared with medium- and higher-educated older men who, at 16.6 million, accounted for 6.6% of total employment).

**2.1.3. Youth employment rates vary widely across Member States**

Youth employment (49.6% of people aged 20-24 in 2015) increased in the EU and many of its Member States in 2015, reinforcing the increase seen in 2014.

In 2015, 49.6% of people aged 20-24 were employed in the EU, down from 54.8% in 2008 (Chart 11). However, youth employment rates varied widely across Member States. The highest employment rates were in the Netherlands and the United Kingdom (recording rates just below 70%), while the lowest rates were in Greece (24%) and Italy (28%).

Most Member States have seen the youth employment rate drop from 2008 to 2015, with the biggest falls in Spain (by 26 pps), Ireland (by almost 21 pps), Cyprus (by almost 19 pps) and Greece (by 15.5 pps).

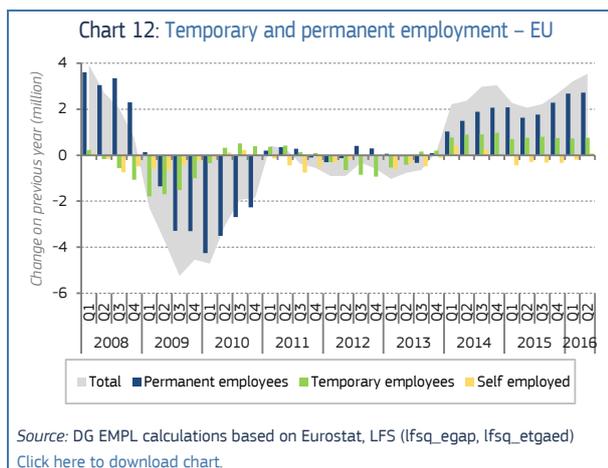


Nevertheless, since 2013 most Member States have recorded increases in their youth employment rates, with strong rises in Luxembourg, Latvia, Hungary and Lithuania (increases of about 8 pps from 2013 to 2015). Among the seven Member States that did not record an increase, Malta, Austria and Finland recorded the strongest decrease.

### 2.1.4. Non-standard jobs continue to increase

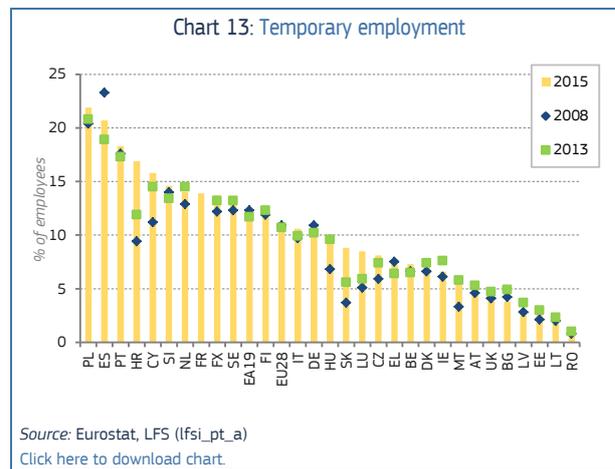
Permanent and temporary employment continued to increase in the EU in 2015 just as in 2014. The share of temporary employment in the EU is about 14% of total employment but varies significantly across the EU.

Employment of workers on temporary contracts started to decline in mid-2008 - one year ahead of the reduction in jobs with permanent contracts - but also began to recover earlier (in mid-2013). However, since 2014 an increase in permanent employment has significantly outnumbered the increase in temporary jobs, leading the recovery (Chart 12). Temporary employment now accounts for about 14% of total employment.



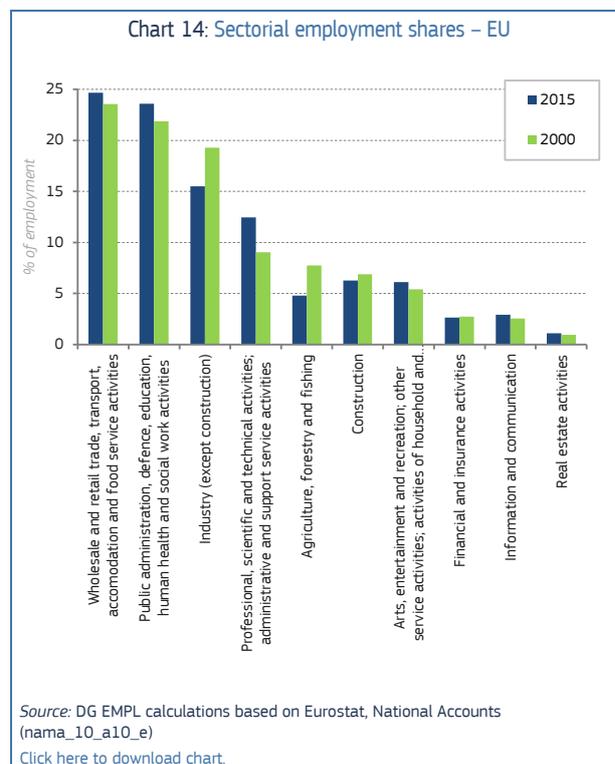
The use of temporary contracts differs considerably across Member States. Poland, Spain and Portugal record the highest proportion, while Romania and the Baltic Member have the lowest (Chart 13).

The number of employees with temporary contracts was higher in 2015 than in 2008 in almost all Member States (except Spain, Germany, Bulgaria and Lithuania).



### 2.1.5. Industry's declining share of total employment

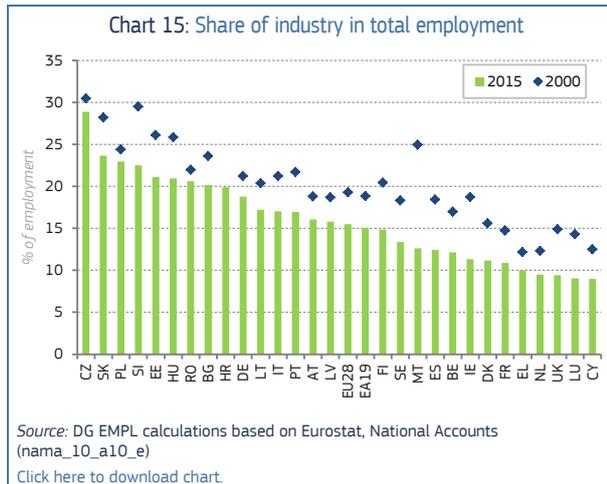
The employment shares of agriculture and industry experienced a sharp decrease in the EU between 2000 and 2015, down from about 19% in 2000 to about 15% in 2015 (Chart 14).



Industry's share of total employment is by far the highest in the Czech Republic, followed by Slovakia and Poland, while Cyprus, Luxembourg and the United Kingdom recorded the lowest share of employment in industry. In all Member States this share is decreasing - see Chart 15.

A major part of the decrease in the employment share of the construction sector (which is a very labour-intensive sector) after 2008 can be attributed to the state of the business cycle and the collapse of the real estate bubble in some Member States.

The decrease in the employment shares of agriculture and industry was caused by a number of structural drivers, including a strong increase in labour productivity in these sectors (compared with services and construction), a shift from the primary and secondary sectors to the tertiary sector (such as professional services and entertainment), changes in business models such as the increased tendency for manufacturers to outsource services (such as logistics, marketing or legal advice) to enterprises in the service sector, and the low income elasticity of demand for goods and services provided by the agriculture sector.



While traditional industrial sectors such as agro-food and textiles are on a declining trend in the EU, employment in activities related to key enabling technologies (KETs) seem to have a strong potential for the creation of high-quality jobs: specific activities with strong employment potential are to be found in photonics, industrial biotechnology, advanced materials, advanced manufacturing techniques, micro- and nanoelectronics as well as nanotechnology<sup>(10)</sup>.

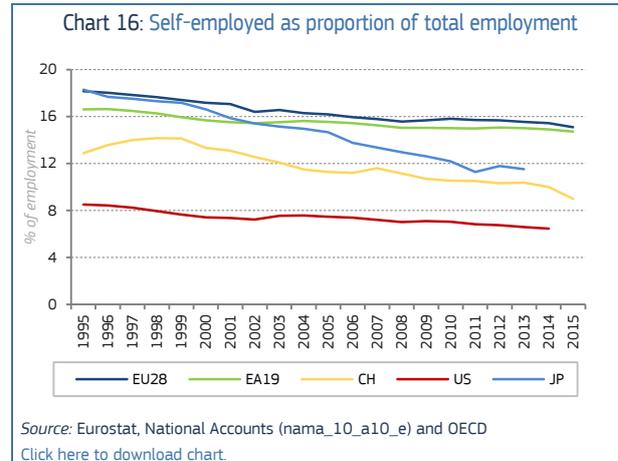
IDEA Consult et al. (2015) estimate that in the EU about 3.3 million employees were employed in KETs in 2013 – with most of them related to activities in advanced manufacturing technology and micro- and nano-electronics. The largest part of this employment is to be found in Germany, followed by France, Italy and the United Kingdom.

## 2.2. Self-employment fails to keep up with the overall improvement in labour market developments of recent years

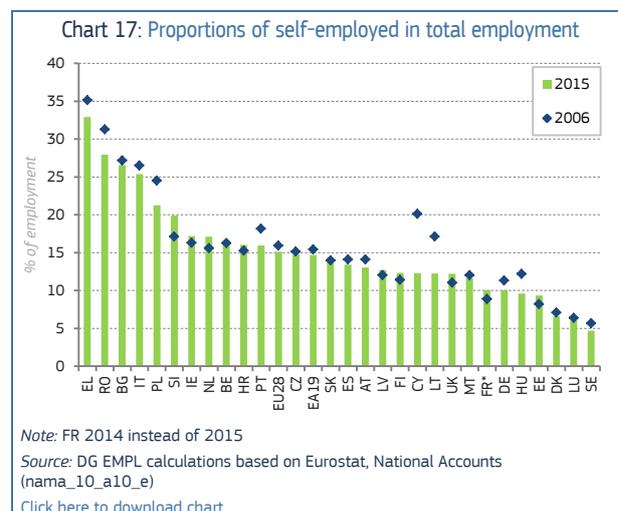
*Self-employment continued to decline in 2015. Wide differences can be seen across Member States and sectors and between men and women. Women represented about one third of all self-employed in 2015.*

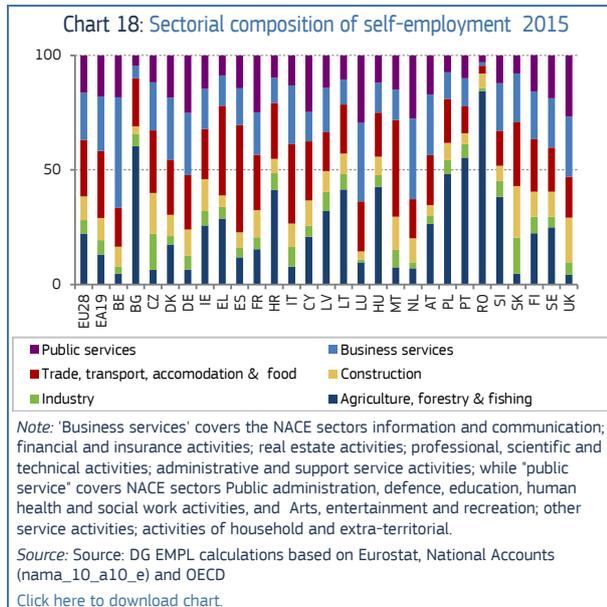
<sup>(10)</sup> See, for example, European Commission (2012), COM(2012) 341 final, 'A European Strategy for Key Enabling Technologies – A bridge to growth and jobs', doi: <http://eur-lex.europa.eu/LexUriServ/LexUriServ.do?uri=COM:2012:0341:FIN:EN:PDF>.

Self-employment as a proportion of total employment has been on a declining trend in the EU and the Euro area, but this trend seems to be less pronounced than in other developed countries such as the US, Switzerland and Japan (Chart 16).



While self-employment accounted for about 15% of total employment in 2015, there was a wide range of self-employment rates across EU Member States, ranging from just below 5% in Sweden to more than 30% in Greece (Chart 17). Cyprus and Lithuania recorded the strongest decrease in the share of self-employed in total employment between 2006 and 2015, while Slovenia recorded a notable increase.



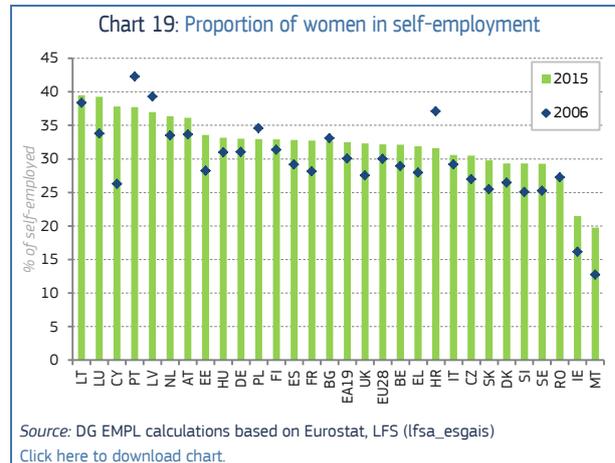


There is also a strong diversity in the proportion of sectoral self-employment (Chart 18). Most striking are the very high percentages of the self-employed in agriculture in Romania (84%) and Bulgaria (60%) - which often involve subsistence farmers. On average the wholesale and retail trade, transport, accommodation and food service sectors record the highest proportion of self-employed in total employment, with the highest in Spain, Malta and Greece whereas the lowest are found in Romania and Portugal. The proportion of self-employed in total employment in the sector covering business services <sup>(11)</sup> is highest in Belgium and the Netherlands, but lowest in Romania and Bulgaria.

Only one third of the self-employed were women in 2015, with the highest percentages (just below 40%) in Lithuania and Latvia and the lowest (around 20%) in Malta and Ireland (Chart 19).

Most Member States recorded a small increase in women's share of self-employment between 2006 and 2015, with Cyprus recording by far the strongest increase, followed by Malta and Luxembourg. Croatia and Portugal recorded a notable decrease in both the total number of self-employed and women's share of that total.

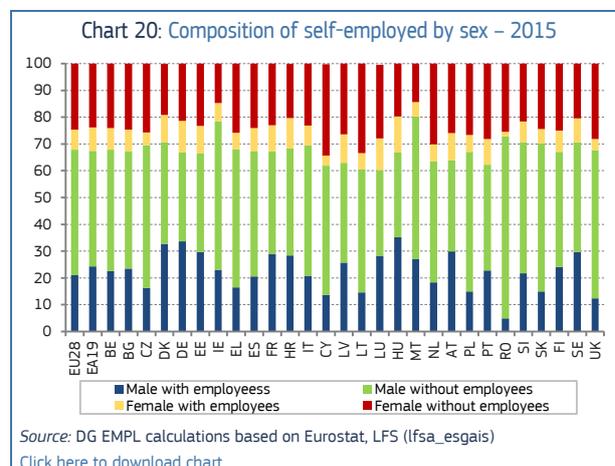
<sup>(11)</sup> In this chapter "business services" covers the NACE sectors information and communication; financial and insurance activities; real estate activities; professional, scientific and technical activities; administrative and support service activities.



Men who do not employ anyone constitute the largest group of the self-employed: about 47% for the EU as a whole, but ranging from just above 31% in Hungary and Luxembourg to 68% in Romania (where the self-employed are often subsistence farmers). Self-employed men with employees accounted for about 21% of the total number of self-employed in the EU, ranging from just below 5% in Romania to 35% in Hungary (Chart 20).

Women who have employees constitute the smallest group of self-employed at just below 8% for the EU as a whole, ranging from less than 5% in Romania, Cyprus, the United Kingdom and the Czech Republic to 13% in Hungary. Women who have no employees constitute about a quarter of self-employed in the EU, with the largest proportions in Cyprus and Lithuania at about one third of total number of self-employed, and the smallest in Malta and Ireland with less than 15% of the total number of self-employed.

Specific barriers that hinder self-employment of women include the need to maintain a good work-private life balance, low participation rates in science, technology, engineering and mathematics (STEM) education, the strong male orientation of business networks and less favourable credit terms (e.g. ESDE, 2015).



### 2.3. Persistently high unemployment with substantial differences across Member States

The steady unemployment reduction that had started in 2013 continued up to the third quarter of 2016 when there were 20.9 million people unemployed in the EU.

Unemployment is on a declining trend but still exceeds pre-crisis levels in most Member States. Indeed, in the third quarter of 2016, there were 20.9 million people unemployed in the EU, of whom 16.3 million were in the Euro area. This is about 5 million more unemployed people than in the second quarter of 2008. The number of people in underemployment<sup>(12)</sup> is nearly a quarter higher than before the crisis, while the number of people available for, but not seeking, work has increased and youth unemployment remains very high in some Member States.

#### 2.3.1. A steadily falling unemployment rate in the EU as a whole

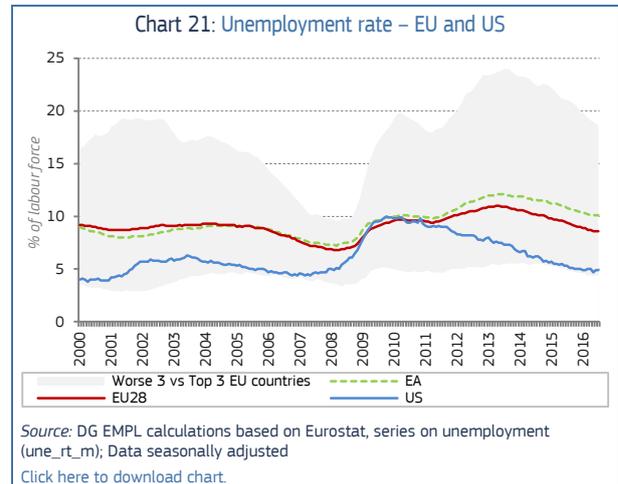
Despite the continuous decline, unemployment rates remain higher in the third quarter of 2016 than in 2008 for many Member States and the EU (8.5%) and Euro area (10.0%) as a whole, but further reductions are in sight.

In 2008, the EU recorded its lowest unemployment rate in recent history at 7% of the labour force. However, with the financial and sovereign debt crisis the unemployment rate reached its peak in 2013, when for several months it was above 11%.

Since mid-2013, the unemployment rate has fallen steadily. In 2015 it was 1.5 pps below the 2013 rate, but still more than 2 pps above the pre-crisis level. The latest data available (third quarter of 2016) shows the same trend, with unemployment at 8.5% of the labour force. According to the European Commission autumn 2016 forecast, the unemployment rate in the EU is set to fall from 8.6% in 2016 to 8.3% in 2017 and 7.9% in 2018.

The evolution of unemployment in the EU and the Euro area was different from that of the US (Chart 21). The US suffered a much faster increase, doubling its unemployment rate from 4.6% to 9.3% in two years, but it did not experience a double-dip recession. After 2009 its unemployment rate declined steadily and returned to its pre-crisis rate in 2015. In contrast, Europe suffered a double-dip recession which increased unemployment for five years, especially in the euro area Member States.

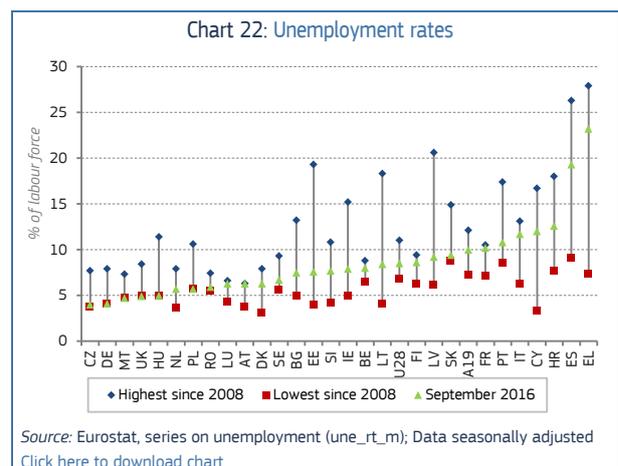
<sup>(12)</sup> i.e. those who currently work part-time and would like to work more hours than they currently are and are available to do so.



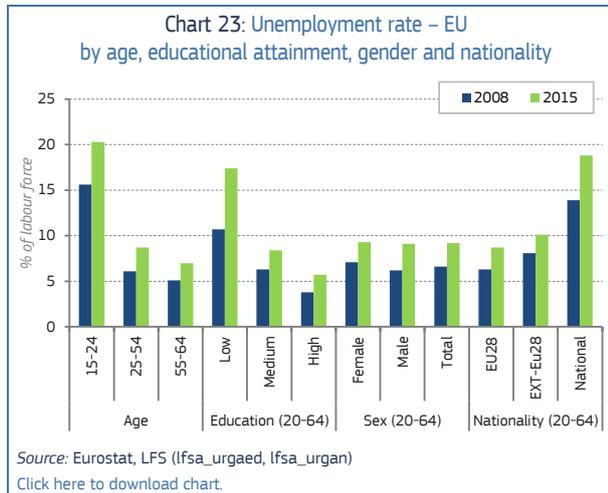
#### 2.3.2. Cross Member State differences in unemployment rates persist

The cross-country differences in unemployment rates remain striking, ranging from 4.5% in Germany to about 25% at the end of 2015 in Greece. In 2015, unemployment rates are higher for young people (more than 20% in the EU) and low-skilled (more than 15%).

Only four Member States had a lower unemployment rate in 2015 than in 2008. Germany achieved the biggest reduction, about 3 pps, over this period (Chart 22). At the same time, several Member States, especially Greece, Cyprus, Spain and Portugal, were far from their pre-crisis rates, despite improvements in their labour market conditions over the last two years. Importantly, however, several Member States which suffered big increases in their unemployment rates at the depth of the crisis, including the Baltics and Ireland, have recorded strong reductions in recent years.



Young people, the low skilled and migrants from outside the EU have been the groups most affected by the crisis (Chart 23). The crisis affected men slightly more than women, so that currently the rates of unemployment are quite similar for men and women.



### 2.3.3. Long-term unemployment rate remains very high with strong differences across Member States

Long-term unemployment registered a decline in 2015 after a first reduction in 2014. About 10 million people in the EU today have been unemployed for more than one year. Important differences in long-term unemployment between EU Member States persist: from less than 2% in Sweden to 18% in Greece.

Despite progress in reducing unemployment generally, long-term and very long-term unemployment remain very high <sup>(13)</sup>. The long-term unemployment rate in the EU doubled during the crisis, peaking at 5.1% of the labour force in 2014, which corresponds to 12.3 million people (Chart 24).

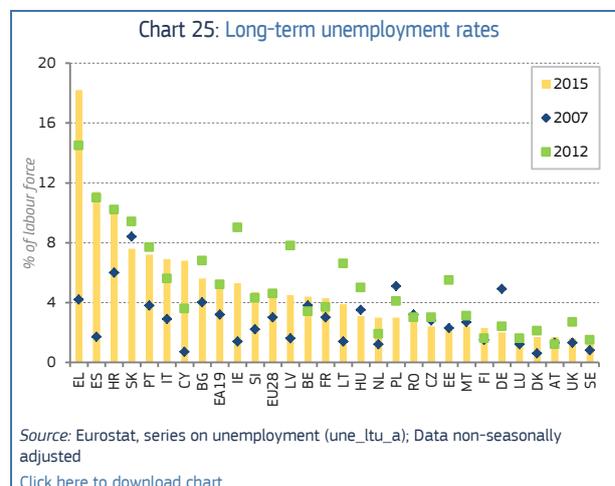
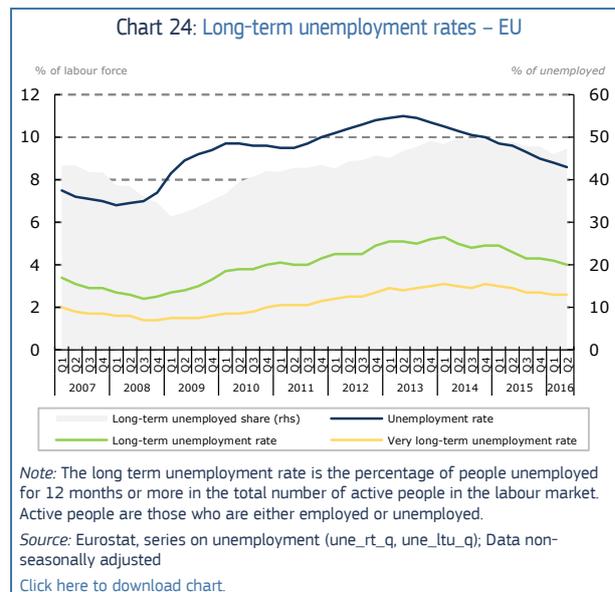
Following the recovery in GDP and (with some delay) in employment, long-term unemployment started to decrease in 2014. Nevertheless, of the 21.1 million unemployed people in the EU in the second quarter of 2016, about 9.8 million (corresponding to 4.0% of the labour force and almost half of the total unemployed) had been unemployed for more than a year and the majority of these (more than 6 million) had been unemployed for over 2 years.

Important differences in long-term unemployment between EU Member States persist. In 2015, Greece recorded by far the highest long-term unemployment rate at about 18%, followed by Spain at about 11% and Croatia at about 10% (Chart 25). Sweden, the United Kingdom, Austria, Denmark and Luxembourg recorded long-term unemployment rates of less than 2%.

Compared with 2007, Germany and Poland recorded the biggest decreases in long-term unemployment in 2015. Slovakia, the Czech Republic, Hungary, Malta and Romania also recorded decreases – though of less than 1 percentage point. Greece and Spain recorded the biggest increases. Compared with 2012, Ireland,

Latvia and Estonia recorded the biggest decreases in long-term unemployment.

Long-term unemployment reduces human capital and increases the probability of a move from unemployment to inactivity. Such developments are particularly worrying in view of the projected decline in the working age population driven by population ageing. Long-term unemployment and rising poverty can also disrupt social cohesion, affect health outcomes and contribute to undeclared work, crime and social unrest.



Since mid-2013 the number of unemployed who have found a job has exceeded the number of people becoming unemployed, but the growth in outflows from unemployment lost momentum and virtually stabilised in late 2014 and 2015. For more empirical evidence on labour market transitions in the European Union (EU) using the new flow statistics from the EU Labour Force Survey (EU-LFS) and micro-data from the EU Statistics on Income and Living Conditions (EU-

<sup>(13)</sup> Long-term unemployment refers to people who have been unemployed for 12 months or more. Very long-term unemployment refers to people who have been unemployed for 24 months or more.

SILC), see for instance European Commission (2016) <sup>(14)</sup>.

### 2.3.4. The situation of the young is improving but success is not experienced by all

The youth unemployment rate declined again in 2015 (to 20.3%) in line with 2014 developments. This has been accompanied by an increase in the employment rate and in the share of young people in education.

The slowdown in the EU economy that started in 2008 also had a significant impact on young people's previously-improving labour market performance. Indeed, young people are arguably one of the groups most affected by the crisis. In 2013, with the end of the double-dip recession, the economy started a modest recovery. However, it was also the first turning point in the labour market performance indicators for young people in the EU.

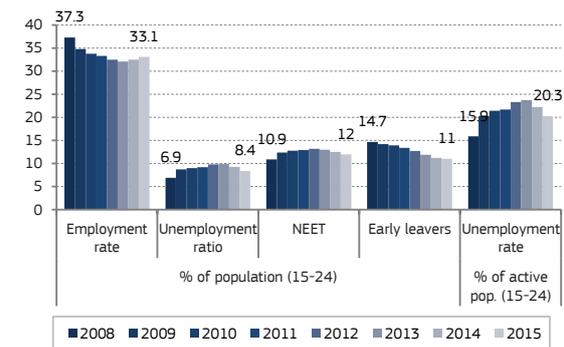
**Chart 26** shows clearly the evolution of young people's labour market performance in the EU over the period 2008-2015. The EU youth unemployment rate - the percentage of unemployed 15-24 year-olds in the total labour force (employed and unemployed) in that age group - increased from 15.8% in 2008 to a historic high of 23.7% in 2013, falling to 20.3% in 2015.

The EU youth unemployment ratio - the percentage of unemployed young people in the total population of that age group (including both active and inactive young people such as students) - was 6.9% in 2008, rose to nearly 10% in 2013 and then fell to 8.4% in 2015. The EU youth employment rate was at its highest (37.3%) in 2008 and at its lowest (32.1%) in 2013. However, in 2015, the youth employment rate increased to 33.1%. The EU NEET rate - which measures the proportion of young people 15-24 years old who are not in employment, education or training - was 10.9% in 2008, rose to 13.2% in 2012 and fell to 12% in 2015.

Steady reductions in the number of young people who are 'early leavers' from education and training, having attained at most lower secondary education and not been involved in further education and training, is declining. There was a 3.7 percentage point reduction between 2008 and 2015.

<sup>(14)</sup> See 'Labour Market Transitions', Analytical Web Note 1/2016, available at <http://ec.europa.eu/social/BlobServlet?docId=15716&langId=en>, as well as Chapter 2 of this report for transitions of people at the bottom end of the wage distribution.

Chart 26: Employment rate, unemployment ratio, NEET, early school leavers from education and training, and unemployment rate – EU



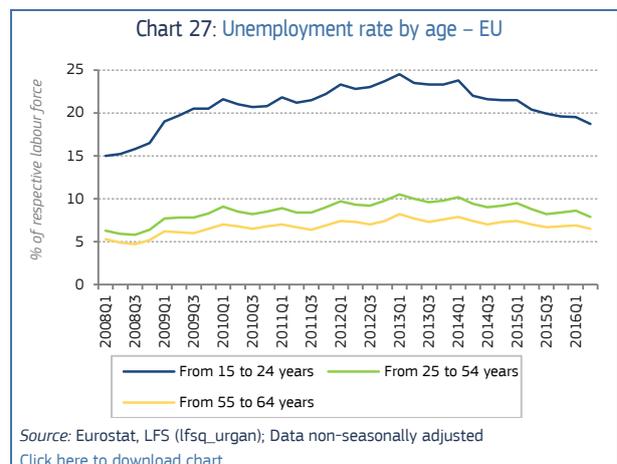
Note:

1. Youth unemployment rate is the percentage of the unemployed in the age group 15 to 24 years old compared to the total labour force (both employed and unemployed) in that age group.
2. The youth unemployment ratio is the percentage of unemployed young people compared to the total population of that age group (not only the active, but also the inactive such as students).

Source: Eurostat, LFS (lfsi\_emp\_a, tespm080, edat\_lfse\_20, edat\_lfse\_14, une\_rt\_a)

[Click here to download chart.](#)

**Chart 27** shows how unemployment evolved for different age groups from 2008 to 2015. While trends are somewhat similar, the chart indicates that unemployment levels increased to nearly 25% for young people aged 15-24 compared with just over 10% for those aged 25 - 54 and around 8% for those aged 55- 64.



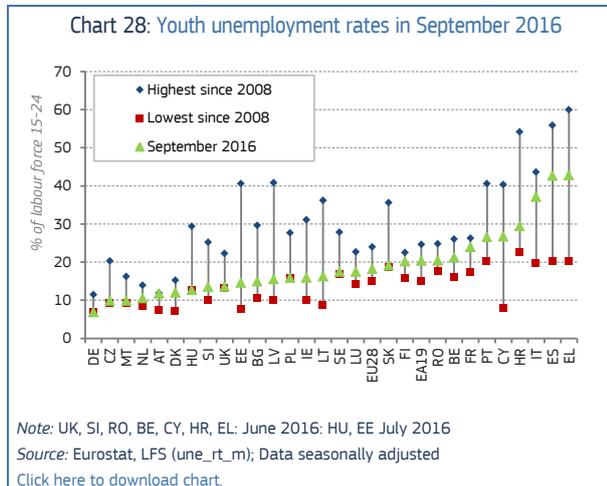
Source: Eurostat, LFS (lfsq\_urban); Data non-seasonally adjusted

[Click here to download chart.](#)

Young people's long-term unemployment (LTU) rates were also affected by the economic crisis and subsequent recovery. In 2008 the LTU rate for young people was 3.6%, increasing to 8% by 2013 and falling to 6.6% in 2015. Rising long-term unemployment rates may have seriously scarring effects on young people if their skills begin to erode.

There has been some convergence among Member States in their youth labour market performance between 2013 and 2015, as those Member States which saw a substantial worsening of the youth labour market during the crisis improved their situation (**Chart 28**). For example, in Greece, where in 2013 the youth unemployment rate was 60%, by 2015 it was below 50%. And between 2013 and 2015, the youth employment rate in Greece increased by 1.2 pps

slightly above the EU average increase of 1 percentage point. Greece has also seen an important reduction in its NEET rate since 2013 (3.2 pps). Croatia, with the highest NEET rate in 2013, saw this rate fall by 0.8 pps by 2015 while the EU average over this period was 1 percentage point. Other large reductions in the NEET rate have been seen in Hungary (3.9 pps), Cyprus (3.5 pps) and Spain (3 pps). Latvia and Ireland saw their NEET rates fall significantly to 10.5% and 14.3% respectively.



### 2.3.5. NEETs are a varied population

The share of people not in employment, education and training (NEET rate) declined in 2015, reinforcing the decline seen in 2014. This reflects a reduction in unemployed NEETs (those looking for work), while those inactive have remained fairly stable compared with 2014 and 2013.

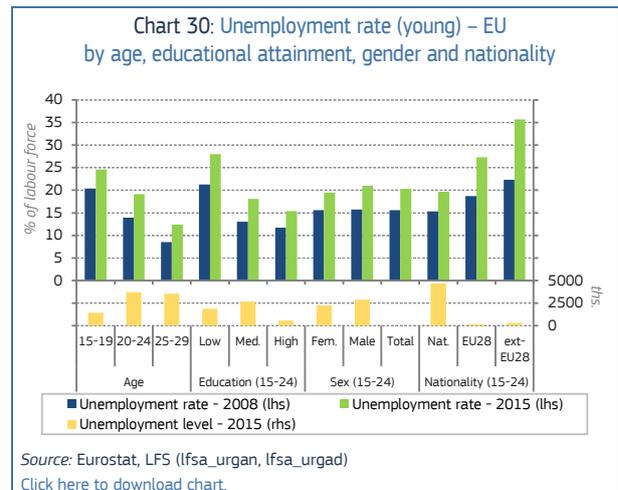
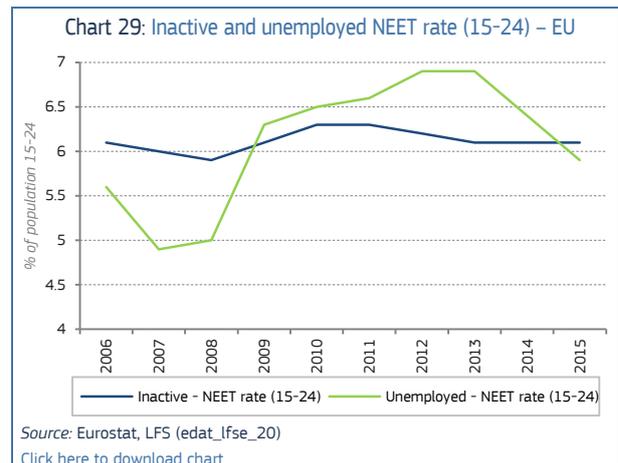
The NEETs can be divided into two broad groups: the *inactive* NEETs, those not actively looking for work, and the NEETs who are *unemployed*. Overall NEET rates hide the different performance of these two groups.

As **Chart 29** shows, the reduction observed in the NEET rate at EU level has been driven by a reduction in unemployed NEETs. The improvement in the unemployed NEET rate which started in 2013, continued through 2014 and 2015. The improved economic situation combined with dedicated policy interventions to help young people in the labour market have contributed to reducing the share of unemployed NEETs. By contrast, the percentage of inactive NEETs in the EU has not changed much. This pattern can be observed in almost all Member States, with the proportion of inactive NEETs ranging from just under 3% in the Netherlands, to around 12% in Romania and Italy and 14.3% in Bulgaria.

Inactive NEETs are not a homogenous group, as the Eurofound<sup>(15)</sup> report on NEETs shows. In some Member States with particularly high NEET rates,

<sup>(15)</sup> Eurofound (2016), Exploring the diversity of NEETs, Publications Office of the European Union, Luxembourg  
<http://www.eurofound.europa.eu/exploring-the-diversity-of-neets-1>.

around 40% of inactive NEETs became discouraged after failing to find work. In Member States with more favourable labour markets, reasons for inactivity are more varied, ranging from caring responsibilities to personal health issues. Nonetheless, the large number of young people aged 15-24 who are not in employment, education and training and who are not even looking for work is a major policy challenge in all Member States. Greater efforts are needed to understand and remove the barriers – real and perceived – that prevent inactive NEETs from entering the labour market.



### 2.3.6. Tackling underemployment remains a challenge

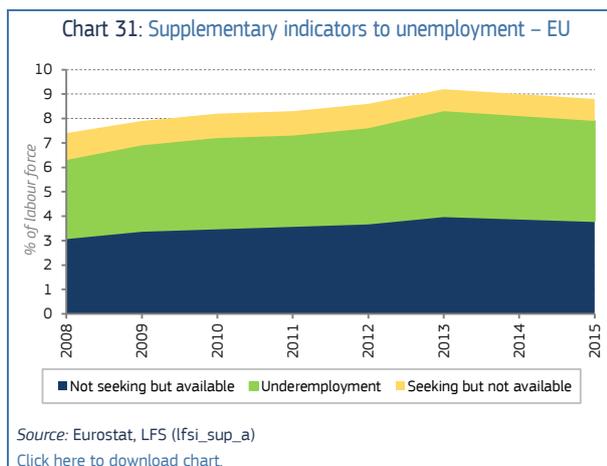
Underemployment also declined in 2015, accompanying the reduction in unemployment. It remains high especially for young people and above 2008 levels. Wide differences can be seen across Member States.

While employment has been rising in recent years, some employed workers have been working fewer hours than they wished to work. Such underemployed workers include, for example, involuntary part-time workers<sup>(16)</sup>.

<sup>(16)</sup> In LFS "Underemployment" is defined as part-time working by those who would like to work more hours and are available to do so. "Involuntary part-time" is the label given to those who,

Underemployment has moved in a similar way to unemployment in the EU: it increased between 2008 and 2013 and has fallen since. However, the underemployment rate in 2015 remained above the pre-crisis rate of 2008, especially in the case of young people (aged 15 to 24) whose underemployment rate increased dramatically.

Developments in the group of people 'available for work but not seeking employment' <sup>(17)</sup> have shown a similar pattern to that of the underemployed (**Chart 31**), a modest 0.1 percentage point improvement in 2015 continuing the trend of 2014. The proportion of people 'seeking work but not immediately available' has remained fairly stable since the onset of the crisis, at around 1% of the labour force.



This fairly stable picture at EU level is not matched at Member State level. **Chart 32** shows that Member States fall into two groups in which either 'available but not seeking' or 'underemployed' people predominate, plus a smaller neutral group in the middle.

Italy combines a high rate of 'Available but not seeking' (more than 13% of the active population) with a low rate of underemployment – which partly explains the low activity rate in Italy.

Cyprus, the Netherlands and Spain show a higher incidence of underemployment than 'available but not seeking'. However, the reasons behind this outcome differ. In the Netherlands the high underemployment rate represents unfulfilled needs for extra hours within the sizeable proportion of part-time jobs. In Cyprus and Spain, both with high shares of involuntary part-

asked why they are in part-time work, say "Couldn't find full time work". There are important overlaps between these groups; it is important to choose the right indicator for the specific context. For instance, a person working part-time and wanting to extend their working hours (for example from 4 to 6 hours daily) but not take a full-time job, will be considered as underemployed rather than involuntary part-time employed. Therefore when looking at underutilisation of the labour force, using Underemployment gives a more complete picture than using Involuntary part-time.

<sup>(17)</sup> This group includes the discouraged people, those who are not seeking a job because they believe there are no jobs available.

time work, underemployment represents the only way of avoiding unemployment.

In Lithuania, Slovenia and France, percentages of underemployed people and those 'available but not seeking' are very similar.

### 2.3.7. The job vacancy rate is rising

*The job vacancy rate in the EU as a whole increased further in 2015, but with strong differences across Member States.*

At the onset of the crisis, the job vacancy rate in the EU stalled at around 1.3%, compared with 1.5% in 2007 <sup>(18)</sup>. From 2014, this rate started increasing again, reaching 1.7% in 2015 <sup>(19)</sup>.

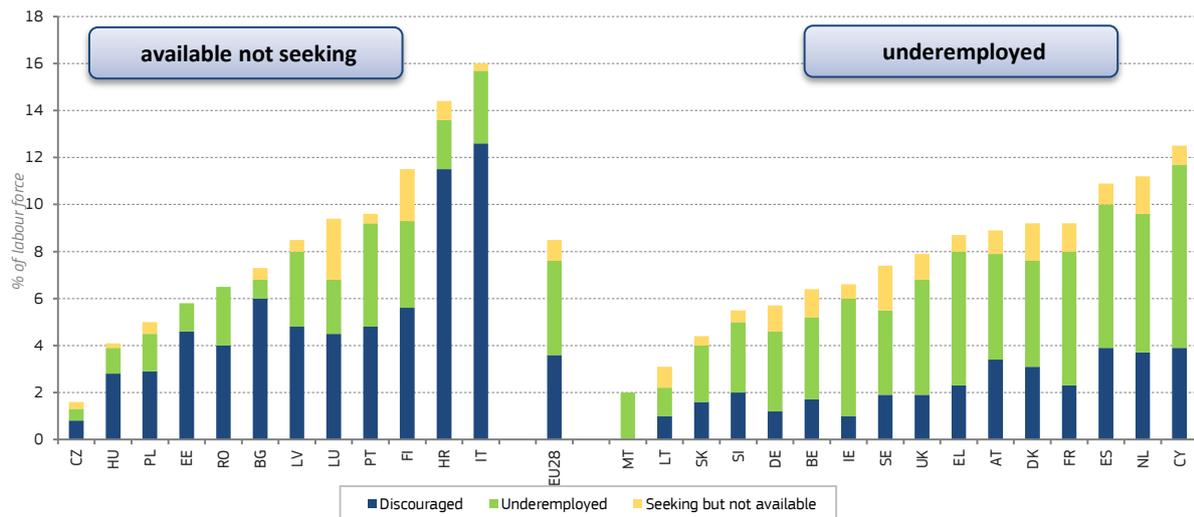
Job vacancy rates varied strongly across Member States in 2015, ranging from 2.5% in the United Kingdom, and 2.4% in Belgium and Germany to less than 0.5% in Latvia (in 2014). Cyprus recorded the sharpest decrease between 2008 and 2015, followed by the Czech Republic (**Chart 33**). Except for Finland, and to a lesser extent Spain and Austria, the vacancy rate in 2015 was higher than the vacancy rate in 2012.

Developments in the job vacancy rate are driven by structural as well as cyclical factors. During a downturn there will be fewer job vacancies: employers will have fewer incentives to post them (until there is a recovery in sight), while the unemployed will be more inclined to accept a job offer. Structural reforms may also affect the job vacancy rate where they improve workers' geographical or occupational mobility, increase the flow of information (such as under an enhanced EURES), and improve the quality and efficiency of public employment services. Nevertheless, while such structural reforms may increase the efficiency of matching people to jobs and thereby reduce the vacancy rates, better matching efficiency may also be an incentive for employers to post more vacancies.

<sup>(18)</sup> Not fully comparable as 2007 observation refers to NACE Rev. 1.1, and post 2007 data to NACE Rev. 2

<sup>(19)</sup> A job vacancy is a paid post that is newly created, unoccupied, or about to become vacant: for which the employer is taking active steps and is prepared to take further steps to find a suitable candidate from outside the enterprise concerned; and which the employer intends to fill either immediately or within a specific period of time. Vacancies may be created because of an increase in the size of the workforce, the need to replace workers (retirement or new skills demanded) or because workers are changing jobs. Job vacancies provide information on the level and structure of labour demand. They may reflect unmet labour demand, i.e. the number of job vacancies increases when unemployment is also increasing.

Chart 32: Supplementary indicators of unemployment, by predominant characteristics – 2016Q1

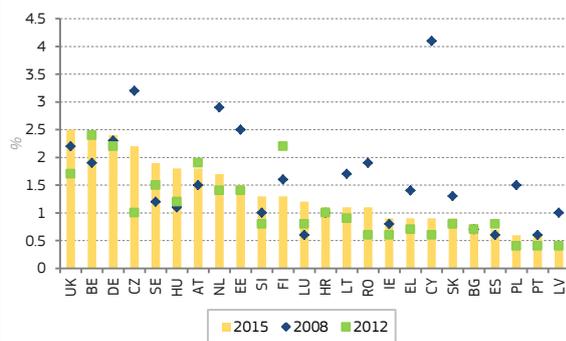


Note: The label 'available not seeking' covers Member States where the percentage of people available for work but not seeking it exceeds the percentage of underemployed people; the label 'underemployed' covers Member States where the percentage of underemployed people exceeds the percentage of people available for work but not seeking it; and the label 'neutral' covers Member States where the two percentages are broadly similar

Source: Eurostat, LFS (lfsi\_sup\_q)

[Click here to download chart.](#)

Chart 33: Job vacancy rates



Notes:

1. A job vacancy is defined as a post which is newly created, unoccupied or about to become vacant, which the employer intends to fill either immediately or in the future, and which the employer wishes and is taking active steps to fill with a suitable candidate from outside the enterprise concerned. The job vacancy rate JVR = number of job vacancies \* 100 / (number of occupied posts + number of job vacancies).

2. Industry, construction and services (except activities of households as employers and extra-territorial organisations and bodies)

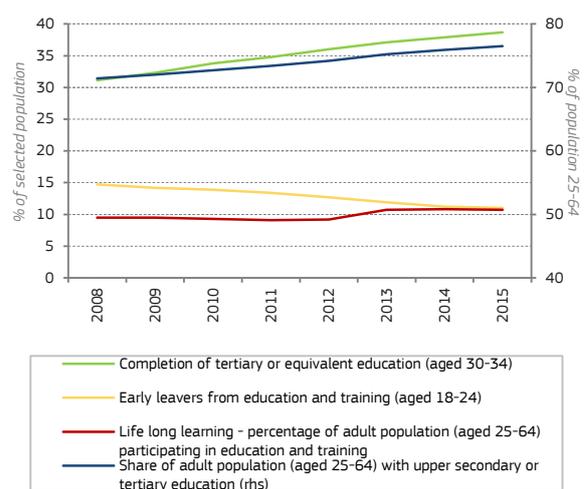
3. EL and LV 2014 observation instead of 2015

4. BE 2010, BG 2009, DE 2011, HR 2012, HU 2009, AT, 2009, FI 2009 instead of 2008

Source: Eurostat, Job Vacancy Statistics (jvs\_a\_nace2)

[Click here to download chart.](#)

Chart 34: Main education indicators – EU



Note: Life Long learning suffered a methodological change in 2013 that impacted the EU rate

Source: Eurostat, LFS (edat\_lfse\_03, edat\_lfse\_14, trng\_lfse\_03)

[Click here to download chart.](#)

## 2.4. Education and skill formation: some encouraging developments

In 2015 the share of early leavers from education and training declined, in line with the trend observed in previous years. The share of the adult population with upper secondary and tertiary education also continued to increase in 2015, even if at a slower pace than in previous years. Outcomes differ strongly across Member States.

A skilled workforce is the key to sustained productivity growth and job creation. Education is the path towards higher levels of skills in the population. Lately there have been several positive developments in the main EU education and training indicators (see Chart 34).

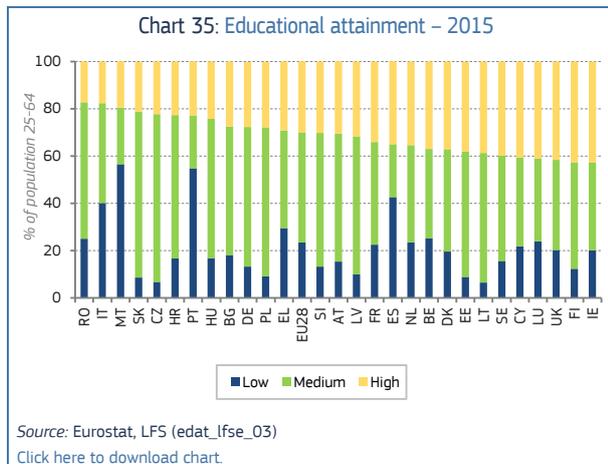
In 2015 the EU average rate of early leavers from education and training was 11%, down by nearly 3 pps since 2010 and down from 17% in 2002. At the same time, the percentage of the population aged 30-34 who had successfully completed tertiary studies increased, up from 23.6% in 2002 to 38.7% in 2015.

Currently 40% of employers report difficulties in finding candidates with the right skills, many of them stressing a lack of transversal skills among job applicants (see the New Skills Agenda for Europe) <sup>(20)</sup>.

A broad set of skills is now deemed important, from as early as practicable in life. Language and communication skills, E-skills and entrepreneurial skills are some examples. Entrepreneurial skills are still

<sup>(20)</sup> At <http://ec.europa.eu/social/main.jsp?catid=1223&langId=en>

quite low among the EU population: less than a quarter of students have had an entrepreneurship experience by the time they finish education. Socioeconomic background remains one of the main determinants of skills acquisition in schools <sup>(21)</sup>.



Initial Vocational Education and Training is a key source of skills and competencies for EU economies and can facilitate a smooth school-to-work transition. On average in the EU, 10.7% of adults aged 25-64 were in life-long learning in 2015. The gap in participation in adult education and training between low-skilled and high-skilled is large: 4.3% of low-skilled people are in education and training, compared to 8.8% of medium-skilled and 18.8% of high-skilled people.

Despite these positive developments at EU level, outcomes differ strongly across Member States (Chart 35). In some Member States - Malta, Portugal, Spain and Italy - 40% or more of the working age population have low educational attainment, with lower secondary school education or less: though the position is improving in younger cohorts (25-34 years).

### 3. SOCIAL COHESION REMAINS A CHALLENGE

*The share of the EU population living at risk of poverty or social exclusion decreased in 2015. Nevertheless, important downside risks remain stemming from persistent high unemployment rates and rising long-term unemployment inherited from the severe economic downturn. This is especially the case when households have low incomes and social protection transfers are insufficient.*

#### 3.1. Sources of household income

While total labour income in the EU, i.e. the compensation of employees and the income of the self-employed, had been on an increasing trend before 2008, it declined in 2009. This decline continued until the end of 2013, as a result of the decrease in

employment and increase in unemployment. In 2014, labour income resumed its growth, which continued throughout 2015 thanks to the recovery in the labour market <sup>(22)</sup>.

Persistent high unemployment rates and rising long-term unemployment carry the risk of exacerbating social exclusion among both jobless and employed people, where households have low incomes and social protection transfers are insufficient.

#### 3.1.1. Net earnings across EU Member States vary strongly

*The latest available data show that net earnings increased in most EU Member States in 2014 just as in 2013. Strong differences across Member states persist.*

The latest available data show that while net earnings (of a single person without children, earning the average wage and adjusted for price differences) have been rising in most Member States since 2012, strong differences across Member states persist. In 2014, net annual earnings in Bulgaria and Romania were only about one quarter of net annual earnings in Luxembourg (Chart 36). However, in Bulgaria earnings almost tripled between 2001 and 2014 (despite a small decrease (-0.5%) in 2014), while in Romania they more than doubled (growing by about 4.5% in 2014).

Within the Euro area <sup>(23)</sup>, net earnings in the Baltic Member States in 2014 were about one third of net earnings in Luxembourg and the Netherlands; in Portugal, Slovenia, and Slovakia they were less than half that level. Net earnings were lower in Ireland and Malta in 2014 than they had been in 2012, down by respectively 1.3% and 5.3%.

Outside the Euro area, net earnings were highest in the United Kingdom followed by Sweden – although in the United Kingdom these earnings were almost 9% lower in 2014 than in 2012. Between 2012 and 2014, Romania recorded the strongest increase at around 20%, followed by Poland and Bulgaria at around 13%.

#### 3.1.2. Labour income taxes differ considerably across Member States

*The gap between gross and net earnings remains wide in several Member States.*

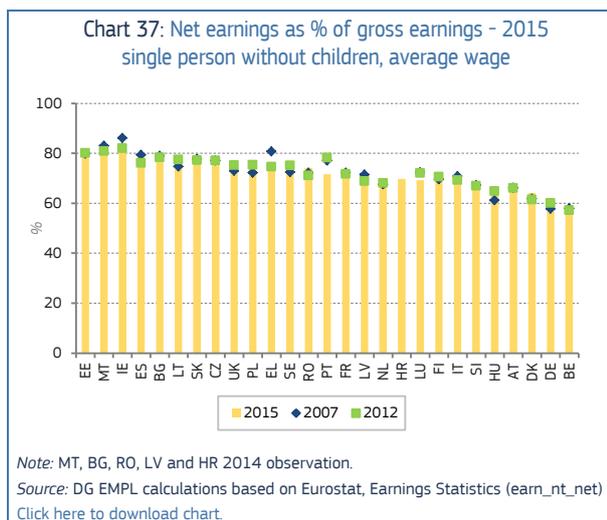
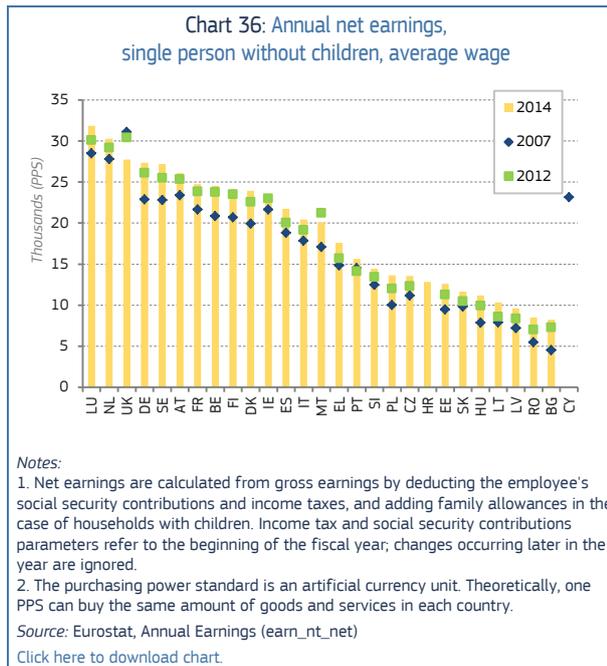
Annual net earnings (of a single person without children earning the average wage, after deductions of social security contribution and taxes) were less than 60% of gross earnings in Belgium in 2015 but more than 80% in Estonia and Malta (in 2014) (Chart 37). Among the Member States for which data are available, Sweden recorded the biggest increase between 2006 and 2015 (up by about 6 pps), while

<sup>(21)</sup> Idem at <http://ec.europa.eu/social/main.jsp?catId=1223&langId=en>

<sup>(22)</sup> See also Chapter 1 of this report for a description of the impact of the tax benefit system on household income.

<sup>(23)</sup> No recent data for Cyprus available.

Greece and Portugal recorded the biggest decreases (down by about 6 pps).



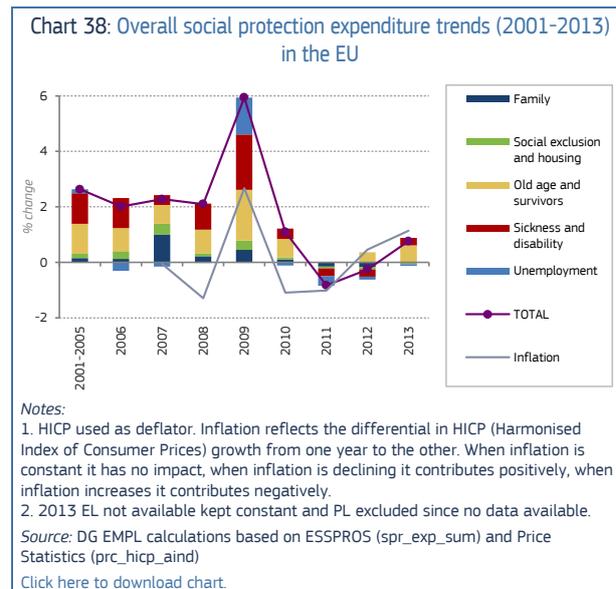
### 3.1.3. The contribution of social protection to household income

Social protection expenditure increased in real terms in the EU in 2015, following the rise seen in 2014 and 2013. Large differences can nevertheless be seen across EU Member States. As a share of GDP public social expenditure declined or remained unchanged reflecting the improvements in economic activity.

The latest available data on detailed expenditure show that social protection expenditure <sup>(24)</sup> in the EU played

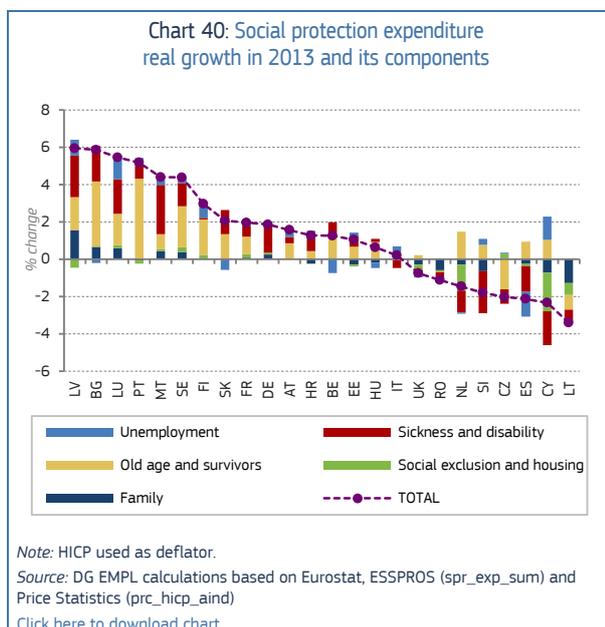
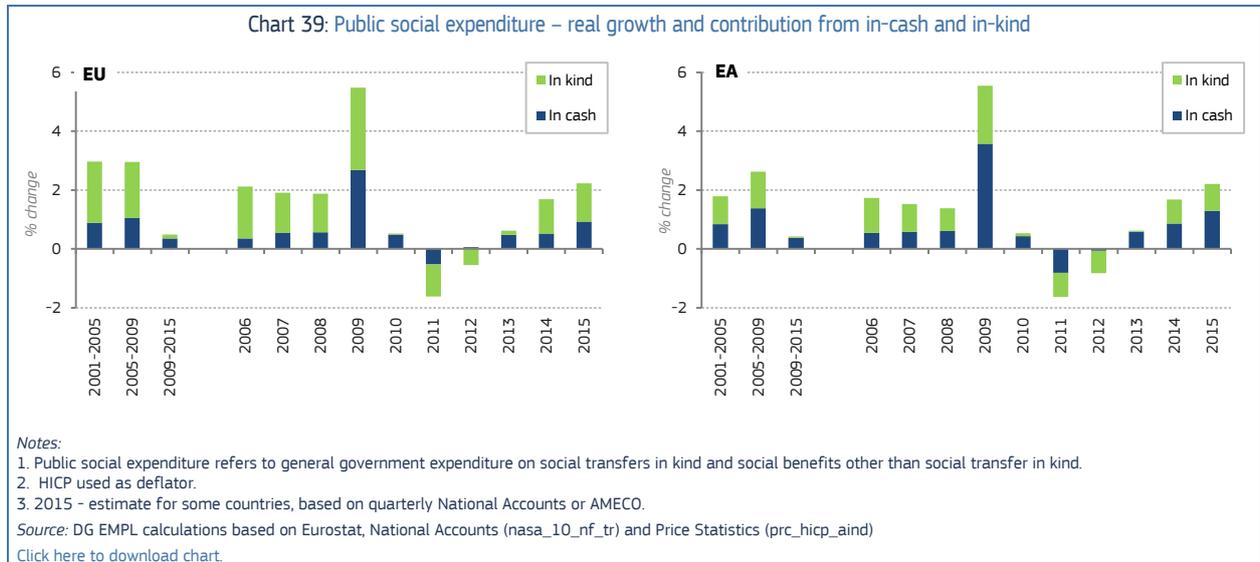
<sup>(24)</sup> Social protection expenditure generally helps to stabilise the economy in bad economic times, since social benefits partly compensate for the decline in households' market income. Unemployment benefits typically have a stabilising function, as do means-tested benefits of various sorts (related to social exclusion, family or housing). Health and pensions expenditure play a role too, but generally to a lesser extent, as this spending does not respond directly to a decline in market incomes.

a major role in stabilising incomes between 2007 and 2009 (Chart 38). In 2011-2012, however, all categories benefiting from social protection experienced cuts in real terms <sup>(25)</sup>, except people receiving old-age pensions in 2012. The available data suggest that social protection expenditure in the EU increased again in 2013, although not significantly. The 2013 increase was mainly due to a further increase in spending on old-age pensions, in part driven by demographic factors, and an increase in spending on health. At the same time, expenditure on families, housing, combatting social exclusion and unemployment stabilised.



At the level of individual Member States (Chart 40) social protection expenditure continued to decline in one-third of the Member States for which 2013 data are available.

<sup>(25)</sup> To reflect on trends in real social expenditure, the HICP is used as deflator. It allows for estimating the trend in the overall real value or purchasing power provided by social expenditure. Indeed, the HICP is a price index that reflects changes in a basket of goods and services, which appears closer to the actual expenditure on consumption of households in comparison to the deflator of household consumption from the National Accounts (which also for instance includes imputed rents).

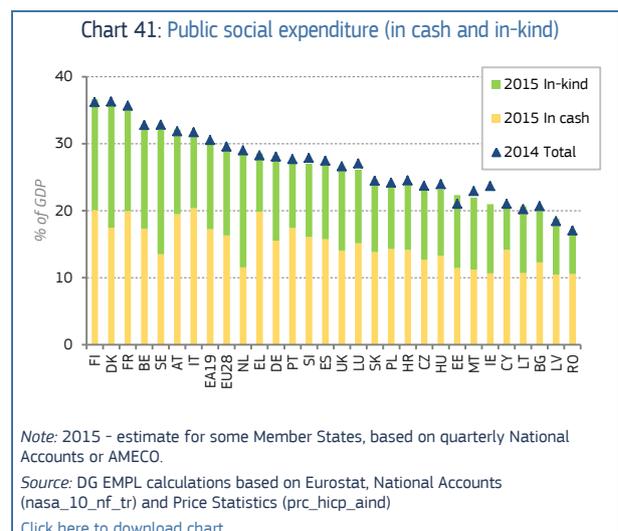


The latest available data based on national accounts (but not disaggregated by expenditure) show that in 2014-2015 <sup>(26)</sup>, while the economic environment continued to improve, both cash and in-kind public social expenditure increased in the EU and Euro area at a faster pace than in 2013. The increases in both types of expenditure in 2013-15 compensated for the declines observed between 2011 and 2012. While overall growth in 2014 and 2015 was similar for the EU and Euro area, in-kind expenditure was the major component of public social expenditure in the EU, while social transfers in cash contributed more in the Euro area (Chart 39).

Most Member States registered increases in public social expenditure in 2015, except Cyprus, Ireland and the Netherlands. However, in-kind benefits declined in Greece, the Netherlands and Ireland, while in-cash benefits declined in Hungary and Cyprus.

<sup>(26)</sup> National Accounts data is more timely than ESSPROS data, but it does not differentiate among expenditure functions.

In the EU as a whole, social protection expenditure as a percentage of GDP increased significantly in 2009 from around 26% to around 30%, but then showed smaller variations, remaining around 29-29.5% until 2015. Over the same period, the orientation of social protection expenditure by functions changed. Last year's report described in details the reasons for the changes in public spending on pensions, unemployment and families, up to 2012.



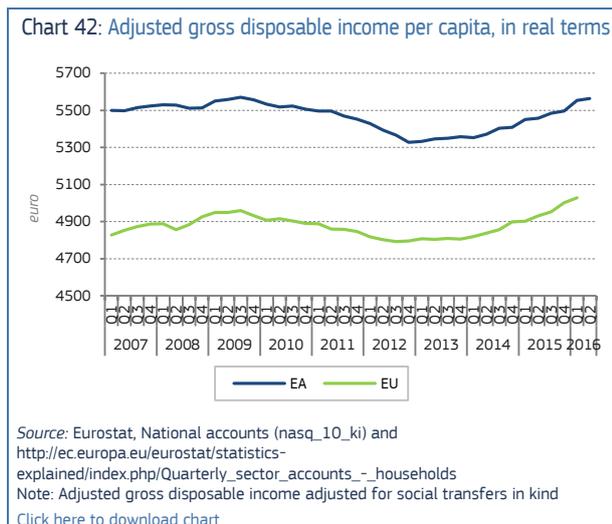
With the expansion in economic activity in 2014 and 2015, social benefits as a percentage of GDP declined or remained unchanged in most Member States (Chart 41). Only Ireland saw a significant decline, as the government limited both in-kind and in-cash expenditure.

### 3.2. Disposable household income

In the EU, disposable household income, which measures market income adjusted for taxes and social transfers, increased again in 2015 as in 2014, benefitting from expansion in economic activity and improved labour market circumstances. In the second quarter of 2016, adjusted gross disposable income per capita (in real terms) of the Euro area was still 0.14%

below the peak value recorded in third quarter of 2009.

Having reached a peak in the third quarter of 2009, household gross disposable income in constant prices started to decrease, bottoming out in the third quarter of 2012 in the EU and in the fourth quarter of 2012 in the Euro area (Chart 42). Subsequently, household gross disposable income increased again, reaching its previous high for the EU as a whole in the third quarter of 2015, while it was still 0.14% below its peak in the Euro area in the second quarter of 2016 (latest available data).



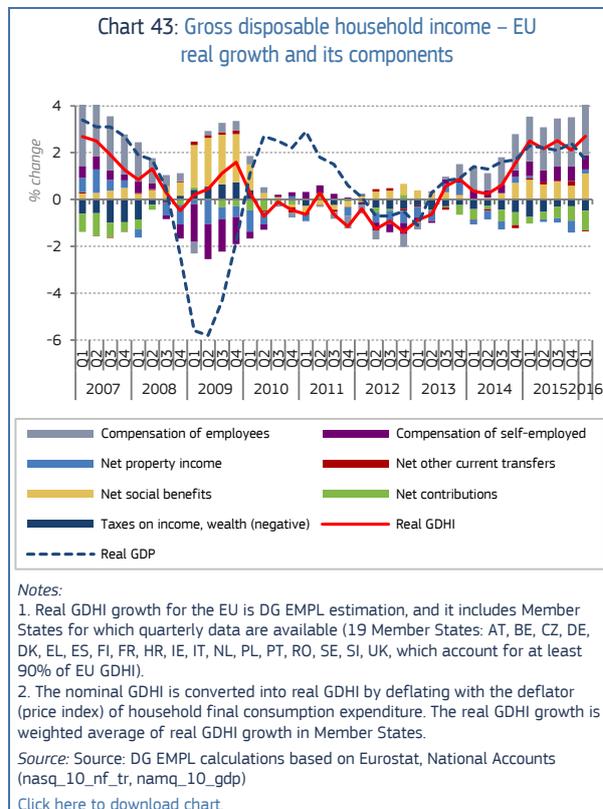
On average in the EU<sup>(27)</sup>, real growth in gross disposable household income (GDHI) remained above 2% in real terms in the year to the first quarter of 2016, reflecting improvements in nearly all Member States.

In 2014, labour income resumed its growth, mainly due to a recovery in the labour market which continued until mid-2016. Meanwhile, increases in social benefits supported the disposable income of households, while higher social contributions (together with taxes that have been increasing consistently except in the 2009 downturn) weighed down on it. The contributions of property income and other transfers have been mixed in that period (Chart 43).

Households in the lowest-income quartile have suffered the most from the intensification in financial distress over the crisis, as the need to draw on savings or to run into debt to cover current expenditures increased. Despite recent easing, about 9% of adults in low-income households are in debt and a further 15% draw on savings to cover current expenditure (this

<sup>(27)</sup> The real GDHI growth for the EU is a DG EMPL estimation. It includes Member States for which quarterly data are available (18 Member States: AT, BE, CZ, DE, DK, EL, ES, FI, FR, HR, IE, IT, NL, PL, PT, SE, SI and UK, which account for at least 90% of EU GDHI, PL and RO available up till 2012). The nominal GDHI is converted into real GDHI by deflating with the deflator (price index) of household final consumption expenditure. The real GDHI growth is a weighted average of real GDHI growth in Member States.

compares with 5% and 10% for the total population, respectively). Financial distress affects around 10% or less of households in the lowest income quartile in Austria, Estonia, Germany and Luxembourg compared with 30% or more of the poorest population in Belgium, Croatia, France, Greece, Italy, Slovakia and Spain.



### 3.3. Risk of poverty and social exclusion

The share of the EU population living at risk of poverty or social exclusion decreased to 23.7% in 2015 (23.0% in the Euro area). This rate corresponds to 118.8 million people at risk of poverty or social exclusion in 2015 (76.6 million in the Euro area). However, there are still 1.2 million more people living at risk of poverty or social exclusion than in 2008. The risk of poverty or social exclusion has decreased or stabilised since 2012 for most Member States, some at very high levels. In some Member States, poverty is still increasing, though some have also seen important declines<sup>(28)</sup>.

After increases between 2009 and 2012, the share of the EU population living at risk of poverty or social exclusion stabilised at about 24.5% and then decreased to 23.7% in 2015 (23.0% in the Euro area), according to the latest available data<sup>(29)</sup>. This rate

<sup>(28)</sup> Data for 2015 not available for Ireland, data as on 17 October 2016.

<sup>(29)</sup> The Europe 2020 target for reduction of poverty or social exclusion (AROPE) in the EU27 is set at 20 million compared with 2008 (which, assuming current population projections, would bring the AROPE rate down to around 19%). The AROPE indicator corresponds to the sum of persons who are at least in one of the situations: at risk of poverty or severely materially deprived or living in households with very low work intensity. These are:  
**At risk-of-poverty (AROP)** are persons with an equivalised

corresponds to 118.8 million people at risk of poverty or social exclusion. This level is almost 5 million lower than the peak of 123.6 million registered in 2012 but still 1.2 million above the 2008 level. In the Euro area, 76.6 million people were at risk of poverty or social exclusion in 2015, i.e. 1.2 million fewer than in 2014 when the Euro area registered its highest level, but still 5.5 million people above the level recorded in 2008. In summary, during the period 2008-2015 the number of people living at risk of poverty or social exclusion in the non-Euro area Member States decreased by 4.3 million whereas it increased by 5.5 million in the Euro area.

The improvement at EU level masks the different trends of the three components underpinning this indicator, i.e. relative poverty, material deprivation and joblessness.

disposable income below the risk-of-poverty threshold, which is set at 60% of the national median equivalised disposable income (after social transfers).

Material deprivation covers indicators relating to economic strain and durables. **Severely materially deprived (SMD)** persons 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.

**People living in households with very low work intensity (JLH)** 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.

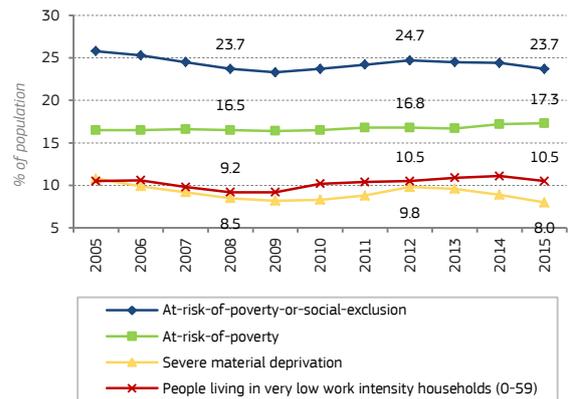
**Note on the reference year:** EU-SILC data, used in poverty and inequality indicators, reflect incomes of the previous year (except for the UK and Ireland where incomes refer to interview period). EU-SILC data reflect also activity status of the previous year. So the 2015 survey year reflects the 2014 income year and the activity status in 2014.

In this chapter the survey year is chosen as a reference year (not the income year). This choice is for consistency with indicators commonly used: Eurostat indicators and most of EMPL monitoring tools and reports use the survey year, moreover AROPE combines AROP, JLH (previous year) and SMD (survey year). The 2015 reference year is based on EU-SILC 2015 (2014 income data).

However, the analysis in chapters 1 and 2 uses the income year as a reference year. The 2014 reference year is based on EU-SILC 2015.

**Note on equivalised income:** 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 equivalisation factor. This indicator gives a weight of 1.0 to the first person aged 14 or more, a weight of 0.5 to other persons aged 14 or more and a weight of 0.3 to persons aged 0-13.

Chart 44: At risk of poverty or social exclusion rate and its components – EU27



Note: AROPE combines AROP, SMD and JLH (Jobless Households with zero or very low work intensity). JLH: % of population aged 0 to 59; AROPE, AROP: income of the previous year; SMD: current year; JLH: status in the previous year.

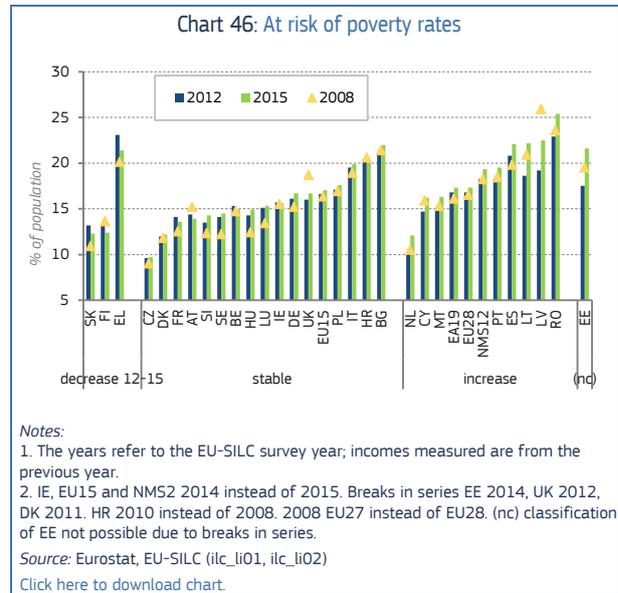
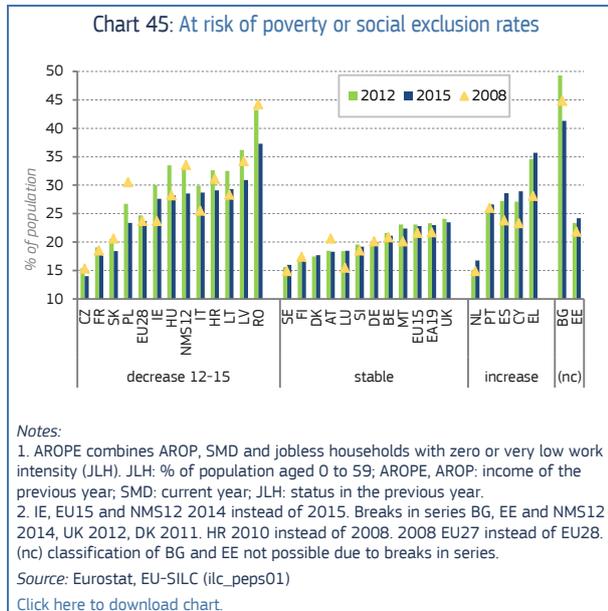
Source: Eurostat, EU-SILC (ilc\_peps01, ilc\_li02, ilc\_mddd11, ilc\_lvhl11)

[Click here to download chart.](#)

First, relative poverty stabilised according to 2015 EU-SILC data (reflecting incomes in 2014), after having increased in the previous year. This increase reflected the weak economic and labour market situation until mid-2013, and the subsequent upward shift in the poverty threshold as household incomes started to recover in mid-2013. Second, while a weak labour market resulted in an increase in the number of people living in jobless households, the rebound produced a decrease in joblessness in 2015. Third, severe material deprivation has been declining since 2013, mainly driven by strong decreases in a few Member States, i.e. Bulgaria, Estonia, Hungary, Italy, Latvia, Lithuania, Poland and Romania (Chart 44).

Important differences in performance between Member States or groups of Member States persist (Chart 45). The risk of poverty or social exclusion has decreased or stabilised in most of the Member States since 2012. Notable declines were recorded in Hungary, Croatia, Latvia, Lithuania, Poland and Romania, while in Cyprus and the Netherlands the rates are still much higher than in 2012.

Overall, less than a quarter of the total population was at risk of poverty or social exclusion in 2015, with the highest proportions (about 40%) recorded in Bulgaria followed by Romania and Greece (more than one third). The lowest proportions of people at risk of poverty or social exclusion are to be found in the Czech Republic, Finland, the Netherlands and Sweden.

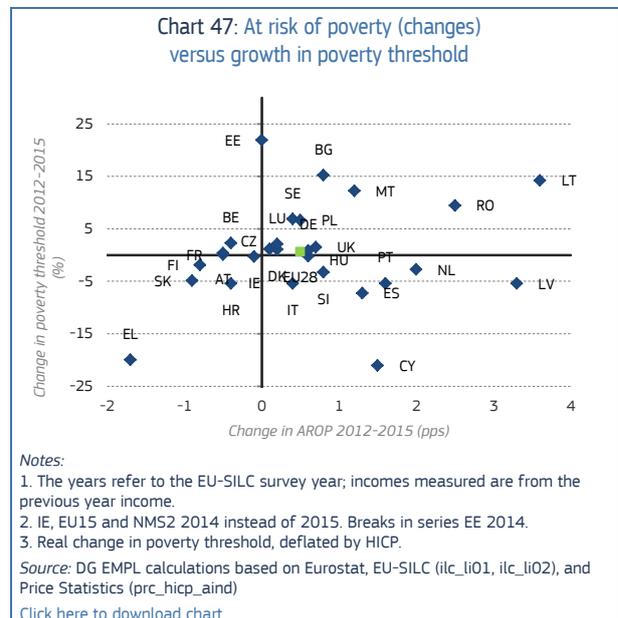


### 3.3.1. Relative poverty: recent stabilisation

Relative poverty for the EU as a whole remained broadly unchanged according to 2015 EU-SILC data (reflecting incomes in the preceding year). This rate corresponds to 86.7 million people at risk of poverty.

Estimates based on the 2015 EU-SILC survey put the at-risk-of-poverty rate for the income year 2014 at 17.3%, about the same level as in the previous year and 0.5 pps higher than in the income years 2010-2012. That increase of half a percent of the EU population represented around 3 million more people being at risk of poverty, mostly in Germany, Romania, Spain and the UK. This higher number of people at risk of poverty could be partly linked to the upward shift in the poverty threshold, the first in five years, as household incomes started to recover in mid-2013. The at-risk-of-poverty rate of 17.3% represented 86.7 million people in the EU.

Relative poverty intensified in several Member States since the 2012 EU-SILC survey, in particular in Latvia, Lithuania and Romania. This outcome must be seen in the context of the significant increase in the poverty threshold, especially in Latvia and Lithuania, reflecting improvements in the economic situation. Relative poverty was lower according to the 2015 EU-SILC than in 2012 in Croatia, Greece Finland and Slovakia (Chart 45). However, in Greece this decline must be seen in the context of a significant decline in poverty thresholds, reflecting an overall deterioration in overall economic performance (Chart 47).



### 3.3.2. Severe material deprivation: declines since 2013

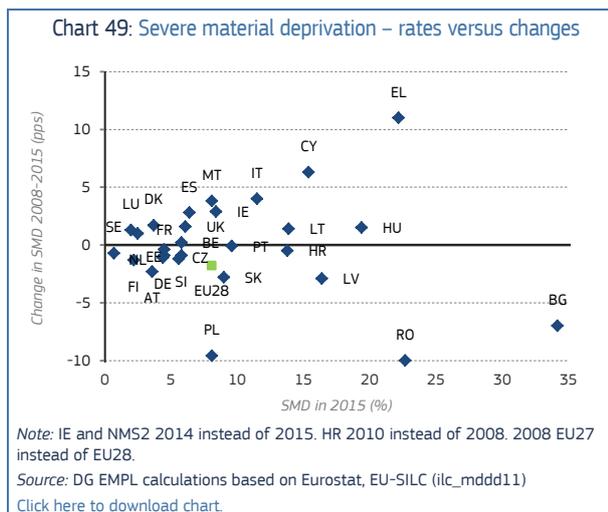
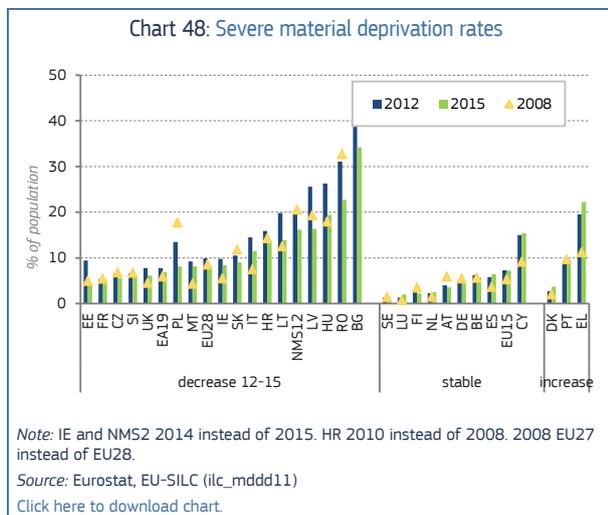
The share of people suffering from severe material deprivation in the EU decreased in 2015 to 8.1%, reinforcing the decline seen in 2013 and 2014. However, there were still 40.3 million people in the EU suffering from severe material deprivation in 2015. Severe material deprivation has increased in some Member States since 2012.

At the start of the economic crisis in 2008, severe material deprivation (SMD) surged. However, as the financial situation of households in the EU started to improve in 2013, SMD declined. The subsequent declines in the number of people suffering severe material deprivation were: 1.6 million in 2013, 3.4 million in 2014 and 4.3 million in 2015.

Most Member States recorded a decrease in the proportion of people facing severe material deprivation between 2012 and 2015, especially in Bulgaria, Estonia, Latvia, Lithuania, Hungary, Poland and

Romania, which (except for Bulgaria and Lithuania) showed a strong decrease in 2015 (Chart 48). Several Member States have shown improvements only in recent years. Increases in 2013 or 2014 in Ireland, Portugal, Belgium, the Netherlands, Malta, Slovenia and Spain, the UK were followed by falls in 2015. Greece remained in the most serious situation, as severe material deprivation continued to deepen for several years till 2015. Severe material deprivation in Denmark, Luxembourg and the Netherlands, although among the lowest in the EU, continued to increase for several years.

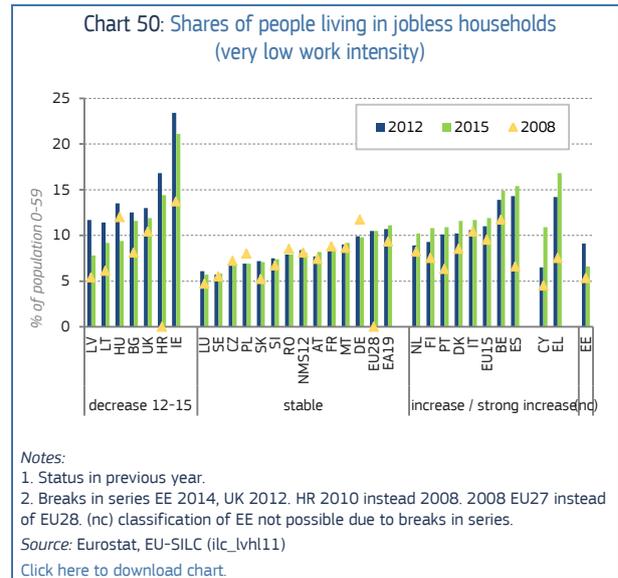
Also, some Member States - Cyprus, Greece, Italy and Malta - have yet to bring SMD rates back down to 2008 levels, even though those 2008 levels were relatively high. Only Bulgaria, Poland and Romania have recorded significant decreases (7 pps or more) since 2008 (Chart 49).



### 3.3.3. Jobless households: some declines in 2014

In 2015, 11.1% of people aged 0-59 reported that they belonged to a household with zero or very low work intensity. This was a return to rates observed in 2012.

The share of people aged 0-59 living in a household with zero or very low work intensity was 10.5% in 2015. The comparable figure was 9.2% in 2008-2009 and 10.5% in 2012 (Chart 50).



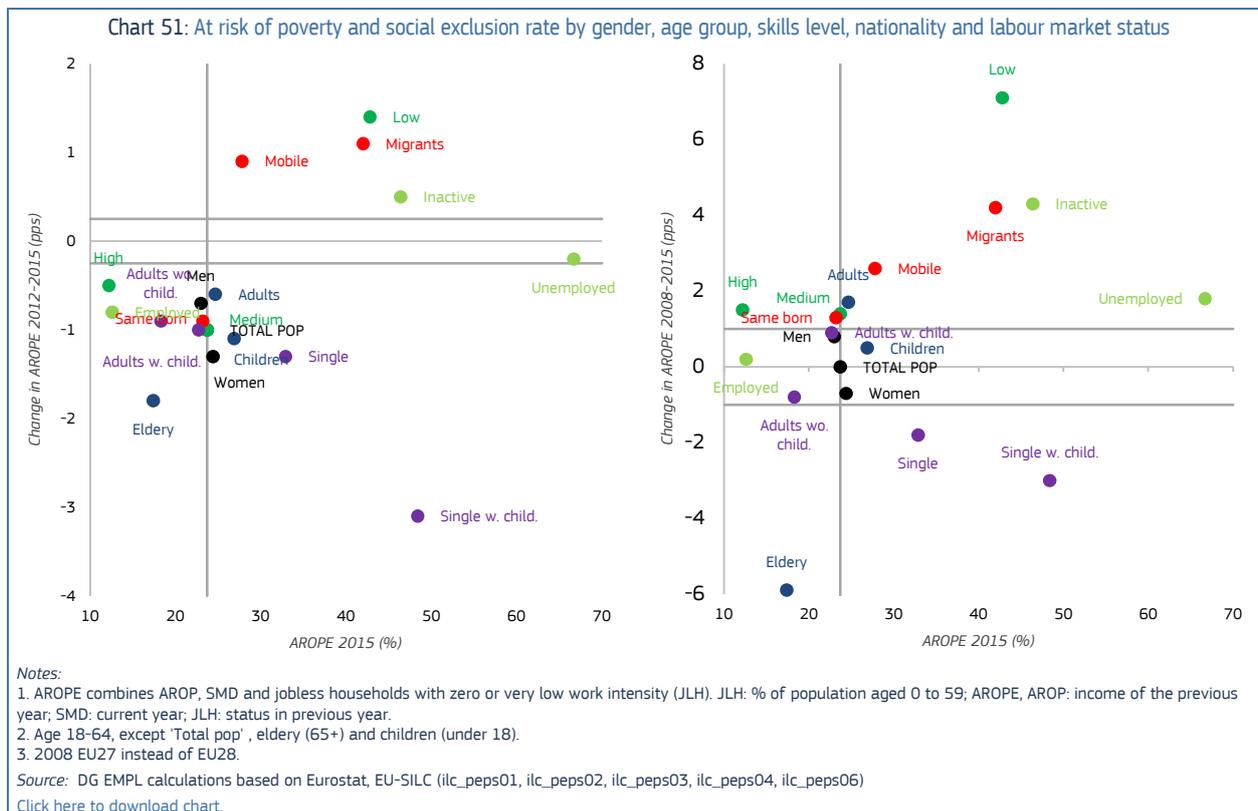
Nevertheless, strong differences across Member States persist. Joblessness intensified in several Member States between 2012 and 2015, in particular in Cyprus, and Greece – though Greece recorded a decline in 2015. Despite recent declines, around 15% of people aged under 60 live in jobless households in Greece and Spain and more than 20% in Ireland.

### 3.3.4. Groups most affected by poverty and social exclusion

The risk of poverty or social exclusion declined in the EU between 2012 and 2015, with declines across most population groups.

In terms of the risk of poverty or social exclusion, some population groups have approached their 2008 level (Chart 51, left panel). While the AROPE decreased for the elderly, adults without children and single people, some other groups have been severely affected by the crises (low-skilled, migrants, inactive) (Chart 51, right panel).

Among migrants (the non-EU born residents), almost half of those aged over 18 (40% in 2015) are at risk of poverty and social exclusion. This is almost double the rate of native-born people. The same is true of severe material deprivation which affects 15% of the non-EU born residents in the EU compared with 7% of native-borns in 2015. Even when in employment, 22% of all non-EU borns still find themselves at risk of poverty, considerably more than the native-born (8% according to 2015 EU-SILC data). This persistent adverse outcome is at least partly attributable to the fact that the share of early leavers from education and training amongst the non-EU born is double the share amongst native-born young people aged 18-24 years and that the non EU-born population shows lower-than-average activity and employment rates,



with an activity gap of 4.2 pps on average compared with the native population (age class 20-64). For more details on migrants see CHAPTER 3 of this report.

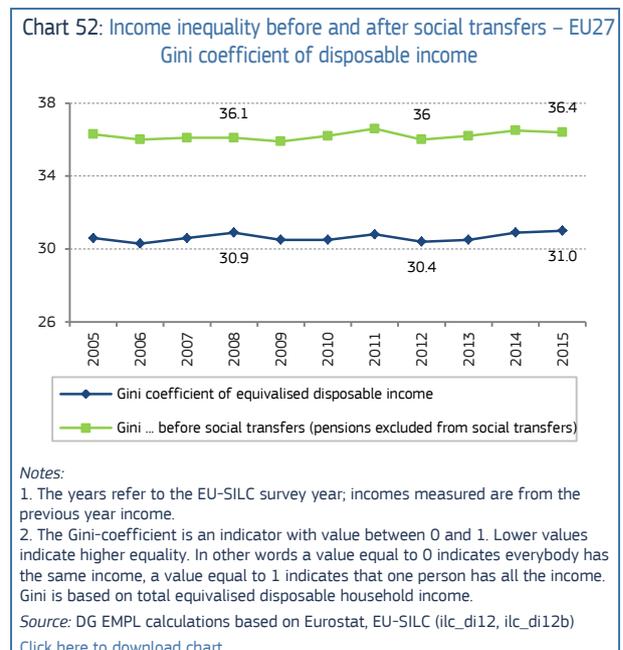
### 3.4. Inequality

*Income inequality, both before and after transfers, has stabilised according to the latest EU-SILC data. The significant gap between income inequality before and after tax and transfers reflects the important role that tax-benefit systems play in the EU in reducing market income inequality.*

Income inequality can refer either to market incomes or to disposable incomes. The former refers to the gross incomes earned by individuals or households before any redistribution via taxes and transfers, while the latter refers to final outcomes taking into consideration the effects of redistributive policies (possibly also including the availability and provision of in-kind benefits and services)<sup>(30)</sup>. The redistributive effects of the tax/benefit systems in the EU contributes strongly to reducing market income inequalities<sup>(31)</sup>.

An increase in the risk of poverty or social exclusion may indicate an increase in income inequality. Income inequality before transfers grew slightly according to EU-SILC results from 2012 to 2014, stabilising in the last year for which data are available. The

redistributive effects of taxes and transfers play an important role in significantly reducing inequalities (Chart 52). Their impact was strong in 2012 but weakened thereafter. However, the previously-observed convergence in levels of income inequality across the EU stopped with the crisis.



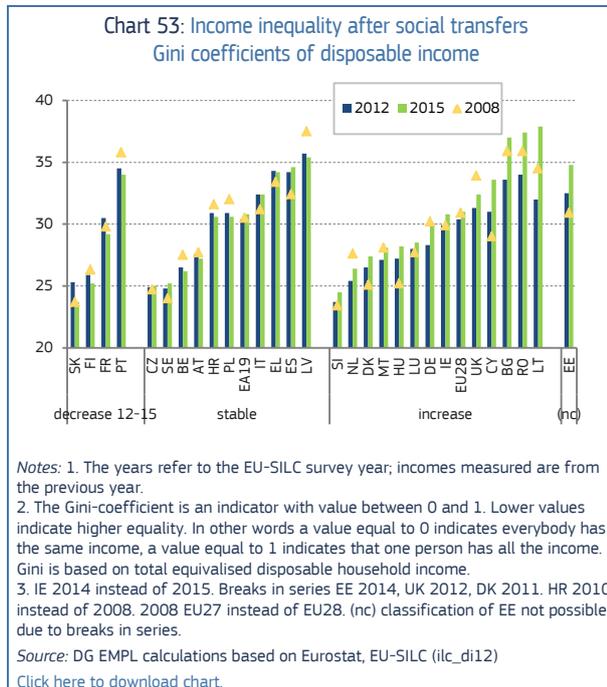
#### 3.4.1. Inequality grew in many Member States

Inequality grew in around half of the Member States between the 2012 and 2015 EU-SILC surveys, most strongly in Estonia, Cyprus, Bulgaria, Romania and Lithuania. Over the same period, the most notable

<sup>(30)</sup> It should be noted that inequality can be measured for different outcomes (such as income and wealth) and opportunities. See for instance, Maquet (2015), 'High and rising inequalities; what can be done about it (at EU level)?', Analytical Web Note 6/2015 available at <http://ec.europa.eu/social/BlobServlet?docId=14556&langId=en>

<sup>(31)</sup> See also Chapter 1 of this report.

decreases could be observed in Slovakia and France. Compared with the 2008 EU-SILC results, there has been little change in inequality for the EU as a whole, with roughly the same number of countries experiencing increases in inequality as there were experiencing less inequality (Chart 53).



With a Gini-coefficient close to or below 0.25, Slovakia, Slovenia, the Czech Republic, Sweden and Finland are the countries with the lowest inequality; Belgium and the Netherlands are slightly above that level, but still far below the European average. The high-inequality Member States include those where inequality rose fastest over recent years, but this was not necessarily a linear trends since the crisis. Indeed, Bulgaria, Romania and Lithuania had first experienced declining inequality before a steep increase over the latest years for which data are available.

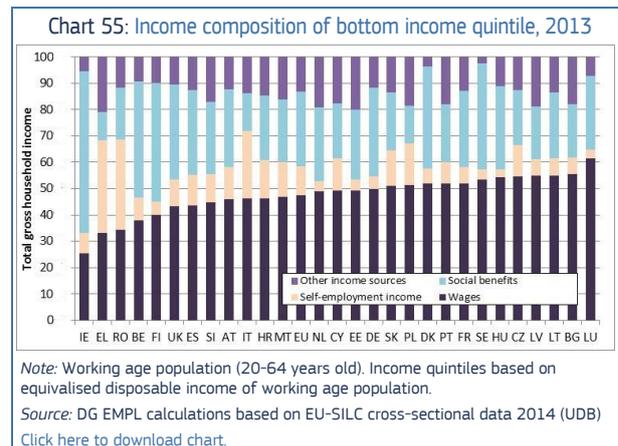
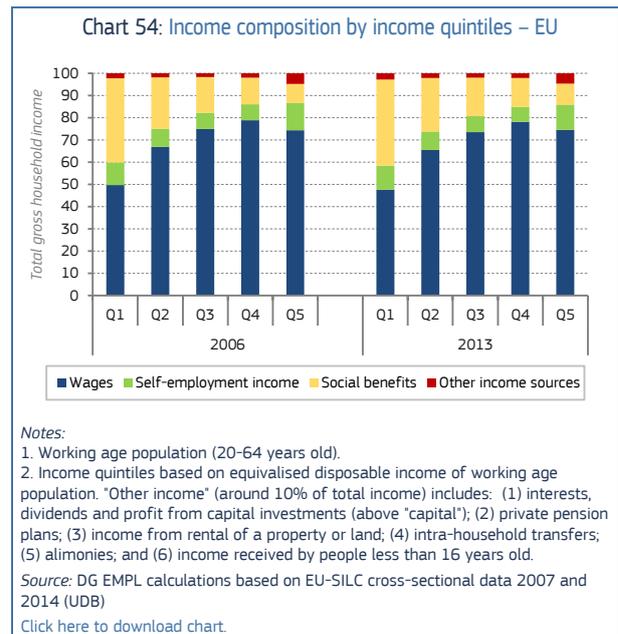
### 3.4.2. Distribution of household incomes

Wages represented the largest share of household income in all income quintiles among the working age population.

Between 2006 and 2013, the wage share slightly declined in all quintiles except for the top quintile (Chart 54). At the same time, the wage share increased as part of total income, while the share of social transfers gradually decreased.

The share of wages in total income of the bottom quintile differs strongly across Member States. In most Member States, wages represent more than 50% of all household income in the bottom income quintile. In Ireland, Greece, Romania and Belgium, the wage share of total gross household income is below 40%. In Greece and Romania this is mainly due to the high

importance of income from self-employment (Chart 55).



### 3.4.3. The gender pay gap persists

For the EU as a whole, average gross hourly earnings of male employees were about 16% higher than those of female employees in 2014. The gender pay gap has nevertheless declined since 2007. At the same time, the gap in average weekly working hours between men and women decreased from about 7 hours in 2008 to about 6 and a half hours in 2014 and 2015.

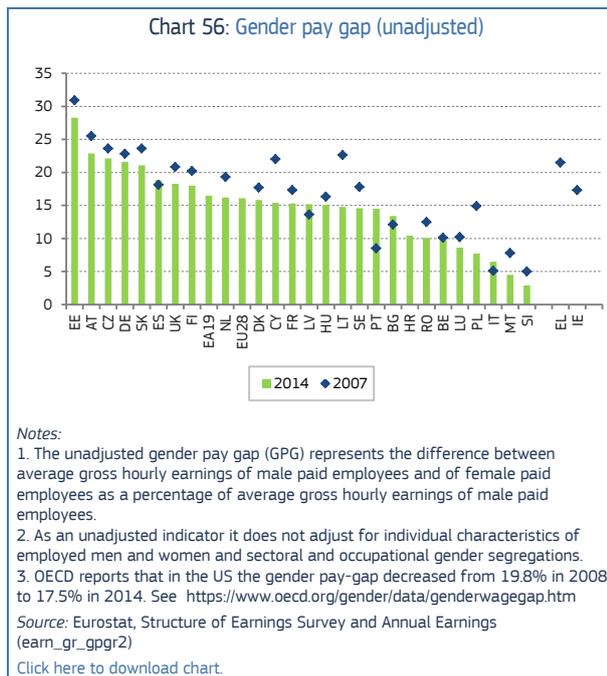
Strong gender differences in pay persist across EU Member States<sup>(32)</sup>. This is due to a number of factors which include the fact that management and supervisory positions are more likely to be held by men, while women are more likely to take time off work to take care of dependent family members or relatives for example<sup>(33)</sup>.

<sup>(32)</sup> Not taking into individual or sectoral characteristics. See also Chapter 2 of this report for an analysis that highlights that women are most likely to be over represented at the bottom of the wage distribution compared to men.

<sup>(33)</sup> The gender overall earnings gap stood at 41% in the EU in 2010 (i.e. the most recent observation). The gender overall

In 2014, Estonia recorded the widest gender pay gap (among the Member States for which the data are available) at 28%, though this gap is less than in 2007 (Chart 56). Slovenia recorded the smallest gender pay gap (just below 3%), followed by Malta, Italy, Poland, Luxembourg and Belgium. In Austria, the Czech Republic, Germany and Slovakia the gender pay gap was above 20%.

In most Member States (for which the data are available) the gender pay gap decreased in 2014, with the strongest decrease to be found in Lithuania, Poland, and Cyprus (at more than 6 pps). Portugal recorded by far the strongest increase (up by 6 pps), followed at some distance by Latvia, Italy and Bulgaria.



## 4. CONCLUSION

As economic recovery reaches its fourth year, the ground has been laid for further job creation and a continuing, albeit slow, fall in unemployment. Total employment (232.1m) in the EU now exceeds pre-crisis levels and is at a record high; it is expected to continue to increase. Unemployment is on a declining trend, although at 8.6% in the second quarter of 2016 it is still above the pre-crisis level of 7%. The labour market participation of women and older workers has continued to increase. The employment rate of women (although still significantly below that of men: 64.3% compared with 75.9% in 2015) has continued to rise. Imbalances in cost competitiveness caused by wage developments are being corrected, and access to credit is improving, especially for small and medium

earnings gap measures the impact of three combined factors on the average earnings of all women of working age - whether employed or not employed - compared to men. The three factors are: average hourly earnings, the monthly average of the number of hours paid (before any adjustment for part-time work) and the employment rate.

enterprises which are an important source of job creation.

Despite these positive developments, important challenges remain. The number of people available for but not seeking work is nearly 25% higher than before the crisis, while underemployment has increased and youth employment (at 20%) remains very high, as do long-term and very long-term unemployment. Furthermore, although labour markets have continued to recover in most Member States, there are substantial differences between Member States: for example, unemployment at the end of 2015 was 4.5% in Germany and the United Kingdom but 25% in Greece.

Persistently high unemployment and rising long-term unemployment carry the risk of exacerbating social exclusion among both jobless people and those in precarious or part-time employment, where households have low overall incomes and social protection transfers are insufficient. Net earnings are rising in most Member States but, again, strong differences persist between Member States. Disposable household income, although increasing, was in the second quarter of 2016 still 0.14% below the peak value recorded in the Euro area in the third quarter of 2009.

The proportion of people living at risk of poverty or social exclusion (23.7% in 2015) has been decreasing or stabilising in most Member States, but remains at very high levels in some Member States. Overall, in 2015, about 119 million people were at risk of poverty or social exclusion, down from its peak in 2012 by about 4.8 million people. Income inequality was higher in 2014 (latest EU-SILC data available) than in 2012, with substantial differences across Member States both regarding levels and recent trends.

The risks to social cohesion therefore remain significant. Reducing those risks depends crucially on securing further improvements in labour market performance across all Member States.

## CHAPTER 1

# Convergence and divergence in the E(M)U and the role of employment and social policies

### INTRODUCTION<sup>(34)</sup>

One of the fundamental objectives of the EU is to improve the lives of its citizens by promoting convergence. This chapter analyses the extent to which employment and social performance converged in the EU and within the Euro area in the period leading up to the economic crisis of 2008 and diverged after it; and whether this divergence has been reversed since the beginning of the recovery. It also discusses how employment and social policies can foster convergence towards better employment and social outcomes in the EU and the euro area <sup>(35)</sup>.

This chapter looks at convergence and divergence in key socio-economic outcomes such as GDP per head, incomes and earnings inequality, poverty, wages, competitiveness, employment and unemployment rates, and also more specifically the incomes of working-age households. It then considers the economic adjustment to shocks within the Euro area and reviews the employment and social policies that can help to strengthen convergence of socio-economic outcomes, specifically unemployment benefits, active labour market policies, and minimum incomes. The potential impact of closer policy convergence on social

and employment outcomes in the EU and more specifically in the Euro area is also discussed.

### 1. CONVERGENCE AND DIVERGENCE OF SOCIO ECONOMIC OUTCOMES IN EUROPE

The convergence of economic and social performance that had been under way across the EU over the previous two decades came to a halt with the crisis in 2008, although this has recently begun to stabilise and indeed to reverse. <sup>(36)</sup> Key dimensions to be considered in this respect are essential drivers of GDP and inequalities, namely wages (and competitiveness) and employment and unemployment rates, as well as income developments among the working age population, which has been most severely affected by the crisis.

#### 1.1. Convergence and divergence in GDP

GDP per head had been growing steadily in the decade before the crisis, but the crisis started a period of stagnation in most Member States (see Main Employment and Social Developments chapter). The economic recovery enabled average GDP per head to return to pre-crisis levels in the EU28 by 2015. However, this has not yet been achieved in the Euro area and there are differences across Member States.

<sup>(34)</sup> This chapter was written by Olivier Bontout, Alessia Fulvimari, Lina Salanauskaitė and Maria Vaalavuo, with contributions from Zeldia Azzara and Matteo Duiella.

<sup>(35)</sup> For earlier discussion on convergence and divergence in E(M)U, see European Commission (2015) and for example Caminada et al. (2010) on the convergence in social protection spending, replacement rates and poverty indicators between the mid-1980s and early 2000s.

<sup>(36)</sup> Convergence analysis can take different forms see Box 1.1.

Box 1.1: Measuring convergence

There is a distinction to be made between nominal and real convergence. Entry into the euro is conditional on fulfilling the Maastricht criteria, which can be seen as nominal convergence (convergence in inflation, interest rates, exchange rate variability and fiscal variables). The euro is nevertheless intended to support real convergence, defined in terms of GDP per head, by fostering economic integration (see European Commission (2008c)) and the focus in this chapter is thus on real convergence and structural convergence of policies, but not on nominal convergence (for a discussion of the different types of convergence, see for instance Buti, M. and A. Turrini (2015)).

Convergence analysis can take different forms: convergence in levels (Beta-convergence) or in variability (Sigma-convergence). In the current context, convergence in variability refers to a reduction of disparities over time between countries in terms of indicators such as level of income, and usually measured in terms of the standard deviation or coefficient of variation (the ratio of the standard deviation to the mean). Convergence in levels refers to a situation such as where incomes in poorer countries grow faster than those in richer ones, which is usually measured in terms of changes in incomes in poor countries over time against their initial income levels. The two concepts of convergence are closely related with Beta-convergence being necessary but not sufficient in order to achieve Sigma-convergence <sup>(1)</sup> <sup>(2)</sup>. In this chapter we use mostly the coefficient of variation as a measure of convergence.

<sup>(1)</sup> See, for example, Young, Higgins and Levy (2008) and Monfort (2008).

<sup>(2)</sup> Other indices exist (for instance the Gini coefficient, the Atkinson index, the Theil index and the Mean Logarithmic Deviation).

GDP per capita divergence reflects adverse developments in some Member States

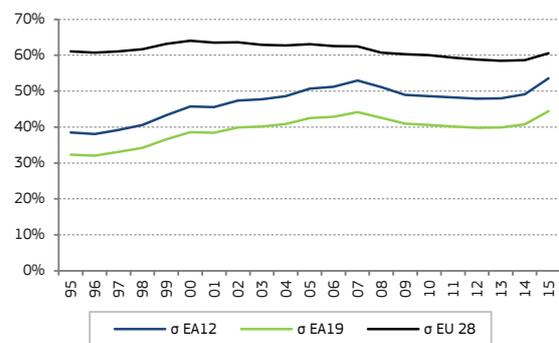
The dispersion of GDP per head since 1995 has been fairly stable, with some convergence within the EU28, as the result of the catching-up process, and some slightly divergent trends in EA19 (Chart 1.1). This reflected a pre-crisis decline in dispersion between main geographical zones (see chart 1 and description in annex), which came to a halt when the 2008 crisis hit and was reversed in relative terms. Member States that had joined in the 2000s caught up to some extent (see Chart 1.2 and ESDE 2014),<sup>(37)</sup> while GDP per head of the Nordic Member States outside the Euro area remained broadly stable (also reflecting potential changes in exchange rates against the Euro).

In the Euro area, changes in GDP per head have been more varied, with Member States in the south and east losing ground mainly from the mid-2000s and resuming growth in 2014-15. Conversely, for those in the centre levels of GDP per head remained broadly stable in comparison with the EU28. All in all, while the gradual catching-up process appeared consistent with previous decades <sup>(38)</sup>, since the mid-2000s and the crisis in 2008-09, convergence patterns in the Euro area have come to a halt.

<sup>(37)</sup> See, also ECB (2015).

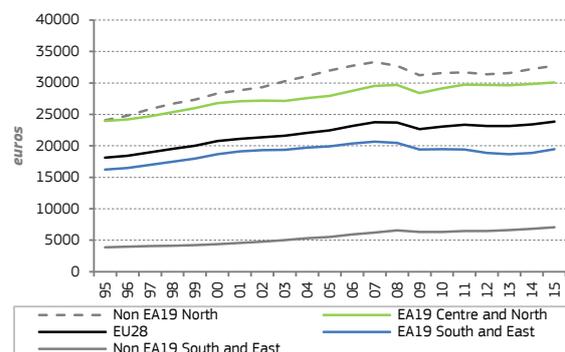
<sup>(38)</sup> See, for instance, Barro and Sala-i-Martin (1991) or Sala-i-Martin (1996).

Chart 1.1: Overall dispersion in GDP per capita in Europe (2003-2013)



Note: MT missing values 1995- 1999 kept constant for the calculation of averages. Source: Eurostat. [Click here to download chart.](#)

Chart 1.2: GDP per capita by Zones in Europe (2003-2013)

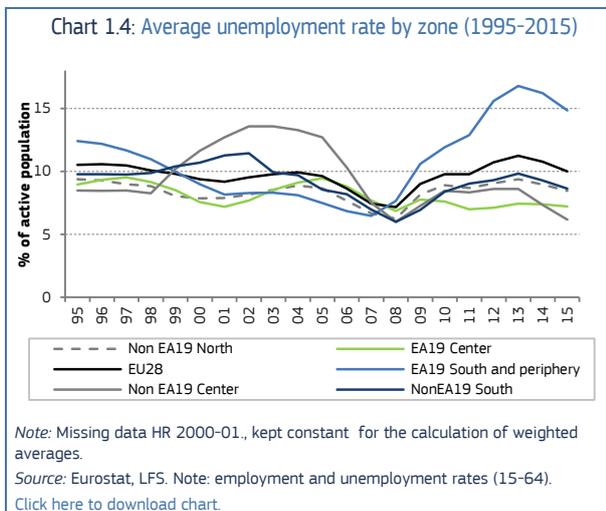
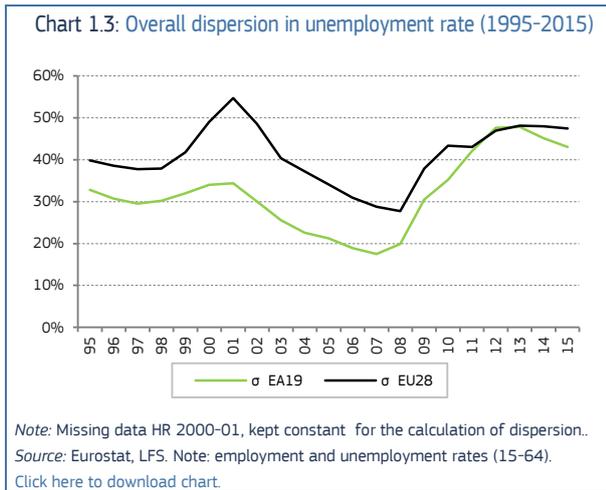


Note: MT missing values 1995- 1999 kept constant for the calculation of weighted averages. Source: Eurostat. [Click here to download chart.](#)

1.2. Convergence and divergence in employment and unemployment

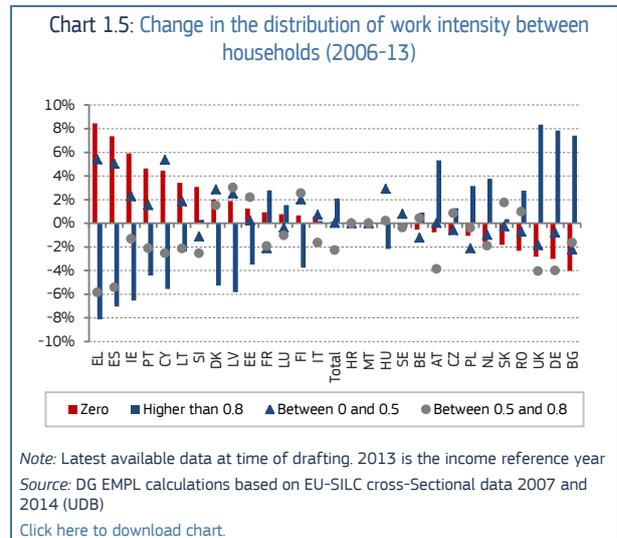
The decade before the onset of the crisis was marked by some EU-wide convergence in both employment

and unemployment rates <sup>(39)</sup>. However, underlying this convergence was an unsustainable combination of diverging unit labour costs, low productivity growth (see section 1.4), and declining real interest rates (see section 1.5). From 2008-09, employment and unemployment rates diverged again, mainly due to adverse developments in the Euro area. This reversal stopped in 2013 and in 2014-15 rates converged again. Trends in unemployment rates showed a strong divergence in the crisis (Chart 1.4) and stabilisation since 2013. It should be noted, however, that this was accompanied by a relatively small fall in activity rates <sup>(40)</sup>.



These trends in employment and unemployment were accompanied by a polarisation of employment between households within Member States. In some Member States, there have been very significant shifts in the distribution of work intensity among households since the pre-crisis period (Chart 1.5). These were either shifts towards more households with low work intensity of 0-50% (in particular in Greece, Spain, Ireland, Portugal, Cyprus and Lithuania) or shifts

towards more households with work intensity above 80% (in particular in Bulgaria, Germany and the UK). The situation was fairly stable in around one third of Member States (France, Luxembourg, Finland, Italy, Croatia, Malta, Hungary, Sweden and Belgium).



### 1.3. Convergence and divergence in household incomes

#### 1.3.1. Increasing income inequality with less differences between countries

Income inequality is usually measured by the Gini coefficient (which runs from 0 representing full equality to 1 representing total inequality).<sup>(41)</sup> There is growing evidence that higher income inequality can have adverse consequences for sustainable growth, macro-economic stability, investment in human capital and job creation <sup>(42)</sup> <sup>(43)</sup>. For example, a 3 points increase in inequality <sup>(44)</sup> appears to be associated with a 0.35 percentage point fall in annual GDP growth. A rising income share for the top quintile is associated with a decline in medium-term growth and similarly an increase in the income share of the bottom quintile is linked to a higher level of economic growth (see Dabla-Norris et al. (2015)) <sup>(45)</sup>. Technological progress, changes in the world of work and family life and globalisation have affected income

<sup>(41)</sup> The Gini coefficient is a measure of statistical dispersion intended to represent the income distribution of a nation's residents. See for instance Monfort (2008) or European Commission (2015).

<sup>(42)</sup> See for instance Berg and Ostry (2011) and Cingano (2014) which stress the importance of the gap between low-income households (in particular the bottom four deciles of the income distribution) and the rest of the population.

<sup>(43)</sup> Ostry et al. (2014) show that lower net inequality is correlated with faster and more sustainable growth and that redistribution generally has a benign impact on economic growth. The study does not support the idea of a trade-off between equality and growth.

<sup>(44)</sup> Corresponding to the increase recorded in the OECD since the beginning of the 1990s, see Cingano (2014).

<sup>(45)</sup> Furthermore, some studies suggested that the seeds of the financial crisis were fertilised by rising income inequality (Rajan, 2010; Stiglitz, 2012) and that high inequality can imperil democratic legitimacy. (see Kuhn et al., 2016).

<sup>(39)</sup> See for instance European Commission 2014, chapter 4.

<sup>(40)</sup> The convergence of activity rates continued during the crisis and activity rates stood up well on average, even in the most affected regions, implying that there were no significant withdrawals from the economically active population. See for instance European Commission 2014 chapter 4.

inequality across the developed world, while policies supporting skills and regulating the labour market have an important balancing impact on inequality and poverty, as do social protection and taxation<sup>(46)</sup>.

The increase in income inequality<sup>(47)</sup> in the EU since 2007, particularly in the Euro area (see Main Employment and Social Developments Chapter) continues a longer-term trend of increasing income inequality<sup>(48)</sup>. Changes in income inequality are driven by a number of factors, in particular the polarisation of access to employment among households (especially for low-skilled workers) and changes in the impact of taxes and social benefits<sup>(49)</sup> <sup>(50)</sup>. Other factors which typically have an impact in the longer run, include changes in skill and household structures (e.g. more couples with similar socio-economic backgrounds<sup>(51)</sup>, more single-person and single-parent households), the demographic composition of the population and changes in female employment levels<sup>(52)</sup> <sup>(53)</sup>.

Overall, inequality levels have converged between Member States since 2005 (**Chart 1.6**), with a notable reduction in inequality levels in Member States that joined the EU in the 2000s, as measured by the Gini coefficient. However, this convergence halted in 2012. Income inequality declined in many of the countries with the highest initial levels of inequality, but increased in several countries with low initial Gini coefficients, such as Slovenia, Denmark, Sweden or Germany (**Chart 1.7**).

<sup>(46)</sup> See European Commission, 2012 and Dabla-Norris et al. 2015 for a recent analysis of the causes of income inequality and poverty.

<sup>(47)</sup> Inequality as measured by the Gini coefficient of equivalised disposable income.

<sup>(48)</sup> See for instance European Commission, 2012 and OECD 2008, 2011 and 2015.

<sup>(49)</sup> See for instance ESDE 2011 and OECD 2011.

<sup>(50)</sup> At the top of the income distribution, changes are also connected to changes in policies on capital, incomes and tax (see Piketty 2014).

<sup>(51)</sup> Assortative mating or marital homogamy means that partners are alike in their socio-economic or educational background. Greenwood et al. (2014) found with US data that if matching of partners had been random instead of the patterns found in real life, the Gini coefficient would have been 0.34 instead of the observed 0.43. This means that assortative mating is an important source of income inequality, at least in the United States.

<sup>(52)</sup> Harkness (2010) finds an inverse relationship between female employment and income inequality, meaning that women's earnings attenuate income inequality despite gaps in female employment by educational background. Furthermore, rising female labour force participation since the 1970s has had a significant poverty reduction impact in the OECD countries (Nieuwenhuis et al., 2016).

<sup>(53)</sup> For a more complete literature review on drivers of income inequality, see European Commission (2012, 79-87).

Chart 1.6: Dispersion of income inequality in Europe (2003-2014)

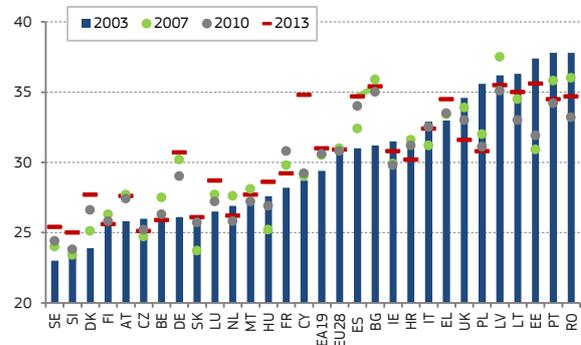


Note: data for Croatia as of 2010 only. Some missing data are kept constant (IE 2014, BG 2005, HR 2005-09, RO 2005-06). Latest year corresponds to SILC 2015 (i.e. latest available data at time of drafting. 2014 is the income reference year).

Source: Eurostat, Gini coefficient of equivalised disposable income (source: SILC [ilc\_di12]).

[Click here to download chart.](#)

Chart 1.7: Gini coefficient of equivalised disposable income (2003-2013)



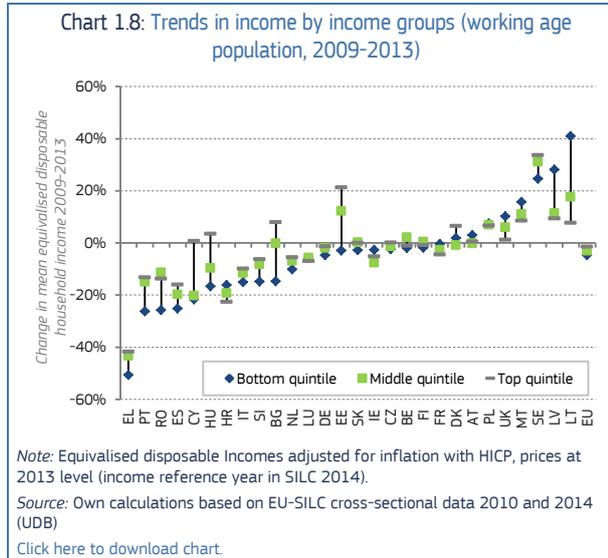
Note: Some missing data are kept constant (IE 2014, BG 2005, HR 2005-09, RO 2005-06). Latest year corresponds to SILC 2015 (i.e. latest available data at time of drafting. 2014 is the income reference year).

Source: Eurostat, SILC [ilc\_di12].

[Click here to download chart.](#)

### 1.3.2. Divergent trends within the working age population

The pattern of changes in incomes for different income groups within the working age population (aged 20-64) has varied a lot since 2009 (**Chart 1.8**). In around half of the countries incomes have declined and the lower incomes have often declined the most. By contrast, in Lithuania, Latvia, Malta and the UK, where incomes have risen, those in the lowest income group experienced a bigger increase than the highest or middle income groups.



### 1.3.3. Increasing poverty levels and dispersion among Member States during the crisis

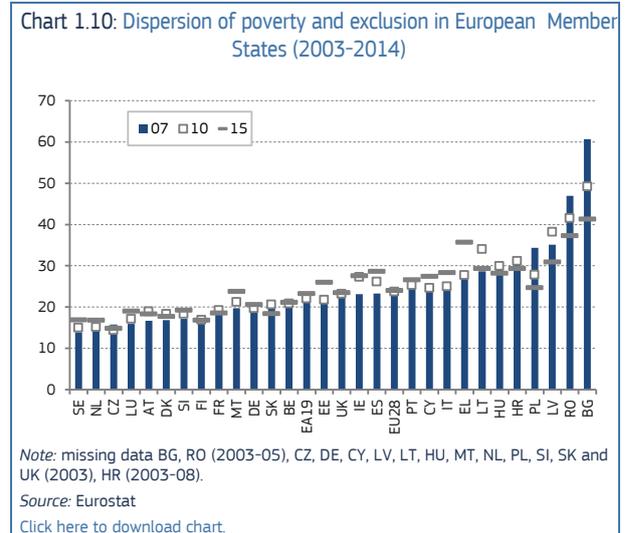
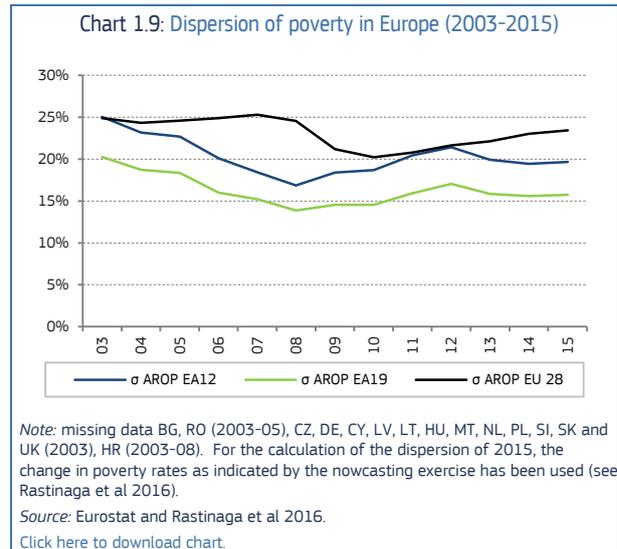
As discussed in the key developments chapter, the proportion of people in the EU living at risk of poverty or social exclusion (AROP) increased between 2009 and 2012, mainly reflecting a slow rise in monetary poverty and an increased share of households with very low work intensity. It then stabilised at about 24.5% in 2013 and 2014 and decreased to 23.7% in 2015 (23.0% in the EA), according to the latest available data

However, there is a striking variation across countries (Chart 1.10)<sup>(54)</sup>. In some Member States that joined the EU in the 2000s with initially high levels of poverty, the numbers of people suffering severe material deprivation fell<sup>(55)</sup>. Between 2007 and 2014, the AROPE rate fell by 20 percentage points (ppts) in Bulgaria, by 10 ppts in Poland and by 6 ppts in Romania. On the other hand, the number of people affected grew significantly in Greece (8 ppts) and Spain (6 ppts), countries hardest hit by the economic crisis; numbers also grew, though to a lesser extent, in Ireland, Estonia, Italy, Malta and Slovenia. While these trends slowed, but did not stop the longer-term

<sup>(54)</sup> See also Employment and Social Developments in Europe 2011 review for earlier analysis in patterns of poverty and social exclusion in Europe (European Commission, 2012, chapter 3).

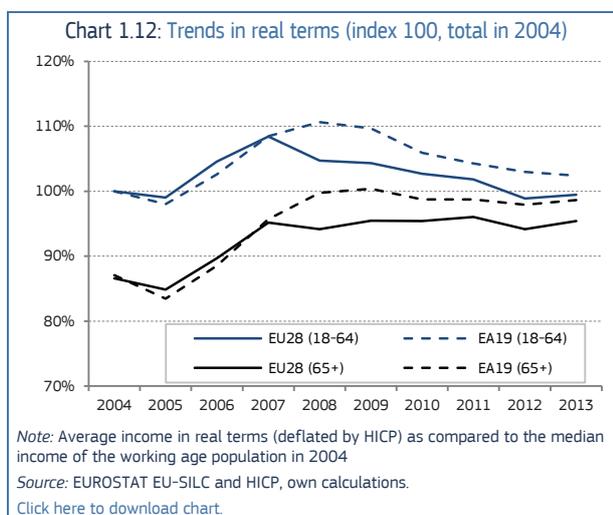
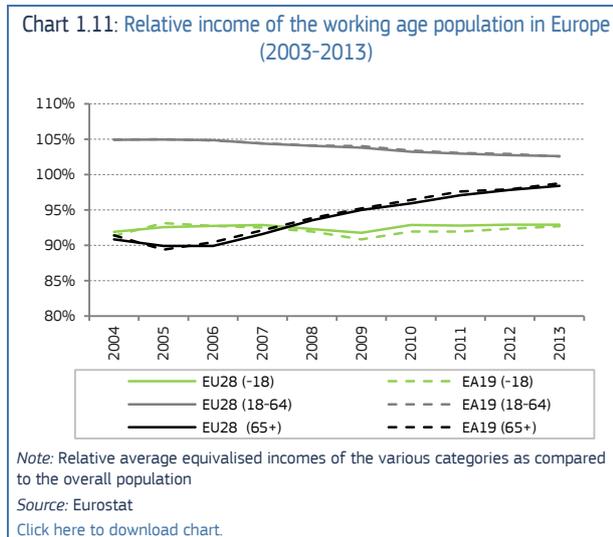
<sup>(55)</sup> As the poverty threshold is linked to the median incomes in the country (set at 60% of the median income), when median incomes falls, the relative poverty rate may get smaller. Similarly, during rapid growth when median income rises, the poverty rate can grow even though living conditions and incomes at the bottom end of the income distribution are improving. Indeed, the indicator of relative poverty identifies people who are relatively worse off in society, those who fall below the poverty threshold. To show trends in more absolute poverty and exclusion, this measure of relative poverty can be complemented with information on severe material deprivation – to identify people who lack some basic necessities – and on joblessness – to identify people who are excluded from the labour market. In addition, anchored poverty thresholds can be used to neutralise the impact of changes in median incomes. The increase in anchored poverty is especially high in countries where median incomes fell as a result of the crisis, such as Greece, Spain and Ireland.

convergence of poverty and exclusion rates in Europe, the crisis caused some increased dispersion of monetary poverty in Europe and in the Euro area (Chart 1.9).



### 1.3.4. Incomes of the working age population declined relative to other groups

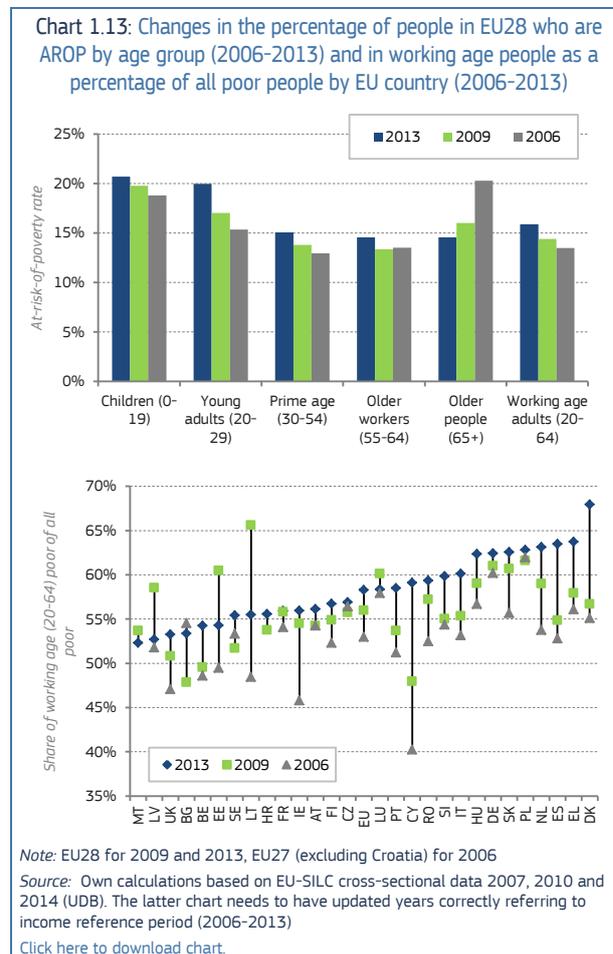
The incomes of working age people suffered more during the economic crisis than those of younger people (aged under 18) and older people (aged 65 or over). The relative income position of older people has generally improved in recent years in spite of the crisis (see also the 2015 Ageing and Pension adequacy reports). On average across the EU28, the median disposable income of those aged 65 or above stood at nearly 100% of that of the total population in 2013, as compared to less than 90% in the mid-2000s (Chart 1.11). Over the same period, the relative position of people aged 18-64 slightly weakened (from 105% to around 103%) and that of children (aged under 18) has been broadly stable (around 93%). These trends essentially reflect the average decline of real incomes among the working age population (and their children) while the real incomes of older people remained broadly constant (Chart 1.12).



Against this background, the crisis has shifted the pattern of poverty across age groups. In particular, the poverty risk of older people fell from 20.3% to 14.6% between 2007 and 2014, and is now lower than the poverty risk of the working-age population (aged 20-64), or of prime-age adults (aged 30-54). One striking trend has also been the increase in the at-risk-of-poverty rate (AROP) of young adults (aged 20-29, see **Chart 1.13**). On average, their poverty risk has increased the most of all age groups from 15.4% in 2007 to 20% in 2014. This confirms the perception that there is an increasing problem of intergenerational equity and fairness, which is to some extent linked to problems in entering the labour market in particular for young people and in finding jobs with permanent contracts; it is compounded by problems of access to financing and building up adequate pension requirements. A key driver of the increase in poverty among the working age population is the increase in jobless households (see section 2.3).

The decreases in old age poverty are linked to pensions being maintained in real terms (and even increased due to price indexation mechanisms in a context of inflation slowing down during the crisis), when incomes from wages and salaries were under pressure (see section 2.1 and European Commission, 2015). Furthermore, new pensioners have tended to

have accumulated better pension rights than previous generations. As a result of these trends, the proportion of the working-age population among the poor in Europe has increased from 53% in 2007, to 56 % in 2010 and 58 % in 2014, varying from 52% in Malta and 53% in Bulgaria, Latvia and the UK to 68% in Denmark).



#### 1.4. Convergence and divergence in wages and competitiveness

Wages in combination with productivity have an effect on competitiveness through unit labour costs. During the decade before the crisis, the unit labour costs (ULCs) of Member States diverged strongly, which fuelled unsustainable growth in countries that lost competitiveness and led to some correction afterwards. The divergence in nominal unit labour cost (ULC) over the period 2000-07 was significant (see **Chart 1.14**). In the long run, such a strong divergence between members of a currency union may pose substantial challenges (see section 1.5). Several Member States greatly exceeded the 2% annual growth target<sup>(56)</sup>, particularly Ireland, Spain and, to a lesser extent, Greece, Italy and Portugal. In contrast, Germany, and to a lesser extent Austria and Finland, undershot this benchmark<sup>(57)</sup>. These divergent

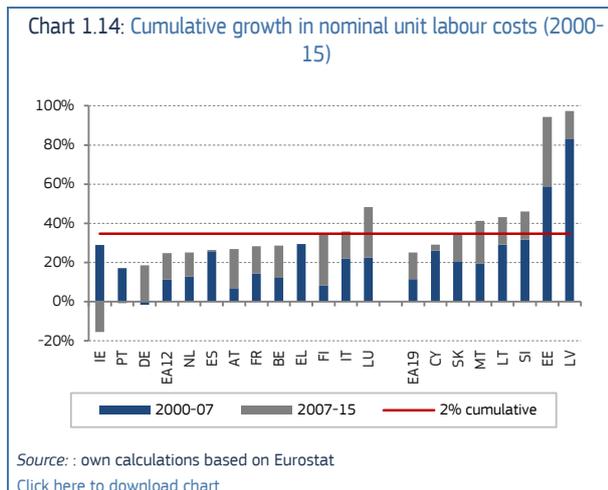
<sup>(56)</sup> The 2% per year annual increase corresponds to the ECB's inflation target, as if real wages grow in line with productivity developments, nominal ULCs will grow at the same rate as nominal prices.

<sup>(57)</sup> See ESDE 2014.

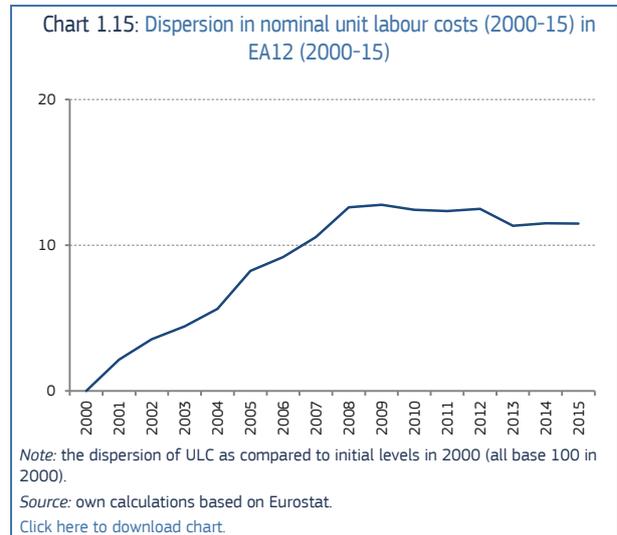
developments led to an unsustainable distortion of competitiveness within the Euro area.

While adjustments in nominal compensation growth are often seen as one way to correct such divergences in ULCs - at least in the short run - strengthening labour productivity is another way to restore external balance and promote upward convergence. The divergence in ULCs in the run-up to the crisis reflected weak average productivity gains in some countries which had experienced higher than average growth in ULC (in particular IT and ES). In contrast, Greece and Ireland (together with Finland) showed the strongest increases in productivity but also recorded much stronger than average increases in nominal compensation per employee. At the same time Germany, and to a lesser extent Austria, showed fairly robust productivity growth in combination with relatively weak growth in nominal compensation per employee<sup>(58)</sup>.

On the whole, rebalancing over the period 2008–15 period allowed the dispersion in ULC growth in the EA12 to stabilise, and slightly curbed some of the divergence observed in the 2000–07 period (Chart 1.15). While, on average, nominal ULCs remained below the 2% inflation benchmark, corresponding to the ECB inflation target this was mostly achieved through significantly below-average changes in some Member States which had previously experienced above-average increases (particularly Ireland, Greece, Spain and Portugal, which all saw declines or stagnation in nominal ULCs). However, in Member States such as Austria and Germany which had previously registered modest increases, increases were not significantly above average.



<sup>(58)</sup> See for instance ESDE 2014 chapter 4.

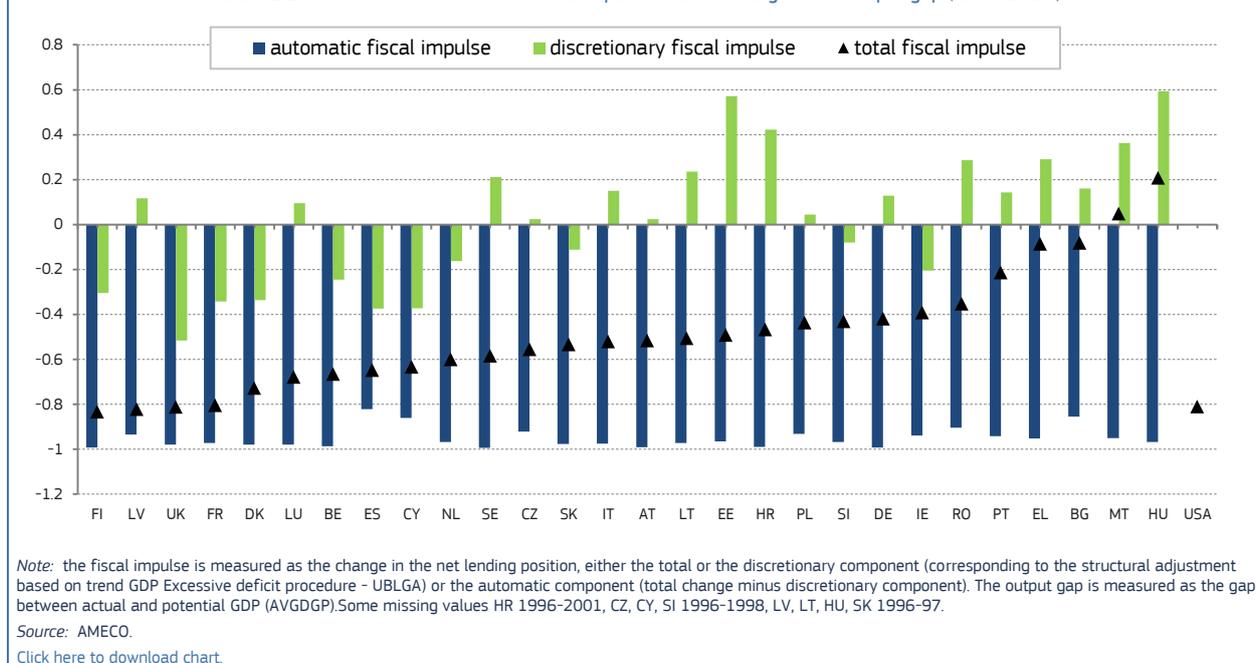


### 1.5. Divergence is a specific challenge within the Euro area

A monetary union has a number of specific features, related to the absence of an exchange rate adjustment channel and to the functioning of fiscal and monetary policy. The available literature underlines that asymmetric shocks can drive short-run divergence in socio-economic performance in the Euro area, and that adverse developments can persist for longer, linked in particular to weakening of competitiveness (see Box 1.2)<sup>(59)</sup>. For instance, following a strong internal contraction (of 10%), reaching similar outcomes with fixed exchange rates takes 4 years longer than with flexible exchange rates (other things being constant). Similarly, adjustment through a fiscal devaluation takes 4 - 5 years longer than adjustment through an exchange rate devaluation (see Vogel (2016)).

<sup>(59)</sup> See for instance European Commission 2014 chapter 4.

Chart 1.16: Correlation between the fiscal impulse and the change in the output gap (1996-2015)



The more limited adjustment capacity can also generate strong adverse socio-economic consequences (such as distributional impacts, hysteresis effects, and interactions with product markets), which may generate self-reinforcing adverse labour market developments that increase the duration and intensity of an economic downturn, with the risk of a permanent loss of potential output and employment <sup>(60)</sup>.

In the event of asymmetric shocks, effective macro-economic stabilisation and the adjustment capacity of national economies are key to providing effective support to the national economy in the context of the economic and monetary union. They are also crucial for strengthening the synchronisation of business cycles, making the impact of the common monetary policy more effective. Moreover, even symmetric shocks can have asymmetric effects as transmission channels are different across economies, partly reflecting differences in economic structures. .

Resilience to an asymmetric shock is all the more important because there is evidence that, since the introduction of the euro, there have been at least as many asymmetric shocks as before (as measured by the dispersion in growth rates (for instance; see European Commission (2008), Pisani (2012) and Allard et al. (2013)). Also, the levels of risk sharing and labour mobility in the Euro area remain relatively low (see **Box 1.2**).

In this context, the functioning of automatic stabilisers and of the various mechanisms that allow the labour market to adjust following shocks impacts on the smooth functioning of the EMU. Most fiscal macro-economic stabilisation is obtained through automatic stabilisers. Discretionary fiscal policies have tended to be pro-cyclical in Europe for around half of Member

States since 1995, while in general automatic changes in the fiscal position have been strongly linked with changes in the output gap (see **Chart 1.16**). All in all, in the EU only a few countries (Finland, Latvia, UK, France and Denmark) have experienced the possibility to have fiscal policy positions as strongly contra-cyclical as the US on average over the last two decades (see **Chart 1.16**).

Furthermore, in the area of labour markets, a growing body of literature emphasises the importance of the interaction of shocks with institutions (see e.g. Acemoglu et al (2003) and Rodrik (1999)) focusing on how labour market institutions may influence the capacity of an economy to withstand a shock, once it hits. Employment and social policies can strengthen the capacity to cope with economic shocks, making the reaction to shocks either quicker or stronger, and supporting increased competitiveness. Typically, employment and social policies support macroeconomic stabilisation and labour market adjustment as well as better labour market transitions and can prevent scarring and hysteresis effects resulting from economic slowdowns <sup>(61)</sup>. The next section focuses on the impact of the tax benefit system, while reviewing other important policy areas and institutional features would be beyond the scope of this chapter (such as the structure of collective bargaining systems, elements of employment legislation including the design of working time arrangements (including short time working schemes) and of wage setting (including of minimum wages)

<sup>(61)</sup> See for instance European Commission 2014, chapter 4.

<sup>(60)</sup> See for instance European Commission DE 2014 chapter 4 for a review of effects.

### Box 1.2: Specificities of economic adjustments in a monetary union

In a monetary union, trends in price competitiveness cannot be corrected by nominal exchange rates which are fixed. Price competitiveness relates to nominal wage dynamics but also to productivity trends – and in particular to developments in skills – and can be directly monitored by trends in nominal unit labour costs.

In the event of accumulation of ULC gaps, adjustment cannot be borne by the exchange rate channel, but only by an internal devaluation process (including fiscal devaluation). This generally takes much longer to be effective and can have strongly adverse social and employment impacts. This underlines the key importance of a careful monitoring of competitiveness developments. In addition, growing gaps in competitiveness can be reinforced by agglomeration effects linked to increasing economic specialisation due to trade integration (see, for instance, Krugman 1993) and the absence of exchange rate risks which can also favour a shift in economic activity away from less developed regions, especially if they were in the periphery of the Community, to the highly developed areas in the centre.

In addition, in a monetary union, asymmetric shocks cannot be smoothed by adjustment in exchange rates. Available channels for adjustment at the Member State level include, on one hand, market-based channels such as wages, prices and labour mobility (geographic and occupational), and private capital flows, and, on the other hand, policy-based channels including fiscal policies such as automatic stabilisers, discretionary taxes and public expenditure. Indeed, the common monetary policy cannot provide support in the event of asymmetric shocks, but only in the event of common (or symmetrical) shocks. In addition, higher business cycle synchronisation allows the monetary policy to be more effective. While a number of factors affect trends in business cycle synchronisation, increased trade integration can lead to more synchronisation of the business cycle (see, for instance, Frankel and Rose, 1998). There are other forces that reduce synchronisation, such as higher specialisation, as well as variations in the development of real interest rates (see, for instance, European Commission 2014).

There is thus a risk that in the absence of national monetary policy instruments (including nominal exchange rates) and with downward rigidity in prices and wages, an adverse asymmetric shock translates into additional adjustment through quantities (including raising unemployment and decreasing real income), in particular when stabilisation mechanisms are not effective enough. This is especially the case when access to capital markets is limited (so that the adjustment burden cannot be spread over time) or when prices or wages are sticky (involving a lengthier adjustment process and additional downwards pressure on the economy).

In addition, available estimates of the overall level of risk-sharing (smoothing capacity against the impact of country-specific shocks) in Europe suggest that it remains low, compared with Canada or the USA (see Allard et al. (2013) and Van Beers et al. (2014)). It appears that the relative weakness of risk-sharing in Europe and the EA does not derive from the credit markets, but is mainly due to lower risk-sharing in the capital market channels and fiscal transfer channels (which are comparatively few, see Chart). Finally, intra-EU labour mobility remains limited, compared with other OECD countries (such as the US, Canada or Australia) (. However, while the migration response to labour market shocks prior to the crisis was stronger in the USA, recent evidence suggests that migration in Europe reacted quite strongly to changes in labour market conditions – more so than in the USA, where internal mobility seems to have declined (see, for instance, Jauer et al., 2014).

## 2. CONVERGENCE AND DIVERGENCE OF POLICIES AND EXPECTED IMPACT ON SOCIO-ECONOMIC OUTCOMES

### 2.1. The impact of social protection expenditure and automatic stabilisers

Social protection expenditure generally helps to stabilise the economy in difficult economic times, since social benefits partly compensate for the decline in households' market income. Unemployment benefits typically have a stabilising function, as do means-tested benefits of various sorts (typically social exclusion, family or housing benefits). Health and pensions expenditure play a role too, but to a lesser extent, since they generally increase or remain constant, while market incomes decline.

#### 2.1.1. Social protection expenditure trends

At the onset of the crisis (2007-2009), social protection expenditure was the main contributing factor to the stabilisation of household incomes in

Europe, but this effect weakened over time because these systems were not designed for a prolonged recession and some countries were affected by fiscal consolidation measures. In 2014, employment incomes started to increase again, reflecting an improvement in labour market conditions <sup>(62)</sup>.

While total social expenditure increased significantly in 2009 as a result of the sharp recession, social expenditure grew at a modest pace in 2010, declining in real terms in 2011 and 2012, in a pro-cyclical manner (see Main Employment and Social Developments Chapter). Reforms implemented in the context of fiscal consolidation explain part of the reduction in expenditure, while indexation mechanisms mostly contributed positively in 2012 (the lag in indexation of benefits leading to a real increase of benefits in a period of declining inflation). The increase in old-age expenditure remained mainly driven by demographic factors (more older people) but was significant in 2009 and then stayed below its long-term trend before stabilising in 2011-12 (see for

<sup>(62)</sup> See for instance *EU Employment and Social Situation - Quarterly Review – Summer 2016*.

instance ESDE 2015). Social benefits continued to increase slightly in comparison with 2013 in real terms, mostly reflecting the slowdown of inflation and related play of indexation mechanisms <sup>(63)</sup>.

The pattern of expenditure growth varied significantly across Member States. For example, in 2009 social protection expenditure had grown strongly (by over 10%) in Spain, less strongly in Germany (around 7%), and even less strongly in France (5%) and Italy (3%). More strikingly, in 2012 social protection expenditure declined in Spain (-4%) and Italy (-2%), while barely changing in Germany and slightly increasing in France (+1%). The declines registered in Italy and Spain in 2012 affected nearly all areas and particularly health and unemployment expenditure in Spain and health and pension expenditure in Italy.

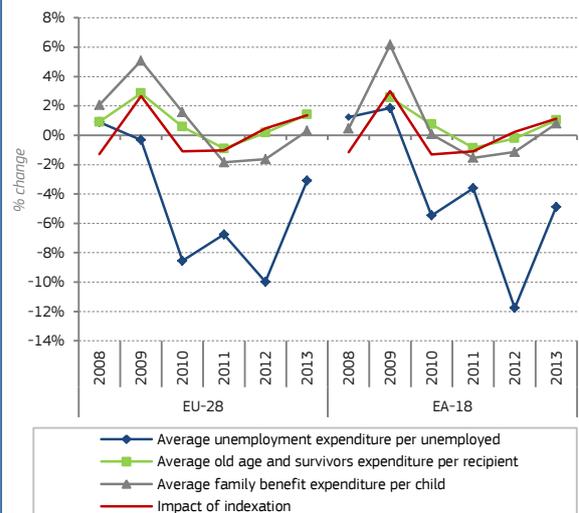
The strong overall expenditure growth observed in 2009 also reflects the impact of the price indexation mechanisms that are usually attached to social benefits (as well as services), and generally work with a lag of 1 year (inflation from year N-1 is used to index benefits in year N) <sup>(64)</sup>. The relatively high inflation observed in 2008 was only translated into benefit levels in 2009, when inflation was relatively low. Inflation slowed down in 2008-11, but because of lagged indexation mechanisms, there was a significant increase in the real growth of most benefits, especially in 2009.

While such indexation mechanisms contribute to the automatic increase of benefits in real terms in times of crisis, related automatic increases in real terms generally apply to all types of expenditure and in particular to pension expenditure (see **Chart 1.17**). However as pensioners' incomes were not particularly affected by the massive increases in unemployment seen during the crisis and their propensity to save is relatively high, particularly as compared to working age household seeing a drop in their labour income, it is questionable whether the related resources were contributing to the overall effectiveness of automatic stabilisation in the most efficient way. Furthermore, the significant increase observed in 2009 weighted pension expenditure levels for the following years.

<sup>(63)</sup> The stabilising role of social benefits is analysed in detail in the 2013 and 2015 reviews of Employment and Social Developments in Europe.

<sup>(64)</sup> It should be noted that price inflation is not the only possible basis for pension indexation. It is quite common for Member States to index pensions on some other basis, such as nominal wages, partial nominal wages or mixed indexation of wages and prices (see Ageing report 2015 for a detailed overview).

Chart 1.17: Annual change in real expenditure per potential beneficiary (2007–13)



Note: missing values for EL and PL in 2013.

Source: ESSPROS, own calculations.

[Click here to download chart.](#)

Countries like Germany, Spain and Sweden have legislated for automatic balancing mechanisms that reduce pension indexation if employment falls (see Ageing Report 2015). The same effect has sometimes been achieved by discretionary measures, such as temporarily reducing or freezing pension indexation.

### 2.1.2. Automatic stabilisation

Estimates of the overall impact of automatic stabilisers in the economic literature <sup>(65)</sup> show that, around 10–20% of output shocks are smoothed (see ESDE 2012) <sup>(66)</sup>. There is some evidence that countries with bigger public expenditure (over the economic cycle) tend to have larger automatic stabilisers (due to the greater stabilising impact of revenues and expenditure, see e.g. Baunsgaard and Symansky (2009)).

Social protection systems represent the major share of automatic stabilisation, as was experienced in 2009 (see for instance ESDE 2012 <sup>(67)</sup>). Two obvious channels are taxes and social contributions and expenditure. Revenues increase in upswings and decrease in downturns and expenditure the reverse in standard recessions (translating into increases of unemployment). On the expenditure side, the most prominent automatic stabilisers are unemployment benefits, but they generally only account for a small share of government budgets. More generally,

<sup>(65)</sup> For instance, In't Veld et al. (2012) argue that differences in the assessment of the working of automatic stabilizers reflect a basic disagreement over how the budget would look without automatic stabilisers (constant absolute revenues and spending, or constant deficit-to-GDP ratio, etc.).

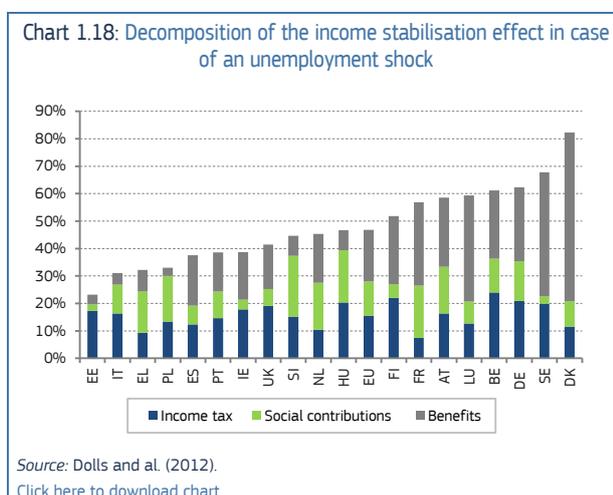
<sup>(66)</sup> Estimates can differ depending on the estimation approach chosen. Differences in estimations typically depend on the type of the fiscal stimulus and the selected approach e.g. whether it is econometric-based (e.g. Gali, 1994; Fatas and Mihov, 1999) or model-based (Van den Noord, 2003; Buti et al., 2003).

<sup>(67)</sup> In particular chapter 3, table 4.

automatic stabilisation is not necessarily limited to cyclically sensitive items in the budget (see In't Veld et al. 2012) and age and health related social expenditure also reacts to the cycle in a stabilising manner (see Melitz and Darby 2008) <sup>(68)</sup>.

Member States have varying levels of automatic stabilisation, reflecting the characteristics of their welfare systems. For instance in the first phase of the crisis (2005–09), Greece was a clear outlier, with some pro-cyclicality; Eastern European Member States (such as Lithuania, Romania, Hungary) were also showing pro-cyclical features. By contrast, Ireland, Finland, Cyprus and Sweden had quite strongly anti-cyclical systems <sup>(69)</sup>. In some countries, such as Italy and Poland, the stabilisation impact works mainly through pensions and unemployment benefits play a negligible role, while in others such as Denmark and Spain unemployment benefits have a strong anti-cyclical effect <sup>(70)</sup>.

Before the crisis, the smoothing impact of taxes and benefits in the event of an increase in unemployment differed significantly among Member States (Chart 1.18). Some countries experienced relatively low levels of 40% or less of the income shock smoothed (Estonia, Italy, Greece, Poland, Spain, Portugal and Ireland), while in some others the impact of the tax benefit system was more significant, reaching 60% or more, thanks to differences in the response of benefits, mainly unemployment benefits (such as in France, Austria, Luxembourg, Belgium, Germany, Sweden and Denmark).



<sup>(68)</sup> In the literature, the size of the government is also associated with automatic stabilisation. Research has shown that the size of government is negatively correlated with the volatility of GDP since the bulk of government discretionary expenditure, such as wages and transfers, is generally not cut during economic downturns or increased during upturns. Also, this inertia aspect of government expenditure has a stabilising effect on total output, as we see in the next section.

<sup>(69)</sup> The calculations are based on how output gap and expenditures changed between late 1990s and 2000s and therefore conclusions on the anti-cyclicality feature of welfare systems only apply to this period. The current crisis and reforms might change the functioning of the systems.

<sup>(70)</sup> See ESDE 2012 chapter 3.

As, in some Member States, coverage and replacement rates are relatively low compared to the European average (see section 2.2), the stabilisation effect of unemployment benefits in periods of crisis can be affected negatively. If the design of unemployment benefits systems would be more adapted to the economic cycle, this could improve their anti-cyclical effect. For example, during economic downturns, the maximum benefit duration can adjust for the stronger need for stabilising incomes, as is the case in the USA, with a very significant impact on the coverage of unemployment benefits <sup>(71)</sup>. Conversely, during recoveries, the unemployment benefit system rules can come back to the pre-crisis situation, providing stronger work incentives and preventing cyclical unemployment from becoming structural <sup>(72)</sup>.

The Five Presidents Report <sup>(73)</sup> emphasised that the creation of an EA-wide fiscal capacity should be considered as a long-term step to improve the macro-economic stabilisation of EA economies, in particular in the case of asymmetric (temporary) shocks. The report also underlined the need to proceed in parallel with a process of political integration, which would culminate in a process of convergence and further pooling of decision-making on national budgets. It underlines the following principles for a fiscal capacity, i) "it should not lead to permanent transfers (...) and should not be conceived as a way to equalise incomes between Member States", ii) "it should not undermine incentives for sound policy making at the national level" (...), iii) "it should be developed within the framework of the European Union" and iv) " (...) its role should be to improve the overall economic resilience of EMU and individual Euro area countries. It would thus help to prevent crises". The design of such stabilisation mechanisms could take different forms including a link to convergence towards a number of standards. <sup>(74)</sup> The functioning of such mechanisms could build on available instruments e.g. as underlined in the Five Presidents Report on the EFSI and could provide support for investment or other forms of budgetary support, including some form of unemployment benefit system.

Three forms of fiscal capacity linked to employment and social developments are commonly discussed in academic circles <sup>(75)</sup>: transfer systems (which lead to budgetary flows to national budgets if specific circumstances arise), reinsurance systems (which provide national unemployment systems with some reinsurance of their cyclical deficits) and actual EA-wide unemployment benefit systems <sup>(76)</sup>. The US

<sup>(71)</sup> See for instance McKenna and Hugh (2016).

<sup>(72)</sup> See for instance ESDE 2012 chapter 3.

<sup>(73)</sup> Juncker and al (2015).

<sup>(74)</sup> See for instance Sapir (2016) and Demertzis and Wolff (2016).

<sup>(75)</sup> See for instance ESDE 2014 chapter 4, ESM (2016) and Vandenbroucke (2016).

<sup>(76)</sup> To help plug the many gaps in the analysis of such supranational schemes, the European Commission has commissioned a study on the feasibility and added value of a European unemployment benefit scheme, following a Pilot Project launched by the European Parliament.

unemployment system mixes these different features with estimates of the stabilisation provided during a recession range from 15% to 30% of the initial drop in GDP (see for instance Chimerine et al. (1999) and Vroman (2010))<sup>(77)</sup>. A characteristic is whether the related funds are earmarked and whether unemployment expenditure would be higher than otherwise (with only the national systems at play) or could also be used to temporarily ease budget constraints. Such systems could also be designed to stabilise both geographically (e.g. across Member States) and over time, thereby allowing for the accumulation of reserves and temporary deficits. Key characteristics of such systems would include the choice of indicator that could serve as a trigger, the strength of the links to national unemployment systems, and the design of mechanisms to guard against moral hazard or lasting transfers.

## 2.2. Investment in human capital, access to employment and support to the jobless

Leaving aside some important aspects of a well functioning adjustment capacity (such as wage setting mechanisms, collective bargaining systems or employment legislation that are beyond the scope of this chapter), the question arises whether there has been some convergence in Member States policies that support higher investment in human capital (such as life-long learning), easier access to employment (such as active labour market policies) and income support to the jobless (such as unemployment benefits and minimum incomes).

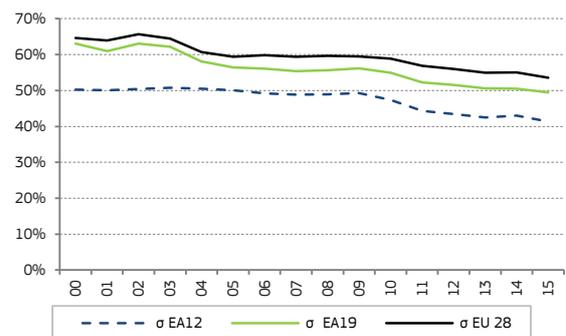
Participation in learning brings a broad range of benefits. Individuals can expect economic, social and well-being benefits from participation in learning, with the strongest evidence existing for the impact on employability. Employers also benefit from the impact on productivity and profitability of companies, while, adult learning also brings broader benefits to society overall (see European Commission, 2015). The available literature also suggests that unemployment benefits may increase the duration of unemployment, but active labour market policies can remedy this and increase the quality of matching between jobs and workers. Benefits provide income support during unemployment spells that allows individuals to search for the most suitable job, while active labour market policies maintain the motivation of jobseekers to search for employment and to improve their employability, thus expanding their opportunities to find jobs suited to their skills and abilities (see **Box 1.3**). When evaluating labour market policy outcomes it is important to focus not only on re-employment, but also on the type and quality of the transition toward employment.

### 2.2.1. Skills structures and life-long learning

The average level of education of the working age population continues to rise, and the educational

standards attained by 16–39 year olds in different EU countries have tended to converge over the past 15 years (see **Chart 1.19** and **Chart 1.20**). These trends were not affected by the economic crisis, suggesting that there has not been any significant deterioration in the potential for long-term growth. Reduced dispersion in the proportions of 16–39 year olds with no more than lower secondary education (ISCED levels 0–2) is worth noting.

Chart 1.19: Dispersion of education performance in the EU28 (percentage of population aged 16–39 with no more than lower secondary education) (2000–2015)

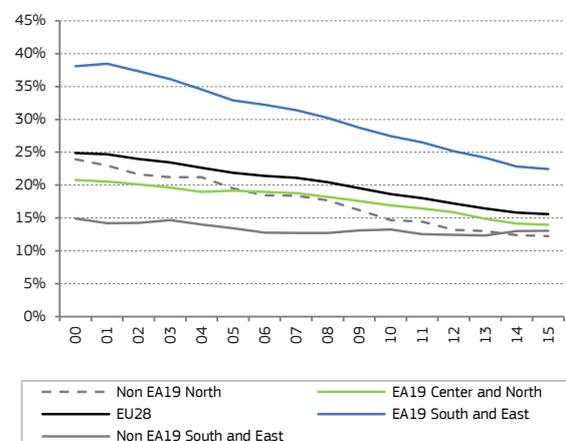


Note:  $\sigma$  values refer to the coefficient of variation (based on weighted averages)

Source: Eurostat, own calculations.

[Click here to download chart.](#)

Chart 1.20: Changes in education performance in the EU28 (percentage of population aged 16–39 with no more than lower secondary education) (2000–2015)



Note: some missing data at the beginning of the period were kept constant for the calculation of dispersion.

Source: Eurostat own calculations.

[Click here to download chart.](#)

As noted in section 2.3.4. of the chapter on Main Employment and Social Developments, the proportions of ‘early school leavers’ in EU Member States – 18–24 years olds who have attained at most lower secondary education and not been involved in further education and training – continued to reduce and converge during the crisis (though at a reduced pace, particularly in Southern EA countries). This is a positive sign that most of the gains made before the crisis will be beneficial after it, providing stronger grounds for employment growth. Less positively, the labour market attachment of younger generations, as reflected by

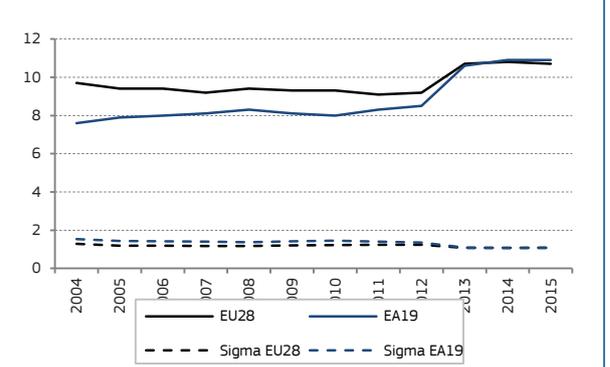
<sup>(77)</sup> See for instance European Commission (2013c).

the EU NEET rate which measures the proportion of young people 15-24 years old who are not in employment, education or training, has seen some significant reversal of the convergence trends in recent years. However, this mainly reflects increases in unemployment rather than inactivity <sup>(78)</sup>.

Any review of trends in the education of the working age population needs to be complemented by analysis of the trends in skills, since these are even more relevant to productivity, and similar education levels can mask very different skill levels between countries <sup>(79)</sup>.

The percentage of adults participating in lifelong learning has been fairly stable over the last decade in the EU (Chart 1.21), and has slightly increased in the EA. Participation varies very significantly among Member States, from below 5% in Bulgaria, Romania, Greece, Croatia, Slovakia and Poland to more than 25% in Finland, Denmark and Sweden. Over the last decade, there has been a slight reduction in the dispersion, with generally slight increases in most countries that initially had lower levels and a more mixed picture in countries with higher initial levels (with increases in Denmark and Finland and declines in Slovenia, UK and Sweden).

Chart 1.22: The proportion of adults (25-64) participating in lifelong learning, dispersion and average (2004-2015)

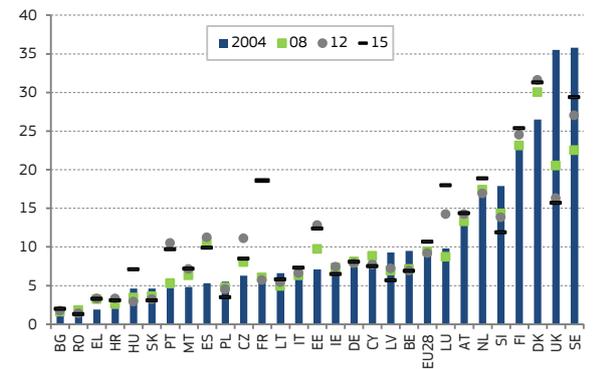


Note: dispersion measured by the coefficient of variation (over the weighted average). Break in 2013 (FR). Missing values for EL (2004-05, 2011-12), HR (2004-11), CY (2004-05, 2013), LT (2005, 2011, 2013), HU (2006-07), MT (2004-05), UK (2010-13).

Source: Eurostat LFS, own calculations.

[Click here to download chart.](#)

Chart 1.21: The proportion of adults (25-64) participating in lifelong learning, by Member State (2004-2015)



Source: Eurostat LFS, own calculations.

[Click here to download chart.](#)

<sup>(78)</sup> See, for instance, ESDE 2014 chapter 4 and EU Employment and Social situation, Quarterly review, March 2014.

<sup>(79)</sup> See, for instance, OECD (2012).

### Box 1.3: Evidence about the impact of unemployment benefits and income support on labour market outcomes

#### Potential adverse effects on unemployment duration

While higher unemployment benefit can reduce incentives to take up work or actively look for a job but entitlement to unemployment benefit is usually integrated with active labour market policies that support job search and maintain jobseeker motivation. A number of studies suggest that longer unemployment benefit durations and higher replacement rates may lead to longer unemployment spells and thus to higher unemployment levels (Carling et al. (1996), Hagedorn et al. (2015), Vodopivec et al.(2015)). Some studies show that the probability of leaving unemployment is higher when benefit is about to expire (Katz L.F and Meyer B.D. (1990), Meyer, B. (1990), Nunziata L. (2002)). Empirical evidence has also shown that the effect of higher benefit duration and a higher replacement rate in lengthening unemployment spells can be very moderate or may not be significant (see for instance A. B. Atkinson and J. Micklewright (1991) and Eugster, B. (2013), or Jenkins S.P., Garcia-Serrano C. (2004), or Fitzenberger B. and Wilke R. (2004), or Wolff J. (2003), Tatsiramos K. and van Ours J. C. (2012), Chetty, R. (2008)), while unemployment benefits may yield employment gains in the short and long term (Ernst E. (2015)). Among the main findings are the following (see, e.g., Immervoll (2012) and Fernandez et al. (2016)): the substitution effect is generally a more powerful driver of employment behaviour, but the income effect can be relevant for some groups (e.g., spouses of well-paid principal earners) ; financial incentives affect overall labour supply mainly through their influence on labour force participation ; Low-income groups and lone parents react more strongly to financial incentives.

#### Positive impact on future employment prospects

The quality and stability of future employment also matters and as mentioned by M. Friedman in his Nobel Lecture, unemployment insurance is likely to encourage unemployed people to look for good quality employment rather than marginal jobs. In the absence of adequate unemployment benefits, individuals may accept an available offer, regardless of type and quality - including jobs that do not make proper use of their skills - in order to avoid a drop in income. This can affect workers' productivity and increase the future likelihood of quitting such jobs, increasing the probability that they will return to unemployment or unstable employment.

High and lasting unemployment benefits can also affect the quality of the transition from unemployment to employment (Gaure S., Røed K., Westlie L., (2008)). Benefits allow individuals to use more time and resources to engage in productive job search. Where there is incomplete information in the labour market about available job offers, finding a suitable available offer may require longer search time. By supporting search, unemployment benefits can increase job search efficiency and matching between jobs and individual skills. Improving the matching process in the labour market can stabilise workers' careers in the long run (Morel N., Palier B. and Palme J. (2012, Acemoglu, D. (2001), Burdett K. (1979), Sjöberg, O., Palme J. and Carroll E. (2010)). In turn, efficient job matching and subsequent employment stability can reduce unemployment levels and improve workers' productivity. The quality of post-unemployment jobs can be measured by the level of earnings and the stability of employment. Empirical studies shows mixed results, with some studies showing very small effects (Card D et al. (2006), Van Ours J. C., and Vodopivec M. (2006), Belzil C. (2001), Centeno M, Novo A.A. (2008), Van Ours J. and Vodopivec M. (2006)) and some recent studies showing a positive relationship between duration and level of unemployment benefits and subsequent job tenure (Centeno M. (2004), Wulfgramm M. and Fervers L. (2015), Tatsiramos K. (2009), Tatsiramos, K. (2014), Caliendo M, Tatsiramos K. and Uhlendorff A. (2012), Lauringson A. (2012)). The latter indicate that, although relatively generous benefit schemes tend to lengthen spells of unemployment, they have a positive effect on the duration of subsequent employment, which is probably the result of improved job matching.

#### Avoiding withdrawal from the labour force and scarring effects

Focusing only on the effect of unemployment benefits on rates of leaving unemployment may be misleading, as the transition out of unemployment can also be the result of a withdrawal from the labour force rather than entry to the labour market. Withdrawal from the labour force may happen because individuals engage in further education, or because they become discouraged and give up active job search or take up a pension. Restrictive eligibility conditions or exhausting benefit entitlements may cause people to become inactive rather than to gain employment (Atkinson A. B. and Micklewright J. (1991)). Becoming inactive has a detrimental effect on workers' human capital, which in turn has a negative effect on workers' re-employment prospects. Conversely, unemployment benefits may induce previously-discouraged workers to join the labour force, as they give them access to the support provided by active labour market policies (Nickell S. (1997)). In all EU countries, active job search is a prerequisite for benefit receipt.

If they are eligible for and receive a certain level of benefit, the unemployed maintain their consumption level (Gruber J. (1994)), which in turn gives them a better chance of re-employment, since poverty makes it more difficult for people to return to work (Gallie D., Paugam S., Jacobs S. (2003)). Moreover, empirical evidence shows that job loss and persistent unemployment are likely to have a scarring effect on workers' future earning and prospects (Ruhm C. J. (1991), Jacobson L., LaLonde R., and Sullivan D. (1993), Farber H. S. (1997), Calvo-Armengol A., Jackson M. O. (2004)). Evidence on the effect of unemployment benefit on post-employment earnings is inconclusive (Addison J. T. and Blackburn M. L. (2000), Ehrenberg R. G. and Oaxaca R. L. (1976), , Lalive, R. (2007)). However, it appears to reduce the scarring effect of long unemployment spells on future earnings (Gangl, M. (2006)). Moreover, high unemployment benefit levels can allow individuals to invest in various skills, enhancing their human capital, with possible productivity-enhancing effects for the economy (Sjöberg O., Palme J. and Carroll E. (2010)).

## 2.2.2. Access to active labour market policies

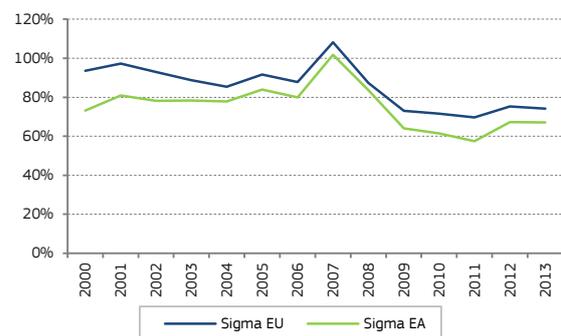
Active labour market policies (ALMPs) are essential to provide support to jobseekers in finding a job. Entitlement to unemployment benefits is generally conditional on participation in active labour market policies. These include job search assistance, labour market training, wage subsidies to the private sector and direct job creation in the public sector. Well-designed and successful schemes foster interaction between incentives, activation and benefits. The function of unemployment benefit is to provide income support during a spell of unemployment, while ALMPs are intended to maintain jobseekers' motivation and capacity to pursue employment, improve their employability and expand their opportunities of being placed in appropriate jobs (McKnight A. and Vaganay A. (2015)).

A number of studies have found that ALMPs have a positive effect on the transition from unemployment to employment and on the quality of subsequent jobs (and even an effect on the transition from employment to education see Koster F. and Fleischmann M. (2012)). The positive effects on the labour market are measured in terms of employment levels, but also post-employment stability, earnings and the likelihood of getting a permanent contract (see Fougère D. and Pouget J. (2004)). Generally, more favourable outcomes appear in the medium and long run rather than in the short run (see Card D. et al. (2010) and Dyke et al. (2006)). This also relates to active programmes, such as training, which require individuals' participation. During the participation period the job search intensity may be lower, as well as the job-finding rate (See Munch et al. (2008)). This will lead to longer unemployment spells. However, involvement in such activity increases individuals' skills, productivity and employability and avoids human capital depreciation. This in turn affects the quality of post-unemployment jobs (See Lechner M et al. (2011), (2007), Crépon B et al. (2012), Torp, H.

(1994), Brown et al. (2012)).

Training programmes and job search assistance appear to have the highest impact on the quality of subsequent employment (See Kluve J. (2006), Bassanini, A. and R. Duval (2006), Rodriguez-Planas N., Benus J. (2010), Lehmann H. and Kluve J. (2010)). Job search assistance generally involves counselling, job search training and in some cases job-brokering. This helps to tackle incomplete information in the labour market about available job offers. Moreover, counselling supports individuals in finding the job that best suits their skills, providing them with the support they need to successfully re-enter the labour market.

Chart 1.23: Coverage of ALMPs in EU and EA by Member State (2006-2014)



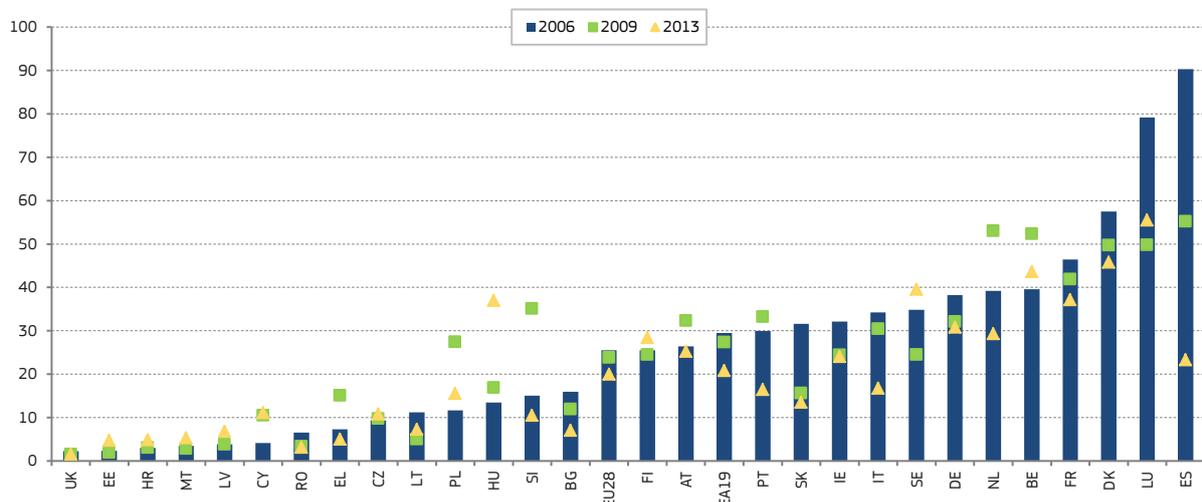
Note: dispersion measured by the coefficient of variation (over the unweighted average). Missing values EL 2003-05, 2011-12 and 2014, CY, MT 2004-2005, HU, HR 2004 to 2011 LT 2005, 2011, ES 2005, 2012, HU 2006-2007, PL, SI and SE 2004, UK since 2009.

Source: DG EMPL, LMP

[Click here to download chart.](#)

The coverage of ALMPs varies a lot among Member States. In the mid-2000s it ranged from negligible levels to nearly full coverage. Since then coverage levels have fallen on average in Europe (and the Euro area), especially since 2009 (Chart 1.24). The reduction was generally seen in Member States with relatively high coverage (such as Spain, Luxembourg, Denmark or France), while coverage did not rise significantly in Member States with low initial

Chart 1.24: Coverage of ALMPs in EU and EA by Member State (2006-2014)

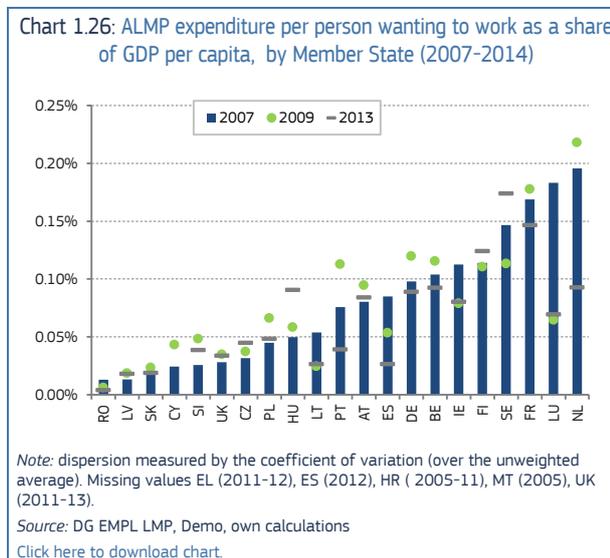
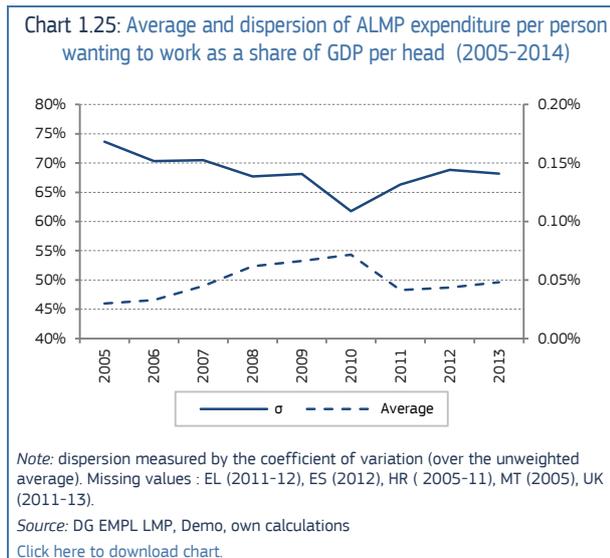


Source: DG EMPL, LMP

[Click here to download chart.](#)

coverage levels. As a consequence, the dispersion of ALMP coverage declined slightly over the period (Chart 1.23).

After generally increasing in the first phase of the crisis, ALMP expenditure per person wanting to work declined afterwards, while the divergence between Member States slightly increased (Chart 1.25). The decline was generally seen in Member States with relatively initial high levels (such as France or the Netherlands), but also in some closer to the average (such as Spain, Ireland and Portugal), while expenditure increased sometimes significantly in Member States with low initial coverage levels.

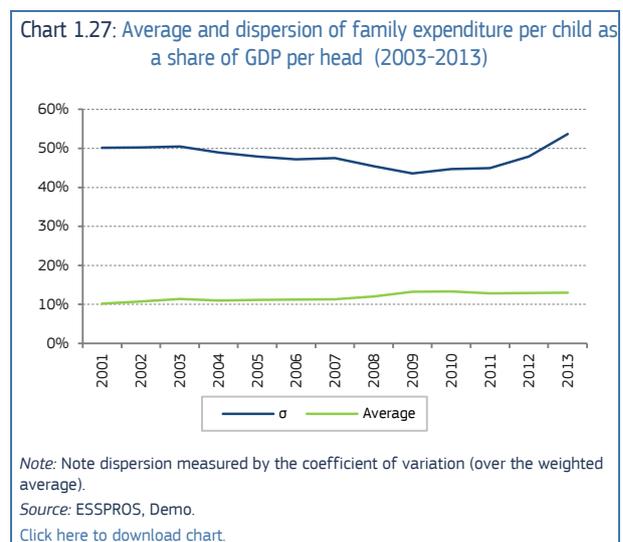


### 2.2.3. Childcare and family expenditure

The participation of mothers in the labour market tends to be higher where there is widespread provision and extensive use of childcare services, as well as availability of part-time work. Conversely, it tends to be lower where there is a wide gender pay gap and low general spending on family benefits. Higher and

more equally distributed family benefits also tend to reduce poverty rates <sup>(80)</sup>.

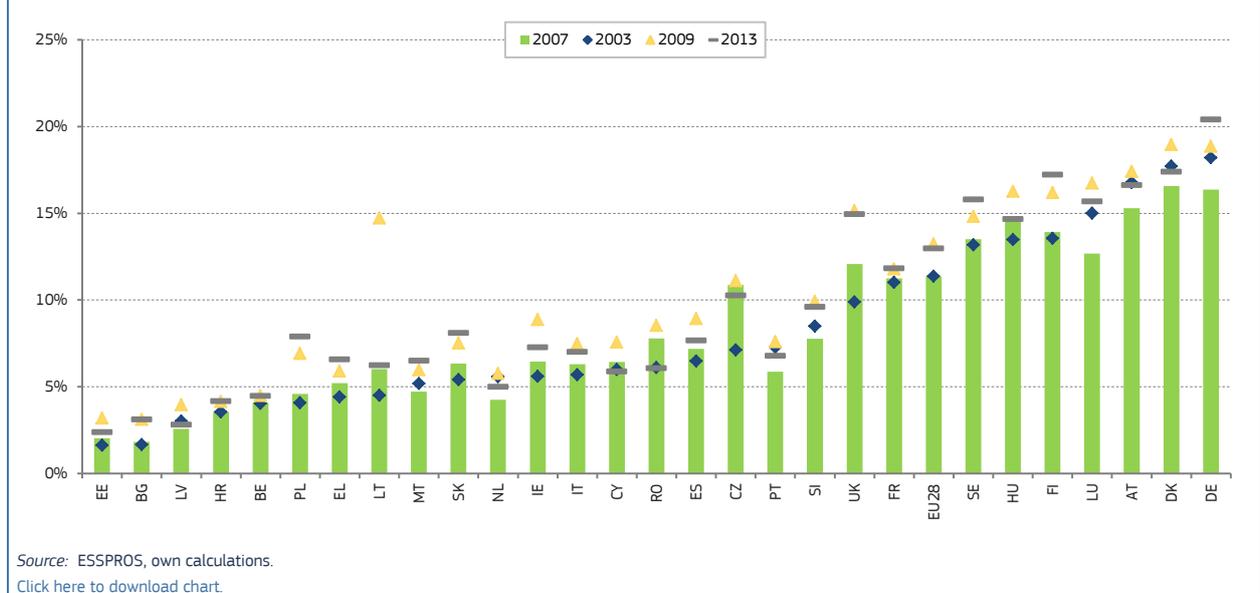
Family expenditure dynamics since the crisis have been mainly driven by changes in the average expenditure per potential beneficiary aged under 18. The acceleration in expenditure growth in 2009 was strong, in particular in the euro area, reflecting the price indexation mechanisms usually attached to these benefits. In 2011 and 2012, expenditure slowed down more than the standard movement of indexation mechanisms would imply. Reductions on this scale would probably not have been needed in 2011 and 2012 if the indexation mechanism of family benefits had been smoothed over the cycle, while the smoothing of the indexation mechanisms of other benefits such as pensions could have left more room for other types of benefits such as family benefits.



Member States' expenditure per child (as measured by average family expenditure per child as a share of GDP per head) converged until 2009 but diverged with the economic crisis, in particular in 2012 and 2013 (Chart 1.27). Average family expenditure per child varied very significantly across Member States, from around 5% of GDP per head in Estonia, Bulgaria, Latvia to around 15% or more in Luxembourg, Austria, Denmark and Germany (see Chart 1.28). Since 2009, average family expenditure per child has increased mostly in Member States where it was already relatively high (such as Finland, Luxembourg, Austria, Germany, Denmark) and tended to decline in Member States where it was in lower than average (such as Portugal, Romania, Cyprus, Ireland).

<sup>(80)</sup> Therefore, while the general level of benefits is important, so is their redistributive impact. See ESDE 2014, chapter III.2.

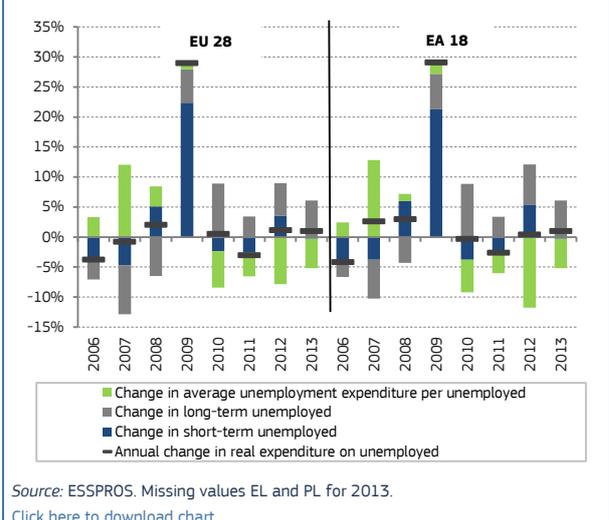
Chart 1.28: Family expenditure per child as a share of GDP per head, by Member State (2003-2013)



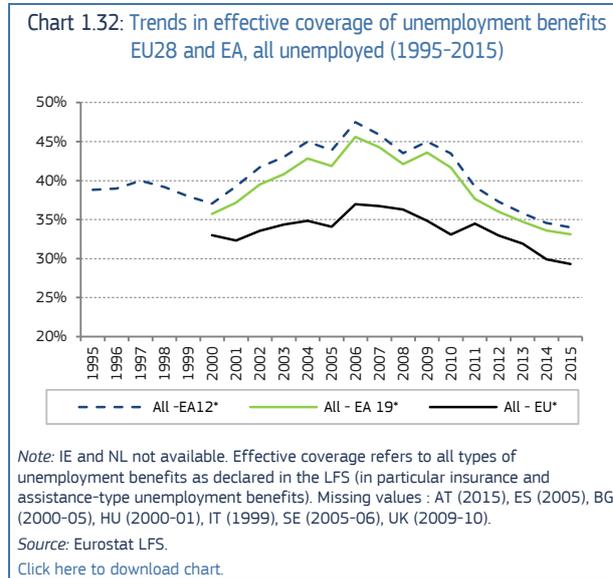
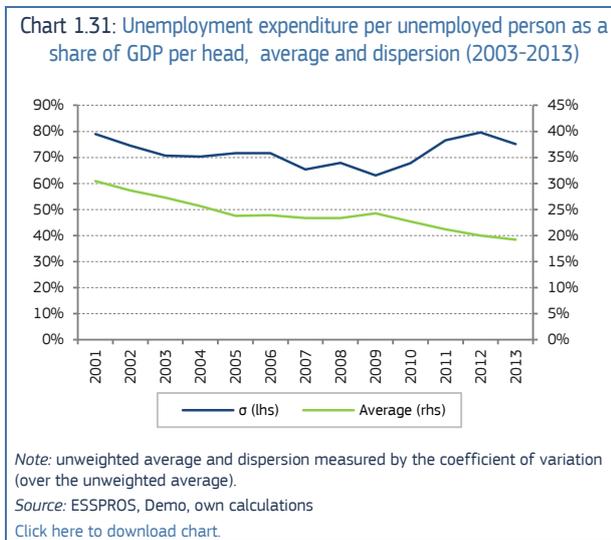
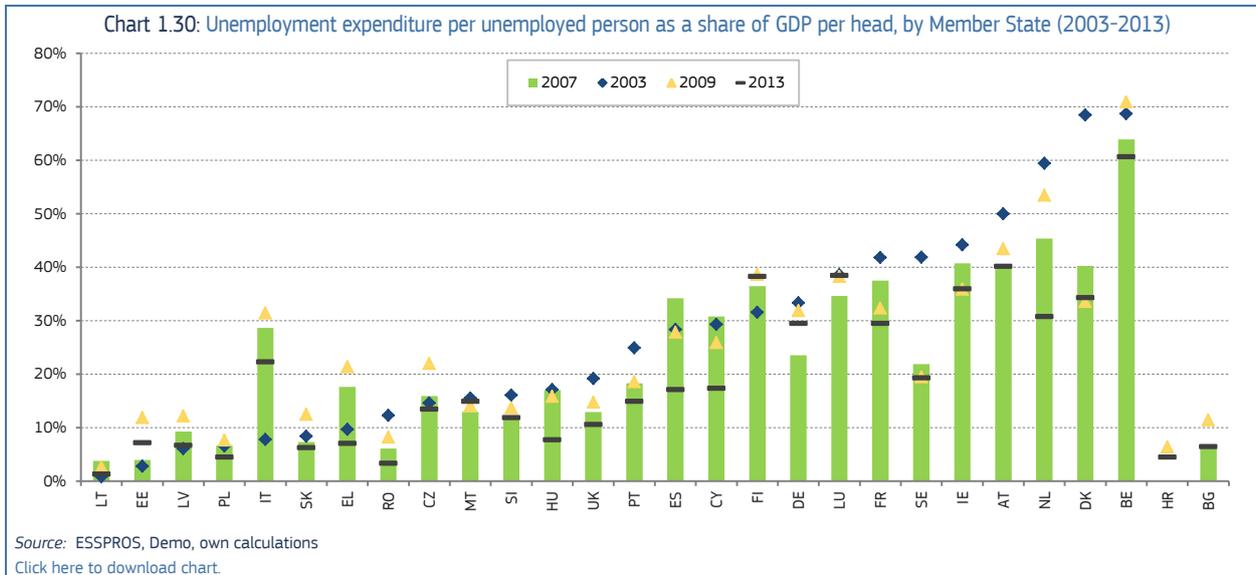
#### 2.2.4. Unemployment expenditure per unemployed person

Since 2010, unemployment expenditure has broadly stabilised, while unemployment continued to increase. This contrasts with the strong growth in unemployment expenditure recorded in 2009, which essentially reflected increases in the number of unemployed people (see **Chart 1.29**). Average unemployment expenditure per unemployed person declined by around 10% a year in the 3 years after the crisis. This reflected a number of factors, including a reduction in or loss of entitlement to unemployment benefits after a prolonged period of unemployment. In most Member States the duration of unemployment (insurance) benefits is less than one year so the long-term unemployed (whose share of total unemployment has increased) are generally not eligible for insurance unemployment benefits, but may eventually qualify for lower assistance unemployment benefits or social assistance benefits.

Chart 1.29: Decomposition of unemployment expenditure real growth (2006-2013) in the EU28 and EA18

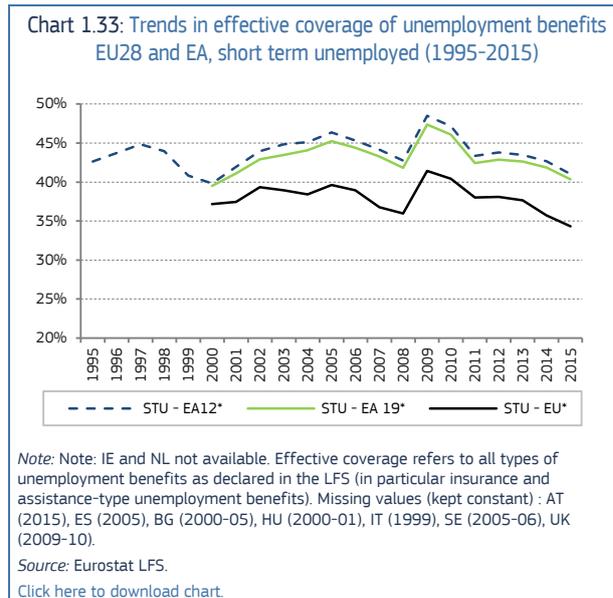


There was some convergence in Member States' expenditure per unemployed person until 2009 (as measured by the average unemployment expenditure per unemployed as a share of GDP per capita). Then the economic crisis brought about significant divergence until 2012, which was slightly reversed in 2013 (**Chart 1.31**). Average unemployment expenditure per unemployed person over the period 2007-13 varied very significantly across Member States, from less than 5% of GDP per head (in Lithuania, Estonia, Croatia, Romania) to around 60% in Belgium (see **Chart 1.30**). At the same time, average unemployment expenditure per unemployed person declined most strongly in Spain and the Netherlands and Cyprus (around 15 percentage points), but also declined in Hungary, Greece, France, Italy, Denmark and Ireland by between 5 and 10 percentage points).



### 2.2.5. Effectiveness of benefit coverage

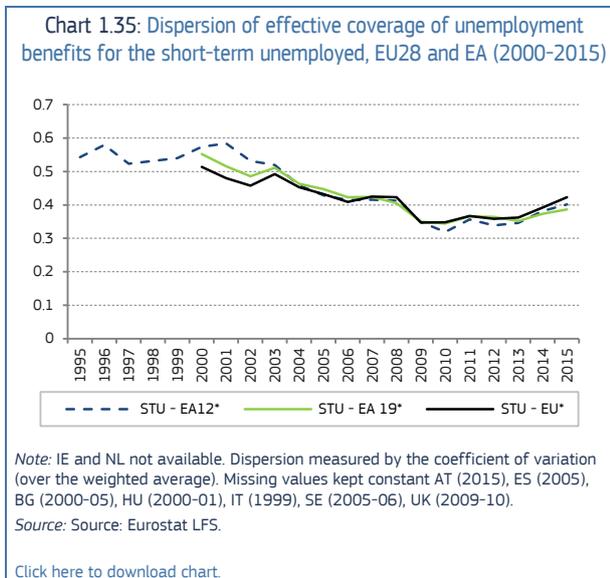
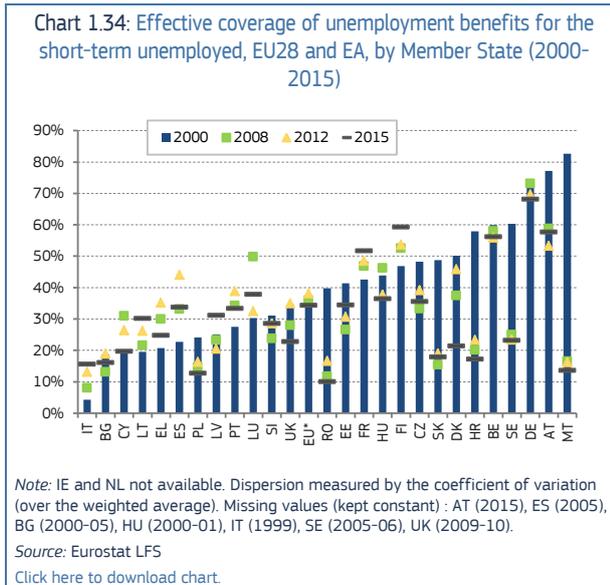
The ability of unemployment insurance schemes to stabilise an economy depends largely on their design, in particular in terms of eligibility conditions and duration. The average (effective) coverage of unemployment benefits has declined since 2009 (Chart 1.32). This decline also reflects an increase in the proportion of long-term unemployed, who are often not eligible for unemployment benefits. For the short-term unemployed, the decline in effective coverage was not as marked, and it occurred mostly in 2014-15 (Chart 1.33). In the initial phase of the crisis, effective coverage increased, probably reflecting the large number of newly unemployed people who were entitled to receive benefits.



The coverage of unemployment benefits for the short-term unemployed impacts directly on the stabilisation of household incomes when unemployment increases. As the maximum duration of unemployment benefits

is often lower than 12 months<sup>(81)</sup>, the coverage of short-term unemployed gives a better indication of the impact of unemployment insurance benefits.

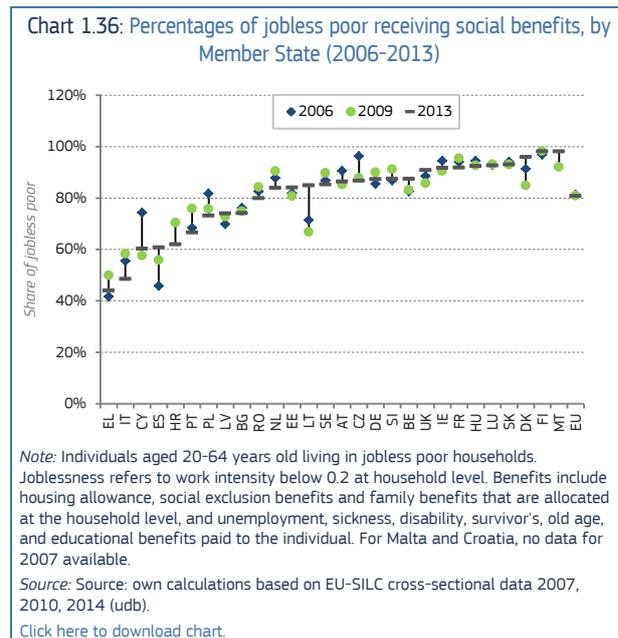
Overall, from 2000 until 2012 there was a converging trend. Before the crisis this mostly reflected some decline in countries with higher coverage levels (such as Malta, Sweden, Austria, Croatia or Slovakia), while from 2008-12 this mostly reflected increases in countries with low coverage (such as Italy, Bulgaria, Greece and Spain). However, the slight increase in dispersion since 2012 comes from a greater-than-average decline in countries with low coverage (such as Bulgaria, Cyprus, Greece, Spain or Poland).



For social protection systems to reduce poverty effectively, it is important that those in need have access to benefits (the focus here is on poor jobless households). This can be measured by the proportion of jobless poor receiving social transfers such as unemployment, disability, sickness, family, housing,

social assistance and educational benefits (old age and survivor's benefits are excluded because the focus is on working age adults only).

In the EU the vast majority of individuals living in jobless poor households (81%) receive some benefits. The share is significantly lower than the EU average in Greece and Italy, where it has further decreased from the level of 2009 by 6 and 10 percentage points (ppts) respectively<sup>(82)</sup>. Receipt of benefits has also fallen in Croatia (by 8 pp.) and Portugal (9 ppts), but has significantly increased in Denmark (11 ppts) and Lithuania (18 ppts) (Chart 1.36). In terms of convergence (using the measure of coefficient of variation), there has been hardly any change between 2006 and 2013.



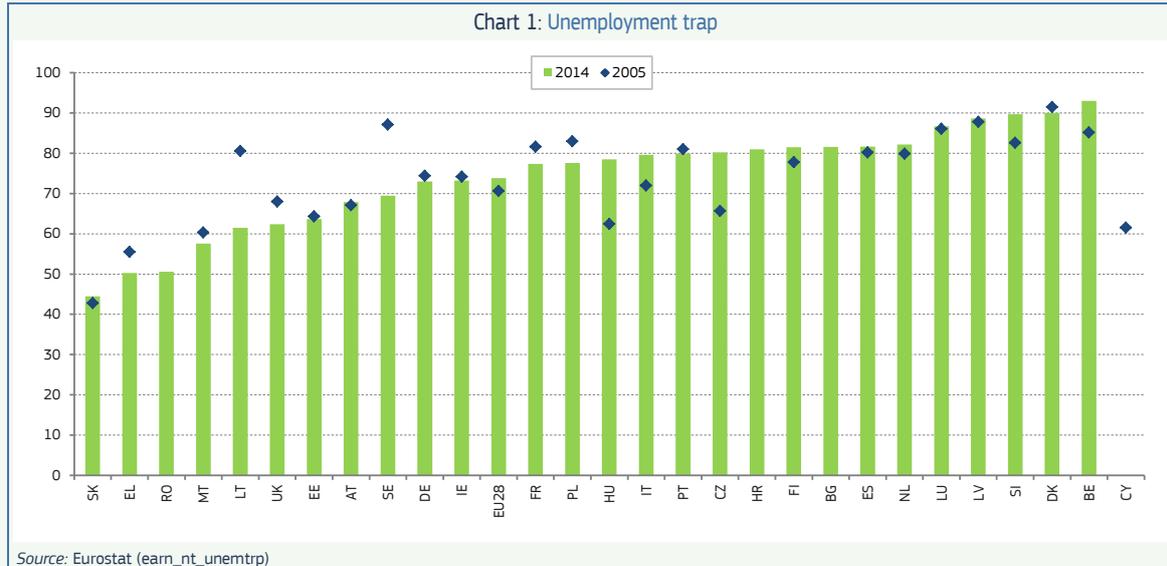
<sup>(82)</sup> Reflecting in particular the absence of minimum income benefits in those countries, see section 2.3.3.

<sup>(81)</sup> < to be added see for instance Palme and al. (2012) >

Box 1.4: Trends in unemployment traps

Unemployment trap indicators measure the marginal effective tax rate on labour, namely the extent to which the increase in gross earnings when moving from unemployment into work is reduced as a result of income taxes, social security contributions and the withdrawal of benefits. The indicator of the unemployment trap refers to the situation of single persons without children, earning 67% of the average wage when in work. Returning to employment after being unemployed triggers the loss of unemployment benefits and can imply higher tax and social security contributions. This may then discourage the unemployed from returning to employment, which in turn may erode their skills and employability and reduce their long-term employment prospects (see box 3).

For the EU as a whole, about 74% of additional gross income is taxed away following a transition from unemployment to employment for a single person without children earning 67% of the average wage. Nevertheless, there are some important differences across Member States (see Chart 1). The highest unemployment trap is to be found in Belgium, Slovenia and Denmark, almost 15 points above the EU average; these countries are among the Member States with the highest replacement rates (see Chart 1).



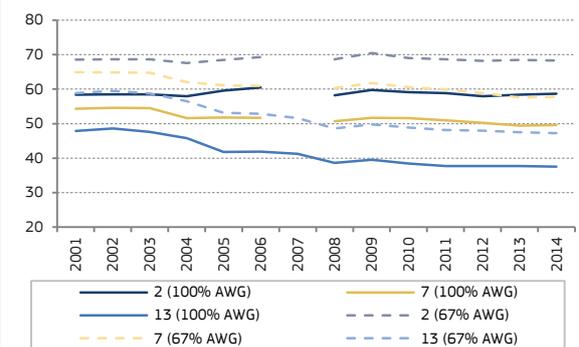
2.2.6. Replacement rates provided by benefits

In addition to trends in benefit coverage and expenditure per potential beneficiary, the analysis of trends in individual entitlements (as measured by net replacement rates for some typical household situations) can be completed by information sources which provide detailed policy descriptions (such the OECD Tax-benefit model).

Unemployment benefits

Unemployment benefit schemes tend to vary across Member States. The main differences relate to benefit durations, replacement rates and eligibility conditions. Benefit duration can increase with the length of the prior work history. Unemployment benefit replacement rates represent the proportion of previous income from work that is maintained after job loss and may depend on former wage levels, benefit duration and levels of financial work incentives. Eligibility depends on previous work record and contributions paid. Strict eligibility conditions mean that fewer unemployed people are entitled to benefits, and thus lower coverage. As entitlement to unemployment insurance requires a minimum work record, individuals with short employment records and less-than-continuous work histories are often ineligible.

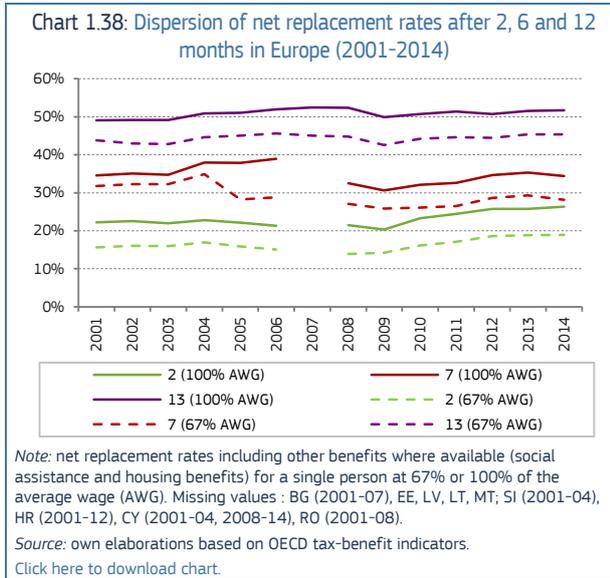
Chart 1.37: Average net replacement rates after 2, 6 and 12 months in Europe (2001-2014)



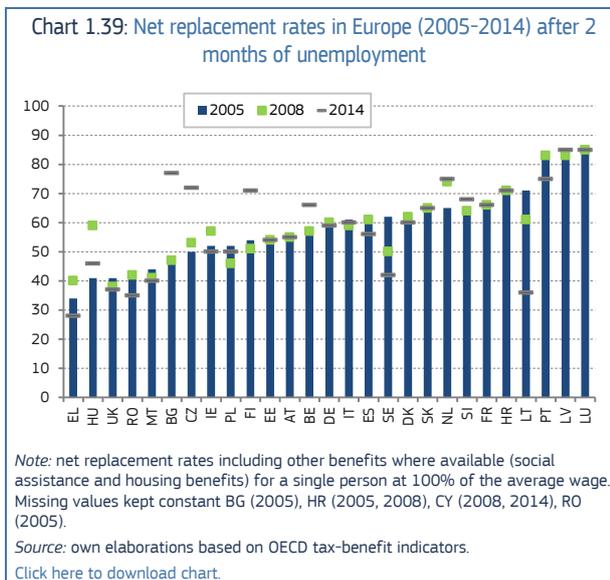
Note: net replacement rates including other benefits where available (social assistance and housing benefits) for a single person at 67% or 100% of the average wage (AWG). Missing values : BG (2001-07), EE, LV, LT, MT, SI (2001-04), HR (2001-12), CY (2001-04, 2008-14), RO (2001-08).

Source: own elaborations based on OECD tax-benefit indicators.

[Click here to download chart.](#)



Replacement rates have generally been declining, though replacement rates 2 or 7 months into unemployment spells have remained broadly stable since the beginning of the crisis. This overall stability was however accompanied by some decline of replacement rates for longer unemployment durations, and slight divergence since 2008 particularly for shorter unemployment spells and in countries with lower initial levels (Chart 1.39, see Box 1.4 for trends in unemployment traps).



### Minimum income benefits

Minimum income (MI) benefits (commonly described as "the income of last resort") refer to the guaranteed minimum incomes that aim at ensuring a minimum standard for those without other financial means (i.e. without sufficient income from work, other benefits or capital income and private transfers). In addition to being among the most important policy tools to combat poverty, minimum income schemes are part of comprehensive active inclusion strategies that

promote the social and labour market inclusion of their beneficiaries <sup>(83)</sup>.

National minimum income schemes currently exist in all EU Member States, except Italy (which still has varied regional provisions) and Greece (a national roll-out of the scheme is on the way). Despite shared overall objectives, the characteristics of the minimum incomes vary a lot across Member States. This reflects their entrenchment in different welfare regimes, which in turn influences needs for and levels of the MI benefits. Still, after taking account of the wider context of tax-benefit systems, MI support remain heterogeneous across the Member States, in particular as regards eligibility, take-up, benefit levels or activity and work requirements (see e.g. Marchal and Van Mechelen, 2014 on the variation in active labour market policies across the Member States).

Existing evidence suggests that the architecture of the minimum income schemes has not changed much over the last decade, but also points to limited "converging levels of minimum income protection" (Van Mechelen and Marchal, 2013). For the period 2000 to 2012, the latter study finds fairly stable dispersion values in benefit levels across the EU, though some catching-up was noted during the pre-crisis period in Romania, Ireland or Portugal.

A few other studies report on increasing minimum income (absolute) benefit levels (partially linked to the adoption of the Lisbon and of the Europe 2020 Strategies), though with a diverging trend across Member States (e.g. Wang et al., 2015; Wand and Fliet, 2014). In contrast, replacement rates (i.e. minimum incomes over average wages) were observed to decline. This points to a potential decline in relative living standards among the MI beneficiaries, when compared to the rest of the society.

Trends in the adequacy of minimum income protection for the working age population across the EU and the Euro zone from 2005 to 2014 can be assessed on the basis of net incomes <sup>(84)</sup> received by the MI recipients and their families. This allows account to be taken of the diverse architecture of tax-benefit provisions across Member States.

Over the period 2005-2015, the real <sup>(85)</sup> values of net minimum incomes to their recipients deteriorated in a few countries; slightly improved (i.e. increased less than 10 percentage points over the monitored 10 year period) in most countries; and improved significantly in a few Member States (Latvia, Estonia, Czech Republic, Slovakia and Lithuania, see Chart 1.40). Changes in minimum income benefit levels were not uniform for

<sup>(83)</sup> (See for instance the European Commission's Social Investment Package (SIP), 2013; the EC Recommendation on Active Inclusion, 2008)

<sup>(84)</sup> Net incomes refer to gross earnings (i.e. gross wages) plus gross cash benefits minus income taxes and individual social security contributions, with variation of income sources subject to work specific situations.

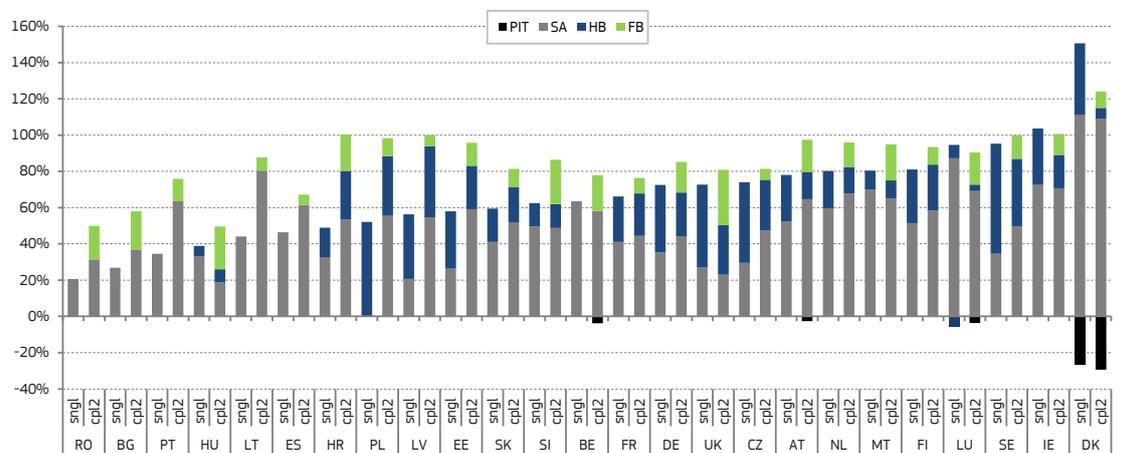
<sup>(85)</sup> Adjusted for inflation based on HICP.

Box 1.5: Adequacy levels are highly diverse across countries and household types

Changes in real minimum income can be heterogeneous across households due to different policies concerning the diverse income sources available to the MI recipients. Therefore, changes observed could be due to developments across various tax and benefit policy domains, rather than a change in a single policy.

The composition of net incomes varies across countries for a single person and a household of two non-working adults with two children (see chart below). Minimum income benefits account for the largest share of net incomes in most countries, though the influence of different MI architectures is well portrayed by such country examples as Romania, Bulgaria, Poland, the Czech Republic, the UK or Denmark. Housing benefits are not available to MI recipients in Romania or Bulgaria, but are the only source of income in Poland and account for more than half of the net incomes in the Czech Republic and the UK. Transfers to children are a much more significant source of income for the UK beneficiaries than for their Czech counterparts. In Denmark, minimum income protection is not only an integral part of the social transfers system, but also has important links to taxes and social security contributions. Adequacy of income support is quite varied, not only across countries but also across household types within countries, as shown in the chart below. Overall, families with children have higher income protection levels than single people, but this is not necessarily due to the complementary receipt of family benefits. For example, in Lithuania single persons are entitled to almost twice lower social assistance levels; relatively little more is given to families of two non-working adults with two children claiming the income support provided by family benefits. In Slovenia or Belgium, on the other hand, similarly generous levels of social assistance are available to single persons and families with children, but the net incomes of families with children are boosted considerably by the receipt of family benefits.

Chart 1: Composition of net incomes of MI recipients as % of net incomes of low wage earners (2014)



Note: FB – family benefits; HB – housing benefits; SA – social assistance benefits; PIT – personal income taxation and social security contributions; 'sngl' refers to single person household; 'cpl2' refers to a family consisting of two non-working adults and two children; low wage refers to 40% of average wage; the listed net income categories include various income components applicable in the country; special rules (e.g. social assistance for non-rent-related housing costs, such as water and electricity) are not explicitly covered; assumption is made that the level of rent for all household types is 20% of the gross earnings of an average worker; more details on the country-specific assumptions are available on [www.oecd.org/els/social/workincentsives](http://www.oecd.org/els/social/workincentsives).

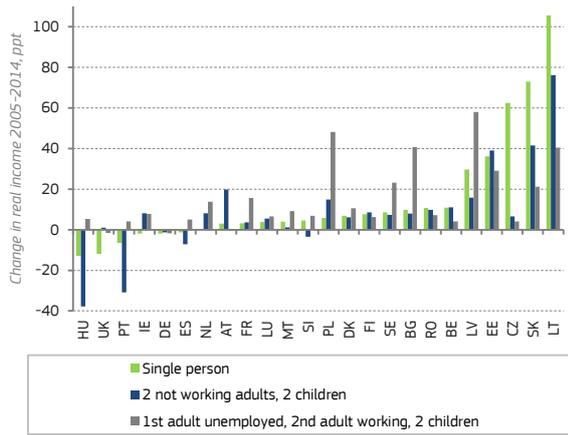
Source: own elaborations based on OECD tax-benefit indicators

different household types, reflecting the interplay with other benefits - welfare benefits, including those due to presence of children, in-work benefits, and the influence of at least one earner being employed at the low wage, see Box 1.5).

For a single person, net minimum incomes lost real value during the period 2005-2014 only in a few countries (Hungary, the UK and Portugal; in Hungary and Portugal, however, a larger reduction took place for families consisting of two non-working adults and two children). In contrast, net incomes actually rose or remained stable in all Member States for families with two children (where one of the two adults was employed at the low wage, i.e. 67% of average wage, the other adult being unemployed). Larger relative increases (more than 40 percentage points) benefited single persons rather than families with children in Lithuania, Slovakia and the Czech Republic.

Given different trends in national living standards, it is important also to account for overall incomes developments in the national context. This can be done either by reviewing trends of minimum income benefits in relation to the national poverty line, or in relation to the income of a low wage earner. While the former relates to the poverty reduction objectives of the MI support and to overall incomes in the country, the latter illustrates more specifically the interlinkages with other benefits available for the working age population.

Chart 1.40: Net incomes of MI recipients, real change 2005 – 2014



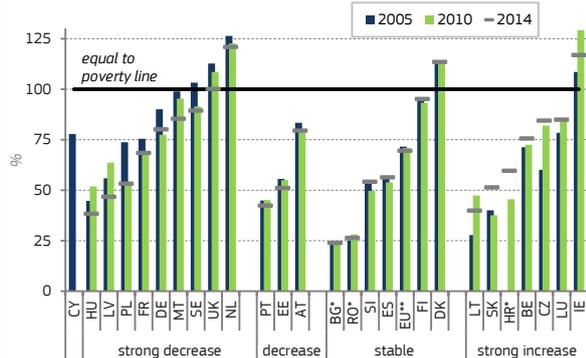
Note: here and further on the following modelling parameters apply: Greece and Italy have no national minimum income schemes for the time considered; no OECD tax-benefit model calculations are available after 2007 on Cyprus; no information is available for Croatia before 2013; where benefit rules are not determined on a national level but vary by region or municipality, results refer to a "typical" case (e.g. the capital); net incomes account for all relevant cash benefits (social assistance, family benefits, housing-related cash support) and are net of any income taxes and social security contributions; real changes in equivalised net incomes (i.e. using modified OECD equivalence scale) account for inflation (HICP); household composition for the 2nd working adult corresponds to 67% of average gross wage; assumption is made that two children are four and six years old; countries are sorted in the ascending order of real changes for single person households

Source: own elaborations based on OECD tax-benefit indicators.

Click here to download chart.

Overall, from 2005 to 2014, MI benefit levels decreased in the majority of Member States, with strong (more than 5 pts) reductions in Hungary, Latvia, Poland, France, Germany, Malta, Sweden, the UK and the Netherlands. The largest reduction in the EU took place in Poland, where MI support fell by more than 20 pts, to just above half of the poverty line in 2014.

Chart 1.41: Net incomes of MI recipients as% of poverty line- single person



Note: 2008 instead of 2005 indicators reported for Bulgaria and Romania and 2013 instead of 2010 for Croatia; \*\* - unweighted average for covered countries, excluding Cyprus; poverty line refers to the at-risk-of-poverty concept and is set at 60% of the national median equivalised disposable income, with reference year being income reference year rather than EU-SILC survey wave year, as EU-SILC 2015 survey wave results (i.e. 2014 incomes) were not yet available for all countries at the time of the analysis, poverty thresholds for countries with missing values were projected on the basis of income "nowcasting" estimations (Rastrigina, Leventi, Vujackov and Sutherland, 2016)

Source: own elaborations based on OECD tax-benefit indicators and EUROSTAT EU-SILC data [ilc\_li01].

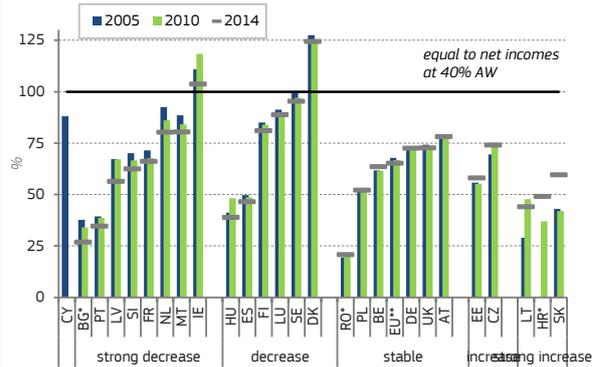
Click here to download chart.

On the other hand, strong rises in the relative adequacy of MIs were also observed, in Lithuania, Slovakia, Croatia, the Czech Republic, Belgium, Luxembourg and Ireland. For Lithuania, the Czech

Republic and Slovakia this corresponds to the observed sharp real increases in absolute net MI incomes. In Luxembourg and Ireland, real MI income levels were roughly stable, but moved closer to these countries' poverty thresholds because the values of the poverty thresholds had declined<sup>(86)</sup>.

A similar picture of widely varied levels across the Member States and generally decreasing living standards emerges when assessing the value of the net incomes of MI recipients compared with the net incomes of low wage earners (i.e. those earning 40% of the average wage) (Chart 1.42)<sup>(87)</sup>. The countries where net incomes of MI recipients compared most favourably with the net incomes of low wage earners in 2005 (Denmark, Ireland, Sweden, the Netherlands, Luxembourg or Finland) saw some decline by 2014, but declines also took place in other countries such as Portugal, Hungary and Bulgaria. In Bulgaria, not only are the net incomes of MI recipients relative to those of low wage earners among the lowest in Europe, but they have steadily reduced over the period 2005-2014.

Chart 1.42: Net incomes of MI recipients as a% of net incomes of low wage earners-single person



Note: 2008 instead of 2005 indicators reported for Bulgaria and Romania and 2013 instead of 2010 for Croatia; \*\* - unweighted average for covered countries, excluding Cyprus; low wage refers to 40% of average wage.

Source: Own elaborations based on OECD tax-benefit indicators.

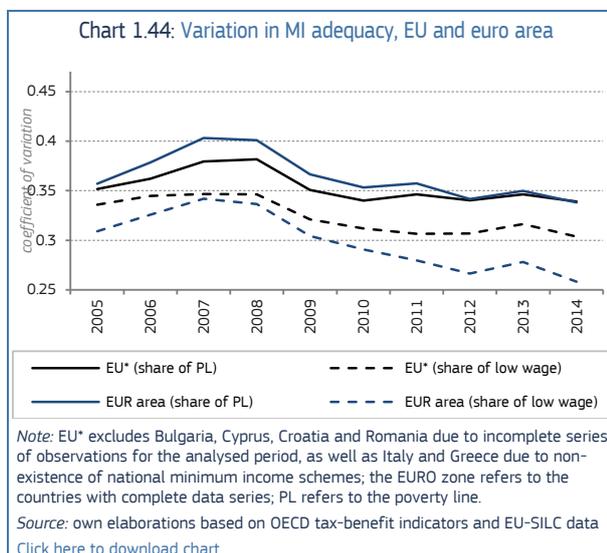
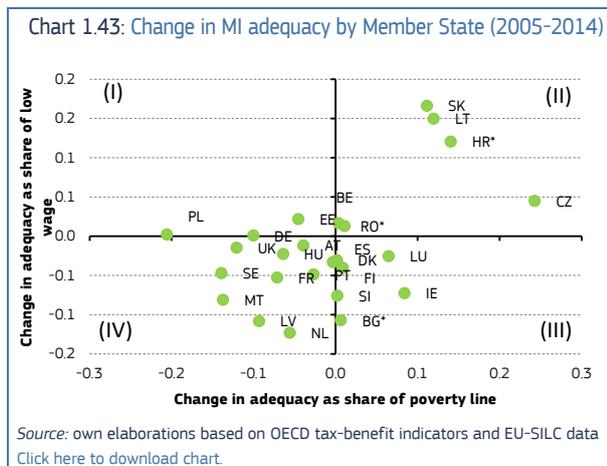
Click here to download chart.

All in all in most countries, the adequacy of MI support weakened over the decade, whether measured relative to the poverty line or to low wage incomes (group IV in Chart 1.43). Only a few countries have seen a significant increase (Slovakia, Lithuania, Croatia, group II in Chart 1.43). In the Czech Republic, the standard of living of the MI recipients increased in comparison with the poverty line, but a smaller increase was noted in comparison with the incomes of the working

<sup>(86)</sup> Since 2005 to 2014, real (adjusted for HICP) reductions in poverty thresholds were observed not only in Ireland and Luxembourg, but also in Cyprus, Greece and Italy; they remained broadly stable in Hungary, Spain, Portugal and the UK.

<sup>(87)</sup> It should be noted that at this wage level, people are entitled to a number of social benefits in some Member States (i.e. CZ, DK, FI, FR, HU, LU, MT, NL, SK, SI, SE, UK in 2014). Such entitlements varied across the studied years: e.g. an entitlement to housing benefits in 2005 in LU was replaced by more generous social assistance in 2014, whereas 2005 entitlements to housing benefits and social assistance in Germany were both scrapped in 2014.

population. Estonia stands out as about the only country where the living standard of the MI recipients rose in comparison to wage earners' situation. This could reflect a stronger rise in other-than-wage incomes in the period 2005-2014.



As a result of these developments, there has been a reduction in the dispersion of adequacy levels across the EU and in particular in the Euro area since 2008-09 (Chart 1.43). The Euro area variation in adequacy levels as a share of poverty thresholds was higher than the EU variation before 2008, but sharply reduced and stabilised at about the same dispersion level by 2014. In contrast, the dispersion of MI support as a proportion of low wage incomes was lower across the euro area than across the EU during the entire period of analysis. Furthermore, a sharper reduction in the dispersion level was noted for the Euro area by 2014. While overall this implies that the living standards of MI recipients in the euro area have converged, it also reflects declining living standards, especially in countries with traditionally higher adequacy levels though living standards of MI recipients have risen in a handful of countries with lower MI adequacy levels.

## 2.2.7. Convergence in employment and social policies: the overall picture

Overall, the evidence on convergence of investment on human capital over the last decade is mixed (see Table 1.1). On the positive side, skills structures have converged (as measured by educational attainment, see above), while the proportion of early school leavers both converged and reduced during the crisis. However, the coverage of ALMPs went down after 2009 as did the level of expenditure per person wanting to work, while the coverage of life-long learning remained broadly stable. Furthermore, while average family expenditure per child remained stable or increased slightly on average, expenditure levels converged before 2009 and diverged afterwards.

The evidence on convergence of support for the jobless is also mixed. Average unemployment expenditure per unemployed person declined in the crisis and only stabilised in 2013, in a context of significant divergence of support per unemployed person between Member States. As regards coverage, since the beginning of the crisis, effective coverage has been either slightly declining (unemployment benefits and ALMP) or constant (lifelong learning and access to benefit for the jobless poor). There have not been any significant trends in dispersion, except for effective unemployment benefit coverage, where convergence before the crisis has been reversed since.

Average benefit levels (unemployment benefit replacement rates and minimum income benefits) have generally been declining, though unemployment benefit replacement rates have remained broadly stable since the beginning of the crisis. This overall stability of average unemployment benefits was however accompanied by some divergence for longer unemployment durations. On the other hand, minimum benefits levels converged in the crisis, mostly reflecting declines in countries with initially higher levels.

## 2.3. Tax-benefit systems and their impact on household incomes

### 2.3.1. Impact of taxes and benefits on inequality

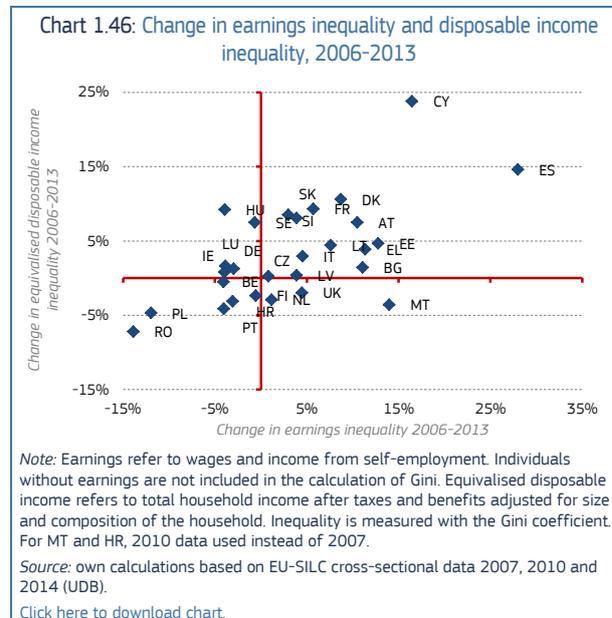
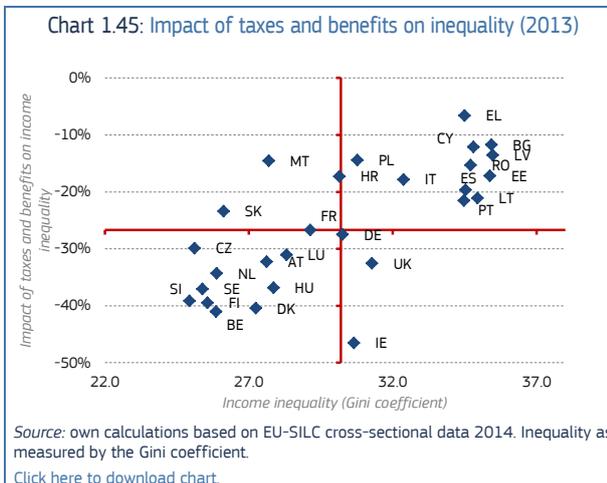
Countries with high income inequality generally also have tax-benefit systems with a low impact on inequality (Chart 1.45). However, some countries achieve relatively low levels of inequality despite the limited impact of the tax-benefit system (e.g. Slovakia compared to Nordic countries, Belgium and Slovenia).

Table 1.1: Summary table of trends in the convergence of policies

	Overall trend		Dispersion	
	Before 2009	After 2009	Before 2009	After 2009
<b>Active labour market policies (ALMPs) and lifelong learning (LLL)</b>				
ALMP coverage	=	↓	=	↑
ALMP expenditure per person wanting to work	↑	↓	=	=
LLL	=	=	=	=
<b>Coverage</b>				
Unemployment benefits	=	↓	↓	↑
ALMP	=	↓	=	=
Any benefit (jobless poor)	=	=	=	=
<b>Benefits individual replacement rates</b>				
Unemployment benefits (UB)	↓	=	=	↑
Minimum income benefits	↓	↓	=	↓
<b>Average expenditure</b>				
UB expenditure per unemployed	=	↓	↓	↑
Family expenditure per child	=	=	↓	↑

Source: own elaboration.

[Click here to download table.](#)



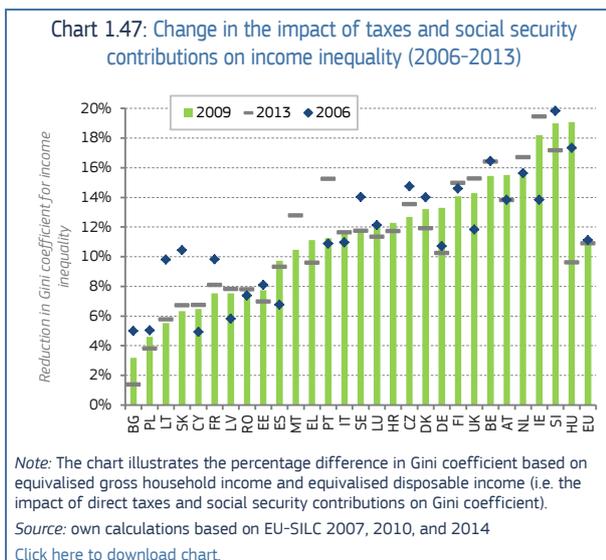
Changes in earnings inequality<sup>(88)</sup> did not translate equally into income inequality across countries (Chart 1.46). In a few countries, such as Hungary, Sweden, Slovakia and Slovenia, earnings inequality has hardly changed or declined since 2006, but income inequality has increased significantly. In other countries, especially Bulgaria, Spain, Estonia, Malta, Greece and Austria, there was a greater increase in earnings inequality than in income inequality, meaning that taxes and transfers were able to counterbalance the increasing earnings inequality.

<sup>(88)</sup> Includes wages and income from self-employment.

The post-war decline in income inequality in Europe was connected not only to rapid economic growth, but also to the expansion of the welfare state and of progressive tax benefit systems (see for instance Atkinson 2014). The difference between earnings and income inequality is strongly influenced by the functioning of the tax-benefit system, which explains cross-country variation in income inequality to a great extent. The fact that market income inequality varies less across OECD countries than income inequality also highlights differences in how effectively countries' tax-benefit systems reduce income inequality<sup>(89)</sup>.

<sup>(89)</sup> OECD (2011: 264, 267) argues that from the mid-1990s to 2005, the reduced redistributive capacity of tax-benefit systems was sometimes the main source of rising income inequality. Almost all countries devoted a declining share of social spending to non-elderly benefits, such as unemployment and family benefits. At the same time, less progressive tax

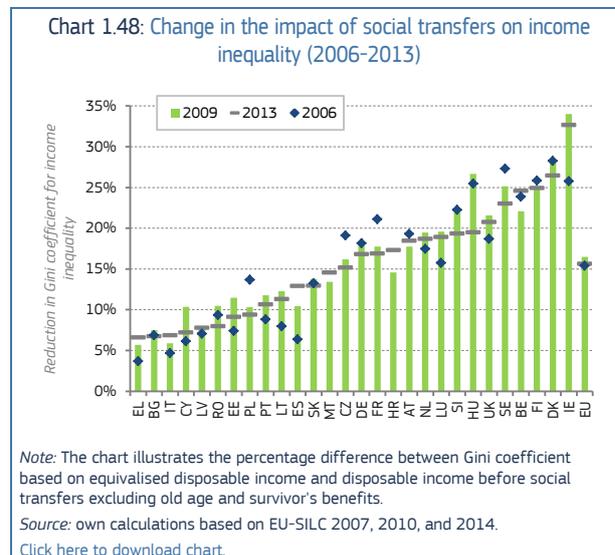
At the EU level, the impact of direct taxes and social security contributions on income inequality has remained broadly constant from 2006 (11.1%) to 2013 (10.9%) - see **Chart 1.47**<sup>(90)</sup>. This impact is minimal and even falling in Bulgaria (where the top personal income tax level is the lowest in the EU and there has been a 10% flat-rate tax system since 2008). In Hungary, the introduction of a flat-rate tax system in 2011 also had a negative impact on inequality (the impact of the tax system fell from 19% in 2009 to 9.5% in 2013). Since 2009, changes have been relatively small, except in Portugal where the impact grew by 4.4 percentage points, attributable to the changes in progressivity of the personal income tax and solidarity surcharge. Bigger changes in the impact of taxes on inequality were recorded between 2006 and 2009, especially in Ireland (rise of 4.4 ppts), in Lithuania (drop of 4.3 ppts) and in Slovakia (drop of 4.1 ppts). However, chart 1.31 does not take into account any changes in indirect taxation, such as VAT, which is known to be regressive: increases in VAT are likely to hit the purchasing power of the people with lowest income hardest. Since 2009, VAT rates have been rising in most EU Member States <sup>(91)</sup>.



The impact of social transfers (excluding old age and survivor's benefits) increased in the initial phase of the economic crisis, mainly because of the income-replacement effect of unemployment benefits, but in the latter phase of the crisis, since 2009 it has weakened (**Chart 1.48**). This reflects the rise in long-term unemployment - the long-term unemployed are less well covered and have lower benefits - as well as cuts in social transfers and their indexation. There is a lot of variation between countries in the inequality reduction impact of social transfers. In Ireland, Belgium, the United Kingdom and the Nordic countries, income inequality is reduced by a fifth through the benefit system. However, in Nordic countries

(especially Sweden) the inequality reduction impact has slightly weakened since 2006.

Since 2009, the impact of social transfers has generally declined. It increased only in seven countries (most significantly in Croatia by 2.7 ppts). There has been an especially big drop in impact in Hungary (7.2 ppts), due to losses in non-means-tested benefits. The magnitude of the impact of social transfers is not only driven by the generosity in coverage and targeting of the benefits. With an economic recovery and a fall in unemployment and inactivity, the impact of social transfers can get smaller as fewer people depend on benefits. However, this is not likely to be the case here as unemployment continued to increase during this period (from 9.0% in 2009 to 11.0% in 2013 for 15 to 64 years old in EU28). Also, if income inequality increases mostly at the top of the earnings scale, social transfers are less likely to have an impact on it.



### 2.4.2 The distributional impact of changes in policies since 2008

Microsimulation models can be used to evaluate how public policies have affected income distribution, isolating the impact of policies from the impact of changes in the labour market or household structures. De Agostini et al. (2015), using data from Euromod<sup>(92)</sup>, highlight that at the EU level, policy changes were poverty-reducing and had a positive effect on mean incomes in the first period of the economic crisis (2008-2011), while the opposite effect was generally observed in the later phase (2011-2014). During both periods policies were inequality-reducing at the EU level with some variation across countries. For example, in Bulgaria the effect was significantly inequality-reducing, especially in 2008-2011, while in Hungary changes in policies increased inequality (resulting from the flat-tax reform in 2011).

instruments were increased, such as social security contributions.

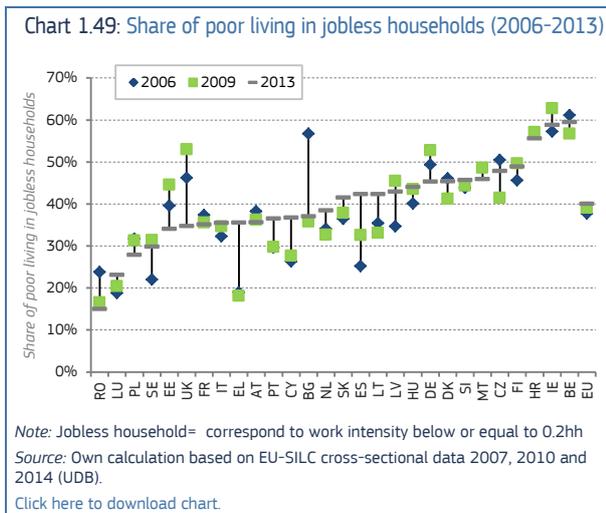
<sup>(90)</sup> For more information on the developments in taxation systems in the EU, see Eurostat (2014).

<sup>(91)</sup> See Eurostat, 2014: 25.

<sup>(92)</sup> EUROMOD allows isolating policy effects such as reforms to the design of the tax-benefit system or changes to tax levels and benefit amounts (relative to price changes) from other factors shaping the income distribution, e.g. changes in population characteristics and market income distribution. For more details see De Agostini et al. (2015).

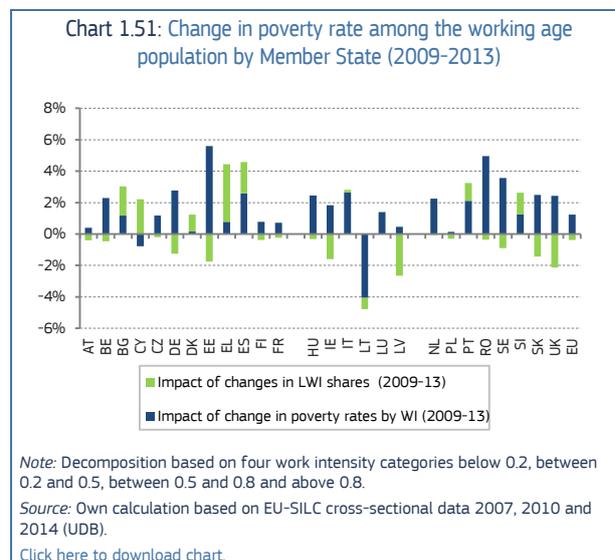
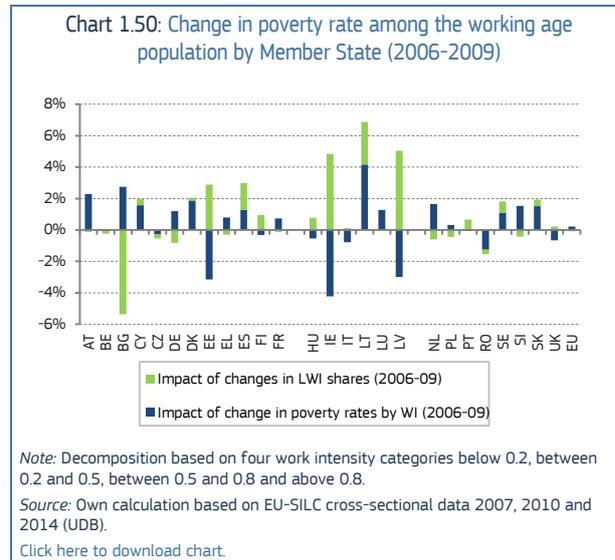
Policies have benefited the bottom income decile especially in Greece, Cyprus and Slovenia (while not offsetting the negative labour market outcomes in Greece); they had a negative effect on the bottom decile in Hungary, Latvia, and Portugal.

While in-work poverty has risen in most EU countries, the in-work poor still represent a minority of all working-age poor in all countries, although in Romania and Luxembourg their share is more than 40%<sup>(93)</sup>. These changes largely reflect the changes in the overall number of people living in jobless households (Chart 1.49); this number has increased on average from 12.4% in 2007 to 13.6% in 2014, with much bigger increases in Greece, Spain, Lithuania, Latvia, and Portugal.



Over the period 2006-09 (Chart 1.50), changes in the poverty rate among the working age population have been mostly driven by shifts in households' work intensity, particularly in the Member States most affected by adverse labour market developments (Estonia, Spain, Ireland, Lithuania, Latvia, Cyprus) but also in some others (Austria, Germany, Denmark, France, the Netherlands, Sweden, Slovenia, Slovakia and UK). Over this period, such trends have sometimes been balanced by lower poverty rates at given work intensity.

<sup>(93)</sup> See Chapter 2 of this review for an in-depth analysis of the poverty risk among low-wage earners as well as in-work poverty in general.

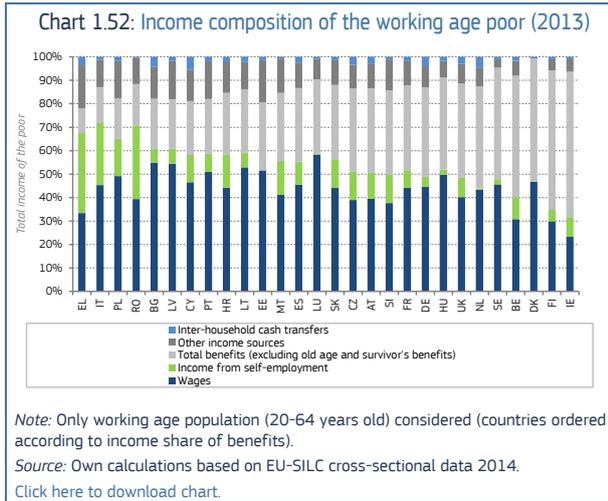


Over the 2009-13 period (Chart 1.51), there has been a slight reversal in the impact of shifts in the structure of work intensity following the start of the recovery (in particular in Germany, Estonia, Ireland, Latvia, Slovakia and the UK), but the declining work intensity of households still had a significant impact in some Member States (such as Greece, Spain). A stronger driver of poverty trends has nevertheless been the increase of poverty rates at any given work intensity of households (in particular in Estonia and Romania, but also in Belgium, Germany, Spain, Hungary, Italy, the Netherlands, Portugal, Sweden, Slovakia and the UK).

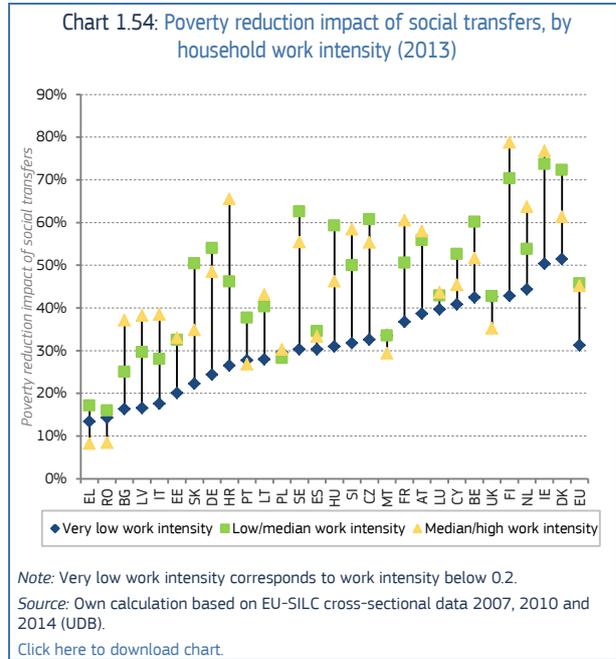
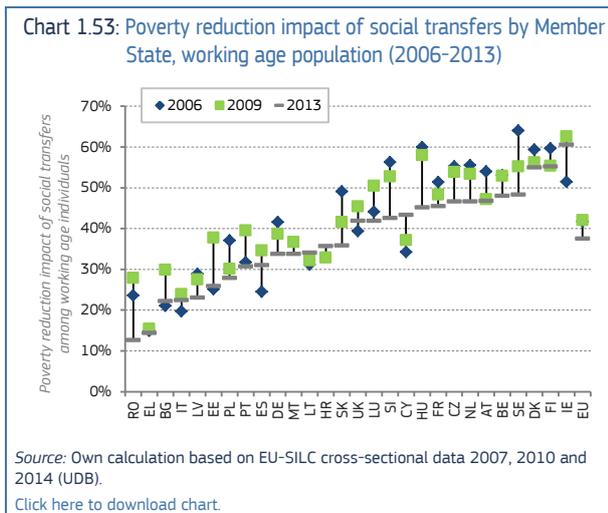
Overall, the poverty reduction impact of social transfers has declined.

On average, social transfers make up around a third of the incomes of the working age poor, with unemployment and family benefits being the most important sources. The weights of wages and social transfers in the income of the poor vary a lot across countries (Chart 1.52). In particular, in Finland and Ireland income from wages and self-employment represents only around a third of total (gross) income

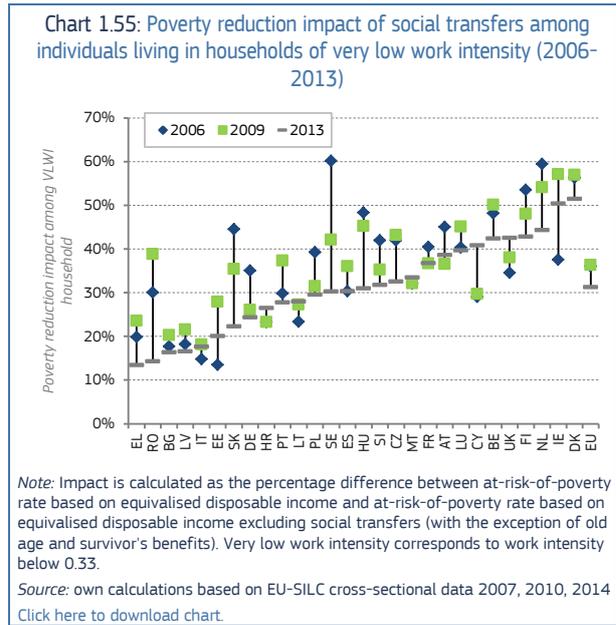
of working age adults living in poor households, while in Italy and Romania it is more than 70%.



Since 2007, the impact of social transfers on poverty reduction has declined in most countries (Chart 1.53), with the exception of Ireland where it was above average in 2007, and Cyprus and Spain (to a lesser extent also Italy, Lithuania, Bulgaria and the UK). However, such a trend can reflect changes in the composition of the working age population (with relatively more people with low work intensity) or different targeting of benefits or lower levels of benefits (see also Cantillon et al., 2015, Nelson, 2008). Poverty reduction varies widely across population groups, which can partly explain the decline in the overall poverty reduction impact (Chart 1.54) as the share of jobless households among the poor has increased. The poverty reduction impact among individuals living in jobless households is usually much lower than among other households (e.g. families with children, the exceptions being Romania, Poland and Spain).



However, while the proportion of poor people who live in households with work intensity lower than 33% has increased, the protection provided by taxes and benefits has also decreased (Chart 1.55).

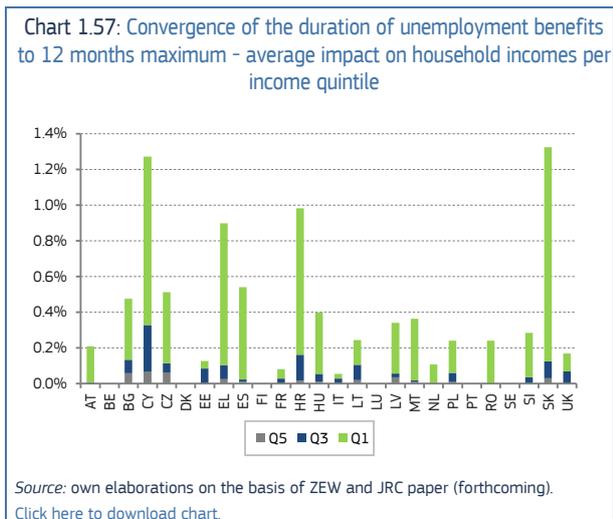
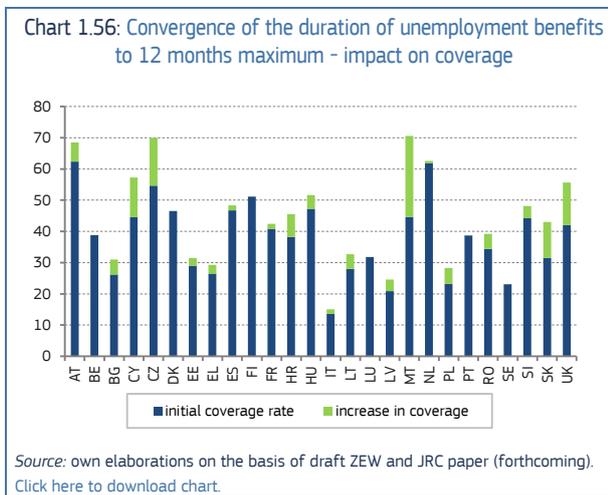


### 2.3.2. Impact of more convergence

Evidence of the impact of further convergence in key policy parameters across unemployment insurance systems can be provided by an analysis of micro data (94). An important caveat is that such analysis

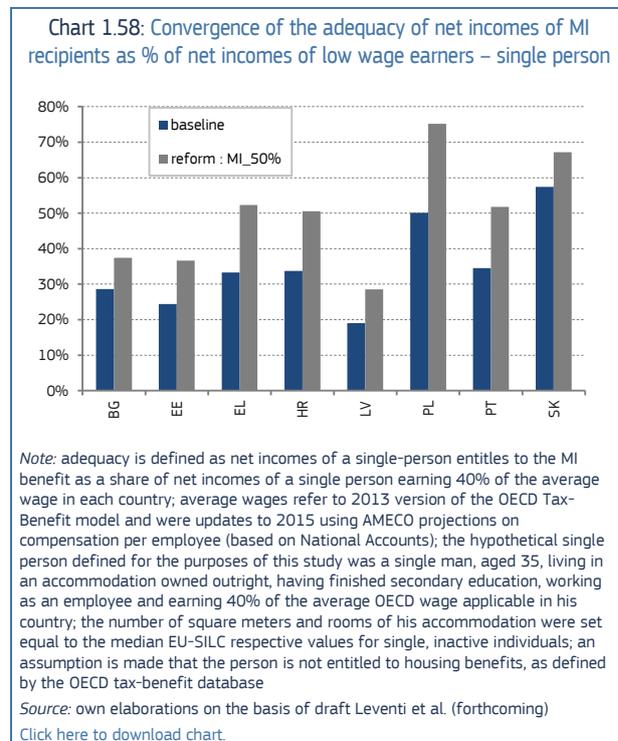
(94) See for instance a recent study by the ZEW and JRC, Barrios et al (2016, forthcoming). Reflecting changes in the rules of 2011 of unemployment insurance schemes and taking into account their interactions with the other parts of the tax-benefit systems. EU-SILC 2012 data is used as the underlying data source, with incomes and thus policy simulations reference year being 2011. Given that simulation of unemployment insurance requires information on previous earnings, which are not available in the cross-sectional EU-SILC, additional

imperfectly takes into account the fiscal implications of such convergence in policies, which is also dependent on the fiscal room that countries can have. Several parameters can be considered for the analysis, such as the minimum duration of unemployment benefits, the net replacement rate and the eligibility criteria. According to this study, a simultaneous adjustment towards a maximum unemployment benefit duration of 12 months would produce positive net income effects across quintiles in 21 out of the 26 countries analysed (in the rest no income effect would be noted because unemployment duration is already 12 months). The increase in coverage would generally range from 5 to 10 percentage points (or more in Austria, Cyprus, Czech Republic, Croatia, Malta, Slovakia and the UK). The impact on household incomes tends to be strongly focussed on the first quintile of the income distribution (with average increases reaching 1% of the average income of the first income quintile in Cyprus, Greece, Croatia and Slovakia).<sup>(95)</sup>



The possible implications of some convergence of national minimum benefit systems can also be captured based on the analysis of micro data. An analysis from Leventi, Makovec, Rastrigina and Sutherland (forthcoming, 2016) focuses on eight EU countries (Bulgaria, Estonia, Greece, Croatia, Latvia, Poland, Portugal and Slovakia) regarded as having the least adequate MI schemes in the EU. In the case of Greece, the analysis simulates the rules of the MI pilot scheme introduced in 2014, so as better to understand the income implications of converting the pilot scheme into a national programme.

The study uses EUROMOD, the tax-benefit microsimulation model for the European Union, to simulate the rules of 2015 MI benefits and to take into account their interactions with other parts of the tax-benefit system (e.g. if MI benefits are taxable or included in a means test for another benefit)<sup>(96)</sup>.

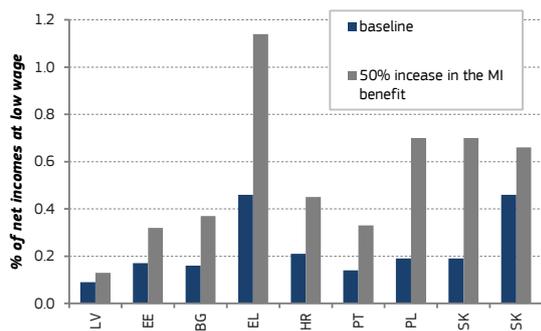


<sup>(96)</sup> As no timely survey micro-data on incomes is available, EU-SILC 2012 data is used as the underlying data source, with incomes updated from 2011 to 2015.

longitudinal EU-SILC elements were integrated into the analysis.

<sup>(95)</sup> According to this study, considering the impact of higher net incomes on consumption and the related increase in VAT would tend to reduce the net fiscal cost of the reforms (by up to 20%).

Chart 1.59: Convergence of the adequacy of net incomes of MI recipients as % of net incomes of low wage earners – costs as % of GDP



Note: adequacy is defined as net incomes of a single-person entitled to the MI benefit as a share of net incomes of a single person earning 40% of the OECD average wage in each country; average wages refer to 2013 version of the OECD Tax-Benefit model and were updated to 2015 using AMECO projections on compensation per employee (based on National Accounts); the hypothetical single person defined for the purposes of this study was a single man, aged 35, living in an accommodation owned outright, having finished secondary education, working as an employee and earning 40% of the average OECD wage applicable in his country; the number of square meters and rooms of his accommodation were set equal to the median EU-SILC respective values for single, inactive individuals; an assumption is made that the person is not entitled to housing benefits, as defined by the OECD tax-benefit database

Source: own elaborations on the basis of draft Leventi et al. (forthcoming)

[Click here to download chart.](#)

The study finds that if MI benefit levels increase (while keeping other policy settings unchanged) by for instance 50%, the net income adequacy of single MI recipients would increase by less than 50% in Bulgaria and Slovakia, mainly due to the compositional effects. In the Bulgarian case, this is due to the 50% increase being applied to the "standard" social assistance benefit, while the heating allowance – another means-tested benefit available to the MI recipients – remains unchanged under the simulation scenario. Similarly in the Slovakian case, the increase is applied to the "basic material needs benefit", whereas the levels of the other two available benefits<sup>(97)</sup> remain unchanged.

Overall, the size of the increase in net income adequacy of the MI recipients would be smallest in Bulgaria (rise by 9 ppts) and largest in Poland (rise by 25 ppts). The corresponding increases in budget costs (including net impact of direct tax and other benefits but not factoring in indirect taxes) would range from 0.04% of GDP in Latvia (from 0.09% of GDP in the baseline scenario to 0.13% of GDP in the reform scenario) to 0.68% of GDP in Greece (from 0.46% to 1.14% of GDP respectively).

Furthermore, notable poverty reduction effects among the MI beneficiaries would be observed in all countries (except Bulgaria, where simulations show a potential slight increase in the poverty rate reflecting the increase in the median income due to the reform). In Poland, poverty among the MI beneficiaries would undergo the largest drop among the selected countries (from 92% in the baseline scenario to 58% in the reform scenario discussed). The poverty gap would also be significantly reduced in all countries.

<sup>(97)</sup> Namely the housing allowance and activation allowance.

Overall, these distributional effects illustrate not only the expected outcomes of such reforms but also the poverty reduction effectiveness of the system in place. This analysis points to the possibility of implementing reforms which can both increase the adequacy of MI benefits, and improve the effectiveness of current benefit systems.

### 3. CONCLUSION

The 2008 crisis halted the overall convergence of economic and social performance in the EU, with in particular, employment and unemployment rates that diverged strongly as a result of the crisis, although this has recently begun to stabilise and indeed to reverse. All in all, while the gradual catching-up process appeared consistent with previous decades for the Member States that joined the EU since 2004, since the mid-2000s and the crisis in 2008-09, convergence patterns in the Euro area have come to a halt. The divergence largely reflected the adverse impact of the crisis on Southern and Eastern EA Member States.

In addition, following longer term trends, inequality has increased since 2007, while stabilising in the most recent years, but it has also tended to converge at these higher levels. Poverty rates have also increased on average and then stabilised and poverty and exclusion declined, while the dispersion of poverty rates has increased. Similarities have emerged in many countries as older people have seen their incomes become better protected and their poverty rates fall, while working age adults – in particular the youngest ones – have been hardest hit by the crisis.

Post 2008 divergence patterns reflected the exceptional size of the crisis, but also weaknesses in countries' policy choices and in the underlying architecture of the EMU. Labour markets and social protection policies and institutions across the EU performed very differently in the face of economic shocks. There was weak productivity growth in some Member States contributing to divergent nominal unit labour cost growth. Member States which had well-functioning social institutions before the crisis were less affected, absorbed shocks better and recovered more quickly. Such resilience will be key to longer-term convergence as it reduces the persistence of unemployment and prevents a temporary economic slowdown having a permanent negative impact on growth and jobs. Investment in education and skills, including high-quality childcare, is also key to sustainable growth.

The crisis also revealed clear weaknesses in the functioning of the EMU. The lack of a Banking Union was felt very starkly and has now been remedied, while mechanisms for better crisis prevention have been adopted (in particular the Macroeconomic Imbalance Procedure). The Euro area also lacked an appropriate degree of cross-border risk sharing (the capacity to smooth national shocks through assistance from less affected countries), with levels less than half

of those in Canada or the USA. This is, essentially, due to lower smoothing of cross-border capital markets (private risk sharing) and fiscal transfers (public risk sharing).

It has become increasingly clear that there is a need to look at factors that influence the depth and persistence of an economic downturn, as well as the capacity of national economies to adjust to shocks. This is particularly true in the Monetary Union, where adjustments are slower and macro-economic shocks may have a strong and lasting adverse impact on employment and social cohesion if adjustment is left solely to market mechanisms (especially when these are constrained by national institutions) with potential cross-border effects. Employment and social policies can help to strengthen the capacity of national economies to cope with economic shocks, particularly by making a stronger and quicker contribution to offsetting their damaging effects and by supporting longer term competitiveness.

Over the last decade, the evidence of convergence in policies, *inter alia* to deliver a stronger national capacity to adjust to shocks, is mixed. On the positive side, skills structures converged, while the proportion of early school leavers both converged and fell since 2009. However, the coverage of ALMPs went down after 2009 (and stabilised in 2014) as did the level of expenditure per person wanting to work, while the coverage of life-long learning remained broadly stable. Furthermore, while average family expenditure per child remained stable or increased slightly on average, expenditure levels converged before 2009 and diverged afterwards.

While social expenditure made a significant contribution to income stabilisation in 2009, its impact had become pro-cyclical by 2012. Average unemployment expenditure per unemployed person declined during the crisis, in a context where the level of the support per unemployed person varied significantly between Member States. However, other types of expenditure withstood the crisis much better, in particular pension expenditure. While the traditional indexation mechanisms seem to have operated as intended, they could have helped more to smooth more demand over the cycle.

Since the beginning of the crisis, the effective coverage of social protection systems has either been declining (in the case of unemployment benefits and ALMPs) or remained constant (in the case of lifelong learning and access to benefit for the jobless poor). Coverage diverged across countries only in the case of

unemployment benefits. Unemployment benefit replacement rates and minimum income generally declined slightly. Minimum benefit levels converged in the crisis, mostly reflecting reductions in countries with initially higher levels.

These trends had the effect of weakening the contribution social transfers could make to reducing poverty. This was partly due to longer unemployment spells and declining work intensity in households (with the longer-term unemployed no longer being entitled to unemployment benefits), but also partly due to the weakening of the capacity of tax and benefits systems to protect households incomes effectively in the context of a prolonged recession.

Reforms of employment and social protection systems in the Member States could make them more responsive to the economic cycle and thereby contribute to the stabilisation of aggregate demand in the face of a temporary shock (by providing adequate income support to households whose members are forced to work less), while strengthening convergence and mitigating the damaging effects of prolonged unemployment (particularly by providing active support to find a job). Many Member States could improve productivity and promote more stable employment, particularly by supporting human capital development (including the prevention of early school leaving and promotion of effective life-long learning) and providing the right incentives for employment growth (for example by providing adequate childcare).

Fostering reforms in the Member States that bring about upwards convergence of employment and social policies and outcomes is seen by many as a high priority at the European level. Without prejudging its final content, this underpins the proposal for the development of a European pillar of social rights, which covers such key policy areas as access to the labour market (including skills development, life-long learning and active support for employment), fair working conditions and adequate and sustainable social protection (including the design of the tax-benefit system and provision of services). Further convergence in such policies (also when combined with well-tailored increased adjustment capacity in terms of wage setting and labour market functioning) could strengthen the capacity of national economies and individuals to adjust to future shocks. In the longer term, a well-designed fiscal capacity at the level of the EMU could also help to boost resilience, therefore supporting upwards convergence, in particular when combined with other wider-ranging structural reforms.

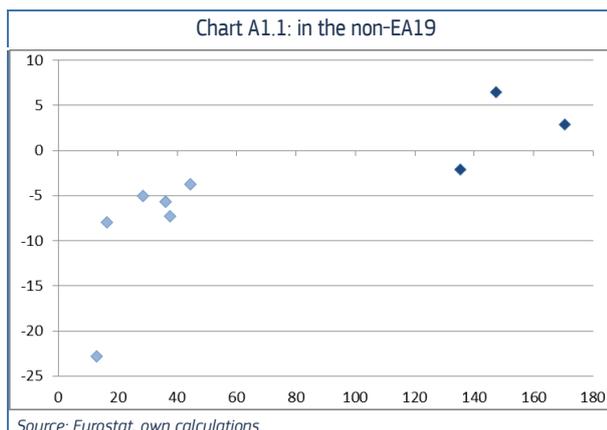
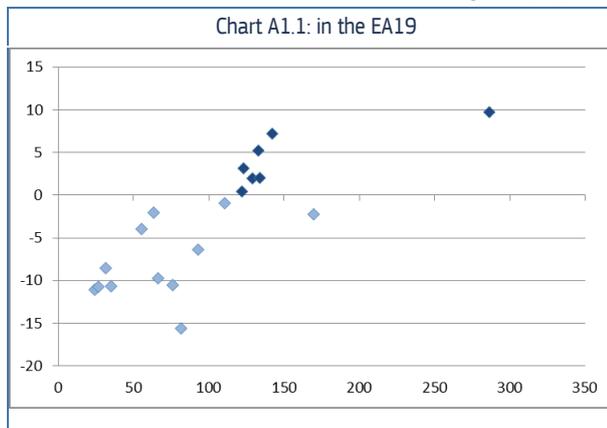
## Annex: Country groupings used

In order to provide an overview of employment and social convergence trends in the EU as a whole (EU28), it is useful to reflect not only on overall developments, but also on changes in dispersion both within and between zones (see ESDE 2014). For this purpose, four groups of countries are considered, reflecting socio-economic and geographical proximity criteria as well as membership of the economic and monetary union (the Euro Area, or EA):

- EA19 Centre and North (BE, LU, NL, DE, FI, FR, AT), which represents around 36% of the EU28 population).
- EA19 South and East (EL, IE, PT, ES, IT, EE, LV, LT, CY, MT, SI and SK) which represents around 26% of the EU28 population).
- Non EA19 North (DK, SE, UK), which represents around 17% of the EU28 population).
- Non EA19 Centre and East (CZ, HU, PL, BG, HR, RO) which represents around 21% of the EU28 population).

These categorisations also correspond to a grouping where countries from the North and Center EA or North non EA (see in chart below points in dark blue) experienced higher levels of GDP per head prior to the crisis than average, as well as on average current account surpluses.

Cluster of charts. average GDPpc (index 100 EU) and CA positions (averages 2000-08)



## References

- A. B. Atkinson and J. Micklewright (1991) and more recent Eugster, B. (2013), 'Effects of a higher replacement rate on unemployment durations, employment, and earnings', Economics Working Paper, Series 1320, University of St. Gallen, School of Economics and Political Science.
- Acemoglu, D., Johnson, S., Robinson, J. and Y. Thaicharoen (2003): Institutional causes, macroeconomic symptoms: volatility, crises and growth, *Journal of Monetary Economics*, 50, 49-123.
- Addison J. T. and Blackburn M. L. (2000), 'The effects of unemployment insurance on postunemployment earnings', *Labour Economics*, Vol. 7, No. 1, pp. 21–53.
- Addison J. T. and Blackburn M. L. (2000), 'The effects of unemployment insurance on postunemployment earnings', *Labour Economics*, Vol. 7, No. 1, pp. 21–53.
- Barrios, S., Buhlmann, F., Dolls, M., Ivaskaite-Tamosiune, V., Krolage, C., Maestri, V. (forthcoming), 'Convergence of unemployment benefit schemes in Europe: evidence at the micro level', JRC Working Paper on Taxation and Structural Reforms.
- Barro, R. and Sala-i-Martin, X., 'Convergence across states and regions', *Brookings Papers on Economic Activity*, Vol. 1, 1991, pp. 107–82.
- Belzil C. (2001), 'Unemployment Insurance and Subsequent Job Duration: Job Matching versus Unobserved Heterogeneity', *Journal of Applied Econometrics*, Vol. 16, No. 5, pp. 619–636.
- Berg, J. and Ostry, J. D. (2011), 'Inequality and Unsustainable Growth: Two Sides of the Same Coin?', IMF Staff discussion note, SDN/11/08.
- Brown A. J. G and Koettl J. (2012), 'Active labour market programs: employment gain or fiscal drain', Working paper Kiel institute for the World Economy, No. 1785.
- Buti, M. and A. Turrini (2015): Three waves of convergence. Can Eurozone countries start growing together again?, VoxEU.org, 17 April 2015.
- Caliendo M, Tatsiramos K. and Uhlenhorff A. (2012), 'Benefit duration, Unemployment Duration and Job Match Quality: A Regression-Discontinuity Approach', *Journal of Applied Econometrics*, Vol. 28, No.4, pp.604–627.
- Calvó-Armengol A., Jackson M. O. (2004), 'The effects of social networks on employment and inequality', *American Economic Review*, Vol. 94, No. 3.
- Calvó-Armengol A., Jackson M. O. (2004), 'The effects of social networks on employment and inequality', *American Economic Review*, Vol. 94, No. 3.
- Cantillon, B., Luigjes, C., Marchal, S. (2015) Decent incomes for the poor: which role for Europe? ImPROve Discussion Paper, No. 15/18. July 2015. Antwerp: Herman Deleeck Centre of Social Policy.
- Card D., Chetty R., and Weber A. (2006), 'Cash-on-Hand and Competing Models of Intertemporal Behavior: New Evidence from the Labor Market', National Bureau of Economic Research Working Paper 12639.
- Card D., Kluve J. and Weber A. (2010), 'Active Labour Market Policy Evaluations. A Meta-Analysis', *The Economic Journal*, 120, 452–477.
- Carling K., Edin P.A., Harkman A., Holmlund B. (1996) 'Unemployment duration, unemployment benefits, and labour market programmes in Sweden', *Journal of Public Economics*, Vol. 59(3): 313-334.
- Centeno M, Novo A.A. (2008) 'The Gains of Unemployment Insurance to Job Match Quality in the Portuguese Labour Market' *Economic Bulletin and Financial Stability Report Articles*, pp. 43–54.
- Centeno M. (2004), 'The Match Quality Gains from Unemployment Insurance', *The Journal of Human Resources*, Vol. 39, No. 3 (Summer, 2004), pp. 839–863.
- Chetty, R. 2008. "Moral hazard versus liquidity and optimal unemployment insurance", in *Journal of Political Economy*, Vol. 116, No. 2.
- Cingano, F. (2014), "Trends in Income Inequality and its Impact on Economic Growth", OECD Social, Employment and Migration Working Papers, No. 163, OECD Publishing.
- Clegg, D. (2016). Institutional arrangements and policy coordination in national anti-poverty regimes. In Halvorsen, R. and Hvinden, B. (Eds.), *Combating Poverty in Europe: Active Inclusion in a Multi-Level and Multi-Actor Context* (pp. 85-108).
- Crépon B, Ferracci M. and Fougère D. (2012), 'Training the Unemployed in France: How Does it Affect Unemployment Duration and Recurrence?', *Annals of Economics and Statistics*, pp. 107-108; pp. 175-199.
- De Agostini, P., Paulus, A., Tasseva, I. (2015) The effect of changes in tax-benefit policies on the income distribution in 2008–2015. EU Social Situation Monitor, Research Note, 2/2015. European Commission.
- Demertzis and Wolff (2016) "what are the prerequisites for a euro area fiscal capacity".

- ECB (2015): Real convergence in the euro area: Evidence, theory and policy implications, ECB Economic Bulletin, Issue 5, 30-45).
- Ehrenberg R. G. and Oaxaca R. L. (1976), 'Unemployment insurance, duration of unemployment, and subsequent wage gain', *American Economic Review*, Vol. 66, No. 5, pp. 754-766.
- Ehrenberg R. G. and Oaxaca R. L. (1976), 'Unemployment insurance, duration of unemployment, and subsequent wage gain', *American Economic Review*, Vol. 66, No. 5, pp. 754-766.
- Ernst E. (2015), 'Supporting jobseekers: How unemployment benefits can help unemployed workers and strengthen job creation', *International Social Security Review*, Vol. 68 No.3.
- European Commission (2015) 'An in-depth analysis of adult learning policies and their effectiveness in Europe'.
- European Commission (2014), *Employment and Social Developments in Europe 2014*. Brussels: DG Employment, Social Affairs and Inclusion.
- European Commission (2015), *Employment and Social Developments in Europe 2015*. Brussels: DG Employment, Social Affairs and Inclusion.
- European Commission (2016), "Public Employment Services (PES)", European Semester Thematic Fiche.
- Fitzenberger B. and Wilke R. (2004), 'Unemployment durations in West-Germany before and after the reform of the unemployment compensation system during the 1980s', ZEW Discussion Paper, No. 04-24, Mannheim, Germany.
- Fitzenberger B., Osikominu A. and Völter R. (2016), 'Get Training or Wait? Long-Run Employment Effects of Training Programs for the Unemployed in West Germany', IZA DP No. 2121. Dyke A,
- Fougère D. and Pouget J. (2004), 'Estimating the Effect of a Retraining Programme for Displaced Workers on their Transition to Permanent Jobs', IZA DP No. 1513.
- Friedman, M. (1977), "Nobel Lecture: Inflation and Unemployment", *Journal of Political Economy*, Vol. 85, No. 3, pp. 451-472.
- Gallie D., Paugam S., Jacobs S. (2003), 'Unemployment, poverty and social isolation: is there a vicious circle of social exclusion?' *European Societies*, Vol. 5, No.1, pp. 1-32.
- Gallie D., Paugam S., Jacobs S. (2003), 'Unemployment, poverty and social isolation: is there a vicious circle of social exclusion?' *European Societies*, Vol. 5, No.1, pp. 1-32.
- Gangl, M. (2006), 'Scar Effects of Unemployment: An Assessment of Institutional Complementarities', *American Sociological Review*, Vol. 71 No.6, pp/ 986-1013.
- Gangl, M. (2006), 'Scar Effects of Unemployment: An Assessment of Institutional Complementarities', *American Sociological Review*, Vol. 71 No.6, pp/ 986-1013.
- Gaure S., Røed K., Westlie L., (2008), 'The Impacts of Labor Market Policies on Job Search Behavior and Post-Unemployment Job Quality', IZA DP No. 3802.
- Gruber J. (1994), 'The consumption smoothing benefits of unemployment insurance', NBER working paper, No. 4750.
- Gruber J. (1994), 'The consumption smoothing benefits of unemployment insurance', NBER working paper, No. 4750.
- Hagedorn M., Manovskii I., Mitman K. (2015) 'The impact of unemployment benefit extensions on employment: the 2014 employment miracle?', NBER Working Paper, No. 20884.
- Heinrich C.J., Mueser P.R., Troske K.R. and Jeon K.S. (2006), 'The Effects of Welfare-to-Work Programme Activities on Labor Market Outcomes', *Journal of Labor Economics* 2006, Vol. 24, No.3, pp. 567-606.
- Jacobson L., LaLonde R., and Sullivan D. (1993), 'Earnings Losses of Displaced Workers', *American Economic Review*, No. 83, pp. 685-709. Farber H. S. (1997), 'The Changing Face of Job Loss in the United States, 1981-1995', *Brookings Papers on Economic Activity*. *Microeconomics*, pp. 55-142.
- Jacobson L., LaLonde R., and Sullivan D. (1993), 'Earnings Losses of Displaced Workers', *American Economic Review*, No. 83, pp. 685-709. Farber H. S. (1997), 'The Changing Face of Job Loss in the United States, 1981-1995', *Brookings Papers on Economic Activity*. *Microeconomics*, pp. 55-142.
- Jenkins S.P., Garcia-Serrano C. (2004), 'The relationship between unemployment benefits and re-employment probabilities: evidence from Spain', *Oxford Bulletin of Economics and Statistics*, Vol. 66, No.2, pp. 239-260.
- Katz L.F, Meyer B.D. (1990), 'The Impact of the Potential Duration of Unemployment Benefits on the Duration of Unemployment', *Journal of Public Economics*, 41 (1) :45-72.
- Kluge J. (2006), 'The effectiveness of European active labour market programs', IZA DP No. 2018. Bassanini, A. and R. Duval (2006), 'Employment Patterns in OECD Countries: Reassessing the Role of Policies and Institutions', *OECD Social, Employment and Migration Working Papers*, No. 35, OECD Publishing.
- Koster F. and Fleischmann M. (2012), "Labour Market Transitions in Europe a Multilevel Analysis of Age Cohorts and Institutions across 13 Countries", *NEUJOBS WORKING PAPER*, No. D 6.5.

- Lalive, R. (2007) 'Unemployment benefits, unemployment duration, and postunemployment jobs: A regression discontinuity approach', *The American Economic Review*, Vol. 97, No. 2.
- Lalive, R. (2007) 'Unemployment benefits, unemployment duration, and postunemployment jobs: A regression discontinuity approach', *The American Economic Review*, Vol. 97, No. 2.
- Lauringson A. (2012), 'The Impact of the Generosity of Unemployment Benefits on Estonian Labour Market Outcomes in a Period of Crisis', *Dissertationes Rerum Oeconomicarum Universitatis Tartuensis*, No. 44. Tartu University Press: Tartu.
- Lechner M., Miquel R. and Wunsch C. (2007), 'The Curse and Blessing of Training the Unemployed in a Changing Economy: the Case of East Germany after Unification', *German Economic Review*, Vol. 4, No. 8, pp. 468–507.
- Lechner M., Miquel R. and Wunsch C. (2011), 'Long-Run Effects of Public Sector Sponsored Training in West Germany', *Journal of the European Economic Association*, No. 9, pp. 742–784.
- Lehmann H. and Kluve J. (2010), 'Assessing Active Labour Market Policies in Transition Economies, in: *The Labor Market Impact of the EU enlargement*' Physica: Heidelberg, pp. 275-307
- Marchal, S. and Van Mechelen, N. (2014). A new kid in town? Active inclusion in European minimum income schemes. *ImPRovE Discussion Paper No. 14/07*. Antwerp
- McKenna C. and McHugh R. (2016), *Share of Unemployed Receiving Jobless Aid Remained at Record Low in 2015*, NELP Blog.
- McKnight A. and Vaganay A. (2015), 'The Strength of the Link between Income Support and Activation', LSE Enterprise in association with LSE CASE.
- Meyer, B. (1990), 'Unemployment Insurance and Unemployment Spells' *Econometrica*, Vol. 58, No.4, pp. 757-782.
- Monfort, Ph. (2008), 'Convergence of EU regions - Measures and evolution', European Commission, Directorate-General for Regional Policy Working papers, No. 1.
- Munch J.R., Skipper L. (2008) 'Programme Participation, Labor Force Dynamics, and Accepted Wage Rates' in Fomby T, Hill TC, Millimet DL, Smith JA, Vytlacil EJ (Eds), *Modelling and Evaluating Treatment Effects in Econometrics (Advances in Econometrics, Volume 21)*, Emerald Group Publishing Limited 2008, pp. 197–262.
- Nelson, K. (2008) Minimum income protection and European integration: trends and levels of minimum benefits in comparative perspective, 1990-2005. *International Journal of Health Services*. Vol. 38(1): 103-124.
- Nickell S. (1997), 'Unemployment and Labor Market Rigidities: Europe versus North America', *The Journal of Economic Perspectives*, Vol. 11, No. 3, pp. 55-74.
- Nunziata L. (2002), 'Unemployment, labour market institutions and shocks', *Nuffield College Working Papers in Economics*, No. 16.
- Ostry J.D., Berg A., and Tsangarides C.G. (2014), *Redistribution, Inequality, and Growth*, IMF SDN/14/02X.
- Poghosyan T., Senhadji A. S., Cottarelli C. (2016) "The role of fiscal transfers in smoothing regional shocks : evidence from exisiting federations", *IMF Working Paper No. 16/141*
- Rajan, R. 2010. "Fault Lines" Princeton University Press, Princeton, NJ. Rastrigina, O., Leventi, C., Vujackov, S. and Sutherland, H. (2016). *Nowcasting: Estimating Developments in Median Household Income And Risk of Poverty in 2014 and 2015*. *Social situation monitor Research note 1/2015*.
- Rodrik, D. (1999): Where did all the growth go? External Shocks, Social Conflict and Growth Collapses, *Journal of Economic Growth*, 4, 385-412.
- Rodriguez-Planas N., Benus J. (2010), 'Evaluating Active Labour Market Programs in Romania', *Empirical Economics*, Vol. 38, No. 1, pp. 65–84.
- Ruhm C. J. (1991), 'Are Workers Permanently Scarred by Job Displacement?', *American Economic Review*, No. 81 pp. 319–24.
- Ruhm C. J. (1991), 'Are Workers Permanently Scarred by Job Displacement?', *American Economic Review*, No. 81 pp. 319–24.
- Sala-i-Martin, X., 'Region cohesion: evidence and theories of regional growth and convergence', *European Economic Review*, Vol. 40, 1996, pp. 1325–52.
- Sapir (2016), *The Eurozone needs less heterogeneity*, Voxeu.
- Scarpetta S. (1996), 'Assessing the Role of Labour Market Policies and Institutional Settings on Unemployment: A Cross Country Study', *OECD Economic Studies*, No. 26, pp. 43-98.
- Sjöberg O., Palme J. and Carroll E. (2010), 'Unemployment Insurance', in Castles, F. G., Leibfried, S., Lewis, J., Obinger, H. and Pierson, C. (eds) *The Oxford Handbook of the Welfare State*, New York, Oxford University Press, pp. 420–434.
- Sjöberg O., Palme J. and Carroll E. (2010), 'Unemployment Insurance', in Castles, F. G., Leibfried, S., Lewis, J., Obinger, H. and Pierson, C. (eds) *The*

Oxford Handbook of the Welfare State, New York, Oxford University Press, pp. 420–434.

Tatsiramos K. (2009), 'Unemployment Duration and Subsequent Employment Stability', *Journal of the European Economic Association*, Vol. 7, No. 6 (Dec.), pp.1225-1260.

Tatsiramos K. and van Ours J. C. (2012), 'Labor Market Effects of Unemployment Insurance Design' IZA Discussion Paper, No. 6950.

Tatsiramos, K. (2014), 'Unemployment benefits and job match quality: Do unemployment benefits help those seeking work to obtain better jobs?', *IZA World of Labour*, No. 44. Bonn, Institute for the Study of Labor.

Torp, H. (1994), 'The Impact of Training on Employment: Assessing a Norwegian Labour Market Programme', *The Scandinavian Journal of Economics*, Vol. 96, No. 4, pp. 531-550.

Van Mechelen, N. & S. Marchal (2013). Trends and convergence of Europe's minimum income schemes. *ImPRovE Discussion Paper No. 13/11*. Antwerp.

Van Ours J. and Vodopivec M. (2006), 'Shortening the Potential Duration of Unemployment Benefits Does Not Affect the Quality of Post-Unemployment Jobs: Evidence from a Natural Experiment' IZA DP, No. 2171.

Van Ours J. C., and Vodopivec M. (2006), 'Duration of Unemployment Benefits and Quality of Post-Unemployment Jobs: Evidence from a Natural Experiment', *The World Bank Policy Research, Working Paper 4031*.

Vandenbroucke (2016), *Automatic stabilisers for the euro area and the European social model*

Vodopivec M., Laporsek S., Dolenc P. and Vodopivec M.(2015), 'The Effect of Unemployment Benefit Generosity on Unemployment Duration: Quasi-Experimental Evidence from Slovenia', *IZA Discussion Paper, No. 9548*.

Wang, J. and Van Vliet, O. (2014). Social assistance and minimum income benefits: Benefit levels, replacement rates and policies across 33 countries, 1990 – 2009. *Leiden University, Department of Economics Research Memorandum 2014.04*.

Wang, J., Van Vliet, O. and Goudswaard, K. (2015). Social assistance benefits and European coordination. *Leiden University, Department of Economics Research Memorandum 2015.02*.

Wolff J. (2003), 'Unemployment compensation and the duration of unemployment in East Germany', *Sfb 386 Discussion Papers, No. 344*, University of Munich.

Wulfgramm M. and Fervers L. (2015), 'Unemployment and subsequent employment stability: does labour market policy matter?', *Socio-Economic Review*, 2015, Vol. 13, No. 4, 791–2.

Young, A., M. Higgins and D. Levy (2008), 'Sigma Convergence versus Beta Convergence: Evidence from U.S. County-Level Data', *Journal of Money, Credit and Banking*, Blackwell Publishing, Vol. 40(5), pp. 1083-1093.

# Employment dynamics and social implications

## INTRODUCTION <sup>(98)</sup>

Bringing about upward convergence in the living standards of Europeans requires, first and foremost, better opportunities for all in the labour market. The increases in inequality and poverty that occurred until recently in many EU Member States as a result of the crisis can be linked to the rise in unemployment and joblessness, but to some extent also to lower quality employment, as in-work poverty has been rising in most countries. Whereas the social impact of poor labour market opportunities was mitigated to varying degrees by social protection systems, sustainable improvements in living standards cannot be built on redistribution alone. Getting people into quality jobs is therefore key to achieving the EU's ambition of fostering upward convergence in living standards across all Member States <sup>(99)</sup>.

This chapter analyses the impact of employment dynamics and wages on poverty and income inequality as well as on living conditions. It considers the conditions that are necessary for jobs and wages to be effective pathways out of, or bulwarks against, poverty. The chapter analyses what chances low-wage workers have of improving their wage level and what factors influence upward wage mobility. The empirical analyses included in this chapter were based on EU-

<sup>(98)</sup> This chapter was written by Alessia Fulvimari, Eric Meyermans and Maria Vaalavuo.

<sup>(99)</sup> This is true for all age groups, as children's living standards depend on those of their working-age parents, and pension rights (and hence poverty risks in old age) depend on employment over the life cycle. The longer-term effects of employment through the accrual of pension entitlements and other benefits of employment (e.g. better health care coverage) are not considered here.

SILC 2014 cross-sectional data and EU-SILC 2013 panel data (see **Box 2.1** for details).

First it describes trends in wages, work intensity and in-work poverty since the onset of the economic crisis. It then uses regression analysis data for the EU as a whole to investigate the conditions in which work can lift people out of poverty, and the characteristics affecting individuals' chances of escaping poverty. The specific role of wages is assessed by focusing on developments at the bottom of the hourly wage distribution. Finally, the chapter reviews the likelihood of upward mobility, as people find employment and leave the low-wage segment of the labour market.

The latest EU-SILC data were released in October 2016, but micro-data were not yet available for all Member States by the time this chapter was finalised.

## 1. WAGES AND WORK INTENSITY SINCE THE ONSET OF THE CRISIS

### 1.1. How wages affect incomes and outcomes

Wages are key to understanding developments in household incomes and social outcomes. Perhaps the single most important driver of rising income inequality is growing disparity in earnings, which represents the largest share of household income among the working age population (OECD, 2011; Blau and Kahn, 2009) <sup>(100)</sup>. **Chart 2.1** illustrates the average composition of total gross household incomes (before

<sup>(100)</sup> For a literature review on drivers of earnings inequality, including technological advances, education, immigration, trade integration, unionisation and product market deregulation, see European Commission (2012, 79-80).

## Box 2.1: EU-SILC cross-sectional and panel data

EU-SILC (European Union Statistics on Income and Living Conditions) is an EU-wide survey which collects detailed data on individuals' and households' labour market status and income components in addition to various socio-demographic characteristics. In this Chapter we have used both the cross-sectional data and the panel data in which individuals are interviewed in four consecutive years.

The empirical questions posed in this Chapter are answered by descriptive and econometric analysis based on EU-SILC time-series data from 2007 to 2014 at the country level, and pooled panel data 2011-2013 (including years from 2008-2013) at the individual level. The latest revisions, which became available in April 2016 have been used.

As EU-SILC data reflect incomes in the previous year (except for the UK and Ireland where incomes refer to the last 12 months before the interview period), the income reference years have been used in the chapter, i.e. in EU-SILC 2014, income components refer to 2013.

As the sample sizes in the panel data tend to be small when we focus on transitions of sub-groups of the population, we have pooled together the datasets of 2011, 2012 and 2013. This considerably increases the sample sizes and makes analysis possible at the country level.

In our analyses of poverty transitions and wage mobility, we mainly focus on year-on-year transitions between the last two waves of the data. This means that we are looking at averages of year-on-year transitions from 2009 to 2010 (EU-SILC 2011), 2010 to 2011 (EU-SILC 2012) and from 2011 to 2012 (EU-SILC 2013). The income years, not the data years, are used in the text and charts.

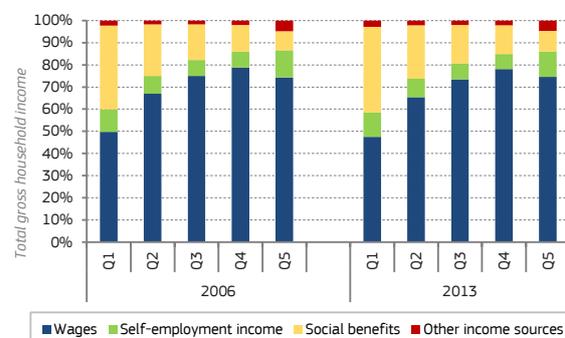
Analytical weights calculated by Eurostat are used. It should be noted that income components in EU-SILC have breaks in time series in 2008 for Spain, France, Cyprus and Austria; in 2010 for Croatia, in 2011 for Denmark; and in 2012 for the UK.

No panel data is available for Germany.

deducting taxes) in Europe by income quintiles in 2006 and 2013.

Wages represent the biggest proportion of household income in all income groups among the working age population, even though this has declined slightly in all groups except for the top 20% of the income distribution since 2006. Going up through the income quintiles, the proportion of wages within total income increases while the proportion of social transfers decreases, as is to be expected.

Chart 2.1: Income composition by income groups, working age population (20-64), EU average in 2006 and 2013.



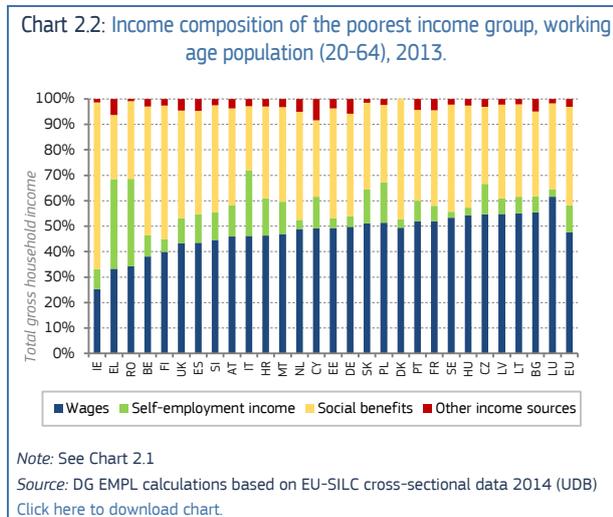
Note: Income groups (Q1-Q5) refer to income quintiles, e.g. Q1 refers to the individuals in the bottom 20% of the income distribution. Only the working age population (20-64 years old) is considered, but the income of everyone in the household is taken into account (including old age pensions received by retired members of the household). Income quintiles are based on equivalised disposable income of working age population. "Other income" includes: (1) interests, dividends and profit from capital investments; (2) private pension plans; (3) income from rental of a property or land; (4) intra-household transfers; (5) alimony; and (6) income received by people less than 16 years old. "Gross incomes" means no taxes or social security contributions are taken into account.

Source: DG EMPL calculations based on EU-SILC cross-sectional data 2007 and 2014 (UDB) (i.e. latest available data at time of drafting. 2013 is the income reference year).

[Click here to download chart.](#)

In the lowest quintile of the income distribution, representing the poorest 20%, there are differences between countries in terms of the share of wages in total income (Chart 2.2). In Ireland, Greece, Romania and Belgium, wages are less than 40% of total gross household income. In Greece and Romania this is mainly due to the high proportion of income from self-employment. In many Member States, however, wages represent more than 50% of all household income in

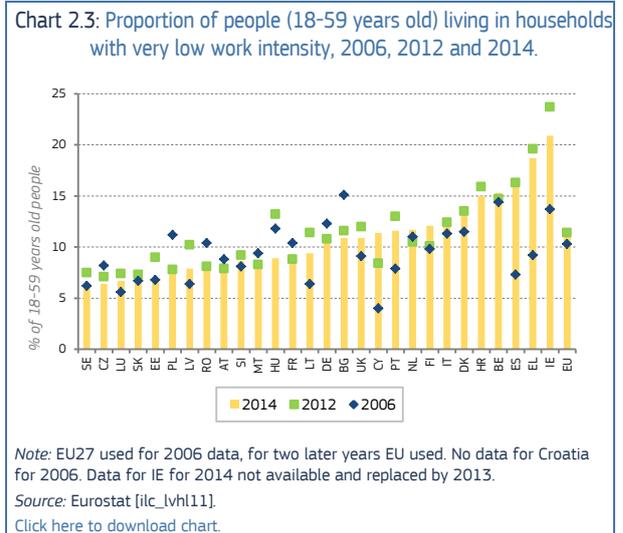
the bottom income quintile. What happens to wages can have a significant impact on the wellbeing of households across the income distribution because they are the main source of income for most households of working age people, even in the bottom quintile.



## 1.2. Increasing numbers of people are living in jobless households

The number of people aged 18-59 living in households with very low work intensity<sup>(101)</sup> increased from 10.3% in 2006 to 11.4% in 2012, but it then decreased to 11% in 2014 (Chart 2.3). Differences between countries are significant: Bulgaria and Poland have experienced a reduction of more than 3 percentage points in joblessness between 2006 and 2014, while the countries hardest hit by the crisis have seen their numbers of jobless people rise significantly, most notably in Greece with an increase from 9.2% in 2006 to 18.7% in 2014 and Spain with an increase from 7.3% in 2006 to 16.5% in 2014.

<sup>(101)</sup> Hereafter, we refer to these households as 'jobless households'. Very low work intensity (VLWI) or joblessness refers to household work intensity below 0.2, meaning that, accounting for months worked, the working age individuals in the household spend less than 20% of their time in employment or self-employment (students aged 18-24 are excluded from the calculation). Elsewhere in the chapter we calculate individual work intensity taking into account hours worked as well.



## 1.3. Part-time employment has risen – notably involuntary part-time work

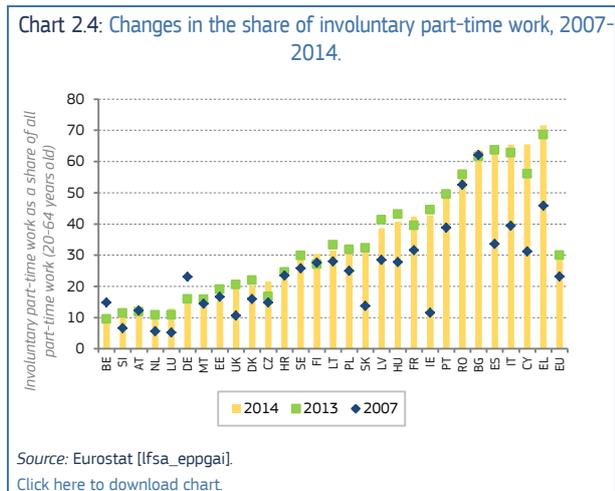
Working hours in the EU have declined since the crisis hit in 2008, though have remained broadly stable since 2013<sup>(102)</sup>. In absolute terms, part-time employment has grown and continues to grow, while full-time employment declined until 2013. The increasing number of Europeans working part-time may be a positive development if it means that people can choose more freely the balance between work and other pursuits. But part-time work also has a downside if it is involuntary, or if it is the only available option because of the difficulty of reconciling a 'standard' job with one's private life and family responsibilities.

The proportion of part-time workers in the EU increased in all but two countries (Croatia and Poland) during recent years, on average from 16.8% to 19.0%, a slightly higher increase than the US and OECD averages. The increase has been especially strong among men: the share of men working part-time has almost tripled in Greece, Cyprus and Slovakia, and more than doubled in Bulgaria, Czech Republic, Ireland, Spain and Malta. The changes among women have been more modest. Nevertheless, the absolute number of women working part-time is still higher than for men. There also seems to be a clear East-West divide: in Central and Eastern Europe, part-time work is still a marginal phenomenon.

As can be seen from Chart 2.4, involuntary part-time work increased by a third following the crisis. On average 23.1% of part-time workers reported working part-time involuntarily in 2007, rising to 30.4% by 2013, and remaining stable since. In a number of Member States the level decreased in 2014 (Slovenia, Germany, Estonia, the UK, Denmark, Lithuania, Latvia, Hungary and Ireland), but in others it continued to increase. More men than women report working part-time involuntarily (42.7% compared with 26.8%). The proportion of involuntary part-time work is especially high in Southern countries, where it also increased

<sup>(102)</sup> See 'Main Employment and Social Developments' Chapter.

significantly (in Greece from 45.8% to 71.7%, Cyprus from 31.2% to 65.5%, Italy from 39.4% to 65.4% and Spain from 33.6% to 64.4%), while it is around 10% in Belgium, Slovenia, Austria and the Netherlands.



## 2. IN-WORK POVERTY: INTERACTIONS BETWEEN WAGES, WORK AND POVERTY

### 2.1. Work protects against poverty but in-work poverty has increased

Several elements can influence a person's poverty risk.

- His/her *individual market income* is affected by annual *work intensity* (both months in employment over the year and weekly hours worked) and the *hourly wage* level. In turn, this hourly wage level is to a large extent determined by the person's productivity per hour worked which is closely related to his/her skills, expertise and accumulated knowledge (from education and experience).
- *Social transfers and taxes* redistribute income between individuals and households and can have a strong impact on poverty and income inequality.
- Income is measured at the household level assuming that *incomes of all household members are pooled*; thus a person without earnings may not be regarded as poor if he or she lives in a household with others who do have an income.
- The *total household income is divided by the number of household members*, but with weights below one for any additional adults and children, to take account of the fact that living costs are lower when several people share resources in a common household.
- The household income adjusted for household size and composition is compared with the median income of the country in which the household is located. If it is below 60% of the median income, then the members of the household are considered as being 'at risk of poverty'. As the median income in a country can fluctuate, people may cross the at-

risk-of-poverty threshold of 60% of the median simply as a result of fluctuations in the median income.

2015 EU-SILC data (released by Eurostat in October 2016) <sup>(103)</sup>, referring to 2014 incomes, show that in 2014, the at-risk-of-poverty (AROP) rate for the working age population <sup>(104)</sup> stood at 17.2% in the EU, up from 14.9% in 2006 and slightly higher than 16.4% in 2012 <sup>(105)</sup>. While this higher level is partly due to the increases in unemployment and joblessness associated with a higher risk of poverty (Chart 2.5), levels of in-work poverty <sup>(106)</sup> have also increased. This may be partly due to the rise in part-time work (Chart 2.6) <sup>(107)</sup>.

There is strong evidence that unemployment poses a serious poverty risk in Europe. In the EU, nearly half (46.3%) of the unemployed (i.e. people unemployed for seven or more months during the year) were at risk of poverty <sup>(108)</sup>, while this was the case for only 8.2% of employed people. There are, however, differences between people active in the labour market: the self-employed have a higher risk of poverty than salaried workers, and part-time workers have a higher risk of poverty than full-time workers.

In Chart 2.5 countries are ordered according to the AROP of the unemployed. In Germany and Lithuania, the AROP of the unemployed is above 60%. The unemployed are best protected against the risk of poverty in Denmark, France, Cyprus, Ireland and the Netherlands, in all of which the AROP of the unemployed is below 40%. However, even in these countries the risk is considerably higher than for full-time or even part-time workers.

Everywhere in the EU, full-time workers are relatively well protected against poverty, with the highest AROP recorded in Estonia (9.2%), Luxembourg (8.9%) and Bulgaria (7.8%). On the other hand, part-time workers face a significantly higher risk of poverty, notably in Bulgaria (34.1%), Portugal (29.6%) and Romania (29.3%) where part-time work is, however, relatively uncommon. Full-time self-employed people have an

<sup>(103)</sup> Indicators based on EU-SILC 2015 data are available in the Eurostat online database. Nevertheless, EU-SILC 2015 micro-data were only available for a limited number of Member States at the time of drafting this chapter.

<sup>(104)</sup> This figure refers to people aged 18-64.

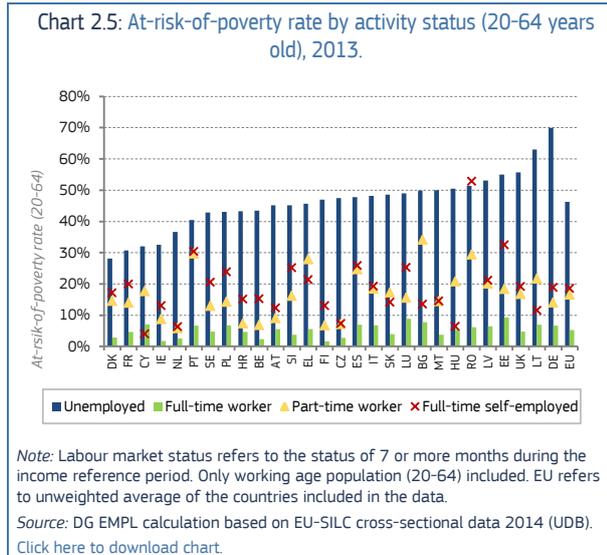
<sup>(105)</sup> For a more complete discussion on who are the poor in the EU, see Chapter 1.

<sup>(106)</sup> In this chapter, in-work poverty refers to the standard EU definition of in-work poverty (Ponthieux, 2010). People considered as "in work" are those who have been working for most of the year (i.e. 7 or more months); poverty refers to "at-risk-of-poverty" status.

<sup>(107)</sup> For an in-depth analysis of in-work poverty in Europe (including discussion on methodological and conceptual issues as well as country comparisons and policy evaluation), see Anderß and Lohmann (2008), Crettaz (2011) and Fraser et al. (2011).

<sup>(108)</sup> Data do not allow differentiation between people covered by unemployment insurance, and those who are covered by unemployment assistance.

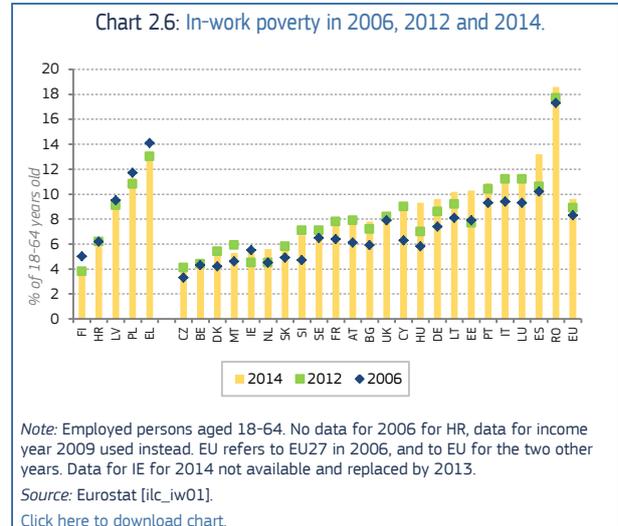
even higher risk of poverty: more than 3.5 times higher than that of full-time workers.



Focussing on those who have been in work for at least seven months in the income reference year <sup>(109)</sup>, **Chart 2.6** indicates growing in-work poverty in the EU; this is confirmed by academic research (Anderß and Lohmann, 2008; Fraser et al., 2011; Crettaz, 2011; Crettaz, 2013). Only in five countries - Finland, Croatia, Latvia, Poland and Greece - has in-work poverty decreased since 2006, while in Ireland the rate is at the same level in 2014 as in 2006. In other EU countries, in-work poverty is now higher: the increase has been especially significant in Hungary (3.5 percentage points, or pps), Spain (3 pps) and Cyprus (2.9 pps).

In 2014, on average, 9.6% of employed people in the EU were at risk of poverty compared with 8.3% in 2006. This means that almost one in ten people is unable to move above the poverty threshold despite working. The rate is especially high in Romania, Spain, Luxembourg and Italy. It is important to analyse the circumstances in which work is not enough to secure adequate income, and, in particular, whether this is mainly connected to insufficient working time (see also **Chart 2.5**), low hourly wages or family circumstances.

<sup>(109)</sup> Eurostat uses this "7 months rule" to calculate in-work poverty rates (having worked 7 or more months during the income reference period is counted as being "worker"). This is also applied in this chapter when we talk about working poor or in-work poverty. However, it should be noted that working status refers to an individual characteristic and poverty to a household characteristic.

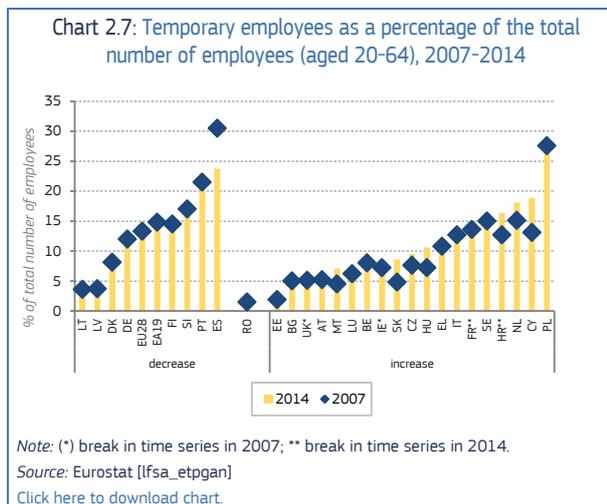


## 2.2. The rise in non-standard employment and links to low wages

Part-time and temporary jobs tend to offer smaller hourly pay than full-time jobs (e.g. Özdemir et al., 2015; Horemans and Marx, 2013). This raises questions about the possible consequences of the rise in non-standard employment for poverty and inequality and the factors that can help to prevent increases in in-work poverty.

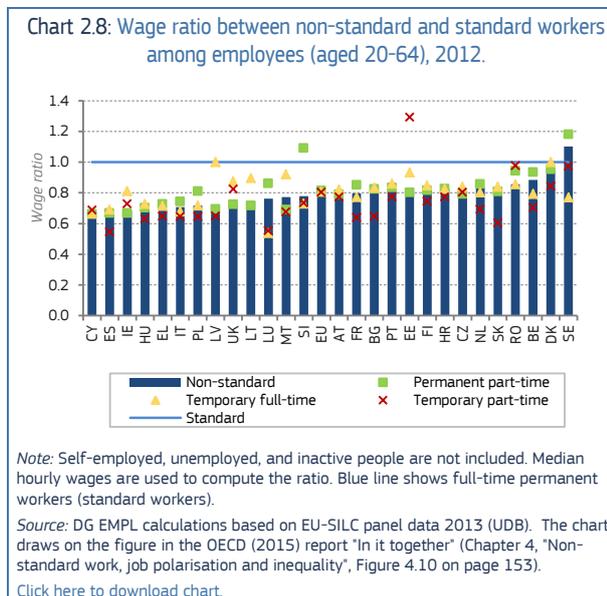
According to a recent study by Eurofound (2016), employers seem to have an increasing need to use temporary contracts when recruiting new employees. As **Chart 2.7** shows, the proportion of temporary workers among all workers increased in most Member States between 2007 and 2014. Nevertheless, it decreased slightly at the EU level, mainly due to the drop in the share of temporary employees in some big Member States, such as Spain, where temporary employment had grown strongly before the crisis. The decrease in the use of temporary work in Spain is likely to be explained by the fact that people already on temporary contracts lost their jobs at the beginning of the crisis (before the reforms). Temporary workers were the hardest hit by the crisis and the large increase in unemployment was the result of the collapse in temporary jobs <sup>(110)</sup>.

<sup>(110)</sup> See section 2.1.4 of Chapter 'Main Employment and Social Developments' for more details on developments in temporary work.



The increases in part-time and temporary work described above can influence income and earnings inequality in many ways. For this reason, their possible connection with lower wages and changes in the wage distribution need to be studied carefully.

The existing empirical evidence shows that non-standard workers (i.e. temporary workers and part-time workers) are over-represented at the bottom of the hourly wage distribution (OECD, 2015). **Chart 2.8** shows the ratio between the median hourly wage<sup>(111)</sup> for three types of employees and the median hourly wage for standard workers (i.e. permanent full-time employees).



Across most countries, both temporary and permanent part-time workers have a lower median hourly wage compared with permanent full-time employees. In other words, non-standard workers face a wage

<sup>(111)</sup> The wage information in EU-SILC is available at annual level. 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 weeks worked per year multiplied by total hours worked per week. The former is given by the monthly labour status (PL211A-PL211L). The variable for the weekly hours worked is PLO6O.

penalty in comparison with standard workers. This compounds the income-reducing effects of shorter working time (part-time workers) and more frequent employment interruptions.

### 2.3. The multiple causes of in-work poverty

The risk of poverty is determined by labour market status, market income, household characteristics and receipt of social transfers.

When considering solutions to in-work poverty, attention easily turns to inadequate wage levels which often reflect low productivity per hour worked. However, while low-wage work can be associated with a number of disadvantages, such as lower job security, it is not clear whether it is the main determinant of in-work poverty. It is important to understand the situations in which low-wage earners are exposed to a risk of poverty and when this risk is linked to low wages per se. Beyond the potential link to poverty, low hourly pay may be particularly problematic when it is persistent and the chances of moving up the wage ladder are low.

Research provides mixed evidence on the connection between low wages and poverty (Crettaz, 2011). This is partly due to the fact that, while a low wage is an individual characteristic, poverty is based on a measurement of household disposable income that also takes into account taxes and benefits, household size and composition and income of other household members.

### 2.4. Low-wage earners in the EU

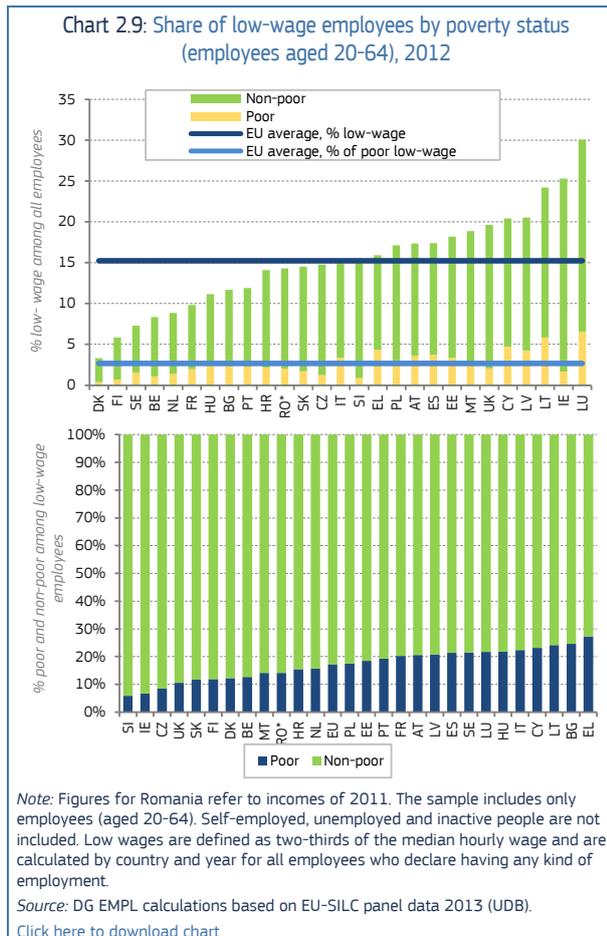
The proportion of low-wage employees – here defined as those with an hourly wage below two-thirds of the median wage<sup>(112)</sup> – among all employees varies considerably across Member States: from below 10% in the Nordic countries, the Netherlands, Belgium and France, to close to 25% in Lithuania and Ireland and about 30% in Luxembourg.

The incidence of low pay is much higher among women than men, particularly among young people under the age of 30 (see **Table A.2.1** in **Annex** to this chapter). Women's lower hourly wages may, to some extent, be the result of gender segregation in sectors, since women are entering comparatively lower-paid sectors than men (European Commission, 2016f). In addition, women have more career breaks, more spells of inactivity, fewer working hours, and gender discrimination in their remuneration (European Commission 2013, Chapter 3). This is reflected in women's lower wages compared with men.

<sup>(112)</sup> Low wages can be defined in many ways. The definition used in this chapter (low-wage earners are those with a wage below two-thirds of the country median hourly wage) is relative to the median wage in the country. The same definition is used in a Eurostat working paper (Ponthieux, 2010: 19). A relative definition of low-wage earners could for example include all employees in the bottom two (or three) deciles in the group of low-wage earners (see Lucifora and Salverda 2009 for a review of the topic).

People with a low level of education are more likely to earn low wages than mid- and highly-educated workers. Moreover, so-called non-standard workers – employees on temporary contracts and part-time arrangements – are more likely than permanent and full-time employees to be low-wage earners (Eurofound (2014); also **Chart 2.8**)<sup>(113)</sup>.

However, the share of low-wage earners among employees does not explain rates of in-work poverty across Europe, because in most cases low-wage earners are not, in fact, poor (see lower panel of **Chart 2.9**).

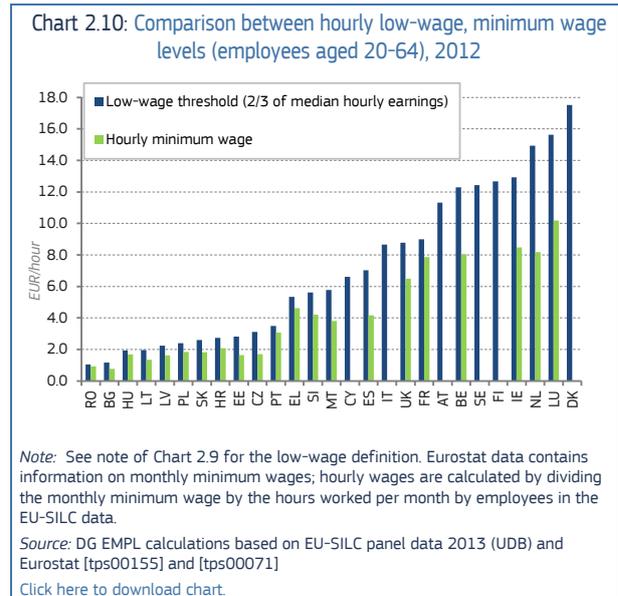


At the EU level, only around one-sixth of workers who earn an hourly wage below two-thirds of the median wage are also at risk of poverty. Differences across Member States are wide. In most Southern European Member States (Greece, Bulgaria, Cyprus, Italy and Spain) and also in Lithuania, Hungary, Luxembourg, Sweden, Latvia, Austria and France, more than one-fifth of low-wage employees are poor, while less than

<sup>(113)</sup> The reasons why workers are low-paid are not discussed in this chapter. However, it may be useful to mention that employees may receive low pay because of labour supply or labour demand constraints. From the labour supply perspective, employees may be low-paid because either they are not well qualified enough for the labour market or they are discriminated against (for example, because of their gender, family or immigrant background or unemployment spells in their career). From the labour demand perspective, individuals can be low-paid because of shifts in the demand for their skills, lower demand in times of economic downturn and distortions in the design of taxes and benefits.

one-tenth of low-wage employees are poor in Slovenia, Ireland and the Czech Republic.

Hourly low wages varied between EUR 1.1 in Romania to around EUR 17.5 in Denmark in 2012 (based on EU-SILC panel data 2013). The low-wage threshold as defined here is generally higher than the minimum wage level (**Chart 2.10**). However, while in some countries the low-wage threshold is very close to the minimum wage floor, in others the gap between them is larger. For example, in the Netherlands the hourly minimum wage in 2012 was around EUR 8.2, while the low-wage threshold was around EUR 14.9 per hour.

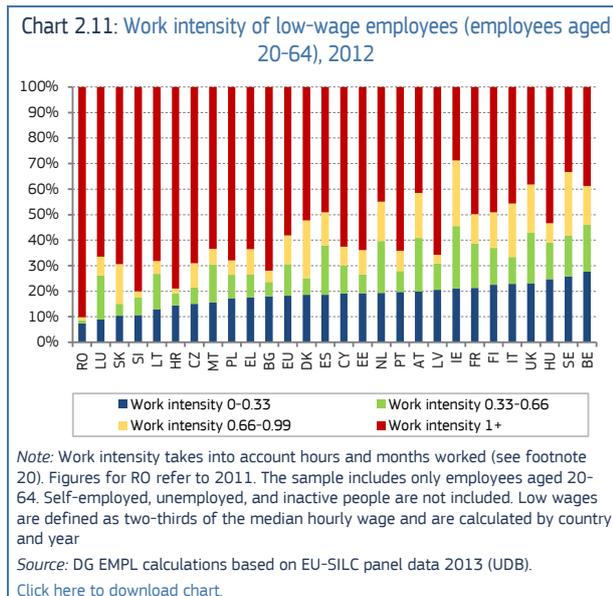


## 2.5. Low work intensity is a cause of in-work poverty

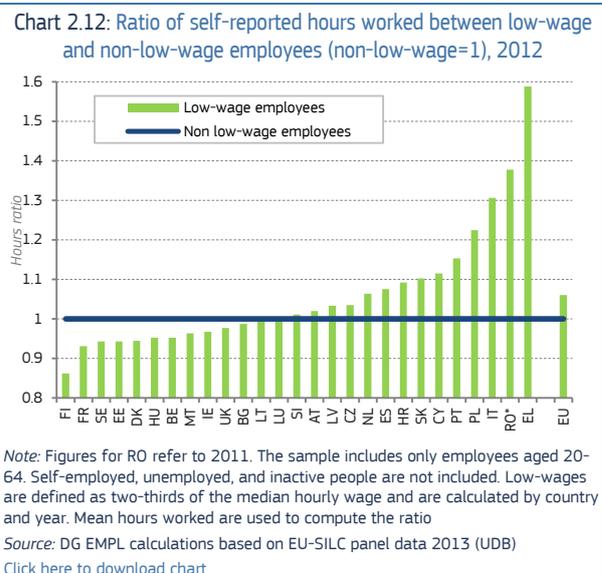
The link between contractual type and the risk of poverty is not clear-cut, in spite of the observed wage penalty. This is because an individual with a non-standard contract may work enough hours to compensate for the lower hourly wage, or he or she may not be the principal breadwinner in the household. Nevertheless, data suggests that temporary workers who work for only part of the year have a significantly higher poverty risk. The poverty risk seems to be more connected to the work intensity of the individual than to the contract type per se (see also **Chart 2.5**).

When low work intensity is combined with a low wage level, the risk of poverty inevitably becomes greater. At EU level, 18.2% of low-wage employees also experience individual low work intensity (measured in months and hours worked during the year), and 30.6% have low or medium-low work intensity (**Chart 2.11**). The combination of low hourly pay and low work intensity affects more than 20% of low-wage employees in Belgium, Sweden, Hungary, the UK, Italy, Finland, France, Ireland and Latvia, while in Romania

and Luxembourg less than 10% of low-wage employees also have low work intensity (<sup>114</sup>).



As **Chart 2.12** illustrates, many workers with lower hourly wages appear to compensate for their low wage with longer working time. In the EU as a whole, low-wage employees work on average more hours than employees with higher wages (self-reported hours worked during a usual week at the time of interview). In particular in Greece, Romania and Italy low-wage employees work considerably longer than those with higher hourly pay. However, in eleven countries (i.e. Finland, France, Sweden, Estonia, Denmark, Hungary, Belgium, Malta, Ireland, UK and Bulgaria) low-wage earners work less than non-low-wage earners (<sup>115</sup>).



Differences in work intensity among Member States may depend on household composition. In many cases low-wage earners may be the second earners of the household, and also have caring responsibilities and work part-time. A low wage becomes especially significant when the individual is a single earner and there is low work intensity at household level (Marx and Nolan, 2012). Individual and household factors may play a different role in different Member States.

The fact that a low wage does not lead to poverty in 5 out of 6 cases may be because the wage earners are not the main contributors to household income (e.g. they are second earners) or they compensate for their low hourly wage with a higher number of hours worked. It is also possible that their household needs are low (e.g. there are no dependent children or non-working adults in the household) (<sup>116</sup>) or their wages are supplemented by social transfers or tax credits.

The poverty risk linked to insufficient wages is amplified if people with one or more disadvantages – namely low work intensity and low wages – live together. However, there is little evidence that low wages are concentrated in certain households (Matsaganis, Medgyesi et al., 2015). Instead, the majority of low-wage earners are not the principal earners of the household. But cultural norms and patterns linked to female employment and low-wage jobs are important for understanding country and regional differences. For example, in the Western part of Germany 71% of low-wage earners lived with another wage-earner and had a below-average in-work poverty risk, while in the Eastern part of Germany low-wage jobs are often the sole source of household income and in-work poverty connected to low pay is higher (Gießelmann and Lohmann, 2008).

<sup>(114)</sup> Here low work intensity is defined as having work intensity below 0.33 at the individual level. This means that a person works less than a third of full-year full-time work, for example less than 4 months in full-time work or less than 8 months in part-time work with number of working hours less than half of the average in the country.

<sup>(115)</sup> This seems inconsistent with OECD's finding (2011, 169) of a growing divide in many OECD countries between higher-wage and lower-wage earners, annual hours having declined among the latter. The explanation may be the different time frame, weekly versus annual hours.

<sup>(116)</sup> Needs are of course taken into account only in a limited way in our analysis of monetary poverty. They are only reflected in the equivalence scale that considers the size and composition of the household, but not for example housing costs or health needs.

## 2.6. Factors connected to being working poor

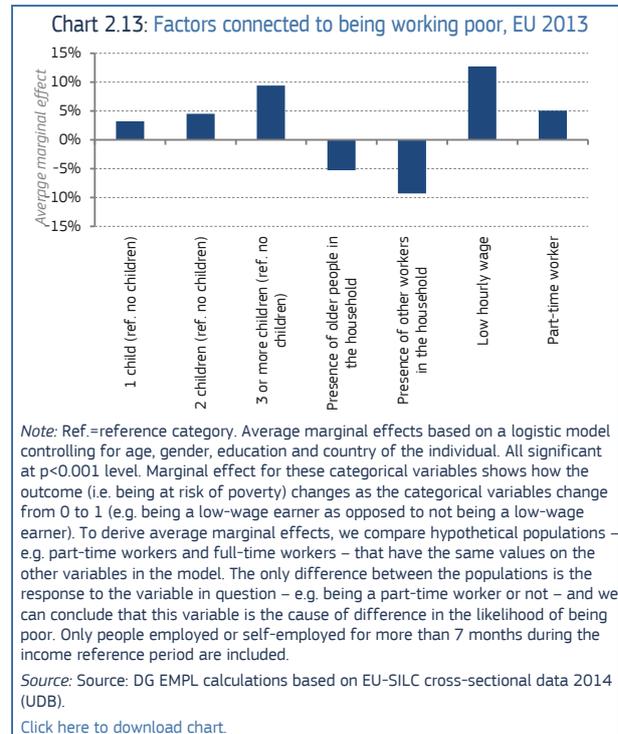
**Chart 2.13** presents results from a regression model analysing the factors linked to being in work and also poor. It shows (unsurprisingly) that a low wage level increases the risk of being working poor, while having more than three children is an almost equally high risk. Being a part-time worker also increases the risk of in-work poverty.

On the other hand, the presence in the same household of other workers (higher household work intensity) and older people (supporting household incomes through old age benefits) is connected to a lower likelihood of being working poor. Being a single earner is associated with a higher poverty risk, given that the average living standard nowadays is normally determined by the living standard of double-earner households (Marx and Verbist, 2008). This was also the conclusion of a study on the poverty impact of mothers' employment (European Commission, 2016b).

This analysis highlights the importance of low wages in explaining in-work poverty. It indicates that even if the problems of the working poor cannot simply be reduced to low-wage employment, the quality of jobs and low wages are the most important determinants of in-work poverty (Goerne, 2011). But as many other researchers have pointed out, low wages are seldom the main cause (Crettaz and Bonoli, 2011). It would be simplistic to focus on wages only. Supporting female labour force participation and dual earners - by providing access to childcare, for example <sup>(117)</sup> - is also important, as is providing adequate family benefits more generally.

There are, of course, variations between countries in the relative importance of these factors, as countries vary in terms of low-wage prevalence or proportions of dual earners. For example, the high overall level of female employment in the UK could mean that low wages do not automatically translate into a risk of poverty. Also, the cost of children (affected by family policies) varies across countries and puts families with children at different levels of risk of poverty and in-work poverty across Europe: in Sweden the household context plays a limited role in in-work poverty, while in Spain and Poland workers in households with many dependents are at particularly high risk of in-work poverty (Goerne, 2011).

<sup>(117)</sup> In turn, high quality early childhood education and care can lay the foundation for children's successful lifelong learning and employability later in life, which are crucial in tackling the problem of income inequality. See, for example, European Commission (2016c).



These results show how more support for families could help to fight in-work poverty. In addition to cash transfers that supplement family incomes directly, subsidised childcare services enable parents to work more hours and thus increase their take-home pay (for an analysis of the impact of childcare on poverty, see European Commission, 2016b). In-work benefits also have potential to reduce the poverty risk among low-wage workers.

Micro-simulations for four EU countries suggest that dedicating 1% of GDP to in-work benefits would reduce in-work poverty by 1.19 percentage points (pps) in Belgium, 1.13 pps in Italy and 2.59 pps in Sweden, while the impact would be more limited in Poland (at most a poverty reduction of 0.83 pps) (Vandelannoote and Verbist, 2016) <sup>(118)</sup>. Another important factor is whether those who are entitled to various benefits actually get them <sup>(119)</sup>.

Raising minimum wages can be an effective means of reducing in-work poverty, but studies have shown that the effect can be relatively limited because minimum wages benefit many more people than just members of poor households (Marchal and Marx, 2015). Micro-simulation research by the EU Social Situation Monitor

<sup>(118)</sup> The exact impact however depends greatly on the design of the benefit, whether it is individual- or household-based, whether there are tapering in and out phases, whether there exists a threshold for eligibility based on hourly wage or total income, etc. In their results, the biggest impact was achieved when the design was either an individual- or household-based lump sum with an income threshold (also either at individual or household level). When labour supply impact is also taken into account, the results change as well. In this case, poverty impact is often smaller, as the median incomes will in general go up: in this case it might be more interesting to see the impact on poverty measured with a fixed poverty threshold that is not impacted by the rise in median income.

<sup>(119)</sup> On the non-take-up of social benefits, see Eurofound (2015).

## Box 2.2: Definitions used for poverty dynamics

In the analysis on poverty dynamics and labour market status, the focus is on the unemployed and inactive poor in time t-1 (referring to data of 2009, 2010 and 2011) and at what happens to them the following year, in t (referring to data of 2010, 2011 and 2012).

Unemployment, inactivity, and employment all refer to self-declared *monthly economic status* during the income reference period. As in the measurement of in-work poverty, status refers to the status of at least 7 months. Using information from several waves of the data provides corresponding information on both incomes and labour market status. Employment, or getting a job, includes in this section both salaried work and self-employment. Thus, hourly wage also includes both wages and income from self-employment. Negative income values are coded as 0.

indicates that the poverty-reducing effect of raising the minimum wage (taking into account interactions with social assistance and other tax-and-benefit policies) is small but not trivial: increasing the minimum wage to 50% of the average wage would lead to a fall of at least 1 percentage point in the overall at-risk-of-poverty rate in 13 out of 28 EU Member States, as well as helping to tackle questions of earnings inequality, work incentives and fairness<sup>(120)</sup> (Matsaganis, Medgyesi et al., 2015, European Commission 2016d and 2016e ).

Combining higher minimum wages with other redistributive policies may prove more effective; but if the effect is offset by a fall in the means-tested benefits they receive, the working poor are likely to see no increase in their disposable income (as suggested by micro-simulation for Germany by Muller and Steiner, 2008). Moreover, if the level of the minimum wage is too much disconnected from productivity levels it may push low-wage earners into unemployment thereby deteriorating their situation as the unemployed face a much stronger risk of poverty.

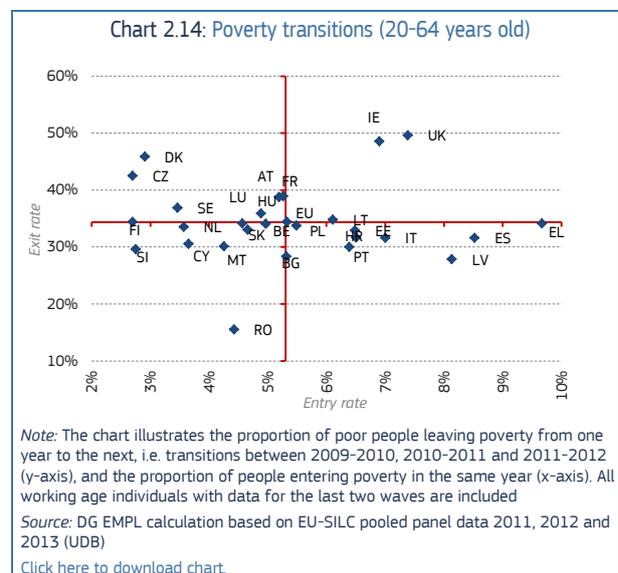
## 2.7. Escaping poverty through work

This section studies the connection between poverty and working status at the individual level by using EU-SILC panel data including all EU Member States except Germany (see **Box 2.2**). It focuses on the question: when does a job lift you out of poverty?

Previous studies on poverty dynamics have revealed high levels of mobility into and out of poverty (Bane and Ellwood, 1986; Jenkins, 2000; Vaalavuo 2015). One way to look at poverty dynamics is to measure year-on-year transitions into and out of poverty. These entry and exit rates are presented in **Chart 2.14**. The horizontal axis shows the people entering poverty as a percentage of those who were not poor the previous year, and the vertical axis shows the people leaving poverty as a percentage of those who were poor the previous year.

<sup>(120)</sup> Matsaganis, Medgyesi et al. (2015) assume no adverse effects on employment or behavioural impact in simulating the effects on poverty of raising national minimum wages to that threshold (50% of average hourly wages). Interactions with social assistance and other tax-benefit policies are taken into account.

On average in the EU, the poverty entry rate is 5.3% and the poverty exit rate is 34.4%. Romania is doing significantly worse with an exit rate of 15.5%, reflecting its high level of persistent poverty. In the UK and Ireland half of the people at risk of poverty escape poverty the following year but these two countries also have above-average entry rates into poverty (7.4% and 6.9%).



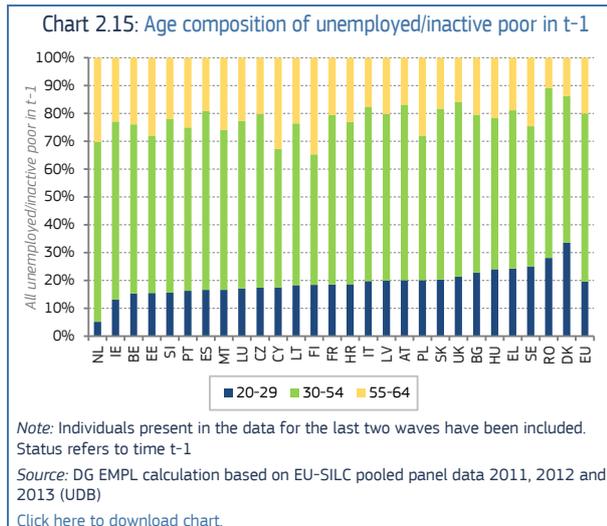
### 2.7.1. More than 40% of the unemployed and inactive poor are long-term poor

The unemployed and inactive<sup>(121)</sup> poor represent around 9% of the total. The analysis here looks at what happens to the individuals in this group from one year (t-1) to the next (t-0) and describes how changes in poverty and work status are related to one another.

First, it is important to note that poverty is often a long-term condition for the unemployed and inactive. Almost 40% of those who are currently poor and also unemployed or inactive have been poor for four or more years.

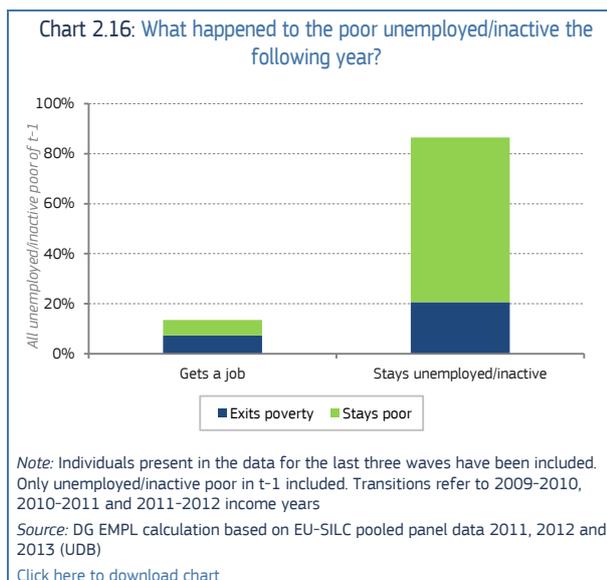
<sup>(121)</sup> As mentioned in **Box 2.2**, individual labour market conditions are defined based on the status of 7 or more months during the income reference period (e.g. unemployment means that the person has been unemployed for 7 or more months). Inactive people include students, pupils, people who are permanently disabled, in military service or fulfilling care responsibilities and other inactive people.

Second, there are differences in the composition of the unemployed/inactive poor across countries. In Denmark, Romania, Sweden and Greece, young adults make up more than 25% of the unemployed/inactive poor, while in Cyprus and Finland more than a third are over 55 years old (Chart 2.15). Different age groups of the poor unemployed/inactive population present different challenges. For older age groups living at risk of poverty, health issues are likely to pose an additional obstacle to a return to work and escaping poverty<sup>(122)</sup>, while some younger individuals may be in a transitory phase linked to studies or the transition from school to work<sup>(123)</sup>.



### 2.7.2. Few transitions out of poverty and out of unemployment

Chart 2.16 shows the transitions year-on-year<sup>(124)</sup> for the unemployed/inactive poor in the EU as a whole.



<sup>(122)</sup> For a brief literature review on the relationship between unemployment and health, see Vaalavuo (2016).

<sup>(123)</sup> It is beyond the scope of this study to look into these details.

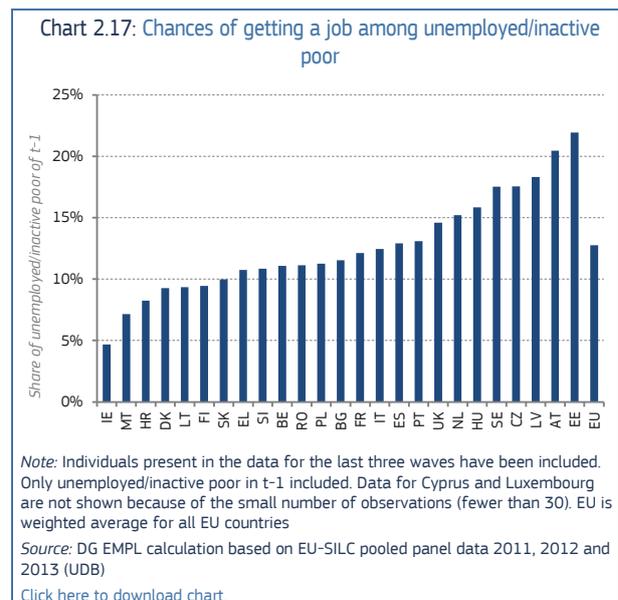
<sup>(124)</sup> Transitions refer to 2009-2010, 2010-2011 and 2011-2012 income years.

More than 85% of the unemployed/inactive poor in one year remained unemployed/inactive in the subsequent year, and more than 70% remained at risk of poverty:

- almost two thirds were in the same state the following year;
- more than 6% remained poor while getting a job;
- 20.6% left poverty while remaining unemployed or inactive; and
- 7.4% made the double transition out of unemployment/inactivity and poverty<sup>(125)</sup>.

### 2.7.3. Older unemployed poor have very low chances of becoming employed

Finding a job and remaining in employment seems to provide a viable exit from poverty when one considers the lower poverty rate of employed individuals (Chart 2.5). However, the chances of the unemployed/inactive poor getting a job vary considerably across countries and also by age (Chart 2.17). In Estonia and Austria, the overall chances of finding a job are more than 20%, while they are less than 10% in Ireland, Malta, Croatia, Denmark, Lithuania and Finland. In some countries, such as Denmark and Finland, this is probably explained by the fact that the poor unemployed/inactive are in many cases young students who are not yet looking for long-term work. On average, older poor people (55-64 years old) have the lowest chance of becoming employed (i.e. being employed or self-employed for more than 7 months during the income reference period) in the next 12 months - half the chance of younger age groups.

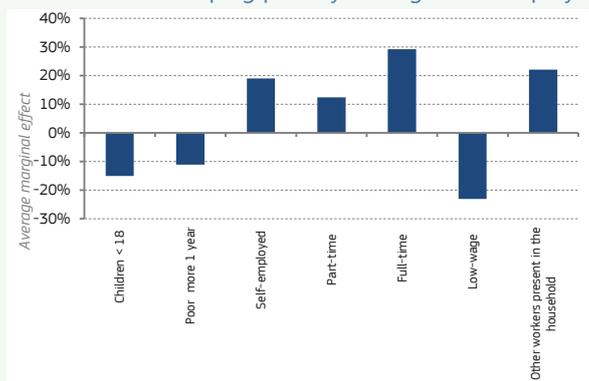


<sup>(125)</sup> Here the analysis focuses only on year-on-year transitions. We do not analyse whether people escaping poverty fall back into poverty later on. Studies have shown that the phenomenon of recurrent poverty is widespread (Stevens 1994; Gardiner and Hills, 1999; Mood and Jonsson 2012). This means that more focus should be put on sustainable escape from poverty.

Box 2.3: Factors connected with escaping poverty

Results based on a logit regression analysis show that those who became employed for at least 7 months during the income reference year had a significantly higher chance of escaping poverty compared with those who remained unemployed or inactive. However, those who became self-employed and those who got a part-time job had a lower chance than those who became full-time employees. Those who got a full-time job had almost a 30% higher chance of escaping poverty compared with those who remain unemployed or inactive, among self-employed the chance was 19% higher and among part-time workers 12% higher. Getting a low-wage job is associated with a significantly lower likelihood of escaping from poverty, other things being equal. If there are other workers in the household there is a 22% higher chance of escaping poverty, but the presence of children under 18 in the household has the opposite effect. It also seems that the longer individuals live in poverty, the smaller their chance of escaping from it.

Chart 1: Factors connected with escaping poverty among the unemployed and inactive poor



Note: Ref. = reference category. Average marginal effects based on a logit model controlling for age, gender, education and country of the individual. All significant at  $p < 0.001$  level. The marginal effect for these categorical variables shows how (the likelihood of escaping poverty) differs between those who have a certain characteristic and those who don't. To derive average marginal effects, we compare hypothetical populations – e.g. part-time workers and those who did not get a job – that have all other characteristics in common. The only difference between the populations compared is therefore the response to the variable in question – e.g. being a part-time worker or not – and we can conclude that this variable is the cause of difference in the likelihood of being poor. Getting a job refers to a situation in which a person has been working for more than 7 months during the income reference period.

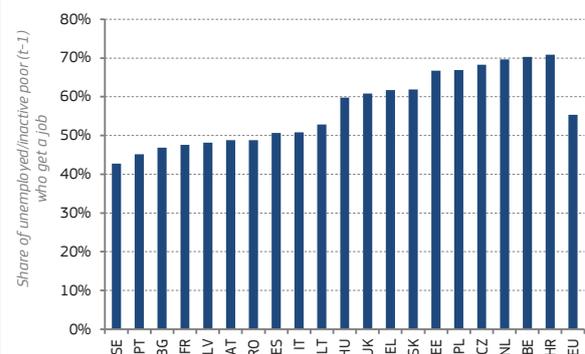
Source: DG EMPL calculations based on EU-SILC pooled panel data 2011, 2012, and 2013 (UDB)

2.7.4. High work intensity and higher wages are connected to better chances of escaping poverty

On average, more than half of those who get a job (employed or self-employed for 7 or more months during the income reference year) also escape from poverty, but there are remarkable differences across countries (Chart 2.18). The proportion is more than 70% in Belgium and Croatia.

The question thus arises why getting a job does not lift every unemployed or inactive person out of poverty. The reasons can be related to the type of work contract, the work intensity (i.e. amount of time worked) and/or low wages. In some cases it can also be linked to losing social transfers due to work income (an issue that has been identified in the literature on 'making work pay' and poverty, unemployment or inactivity traps). Household characteristics can also affect the likelihood of escaping poverty.

Chart 2.18: The share of unemployed/inactive poor getting a job and escaping poverty the following year



Note: Individuals present in the data for the last two waves have been included. Only unemployed/inactive poor in t-1 who get a job in t-0 are included. EU is weighted average for all EU countries. Data for Cyprus, Denmark, Finland, Ireland, Luxembourg, Malta and Slovenia not shown because of small number of observations (fewer than 30)

Source: DG EMPL calculation based on EU-SILC pooled panel data 2011, 2012 and 2013 (UDB)

[Click here to download chart.](#)



Table 2.1: Determinants of transitions from unemployment to employment (odds ratios)

Explanatory variables	Mod. 1	Mod. 2	Mod. 3	Mod. 4	Mod. 5	Mod. 6
Individual level						
Woman	0.842*** [0.825,0.859]	0.823*** [0.806,0.840]	0.811*** [0.794,0.829]	0.811*** [0.793,0.828]	0.828*** [0.809,0.847]	0.811*** [0.793,0.828]
Young 20-29	1.463*** [1.427,1.499]	1.407*** [1.359,1.457]	1.394*** [1.345,1.444]	1.407*** [1.357,1.458]	1.416*** [1.363,1.470]	1.407*** [1.357,1.458]
Older 55-64	0.435*** [0.421,0.449]	0.431*** [0.415,0.447]	0.425*** [0.409,0.441]	0.421*** [0.406,0.438]	0.422*** [0.406,0.439]	0.421*** [0.406,0.438]
Low education	0.648*** [0.634,0.663]	0.648*** [0.633,0.664]	0.649*** [0.633,0.664]	0.649*** [0.633,0.664]	0.629*** [0.613,0.644]	0.649*** [0.633,0.664]
High education	1.495*** [1.455,1.537]	1.489*** [1.447,1.533]	1.488*** [1.446,1.531]	1.489*** [1.447,1.532]	1.499*** [1.454,1.546]	1.489*** [1.447,1.532]
Widowed/divorced	0.904*** [0.873,0.935]	0.896*** [0.864,0.930]	0.895*** [0.863,0.929]	0.894*** [0.862,0.927]	0.885*** [0.852,0.920]	0.894*** [0.862,0.927]
Single	0.820*** [0.801,0.840]	0.818*** [0.797,0.839]	0.818*** [0.798,0.839]	0.818*** [0.798,0.839]	0.816*** [0.794,0.837]	0.818*** [0.798,0.839]
Group level						
UB coverage		0.997** [0.995,0.999]	0.996** [0.994,0.999]	0.997* [0.995,1.000]	0.998 [0.996,1.000]	0.997* [0.995,1.000]
PES involvement in finding current job			1.006*** [1.003,1.008]	1.007*** [1.004,1.010]	1.007*** [1.004,1.010]	1.007*** [1.004,1.010]
Country level						
ALMP participation				1.079** [1.026,1.135]	1.047*** [1.041,1.052]	1.047*** [1.042,1.053]
NRR					0.997 [0.992,1.001]	
GDP growth						1.024 [0.981,1.069]
Country dummies	included	included	included	included	included	included
Observations	246 953.0	230 493.0	230 493.0	230 493.0	201 398.0	230 493.0

Note: Exponentiated coefficients; 95 per cent confidence intervals in brackets; \* p<0.05, \*\* p<0.01, \*\*\* p<0.001. Reference categories for individual level variables are: man; prime age; mid-educated; married

Source: DG EMPL calculations based on LFS micro-data 2014

[Click here to download table.](#)

A second set of explanatory variables is defined at a group level: 1) effective unemployment benefit coverage and 2) PES involvement in finding the current job<sup>(130)</sup>. These groups capture gender and age in six groups within each country. For example, for unemployment benefit, the coverage of recipients has been calculated for each group within each country. Similarly, for PES involvement in finding a job, the proportion of jobseekers who declare some involvement of the PES in finding their job has been calculated for each group.

The third set of explanatory variables is country-level characteristics, including policy interventions such as ALMP participation<sup>(131)</sup>, the net replacement rate (NRR)<sup>(132)</sup>, and macroeconomic indicators such as GDP growth<sup>(133)</sup>.

<sup>(130)</sup> Unemployment benefit coverage is defined at group level and refers to the year in which individuals were unemployed (t-1, 2013). The LFS survey only registers unemployment benefit recipients among current unemployed, while no information is available on whether an unemployed person who found a job was receiving the unemployment benefit the year before. For this reason information on unemployment benefits receipt cannot be included at individual level in the regression analysis. By contrast, PES involvement in finding the current job is a question available at individual level for those unemployed who moved to employment in the LFS survey. However, in this analysis, the PES involvement has been included at group level as the interest is in how improving the role of PES across different groups of individuals may improve the chances of escaping unemployment.

<sup>(131)</sup> ALMP participation is measured as the percentage of participants in ALMP measures per 100 people wanting to work. Measures taken into account include: training, employment incentives, supported employment and rehabilitation, direct job creation and start-up incentives.

<sup>(132)</sup> The net replacement rate included in the regression analysis is measured for a single person who was a low-wage worker

The results of the regression analyses in **Table 2.1** suggest that individual characteristics are very influential. There is a higher likelihood of moving from unemployment into a job if individuals are young (rather than prime age adults) and highly-educated (rather than having only mid-level education). Being a woman, being old (rather than a prime-age person), having only low-level education (rather than mid-level education), and being widowed/divorced or single are all associated with lower chances of moving out of unemployment.

The chances of getting a job are strongly and positively linked to the ALMP participation rate in the country. The active involvement of PES in finding a job is also significant and positively linked to movements out of unemployment across four regression specifications. This suggests that the more substantial the role of PES within each group, the higher the probability of moving out of unemployment (though the magnitude of the impact is small). Unemployment benefit coverage has a very limited impact or no impact on the chances of getting a job. Similarly, the level of the replacement rate (calculated at country level) and GDP growth are not significant.

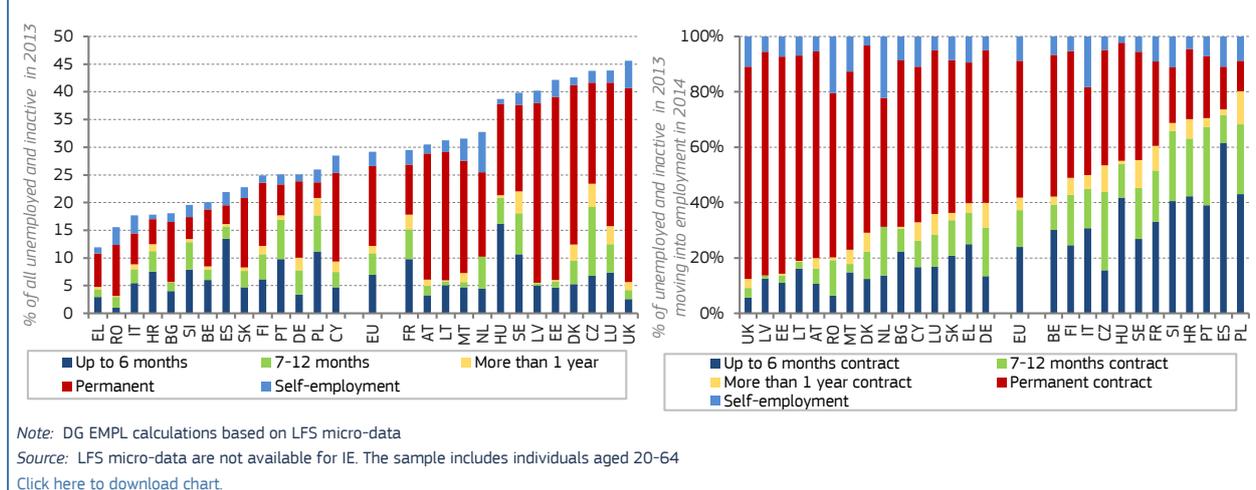
### 2.8.3. Quality of transitions into employment

At the EU level, around 42% of people who leave unemployment get a temporary job and around 9% move into self-employment. More than 75% of those people who leave unemployment to take a temporary

(67% of the average wage) and is in the second month of unemployment.

<sup>(133)</sup> Some key variables such as other macroeconomic factors are not included, although partly controlled for by GDP growth and country dummies.

Chart 2.20: Transitions from unemployment to employment by length of the contract, 2014



job said that they did so only because they could not find a permanent job <sup>(134)</sup>.

The first panel in **Chart 2.20** shows that at the EU level, 29.2% of all unemployed people found a job between 2013 and 2014: 14.4% found a permanent job, 2.6% became self-employed and the remaining 12.2% moved into a temporary job, of which more than half (7.0%) had very short-term contracts (up to six months). The second panel in **Chart 2.20** illustrates that in Poland, Spain, Portugal, Croatia, Slovenia and France more than 60% of unemployed people who found a job moved into temporary employment. Spain has the highest proportion of people (61.6%) who take jobs with very short-term contracts (up to six months). At the other end of the spectrum, in the Baltic countries, the UK and Austria around 75% of unemployed people who moved into employment found a permanent job.

### 3. HOURLY WAGES AT THE BOTTOM OF THE WAGE DISTRIBUTION

The hourly wage is an important factor affecting disposable income of workers at the lower end of the wage distribution, as it constitutes their most important source of income.

Nevertheless, hourly wages <sup>(135)</sup> at the lower end of the wage distribution were fairly low if compared with the average hourly wage. For the EU as a whole <sup>(136)</sup> they were about 36% of the average hourly wage in 2013, compared with 33% in 2006 (see **Chart 2.21**).

Moreover, notable differences between Member States exist. In Belgium and Finland employees in the bottom decile were paid an hourly wage which was about 50%

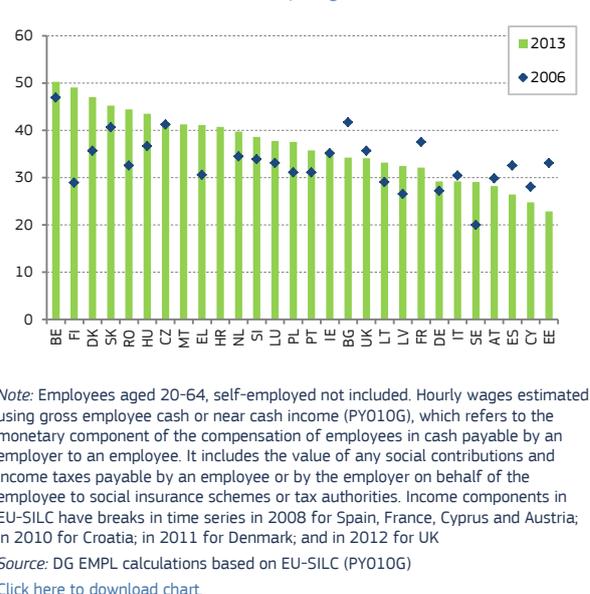
<sup>(134)</sup> The LFS survey contains a question on reasons for having a temporary job/work contract of limited duration (variable "TEMPREAS"). Among the possible reasons one is "person could not find a permanent job".

<sup>(135)</sup> Hourly wages estimated using EU-SILC data, i.e. gross employee cash or near cash income (PY010G). The earnings of self-employed people are not included.

<sup>(136)</sup> Unweighted average.

of the average hourly wage, while the same group of employees earned about 25% of the average hourly wage in Estonia, Cyprus and Spain. From 2006 to 2013, Finland recorded the strongest increase, while Estonia, Bulgaria and Spain had the strongest decrease <sup>(137)</sup>.

Chart 2.21: Hourly wages: first decile as percentage of average hourly wage



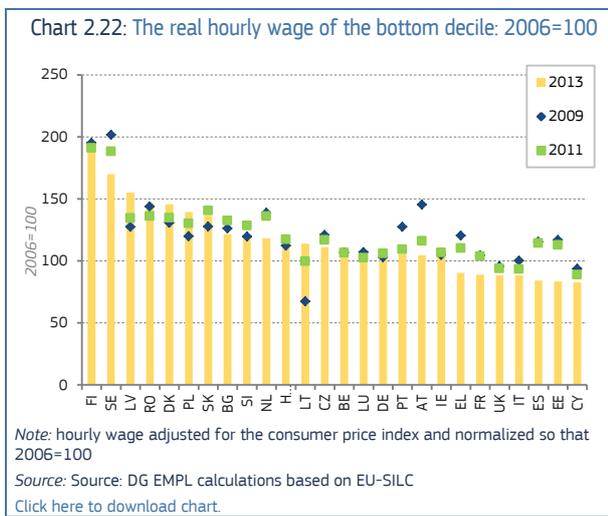
**Chart 2.22** shows the nominal hourly wage level adjusted for consumer prices (i.e. the real hourly wage), which is a good measure of the evolution of the purchasing power of the hourly wage over time.

From 2006 to 2013 developments in the real hourly wage at the bottom of the wage distribution varied strongly across Member States. While the real hourly wage increased considerably in Finland and Sweden, it decreased strongly in Cyprus, Estonia and Spain.

<sup>(137)</sup> Such developments are driven by several factors, including those that have a direct impact on the productivity and bargaining power of low wage earners, but also composition effects; since the onset of the crisis some of the most vulnerable and the lowest-paid have become unemployed, and thus did not lower the average wage of the bottom decile.

The data indicate that women, the young and the low-skilled were most likely to be found in the bottom decile of the wage distribution between 2006 and 2013, while the high-skilled and men were most likely to be in the higher wage deciles.

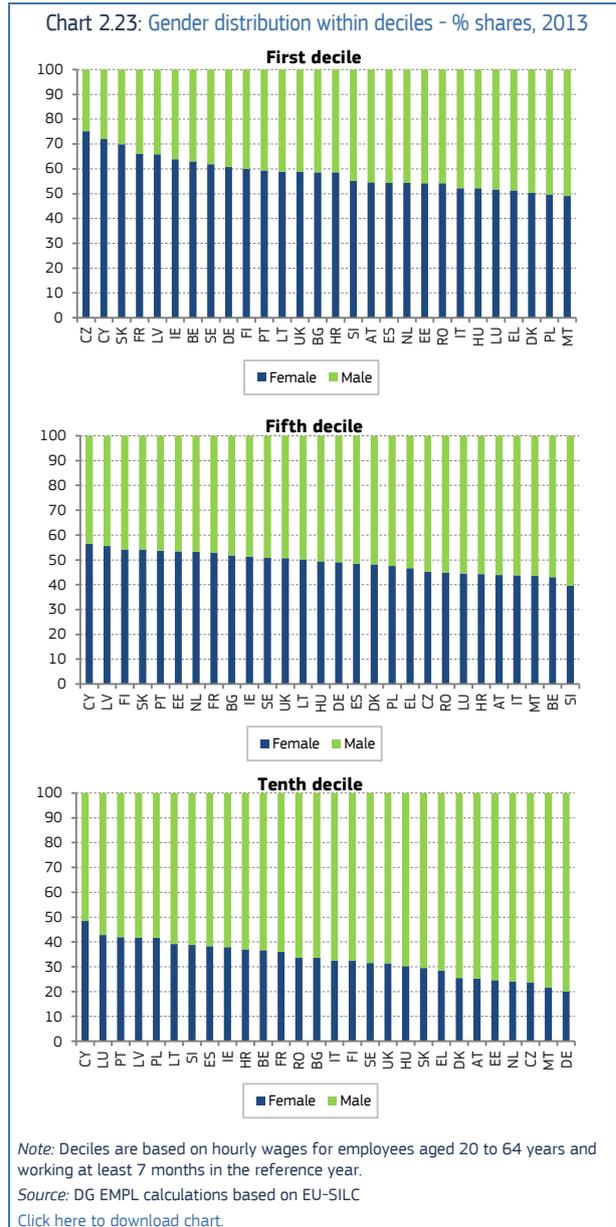
There was a larger proportion of women than of men in the bottom wage decile in all Member States (except Malta and Poland) in 2013, with the highest proportion of women in the Czech Republic (Chart 2.23). In the same year, in all Member States, the proportion of men in the top decile was larger than that of women, with the highest proportion of men in Germany and Malta, and the lowest proportion of men in Cyprus and Luxembourg. In the fifth decile the gender distribution was more balanced, with the highest proportion of women found in Cyprus and Latvia and the lowest proportion of women in Slovenia and Belgium.



All in all, Chart 2.23 shows that women are over-represented in the bottom decile of the earnings distribution and under-represented in the top deciles. This can be attributed to several factors. First, women and men have different jobs and work in different sectors, and women tend to work in the jobs with lowest earnings<sup>(138)</sup>. This in turn reflects, inter alia, gender imbalances in education: girls are less likely to choose scientific or technological fields of study<sup>(139)</sup>. Second, on average, women spend more time than men carrying out unpaid domestic and care work, so that they tend to work shorter hours than men and have fewer opportunities to advance their careers. Third, in some cases (albeit illegally) women are not

<sup>(138)</sup> For more background information on occupational gender segregation see for instance, Burchell, et al. (2014), 'A New Method to Understand Occupational Gender Segregation in European Labour', DG JUST report at [http://ec.europa.eu/justice/gender-equality/files/documents/150119\\_segregation\\_report\\_web\\_en.pdf](http://ec.europa.eu/justice/gender-equality/files/documents/150119_segregation_report_web_en.pdf).  
<sup>(139)</sup> See, for instance, European commission (2013), 'Report on Progress on equality between women and men in 2012', Commission Staff Working Document, SWD (2013) 171 final, doi: [http://ec.europa.eu/justice/gender-equality/files/swd\\_2013\\_171\\_en.pdf](http://ec.europa.eu/justice/gender-equality/files/swd_2013_171_en.pdf).

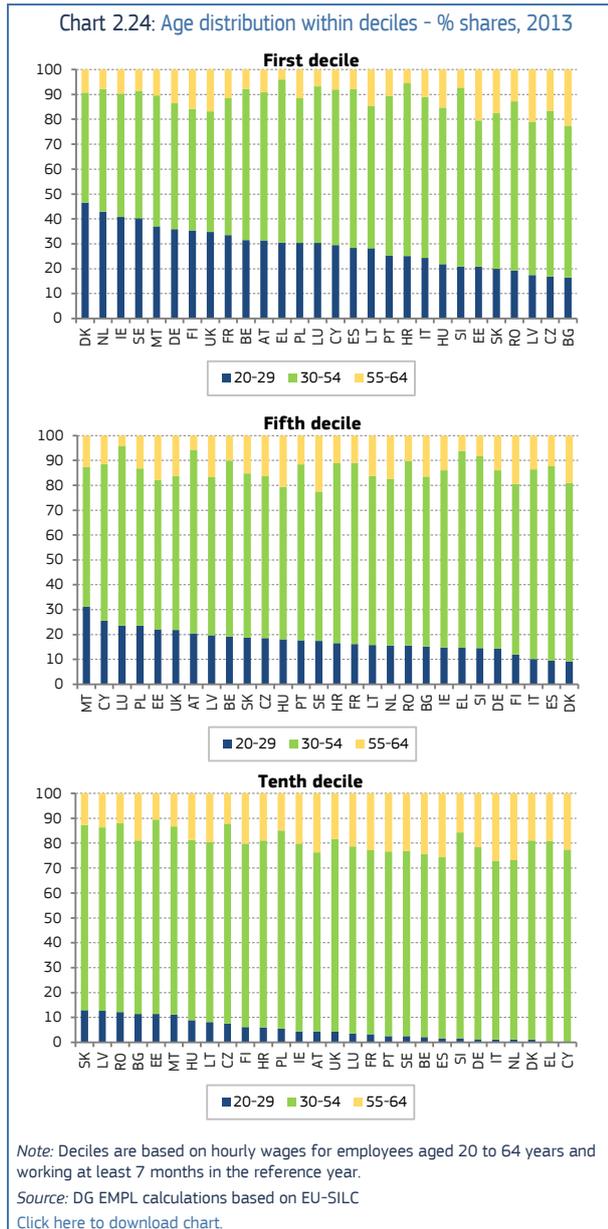
paid the same as men for the same work or work of equal value<sup>(140)</sup>.



Young employees (20 to 29 years) constitute the largest proportion of employees in the bottom wage decile in Denmark, the Netherlands, Ireland and Sweden: to some extent this reflects the high part-time labour market participation by students in the Nordic Member States<sup>(141)</sup>. In Slovenia, Croatia and

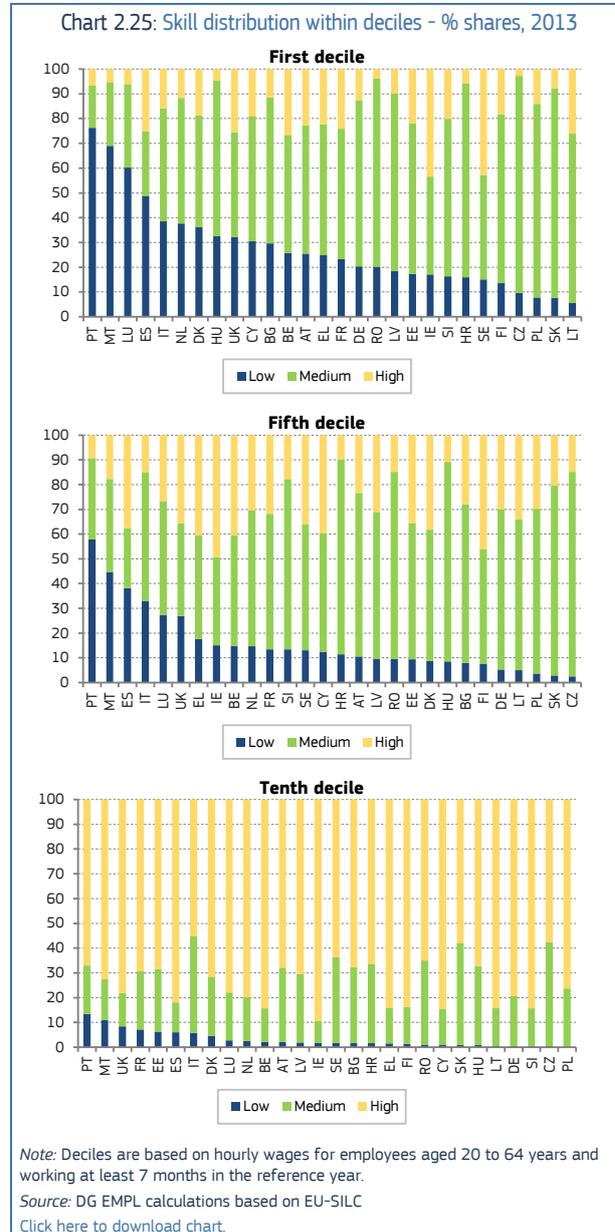
<sup>(140)</sup> For example, Foster-McGregor et al. (2014) report that (using Structure of Earnings Survey data) in 2010 the contribution of differences between men and women to inequality (as measured by the Gini index) ranged from more than 6% in Finland and around 4% to 5% in Estonia, Slovakia, Sweden and Norway to less than 1% in Bulgaria and Romania. For more details see Neil Foster-McGregor, Sandra Leitner, Sebastian Leitner, Johannes Pöschl and Robert Stehrer (2014), 'Study on various aspects of earnings distribution using micro-data from the European Structure of Earnings Survey', doi: <http://ec.europa.eu/social/BlobServlet?docId=12622&langId=en>.  
<sup>(141)</sup> Such jobs include babysitting, housekeeping, cleaning, waiting, delivering papers or acting as kitchen and bar assistants and similar jobs. See, for instance, <http://www.ucnorth.dk/home/programmes->

Romania the middle-aged group (30 to 54 years) constituted by far the largest group of workers in the bottom decile (Chart 2.24). The highest proportion of older workers (55 to 64 years) is to be found in Bulgaria, Latvia and Estonia, with the lowest proportions observed in Greece, Croatia and Luxembourg, partly reflecting the overall low participation rates of older workers in these Member States. In the fifth decile the middle-aged workers constitute the largest group of workers in all Member States, while in the tenth decile the presence of young workers is very low in most Member States (except in Slovakia, Latvia, Romania, Bulgaria, Estonia and Malta).



The proportion of low-skilled workers within the bottom decile varies widely across Member States, reflecting strong differences in education level, such as a very high proportion of low-skilled workers in overall employment in Portugal and a low proportion in Slovakia and Lithuania (Chart 2.25). As might be

expected, the proportion of high-skilled workers within the top decile is large in all Member States, while the proportion of the low-skilled is rather low (except in Portugal, Malta and the United Kingdom). Low-skilled workers are most likely to be found in the bottom decile as their reservation wage (below which they will not accept a job offer) is most likely to be lower than that of the other skill groups.



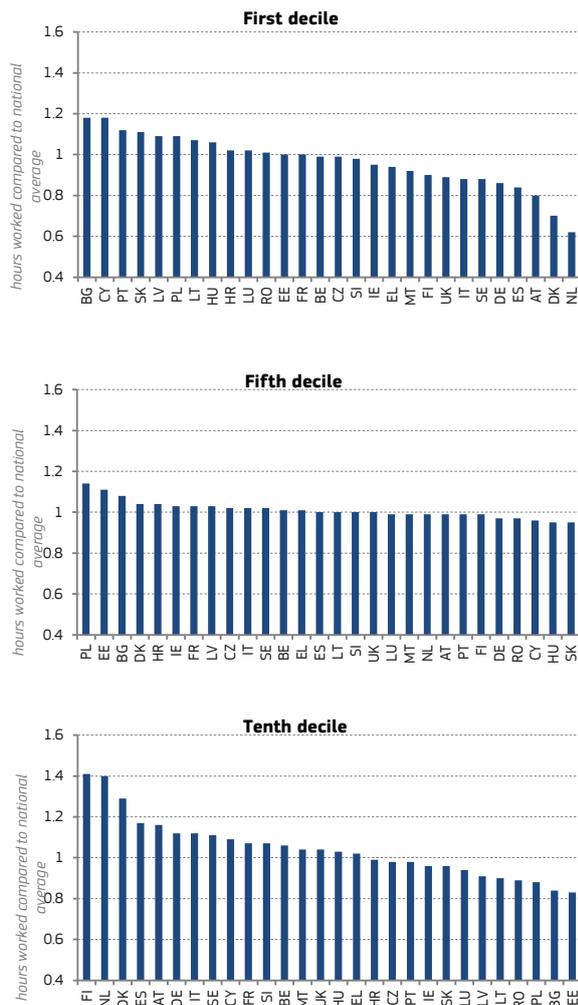
In most Member States, employees receiving the lowest hourly wage worked fewer hours than the national average: notable exceptions are Bulgaria and Cyprus where employees in the bottom decile worked almost 20% more than the national average in 2013 (Chart 2.26). In the Netherlands, the employees in the bottom decile worked about 60% of the national average number of hours. Hours worked in the fifth decile were close to the national average in most Member States. Employees in the top decile recorded about 40% more working hours than the national average in Finland and the Netherlands, while they worked only about 85% of the national average in Estonia and Bulgaria.

## Box 2.4: Definitions used for wage mobility

In the analysis on wage mobility, the focus is on people who have been employees in two consecutive waves, meaning that they were employees in  $t-1$  (referring to data of 2009, 2010 and 2011) and they remained employees the following year, in  $t$  (referring to data of 2010, 2011 and 2012). The analysis refers to averages of year-on-year transitions from 2009-2010, 2010-2011 and 2011-2012.

The self-declared economic status refers to the year of the interview, while the wage refers to the year before. The time discrepancy between the wage reference year and all other variables in EU-SILC has been solved by using the information referring to the wage reference year for all variables. Negative wage values are coded as zero.

Chart 2.26: Hours worked – compared with national average, 2013



Note: Deciles are based on hourly wages for employees aged 20 to 64 years and working at least 7 months in the reference year.

Source: DG EMPL calculations based on EU-SILC

[Click here to download chart.](#)

## 4. THE CHANCES OF UPWARD MOBILITY

The lower the degree of labour and wage mobility in a country, the higher is the risk of being stuck in unemployment and low-paid jobs. Understanding the drivers of labour and wage mobility is therefore important for policy-makers. Similarly, identifying

groups of individuals with lower chances of upward mobility may help policy-makers to target active and passive labour market policies more effectively towards the most vulnerable individuals.

This part of the chapter presents evidence on various types of transition based on EU-SILC panel data<sup>(142)</sup>. The analysis is based on pooled longitudinal EU-SILC datasets from 2011, 2012, and 2013 and covers employees<sup>(143)</sup> aged 20-64 years old for whom data for at least two consecutive years are available, and who maintain their status over at least two years<sup>(144)</sup> (see **Box 2.4** for more details on the definitions used in the analysis). Due to the limited length of EU-SILC panel data, the analysis only looks at chances to improve the wage in the very short term (year-on-year) and short term (two-year time span), while it would be interesting to analyse these phenomena over longer periods of time. The existing empirical evidence supports the idea that wage mobility increases with the time span considered (Bachmann et al., 2016).

### 4.1. Transitions between labour market statuses

**Table 2.2** presents transitions across different labour market statuses<sup>(145)</sup> from one year to the next. Seven different labour market statuses are reported. There are four employee profiles which combine contractual condition (temporary vs. permanent jobs) and working time arrangement (part-time vs. full-time jobs). In addition to these four types of employees there are self-employed, unemployed and inactive individuals.

The transition matrix presented in **Table 2.2** shows the proportion of individuals who maintain the same labour market status, and the proportion of people who move from a given status to any other from one year ( $t-1$ ) to the next ( $t-0$ ). From the transition matrix a synthetic mobility index (Baldini and Toso 2004; Burkhauser and Couch 2009) can be easily calculated as  $M = \frac{N - tr}{N - 1}$ , where  $N$  is the number of possible labour

<sup>(142)</sup> All EU countries are included except Germany, for which panel data are not publicly available.

<sup>(143)</sup> Self-employed people are not included in the analysis, due to the lower reliability of their labour income variable in EU-SILC compared with employees.

<sup>(144)</sup> At EU level around 91.4% of employees maintain their status over two years, 4.3% become unemployed, 3.2% become inactive and 1.1% move to self-employment.

<sup>(145)</sup> Labour market status refers to self-declared status at the time of the interview.

Table 2.2: Year-on-year transition matrix by employment status (employees aged 20-64), 2010-2011, 2011-2012 and 2012-2013.

Employment states in t-1	Employment states in t							% of group in t-1	% of group in t (ppt change)
	Permanent full-time	Permanent part-time	Temporary full-time	Temporary part-time	Self-employed	Inactive	Unemployed		
Permanent full-time	89.5	2.4	1.7	0.2	1.0	2.7	2.7	41.9	-0.6
Permanent part-time	13.2	73.7	1.1	1.8	1.4	5.6	3.3	6.0	0.3
Temporary full-time	21.6	1.2	54.6	3.6	1.8	3.6	13.7	5.6	-0.1
Temporary part-time	5.3	10.1	11.7	47.8	1.7	8.2	15.2	1.8	0.1
Self-employed	2.8	0.6	1.0	0.4	89.0	3.8	2.5	11.0	0.2
Inactive	2.7	1.4	1.9	1.1	1.9	85.3	5.7	24.7	-0.1
Unemployed	7.7	2.1	9.9	3.4	3.5	14.1	59.4	9.1	0.3
Summary statistics	<b>Mobility index</b>							<b>0.335</b>	

Note: All EU countries shown together. Figures refer to year-on-year transition rates (2010-2011, 2011-2012 and 2012-2013) and include only individuals (aged 20-64) for whom data for two consecutive years is available.

Source: DG EMPL calculations based on EU-SILC pooled panel data 2011, 2012 and 2013 (UDB).

[Click here to download table.](#)

Table 2.3: Transition matrix by employment status in a two-year period (20-64 years old), 2009-2011, 2010-2012 and 2011-2013

Employment states in t-2	Employment states in t							% of group in t-1	% of group in t (ppt change)
	Permanent full-time	Permanent part-time	Temporary full-time	Temporary part-time	Self-employed	Inactive	Unemployed		
Permanent full-time	84.3	3.2	2.3	0.4	1.6	4.5	3.8	43.2	-1.4
Permanent part-time	15.0	66.4	1.3	2.5	2.2	8.7	3.9	6.1	0.6
Temporary full-time	29.6	1.8	42.8	3.6	2.7	5.0	14.5	5.6	-0.2
Temporary part-time	9.9	13.4	11.0	38.0	2.0	10.0	15.9	1.9	0.2
Self-employed	4.5	1.3	1.6	0.7	82.7	5.1	4.1	10.9	0.2
Inactive	4.5	2.2	2.9	1.7	2.8	78.8	7.1	23.3	0.1
Unemployed	12.5	2.7	10.6	3.8	4.8	17.9	47.8	8.9	0.4
Summary statistics	<b>Mobility index</b>							<b>0.432</b>	

Note: DG EMPL calculations based on EU-SILC pooled panel data 2011, 2012 and 2013 (UDB)

Source: All EU countries shown together. Figures refer to transition rates in two-year time span (2009-2011, 2010-2012 and 2011-2013). Figures include only individuals (aged 20-64) for whom data for three consecutive years is available

[Click here to download table.](#)

market statuses (seven in this case), and  $tr$  is the trace of the matrix (i.e. the sum of the elements on the main diagonal). The mobility index ranges from 0 to 1 where 0 corresponds to complete immobility and 1 to maximum mobility.

Table 2.2 shows that from one year to the next (2010-2011, 2011-2012 and 2012-2013) around 60% of unemployed people in the EU remain unemployed and 14.1% move to inactivity. For inactive people the figures are worse. Less than 10% of the inactive individuals in the EU become employed (including self-employed) in one-year time frame<sup>(146)</sup>. The table also shows that 21.6% of temporary full-time employees obtain a permanent full-time contract. At the same time 13.7% lose their job and 3.6% become inactive; these are of course much higher proportions than among permanent workers. Temporary part-time workers have an even greater chance of becoming unemployed (15.2%) or inactive (8.2%) and a much poorer chance of getting a permanent full-time job (5.3%).

Overall, the year-on-year mobility index of 0.335 in Table 2.2 suggests that the labour market status of individuals does not change much within a year. However, Table 2.3 shows that over a two-year period employment become more mobile (the mobility index rises from 0.335 to 0.432). The higher mobility index

for the two-year period is mostly the result of the return to the labour market of inactive people, of a higher number of unemployed people finding a job and of higher transition rates from temporary to permanent contracts. The higher job mobility over the two-year period compared with the annual time frame is partly attributable to a greater number of temporary workers and self-employed becoming unemployed<sup>(147)</sup>.

#### 4.1.1. The chances of moving to permanent contracts deteriorated during the crisis

Labour market polarisation can be the result of a deepening divide between those who have access to a job and those who do not, between those with high and those with low wages, and between those with secure jobs and those with precarious jobs. A new class-in-the-making is rapidly growing: the so-called 'precariat'. "The precariat consists of millions of people with insecure jobs, housing and social entitlements. They have no occupational identity, and do not belong to any occupational community with a long-established social memory giving an anchor of ethical norms" (Standing, 2011). The identification of social divisions on the basis not only of workers' pay, but also of their employment security, further supports the idea that the nature of contracts and working time arrangements play a significant role in creating labour

<sup>(146)</sup> Note that inactive people also include the disabled and students. The low transition rate may be because these people are not looking to become employed.

<sup>(147)</sup> However this evidence may be influenced by the crisis. Since 2013 the labour market in the EU has gradually recovered. Therefore, this trend could be less evident in the most recent years.

market polarisation. Movements from temporary to permanent contracts, and from part-time to full-time jobs, both represent progress towards more secure wages.

Empirical evidence supports the conclusion that the use of temporary contracts increased in most Member States during the crisis (between 2008 and 2013), and the rate of movement to permanent contracts deteriorated. At the same time, more temporary workers lost their jobs. Between 2008 and 2013, the probability of moving from temporary to permanent jobs fell by 4.6 percentage points at the EU level. Overall, only 23% of those who were temporary workers in 2012 had a permanent contract in 2013, while 13% became unemployed (Fulvimari et al., 2016).

The role of temporary contracts differs considerably across the EU. In those countries where there is a low rate of movement from temporary to permanent jobs there is also a strong likelihood of temporary workers becoming unemployed. This is particularly the case in Spain, but also in Greece, Italy and France. In other Member States (UK and Lithuania) there is a greater chance that temporary work will be a “stepping stone” to a more permanent job. In terms of individual characteristics, moving into permanent jobs is harder for young people (see also Smith and Villa, 2016).

The rate of movement from part-time to full-time jobs also deteriorated during the crisis. Moving into full-time jobs becomes less frequent with age and is also less likely for women. This may well reflect the fact that part-time jobs are linked with part-time retirement; where this opportunity exists it enables older workers to extend their working lives (Eurofound, 2016).

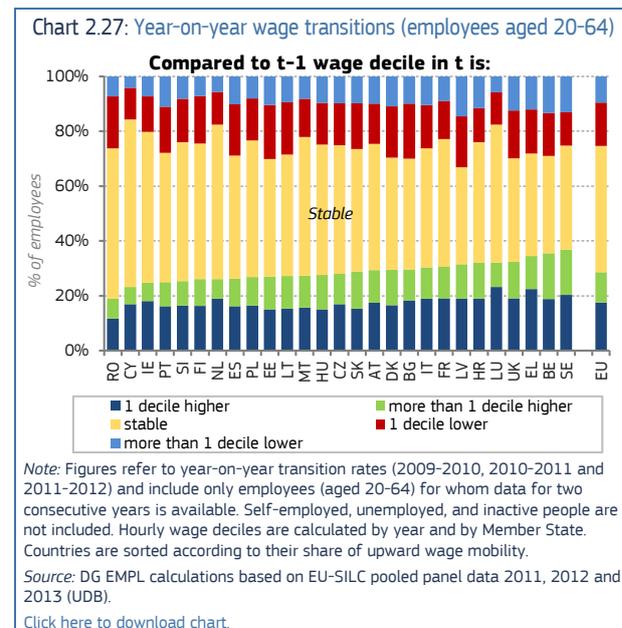
Improved economic conditions, stronger active labour market policies and better incentives to work all help to account for higher or lower rates of transition from temporary to permanent jobs and from part-time to full-time occupations. Recent evidence shows that the crisis significantly reduced the likelihood of moving from temporary to permanent contracts (Bachmann et al., 2014).

## 4.2. Transitions to higher wages

The chances of an individual’s wage changing over time may vary considerably across the different segments of the wage distribution (i.e. bottom, middle and top) and across different population groups. These aspects are not captured by wage inequality indicators, but are crucial in terms of “wage inequality tolerance”. Indeed, the higher the degree of wage mobility, the more equality of opportunity there will be. If people can see that they have a chance to increase their wages, and that skills and effort are well rewarded, they may become more tolerant of wage inequality. However, wage instability and volatility are also a source of financial insecurity.

### 4.2.1. Half of employees change wage decile from one year to the next

Chart 2.27 shows year-on-year wage transition rates by Member State, for those employees who maintain their employed status from one year ( $t-1$ ) to the next ( $t$ ) - around 91.4% of employees at EU level. Overall, more than half of the employees in the EU move to a different wage decile from one year to the next. Total wage mobility (wage transitions both upward and downward) differs considerably across the EU, ranging from 41% in Cyprus to 66% in Latvia.

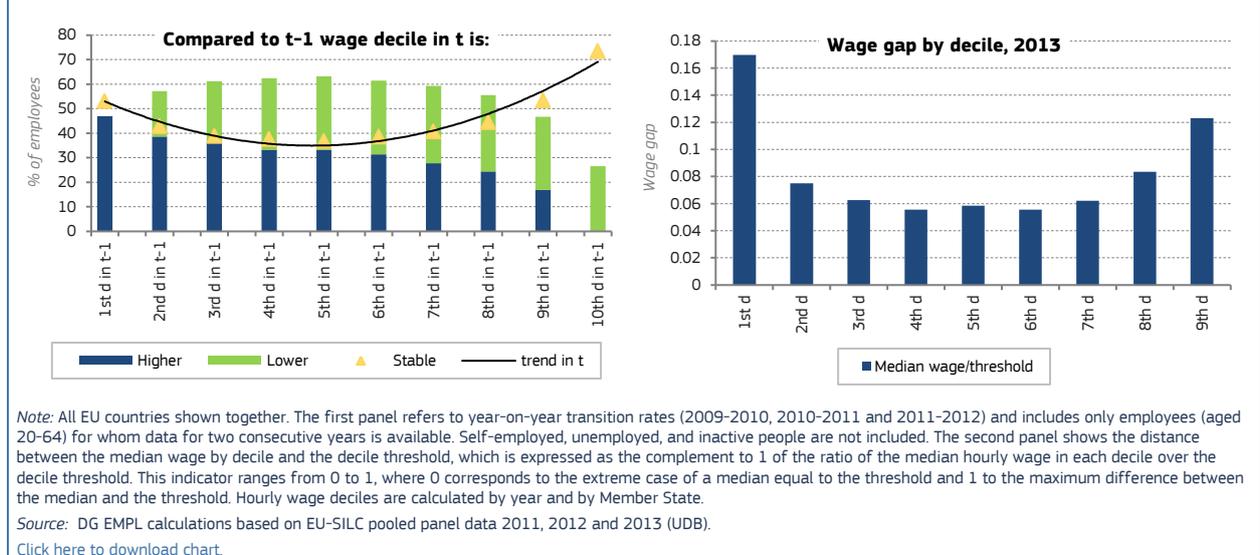


### 4.2.2. Young adults are more likely to experience wage mobility

The picture of overall wage transitions by individual socio-demographic characteristics shows few differences between women and men in most Member States. By contrast, age seems to play an important role. Upward wage transitions are more common among younger workers (aged 20-29) who, in general, experience the highest wage volatilities and also have very high chances of moving down the wage distribution. Older workers aged 55 and above have the lowest chances of improving their wage position from one year to the next and a relatively higher risk than prime-age workers of moving downward. This is likely to be linked to the fact that older workers tend to have relatively stable occupations (more stable than prime-age workers) and that their careers are less likely to progress than those of younger workers.

Overall, workers with low-level education have the highest mobility between wage deciles, followed by those with mid-level education, while highly-educated employees generally have higher wage stability. This is in line with recent findings based on EU-SILC data, according to which lower skills are associated with higher wage mobility and therefore with lower wage stability (Bachmann et al., 2016).

Chart 2.28: Year-on-year wage transitions by decile (employees aged 20-64), EU average



### 4.2.3. More wage mobility in the middle of the wage distribution

The first panel in **Chart 2.28** shows total wage mobility (the bars, signalling both upward and downward) and wage stability (the black line), which reaches its lowest point at the 5<sup>th</sup> decile. Low wage mobility at the bottom of the distribution is known as the "sticky floor" effect, a pattern that persistently keeps workers with low wages at the bottom of the distribution (OECD, 2015). By contrast low wage mobility at the top of the distribution is known as the "glass ceiling" effect, a situation which affects all those employees with very high wages who are unable to improve their financial situation further. And upward wage mobility tends to be higher at the bottom of the wage distribution than at the middle (corroborating findings by Bachmann et al., 2016).

The difficulty of jumping from one decile to the next varies, depending on the part of the distribution from which the worker starts. The second panel in **Chart 2.28** shows that it is at the bottom of the wage distribution (i.e. first decile) where the wage gap between the median wage and the decile threshold (defined as the complement to 1 of the ratio of the median hourly wage in each decile over the decile threshold) is the highest. This suggests that moving from the first to the second decile requires a relatively high wage increase compared with upper segments of the wage distribution.

Individual transitions are presented in the form of a transition matrix in **Table A.2.2** in the **Annex**. This matrix shows the percentages of workers who stay in the same decile, and who move from one decile to another. 29.7% of employees experience upward wage mobility, while 25.6% move downwards. Both these percentages, but particularly the proportion of workers whose wages move upward, increase over the time span considered. As a result, the wage mobility indices move from 0.61 for year-on-year transitions to 0.67 for transitions within three years. This is considerably

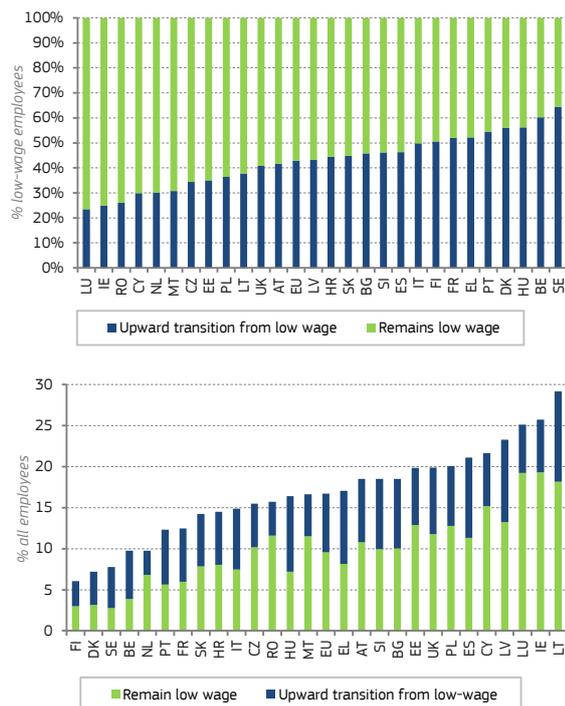
higher than the transitions between different labour market statuses shown in **Table 2.2** and **Table 2.3**.

### 4.2.4. The chances of escaping from low wages

How persistent are low wages<sup>(148)</sup>? What are the chances of low-wage employees moving upward and what facilitates this? Overall, in 2012 15.2% of employees were low-wage earners in the EU. Of those, 55.5% were still low-wage earners the following year, while 44.5% had moved up from low-waged status.

<sup>(148)</sup> Low wage is a concept that relates to gross wage distribution without taking account of a worker's household situation, living standards, and family and other needs (Lucifora and Salverda, 2009). As mentioned in section 2, low wage earners are defined as those who earn below two-thirds of the median hourly wage.

Chart 2.29: Year-on-year upward transitions from a low wage and the share of employees who remain low-wage earners (employees aged 20-64)



Note: DG EMPL calculations based on EU-SILC pooled panel data 2011, 2012 and 2013 (UDB).

Source: Figures refer to year-on-year transition rates (2009-2010, 2010-2011 and 2011-2012) and include only employees (aged 20-64) for whom data for two consecutive years is available. Self-employed, unemployed, and inactive people are not included. Countries are sorted according to their share of upward wage mobility. Low wages are defined as two-thirds of the median hourly wage and are calculated by country and year.

[Click here to download chart.](#)

As already shown, Member States vary widely in their proportion of low-wage workers, from below 10% in the Nordic countries, the Netherlands, Belgium and France, to 25% and above in Luxembourg, Ireland and Lithuania.

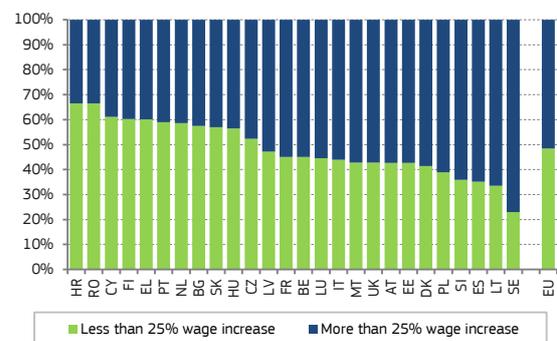
Member States also vary with respect to the chances that their low-wage earners have of improving their condition through an upward transition<sup>(149)</sup>. The upper panel in **Chart 2.29** shows that in Sweden and Belgium more than 60% of low-wage workers in  $t-1$  are no longer earning low wages in  $t$ , while in Luxembourg, Ireland and Romania low-wage workers are most likely to remain in this condition. The lower panel in **Chart 2.30** indicates how many employees move upward from low hourly pay. It shows, for example, that Sweden and Belgium have very high exit rates from low wages, in addition to a low incidence of low pay in these countries.

Upward transition rates from low wages increase considerably within a two-year time frame, compared

<sup>(149)</sup> Upward transitions from low-wage status vary a lot (both within and between countries) depending on the definition of low-wage earners chosen. In general, the relative definition of low-wage earners used in this section (i.e. all those employees whose wage is below two-thirds of the median wage) leads to higher year-on-year upward transition rates compared to the absolute definition of low-wage earners as those belonging to the bottom three deciles.

with year-on-year movements. While on average at EU level the share of low-wage employees who move upward from low-wage from one year to the other is around 44.5%, in a two-year time frame around 48% of employees with low hourly pay manage to escape from low wages. This increase in the chances of upward mobility is true for most EU Member States with the exception of Ireland, Spain, UK, Latvia, Austria and Luxembourg<sup>(150)</sup>.

Chart 2.30: Proportion of people with a wage increase of more than 25% among those escaping low wages (employees aged 20-64)



Note: Data are not reliable for IE due the limited sample size. Figures refer to year-on-year transition rates (2009-2010, 2010-2011 and 2011-2012) and include only employees (aged 20-64) for whom data for two consecutive years is available. Self-employed, unemployed and inactive people are not included. Low wages are defined as two-thirds of the median hourly wage and are calculated by country and year.

Source: DG EMPL calculations based on EU-SILC pooled panel data 2011, 2012 and 2013 (UDB).

[Click here to download chart.](#)

**Chart 2.30** shows how far people moving out of low wages get. Overall, a significant proportion (52% at EU level) of employees moving upward from low wages receive a wage increase of more than 25%. Sweden outperforms the EU average with around 77% of employees moving upward from low wages, increasing their pay by more than 25%.

#### 4.2.5. Individual characteristics connected to upward mobility from low-wage jobs

To determine which individual characteristics are associated with upward mobility from low wages **Chart 2.31** presents the average marginal effects from a logistic regression model<sup>(151)</sup>. The regression analysis suggests that being highly educated, having changed employment in the year before and working fewer hours than before are all characteristics associated with higher probability of moving upward from a low wage.

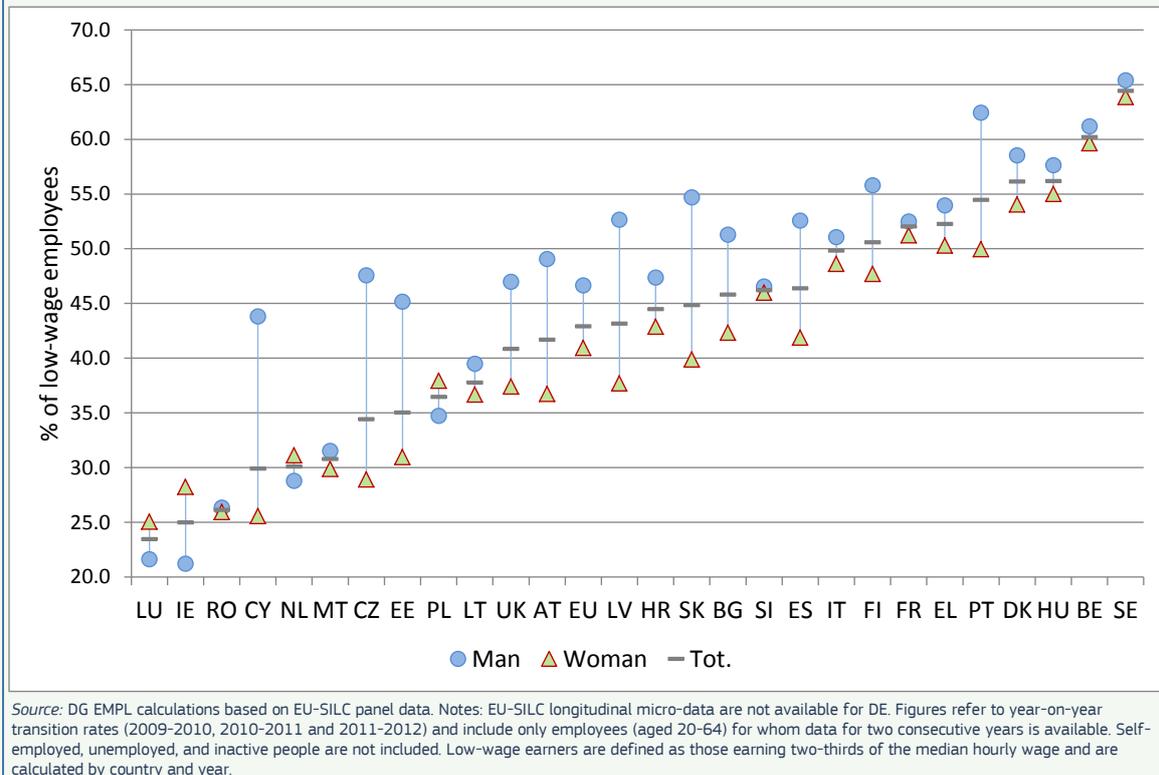
<sup>(150)</sup> Data on this are available upon request.

<sup>(151)</sup> Full model with odd ratios is available upon request.

## Box 2.5: Women are less likely to escape low wages

Despite being over-represented among the group of low-wage earners, women also have lower chances of moving upward along the wage ladder and escaping low wages. At EU level the proportion of women who escape low wages from one year to the other (42.4%) is around 5 percentage points lower than that of men (47.5%). Women have a lower upward transition rate from low wages than men (Chart 1) especially in the Czech Republic, Cyprus, Estonia, Latvia, Slovakia, Portugal, Spain and Austria. Interestingly, the Czech Republic and Slovakia are countries where young mothers tend to stay at home with children and where, as a consequence, the employment gap between parents or mothers and other women is very large. The career interruption of most mothers in these countries may lead to persistently lower wages of women compared to men.

Chart 1: Year-on-year upward transition from low wage by gender



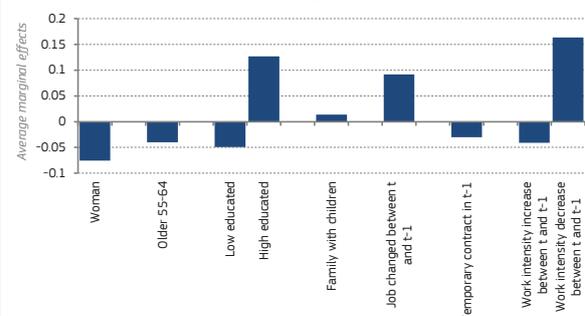
The evidence that being highly educated improves the chances of moving upward from a low wage may suggest a merit effect and better opportunities in the labour market<sup>(152)</sup>. Changing employment is also positively associated with exit chances from low-wage employment, and this indicates the existence of a link between job mobility and wage mobility. The third characteristic positively related with upward mobility from low-wages – working fewer hours – is in line with the evidence presented earlier that low-wage workers often tend to work longer hours in order to compensate for low hourly pay, so the reduction in hours could be the result of moving to a higher wage level rather than a cause.

On the other hand, having a low level of education, being a woman (see Box 2.5) or an older employee, or working more hours than in the previous year, are all associated with a lower likelihood of moving upwards

<sup>(152)</sup> When focusing on the whole wage distribution, highly educated individuals appear to be the most stable (section 4.2.2). However, among low-wage earners, the higher the educational level the better the chances of moving upward on the wage ladder.

from a low wage. As regards the gender effect, the career interruption linked to being a mother may explain why being a woman reduces the likelihood of escaping low-wages.

Chart 2.31: Characteristics connected with upward mobility from low wages (employees aged 20-64): results from logistic regression model



Note: Average marginal effects are shown in the Chart. The model also includes other household composition variables (not significant), having a part-time contract in t-1 (not significant), country fixed effects and year dummies. The full model is available upon request.

Source: DG EMPL calculations based on EU-SILC pooled panel data 2011, 2012 and 2013 (UDB)

[Click here to download chart.](#)



a job. By contrast, being a woman, old, having only low-level education and being widow/divorced or single are all associated with lower chances of escaping unemployment. Active labour market policies and active involvement of Public Employment Services in finding a job have a positive impact on transitions out of unemployment. Such findings underline the importance of active labour market policies for raising the employability of the unemployed and inactive, notably through education and training measures targeted at those individuals with serious skill deficits.

The findings also underline that as women have more career breaks and periods of inactivity compared with men, they face specific risks. These risks pose an important policy challenge, as households (and particularly single parent households) rely more and more on women's earnings. The promotion of work-life balance and the provision of childcare are important, both in tackling poverty and in enabling upward social mobility.

## Annex: Further descriptive evidence

Table A.1: Percentages of low-wage earners among different groups of workers (employees aged 20-64), 2012

	% low-wage	Young 20-29		Prime age 30-54		Older 55-64		Educational level			Employment contract		Working time	
		men	women	men	women	men	women	low	medium	high	permanent	temporary	full-time	part-time
AT	17.4	25.7	23.6	9.4	23.1	7.7	18.0	32.6	17.5	8.7	16.1	30.6	13.9	28.6
BE	8.3	13.3	22.2	4.5	8.9	4.0	6.6	14.7	10.9	4.3	7.0	20.5	6.6	12.8
BG	11.7	10.8	10.0	7.1	15.0	15.2	14.9	27.9	12.6	3.6	10.5	25.5	11.2	30.5
CY	20.4	27.5	42.7	9.6	24.0	8.4	21.9	32.7	22.5	12.7	15.8	55.2	19.6	32.7
CZ	14.8	12.5	22.1	6.3	23.1	10.3	19.2	37.2	16.9	2.3	13.6	23.6	14.3	31.8
DK	3.3	11.0	11.5	1.2	3.2	1.7	4.1	7.2	4.1	1.3	4.6	13.9	2.9	4.9
EE	18.2	9.9	19.6	8.4	25.4	15.2	32.8	30.5	22.1	10.8	17.9	16.7	16.7	35.4
EL	15.9	29.9	28.7	11.6	15.8	6.2	27.8	26.4	18.5	7.9	9.8	30.4	13.4	32.6
ES	17.4	18.6	30.0	12.9	21.5	9.7	17.6	23.5	22.0	10.4	14.4	28.0	14.5	35.9
FI	5.9	8.7	14.7	2.8	6.7	2.3	5.4	11.1	8.5	2.4	8.9	16.7	5.4	10.6
FR	9.8	18.3	15.9	5.5	11.5	4.3	14.3	18.1	11.4	4.8	7.5	23.4	7.2	20.7
HR	14.1	15.9	16.4	11.3	18.3	6.3	7.2	28.6	15.8	2.9	12.9	21.6	14.1	16.8
HU	11.2	13.1	19.6	9.2	12.1	5.9	10.6	27.4	11.2	3.7	8.8	27.8	10.0	31.1
IE	25.3	48.8	41.0	18.3	24.1	23.9	28.3	40.6	36.8	13.1	23.4	32.6	16.3	44.7
IT	15.0	24.5	37.4	10.9	16.9	9.5	9.9	21.1	14.5	6.0	12.6	30.9	12.3	31.2
LT	24.2	23.6	33.3	19.2	27.6	23.3	20.8	38.2	31.8	13.1	24.4	18.1	23.1	45.3
LU	30.1	49.6	33.8	23.6	33.1	12.6	38.3	54.9	27.1	7.6	28.6	44.6	28.8	35.2
LV	20.5	15.4	22.8	16.9	23.6	16.1	27.0	33.8	27.2	6.6	20.0	27.8	18.8	48.9
MT	18.9	27.3	27.3	11.2	22.1	15.0	25.9	28.5	16.7	2.7	18.6	24.1	15.7	51.0
NL	8.8	19.0	14.3	5.6	8.9	3.9	11.5	17.0	10.0	4.1	14.5	24.7	7.4	10.8
PL	17.1	23.7	23.6	14.3	16.7	14.8	14.7	31.2	21.7	5.5	12.5	28.3	16.3	28.1
PT	11.9	16.4	17.5	7.7	13.6	6.7	18.4	15.1	8.6	4.2	10.4	16.3	11.0	25.8
RO	14.3	13.7	20.7	10.8	18.8	8.5	11.1	32.6	16.1	3.4	14.1	21.5	14.3	12.1
SE	7.3	14.4	26.9	3.9	7.4	2.2	4.0	9.2	8.0	6.1	8.3	37.3	5.9	12.7
SI	15.2	20.3	30.3	11.7	17.0	9.0	8.6	30.8	17.4	6.4	12.8	26.7	15.1	18.9
SK	14.5	13.4	19.2	8.9	18.7	12.7	18.0	39.0	17.0	4.6	13.5	22.0	13.9	33.2
UK	19.6	30.0	28.7	11.6	22.9	15.3	24.5	34.7	25.3	10.6	19.2	25.1	14.9	34.8
EU	15.2	20.6	24.2	10.2	17.8	10.0	17.1	27.6	17.5	6.3	14.1	26.4	13.5	28.0

Note: EU-SILC micro-data are not available for DE. Figures for RO refer to 2011. The sample includes only employees (aged 20-64). Self-employed, unemployed, and inactive people are not included. Low-wages are defined as two-thirds of the median hourly wage and are calculated by country and year.

Source: DG EMPL calculations based on EU-SILC panel data 2013 (UDB).

[Click here to download table.](#)

Table A.2: Year-on-year transition matrix by wage deciles (employees aged 20-64)

		Destination - Wage decile in t										
		1st decile	2nd decile	3rd decile	4th decile	5th decile	6th decile	7th decile	8th decile	9th decile	10th decile	
Origin - Wage decile in t-1	1st decile	52.2	23.1	8.8	5.4	3.4	2.1	1.6	1.2	0.9	1.2	
	2nd decile	17.8	41.2	20.8	9.1	4.7	2.3	1.3	1.2	0.9	0.6	
	3rd decile	6.6	18.4	38.7	19.3	8.2	4.0	2.5	1.3	0.6	0.5	
	4th decile	3.6	7.1	17.9	37.1	19.0	8.3	3.8	1.4	1.1	0.9	
	5th decile	2.3	3.9	6.9	17.3	36.1	19.0	8.7	3.2	1.7	0.8	
	6th decile	2.1	2.2	3.4	6.2	16.9	36.5	20.1	7.8	3.2	1.6	
	7th decile	1.4	1.5	1.6	3.2	6.3	18.6	38.1	20.7	6.7	1.8	
	8th decile	1.5	0.7	1.0	1.6	2.7	6.4	18.6	42.9	20.2	4.3	
	9th decile	0.9	0.7	0.8	0.9	1.4	2.8	5.6	17.4	52.2	17.2	
	10th decile	1.5	1.4	0.5	0.7	0.8	1.3	2.1	4.3	15.2	72.3	
Total in t		8.5	9.7	9.9	10.1	10.0	10.3	10.5	10.4	10.5	10.2	
Summary statistics									<b>29.7%</b>			
									<b>25.6%</b>			
									<b>44.7%</b>			
									<b>0.614</b>			

Note: All EU countries shown together. Figures refer to year-on-year transition rates (2009-2010, 2010-2011 and 2011-2012) and includes only employees (aged 20-64) for whom data for two consecutive years is available. Self-employed, unemployed, and inactive people are not included. Hourly wage deciles are calculated by year and by Member State.

Source: DG EMPL calculations based on EU-SILC pooled panel data 2011, 2012 and 2013 (UDB).

[Click here to download table.](#)

## References

- Anderß, H.-J., and Lohmann, H. (2008) *The working poor in Europe. Employment, Poverty and globalization*. Cheltenham: Edward Elgar.
- Bachmann, R., Bauer T. K., Kösters W. (2014), "A Study on labour market transitions using micro-data from the Statistics on Income and Living Conditions (SILC), Rheinisch-Westfälisches Institut für Wirtschaftsforschung, Research Project for the European Commission – DG Employment, Social Affairs & Inclusion.
- Bachmann, R., Bechara P., Schaffner S. (2016), "Wage inequality and wage mobility in Europe", *Review of Income and Wealth*, 62.1, 181-197.
- Baldini, M., Toso S., (2004), *Disuguaglianza, povertà e politiche pubbliche*, Il Mulino, Itinerari
- Bane, M.J., Ellwood, D. (1986) "Slipping into and out of poverty: the dynamics of spells", *Journal of Human Resources*. Vol. 21: 1-23.
- Bentolila, S., Cahuc P., Dolado J.J., Le Barbanchon T. (2012), "Two- Tier Labour Markets in the Great Recession: France Versus Spain", *The Economic Journal*, 122 (562): F155-F187.
- Blau, F.D., Kahn, L.M. (2009) Inequality and earnings distribution. Chapter 8 in Salverda, W., Nolan, B., Smeeding, T.M. (eds.) *The Oxford Handbook of Economic Inequality*. Oxford: Oxford University Press.
- Branyiczki, R. (2015) *Employment, education and other means of reducing poverty*. EU Social Situation Monitor, Research Note 4/2015, European Commission.
- Burkhauser, R., Couch K. (2009), "Intragenerational inequality and intertemporal mobility", *Oxford Handbook of Economic Inequality*, Ch. 21.
- Cantillon, B. and Vandenbroucke F., (2013) "Reconciling Work and Poverty Reduction: How Successful are European Welfare States?" *International Policy Exchange*, Oxford University Press.
- Crettaz, E. (2011) *Fighting working poverty in post-industrial economies. Causes, trade-offs and policy solutions*. Cheltenham: Edward Elgar.
- Crettaz, E. (2013), "A state-of-the-art review of working poverty in advanced economies: theoretical models, measurement issues and risk groups", *Journal of European Social Policy*. Vol. 23(4): 347-362.
- Crettaz, E., Bonoli, G. (2011), "Worlds of working poverty: national variation in mechanisms", Pp. 46-69 in Fraser, N., Gutierrez, R., Pena-Casas, R. (eds.) *Working poverty in Europe. A comparative approach*. New York: Palgrave Macmillan.
- Dolado, J., (2015), "EU Dual Labour Markets: Consequences and Potential Reforms", FP7 Project COEURE
- Eurofound (2015) *Access to social benefits: reducing the non-take-up*. Luxembourg: Publications Office of the European Union.
- Eurofound (2016), *Recent developments in temporary employment: Employment growth, wages and transitions*. Luxembourg: Publications Office of the European Union.
- European Commission (2012) *Employment and Social Developments in Europe 2011*. Luxembourg: Publication Office of the European Commission.
- European Commission (2013), "The gender impact of the crisis and the gap in total hours worked". In *Employment and Social Developments in Europe 2013*. Luxembourg: Publication Office of the European Commission.
- European Commission (2016a), "Labour legislation in support of job creation". Chapter 1.2 in *Employment and Social Developments in Europe 2015*. Luxembourg: Publication Office of the European Commission.
- European Commission (2016b), "The efficiency and effectiveness of social protection systems over the life course". Chapter 3.2 in *Employment and Social Developments in Europe 2015*. Luxembourg: Publication Office of the European Commission.
- European Commission (2016c), *Education and Training Monitor 2016*. Luxembourg: Publication Office of the European Commission.
- European Commission (2016d), *Labour Market and Wage Developments in Europe - Annual Review 2016*. Luxembourg: Publication Office of the European Commission.
- European Commission (2016e) *Fighting Poverty and Exclusion through Social Investment: A European Research Perspective*. pp. 44-45. Brussels: DG Research and Innovation.
- European Commission (2016f), *2015 Report on equality between women and men in the European Union*, Staff Working Document, SWD(2016)54.
- Fraser, N., Gutierrez, R., Pena-Casas, R. (2011) *Working poverty in Europe. A comparative approach*. New York: Palgrave Macmillan.
- Fulvimari, A., Grzegorzewska M., Salanauskaite L. (2016), "Labour Market Transitions", *Analytical Web Note 1/2016*, European Commission, Employment, Social Affairs and Inclusion.

- Gabos, A., Branyiczki, R., Lange, B., Toth, I. (2015) "Employment and poverty dynamics in the EU countries before, during and after the crisis". *ImPROvE Discussion paper*, No. 15/06. March 2015.
- Gardiner, K., Hills, J. (1999) "Policy implications of new data on income mobility", *The Economic Journal*. Vol. 109: F91-F111.
- Gießelmann, M., Lohmann, H. (2008) "The different roles of low-wage work in Germany: regional, demographical and temporal variances in the poverty risk of low-paid workers". Chapter 4 in Anderß, H-J., and Lohmann, H. (eds.) *The working poor in Europe. Employment, Poverty and globalization*. Cheltenham: Edward Elgar.
- Goerne, A. (2011) "A comparative analysis of in-work poverty in the European Union". Pp. 15-45 in Fraser, N., Gutierrez, R., Pena-Casas, R. (eds.) *Working poverty in Europe. A comparative approach*. New York: Palgrave Macmillan.
- Horemans, J. and Marx I., (2013), "In-work poverty in times of crisis: Do part-times fare worse?", FP7 Project ImPROvE, Discussion Paper, No. 13/14.
- Jenkins, S.P. (2000), "Modelling household income dynamics". *Journal of Population Economics*. Vol. 13(4): 529-567.
- Lohmann, H. (eds.) *The working poor in Europe. Employment, Poverty and globalization*. Cheltenham: Edward Elgar.
- Lucifora, C., Salverda W. (2009), "Low pay", *Oxford Handbook of Economic Inequality*, Ch. 11.
- Marchal, S., Marx, I. (2015) "Stemming the tide: what have EU countries done to support low-wage workers in an era of downward wage pressures?", FP7 Project ImPROvE, Discussion Paper, No. 15/18. August 2015.
- Marx, I., and Nolan, B. (2012). *In-Work Poverty*. AIAS. FP7 Project GINI Discussion Paper No 51. July 2012.
- Marx, I., Nolan, B., Olivera, J. (2014), "The welfare state and anti-poverty policy in rich countries". *IZA Discussion Paper*, No. 8154.
- Marx, I., Verbist, G. (2008), "When familism fails: the nature and causes of in-work poverty in Belgium". Chapter 3 in Anderß, H-J., and Lohmann, H. (eds.) *The working poor in Europe. Employment, Poverty and globalization*. Cheltenham: Edward Elgar.
- Matsaganis, M., Medgyesi, M., Karakitsios, A. (2015) "The interaction between minimum wages, income support and poverty". *EU Social Situation Monitor*, Research Note 10/2015, European Commission.
- Mood, C., Jonsson, J.O. (2012), "The illusion of spells: making sense of poverty dynamics". Paper presented at Population Association America 2012 Annual Meeting. San Francisco, 3-5 May, 2012.
- Muller, K-U., Steiner, V. (2008), "Would a legal minimum wage reduce poverty? A microsimulation study for Germany". *DIW Berlin Discussion Paper*, No. 791. May 2008.
- OECD (2011) *Divided we stand: why inequality keeps rising*. Paris: OECD.
- OECD (2015) *In It Together: Why Less Inequality Benefits All*. Paris: OECD.
- Özdemir, E., Ward, T. (2015), "The characteristics of workers on low wages". *EU Social Situation Monitor*, Research Note 9/2015, European Commission.
- Ponthieux, S. (2010), "In-work poverty in the EU". *Eurostat: Methodologies and working papers*.
- Smith, M., and Villa, P. (2016) *Flexicurity policies to integrate youth before and after the Crisis*. FP7 Project Strategic Transitions for Youth Labour in Europe (STYLE).
- Somaskanda, S. (2015), "Rich Germany has a poverty problem". *Foreign Policy*. May 5, 2015.
- Standing, G. (2011), *The Precariat: The New Dangerous Class*. London, Bloomsbury Academic.
- Stevens, A.H. (1994), "The dynamics of poverty spells: updating Bane and Ellwood". *The American Economic Review*. Vol. 84(2): 34-37.
- Taylor-Gooby, P., Gummy, J.M., Otto, A. (2015), "Can 'new welfare' address poverty through more and better jobs?". *Journal of Social Policy*. Vol. 44(1): 83-104. FP7 project INSPIRES.
- Vaalavuo, M. (2015), "Poverty dynamics in Europe: from what to why". Working paper 03/2015. *DG Employment, Social Affairs and Inclusion*. European Commission.
- Vaalavuo, M. (2016), "Health and (un)employment: the relationship". Data Brief 1. Helsinki: National Institute for Health and Welfare.

# Labour market integration of Refugees

## INTRODUCTION <sup>(153)</sup>

Whether the EU can tackle poverty and increase prosperity for all will depend strongly on how well those who were not born in the EU can be integrated into the labour market and society. As the EU faces an unprecedented inflow of asylum seekers, many of whom may be granted protection status and stay, the question of the integration of refugees is gaining importance.

This chapter analyses the available evidence on the labour market and social challenges that refugees face in the EU and the factors and policies that can help their integration in the economy and in society. It builds on and further develops the analysis of the labour market outcomes of refugees resident in the EU prior to 2014, notably the 2016 joint EC-OECD Working Paper (Dumont, Liebig, Peschner, Tanay and Xenogiani, 2016).

This chapter uses a combination of descriptive, regression and simulation analyses to look at labour market and social outcomes of refugees using the most recent and the most detailed data available: the 2014 Labour Force Survey (LFS) Ad Hoc Module on Migration in combination with micro data from the standards LFS. It also provides an extensive mapping of labour market and social integration policies available to asylum seekers and refugees across the 28 EU Member States.

In the last seven years, the yearly number of first-time asylum seekers has increased from 153,000 in 2008 to 1.3 million in 2015 and close to 900,000 in the first nine months of 2016. These numbers remain relatively small, in comparison to the total population: 0.4% for asylum applications and 0.15% for positive first instance asylum decisions in 2015. However, the distribution of asylum seekers across the EU has not been uniform, with a few Member States receiving most of the recent asylum seekers and the speed of the inflow giving rise to the need to upgrade existing integration programmes and introduce new ones.

The topic has received high media attention and is expected to continue doing so for years to come. Even if the numbers of people arriving in the EU have stabilised or declined somewhat compared with 2015, the migration of people seeking protection in the EU is forecast to continue. With over 60 million people displaced worldwide and no end in sight for many of the conflicts causing this displacement, the number of people seeking protection in the EU is expected to continue to grow (UNHCR, 2016). This forms part of a general trend of increased migration across the globe. Since migration flows are predicted to double in the next 35 years, it has been said that "the age of migration is here to stay" (EPSC, 2015).

In the face of a sudden strong inflow of people seeking protection in the EU in 2015, the Commission and Member States took steps to prevent loss of life at sea, improve legal channels for migration and manage the reception of asylum seekers in the host countries. At the same time, efforts have been made to prepare effective integration programmes for those who have been granted protection status. In particular, the recently adopted Commission Action Plan on

---

<sup>(153)</sup> This chapter was written by Filip Tanay and Jörg Peschner, with contributions from Bettina Kromen, Balazs Palvolgyi, Laurent Aujean, Jörn Griesse, Lorenza Errighi, Massimo Bengt Serpieri, Jean-Christophe Dumont (OECD), Klara Foti (Eurofound), Andrea Fromm (Eurofound), Thomas Liebig (OECD) and Theodora Xenogiani (OECD).

### Box 3.1: Refugee, asylum seeker or migrant - what is the difference?

A **migrant** is technically any person who is residing in a country other than his country of citizenship or birth. Asylum seekers, beneficiaries of international protection (commonly referred to as refugees), beneficiaries of subsidiary protection, and family, labour and study migrants, are hence all migrants, but with important differences in the rights they hold (e.g. to work, to social security etc.) and their socio-economic situation.

An **asylum seeker** is a person seeking international protection who has applied but not yet been granted the status of "beneficiary of international protection". The term **refugee**, on the other hand, is considered here a person who is a successful asylum applicant. This may be a third-country national who, owing to a well-founded fear of being persecuted for reasons of race, religion, nationality, political opinion or membership of a particular social group, is outside their country of nationality and is unable or, owing to such fear, unwilling to avail themselves of the protection of that country; or a stateless person, who, being outside their country of former habitual residence for the same reasons as mentioned above, is unable or, owing to such fear, unwilling to return to it (Directive 2011/95/EU).

**Subsidiary protection** is given to a third-country national or a stateless person who does not qualify as a refugee, but in respect of whom there are substantial grounds for believing that, if they were returned to their country of origin or, in the case of a stateless person, their country of former habitual residence, they would face a real risk of suffering serious harm.

An **unaccompanied minor** is a non-EU national or stateless person below the age of eighteen who arrives on EU Member State territory unaccompanied by an adult who is responsible for them, by law or custom; or a minor who has been left unaccompanied after they entered EU Member State territory.

The term '**non-EU born**' refers to people who were born outside the EU. When analysing integration it is useful to consider country of birth. Migrants who become naturalised may still experience integration difficulties after naturalisation.

For the purposes of this chapter, **other non-EU born/other migrants** are non-EU born individuals who have immigrated for reasons other than seeking international protection (e.g. family, employment or study reasons). **Third-country national** is the term covering everyone who is not a citizen of any EU State.

The term '**second generation**' refers to the children of immigrants who were born in the host country. **Naturalisation** denotes the situation where people of third-country citizenship obtain nationality of the host country in which they reside.

**This chapter uses country of birth to define migrants and the term "refugee" to denote anyone who came for reasons of humanitarian, international or subsidiary protection.**

Integration<sup>(154)</sup>, the New Skills Agenda<sup>(155)</sup> and the proposed revision of the Common European Asylum System<sup>(156)</sup> demonstrate that the European Union is taking significant steps to improve the integration of refugees and other migrants and support their economic and social contribution to the EU.

## 1. CURRENT REFUGEE FLOWS: WHAT WE KNOW THUS FAR

### 1.1. A big recent increase in the number of asylum seekers

Over the last two years the EU has seen an unprecedented increase in the number of people seeking asylum within its borders. This has been driven by conflicts in the Middle East (e.g. the war in Syria) and in Africa<sup>(157)</sup>. In 2015, the number of asylum

seekers reached 1.3 million and 900,000 in the first nine months of 2016 (**Chart 3.1**). Nevertheless, many Member States experienced similarly high and sudden asylum inflows in the late 1980s and 1990s (e.g. France, Germany, Sweden and Denmark due to the Balkan Wars and fall of the Iron Curtain) and the late 1990s/early 2000s (e.g. France, Austria and the United Kingdom due to the wars in Iraq, Afghanistan, Sri Lanka and conflicts in Turkey and many countries in Africa) (**Chart 3.2**).

---

example Migration Policy Institute (2015), *Europe's Migration Crisis in Context: Why Now and What Next?*, 24 September 2015 – available at <http://www.migrationpolicy.org/article/europe-migration-crisis-context-why-now-and-what-next>.

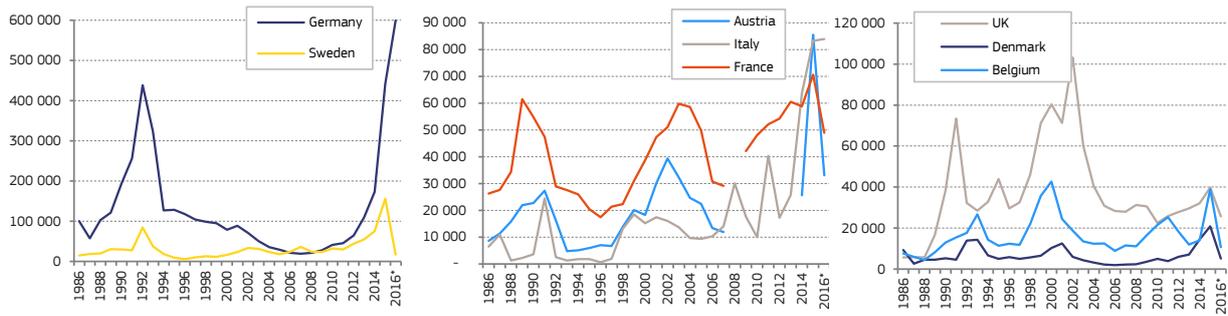
<sup>(154)</sup> Action Plan on the Integration of Third Country Nationals, Commission Communication COM(2016) 377 final, Brussels, 7.6.2016.

<sup>(155)</sup> A New Skills Agenda for Europe, Commission Communication COM(2016) 381 final, Brussels, 10.6.2016.

<sup>(156)</sup> See proposal for revised Reception Conditions Directive (Brussels, 13.7.2016 COM(2016) 465 final) and Qualifications Regulation (Brussels, 13.7.2016 COM(2016) 466 final).

<sup>(157)</sup> For more detailed explanations of the timing, reasons and factors influencing the current wave of migration see for

Chart 3.1: Evolution of asylum applications in selected Member States, 1985-2016\*

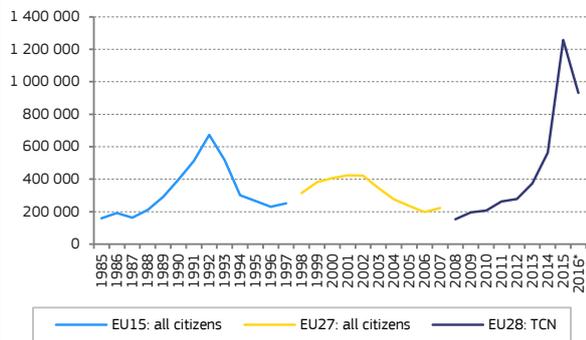


Note: Till 2007: asylum applicants by citizenship (all nationalities); from 2008: first time asylum applications (only third-country nationals). \*The figure for 2016 includes January till September.

Source: Eurostat [migr\_asyctz] and [migr\_asyappctza]

[Click here to download chart.](#)

Chart 3.2: Evolution of asylum applications in the EU, 1985-2016\*



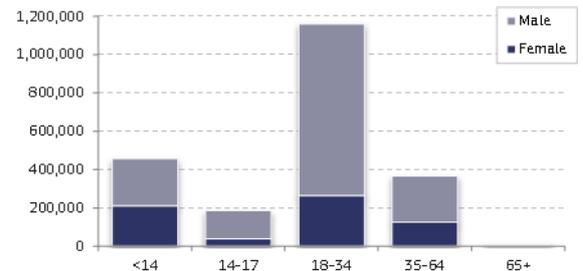
Note: Till 2007: EU15 and EU-27 asylum applications by citizenship (all nationalities); from 2008: EU-28 first time asylum applications (only third-country nationals). \*The figure for 2016 includes January till September.

Source: Eurostat [migr\_asyctz], [migr\_asyappctza] and [migr\_asyappctzm].

[Click here to download chart.](#)

all first time asylum applications were lodged by Syrians (Chart 3.3)

Chart 3.4: Age and gender composition of asylum seekers, 2015-2016\*

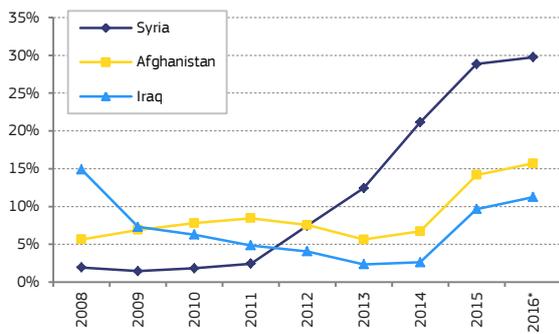


Note: \*The figure for 2016 includes January till September.

Source: Eurostat [migr\_asyappctzm].

[Click here to download chart.](#)

Chart 3.3: First time asylum applications by country of origin, 2008-2016\*



Source: Eurostat [migr\_asyappctzm] \*The figure for 2016 includes January till September.

[Click here to download chart.](#)

Young people aged between 18 and 34, and notably young men, constitute the largest group of asylum seekers. 41% of all arrivals seeking asylum in 2015 and first nine months of 2016 (896,000 people) were young working-age men between 18 and 34 (Chart 3.4).

Many children flee their home countries. Almost 21% of all asylum seekers, or 458,000 people in 2015 and first nine months of 2016, were minors below the age of 14. The number of unaccompanied minors seeking asylum in the EU almost doubled between 2013 and 2014 (from 13,000 to 23,000) and quadrupled in the following year (96,000 in 2015). The majority of them (59% of all unaccompanied minors in the EU) went to Sweden and Germany in 2015 <sup>(158)</sup>.

Of the 1.3 million asylum applications filed in 2015 in the EU, almost a third were made by Syrian citizens (29%) and a quarter by Afghan (14%) and Iraqi (10%) citizens. The proportion of Syrians in total asylum applications has risen rapidly as the conflict in Syria has worsened. At the start of the Syrian Civil War in 2011 Syrians made up only 2% of all first time asylum applications in the EU, but from that year onwards the proportion grew year by year, reaching 29% in 2015. In the first nine months of 2016 30% of

## 1.2. Germany and Sweden are the main destination countries

The distribution of asylum seekers across the EU is not uniform, with a handful of Member States receiving most of the current inflow. In terms of the absolute number of people applying for asylum, Germany (48%), Hungary (9%), Sweden (8%), Italy (8%), France

<sup>(158)</sup> Eurostat: Asylum applicants considered to be unaccompanied minors by citizenship, age and sex Annual data (rounded) [migr\_asyunaa]

Table 3.1: Level of education of asylum seekers, refugees and immigrants who arrived or started to reside in 2015

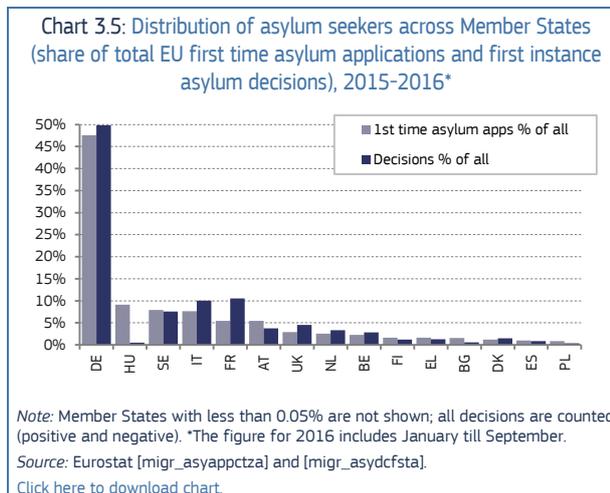
Males																		
Country of origin	Asylum seekers/refugees overall			Syria			Afghanistan			Iraq			Eritrea			Overall population <sup>2</sup>		
	DE	AT	SE	DE	AT	SE	DE	AT	SE	DE	AT	SE	DE	AT	SE	DE	AT	SE
Country of assessment																		
High	18	15		28	21	12	6	5	9	14	31	17	3		4	28	29	29
Medium	22	38		27	45	50	18	20	29	15	31	42	23		42	57	57	50
Low	59	47		45	34	38	75	75	62	70	39	41	74		54	14	13	20
Females																		
Country of origin	Asylum seekers/refugees overall			Syria			Afghanistan			Iraq			Eritrea			Overall population <sup>2</sup>		
	DE	AT	SE	DE	AT	SE	DE	AT	SE	DE	AT	SE	DE	AT	SE	DE	AT	SE
Country of assessment																		
High	16	32		24	36	12	5	11	4	13	44	18	2		2	21	27	40
Medium	17	37		25	32	51	14	15	30	13	34	40	18		36	60	51	40
Low	66	31		50	31	37	80	73	66	74	22	42	80		62	18	22	19

Note: the German data refers to asylum seekers who arrived in 2015 (data for the first half of 2016 broadly confirm the picture), the Austrian data to people benefitting from international protection who arrived in 2015 and the Swedish data to people whose previous residence was the named country and who started to reside in Sweden in 2015. This by itself may result in better qualifications showed for Sweden, as some of the new residents may have entered not as refugees but on student or employment visas. Another possible source of differences is the non-participation bias: the German data covers voluntary responses though of a large subsample of about 220,000 asylum seekers, the Austrian sample covers a very selective group of about 1,000 people who volunteered to participate in the skills assessment effort and the Swedish administrative data is available only for 40-80% of new residents, the qualifications of the others not being known. This may have contributed to the generally better outcomes observed in the Austrian data. Finally, for the German study, respondents were asked about the most advanced educational institution they attended, regardless of whether they obtained a corresponding degree or not, while the Austrian and Swedish data refer to finished qualifications.

Source: by country of assessment: Austria: Kompetenzcheck, Germany: BAMF (2016), 'Sozialstruktur, Qualifikationsniveau und Berufstätigkeit von Asylantragstellenden', Sweden: Statistics Sweden.

[Click here to download table.](#)

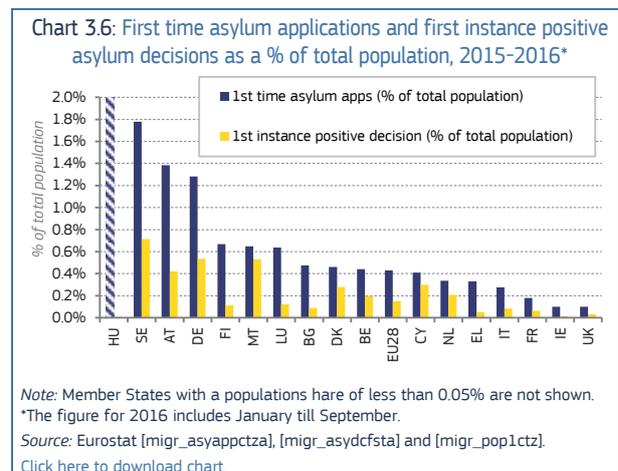
(5%) and Austria (5%) have received the largest proportion in 2015 and first nine months of 2016 (Chart 3.5). Nevertheless, the distribution of first-instance decisions on asylum across the EU indicates that Hungary is more a transit than a destination country<sup>(159)</sup>. Asylum seekers are required to file for asylum immediately in the country where they enter the EU even if they choose not to stay there. This phenomenon highlights the problem of potential double counting, but also the need for examining asylum applications and decisions side by side.



<sup>(159)</sup> The exact figures confirm this as Hungary registered 174,400 first time asylum applications in 2015 alone, but with only 3,400 first instance asylum decisions in 2015 and 2900 in the first three quarters of 2016. However, there is a delay between lodging an asylum application and the decision on this application, this may indicate that while many people file an application for asylum in Hungary, few actually remain in the country to see the asylum process to the end. In addition, in 2015 Hungary reported 103 000 withdrawn asylum applications (Eurostat: Asylum applications withdrawn by citizenship, age and sex Annual aggregated data (rounded) (migr\_asywitha).

Figures on the number of asylum seekers must take into consideration the large differences in population size between Member States and the efforts being made by Member States relative to their total population (Chart 3.6). Apart from Hungary, Sweden has received the highest number of asylum seekers relative to its population. Moreover, in Sweden, first time applications and first instance positive asylum decisions are equivalent to 1.8% and 0.7% respectively of the total population. Austria follows with 1.4% and 0.4%, then Germany with 1.3% and 0.5%.

For the EU as a whole, the proportions are much lower: 0.4% and 0.15% respectively. Therefore, the potential for sharing the burden more evenly across all Member States is considerable.



### 1.3. Education and qualification levels of recent asylum seekers/refugees

There is no systematic assessment of the qualifications and skills of asylum seekers at entry. If at all recorded, this information was often collected on

the basis of voluntary declarations and covered only a small proportion of asylum seekers (EEPO 2016a). Evidence points to average qualifications being lower than those of the native population, while illustrating a considerable variation according to countries of origin. **Table 3.1** shows the level of schooling of asylum seekers who arrived or started to reside in the EU in 2015 <sup>(160)</sup>. Among the main countries of origin, a large proportion of surveyed asylum seekers from Afghanistan and Eritrea had no or only a low level of education (below upper secondary) and only a small proportion had benefitted from secondary and tertiary education. In contrast, a sizeable proportion of Syrians had benefited from tertiary education. Nonetheless, as with the other main countries of origin, the proportion of Syrians with only low-level education was considerably higher than that for the native-born population in receiving countries.

There are also some important gender differences in some countries: surveyed women from Afghanistan and Eritrea have on average attained lower education than men. Gender differences are not pronounced when considering asylum seekers from Syria and Iraq.

Available information about the professional qualifications of asylum seekers is even more sporadic than the evidence of their education levels. There are some indications that professional qualifications may be less favourable. The gap compared with other foreigners and natives in the recipient countries may be even more pronounced than for education levels <sup>(161)</sup>.

## 2. PREVIOUS INFLOWS OF REFUGEES AND THEIR LABOUR MARKET INTEGRATION

This section looks at refugees who arrived in the EU up to 2014, examining their characteristics and exploring the factors which influence their labour market integration – with a view to drawing lessons for the future. It is based on Eurostat survey data, mainly on data gathered through the 2014 Labour Force Survey (LFS) Ad Hoc Module on the Labour market situation of

migrants and their immediate descendants but also drawing on other sources where available.

The Ad Hoc Module provided detailed information on the labour market and social situation of various types of migrants which was not available for previous years through the regular LFS <sup>(162)</sup>. It has thus become possible to identify for the year 2014 the main reason for having migrated to the current country of residence and therefore to distinguish refugees from other third-country migrants <sup>(163)</sup>.

Even though the Ad Hoc Module only covers data up to 2014 - i.e. it came one year before the big 2015 wave of refugees - it provides important lessons from previous inflows of refugees. Notably, it gives a unique opportunity to shed light on how refugees are faring in Europe in the medium- and long-term and to inform policy-making in this area.

This section's focus is on refugees, defined as people born outside the EU who state that they came to the EU for reasons of international protection.

### 2.1. Patterns of refugee inflows up to 2014

#### 2.1.1. Strong concentration of refugees in a few countries

Non-EU born people are very unevenly distributed across Member States. According to the 2014 Module, five countries alone (Germany, the United Kingdom, France, Italy, and Spain) host 83% of all non-EU born migrants aged between 15 and 64 years in the 25 EU countries (EU-25) that took part in the Ad Hoc Module. Those included all current EU countries except the Netherlands, Denmark and Ireland. By contrast, the 13 countries included in the Ad Hoc module which joined the EU from 2004 onwards host less than 5% of non-EU born migrants in the EU-25.

Looking specifically at refugees in 2014, 81% of the 1.8 million refugees residing in the EU (and identified in the Ad Hoc Module) were living in just four EU Member States (Germany, the United Kingdom, Sweden and France: **Chart 3.7**) <sup>(164)</sup>. By contrast, Italy and Spain host more than 3 million non-EU born migrants each, but only few refugees: around 23,000 each in 2014 <sup>(165)</sup>.

<sup>(160)</sup> The Austrian statistics shown relate to people who benefitted from international protection, the German statistics relate to asylum seekers, and the Swedish statistics to people whose previous residence was in the named countries. This, as well as differences in the assessment method, including its representativeness, may contribute to the observed differences of the education level shown by country of origin. In making comparisons with the data for the native population, it should be noted that data on asylum seekers is based on voluntary self-reporting and in the case of Germany does not refer to the highest obtained qualification but only to attendance at a corresponding educational institution.

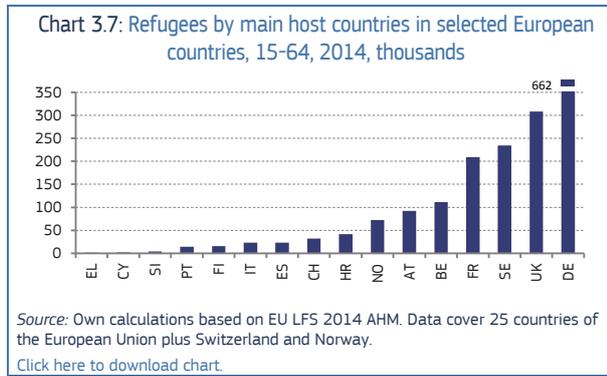
<sup>(161)</sup> For Germany, PES statistics indicate that, among persons registered as employed or unemployed who come from the main countries of origin of current asylum seekers, 53% had no professional qualification, while 22% had a vocational qualification and 10% held a tertiary education degree. This is based on a purely geographical breakdown, i.e. it includes only a subgroup that had come to Germany to apply for asylum.

<sup>(162)</sup> The last LFS ad hoc module on this topic was in 2008; the next one is scheduled for 2021.

<sup>(163)</sup> It is important to note that the dataset is not without its limitations. Unfortunately, the ad hoc module was not implemented in several Member States (DK, IE and NL).

<sup>(164)</sup> The top countries in terms of the number of refugees they host are similar to those identified in the UNHCR population statistics for 2014, albeit in a somewhat different order. In order of numbers, they are: France, Germany, Sweden, the United Kingdom, Italy, Netherlands (not included in our sample), Austria and Belgium. However, these include refugees of all ages, while our sample notes only those of working age (15-64).

<sup>(165)</sup> Caution should be exercised, nevertheless, in terms of using absolute figures from the Labour Force survey. For reasons mentioned in the Data limitations and coverage section above,



### 2.1.2. Refugees a small group among non-EU migrants

Considering the total number of 24 million non-EU born migrants in the EU, the number of 1.8 million refugees is relatively limited (Chart 3.8). By far the biggest proportion of migrants came to the EU for family reasons (52% in 2014), followed by those that came for work (25%) and study (7%).

According to the previous 2008 LFS Ad Hoc Module on migration, after adjusting for differences between the two surveys<sup>(166)</sup>, the proportion of refugees among total non-EU born remained relatively stable between 2008 and 2014 (+1 percentage point (pp)). On the other hand, that of family migrants and migration for employment increased somewhat (+3 pps each), mainly reflected in increases in France, Sweden and the United Kingdom. Those who came for study reasons also increased in those 6 years (+2 pps). However, an unknown number of the family migrants, counted separately in the data, are directly linked to people seeking international protection. This is because, once settled, many refugees want their families to join them afterwards (see section 2.5 for further details).

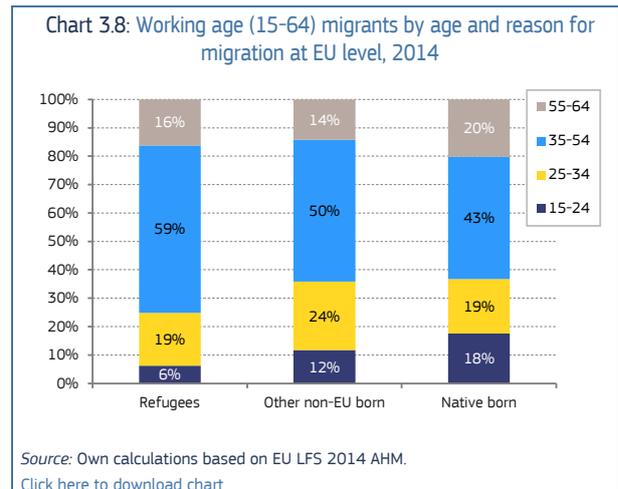
### 2.1.3. More young refugees in the recent wave

Among the working-age non-EU born living in the EU-25 in 2014, refugees were on average older than other migrants (Chart 3.9). Some 25% of refugees were aged between 15 and 34 years, compared with 36% among other non-EU migrants. The most recent refugee inflow will have significantly changed the average age composition of refugees in the EU as

administrative data sources are better placed to estimate absolute numbers of refugees in each country. As such, the absolute numbers noted here provide a useful snapshot of the relative distribution among the countries included in the 2014 ad hoc module and provide a better idea of the relative distribution across countries of the refugee population.

<sup>(166)</sup> Unlike the 2008 survey, the migrants that were part of the 2014 survey also included those that were younger than 15 when they arrived. In order to compare the two years we thus had to remove from the 2014 sample these people who migrated as a child (but they are included in the rest of the analysis of 2014 data). This also means that the distribution of migrants by reason for migration changes in 2014 to the following: family reasons (39%), employment (33%), refugees (9%), study (10%), other (8%) and unknown (3%).

more than half of working-age asylum seekers in 2015 were aged 15-34 (see section 1).



### 2.1.4. Mainly men amongst previous waves of refugees

In most countries, men were also overrepresented amongst refugees in previous flows as was observed in 2015. On average, about 59% of all refugees in the 25 EU Member States surveyed are men, broadly in line with the 58% share of other non-EU born – with some variation across EU countries, though (Dumont et al, 2016). The proportion of women in the Iberian Peninsula can be explained by the predominance of South American refugees<sup>(167)</sup>, among whom women are strongly represented, whereas in Italy and Greece, the majority of people who came in need of protection are men from the Middle East and North Africa.

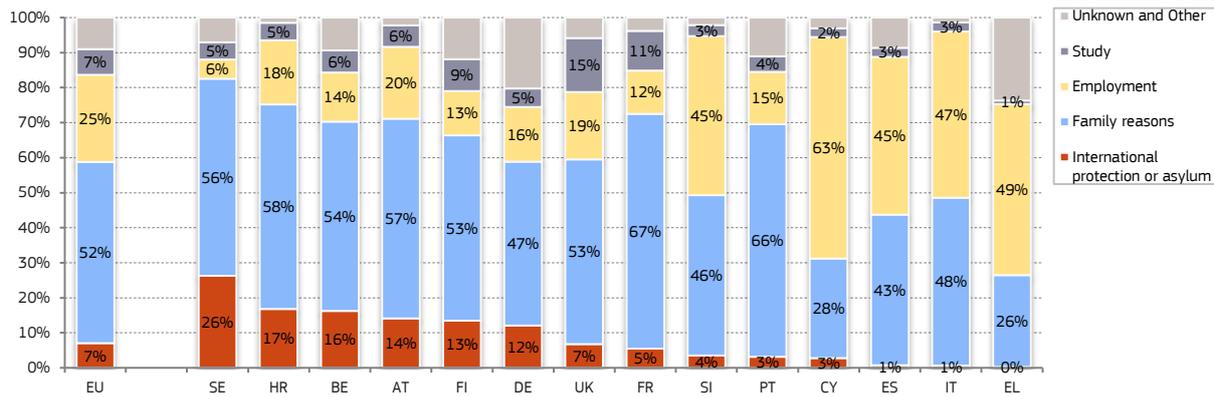
## 2.2. Social characteristics and outcomes of refugees

### 2.2.1. Education levels and language skills

22% of the refugees aged between 22 and 64 years who resided in the EU by 2014 had a high level of education (tertiary or above). This compares with 30% of other non-EU born migrants and 29% of the native-born (Chart 3.10). However, refugees had a considerably higher proportion of those with a low level of education (up to lower secondary school level) compared with other non-EU born migrants (40% v.. 35%), especially when compared with the native-born (23%). The lower level of education is reflected in lower employment outcomes (see section 3.6).

<sup>(167)</sup> For further info see MPI article on Latin American Immigration to Southern Europe - <http://www.migrationpolicy.org/article/latin-american-immigration-southern-europe>.

Chart 3.9: Distribution of non-EU born migrants by reason for migration at EU level, 15-64, 2014

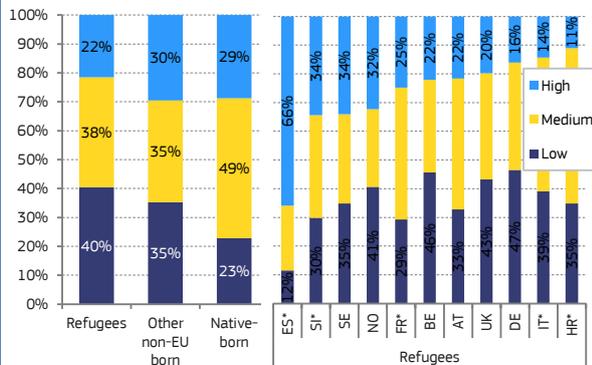


Note: Data cover 25 countries of the European Union. Limited reliability for data on some categories in Slovenia, Finland, Croatia and Greece.

Source: Own calculations based on EU LFS 2014 AHM.

[Click here to download chart.](#)

Chart 3.10: Education levels by reason for migration at EU level, 25-64, 2014



Note: highly educated people are defined as those having the highest level of qualification equal to or above tertiary education level (ISCED 5-8); medium educated are defined as those who have finished upper secondary and post-secondary non-tertiary education (ISCED 3 to 4) and low educated are defined as those who have finished up to lower secondary school level (ISCED 0-2). \*Limited reliability of refugee data for Spain, Slovenia, France, Italy and Croatia

Source: Own calculations based on EU LFS 2014 AHM.

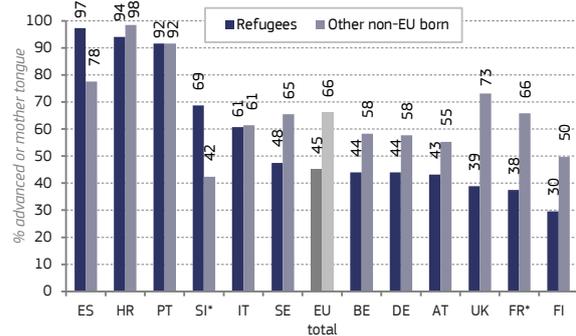
[Click here to download chart.](#)

Knowledge of the host country's language is a key factor for integration. Although it is difficult to measure how well non-EU born migrants master their host-country language, one basic but widely used measure is the self-reported command of that language. The Ad Hoc Module includes such a question. In practice, migrants who report that they have lower language skills also score less favourably on other integration indicators. This supports the assumption that on average self-reported language knowledge provides a relatively good proxy for migrants' proficiency in the host-country language (Damas de Matos and Liebig, 2014).

In total, less than half (45%) of refugees in the EU reported having at least an advanced knowledge of the host-country language, compared with two thirds of other non-EU born migrants. While the overwhelming majority of refugees in Spain and Portugal speak the host-country language well, this is the case for only about a third of refugees in France and the United Kingdom, reflecting the fact that their countries of origin are different from those of other non-EU born people (Chart 3.11). Large proportions of

the refugees who report having an advanced knowledge of their host-country language are also found in Croatia and Slovenia, where many people have crossed borders from the neighbouring countries of former Yugoslavia.

Chart 3.11: Percentages of refugees and other non-EU born who report having an advanced or mother tongue knowledge of the host-country language, 15-64, 2014



Note: Data cover 25 countries of the European Union.

Source: Own calculations based on EU LFS 2014 AHM.

[Click here to download chart.](#)

Knowledge of the host-country language tends to improve with length of residence in the host country. More than half of those who live in their host country for more than 10 years have at least advanced language skills. Amongst more recent arrivals the share is below a quarter (Table 3.2). The improvement over time is particularly strong in Germany and Austria. In addition, the language gap between refugees and other migrants is significantly smaller for those who have been in the country for longer. It seems, therefore, that, although refugees start from a lower level, there is convergence in language skills over time<sup>(168)</sup>.

<sup>(168)</sup> Note, however, that these are not longitudinal data – that is, following the same migrants over time – but cross-sectional data looking at migrants with different durations of residence at a given time. This means that there may be so-called cohort effects, for example that refugees who have arrived many years ago may come from different countries and have different characteristics. In particular, many refugees with

### Box 3.2: Data limitations and coverage

The analysis builds on the 2014 EU-Labour Force Survey Ad Hoc Module on the Labour Market Situation of Migrants and their immediate descendants. It covers 25 EU Member States (Ireland, Denmark and the Netherlands did not participate), but in 11 EU countries, no refugees or only insignificant numbers were identified (i.e. Bulgaria, the Czech Republic, Estonia, Hungary, Latvia, Lithuania, Luxembourg, Malta, Romania, Poland and the Slovak Republic). Data on Germany, which has been collected separately,<sup>1</sup> is excluded from some parts of the analysis due to the lack of detailed specific information. Data for Norway and Switzerland, which are covered by the 2014 LFS Ad Hoc Module, are presented separately whenever possible.

As for all surveys, the sample size may limit the level of detail that can be analysed. For reliability reasons, the publication of results is limited to cases where the sample is large enough to be representative of the population group. This threshold varies from 500 persons in Cyprus to 50,000 in Germany, France and the EU in total. The presentation of country-specific results is limited to cases where this condition is satisfied.

The Ad Hoc Module contains information on the **self-declared** reason for migration. People who declared that they came to Europe to seek international protection may or may not have obtained formal refugee status (according to the UNHCR Geneva convention or temporary/subsidiary protection status).<sup>2</sup> In this report, everyone who declared that they migrated for 'international protection purposes' is referred to as a refugee.

Data may include asylum seekers (i.e. people who have not yet completed the recognition process). However, as these are more likely to be hosted in collective accommodation (not usually covered by the LFS) numbers should be marginal. Data may also include people who have been denied the status of refugees and may be staying in the country with a tolerated status<sup>3</sup> or irregularly. But the probability that these people will identify themselves as refugees in the survey is limited.

The borders between 'family-related reasons' and 'seeking international protection' may often be blurred: many people (often women) join family members who have filed an asylum application. They could therefore consider their main motivation either family-related or international protection. Other asylum applicants may have indicated 'employment' instead of 'international protection' as their main reason to migrate. Despite these possible limitations, the 2014 LFS Ad Hoc Module data remains the richest most recent pool of data available on refugees and their labour market and social situation across most EU Member States up to 2014.

In this chapter, 'refugees' are restricted to those who were born outside the EU.<sup>4</sup> They are systematically compared to 'other non-EU born migrants', that is those who declare they have come to Europe for reasons such as employment, study or family. This definition draws on the country of birth rather than nationality. This is to avoid statistical noise created by the fact that the take-up of citizenship varies significantly in the countries considered. The country-of-birth approach is also relevant because even migrants who become naturalised (i.e. obtain the nationality of their host country) have lower labour market and social outcomes than the native-born (OECD, 2011), as will be seen. Still, this does not invalidate the conclusion that citizenship is also a relevant variable, as it impacts on rights, including the right to reside, and in turn on the right to take up employment and social outcomes. This has implications for policy levers.

<sup>1</sup> The authors thank Eurostat and the German Federal Statistical Office for their support.

<sup>2</sup> Temporary protection is a precursor, not an alternative, to 1951 Geneva Convention protection. See Box 3.1 for definition of a beneficiary of subsidiary protection.

<sup>3</sup> Temporary suspension of removal of a third-country national who has received a return decision but whose removal is not possible either for humanitarian reasons (as in their case removal would violate the principle of not forcing refugees or asylum seekers to return to a country in which they are liable to be subjected to persecution) or for technical reasons (such as lack of transport capacity or failure of the removal due to lack of identification or the country of origin's refusal to accept the person) and for as long as a suspensory effect is granted in accordance with Article 13(2) of Directive 2008/115/EC.

<sup>4</sup> For various reasons, the 2014 European Labour Force Survey Ad Hoc Module identifies 128,000 people who were born in one EU-28 country and migrated to another Member State as 'refugees'.

---

more than ten years of residence in countries like Austria, Germany and Switzerland have come from the successor countries of the former Yugoslavia.

Table 3.2: Share of refugees and other non-EU born who have an advanced or mother tongue host-country language knowledge, by duration of stay, 2014

	up to ten years		more than ten years	
	Refugees	Other	Refugees	Other
Spain	98	76	97	79
Italy	39	46	73	70
Belgium	33	45	57	70
UK	29	66	42	78
Sweden	29	37	57	83
<b>EU total (25)</b>	<b>24</b>	<b>54</b>	<b>49</b>	<b>69</b>
Austria	15	40	54	61
France	14	46	45	71
Finland	9	26	30	70
Germany	9	29	50	64
Switzerland	61	30	66	58
Norway	22	30	53	61

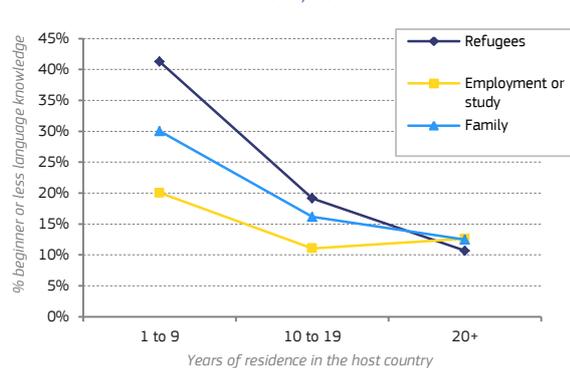
Note: Data cover 25 countries of the European Union.

Source: Own calculations based on EU LFS 2014 AHM.

[Click here to download table.](#)

Indeed, the proportion of those who have a beginner-level or less knowledge of their host country language by years of residence in the host country indicates that refugees are the quickest to start to learn the language (Chart 3.12). In the first 10 years, the proportion of refugees whose language knowledge is beginner-level or less is considerably higher (41%) than the proportions of both family migrants (30%) and employment or study migrants (20%). In the next 10 years of residence this drops considerably for family and employment or study migrants (-9 pps and -14 pps respectively) but the biggest drop is for refugees (-22 pps). This demonstrates refugees' unfavourable linguistic starting position, but also that refugees who stay tend to make good learning progress over time.

Chart 3.12: Share of each migrant group that has a beginner-level or less knowledge of their host country language by years of residence, EU total, 2014



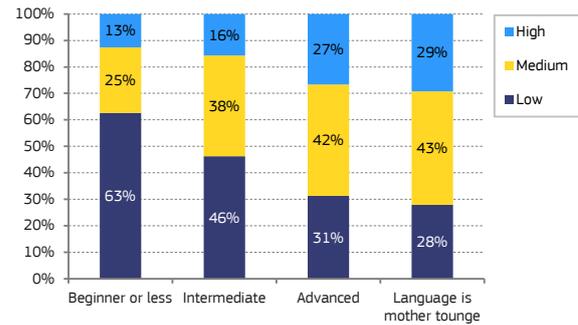
Note: Data cover 25 countries of the European Union.

Source: Own calculations based on EU LFS 2014 AHM.

[Click here to download chart.](#)

Refugees' language skills are positively correlated with education (Chart 3.13). Almost two thirds of those who have at most beginner-level knowledge of their host country language also have a low level of education (63%). On the other hand, more than two thirds of those with at least 'advanced' skills are highly educated.

Chart 3.13: Working age (15-64) refugees by language proficiency and education level in the EU, 2014



Note: Data cover 25 countries of the European Union.

Source: Own calculations based on EU LFS 2014 AHM.

[Click here to download chart.](#)

### 2.2.2. High overall risk of social exclusion

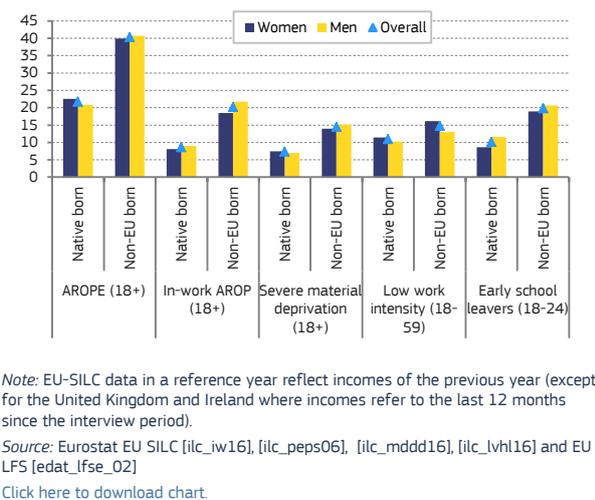
There is no EU-wide data specifically about refugees in relation to social inclusion core indicators. However, social integration of people with a migrant background<sup>(169)</sup> will continue to be a challenge in the EU. Non-EU born migrants are a very vulnerable group among which refugees tend to be an even more vulnerable one compared to the rest of the non-EU born due to their lower employment and education outcomes. Chart 3.14 reveals that non-EU born migrants have a much higher exposure to poverty (both general poverty and in-work poverty), material deprivation and low-work-intensity households than the native-born population, which indicates that the situation for refugees is likely to be even more severe. There is also evidence that many migrants have become homeless (European Commission, 2014).

Moreover, the proportion of early school leavers amongst the non-EU born is double the proportion amongst native-born young people aged 18-24 years, contributing to a disadvantaged inheritance (Chart 3.14)<sup>(170)</sup>. The reasons why migrants may not have finished their secondary school education are numerous and may include lack of financial means, lack of opportunity in their country of origin or (in the case of refugees) unavailability of education in war zones or while fleeing conflict.

<sup>(169)</sup> The term "people with a migrant background" in this note refers to non-EU born, and to the children of immigrants who were born in their host country ("second generation"). Many of these people, originally with a non-EU nationality, were naturalised over time, hence the group of third-country nationals, a legally defined group, is smaller. Today, 7% of the EU population were born outside the EU, and third country nationals represent 4% of the EU population. See also Eurostat online publication on migrant integration: [http://ec.europa.eu/eurostat/statistics-explained/index.php/Migrant\\_integration\\_statistics](http://ec.europa.eu/eurostat/statistics-explained/index.php/Migrant_integration_statistics).

<sup>(170)</sup> Early leavers from education and training denotes the percentage of the population aged 18 to 24 having attained at most lower secondary education and not being involved in further education or training.

Chart 3.14: At-risk-of-poverty and social exclusion (AROPE), in-work poverty at-risk-of-poverty, early school leaving, severe material deprivation rates and share of low-work-intensity households by country of birth, 2015



### 2.2.3. Transmission of social disadvantages among persons with a migrant background

The acquisition of host country citizenship appears to reduce the social disadvantage of migrants. Socio-economic outcomes are usually worse for the subgroup of non-EU nationals than for non-EU born (i.e. looking at citizenship rather than country of birth) though this is partly explained by the length of stay in the country (e.g. higher share of third-country nationals have been resident for less than ten years than non-EU born) and selection mechanisms for obtaining citizenship.

These unfavourable socio-economic outcomes persist and are transmitted to some extent to the second generation who were born in the host country and benefited from its social and educational systems. For example, having parents born outside the EU constitutes a significant disadvantage in the labour market, irrespective of one's education level (171). The employment gap between the children of two non-EU born parents and the children of two native-born parents in 2014 was still very high in Sweden (-21 pps) and Belgium (-18 pps) - and much higher than for current first generation labour migrants in Italy (-31 pps) and Spain (-17 pps). Part of these gaps certainly reflect that children of non-EU born are on average younger within the age group 20-64. The second generation (from both other-EU and non-EU born parents) also have lower mean literacy scores than the children of native-born parents in many Member States. Voting in elections is also considered an indicator of social integration and there is evidence that even the second generation vote less often in elections (172).

(171) See forthcoming analytical DG Employment Working Paper "Labour market performance of refugees in the EU".

(172) OECD (2015) Settling In: Indicators of Immigrant Integration

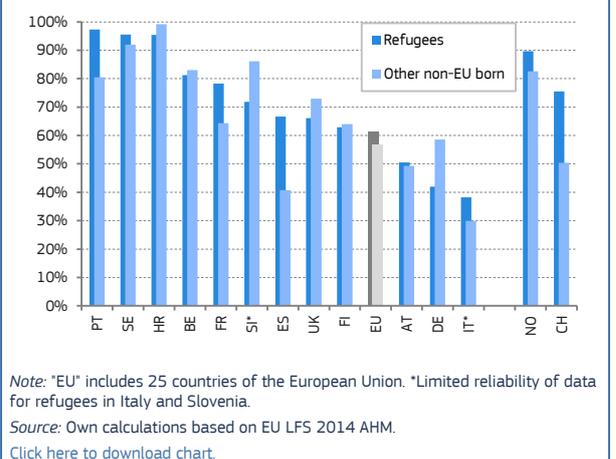
### 2.2.4. Citizenship acquisition and social integration

Gaining host-country citizenship is an important step in the integration process. Naturalised migrants tend to have better employment and social outcomes than their peers who do not obtain host-country citizenship, even after allowing for observable factors such as education, country of origin and length of stay (OECD 2011) (173). Hainmueller et al. (2015) show that in the case of Switzerland, even when controlling for personal characteristics, migrants who obtained Swiss citizenship experienced higher political integration including increased political participation and knowledge, which points to better social integration overall (174).

However, citizenship take-up is generally not possible for recent arrivals and is subject to a minimum number of years of residence in addition to other requirements. In virtually all EU and OECD countries the minimum residency requirement is ten years at most. In the EU overall, 61% of refugees with more than ten years of residence have acquired their host-country's citizenship, compared with 57% of other non-EU born migrants. However, Chart 3.15 shows that the naturalisation rate varies greatly amongst typical receiving countries.

Refugees tend to have a higher likelihood of acquiring host-country citizenship in most EU countries (175).

Chart 3.15: Share of nationals among non-EU born who have been in the country at least 10 years



(173) Nevertheless, selection may also contribute to this effect to some degree; accession to citizenship may be conditional on factors that reflect success or are drivers of success in integration.

(174) Note though that awarding citizenship may in some cases exacerbate social exclusion if it is awarded without a sufficient level of integration, and policy support instruments available to refugees are reduced.

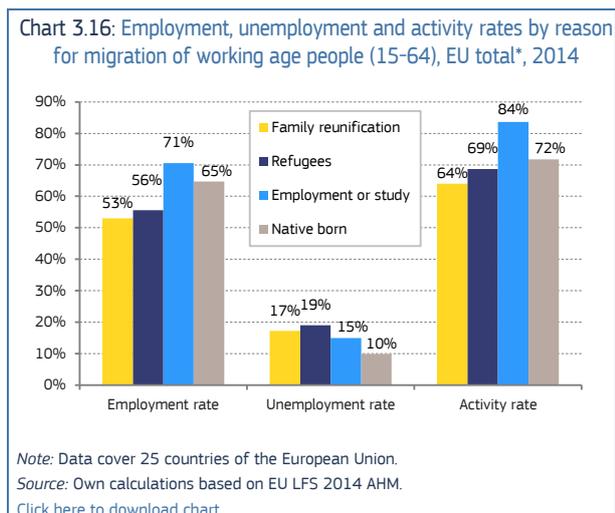
(175) The only major exception among the main recipient countries is Germany, where refugees are less often naturalised than other non-EU born. This might in part be due to the fact that many refugees from the former Yugoslavia initially had an unstable residence status and were not eligible for naturalisation.

This is linked to two reasons. First, refugees – as a group who are vulnerable in the labour market – tend to benefit more from acquiring citizenship, in terms of employment outcomes, than those who came for employment reasons (see **Chart 3.20** below for details). Second, refugees may seek host-country citizenship because return migration is not an option. Several countries acknowledge this and provide facilitated access to citizenship for refugees.

## 2.3. Labour Market Outcomes of Refugees

### 2.3.1. Lower employment rates than most other migrant groups

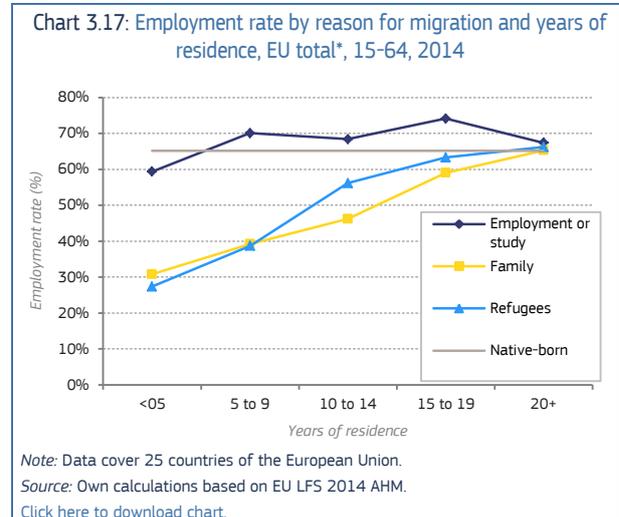
Refugees represent one of the most vulnerable groups of non-EU migrants on the labour market (**Chart 3.16**). They have lower employment rates than the native-born (56% v. 65% as an EU-average) and much lower rates than those migrants who come for employment and study (71%). The employment rate those who migrated for family reunification is even lower and stands at only 53%. This indicates that it is important to address challenges associated with not only the first arrived family member but also the rest of his/her family when they join him/her. Investing in the family members who reunite with the principal migrant, as well as the latter, may prove especially important when developing integration policies for the recent inflows of refugees as family migrants are expected to follow the refugees who came initially (see section 2.5 on family migrants for more detailed analysis). The activity rate gap between refugees and the native-born is much smaller than the employment gap (3 pps v. 9 pps), indicating that refugees are highly motivated to work but face obstacles to obtaining employment.



### 2.3.2. Employment rate of refugees catching up over time

While the overall employment situation of refugees is an ongoing challenge, developments over time suggest that labour market integration is more achievable as people reside in the host country for a longer period

(**Chart 3.17**). Family-related and refugee migrants see their employment rates increase strongly as they gain experience in the host country and, most importantly, get acquainted with the language (see also **Chart 3.12** and **Chart 3.19**). Nevertheless, it takes refugees between 15 and 19 years to catch up with the EU average (<sup>176</sup>) – a finding also confirmed by studies based on panel data in Germany (IAB, 2015b).



### 2.3.3. The role of education

As with the population in general, the educational attainment level of refugees has a significant impact on their employment rates (**Chart 3.18**). Highly educated refugees aged between 25 and 64 years have a much higher employment rate than their low-educated peers (70% v. 45%). As is perhaps to be expected, higher levels of education are associated with higher employment rates (see section 3.6). This is particularly true of refugees who progress from the low-education segment to attain upper secondary (medium) qualifications i.e. those who go from having at most a lower secondary school education level to having an upper secondary or post-secondary non-tertiary education level: doing so raises refugees' employment rate to 63%.

However, when it comes to acquiring tertiary (higher) education, as was shown in the 2015 ESDE chapter (European Commission 2016a), there is a positive return for all groups involved, but compared with native-born people, the return in terms of employment gains is modest for migrants, and for refugees in particular. This is also confirmed by the regression analysis in this chapter (<sup>177</sup>). The return on investment in migrants' education at the lower end of the qualification scale (those who did not finish upper secondary school) therefore seems to be greater than the return on investment in migrants' tertiary education, even when controlling for demographic characteristics and knowledge of the host country language. Reasons for this may include specific

<sup>176</sup> On the time it takes refugees to integrate see also IMF (2016)

<sup>177</sup> See also the forthcoming analytical DG Employment Working Paper "Labour market performance of refugees in the EU".

### Box 3.3: Combatting discrimination on the ground of racial or ethnic origin

Discrimination based on racial or ethnic origin is prohibited by Council Directive 2000/43/EC. The most recent implementation report about this and the Employment Equality Directive is COM(2014) 2 final. A number of policy initiatives relate to combatting discrimination and to promote equality.<sup>1</sup>

Equality bodies are established in each Member State with statutory mandates to promote equality and combat discrimination according to the anti-discrimination EU Directives 2000/43/EC, 2004/113/EC, 2006/54/EC and 2010/41/EU. Equinet is the European network coordinating the national equality bodies. In the ESIF funds, there is an ex-ante conditionality on non-discrimination that relates to the involvement of the equality bodies in the preparation and implementation of the programmes as well as to training on non-discrimination law and policy for MS' staff managing funds.

It is challenging to collect data on discrimination in a comprehensive and comparable way because of under-reporting, data protection rules, strong reluctance by many Member States.<sup>2</sup> A report "Analysis and comparative review of equality data collection practices in the European Union" will be published by the end of 2016. The most recent EU-wide survey on "perceived discrimination" is the Eurobarometer 2015.<sup>3</sup>

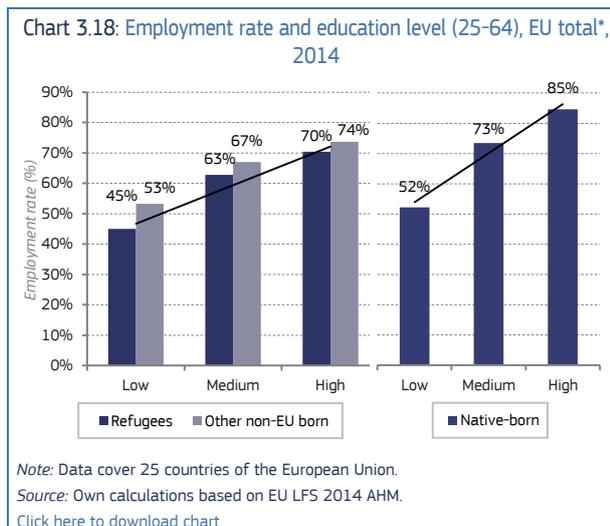
<sup>1</sup> For all relevant documents see: [http://ec.europa.eu/justice/discrimination/index\\_en.htm](http://ec.europa.eu/justice/discrimination/index_en.htm)

<sup>2</sup> Sources vary country by country; for UK there is information available, see e.g. see the report issued by the Equality and Human Rights Commission and is the biggest ever review into race inequality in Great Britain (England, Wales and Scotland) <https://www.equalityhumanrights.com/en/race-report-healing-divided-britain>

<sup>3</sup> For more info see [http://ec.europa.eu/justice/events/colloquium-fundamental-rights-2015/files/factsheets/eb-discrimination\\_factsheet\\_religion\\_en.pdf](http://ec.europa.eu/justice/events/colloquium-fundamental-rights-2015/files/factsheets/eb-discrimination_factsheet_religion_en.pdf)

barriers such as non-recognition of their previous formal education, legal obstacles to accessing the labour market (for non-refugee migrants) and discrimination.

findings suggest that raising refugees' knowledge of their host country's language to even just an intermediate level could bring significant employment gains.



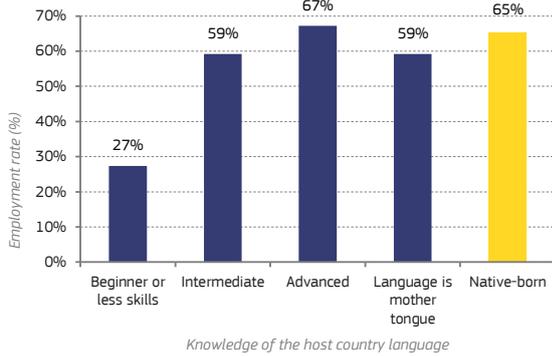
The only exception to this relationship between language and employment is that refugees with an advanced level of language knowledge have a higher employment rate than those whose mother tongue is that of the host country (67% v. 59%). However, this finding is sensitive to the inclusion of France in the sample. France has many migrants from French-speaking areas in Northern Africa who face particular problems in the labour market. In-depth regression analyses find evidence that those problems are related to other, non-measured factors such as discrimination, legal obstacles to work and the inability of migrants to capitalise on their education and skills (European Commission, 2016a; see also regression results referred to in section 2.6) <sup>(178)</sup>.

#### 2.3.4. The importance of language skills for securing employment

A similar finding is evident for the return on language skills. Overall, the level of knowledge of the host country language has a clearly positive impact on the employment outcomes of refugees (Chart 3.19). The employment rate of refugees rises almost in parallel with the level of their knowledge of their host country's language. Most importantly, the highest jump in the employment rate is between refugees with beginner-level or no language skills and those with an intermediate level of host country language knowledge. Refugees with an intermediate language level have an employment rate of 59%, more than twice that of those with a lower level (27%). This seems to hold true across education levels. These

<sup>(178)</sup> This analysis will be presented in detail in the forthcoming analytical DG Employment Working Paper "Labour market performance of refugees in the EU".

Chart 3.19: Employment rate of refugees, depending on knowledge of the host country language, EU total\*, 15-64, 2014



Note: Data cover 25 countries of the European Union except for "Language is mother tongue" where data from Germany was excluded due to lack of reliable data.

Source: Own calculations based on EU LFS 2014 AHM.

[Click here to download chart.](#)

### 2.3.5. Citizenship and employment of refugees

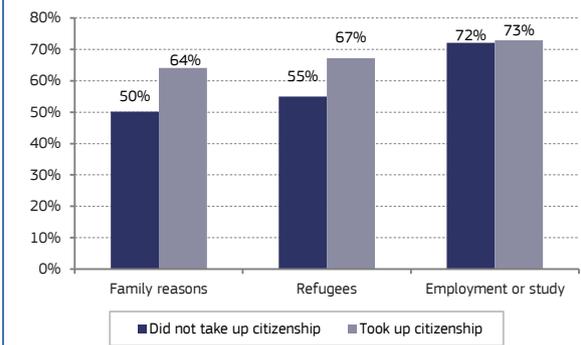
Acquiring citizenship tends to improve refugees' labour market outcomes. Of those who arrived in the host country 10 years or more ago, refugees who acquired host country citizenship had significantly higher employment rates than those who did not (67% v. 55%; **Chart 3.20**). The same is true of family migrants (64% v. 50%). Interestingly, taking up citizenship only slightly improves employment rates for those who came for reasons of employment or study (73% v. 72%); their employment rates are already very high.

This can be seen as an indication that better social integration and greater security to remain in the host country improve the labour market outcomes of refugees. Nevertheless, it is also possible that it is mainly those with good labour market outcomes who obtain the host country citizenship and that a share of them already had host country citizenship even before arrival.

### 2.3.6. Employment patterns of refugees

Finding employment is crucial for the labour market and social integration of refugees and other migrants. Nevertheless, the level of security and rights that come with employment, i.e. whether it is on a temporary or permanent contract, is also an important factor. Moreover, looking at the type of contract obtained over years of residence provides an indication of whether temporary contracts are functioning as a "stepping stone" in the labour market, enabling migrants to move to more permanent and stable employment in time.

Chart 3.20: Employment rate of those residing in the host country 10 years or longer by citizenship take up and reason for migration, EU total, 2014



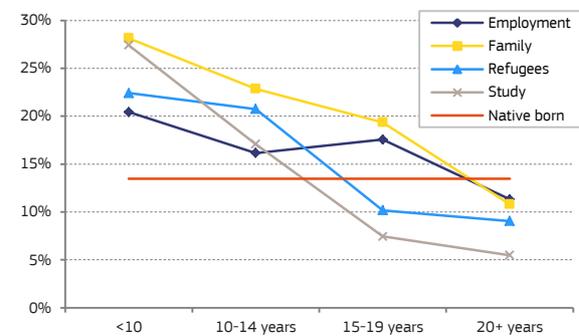
Note: Data cover 25 countries of the European Union.

Source: Own calculations based on EU LFS 2014 AHM.

[Click here to download chart.](#)

Considering the non-EU migrants who reside in the country for less than 10 years: Their share of temporary in total employment is not much higher than for migrants who came for employment: 22% v. 20% (**Chart 3.21**). The proportion of refugees and other non-EU migrants on temporary contracts appears to decline with years of residence, giving some support to the "stepping stone" hypothesis. However, further research is required to confirm that this is not just due to the increasing incidence of temporary rather than permanent forms of employment more generally.

Chart 3.21: Share of employed migrants in temporary employment by reason for migration and years of residence, 2014



Note: Data cover 25 countries of the European Union. Only persons on temporary and permanent contracts included in the calculation. Limited reliability for figures for refugees.

Source: Own calculations based on EU LFS 2014 AHM.

[Click here to download chart.](#)

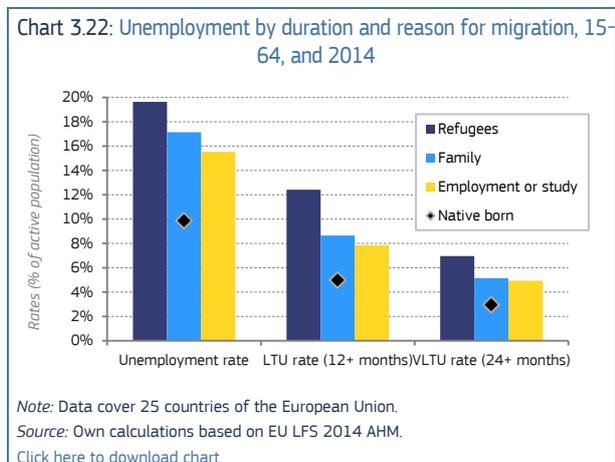
Refugees are more often employed full-time than part-time but, compared with other non-EU migrants and the native-born, they have a somewhat higher share of those working part-time. They have a greater likelihood of being in part-time employment than other non-EU migrants (30% v. 25%) and considerably more than their native-born peers (30% v. 17%). This holds true even when allowance is made for education differences: in all groups the proportion of those working part-time drops as the education level rises

but the proportion of refugees working part-time remains higher than that of other groups <sup>(179)</sup>.

Across the EU, refugees tend to be overqualified for the jobs they do (57%) in comparison with both other non-EU born persons (36%) and their native-born peers (23%: Dumont et al. 2016) <sup>(180)</sup>. This is a situation that can represent a waste of migrants' skills. Research suggests that such over-qualification is in part due to lower skills in the host-country language and in part due to lack of official or employers' recognition of refugees' qualifications. Qualifications are obtained in education systems that are very different from those in their host countries and employers may have difficulties in evaluating them. This is often coupled with lack of related documentation

### 2.3.7. Chances of escaping unemployment

In-depth regression analysis reveals that refugees have lower chances of finding a job if unemployed or inactive than other non-EU born migrants and the native-born population <sup>(181)</sup>. As a result, their unemployment rate is higher, as is their average duration of unemployment. Chart 3.22 shows that among economically active refugees in 2014, one in five was unemployed, one in eight was unemployed for 12 months or longer (long-term unemployed – LTU) and one in fourteen was unemployed for two years or longer (very long-term unemployed – VLTU).



Refugees in 2014 had more than double the long-term unemployment rate of the native-born (12% v. 5%) and twice the very long-term unemployment rate (7% v. 3%). Other migrants too were in a worse

<sup>(179)</sup> Source: Own calculations based on EU LFS 2014 AHM. Data cover 25 countries of the European Union. Limited reliability of data on highly educated refugees working part-time.

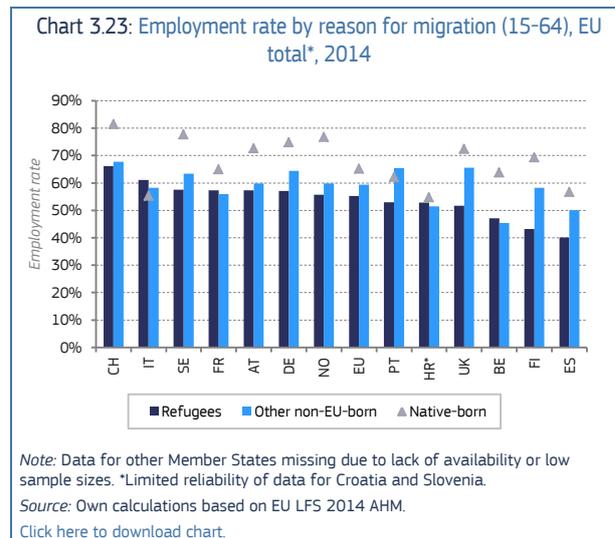
<sup>(180)</sup> Estimates suggest that between one-third and one-half of the observed high level of overqualification of migrants compared with the native-born is associated with lower skills at given qualification levels (Bonfanti and Xenogiani, 2014; OECD, 2008; Dumont and Monso, 2007).

<sup>(181)</sup> This holds even after controlling for important socio-demographic variables such as education or age. This is detailed in a forthcoming analytical DG Employment Working Paper "Labour market performance of refugees in the EU".

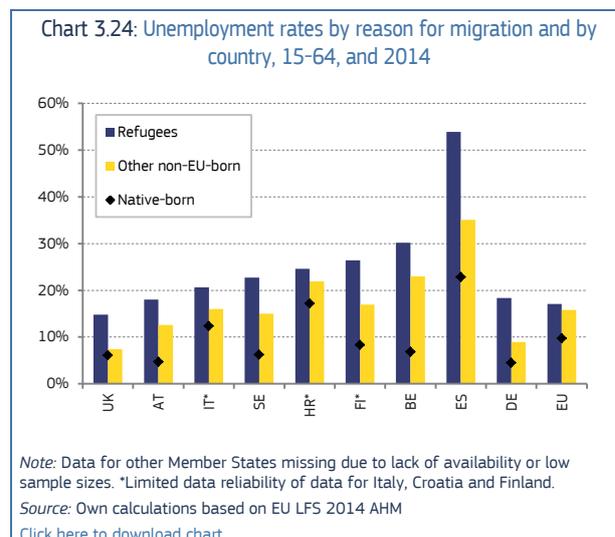
unemployment situation than their native-born peers, but somewhat less so than refugees.

### 2.3.8. Cross-country differences in refugee employment

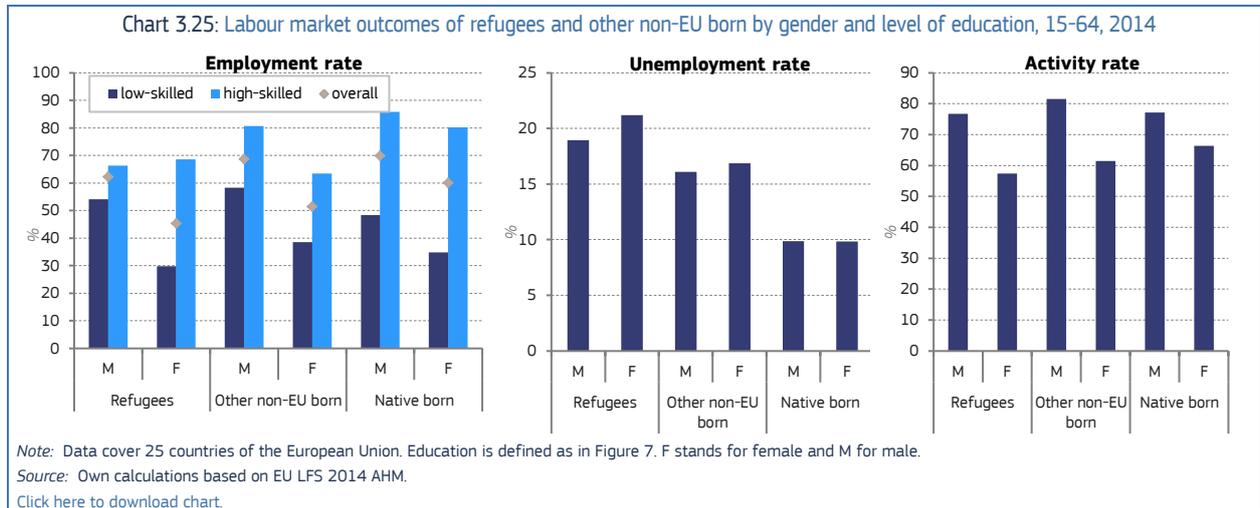
The employment rate of refugees varied significantly between Member States (Chart 3.23). Refugees in Spain and Finland had an employment rate of 40% and 43% respectively, whereas their employment rate was considerably higher in Germany, France and Austria (57% in each), Sweden (58%) and Italy (61%).



The biggest gaps between the refugees and the native-born population could be observed in Finland (26 pps), United Kingdom (21 pps) and Sweden (20 pps), in part owing to the above-EU-average employment rate of the native-born population. Conversely, the lower gaps observed in some countries such as Spain, Croatia and Portugal are in part due to their overall difficult national labour market situations. On the other hand, refugees in Italy had even higher employment rates than the native-born (+6 pps).



The unemployment rate of refugees is above average in all countries, reaching 50% in Spain and more than 60% in Cyprus (Chart 3.24).



### 2.3.9. Labour market integration of asylum seekers and refugees who arrived since 2014

Preliminary data point to limited integration in the labour market of asylum seekers and refugees who arrived since 2014. Employment statistics of the public employment service from *Germany* (182) for September 2016 show a year-on-year increase in employment of 47,000 (40%) for people originating from the group of non-European countries from which most asylum seekers come (183). Over the same period, unemployment among this group increased much more steeply, by 87,000 (102%). Among people who came to Germany in the context of an application for asylum (184) around 406,000 were looking for work in November 2016. Among this group, 160,000 were counted as unemployed, while the rest were benefitting from active labour market measures, on short-term sick leave or working a limited number of hours.

The picture is similar in *Sweden* where refugees participate in a two-year comprehensive programme and effective entry to the labour market is limited. Between July 2015 and July 2016, the number of registered unemployed born outside Europe increased by 13,000 to 148,000, while total unemployment fell by 11,000, thus increasing the proportion of the non-EU born among the unemployed to 42% (185). For *Austria*, the corresponding data underline the

significance of regional concentration – in July 2016, two-third of the 25,000 unemployed refugees were registered with the Vienna public employment service (186). It is also clear that low level education and qualifications in limiting effective labour market integration: 73% of the registered unemployed refugees had no formal professional qualification (187).

National studies further underline the difficult and lengthy process leading to previous refugees' labour market integration (188). In *Germany*, in the year of arrival the proportion of refugees aged 15-64 who were employed amounted only to 8%, gradually increasing to close to 50% after 5 years, 60% after 10 years and nearly 70% after 15 years. Convergence with other migrants' labour market performance is very gradual: even after 10 years the latter group's employment rate was 14 percentage points higher (189). In *Austria*, relying on Swiss experience, it is considered that reaching a 50% employment rate may take more than 5 years and is expected to be closer to 10 years (190). In *Sweden*, in the past refugees reached a 50% employment rate after 7 years of residence on average, with Iraqi and Syrian refugees somewhat below 50%, and Somali refugees at 35% (191). Beyond differences in the employment rate, wage levels persistently lagged behind those of native citizens, while over-qualification remained more prevalent.

(182)

<https://statistik.arbeitsagentur.de/Navigation/Statistik/Statistische-Analysen/Statistische-Sonderberichte/Migration-Arbeitsmarkt/Migration-Arbeitsmarkt-Nav.html>

(183) Afghanistan, Eritrea, Iraq, Iran, Nigeria, Pakistan, Somalia and Syria. While information broken down by legal status is not available such that the series also includes people who did not come to Germany as asylum seekers, recent changes are likely to have been driven largely by the inflow of asylum seekers.

(184) Defined as including asylum seekers awaiting decision, people whose application for asylum has been accepted (but who have no permanent residence permit yet) and those whose presence in Germany is temporarily tolerated despite a refusal of their application for asylum.

(185) <http://www.arbetsformedlingen.se/Om-oss/Pressrum/Pressmeddelanden/Pressmeddelandeartiklar/Riket/2016-08-11-Farre-arbetslosa-men-tydligare-tudelning.html>

(186) AMS (2016), Daten und Fakten zur Arbeitsmarktsituation von Flüchtlingen: Spezialthema zum Arbeitsmarkt Juli 2016

(187) AK Wien (2016), Arbeitsmarkt im Fokus - Arbeitsmarktanalyse des 1. Halbjahres 2016 Mit Spezialteil zum Thema: Arbeitsmarktintegration von Flüchtlingen

(188) AB-SOEP-migration sample, see IAB (2015a).

(189) Indeed refugees differ from other migrants not only in terms of the motivation for migration but also in terms of other characteristics. The reference group notably also includes EU nationals who face more favourable conditions regarding the recognition of professional qualifications and may have better language skills.

(190) Bundesministerium für Europa, Integration und Äußeres (2016), 'Integrationsbericht 2016', quoting Spadarotto et al. (2014) 'Erwerbsbeteiligung von anerkannten Flüchtlingen und vorläufig Aufgenommenen auf dem Schweizer Arbeitsmarkt.'

(191) Aldén, L. and M. Hammarstedt (2016), 'Flyktinginvandring Sysselsättning, förvärsinkomster och offentliga finanser' Rapport till Finanspolitiska rådet 2016/1.

## 2.4. Refugee women

Refugee women face more serious challenges securing employment than their male peers but also than all other groups of migrant women. The employment rate for refugee women is on average 45%. It is lower than for other female non-EU born and native-born women and 17pp lower than that of refugee men (Chart 3.25). Refugee women also have the highest rate of unemployment of all groups: 21%, compared with 19% for refugee men and 17% for non-refugee migrant women from outside the EU.

This is to some extent the result of marked differences in education. Nearly half of refugee women have a low level of education, compared with 40% of refugee men and 37% of non-refugee women from outside the EU (Table 3.3). The employment rates of refugee women vary sharply with their level of education. Highly-educated refugee women have an employment rate close to 69%. This is three percentage points higher than that of similarly highly qualified refugee men and that of other non-EU born women. In contrast, refugee women with only a low level of education have by far the lowest employment rates of all groups, with less than one in three in employment (30%). In addition, they face the highest unemployment rate (34%).

Another factor explaining the low employment rate of refugee women compared with their male counterparts is their relatively low activity rate: 57% compared with 77% for refugee men. Refugee women are also somewhat less economically active than other non-EU born migrant women (61%) and the native-born women (66%). This is further accentuated by the fact that women refugees have a somewhat lower level of host country language proficiency than their male peers (76% intermediate or above knowledge v. 83%).

Table 3.3: Education level distribution by gender and duration of residence, 2014

		Refugees			Difference in pps with other non-EU born		
Duration of stay	Education level	Male	Female	Total	Male	Female	Total
0 to 14	Low	45%	44%	44%	6.6	6.1	6.5
	Medium	33%	30%	32%	0.4	-2.2	-0.7
	High	22%	26%	24%	-7.0	-3.8	-5.8
15+	Low	37%	47%	41%	-1.5	9.7	3.2
	Medium	47%	36%	42%	6.6	-6.0	1.3
	High	16%	17%	17%	-5.2	-3.7	-4.5
Total	Low	40%	45%	42%	3.8	7.1	5.0
	Medium	40%	33%	37%	2.6	-3.2	0.4
	High	19%	22%	20%	-6.4	-4.0	-5.4

Notes: Data cover 25 countries of the European Union. Notes: Education is defined as in Figure 7.

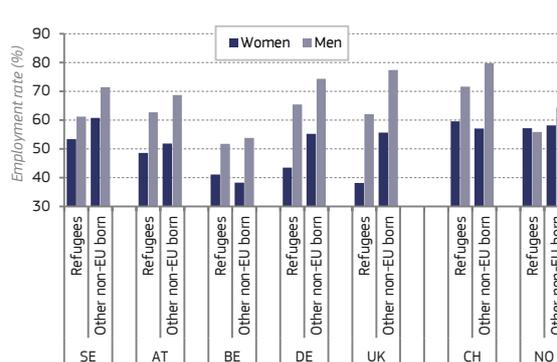
Source: Own calculations based on EU LFS 2014 AHM.

[Click here to download table.](#)

The employment rates of refugee women, but also the gap between them and their male peers, vary sharply across European countries, according to available data (Chart 3.26). Their employment rate is 38% in the

United Kingdom and 43% in Germany, whereas it reaches 53% in Sweden and 49% in Austria. What is of more concern in Sweden and Austria is the gender employment gap, which is 22 percentage points or more in these two countries. Furthermore, the employment rates of refugee women in Sweden and Austria lag significantly behind those of non-refugee migrant women from outside the EU. In contrast, refugee women enjoy the highest employment rates in two non-EU countries, Switzerland (60%) and Norway (57%).

Chart 3.26: Employment rates by gender and reason for migration, 15-64, and 2014



Note: Data cover 25 countries of the European Union.

Source: Own calculations based on EU LFS 2014 AHM.

[Click here to download chart.](#)

Gender roles in some origin countries clearly act as a barrier to skills use and labour market participation. In 2010, before the crisis, the activity rate of Syrian men was 72.7%, but only 13.2% for women. The situation has been similar in other countries in the Middle East and Northern Africa and non-EU countries in the Balkans: see Table 3.4<sup>(192)</sup>. Some countries in Sub-Saharan Africa, on the other hand, had relatively high female activity rates, although the labour market integration difficulties of women from Africa indicate that a high activity rate in the country of origin may not be enough in itself to ensure successful labour market performance in the EU.

Table 3.4: Female employment by some major countries of origin

	Syria	Iraq	Afghanistan	Eritrea	Kosovo
Asylum seekers employed before arrival [BAMF survey]	29.5%	17.1%	20.3%	41.5%	17.0%
Activity rates (UN)	13.2% [2010]	15.0% [2014]	18.9% [2014]	77.6% [2014]	18.1% [2015]

Source: Germany: BAMF (2016), 'Sozialstruktur, Qualifikationsniveau und Berufstätigkeit von Asylantragstellenden', United Nations, World Bank: Kosovo 2015 Labour Force Survey

[Click here to download table.](#)

<sup>(192)</sup> The relevance of general employment statistics of countries of origins is confirmed by assessments in receiving countries. Out of 220,000 adult asylum seekers surveyed in Germany in 2015, 74.8% of men had previously been employed, compared to only 32.7% of women.

## 2.5. Family migrants joining their refugee family member(s)

Family migrants constitute more than half (52%) of the total working age (15-64) non-EU born migrant population (Chart 3.8). Moreover, successful asylum seekers from the most recent humanitarian migration inflow starting in 2014 are forecast to be joined later by their families. The integration pathways and outcomes of existing family migrants are therefore of great importance for current and future migrant integration efforts.

Table 3.5: Asylum seekers, asylum acceptance rates and asylum seekers likely to stay, EU-28

	2014	2015	2016 Q1-3	TOTAL
<b>1st time asylum seekers</b>	562 680	1 255 695	932 020	2 750 395
<b>% of positive decisions</b>	46%	52%	60%	
<b>Asylum seekers likely to stay</b>	256 738	651 417	563 784	1 471 939

Source: Own calculations based on Eurostat [migr\_asyappctzm], [migr\_asydcfst] and [migr\_asydcfstq].  
Click here to download table.

In 2014, according to the Ad Hoc Module, there were 13 million family migrants living in the EU-25<sup>(193)</sup>. Of these, 268,000 (2.1%) were born in the main countries of origin of asylum seekers today, namely Syria, Iraq, Afghanistan and Eritrea. In the past each refugee was on average accompanied or joined by around one family member<sup>(194)</sup>. This was also confirmed for Germany by a forecast done in June 2016<sup>(195)</sup>. It is therefore reasonable to assume that the 1.5 million asylum seekers who arrived between January 2014 and September 2016 who are likely to stay in the EU (Table 3.5) may be joined in due time by an additional 1.5 million family migrants. However this forecast should be considered with caution given the variety of uncertain factors influencing the phenomenon of family reunification with refugees, in particular the legal rights attached to certain statuses (Geneva convention refugees versus beneficiaries of subsidiary protection) as well as the composition of asylum seekers (many young men may mean less potential family reunification compared to past waves).

### 2.5.1. Characteristics of family migrants

In terms of their demographic characteristics, family migrants in general were on average younger than

<sup>(193)</sup> EU-28 without Denmark, Ireland and the Netherlands.

<sup>(194)</sup> The first estimate is calculated assuming that the 268 thousand family migrants from Syria, Iraq, Afghanistan and Eritrea accompanied the 355 thousand refugees born in the same countries (in the 2014 ad hoc module), giving a ratio of 0.75 family migrants to refugees. Another estimate was calculated by taking the household level data from the 2014 EU LFS ad hoc module, which finds that on average 1.05 non-EU persons live in each household where a refugee lives.

<sup>(195)</sup> The DE migration agency BAMF calculated in June with 0.9 to 1.2 reunited family members per recognised Syrian refugee – [https://www.bamf.de/SharedDocs/Meldungen/DE/2016/201606\\_08-familiennachzug-syrischer-gefluechteter.html](https://www.bamf.de/SharedDocs/Meldungen/DE/2016/201606_08-familiennachzug-syrischer-gefluechteter.html)

refugees, predominantly women and are slightly better educated than refugees (Table 3.6). They have also been living in the EU for somewhat longer than refugees.

Family migrants who joined a relative who has come to the EU as a refugee are considerably younger than other family migrants (67% aged 15-34 v. 40%). This is partly explained by the fact that family migrants joining refugees have arrived more recently than other family migrants joining their relatives. Moreover, like other family migrants, family migrants joining refugees are predominantly women (60%). The majority of them have a medium or high level of education (54%), which is lower than that of refugees (57%) or of other family migrants (62%) and the native-born (73%). Three quarters of the 212,000 family migrants joining refugees identified in the Ad Hoc Module survey live in just two EU countries: Sweden and the United Kingdom.

Table 3.6: Age, gender and educational distribution of family migrants by country of birth, EU total, 2014

	Age		Gender		Education level		Years of residence	
	15-34	35-64	M	W	Low	Medium + High	0-9	10+
<b>Family migrants (EU24)</b>	<b>41%</b>	<b>59%</b>	<b>39%</b>	<b>61%</b>	<b>38%</b>	<b>62%</b>	<b>27%</b>	<b>73%</b>
<i>SY,ER,IQ,AF</i>	67%	33%	40%	60%	46%	54%	50%	50%
<i>other non-EU</i>	40%	60%	39%	61%	38%	62%	27%	73%
<b>Refugees (EU25)</b>	<b>25%</b>	<b>75%</b>	<b>59%</b>	<b>41%</b>	<b>43%</b>	<b>57%</b>	<b>24%</b>	<b>76%</b>

Note: Data in italics are of limited reliability. Country of birth acronyms used in table: SY stands for Syria, ER for Eritrea, IQ for Iraq and AF for Afghanistan.  
Source: Own calculations based on EU LFS 2014 AHM. Data cover 25 countries of the European Union.  
Click here to download table.

### 2.5.2. Integration challenges of family migrants

Family migrants are a vulnerable group in the labour market with similar labour market outcomes to those already observed for refugees. Family migrants have the lowest employment rate among all the non-EU born (53%), which in turn reflects their low activity rate of 64% (Table 3.7). Family migrants also have the most pronounced gender employment gap of all the non-EU born (almost 20pp).

Table 3.7: Employment rate of non-EU born (aged 15-64) by main reason for migration, 2014, EU total\*

Main reason	Employment rate (Total)	Women	Men	Unemployment rate	Activity rate
Family	53%	45%	65%	17%	64%
Refugees	56%	45%	62%	19%	69%
Employment	73%	71%	74%	16%	87%
Study	62%	57%	66%	12%	71%
TOTAL non-EU born	59%	51%	68%	17%	71%
Native-born	65%	60%	70%	10%	72%

Source: Own calculations based on Eurostat 2014 ad hoc module. \*EU total covers 25 countries (no data available for Ireland, Denmark and the Netherlands).  
Click here to download table.

Considerable gains could be made by increasing the activity rate of family migrants, given that they, like refugees, have almost the same ratio of employed to active persons as those migrants who came for employment. A total of 83% of all economically active

family migrants are employed compared with 84% of labour migrants and 81% of refugees. If the activity rate of family migrants were the same as that of labour migrants, family migrants would have almost the same employment rate as employment migrants (72% v. 73%) and a higher rate than the native-born (72% v. 65%).

## 2.6. Regression analysis: determinants of labour market integration

An econometric analysis carried out for this report analyses the individual factors which explain why refugees and family face lower employment rates. The analysis is presented here in brief <sup>(196)</sup>. Based on the 2014 ad hoc LFS module which included a sample of 26 countries <sup>(197)</sup>, the core results are shown in **Box 3.4**.

Most importantly, the impact of refugees' education is modest. The higher proportion of refugees and family migrants who have only low-level education means that they are in a less favourable position than the native-born. However, controlling for this difference would lead to a surprisingly modest increase in their employment rate. Likewise, the analysis shows that refugees' education seems to make little difference when it comes to entering (or re-entering) the labour market, starting from either unemployment or inactivity. These findings support evidence that the return on refugees' existing formal qualifications is low.

Being young helps in finding a job – but less so for refugees. A strong age effect becomes most evident when analysing labour market transitions, i.e. refugees' chances of moving from unemployment or inactivity into employment. Generally, age is an asset in job search: the younger one is, the better the chance of finding a job. However, in the case of migrants from typical refugee regions, their chances improve by less than is the case for the population as a whole.

How well refugees do depends very much on the host country. Migrants, especially refugees, are distributed very unevenly across Member States. They tend to be overrepresented in countries where the labour market is relatively stable and unemployment is low. This increases their chances of being in employment significantly.

Having spent time in the host country is a major advantage. A strong positive residence effect is closely intertwined with language. The employment rates of refugees and family migrants strongly increase with the number of years they live in their host country.

Knowing the language strongly improves labour market performance. The very strong role of host-

country language skills, as outlined in this chapter, is confirmed when controlling for other potential influences <sup>(198)</sup>. In other words, even for a given age or level of education, the better refugees' command of their host country language, the brighter are their employment prospects.

Refugees find it difficult to make the most of their existing human capital but well-chosen policies can help them to do so. The findings confirm that youth and education are normally strong assets for people seeking employment. This is also true for refugees, but the positive effects are much less pronounced. Educational attainments have less of an impact in giving them a good chance of finding a job compared with their native-born peers. This is particularly true for people acquiring higher (tertiary) level qualifications. It takes supplementary policy initiatives for refugees and family migrants to capitalise fully on qualifications – whether existing qualifications or those acquired after arrival. Obtaining language skills improves labour market prospects significantly, especially if language skills are low on arrival <sup>(199)</sup>. In the same way, spending time in the host country improves employment chances.

The fact that refugees are not evenly distributed across the EU can pose a significant budgetary challenge to a number of Member States, especially in the first years when investment in them is needed <sup>(200)</sup>. However, refugees, by choosing to settle in countries with a relatively stable labour market, have lower chances of being unemployed or inactive. This, in turn, reduces unemployment in the EU.

## 3. POLICIES TO HELP REFUGEES INTEGRATE

This section considers which policy measures appear to help refugees and other migrant groups to obtain employment. It combines key analytical results from EU-wide survey data on previous inflows of refugees with insights from administrative data on relevant policies in place in Germany, Austria, Sweden and Italy. These have been identified as key recipient countries in the context of the most recent refugee inflow.

Early and comprehensive efforts at integration can help to make better use of the time needed for the (often lengthy) asylum procedure. At the beginning of 2016, the time between making an asylum request and a first instance decision was at least 6 months in Germany, Austria, Sweden and Italy. In addition, weeks or months may have passed between arrival and submitting an asylum request, sometimes due to administrative bottlenecks. Acting early may render this waiting time more useful to all and make a difference. This is further supported by evidence from Switzerland that longer asylum procedure durations

<sup>(196)</sup> It is detailed in a forthcoming analytical DG Employment Working Paper "Labour market performance of refugees in the EU".

<sup>(197)</sup> There is data for 24 EU member states, but no data for Germany, the Netherlands, Ireland and Denmark).

<sup>(198)</sup> Namely: differences, in sex, age, and education.

<sup>(199)</sup> See also IMF (2016)

<sup>(200)</sup> See European Commission (2016d) for Germany.

### Box 3.4: Drivers of refugees' labour market performance – core results of a regression analysis

Previous sections have noted that refugees and family migrants have much lower employment rates than the native-born population. To what extent do their individual characteristics explain these results? To find out, one must control them for a series of other variables which are expected also to have an important impact on someone's employment outcomes. The regression takes on board a series of control variables and is split into two parts. A basic model looks at the association between the employment performance of individuals and their standard socio-demographic characteristics: a person's sex, age, education level, and the host country into which the person has migrated (country effect). Supplementary models then also include other important variables: language skills, the parents' level of education, whether or not the parents were born outside the country or even outside the EU (a person's migratory background) and the number of years a person has already spent in the host country.

The core results are as follows <sup>(1)</sup>.

**Country effect:** refugees have the best chance of finding employment in Sweden, Norway, Switzerland and the UK. Those four countries account for more than half of all refugees resident in 26 countries included in the analysis. Migrants, especially refugees, tend to be overrepresented in countries where the labour market is relatively stable and unemployment is low. This improves the refugees' own labour-market performance, i.e. increases their chances of being in employment. For refugees, the choice of country can lead to a 9pp increase in their employment rate; for family migrants the increase is estimated to be around 4pp.

**Education effect:** The chances of gaining employment increase strongly with education. The proportion of highly educated people in the age group 25-64 amongst refugees and family migrants (both around 30%) is comparable to the proportion of native-born people. However, the proportion of low-educated people amongst refugees and family migrants compared with the native-born is considerably higher (around 33% v. 25%). This less favourable educational composition lowers the employment chances of refugees by -3pp and of family migrants by -1pp. A supplementary regression on labour market transitions confirms evidence that the return on higher education is indeed low for refugees and family migrants alike: attaining high (tertiary) education improves refugees' chances of finding a job. But the improvement is much less significant than it is for the general population.

**Language effect:** The better refugees' command of their host country language, the brighter are their employment prospects. Statistically, the chance of being in employment for those who have at best beginner-level knowledge is less than 40% of the native born population's chance. Controlling for the language effect assumes that there is no difference in terms of language command compared with that of the native population. As a consequence, if refugees had a command of the host country language comparable to that of the native-born, it would improve their employment rate by 9pp. Command of host-country language would increase the employment rate of family migrants by some 6pp.

**Long-term residency effect:** The employment rates of refugees and family migrants strongly increase with the number of years they live in their host country. If they had the same residential history in the host-country as native-born people - i.e. if they had spent their entire life (or at least a major part) in the host country - the employment rate of all migrant categories would be considerably higher: for refugees and family migrants, the employment rate would increase by 8pp and 6pp, respectively. Getting acquainted with the host country, especially its language, is a very powerful lever for participating in its labour market.

**Parents' origin when outside EU:** Parents can be born either in the host country, in an EU country, or outside the EU. If parents are from outside the EU there is a significantly higher risk that their offspring will have much lower labour market prospects than the native population of the same sex, age, and education. This finding has a general implication: a third-country origin lowers employment prospects significantly. This problem has already been highlighted in the 2015 Employment and Social Developments in Europe Review. It implies that non-observable factors such as discrimination, low recognition of skills and education or cultural differences damage the employment prospects of refugees to such an extent that they reduce the value to refugees of acquiring better skills and education.

<sup>(1)</sup> Details of the regression analyses will be presented in a forthcoming analytical DG Employment Working Paper "Labour market performance of refugees in the EU".

have a negative impact on the refugees' subsequent employment rate, with each additional year of waiting being estimated to reduce the subsequent employment of refugees by 20% (Heinmueller et al. 2016).

One possibility is to focus policy efforts and resources on those more likely to succeed in being granted refugee status and therefore to remain, since not all asylum seekers have the same chance of being granted asylum.

### 3.1. Early labour market access helps

Access to the host countries' labour market is a prerequisite for refugees' labour market integration and future employment outcomes. Access depends on their legal status. Applicants for asylum generally have the same rights as the native population once their application has been accepted. According to Reception Conditions Directive in force from July 2015, asylum seekers should be provided with labour market access no later than 9 months from starting their application

### Box 3.5: What the current EU legal framework on asylum provides for in terms of access to services and integration

The Reception Conditions Directive (2013/33/EU) sets out minimum standards of reception conditions for **asylum applicants**. The aim is to ensure that the applicants have a dignified standard of living and that comparable living conditions are afforded to them in all Member States (bound by the Directive). It ensures that applicants have access to housing, food, clothing, health care, as well as medical and psychological care. Provisions that are relevant as far as socio-economic integration is concerned are article 14 (schooling and education of minors), article 15 (employment) and Article 16 (vocational training). In particular article 15 provides that Member States have to ensure access to the labour market for asylum applicants no later than 9 months from the lodging of the application if a first instance decision has not been taken. There are wide differences in terms of the minimum period before which access to the labour market is granted, from immediate access in some Member States to 9 months period in others (see table 3.8). Equally important than the minimum periods applied by Member States, are the actual procedural steps or other conditions of access that Member States set as they can limit the labour market access (e.g. requirement for a work permit or the need for a 'labour market check').

As for **beneficiaries of international protection**, the Qualification Directive (2011/95/EU) defines "standards for the qualification of third-country nationals or stateless persons as beneficiaries of international protection, for a uniform status for refugees or for persons eligible for subsidiary protection, and for the content of the protection granted". Moreover, this piece of legislation also provides for equal treatment for beneficiaries of international protection (compared to host country nationals) in the field of: access to employment (article 26); access to education (article 27); access to procedures for recognition of qualifications (article 28) in addition to a facilitation for those who cannot provide documentary evidence of their qualifications; social welfare (article 29) even if Member States may limit social assistance granted to beneficiaries of subsidiary protection status to core benefits; and healthcare (article 30). Finally, article 34 provides "**access to integration facilities**": "*in order to facilitate the integration of beneficiaries of international protection into society, Member States shall ensure access to integration programmes which they consider to be appropriate so as to take into account the specific needs of beneficiaries of refugee status or of subsidiary protection status, or create pre-conditions which guarantee access to such programmes*".

These existing rules are currently subject to a reform following the proposals made in July 2016 by the European Commission<sup>1</sup> to revise the Reception Conditions Directive<sup>2</sup> and to transform the Qualification Directive into a Regulation<sup>3</sup>.

<sup>1</sup> [http://europa.eu/rapid/press-release\\_IP-16-2433\\_en.htm](http://europa.eu/rapid/press-release_IP-16-2433_en.htm)

<sup>2</sup> COM(2016) 465 final - 2016/0222 (COD)

<sup>3</sup> COM(2016) 466 final - 2016/0223 (COD)

procedure. Nevertheless, the exact period varies between Member States (Table 3.8) and, restrictions may apply, including labour market tests<sup>(201)</sup> and waiting periods.

Table 3.8: Number of months after which labour market access is granted to asylum applicants whose application is pending

Period	Country
Direct	EL, PT and SE
2 months	IT
3 months	AT, BG, DE, RO and FI*
4 months	BE
6 months	CY, CZ, DK, EE, ES, LU, NL, PL and FI*
9 months	FR, HR, HU, LV, MT, SI and SK
12 months	UK
No access	IE and LT**

Note: Denmark, Ireland and the United Kingdom are not bound by the Reception Conditions Directive (2013/33/EU). \*In Finland, quicker access is provided (3 months) if valid travel documents are provided and slower access is provided for those without valid travel documents (6 months). \*\*In Lithuania, access is provided when a final decision is taken on the application for international protection, within 6 months at most.

Source: OECD (2016a) and EPEO (2016a).

[Click here to download table.](#)

Restrictions for asylum seekers have been fine-tuned in several countries recently. In *Germany*, the previously required labour market test has been suspended for three years in the vast majority of regions<sup>(202)</sup>, allowing asylum seekers to work for temporary work agencies, though not to be self-employed. While asylum applicants are now generally allowed to take up work after a period of three months, this market access is denied to those applicants who have recently come from third countries that are considered safe/secure<sup>(203)</sup>. *Austria* continues to apply a waiting time of three months and a labour market test: entry is allowed only to a few sectors where no negative impact on the domestic workforce is expected<sup>(204)</sup>. *Sweden* grants labour market access to asylum seekers with valid IDs without a labour market test. In *Italy*, since September 2015 asylum applicants may take up work 60 days after filing their application, compared with six months previously, and no labour market test is applied. They

<sup>(202)</sup> See <http://www.bmas.de/DE/Presse/Pressemitteilungen/2016/erleichterter-arbeitsmarktzugang-fluechtlinge.html>.

<sup>(203)</sup> Exceptions include asylum applicants residing in reception facilities (for up to six months).

<sup>(204)</sup> Tourism and agriculture as well as apprenticeships in shortage occupations, see OECD (2016a), Making Integration Work: Refugees and others in need of protection, OECD Publishing, Paris.

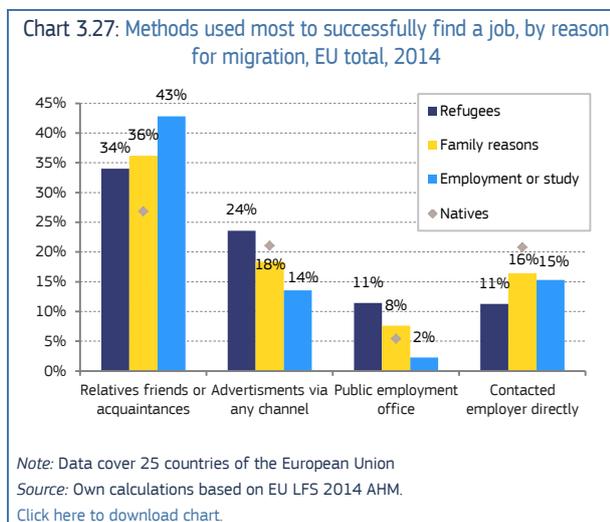
<sup>(201)</sup> When labour market access is conditional on tests, employers have to prove that no domestic worker could have filled the vacancy.

are also allowed to be self-employed, with some integration projects in the accommodation centres including support for becoming self-employed.

### 3.2. The role of networks and Public Employment Services (PES) in finding a job

All groups, including the native-born, rely mainly on their local networks to get a job (Chart 3.27). More than a third of refugees (34%) and family migrants (36%) who obtained a job in the last 5 years did so thanks to relatives, friends or acquaintances. For those who came for employment or study reasons this proportion was even higher and stood at 43%, while for the native-born it represented more than a quarter of those successfully employed (27%). This indicates the critical importance of local networks and successful social integration of refugees and other migrants for their labour market success. Policies such as mentoring and establishing contacts with local communities and private sponsors could be a powerful means of aiding refugees and other migrants in their job search efforts.

Using public employment services (PES) helped one in ten refugees find a job. Other migrant groups, as well as the native-born, use the PES much less than other methods such as direct employer contact. Refugees rely more than other migrants on the PES to find a job, placing the PES in a key position to help with their labour market integration.



### 3.3. Substantial registration with the PES and good unemployment benefit coverage

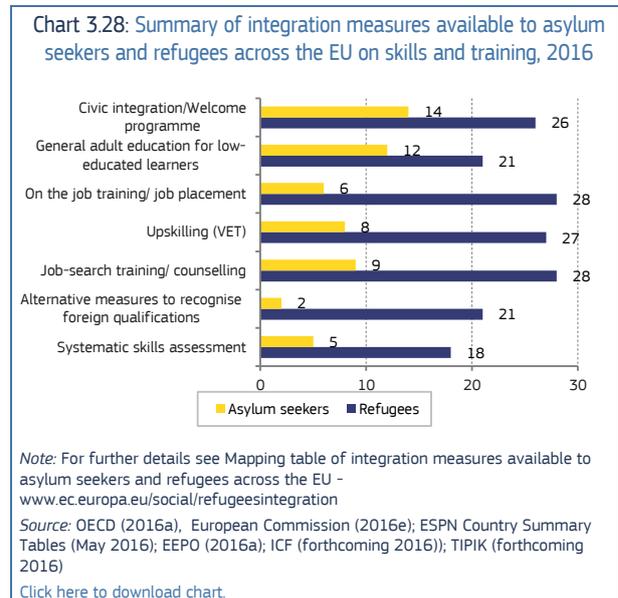
Refugees seem to be as much in contact with the PES as other groups, judging by their PES registration. They seem on average to be better covered by unemployment benefits than other migrant groups (71% v. 67%) and the native-born (67%)<sup>(205)</sup>. However, a third of unemployed refugees are not

<sup>(205)</sup> Source: Own calculations based on EU LFS 2014 AHM. Data cover 24 countries of the European Union (data for Germany is missing).

registered with PES services and three out of five do not receive unemployment benefits during their job search. This, combined with the fact that refugees rely on the PES for obtaining employment much more than other migrant groups (Chart 3.27) indicates the PES as a possible area for action.

Member States offer a wide range of policy measures to aid the labour market integration of refugees and asylum seekers (Chart 3.28). These range from civic integration courses designed to help people better to understand the practicalities of life in the host country to early skills assessments and alternative measures for recognising foreign qualifications, available in large part due to the Qualifications Directive<sup>(206)</sup>. Labour market integration measures also include support for enhancing employability such as vocational education and training (VET), on-the-job training and general education for low-educated learners, which is of particular importance given the education profile of refugees.

The services that the PES provides to help people integrate into the labour market differ considerably between asylum seekers and refugees, and between Member States (Chart 3.28). While almost all Member States provide on-the-job training, up-skilling possibilities and job counselling support to refugees, a third or less of them do so for asylum seekers, including those who have gained labour market access.



### 3.4. Case-study: lifelong learning for refugees in Germany

This section provides a simulation of the economic and labour market potential of a subsidy offered to firms in order to encourage them to offer training to refugees. The projection horizon covers the period up to the year 2030.

<sup>(206)</sup> Directive 2011/95/EU

## Box 3.6: EU funding for integration of refugees and other migrants

EU funding can support the integration of asylum seekers and refugees into the labour market and society in general. The Commission is working with the Member States to identify how different EU instruments can contribute to addressing the needs. These funds include, among others, the European Social Fund (ESF), European Regional Development Fund (ERDF), Fund for European Aid to the Most Deprived (FEAD), and the Asylum, Migration and Integration Fund (AMIF).

Projects to foster labour market integration of refugees can be part of the exercise. The mentioned sources of funding are already investing in many successful integration projects across Europe. The Commission is also actively working with all relevant stakeholders to ensure that all funding sources available are used to their maximum potential and in an integrated and strategically coordinated way.<sup>1</sup> The ESF is the main EU instrument to support human capital. It can therefore provide valuable support to the integration of asylum seekers and refugees in the Member States by funding measures such as training, language courses, counselling, coaching, vocational training and even access to social services.

Refugees and all other legally resident migrants in a Member State can benefit from these EU funded integration projects. Asylum seekers can receive general support from the ESF from the moment they are legally entitled to participate in the labour market. Member States are required to grant this access at least 9 months after the asylum seekers have applied for international protection.

But even before having access to the labour market, Member States may grant asylum seekers access to vocational training, if the national law allows it. In addition, children of applicants (or minors who are applicants) must be granted access to the education system under similar conditions as country nationals for as long as an expulsion measure has not been enforced.

For examples of ESF funded migrant integration projects, visit the ESF website.<sup>2</sup>

<sup>1</sup> See also note on Synergies between the Asylum Migration and Integration Fund (AMIF) and other EU funding instruments in relation to reception and integration of asylum seekers and other migrants: <http://ec.europa.eu/social/main.jsp?catId=1274&langId=en&intPageId=4317>

<sup>2</sup> [http://ec.europa.eu/social/esf\\_projects/search.cfm](http://ec.europa.eu/social/esf_projects/search.cfm)

The model simulation is based on the Labour Market Model (LMM) of Directorate General Employment, Social Affairs and Inclusion. The simulation is based on Berger et al (2016) <sup>(207)</sup> and assumes a strong influx of refugees into Germany, taking account of recent statistics from the Federal Office for Migration and Refugees (BAMF) on the number of asylum seekers <sup>(208)</sup>.

Following Berger et al (2016), a number of assumptions on the asylum procedure are made reflecting recent statistics <sup>(209)</sup>. Also in line with available data, asylum seekers are assumed to be younger than Germany's population on average. Two alternative scenarios illustrate the impact of asylum

seekers' educational levels on the German economy: a 'low-education scenario' assumes that the refugees are on average less educated than the German population, <sup>(210)</sup> while a second 'neutral-education' scenario assumes that refugees' educational composition corresponds to Germany's average education structure. Importantly, in line with the evidence presented in this chapter, it is assumed that refugees, at the same education level and the same age as natives, face lower labour-market participation, higher unemployment and a significant wage gap.

Low-educated refugees change the workforce skill composition. In the education-neutral scenario the population increase <sup>(211)</sup> translates by 2030 into a uniform increase of the employed workforce of around 1% across all education levels (compared with the situation without the refugee influx). In the low-education scenario, however, the low-educated group would grow by around 3.5%, medium and high-educated by less than 0.5%, implying that the education profile of Germany's overall workforce would change towards the lower end. Due to the complementarity of workers' qualifications and capital accumulation, a less educated workforce would result

<sup>(207)</sup> An initial simulation was done for DG EMPL by Berger et al (2016) as part of the Final Report of the "Updating the Labour Market Model" project. This simulation referred to here was re-done by DG EMPL, taking on board the latest available figures on refugee flows into Germany, and adding the training scenario.

<sup>(208)</sup> The updated simulation assumes that Germany was/is confronted with an additional number of asylum seekers with the number of applications increasing by 203,000 in 2014, 477,000 in 2015 and 741,000 in 2016. Those people are assumed to be younger than Germany's population on average.

<sup>(209)</sup> It is assumed to take six months on average from crossing German borders until a person is able to submit an asylum application and then another six month until a decision on the request is made. Many of the 741,000 assumed asylum applicants in 2016 already came to Germany during 2015 – the year that saw an influx of 0.89 million people (This figure is an estimation that may be biased by potential double-counting.) Further, it is assumed that some 53% of all decisions will be positive, and that only those refugees who receive a positive decision will increase Germany's population.

<sup>(210)</sup> In line with Institut für Arbeitsmarkt- und Berufsforschung (2015a), it is assumed that that 62% of all asylum seekers are low-skilled and only 13% highly educated. Among Germany's population aged between 15 and 64 years, 20% are low-educated, while 24% are highly educated.

<sup>(211)</sup> In the model, Germany's 2030 population aged 15 years and older increases by 1% relative to the reference scenario (no additional refugees).

in lower investment per worker and lower productivity. As a result, GDP growth in the low-education scenario would be significantly lower than in the education-neutral scenario (+0.5% v. +0.8% by 2030).

An increased labour supply implies that wages for the low-educated native workers would grow less fast.<sup>(212)</sup> Investment in the training of refugees would alleviate pressures on wages, as shown in **Chart 3.28**. The Labour Market Model simulation assumes that the government will spend some 800 million euro every year (around 0.025% of GDP) to subsidise firm-sponsored training, targeting the entire refugee population.<sup>(213)</sup> It assumes that this expenditure will not stop after 2017, taking into account the long-term nature of measures designed to integrate mainly young and low-educated refugees in the labour market.

The training subsidy should improve refugee workers' productivity and firms' profitability. As a result, firms hire more workers and refugees' labour market prospects improve. A subsidy paid to firms for offering training should lead to more refugee workers undergoing training and hence improving their individual productivity. As a result, firms will step up demand for refugee workers. In addition, the subsidy will, like any subsidy, improve the profitability of the firm they work for.

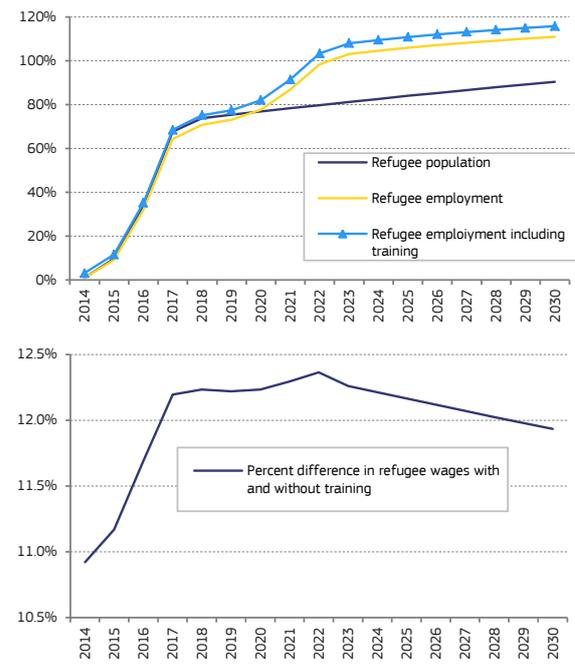
This will make it easier for workers to bargain on higher wages, as firms, in effect, share their profits with workers. In other words: the firms' reservation wage increases. The supplementary training would therefore alleviate downward pressures on wages overall. For refugees, the simulation reveals a significant wage increase due to the substantial amount of money made available for this small labour market segment<sup>(214)</sup>.

<sup>(212)</sup> The results from the Labour Market Model for the low-education scenario show that wages of native low-educated workers would, during the adjustment period, be 1% below the trend without the refugee inflow. This is in line with results from a similar simulation published in 'An Economic Take on the Refugee Crisis' (European Commission (2016d)) which found that by 2020 wages overall would be 0.3% below the trend without refugees.

<sup>(213)</sup> Following Berger et al (2016), the initial refugee population before the influx is proxied by the number of migrants from Africa and the Near/Middle East who had lived in Germany in 2014: some 0.9 million people according to the Federal Statistical Office of Germany.

<sup>(214)</sup> The magnitude of the training's wage impact has to be seen from that perspective.

Chart 3.29: Germany's refugee labour market segment in the low-education scenario, with and without a subsidy for firm-sponsored training (0.025% of GDP per year) paid every year as from 2014



Note: The chart shows the impact of training on refugee employment and wages in the low-education scenario. All values are shown as percentage increases, relative to the baseline scenario, without additional refugee migration and without training investment.

Source: DG EMPL calculations based on the Labour Market Model

[Click here to download chart.](#)

Because of certain technical limitations of the model, the employment effect shown in **Chart 3.29** tends to underestimate the true effect of training. This is because the refugees' participation rate had to remain exogenous in the training scenario shown here<sup>(215)</sup>. As a result, important positive labour supply effects are not taken into account.

The current influx of refugees to Germany should not, therefore, have a substantial impact on the country's overall wage and employment levels. Refugees' formal qualifications and skills are two crucial assets in terms of their labour market integration. These assets enhance productivity, trigger investment, prevent wages from falling and increase employment. Since many refugees are very young on arrival, investment in their education and relevant skills (through training) will yield a high return, even though (in the case of education) it will take time for human capital to form and find its application in the labour market.

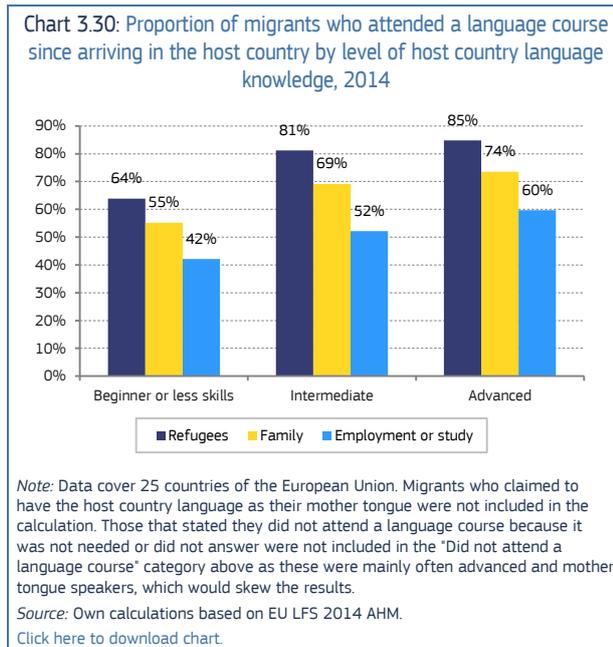
### 3.5. Language courses widely available but not always systematically or to a sufficient level

Knowledge of their host country language is one of the strongest determinants of the labour market outcomes

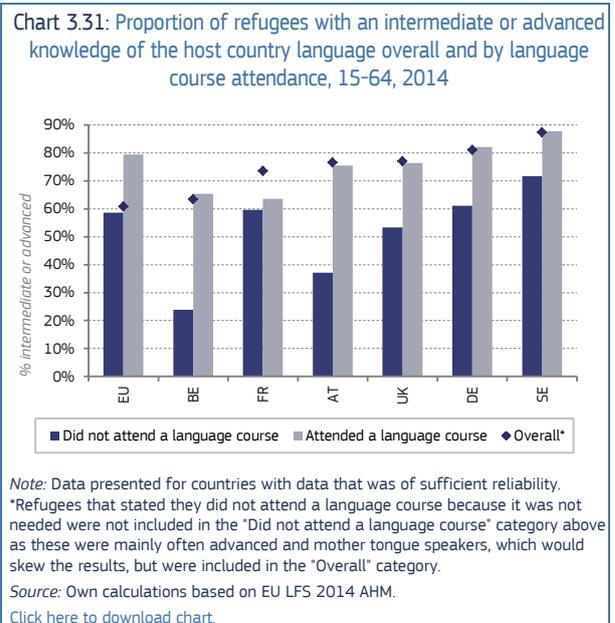
<sup>(215)</sup> It is taken into account that low-educated refugees improve their labour market participation in the course of time. To make that certain, the participation rate has to remain exogenous and follows a pre-defined path. The model can therefore not incorporate increases in the participation rate which are due to wage shifts.

of refugees (as shown in Section 2.3.4), but the extent to which the level of host country language knowledge is fostered by language courses has not yet been explored.

Judging from the proportion of migrants who have attended a language course since arriving in their host country, refugees take part in language courses more than other migrant groups, irrespective of the level of their linguistic proficiency (Chart 3.30). This makes sense since refugees on average also appear to have lower levels of host country language knowledge (Chart 3.11 and Chart 3.12).



Language courses are efficient, but overall less so in the case of refugees than for other migrants. Why might this be? First, the courses that the refugees attended may not have been very good at equipping them with language skills. Secondly, refugees may have had higher dropout rates from language courses because of their vulnerable socio-economic situation. Thirdly, their personal situation (including stress leading to trauma and depression) may make learning new skills more challenging for refugees than for other migrants. Finally, the relatively lower level of education of refugees compared with other migrant groups (Chart 3.10) may mean that it is more difficult for them to benefit from attendance on a language course. Attendance on language courses is, however, positively correlated with higher levels of host country language knowledge *within each migrant group* (Chart 3.31).



Refugees who attend a language course have a better command of the host country language than those who do not; those who follow language courses have a much higher share of intermediate and advanced levels of language knowledge than those who do not (20 pps: 79% v. 59%). This is a consistent observation across Member States. In other words, even though higher language course attendance among refugees does not necessarily result in their gaining higher language knowledge than other migrant groups, language courses do nevertheless improve their overall language knowledge.

**Table 3.9: Highest level of language training provided to refugees (A1-C2)**

Language level (CEFR)	Country
A1	HR
A2	BG, FR, IE and IT
B1	ES, PT, SE, SK and UK
B2	AT, EE and PL
C1	BE, DE, DK and LU
C2	CY

*Note:* For further details see Mapping table of integration measures available to asylum seekers and refugees across the EU - [www.ec.europa.eu/social/refugeesintegration](http://www.ec.europa.eu/social/refugeesintegration)  
*Source:* OECD (2016a) and EEPO (2016a)  
[Click here to download table.](#)

Interestingly, in France the language knowledge gain among refugees from course attendance is only 4 percentage points. This could be linked to the intensity of the language tuition provided as France is the only Member State of the six presented that provides language tuition only to level A2 (Table 3.8), a level judged to be "not sufficient for accessing the labour market" (EEPO France, 2016a).

Regression analysis results reveal that those refugees who attended a language course stand a 50% higher chance of improving their host-country language command than those refugees who did not attend such course. This is true even assuming the same age

### Box 3.7: Impact of integration policies on labour market outcomes: the devil is in the detail

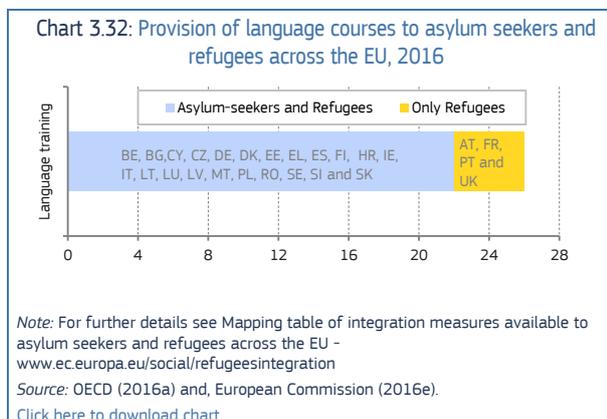
Data at the EU level is able to provide us with a comparative glimpse into the availability of certain types of integration policies available to refugees and asylum seekers and in some cases (e.g. language courses, PES registration etc.) also the proportion of refugees and asylum seekers who took part in them. Together with certain personal characteristics and labour market outcomes (e.g. the employment rate by knowledge of host country language) this enables us in this Chapter to broadly see which integration policies seem to have a positive impact on the labour market outcomes of refugees.

Nevertheless, even if a given integration policy is shown to have a positive impact on the labour market integration of refugees, the exact design, content and implementation of the policy measure is of critical importance. Hence, the research in this chapter needs to be complemented by qualitative and quantitative evaluations of specific policy measures at the national and local levels.

and education. The analysis also confirms that refugees' chances improve by less than is the case for family migrants (+70%) or those who came for employment or study reasons (+80%)<sup>(216)</sup>. This may indicate a lower efficiency of language courses in the case of refugees.

Courses are most effective for refugees if they start at the lowest language proficiency level (beginner level or below). In that case, attending a language course improves refugees' chances of attaining one of the higher levels by 130%, whereas the language skills gain is less pronounced for family migrants (+80%) and migrants who came for employment or to study (+90%)<sup>(217)</sup>.

These findings suggest that offering language courses are a very effective tool across the board. For refugees this is true especially in those cases where they come without any knowledge of the host-country language.



Language training is one of the most widely available types of support that asylum seekers and refugees alike can benefit from in the EU (Chart 3.32). This is a particularly encouraging finding, given that the analysis in this chapter has consistently shown that higher levels of host country language knowledge are linked to improvements in labour market outcomes. Most countries provide language learning to intermediate language levels and above (B1+). However, in several countries language courses are provided only up to level A2, which has been evaluated

as "too low for practical use" (UNHCR 2013). Other challenges include lack of coordination, resources, capacity and systematic provision (EEPO 2016a).

In *Germany*, since November 2015 a new law grants access to "integration courses" during the asylum process for applicants from countries with high protection rates<sup>(218)</sup>. These courses include 600 hours of language training. The "Integration Law" which entered into force in August 2016 makes participation obligatory for asylum seekers likely to remain in the country. However, speedily expanding the offer of places to match the large recent inflows is a challenge. In 2015, 179,000 new participants started integration courses, and another 62,000 started in the first quarter of 2016<sup>(219)</sup><sup>(220)</sup>. Asylum seekers also have access to vocational language courses co-financed with ESF funds.

*Sweden* offers customised language training at the asylum reception centre, and a promising project is targeted at the language needs of the likely sector of employment<sup>(221)</sup>. In *Austria*, basic language courses (A1 and A2 levels) are provided by the Länder, intermediate (B) levels by the public employment service (PES). Overall, there is further room for increasing the number of language courses – German

<sup>(218)</sup> This refers to asylum seekers from countries of origin subject to a protection rate of at least 50% (in 2016, Eritrea, Iraq, Iran, Somalia and Syria). See <http://www.bamf.de/EN/Infothek/FragenAntworten/IntegrationskurseAsylbewerber/integrationskurse-asylbewerber-node.html>. The corresponding condition applied to close to half of first time asylum applications in 2015. Previously, asylum seekers had no access.

<sup>(219)</sup> Antwort der Bundesregierung (18/9623)

<sup>(220)</sup> Additionally, one-off basic level German classes to encourage asylum seekers with good prospects to remain are financed by the Federal Employment Agency resulted in over 220,000 enrolments in autumn 2015. Given the significant inflow of asylum seekers, there is a certain trade-off between swift and comprehensive provision of language courses and their quality and usability. Indeed an area of improvement that has been identified was that the courses at the moment do not lead to any recognised certificate for participants and for the low standards required of course providers, see <http://www.welt.de/politik/deutschland/article151817158/400-Millionen-fuer-fragwuerdige-Sprachkurse.html>.

<sup>(221)</sup> Promising practices on refugee integration - [ec.europa.eu/social/BlobServlet?docId=15356&langId=en](http://ec.europa.eu/social/BlobServlet?docId=15356&langId=en)

<sup>(216)</sup> See Chart A2.1 in Annex

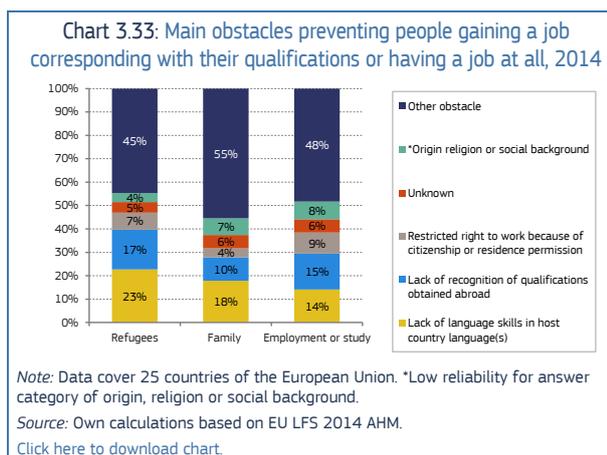
<sup>(217)</sup> See Chart A2.2 in Annex

language courses for 22,400 refugees do not go beyond B1 <sup>(222)</sup>.

In *Italy*, asylum seekers are entitled to personalised integration support that comprises language training, ten hours of adult education per week and civic integration classes. About one in four asylum seekers took up integration support in 2014 <sup>(223)</sup>. There appears to be room for further expanding the offer of integration programmes for both asylum seekers and refugees and addressing large geographical variations in their provision <sup>(224)</sup>. More work may also be required to improve coordination, as there are currently many different stakeholders, sources of funding and services and some overlap exists (EEPO (2016a)).

### 3.6. Main obstacles to obtaining a job suited to their qualifications

Among the non-EU born who were either jobless or who identified themselves as being over-qualified for their job, 40% indicated that they had encountered no particular obstacle in either getting a job or obtaining a job that matched their skills. The remaining 60%, however, said that they had encountered such obstacles (Chart 3.33).



Refugees, family migrants and labour and student migrants identified the lack of host country language skills, recognition of qualifications and legal restrictions as the three main barriers to their getting a job or a job that matched their skills. The language barrier to suitable employment was more pronounced for refugees (23%) than for family migrants (18%) or for those who came for employment or study (14%). One in six refugees (17%) highlighted recognition of their qualifications as the main obstacle. Origin, religion or social background was the main obstacle for only a smaller proportion of refugees (7%) but a somewhat bigger issue for employment or study migrants (9%), indicating that discrimination, while a notable obstacle, may be less of an issue than skills and administrative or legal barriers.

<sup>(222)</sup> Bundesministerium für Europa, Integration und Äußeres (2016), 'Integrationsbericht 2016',

<sup>(223)</sup> OECD (2016a), Making Integration Work: Refugees and others in need of protection, OECD Publishing, Paris.

<sup>(224)</sup> Italian Council for Refugees (2015), p. 82.

Clearly, refugees' education and previously acquired qualifications are assets which will be devalued if those qualifications are not recognised in their host country or if refugees encounter discrimination in one form or another. In other words, education and qualifications alone are not enough to ensure that refugees will be able to get jobs for which they are qualified by skill and ability.

### 3.7. Social integration support

Even when refugees succeed in finding a job, they may need additional support if they are to become integrated into the societies in which they live. Many people fleeing war and persecution are likely to suffer from anxiety, depression and trauma because of the violent events they may have witnessed or experienced. Thus, they may not be suitable candidates for immediate inclusion in an integration programme.

Systematic physical and mental health screenings of asylum seekers upon arrival can help to identify such vulnerable individuals and provide them with the medical support they need, in line with the relevant provisions of the Asylum procedures Directive and the Reception Conditions Directive on medical screenings, vulnerability assessment and specific support to vulnerable asylum seekers. More than half of Member States provide systematic mental health screenings to asylum seekers (17) and refugees (16), and virtually all Member States offer mental health support for those who need it (Chart 3.34).

Housing market and dispersion policies aim at limiting additional pressure from asylum seekers in already tight local housing markets. At the same time, these can be an obstacle to their labour market integration <sup>(225)</sup>. In *Germany*, since 2016 a residence requirement makes it possible to assign temporarily recognised refugees a place of residence, but exceptions apply for those who undertake work or study <sup>(226)</sup>. Assigning residence is also considered desirable by the *Austrian* Integration Ministry and PES, because about 70% of people who benefit from international protection move to the capital, Vienna, although no such measure was implemented until 5 September 2016 <sup>(227)</sup>.

<sup>(225)</sup> In a recent stocktaking exercise assembling good practice regarding the integration of refugees and others in need of protection, the OECD highlighted the need to locate humanitarian migrants according to the availability of jobs, not housing, given that local labour-market conditions on arrival have proved to be a crucial determinant for lasting integration. See OECD (2016a), Making Integration Work: Refugees and others in need of protection, OECD Publishing, Paris.

<sup>(226)</sup> In particular, unless the person finds employment subject to social security contributions with weekly working hours of at least 15 hours, or is pursuing VET or university studies elsewhere.

<sup>(227)</sup> Bundesministerium für Europa, Integration und Äußeres (2016), 'Integrationsbericht 2016', as well as [http://www.wienerzeitung.at/nachrichten/oesterreich/politik/841671\\_Wenn-wir-Vieles-richtig-machen.html](http://www.wienerzeitung.at/nachrichten/oesterreich/politik/841671_Wenn-wir-Vieles-richtig-machen.html)

## Box 3.8: What role do social partners play in refugee integration?

Although in most Member States the social partners are heavily involved in labour policy planning at national level, they may not participate specifically in refugees' labour market integration. This seems to be the case in countries where the labour market integration of asylum seekers and refugees is not important in the current political debate.

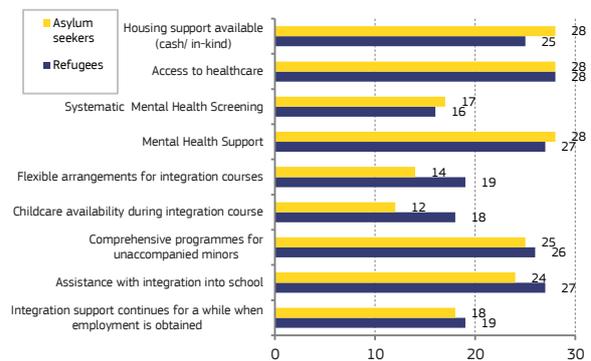
In general, whereas employers focus on easing labour market access (and often wish to see an increase in the size of the labour force in order to meet labour shortages in certain occupations), trade unions emphasise the importance of respecting labour standards (working conditions, skills and job matching, decent wages, etc.). The focus may be different, but they agree on the importance of avoiding the risk of exploitation and impoverishment which arises when asylum seekers or refugees are employed illegally. Legal employment makes it easier to access public services, and this in turn can be instrumental in getting information on social and labour rights. For specific refugee integration initiatives involving social partners, which have already led to changes in the process of labour market integration, and also concrete proposals which could have a similar effect in the near future, please see Eurofound (forthcoming 2016).

Sweden is among the few countries where dispersal schemes for humanitarian migrants include employment-related elements. Migrants are placed in localities matching their profile, taking account of their education levels and work experience, local employment rates, the locality's size, its concentrations of foreign-born people and the availability of housing<sup>(228)</sup>. In Italy, there are no dispersion policies for humanitarian migrants (OECD 2016a).

Childcare and flexible arrangements during integration courses still leave room for improvement. Such arrangements can help to ensure that parents who come with children or refugees who gain employment during their integration course do not have to drop out of their course to take care of their children or to take up employment. Two thirds of Member States offers such possibilities to refugees, but only half of them offer childcare and flexible arrangements as part of integration courses provided to asylum seekers (Chart 3.34).

<sup>(228)</sup> Denmark and Finland also have incorporated employment-related elements into their dispersal schemes. In Denmark, a screening of informal and formal qualifications is made during the asylum application process, and local job opportunities are then taken into consideration in deciding which municipality should be the individual's place of residence.

Chart 3.34: Social integration measures available to asylum seekers and refugees in the EU, 2016



Note: For further details see Mapping table of integration measures available to asylum seekers and refugees across the EU - [www.ec.europa.eu/social/refugeesintegration](http://www.ec.europa.eu/social/refugeesintegration)

Source: OECD (2016a), European Commission (2016e); ESPN Country Summary Tables (May 2016); EEPO (2016a); ICF (forthcoming 2016); TIPIK (forthcoming 2016)

[Click here to download chart.](#)

In many Member States, integration support ends as soon as the person obtains employment, potentially cutting short much needed integration courses. One of the goals of integration courses is for an asylum seeker with access to the labour market or for a refugee to obtain employment as soon as possible. However, it is not necessarily the case that integration support is no longer needed once in employment. For example, a refugee may quickly obtain employment that requires little or no language skills. In such a case in nine Member States their integration support will be discontinued, even if their knowledge of the host country language remains insufficient for them to be able to function independently in society or to obtain further employment that corresponds to their skills and qualification level.

Many EU Member States are seeing large increases in the numbers of unaccompanied minors coming in search of asylum. Comprehensive programmes and support for asylum seekers and refugees who come as unaccompanied minors are essential because of their particularly vulnerable position. They not only lack parental support but also “most arrive just before or after the age at which schooling is no longer compulsory – between 14 and 17 years old – but have little or no formal education” (OECD 2016a). For this

### Box 3.9: Online databases of promising practices on the integration of asylum seekers, refugees and other migrants

There are several websites that contain information on promising projects that have been or are in the process of being implemented in Member States.

DG EMPL recently launched a [Repository of promising practices of social and labour market integration of refugees and asylum-seekers](#). The aim of this database is to enhance mutual learning and transferability between EU Member States of the most effective policies in the area of social and labour market integration of refugees and asylum-seekers, as well as skills by showcasing promising projects in these fields.<sup>1</sup>

One such example is a housing project called Convivial in Belgium, which helps refugees to find sustainable, decent and affordable housing after they leave the accommodation centres. It provides information, mediation services and even transitional housing solutions. It also works with property owners with any help they might require and has set up a list of 'clever' owners who, happy with the services of the association, reserve their properties for refugees on a regular basis.

The European Web Site on Integration features a wider collection of best practices relating to the integration of all different types of migrants, with the possibility to look for practices by country, categories of migrants, target group, actor in charge, etc.<sup>2</sup> It provides policy makers and practitioners working on integration in Europe with a tool for the exchange of information and good practice as well as a one-stop-shop for migrant integration news, documents, events and analysis.

<sup>1</sup> See <http://ec.europa.eu/social/main.jsp?langId=en&catId=1208>

<sup>2</sup> See <https://ec.europa.eu/migrant-integration/home>

reason it is beneficial that most Member States have comprehensive programmes for unaccompanied minors in place.

Children who arrive with parents are likely to be in need of some help in integrating into the local school system and easing their access to education. Examples include intensive language courses, educational mentor/assistant, skills/knowledge assessment and tailoring of education to enable children to catch up with the curriculum. Again, almost all Member States provide some kind of support for integrating the children of refugees (27 MS) and asylum seekers (24) into school education.

### 3.8. Awareness-raising as a key part of integration strategies

Public opinion regarding the inflow and integration of refugees and other migrants is crucial for investment in and successful delivery of migrant integration measures in the EU. Public opinion in Europe on immigration and its impact seems to have become slightly more positive between 2002 and 2015 (Heath and Richards, 2016). However, it remains one of the top concerns of a large proportion of Europeans (48%, down by 10 pps from Autumn 2015), followed by terrorism (39%) and the economic situation (19%) (Standard Eurobarometer 85, 2016).

This concern is mutually reinforced by negative opinions on immigration in general. Even before the most recent inflow of asylum seekers, Europeans were "the most negative globally towards immigration" (IOM-Gallup, 2015). According to the Spring 2016 Eurobarometer, immigration of people from outside the EU evoked a positive feeling in 34% of respondents and a negative one in 58%, compared with 58% and 35% respectively for EU mobile citizens (Standard Eurobarometer 85, 2016). However, the fact

that a large majority (67%) support a common European policy on migration and that 63% believe that their country should help refugees suggests that EU level action to improve the migration situation would be welcomed.

Research also indicates that personal contact can help dispel potential fears and foster positive attitudes towards migrants. Those who personally know a migrant (e.g. in Hungary) or live in areas with higher concentrations of migrants (e.g. in France and the United Kingdom) tend to be much more welcoming in their attitudes towards migrants than those who do not (Tarki 2015; Jolly and DiGiusto 2009 and 2014). Moreover, nearly all countries with large Muslim populations (Germany, Netherlands, France, Belgium and the United Kingdom) are more favourable towards Muslim immigration than other countries (Heath and Richards, 2016).

The demographics surrounding opinion polls consistently show that more educated and younger people tend to be more favourable towards immigration in general (IOM-Gallup 2015; Heath and Richards 2016; Tarki 2015). Labour status also seems to have an impact on attitudes to migrants, with the unemployed being more in favour of reducing migration than others (IOM-Gallup 2015).

Given that government policies on migration tend to be aligned with public opinion (IOM-Gallup 2015) and that, in turn, positive public sentiment is likely to make it easier for refugees and other migrants to integrate, it becomes increasingly important to ensure that public opinion is properly informed.

Unemployed people and those who see migrants as direct competition for jobs are more often in favour of reduced immigration (IOM-Gallup 2015). However, a disjoint can arise between the perceived severity of a

### Box 3.10: The importance of the local level for refugee integration

While asylum reception and refugee integration policies are mostly decided at national level, their implementation is often done at the local level, often in cities. According to a report by Eurocities, even though local authorities are often provided with little room for manoeuvre in dealing with refugees, many cities have nevertheless in a way taken over the implementation of reception measures (Eurocities 2016). The efforts cities make are particularly important as migrants in general tend to be overrepresented in urban areas (OECD 2016b).

Moreover, the public response in cities has been mostly positive with strong support of civil society underpinning local administration efforts. This is likely to have been fostered by the open and transparent communication of the cities with their population on the reality of the situation. Examples of such communication efforts include utilising websites, social media and even apps to provide information. Utrecht provided neighbourhood information sessions given by key stakeholders including the vice mayor responsible for refugees and asylum seekers, the police chief and a doctor working in the asylum centres (Eurocities 2016).

Providing affordable housing for refugees is considered one of the greatest challenges in cities, which coupled with limited and tightening budgetary allocations and recruitment freezes, has made integration of refugees more difficult. Current EU state aid rules are also considered to make providing affordable housing more difficult (Eurocities 2016). The refugee crisis in this way highlights some important aspects of inter-governmental policy and fiscal relations. Local authorities are very often the ones that bear the cost of integration (e.g. in terms of housing, and education and training) but are not necessarily those that benefit from successful integration as refugees often end up moving in search of jobs and the taxes they pay go to the central government (OECD 2016b forthcoming).

To improve the functioning of integration programmes and the inter-governmental relations, the OECD proposes new initiatives that would balance incentives and fairness. These include more tailored but not overly complex fiscal transfers from central to subnational levels and a reward system for local governments that do particularly well in integrating refugees and other migrants, same as in some PES systems that are regarded for placing people successfully on the labour market.

given situation and reality. The fact that people tend grossly to overestimate the share of migrants in the population (e.g. 31% v. 14% in the United Kingdom; IPSOS MORI 2014), shows that there is an urgent need to improve public awareness of the facts surrounding migration.

While public opinion towards refugees remains welcoming, many expect that refugees will soon return home. This remains to be seen considering that there are now many conflicts around the world, which also explains the high propensity of refugees to take up host country citizenship (see section 2.2.6). On the one hand, a sizeable majority of people in Visegrad countries - Czech Republic, Hungary, Poland and Slovakia - and in Germany, France, Denmark, Spain, Netherlands, Italy and the United Kingdom (IFOP-FEPS 2015) indicate that they are in favour of admitting asylum seekers in need. On the other, an even greater majority of them would like the refugees to return to their countries of origin once it is safe or after a few years or months.

Finally, the importance of better public awareness becomes even clearer as misinformed opinions fuel public support for closing borders and the erosion of support for helping those in need. According to a recent poll that covered many EU Member States <sup>(229)</sup>, a significant share of the EU population believe that most refugees in fact are not refugees – ranging from 36% in Spain to over 70% in Hungary and Poland with around 60% in France and Germany holding the same opinion (IPSOS MORI 2016). This is coupled with a

widely-held fear that there are people among the refugees who aim to cause violence and destruction. At the same time the majority of the population in EU countries doubt that most refugees will successfully integrate (despite evidence to the contrary) <sup>(230)</sup>. As a result, over half of the population in Hungary, Italy and France support the complete closing of borders to refugees, with support for this being nearly as high in Germany and Sweden (49% and 47% respectively). Such opinions make it clear that improving public awareness is not just a matter of enhancing political capital to undertake needed reforms to integrate refugees better into host societies and deal with security risks but of building public support for the implementation of integration strategies themselves.

## 4. LOOKING BEYOND OUR BORDERS: THE SYRIAN REFUGEE CRISIS AND THE LABOUR MARKET IMPLICATIONS IN JORDAN AND LEBANON

While the EU has experienced a significant increase in asylum applications in the past two years, other regions closer to Syria have had to cope with far larger numbers of refugees <sup>(231)</sup>. According to the United

<sup>(229)</sup> Hungary, Italy, France, Germany, Sweden, Poland, Belgium, UK and Spain.

<sup>(230)</sup> For evidence that shows that refugees do integrate over time see for example OECD and European Commission 2015 and OECD 2015.

<sup>(231)</sup> This section draws on European Economy Discussion Paper No. 29 (May 2016) entitled *The Syrian Refugee Crisis: Labour Market Implications in Jordan and Lebanon* written by Lorenza Errighi and Jörn Griesse, available at: [http://ec.europa.eu/economy\\_finance/publications/eedp/dp029\\_en.htm](http://ec.europa.eu/economy_finance/publications/eedp/dp029_en.htm). For details, including references and sources, please refer to this paper.

Nations High Commissioner for Refugees (UNHCR), the 1 million asylum applications filed by Syrians in Europe constitute only 10% of the total number of Syrian refugees worldwide. The majority of Syrians fleeing the conflict have sought refuge in neighbouring countries. Since the outbreak of the conflict in Syria in 2011, the UNHCR has registered 2.7 million Syrian refugees in Turkey, just over 1 million in Lebanon and 0.7 million in Jordan. The total Syrian refugee count in these countries is even higher because not all of them register with the UNHCR. With refugees accounting for approximately a quarter of its population, Lebanon is the country with the highest density of refugees in the world. In Jordan refugees constitute about 15% of the population – significantly lower than Lebanon, but far higher than any European country. The highest proportion in the EU is found in Sweden where refugees are approximately 3% of the population, including the arrivals in 2014 and 2015.

The conflict in neighbouring Syria has posed serious challenges for Jordan and Lebanon, not least for their labour markets. Pressure on certain segments of the labour market, in particular in low-pay, low-skill sectors, has added to a cyclical weakening of labour market performance – as a result of negative economic spill-overs from the conflict – while exacerbating pre-existing structural weaknesses, such as a high proportion of informal work. Of the refugees who work, more than 90% do so informally. Most remain excluded altogether from employment (both formal and informal), through a combination of low labour force participation and high unemployment. Women in particular post very low employment rates. This can be attributed in part to cultural attitudes to gender roles, but also to the high proportion of small children among the Syrian refugee population and the concomitant need for some of the adult population to care for the children. Exclusion from livelihoods means that poverty is widespread among Syrian refugees in the two countries.

The lack of refugees' labour market integration partly reflects the restrictive approach to labour market access for Syrian refugees that the Jordanian and Lebanese authorities have taken. Neither Lebanon nor Syria has signed the 1951 UN Refugee Convention and its 1967 protocol (ratified by 147 countries), which establish the rights of refugees to engage in wage-earning employment and self-employment. No explicit right for refugees to work is present in the labour legislation of either country.

In Lebanon, registered Syrian refugees were allowed to work until early 2015, when, following mounting social unrest and problems with public services provision, national authorities suspended this right and introduced the "pledge not to work" – a document that each Syrian refugee wishing to renew his or her residency permit on the basis of a UNHCR registration certificate has to sign.

Jordan operates a rigid quota system stipulating a maximum proportion of foreigners that may be

employed in each sector – provided they obtain a work permit – ranging from 70% in car washing to just 5% in the pharmaceutical industry. Work permits normally involve a significant fee (equivalent to USD 170–1,270, depending on the sector) and a lengthy bureaucratic process. In addition, they are tied to the job and the employer for which they were issued. Moreover, the legal minimum wage is 27% higher for Jordanians than for migrant workers.

Broadly speaking, the two countries' labour market policies for Syrian refugees have been restrictive. This has contributed to certain undesirable outcomes, not just for the refugees but also for the labour market itself. Labour shortages may coexist with significant unemployment. Labour mobility is hampered and the economy's ability to adjust – by reallocating labour depending on productivity developments – is curtailed. In order to sidestep costs and restrictions, both employers and workers have an incentive to opt for informal employment.

Joint efforts by host governments and the international community are required to foster the labour market integration of Syrian refugees in Jordan and Lebanon, which – if properly managed – holds upside potential for all interested parties. To the refugees, it offers the opportunity to improve their living conditions through their own efforts. To the host countries' economies, labour market integration of refugees enhances the effect of the demographic boost, lifting the level of output. The combination of these two effects should reduce pressure for onward migration.

The EU is part of this international effort, notably through bilateral compacts with Jordan and Lebanon, announced in February 2016 at the international donors' conference in London (which secured pledges of USD 10 billion altogether). Encouragingly, some relaxation of labour market restrictions for refugees is envisaged by the two countries' authorities as part of these compacts. In August 2016 Lebanon committed vis-à-vis the EU to simplify documentary requirements, with a view to easing refugees' access to the job market in certain labour-intensive sectors such as agriculture and construction, albeit without fully abolishing the "pledge not to work." The Jordanian government waived the fee for work permits in April 2016 for a limited period of three months (later extended in two steps to end-2016) and relaxed the documentary requirements, to provide an incentive for the regularisation of informal work by Syrian refugees. In the agricultural sector, the link of work permits to a specific employer was also relaxed. While many problems remain, these measures have already had positive effects on the ground. In return for policy steps such as this, the EU is offering significant support, both financial and through trade facilitation (notably a softening of rules of origin), recognising that Syria's neighbours are providing a global public good by hosting millions of refugees.

## 5. CONCLUSIONS

In the last few years, the EU has experienced an unprecedented inflow of asylum seekers and other migrants from outside Europe. Over 1.8 million asylum applications were filed in 2015 and the first half of 2016.

The evidence presented in this chapter confirms that refugees are one of the most vulnerable groups in terms of labour market integration. On average, in the European Union, the employment rate of refugees currently lags behind that of other migrants and natives by about 10 percentage points.

There are, however, significant differences across member countries, partly due to differences in the composition of refugee flows and in the point in time when different refugee waves arrived. The integration of refugees improves with their length of residence in their host country but it takes more than 15 to 19 years in the host country for refugees to reach parity with the native-born in terms of employment rates.

Reducing the time that it takes for refugees to integrate into the labour market should remain a priority for policy makers, notably in the current context of large inflows of asylum seekers. The same holds true for family migrants who account for the bulk of migration from third countries to the EU and who on average have similar outcomes to refugees.

Refugee women, although better qualified than their male counterparts among the arrivals in the last 10 years, face specific and persistent difficulties integrating in the labour market. The employment rate of refugee women with only a low level of education is particularly small (30%) and this group therefore merits special attention.

As with other migrants, most refugees work full-time and they obtain more stable employment in time, but are also more likely to accept jobs below their qualification level.

Many refugees from pre-2014 inflows have qualifications and skills on which host countries can build. On average, one refugee in every five in the European Union is educated to tertiary level. However, nearly half of all refugees have not progressed beyond lower secondary education and this can be a significant obstacle to their labour market integration.

The analysis shows that higher formal education leads to higher employment rates and an easier transition from unemployment or inactivity into employment. It improves productivity growth and leads to higher average wages and higher economic growth. These findings have important implications. Given that many refugees have low qualifications, but are young and keen to climb the qualification ladder, it is worth investing in improving their qualifications. In addition, it is important to improve the employment outcomes of those with higher levels of education, whose returns

on education remain lower than for the native population.

Formal education alone, while important, is not a sufficient condition for refugees to integrate successfully into the labour market. It takes several 'levers' to activate their existing formal qualification for the labour market. The analysis provides strong evidence that language skills and/or host-country experience are also very important. Those refugees whose language skills are low or non-existent on arrival improve their employment chances significantly by acquiring more solid host-country language skills. Early investment in the language skills of refugees may actually be one of the most cost-effective instruments to enable them to capitalise fully on their existing formal qualifications. While language tuition is provided to refugees in most countries, in several countries the level of tuition remains too low for practical use and for obtaining employment.

Knowledge of the host-country language is a very strong determinant of labour market outcomes. The highest gain in employment (+28 percentage points) is for those refugees who have between an intermediate level of host country knowledge and the level of beginner or less. An early investment in the language skills of refugees may be one of the most cost-effective ways to integrate them and enable them to capitalise fully on their formal qualification and thus contribute to society. In a context of continuous inflows of refugees, most of whom are forecast to stay, this finding should be considered closely. Language tuition is provided to refugees in most countries.

In general, training measures offered to refugees are very effective and these are available in almost all Member States. However, the contribution of refugees' skills and education remains limited unless combined with more comprehensive support and removal of integration obstacles such as discrimination and lack of recognition of qualifications.

Social support for refugees is very important in order to enable them to settle into their new surroundings and benefit from the integration programmes offered to them. Access to housing, healthcare and assistance for children to integrate into schools are widely available to refugees and asylum seekers across the EU. However, many Member States struggle with housing capacity. Mental health support is also widely available but mental health screening is not conducted systematically, thereby perhaps leaving a lot of people suffering from trauma without treatment and support. Childcare and flexible arrangements during integration courses still leave room for improvement: many Member State do not provide them to refugees during their integration programmes. In many Member States, integration support ends as soon as the person obtains employment, potentially cutting short much needed integration courses.

The recently adopted Action Plan on Integration <sup>(232)</sup>, the New Skills Agenda <sup>(233)</sup> and the proposed revision Common European Asylum System <sup>(234)</sup> all demonstrate that the European Union is taking active steps to improve the integration of refugees and other migrants and support their economic and social contribution to the EU. Collecting more, better and timelier data will be of great importance to integration policy efforts, both now and in the years to come, since the refugee flows are forecast to continue.

Enhancing public awareness regarding the benefits and true challenges of migration needs to be an essential part of refugee and migrant integration strategies. Otherwise, fear and misinformation rather than facts and research risk undermining integration policies and the ability of refugees to integrate successfully into society.

Receiving refugees is not an economically motivated decision, but a humanitarian one that results in helping people in need. While it is often considered temporary, this is not always the case. If the reception of refugees and their family members is properly combined with integration, it will enable the EU to benefit from the human potential of refugees and their strong motivation to become active members of European society. Creating better labour market and social integration systems will not only help refugees and those who were not born in the EU, but will also ensure all vulnerable groups are better supported. It will ensure that the EU can better tackle poverty and increase prosperity for all in order to ensure social cohesion.

---

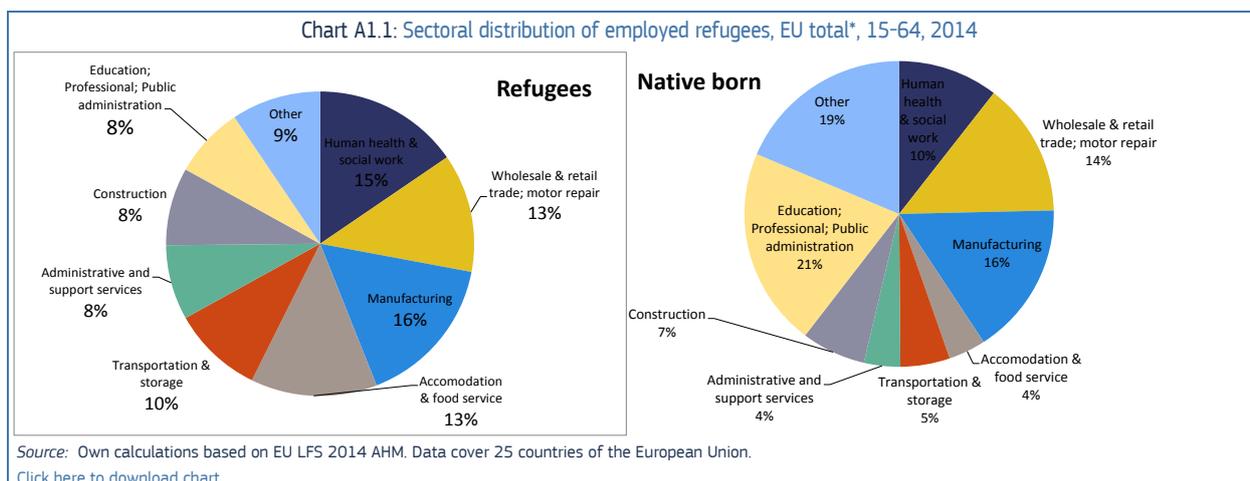
<sup>(232)</sup> Action Plan on the Integration of Third Country Nationals, Commission Communication COM(2016) 377 final, Brussels, 7.6.2016.

<sup>(233)</sup> A New Skills Agenda for Europe, Commission Communication COM(2016) 381 final, Brussels, 10.6.2016.

<sup>(234)</sup> See proposal for revised Reception Conditions Directive (Brussels, 13.7.2016 COM(2016) 465 final) and Qualifications Regulation (Brussels, 13.7.2016 COM(2016) 466 final).

## Annex 1: Additional labour market outcomes

The refugees who were in employment in 2014 were quite evenly distributed across seven major sectors. The largest group was employed in the manufacturing sector (16%), followed by health and social work (15%), wholesale, retail and motor repair (13%) and the accommodation and food service (13%). Many of them also work in transportation and storage (10%), administrative and support services (8%), construction (8%) and education, professional services and public administration (8%). This distribution is similar to that of the native-born but with relatively more refugees employed in accommodation and food service (+9 percentage points) and human health and social work (+5). Refugees were less likely to work in education, professional services and public administration compared with the native-born (-14 percentage points).



## Annex 2: Ordinal logistic regression

Chart A2.1: Odds of a shift in language proficiency from ANY level to any higher level

		Category of migrants for which regression is done:		
		Employment or study	Family reunif.	Refugees
LANGCOUR	No, was not necessary	9.17	21.44	15.46
	No, for other reason	0.57	0.58	0.65
	Yes	1.00	1.00	1.00
	<b>YES, relative to No (for other reas.)</b>	<b>1.76</b>	<b>1.71</b>	<b>1.53</b>
control variables:				
EDUC	Low education	0.55	0.57	0.36
	High education	1.62	1.23	1.11
	Medium Education - Reference	1.00	1.00	1.00
AGE	15-34	0.90	1.09	0.69
	55-64	1.20	1.47	0.67
	35-54 - Reference	1.00	1.00	1.00
COUNTRY	AT	1.45	1.24	1.26
	BE	1.00	1.09	1.08
	BG	0.67	0.63	0.52
	CH	1.71	2.00	4.05
	CY	0.35	1.37	0.24
	CZ	1.23	2.13	0.69
	EE	0.03	0.12	:
	ES	:	:	:
	FI	0.67	2.08	1.75
	FR	0.73	0.60	0.66
	GR	1.69	1.75	1.81
	HR	:	:	:
	HU	7.88	6.15	:
	IT	1.37	1.31	2.63
	LT	0.13	0.48	:
	LU	:	:	:
	LV	0.19	0.18	0.49
	MT	0.09	0.02	0.22
	NO	0.39	0.88	1.52
	PL	0.97	1.17	0.52
PT	5.75	5.87	47.65	
RO	0.60	2.18	:	
SE	1.76	2.25	2.82	
SI	0.81	0.59	3.25	
SK	1.52	1.31	:	
UK	1.00	1.00	1.00	

Source: Own calculations based on EU LFS, ad-hoc module 2014; no data for Germany

[Click here to download chart.](#)

Chart A2.2: Odds of a shift in language skills from LOWEST level to any higher level

		Category of migrants for which regression is done:		
		Employ- ment or study	Family reunif.	Refugees
LANGCOUR	No, was not necessary	6.20	11.93	16.77
	No, for other reason	0.52	0.56	0.43
	Yes	1.00	1.00	1.00
<b>YES, relative to No (for other reas.)</b>		<b>1.92</b>	<b>1.79</b>	<b>2.31</b>
control variables:				
EDUC	Low education	0.5	0.5	0.3
	High education	1.6	1.4	1.0
	Medium Education - Reference	1.0	1.0	1.0
AGE	15-34	0.9	1.2	0.4
	55-64	1.2	1.0	0.5
	35-54 - Reference	1.0	1.0	1.0
COUNTRY	AT	0.8	0.9	0.9
	BE	0.5	0.7	0.5
	BG	0.9	0.9	0.1
	CH	0.8	1.6	3.3
	CY	0.3	0.5	0.2
	CZ	1.4	2.0	:
	EE	0.0	0.1	:
	ES	3.4	2.9	:
	FI	:	:	:
	FR	1.5	1.2	0.7
	GR	9.8	6.5	1.9
	HR	7.0	6.0	:
	HU	0.8	2.6	:
	IT	2.0	1.0	2.9
	LT	0.1	1.5	:
	LU	13.3	21.4	:
	LV	0.5	0.5	:
	MT	0.0	0.0	0.1
	NO	0.3	1.3	1.9
	PL	1.6	3.2	:
	PT	3.6	4.7	1.7
RO	0.4	16.1	:	
SE	0.8	2.3	2.8	
SI	6.4	2.1	4.8	
SK	0.5	0.9	:	
UK	1.0	1.0	1.0	

Source: Own calculations based on EU LFS, ad-hoc module 2014; no data for Germany

[Click here to download chart.](#)

## References

- Ajluni, S.; Kavar, M. (2015). *Towards Decent Work in Lebanon: Issues and Challenges in the Light of the Syrian Refugee Crisis*. International Labour Organization Regional Office for the Arab States, Beirut, June 2015.
- AK Wien (2016), Arbeitsmarkt im Fokus - Arbeitsmarktanalyse des 1. Halbjahres 2016 Mit Spezialteil zum Thema: Arbeitsmarktintegration von Flüchtlingen
- AMS (2016), Daten und Fakten zur Arbeitsmarktsituation von Flüchtlingen: *Spezialthema zum Arbeitsmarkt* Juli 2016
- BAMF (2016). Bericht zur Integrationskursgeschäftsstatistik für das Jahr 2015.
- Berger, J., Biffl, G., Schuh, U., Strohner, L., *Updating of the Labour Market Model*, Final report by EcoAustria and Donau-Universität Krems to a project funded by the European Commission, Employment, Social Affairs, and Inclusion DG, Vienna, May 2016. <http://ec.europa.eu/social/main.jsp?catId=738&langId=en&pubId=7933&type=2&furtherPubs=yes>
- Bonfanti, S. and T. Xenogiani (2014), "Migrants' skills: Use, mismatch and labour market outcomes – A first exploration of the International Survey of Adult Skills (PIAAC)", in OECD and European Union, *Matching Economic Migration with Labour Market Needs*, OECD Publishing, Paris, <http://dx.doi.org/10.1787/9789264216501-11-en>.
- Bratsberg, B.; Raaum, O. and K. Røed (2016), *Flyktninger på det norske arbeidsmarkedet*. Frisch Centre, mimeographed.
- Brücker, H. (Ed.); Rother, N. (Ed.); Schupp, J. (Ed.); Babka von Gostomski, C.; Böhm, A.; Brücker, H.; Fendel, T.; Friedrich, M.; Giesselmann, M.; Holst, E.; Kosyakova, Y.; Kroh, M.; Liebau, E.; Richter, D.; Romiti, A.; Rother, N.; Schacht, D.; Scheible, J. A.; Schmelzer, P.; Schupp, J.; Siegert, M.; Sirries, S.; Trübswetter, P.; Vallizadeh, E. (2016): *IAB-BAMF-SOEP-Befragung von Geflüchteten: Überblick und erste Ergebnisse*. (IAB-Forschungsbericht, 14/2016), Nürnberg.
- Chiswick, B. and P. Miller (2015), "International Migration and the Economics of Language", Chapter 5 in Chiswick, B. and P. Miller (eds.), *Handbook on the Economics of International Migration*, Elsevier.
- Damas de Matos, A. and T. Liebig (2014), "The qualifications of immigrants and their value in the labour market: A comparison of Europe and the United States", in OECD/EU, *Matching Economic Migration with Labour Market Needs*, OECD Publishing, Paris, <http://dx.doi.org/10.1787/9789264216501-9-en>.
- Dumont, J.-C. and O. Monso (2007), "Matching Educational Background and Employment: A Challenge for Immigrants in Host Countries", in OECD, *International Migration Outlook 2007*, OECD Publishing, Paris, [http://dx.doi.org/10.1787/migr\\_outlook-2007-4-en](http://dx.doi.org/10.1787/migr_outlook-2007-4-en).
- Dumont, J.-C., Liebig, T., Peschner, J., Tanay, F. and Xenogiani, T. (2016), *How are refugees faring on the labour market in Europe?*, Commission-OECD Working Paper, 7 September 2016
- EEPO (2016a), *Labour market integration of asylum seekers and refugees - country reports* (Feb-April 2016) - <http://ec.europa.eu/social/main.jsp?catId=1087&langId=en>
- EEPO (2016b), *Challenges in the Labour Market Integration of Asylum Seekers and Refugees*. May 2016 - <http://ec.europa.eu/social/BlobServlet?docId=15894&langId=en>
- EIGE (2016), *Poverty, gender and intersecting inequalities: Review of the implementation of the Beijing Platform for Action in the EU Member States*
- EPSC (2015), *Legal Migration in the EU: From Stop-Gap Solutions to a Future-Proof Policy*, Issue 2/2015, April 2015
- Eurocities (2016), *Social affairs: Refugee reception and integration in cities*. March 2016 - <http://www.eurocities.eu/eurocities/events/Refugee-reception-and-integration-in-cities-WSPO-A8KCQ5>
- Eurofound (2016), *Sweden: Fast-track initiative to help asylum-seekers enter labour market* (authors: Hedvig Westphal & Anna-Karin Gustafsson), <https://www.eurofound.europa.eu/observatories/eurwork/articles/labour-market-social-policies/sweden-fast-track-initiative-to-help-asylum-seekers-enter-labour-market>
- Eurofound (forthcoming 2016), *Approaches to labour market integration of refugees and asylum seekers*, Dublin written by Klara Foti and Andrea Fromm.
- Eurofound (forthcoming), *Labour market integration and competences of refugees in Austria* (in: EurWORK, (European Observatory of Working Life))
- European Commission (2008), "The labour market situation and impact of recent third-country migrants" in *Employment in Europe 2008*, 2008, Chapter 2.
- European Commission (2014), *Study on mobility, migration and destitution in the European Union*, Publication Office of the European Union, Luxembourg, available at: <http://bookshop.europa.eu/en/study-on->

- mobility-migration-and-destitution-in-the-european-union-pbKEO214805/
- European Commission (2015a), *A European Agenda on Migration*, Commission Communication COM(2015) 240 final, Brussels, 13.05.2015.
- European Commission (2015b), "European Economic Forecast, Autumn 2015", *European Economy*, Institutional Paper 011, November 2015.
- European Commission (2016a), "Mobility and Migration in the EU: Opportunities and Challenges" in *2015 Employment and Social Developments in Europe Review*  
<http://ec.europa.eu/social/BlobServlet?docId=14954&langId=en>
- European Commission (2016b), *Action Plan on the Integration of Third Country Nationals*, Commission Communication COM(2016) 377 final, Brussels, 7.6.2016.
- European Commission (2016c), *EMN Annual Report on Immigration and Asylum 2015* - [http://ec.europa.eu/dgs/home-affairs/what-we-do/networks/european\\_migration\\_network/index\\_en.htm](http://ec.europa.eu/dgs/home-affairs/what-we-do/networks/european_migration_network/index_en.htm)
- European Commission (2016d), *An Economic Take on the Refugee Crisis - A Macroeconomic Assessment for the EU*. ECFIN European Economy Institutional Paper, July 2016
- European Commission (2016e), *EMN focused study on Integration of beneficiaries of international/humanitarian protection into the labour market: policies and good practices*. June 2016;
- European Commission (2016f), *The Syrian Refugee Crisis: Labour Market Implications in Jordan and Lebanon*. European Economy Discussion Paper No. 29 (May 2016) written by Lorenza Errighi and Jörn Griesse, available at: [http://ec.europa.eu/economy\\_finance/publications/eedp/dp029\\_en.htm](http://ec.europa.eu/economy_finance/publications/eedp/dp029_en.htm)
- European Commission (forthcoming 2016b), *Educational outcomes and immigrant background*. Flisi, S., Meroni, E.C., Vera-Toscano, E. JRC102629. EUR 28195 EN. doi:10.2791/026577
- Eurostat, *Migrant integration statistics* (online publication) [http://ec.europa.eu/eurostat/statistics-explained/index.php/Migrant\\_integration\\_statistics](http://ec.europa.eu/eurostat/statistics-explained/index.php/Migrant_integration_statistics)
- Eurostat, *First and second-generation immigrants - a statistical overview* (online publication) [http://ec.europa.eu/eurostat/statistics-explained/index.php/First\\_and\\_second-generation\\_immigrants\\_-\\_a\\_statistical\\_overview](http://ec.europa.eu/eurostat/statistics-explained/index.php/First_and_second-generation_immigrants_-_a_statistical_overview)
- Eurostat (2011), *Migrants in Europe - A statistical portrait of the first and second generation* <http://ec.europa.eu/eurostat/web/products-statistical-books/-/KS-31-10-539>
- Eurostat (2011), *Indicators of Immigrant Integration - A Pilot Study*  
<http://ec.europa.eu/eurostat/web/products-statistical-working-papers/-/KS-RA-11-009>
- Eurostat, *Asylum statistics* (online publication) [http://ec.europa.eu/eurostat/statistics-explained/index.php/Asylum\\_statistics](http://ec.europa.eu/eurostat/statistics-explained/index.php/Asylum_statistics)
- Eurostat, *Residence permits statistics* (online publication) [http://ec.europa.eu/eurostat/statistics-explained/index.php/Residence\\_permits\\_statistics](http://ec.europa.eu/eurostat/statistics-explained/index.php/Residence_permits_statistics)
- Flood, L. and Ruist, J. (2016), *Migration, en åldrande befolkning och offentliga finanser*. SOU 2015:95 - <http://www.regeringen.se/contentassets/6a0373dacf97488d8aae6b5785e46583/migration-en-aldrande-befolkning-och-offentliga-finanser-sou-201595>
- Hainmueller, J., Hangartner, D. and Pietrantuono, G. (2015), *Naturalization fosters the long-term political integration of immigrants*. PNAS, vol. 112, no. 41, 13 October 2015 - [www.pnas.org/cgi/doi/10.1073/pnas.1418794112](http://www.pnas.org/cgi/doi/10.1073/pnas.1418794112)
- Hainmueller, J., Hangartner, D. and Lawrence, D. (2016), *When lives are put on hold: Lengthy asylum processes decrease employment among refugees*. Science Advances, Vol. 2, no. 8, 03 Aug 2016 - <http://advances.sciencemag.org/content/advances/2/8/1600432.full.pdf>
- Heath, A. and Richards, L. (2016), *How do European differ in their attitudes to immigration*. - <http://csi.nuff.ox.ac.uk/wp-content/uploads/2016/06/CSI-24-Attitudes-to-Immigration.pdf>
- IAB (2015a), *Flüchtlinge und andere Migranten am deutschen Arbeitsmarkt: Der Stand im September 2015*. Aktueller Bericht 14/2015
- IAB (2015b), *Qualifications and labour market integration of refugees: overview of current state of research*. 10 Dec 2015
- IAB (2016), *Typisierung von Flüchtlingsgruppen nach Alter und Bildungsstand*, IAB Kurzbericht 6/2016.,
- ICF (forthcoming 2016), *Evaluation of the application of the recast Qualification Directive (2011/95/EU)*.
- IFOP-FEPS (2015), *Survey: How West Europeans face the migrant crisis?* - <http://www.feps-europe.eu/en/publications/details/348>
- ILO (2014). *Assessment of the impact of Syrian refugees in Lebanon and their employment profile*. International Labour Organization Regional Office for the Arab States, Beirut, April 2014.

ILO-MPI (2014a), *Moving up or standing still? Access to middle-skilled work for newly arrived migrants in the European Union*. Washington, DC and Geneva: Migration Policy Institute and International Labour Office

ILO-MPI (2014b), *Aiming Higher: Policies to get immigrants into middle-skilled work in Europe*. Washington, DC and Geneva: Migration Policy Institute and International Labour Office

IMF (2016), *The refugee surge in Europe: Economic challenges*. IMF Staff Discussion Note, January 2016

IOM-Gallup (2015), *How the world views migration*, IOM Migration Research Division, Geneva, January, 2015 - [http://publications.iom.int/system/files/how\\_the\\_world\\_gallup.pdf](http://publications.iom.int/system/files/how_the_world_gallup.pdf)

IPSOS MORI (2014), *Perceptions and Reality* - [https://www.ipsos-mori.com/DownloadPublication/1634\\_sri-perceptions-and-reality-immigration-report-2013.pdf](https://www.ipsos-mori.com/DownloadPublication/1634_sri-perceptions-and-reality-immigration-report-2013.pdf)

IPSOS MORI (2016), *Global Views on Immigration and the Refugee Crisis*, July 2016 - <https://www.ipsos-mori.com/researchpublications/researcharchive/3771/Global-study-shows-many-around-the-world-uncomfortable-with-levels-of-immigration.aspx>

Jolly, S.K. and DiGiusto, G.M., *Xenophobia and Immigrant Contact: British Public Attitudes Toward Immigrants*. APSA 2009 Toronto Meeting Paper - <http://ssrn.com/abstract=1452208>

Jolly, S.K. and DiGiusto, G.M. (2014), *Xenophobia and immigrant contact: French public attitudes toward immigration*, *The Social Science Journal*, Volume 51, Issue 3, September 2014, Pages 464-473 - <http://www.sciencedirect.com/science/article/pii/S0362331913001468>

Liebig, T. and F. Von Haaren (2011), "Citizenship and the Socio-economic Integration of Immigrants and their Children: An Overview across European Union and OECD Countries", in OECD, *Naturalisation: A Passport for the Better Integration of Immigrants?*, OECD Publishing, Paris, <http://dx.doi.org/10.1787/9789264099104-4-en>.

Liebig, T. and T. Huddleston (2014), "Labour Market Integration of Immigrants and their Children: Developing, Activating and Using Skills", in *International Migration Outlook 2014*, OECD Publishing, Paris, [http://dx.doi.org/10.1787/migr\\_outlook-2014-5-en](http://dx.doi.org/10.1787/migr_outlook-2014-5-en).

Fernandez-Huertas Moraga, J. (2016), *Can market mechanisms solve the refugee crisis?*, IZA World of Labor, 2016

OECD (2008), *Jobs for Immigrants (Vol. 2): Labour Market Integration in Belgium, France, the Netherlands*

and Portugal, OECD Publishing, Paris, <http://dx.doi.org/10.1787/9789264055605-en>.

OECD (2011), *Naturalisation: A Passport for the Better Integration of Immigrants?*, OECD Publishing, Paris, <http://dx.doi.org/10.1787/9789264099104-en>.

OECD (2015), *Is this humanitarian migration crisis different?* Migration Policy Debates no. 7, September 2015 - <https://www.oecd.org/migration/Is-this-refugee-crisis-different.pdf>

OECD (2016a), *Making Integration Work – Refugees and Others in Need of International Protection*. OECD Publishing, Paris.

OECD (2016b), *International Migration Outlook 2016*. OECD Publishing, Paris.

OECD (2016a forthcoming), *Making Integration Work – The Assessment and Recognition of Foreign Qualifications*. OECD Publishing, Paris.

OECD (2016b forthcoming), *What are the implications of the refugee crisis for intergovernmental fiscal relations?*. OECD Publishing, Paris.

OECD and European Commission (2015), *Settling In – Indicators of immigrant integration*, OECD Publishing, Paris.

Peschner J. (forthcoming 2016), "Labour market performance of refugees in the EU". DG Employment Working Paper

Rich, A.-K. (2016). *Asylerstantragsteller in Deutschland im Jahr 2015: Sozialstruktur, Qualifikationsniveau und Berufstätigkeit*. BAMF-Kurzanalyse 3/2016, German Federal Office for Migration and Refugees, Nuremberg.

Standard Eurobarometer no. 84, Autumn 2015, First results

Standard Eurobarometer no. 85, Spring 2016, First results

Stave, S. E.; Hillesund S. (2015). *Impact of the Syrian refugee crisis on the Jordanian labour market*.

Stibbard, P. (1999), *Labour market dynamics: A global survey of statistical activity*, International Labour Organization (ILO), Employment and Training Papers 38.

TARKI (2015), *Attitudes towards refugees, asylum seekers and migrants: First results*. October 2015 - [http://www.tarki.hu/hu/news/2015/kitekint/20151203\\_refugee.pdf](http://www.tarki.hu/hu/news/2015/kitekint/20151203_refugee.pdf)

TIPIK (forthcoming 2016), *Final Overall report on the transposition of Directive 2011/95/EU*

UNHCR (2013), *A New Beginning: Refugee Integration in Europe*. UNHCR Bureau for Europe, September 2013 <http://www.unhcr.org/protection/operations/52403d389/new-beginning-refugee-integration-europe.html>

UNHCR (2015), *Mid Year Trends 2015* - [www.unhcr.org/56701b969.html](http://www.unhcr.org/56701b969.html)

UNHCR (2016), *Global Trends in 2015*

Wößmann, L (2016). Bildung als Schlüssel zur Integration: Nur eine realistische Flüchtlingspolitik wird Erfolg haben. *ifo Schnelldienst* 69 (01), 21-24

## CHAPTER 4

# The labour market implications of ICT development and digitalisation

### INTRODUCTION <sup>(235)</sup>

This chapter looks at the possible labour market implications of the development of Information and Communication Technology (ICT), the digitalisation of the economy and the automation/robotisation of tasks <sup>(236)</sup>. It reviews existing literature and evidence on how digitalisation and automation/robotisation can affect employment, productivity and growth, and whether this may result in wage and job polarisation. It also considers the development of on-line platforms, the related opportunities for business development and job creation and the challenges that the development of on-line platforms may generate. It ends with a brief overview of how prepared EU societies are to face and benefit from digitalisation in terms of infrastructure and skills.

Since the mid-1990s, labour markets have been undergoing major structural transformation driven by technological progress, population ageing, globalisation and the greening of the economy. Technological progress in particular has had a big impact on the way goods and services are produced, bringing important changes to all sectors, from primary activities (agriculture, mining), to manufacturing (such as textiles and the car industry) and more recently to communication industries and the liberal professions. ICT development and

digitalisation are now expected to bring yet more radical changes to the production and delivery of goods and services.

ICT development and digitalisation may be generating an economic transformation that will affect all industries on a scale comparable to the impact of the steam engine during the first industrial revolution. For this reason, it has been called the Fourth Industrial Revolution (see Annex for an overview of previous industrial revolutions). Societies are expected to see fundamental changes in the way we live, work and relate to one another – changes of a scale, scope and complexity that may never have been experienced before (World Economic Forum, 2016; ILO, 2015). This has important implications for employment, education and skills, labour market institutions and social protection systems (e.g. the ability of legislation to adjust to changes in the way we work).

Digitalisation and the ensuing automation can generate new business opportunities through new production processes, new products and new markets. For instance, the development of mobile phone applications has created new opportunities for small and medium-sized enterprises (SMEs). These applications can reduce substantially the costs of starting a new business, and therefore encourage product innovation. They can help to reduce bureaucracy and administrative costs for businesses, with positive implications for job creation. Also, by allowing jobs to be broken down into component tasks, digitalisation enables the use of cheaper global options, creating more and wider global value chains.

These new technologies may also enlarge the possibilities for new ways of working and new types of activities. They may increase opportunities for self-employment, increase workers' autonomy, make career

<sup>(235)</sup> This chapter was written by Fabienne Abadie, Federico Biagi, Katarina Jaksic, Sonia Jemmotte, Simone Marino, Giuseppe Piroli and Ana Xavier with contributions from Margherita Bacigalupo, Marc Bogdanowicz, Nicholas Costello, Marie Lagarrigue, Guy Lejeune, Gianluca Misuraca, Maria Nyberg, Yves Punie and Ibrahim Kholilul Rohman.

<sup>(236)</sup> Automation is the replacement by computers of tasks formerly carried out by humans. Robotisation is the introduction of robots to carry out tasks.

patterns more diverse and help to reduce barriers to the labour market participation of women, older workers, those with family responsibilities and disabled workers (ESDE, 2014). New and more flexible working arrangements, in terms of both time and place of work, may allow workers to perform tasks in ways that best fit their abilities and preferences. Shorter working days, working from home, flexible work and other adjustments to traditional working patterns can give workers a better work-life balance. They may also make it easier to ensure skill matching through e-employment services (e.g. Eures) and therefore enhance the mobility of workers and improve the allocation of resources.

The impact of digitalisation is also visible in the role that ICTs are playing in increasing transparency, promoting anti-corruption and reducing red tape within governments and public authorities (e.g. e-government). Allowing citizens to track government activities and monitor the work of public administrations could, in turn, increase trust in public authorities as well as promoting good governance and strengthening reform-oriented initiatives (Bertot et al., 2010).

There are nevertheless some concerns about the potentially adverse effects of digitalisation on jobs and workers. One such effect is the reduction of a number of occupations by automation<sup>(237)</sup>. Digitalisation may render some production processes, tasks and professions obsolete. Digitalisation allows some tasks to be done by machines considerably faster than humans can do them, so is likely to change the allocation of tasks between humans and machines and the content of jobs. In extreme cases, robots will be able to take up the whole bundle of tasks that make up a job, so that that job disappears. Many examples of this can be found in the car industry but robots/machines now carry out a number of medical care<sup>(238)</sup> tasks previously done by humans. In several professions, digitalising tasks and breaking them down into smaller components allows tasks to be shared across a range of players and locations globally. One example is customer services in banks.

Some authors suggest that up to 50% of all professions at different skill levels could be automated to the extent that they disappear as now known (e.g. Frey and Osborne, 2013). Other studies expect a smaller impact (Arntz et al., 2016). Important questions therefore arise: which occupations or tasks are likely to disappear and which are likely to remain? Will the tasks and jobs that become obsolete be replaced by new, different tasks or jobs so that additional jobs are created? And which new skills will

be needed in these new tasks and jobs? This chapter looks at some of these questions.

In addition, concerns have been expressed<sup>(239)</sup> about the types of employment contracts likely to develop and the implications for wages and access to social protection (pension rights, health insurance, unemployment benefits and childcare).

Overall, there is evidence that societies want to embrace and pioneer further technological and digital progress. Governments are investing in infrastructure, policies and funding to enable further digitalisation (Yates et al., 2015) as a means of supporting new businesses and business models, increasing employment, productivity and GDP growth. Some believe that global value chains could create new kinds of work in the EU, as low-skilled jobs, displaced elsewhere in the globe, are replaced by higher-skilled and better paid jobs: they may even reduce business relocation and outsourcing because digitalisation reduces costs.

In this context, it is important that EU societies are prepared to reap the benefits of ICT development and digitalisation, notably in terms of infrastructure and skills. The need to draw the maximum benefits from ICT development and digitalisation through coordinated action at EU level is highlighted in the Digital Single Market strategy<sup>(240)</sup>, as well as in the Commission's Communication on 'Digitising European Industry – Reaping the full benefits of a Digital Single Market'<sup>(241)</sup>.

This chapter starts by looking at the potential impact on employment of ICT development and digitalisation, particularly substitution and compensation effects and wage and job polarisation (section 1). It then reviews the development of the online economy and the collaborative economy (section 2) before assessing how prepared EU countries are to face and benefit from the digital revolution (section 3).

## 1. THE IMPACT OF ICT DEVELOPMENT AND DIGITALISATION ON EMPLOYMENT

### 1.1. The scope of the economic transformation due to ICT development and digitalisation

Rapid ICT development and digitalisation can be expected to have major consequences for job creation, business innovation, new services and industries, productivity and growth. Some trends can already be observed, as summarised below.

- **Job creation.** Between 2003 and 2013 employment in ICT occupations grew between 16%

<sup>(237)</sup> SWD(2016) 51 final 'Key economic, employment and social trends behind a European Pillar of Social Rights'. ILO (2015) 'World Employment and Social Outlook—trends 2015': [http://www.ilo.org/wcmsp5/groups/public/---dgreports/---dcomm/---publ/documents/publication/wcms\\_337069.pdf](http://www.ilo.org/wcmsp5/groups/public/---dgreports/---dcomm/---publ/documents/publication/wcms_337069.pdf)

<sup>(238)</sup> E.g. WebMD and NetDoctor.

<sup>(239)</sup> For example the UK government recently announced a six-month review of modern working practices and is setting up a new unit to review new types of work contracts.

<sup>(240)</sup> COM (2015) 192 final, 6.5.2015.

<sup>(241)</sup> COM (2016) 180 final, 19.4.2016.

and 30% for 25 European countries (OECD, 2014) and is expected to continue to do so <sup>(242)</sup>. Over the last decade, an extra 2 million ICT specialist jobs have been created, one million in the last three years alone. It has been estimated that 4 to 5 jobs are created in the economy for each new ICT job (European Commission, 2016; Moretti, 2012). The demand for medical robotics is expected to grow massively over the next few years, leading to a 21-24% increase in new jobs associated with the manufacturing and marketing of service robots (IFR, 2013). Demand for skilled ICT professionals is already outstripping the supply: 39% of companies that recruited or tried to recruit ICT specialists in 2014 reported difficulties in filling the vacancies. Latest estimates suggest that by 2020 there could be around 756,000 unfilled vacancies for ICT specialists in the EU (Hüsing et al., 2015). Increasingly these specialist jobs are created outside the ICT sector, in sectors such as the automotive industry. Over half of ICT professional jobs are now outside the ICT sector, as the whole economy becomes digital.

- **Business innovation.** In OECD countries, more than 95% of businesses have an online presence. ICT tools are increasingly used by companies to promote business processes and improve efficiency. They are changing business strategies and creating new opportunities for business (see section 3).
- **Emergence of new services and industries.** Both public and private services are benefiting from ICT development. New economic sectors are appearing, such as the app industry. Facebook apps alone created over 182,000 jobs in 2011 (DIGITS, 2011). Some governments (e.g. in Moldova) have shifted their IT infrastructure into the Cloud and launched mobile e-services for citizens and businesses (The World Economic Forum, 2013).
- **Productivity.** In the EU, the slow-down in productivity growth in the last 15 years has been attributed to the limited size of the ICT sector and insufficient adoption of ICT. As a result, the contribution of ICT to labour productivity in Europe fell from 1.3 percentage points (pps) for the period 1980-1995 to 0.9 pps for the period 1995-2004 (Van Ark et al., 2008). By contrast, in the US over the same period the contribution of ICT went up from 1 to 2.2 pps. A study of firms in 13 European countries between 1998 and 2008 found that a 10% increase in ICT capital was associated with an increase in output of between 0.9% and 0.23%. Various studies have shown a significant relationship between ICT investment intensity and sales per employee for large firms. Moreover, ICT

investment has a greater positive effect on productivity when coupled with investment in complementary assets, such as organisational and human capital (Brynjolfsson, 2003; Bloom et al., 2012). The Annex to this chapter reviews in more detail the impact of ICT development and digitalisation on productivity.

- **Contribution to GDP Growth.** A 10% increase in broadband penetration has been found to increase economic growth from a low of 0.24% to a high of 1.50% (The World Bank, 2013). ICT investment was found to have contributed to one fifth of all economic growth in the EU during the period from 1995 to 2010. For the period 2005-2010, one third of all EU growth has been traced back to investment in ICT (Koutroumpis et al., 2012).
- **New ways of working.** With the rise of the collaborative economy, more and more individuals can work using digital platforms (see section 3).

To understand better how ICT development and digitalisation lead to such outcomes, it is useful to look at some key technological developments in this area. A key technological development that has changed the economic model of many companies and generated a new typology of jobs is the use of new types of algorithms. The '*algorithmic revolution*' (Martin and Zysman, 2016) has allowed the development of digital platforms for the exchange of services and goods including labour. It has also transformed traditional companies by enabling them to manage their business using digital processes. This has cut costs and facilitated the entry of newcomers into the market. Cloud computing <sup>(243)</sup>, for example, has radically reduced the costs of using ICT tools.

More specifically, three factors combined can explain the recent transformation: 1) the falling prices of IT tools; 2) the fact that ICT can boost labour productivity and increase efficiency; and 3) the increased usability of ICT over the last decade.

Users of technology – individuals, SMEs, start-ups and bigger corporations – have benefited from a reduction in monetary and non-monetary barriers to the use of ICT. These processes have fostered business innovation, the production of new goods and therefore job creation, and have increased labour productivity. They have drastically changed the way in which people communicate and exchange information and knowledge.

<sup>(243)</sup> Cloud computing is a type of internet-based computing that provides shared processing resources and data to computers and other devices on demand. It is a model for enabling ubiquitous, on-demand access to a shared pool of configurable computing resources (e.g., networks, servers, storage, applications and services), which can be rapidly provisioned and released with minimal management effort. Cloud computing and storage solutions provide users and enterprises with various capabilities to store and process their data in third-party data centres. It relies on sharing of resources to achieve coherence and economies of scale, similar to a utility (like the electricity grid) over a network.

<sup>(242)</sup> Namely: Austria, Belgium, the Czech Republic, Denmark, Estonia, Finland, France, Germany, Greece, Hungary, Iceland, Ireland, Italy, Luxembourg, the Netherlands, Norway, Poland, Portugal, the Slovak Republic, Slovenia, Spain, Sweden, Switzerland, Turkey, and the UK.

The existence of digital platforms is an example of the potential of ICT and digitalisation. Digital platforms are a mixture of different technologies – related to the internet, computation and data usage – and their success lies in the ability to connect software, hardware, operations and networks. Digital platforms can also facilitate the growth of other digital platforms. For instance, many of the current internet platform firms use Amazon Web Services. The ecosystem generated by digital platforms is a source of value in itself and regulates the terms by which the different actors can take part in it.

ICT has also supported the emergence of a globalised market in goods and services. Whether through computer-based logistics systems that help firms manage complex globalised supply-chains, through increased communication capability for managers, or through software that facilitates the organisation of business activities in dispersed locations, ICT has not only enhanced communication systems, but also contributed significantly to cutting costs and expanding businesses.

By improving supply chains, providing information on potential economic opportunities and reducing communication costs, ICT is allowing businesses – and indeed most organisations – to rearrange inputs (labour and capital) as never before<sup>(244)</sup>. These new globalised production chains enable enterprises to specialise in what they are good at and contract out what they are not good at, or find too expensive to do themselves.

At the same time, advances in technology can be expected to reduce the use of some of the outsourcing processes of the past. At present, manufacturing remains highly concentrated in large factories. Components and finished goods are transported at great cost and with high impact on the environment. Offshoring and outsourcing have made manufacturing plants bigger and lengthened the distances goods travel. New technologies such as robotics and 3D printing could radically change this, making it possible to manage capacity and demand flexibly through internet-linked networks of small, localised manufacturers (MIT, 2014).

While the acquisition and application of technology is a key factor in achieving economic transformation, economic activities are themselves a source of technological progress. Economic growth, economic transformation and technological change are interlinked and reinforce each other (Ibrahim, 2012).

<sup>(244)</sup> ILO (2016) *Guidance on "decent work in global supply chains": Conclusions of the International Labour Conference 2016* [http://www.ilo.org/wcmsp5/groups/public/---ed\\_norm/---relconf/documents/meetingdocument/wcms\\_497555.pdf](http://www.ilo.org/wcmsp5/groups/public/---ed_norm/---relconf/documents/meetingdocument/wcms_497555.pdf) and <http://www.ilo.org/ilc/ILCSessions/105/committees/supply-chains/lang--en/index.htm>.

## 1.2. The substitution and compensation effect of technological progress and digitalisation

This section looks at the relationship between ICT on the one hand, and employment levels and composition on the other. Economic theory identifies two main effects of technological change on employment at firm level: the substitution effect and the compensation effect. According to economic theory<sup>(245)</sup>, process innovation and organisational change can lead to capital-labour substitution, or the substitution effect, where ICT-driven innovations such as robots directly replace human workers. The compensation effect is where technological progress leads to job creation through product innovation, commercialisation of new products and demand for new equipment. In addition, lower production costs and prices may increase demand for a firm's products. This generates higher production and therefore increases employment. Both effects (substitution and compensation) combine to produce the net employment effect.

While generating jobs, the compensation effect is often accompanied by changes in the skill composition of labour demand. In the case of ICT and digitalisation this is likely to favour the highly skilled, with potential consequences for skill mismatch, unemployment and ultimately growth. This is because, first, the input of high-skilled workers is fundamental to R&D and innovation; and second, innovative firms often participate in the global economy, and human capital is necessary for firms to compete in that space.

Substitution and compensation effects interact in a number of ways:

1. Digital technologies allow automatising of some tasks, especially those that involve repetitive and standardisable activities. These activities can be more productively performed by "machines" (i.e. ICT capital, both hardware and software, and robots). Therefore, there is task reallocation between workers and "machines" (and hence the task content of jobs), which in some cases can take up the whole bundle of tasks that make up a job profile so that the job disappears (e.g. robots have replaced workers in the automobile industry);
2. Digital technologies allow the transfer of many tasks across space with close to zero marginal costs. This applies both to new tasks (e.g. programming) and traditional tasks (e.g. translation). In both cases, workers in one country/region are at risk of substitution by workers who live in places where labour costs are lower, and/or by ICT capital in areas where the level of technological advance is higher. However, the emergence of a larger pool of potential employers

<sup>(245)</sup> For example, in Schumpeterian models of creative destruction, faster innovation is accompanied by faster obsolescence of skills and, hence higher labour turnover and (structural) unemployment.

could compensate for the higher risk of substitution;

3. Increased digitalisation brings with it the need (and demand) for new job profiles (e.g. ICT specialists), while also affecting the skill-competence requirements across all sectors and within the general population. Now even traditional jobs (e.g. secretary, accountant, lawyer) now require some digital competences. More generally, digital skills and competences cannot function in isolation; the ICT-driven knowledge economy requires individuals not only to be able to deal with digital technology but also to possess transferable skills and competences that can be applied to a broad range of occupations and sectors. Overall, the digitalisation of the economy requires a re-skilling and up-skilling of the labour force. These effects can be seen as stimuli to human capital accumulation arising from the demand side that induce a response from the supply side; the extent of that response will determine the extent to which the substitution and compensation effects offset each other;
4. ICT provides the technology that reduces transaction costs and information asymmetries in trading. This is reflected in the importance of platforms and in the rise of the collaborative economy. From a substitution vs. compensation perspective, the main issues are the extent to which labour platforms: i) increase efficiency in the labour matching process (i.e. enlarge the size of the labour market and matching efficiency); ii) reinforce or mitigate the effects of globalisation (i.e. the trading of tasks between more and less developed areas); iii) stimulate or delay capital-labour substitution (due to the effect of point ii); and iv) affect wage and job polarisation;
5. ICT acts as a driver of organisational change<sup>(246)</sup> and leads to gains in productivity especially if coupled with investment in complementary assets such as organisational change and human capital<sup>(247)</sup>. Human capital is an important driver of the diffusion of digital technologies. This can create complex feedbacks in the relationship between ICT and employment that further complicate the analysis in terms of substitution and compensation effects.

Theoretical macro models have been used to model and estimate the impact of technology change on employment. Due to the difficulty in directly measuring technological change, when analysing the relationship between technology progress and employment, many

<sup>(246)</sup> The literature that, in the last 15 years, has addressed the relationship between ICT, organisational change and human capital covers two main areas: a) the effect of work-practices on productivity and wage inequality; and b) the impact of ICT-induced changes on firms' organisational structure and productivity (see the work of Brynjolfsson and co-authors).

<sup>(247)</sup> This is the so-called Complementary Hypothesis, which goes back to Milgrom and Roberts (1990).

economists focus on indirect measures, such as those related to innovation. Different measures of innovation can be used. Some of them relate to inputs to the innovation process (such as R&D expenses or R&D intensity), while others refer to outputs such as patents or product<sup>(248)</sup>, process<sup>(249)</sup>, organisational<sup>(250)</sup> and marketing<sup>(251)</sup> innovations (OECD/Eurostat, 2005). This section focuses on process and product innovation because they are most clearly related to the substitution and compensation effects of innovation on employment.

Process innovation (a new or significantly improved production or delivery method) is the use or adoption of a new production or delivery method<sup>(252)</sup>. It tends to be labour-saving as it reduces the variable costs of production (i.e. the same output can be produced with lower variable costs or more output can be produced with the same variable costs). It is the type of innovation most often associated with capital-labour substitution<sup>(253)</sup>. Product innovation (a new or significantly improved good or service), improves firms' competitive positions and hence the demand for their products. This provides a positive stimulus to employment in innovating firms (possibly at the expense of non-innovating firms).

In addition, demand and therefore employment will increase in the industries which create the new capital goods (the 'machines') that may replace workers in other industries (while employment will decrease in the industries producing the old capital goods) (e.g. Vivarelli, 2007)<sup>(254)</sup>. Product and process innovation can also lead to higher profits for the innovating firms and these profits can be reinvested, thus supporting aggregate demand for other goods and services. This in turn can generate higher employment in the sectors producing and delivering such goods and services<sup>(255)</sup>.

<sup>(248)</sup> Defined as a good or service that is new or significantly improved. This includes significant improvements in technical specifications, components and materials, software in the product, user-friendliness or other functional characteristics.

<sup>(249)</sup> Defined as a new or significantly improved production or delivery method. This includes significant changes in techniques, equipment and/or software.

<sup>(250)</sup> Defined as a new organisational method in business practices, workplace organisation or external relations.

<sup>(251)</sup> Defined as a new marketing method involving significant changes in product design or packaging, product placement, product promotion or pricing.

<sup>(252)</sup> Since it includes new techniques, new equipment and new software, it is consistent with both embodied and disembodied technological progress.

<sup>(253)</sup> Note that process innovation can still have a positive indirect effect on employment in the following way. Higher productivity brought about by process innovation may lead to lower product prices which may in turn result in higher demand for the product and therefore higher employment. This may be especially the case when demand is responsive to price changes.

<sup>(254)</sup> Note that the general equilibrium effects would also show up at the meso and micro levels (even for non-innovating firms). This implies that these effects would bias downward the estimates of the substitution effects at the firm level.

<sup>(255)</sup> Whether these effects, and therefore the compensation effect, materialise is uncertain and depends upon: 1) future profits

The empirical evidence is generally consistent with the hypothesis that process innovation tends to be labour-saving, whereas invention, development and commercialisation of new products (including new equipment goods) tend to have a positive effect on the demand for labour and hence on employment growth. Existing studies also indicate that the effects of (product and process) innovation vary by firms' size and by sector <sup>(256)</sup>: large firms and firms in high-tech sectors tend to exhibit larger substitution effects.

However, empirical evidence on the specific relationship between ICT (digitalisation) and employment is limited. Only a few papers address it specifically and even fewer look at multiple countries. Studies based on macro or sectoral data often indicate that the substitution and compensation effects tend to cancel each other out (OECD, 2016; Falk and Biagi, 2015), or find that ICT usage by individuals and firms is associated with employment growth (Evangelista et al., 2014). Studies based on firm-level data find that internet-related product or service innovations and ICT firm-wide applications tend to be positively associated with employment growth (Koellinger, 2008; Atasoy, 2013) or do not find evidence that ICT has had a significant negative substitution effect on employment at the firm level (Pantea et al., 2014) <sup>(257)</sup>.

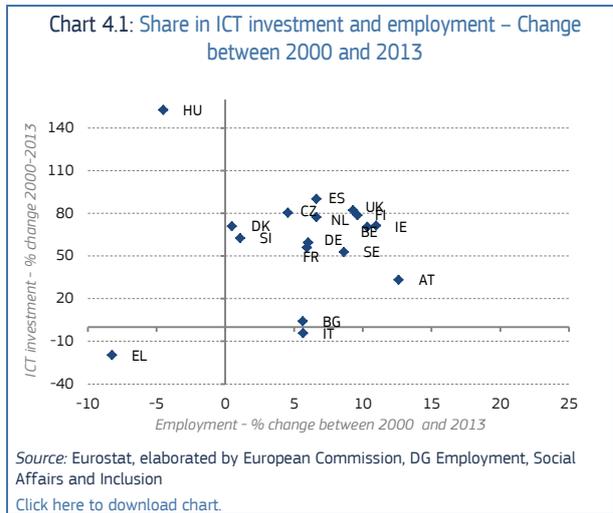
**Chart 4.1**, showing percentage changes in ICT investment and employment, suggests (reassuringly) that higher ICT investment is not associated with a reduction in employment. In other words, ICT development and digitalisation do not appear to have led to labour substitution. This may not hold true, however, for every sector or occupation.

---

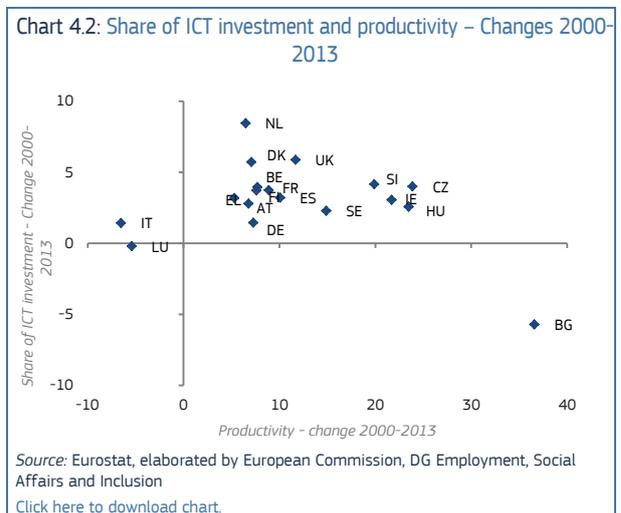
and whether and where they are invested; and 2) the elasticity of demand and of substitution between labour and capital. If profits are reinvested in activities related to process innovation there is a possibility that they will reinforce the labour substitution effect.

<sup>(256)</sup> The level of data aggregation at which the analysis of the relationship between innovation and employment is conducted plays an important role. Firm-level data can be useful, as it measures the innovation input (R&D expense) or output (product, process innovation and patents) directly, and often data is collected for multiple periods of time (which allows researchers to control for some unobservable factors). However, it is not well fitted to capturing more complex or aggregate effects such as "business stealing" effects (see Greenan and Guellec, 2000).

<sup>(257)</sup> For more information on the data used in the following two charts and other data on the ICT sector, see the Annex to this chapter.



**Chart 4.2**, using ICT investment share and productivity measured as real labour productivity per person (index 2010=100 by Eurostat), indicates a positive, although weak, correlation between these variables .



In sum, existing studies do not support the hypothesis that ICT developments have so far produced a loss in employment. Instead, ICT development and digitalisation have in overall terms had a positive or neutral effect on employment and a positive effect on productivity. However, that may change in the future, given the current pace of technological development in artificial intelligence and machine learning.

### 1.3. Skill-Biased Technological Change vs. Routine-Biased Technical Change: implications for wage and job polarisation

The labour market impact of digitalisation can be analysed using the Skill-Biased Technological Change (SBTC) hypothesis (Hornstein et al., 2005; Acemoglu, 2002; Krusell et al., 2000). This hypothesis is based on the assumption that technological change such as ICT and digitalisation, by improving the productivity of capital, increases the relative demand for skilled labour because this is more complementary to capital than unskilled labour. At the core of the SBTC hypothesis is the assumption that technological

change is not factor-neutral, as in standard neoclassical growth models <sup>(258)</sup>.

The hypothesis that ICT and digitalisation induce an increase in the demand for skilled labour relative to unskilled labour suggests, other things being equal <sup>(259)</sup>, an increase in the return to education. It also suggests higher wage and employment/unemployment differentials between skilled and unskilled. Many empirical studies have provided estimates for the increase in the (pre-tax) wage premium for higher education <sup>(260)</sup> or the increase in (pre-tax) wage inequality <sup>(261)</sup>.

Some authors have argued that it is important to disentangle the effects attributable to SBTC from those arising from increased trade and globalisation or from changes in labour market institutions such as the change in minimum wages and unionisation <sup>(262)</sup> (Card et al., 2004; Koeninger et al., 2004; Jaumotte and Osorio-Buitron, 2015). Other studies, investigating the potential rigidity of EU labour markets <sup>(263)</sup>, have looked at the unemployment consequences of ICT-induced SBTC, taking into account demographic change, shifts in the educational composition of the workforce and the role of labour market institutions (Biagi and Lucifora, 2008).

The relationship between skill-biased technological change and digitalisation can be summarised as follows:

1. The SBTC hypothesis postulates that improvements in technology in the ICT-producing sector will affect the whole economy through direct and indirect mechanisms;
2. This generates an increase in the returns to ICT capital accumulation and to the accumulation of complementary factors such as skilled labour, which in turn can induce investment in human capital;
3. Depending on the 'race' between ICT-induced technological change and investment in human capital (Goldin and Katz, 2008), these labour demand and labour supply effects will determine the evolution of the skill premium and wage inequality (inequality and the returns to education would increase if demand factors prevail);
4. Labour demand and supply evolution will also determine employment patterns; however in this case both supply and demand factors go in the same direction and lead to higher employment of skilled workers;
5. The increased demand for skills and competences brought about by the ICT revolution is compatible with the increase in residual wage inequality <sup>(264)</sup> observed in many countries.

Some authors consider that the SBTC hypothesis accounts for the wage and employment patterns observed in the US in the 1980s. However, the hypothesis does not appear to explain fully the wage and employment patterns observed in other countries or other periods. In particular, the SBTC hypothesis cannot account for the wage and employment patterns observed in the US after 1990, and particularly the fall in the wage differential between the first and the fifth decile <sup>(265)</sup> observed during the 1990s. It also cannot explain the drop in employment in middle-skilled jobs and the increase in high-skilled and low-skilled occupations observed during the same decade.

A proposed revised version of the SBTC hypothesis was therefore developed, often referred to as **Routine-Biased Technological Change** (RBTC) (Autor et al., 2003; Acemoglu and Autor, 2011). According to the RBTC hypothesis, the production process can be defined in terms of tasks, as opposed to capital and labour (and where labour is both high- and low-skilled). Job tasks are allocated to workers or to capital ('machines') depending on, first, the degree to which they are automatable (repetitive and replaceable by code and machines); second, whether they are separable from other tasks; and third, the relative

<sup>(258)</sup> The more general version of the SBTC hypothesis - the "canonical model" in Acemoglu and Autor, 2011 - does not impose substitution between ICT capital and unskilled labour and simply assumes that technological change favours skilled workers. In this case SBTC leads to wage growth for both skilled and unskilled workers but the gains are larger for the skilled workers, implying an increase in the skilled/unskilled wage gap. In Krusell et al. (2000) the SBTC hypothesis is interpreted as an increase in capital-skill complementarity. This can be interpreted as an intermediate step towards the models where capital (i.e. ICT capital) complements skilled labour and replaces unskilled labour (as in the RBTC hypothesis).

<sup>(259)</sup> In practice, the ceteris paribus condition is not fully exactly satisfied because of changes in the educational composition of the workforce.

<sup>(260)</sup> While some studies have looked simply at the characterisation of the wage premium (Katz and Murphy, 1992; Juhn et al., 1993; MaCurdy T. and T. Mroz, 1995; Beaudry and Green, 2000; Brunello et al., 2000) others have tried to separately estimate the impacts of labour demand changes separately from those arising from the labour supply (demographic change and changes in education composition; see Card and Lemieux 2001)

<sup>(261)</sup> See for example ILO (2015) World Employment and Social Outlook - Trends 2015 [http://www.ilo.org/wcmsp5/groups/public/---dgreports/---dcomm/---publ/documents/publication/wcms\\_337069.pdf](http://www.ilo.org/wcmsp5/groups/public/---dgreports/---dcomm/---publ/documents/publication/wcms_337069.pdf).

<sup>(262)</sup> On the interplay between inequality and different labour market policies, DiNardo et al. (1996) show that the reduction in real minimum wages and de-unionisation can account for more than one third of the increase in male wage inequality in the US (as measured by the standard deviation). See also Blau and Khan (1996) and Firpo et al. (2011) for more recent contributions.

<sup>(263)</sup> The intuition is that ICT-induced technological change affects mostly wages in the US and mostly unemployment in the EU, due to more rigid labour markets in the EU.

<sup>(264)</sup> Residual wage inequality is that part of inequality that cannot be accounted for by observable variables such as education, experience, age, gender and occupation type.

<sup>(265)</sup> This is the ratio between the median real wage and the average real wage of the first decile. It is often used as a measure of lower tail inequality. Similarly, the ratio of the average real wage in the 9th decile and the median real wage (p90/p50) is considered a measure of upper tail inequality.

costs of using 'machines' and human beings <sup>(266)</sup>. In this context, 'machines' includes hardware, software and combinations of the two, such as robots.

The RBTC hypothesis is based on the idea that tasks can be categorised as either routine or non-routine, and either cognitive or manual <sup>(267)</sup> in content. Jobs are seen as bundles of tasks. The hypothesis is that computers and advanced machinery can more easily replace workers employed in jobs that are very intensive in routine tasks. These are tasks that are repetitive and can be easily codified and programmed into some form of algorithm. They are:

1. Routine manual tasks which involve repetitive physical labour that can easily be replicated by machines and automated; these are typical of production and operative occupations, such as assemblers and machine operators, usually performed by middle-skilled workers;
2. Routine cognitive tasks such as those involving gathering and processing of information. These tasks are characteristic of clerical and administrative occupations where middle-skilled workers are typically employed.

There are also non-routine manual and non-routine cognitive tasks:

1. Non-routine manual tasks are non-repetitive tasks of a physical nature, typical of low-skilled service occupations such as truck drivers, plumbers or janitors and some types of support care (cleaning, shopping). These tasks exhibit neither strong substitution nor complementarity with computers.
2. Non-routine cognitive tasks imply non-repetitive or non-codifiable analytic and interactive work. They are carried out mainly within managerial, professional and creative occupations and are usually performed by high-skilled workers. Tasks of this type cannot be easily replaced by machines. The hypothesis is that ICT developments and digitalisation tend to complement (and increase the output of) jobs involving non-routine cognitive tasks.

Therefore, the RBTC hypothesis predicts that ICT development and digitalisation lead to a decline in jobs that are rich in the routine component (manual or cognitive) and an increase in the number of jobs that are rich in the cognitive non-routine component. The theory does not make clear predictions about

<sup>(266)</sup> There is a clear distinction between tasks (which arise from the demand side) and skills (which are possessed by workers).

<sup>(267)</sup> In the pioneering paper by Autor et al. (2003) there was a distinction between a) cognitive vs. manual vs. interactive tasks and between b) routine vs. non-routine tasks. In Autor and Dorn (2013) the distinction between manual and interactive is abandoned and leaves the following possible task combinations: i) cognitive-routine; ii) cognitive-non-routine; iii) manual-routine and iii) manual-non-routine. This is the approach more prevalent in the literature (e.g. Eurofound, 2016).

employment in jobs that are mostly manual and non-routine, as these are not directly affected by the digital revolution (the indirect effects are considered below).

The effects of ICT-driven technological change on the demand for tasks are magnified by globalisation and free trade, since the ability to separate tasks and the availability of a technology through global trade allows for their outsourcing <sup>(268)</sup>.

### 1.3.1. Wage and job polarisation

The 'routinisation' hypothesis can help to explain job and wage polarisation <sup>(269)</sup>. Polarisation is a peculiar-shaped job or wage distribution in which over time many individuals concentrate at the extremes of the distribution.

**Wage polarisation** happens when wages tend to grow faster at the extremes of the distribution than at the centre <sup>(270)</sup>. Wage polarisation was observed in the US in the 1990s, when wages in the 9<sup>th</sup> decile of the distribution increased compared with the 5<sup>th</sup> decile, and wages in the 5<sup>th</sup> decile decreased compared with the 1<sup>st</sup> decile.

An increase in the demand for ICT-complementary skills, typically requiring higher education, tends to drive the wages of highly educated individuals up because such skills are relatively scarce. By contrast, a reduction in the demand for skills for which ICT provides valuable substitutes - typically those of individuals with intermediate levels of education - tends to drive the wages of those in the middle of the income distribution down as they are in excess supply. As for low-skilled labour, in some cases the demand for low skills will decrease due to substitution by ICT, with a direct negative impact on wages, while in others it will rise, due to the rise in demand for personal services in an affluent and ageing society. In this latter case, upward pressure on wages for low-skilled workers may not be observed because some of the displaced medium-skilled workers are now competing for jobs requiring less skill, counteracting the upward pressure coming from the demand side.

**Job polarisation** sees employment becoming concentrated at the extremes of the wage <sup>(271)</sup> distribution. This is because over time employment in

<sup>(268)</sup> Research has shown that these factors combined make outsourcing of middle-skilled occupation cheap and easy (e.g. Blinder, 2009).

<sup>(269)</sup> For complementary explanations see job polarisation as the result of globalisation (Blinder, 2009) or the result of high skilled consumption spillovers (Mazzolari and Ragusa, 2013).

<sup>(270)</sup> An interesting case of wage polarisation is the one observed in the US and discussed by Autor et al. (2006), where they show that monotone wage growth along the wage distribution during the period 1973-1988 has been followed by wage polarisation in the period 1988-2004.

<sup>(271)</sup> Other alternative dimensions/distributions to consider include job quality or education. However, the wage dimension is the one most often used to order jobs as it is continuous and allows for a comparison of wage and job polarisation.

high and low-wage jobs grows faster than employment at the centre of the wage distribution. This hypothesis is rationalised as follows:

1. Workers employed in jobs that involve manual routine tasks are likely to be replaced by machines. They typically have lower education and wages;
2. More generally, workers employed in jobs that have highly routine and standardised tasks are more likely to be replaced by technology. These workers tend to have an intermediate level of education and wages;
3. Workers employed in highly cognitive, non-routine and non-standardised jobs perform tasks that are difficult to replace by technology. In fact, in many cases their productivity is enhanced by ICT. These workers typically have higher education and higher wages, and the demand for such workers is increasing;
4. Workers involved in tasks that - in spite of being manual - are not easily performed or replaced by machines (such as those related to people care and education) will not be negatively affected by digitalisation. These may be workers with lower or intermediate education but the demand for such non-routine tasks appears to be growing. This demand is partly due to population ageing, partly due to the increased demand for personal services from the richer part of the population (Mazzolari and Ragusa, 2013) and partly due to the general equilibrium effects of ICT-induced technological change (Autor and Dorn, 2013) <sup>(272)</sup>.

Whether job polarisation is accompanied by wage polarisation depends on the structure of the respective labour market segments. It also depends on existing labour market institutions. Compared with the USA, for example, labour market institutions in Europe may make labour markets more rigid in terms of wages. This may explain the more substantial evidence of job polarisation rather than wage polarisation in Europe (Bertola and Ichino, 1995). As wages adjust less quickly to supply and demand shifts, the shifts show up in quantities (i.e. employment/unemployment). This might also lead to polarisation of unemployment. Middle-skilled individuals who are less in demand because of technological progress may not find employment in either high-skilled jobs (because they cannot perform the tasks required) or low-skilled jobs

<sup>(272)</sup> Technological change will increase productivity and reduce prices, which will boost purchasing power, providing a demand-driver to growth and employment. Applying a spatial equilibrium model, the authors find that local labour markets specialised in routine tasks adopted information technology, reallocated low-skilled labour into service occupations (employment polarisation), experienced earnings growth at the tails of the distribution (wage polarisation) and received inflows of skilled labour.

(because of wage rigidity or labour market frictions) <sup>(273)</sup>.

### 1.3.2. Empirical evidence on “routinisation” and wage and job polarisation in the EU

Analysis of industry level and individual level data for 12 EU countries in the period 1995-2007 does not show a generalised wage polarisation (Naticchioni et al., 2014). Mild wage polarisation has been found in the UK (Machin, 2011) and in Germany (Antonczyk et al., 2010; Dustmann et al., 2009).

Evidence from the European Labour Force Survey (LFS) for the period 1993-2010 reveals that some job polarisation has been occurring in all the EU countries considered with the exception of Finland and Luxembourg, where hours worked by low-wage workers have actually declined (Goos et al., 2014). The job polarisation hypothesis is also confirmed for selected OECD countries in the period 1990-2012, but such effects disappear in the long run (OECD, 2016). Evidence supporting job polarisation is also found for the USA, Japan and nine EU countries using EU KLEMS data over the period 1980-2004 (Michaels et al., 2014). Results suggest that industries that experienced the fastest growth in ICT investment also experienced the fastest growth in the demand for high-skilled workers and a fall in the demand for workers with intermediate levels of education.

Looking at wage and job polarisation in the EU and in individual Member States before the crisis (1995-2007) and during the crisis (2008-2010) there is some evidence that the crisis has added to the pre-existing polarisation for the EU as a whole: changes in employment across the wage distribution during the subsequent recession were much larger than those prior to the recession (Eurofound, 2013). However, when countries are analysed separately, large country differences emerge.

Job polarisation is observed in some countries but for many Member States there is evidence in favour of occupational upgrading in all sectors (Fernández-Macías and Hurley, 2016). Data covering the period 2013 Q2-2015 Q2 confirm a very mild upgrading with large cross-country differences (Eurofound, 2016).

<sup>(273)</sup> Note that some authors point to evidence indicating that the rise in demand for cognitive tasks in the US has started to decline as of year 2000, as a consequence of the GPT aspects of ICT reaching maturity. Beaudry et al. (2016) argue that the large cognitive skill-biased productivity-enhancing effects of the ICT revolution in the US were basically over in the year 2000. This means that the demand for higher skills has in fact started to decline in the US. The implication is that wages are stagnating overall, and that individuals with higher skills are now competing with individuals with middle and lower skills in jobs that require less cognitive tasks and more in-person tasks. This would imply that: 1) wage inequality is reduced; and 2) some of the lowest-skilled individuals are expelled from the market. It is not obvious that this type of interpretation applies to the EU.

For the USA, there is clear evidence of wage and job polarisation, at least for the period 1990-2000 (e.g. Firpo et al., 2013).

### 1.3.3. Looking to the future

Trying to forecast changes in employment is a very complex exercise because it requires forecasters need to predict the evolution of technology and of labour markets at the same time. The longer the time horizon considered, the riskier it is to draw conclusions <sup>(274)</sup>.

An interesting and pioneering attempt in this direction is the study by Frey and Osborne (2013) who use the US 2010 O\*NET dataset to compute an estimate of the overall employment impact of the ICT revolution in the US. Their work is influenced by the RBTC hypothesis and by recent developments in Computer Science <sup>(275)</sup> that allow the computerisation of non-routine cognitive tasks (such as those used by lawyers, doctors, accountants, financial analysts, law enforcers) or manual tasks (such as those used by truck drivers or workers employed in food manufacturing) – tasks that had previously been considered 'safe' from computerisation (see also Brynjolfsson and McAfee, 2014).

The authors calculate the likelihood that a given occupation will become automated in the future. Occupations are categorised as low vs. middle vs. high risk; no clear time span is provided. They conclude that about 47% of current US jobs face a high risk of substitution because of the ability of machines to replace humans in tasks that can easily be automated (possibly in the next two decades, starting with workers in transportation, logistics and administration support and followed by workers in services, sales and construction).

They also find that 'generalist occupations requiring knowledge of human techniques, and specialist occupations involving the development of novel ideas and artefacts, are the least susceptible to computerisation'. Such low-risk groups include most management, business and finance occupations (due to the role of social intelligence) and engineering and science occupations (due to the role of creativity). They also predict that, in future, computerisation will mostly substitute for unskilled labour – particularly in the service sector – putting an end to job polarisation in the USA (a fact already suggested by existing data).

Applying to the EU employment structure this method of calculating the likelihood of substitution for given occupations, Bruegel <sup>(276)</sup> found that the percentage of jobs at risk of substitution by ICT is even higher in Europe than in the US (54% compared with 47%), particularly in Southern Europe where employment in

occupations at high risk of substitution is higher. It is therefore important to equip the EU labour force with appropriate skills allowing workers to adapt to technological progress. European funds can be used for that purpose as part of regional Smart Specialisation Strategies.

The findings of Frey and Osborne have been challenged, on the grounds that they focus on jobs as opposed to tasks, which may be inappropriate. Arntz et al. (2016) argue that jobs are bundles of tasks, and even if some tasks are substitutable by 'machines' this does not imply that the whole job will disappear. Their own analysis of data from PIAAC – a survey of adult skills in 21 OECD countries – suggests that about 9% of jobs are at high risk of substitution <sup>(277)</sup> by 'machines', ranging from around 12% of jobs in Austria, Germany and Spain to around 6% in Finland and Estonia.

Countries that have a larger share of employment dedicated to occupations involving face-to-face interaction are less likely to suffer the consequences of the digital revolution. Across all countries, workers with the lowest level of education are those with the highest risk of displacement: 40% of workers educated only to lower secondary level are in jobs that have a high risk of automation, while the same is true for fewer than 5% of the workers educated to tertiary level. This underlines the importance of investing in skills and higher education.

In addition, it has been suggested that the distribution of skills among the workforce and the level of human capital are also important in determining the impact of ICT investment and organisational change.

Another important issue is the impact of robotisation on employment. Is increased robotisation reducing employment as robots replace labour? A firm-level analysis using data from the European Manufacturing Survey <sup>(278)</sup> shows the positive effects of robotisation on both labour productivity and employment. Key results include:

- companies using industrial robots more intensively are more efficient than those not using robots. They show significantly higher levels of labour productivity. The deployment of industrial robot applications in production leads to more efficient production processes, by reducing processing times and idle times while increasing process quality and competitive economies of scale;
- companies with a higher number of value-creating processes in-house show higher efficiency in terms of both labour productivity and total factor productivity;

<sup>(274)</sup> Different institutions are paying attention to this topic. See, for example, 'The future of work' by ILO.

<sup>(275)</sup> Mostly related to Big Data analytics and to advances in algorithms.

<sup>(276)</sup> See <http://bruegel.org/2014/07/the-computerisation-of-european-jobs/>.

<sup>(277)</sup> These are jobs for which at least 70% of tasks are automatable.

<sup>(278)</sup> European Commission, (2015) Analysis of the Impact of robotic systems on employment in the European Union. DG Communication Networks, Content and Technology.

- companies that deploy industrial robots in their manufacturing and production processes are less likely to relocate or offshore their production outside Europe;
- the use of industrial robots does not have significant negative effects on employment and employment growth, despite its positive effect on productivity. The increase in efficiency and competitiveness obtained by the deployment of industrial robots is either neutral, or stimulates employment growth at company level. Analysis shows a slight positive (though not statistically significant) effect of robot utilisation on employment<sup>(279)</sup>. Therefore, the implementation of industrial robots does not necessarily mean following the 'low road' of rationalisation by job cuts;
- the use of robots seems crucial to increasing firms' global competition capacity and Europe's ability to maintain and create jobs. In future, stiffer international competition may force companies that cannot increase their productivity and business outreach to close. Therefore, investing in technology can be an effective way to increase efficiency and maintain employment in Europe.

There is also evidence of the impact of robotisation at firm level, suggesting that: the continuous rise of operational manufacturing robots may improve the quality of jobs and strengthen global competitiveness; robotisation can improve safety and ergonomics; it can improve working conditions and reduce medical problems; and it can make systems more responsive and reduce lead times, by combining robot precision with human intelligence (Robotics VO, 2013; Lin et al., 2011; Surdilovic et al., 2010).

Data on industrial robots in 17 countries from 1993-2007 showed that increased use of industrial robots increased labour productivity and raised countries' average growth by about 0.4 percentage points (Graetz and Michaels, 2015). Robots increased both wages and total factor productivity. They did not have a major impact on total hours worked, but there was some evidence that they reduced the hours of work for low- and middle-skilled individuals.

To sum up, the evidence is that ICT development and digitalisation can have a positive impact on labour productivity across many activities. The effect of ICT development on employment also appears to be neutral if not positive – though this does not necessarily mean that there are no effects on the composition of employment or in particular sectors and occupations. The evidence also shows the complementarity between ICT, organisational capital and human capital.

<sup>(279)</sup> These results seem to provide some support for the hypothesis of compensation effect discussed in the previous section.

## 2. THE RISE OF ONLINE PLATFORMS AND THE COLLABORATIVE ECONOMY: NEW OPPORTUNITIES AND CHALLENGES

This section looks at the digital economy and specifically at the development of digital platforms in the context of the collaborative economy. The definition of the collaborative economy is 'business models where activities are facilitated by collaborative platforms that create an open marketplace for the temporary usage of goods or services often provided by private individuals' (COM(2016) 356 final; SWD (2016) 184 final)<sup>(280)</sup>. *Collaborative platforms* are typically transaction-based platforms, similar to the peer-to-peer e-commerce platforms founded in the early phase of the internet. Collaborative platforms have expanded peer-to-peer e-commerce into more complex service sectors, such as transport and accommodation, as a result of key technological improvements such as Cloud computing, the advent of algorithms and the capacity to manage and process Big Data. Digitalisation and digital platforms leverage the use of private assets (e.g. time, property, private cars) which their owners are not using fully all the time. While the collaborative economy brings new opportunities for consumers and entrepreneurs and has the potential to create jobs, some uncertainty and concerns remain about the rights and obligations of those taking part. These relate to, for example, lack of information on service providers, consumer and social protection and taxation. Some Member States have started to address these issues.

### 2.1. Platforms typology and relevance

#### 2.1.1. Activities in the collaborative economy

The collaborative economy involves three types of actors:

- service providers who share assets, resources, time and skills (e.g. private individuals offering services on an occasional basis ('peers') or professional service providers);
- users of these services; and
- collaborative economy platforms that connect providers with users and facilitate transactions between them, also ensuring the quality of these transactions e.g. through after-sale services (handling complaints), insurance services, etc.

Activities in the collaborative economy do not always involve financial remuneration. Providers may, for instance, receive financial contributions to cover costs incurred to provide a service intended to increase social innovation. Another example is 'time banking', which links people who want to share their time and skills.

<sup>(280)</sup> at [http://ec.europa.eu/growth/single-market/strategy/collaborative-economy\\_en](http://ec.europa.eu/growth/single-market/strategy/collaborative-economy_en)

The label ‘collaborative economy’ covers various types of platforms that share a number of characteristics but can have widely different policy and regulatory implications (for market access, taxation, consumer protection and liability, protection of personal data, labour matters, etc.) Also, some have a user base of a few hundred or thousand individuals, others of millions of people. Even within a type of service, say, ride services, the way the service is provided and the implications can differ. Ride services (e.g. Uber) differ from ride sharing (e.g. BlaBlaCar) and car sharing (e.g. Turo, formerly known as RelayRides). While they are all labour-intensive, ride services usually involve financial remuneration and profit, while car and ride sharing may have a wider range of aims (e.g. company while driving), and is seen as a way of sharing costs rather than necessarily making a profit. In addition, ride services have raised the issue of market access (i.e. licensing) and have provoked strong protests from incumbents, while car and ride sharing have not.

### 2.1.2. The extent of the platform phenomenon

There are no systematic quantifications of the size of the ‘collaborative economy’, in terms of the revenues or number of individuals directly involved, but emerging estimates indicate that it is sizeable (Codagnone et al., 2016). It has been estimated that collaborative economy platforms involve around 1% of the US workforce. A recent survey indicated that in the UK 11% of the population aged 15-75 (i.e. 5 million individuals) have found work at least once in labour platforms (Huws & Joyce, 2016). Another survey found that in 2013, about 29% of the British population had engaged at least once in a ‘collaborative economy’ transaction (Owyang et al., 2014). In Sweden, a survey shows that 24% of individuals aged 16-65 (1.4 million people) have looked for jobs in the collaborative economy, 12% (700,000) have worked through platforms at least once, 4% (245,000) worked through platforms every month and 3% (170,000) every week (Huws & Joyce, 2016). A recent study by the French government <sup>(281)</sup> estimates that in France, ‘Airbnb’ activities produce turnover of €2.5 billion and generate 13,000 permanent jobs.

At the end of 2015, there were at least 20 platforms worth more than USD 1 billion. Uber is valued at USD 50 billion <sup>(282)</sup> and is present in 230 cities in 60 countries. Airbnb is worth USD 20 billion, is present in 34,000 cities in 190 countries, and has had 35 million guests and 2 million listings since its launch in 2008 <sup>(283)</sup>. BlaBlaCar has expanded beyond France’s borders and has now recruited 10 million members in 13 countries.

<sup>(281)</sup> See “Economic Impact of Airbnb in France Grows to €2.5 Billion” at <https://www.airbnb.com/press/news/economic-impact-of-airbnb-in-france-grows-to-2-5-billion>.

<sup>(282)</sup> Valued at July 2015. See Wall Street Journal <http://www.wsj.com/articles/uber-valued-at-more-than-50-billion-1438367457>

<sup>(283)</sup> Valued June 2015 <http://nextjuggernaut.com/blog/airbnb-business-model-canvas-how-airbnb-works-revenue-insights/>

Though in its infancy, this new phenomenon increasingly covers both factor (capital and labour) and product markets (goods and services), and therefore the entire economy. Owyang (2014) and VB Profiles & Crowd Companies (2015) found that there are 17 billion-dollar companies in the collaborative economy globally, of which 14 are in the goods, space, money and transport sectors. Of the 17, 12 are US-based and 8 are in California. Other sectors, such as corporate, food, health and municipal, have yet to see large companies emerging.

Platforms enable individuals to provide work. As they grow in scale and complexity they continue to innovate (Zhu and Furr, 2016). If smartly incorporated within the existing labour market, platforms could increase transparency in the jobs market and increase the active labour force by efficiently matching work demand and supply. From this point of view, online or mobile labour market platforms are particularly interesting. Their impact is still limited (it has been estimated that they involve just 1% of the US and 3% of the UK workforce) but the growth in numbers of providers for certain platforms has been phenomenal in recent years: for instance, oDesk (now Upwork) saw the number of contractors per quarter increasing by approximately 1,000% between 2009 and 2013.

There are no statistics or large empirical studies to provide reliable information on the number of individuals employing their time and skills to deliver services through digital platforms under different labour arrangements in the EU. A selective review of platforms identified a total of 52 million registered individuals. This could be an under-estimate if some platforms are not included, or an over-estimate if individuals are registered with several platforms (Codagnone et al., 2016).

The limited evidence available on on-demand service providers’ profiles and their working conditions suggests that platform service providers:

- tend to be younger and more highly educated than the general population, with women overrepresented (but not on all platforms);
- may work long hours on several platforms, earning below or just above minimum wages - or may use the collaborative economy earnings as an income top-up, putting in only a few additional working hours;
- may have no social protection or risk insurance.

More evidence is necessary to understand if these features are common to most platforms and services, or are specific to some. It is also important to establish how many service providers use the collaborative economy for their main income, as opposed to top-up income.

Online and mobile labour market platforms have the potential to improve the matching process between

labour demand and supply by reducing transaction costs and information asymmetries (Codagnone et al., 2016). However, some field experiments (Pallais, 2014) have shown that service providers with referrals are more likely to be hired than those without referrals. This reflects a hiring bias and hiring inefficiencies, since decisions not to hire potentially suitable workers are made solely on the basis of referrals. Another study (Stanton and Thomas, 2014) showed that inexperienced contractors are more likely to find a job on a platform (and earn more) if they are affiliated with an intermediary agency. Such agencies screen service providers and communicate with users, thus reducing information frictions.

Empirical evidence on the net effects of labour platforms on employment and incomes is limited. It is hard to tell whether their impact on the labour market is positive (e.g. creating a large number of jobs, including for the inactive and unemployed, reducing income inequality) or negative (e.g. leading to further job or wage polarisation, increasing income inequality) or both, or either, depending on circumstances. Evidence is also limited on aggregate social welfare effects and whether labour market efficiency and production efficiency increase. More data and research are therefore needed <sup>(284)</sup>.

### 2.1.3. Implications of digital platforms for the future of work and business

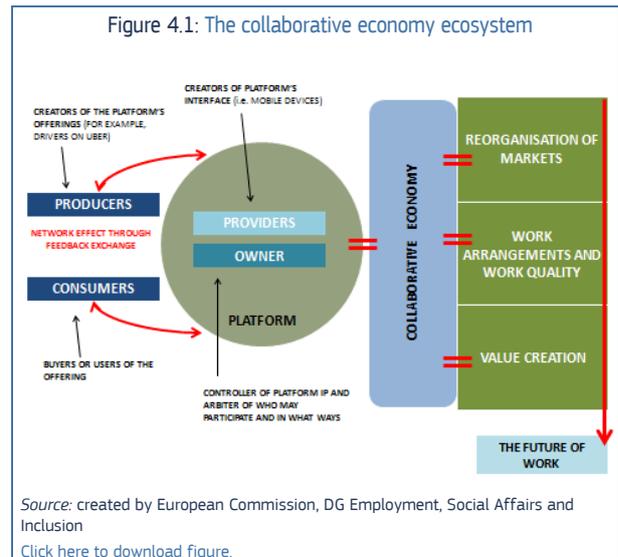
The existence of platforms is not a novelty but ICTs have played a big role in the emergence of digital platforms, and of companies such as Alibaba, Uber, Etsy, Salesforce and Airbnb. The use of computable algorithms and data clouding has initiated a profound reorganisation of sectors as diverse as service, manufacturing, consumption and leisure. These technologies have led to drastic cost reductions for businesses and lowered barriers to accessing services, thus creating the infrastructure needed for this new ecosystem to grow (Figure 4.1).

There are three distinct but connected dimensions related to the potential transformative power of this economy model for both business and work:

- platforms are leading economic actors in the reorganisation of different markets and transform competition;
- platforms transform work arrangements and influence work quality; and
- their business models use strategies to secure value creation different to those of 'pipeline' businesses.

<sup>(284)</sup> Commission services are exploring different possibilities to collect data on digital platforms. For example, the "Community survey on ICT usage in households and by individuals", in 2017, will include two questions on digital platforms in accommodation and transport.

The infrastructure and rules introduced by platforms constitute the backbone of a new marketplace which brings together producers and consumers. As shown in Figure 4.1, the main actors of this ecosystem play different roles and sometimes shift rapidly from one to another. They include a) the producers or providers of goods and services (i.e. individuals or businesses), b) the consumers or users of the goods and services supplied (i.e. buyers), and c) the platforms that connect them. Additional players include infrastructure/interface providers (who develop the interfaces which allow platforms to operate) and platform owners (who control the platform IP and define the participation rules).



The interaction among these actors and their exchange of data and feedback produce the *network effect*. This is what creates value for the platform business. When an actor believes their needs can be met more efficiently elsewhere, they may defect and disrupt the platform's ecosystem, which increases volatility compared with traditional pipeline businesses <sup>(285)</sup>.

Pipeline firms usually have clearly defined customers and competitive strategies, and make a clear distinction between suppliers, customers and competitors. To create value, pipeline firms must control a linear set of activities - the value-chain model (Parker et al., 2016). In contrast, for platforms it is the community in which they operate and the resources of their members that determine interactions. Platforms tend to coordinate rather than exercise direct control over the resources 'traded' and platforms' assets are the network of producers and consumers they control. Hence platforms flourish

<sup>(285)</sup> Pipeline business is often used as a synonym of supply chain business management (Christopher, 1992). In this context, pipeline business is used to highlight the different characteristics of traditional business compare to platform management strategies, particularly in reference to management processes and the structural organisation of business. With pipeline management the company controls both a linear set of activities from the inputs it receives to the outputs produced and the process of production. This management strategy differs radically from the one adopted by platforms, as explained in the text.

when they succeed in facilitating external interactions. Their goal is the efficient governance of the ecosystem and maximising ecosystem value (rather than just customer value) by 'expanding the ecosystem in a circular, iterative, feedback-driven process' <sup>(286)</sup>. The higher the number of participants and interactions, the higher the value created and the easier it will be for consumers to access their chosen service (e.g. ride on Uber) and for producers to maximise profit (by finding a high number of consumers).

Some research shows that the presence of platforms, alongside pipeline businesses, may increase competition in certain activities, but other research seems to suggest the opposite <sup>(287)</sup>. For instance, Airbnb has become a serious competitor to conventional hotel chains <sup>(288)</sup>. The impressive growth of its market share and market value epitomises the potential of online markets (Table 4.1) and explains why pipeline giants in the US such as Walmart, Nike, John Deere and GE are all considering the possibility of introducing platform marketplaces alongside their established business model <sup>(289)</sup>.

Table 4.1: Airbnb successful growth

COMPANY	NUMBER OF ROOMS	FOUNDED	MARKET CAP	TIME TO 1M ROOMS	REAL ESTATE ASSETS
Airbnb	1M+	2008	€ 25B	7 YRS	€ 0
Marriott	1.1M	1957	€ 16B	58 YRS	€ 985M
Hilton	745K	1919	€ 19B	N/A	€ 9.1B
Intercontinental Hotel Group	727K	1988	€ 9B	N/A	€ 741M

*Note:* Data as of end of 2015; data accessed October 2016  
*Source:* Hagiu and Rothman (2016)  
[Click here to download table.](#)

As employment has only partially recovered from the prolonged EU economic crisis, a significant number of new jobs have already emerged around digital platforms. Hundreds of thousands of small vendors already use digital e-commerce platforms such as Alibaba, Amazon, and eBay to go global. Global estimates (data on the EU alone are not available) forecast that the collaborative economy could be worth an additional 2.4 trillion EUR (i.e. +2% of global GDP) and create 72 million new jobs (McKinsey Global Institute, 2015) <sup>(290)</sup>.

<sup>(286)</sup> Parker et al., 2016.

<sup>(287)</sup> For a discussion regarding the effects of digital platforms on competition see for instance Van Alstyne et al. (2016), Strowel and Vergote (2015) or Winston and Pénard (2015).

<sup>(288)</sup> Another example, in Denmark, a loss of 500,000 rides for taxis has been reported in the greater Copenhagen area for the period Jan-May 2016 vs 2015, corresponding to an estimated loss of more than 12 million EUR, which is attributed to Uber. <http://www.business.dk/transport/taxafirmaer-giver-uber-skyld-for-brat-fald-i-ture>.

<sup>(289)</sup> Parker et al., 2016.

<sup>(290)</sup> Alternative source, EU Parliament report estimates "potential economic gain linked with a better use of capacities (otherwise under-used) as a result of the sharing economy is estimated at €572 billion." [http://www.europarl.europa.eu/RegData/etudes/STUD/2016/558777/EPRS\\_STU\(2016\)558777\\_EN.pdf](http://www.europarl.europa.eu/RegData/etudes/STUD/2016/558777/EPRS_STU(2016)558777_EN.pdf).

Worldwide up to 540 million individuals could benefit from online platforms by 2025. As many as 230 million could shorten search times between jobs, while 200 million who are inactive or working part-time could work additional hours through platforms. Moreover, 60 million people could find work that more closely suits their skills or preferences, and another 50 million could shift from the informal to the formal sector. Countries with persistently high unemployment and low participation, such as Greece, Spain or Italy, could potentially benefit the most (McKinsey Global Institute, 2015).

This holds particularly true if one considers that *total job opportunities* are the sum of newly-created jobs (*expansion demand*) and jobs arising from the need to replace people (*replacement demand*). In the EU up to 2025, replacement demand is forecast to provide nine times more job opportunities than expansion demand (CEDEFOP, 2015). However, the net amount of new job creation in the future is likely to be concentrated in firms and new economic sectors, which will be transformed by the diffusion of online platforms. In addition, the pool of highly-qualified people could increase.

Digital platforms and the collaborative economy in general might evolve and diversify further to take full advantage of this pool of talent. The presence of highly-qualified workers could lead to further innovation in services and products offered and a boom in small-scale entrepreneurs, in which individuals (rather than corporations) are the main economic actors.

In this hypothetical future, different scenarios can be envisaged. On the one hand, the collaborative economy could improve matching between labour supply and demand. This, in turn, could reduce over-qualification rates. This could be particularly important for countries with high labour market segmentation. With more highly-skilled individuals and the integration of digital platforms into traditional and new firms' strategies, more diverse tasks could be carried out through the collaborative economy, granting the workforce smoother access to jobs which better fit their skills.

A survey of EMEA <sup>(291)</sup> countries conducted by Manpower (2015) found that 38% of employers in 42 countries had difficulties filling vacancies for specific skills profiles, while in the EU one in three employers reported difficulties in finding the right candidate. In theory the collaborative economy, by matching people with the right skills to suitable jobs, could increase employment by putting unemployed or inactive people into work.

This could improve the job prospects of millions of young people who are not in employment, education or training (NEETs): a LinkedIn survey indicated that 37%

<sup>(291)</sup> EMEA is a shorthand designation meaning Europe, the Middle East and Africa.

of young jobseekers worldwide thought that their current job did not allow them to utilise their skills fully or was not challenging enough. It could also benefit older workers and the long-term unemployed, allowing them to make use of their experience and skills, improve their economic prospects and increase their sense of engagement as productive members of society.

It has been argued <sup>(292)</sup> that the forms of employment created by the collaborative economy are a manifestation of more general trends which are linked to digitalisation and likely to change the nature of work. Platforms manage and monitor work; they use the data derived from online monitoring activities (including customer ratings) for setting targets and apply performance monitoring. They also create the potential for work to be carried out beyond the spatial and temporal boundaries of traditional workplaces, with services and goods, and therefore the labour force, available 24/7. This heterogeneous employment configuration is a clear sign of the complexity of the employment and business relationships guiding the development of this new phenomenon. One feature common to all the different platforms is uncertainty regarding earnings and working hours. The individuals working on platforms tend to work as service providers or contractors; they are required to be flexible and reliable, and often receive low remuneration.

Individual flexibility is often cited as an important advantage of working in the collaborative economy. The possibilities of setting one's own schedule, selecting tasks, and to a certain extent negotiating pay, may all function as a motivation for joining the collaborative workforce. However, evidence suggests that the situation may not be as bright (Codagnone et al., 2016), with platforms sometimes incentivising service providers to offer additional services in return. For instance, Uber 'surge prices' may encourage drivers to take more rides where demand exceeds supply, or provide guaranteed gross fares to selected drivers if they accept specific conditions (Rosenblat and Stark, 2015). Of course, service providers remain free to manage their own working time allocation.

While the main motivation of those providing occasional services via platforms is to obtain top-up income, service providers cannot always anticipate when they will make their earnings. For instance, in the USA, 42.9% of collaborative economy providers interviewed cite 'insufficient pay' as one of the reasons for leaving the collaborative economy <sup>(293)</sup>. In addition, exogenous economic shocks, such as a downturn in demand or a sudden change in consumer needs, may reduce business opportunities. Also, individual circumstances such as an accident or sickness are not regulated in the same way as in traditional businesses or standard work contracts. If risks are shifted in full to

<sup>(292)</sup> Huws, U. (2015) *Labour in the Digital Economy*. Monthly Review Press.

<sup>(293)</sup> Requests for Startups (2015) *The 2015, 1099 Economy Workforce Report*.

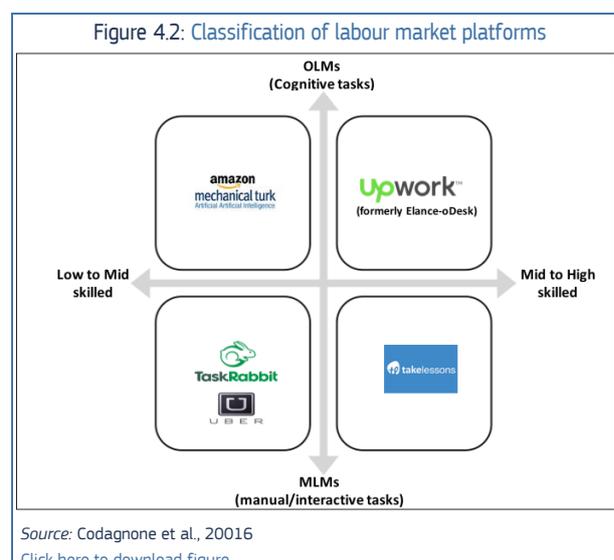
service providers, the lack of risk insurance may not only lead to income loss, but may also discourage service provision <sup>(294)</sup>.

Public authorities could encourage individual freedom and private initiative, which will foster job creation. It is also possible that a clearer definition of the employment model could help in designing a business strategy in which costs, risks and revenues from the collaborative economy are shared more evenly by all stakeholders involved.

#### 2.1.4. Classifying labour market platforms

Labour market platforms bring together service providers (workers or self-employed) and users (peers or businesses) for the delivery of different types of services. In all these platforms, the matching, administration and monitoring of service delivery are largely digitalised. In some of them the services produced by labour are also delivered digitally and remotely (no face-to-face interaction is required) and their reach is global. These have been referred to as **online labour markets (OLM)**. In others, services are delivered physically and the reach is local. These have been referred to as **mobile labour markets (MLM)**. In some platforms the service delivery requires low-skilled work; in others it demands high-skilled work (Codagnone et al., 2016).

Distinguishing between online labour markets and mobile labour markets, i.e. virtual versus physical service delivery, and between low-to-medium and medium-to-high level of skills required to perform a task, allows four types of labour market services to be identified, as shown in **Figure 4.2**.



Amazon, MTurk, Clickworker and Crowdfunder are examples of platforms in the top left quadrant of **Figure 4.2** which trade routine micro-tasks (OLM micro-tasking). These require low levels of skills which individuals provide to businesses (peer-to-business

<sup>(294)</sup> See Chapter 2 on Employment Dynamics and Social Implications.

interaction). In these markets, small pieces of work are put out in high volume, with correspondingly low compensation levels and near-complete standardisation; legal disputes have arisen around the classification of service providers as self-employed contractors rather than workers and on minimum wage issues.

In the top right quadrant (OLM macro-tasking), there are platforms dealing with non-routine macro-tasks or projects such as Upwork and Freelancer. These platforms offer truly independent freelancers for work which requires flexibility, creativity, generalised problem-solving and complex communications skills (e.g. software development, data science).

In the bottom left quadrant, platforms such as TaskRabbit trade low-skilled personal and home services for consumers (MLM physical services). Problems around the classification of service providers (i.e. self-employed or workers) have also arisen here. Ride services platforms such as Uber and Lyft are a case in point. Although they disrupt licensed and professional services (e.g. taxi business), such services are delivered by individuals with a car who do not necessarily have any professional training, though a licence or authorisation may be requested. These platforms can therefore be placed in the low-to-mid-skilled category.

The fourth quadrant (MLM interactive services) represents local digital markets for high-skilled services which require complex communication skills, like Takelessons which matches students and teachers. These markets currently have a very limited reach.

## 2.2. The collaborative economy, employment in the informal economy and labour law challenges

New programmes intended to stimulate job creation should take into consideration the great opportunities, as well as the risks, that the collaborative economy brings. Individuals working in the collaborative economy may experience first-hand the benefits and risks of creating and managing a business and working as an independent contractor. This entrepreneurship knowledge could be used to spur innovation across the economy. On the other hand, the risks linked to these new forms of employment can lead to further inequality and social exclusion.

Given the pervasive nature of the collaborative economy model, and the ability of digital platforms to improve matching between job demand and supply, the collaborative economy may well increase formal employment (which differs from standard employment) and consequently reduce employment in the informal sectors of the economy <sup>(295)</sup>.

<sup>(295)</sup> Analysis on crowd work and the sharing economy, in particular as regards labour rights: research conference 2015 "regulating for decent work"

### 2.2.1. The potential to tackle the informal economy

The collaborative economy could support job creation by transforming informal employment/ undeclared work into formal employment <sup>(296)</sup>. Estimates of informal work suggest that informal employment in Europe is a sizeable share of employment which accounts for 17.1% of European GDP (EU 27). It represents 9.7% of GDP in the Nordic countries vs 19.2% of GDP in Southern European countries and 21.5% in East-Central Europe <sup>(297)</sup>.

The demographic distribution of employment in the informal economy is U-shaped, meaning that young and older workers are the most likely to be found in this segment. Employment in the informal sector is often not sustainable, as it is associated with low productivity and lack of social protection. In the shadow of the ageing challenge and the resulting workforce decline from around 2020, productivity growth will be critical to sustain economic growth and maintain current welfare levels <sup>(298)</sup>. In this context, moving employment from the informal to the formal sector should be seen as a priority.

The collaborative economy has the potential to reduce the informal sector by offering people formal employment in sectors <sup>(299)</sup> particularly prone to undeclared work. This is particularly the case if labour and tax regulations are designed and enforced so that the potential to reduce informality materialises in fair conditions.

In addition, the collaborative economy could increase job opportunities for the long-term unemployed. Research <sup>(300)</sup> demonstrates that increasing length of unemployment spells and numbers of discouraged workers are generally seen as conducive to an increase in employment in the informal sector (**Chart 4.3**).

[http://www.ilo.org/travail/whatwedo/eventsandmeetings/WCMS\\_314026/lang--en/index.htm](http://www.ilo.org/travail/whatwedo/eventsandmeetings/WCMS_314026/lang--en/index.htm)

<sup>(296)</sup> See also ILO "Recommendation No. 204 concerning the Transition from the Informal to the Formal Economy" labour standard adopted in 2014

[http://www.ilo.org/ilc/ILCSessions/104/texts-adopted/WCMS\\_377774/lang--en/index.htm](http://www.ilo.org/ilc/ILCSessions/104/texts-adopted/WCMS_377774/lang--en/index.htm)

<sup>(297)</sup> Williams, C. (2013) *Evaluating Cross-National Variation in the Extent and Nature of Informal Employment in the European Union*. BRITOW and John Wiley & Sons Ltd.

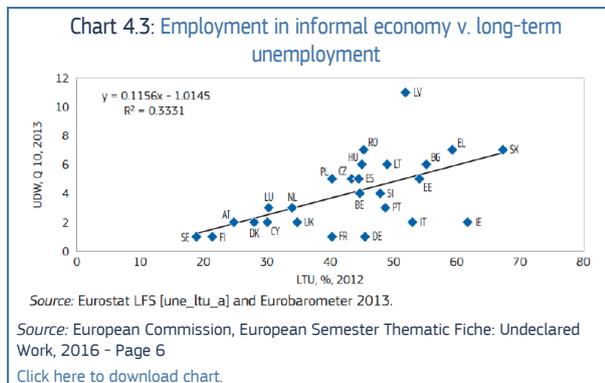
<sup>(298)</sup> ESDE (2014) Chapter 2: Investing in Human Capital and Responding to Long-Term Societal Challenges, and Ageing Report (2015).

<sup>(299)</sup> Particularly important sectors for the growth of job opportunities in the collaborative economy would be: household services, including domestic cleaning services and child and elderly care, personal services, private security, industrial cleaning, agriculture and hotel, food industry, transportation, and the green economy.

<sup>(300)</sup> European Commission: European Semester Thematic Fiche: Undeclared Work, 2016. [http://ec.europa.eu/europe2020/pdf/themes/2016/undeclared\\_work\\_201605.pdf](http://ec.europa.eu/europe2020/pdf/themes/2016/undeclared_work_201605.pdf).

## Box 4.1: 'Humans-as-a-service' (J. Bezos, CEO Amazon.com)

One of the changes brought about by the platform economy is the **transformation of the role of human beings within the employment relationship**: from a form of production that has relied on individuals to produce certain goods or services, to an economic model which gives companies and customers direct access to '*humans-as-a-service*' (Bezos, opening keynote at 2006 MIT Emerging Technologies Conference). This has important consequences for people's working conditions. The fact that most of these platforms are based on dematerialised relations and customers' reviews modifies the concept of work: individual service providers become the extension of a mobile application. The risk is that of dehumanising as service providers may be expected to work as flawlessly as machines.



Furthermore, analysis of Eurostat data reveals a negative relationship between job vacancy rates and the extent of employment in the informal economy. The use of digital technologies and online platforms could reverse or at least limit this phenomenon by acting as a tool to match job vacancies and labour supply.

Supporting the transition from low-productivity jobs in the informal economy to formal employment will require investment in skills, particularly digital skills. The new European Commission Communication on the Skills Agenda <sup>(301)</sup> sets out a path to designing specific skills programmes that would help the long-term unemployed, students, women and migrants to move from informal low-productivity jobs to formal employment, thus leading to a net increase in productivity levels and a boost for economic growth. The collaborative economy may facilitate the transition to high-productivity jobs by allocating human capital more efficiently and avoiding skills depreciation.

In addition, the collaborative economy has created new opportunities to help tax authorities and taxpayers with their tax obligations. This is, in particular, thanks to the increased traceability allowed by the intermediation of online platforms. It is already an ongoing practice in some Member States to have agreements with platforms for the collection of taxes. For example, in the accommodation sector, platforms facilitate the payment of tourist taxes on behalf of service providers. There are also cases where tax authorities use the traceability allowed by online platforms to collect taxes from the individual providers (COM(2016) 356 final).

<sup>(301)</sup> European Commission Communication "A New Skills Agenda for Europe: Working together to strengthen human capital, employability and competitiveness", Brussels, 2016.

## 2.2.2. Labour Law Challenges

Alongside the opportunities it presents, including more flexible contracts, the collaborative economy may increase some forms of atypical and non-standard work relationships, including 'bogus self-employment'. Labour law will need to find a balance between facilitating new and flexible ways of work, and avoiding illegal practices.

The changing nature of work <sup>(302)</sup> in this new economy is likely to bring certain challenges. Job quality – including job and earnings security and career progress, access to training, health and safety and autonomy over work, work-life and gender balance – can be affected by technology change. Through the transformation of production processes, the standard full-time organisation of work may give way to new, more flexible but less stable forms of work arrangements (e.g. on-call work or economically dependent self-employment), without the same levels of health and safety, income security or access to social protection.

One important question that arises in this context is the legal nature of the work relationship, and how to ensure that labour legislation is in place to protect all types of service providers.

The 'platformisation' of the economy is commonly associated with the growth of self-employment and appears to challenge the use of traditional standard forms of work. Indeed, working arrangements in the platform economy are often based on individual tasks performed on an ad-hoc basis and multiple job-holding. As a consequence, while platforms may help formalise informal work, this may not in all cases be comparable to more standard forms of work, and, from a legal viewpoint, remain unclear in terms of employment status.

The result could be an increase in non-standard forms of employment such as temporary work, part-time work or contractual arrangements involving multiple parties. These may not always be a stepping stone to better and more stable employment and career opportunities; some workers may be trapped in forms of dependent self-employment. On the other hand,

<sup>(302)</sup> "World Employment and Social Outlook 2015 - the changing nature of jobs": data/analysis on changes in the employment relationship and through global supply chains. [http://www.ilo.org/wcmsp5/groups/public/---dgreports/---dcomm/---publ/documents/publication/wcms\\_368626.pdf](http://www.ilo.org/wcmsp5/groups/public/---dgreports/---dcomm/---publ/documents/publication/wcms_368626.pdf).

non-standard forms of employment may also offer flexibility in working arrangements which may be more tailored to the needs of individuals.

One criterion that could be used to distinguish self-employment from a worker's status is the degree of control exerted by platforms on key terms of the organisation and conditions of work. In other words, how much autonomy and control do the service providers have over the delivery of the services they offer through the platforms <sup>(303)</sup>?

The terms and conditions of work which bind service providers to the platforms are sometimes inconsistent with the idea of individuals working as consultants or self-employed. Some platforms used exclusivity clauses to control individuals' labour practice, which is at odds with the idea of independent contractors able to work freely (e.g. 'You will only accept work product from Providers that has been submitted through the Site' (AMT)) (De Stefano, 2016).

Research on these labour platforms (Codagnone et al., 2016) also suggests that aside from a few clear-cut cases, the actual nature of the employment relationship is unclear: social protection is lacking and guarantees are minimal in most situations.

The relationship between platforms and individual service providers may in certain cases entail features of an 'employment relationship' rather than the characteristics of self-employment <sup>(304)</sup>. According to the 'subordination' criterion, the provider would act under the direction of the collaborative platform if the platform determines the choice of the activity, remuneration and working conditions. Some platforms are beginning to reclassify their service providers as employees (Instacart, Alfred), while others have revised their terms of payment (TaskRabbit) to avoid having their workers defined as employees. In the USA, labour platforms have faced lawsuits over the application of minimum wage legislation and the status of individuals delivering work through the platforms.

Service providers are moving towards an embryonic self-organisation of their interests, either by creating new trade unions such as Turkoption and Freelancer Union, or by using existing actors, like the Global Taxi Network (see Chapter 5 on Social Dialogue for a further discussion).

All these trends illustrate the existing grey zone of employment status in the platform economy, and the steps being taken towards its resolution. More broadly, the platform economy has important implications for the definition of the workplace and of working time (e.g. what is the status of on-call/stand-by time? How should 'search for work' time be regarded?) Wage-setting is also affected, as flexible working hours and

task-based work mean flexible wages, not to mention auction wages (i.e. consumers bid a price for the service/good).

European and national policies seek to address these issues in order to support the sustainable development of these new models of production and service delivery from a social viewpoint. These discussions are more advanced in some Member States, such as the UK, where a third category, the category of 'platform workers', is being considered.

The European Commission has already provided some guidance on the issue of 'self-employed and workers in the collaborative economy' in its recent Communication on the collaborative economy <sup>(305)</sup>. In the light of new production patterns and broader economic and social trends, the Commission acknowledged the need to consider the best way forward with the current EU social *acquis*, the future of work and the coverage of social protection schemes under the European pillar of social rights and the related public consultation <sup>(306)</sup>.

These trends raise both familiar and new issues for social policy. These 'pay-as-you-go' occupations present a risk of demutualisation and shift risks, costs and liabilities from platforms/customers to service providers. There are also concerns regarding the application of EU working time and health and safety legislation, and over work-life balance. For example risks related to on-line work, including postural disorders or stress, may not be identified due to the nature of the job <sup>(307)</sup>. The performance of providers may also be subject to strong managerial control and unilateral decisions such as a unilateral change of terms and conditions affecting providers' fees.

Platforms are being increasingly used to manage and monitor work, which could raise issues in terms of data protection. There are also risks of "lock-in" effects: since service providers are not allowed to export their reputations from one platform to another, they may have to conform to any requests (reasonable or not) in order to avoid losing work. In addition, service providers may be subjected to abusive termination or 'deactivation' of their work on the online platform.

In summary, while labour market platforms have the potential to improve the matching between labour demand and supply by reducing transaction costs and information asymmetries, they may pose a number of challenges:

- lack of a precise identification of the employment relationship;

<sup>(303)</sup> The legal challenges derived from workers' classification will be further explored in the last section.

<sup>(304)</sup> Court cases, i.e. against Uber and Lyft, have resulted in settlements therefore no decision has been made so far.

<sup>(305)</sup> 'A European agenda for the collaborative economy', COM(2016)356 final, 09.06.2016.

<sup>(306)</sup> 'Launching a consultation on a European Pillar of Social Rights', COM(2016) 127 final, 08.03.2016.

<sup>(307)</sup> While this may be a wider concern for all those using a computer, the question is that of whether it is less identifiable or tackled in the platform context.

- unclear or lacking contractual obligations for both parties (e.g. they do not cover health and safety at work, collective and individual rights under labour law etc); and
- job quality issues such as *de facto* limited workers' autonomy versus platform control, the risk of bogus self-employment in some cases, atypical forms of employment that limit career progress, limited ability to monitor/ensure adequate working conditions (working time and health and safety) and concerns over *de facto* work-life balance.

There is much discussion about these non-standard forms of employment<sup>(308)</sup> and the associated legal implications. Some consider that platforms may lead to the emergence of a new, intermediate category between employees and independent contractors, which would need to be defined in policy and law. Others maintain that moving beyond the well-established concepts of the self-employed and workers would risk creating legal confusion and undermining rights at work and social protection for all in the long run.

### 3. IS THE EU READY TO BENEFIT FROM THE 4TH INDUSTRIAL REVOLUTION?

This section considers the readiness of EU countries to benefit from ICT development and digitalisation. Both physical infrastructure, such as availability of and access to broadband, and skills infrastructure are essential if EU countries are to benefit from the transformational power of the digital revolution and to reinforce digitalisation's potential gains.

#### 3.1. Framework conditions for the 4th industrial revolution: ICT infrastructure and digital environment

The availability of ICT infrastructure represents an important pre-condition for exploiting opportunities created by ICT development and digitalisation. The digitalisation level of a country depends on both the development of physical infrastructure and the attitude towards its use of enterprises, households and public administrations. In this context, higher demand for digital infrastructure, contents and services can also induce higher supply.

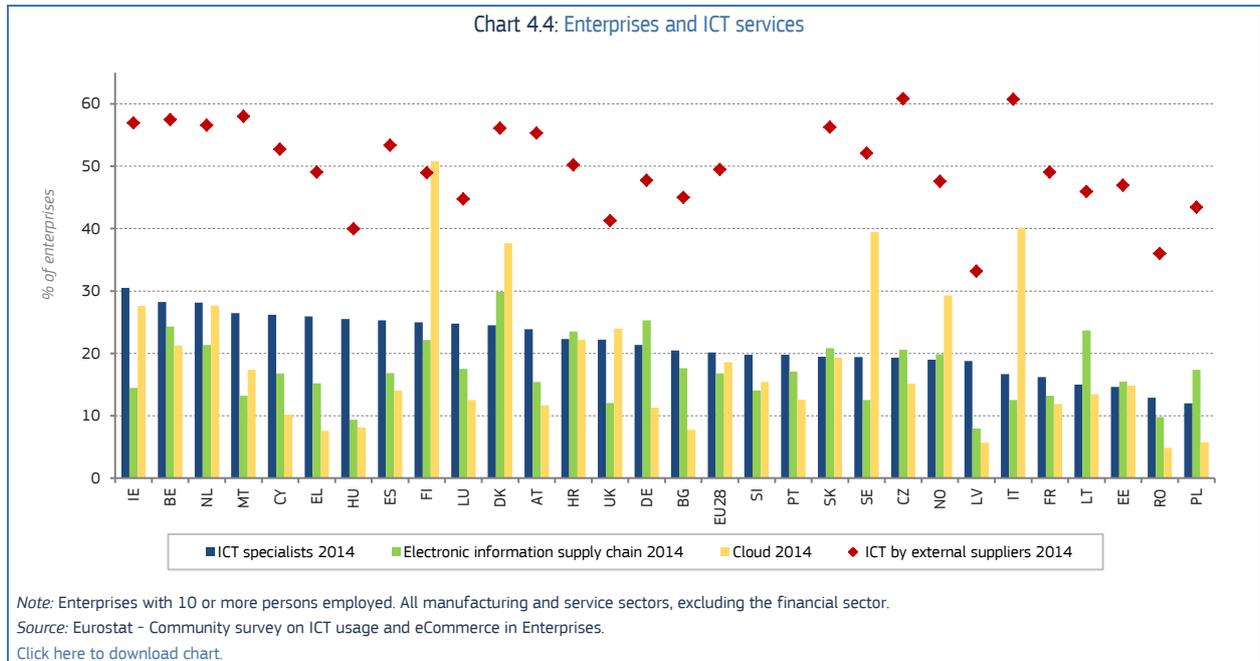
The Digital Single Market (DSM) strategy and Eurostat have developed a number of interesting indicators which measure the availability of physical infrastructure in EU Member States. These indicators provide a measure of Member States' digital competitiveness. The coverage and speed of the broadband are some examples.

The Commission's strategy on Connectivity for a European Gigabit Society<sup>(309)</sup>, adopted in September 2016, sets out a vision of Europe where availability and take-up of very high capacity networks enable the widespread use of products, services and applications in the Digital Single Market. This vision relies on three main strategic objectives for 2025:

- Gigabit connectivity for all main socio-economic drivers,
- uninterrupted 5G coverage for all urban areas and major terrestrial transport paths, and
- access to connectivity offering at least 100 Mbps for all European households.

<sup>(309)</sup> Delivering on its Digital Single Market strategy, the Commission adopted on 14 September 2016 a set of initiatives and legislative proposals to place the EU at the forefront of internet connectivity. <https://ec.europa.eu/digital-single-market/en/broadband-europe>

<sup>(308)</sup> See, for example, Eurofound (2015) for a discussion on new form of employment.



Full coverage <sup>(310)</sup> of fixed basic broadband has almost been achieved, with 97.3% of EU households having fixed basic broadband availability. However, not all households with access to broadband make use of it and the rate of usage varies significantly between Member States. Only 71.7% of households in the EU have fixed internet access; the percentage ranges from 94.5% in Luxembourg to 52.6% in Italy.

The picture changes considerably in respect of the availability of fast and superfast broadband (NGA) <sup>(311)</sup>. The percentage of households living in areas served by NGA in the EU was 48% in 2011 and reached 70.9% four years later (2015), which is considerable progress. However, country differences are wide. The countries still quite far from this level are Greece (36.3%), Italy (43.8%), France (44.8%), Croatia (52%) and Poland (60.7%).

**Chart 4.4** provides information on how ICTs affect the activities of enterprises. It shows the percentages of enterprises which employ ICT specialists <sup>(312)</sup>; share electronic information on the supply chain <sup>(313)</sup>; buy Cloud computing services <sup>(314)</sup>; and outsource ICT

functions <sup>(315)</sup>. **Chart 4.4** shows that in 2014 all countries had significant percentages of enterprises where ICT functions were mainly performed by external suppliers. However, proportions of enterprises buying Cloud computing services varied widely from 5.7% in Latvia to 50.7% in Finland. Similarly, the percentage of enterprises sharing information with the supply chain ranged from 7.9% in Latvia to 25.3% in Ireland.

According to Eurostat data <sup>(316)</sup>, there has also been an increase in both the share of enterprises selling online <sup>(317)</sup> and electronic sales as a percentage of total turnover. In the EU in 2014, more than 15% of enterprises operated online for about 15% of their total turnover.

From a labour market perspective, one interesting aspect concerns the use of the internet to search for a job or send a job application. **Chart 4.5** shows that, on average, unemployed people benefit widely from such an opportunity but that differences between countries exist.

New technologies also allow public administrations to have a direct and more efficient interactions with citizens, reducing administrative burdens and red tape

<sup>(310)</sup> Coverage is a supply indicator defined as the percentage of households living in areas served by a certain type of broadband. Standard fixed broadband includes xDSL, cable (basic and NGA), FTTP or WiMax networks. Some studies commissioned by the EC (Point Topic, IHS and Valdani, Vicari & Associati) report that, in 2015, 97.3% of European households had potential access to a standard fixed broadband.

<sup>(311)</sup> Next Generation Access includes the following technologies: FTTH, FTTB, Cable Docsis 3.0, VDSL and other superfast broadband (at least 30 Mbps download).

<sup>(312)</sup> ICT specialists are employees for whom ICT is the main job: for example, to develop, operate or maintain ICT systems or applications.

<sup>(313)</sup> The indicator refers to sending/receiving all types of information on the supply chain (e.g. inventory levels, production plans, forecasts, progress of delivery) via computer networks or via websites, but excluding manually typed e-mail messages.

<sup>(314)</sup> Cloud computing and cloud services are services made available to users on demand via the internet from a cloud

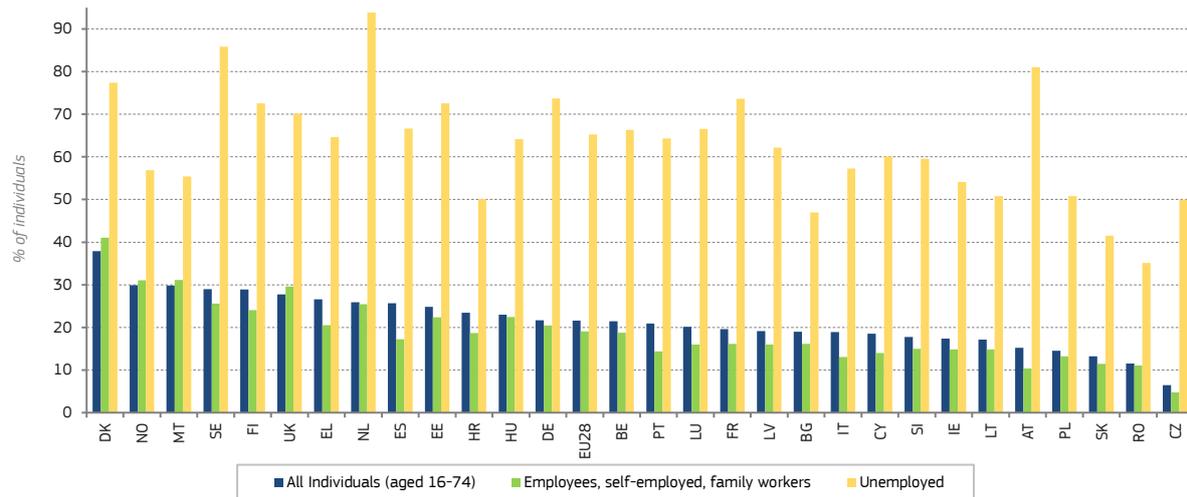
computing provider's servers as opposed to being provided from a company's own on-premises servers. Cloud services are delivered from servers of service providers, can be easily scaled up or down and can be used on-demand by the user without human interaction with the service provider; they are paid for either per user, by capacity used, or pre-paid.

<sup>(315)</sup> The majority of ICT functions, out of a list of seven, are mainly performed by external suppliers and not by own employees or by ICT specialists in parent or affiliate enterprises. The functions include: maintenance of ICT infrastructures, support for office software, development and support for web solutions or business management software/systems (e.g. ERP, CRM, HR, databases), security and data protection.

<sup>(316)</sup> Eurostat, Community survey on ICT usage and eCommerce in Enterprises.

<sup>(317)</sup> Enterprises using any computer network for sales (at least 1%).

Chart 4.5: Looking online for a job or sending a job application in 2015 - Percentage of individuals who used Internet in the last 3 months



Source: Eurostat - Community survey on ICT usage in Households and by Individuals  
[Click here to download chart.](#)

for firms and businesses. Almost 60% of European individuals <sup>(318)</sup> interact online with public authorities.

The Digital Economy and Society Index (DESI) <sup>(319)</sup> - a composite index built by the European Commission using the most recent data available in the Digital Agenda Scoreboard - summarises relevant indicators on Europe's digital performance and highlights the weaknesses and strengths of EU Member States. The index is composed of five domains deemed important in the context of the digital revolution: connectivity, human capital, use of the internet, integration of digital technology and digital public services.

Broadly speaking, all the indicators suggest that, although much progress has been achieved in recent years, some countries lag behind. The data indicates that EU countries can be divided into three groups. The first group, of countries performing above the EU average, includes mainly Nordic countries and Netherlands; the second, of countries below the EU average for almost all the indicators, is composed of Eastern European countries Cyprus, Italy and Greece; and the third group includes (all the other) countries around the EU 28 average. This demonstrates the importance of the continuing implementation of policy initiatives such as the Digital Agenda and the Digital Single Market.

### 3.2. Skills: are Europeans ready for the new opportunities?

The potential of the knowledge economy and the digital revolution cannot be fully realised without the appropriate human capital. Skills which make it possible to leverage new technologies are in strong demand in the job market. Section 1.3 highlighted the possible implications of digitalisation for routine tasks and jobs in medium-skilled medium-paid and low-

skilled low-paid occupations. Recent employment and unemployment trends may indicate pervasive mismatches between a) the rapidly changing demand for labour due to ICT-induced innovation in production and consumption and b) the lagged adjustment in the skill composition of the labour supply at individual and institutional level.

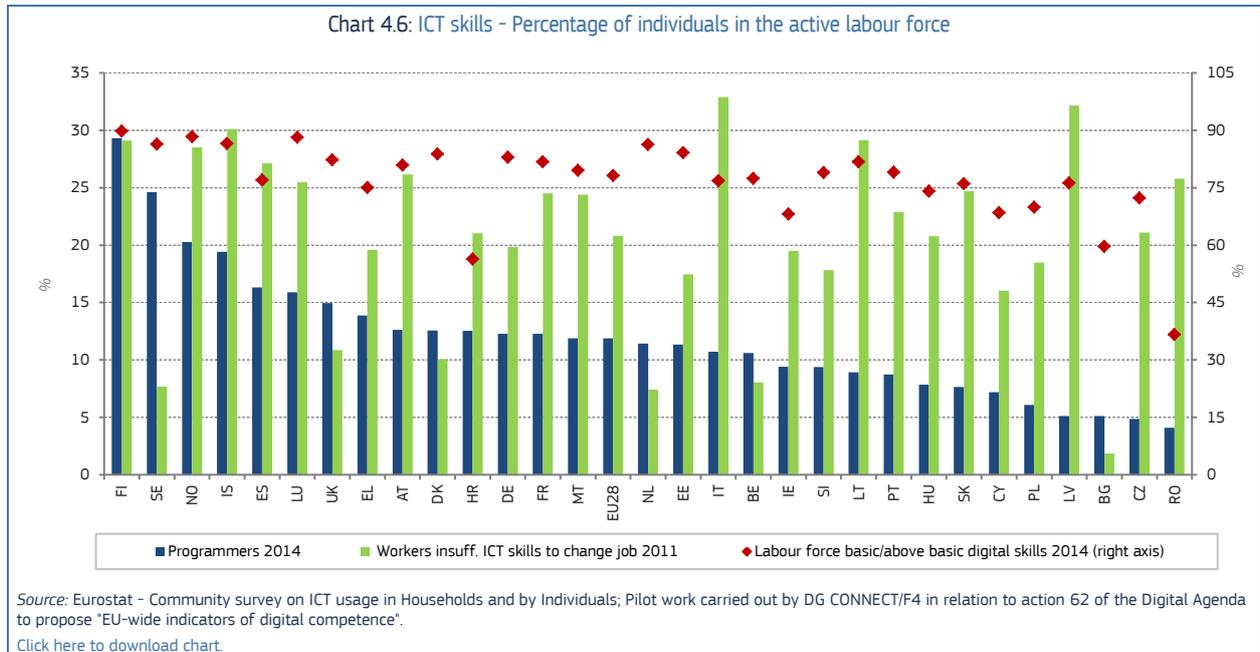
Re-skilling and up-skilling are important elements of education and training policies to ensure that individuals are prepared for and can benefit from technology change. In turn, this can provide the fuel for growth and jobs. This is clearly recognised in the Europe 2020 strategy goals and in the European Commission's objectives for growth and jobs. The Europe 2020 strategy states as its objectives: increasing employment by providing the right skills for jobs in demand (including digital skills and increasingly important 'soft skills'); encouraging creativity and entrepreneurship; and encouraging participation in civic life.

The skills necessary to make efficient use of ICT and benefit from the digital revolution include technical ICT-related skills. Those at risk of unemployment or exclusion are usually 'basic' users of ICT, as opposed to 'specialist' or 'advanced' users of ICT. ICT skills can enhance a person's employability profile, particularly when combined with other skills and attributes, and can be a catalyst for learning further skills. However, some ICT skills may also become increasingly routinised and less in demand as ICT gets better - much as driving started as a skilled profession but became a skill that most adults could easily acquire as cars improved and their use became ubiquitous.

This underlines the importance of other, ICT-complementary skills, including context-specific literacy and numeracy skills as well as communication and entrepreneurial skills. All these skills allow individuals to make use of new technologies in genuinely beneficial ways. The fast pace at which

<sup>(318)</sup> Percentage of individuals who used Internet within the last year.

<sup>(319)</sup> <https://ec.europa.eu/digital-single-market/en/desi>



new technologies develop leads inevitably to 'shortening life-cycles' of ICT skills, and so continuous learning and up-skilling (CEPIS, 2006) are essential, both for businesses and for the employability of individuals.

Both young workers and older workers may face specific challenges in re-skilling or up-skilling. Although young people are typically seen as 'digital natives', there is little evidence that their ICT skills can be directly translated into employability skills. They may need further support in the form of career guidance and digital skills development. Older people are more likely to lack ICT skills than young people, but they may have other complementary knowledge and experience, which, once they have acquired ICT skills, can be used more strategically. For this group, e-Inclusion training which provides access to ICT and support to engage with it is crucial.

ICT skills by themselves do not guarantee employability at any age; they need to be complemented by other skills, attributes and behaviours. A holistic approach that focuses both on ICT skills and complementary skills is more likely to be successful in finding and maintaining employment.

### 3.2.1. The distribution and availability of digital skills within the EU population and workforce

According to the New Skills Agenda (European Commission, 2016), in the near future nearly all jobs will require some level of digital skills and some will require very high levels of professional ICT skills. The Commission therefore sees the acquisition of digital skills as vital for employability, jobs, innovation, competitiveness and growth.

Evidence suggests that more than 20% of the EU population have no digital skills and less than 30% have digital skills above the basic level.

Chart 4.6 brings together three Eurostat indicators on ICT skills. For most EU countries, in 2014, the percentage of individuals in the active labour force with basic or above basic digital skills<sup>(320)</sup> was over 75% (right axis); it was very low only in Romania (36.6%). Nordic countries ranked high, in the upper part of the band. Nordic countries also had significant proportions of individuals in the active labour force who were able to write a computer programme using a specialised programming language: 29% in Finland and 25% in Sweden. This compares with the EU average of 11.8%. Conversely, in Finland and Norway – perhaps as a result of the high ICT standards expected there – about 29% of the active labour force judged their current ICT skills to be insufficient to enable them to change job within a year. This perception is stronger only in Italy (33%), Latvia (32%) and Iceland (30%).

According to the New Skills Agenda Factsheet on Digital Skills, 39% of companies report difficulties in finding suitably skilled ICT professionals. It is estimated that by 2020 there will be 756,000 unfilled vacancies for ICT professionals in the EU and 578,000 already in 2017. The Commission proposed a "Skills Guarantee" in the New Skills Agenda for Europe to help low-skilled adults acquire a minimum level of literacy, numeracy and digital skills and progress towards an upper secondary qualification. This has been endorsed by the Council on 21 November 2016 in the Recommendation "Upskilling pathways: New Opportunities for Adults".

The PIAAC (Programme for the International Assessment of Adult Competencies)<sup>(321)</sup>, often called

<sup>(320)</sup> An individual has basic digital skills if they are able to perform at least one 'basic' activity in each of the four main domains defined by the Digital Competence Framework.

<sup>(321)</sup> PIAAC is a broad research and policy programme managed by the OECD in collaboration with the governments of the participating countries and a number of other international organisations. Sampled individuals complete a very detailed,

the Survey of Adult Skills, can be used to analyse the distribution of digital skills within the EU population. One of the key and innovative features of the OECD Skills Survey is its skill assessment module. After answering the background questionnaire, survey participants are asked to take a test of their competence in three skill domains: literacy, numeracy and problem-solving in Technology Rich Environments (TRE), which is a useful proxy for the e-skill levels of the participants. The interviews for the first survey <sup>(322)</sup> were conducted between the summer of 2011 and the spring of 2012 in 24 countries.

Problem solving in TRE refers to the ability to solve specific problems using modern ICT tools, typically a personal computer and its associated functions. Examples of the type of questions that are asked in this module include searching books in the archive of an electronic library and finding the quickest route between two locations on an online map. In order to take the PIAAC test on competences in TRE, individuals need to have some basic ICT skills. Otherwise they are excluded from the test.

The PIAAC data show a clear generational gap: 54.3% of those who did not have prior computer experience were in the age group 55-65 and only 1.5% in the age group 16-24. The data also suggest an education divide. When looking at the surveyed individuals who have no ICT skills, those with low educational attainment (less than upper secondary schooling) made up the biggest group (56%) of individuals with no ICT skills, followed by those who had completed upper secondary and post-secondary non-tertiary education. Only 3.6% of those who had no ICT skills have completed tertiary education. Almost all (92.3%) of those with no computer experience were in elementary or semi-skilled occupations.

**Chart 4.7** presents the assessment scores for problem-solving in TRE for the EU countries for which PIAAC provides data. The mean scores range from 275 in Poland to 289 in Finland, with an EU average of 282.

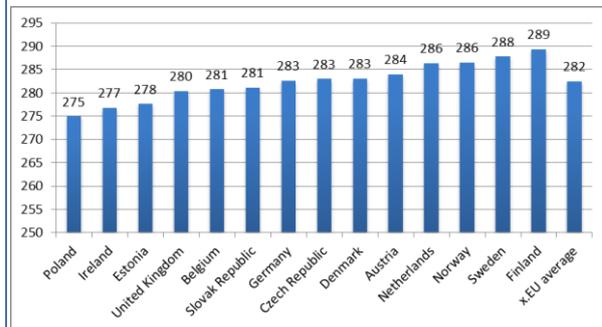
For all countries together only a minority of respondents achieved the highest proficiency level (level 3) of TRE (e-skills). The vast majority were in levels 1 and 2. However, there were large differences across countries, with some countries clearly showing better test results. In particular, Finland, Norway, Sweden, the Netherlands and Austria had above-average test outcomes and larger than average percentages of level 3 test scores. The largest

but otherwise relatively standard, background questionnaire collecting information on family composition, employment, incomes and, interestingly, a battery of questions on the use of skills at work. The survey uses nationally representative samples for the adult population aged 16 to 65 in each participating country. The samples are constructed according to harmonised guidelines designed to guarantee the comparability of data across national boundaries. OECD (2013) provides a wealth of detail on the structure of the test.

<sup>(322)</sup> OECD is finalising the report on the second survey, but at the time of writing the data are not yet publicly available.

percentages of adults with test outcomes below level 1 were found in Poland (24%), Estonia (19.6%), Belgium (18.8%), Ireland (18.7%) and the UK (18%).

Chart 4.7: Mean problem solving in technology rich environment (PS - TRE)



Source: PIAAC data (OECD), calculations by European Commission, DG Employment, Social Affairs and Inclusion  
[Click here to download chart.](#)

In answer to the question: “Do you think you have the computer skills you need to do your job well?” the data show large cross-country differences. While the EU average for positive answers was 7.54%, country-specific values range from 16.2% in Norway, 11.1% in Finland and 9.9% in Denmark, to only 3.2% in the Czech Republic.

A lack of computer skills may not only affect productivity and efficiency at the workplace, it may also affect the possibility of getting a job, getting a promotion or a pay rise. In answer to the question: “Has a lack of computer skills affected your chances of being hired for a job or getting a promotion or pay rise?” 5.4% of EU respondents reported that lack of computer skills had affected their career. The percentage of positive answers to this question was highest in Poland (9.5%) and lowest in the Netherlands (3.6%).

Overall, EU respondents with lower education qualifications were more likely to be affected by their lack of computer skills than those with higher education qualifications. For those with the lowest educational attainment there were wide cross-country differences in the perceived career disadvantages of lack of computer skills - from Cyprus (22.3%) to the Czech Republic (3.2%), with an EU average of 8.76% <sup>(323)</sup>.

In this context, the Digital Skills and Jobs Coalition aims to improve ICT skills in the EU <sup>(324)</sup>. The new Coalition, launched on 1st December 2016, expands the Grand Coalition for Digital Jobs, which trained over 2 million people over a three year period (2013-2016). It brings together a broader variety of stakeholders, beyond those from the ICT sector, to include ICT-using sectors, training organisations, academia, social partners, Innovation Hubs and, crucially, Member States.

<sup>(323)</sup> Pellizzari et al. (2015).

<sup>(324)</sup> <https://ec.europa.eu/digital-single-market/en/digital-skills-jobs-coalition>

In this context, Member States have been called upon to develop national digital skills strategies and to set up national digital skills coalitions with a board set of stakeholders through which to implement them.

The Commission's Digital Competence Framework for Citizens (DigComp) identifies, defines and describes the digital skills needed by all citizens as part of the key competences for lifelong learning (Ferrari, 2013). DigComp version 2.0 has recently been released to update the conceptual reference model, the vocabulary of terms and the competence descriptors to reflect recent changes (Vuorikari et al., 2016) <sup>(325)</sup>.

DigComp has already been included in Europass as a self-assessment tool for job-seekers to self-evaluate their digital competence and have it described in their CV. At national and regional level, DigComp is being used as the reference for self-assessment tools for employability (Basque Country and Andalusia in Spain), for the development of strategic policies (Italy, Malta, Navarre in Spain, Poland and the United Kingdom), for the assessment of education and training content and student performance (Estonia, Flanders in Belgium, Region Emilia Romagna in Italy and Slovenia) as well as for teachers' professional development <sup>(326)</sup> (Croatia, Lithuania and Spain) <sup>(327)</sup>.

DigComp has also been used to develop the Commission's Digital Skills Indicator to measure citizens' digital competence, showing that 45% of the EU population lack a sufficient level of basic digital skills of which around half of them have none at all.

### 3.2.2. General skills and adaptability: addressing skills gaps

The knowledge economy and the digital revolution require a labour force that not only has specialised e-skills and competences, but also possesses the skills necessary to ensure complementarity between human capital and technology. New ways of working, increased independent and contract-based work and more frequent job changes (by necessity or opportunity) call for skills that can be transferred by individuals across contexts in daily life, study or work. What level of literacy, numeracy, science and technology (S&T) and entrepreneurship skills do adults and students in the EU possess?

According to OECD's PISA survey, around 20% of 15-year-olds in the EU have low reading and numeracy skills. And according to PIAAC, 20% of adults show low literacy skills while 24% have low numeracy skills.

In some countries (Luxembourg, Cyprus and the Netherlands) the proportion of tertiary graduates in

S&T is rather small. However, in Austria, Denmark, Finland, France, Ireland, Portugal, Spain and the UK in 2014, more than one fifth of graduates had been enrolled in S&T courses.

Entrepreneurship skills are also important because the labour market of the future will need more complex skills that can drive/support creativity and innovation. People need the mind-set, skills and knowledge to generate creative ideas, and the entrepreneurial initiative to turn those ideas into action. Yet less than a quarter of students have had an entrepreneurship experience by the time they finish school (Eurydice report, 2016) <sup>(328)</sup>. Entrepreneurship in Education is a pillar of the EU Strategic framework – Education & Training 2020 <sup>(329)</sup> and is about inspiring entrepreneurial potential.

For the past ten years the Commission has been promoting the take-up of Key Competences (as described in e.g. the 2006 Key Competences Recommendation <sup>(330)</sup>) by supporting a range of initiatives, including the development of reference frameworks for an initial set of key competences.

The Entrepreneurship Competence framework (EntreComp) defines the competences that make citizens entrepreneurial, capable of developing initiatives that create cultural, social or commercial value for others. EntreComp aims at creating a common understanding of entrepreneurship as a competence and its learning outcomes, and establishing a Europe-wide reference set of knowledge, skills and attitude statements reflecting different level of proficiency. The EntreComp was published last June (Bacigalupo, et al. 2016) and is already being taken up in many contexts. The Ministries of Education of Finland and Greece are translating it, and Finland has decided to use it as part of their forthcoming national evaluation of entrepreneurship education and competence at all stages of education and schooling. The Portuguese Ministry of Education is also revising the framework in the light of their development of a national framework. Beyond the EU, Ukraine, supported by the ETF, has embarked on a pilot adaptation of the EntreComp. The Ministry of Employment and Vocational Education of Madagascar, with the technical support of UNIDO, is also adapting the framework to fit the needs of their Vocational Education and Training curricula <sup>(331)</sup>.

Work is also ongoing within the 2020 Education and Training Strategic Framework for European

<sup>(325)</sup> Vuorikari et al. (2016).

<sup>(326)</sup> The Commission is currently working on the definition of a specific digital competence framework for teachers (DigCompTeach) which is expected to be ready by the end of 2016.

<sup>(327)</sup> European Commission website, "Being digitally competent – a task for the 21st century citizen", Joint Research Centre.

<sup>(328)</sup> The Eurydice network supports and facilitates European cooperation in the field of lifelong learning by providing information on education systems and policies in 38 countries and by producing studies on issues common to European education systems.

<sup>(329)</sup> [http://ec.europa.eu/education/policy/strategic-framework/index\\_en.htm](http://ec.europa.eu/education/policy/strategic-framework/index_en.htm).

<sup>(330)</sup> <http://eur-lex.europa.eu/legal-content/EN/TXT/?uri=uriserv:c11090>

<sup>(331)</sup> Bacigalupo et al. (2016).

cooperation on education and training (ET 2020) to modernise education systems and promote digital skills and competences for teachers and learners. A dedicated ET 2020 working group on digital skills and competences brings together representatives from ministries of education and education stakeholders to share experience and best practice.

Skills mismatch and skill shortages appear to be present in the labour market – even if at a lower level than often believed <sup>(332)</sup> – and guaranteeing high employment rates and decent wages has become more challenging with the development of the digital revolution. There is a risk of a drop in demand for routine workers and of resulting job displacements. A coordinated policy response to these challenges is therefore necessary. While forecasts of skill needs (such as those provided by Cedefop) are very important, especially in the short-medium run, long-run estimates of the future demand for skills/occupations tend to be less accurate, especially at the level of occupational profiles.

## 4. CONCLUSIONS

Previous industrial revolutions have created profound structural changes in the organisation of our societies. In the same way, the velocity, scope, and impact of the technological innovations at the heart of the fourth industrial revolution have the potential to cause a major transformation of the current social and economic systems governing our lives. The transformative power of key technological breakthroughs such as artificial intelligence, robotics, Cloud computing, 3D printing, digital platforms, and algorithms (described in more detail in the Annex, Box A1.1) may well demonstrate that we have entered a new path of development in human history.

Economic theory identifies two main effects of technological change on employment at firm level: the effect of substituting capital for labour (the substitution effect) and the employment-generating effect (the compensation effect). Through the compensation effect, technological progress can and has led to job creation through product innovation and the commercialisation of new products and demand for new equipment.

While new jobs are likely to be created, the composition of employment may nevertheless change. Process and organisational innovation typically alter the skill composition of labour demand, and in the case of ICT and digitalisation this is likely to favour the highly skilled, with potential consequences for skill mismatch, unemployment and ultimately growth. The evidence suggests that ICTs can have a positive impact on labour productivity. The effect of ICT development on employment appears to be neutral if not positive – though this does not necessarily mean that there are no effects on the composition of employment, or on

particular sectors and occupations. The evidence also shows the complementarity between ICT, organisational capital and human capital.

Therefore, digitalisation of the economy and the possible disruption of jobs should prompt a rethinking of education policy. To maximise the benefits of digitalisation and to create new entrepreneurial opportunities it is fundamental to invest in raising the analytical and creative abilities of the workforce. Flexibility and adaptability to new forms of work will require individuals with skills transferable to different sectors. Job polarisation, which seems to be arising as a consequence of technological innovation, means that more jobs will be created at the bottom and top end of the workforce while employment for middle-earners in the labour market will decrease. For example, workers providing in-person service may not see their jobs change; workers in routine jobs such as accountants may see machines replacing them; and highly skilled workers such as surgeons may expect to see their productivity increased.

The availability of ICT infrastructure is also an essential pre-condition for exploiting the full potential of the digital economy. But, although much progress has been made in recent years, some aspects of infrastructure coverage and use have not developed at a uniform rate in all EU countries. It is vital for European companies to recognise the potential of ICT development and digitalisation. This underlines the importance of implementing existing policy initiatives such as the Digital Single Market.

This chapter has also investigated the link between the development of new technologies and the rise of a new economic phenomenon, the collaborative economy. The available data shows that this phenomenon represents a non-negligible proportion of employment in some EU countries. The collaborative economy represents a new form of production of goods and services at both the global and local level. It has grown in importance thanks to technological innovations such as smartphones, new types of algorithms, and powerful broadband connections. Important components of this new economy are platforms, which function as online marketplaces that facilitate transactions in a wide range of services.

While concerns about the quality of work and social protection of individuals employed in this economy remain, online platforms have the undeniable advantage of functioning as a multiplier for job opportunities. For instance, online platforms can match people and jobs which might or might not be found in local labour markets; they can create new marketplaces where people can access services or provide work without the high costs sometimes found in traditional economic sectors; they may also help traditional firms hiring and managing talent; they can increase the share of formal employment by diverting workers from employment in the informal sector; and they can reveal trends in the demand for skills, which

<sup>(332)</sup> Pellizzari et al. (2015).

in turn can help to shape decisions about new education and training curricula.

At the same time, while taking steps to encourage economic growth, governments around Europe may need to take steps to minimise the adverse consequences that the digital revolution may bring, for example as regards working rights, access to social protection and protection of personal data. In this context and in various forums and actions<sup>(333)</sup>, including the ongoing consultation on a European Pillar of Social Rights<sup>(334)</sup>, the European Commission is exploring with Member States and different stakeholders the opportunities and the risks associated with technology change, the future of work and the potential need to adjust regulation to a phenomenon that, by its very nature, transcends national boundaries.

In future, the features that characterise employment relationships and business activities may be different from today's, reshaping the way in which policy-makers and researchers approach employment issues. In this context, it seems worthwhile to make more use of social dialogue, perhaps in additional forms, as a means of discussing and resolving social and economic issues related to the emergence of new jobs.

It will be crucial to identify good practices that ensure a friendly environment for start-ups to develop their business using new technologies, and for companies who invest substantially in innovation in order to create new services and products. These companies can give Europe a competitive advantage relative to other industrialised economies, therefore they should be helped to prosper. At the same time, it will be important to identify practices that can ensure fair and well-functioning labour markets and welfare systems. As the European Pillar of Social Rights consultation asks: Which best practices and lessons from social innovation should be actively encouraged?

<sup>(333)</sup> "Recommendation No. 204 concerning the Transition from the Informal to the Formal Economy": labour standard adopted in 2014 [http://www.ilo.org/ilc/ILCSessions/104/texts-adopted/WCMS\\_377774/lang--en/index.htm](http://www.ilo.org/ilc/ILCSessions/104/texts-adopted/WCMS_377774/lang--en/index.htm).

<sup>(334)</sup> [http://ec.europa.eu/priorities/deeper-and-fairer-economic-and-monetary-union/towards-european-pillar-social-rights/public\\_en](http://ec.europa.eu/priorities/deeper-and-fairer-economic-and-monetary-union/towards-european-pillar-social-rights/public_en).

Relevant data needs to be drastically improved. Currently there are no direct employment measures of occupations in the collaborative economy, so that it is necessary to rely on indirect or proxy measures. An important problem for European statistics is the lack of a clear picture of how many service providers are freelancing; whether service providers are voluntarily or involuntarily pushed into atypical working arrangements; and whether this activity is their main source of income or an extra economic activity to top up their salaries from other occupations. It has been difficult to assess these issues because of the wide variety of working arrangements. These include incorporated freelancers and other self-employed people without employees; independent contractors; full-time employees who also do undeclared work; and others who participate in digital platforms but do not consider this as a proper job, and thus do not mention or admit to it when surveyed.

Designing appropriate measures to capture the employment expansion encompassing the different economic activities originating from the digital revolution is one of the important challenges that statistical agencies, both at the national and European level, need to address. To harness the full potential of the technological revolution it is crucial to have access to robust statistics, including on the type of employment and on earnings. Data would then support the design of policy programmes aimed at supporting social inclusion and economic growth in this new era of digital revolution.

More research is needed and should be encouraged, to improve understanding of how the nature of work and jobs is changing and whether the digital economy in general - and the collaborative economy in particular - will produce a new workforce predominantly of genuine high-income independent mini-entrepreneurs free from the "9-to-5 grind", or a new class of service providers mainly dependent self-employed in low-wage, insecure occupations, with limited access to social protection. Universal social insurance/protection would make issues relating to (bogus) self-employment less critical.

Devising and applying effective strategies to transform the opportunity presented by the 4th industrial revolution into long-lasting economic growth will be one of the challenges that will define the future of the EU.

# Annex: ICT as a key driver

## A.1. ARE ICTs TRIGGERING A FOURTH INDUSTRIAL REVOLUTION?

There is much debate among academics about whether societies are currently undergoing a fourth industrial revolution. An industrial revolution has been described as involving “not simply an acceleration of economic growth, but an acceleration of growth because of, and through, economic and social transformation” (Hobsbawm, 1999). As **Table A.1** shows, the first industrial revolution (1784-1830) was caused by the steam engine, which was the basis of the development of cotton spinning, railroads and intense maritime transportation. The second industrial revolution (1870-1970) originated with two major technological breakthroughs: electricity and the internal combustion engine, and the advent of running water with indoor plumbing. The third industrial revolution (1970-today) saw the development of electronics, IT and automated production.

Many commentators argue that the current scope and speed of digitalisation is evidence of a fourth industrial revolution taking place, associated with the mass diffusion of ICTs (a General Purpose Technology, just as the railway, electricity, the steam engine and the internal combustion engine were), with the potential to transform society’s entire system of production, management and governance.

The fourth industrial revolution is driven by a complex array of technologies, some of which have not yet reached their full capacity. Examples of these technologies are: smart machines, advanced computer processing, artificial intelligence and networked communication.

**Box A.1** describes these and other key technological breakthroughs, which are digitalising many aspects of people’s economic and social life, changing the world of work and generating significant growth in the global economy. They are creating opportunities for new jobs and new business, but also challenging some current tasks and jobs.

ICT development and digitalisation are generating an economic transformation that is affecting all industries on a scale comparable to the steam engine during that first industrial revolution. Almost every aspect of daily life is being influenced in some way by digitalisation, and some argue that the pace of change is faster than ever before.

Digitalisation has already caused important changes in the world of work. Industry 4.0 (Schwab, 2016) and the robotisation of manufacturing are some examples. Alongside the effects on labour productivity and employment, traditional models of value creation are also being challenged by new business strategies and new technologies. ICT development has already contributed to increasing access to new markets and, therefore, facilitating/encouraging the starting up of new businesses. Nowadays, a firm that provides a digital application to the Apple app store gains worldwide access to over 500 million app store account holders (The World Bank, 2013).

Digitalisation, smart machines and advanced computer processing can transform the world of work by making many work-related (but also private) activities ‘mobile’, with all the attendant risks and opportunities. They can generate new business opportunities and make ‘offering anything as a service’ (Renda, 2016; Claffy and Clark, 2013) a reality, as evidenced by the range of services that are already being traded on line via platforms. ICT-based innovations (such as internet shopping) can change consumption patterns and consumer behaviour and therefore the scale and nature of the demand for goods and services.

Furthermore, in the field of advanced manufacturing, the merging of digital technology, the internet and conventional industry are estimated to provide efficiency gains in manufacturing of between 6% and 8% (ACATECH, 2015). In Germany alone it is predicted that the ‘fourth industrial revolution’ will bring 390,000 more jobs and contribute 1% per year to GDP growth over a ten-year period (BCG, 2015).

The automation of processes and robotisation is expected to increase flexibility in production: different products will be produced in the same facility, with a net gain in terms of cost reduction and decreasing need for production outsourcing. At the same time, the speed at which products and services can be improved is expected to create ‘mass customisation’, increasing firms’ ability to adapt to customer-supplied specifications and drastically reducing the time between the design of a product and its delivery, or, in the case of digital platforms, between the demand for a service and the opportunity to access it (Davies, 2015).

In manufacturing, data-driven supply chains can more than double the speed of production processes in terms of time needed to deliver orders, and reduce by 70% the time needed to get products to market (European Commission, 2015).

Table A.1: The path to the fourth industrial revolution

Revolution	Time periods	Key Technologies
First	1784 – mid 19 <sup>th</sup> century	Water and steam powered mechanical manufacturing
Second	Late 19 <sup>th</sup> century – 1970s	Electric-powered mass production based on the division of labour
Third	1970s-Today	Electronics and information technology drives new levels of automation of complex tasks
Fourth	Today –	Presence of high-speed ubiquitous Internet, increased functionality and capacity of the network, leading to the "The Internet of Everything"; Availability of Big Data(1) and of the technology capable of analysing them; Open Cloud and Cloud computing; Developments in Artificial Intelligence, robots, and machine learning (e.g. the Watson Computer, the driverless car); Additive manufacturing and 3D printing; Advances in simulation methods; Advances in systems integration; Blockchain.

(1) A term for data sets that are so large or complex that traditional data processing applications are inadequate.

Source: created by European Commission, DG Employment, Social Affairs and Inclusion

[Click here to download table.](#)

In a time of slow economic growth, ICTs offer an important opportunity for industries and companies to innovate and create new jobs. ICTs' penetration of our daily lives is a reality. For instance, mobile phone subscriptions (7.4 billion in 2015) approach global population figures: 69% of the world population is using at least a 3G mobile broadband network (ITU, 2015). In this environment, the competitiveness of economies increasingly depends on their ability to leverage new technologies (The World Economic Forum, 2013).

European countries have accepted the opportunities and challenges brought about by ICT development and digitalisation and have taken important policy initiatives as highlighted for example in the EU Digital Agenda for Europe<sup>(335)</sup>. In Italy the 'Fabbrica del Futuro' project (2011-13) has supported research initiatives to generate the knowledge needed to support the creation of new industry and smart production processes.

Germany has launched the 'Industrie 4.0' initiative to develop smarter factories, putting together best practices from both private and public experiences. The aim is to create a strategic plan to best apply digital technologies to business. France launched in 2015 the 'Factory of the Future' programme as part of a larger framework programme called 'Industry of the Future'. The intention is to help small and medium enterprises to get loans to invest in new technologies such as robotics, big data, and high performance computing. The UK has created 'catapult centres' which aim to facilitate companies' access to research and expertise in specialised areas such as advanced manufacturing and process innovation.

## A.2. IS ICT ACCELERATING THE RATE OF CHANGE? THE IMPORTANCE OF ICT IN THE EU ECONOMY

It is generally agreed that ICT development and digitalisation have improved productivity and economic growth. For example, the majority of researchers agree on the important role played by ICT in the US growth resurgence observed from 1995 to 2006<sup>(336)</sup>. The Digital Single Market initiative for example aims to induce productivity and economic growth through the diffusion and adoption of ICT in the EU<sup>(337)</sup>.

This section looks at the importance of ICT and ICT investment in the economy. Current adoption and usage rates show that almost all businesses in the OECD area rely on ICT – in 2014, 95% of all enterprises in the OECD area with more than ten employees had a broadband connection. However, web presence in SMEs ranges from 90% and above in Denmark, Finland and Switzerland to less than 50% in Latvia and Portugal. This shows a significant divide in ICT uptake between different EU countries.

Moreover, firms in Europe have a relatively low adoption rate for supply chain management or enterprise resource planning (ERP) software<sup>(338)</sup> even where European companies are highly integrated in supply chains,

<sup>(335)</sup> See <https://ec.europa.eu/digital-single-market/en/digital-agenda-europe-key-publications>.

<sup>(336)</sup> Jorgenson et al. (2008) estimate that the proportion of US growth performance attributable to ICT goes from 43% for the period 1971-1995 to 59% for the period 1995-2000, with an almost doubling of the contribution from increased investment in ICT capital (ICT capital deepening) and a more than twofold increase in Total Factor Productivity (TFP), both inside and outside the ICT producing sector. For the post-2000 period, the authors find that the contribution of ICT investment to growth has been reduced and that TFP growth in the ICT producing sector has gone down (from 0.58 for the 1995-2000 period to 0.38 for the 2000-2006 period). On the other hand, the role of TFP outside the ICT producing sector (and hence in ICT-using sectors) has increased. Overall, in the period 2000-2006, ICTs are estimated to account for about 38% of the US output growth.

<sup>(337)</sup> See [https://ec.europa.eu/priorities/digital-single-market\\_en](https://ec.europa.eu/priorities/digital-single-market_en).

<sup>(338)</sup> Enterprise resource planning is a process to manage and integrate the important parts of the business in a company by connecting different technologies used by each individual part in order to eliminate duplicate and incompatible technology, reducing costs and increasing efficiency.

## Box A.1: Key technological breakthroughs

**Artificial intelligence** has been defined as 'the construction of intelligent agents - systems that perceive and act in some environment'. Recently artificial intelligence has developed a technique called 'deep learning'. With deep learning, artificial neural networks learn - through examples supplied by a vast database - to improve their performance of a specific, mainly cognitive task. The expansion of artificial intelligence has the potential to influence virtually all sectors of the economy using computers. Artificial intelligence is used by the Google search engine to find the most relevant reference for particular queries, by Amazon to provide shopping recommendations, and by Google and Tesla to develop self-driving cars. With its expansion, it will be important to improve the robustness of these systems, optimise their impact on the economy, adapt relevant regulation and address ethical considerations.

The use of **robots** in the manufacturing sector is not new. However, the number of robots used in workplaces and homes continues to increase, as does their physical dexterity and ability to learn. Recent technological breakthroughs - for example, increased computing power and cheaper sensors - have allowed more versatile and collaborative robots to be developed. Most professional service robots are collaborative by design. Offices, homes, laboratories, warehouses, farms, distribution centres and healthcare facilities all make some use of service robots. Collaboration between robots and humans has the potential to improve labour productivity on challenging tasks. In a human-machine study conducted at BMW, it was demonstrated that hybrid teams of humans and robots can be more productive than teams of either humans or robots alone.

**3D printing** - also known as additive manufacturing in its industrial version - produces items of different shapes on the spot. Like traditional printers applying ink on paper, 3D printers build objects based on the data delivered to the 3D printer. But whereas traditional manufacturing uses a subtractive approach - grinding, forging, welding - a 3D printer is additive; it produces an object in a single act, building it up layer by layer. This reduces the amount of waste, thereby lowering the cost of the manufacturing process and reducing the environmental impact of production. There are numerous possibilities for this technology in, for example, prototyping or in the healthcare industry (building prosthetic devices, creating organs, tissues and bones for transplantation).

**Digital platforms** connect providers with users and facilitate transactions between them using the internet. They have contributed to the globalisation of labour markets, a phenomenon that gained importance in the 1980s when large multinationals started to outsource and offshore whole chunks of activities such as IT services or call centres to countries offering comparatively cheap labour costs. While SMEs and smaller companies could not afford such outsourcing and offshoring solutions, platforms now fill this gap, allowing even very small companies to outsource work.

**Blockchain** - the technology underpinning the digital currency Bitcoin - is a technology that permanently records transactions in a way that cannot be erased later but can only be sequentially updated, in essence keeping a never-ending historical trail. The technology creates and maintains a global database open to anyone, where everything with a value can be managed and stored securely and privately. It is like a digital ledger of transactions, agreements, contracts - anything that needs to be independently recorded and verified as having happened. However this ledger is not stored in one place, but distributed across thousands of computers around the world. Blockchain can potentially change the way transactions are made, data is stored and assets are moved. It could replace powerful intermediaries like banks, governments and technology companies, by building mass peer-to-peer systems of collaboration and clever code. Several concerns would need to be addressed for blockchains to deliver fully on their potential. Among these concerns are large energy consumption, high initial capital costs, regulatory uncertainty, security and privacy.

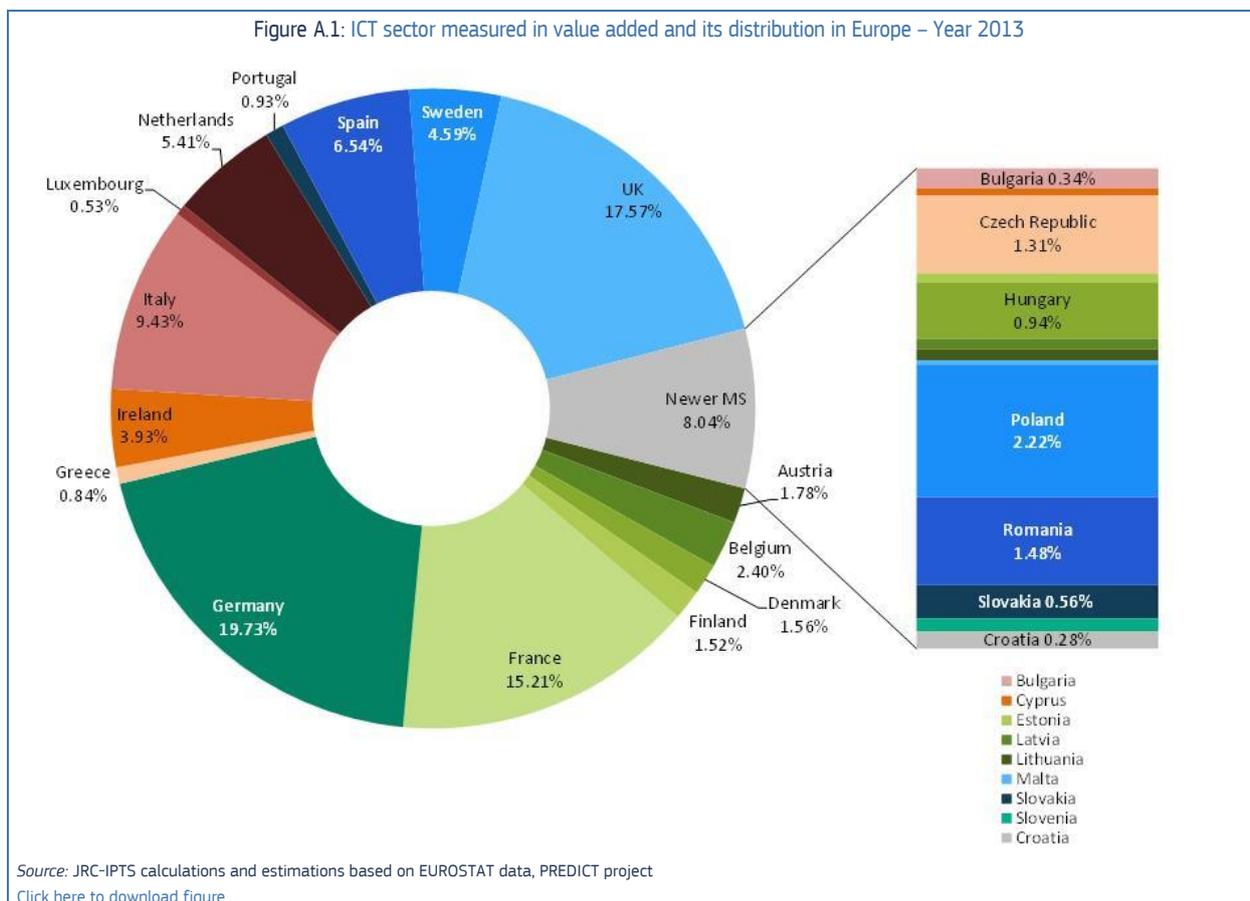
both upstream and downstream<sup>(339)</sup>. Such software, intended to manage business information flows, is often associated with improvements in firms' productivity. In 2014, 31% of European companies used ERP applications. There are noticeable differences in adoption rates between countries (Belgium, Austria, Sweden and Denmark leading, Latvia, Iceland and the UK lagging behind) and between firms of different sizes (a larger proportion of bigger companies use ERP).

The value of the ICT sector<sup>(340)</sup> in the EU, measured in terms of value added (VA), appears to be closely linked to the size of the economy (**Figure A.1**)<sup>(341)</sup>. The largest EU economies, i.e. those with the highest shares of EU GDP, also have the highest shares of ICT value added in the EU: Germany (19.7%), the UK (17.6%), France (15.2%), Italy (9.4%) and Spain (6.5%). Together, these five countries represented 68.5% of EU ICT value added in 2013.

<sup>(339)</sup> See ILO (2016), page 14 at [http://www.ilo.org/wcmsp5/groups/public/---ed\\_norm/---relconf/documents/meetingdocument/wcms\\_468097.pdf](http://www.ilo.org/wcmsp5/groups/public/---ed_norm/---relconf/documents/meetingdocument/wcms_468097.pdf).

<sup>(340)</sup> PREDICT project (<https://ec.europa.eu/jrc/en/predict>) provides comparable ICT sector data adopting the OECD 2007 classification of the ICT sector. It consists of five ICT manufacturing sectors (ISIC Rev. 4 classification), two ICT trade sectors and five ICT services sectors.

<sup>(341)</sup> Figures elaborated by Joint Research Centre's Institute for Prospective Technological Studies (JRC-IPTS) are taken from last PREDICT report (De Panizza, forthcoming).



According to **Chart A.1**, in 2013, the ICT sector's value added as a share of GDP ranged from 12.7% for Ireland to about 3% or less for Lithuania and Greece. Some of the Member States that acceded in 2004 have ratios of ICT value added to GDP that are above the EU average, while the ratio is below the EU average for 9 out of the 15 Member States that joined before 2004. Romania was the Member State with the highest increase in ICT value added as a share of GDP.

The increasing importance of ICT development is attested by growing ICT investment. In recent times when overall investment contracted, ICT investment grew, or remained steady, in many countries.

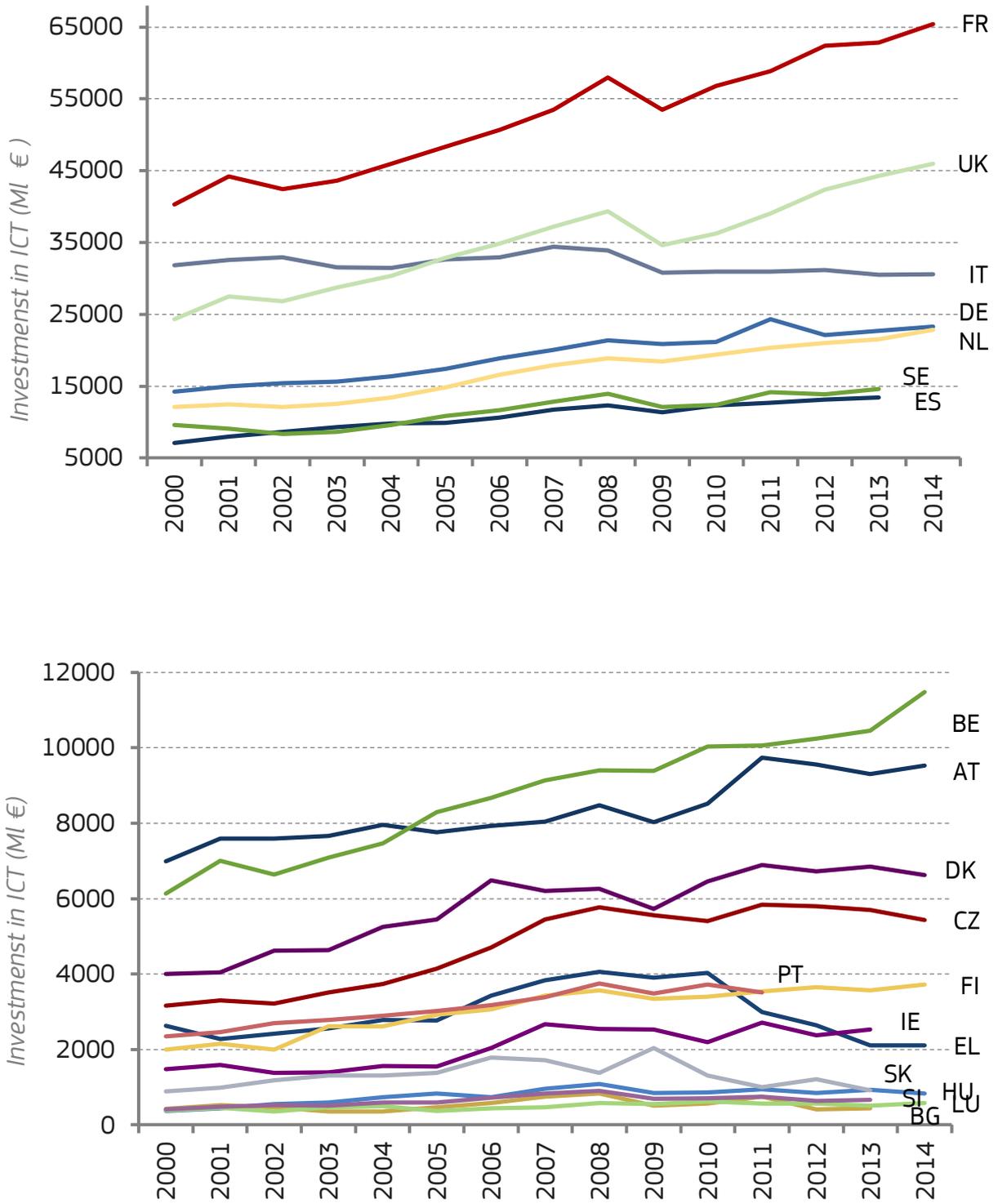
**Chart A.2** shows gross investment in ICT since 2000 in millions of euro. Investment in ICT is calculated as the flow in three different types of fixed assets: computer hardware, computer software and databases and telecommunications equipment. Steady growth can be observed for almost all the countries, notably France, UK and Belgium. The trend only turned negative in Greece and Hungary (there is some evidence of a negative trend also for the Czech Republic and Denmark).

The rising trend remains visible for most Member States when considering ICT investment as a proportion of total investment. In 2013, this reached 17.8% in Netherlands and 16.7% in Sweden, but was only just over 4% in Hungary.

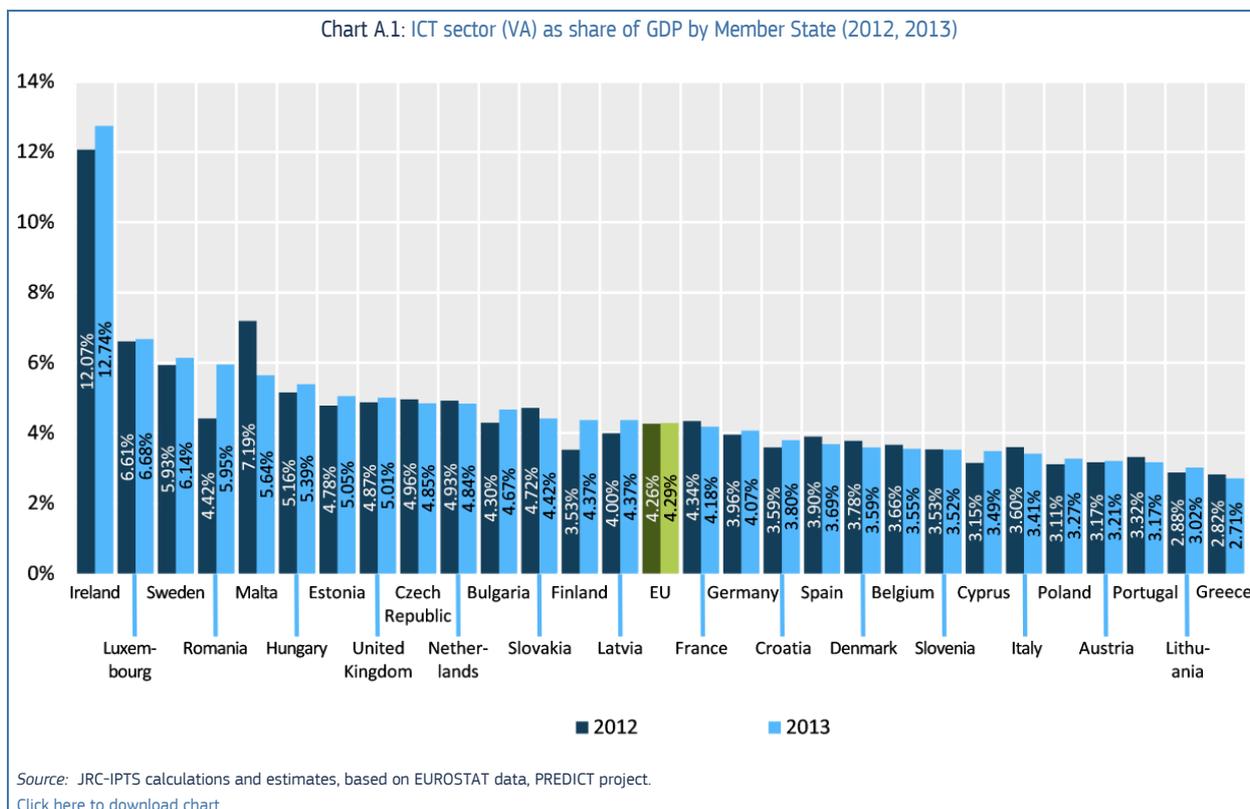
**Chart A.3** shows the share of ICT investment in 2000, indicated on the horizontal axis, and the share of ICT investment in 2013<sup>(342)</sup> on the vertical axis.

<sup>(342)</sup> Year 2013 is chosen for the comparison due to the poor availability of data for 2014.

Chart A.2: ICT investment by Member State and by year



Source: Eurostat, elaborated by European Commission, DG Employment, Social Affairs and Inclusion  
[Click here to download chart.](#)



Countries above the diagonal line show an increase; those below it (Luxembourg and especially Bulgaria) show a decrease. It can be seen that for nearly all the EU countries for which data are available the proportion of ICT investment has increased.

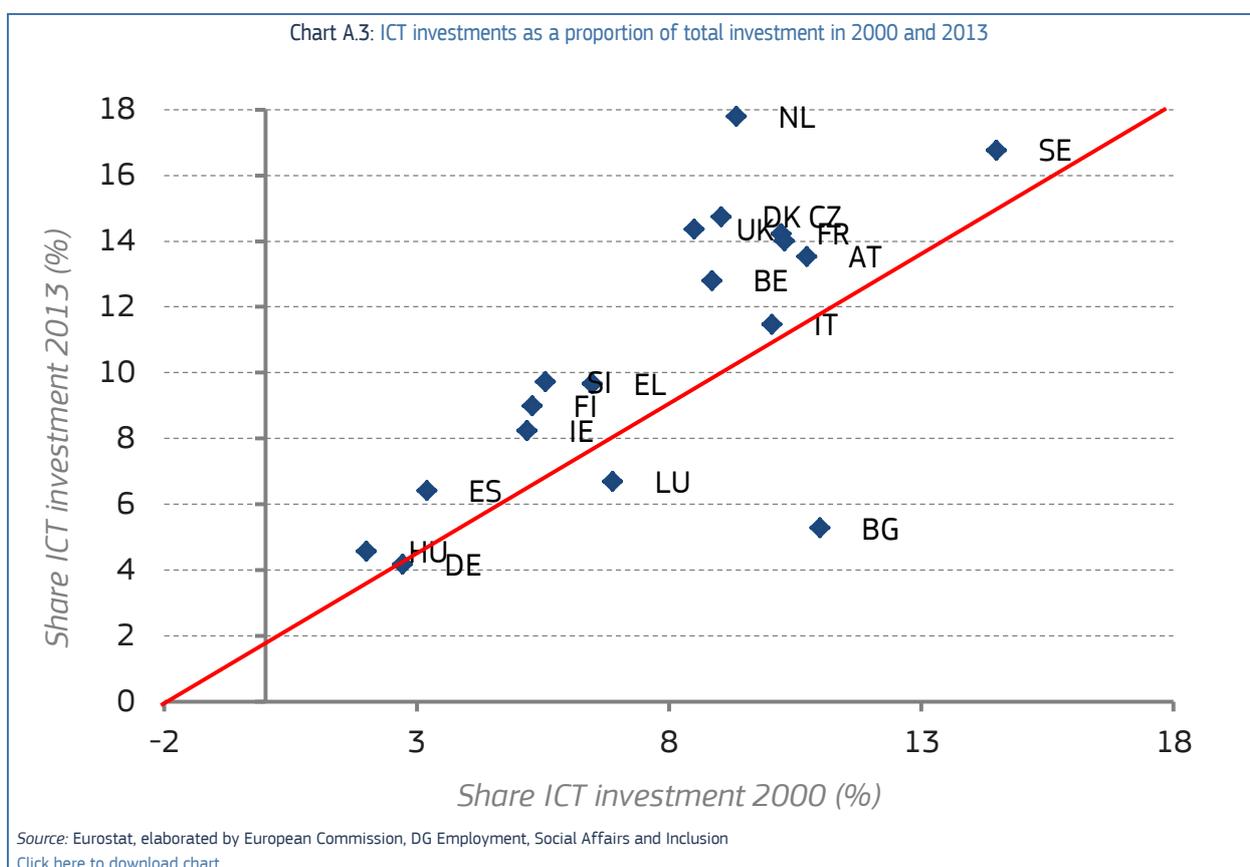
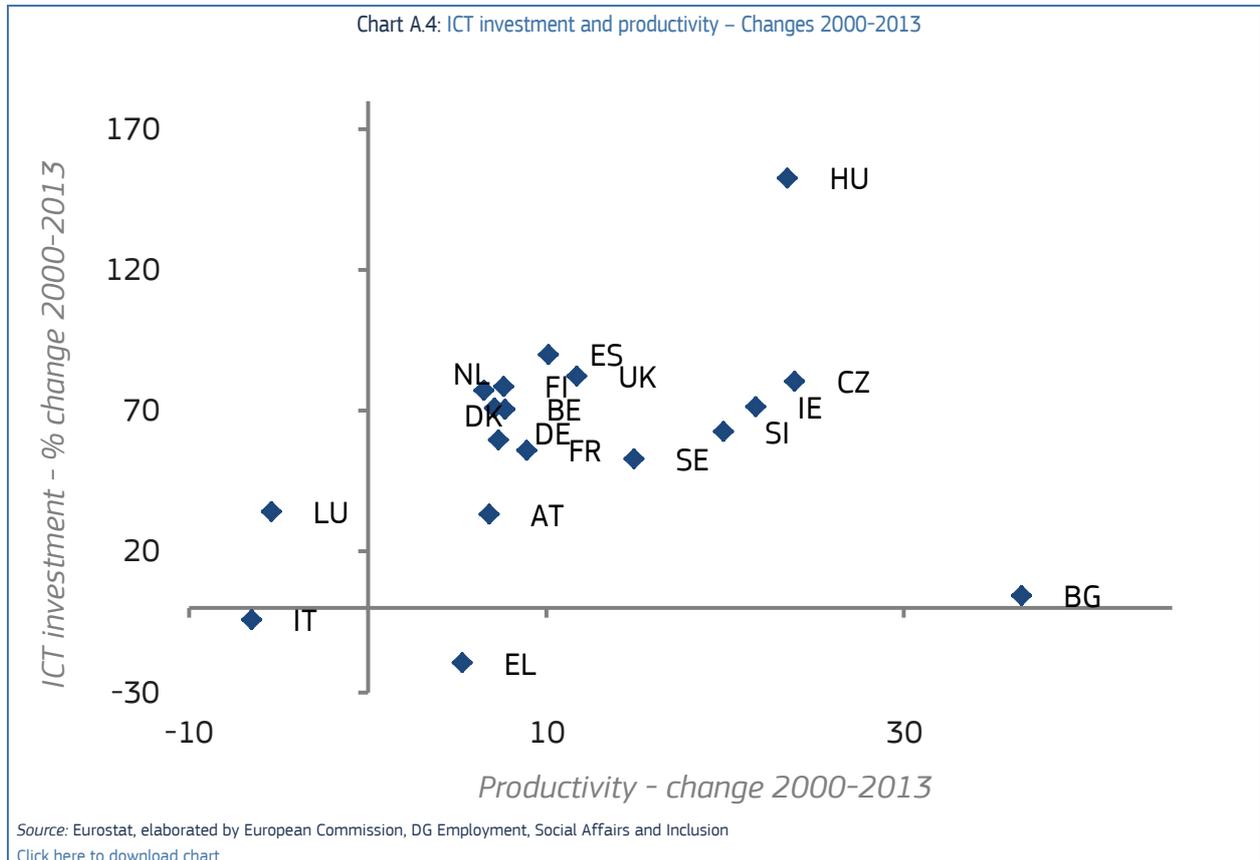


Chart A.4 plots the change in productivity between 2000 and 2013 against the change in ICT investment during the same period. The correlation between these two variables is positive (Bulgaria appears to be an outlier).



The ICT sector shows higher labour productivity than other sectors: 69.1% higher than overall productivity (Predict project). From 2007 to 2013 labour productivity growth in the ICT sector was always higher than that for the total economy. In addition, labour productivity is 26.6% higher in the ICT services sector than in ICT manufacturing, also presenting a less cyclical pattern. Since 2009, ICT services productivity has always shown growth, though growth rates declined from 3.9% in 2010 to 1.2% in 2013. ICT manufacturing productivity fell sharply in 2012 (-9.3%), but returned to growth in 2013 (10.3%).

### A.3. MICRO REVIEW OF THE IMPACT OF ICT ON PRODUCTIVITY

Productivity evidence at company level shows that companies in the USA outperform European companies in terms of productivity. There are at least three reasons for this EU-US labour productivity gap (Biagi, 2013):

- the USA has a higher productivity growth rate in the ICT sector, thanks to improvements in technological equipment improvements;
- investment in ICT capital (i.e. ICT capital deepening) has been higher in the USA than in the EU;
- total factor productivity (TFP) in the service sector has been growing faster in the USA than in the EU (except for the Netherlands and the UK).

ICT investment has been crucial in helping a variety of European companies to increase their chances of survival in the global economy. ICT's substantial positive effect on productivity and efficiency at the company level has been demonstrated in a number of studies. For example:

Van Reenen et al. (2010), studying firms in 13 European countries in 1998-2008, found that a 10% increase in ICT capital is associated with an increase in output of between 0.9% and 0.23%, confirming the importance of ICT for growth.

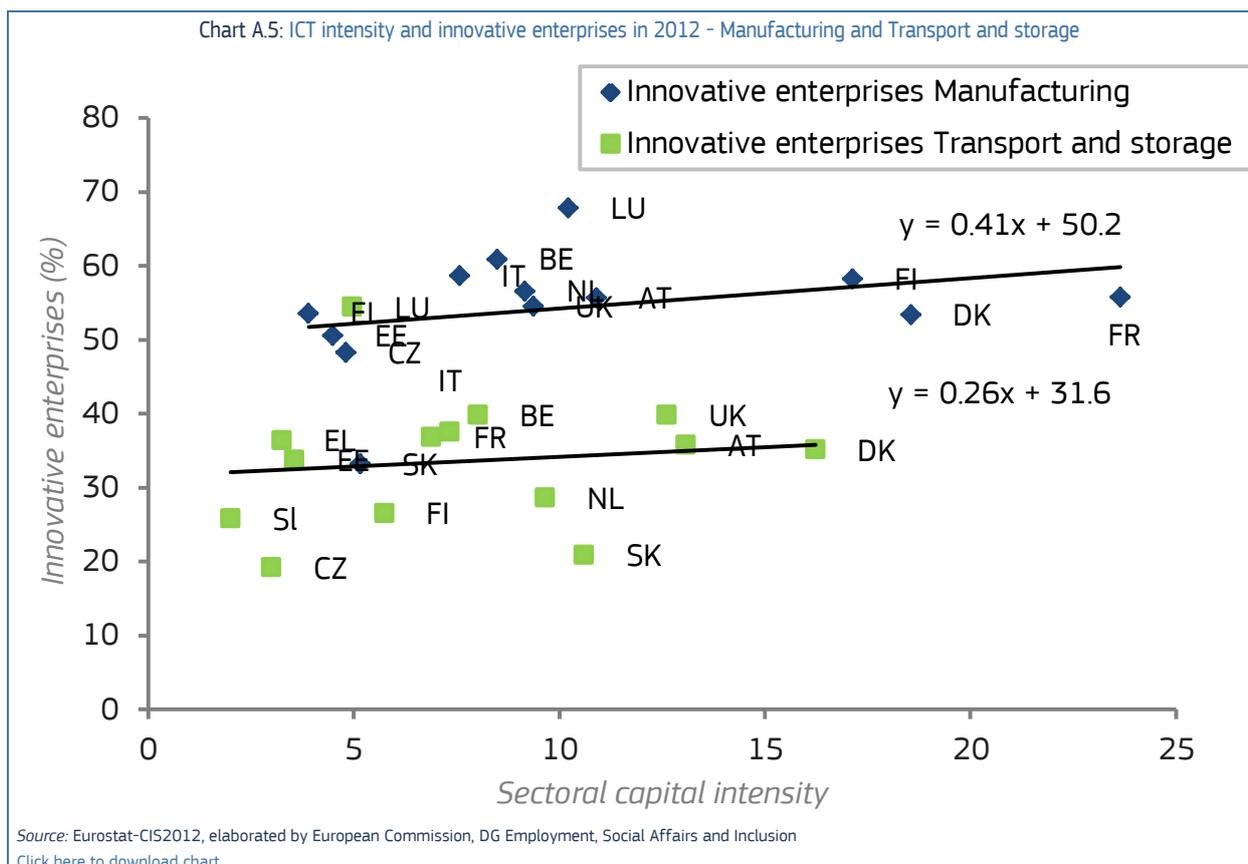
- Broersma et al. (2003) found that computers contributed positively to productivity (real output), even after accounting for firm-specific factors such as labour quality.
- Doms et al. (2004) found evidence of a significant relationship between ICT investment intensity and sales per employee for large firms.

- Mendelson and Pillai (1999) and Biagi (2013), using data on the computer and electronic industry, found a positive relationship between digitalisation and business success (as measured by profitability and growth).
- Brynjolfsson (2003) and Bloom et al. (2012) suggested that ICT investment has a greater positive effect on productivity when coupled with investment in complementary assets, such as organisational and human capital.

ICT has also been found to foster innovation in several sectors. In both the manufacturing and transport and storage sectors <sup>(343)</sup>, there is a positive correlation between ICT capital intensity <sup>(344)</sup> and the percentage of innovative enterprises <sup>(345)</sup> (Chart A.5).

Other studies have suggested, however, that:

- ICT investment alone has a positive but low impact on productivity;
- the impact of ICT investment becomes large and positive only when it is coupled with organisational change (which itself may also have a small positive impact);
- due to the complementarity between ICT investment and organisational change, some lag is to be expected between the time of the investment in ICT and the time the positive impact on productivity is observed, due to the organisational change that a firm has to go through if it wants to reap the full benefit of ICT investment;
- the distribution of skills among the workforce and the level of human capital are also important in determining the impact of ICT investment and organisational change; and
- not all firms can benefit in the same way from ICT investment since not all firms can implement organisational change successfully.



<sup>(343)</sup> These charts use available cross-sectional data at country level for year 2012.

<sup>(344)</sup> ICT capital intensity is measured, at sectoral level, as fixed stock in ICT divided by number of employees.

<sup>(345)</sup> Firm level data provided by Eurostat - Community Innovation Survey 2012 (CIS2012). Innovative enterprises include enterprises with abandoned, suspended or ongoing innovation activities. CIS2012 considers four different types of innovations: product, process, organisational and marketing.

## References

- ACATECH (2015), Jahresbericht 2014, Deutsche Akademie Der Technikwissenschaften, Berlin and Munich.
- Acemoglu, D. (2002), Technical Change, Inequality, and The Labor Market, *Journal of Economic Literature*, volume 40, pp. 7-72.
- Acemoglu, D. and D. Autor (2011), Skills, tasks and technologies: Implications for employment and earnings, *Handbook of labor economics* (4) 1043-1171.
- Antonczyk, D., T. DeLeire and B. Fitzenberger (2010), Polarization and rising wage inequality: comparing the US and Germany, ZEW-Centre for European Economic Research Discussion Paper.
- Arntz, M., T. Gregory and U. Zierahn (2016), The Risk of Automation for Jobs in OECD countries: A Comparative Analysis, *OECD Social, Employment and Migration Working Papers*, No. 189, OECD Publishing, Paris, <http://dx.doi.org/10.1787/5j1z9h56dvq7-en>.
- Atasoy, H. (2013), The Effects of Broadband Internet Expansion on Labor Market Outcomes, *ILR Review*, Cornell University, ILR School, vol. 66(2), pages 315-345, April.
- Autor D. H. and D. Dorn (2013), The growth of low-skill service jobs and the polarization of the US labour market, *American Economic Review*, 2013, 103(5), 1553-1597.
- Autor D. H., L. F. Katz and M. S. Kearney (2006), The polarization of the U.S. labour market, *American Economic Review*, 96 (2): 189-94.
- Autor, D. H., F. Levy and R. J. Murnane (2003), The skill content of recent technological change: an empirical exploration, *Quarterly Journal of Economics*, 118(4), 1279-1333.
- Bacigalupo, M., P. Kampylis, Y. Punie and G. Van den Brande (2016), *EntreComp: The Entrepreneurship Competence Framework*. Luxembourg: Publication Office of the European Union. EUR 27939 EN; doi:10.2791/593884
- Bertola, G., and A. Ichino (1995), Wage inequality and unemployment: United States versus Europe. *NBER Macroeconomics Annual 1995*, Volume 10, 13-66.
- Beaudry, P. and D. A. Green (2000), Cohort Patterns in Canadian Earnings: assessing the role of skill premia in inequality trends; *Canadian Journal of Economics*; vol.33 (4), 907-936.
- Beaudry P., D. A. Green, and B. M. Sand (2016), The Great Reversal in the Demand for Skill and Cognitive Tasks, *Journal of Labor Economics*, University of Chicago Press, vol. 34(51), pages S199 - S247.
- Bertot, J. C., P. T. Jaeger and J. M. Grims (2010), Using ICTs to create a culture of transparency: E-government and social media as openness and anti-corruption tools for societies, *Government Information Quarterly* 27(3), University of Maryland, pages 264-271.
- Bezos, J. (2006), Opening Keynote. MIT Emerging Technologies Conference.
- Biagi, F. (2013), ICT and Productivity: A Review of the Literature, *Digital Economy Working paper n. 07*, 2013, European Commission.
- Biagi, F., D. Cavapozzi and R. Miniaci (2013), Employment transitions and computer use of older workers, *Applied Economics*, 45:6, 687-696.
- Biagi, F. and C. Lucifora (2008), Baby Bust, Educational Boom and Unemployment in Europe: Economic Factors and Labour Market Institutions” in “*Labour Economics*”, 15 (2008) 1076–1101.
- Blau, F. and L. M. Khan (1996), International Differences in Male Wage Inequality: Institutions versus Market Forces, *Journal of Political Economy*, 104, pp. 791-837.
- Blinder A. S. (2009), How Many US Jobs Might be Offshorable?, *World Economics*, 10(2), 41-78.
- Bloom, N., R. Sadun and J. Van Reenen (2012), Americans Do IT Better: US Multinationals and the Productivity Miracle, *American Economic Review*, 102(1): 167-201.
- Broersma, L., R. H. McGuckin and M.P. Timmer (2003), The impact of computers on productivity in the trade sector: explorations with Dutch microdata, *De Economist*, 151, 53-79.
- Brynjolfsson, E. and L. M. Hitt (2003), Computing Productivity: Firm-Level Evidence, *The Review of Economics and Statistics*, MIT Press, vol. 85(4), pages 793-808, November.
- Brynjolfsson, E. and A. McAfee (2011), *Race Against the Machine: How the Digital Revolution is Accelerating Innovation, Driving Productivity, and Irreversibly Transforming Employment and the Economy*, Digital Frontier Press.
- Brynjolfsson, E. and A. McAfee (2014), *The Second Machine Age*, W. W. Norton & Company.
- Brunello, G., S. Comi and C. Lucifora (2000), The College wage gap in 10 European countries: evidence from two cohorts, *IZA Discussion paper* 228.
- Card, D. and T. Lemieux (2001), Can Falling Supply Explain the Rising Return to College for Younger Men?

- A Cohort-Based Analysis, *Quarterly Journal of Economics*, 116(2), pp 405-476.
- Card, D., T. Lemieux and W. C. Riddell (2004) Unions and Wage Inequality, *Journal of Labor Research*, Transaction Publishers, vol. 25(4), pages 519-562, October.
- CEDEFOP (2015), Briefing note, June 2015, ISSN 1831-2411.
- CEPIS (2006), ICT Skills Certification in Europe, Office for Official Publications of the European Communities, Luxembourg.
- Christophen, M. (1992), *Logistics and Supply Chain Management*, London: Pitman Publishing.
- Claffy, K. and D. Clark (2013), Platforms Models for Sustainable Internet Regulation, *Telecommunications Policy Research Conference (TPRC) 41*, Vol.4 (2013).
- Codagnone, C., F. Abadie and F. Biagi (2016), The future of work in the 'sharing economy': Market Efficiency and Equitable Opportunities or Unfair Precarisation?, *JRC Science and Policy Report: European Commission, Joint Research Centre Institute for Prospective Technological Studies*.
- Codagnone, C. and F. Biagi (2016a), The Passions and the Interests: Unpacking the Sharing Economy, *JRC Science for Policy Report*, Luxembourg: Publications Office of the European Union Studies, forthcoming.
- Codagnone, C. and F. Biagi (2016b), The future of work in the 'collaborative economy': Market Efficiency and Equitable Opportunities or Unfair Precarisation?, *JRC Science for Policy Report*, Luxembourg: Publications Office of the European Union Studies, forthcoming.
- Davies, W. (2015), *The happiness industry: How the government and big business sold us well-being*, London: Verso.
- De Panizza, A. (2016), *PREDICT 2016 Key Facts*, JRC Scientific and Technical Report, forthcoming. <https://ec.europa.eu/jrc/en/predict/predict2016>
- De Stefano, V. (2015), The rise of the "just-in-time workforce": on-demand work, crowdwork and labour protection in the "gig-economy", *International Labour Office, Inclusive Labour Markets, Labour Relations and Working Conditions Branch*, Geneva: ILO, 2016 *Conditions of work and employment series*, No. 71.
- DiNardo, J., N. M. Fortin and T. Lemieux (1996), Labor Market Institutions and the Distribution of Wages, 1973-1992: A Semiparametric Approach, *Econometrica*, Vol. 64, No. 5. (Sep., 1996), pp. 1001-1044.
- Doms, M., R. Jarminand and S. Klimek (2004), Information technology investment and firm performance in US retail trade, *Economics of Innovation and New Technology*, Taylor & Francis Journals, vol. 13(7), pages 595-613.
- Dustmann, C., J. Ludsteck and U. Schönberg (2009), Revisiting the German Wage Structure". *The Quarterly Journal of Economics*, Vol. 124(2):843-881.
- Eurofound (2013), *Employment polarization and job quality in the crisis: European Job Monitor 2013*, Eurofound, Dublin.
- Eurofound (2015), *New forms of employment*, Publication Office of the European Union, Luxembourg.
- Eurofound (2016), *What do Europeans do at work? A task-based analysis: European Jobs Monitor 2016*, Publications Office of the European Union, Luxembourg.
- European Commission (2010), *Digital Agenda for Europe*
- European Commission (2014), *Employment and Social Developments in Europe 2014*.
- European Commission (2015), *Digital Transformation of European Industry and Enterprises. Strategic Policy Forum on Digital Entrepreneurship*.
- European Commission (2016a), *Key economic, employment and social trends behind a European Pillar of Social Rights*.
- European Commission (2016b), *European Semester Thematic Fiche: Undeclared Work*. [http://ec.europa.eu/europe2020/pdf/themes/2016/undeclared\\_work\\_201605.pdf](http://ec.europa.eu/europe2020/pdf/themes/2016/undeclared_work_201605.pdf)
- European Commission Communication (2016c) *A New Skills Agenda for Europe: Working together to strengthen human capital, employability and competitiveness*.
- European Commission (2016d), *Analytical underpinning for a New Skills Agenda for Europe*
- European Commission (2016e), *A European agenda for the collaborative economy*.
- European Commission (2016f), *European Agenda for the collaborative economy – supporting analysis*.
- Evangelista, R., P. Guerrieriand and V. Meliciani (2014), The economic impact of digital technologies in Europe, *Economics of Innovation and New Technology*, 23(8), 802-824.
- Falk, M. and F. Biagi (2015), *Empirical Studies on the Impacts of ICT Usage in Europe*. Institute for Prospective Technological Studies Digital Economy Working Paper 2015/14. JRC98693
- Fernández-Macías, E. and J. Hurley (2016), Routine-biased technical change and job polarization in Europe, *Socio-economic Review*.

- Ferrari, A. (2013), DIGCOMP: A Framework for Developing and Understanding Digital competence in Europe, JRC Scientific and Policy Reports, Joint Research Centre, Publications Office of the European Union, 2013.
- Firpo, S., N. M. Fortin, and T. Lemieux (2011), Occupational Tasks and Changes in the Wage Structure, IZA Discussion Papers 5542, Institute for the Study of Labor (IZA).
- Frey, C. B. and M. A. Osborne (2013), The future of employment: how susceptible are jobs to computerisation? Oxford University, Sept. 17, 2013.
- [http://www.oxfordmartin.ox.ac.uk/downloads/academic/The\\_Future\\_of\\_Employment.pdf](http://www.oxfordmartin.ox.ac.uk/downloads/academic/The_Future_of_Employment.pdf)
- Goldin, C. and L. Katz (1996), The Origins of Technology-Skill Complementarity; Quarterly Journal of Economics; 113; pp. 693-732.
- Goos, M., A. Manning and A. Salomons (2014), Explaining job polarization: the roles of technology, offshoring and institutions, *American Economic Review*, Aug 2014, Vol. 104, No. 8: Pages 2509-2526.
- Gordon, R. J. (2000), Does the New Economy Measure up to the Great Inventions of the Past?, Journal of Economic Perspectives, Vol. 14(4), pages 49-74.
- Gordon, R. J. (2012), Is the U.S. Economy Growth Over? Faltering Innovation Confronts the Six Headwinds, NBER Working Paper No. 18315.
- Graetz, G. and G. Michaels (2015), Robots at Work, CEPR Discussion Paper 10477, March.
- Greenan, N. and D. Guellec (2000), Technological innovation and employment reallocation, Labour, 14(4), 547-590.
- Hagiu, A. and S. Rothman (2016), Network Effects Aren't Enough, Harvard Business Review, April 2016 issue (pp.64-71)
- Hobsbawm, E. (1999), Industry and Empire, the Birth of the Industrial Revolution, The New Press.
- Hornstein A., P. Krusell and G. L. Violante (2005), "The effects of technical change on labour market inequalities", Chapter 20 in P. Aghion and S.N. Durlauf (eds.), Handbook of economic growth, Elsevier B.V., 2005
- Huws, U. (2015), Labour in the Digital Economy, Monthly Review Press.
- Hüsing, T., W. B. Korte and E. Dashja (2015), Trends and Forecasts for the European ICT Professional and Digital Leadership Labour Markets (2015-2020), Empirica Working Paper, November 2015.
- Ibrahim, M. J. (2012), "Technological Change and Economic Transformation, Technological Change", Chapter in Dr. Aurora Teixeira (Ed.), InTech, DOI: 10.5772/47985. Available from: <http://www.intechopen.com/books/technological-change/technological-change-and-economic-transformation>
- ILO (2015), World Employment and Social Outlook – trends 2015: data/analysis on skills and routine/non routine jobs. [http://www.ilo.org/wcmsp5/groups/public/---dgreports/---dcomm/---publ/documents/publication/wcms\\_337069.pdf](http://www.ilo.org/wcmsp5/groups/public/---dgreports/---dcomm/---publ/documents/publication/wcms_337069.pdf)
- ILO (2016), Guidance on "decent work in global supply chains": Conclusions of the International Labour Conference 2016. [http://www.ilo.org/wcmsp5/groups/public/---ed\\_norm/---relconf/documents/meetingdocument/wcms\\_497555.pdf](http://www.ilo.org/wcmsp5/groups/public/---ed_norm/---relconf/documents/meetingdocument/wcms_497555.pdf)
- IFR (2013), World Robotics 2013 Industrial Robots, International Federation of Robotics (IFR) Publication Series.
- Jaumotte, F. and C. Osorio-Buitron (2015), Inequality and Labor Market Institutions (July 17, 2015), IMF Staff Discussion Note No. 15/14.
- Joyce, S., and U. Huws (2016), Results of a survey of crowd work in four EU countries, presentation at the workshop on Dynamics of Virtual Work, Brussels, 8 June 2016.
- Jorgenson, D. W., M. S. Ho and K. J. Stiroh (2008), A Retrospective Look at the U.S. Productivity Growth Resurgence, Journal of Economic Perspectives, vol. 22, N. 1, pp3-24
- Juhn, C., K. Murphy and B. Pierce (1993), Wage Inequality and the Rise in Returns to Skill; Journal of Political Economy; vol.101 (3), pp. 410-442.
- Katz L. and K. Murphy (1992), Changes in Relative Wages, 1963-1987: Supply and Demand Factors; Quarterly Journal of Economics; vol. 107; pp. 35-78.
- Koellinger, P. (2008), The relationship between technology, innovation, and firm performance – empirical evidence from e-business in Europe, Research Policy 37(8): 1317-28.
- Koutroumpis, P., A. Leiponen and L. D. W. Thomas (2012), ICT innovation in Europe: productivity gains, startup growth and retention, Imperial College Business School.
- Krusell, P., L. E. Ohanian, J.V. Rios-Rull and G. L. Violante (2000), Capital-Skill Complementarity and Inequality: A Macroeconomic Analysis, Econometrica, vol. 68(5), pp 1029-1054.
- Lin, H. T., G. G. Leisk and B. Trimmer (2011), GoQBot: a caterpillar inspired soft-bodied rolling robot. Bioinspir. Biomim. 6, 026007.10.1088/1748-3182/6/2/026007

- Machin, S. (2011), Changes in UK Wage Inequality Over the Last Forty Years, in P. Gregg and J. Wadsworth (eds.) *The Labour Market in Winter - The State of Working Britain 2010*, Oxford University Press.
- MaCurdy, T. and T. Mroz (1995), *Measuring Macroeconomic Shifts in Wages from Cohort Specification*; mimeo.
- Mazzolari, F. and G. Ragusa (2013), Spillovers from high-skill consumption to low-skills labour markets, *The Review of Economics and Statistics*, 95(1): 74-86.
- Mendelson, H. and R. R. Pillai (1999), Information Age Organizations, Dynamics and Performance, *Journal of Economic Behavior & Organization*, vol. 38 pp 253-281.
- Michaels, G., A. Natraj and J. Van Reenen (2014), Has ICT Polarized Skill Demand? Evidence from Eleven Countries over Twenty-Five Years, *The Review of Economics and Statistics*, 96(1), 60-77.
- Milgrom, P. and J. Roberts (1990), The Economics of Modern Manufacturing: Technology, Strategy, and Organization, *American Economic Review*, 80:3, pp.511-528.
- Moretti, E. (2012), The high-tech boom and the rest of us, *The San Francisco Chronicle* (Online: November, 18, 2012).
- Naticchioni, P., G. Ragusa and R. Massari (2014), Unconditional and conditional wage polarization in Europe, IZADP n. 8465, 2014.
- OECD (2002), *Measuring the Information Economy*, OECD, Paris.
- OECD (2003), *ICT and Economic Growth: Evidence from OECD countries, industries and firms*, OECD, Paris.
- OECD (2004), *Understanding Economic Growth, Macro-level, Industry-level, Firm-level evidence*, OECD, Paris.
- OECD (2013), *OECD Skills Outlook 2013: First results from the Survey of Adult Skills*, OECD, Paris.
- OECD, WTO and World Bank Group (2014), *Global Value Chains: Challenges, Opportunities, and implications for policy*, OECD, Paris.
- OECD (2014), *Measuring the Digital Economy*, OECD, Paris.
- OECD (2015), *The future of productivity*, OECD, Paris.
- OECD (2016), *Working Party on Measurement and Analysis of the Digital Economy*, OECD, Paris.
- OECD/Eurostat (2005), *Oslo Manual: Guidelines for Collecting and Interpreting Innovation Data*, 3rd Edition, OECD Publishing, Paris.
- Owyang, J. (2014), *Collaborative economy honeycomb. Creative commons*.
- Owyang, J., A. Samuel and A. Grenville (2014), *Sharing is the New Buying: How to Win in the Collaborative Economy*. <http://www.web-strategist.com/blog/2014/03/03/report-sharing-is-the-new-buying-winning-in-the-collaborative-economy/>
- Pallais, A. (2014), Inefficient Hiring in Entry-Level Labor Markets. *American Economic Review*, 104 (11): 3565-3599. Reprinted in *Learning in Labor Markets* edited by Michael Waldman (forthcoming).
- Pantea, S., F. Biagi, and A. Sabadash (2014), Are ICT displacing workers? Evidence from seven European countries, JRC Technical reports, *Digital Economy Working Paper n.7*, 2014, Joint Research Centre, European Commission.
- Parker, G., M. van Alstyne and S. Choudary (2016), *Platform Revolution*, New York: Norton.
- Pellizzari, M., F. Biagi, and B. Brecko (2015), E-skills Mismatch: Evidence from International Assessment of Adult Competencies (PIAAC), JRC Technical reports, *Digital Economy Working Paper n.10*, 2015, Joint Research Centre, European Commission.
- Renda, A. (2016), *Selecting and Designing European Innovation Policies*, JRC Technical Reports, 2016, Joint Research Centre, European Commission, forthcoming.
- Ringel, M., A. Taylor and H. Zablitz (2015), *Innovation 2015*, BCG Perspectives.
- Rosenblat, A. and L. Stark (2015), *Uber's Drivers: Information Asymmetries and Control in Dynamic Work* (October 15, 2015). Available at SSRN: <http://ssrn.com/abstract=2686227> or <http://dx.doi.org/10.2139/ssrn.2686227>
- Schwab, K. (2016), *The Fourth Industrial Revolution*, The World Economic Forum.
- Stanton, C. T. and C. Thomas (2012), *Landing the First Job: The Value of Intermediaries in Online Hiring*, 2012.
- Strowel, A. and W. Vergote (2015), *Digital Platforms: To Regulate or Not To Regulate?*
- Surdilovic, D., Y. Yakut, T. M. Nguyen, X. B. Pham, A. Vick and R. M. Martin (2010), Compliance control with dual-arm humanoid robots: Design, planning and programming, *Humanoids*, pp. 275-281.
- Van Alstyne, M.W., G. G. Parker, and S. P. Choudary (2016), *Pipelines, Platforms, and the New Rules of Strategy*, Harvard Business Review.
- van Ark, B., M. O'Mahony and M. P. Timmer (2008), The Productivity Gap between Europe and the United States: Trends and Causes, *Journal of Economic Perspectives*, vol. 22, N.1, 2008, pp.25-44.
- Van Reenen J., N. Bloom, M. Draca, T. Kretschmer, Sadun R., H. Overman and M. Schankerman (2010), *The*

Economic Impact of ICT, Final Report for the European Commission, 2010.

Vivarelli, M. (2007), Innovation and Employment: a Survey, IZA Discussion papers n. 2621, 2007.

Vuorikari, R., Y. Punie, S. Carretero Gomez and G. Van den Brande (2016), DigComp 2.0: The Digital Competence Framework for Citizens, Update Phase 1: The Conceptual Reference Model, Luxembourg Publication Office of the European Union. EUR 27948 EN; doi:10.2791/11517

Williams, C. (2013), Evaluating Cross-National Variation in the Extent and Nature of Informal Employment in the European Union, BRITOW and John Wiley & Sons Ltd.

Winston, M. and T. Pénard (2015), Regulating digital platforms in Europe – a white paper.

Yates, S. J., J. Kirby and S. Lockley (2015), Digital-by-default: reinforcing exclusion through technology, Social Research online.

Zhu, F. and N. Furr (2016), Products to Platforms: Making the Leap, Harvard Business Review 94, no. 4 (April 2016): 72–78.

# Capacity building for social dialogue

## INTRODUCTION<sup>(346)</sup>

Social dialogue has a key role to play in tackling the challenges related to labour market and social developments and is a core component of a well-functioning social market economy. This chapter looks at recent developments in social dialogue in Europe, in particular how social partners increase their capacity in order to represent an increasingly diverse range of workers effectively.

In recent years social dialogue has not realised its full potential. It has been under particular strain in those countries most affected by the recent economic crisis. Even in countries where social dialogue had been performing comparatively well the crisis has had a negative impact on its functioning.

However, in this period of economic recovery social dialogue can be a strong factor in promoting job creation and job quality by contributing to increased competitiveness, improved working conditions and structural reforms. These three elements are essential for responding to the challenges of globalisation as well as to technological (including new forms of work), demographic, and climate change.

As a consequence, there is a need for further improvement in the functioning of social dialogue. In March 2015, 30 years after the launch of the European Social Dialogue, the European Commission, together with the social partners and the other EU institutions launched a "New Start for Social Dialogue".

<sup>(346)</sup> This chapter was written by Sigfried Caspar, Melissa Thomas and Tim Van Rie with contributions from David-Pascal Dion and Raymond Maes. Section 1 is based on a contribution by Christian Welz, Andrea Fromm, Karel Fric, Camilla Galli da Bino, Peter Kerckhofs and Ricardo Rodriguez (Eurofound)

Since then, the Commission, the Council and the social partners have delivered on this new start through a number of initiatives. In addition, a joint statement was co-signed whereby all actors agreed that the new start for social dialogue should lead to (1) a stronger emphasis on capacity building of national social partners, (2) more substantial involvement of the social partners in the European Semester, (3) strengthened involvement of social partners in EU policy and law-making and (4) a clearer relationship between social partners' agreements and the 'Better Regulation' agenda.

Strengthening the national social partners and their capacity to engage in bipartite and tripartite dialogue can be instrumental in the success of the New Start for Social Dialogue. Of course, there are a number of preconditions for social dialogue to exist and prosper. These include the respect for basic values and fundamental rights and notably the right to freedom of association and collective bargaining<sup>(347)</sup>. Social dialogue also necessitates a sound industrial relations environment and respect for the role of social partners<sup>(348)</sup><sup>(349)</sup>.

Some of the conditions necessary for such dialogue obviously fall under the direct responsibility of the social partners, others are addressed more to the public authorities. Crucially, a political willingness and commitment to be involved in the dialogue and to

<sup>(347)</sup> European Charter of Fundamental Rights of 2009 (art. 12 and 27); European Community Charter of the Fundamental Social Rights of Workers of 1989 (art. 11-15); ILO Conventions N°97 of 1948 and N°98 of 1949.

<sup>(348)</sup> "Resolution concerning tripartism and social dialogue", ILC, 2002.

<sup>(349)</sup> "Resolution concerning the recurrent discussion on social dialogue", ILC, 2013.

contribute to economic and social development must exist between the relevant actors, primarily the social partners themselves. Public authorities also have a responsibility to provide an enabling environment and establish laws and regulations for the enforcement of the basic rights of freedom of association and of collective bargaining.

The first section of this chapter looks at the internal make-up of social partner organisations and the ways in which they must evolve in order to stay relevant in the fast changing world of work. Specifically it explores the need of social partners to extend their membership base beyond the traditional type of 'worker'.

The second section then deals with the impact social partners have on policy design and implementation. It explores the different institutional frameworks Member States have for involving social partners in policy discussions, focuses on the quality of the participation of the national social partners and looks at how and when social partners have affected national policy.

## 1. MEMBERSHIP AND STRUCTURE OF SOCIAL PARTNERS' ORGANISATIONS<sup>(350)</sup>

### 1.1. Number of social partners' organisations

Cross-industry Social Dialogue in Europe is performed by around 108 trade union organisations and 134 employers' organisations at national levels (Eurofound 2014a) <sup>(351)</sup>. In almost all countries (except for Ireland and Latvia) more than one trade union organisation is involved in cross-industry industrial relations. Such pluralism is due to the following factors: the presence of traditional ideological cleavages between the main trade unions (in Italy and France); the process of trade union renewal in central and eastern European countries after the transition to democracy and a market economy since the 1990s (Slovenia, Hungary, Croatia and Romania); the inclusion in cross-industry negotiations of autonomous trade union

confederations (Italy); and the inclusion of occupational unions (Italy) and regional unions (Spain).

Of the 108 trade union organisations considered, 56% are economy-wide, all-encompassing organisations which cover the whole of the private and public sectors. The remaining 44% have a representational domain which is limited to some subsectors (generally the private or the public sectors) or certain occupations (blue- or white-collar unions, technicians, and managers).

For the 134 employers' associations pluralism is the rule, as it is with trade unions. In all countries there are at least two employers' organisations. This pluralism is usually linked to the representation of specific categories of employers in different organisations, with specialised associations for the private and public sectors, for large and smaller enterprises, or for specific types of firms such as crafts or cooperatives. Ideological or traditional cleavages within the same representational domain can further complicate the picture, as in the case of Italy.

Employers' associations, even if they are national-level organisations, tend to be focused on specific interests and this often encourages relatively narrow representational domains. Around 40% of the employers' associations included in the study have encompassing domains (covering the entire private or public sector). The remaining 60% of employers' organisations concentrate on specific sections of the production system.

Almost nine out of ten top-level employers' organisations are involved in multi-sector collective bargaining, which means that the employer association takes part directly or through its affiliates in collective bargaining in at least two sectors or more. Only one third are directly involved in cross-industry collective bargaining. For top-level trade union organisations, the percentages are higher: 97% are involved in multi-sector collective bargaining, while 55% participate directly in cross-industry collective bargaining (Eurofound 2014a).

<sup>(350)</sup> Section 1 was drafted by Eurofound colleagues Christian Welz, Andrea Fromm, Karel Fric, Camilla Galli da Bino, Peter Kerckhofs and Ricardo Rodriguez.

<sup>(351)</sup> A national association was considered as relevant if it met the following criteria:

either regularly directly or indirectly (through its member organisations) involved in cross-industry collective bargaining (or employment regulation) or directly involved in bipartite/tripartite consultations on cross-industry labour market and industrial relations issues; and/or affiliated to a relevant European interest association; the association's domain relates to either more than one sector of the economy (at least two sections under the NACE Rev.2 classification system – that is one-digit sectors), thus including associations with a general membership domain; or a group of enterprises or organisations (such as small and medium-sized enterprises (SMEs), cooperatives and public-owned enterprises) across the economy, in the case of employers' organisations, or a category of employees (such as white-collar workers, blue-collar workers or academics) across the economy, in the case of trade union confederations.

Table 5.1: Mergers and demergers of trade unions at various stages

	Organisations	Sector	Status at the end of 2015
<b>Trade Unions: discussed/proposed mergers</b>			
SI	ZSSS, SKEI, SVIZ	Public/private sector	Trade union confederations in May 2015 participated in a roundtable discussion on the association of trade union confederations; Public sector trade unions (SVIZ) are more open to associating with other trade unions than private sector trade unions (ZSSS), who see more benefits in international connections.
DK	FTF and LO	Top-level	Intensified talks about a possible merger in the years to come.
FI	SAK and STTK	Top-level	Initially expected to be up and running by 2017.
<b>Trade Unions: completed mergers</b>			
IT	DirCredito and FIBA Cisl to merge into 'FIRST Cisl'	Banking, credit and financial sector	Completed 29 April 2015
HU	MaSZSZ	Top-level	Completed 27 February 2015
HR	SING and EKN	Oil/gas/energy	Completed 26 November 2015
SK	OZ SP and OZ Kovo	Glass, metal	Completed 13 October 2015
<b>Trade Unions: demergers</b>			
EE	EÖL from EAKL	Healthcare (nursing)	Proposed demerger
HU	SZEF and MaSZSZ	Public sector/top-level	Completed 15 September 2015
PT	SNPVAC from UGT	Aviation/crew workers of company TAP	Independence of SNPVAC confirmed by referendum in March 2015

Source: Eurofound network of correspondents, EurWORK quarterly reports

[Click here to download table.](#)

## 1.2. Mergers and demergers

The landscape evolves over time, and in 2015 mergers of trade unions took place in Croatia, Denmark, Finland, Hungary, Italy, Slovakia and Slovenia (Eurofound 2016) (Table 5.1). At the same time, in Estonia, Hungary and Portugal, trade union confederations split up into smaller organisations. No major developments were observed among employers' organisations.

## 1.3. Membership of trade unions and employers' organisations

### 1.3.1. Membership matters

Membership and its cross-national variation and changes over time remain key to assessing the organisational strength and relevance of the actors. First, membership is a key criterion for actors to be accepted as parties to collective bargaining, for the resulting agreements to be declared generally binding through extension mechanisms, or for securing participation in tripartite bodies. Secondly, membership contributes to other elements of organisational strength, for example through the link to financial resources – which are at least partly dependent on membership fees – even if efficient internal structures may be just as important for organisational strength. Thirdly, the role and importance of social partner organisations depends on additional factors, such as their capacity to negotiate and represent their members (involving the ability to obtain a negotiating mandate), to mobilise members (and sometimes non-members), to act autonomously and to make lasting commitments.

However, in determining the representativeness of social partner organisations elements other than membership can play a more prominent role (according to the specific characteristics of the national system) (Eurofound, 2016a) (Box 5.1). In some countries, mutual recognition by social partners is much more important (for example: Cyprus, Denmark, Finland, Ireland, Lithuania, Malta, Slovenia, Sweden and the UK) thus reducing the direct relevance of organisational density. Examples of countries where legal requirements regulate representativeness are: Bulgaria, Croatia, Czech Republic, France, Greece, Latvia, Poland, Romania and Slovakia. Finally, in a number of countries the outcome of elections for workplace employee representatives is more important than membership density in assessing the importance of trade unions. France, Belgium, Luxembourg and Spain are examples of this.

### 1.3.2. Trade union membership and density

In most Member States, union membership has been in decline since the 1980s, at least in relative terms (i.e. measured as a proportion of wage and salary earners) (ESDE 2015).

Strong increases in female employment, the proliferation of non-standard work and migration and labour mobility have presented distinct challenges to trade union organisations, which have often struggled to attract and successfully represent the workers concerned.

Union strategies to attract and retain members are often considered with reference to two broad categories: the 'servicing' and 'organising' models.

Box 5.1: Criteria for representativeness

Representativeness has various meanings across the 28 Member States. At national level, in some Member States conformity with legal requirements is crucial, while in other countries mutual recognition by the social partners is more important, or the only basis for representativeness. In practice, few national systems would correspond to a 'pure' form of either mutual recognition or legal conformity. Most Member States feature a combination of these principles, applying a mix of both formal and informal criteria. To this main dichotomy were added three elements or drivers that can contribute in different ways to representativeness of social partners: electoral success, organisational or 'social strength' in terms of membership and, the capacity to negotiate. When thresholds exist, these are less common for employers than for the trade unions. Employer thresholds are either a requirement for the extension of collective agreements or a criterion permitting access to tripartite bodies.

All in all, four models of representativeness can be identified, combining in different ways the criteria of organisational (or "social") strength, negotiating capacity and formal criteria relating to membership or electoral success.

1. a system of self-regulation where social partners decide which organisations are representative, through mutual recognition,. This is associated with the negotiating capacity and social strength drivers and with very little state regulation on representativeness;
2. a mixed model combining elements of mutual recognition and of state regulation and legal conformity;
3. a state-regulated system where 'social strength'(membership) is used as a legal measure of representativeness; and
4. a state-structured system in which electoral success primarily determines representativeness.

Representativeness model	Countries
<b>Social partner self-regulation</b>	Cyprus, Denmark, Finland, Ireland, Lithuania, Malta, Norway, Slovenia, Sweden and the UK.
<b>Mixed</b>	Austria, Estonia, Germany, Hungary, Italy, Netherlands, Portugal and Spain (for employers).
<b>State regulation membership strength</b>	Bulgaria, Croatia, Czech Republic, Greece, Latvia, Poland, Romania and Slovakia.
<b>State regulation electoral strength</b>	Belgium, France, Luxembourg and Spain (for trade unions).

Source: Eurofound (2016) The concept of representativeness at national and at European level.

In the servicing model, trade unions attract members through their core business of collective bargaining, or through (individualised) service provision such as support in handling conflicts at the workplace. Servicing is therefore associated with an institutional context featuring support for workplace representation and (multi-employer) collective bargaining (Gumbrell-McCormick & Hyman, 2013). It requires trade union staff with knowledge of legal proceedings or strong negotiating skills.

In many ways, the so-called *Ghent system* – in which trade unions are either directly involved in the provision of unemployment benefits, or closely linked to unemployment insurance funds providing such benefits – could be seen as a strong manifestation of membership promotion through services. However, while it has been argued that the servicing model

tends to favour representation of 'core 'workers in relatively stable employment, the Ghent system seems to increase membership specifically among those with less formal education who might be expected to be at a higher risk of unemployment (Høgedahl, 2014).

A functional equivalent to the Ghent system is the involvement of trade unions in offering supplementary social benefits (occupational welfare) (Natali, Pavolini, 2014).

The organising model, for its part, translates into specific efforts to actively recruit members (particularly groups that are relatively underrepresented), either by the unions' rank-and-file approach, or by professional recruiters.

This approach first emerged in the US, with the UK and Ireland among the early adopters. Organising models

are said to be particularly popular in a context of single employer bargaining, where trade unions need actively to secure representation in individual companies (Gumbrell-McCormick & Hyman, 2013). While there have been recent attempts to adopt elements of the organising model in France and Germany, the outcomes have varied. For instance in France the limited organisational power of trade union leadership at the national level hampered the implementation of in-depth organisational changes required by the organising model (Thomas, 2016).

In the context of the overall decline in trade union membership during the last decades, specific consideration must be given to those countries which operate the Ghent system. As explained above, in this system trade unions are involved in the provision of unemployment benefits or closely linked to unemployment insurance funds providing such benefits. To the extent that union membership is seen as a condition for obtaining unemployment benefits, this is a highly relevant factor for recruitment and retention of members and has consequently contributed to the high union density rate in the countries applying this system. In this context, research refers to the use of *selective incentives* (Olson, 1965) by unions to explain the value added for membership. This contrasts with the non-selective benefits of, for example, collective agreements, which in most countries apply to union members and non-members alike.

The Ghent system is a core feature of the Scandinavian industrial relations systems. Overall, union density rates in Denmark, Finland and Sweden have remained significantly higher than in most other Member States, despite some decrease particularly since the beginning of 2000. The Belgian trade union density rate, though lower than that in the Nordic countries is relatively high from an EU-wide perspective and in Belgium, by contrast with many other countries, trade unions have steadily increased their membership rates between 2001 and 2013.

The Ghent system is applied in different ways in these countries. In the Nordic countries, unemployment insurance is voluntary for workers, while in Belgium it is compulsory and the fund is entrusted to a public institution and co-managed by the social partners. Among other elements, sources of funding for unemployment benefits also differ, through social contributions by employers and employees, state funding and mixed methods. The rules for membership, the level of unemployment benefits, the administration and management style vary significantly. In legal terms, membership of unemployment insurance funds is distinct from membership of a trade union. In practice, however, many trade unions have set up these funds covering the (occupational, professional or other) domain in which they organise and engage in collective bargaining (Lindt, 2009). Voluntary unemployment insurance in the Nordic countries is subsidised (in some cases by making membership fees tax

deductible), which makes it relatively attractive to join the fund and the associated trade union.

The implementation of the Ghent system has been challenged in several countries (Eurofound, 2015), but, while in most countries, increases in unemployment are associated with drops in union density, Ghent system countries tend to record increases in union density under such conditions (Checchi and Visser, 2005). Furthermore, employees' rational choices to become union members and join their unemployment insurance funds in the Nordic countries depend on their (perceived) risk of becoming unemployed, which is linked to their age, education, skills, employment contract status (temporary or open-ended) and other factors.

### 1.3.3. Membership and density of employer organisations

Information on the density of employers' organisations (calculated as the proportion of employees in employment) is patchier than the information on trade unions. Still, overall, the membership of employer organisations has remained comparatively stable across Member States over recent years. According to the literature (Eurofound, 2010, Brandl and Lehr, 2016) many organisations have increased their focus on service provision, including training, finance/credit, management and legal matters. Employer organisations adapted their organisational structure and activities to the changing needs of business. Many companies deemed the changing institutional framework, which enabled them to negotiate their own wage agreements with trade unions, preferable to the previous system of multi-employer bargaining. Employer organisations responded by focusing more on non-wage related aspects of collective bargaining and getting more involved in occupational training programmes and active labour market policies. They adapted their organisational structure and activities, in particular by undertaking mergers. All of this helped to stabilise membership levels.

### 1.3.4. Examples of strong social partner organisations

Countries where social partner organisations can be characterised as 'strong and effective' include Denmark, Germany, Finland, Austria and Sweden. These countries have a solid organisation on the side of both the trade unions and the employer organisations and benefit from a close working relationship between political decision-makers and the social partners. These countries also managed the crisis reasonably well (European Commission, 2015). This of course cannot only be attributed to social dialogue, although the ability to reach a quick agreement on, for example generously extended short-time working arrangements helped to avoid unemployment rising rapidly.

### Box 5.2: Social partners have started representing workers in the sharing economy

In Denmark LO union opened a dialogue with the Uber company and encouraged employers to engage with them, with a view to ensuring that Uber observes Danish labour market regulations.

In France a new union, UNSA SCP-VTC, was set up in October 2015 with the specific aim of covering drivers not affiliated with taxi companies, in particular Uber drivers. On the employers' side, MEDEF has asked the government to promote new forms of digital companies, arguing that *'it would be a mistake to force platforms to enter in an old social model that has to be reformed'*.

The German Metalworkers Union (IG Metall) announced a plan for significant investment, up to 2025, in activities that organise crowd workers in the digital economy

In Poland Uber has joined the employers' organisation Pracodawcy RP, although this has been generally criticised because the company is viewed as illegally competing with taxi services. In June 2015 the Constitutional court ruled in favour of the right of non-standard workers to join a union, previously only possible for those with an employment contract.

One longer-term risk for these countries may be that the contribution social dialogue makes to the overall economic development is not sufficiently recognised, even taken for granted, to the extent of neglecting active investment to ensure that its strength is fully maintained. For instance, in the case of Germany social partnership rests on a basic consensus on the shared interest of employers and employees, in sound economic development and in an export-based economy. Social partners have strong institutional capacity: both employer organisations and trade unions have their own research centres and a sophisticated understanding of economic development.

## 1.4. Specific groups of workers

The context in which social partners work has changed significantly over recent decades, as the pressures and opportunities of globalisation and technological change have grown. Mass-production in industry has given way to predominantly service or knowledge-based economies (on which more information can be found in Chapter 4 which considers the effects of the collaborative economy may have on future of work and business). There has also been a rise of 'individualisation' in society at large – affecting the attitudes of the workforce towards both their work and the collective institutions which seek to represent their interests. The growth of female employment and changing gender roles have brought new emphasis to issues of work-life balance, care arrangements and working-time patterns as topics for social dialogue. The flexibility needs of companies and workers have come on to the agenda of social dialogue. Taken together these factors have contributed to what may be described as at least a partial 'de-standardisation' of employment relations. This has posed a major challenge to the traditional actors in industrial relations.

### 1.4.1. Atypical workers

Atypical work refers to employment relationships which do not conform to the standard or 'typical' model of full-time, regular, open-ended employment with a single employer over a long time span. Chapter 2 also looks at this new emerging class of workers for

example the so-called 'precariat' which defines workers with unstable or uncertain employment. In addition, chapter 4 explores the new employment relationships which have developed as a result of technological developments. However, this section looks specifically at how social partners can attract these atypical workers to their membership.

In Italy, all major trade union federations have established specific trade union sections in order better to organise, recruit and support atypical workers, including specific branches in the General Confederation of Italian Workers (Nidil Cgil), in the Union of Italian Workers (Uil-Temp) and in the Italian Confederation of Workers' Trade Unions (FeLSA Cisl). These organisations sign collective agreements with employer organisations representing temporary work agencies and provide atypical workers with specific services, such as fiscal counselling, information on their rights and support in disputes (Pulignano et al, 2015). Similar developments are reported from other countries such as Austria and the Netherlands. Among the previously unorganised groups of workers which the All-Poland Alliance of Trade Unions (OPZZ) has made attempts to organise are those employed on the basis of civil law contracts.

In the context of the digitally-based 'sharing economy', the responses and initiatives of the social partners around Europe have been mixed. Some examples can be found in the case of Uber drivers (see Box 5.2 )

There are other examples of new policies and strategies that have been put in place to open up the structure and services of unions to new members. In Bulgaria, the Trade Union of Self-employed and Informal Workers was created in 2014 in response to the poor working conditions, high unemployment and social insecurity of approximately 500,000 home-based workers (both self-employed and outsourced workers).

### Box 5.3: Coverage of self-employed workers

On-going Eurofound research focuses on mapping the types of self-employment, the working conditions for this group of workers as well as the potential of self-employment for job creation. As part of this study, options for collective representation and the degree of coverage are collected at national level, covering umbrella organisations specifically for self-employed, including trade unions and professional associations (like those for architects, lawyers or medical practitioners).

The information gathered so far in the context of the study shows a large variety of situations, which correspond to the ample diversity of self-employment forms existing in this group of workers. Self-employed are organised across Europe in employers, trade unions and professional organisations according to specific features in each Member State. Collective representation may cover self-employed and employees on the one hand, employers and self-employed on the other, or just self-employed without employees. Data on representation or coverage are not easily accessible, if they formally exist.

In some cases (Austria), the coverage is very high as the membership to the Federal Economic Chamber (WKO) is mandatory for all self-employed persons holding a business licence, including one-person enterprises. Mandatory membership also applies to the umbrella association of all chambers of liberal professions (Bundeskonferenz der Freien Berufe Österreich BUKO, Federal Conference of Liberal Professions). In Germany, every registered artisan has to join the local chamber of crafts.

In specific sectors such as agriculture, data can be more easily found. For example, in Germany according to the German Farmers' Association (DBV), around 90% of the 380,000 farmers are DBV members. In Ireland, the Irish Farmers Association (IFA) claims 85,000 members in the country.

In Belgium, the Union of independent entrepreneurs (Unizo), a broad-based, inter-professional organisation declares that it has 80,000 members, mostly in Flanders and Brussels regions; and the Fédération nationale de l'Union des Classes moyennes (UCM) covering artisans, tradespeople, liberal professionals in Walloon and Brussels declares 90,000 members.

Data on trade unions representing self-employed are more difficult to collect. In Belgium, the Syndicat Neutre pour Indépendants (SNI) representing self-employed, liberal and intellectual professionals and SMEs declares 40,000 members. In Italy, unions affiliated to the most representative trade union confederations are actively organising the self-employed in their diverse forms, although mainly addressing freelance and temporary agency work. Thus, Nuove Identità di Lavoro - New Labour Identities (NiDIL) covering workers with atypical contracts (partite IVA or sole traders, freelance, transfer of copyright, and TAW) is associated to the Confederazione Generale Italiana del Lavoro, (CGIL); National Association of Temporary, Autonomous, and Atypical Workers and Partite IVA (UILtemp) is associated with the Unione Italiana del Lavoro (UIL); FeLSA, the Federation of Temporary Agency, Autonomous and Atypical Workers is linked to the Confederazione Italiana Sindacati Lavoratori (CISL). Union coverage is very low in comparison with standard workers. NiDIL boasts 53,000 members, while FeLSA has 50,000 and UILtemp 43,000 members. The three unions together may reach 5.4% of potential workers they could cover.

#### 1.4.2. Members facing financial strain

Some trade unions have enlarged their portfolio of services in response to the economic and social crisis. For example, in Cyprus trade unions developed support programmes for those members who have become unemployed or who face severe financial strain by providing them with help and healthcare provision, reduced prices for medication, remedial teaching for students and assistance in acquiring essentials such as food and clothing. In Spain, CCOO approved a "Plan of fees" for 2014–2015 aimed at reaching potential affiliates among disadvantaged social groups, by creating, for example, a reduced monthly "support fee" of €2 for people under the age of 30 who have never worked before and who, due to their particular situation, have no other organisation to support them. Similarly, in Ireland, trade unions have established a way of retaining members experiencing difficult personal financial circumstances. Instead of charging for unpaid dues, they are allowing these members to remain without having to pay arrears.

#### 1.4.3. The gender dimension

The increasing participation of women in the labour market over the past decades (often in non-standard employment) has meant that social partner organisations have had to intensify their activities in dealing with gender issues too. The gender gap is visible in terms of horizontal and vertical occupational segregation, different pay levels, the unequal distribution of domestic and care responsibilities and women's participation in decision-making. The organisational and bargaining structures of the social partners have faced the challenge of adapting to include and deal with the challenges posed by gender-based inequality.

The extent to which issues related to gender have been given priority in the relevant activities of the social partners differs across the EU Member States. While the internal activities of trade unions and employer organisations tend to concentrate on quota systems, training, and awareness raising campaigns, their external activities mainly concentrate on campaigning and educational activities and the integration of gender equality and work-life balance

measures into national policies and collective agreements.

Research mapping of social partners' gender equality strategies and initiatives in seventeen countries indicates that a number of relatively well-developed internal and/or external policies were carried out by social partners <sup>(352)</sup>. In seven countries (the Czech Republic, Hungary, Lithuania, the Netherlands, Romania, Slovakia and Slovenia) the study found support and implementation of gender-equality-related activities by trade unions, while in four countries (Bulgaria, Estonia, Latvia and Poland) the study reported no social partner activities related to gender.

In an effort to improve gender equality the ETUC since 2007 has been collecting gender-disaggregated data on its affiliates' membership and decision-making positions. The overall trend indicates that the number of women who are members of trade unions has increased.

The Confederation of Independent Trade Unions in Bulgaria (CITUB) has a slight majority of women members (51%), as does the Confederation of Unions for Academic Professionals in Finland (AKAVA) (52%). Women are in the majority in the two Slovakian trade union organisations: the Confederation of Trade Unions (KOZ SR) and the Independent Christian Trade Unions of Slovakia (NKOS) (in both Trade Unions 65% of members are women). Women are also in the majority in the Swedish Confederation of Professional Employees (TCO) (61%), while in Slovenia there is an equal number of women and men in both the Association of Free Trade Unions of Slovenia (ZSSS) and the Confederation of Public Sector Trade Unions (KSJS).

However, social partner organisations remain dominated by men. Examples of how social partner organisations have responded to this challenge internally include the resolution adopted by the Austrian ÖGB to ensure that a minimum of one third of all ÖGB positions are filled by women. Similar measures were adopted in Italy, Germany, Spain and the UK.

The lack of strong internal strategies to support gender equality in the social partners' organisations can have an impact on their ability to recruit and retain the best among their member organisations. In trade unions, the full potential for increasing women's membership may not be realised if there is no corresponding increase in the number of women participating in the relevant governing and representative bodies.

Externally the efforts by social partners to intensify their activities in dealing with gender issues are hampered by persistent gender stereotypes and with

specifically women-centred policies particularly in relation to work-life balance initiatives. For instance, policies often grant more flexibility in terms of working time to women to enable them to care for family members. There have been only limited initiatives to encourage and facilitate men to take up caring responsibilities. Gender pay gaps tend to persist and women's decisions to dedicate more time to family needs may be reinforced if their earnings are typically lower than those of their male partners.

#### 1.4.4. Migrant workers

Employers' organisations or companies appear to provide a complementary approach to trade union responses to migration. Trade union responses to migrants generally concentrate on recruiting and organising migrant workers <sup>(353)</sup>; Employers' organisations focus on improving access to the skilled labour which migrants can increasingly provide in the context of our ageing labour market. Information is patchy both on migrant members of trade unions and companies founded by migrants which become affiliated to employer organisations because the country of origin of a worker or employer is commonly not recorded by the social partners. Yet social partners continue to face challenges in responding effectively to migration and to recruiting new members with a migrant background. This section focuses on trade unions since they are the more relevant organisations in this context. Most migrants when they arrive in a new country are more likely to start as employees than as entrepreneurs or employers.

A report by the European Federation of Building and Woodworkers (EFBWW, 2012) identified some of the main challenges. The majority of migrants have not been trade union members in their country of origin (perhaps for reasons which reflect weaknesses in these organisations, their different structure or their poor reputation). Migrants may not have been in contact with a union, or may start from a position of distrust. As a consequence trade unions in the host countries need proactively to explain and 'advertise' their activities (especially their information, support and legal services) and to communicate and build trust and confidence in the union movement among the migrant community. Trade union officers who share the same language and cultural background as new migrants can be recruited for this purpose. In some cases bilateral agreements and mutual recognition of membership between trade unions in the originating and host countries have been concluded to help the organisation of migrants across borders.

The strategic reasons for trade unions to focus on recruiting migrants include concerns about the continuing decline of membership, the need to tackle

<sup>(352)</sup> Eurofound (2014), *Social partners and gender equality in Europe*, Publications Office of the European Union, Luxembourg

<sup>(353)</sup> In the broad sense of any person who is residing in a country other than his country of citizenship or birth (see Chapter 3).

exploitation<sup>(354)</sup> and the need to maintain (minimum) wage rates in the host country (Philipps, 2010).

However, no one strategic approach or associated measure is sufficient to fully represent and include migrant workers in trade union structures. For full and effective representation of migrant workers, trade unions need to start addressing a range of issues of class, race or ethnicity and social rights in a coherent way (Conolly et al., 2014). In practice, efforts tend to focus on only one or two of these issues. Furthermore the importance of internal dynamics in shaping the unions' attitudes towards immigration and immigrants should not be overlooked (Marino et al., 2015). These internal dynamics are based on three variables: the union's identity (i.e. the inherited tradition that determines the union's choices), the unions' structure and its internal communication processes. As to the structure, centralised trade unions which tend to be less present at the firm level are likely to be less capable of reaching out to migrant workers and defending their rights in the workplace. Similarly, centralised and top-down internal communication channels may work against inclusion of migrant and ethnic minority workers.

### 1.5. Observations

This section has shown that social partner organisations continue to adapt and review their structures to remain relevant in an environment characterised by new forms of work. Since membership has remained the main source of revenue, these adaptations have influenced the financial capacity of these organisations. A relatively low membership level may lead to insufficient financial resources, which in turn puts pressure on the human resources at the disposal of the organisation. It limits the capacity of the organisation to provide the required services to their members, develop technical, legal or analytical expertise and engage efficiently in social dialogue.

The multitude of social partners in some Member States reflecting different and sometimes opposite agendas, as well as the absence of coordinated positions, may also impact on the potential for agreement between labour and management and between them and public authorities. This situation applies to both cross-industry and sectoral organisations. More joint positions and agreements could be reached if there were greater coordination between national, regional or sectoral levels; more joint research; and more interaction between representatives of different trade unions or different employer organisations.

The situations experienced in some Member States, notably in Central and Eastern Europe, call for the development of strategies by the social partners to

expand their membership, to reinforce their representativeness and to develop their technical capacities to engage with the other side of social dialogue and with public authorities. Some social partners have been developing new services for potential members such as training on collective bargaining negotiations, dispute settlement mechanisms or closer engagement with public authorities on economic and social policy reforms.

Ensuring that social partners can continue to attract and appropriately represent (especially new groups of) workers and employers will be crucial to the future health of Europe's social-market economy.

## 2. INVOLVEMENT OF SOCIAL PARTNERS IN THE DESIGN AND IMPLEMENTATION OF POLICIES AND REFORMS<sup>(355)</sup>

The diversity of national systems has increased substantially with successive enlargements of the European Union. The differences concern not only the institutional frameworks, but also differing levels of operational capacity of social partner organisations in different countries. Over the course of the recent economic crisis, employers and workers in many Member States found it difficult to agree on the correct policy mix to promote a recovery. Without consensus, governments and public authorities more frequently took unilateral decisions without social partner support.

The European Commission in its Communication on steps towards completing the Economic and Monetary Union (2015b) calls for the Member States to pay greater attention to the contribution of national social partners, in particular to strengthening ownership of reform efforts, notably through stronger involvement in the elaboration of National Reform Programmes.

Guideline 7 for the employment policies of the Member States adopted by Council Decision on 5 October 2015 states 'In line with national practices, and in order to improve the functioning and effectiveness of social dialogue at national level, Member States should closely involve national parliaments and social partners in the design and implementation of relevant reforms and policies'.

In June 2016, the Council of the European Union, the Commission and the European social partners signed a statement<sup>(356)</sup> on the New Start for Social Dialogue. The statement underlines the fundamental role of European social dialogue in EU employment and social policy-making. It identifies actions to be undertaken by

<sup>(354)</sup> See also Eurofound (2016a), The regulation of labour market intermediaries and the role of social partners in preventing trafficking of labour, Publications Office of the European Union, Luxembourg

<sup>(355)</sup> Section 2 is based on an overview report by ICF under the European Employment Observatory (EEPO) <http://ec.europa.eu/social/main.jsp?langId=en&catId=89&newsId=2661&furtherNews=yes>

<sup>(356)</sup> <http://ec.europa.eu/social/main.jsp?catId=521&langId=en&agreementId=5474>

#### Box 5.4: The different types of involvement for social partners in policy making

As a starting point for this analysis we distinguish three types of social partner involvement in design and implementation of policy-making:

**Autonomous bipartite action:** social partners have an (implicit or explicit) prerogative to jointly regulate (certain aspects of) employment and social affairs, without (direct) involvement of the government or public authorities.

**Tripartite co-decision:** the state routinely engages in direct negotiations with social partners to jointly regulate (certain aspects of) employment and social affairs, based on legislation or custom and practice.

**Consultation and advisory roles:** there is a legal obligation or custom and practice on the part of the public authorities to seek (non-binding) input from social partners when taking policy initiatives in the field of employment and social affairs, however, social partners are not in a position to decide or co-decide.

the signatories to further strengthen social dialogue at EU and national level.

This section aims at providing information on the channels and practices through which national social partners contribute to policy making in the EU Member States. These practices are an expression of the capacity of social partners, and a prerequisite for social dialogue<sup>(357)</sup>.

### 2.1. Social Dialogue Institutions

Each Member State has at least one institution where social partners meet to discuss policy issues, although the functions and composition of these bodies vary widely and different sources suggest different numbers of such institutions in each Member State.(Table 5.2)

Research in the Member States identified 115 institutions which bring together social partners with the aim of influencing policy making, 105 of them were considered by national experts as formal, 10 informal. Formal institutions are based on law, collective agreement or statutes. Informal institutions are based on an established practice (e.g. recurrent meetings in a given format) that is not codified as such. In addition to the 10 informal institutions there may be other informal bodies and ways in which social partners can influence political decision-making and policy implementation. Due to a lower degree of institutionalisation, informal institutions are less likely to be reported by experts.

These institutions may be *bipartite* (where there is only worker and employer representation) or *tripartite* (where governmental authorities are also involved), but it is clear that tripartite institutions are in the majority (83 of 115). In 23 of these 83 cases, the institutions involved not only the social partners but also other stakeholders.

Other stakeholders may include academics or experts (for instance in Ireland, Spain, Hungary, Slovakia, Finland, the UK), NGOs or civil society organisations

(Bulgaria, Germany, Hungary, Portugal, Romania, Slovakia, France). In some cases, organisations representing specific groups may take part in the discussions, for example pensioners' organisations (Bulgaria, Austria, Slovenia); women's groups (gender equality associations in Bulgaria and Greece); migrants' representatives (Ireland); associations representing people with disabilities (Greece, Slovenia); religious bodies (Hungary, Slovakia); environmental groups (Bulgaria, Greece, France); consumers' organisations (Bulgaria, Greece) and voluntary organisations (Ireland). In Finland, the National Bank is represented in the Economic Council and in the Tripartite Information Committee on Cost and Income Developments.

Of course, formal involvement in such institutions is only one of the ways in which social partners may exercise their influence. There are other forums such as supervisory or consultative bodies which, whether by right or by invitation, include representatives of the relevant social partner organisations. In that sense, organisations such as the chambers of commerce, which include both business and trade union representation, can in some Member States be seen as a form of social dialogue.

#### 2.1.1. Institutions with a role in negotiating binding agreements

In six countries, social partners were found to be involved in institutions charged with the binding negotiation of legislation and/or policy (e.g. Bulgaria - National Council for Tripartite Cooperation; Denmark - Regional Labour Market Councils; Luxembourg - Tripartite Coordination Committee; Poland - Social Dialogue Council; Portugal - Standing Commission of Social Concertation; Slovakia - Committees for Employment Issues). The social partners do not have the ability to block decision-making by the government, however.

Where social partners have a role in joint policy and programme management, decision-making largely focuses on implementation of policy rather than policy formulation. These are typically tripartite bodies. Croatia has institutions governing the Public Employment Service, Health Insurance Fund, Pensions, and Councils supporting the rehabilitation and

<sup>(357)</sup> This section is based on the report on the role of social partners in the design and implementation of policies and reforms prepared by the EEPO Network Services for the European Commission.  
<http://ec.europa.eu/social/main.jsp?catId=1086&langId=en>

Table 5.2: Institutions within each policy domain

	Total number of institutions in this domain	MS with institutions focusing on policy domain	Number of MS
General social and economic issues	40	AT, BE, BG, CZ, DK, IE, EL, ES, FI, FR, HR, IT, LV, LT, LU, HU, MT, NL, PL, PT, RO, SK, SI	23
Active labour market policies	21	AT, BG, CY, CZ, DE, DK, EE, EL, ES, FR, HR, HU, LT, LU, SE, SI, SK	17
Labour law, including EPL	18	DK, EL, ES, FR, HR, HU, IE, IT, LT, MT, SE, UK, RO[1]	13
Education and training systems	11	DK, EE, ES, FR, LT, SI, SK	7
Social security systems	10	AT, EE, EL, HR, IT, LT, SE, SI, BG	8
Wage setting institutions and dynamics[2]	10	BE, DE, ES, FI, FR, IE, UK	6
Occupational health and safety	9	BE, CY, DK, HR, IT, LT, LU, SK, UK	9
Work-life balance and gender equality	2	CZ, IT	2

Note: (1) In Romania the consultation of the Economic and Social Committee is mandatory for all labour legislation.

(2) Not including the negotiation of collective agreements.- In Romania and Bulgaria social partners are consulted on minimum wages, however, research did not find an 'institution'.

Source: ICF, based on EEPO country reports

[Click here to download table.](#)

employment of persons with disabilities and workers' claims in cases of employer bankruptcy. In Lithuania social partners have a decision-making role in the State Social Insurance Fund and the Guarantee Fund (supporting workers' claims in cases of employer bankruptcy). Other examples of such bodies can be found in Slovenia, Estonia and - somewhat less prominently - Italy, Finland, France, Austria and Belgium.

Countries with tripartite bodies which are more engaged in policy-making or implementation in specific policy areas include Spain (the General Council of VET); Germany (the Tripartite Board of Governors of the Federal Employment Agency); and the UK (Advisory Conciliation and Arbitration Service).

In several countries, institutions which involve the social partners play a role in industrial and employment arbitration. In Greece, the Organisation for Mediation and Arbitration (tripartite) is an independent organisation for dispute resolution in contract negotiations. In Ireland, the Labour Court (tripartite) operates as an industrial relations tribunal. Spain (Inter-Confederal Service of Mediation and Arbitration - tripartite) funded by the state and managed autonomously by the social partners and Sweden (Labour Court - bipartite) have similar bodies, and in the UK, the Northern Ireland Labour Relations Agency (bipartite +) and the Central Arbitration Committee (bipartite +) play a key role in employment relations and the resolution of disputes.

### 2.1.2. Institutions with a consultative and/or an advisory role

Many countries have institutions with social partners in a consultative role (Table 5.3). In some cases there is a clear statutory basis for these institutions to contribute formally to policy-making. In Lithuania, the Government has committed itself to adopting resolutions on relevant economic, employment, labour and social issues only after they have been analysed

by the Tripartite Council of the Republic of Lithuania (TCRL). This agreement is binding on all governments irrespective of which political party is in power. In Romania, the Economic and Social Council (bipartite+) has a legal mandate to issue opinions on various matters of social and economic interest to the national authorities. Moreover, there is a legal obligation on the legislator to consult them on pieces of legislation in the field. In France, the Economic, Social and Environmental Council (bipartite +) allows social, economic and environment stakeholders to participate in the definition and evaluation of public policies. Portugal (Economic and Social Committee - tripartite +) and Slovenia (Economic and Social Council - tripartite) have similar bodies.

Other countries focus on specific issues, where there is also a clear legal basis for this input. Most commonly, the focus is on employment. Institutions contribute to the development of employment policies in Bulgaria (National Council for Employment Promotion - tripartite), France (National Council for Employment, Training and Career Guidance - tripartite +), and Luxembourg (Conjuncture Committee - tripartite+).

Other areas where institutions play a clear consultative role include collective bargaining (France, Spain, Finland,) and training and education (Slovenia). The Czech Republic has three bodies that each identify policy issues and options, evaluate reforms, formulate strategies, coordinate policies and cooperate with the NGO sector (Council for Equal Opportunities for Women and Men; Council for Safety; Hygiene and Health at Work; The Government Council for Older Persons and Population Ageing). In Denmark, three different councils advise the government and comment on issues concerning the working environment, vocational training, and adult and further education<sup>(358)</sup>.

<sup>(358)</sup> See

<https://www.uvm.dk/Uddannelser/Erhvervsuddannelser/Ansvar-og-aktoerer/Raad-og-udvalg/REU/Om-REU>

Table 5.3: Dominant forms of decision-making in different policy areas and the role of the social partners within them

	Autonomous social partners action	Tripartite co-decision	Consultation and advice
Wage setting institutions and dynamics	17 MS	3 MS	3 MS
Labour law, including EPL	1 MS	5 MS	6 MS
Occupational health and safety	4 MS	3 MS	5 MS
ALMPs	2 MS	3 MS	7 MS
Social Security Systems	1 MS	3 MS	5 MS
Work Life Balance and Gender Equality	3 MS	3 MS	3 MS
Education and Training systems	2 MS	1 MS	7 MS
Labour taxation	0 MS	1 MS	3 MS

Source: ICF, based on EEPO Country reports

[Click here to download table.](#)

In the case of a number of general social and economic councils/forums, which are both bipartite (Belgium, Bulgaria, Greece, France and the Netherlands) and tripartite (Czech Republic, Ireland, Greece, Spain, Croatia, Italy, Malta, Austria, Portugal, Slovakia and Finland), it was not clear whether the institution should be considered consultative or advisory.

A number of institutions are closer to a solely advisory role, whereby the institution provides input on its own initiative. In Austria, the Advisory Council for Economic and Social Affairs acts as a permanent board for policy advice in relation to general social and economic issues. The Bad Ischler Dialogue (tripartite) organises bigger events. The French Joint Cross-Industry Council for Employment and Training (bipartite) defines and coordinates social partners' policies in relation to the specific issue of training and employment.

### 2.1.3. Policy themes for social dialogue institutions

In terms of the policy remit of these institutions, in most countries there seems to be at least one institution which deals with general social and economic issues. In total 40 such institutions have been identified in 23 Member States. Only in Cyprus, Germany, Estonia, Sweden and the UK did research fail to identify an institution which discusses general social and economic issues (although in all these countries there are institutions which deal with more specific policy issues).

Except for Latvia and Poland, all countries which have institutions with a general policy remit also have institutions dealing with more specific policy issues. It should be noted, however, that the Latvian National Tripartite Cooperation Council features 9 sub-councils which each deal with specific policy domains such as employment, education or social matters.

Table 5.2 summarises the countries with institutions relevant to each of the policy remits. As a few institutions cover more than one policy area, the sum of institutions active in the various domains is 120, although only 115 institutions have been identified.

## 2.2. Social partners' roles

This section considers the extent to which social partners can play a role in policy-making and legislation, the ways in which their involvement can be categorised, and whether there has been a significant change in this participation in recent years. Such categorisation has to be applied with caution because roles can change between policy areas, over time and sometimes even over the course of a single policy process. The 'formal' process does not necessarily tell the full story; influence can sometimes be even stronger in more informal settings. Informal processes are partly linked to the traditional/historical relationship between organisations representing employers or workers and political parties. The policy area where autonomous bipartite action plays the most important role is wage-setting.

Labour law and employment protection legislation are areas where tripartite involvement tends to be strongest, not least because here the legislative competences of the government can be beneficially combined with the experience of the social partners. Labour taxation is a policy area in which social partners generally have an interest but few formal rights. Here the social partners are (at best) consulted while the government takes the decisions. Topics such as occupational health and safety, social security, active labour market policy, vocational education and training, gender equality at work and work-life balance are in general areas where the social partners are involved in the decision-making process, albeit to a varying degree in different Member States.

### 2.2.1. Wages and collective bargaining<sup>(359)</sup>

The key questions for collective bargaining concern:

- the main level at which collective bargaining takes place (e.g. national vs regional level, cross-industry vs sectoral or company level);

<sup>(359)</sup> For more details please see Labour Market and Wage Developments in Europe – Annual Review 2016 <http://ec.europa.eu/social/main.jsp?langId=en&catId=89&newsId=2654&furtherNews=yes>

- the coverage of collective agreements (whether terms and conditions apply solely to members of contracting parties to the agreement, or by extension also to other employers and their workers); and
- coordination or linkages between agreements at different levels, as well as between bargaining units at a given level.

Across industrialised countries, there has been a general trend towards the decentralisation of collective bargaining (European Commission 2015 and 2016) encouraged by the argument that this allows for more flexibility to take into account the situation of sub-sectors or even firms (see also **Box 5.6**). However, some coordination of collective bargaining is desirable to achieve macro-economic objectives, such as anchoring inflation expectations, reducing unemployment or containing wage dispersion. Moreover, recent evidence suggests that coordinated collective bargaining can be more effective than fragmented bargaining in promoting wages that are in line with productivity<sup>(360)</sup>. Furthermore there is an increasing use of supplementary employee reward systems such as performance-related pay (see **Box 5.5**).

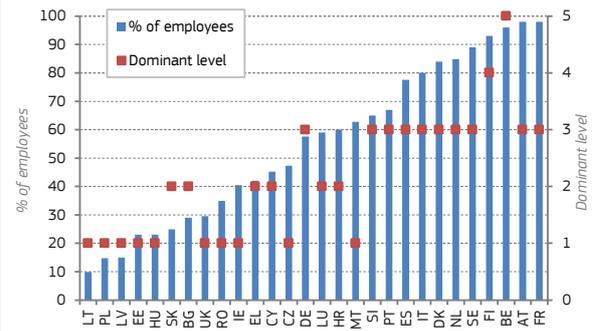
According to the EurWORK observatory<sup>(361)</sup>, in all EU Member States some form of collective bargaining exists both at the company/establishment level and at sector/industry level, and these mutually influence each other. Overall, collective bargaining is more commonly found in the public than in the private sector, with the important nuance that in several Member States<sup>(362)</sup>, certain professions may not have the right to collective bargaining.

<sup>(360)</sup> Eurofound (2015), *Pay in Europe in different wage-bargaining regimes*, Publications Office of the European Union, Luxembourg.

<sup>(361)</sup> <http://www.eurofound.europa.eu/observatories/eurwork>

<sup>(362)</sup> <http://ec.europa.eu/social/main.jsp?catId=738&langId=en&pubId=7498>

Chart 5.1: Collective bargaining coverage rate and dominant level of bargaining



Note: Share of employees covered by collective (wage) bargaining agreements (excluding sectors or occupations that do not have the right to bargain). Dominant bargaining level: 5 = bargaining predominantly takes place at central or cross-industry level and there are centrally determined binding norms or ceilings to be respected by agreements negotiated at lower levels; 4 = intermediate or alternating between central and industry bargaining; 3 = bargaining predominantly takes place at the sector or industry level; 2 = intermediate or alternating between sector and company bargaining; 1 = bargaining predominantly takes place at the local or company level.

Data years: dominant level: 2014 for all Member States; collective bargaining coverage: 2014 for FI and PT; 2013 for AT, BE, CY, CZ, DE, DK, EL, ES, HU, LV, NL, RO, SE, SI, SK and UK; 2012 for BG, EE, FR, LT, LU, MT and PL; 2010 for IT; 2009 for HR and IE.

Source: ICTWSS database (Visser, 2015)

[Click here to download chart.](#)

Overall, the dominant level of collective bargaining is closely linked to the overall coverage rate of agreements: where company or plant-level collective bargaining is dominant, fewer employees have their working conditions regulated in a collective agreement (see **Chart 5.1**). In addition to the main level of bargaining and the membership of employers' organisations, the practice of extension plays an important role. Extension renders the terms of a collective agreement binding also upon employers who are not members of the employers' organisation which has signed the agreement. Extension is usually associated with high coverage but, when automatic, may also reduce the adjustment of the labour costs to intra-sectoral shocks.

Coordination of collective bargaining is considered a functional equivalent of centralised collective bargaining, a process whereby different actors or bargaining units integrate or synchronise their pay policies (Soskice 1990, Traxler and Brandl, 2012; Visser 2016). The following forms of coordination can be distinguished.

### Box 5.5: Changes in remuneration and reward systems

Variable forms of pay are widespread in many European companies. Companies have been increasingly using supplementary employee reward systems to reward performance and motivate employees. These systems include performance-related pay, salaries in kind, supplementary social security contributions and financial participation schemes such as profit-sharing. A Eurofound report<sup>1</sup> examines the extent of these schemes in the EU Member States and Norway.

**Findings:** The European Company Survey (ECS 2013) shows that 62% of European establishments use some form of variable pay. The most common type is pay linked to individual performance, assessed by management appraisal (43%), followed by payment by results (34%), profit-sharing (30%) and pay linked to group performance (25%). Share-ownership schemes are used by only 5% of establishments. However, there are substantial differences: the financial services sector has the highest proportion of establishments using types of variable payment, whereas the transport sector has the lowest proportion of establishments using any form of variable pay, but high numbers of self-employed workers. Larger companies are more likely to use these systems, with 5 out of 6 large establishments using at least one form of variable pay. The majority of establishments which use variable forms of pay, provide paid time-off for training (62%), they use accumulated overtime for days off (81%), report innovation (78%) and report good financial situation (70%).

Many countries offer incentives to introduce flexible pay systems via tax rebates or social security deductions. During the crisis, however, companies have tried to reduce labour costs and governments have reduced the tax or social security advantages thus also reducing the volume of these reward schemes. Supplementary reward systems are regulated by a combination of employment law, tax provisions and collective agreements. National labour codes or laws tend to set general parameters about pay but not necessarily about supplementary reward systems.

**What are the views of employers and trade unions?** Employers generally consider that performance-based reward schemes increase employees' motivation and identification with the company and encourage entrepreneurial behaviour. They also offer greater flexibility in managing labour costs and can be used to increase equity capital. Tax advantages and social security relief are an added incentive. Trade unions have overall a positive view but they highlight that the supplementary reward systems: i) should not be a substitute to decent base pay; ii) are part of the employee involvement system; iii) should not enlarge inequalities of income in a firm, iv) should be open to all and mindful of gender implications. Unions have also pointed out that certain fringe benefits are not calculated or are calculated at a lower amount for social security contributions, which could affect future entitlement to sickness, unemployment or retirement benefits

**Outlook:** The use and presence of supplementary employee reward systems is likely to increase in the future, especially in a context of economic recovery and particularly in the private sector.

<sup>1</sup> [Changes in remuneration and reward systems](http://www.eurofound.europa.eu/sites/default/files/ef_publication/field_ef_document/ef1632en.pdf)  
[http://www.eurofound.europa.eu/sites/default/files/ef\\_publication/field\\_ef\\_document/ef1632en.pdf](http://www.eurofound.europa.eu/sites/default/files/ef_publication/field_ef_document/ef1632en.pdf)

*Intra-associational bargaining* refers to social partner organisations ('associations') at the highest level providing guidance to their membership for collective bargaining at the decentralised levels (without however reaching an agreement with other top-level associations representing the 'other side of industry'). In the Netherlands, the main trade union confederation has provided such guidance to its membership since 1993, based on past inflation and productivity. The guidance appears to have a strong influence on actual wage rises, which remain consistently below this target (De Beer 2013).

In Ireland, when tripartite national wage agreements ended in 2009, the largest manufacturing trade union, SIPTU, adopted intra-associational bargaining. Their so-called '2% strategy' set a goal of wage rises in line with trends in the German export sector and ECB forecasts. The strategy was declared to union members, but not announced to the media. The campaign is said to have resulted in some 220 collective agreements covering more than 50,000 workers (Hickland and Dundon, 2016; Geary 2016).

*Inter-associational bargaining* refers to negotiations and agreements between trade unions and employers'

organisations at the highest level. Spain has a tradition of such bipartite agreements, setting benchmarks for negotiators at lower levels. The 2015 social partners' 'Acuerdo' set a benchmark pay rise of 1% in 2015 and 1.5% in 2016. By setting a common benchmark at central level, while allowing flexibility at the decentralised level, this agreement could be seen as promoting 'organised decentralisation'. Recent data suggest that in Spain negotiated wages have remained below the benchmark but above previous trends, wages have differentiated according to the companies' performance, and the proportion of workers covered by company level agreements has declined (<sup>363</sup>).

*Pattern bargaining* implies that one leading sector or company concludes an agreement that acts as a reference for other sectors or its peers across regions. Usually this pace-setting agreement is concluded in a sector that is strongly exposed to international competition (such as metal or electronics) and can therefore be expected to have taken due account of the need to remain competitive in its wage deal

<sup>(363)</sup> Spain country report 2016

(Hassel, 2006). Such coordination has been common in Germany, Austria, Denmark and Sweden.

Where there is *state-sponsored bargaining*, social partners and government negotiate a framework or parameters within which decentralised collective bargaining will take place. Such a framework may be concluded in the 'shadow of the law', i.e. the government signals its intention to intervene unilaterally if social partners do not come to an agreement. A tripartite Competitiveness Pact was signed by the Finnish government and social partners in June 2016. Facing a substantial deterioration of the country's cost competitiveness, the Finnish government had envisaged several measures to reduce unit labour costs, as well as a number of structural reforms, including savings (and reduction in benefits) in the public sector to offset a planned reduction in employer contributions. The government then invited social partners to negotiate a social contract as an alternative to its planned measures, which led to the Competitiveness Pact<sup>(364)</sup>. In 2017, a new bargaining model will be tested, which incorporates elements of 'pattern bargaining'.

The process of collective bargaining built on experience from the early 1990s, when Finland experienced a more pronounced recession than other EU countries. In this situation social pacts, and government cooperation with the social partners in order to achieve wage restraint and solve questions related to the functioning of the labour market, helped to partly restore competitiveness and stability. The process also built on the Finnish tradition of social dialogue, which has produced several national level tripartite agreements on incomes (TUPOs) since 1968.

*State-led coordination* of collective bargaining can be observed in Belgium. The 'law on the promotion of employment and the safeguarding of competitiveness' allows the State to link maximum pay increases to the forecast pay trends in Belgium's immediate neighbours, Germany, France and the Netherlands. National level negotiations take place in the context of a technical report prepared by the Central Economic Council, which set out the forecasts. The Central Economic Council is composed of social partners. The Belgian federal government may intervene if the social partners cannot agree on a rate by a given deadline<sup>(365)</sup>.

### 2.2.2. *Involvement of bipartite social partners' structures in drafting legislation*

The degree to which social partners are involved in law-making varies very much between Member States, and formal involvement does not provide a conclusive indication that social partners have made a substantial

contribution. It is therefore only possible to give a number of examples of what happens in practice.

In France, social partner agreements have to be discussed in Parliament prior to passing into law. Many agreements forming the basis of new legislation have been modified by the Government following discussion in Parliament. However, there is an exception to this usual practice: the national cross-industry agreement (Accord National Interprofessionnel, ANI) on modernisation of employment signed on 11 January 2013, which was – following a request from the Government – accepted by Parliament without changes. Some social partner agreements such as the 'Youth ANI' from 2011 aimed at promoting the inclusion of young people in the labour market were implemented by the different public employment actors (Pôle Emploi, Missions locales and APEC) without having to become legislation. They were the subject of a pilot approach first; then after a few months the main ideas were implemented via the 'garantie jeunes'.

<sup>(364)</sup> <http://www.eurofound.europa.eu/observatories/eurwork/articles/working-conditions-industrial-relations/finland-latest-working-life-developments-q2-2016>

<sup>(365)</sup> See European Semester Country Report Belgium 2016, [http://ec.europa.eu/europe2020/making-it-happen/country-specific-recommendations/index\\_en.htm](http://ec.europa.eu/europe2020/making-it-happen/country-specific-recommendations/index_en.htm)

### Box 5.6: Company level social dialogue practices that lead to mutual gains

Greater relevance of collective bargaining at the company level has increased interest in how social dialogue functions at company level and how 'beneficial outcomes' to both companies and employees can be produced.<sup>1</sup> The study looked at a sample of 20 companies from 5 countries which faced major challenges and subsequently introduced different measures in the areas of human resource management, innovation and cost management, including major changes to work organisation. The study found that companies with 'trusting' forms of social dialogue were able to introduce even difficult reorganisation or restructuring measures with trade union or employee support, especially where there had been consultation at an early stage to allow compromises to be reached and to build commitment to a common goal. This leads to better performance and better financial results than in cases where conflictual labour relations were predominant.

Engaging in meaningful social dialogue practices, allowing time for discussions, and using the expertise and acquired knowledge of the employees, are among the characteristics that feature positively in the case studies. A great number of 'trusting social dialogue' type firms use regular line manager-employee meetings, ad hoc meetings, and individual and collective inputs.

Overall, **factors contributing to win-win arrangements at company level** are:

- introduction of change through fostering (rather than forcing) strategies;
- integrative social dialogue;
- working relationships built on trust;
- measures introduced through meaningful social dialogue structures;
- trade union leadership engaged in dialogue;
- careful management of tensions

<sup>1</sup> Follow-up to the data analysis presented in the European Company Survey (ECS) 2013 (Eurofound, 2015); The ECS offers a typology that distinguishes companies according to types of social dialogue practices: "extensive and trusting", "extensive and conflictual", "moderate and trusting" and "limited and conflictual".  
<http://www.eurofound.europa.eu/publications/report/2016/industrial-relations/win-win-arrangements-innovative-measures-through-social-dialogue-at-company-level>

In some cases, social partners have a right of initiative when it comes to drafting legislation<sup>(366)</sup>. In Austria, social partners have the right to submit proposals and draft legislation in the sphere of interest of the social partners (e.g. labour law). Whether or not such proposals are taken on board depends on the government. Similarly, according to Hungarian law, social partners have the right to initiate regulatory changes, and, in the case of initiatives supported by two thirds of the members of National Economic and Social Council (*Nemzeti Gazdasági és Társadalmi Tanács (NGTT)*, a bipartite+ body not involving the government) it is mandatory for them to be discussed.

Examples of areas where social partners have had an initiating role in law-making include: minimum wage, access to lifelong learning, working conditions (violence and mobbing at the workplace) and promoting the inclusion of a specific group (young people) in the labour market.

### 2.2.3. Bipartite management or administration

This section describes examples of social partner involvement in the management or administration of various bipartite funds. The rules for the management of these funds are, however, generally set by law, so

the role of the social partners is often more administrative than policy-making.

<sup>(366)</sup> This is distinct from requests for the extension of a collective agreement to non-signatory parties.

## Box 5.7: Involvement of social partners in recent reforms

**Unemployment benefits, Public Employment Services and Active Labour Market Policies**

In **Denmark**, the 2015 reform of the unemployment benefit system was largely based on the work of an expert group (Dagpengekommisionen) involving social partners. The 2015 reform aimed to strengthen incentives for the unemployed to take up work, with better recognition and compensation for short-term and part-time work. In 2016, the government set up a working group - once more including social partners- to address outstanding issues linked to self-employed and freelance workers.

In **Finland**, the social partners agreed in 2016 to increase employees' unemployment insurance contributions by a total of 0.85% in 2017-18. Employers' contributions will decrease by the same amount over this period, and then continue to decrease until 2020. The Competitiveness Pact includes redeployment training and continued coverage of occupational health care for employees who are made redundant (under specific conditions of seniority, in companies with at least 30 employees).

In **Belgium**, regional social partners in Flanders and Wallonia each reached agreements. In Flanders this agreement streamlined the different support schemes for those furthest away from the labour market. In Wallonia the reform refocused the employment incentive schemes on activating the young and long-term unemployed and reduced social security contributions for older workers.

In **Estonia**, the social partners (along other civil society actors) were involved in drafting the Work Ability Reform which entered into force in January 2016.

In **Ireland**, social partners contributed to the Action Plan for Jobs.

The **Slovenian** social partners were involved in discussions on the Guidelines for Active Labour Market Policy Measures 2016- 2020.

In **Hungary**, consultation of the social partners on the reform of the public employment service appears to have been mainly procedural.

In **France**, negotiations between social partners on unemployment insurance started in February 2016. In June 2016, however, the employers and trade unions came to the conclusion that they could not reach an agreement, thereby handing the file to the government.

In **Austria** social partners were involved in an economic and labour summit in autumn 2015, where the introduction of a bonus-malus system has been decided. As of 2018, companies will receive a 0.1% reduction of the employer's contribution to the family burdens equalization fund (FLAF) if they employ a higher proportion of workers aged over 55, compared to an average company in the respective sector. Companies that employ fewer older workers than the sector average will have to pay a penalty which amounts to double of the job contract dissolution fee (Auflösungsabgabe).

**Pensions**

In **Finland**, the pension reform based on a tripartite agreement between government and social partners concluded in 2014 and will be implemented from 2017. The reform links pension ages to life expectancy, restricts access to early pensions, and provides stronger financial incentives with the aim of raising awareness of the need for longer working lives.

In **Belgium**, social partners agreed in 2016 to lower the interest rate to be guaranteed by employers on the so-called second pillar pensions, given concerns for life insurers' solvency.

In **France**, an agreement among social partners of October 2015 enhanced the sustainability of complementary pension schemes and strengthened incentives to work longer.

In **Bulgaria**, social partners were consulted on the pension reforms introduced in July 2015 (including an increase in pensionable ages and contribution periods, and an increase in social contributions as well as in the accrual rate for each year).

In **Slovenia**, the government published a White Paper on pensions in April 2016, as a basis for negotiations with social partners on key elements such as the retirement age, level of pensions, indexation and optimisation of the second pillar.

In the **Netherlands**, the government announced in July 2016 its intention to reform the second pension pillar substantially with the involvement of social partners in order to create a more transparent and actuarially fairer system.

*(Continued on the next page)*

*Box (continued)*

### Working Conditions

In **Spain**, once economic recovery could be felt social dialogue was renewed. The bipartite Agreement for Employment and Collective Bargaining for 2015-2017 includes a wage setting deal which foresees a rise of real wages in the years to come.

In **Latvia**, social partners routinely negotiate in the area of employment law. Negotiations on amendments to the Labour Law which came into force in 2015 represent an example of largely successful tripartite cooperation. Out of 37 amendments proposed 35 were agreed on by the government and social partners.

In **Germany**, the statutory minimum wage was introduced in 2015 after much support from trade unions. Three trade union and three employer representatives will make up part of the Statutory Minimum Wage Commission which will decide on the future rise in the minimum wage.

In **Luxembourg**, autonomous bi-partite action by social partners has resulted in binding agreements that are enforced by law. An example of one is the 2011 inter-professional agreement on teleworking.

In **Estonia**, social partners have the right to regulate the national minimum wage, without (direct) involvement of the government or public authorities.

In **Austria**, the evaluation of mental workload, anchored in the context of a reform of the Occupational Safety and Health at Work for Employees law in 2013, was based on an agreement of the social partners.

### Vocational Education and Training and skills

In **Denmark and Ireland**, social partners have been involved in reports on future needs for and supply of apprenticeships.

In **Luxembourg**, social partners were involved in measures to promote basic skill acquisition in a professional context.

In **Estonia**, cooperation is increasing with implementation of a thematic programme on VET.

In **Latvia**, the social partners are involved in a curriculum reform, but there is scope for stronger cooperation with regard to work-based learning and VET school governance.

In **Spain**, under the third framework agreement 2015-2017, the social partners have agreed to cooperate on ways to encourage and monitor continuous vocational training for all workers. Despite promotional activities by Chambers of Commerce, there are enduring obstacles to implementation, such as the capacity of small and medium-sized enterprises to absorb trainees, or the lack of training for tutors.

In **Lithuania**, social partners are only marginally involved in VET, but a draft law on higher education and research provides for cooperation on curriculum development with social partners.

In several Member States (including **Bulgaria and Romania**) cooperation with social partners on VET is deemed insufficient.

### Integration of refugees<sup>1</sup>

In **Belgium**, there was an agreement between the federal government and social partners to reduce the period after which refugees can access the labour market (from 6 to 4 months) once they have been registered.

In **Denmark**, 2016 tripartite negotiations led to specific job integration measures for refugees.

In **Germany**, social partners along with other civil society actors agreed to complement public education measures to facilitate integration of refugees.

In a joint position paper in April 2016, the **Austrian** social partners demanded faster and broader opening of the labour market to asylum seekers, and this was recently welcomed by Austria's federal chancellor in May 2016.

<sup>1</sup> For the joint statement of European social partners on the refugee crisis (adopted 16 March 2016), see <http://ec.europa.eu/social/main.jsp?catId=521&langId=en&agreementId=5464>

In France, there is a joint representation management system for unemployment insurance, social security, pensions and training systems. There is also a joint system for managing training, which is implemented through 50 joint bodies for financing training (*Organismes paritaires collecteurs agréés*, OPCA). There are other joint bodies like the Association for

executives' employment and the Association for promoting the inclusion of the disabled.

In Italy, the social partners oversee institutions administering unemployment insurance schemes <sup>(367)</sup>

<sup>(367)</sup> In Italy there are neither unemployment assistance nor social assistance schemes at the end of 2015.

and training funds. In Austria, social partner organisations play an important role in the social security system through representatives on the social insurance institutions, which are organised as self-administrating entities under public law. In Belgium, the social partners are represented in the Management Councils of the different branches of the social security administration.

#### 2.2.4. Tripartite co-decision

Tripartite co-decision is employed in the Member States in different ways (Box 5.7). Core topics for tripartite arrangements are vocational education and training - including the induction of young people into the labour market - and forging broad strategic alliances on issues such as the reform of public employment services.

Tripartite co-decision procedures were severely tested by the economic crisis. In particular the Mediterranean Member States report that previously well-established tripartite decision-making arrangements were perceived as failing during the crisis because decision-making in these structures was considered to be too slow and consensus on reforms seemed impossible to achieve. However, a closer look suggests that even before the crisis decision-making was not built on a sufficiently broad social consensus and a widely-agreed reform strategy <sup>(368)</sup>.

Formal tripartite pacts or agreements are, or have been, used in Spain, the Netherlands, Germany and Portugal. These pacts/agreements can be wide-ranging or focus on a specific policy area. They also vary in their level of impact, which can be influenced by external factors.

In the Netherlands, a Social Pact was signed in April 2013 with the aim of creating common ground and policy guidance on the future of the labour market and social security. The agreement contained a set of socio-economic measures to address growing unemployment and to prevent far-reaching cuts in public finances. In Germany, a pact focusing specifically on vocational training (the Allianz für Ausbildung) was agreed in 2014, replacing the previous training pacts which had included employer organisations and the Chambers but not the trade unions <sup>(369)</sup>.

In Spain, tripartite social pacts are one of the most important instruments of tripartite co-decision. These have often been translated into laws. A good example is the Toledo Pact, signed in 1995, which relates to retirement pensions and is based on a formula that combines tripartite agreements between social partners and the Government with parliamentary consensus. In Portugal, the five tripartite agreements achieved by the Socialist government under Prime

Minister José Sócrates and Minister of Labour José Vieira da Silva (2006, 2007 and 2008) are said to represent the most advanced period in the history of tripartite cooperation since 1984. Despite having an absolute majority in Parliament, the government successfully sought social partner support for controversial reforms across multiple policy areas.

Tripartite negotiations which are informal or ad hoc (in the sense that they are not part of an established institutional procedure) can nevertheless lead to legislation or regulations. This has happened not only in countries where consensus building takes an important place in the political system (e.g. Austria, Finland, Czech Republic), but also in countries such as Greece, Spain and Portugal, where the economic crisis challenged the established way of functioning; alliances forged by the tripartite social dialogue had a positive role in helping these countries to weather the crisis.

The Austrian social partners were involved in the negotiations over the 2016 tax reform, with changes in income tax at their core. First, a political reform group was set up; then experts, including representatives from social partner organisations, were nominated for a Tax Reform Commission. The social partners had contrasting interests: trade unions and employers each presented their own proposals.

In Spain, tripartite social dialogue plays an important role, although it results not in legislation but in 'joint declarations' such as the tripartite 'Agreement on Extraordinary Activation of the Employment Programme', which was signed in December 2014, by the government and the most representative social partners at national level (CEOE, CEPYME, UGT and CCOO). The pact agreed on a temporary programme of last resort addressed to the long-term unemployed who were no longer eligible for unemployment benefits, not covered by other support programmes, and who had dependents. Its benefits were made conditional upon the participation of the beneficiaries in active labour market policies.

#### 2.2.5. Consultation and advisory roles

In 14 Member States there is a (legal) obligation to seek input from the social partners (Austria, Czech Republic, Germany, Greece, France, Croatia, Lithuania, Hungary, Poland, Portugal, Romania, Slovakia, Slovenia and Finland). The main differences between countries concern the timing of this consultation, the level of detail involved, and whether there are obligations for the administration concerning follow-up to the social partners' input. Furthermore, in certain Member States there are general and customary forms of consultation, which enable the social partners to contribute their views before policies and legislation are decided. Depending on the issue at stake and their relative negotiating power, social partners can also have an impact on policy in such a setting.

<sup>(368)</sup> See e.g. the Evaluation: <http://ec.europa.eu/social/BlobServlet?docId=5708&langId=en>

<sup>(369)</sup> <http://www.bmwi.de/DE/Themen/Ausbildung-und-Beruf/allianz-fuer-aus-und-weiterbildung.html>

The importance and effectiveness of consultation and advisory procedures ultimately depend on many more factors than the existence or absence of a formal obligation to consult. Other significant factors include the organisational power of the social partners, the linkage between social dialogue and political decision-makers and the influence of social partners on public opinion.

It can be assumed that in all Member States social partners seek to develop links with the political system, for example through lobbying legislators on specific issues, or by influencing public opinion via the media, or by commissioning and publishing research. Such links with the political system can also take the form of the (traditional) association of certain social partner interests with specific political groupings. Many established political parties (socialists, social democrats, christian democrats, republicans – and depending on the country – also the liberals) have 'wings' which associate themselves with workers' and/or employers' interests, requiring the party to find a balance between these different perspectives. More recent political parties (such as ecological parties, right-wing populist or protest parties) tend to be less linked with social partners.

### 2.3. Observations

Throughout the EU, social partners are involved in various ways in the design and implementation of policies and reforms. Exclusively bipartite forms of negotiation, however important, seem to be under substantial pressure, considered appropriate only for a limited range of topics and not equally well-rooted in all Member States. Tripartite deliberations tend to have gained importance overall, although this did not happen in a consistent way.

Exogenous factors such as the economic and social transformations brought by globalisation, technological, demographic or climate changes or the recent economic and social crisis have affected the organisation and influence of social partners. Membership of the European Union and the emphasis of the European Semester process on reinforced coordination of economic and social policies have also shed new light on the potential involvement of social partners in the design and implementation of policies and reforms (**Box 5.8**).

Major endogenous factors, such as national, institutional and legal frameworks and the political and ideological landscape, also affect the role of social dialogue. In some Member States (e.g. Austria, Belgium, Germany or France) members of social partners are also members of political parties or other bodies closely tied to political institutions.

Substantial involvement of social partners in decision-making strongly depends on the general attitude of the relevant government towards the social partners and on the links between political decision-makers and representatives of social partner organisations. The

amendments to the Labour Law negotiated in 2014 in Latvia illustrate both the degree of agreement/disagreement and the main causes of disagreement. This law is an example of a largely successful tripartite co-operation. In Lithuania the influence of the social partners on final decisions is less linked to political power than with their lobbying skills, the quality of their arguments, their capacity to agree on common policy orientations and the government's willingness to listen to the arguments.

Attention to the systematic involvement of social partners in the European Semester is one way of encouraging Member States to have a more positive attitude. In 2015 and 2016 the European Commission emphasised the involvement of the social partners in this process. Indeed in October 2016 there was an EMCO thematic review which exclusively focused on the involvement of social partners in the design and implementation of relevant reforms and policies. This is in line with Employment Guideline 7, mentioned earlier and it also asks the question of whether this EU-level request for involvement of social partners has succeeded in helping to strengthen national social dialogue.

National social partners <sup>(370)</sup> are involved in European Semester activities – including <sup>(371)</sup> by providing a contribution to the National Reform Programme (NRP). The degree of their involvement in the Semester often reflects their overall involvement in national decision-making processes.

In some countries the involvement of social partners is formalised but they do not have a central role in the process. In these cases the social partners usually have a limited impact and their role is purely consultative.

In this regard, public authorities have a specific responsibility. Obviously, where there is an inadequate legislative framework this would need to be remedied. Labour administrations also need to be equipped with the necessary means to support tripartite social dialogue via formal and less formal fora to ensure the involvement of social partners in policy and law-making for issues of joint interest.

<sup>(370)</sup> European social partners provide their views on the Annual Growth Survey, which launches the annual cycle of economic governance, sets out general economic priorities for the EU and provides Member States with policy guidance for the following year. Moreover, they are involved with regard to the country reports and the discussions in the Employment Committee the Social Protection Committee and the informal Employment, Social Policy, Health and Consumer Affairs Council, as well as during the discussion of the employment guidelines and the policy orientations.

<sup>(371)</sup> In addition, national social partners may have direct contacts with Commission staff in Brussels or in the national delegations, or be consulted during the Commission's country missions.

### Box 5.8: Involvement of Social Partners in the European Structural and Investment Funds, in particular the European Social Fund

Social partners have been for many years a key stakeholder in the implementation of the European Union's shared management funds, and particularly the European Social Fund. This active involvement and more generally the important contribution social partners can make to designing and implementing policies and reforms necessitates the empowerment of all partners. Social partners should be able to negotiate and have an impact, interact with government and make substantive comments when consulted, and represent their members' views vis a vis the Commission. Continuous capacity building of social partners is therefore crucial for ensuring that they are able to provide a valuable contribution to the economy and society.

#### Legal framework

The efficient and effective implementation of actions supported by the ESF depends on good governance and partnership between all relevant territorial and socio-economic actors in particular, social partners and non-governmental organisations<sup>1</sup>. Member States should therefore ensure the participation of social partners and non-governmental organisations in the strategic governance of the ESF, from shaping priorities for operational programmes to implementing and evaluating ESF results.

To this end, Member States may use the possibilities offered by the ESF Regulation under the Investment priority on "Capacity building for all stakeholders delivering education, lifelong learning, training and employment, and social policies. This includes sectoral and territorial pacts to mobilise reform at the national, regional and local levels". Croatia, France, Hungary, Italy, Malta, Portugal, Slovenia have selected this investment priority (IP) in their Operational Programmes.

In order to ensure adequate participation of social partners in actions supported by the ESF, the managing authorities of an operational programme in a less developed region<sup>2</sup> or in a Member State eligible for support from the Cohesion Fund must ensure that an appropriate amount of ESF resources (according to the need) is allocated to capacity building activities, in the form of training, networking measures, and strengthening of the social dialogue, and to activities jointly undertaken by the social partners<sup>3</sup>.

Moreover, Member States can use technical assistance of the European Structural and Investment Funds to support capacity building of social partners<sup>4</sup>. Such capacity building measures in relation to the operational implementation of the funds must be based on concrete project proposals. These projects must demonstrate a clear contribution to the objectives of the given Technical Assistance priority axes or focus areas. Technical Assistance cannot provide support for the general running costs of partners.

Since 2014, the European Code of Conduct paves the way for a substantial improvement in the way partners are involved in policy in a meaningful way. The ECCP provides the framework for involving partners in the implementation of the ESIF at national level.

#### Recent activities undertaken in the context of the ESF

A mapping exercise on capacity building of social partners was conducted through the ESF managing authorities. The aim was to collect information on the use of ESF resources for the capacity building of social partners in the previous and current financing periods to enhance their involvement in the implementation of the ESF Operational Programmes (OPs) as well as in the European Semester. This is of particular importance in view of the alignment of the ESF objectives with the Europe 2020 priorities and hence the need for the OPs to support policy-making in line with challenges and recommendations outlined by the Commission.

Based on a first assessment, it appears that the situation as regards the level of involvement of social partners in the implementation of the ESF OPs for the programming period 2014-2020 does not differ significantly from the previous programming period in the majority of the Member States.

- 
- 1 Regulation No 1304/2013 on the European Social Fund (ESF)
  - 2 defined under Article 90(2)(a) or (b) of Regulation (EU) No 1303/2013 (CPR)
  - 3 Article 6 of the ESF regulation (No 1304/2013)
  - 4 Regulation No 1303/2013 on the ESIF Common Provisions Regulation (CPR) recognises the need to develop administrative capacity of partners that are capable to participate in the ESIF implementation. Article 59 CPR laying down the provisions for Technical Assistance at the initiative of the Member States, allows supporting actions to reinforce the capacity of relevant partners, including social partners, and to support exchange of good practices between such partners.

*(Continued on the next page)*

*Box (continued)*

Social partners are participating in the monitoring committees of the Operational Programmes (OPs) as full members and, consequently, they can take part in all the relevant functions. This includes:

- reviewing the implementation of the OP for which the committee is in charge and the progress made towards achieving its objectives; examining all issues that affect the performance of the OP;
- being consulted and, if appropriate, giving an opinion on any amendment of the OP proposed by the Managing Authority (MA);
- making observations to the MA regarding implementation and evaluation of the OP, including actions for reducing the administrative burden on beneficiaries.

Capacity building of the social partners is foreseen in several OPs, in particular in the Member States that can benefit from the provisions of article 6 ESF (see above) requiring specific budgetary earmarking. However, from the mapping exercise Member states seem to be reluctant overall to use their Technical Assistance budget for supporting such activities.

The most frequent typology of activities planned in this respect are the following:

- Organisation of trainings for project management, including on tools for monitoring and evaluation,
- Information and publicity measures regarding financing opportunities,
- Networking events.

In some Member States the potential for the social partners to implement projects is explicitly provided in OPs.

The mapping exercise has shown that Managing Authorities are of the view that the ESF support will contribute to equipping stakeholders with the necessary technical capacity that would further enhance their participation in the development of policies, by improving directly or indirectly the capacity building of the social partners for example in participating in the European semester.

However, social partners will also have to look at their own organisations and position themselves constructively within the governance system. Issues such as their attractiveness to members, their capacity to avoid fragmentation and their ability to come to joint bilateral positions are important factors for the future.

### 3. CONCLUSIONS

While social partner structures and their organisational strength differ substantially between Member States, it is neither realistic nor recommended that all Member States aim for one specific system. Even strong systems may show signs of weakening, and raise the question of whether more fundamental changes are needed to maintain the democratic values inherent in the involvement of social partners in decision-making.

In many countries the involvement of social partners in decision-making has changed over time, sometimes in reaction to a change of government, sometimes in the context of the economic, financial and debt crisis. Indeed, since the beginning of the crisis social dialogue has been under pressure and there has been an increase in unilateral government action. This mainly occurred because social dialogue was considered not to be able to deliver quickly enough. Trade Unions were also often reluctant to accept proposed solutions because they feared that these could not be explained to their membership.

However, with the recovery from the crisis and with the increased attention to social topics, social dialogue

has moved up the agenda in the European Union and elsewhere. It is recognised that, although it might take some time to arrive at a consensus in social dialogue, such agreements have significant advantages in terms of democratic legitimacy and social cohesion. It is much easier for a government to implement solutions which are jointly proposed and adopted by the social partners than measures which are the result of government initiatives alone.

This analysis suggests that to make social dialogue more effective, social partners should: 1) increase their membership; 2) broaden their base by reaching out to sectors and/or categories where representation levels are low; 3) fortify and adjust their organisational structures via internal improvements; 4) review, where relevant, their internal management; and 5) develop their services provision, notably in terms of technical expertise. These steps are needed to raise their recognition, representativeness, added value and relevance, among their members as well as among the public at large <sup>(372)</sup>.

Social dialogue also gains in effectiveness if social partners ensure that they benefit from a clear mandate to engage in negotiations with a view to collective agreements at all relevant levels and possible coordination between them, in order to ensure a level playing field and promote economy-wide upward convergence. They need to have the means to

<sup>(372)</sup> "Resolution concerning tripartism and social dialogue", ILC, 2002; "Resolution concerning the recurrent discussion on social dialogue", ILC, 2013; "National tripartite social dialogue: an ILO guide for improved governance", ILO, 2013.

ensure proper implementation of their collective agreements once concluded, and the resources and technical knowledge to interact with the other side and with public authorities.

A good, effective social dialogue requires strong social partner organisations and a good relationship between them and their public authorities. The social dialogue gathers strength as the social partners gain experience in contributing jointly to the improved functioning of the country and its economy, and as compromises between the social partners and with the government are seen to yield beneficial results in the medium to longer term.

The extent to which governments acknowledge the value and importance of social dialogue and its role is another crucial element for its effectiveness. The success of social partners also depends on their ability to find compromises and jointly press the government to accept them. Disagreements between the social partners can lead to longer-term disruption of consensus-finding and to disunity in national policy negotiations.

While the capacity for social dialogue remains primarily a responsibility for the social partners, it is the public authorities' role to update – where relevant – the legal framework to enhance the organisation and collective rights of specific categories of workers, notably those in atypical forms of work and labour relations. In some countries the public authorities may also need to reinforce those institutions which aim at supporting and facilitating social dialogue (e.g. those dealing with conflict prevention, dispute settlement or resolution mechanisms such as labour courts, labour inspectorates and other specialized judicial bodies).

Labour administrations also have a particular responsibility to provide direct support to bipartite and tripartite social dialogue, including facilitating the adoption of collective agreements at higher levels in some countries. Public authorities would need to aim to ensure greater involvement of social partners in economic and social policies. This entails providing the social partners with the necessary information (including statistics and analyses) in a regular and timely manner, to allow them to engage in an effective discussion. Some tripartite bodies may need to be made more operational to fulfil that purpose by establishing permanent secretariats and stable structures to ensure continuity, as well as fostering a level of mutual trust between the partners via regular meetings.

There is neither a universal model of social dialogue within the EU in terms of institutions, processes or outcomes nor, as a consequence, a one-size-fits-all approach to capacity-building for social dialogue. Nevertheless, the EU Member States share a number of common features, such as pluralistic democracies, social market economies and respect for fundamental rights, which are all preconditions for effective social dialogue. Likewise, all Member States have bipartite or

tripartite bodies to allow for interactions between social partners, and in some cases public authorities.

There is a basic legal framework in Europe which allows for the establishment and development of independent organisations able to engage voluntarily in social dialogue and collective bargaining as well as the settlement of collective labour disputes in all Member States. This common legal framework also allows for informing and consulting workers and enabling their participation at company level.

However, beyond these basic features and minimum standards, there are different and more specific features of national forms of social dialogue. The main parameters remain membership rates, mandates of social partners, modalities of cooperation with public authorities and the ability of social partners to enter into advanced and complex policy debates.

The present chapter has shown that social dialogue adapts itself to diverse situations and practices. However, to measure the effectiveness of certain models of social dialogue, a broad analysis of their respective impact on economic and social outcomes would be required. This would entail the development of social dialogue indicators to establish linkages between social dialogue features and socio-economic parameters. In particular, up-to-date research on the socio-economic outcomes of different collective bargaining systems and the identification of the factors that contribute to the effectiveness of these systems is needed <sup>(373)</sup>.

More analytical work is also needed to identify the gaps and weaknesses in the capacities of national social partners' organisations across the EU (cross-industry as well as sectoral) and to better understand the longer-term development trajectories of the industrial relations systems in the European Member States. Further analysis of the type of technical assistance and evidence-based policy advice required to build and/or reinforce institutions and other bodies for social dialogue is needed. This analysis should pay particular attention to the existence and functioning of collective bargaining systems and to the degree of involvement of social partners in the design and implementation of economic and social policies.

---

<sup>(373)</sup> See *Industrial Relations in Europe 2006 Chapter 8 for an overview*:  
<http://ec.europa.eu/social/keyDocuments.jsp?advSearchKey=IRIE&mode=advancedSubmit&langId=en&policyArea=&type=0&country=0&year=2006>

## Annex: Additional information on aspects of social dialogue

Table A.1: List of organisation acronyms for table with mergers/demergers

Country	Acronym	Full name	English translation
Croatia	SING	Sindikát naftnog gospodarstva	Union of Oil Industry
	EKN	Samostalni sindikat energetike, kemije i nemetala Hrvatske	Autonomous Trade Union of Energy, Chemistry and Non-Metal Industry of Croatia
Denmark	FTF	FTF	The Confederation of Professionals in Denmark
	LO	Landsorganisationen i Danmark	The Danish Confederation of Trade Unions
Estonia	EÕL	Eesti Õdede Liit	Estonian Nurses Union
	EAKL	Eesti Ametiühingute Keskkliit	Estonian Trade Union Confederation
Finland	SAK	Suomen Ammattiliittojen Keskusjärjestö	Central Organisation of Finnish Trade Unions
	STTK	Toimihenkilökeskusjärjestö	Finnish Confederation of Professionals
France	UNSA	Union nationale des syndicats autonomes	National Union of Independent trade unions
	SCP-VTC	Trade union of private taxi drivers	Union of private taxi drivers
Hungary	MaSZSZ	Magyar Szakszervezeti Szövetség	Hungarian Trade Union Confederation
	SZEF	Szakszervezetek Együttműködési Fóruma	Forum for the Co-operation of Trade Unions
Italy	DirCredito	Associazione Sindacale del Settore Credito	Credit sector trade association
	FIBA	Federazione Italiana Bancari e Assicurativi	Italian bank and insurance federation
Norway	NHO Mat og Drikke	NHO Mat og Drikke	FoodDrinkNorway
Portugal	SNPVAC	Sindicato Nacional do Pessoal de Voo da Aviação Civil	The National Union of Civil Aviation personnel
	UGT	União Geral dos Trabalhadores	General Union of Workers
Slovakia	OZ SP	Not available	Slovak Trade Union Association of the Glass Industry
	OZ Kovo	Odborový Zväz Kovo	Metal Trade Union Association
Slovenia	ZSSS	Zveza svobodnih sindikatov Slovenije	The Association of free trade unions of Slovenia
	SKEI	Sindikát Kovinske in elektro industrije Slovenije	Trade Union of Metal and Electro Industry
	SVIZ	Sindikát vzgoje, izobraževanja, znanosti in kulture Slovenije	Education, Science and Culture Trade Union of Slovenia

Source:

[Click here to download table.](#)

## Box A.1: Developments in trade union membership and density

**Declining trade union membership and density**

In Spain, **it was reported** that the four biggest trade unions (who represent 80% of all trade union members) lost 585000 members between 2009 and 2015 (due to a strong decline in employment, trade union density remained stable). In the Netherlands, trade unions reported the lowest membership since 1991, with an ongoing decline in the fifth consecutive year: by the end of March 2015 there were 1.7 million members, 28,000 less than in 2014. Decline in trade union membership and density (along with uncertainty about its actual magnitude) was also reported in Romania, where according to the National Statistics Institute, the five national confederations currently account for less than 1.5 million members, out of a total number of approximately 4.5 million employees, pointing to a trade union density of approximately 30% in 2015. In Ireland, survey data from the Central Statistical Office (CSO) also suggest a continuous decline in trade union membership, with 428,000 members in 2015 (27% of employees aged 15 and over), down from 542,000 (34% of employees) in 2005. Statistics from Lithuania show an ongoing decline, from 115,700 members in 2006 down to 94,200 in 2014. In Malta, a **recently conducted survey** by the Centre for Labour Studies at the University of Malta highlighted discrepancies in membership data: according to the survey, 34% of Maltese workers are trade union members. This figure does not tally with the official statistics of trade union membership, the last such official report, which covered the year 2012–2013, indicated that union density in Malta is 58.8%. Even if pensioners, who are included in the data provided by the trade unions, were subtracted, the density would still be above 50%.

**Relatively stable membership**

New data from the Work Life Survey in 2015 by Statistic Estonia show that the prevalence and density of trade unions remain very low in Estonia: trade unions are present in 6% of all enterprises and 7% of employees belong to a trade union. The study involved 850 enterprises and 4780 employees. Stable membership for 2014 **was reported** from the UK (6.4 million in total, unchanged). In the UK private sector, union membership increased for the fourth consecutive year to 2.7 million (+38000). Austria **reported a small overall decline** in trade union membership for 2015. According to the Austrian trade union confederation, ÖGB, there were 1.2 million members, amounting to a decrease of 0.13% on the previous year. Three out of the seven unions saw small increases, the biggest of which was recorded in the Union of Public Sector Employees. The largest decrease took place in the Union of Post and Telecommunications (GPF), the Union of Salaried Employees, Graphical Workers and Journalists (GPA-djp) and the services union, Vida. In Germany, the trade union confederations reported an overall positive membership trend in 2015: the German Trade Union Confederation (DGB) saw a decline of only 0.15% and in December 2015 had 6.1 million members. Losses were reported in some manufacturing sectors, in construction and rail transport, while the teachers' unions and the police union saw significant gains in membership.

**Upward trends or more favourable developments than expected**

In Poland, the first trade union survey conducted in 25 years by the Central Statistical Office (GUS) showed a more positive situation than results of annual public opinion polls performed by the Public Opinion Research Centre (CBOS) had suggested. GUS established that 1.6 million people belonged to trade unions. Trade union density amounted to 17% of those who are employed on the basis of employment contracts, and 11% of all people in employment belonged to trade unions. There are 12,900 active trade union organisations (of 19,500 registered), of which 66% operate in the public sector. In Sweden, blue collar trade union membership is reported to be at its lowest level in decades, while white collar unions have seen an increase. Between 2007 and 2014, the density rate for blue-collar workers decreased by two percentage points, falling to 64%, while it went up to 74% for white-collar workers (National Mediation Office (Medlingsinsitutet)). The fall in density rates started in 2007 when the centre-right government raised the fees for unemployment insurance funds (UIF). These fees were abolished in 2014. Preliminary Swedish data for 2015 now suggest that in that year, the Swedish Trade Union Confederation (LO) gained its first membership increase for two decades (an increase of 1,500 members) and both of the two other trade union confederations, Saco and TCO, are also continuing to grow.

A similar development was reported from Finland where a surge in public sector trade union members followed fiscal consolidation measures announced by the new government. The Service Union United (PAM) gained over 500 new members in one day while, during the same timeframe, a much smaller number than usual quit their membership. The Trade Union for the Public and Welfare Sectors (JHL) attracted 600 new members in one week – triple the usual number – while the number of drop-outs remained stable. Membership rates in unions for employees with a higher education level, by contrast, have remained largely stable, although in some cases both inward and outward flows have been higher than usual.

The latest statistics from Statistics Denmark show an overall increase in the number of union members from 31 December 2013 to 31 December 2014 ([DST.dk](http://DST.dk)). The overall increase is mainly due to growth in so-called 'yellow unions', such as KRIFA, Det faglige hus and other ideological alternatives to the traditional 'red' trade unions. These unions had an increase of 7.9% while most of the traditional unions are still seeing a decrease in members. In 2014, the Danish Confederation of Trade Unions (LO) decreased by 2.7% and the Confederations of Professionals in

*(Continued on the next page)*

*Box (continued)*

Denmark (FTF) saw a decline of 0.3%. The unions for academics and leaders experienced a minor growth in membership.

#### Box A.2: Involvement of national social partners in the European Semester

In Austria social partners are *de facto* involved in the development of the NRP in an institutionalised way, but with limited influence on its content. The content comes mainly from the relevant ministries, although it can be assumed that the relevant ministry will not include any content which is against the consensus of the social partners.

In the Czech Republic social partners are actively involved in the drafting of the NRP. Social partners comment on the country's response to Council recommendations and participate in several Round Table negotiations organised by the EU section of the Office of the Government.

Denmark has established formal structures for consultation between social partners and government on matters associated with the Europe 2020 strategy. A special Contact Committee for the Europe 2020 Strategy was established in 2001 as the focal point for national actions around the Europe 2020 Strategy and the European Semester. The Committee consists of approximately 30 members representing regional and local authorities and a wide range of organisations (including the social partners and regional and local authorities).

In Sweden the government has set up reference groups with representatives from the ministries concerned and the social partners. Consultation meetings take place at different official levels and the social partners are invited to contribute to the National Reform Programme.

In Estonia social partners are included in the European Semester process through participation in discussions and in written feedback.

In Hungary social partners have at most a consultative role. Formal institutions exist, but their powers are limited in terms of allowing social partners to shape the actual response or policy agenda.

In Latvia the government has discussed the NRP with the social partners in one 'half a day' meeting. Their influence on the design and content of the NRP was limited.

In the UK, the NRP is discussed in the annual (ad hoc) informal tripartite meetings with the government. These discussions are used more as an occasion for the government to inform the social partners of its intentions, rather than seeking input. The social partners can be considered to have no substantive influence on the shape of the NRP.

In Lithuania, the Ministry of Economy drafts the NRP and then presents it for the social partners' consideration.

In Croatia social partners hold weekly meetings on the topics of common interest, and the involvement of social partners is consultative so far.

In Luxembourg the involvement of social partners has increased recently. In October 2014 the government decided, following a social partner initiative, to implement a more coherent framework for social partner involvement with four meetings to be organised in the European Semester as of 2015. Two meetings take place on the invitation of the government and two on the invitation of the Economic and Social Council. This procedure should be seen as a first step in the direction of more social partner involvement.

In Slovakia social partners' representation in governing and advisory bodies of public institutions enables them to influence policy-making. While the impact is difficult to assess, the formal involvement of social partners and other interest groups in the NRP process has increased since the introduction of the European Semester.

(Source: ICF, based on EEPO Country reports)

## References

- Addison, J.T.** (2015) Collective Bargaining Systems and Macroeconomic and Microeconomic Flexibility: The Quest for Appropriate Institutional Forms in Advanced Economies (IZA paper)
- Bandau, F.** Putting an End to Ghent? The Politics of Disempowering the Unions (June 3, 2016). Available at SSRN: <http://ssrn.com/abstract=2789948>
- Bernaciak, M.** (2015) All roads lead to decentralization? Collective bargaining trends and prospects in Central and Eastern Europe. *Transfer* Vol 21 (3) 373-381.
- Boeri, T.** (2014) Two-tier bargaining. IZA DP No. 8358
- Calmfors & Larsson Seim** (2013) Pattern Bargaining and Wage Leadership in a Small Open Economy. *Scand. J. of Economics* 115(1), 109–140, 2013
- Connolly, H., Marino, S., & Lucio, M. M.** (2014). Trade union renewal and the challenges of representation: Strategies towards migrant and ethnic minority workers in the Netherlands, Spain and the United Kingdom. *European Journal of Industrial Relations*.
- Cziria, L.** (2016, forthcoming) Post-crisis social dialogue: Good practices in the EU 28: The case of Slovakia
- Du Caju, P., Gautier, E., Momferatou, D., & Ward-Warmedinger, M. E.** (2008). Institutional features of wage bargaining in 23 European countries, the US and Japan.
- EFBWW** (2012) Strengthening social inclusion of migrant workers in the European construction industry
- Eurofound** (2006) Capacity building for social dialogue in Slovenia.
- Eurofound** (2010) Trade union strategies to recruit new groups of workers.
- Eurofound** (2015a), Pay in Europe in different wage-bargaining regimes, Publications Office of the European Union, Luxembourg
- Eurofound** (2015b), Collective bargaining in Europe in the 21st century, Publications Office of the European Union, Luxembourg.
- Forth, J., Bryson, A & George, A.** (2016) Explaining Cross-National Variation in Workplace Employee Representation. IZA Discussion Paper No. 9963.
- Frangi, L & M. Barisione** (2015) 'Are you a union member?' Determinants and trends of subjective union membership in Italian society (1972-2013). *Transfer*
- Geary, J** (2016) Economic crisis, austerity and trade union responses: The Irish case in comparative perspective. *European Journal of Industrial Relations*
- Glassner, V.** (2015) The Transnationalisation of Collective Bargaining. Approaches of European Trade Unions. Brussels: P.I.E. Peter Lang.
- Hassel, A.** (2006). Wage setting, social pacts and the euro: a new role for the state (p. 334). Amsterdam University Press.
- Hickland, E & Dundon, T** (2016) The shifting contours of collective bargaining in the manufacturing sector in the Republic of Ireland: Government, employer and union responses since the economic crisis. *European Journal of Industrial Relations*
- Hooghe, M & Oser, J** (2015): Trade union density and social expenditure: a longitudinal analysis of policy feedback effects in OECD countries, 1980–2010, *Journal of European Public Policy*
- Høgedahl, L** (2014) The Ghent effect for whom? Mapping the variations of the Ghent effect across different trade unions in Denmark. *Industrial Relations Journal* 45:6, 469–485
- Höpner, M & Lutter, M** (2014) One Currency and Many Modes of Wage Formation. Why the Eurozone Is Too Heterogeneous for the Euro. MPIfG Discussion Paper 14/14
- Ibsen, C. L.** (2015). The Role of Mediation Institutions in Sweden and Denmark after Centralized Bargaining. *British Journal of Industrial Relations*.
- Ibsen, C. L.** (2015). Three approaches to coordinated bargaining: A case for power-based explanations. *European Journal of Industrial Relations*, 21(1), 39-56.
- Ibsen, C. L., Andersen, S. K., Due, J., & Madsen, J. S.** (2011). Bargaining in the crisis—a comparison of the 2010 collective bargaining round in the Danish and Swedish manufacturing sectors. *Transfer: European Review of Labour and Research*, 17(3), 323-339.
- Johnston, A., Hancké, B. & Pant, S.** (2014) Comparative Institutional Advantage in the European Sovereign Debt Crisis. *Comparative Political Studies*, Vol. 47(13) 1771–1800
- Kahancová, M** (2015) Central and Eastern European trade unions after EU enlargement: successes and failures for capacity building. *Transfer* Vol 21 (3) 343-357.
- Karnite, R.** (2016) "An attempt to revitalize social dialogue and national industrial relations systems in some of the CEECs" – Lessons learnt and best

practices in the way out of the crisis. Final report. <http://sodcial.eu/page/2679/html/expert-materials.html>

**Koukiadaki, A., Távora, I. & Martínez Lucio, M** (2016) Continuity and change in joint regulation in Europe: Structural reforms and collective bargaining in manufacturing. *European Journal of Industrial Relations* 1–15

**Marginson, P** (2014). Coordinated bargaining in Europe: from incremental corrosion to frontal assault? *European Journal of Industrial Relations*

**Marino, S., Penninx, R., & Roosblad, J.** (2015). Trade unions, immigration and immigrants in Europe revisited: Unions' attitudes and actions under new conditions. *Comparative Migration Studies*, 3(1), 1.

**Mrozowicki, A.** (2014). Varieties of trade union organizing in Central and Eastern Europe: A comparison of the retail and automotive sectors. *European Journal of Industrial Relations*, 20(4), 297-315.

**Natali, D & Pavolini, E** (2014) Comparing (Voluntary) Occupational Welfare in the EU: Evidence from an international research study, Research paper Observatoire social européen No.16

**OECD** (2012) What Makes Labour Markets Resilient During Recessions? *OECD Employment Outlook* 2012

**Park, SH** (2013) Capital openness, monetary integration, and wage-setting coordination in developed European countries. *Economic and Industrial Democracy*, 34(4) 637–666

**Pernicka, S., & Glassner, V.** (2014). Transnational trade union strategies towards European wage policy: A neo-institutional framework. *European Journal of Industrial Relations*.

**Pulignano, V., Meardi, G. & N Doerflinger** (2015) Trade unions and labour market dualisation: A comparison of policies and attitudes towards agency and migrant workers in Germany and Belgium. *Work, Employment & Society* October 2015 29: 808-825

**Pulignano, V., Ortíz Gervasi, L. & de Franceschi, F.** (2016) Union responses to precarious workers: Italy and Spain compared. *European Journal of Industrial Relations* 2016, Vol. 22(1) 39–55.

**Ramskogler, P** (2013) The National–Transnational Wage–Setting Nexus in Europe: What have We Learned from the Early Years of Monetary Integration?\* *Journal of Common Market Studies*, Volume 51. Number 5. pp. 916–930

**Soskice, D & Iversen T.** (2001) Multiple Wage Bargaining Systems in the Single European Currency Area. *Empirica* 28: 435–456.

**Thomas, A.** (2016). Degrees of Inclusion: Free Movement of Labour and the Unionization of Migrant

Workers in the European Union. *JCMS: Journal of Common Market Studies*, 54(2), 408-425.

**Thomas, A** (2016). The transnational circulation of the 'organizing model' and its reception in Germany and France. *European Journal of Industrial Relations*

**Traxler, F.** (1995). Farewell to labour market associations? Organized versus disorganized decentralization as a map for industrial relations. *Organized industrial relations in Europe: What future*, 3-19.

**Traxler, F.** (2004). Employer associations, institutions and economic change: a cross-national comparison. *Industrielle Beziehungen/The German Journal of Industrial Relations*, 42-60.

**Turner, T., & D'Art, D.** (2012). Public Perceptions of Trade Unions in Countries of the European Union A Causal Analysis. *Labor Studies Journal*, 37(1), 33-55.

**Varga, M.** (2013). Refocusing studies of post-communist trade unions. *European Journal of Industrial Relations*, 19(2), 109-125.

**Visser, J.** (2016) What happened to collective bargaining during the great recession? *IZA Journal of Labor Policy* (2016) 5:9

**Waddington, J.** (2014) Trade union membership retention in Europe: the challenge of difficult times.

**Walsh, Frank** (2013) Union membership and the union wage premium in Ireland. Slides from the NERI conference 1 May 2013

# Statistical annex

## 1. COUNTRY PROFILES<sup>(374)</sup>

### European Union 28

European Union 28		2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015
Macro Economic Indicators (Annual % growth)	Real GDP	2.1	3.3	3.1	0.4	-4.4	2.1	1.7	-0.5	0.2	1.6	2.2
	Total employment	1.0	1.7	1.9	1.0	-1.7	-0.7	0.1	-0.4	-0.3	1.0	1.1
	Labour productivity	1.0	1.6	1.1	-0.6	-2.7	2.8	1.5	-0.1	0.5	0.6	1.1
	Annual average hours worked per person employed	-0.1	-0.1	0.1	-0.2	-1.3	-0.3	0.1	-1.0	-0.5	0.1	-0.1
	Real productivity per hour worked	1.1	1.7	1.0	-0.4	-1.4	3.1	1.4	0.9	1.0	0.5	1.2
	Harmonized CPI	2.3	2.3	2.4	3.7	1.0	2.1	3.1	2.6	1.5	0.5	0.0
	Price deflator GDP	2.3	2.4	2.8	0.1	-1.5	2.0	1.2	2.4	0.6	1.6	2.8
	Nominal compensation per employee	2.7	3.1	3.4	0.5	-1.0	3.7	1.9	2.9	0.8	1.8	3.1
	Real compensation per employee (GDP deflator)	0.4	0.7	0.6	0.3	0.5	1.7	0.6	0.4	0.2	0.2	0.3
	Real compensation per employee (private consumption deflator)	0.4	0.7	1.0	-3.1	-2.0	1.6	-1.2	0.2	-0.7	1.2	3.1
	Nominal unit labour costs	1.7	1.5	2.2	1.1	1.7	0.9	0.3	2.9	0.3	1.1	1.9
	Real unit labour costs	-0.7	-0.8	-0.6	0.9	3.3	-1.1	-0.9	0.6	-0.3	-0.5	-0.8
	Labour Market Indicators - Total	Total population (000)	494598	496437	498301	500297	502090	503171 b	502965 b	504060 b	505167	506944 bep
Population aged 15-64 (000)		332266	333371	334546	335847	336478	336350	335459 b	334949	334142	333782 bep	333084 bep
Total employment (000)		212065	216156	220363	222876	218952	216121	216219	215811	215415	218334	220845
Employment aged 15-64 (000)		208581	212568	216564	218924	214981	212089	212033	211351	210777	213422	215725
Employment rate (% population aged 20-64)		67.9	68.9	69.8	70.3	69.0	68.6	68.6	68.4	68.4	69.2	70.1
Employment rate (% population aged 15-64)		63.4	64.3	65.2	65.7	64.5	64.1	64.2	64.1	64.1	64.8	65.6
Employment rate (% population aged 15-24)		35.9	36.4	37.2	37.3	34.8	33.8	33.3	32.5	32.1	32.5	33.1
Employment rate (% population aged 25-54)		77.0	78.1	79.0	79.4	78.0	77.7	77.7	77.3	76.9	77.5	78.0
Employment rate (% population aged 55-64)		42.2	43.3	44.5	45.5	45.9	46.2	47.2	48.7	50.1	51.8	53.3
FTE employment rate (% population aged 20-64)		15.3	15.2	15.1	14.9	15.0	15.3	15.1	15.2	15.2	15.1	14.9
Part-time employment (% total employment)		17.2	17.4	17.5	17.5	18.0	18.5	18.8	19.2	19.6	19.6	19.6
Fixed term contracts (% total employees)		14.0 b	14.5	14.6	14.2	13.6	13.9	14.1	13.7	13.7	14.0	14.1
Employment in Services (% total employment)		69.1	69.5	69.8	70.1	71.1	71.8	72.1	72.5	72.9	73.1	
Employment in Industry (% total employment)		24.9	24.7	24.7	24.5	23.6	22.8	22.7	22.4	22.1	21.9	
Employment in Agriculture (% total employment)		6.0	5.7	5.5	5.4	5.4	5.4	5.2	5.1	5.0	5.0	
Activity rate (% population aged 15-64)		69.7	70.1	70.3	70.7	70.8	71.0	71.1	71.7	72.0	72.3	72.5
Activity rate (% population aged 15-24)		44.1	44.1	44.0	44.2	43.5	42.8	42.5	42.3	42.0	41.7	41.5
Activity rate (% population aged 25-54)		83.6	84.1	84.3	84.6	84.7	85.0	85.0	85.4	85.4	85.5	85.5
Activity rate (% population aged 55-64)		45.1	46.1	47.0	47.9	48.9	49.6	50.6	52.5	54.3	55.9	57.3
Total unemployment (000)		20942	19316	16988	16750	21358	22987	23126	25271	26299	24809	22884
Unemployment rate (% labour force)		9.0	8.2	7.2	7.0	9.0	9.6	9.7	10.5	10.9	10.2	9.4
Youth unemployment rate (% labour force 15-24)		19.0	17.7	15.9	15.9	20.3	21.4	21.7	23.3	23.7	22.2	20.3
Long term unemployment rate (% labour force)		4.0	3.7	3.0	2.6	3.0	3.8	4.1	4.6	5.1	5.0	4.5
Share of long term unemployment (% of total unemployment)		45.2	45.1	42.6	36.9	33.2	39.7	42.8	44.3	47.1	49.3	48.1
Youth unemployment ratio (% population aged 15-24)		8.3 b	7.7	6.8	6.9	8.7	9.0	9.2	9.8	9.9	9.3	8.4
Employment rate for low skilled 25-64 (ISCED 0-2)		55.7 b	56.4	57.1	56.5	54.6	53.8	53.4	52.7	52.0	52.6 b	53.2
Employment rate for medium skilled 25-64 (ISCED 3-4)		72.6 b	73.5	74.4	74.7	73.5	73.0	73.1	72.9	72.7	73.4 b	73.9
Employment rate for high skilled 25-64 (ISCED 5-8)		84.1 b	84.7	85.2	85.1	84.3	83.9	83.7	83.5	83.4	83.7 b	84.1
Employment rate (Nationals aged 15-64)		63.7 b	64.5	65.5	65.9	64.8	64.4	64.5	64.5	64.5	65.2	66.0
Employment rate (Other EU28 aged 15-64)			68.6	69.6	69.6	67.8	67.6	68.0	67.8	68.2	69.2	70.5
Employment rate (Other than EU28 aged 15-64)			57.3	58.1	59.0	55.2	55.0	54.7	53.4	52.6	53.2	53.7
Employment rate (Born in the same country aged 15-64)		63.9 b	64.6	65.4	65.9	64.8	64.4	64.4	64.4	64.4	65.2	66.0
Employment rate (Born in other EU28 aged 15-64)			67.9	69.1	68.7	66.9	66.6	66.6	66.1	66.5	67.5	68.7
Employment rate (Born outside EU28 aged 15-64)			62.1	62.9	63.2	59.5	58.8	58.0	57.0	56.1	57.0	57.6
Underemployment (% of labour force aged 15-74)					3.2	3.5	3.7	3.7	3.9	4.3	4.2	4.1
Seeking but not available (% of labour force aged 15-74)		1.2	1.2	1.1	1.1	1.0	1.0	1.0	1.0	0.9	0.9	0.9
Discouraged, available but not seeking (% of labour force aged 15-74)		3.4	3.3	3.2	3.1	3.4	3.5	3.6	3.7	4.0	3.9	3.8

[Click here to download table.](#)

<sup>(374)</sup> Data extracted 12<sup>th</sup> December 2016

European Union 28		2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015
Labour Market Indicators - Male	Total population (000)	240994	241952	242934	243991	244912	245500 b	245185 b	245760 b	246385	247379 bep	248182 bep
	Population aged 15-64(000)	166149	166743	167334	168007	168307	168234	167556 b	167298	166912	166801 bep	166510 bep
	Total employment (000)	118133	120061	122125	123039	119748	117964	117553	117190	116669	118111	119431
	Employment aged 15-64 (000)	115957	117822	119757	120575	117307	115496	115177	114425	113787	115051	116237
	Employment rate (% population aged 20-64)	75.9	76.8	77.6	77.8	75.7	75.1	75.0	74.6	74.5	75.0	75.9
	Employment rate (% population aged 15-64)	70.7	71.5	72.4	72.6	70.6	70.1	70.0	69.6	69.4	70.1	70.9
	Employment rate (% population aged 15-24)	38.3	39.3	40.2	40.1	36.8	35.4	35.4	35.4	35.3	34.4	34.9
	Employment rate (% population aged 25-54)	85.1	85.9	86.7	86.8	84.6	84.0	83.9	83.3	82.6	83.2	83.8
	Employment rate (% population aged 55-64)	51.5	52.5	53.7	54.8	54.6	54.5	54.9	56.2	57.4	58.8	60.2
	FTE employment rate (% population aged 20-64)			76.1	76.2	74.0	73.2	72.9	72.4	72.0	72.7	73.4
	Self-employed (% total employment)	19.3	19.2	19.0	18.8	19.1	19.4	19.2	19.3	19.2	19.1	18.8
	Part-time employment (% total employment)	6.7	6.9	6.9	7.0	7.4	7.8	8.0	8.4	8.7	8.8	8.9
	Fixed term contracts (% total employees)	10.8	11.2	11.2	10.8	10.3	10.7	10.9	10.6	10.6	10.9	11.2
	Employment in Services (% total employment)	59.5	59.9	59.1	59.3	60.1	60.9	61.3	61.8	62.3	62.5	62.8
	Employment in Industry (% total employment)	34.5	34.5	34.6	34.7	33.8	32.9	32.6	32.2	31.7	31.4	31.0
	Employment in Agriculture (% total employment)	6.8	6.5	6.3	6.0	6.1	6.2	6.1	6.1	6.0	6.0	6.0
	Activity rate (% population aged 15-64)	77.2	77.5	77.6	77.8	77.6	77.6	77.5	77.8	77.9	78.1	78.3
	Activity rate (% population aged 15-24)	47.7	47.4	47.4	47.6	46.6	45.9	45.4	45.2	44.8	44.4	44.1
	Activity rate (% population aged 25-54)	91.6	91.9	91.9	91.9	91.7	91.8	91.6	91.8	91.5	91.5	91.5
	Activity rate (% population aged 55-64)	55.1	55.9	56.8	57.7	58.4	58.7	59.5	61.0	62.6	63.9	65.0
	Total unemployment (000)	10792	9858	9630	9677	11747	12583	12469	13540	14178	13379	12247
	Unemployment rate (% labour force)	8.4	7.6	6.6	6.6	9.0	9.7	9.6	10.4	10.8	10.1	9.3
	Youth unemployment rate (% labour force 15-24)	18.9	17.4	15.6	16.0	21.4	22.1	22.3	23.9	24.4	22.8	21.0
	Long term unemployment rate (% labour force)	3.7	3.4	2.8	2.4	2.8	3.9	4.1	4.6	5.1	5.0	4.5
	Share of long term unemployment (% of total unemployment)	44.8	45.2	42.7	36.6	31.7	40.2	43.4	44.6	47.4	49.8	48.6
	Youth unemployment ratio (% population aged 15-24)	8.9 b	8.1	7.2	7.5	9.8	10.0	10.1	10.8	10.9	10.1	9.3
	Employment rate for low skilled 25-64 (ISCED 0-2)	69.1 b	69.8	70.2	69.7	66.6	65.2	64.3	63.0	62.0	62.5 b	63.5
	Employment rate for medium skilled 25-64 (ISCED 3-4)	79.3 b	80.1	81.0	81.4	79.6	79.1	79.2	79.0	78.7	79.1	79.8
	Employment rate for high skilled 25-64 (ISCED 5-8)	87.4 b	88.0	88.7	88.9	87.9	87.3	87.5	87.3	87.1	87.3 b	87.8
	Employment rate (Nationals aged 15-64)	70.8 b	71.5	72.4	72.6	70.8	70.2	70.1	69.8	69.6	70.2	71.0
	Employment rate (Other EU28 aged 15-64)		77.1	78.1	78.2	74.9	74.7	74.8	74.5	74.9	76.1	77.3
	Employment rate (Other than EU28 aged 15-64)		69.0	69.8	69.8	63.9	64.5	64.5	62.8	61.9	62.6	63.4
	Employment rate (Born in the same country aged 15-64)	71.0 b	71.5	72.3	72.5	70.7	70.1	69.9	69.6	69.4	70.1	70.9
Employment rate (Born in other EU28 aged 15-64)		77.1	78.4	77.7	74.2	74.2	73.6	73.4	72.7	73.0	73.9	
Employment rate (Born outside EU28 aged 15-64)		75.6	75.3	75.2	67.7	67.2	66.5	65.3	64.2	65.3	66.2	
Underemployment (% of labour force aged 15-74)		1.7	1.9	2.1	2.2	2.1	2.2	2.4	2.6	2.6	2.6	
Seeking but not available (% of labour force aged 15-74)	0.9	0.9	0.9	0.8	0.8	0.8	0.8	0.8	0.7	0.7	0.7	
Discouraged, available but not seeking (% of labour force aged 15-74)	2.4	2.3	2.2	2.1	2.5	2.7	2.9	2.9	3.1	3.1	3.0	
Labour Market Indicators - Female	Total population (000)	253604	254485	255366	256306	257178	257671 b	257780 b	258300 b	258872	259565 bep	260219 bep
	Population aged 15-64(000)	166117	166629	167211	167841	168171	168116	167903 b	167651	167229	166981 bep	166573 bep
	Total employment (000)	93930	96094	98238	99837	99205	98157	98466	98621	98746	100223	101415
	Employment aged 15-64 (000)	92624	94746	96807	98349	97674	96593	96857	96926	96950	98371	99489
	Employment rate (% population aged 20-64)	61.1	62.1	62.1	62.8	62.3	62.4	62.2	62.4	62.2	63.4	63.6
	Employment rate (% population aged 15-64)	56.1	57.2	58.1	58.9	58.4	58.2	58.4	58.6	58.8	59.6	60.4
	Employment rate (% population aged 15-24)	32.9	33.4	34.1	34.3	31.6	31.2	30.5	30.2	30.6	31.3	
	Employment rate (% population aged 25-54)	69.0	70.2	71.3	72.1	71.5	71.4	71.4	71.3	71.1	71.7	72.3
	Employment rate (% population aged 55-64)	33.5	34.7	35.8	36.7	37.7	38.5	40.0	41.7	43.3	45.2	46.9
	FTE employment rate (% population aged 20-64)			53.7	54.4	53.8	53.5	53.5	53.6	53.7	54.4	55.3
	Self-employed (% total employment)	10.2	10.2	10.2	10.1	10.1	10.3	10.2	10.4	10.3	10.5	10.4
	Part-time employment (% total employment)	30.3	30.5	30.5	30.4	30.8	31.3	31.5	31.9	32.4	33.2	33.1
	Fixed term contracts (% total employees)	12.7	13.2	13.4	13.2	12.8	12.8	12.8	12.5	12.4	12.6	12.8
	Employment in Services (% total employment)	81.8	82.3	82.6	83.0	83.9	84.5	84.6	84.9	85.1	85.3	85.3
	Employment in Industry (% total employment)	13.2	12.9	12.8	12.4	11.6	11.1	11.2	11.1	11.0	10.9	10.9
	Employment in Agriculture (% total employment)	5.1	4.8	4.6	4.6	4.5	4.4	4.2	4.1	3.9	3.8	3.8
	Activity rate (% population aged 15-64)	62.2	62.8	63.1	63.6	64.1	64.4	64.8	65.5	66.0	66.5	66.8
	Activity rate (% population aged 15-24)	40.5	40.6	40.5	40.6	40.2	39.6	39.4	39.3	39.2	38.9	38.8
	Activity rate (% population aged 25-54)	75.6	76.3	76.7	77.3	77.7	78.0	78.2	78.4	78.2	78.5	78.4
	Activity rate (% population aged 55-64)	35.7	36.9	37.9	38.6	40.0	41.0	42.6	44.6	46.5	48.4	50.0
	Total unemployment (000)	10150	9458	8358	8073	9611	10405	10657	11631	12120	11530	10637
	Unemployment rate (% labour force)	9.8	9.0	7.9	7.5	8.9	9.6	9.8	10.5	10.9	10.3	9.5
	Youth unemployment rate (% labour force 15-24)	19.2	18.1	16.2	15.9	19.0	20.5	21.0	22.4	23.0	21.4	19.5
	Long term unemployment rate (% labour force)	4.4	4.0	3.3	2.8	3.1	3.7	4.1	4.6	5.1	5.0	4.7
	Share of long term unemployment (% of total unemployment)	45.7	44.9	42.5	37.3	34.9	39.1	42.0	44.0	46.8	48.7	47.6
	Youth unemployment ratio (% population aged 15-24)	7.6 b	7.2	6.4	6.3	7.5	8.0	8.3	8.8	9.0	8.3	7.6
	Employment rate for low skilled 25-64 (ISCED 0-2)	43.9 b	44.6	45.3	44.7	43.8	43.3	43.2	43.1	42.6	43.0 b	43.2
	Employment rate for medium skilled 25-64 (ISCED 3-4)	65.5 b	66.5	67.4	67.6	66.9	66.6	66.6	66.5	66.4	67.1 b	67.7
	Employment rate for high skilled 25-64 (ISCED 5-8)	80.7 b	81.3	81.8	81.6	81.1	80.6	80.3	80.1	80.1	80.4 b	80.8
	Employment rate (Nationals aged 15-64)	56.6 b	57.6	58.6	59.3	58.8	58.7	58.9	59.2	59.4	60.2	61.0
	Employment rate (Other EU28 aged 15-64)		60.2	61.3	61.3	60.9	60.9	61.8	61.6	61.8	62.7	64.0
	Employment rate (Other than EU28 aged 15-64)		45.5	46.4	48.1	46.7	46.0	45.3	44.5	43.9	44.5	44.5
	Employment rate (Born in the same country aged 15-64)	56.7 b	57.7	58.6	59.3	58.9	58.9	58.9	59.2	59.4	60.2	61.1
Employment rate (Born in other EU28 aged 15-64)		59.9	61.0	60.8	60.6	60.6	60.8	60.5	61.0	62.1	63.2	
Employment rate (Born outside EU28 aged 15-64)		51.4	52.4	53.7	51.7	51.0	50.1	49.2	48.6	49.4	49.8	
Underemployment (% of labour force aged 15-74)				5.1	5.3	5.5	5.4	5.7	6.2	6.1	5.9	
Seeking but not available (% of labour force aged 15-74)	1.5	1.5	1.5	1.4	1.2	1.2	1.2	1.2	1.1	1.1	1.1	
Discouraged, available but not seeking (% of labour force aged 15-74)	4.7	4.6	4.5	4.3	4.5	4.5	4.6	4.7	4.9	4.9	4.7	

[Click here to download table.](#)

European Union 28		2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	
Social Indicators	All	At-risk-of-poverty or exclusion (% of total population)					23.7	24.3	24.7	24.6	24.4	23.7 e	
		At-risk-of-poverty (% of total population)					16.5	16.8	16.8	16.7	17.2	17.3 e	
		At-risk-of-poverty threshold (PPS single person)											
		Poverty gap (%)						22.9	23.0	23.4	23.9	24.5	24.9
		Persistent at-risk-of-poverty (% of total population)						10.0 e	9.8 e	10.3 e	10.0	10.3	10.3
		At-risk-of-poverty before social transfers excl. pensions (% of total population)						26.0	26.4	25.8	26.0	26.1	25.9 e
		Impact of social transfers (excl. pensions) in reducing poverty (%)						36.5	36.4	34.9	35.8	34.1	33.2 e
		Severe Material Deprivation (% of total population)						8.4	8.8	9.9	9.6	8.9	8.1 e
		Share of people living in low work intensity households (% of people aged 0-59)						10.3	10.5	10.5	10.9	11.2	10.5 e
		Real Gross Household Disposable income (growth %)	1.3	2.0	2.1	0.6	0.7	-0.3	-0.5	-1.0	-0.1	1.1	2.3
		Income quintile share ratio S80/S20						4.9	5.0	5.0	5.0	5.2	5.2
		GNI coefficient						30.8	30.4	30.5	30.9	31.0	31.0
	Early leavers from education and training (% of population aged 18-24)	15.7	15.3 b	14.9	14.7	14.2	13.9	13.4	12.7	11.9	11.2 b	11.0	
	NEET: Young people not in employment, education or training (% of total population aged 15-24)	12.7	11.7 b	11.0	10.9	12.4	12.8	12.9	13.2	13.0	12.5	12.0	
	Male	At-risk-of-poverty or exclusion (% of male population)						22.6	23.1	23.7	23.7	23.6	23.0 e

## Euro Area 19

Euro Area 19		2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	
Macro Economic Indicators (Annual % growth)	Real GDP	1.7	3.2	3.0	0.4	-4.5	2.1	1.5	-0.9	-0.3	1.2	2.0	
	Total employment	1.0	1.8	1.9	0.8	-1.9	-0.6	0.1	-0.4	-0.6	0.6	1.0	
	Labour productivity	0.6	1.4	1.1	-0.4	-2.7	2.7	1.4	-0.5	0.3	0.6	1.0	
	Annual average hours worked per person employed	-0.3	-0.1	0.1	-0.1	-1.8	0.1	-0.1	-1.2	-0.8	-0.1	0.1	
	Real productivity per hour worked	0.9	1.6	1.0	-0.3	-1.0	2.6	1.5	0.7	1.1	0.7	0.9	
	Harmonized CPI	2.2	2.2	2.2	3.3	0.3	1.6	2.7	2.5	1.3	0.4	0.0	
	Price deflator GDP	1.9	2.0	2.5	2.0	1.0	0.7	1.1	1.3	1.2	0.9	1.1	
	Nominal compensation per employee	2.1	2.4	2.6	3.4	1.6	2.0	2.0	1.5	1.5	1.3	1.3	
	Real compensation per employee (GDP deflator)	0.2	0.4	0.1	1.3	0.7	1.3	0.9	0.2	0.3	0.5	0.2	
	Real compensation per employee (private consumption deflator)	-0.1	0.1	0.5	0.0	1.3	0.3	-0.7	-1.0	0.2	0.9	1.3	
	Nominal unit labour costs	1.5	0.9	1.5	3.8	4.4	-0.7	0.6	2.0	1.2	0.7	0.3	
	Real unit labour costs	-0.5	-1.1	-0.9	1.7	3.4	-1.4	-0.5	0.7	-0.1	-0.1	-0.9	
	Labour Market Indicators - Total	Total population (000)	528141	529685	531205	535097	534470	535266	535753	535301	535049	537473	538422
		Population aged 15-64 (000)	219379	219986	220686	221860	222290	222222	221221	220963	220561	220607	220249
		Total employment (000)	139775	142543	145354	146759	143820	142198	142296	141457	140663	142078	143559
Employment aged 15-64 (000)		137908	140590	143260	144574	141626	140006	140004	138982	138103	139557	140667	
Employment rate (% population aged 20-64)		67.9	69.0	69.9	70.2	68.8	68.4	68.4	68.0	67.7	68.2	69.0	
Employment rate (% population aged 15-64)		63.5	64.5	65.5	65.8	64.4	64.0	64.1	63.7	63.4	63.9	64.5	
Employment rate (% population aged 15-24)		36.1	36.6	37.5	37.3	34.7	33.3	32.9	31.6	30.9	30.7	30.8	
Employment rate (% population aged 25-54)		77.2	78.3	79.1	79.4	77.7	77.3	77.5	76.5	75.9	76.1	76.7	
Employment rate (% population aged 55-64)		40.5	41.7	42.5	44.4	45.1	45.7	47.0	48.6	50.0	53.6	53.3	
FTE employment rate (% population aged 20-64)		62.4	63.2	64.0	64.4	62.9	62.3	62.2	61.6	61.2	61.6	62.3	
Self-employed (% total employment)		15.2	15.2	15.1	14.8	14.9	15.1	15.0	15.0	15.0	14.9	14.8	
Part-time employment (% total employment)		17.9	18.5	18.6	18.7	19.3	19.7	20.1	20.7	21.5	21.5	21.6	
Fixed term contracts (% total employees)		15.9	16.5	16.4	16.0	15.2	15.4	15.6	15.0	14.9	15.1	15.4	
Employment in Services (% total employment)		71.3	71.7	72.0	72.5	73.4	74.1	74.5	74.8	75.1	75.4	75.2	
Employment in Industry (% total employment)		24.7	24.4	24.3	24.0	23.0	22.4	22.1	21.8	21.5	21.4	21.4	
Employment in Agriculture (% total employment)		4.0	3.9	3.9	3.9	3.6	3.6	3.5	3.4	3.4	3.4	3.4	
Activity rate (% population aged 15-64)		69.9	70.4	70.8	71.2	71.3	71.3	71.4	72.0	72.2	72.4	72.5	
Activity rate (% population aged 15-24)		43.9	43.9	44.1	44.2	43.3	42.1	41.7	41.3	40.8	40.1	39.6	
Activity rate (% population aged 25-54)		83.9	84.5	84.7	85.1	85.1	85.2	85.2	85.6	85.5	85.5	85.4	
Activity rate (% population aged 55-64)		43.7	44.9	46.2	47.1	48.4	49.4	50.7	52.8	54.6	56.4	58.0	
Total unemployment (000)		13993	12985	11722	11951	12533	16156	16185	16192	16241	18638	17451	
Unemployment rate (% labour force)		9.1	8.4	7.5	7.6	9.6	10.2	10.2	11.4	12.0	11.6	10.9	
Youth unemployment rate (% labour force 15-24)		18.5	17.2	16.5	16.1	21.4	21.5	21.4	23.6	24.4	23.6	22.4	
Long term unemployment rate (% labour force)		4.0	3.8	3.2	2.9	3.3	4.3	4.6	5.2	5.9	6.0	5.5	
Share of long term unemployment (% of total unemployment)		44.7	45.5	43.5	38.5	35.0	42.0	45.1	46.2	49.5	52.3	51.2	
Youth unemployment ratio (% population aged 15-24)		7.9	7.3	6.6	6.9	8.7	8.8	8.8	9.7	9.9	9.5	8.8	
Employment rate for low skilled 25-64 (ISCED 0-2)		56.1	57.0	57.5	57.2	55.1	54.3	54.0	53.0	52.1	52.2	53.0	
Employment rate for medium skilled 25-64 (ISCED 3-4)		73.1	74.2	75.1	75.5	74.4	74.1	74.0	73.7	73.3	73.7	74.1	
Employment rate for high skilled 25-64 (ISCED 5-8)		85.2	85.9	84.5	84.8	85.9	85.5	85.5	85.1	82.7	82.7	85.2	
Employment rate (Nationals aged 15-64)		63.9	64.9	66.2	66.2	64.6	64.6	64.6	64.3	64.1	64.1	64.1	
Employment rate (Other EU28 aged 15-64)		67.4	68.2	67.9	67.9	65.8	65.8	65.9	65.7	65.8	66.5	67.6	
Employment rate (Other than EU28 aged 15-64)		56.5	57.8	58.6	58.5	54.5	54.5	54.0	52.5	51.5	52.1	52.5	
Employment rate (Born in the same country aged 15-64)		64.0	64.9	65.8	66.2	64.9	64.5	64.6	64.2	64.0	64.4	65.1	
Employment rate (Born in other EU28 aged 15-64)		66.4	67.4	66.5	66.4	64.1	64.1	63.5	62.9	62.9	63.3	64.2	
Employment rate (Born outside EU28 aged 15-64)		62.6	63.5	63.4	63.4	58.9	58.1	56.8	55.4	53.8	54.4	55.0	
Underemployment (% of labour force aged 15-74)					3.5	3.7	3.8	3.8	4.0	4.6	4.6	4.5	
Seeking but not available (% of labour force aged 15-74)		1.4	1.4	1.3	1.2	1.1	1.1	1.1	1.0	1.0	1.0	1.0	
Discouraged, available but not seeking (% of labour force aged 15-74)		3.4	3.2	3.2	3.3	3.5	3.6	3.7	3.9	4.2	4.4	4.3	

[Click here to download table.](#)

Euro Area 19		2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	
Labour Market Indicators - Male	Total population (000)	159964	160760	161550	162517	163200	163564	162976	163344	163747	164519	165034	
	Population aged 15-64(000)	109957	110271	110616	111180	111344	111235	110489	110344	110123	110168	110008	
	Total employment (000)	78626	80064	81697	80897	78987	78626	78626	78626	78626	78626	78626	
	Employment aged 15-64 (000)	77584	78776	79951	80172	77672	76433	76124	75242	74473	74885	75588	
	Employment rate (% population aged 20-64)	76.6	77.4	78.2	78.1	75.7	75.0	74.9	74.1	73.4	73.8	74.6	
	Employment rate (% population aged 15-64)	71.6	72.4	73.2	73.1	70.8	70.2	70.0	69.3	68.7	69.0	69.7	
	Employment rate (% population aged 15-24)	39.4	40.1	40.8	40.3	36.7	35.4	34.9	33.5	32.7	32.4	32.4	
	Employment rate (% population aged 25-54)	86.2	87.0	87.6	87.4	84.7	84.0	83.8	82.7	81.7	81.9	82.4	
	Employment rate (% population aged 55-64)	49.9	50.8	52.3	53.3	53.4	53.7	54.3	55.6	56.7	58.1	59.6	
	FTE employment rate (% population aged 20-64)	75.1	75.7	76.4	76.3	73.8	73.8	74.1	74.5	74.9	75.4	76.1	
	Self-employed (% total employment)	19.0	19.0	18.8	18.5	18.8	19.1	19.0	19.1	19.0	18.8	18.6	
	Part-time employment (% total employment)	6.3	6.7	6.8	6.8	7.3	7.6	8.0	8.4	8.9	9.1	9.3	
	Fixed term contracts (% total employees)	12.3	12.7	12.7	12.3	11.5	11.6	11.7	11.7	11.6	11.9	12.3	
	Employment in Services (% total employment)	60.7	60.8	61.0	61.3	62.2	63.0	63.5	63.9	64.4	64.6	64.6	
	Employment in Industry (% total employment)	34.5	34.5	34.5	34.4	33.4	32.6	32.2	31.7	31.2	30.9	30.9	
	Employment in Agriculture (% total employment)	4.8	4.7	4.5	4.3	4.4	4.4	4.3	4.4	4.4	4.4	4.4	
	Activity rate (% population aged 15-64)	78.0	78.3	78.4	78.5	78.3	78.0	77.5	78.1	78.4	78.1	78.1	
	Activity rate (% population aged 15-24)	47.6	47.5	47.5	47.6	47.6	47.6	47.6	47.6	47.6	47.6	47.6	
	Activity rate (% population aged 25-54)	92.8	93.0	92.9	92.9	92.5	92.4	92.2	92.2	91.8	91.6	91.4	
	Activity rate (% population aged 55-64)	53.8	54.5	55.6	56.4	57.4	58.1	58.8	60.7	62.4	63.8	65.3	
	Total unemployment (000)	7076	6453	5782	6048	8248	8725	8630	8750	10312	9930	9272	
	Unemployment rate (% labour force)	8.3	7.5	6.7	6.9	9.5	10.1	10.0	11.2	11.9	11.5	10.7	
	Youth unemployment rate (% labour force 15-24)	17.8	16.3	14.8	15.9	21.5	22.0	21.6	24.0	24.8	24.2	23.0	
	Long term unemployment rate (% labour force)	3.6	3.4	2.9	2.6	3.1	4.2	4.5	5.9	6.0	5.5	4.9	
	Share of long term unemployment (% of total unemployment)	44.0	45.9	43.3	37.7	33.2	42.0	46.3	46.2	49.5	52.3	51.3	
	Youth unemployment ratio (% population aged 15-24)	8.2	7.5	6.8	7.3	9.7	9.7	9.5	10.5	10.7	10.3	9.6	
	Employment rate for low skilled 25-64 (ISCED 0-2)	71.2	71.7	71.8	70.9	67.4	66.0	65.2	63.3	61.9	62.1	63.1	
	Employment rate for medium skilled 25-64 (ISCED 3-4)	80.2	81.0	82.0	82.1	80.2	79.8	79.8	79.4	78.8	79.0	79.4	
	Employment rate for high skilled 25-64 (ISCED 5-8)	86.9	87.7	88.5	88.7	87.5	87.1	87.1	86.8	86.3	86.3	86.9	
	Employment rate (Nationals aged 15-64)	71.7	72.5	73.3	73.2	71.2	70.5	70.3	69.6	69.0	69.2	69.8	
	Employment rate (Other EU28 aged 15-64)	75.1	75.7	76.4	76.3	73.8	73.8	74.1	74.5	74.9	75.4	76.1	
	Employment rate (Other than EU28 aged 15-64)	68.5	69.7	69.5	69.5	63.1	63.1	63.7	61.5	60.7	61.1	62.2	
	Employment rate (Born in the same country aged 15-64)	71.8	72.5	73.2	73.1	71.1	70.3	70.2	69.4	68.8	69.1	69.7	
	Employment rate (Born in other EU28 aged 15-64)	76.6	77.1	75.9	75.8	71.8	71.5	70.7	69.1	69.1	69.4	70.8	
	Employment rate (Born outside EU28 aged 15-64)	73.8	74.4	73.2	73.2	66.7	66.1	64.9	63.1	61.6	62.0	63.3	
	Underemployment (% of labour force aged 15-74)				1.6	1.8	1.9	2.0	2.2	2.6	2.7	2.7	
	Seeking but not available (% of labour force aged 15-74)	1.1	1.1	1.0	1.0	0.9	0.9	0.9	0.9	0.8	0.8	0.8	
	Discouraged, available but not seeking (% of labour force aged 15-74)	2.2	2.0	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1	
	Labour Market Indicators - Female	Total population (000)	166177	168925	169655	170580	171270	171702	171597	171957	172302	172954	173388
		Population aged 15-64(000)	109422	109715	110070	110681							

Euro Area 19		2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	
Social indicators	All	At-risk-of-poverty or exclusion (% of total population)	22.0	22.1	21.9	21.7	21.6	22.0	22.9	23.5	23.1	23.5	23.0 e
		At-risk-of-poverty (% of total population)	15.5	15.6	16.1	16.1	16.2	16.3	16.8	16.8	16.7	17.1	17.3 e
		At-risk-of-poverty threshold (PPS single person)											
		Poverty gap (%)	21.5	22.1	22.2	21.4	21.9	22.5	22.8	23.2	24.0	24.8	25.0
		Persistent at-risk-of-poverty (% of total population)				9.0	9.7	10.3	10.0	10.4	10.4	10.6	10.6
		At-risk-of-poverty before social transfers excl. pensions (% of total population)	24.4	24.8	24.6	24.2	24.4	25.2	25.7	25.2	25.5	25.8	25.6 e
		Impact of social transfers (excl. pensions) in reducing poverty (%)	36.5	37.1	34.6	35.5	35.6	35.3	34.6	33.5	34.5	35.7	32.4 e
		Severe Material Deprivation (% of total population)	6.3	6.0	5.6	5.9	6.0	6.1	6.9	7.8	7.5	7.4	6.9 e
		Share of people living in low work intensity households (% of people aged 0-59)	9.8	10.3	9.7	9.3	9.1	10.4	11.0	10.7	11.2	11.9	11.1 e
		Real Gross Household Disposable income (growth %)	0.9	1.8	1.6	0.5	0.2	-0.7	-0.4	-1.6	-0.5	0.7	1.9
	Income quintile share ratio S80/S20	4.7	4.7	4.8	4.9	4.9	4.9	5.0	5.0	5.0	5.2	5.2	
	GINI coefficient	29.4	29.4	30.0	30.5	30.3	30.3	30.6	30.4	30.7	31.0	30.8	
	Early leavers from education and training (% of population aged 18-24)	17.5	17.2 b	16.7	16.3	15.7	15.4	14.6	13.8	12.8	11.9 b	11.6	
	NEET: Young people not in employment, education or training (% of total population aged 15-24)	12.1	11.3 b	10.8	11.0	12.6	12.8	12.7	13.1	12.9	12.6	12.2	
	At-risk-of-poverty or exclusion (% of male population)	20.5	20.6	20.2	20.2	20.3	20.9	21.8	22.2	22.2	22.6	22.3 e	
	At-risk-of-poverty (% of male population)	14.5	14.6	15.1	15.0	15.2	15.5	16.0	16.1	16.1	16.5	16.8 e	
	Poverty gap (%)	22.6	22.9	22.8	22.2	22.4	23.0	23.8	23.9	24.7	25.7	25.9	
	Persistent at-risk-of-poverty (% of male population)				8.2	8.8	9.5	9.4	9.7	10.0	10.2	10.2	
	Severe Material Deprivation (% of male population)	6.0	5.7	5.2	5.7	5.8	5.9	6.6	7.5	7.3	7.2	6.9 e	
	Share of people living in low work intensity households (% of males aged 0-59)	8.9	9.2	8.7	8.4	8.3	9.7	10.3	10.1	10.7	11.4	10.7 e	
	Life expectancy at birth (years)												
	Healthy life years at birth (years) - men												
	Early leavers from education and training (% of males aged 18-24)	20.1	20.0 b	19.4	18.9	18.2	17.9	16.9	15.9	14.7	13.6 b	13.2	
	NEET: Young people not in employment, education or training (% of males aged 15-24)	11.0	10.2 b	9.8	10.2	12.6	12.7	12.6	13.2	13.0	12.7	12.3	
	At-risk-of-poverty or exclusion (% of female population)	23.4	23.6	23.5	23.2	22.9	23.1	24.0	24.4	24.0	24.3	23.7 e	
	At-risk-of-poverty (% of female population)	16.4	16.5	17.1	17.1	17.1	17.1	17.6	17.6	17.3	17.7	17.7 e	
	Poverty gap (%)	20.8	21.4	21.6	20.9	21.5	22.1	22.1	22.6	23.5	24.1	24.1	
	Persistent at-risk-of-poverty (% of female population)												
	Severe Material Deprivation (% of female population)	6.6	6.2	6.0	6.2	6.2	6.2	7.2	8.0	7.7	7.5	7.0 e	
	Share of people living in low work intensity households (% of females aged 0-59)	10.8	11.4	10.7	10.2	9.9	11.1	11.6	11.4	11.6	12.3	11.4 e	
	Life expectancy at birth (years)												
	Healthy life years at birth (years) - women												
	Early leavers from education and training (% of females aged 18-24)	14.9	14.4 b	13.9	13.6	13.2	12.8	12.3	11.6	10.9	10.0 b	9.9	
	NEET: Young people not in employment, education or training (% of females aged 15-24)	13.3	12.4 b	11.8	11.8	12.6	12.8	12.9	13.0	12.8	12.5	12.1	
	At-risk-of-poverty or exclusion of children (% of people aged 0-17)	13.7	14.0	14.6	14.6	14.8	15.3	16.2	15.6	15.8	17.4	17.4 e	
	At-risk-of-poverty (% of Children population)	18.0	17.8	18.4	19.0	19.6	20.7	20.5	20.4	19.9	20.4	20.8 e	
	Severe Material Deprivation (% of Children population)	7.2	6.8	6.2	7.1	7.2	7.2	7.8	9.0	8.4	8.4	7.9 e	
	Share of children living in low work intensity households (% of Children population)	7.6	7.9	7.4	7.0	7.1	8.6	9.0	8.3	8.7	9.4	8.5 e	
	Risk of poverty of children in households at work (Working Intensity > 0.2)	13.9	13.7	14.3	15.1	15.6	15.7	15.2	15.3	14.8	15.0	15.6 e	
	Impact of social transfers (excl. pensions) in reducing poverty (0-17) (%)	42.5	43.5	41.8	39.9	39.1	38.9	39.2	37.8	40.2	38.6	37.4 e	
At-risk-of-poverty or exclusion (% of Working age population)	21.6	22.0	21.7	21.5	21.5	22.3	23.5	24.3	24.5	25.1	24.6 e		
At-risk-of-poverty (% of Working age population)	13.7	14.0	14.6	14.6	14.8	15.3	16.2	15.6	15.8	17.4	17.4 e		
Severe Material Deprivation (% of Working age population)	6.2	6.0	5.7	6.0	6.1	6.2	7.1	8.0	7.9	7.8	7.4 e		
Very low work intensity (18-59)	10.6	11.1	10.4	10.0	9.7	11.0	11.6	11.5	12.0	12.7	11.9 e		
In-work at-risk-of-poverty rate (% of persons employed 18-64)	7.3	7.3	7.9	8.1	8.2	8.0	8.5	8.6	8.7	9.4	9.5 e		
Impact of social transfers (excl. pensions) in reducing poverty (18-64) (%)	40.2	40.4	37.1	36.5	36.5	38.1	36.7	34.7	35.4	34.6	34.1 e		
At-risk-of-poverty or exclusion of elderly (% of people aged 65+)	22.0	21.3	21.5	20.4	19.5	17.6	18.2	17.6	16.5	16.2	15.9 e		
At-risk-of-poverty (% of Elderly population)	19.1	18.8	19.1	18.2	17.4	15.2	15.1	14.1	13.3	13.3	13.5 e		
Severe Material Deprivation (% of Elderly population)	5.4	4.9	4.9	4.5	4.3	4.2	5.4	5.7	5.2	4.9	4.3 e		
Relative median income of elderly (ratio with median income of people younger than 65)	0.86	0.86	0.85	0.86	0.88	0.90	0.91	0.93	0.95	0.95	0.95		
Aggregate replacement ratio (ratio)	0.52	0.51	0.49	0.49	0.51	0.52	0.54	0.54	0.56	0.56	0.58		
Sickness/Health care	7.3 p	7.3 p	7.2 p	7.5 p	8.3 p	8.2 p	8.1 p	8.2 p	8.3 p	8.3 p	8.3 p		
Disability	1.9 p	1.8 p	1.8 p	1.8 p	2.0 p	2.0 p	2.0 p	2.0 p	2.1 p	2.1 p	2.1 p		
Old age and survivors	11.7 p	11.6 p	11.4 p	11.6 p	12.5 p	12.6 p	12.6 p	12.9 p	13.1 p	13.1 p	13.1 p		
Family/Children	2.1 p	2.0 p	2.0 p	2.0 p	2.2 p	2.3 p	2.3 p						
Unemployment	1.7 p	1.5 p	1.5 p	1.5 p	2.0 p	1.9 p	1.8 p	1.8 p	1.8 p	1.7 p	1.7 p		
Housing and Social exclusion n.e.c.	0.7 p	0.8 p	0.8 p	0.8 p	0.9 p								
Total (including Admin and other expenditures)	26.5 p	26.2 p	25.8 p	26.5 p	29.3 p	29.2 p	28.9 p	29.3 p	29.7 p	29.7 p	29.7 p		
of which: Means tested benefits	2.6 p	2.6 p	2.6 p	2.6 p	3.0 p	3.0 p	2.9 p	3.0 p	3.0 p	3.1 p	3.1 p		

[Click here to download table.](#)

## Belgium

Belgium		2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	
Macro Economic indicators (Annual % growth)	Real GDP	2.1	2.5	3.4	0.7	-2.3	2.7	1.8	0.1	-0.1	1.7	1.5	
	Total employment	1.4	1.1	1.7	1.8	-0.2	0.6	1.4	0.4	-0.3	0.4	0.9	
	Labour productivity	0.6	1.4	1.7	-1.0	-2.1	2.0	0.4	-0.3	0.3	1.2	0.6	
	Annual average hours worked per person employed	-0.5	0.4	0.3	-0.4	-1.4	-0.2	0.9	0.0	-0.1	-0.2	-0.3	
	Real productivity per hour worked	1.1	0.9	1.4	-0.6	-0.7	2.2	-0.5	-0.5	0.4	1.4	0.9	
	Harmonized CPI	2.5	2.3	1.8	1.9	4.5	0.0	2.5	3.4	2.6	1.2	0.5	0.6
	Price deflator GDP	2.1	2.3	2.1	2.0	0.8	1.9	2.0	2.1	1.2	0.7	0.9	
	Nominal compensation per employee	1.8	3.6	3.6	3.7	1.1	1.4	3.1	3.2	2.5	1.0	0.0	
	Real compensation per employee (GDP deflator)	-0.3	1.2	1.5	1.7	0.3	-0.6	1.1	1.1	1.3	0.4	-0.8	
	Real compensation per employee (private consumption deflator)	-0.7	1.2	1.7	-0.8	1.1	-0.9	-0.2	0.5	1.2	0.5	-0.6	
	Nominal unit labour costs	1.1	2.2	1.8	4.7	3.3	-0.7	2.7	3.5	2.2	-0.2	-0.5	
	Real unit labour costs	-1.0	-0.2	-0.2	2.7	2.5	-2.6	0.7	1.3	1.1	-0.8	-1.4	
	Total population (000)	10446	10511	10585	10667	10753	10840	11001 b	11095	11162	11204	11209 b	
	Population aged 15-64 (000)	6851	6906	6977	7047	7101	7148	7250	7284	7304	7304	7272 b	
	Total employment (000)	4235	4264	4380	4446	4421	4489	4509	4524	4530	4544	4552	
Employment aged 15-64 (000)	4199	4233	4348	4414	4389	4451	4471	4479	4485	4497	4499		
Employment rate (% population aged 20-64)	66.5	66.5	67.7	68.0	67.1	67.6	67.3	67.2	67.2	67.3	67.2		
Employment rate (% population aged 15-64)	61.1	61.0	62.0	62.4	61.6	62.0	61.9	61.8	61.8	61.9	61.8		
Employment rate (% population aged 15-24)	27.5	27.6	27.5	27.4	25.3	25.2	26.0	25.3	23.6	23.2	23.4		
Employment rate (% population aged 25-54)	78.3	78.4	79.7	80.5	79.8	80.0	79.3	79.3	79.0	79.1	78.5		
Employment rate (% population aged 55-64)	31.8	32.0	34.4	34.5	35.3	37.3	38.7	39.5	41.7	42.7	44.0		
FTE employment rate (% population aged 20-64)	60.7 b	60.5	61.8	62.0	61.0	61.4	60.6 b	60.7	60.7	61.2	60.8		
Self-employed (% total employment)	13.5	13.5	13.5	13.0	13.5	13.4	13.2	13.5	14.2	13.7	14.3		
Part-time employment (% total employment)	21.7	22.0	21.9	22.4	23.2	23.7	24.7	24.7	24.3	23.7	24.3		
Fixed term contracts (% total employees)	8.9 b	8.7	8.6	8.3	8.2	8.1	9.0	8.1	8.2	8.7	9.0		
Employment in Services (% total employment)	77.5	77.6	77.9	78.1	78.7	79.3	79.4	79.7	80.0	80.4			
Employment in Industry (% total employment)	20.8	20.7	20.5	20.3	19.8	19.3	19.2	19.0	18.7	18.3			
Employment in Agriculture (% total employment)	1.8	1.7	1.6	1.5	1.4	1.4	1.3	1.3	1.3	1.3			
Activity rate (% population aged 15-64)	66.7	66.5	67.1	67.1	66.9	67.7	66.7	66.9	67.5	67.7	67.6		
Activity rate (% population aged 15-24)	35.0	34.7	33.9	33.4	32.4	32.5	32.0	31.5	31.0	30.2	30.0		
Activity rate (% population aged 25-54)	84.6	84.5	85.3	85.7	85.6	86.3	84.7	85.0	85.3	85.6	85.1		
Activity rate (% population aged 55-64)	33.3	33.6	35.9	36.1	37.2	39.2	40.3	41.4	44.1	45.1	46.6		
Total unemployment (000)	390	383	353	333	380	406	347	369	417	423	422		
Unemployment rate (% labour force)	8.5	8.3	7.5	7.0	7.9	8.3	7.2	7.6	8.4	8.5	8.5		
Youth unemployment rate (% labour force 15-24)	21.5	20.5	18.8	18.0	21.9	22.4	18.7	19.8					

Belgium		2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	
Labour Market Indicators - Male	Total population (000)	5111	5144	5181	5224	5269	5312	5402 b	5452	5487	5508	5506 b	
	Population aged 15-64(000)	3448	3473	3508	3543	3570	3592	3650	3668	3678	3676	3653 b	
	Total employment (000)	2387	2392	2444	2461	2429	2458	2462	2466	2451	2435	2434	
	Employment aged 15-64 (000)	2361	2371	2421	2439	2406	2433	2435	2433	2420	2403	2397	
	Employment rate (% population aged 20-64)	74.3	74.0	75.0	74.7	73.2	73.5	73.0	72.7	72.3	71.6	71.3	
	Employment rate (% population aged 15-64)	68.3	67.9	68.7	68.6	67.2	67.4	67.1	66.9	66.4	65.8	65.5	
	Employment rate (% population aged 15-24)	29.6	30.4	29.7	29.7	27.4	27.7	27.8	27.8	25.3	24.5	25.0	
	Employment rate (% population aged 25-54)	86.1	85.9	87.0	87.0	85.7	85.5	84.9	84.5	84.0	83.2	82.5	
	Employment rate (% population aged 55-64)	41.7	40.9	42.9	42.8	42.9	45.6	46.0	46.0	47.7	48.4	48.9	
	FTE employment rate (% population aged 20-64)	73.0 b	72.6	73.6	73.2	71.5	71.8	70.9 b	70.9	70.2	70.0	69.2	
	Self-employed (% total employment)	17.1	17.2	17.1	16.6	17.2	17.0	17.0	17.2	18.4	17.5	18.3	
	Part-time employment (% total employment)	7.1	7.0	7.1	7.5	8.2	8.4	9.2	9.0	8.7	8.4	9.3	
	Fixed term contracts (% total employees)	5.6	5.7	5.7	5.5	5.4	5.6	6.4	5.9	5.9	6.3	6.8	
	Employment in Services (% total employment)	67.6	67.2	67.8	67.3	68.1	69.0	69.0	69.1	69.4	69.8	69.8	
	Employment in Industry (% total employment)	30.2	30.6	30.1	30.7	30.0	29.1	29.3	29.1	28.9	28.6		
	Employment in Agriculture (% total employment)	2.2	2.2	2.0	2.0	2.0	1.9	1.8	1.8	1.8	1.7		
	Activity rate (% population aged 15-64)	73.9	73.4	73.6	73.3	72.8	73.4	72.3	72.5	72.7	72.4	72.2	
	Activity rate (% population aged 15-24)	37.6	37.4	36.1	36.0	34.9	35.2	34.1	35.0	33.7	32.3	32.8	
	Activity rate (% population aged 25-54)	92.2	91.9	92.5	92.3	91.8	92.2	90.7	90.7	90.9	90.7	89.9	
	Activity rate (% population aged 55-64)	43.4	42.7	44.4	44.4	45.2	47.6	47.8	47.9	50.5	51.3	52.2	
	Total unemployment (000)	196	191	174	170	204	217	188	204	232	241	243	
	Unemployment rate (% labour force)	7.6	7.4	6.7	6.5	7.8	8.1	7.1	7.7	8.7	9.0	9.1	
	Youth unemployment rate (% labour force 15-24)	21.0	18.8	17.1	17.3	21.5	22.4	18.7	20.4	24.7	24.0	23.8	
	Long term unemployment rate (% labour force)	3.9	3.7	3.3	3.0	3.4	4.0	3.4	3.5	4.0	4.7	4.8	
	Share of long term unemployment (% of total unemployment)	50.6	49.8	49.3	47.0	43.5	49.5	47.1	46.0	46.5	51.8	52.5	
	Youth unemployment ratio (% population aged 15-24)	7.9 b	7.0	6.2	6.2	7.5	7.9	6.4 b	7.1	8.3	7.7	7.8	
	Employment rate for low skilled 25-64 (ISCED 0-2)	62.2 b	61.2	61.9	60.6 b	58.7	59.2	57.9 b	57.5	56.9	56.1 b	54.4	
	Employment rate for medium skilled 25-64 (ISCED 3-4)	81.8 b	81.2	82.0	81.3 b	80.5	80.7 b	79.8 b	79.5	78.4	78.1 b	77.6	
	Employment rate for high skilled 25-64 (ISCED 5-8)	88.0 b	87.2	88.2 b	88.2 b	86.7	86.8 b	86.9 b	87.2	87.2	87.2 b	86.8	
	Employment rate (Nationals aged 15-64)	68.9 b	68.7	69.2	68.9	67.7	68.0	67.8 b	67.8	67.3	66.5	66.0	
	Employment rate (Other EU28 aged 15-64)	67.0	69.4	70.4	67.3	68.5	68.3 b	67.1	65.5	67.3	69.1		
	Employment rate (Other than EU28 aged 15-64)	45.7	52.4	54.1	51.3	50.0	49.3 b	45.3	47.1	48.4	51.1		
	Employment rate (Born in the same country aged 15-64)	69.3 b	69.0	69.7	69.2	68.1	68.5	68.2 b	68.2	67.5	66.9	66.5	
	Employment rate (Born in other EU28 aged 15-64)	65.8	65.5	69.5	66.8	67.6	68.1 b	67.4	67.5	67.6	68.8		
	Employment rate (Born outside EU28 aged 15-64)	56.5	57.2	60.1	57.1	56.5	56.7 b	55.0	55.2	55.0	54.6		
	Underemployment (% of labour force aged 15-74)	0.4	0.5	0.4	0.5	0.6	0.5	0.6	1.6 b	1.6	1.6	1.8	
	Seeking but not available (% of labour force aged 15-74)	1.7	1.4	1.4	1.1	1.2	1.4	0.9 b	0.9	0.9	0.8	0.9	
	Discouraged, available but not seeking (% of labour force aged 15-74)	0.7	0.6	0.6	0.5	0.7	0.6	2.0 b	1.9	2.0	1.8	1.6	
	Labour Market Indicators - Female	Total population (000)	5335	5368	5403	5443	5484	5528	5599 b	5643	5674	5696	5703 b
		Population aged 15-64(000)	3404	3433	3468	3503	3532	3556	3600	3616	3626	3628	3619 b
Total employment (000)		1849	1872	1937	1985	1991	2031	2047	2058	2080	2108	2118	
Employment aged 15-64 (000)		1838	1862	1927	1975	1984	2018	2036	2046	2065	2095	2105	
Employment rate (% population aged 20-64)		58.6	58.8	60.3	61.3	61.0	61.6	61.5	61.7	62.1	62.9	63.0	
Employment rate (% population aged 15-64)		53.8	54.0	55.3	56.2	56.0	56.5	56.7	56.8	57.2	57.9	58.0	
Employment rate (% population aged 15-24)		25.2	24.7	25.0	25.0	23.2	23.1	24.2	22.6	21.9	21.8	21.7	
Employment rate (% population aged 25-54)		70.4	70.7	72.3	73.8	73.8	74.4	73.8	73.9	74.0	74.9	74.5	
Employment rate (% population aged 55-64)		22.1	23.2	26.0	26.3	27.7	29.2	31.6	33.1	35.8	37.0	39.3	
FTE employment rate (% population aged 20-64)		49.2 b	49.2	50.6	51.5	51.1	51.7	51.2 b	51.5	52.1	53.3	53.4	
Self-employed (% total employment)		8.9	8.8	9.1	8.6	9.1	8.6	9.1	8.6	9.2	9.4	9.7	
Part-time employment (% total employment)		40.4	41.0	40.5	40.3	41.4	42.7	43.3	43.5	42.5	41.2	41.4	
Fixed term contracts (% total employees)		10.0	9.6	9.6	9.2	9.0	8.6	9.2	8.3	8.2	8.7	8.6	
Employment in Services (% total employment)		89.5	90.2	89.9	90.8	91.0	91.0	91.3	91.8	92.0	92.2		
Employment in Industry (% total employment)		9.3	8.7	9.0	8.2	8.0	8.1	7.8	7.4	7.2	7.0		
Employment in Agriculture (% total employment)		1.2	1.1	1.1	1.0	1.0	0.9	0.9	0.8	0.8	0.9		
Activity rate (% population aged 15-64)		59.5	59.5	60.4	60.8	60.9	61.8	61.1	61.3	62.3	63.0	63.0	
Activity rate (% population aged 15-24)		31.9	31.9	31.6	30.8	29.8	29.8	27.9	28.2	28.1	27.1	27.1	
Activity rate (% population aged 25-54)		78.6	77.0	78.7	79.0	79.2	80.4	78.7	79.1	79.7	80.6	80.2	
Activity rate (% population aged 55-64)		23.4	24.6	27.5	27.9	29.3	30.9	33.0	34.9	37.8	39.0	41.2	
Total unemployment (000)		194	192	179	163	176	189	158	165	185	182	178	
Unemployment rate (% labour force)		9.5	9.3	8.5	7.6	8.1	8.5	7.2	7.4	8.2	7.9	7.8	
Youth unemployment rate (% labour force 15-24)		22.1	22.6	20.9	18.7	22.5	22.4	18.7	18.9	22.5	22.3	20.0	
Long term unemployment rate (% labour force)		5.0	4.9	4.3	3.6	3.6	4.1	3.6	3.2	3.7	3.8	3.9	
Share of long term unemployment (% of total unemployment)		52.6	52.4	51.2	47.7	47.6	49.7	42.9	42.9	45.4	47.3	50.6	
Youth unemployment ratio (% population aged 15-24)		7.1 b	7.2	6.6	5.8	6.7	6.7	5.6 b	5.3	6.3	5.3	5.4	
Employment rate for low skilled 25-64 (ISCED 0-2)		35.7 b	36.6	37.7	38.1 b	37.0	38.2	37.0 b	36.9	37.9	38.1 b	38.1	
Employment rate for medium skilled 25-64 (ISCED 3-4)		65.5 b	64.5	65.4	66.8 b	66.8	66.7	66.6 b	66.5	67.1	66.9 b	66.0	
Employment rate for high skilled 25-64 (ISCED 5-8)		80.6 b	80.2	81.9	81.5 b	81.6	81.6	81.8 b	82.3	81.5	82.6 b	82.7	
Employment rate (Nationals aged 15-64)		55.0 b	55.3	56.6	57.3	57.3	57.7	58.1 b	58.1	58.6	59.4	59.5	
Employment rate (Other EU28 aged 15-64)		49.5	52.0	53.5	51.2	55.8	55.9 b	56.8	55.3	57.5	57.3		
Employment rate (Other than EU28 aged 15-64)		24.0	24.0	26.0	26.0	26.4	26.6	25.6 b	27.1	27.8	28.1	28.1	
Employment rate (Born in the same country aged 15-64)		56.0 b	56.2	57.2	58.2	58.2	58.7	59.1 b	59.4	59.7	60.1	60.3	
Employment rate (Born in other EU28 aged 15-64)		47.3	50.7	52.8	50.9	55.2	56.8 b	56.5	56.9	57.9	58.2		
Employment rate (Born outside EU28 aged 15-64)		33.7	34.2	36.6	37.4	36.9	35.2 b	35.9	37.0	36.8	38.0		
Underemployment (% of labour force aged 15-74)					1.2	1.1	1.1	1.0	5.2 b	5.3	4.8	5.2	
Seeking but not available (% of labour force aged 15-74)		3.1	2.6	2.4	2.0	2.2	2.1	2.0 b	1.6	1.4	1.3	1.3	
Discouraged, available but not seeking (% of labour force aged 15-74)		1.1	1.1	1.0	1.0	0.9	0.9	2.5 b	2.2	2.3	2.3	1.9	

[Click here to download table.](#)

Belgium		2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	
Social Indicators	All	At-risk-of-poverty or exclusion (% of total population)	22.6	21.5	21.6	20.8	20.2	20.8	21.0	21.6	20.8	21.2	21.1
		At-risk-of-poverty (% of total population)	14.8	14.7	15.2	14.7	14.6	14.6	15.3	15.3	15.1	15.5	14.9
		At-risk-of-poverty threshold (PPS single person)	9320	9707	9787	10046	10501	10399	10895	11038	11738	11755	11955
		Poverty gap (%)	17.8	19.4	17.8	17.2	18.1	18.0	18.6	18.7	19.2	18.8	17.4
		Persistent at-risk-of-poverty (% of total population)	8.0	7.8	8.0	7.9	8.0	7.9	8.0	7.9	8.7	9.1	9.8
		At-risk-of-poverty before social transfers excl. pensions (% of total population)	28.3	26.8	27.5	27.0	26.7	26.7	27.8	27.7	26.3	27.5	26.7
		Impact of social transfers (excl. pensions) in reducing poverty (%)	47.7	45.2	44.7	45.6	45.3	45.3	45.0	44.8	42.6	45.6	44.2
		Severe Material Deprivation (% of total population)	6.5	6.4	5.7	5.6	5.2	5.9	5.7	6.3	5.1	5.9	5.8
		Share of people living in low work intensity households (% of people aged 0-59)	15.1	14.3	13.8	11.7	12.3	12.7	13.8	13.9	14.0	14.6	14.9
		Real Gross Household Disposable income (growth %)	1.0	2.3	2.1	2.4	2.1	-1.0	-1.0	-0.1	0.0	0.3	0.7
		Income quintile share ratio S80/S20	4.0	4.2	3.9	4.1	3.9	3.9	3.9	4.0	3.8	3.8	3.8
		Gini coefficient	28.0	27.8	26.3	26.3	26.4	26.5	26.5	26.4	25.9	25.9	26.2
	Early leavers from education and training (% of population aged 18-24)	12.9	12.6 b	12.1	12.0 b	11.1	11.9	12.3	12.0	11.0	9.8 b	10.1	
	NEET: Young people not in employment, education or training (% of total population aged 15-24)	13.0	11.2 b	11.2	10.1	11.1	10.9	11.8 b	12.3	12.7	12.0	12.2	
	Male	At-risk-of-poverty or exclusion (% of male population)	21.4</										

## Bulgaria

Bulgaria		2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	
Macro Economic Indicators (Annual % growth)	Real GDP	7.1	6.9	7.3	6.0	-3.6	1.3	1.9	0.0	0.9	1.3	3.6	
	Total employment	2.7	3.3	3.2	2.4	-1.7	-3.9	-2.2	-2.5 p	-0.4 p	0.4 p	0.4 p	
	Labour productivity	4.3	3.4	4.0	3.6	-1.9	5.4	4.2	2.6 p	1.3 p	1.0 p	3.3 p	
	Annual average hours worked per person employed	-0.3	-0.3	0.0	2.4	-2.8	-0.1	-0.1	0.1 p	0.0 p	-0.1 p	0.0 p	
	Real productivity per hour worked	4.6	3.7	4.0	1.2	0.9	5.5	4.3	2.5 p	1.3 p	1.0 p	3.2 p	
	Harmonized CPI	6.0	7.4	7.6	12.0	2.5	3.0	3.4	2.4	0.4	-1.6	-1.1	
	Price deflator GDP	6.5	6.7	11.1	8.1	4.0	1.1	6.0	1.6	-0.7	0.5	2.2	
	Nominal compensation per employee	9.3	6.3	12.7	16.8	8.1	9.9	6.8	7.7 p	8.8 p	5.6 p	5.6 p	
	Real compensation per employee (GDP deflator)	2.6	-0.4	1.5	8.0	3.9	8.7	0.8	6.1 p	9.6 p	5.1 p	3.4 p	
	Real compensation per employee (private consumption deflator)	3.1	-1.0	4.8	4.3	5.5	6.7	3.3	5.2 p	8.4 p	7.3 p	6.8 p	
	Nominal unit labour costs	4.8	2.8	8.3	12.8	10.2	4.3	2.5	5.0 p	7.4 p	4.6 p	2.3 p	
	Real unit labour costs	-1.7	-3.6	-2.5	4.2	5.9	3.1	-3.3	3.4 p	8.2 p	4.1 p	0.1 p	
	Labour Market Indicators - Total	Total population (000)	7689	7629	7573	7518	7467	7422	7369	7327	7285	7246	7202
		Population aged 15-64 (000)	5297	5270	5235	5194	5147	5097	5034	4965	4899	4832	4764
		Total employment (000)	2982	3110	3253	3361	3254	3075	2965	2934	2935	2981	3032
Employment aged 15-64 (000)		2947	3072	3209	3306	3205	3075	2928	2895	2889	2927	2974	
Employment rate (% population aged 20-64)		61.9	65.1	68.4	70.7	68.8	64.7 b	62.9 b	63.0	63.5	65.1	67.1	
Employment rate (% population aged 15-64)		55.8	58.6	61.7	64.0	62.6	59.8 b	58.4 b	58.8	59.5	61.0	62.9	
Employment rate (% population aged 15-24)		21.6	23.2	24.5	26.3	24.8	24.3 b	22.1 b	21.9	21.2	20.7	20.3	
Employment rate (% population aged 25-54)		34.0	35.7	37.4	39.1	37.2	35.1 b	33.1 b	33.1	33.3	34.5	36.1	
Employment rate (% population aged 55-64)		75.7	76.5	77.6	78.6	77.6	75.8 b	74.6 b	74.6	74.6	75.0	75.0	
FTE employment rate (% population aged 20-64)		61.4 b	64.7	68.1	70.3 b	68.4	64.1 b	62.4 b	62.4	62.9	64.4	66.5	
Self-employed (% total employment)		12.5	11.9	11.3	11.4	11.5	11.5	11.1	10.8	11.5	11.8	11.4	
Part-time employment (% total employment)		1.8	1.7	1.4	2.0	2.1	2.2 b	2.2 b	2.2	2.5	2.5	2.2	
Fixed term contracts (% total employees)		6.4 b	6.2	5.2	5.0	4.7	4.5 b	4.1 b	4.5	5.7	5.3	4.5	
Employment in Services (% total employment)		51.4	51.4	51.4	50.6	52.5	54.1	54.6	55.3 p	55.7 p	55.6 p		
Employment in Industry (% total employment)		27.4	28.3	29.2	30.1	27.9	26.2	25.9	25.8 p	25.1 p	25.0 p		
Employment in Agriculture (% total employment)		21.2	20.7	19.3	19.3	19.7	19.1	19.6	19.9 p	19.2 p	19.4		
Activity rate (% population aged 15-64)		62.1	64.5	66.3	67.8	67.2	66.7 b	65.9 b	67.1	68.4	69.0	69.3	
Activity rate (% population aged 15-24)		27.9	28.9	28.9	30.1	29.5	31.2 b	29.5 b	30.4	29.6	27.2	26.0	
Activity rate (% population aged 25-54)		80.2	82.3	84.5	85.5	84.3	82.9 b	81.9 b	82.3	83.1	83.3	83.2	
Activity rate (% population aged 55-64)		38.0	43.0	45.7	48.7	49.2	49.3 b	48.9 b	51.1	54.1	56.6	58.0	
Total unemployment (000)		338	309	242	202	240	352 i	376	410	436	385	305	
Unemployment rate (% labour force)		10.1	9.0	6.9	5.6	6.8	10.3 i	11.3	12.3	13.0	11.4	9.2	
Youth unemployment rate (% labour force 15-24)		15.9	16.5	14.1	11.9	15.3	21.9 i	25.0	28.1	28.4	23.7	21.6	
Long term unemployment rate (% labour force)		6.0	5.0	4.0	2.9	2.9	4.7	6.3	6.8	7.4	6.9	5.6	
Share of long term unemployment (% of total unemployment)		59.2	55.2	58.3	51.2	42.9	46.1	55.7	55.2	57.3	60.4	61.2	
Youth unemployment ratio (% population aged 15-24)		6.2 b	5.6	4.4	3.8 b	4.8	6.8 b	7.4 b	8.5	8.4	6.5	5.6	
Employment rate for low skilled 25-64 (ISCED 0-2)		40.8 b	41.4 b	44.5	47.6 b	46.4	41.0 b	38.0 b	37.4	38.1	40.0 b	40.3	
Employment rate for medium skilled 25-64 (ISCED 3-4)		69.9 b	73.0 b	75.7	77.8 b	75.4	70.7 b	69.3 b	69.1	69.3	71.1 b	73.0	
Employment rate for high skilled 25-64 (ISCED 5-8)		80.9 b	82.7 b	85.1	86.4 b	85.8	83.2 b	81.8 b	81.8	81.4	82.7 b	84.9	
Employment rate (National aged 15-64)		55.8 b	58.7	61.7	64.0 b	62.6	59.8 b	58.5 b	58.8	59.5	61.1	62.9	
Employment rate (Other EU28 aged 15-64)			54.2 u	60.6 u		42.7 u	42.5 bu			47.5 u	55.4 u		
Employment rate (Born in the same country aged 15-64)			58.6	61.7	64.0 b	62.6	59.8 b	58.5 b	58.8	59.5	61.1	62.9	
Employment rate (Born in other EU28 aged 15-64)													
Employment rate (Born outside EU28 aged 15-64)													
Underemployment (% of labour force aged 15-74)			61.4	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	
Discouraged, available but not seeking (% of labour force aged 15-74)	0.5	0.6	0.5	0.7 b	0.6	0.8 b	0.8 b	0.8	1.0	1.0	0.7		
Discouraged, available but not seeking (% of labour force aged 15-74)	13.1	10.4	8.0	5.8 b	6.8	8.2 b	8.5 b	8.1	7.5	6.9	6.4		

[Click here to download table.](#)

Bulgaria		2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015
Labour Market Indicators - Male	Total population (000)	3744	3715	3687	3660	3636	3614	3589	3567	3545	3525	3502
	Population aged 15-64(000)	2646	2636	2622	2604	2584	2562	2534	2501	2470	2439	2406
	Total employment (000)	1592	1658	1701	1756	1699	1640	1567	1542	1527	1517	1508
	Employment aged 15-64 (000)	1569	1626	1702	1756	1699	1614	1541	1517	1518	1545	1572
	Employment rate (% population aged 20-64)	66.8	69.9	73.4	76.1	73.8	68.6 b	66.0 b	65.8	66.4	68.1	70.4
	Employment rate (% population aged 15-64)	60.0	62.8	66.0	68.5	66.9	63.3 b	61.2 b	61.3	62.1	63.9	65.9
	Employment rate (% population aged 15-24)	23.9	25.4	27.1	29.3	28.0	27.3 b	25.1 b	24.9	24.0	24.0	24.0
	Employment rate (% population aged 25-54)	34.0	35.7	37.4	39.1	37.2	35.1 b	33.1 b	33.1	33.3	34.5	36.1
	Employment rate (% population aged 55-64)	75.7	76.5	77.6	78.6	77.6	75.8 b	74.6 b	74.6	74.6	75.0	75.0
	FTE employment rate (% population aged 20-64)	61.4 b	64.7	68.1	70.3 b	68.4	64.1 b	62.4 b	62.4	62.9	64.4	66.5
	Self-employed (% total employment)	12.5	11.9	11.3	11.4	11.5	11.5	11.1	10.8	11.5	11.8	11.4
	Part-time employment (% total employment)	1.5	1.2	1.1	1.6	1.8	2.0 b	2.0 b	2.0	2.0	2.2	1.9
	Fixed term contracts (% total employees)	5.1	4.9	4.0	4.7	4.4	4.2 b	3.8 b	4.2	5.2	4.8	4.0
	Employment in Services (% total employment)	44.5	43.7	43.4	42.3	43.6	44.9 b	45.7	46.9	47.2	46.5	
	Employment in Industry (% total employment)	30.5	32.2	33.4	35.1	33.0	31.8 b	30.4	29.4	28.8	29.0	
	Employment in Agriculture (% total employment)	25.0	24.1	23.1	22.6	23.4	23.3 b	23.9	23.7	24.0	24.5	
	Activity rate (% population aged 15-64)	67.0	69.8	70.6	72.5	72.4	71.1 b	69.9 b	71.0	72.2	72.9	73.2
	Activity rate (% population aged 15-24)	31.1	31.3	31.7	34.0	34.0	35.5 b	33.9 b	35.3	34.4	31.5	30.5
	Activity rate (% population aged 25-54)	83.3	85.1	87.5	88.8	88.0	86.1 b	84.5 b	84.8	85.7	86.2	86.4
	Activity rate (% population aged 55-64)	49.9	53.6	55.3	58.7	57.4	56.6 b	55.8 b	57.3	59.9	62.5	62.7
	Total unemployment (000)	185	159	123	105	132	200 i	219	241	250	221	174
	Unemployment rate (% labour force)	10.3	8.6	6.5	5.5	6.9	10.9 i	12.3	13.5	13.9	12.3	9.8
	Youth unemployment rate (% labour force 15-24)	22.0	17.7	13.5	12.8	16.7	23.2 i	26.0	29.5	30.2	23.8	21.2
	Long term unemployment rate (% labour force)	5.9	4.7	3.6	2.7	2.7	8.1	7.7	8.1	7.7	6.1	5.1
	Share of long term unemployment (% of total unemployment)	57.9	54.2	55.8	49.3	40.2	46.0	50.9	56.7	59.3	62.4	62.4
	Youth unemployment ratio (% population aged 15-24)	7.3 b	5.9	4.6	4.7 b	6.0	8.2 b	8.8 b	10.4	10.4	7.5	6.5
	Employment rate for low skilled 25-64 (ISCED 0-2)	48.2 b	49.2 b	52.2	56.9 b	54.9	47.5 b	43.7 b	42.7	43.4	45.4 b	46.6
	Employment rate for medium skilled 25-64 (ISCED 3-4)	74.9 b	77.8 b	80.9	82.7 b	80.1	75.3 b	72.7 b	72.1	72.5	74.7 b	76.8
	Employment rate for high skilled 25-64 (ISCED 5-8)	85.4 b	86.5 b	88.6	90.2 b	89.9	85.7 b	83.7 b	83.6	84.1	85.6 b	87.6
	Employment rate (National aged 15-64)	60.0 b	62.8	66.0	68.5 b	66.9	63.4 b	61.2 b	61.3	62.1	63.9	65.9
	Employment rate (Other EU28 aged 15-64)											
	Employment rate (Born in the same country aged 15-64)		62.8	66.0	68.5 b	66.9	63.4 b	61.2 b	61.3	62.1	63.8	65.9
	Employment rate (Born in other EU28 aged 15-64)											
	Employment rate (Born outside EU28 aged 15-64)			67.7 u	58.8 u					62.4 u	71.0 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
Discouraged, available but not seeking (% of labour force aged 15-74)	0.5	0.6	0.5	0.6 b	0.6	0.7 b	0.8 b	0.7	0.7	0.8	0.7	
Discouraged, available but not seeking (% of labour force aged 15-74)	13.6	10.2	7.6	5.4 b	6.5	8.6 b	8.6 b	8.1	7.6	7.2	6.6	
Labour Market Indicators - Female	Total population (000)	3944	3915	3886	3858	3851	3808	3781	3760	3739	3717	3700
	Population aged 15-64(000)	2651	2634	2614	2589	2563	2535	2500	2465	2429	2393	2358
	Total employment (000)	1390	1457	1521	1568	1521	1435	1398	1388	1388	1404	1424
	Employment aged 15-64 (000)	1378	1446	1508	1551	1506	1423	1386	1378	1372	1384	1402
	Employment rate (% population aged 20-64)	57.1	60.4	63.5	65.4	64.0	60.8 b	59.8 b	60.2	60.7	62.0	63.8
	Employment rate (% population aged 15-64)	51.7	54.6	57.6	59.5	58.3	56.2 b	55.6 b	56.3	56.8		

Bulgaria		2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015
Social indicators	All	At-risk-of-poverty or exclusion (% of total population)	61.3	60.7	44.8 b	46.2	49.2	49.1	49.3	48.0	40.1 b	41.3
		At-risk-of-poverty (% of total population)	18.4	22.0	21.4	21.8	20.7	22.2	21.2	21.0	21.8	22.0
		At-risk-of-poverty threshold (PPS single person)	1920 b	1979	2859	3436	3531	3499	3418	3540	4052	4129
		Poverty gap (%)	28.1	33.5	27.0	27.4	29.6	29.4	31.4	30.9	33.2	30.3
		Persistent at-risk-of-poverty (% of total population)				10.7	16.4	16.9	12.9	13.4	16.5	16.2
		At-risk-of-poverty before social transfers excl. pensions (% of total population)	24.7	25.5	27.1	26.4	27.1	27.4	25.9	26.7	27.3	28.4
		Impact of social transfers (excl. pensions) in reducing poverty (%)	25.5	13.7	21.0	17.4	23.6	19.0	18.2	21.4	20.2	22.5
		Severe Material Deprivation (% of total population)	57.7	57.6	41.2	41.9	45.7	43.6	44.1	43.0	33.1	34.2
		Share of people living in low work intensity households (% of people aged 0-59)	14.7	16.0	8.1 b	6.9	8.0	11.0	12.5	13.0	12.1	11.6
		Real Gross Household Disposable income (growth %)	4.9	11.3	4.5	13.7	1.9	-1.7	3.0	-2.3	5.2	-7.1
		Income quintile share ratio S80/S20		5.1	7.0	6.5	5.9	5.9	6.5	6.1	6.6	6.8
		GINI coefficient		31.2 b	35.3	35.9	33.4	33.2	35.0	33.6	35.4	35.4
	Early leavers from education and training (% of population aged 18-24)	20.4	17.3 b	14.9	14.8	14.7	12.6 b	11.8	12.5	12.5	12.9 b	
	NEET: Young people not in employment, education or training (% of total population aged 15-24)	25.1	22.2 b	19.1	17.4 b	19.5	21.0 b	21.8	21.5	21.6	20.2	
	At-risk-of-poverty or exclusion (% of male population)	60.5	59.4	43.0 b	44.1	47.3	47.7	47.6	46.5	38.8 b	39.4	
	At-risk-of-poverty (% of male population)	17.3	20.9	19.8	19.8	19.0	20.8	19.5	19.7	20.9	20.0	
	Poverty gap (%)	30.8	37.1	26.8	27.3	29.0	31.0	32.6	31.8	34.8	32.9	
	Persistent at-risk-of-poverty (% of male population)				9.8	13.7	15.9	11.0	11.8	15.7	13.7	
	Severe Material Deprivation (% of male population)	57.1	56.6	39.6	40.1	44.2	42.5	42.9	41.6	31.7	33.0	
	Share of people living in low work intensity households (% of males aged 0-59)		14.5	15.6	7.8 b	7.0	7.8	11.1	12.5	12.9	12.1	
	Life expectancy at birth (years)	69.0	69.2	69.5	69.6 b	70.1	70.3	70.7	70.9	71.3	71.1	
	Healthy life years at birth (years) - men		66.2 d	67.1	62.1 b	62.1	63.0	62.1	62.1	62.4	62.0	
	Healthy life years at birth (years) - women		71.9 d	73.9	65.7 b	65.9	67.1	65.9	65.7	66.6	66.1	
	Early leavers from education and training (% of males aged 18-24)	20.6	17.7 b	15.2	14.1	13.7	12.4 b	11.2	12.1	12.3	12.8 b	
	NEET: Young people not in employment, education or training (% of males aged 15-24)	23.7	19.9 b	17.7	15.6 b	18.1	20.3 b	21.8	21.6	22.1	19.2	
	At-risk-of-poverty or exclusion (% of female population)	62.1	61.9	46.4 b	48.1	50.9	50.5	50.9	49.4	41.3 b	43.0	
	At-risk-of-poverty (% of female population)	19.3	23.0	22.9	23.7	22.3	23.6	22.8	22.2	22.6	23.8	
	Poverty gap (%)	26.6	31.6	27.0	27.5	30.2	29.0	30.5	30.4	31.9	28.5	
	Persistent at-risk-of-poverty (% of female population)				11.5	18.9	17.8	14.6	15.0	17.1	18.4	
	Severe Material Deprivation (% of female population)	58.2	58.6	42.8	43.5	47.2	44.6	45.3	44.4	34.3	35.3	
	Share of people living in low work intensity households (% of females aged 0-59)		15.0	16.4	8.3 b	6.8	8.2	11.0	12.4	13.2	12.1	
	Life expectancy at birth (years)	76.2	76.3	76.6	77.0 b	77.4	77.4	77.8	77.9	78.6	78.0	
	Healthy life years at birth (years) - women		71.9 d	73.9	65.7 b	65.9	67.1	65.9	65.7	66.6	66.1	
	Early leavers from education and training (% of females aged 18-24)	20.3	17.0 b	14.7	15.5	15.8	12.9 b	12.6	13.0	12.7	12.9 b	
	NEET: Young people not in employment, education or training (% of females aged 15-24)	26.5	24.7 b	20.6	19.3 b	20.9	21.8 b	21.9	21.5	21.1	21.4	
	At-risk-of-poverty or exclusion of children (% of people aged 0-17)	60.8	60.8	44.2 b	47.3	49.8	51.8	52.3	51.5	45.2 b	43.7	
	At-risk-of-poverty (% of Children population)	25.0	29.9	25.5	24.9	26.7	28.4	28.2	28.4	31.1	25.4	
	Severe Material Deprivation (% of Children population)	57.6	58.3	40.8	43.6	46.5	45.6	46.6	46.3	38.4	37.3	
	Share of children living in low work intensity households (% of Children population)	16.8	18.9	9.5 b	7.6	10.4	14.1	16.8	18.2	15.2	13.9	
	Risk of poverty of children in households at work (Working Intensity > 0.2)	13.4	16.6	18.2	19.3	19.3	19.0	17.0	16.6	22.5	15.3	
	Impact of social transfers (excl. pensions) in reducing poverty (0-17) (%)	23.1	11.8	18.0	17.3	21.7	19.3	21.5	25.5	18.5	32.1	
	At-risk-of-poverty or exclusion (% of Working age population)	58.1	57.9	39.5 b	40.6	45.0	45.2	45.6	44.3	36.4 b	37.4	
At-risk-of-poverty (% of Working age population)	16.2	19.4	17.0	16.4	16.0	18.2	17.4	17.1	18.9	18.0		
Severe Material Deprivation (% of Working age population)	54.2	54.9	36.2	37.1	42.2	40.3	40.8	39.9	29.5	31.4		
Very low work intensity (1.8-5.9)	14.1	15.1	7.7 b	6.7	7.3	10.2	11.2	11.6	11.2	10.9		
In-work at-risk of poverty rate (% of persons employed 18-64)	5.5	5.9	7.6	7.5	7.7	8.2	7.4	7.2	9.3	7.8		
Impact of social transfers (excl. pensions) in reducing poverty (18-64) (%)	24.3	14.5	24.1	21.2	28.9	21.9	21.3	24.7	22.2	26.2		
At-risk-of-poverty or exclusion of elderly (% of people aged 65+)	73.7	71.1	65.5 b	66.0	63.9	61.1	59.1	57.6	47.8 b	51.8		
At-risk-of-poverty (% of Elderly population)	19.9	25.9	35.8	39.3	32.2	31.2	28.2	27.9	22.6	31.7		
Severe Material Deprivation (% of Elderly population)	70.7	67.2	61.0	58.4	58.1	53.7	53.2	50.7	40.3	40.9		
Relative median income of elderly (ratio with median income of people younger than 65)	0.79 b	0.78	0.66	0.63	0.74	0.72	0.74	0.76	0.82	0.71		
Aggregate replacement ratio (ratio)	0.37	0.37	0.34	0.34	0.43	0.41	0.42	0.39	0.44	0.41		
Sickness/Health care	4.1	3.5	3.5	4.2	3.7	4.0	4.2	4.2	4.4	4.9		
Disability	1.2	1.2	1.1	1.1	1.3	1.3	1.2	1.2	1.4	1.4		
Old age and survivors	7.3	7.1	6.7	7.1	8.1	8.5	8.0	8.0	8.6	8.9		
Family/Children	1.0	1.0	1.1	1.2	1.9	1.9	1.7	1.7	1.8	1.9		
Unemployment	0.3	0.3	0.3	0.3	0.5	0.6	0.6	0.6	0.5	0.5		
Housing and Social exclusion n.e.c.	0.4	0.3	0.3	0.3	0.2	0.3	0.2	0.3	0.3	0.3		
Total (including Admin and Other expenditures)	14.7	13.8	13.4	14.7	16.1	17.0	16.5	16.6	17.6	18.5		
of which: Means tested benefits	1.0	0.8	0.6	0.7	0.7	0.7	0.7	0.7	0.7	0.8		

[Click here to download table.](#)

## Czech Republic

Czech Republic		2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015
Macro Economic indicators (Annual % growth)	Real GDP	6.4	6.9	5.5	2.7	-4.8	2.3	2.0	-0.8	-0.5	2.7	4.5
	Total employment	1.9	1.3	2.1	2.2	-1.8	-1.0	-0.3	0.4	0.3	0.6	1.4
	Labour productivity	4.4	5.5	3.4	0.5	-3.1	3.4	2.3	-1.2	-0.8	2.2	3.1
	Annual average hours worked per person employed	0.0	-1.0	-0.8	0.3	-0.6	1.2	0.3	-1.6	-0.7	0.8	-1.2
	Real productivity per hour worked	4.4	6.5	4.2	0.2	-2.5	2.2	1.9	0.4	-0.1	1.4	4.3
	Harmonized CPI	1.6	2.1	2.9	6.3	0.6	-1.5	0.0	1.5	1.4	0.4	0.3
	Price deflator GDP	0.1	0.7	3.5	2.0	2.6	-1.5	0.0	1.5	1.4	2.5	1.0
	Nominal compensation per employee	3.9	5.9	6.2	4.1	-0.6	3.3	2.9	1.8	-0.3	2.6	2.6
	Real compensation per employee (GDP deflator)	3.8	5.2	2.5	2.0	-3.1	4.9	2.8	0.3	-1.7	0.1	1.6
	Real compensation per employee (private consumption deflator)	2.2	3.8	3.2	-2.1	-1.1	2.1	0.7	-1.8	-1.6	2.1	2.4
	Nominal unit labour costs	-0.5	0.5	2.7	3.5	2.6	0.0	0.6	3.0	0.5	0.4	-0.5
	Real unit labour costs	-0.5	-0.3	-0.8	1.5	-0.1	1.5	0.6	1.5	-0.8	-2.1	-1.5
	Total population (000)	10199	10224	10254	10283	10226	10462	10467	10505	10516	10512	10538
	Population aged 15-64 (000)	7242	7271	7297	7358	7392	7569	7528	7263	7188	7109	7057
	Total employment (000)	4764	4828	4922	5003	4934	4885	4873	4890	4937	4974	5042
	Employment aged 15-64 (000)	4710	4769	4856	4934	4857	4810	4796	4810	4846	4884	4934
	Employment rate (% population aged 20-64)	70.7	71.2	72.0	72.4	70.9	70.4	70.9 b	71.5	72.5	73.5	74.8
	Employment rate (% population aged 15-64)	64.8	65.3	66.1	66.6	65.4	65.0	65.7 b	66.5	67.7	69.0	70.2
Employment rate (% population aged 15-24)	27.5	27.7	28.5	28.1	26.5	25.2	24.5 b	25.2	25.6	27.1	28.4	
Employment rate (% population aged 25-54)	82.0	82.5	83.5	83.8	82.5	82.2	82.8 b	82.9	83.5	83.9	84.5	
Employment rate (% population aged 55-64)	44.5	45.2	46.0	47.6	46.8	46.5	47.7 b	49.3	51.6	54.0	55.5	
FTE employment rate (% population aged 20-64)	69.9 b	70.2	70.9	71.3	69.8	69.1	69.8 b	70.3	71.0	72.2	73.5	
Self-employed (% total employment)	15.3	15.5	15.6	15.5	16.2	17.1	17.5	17.8	16.9	17.4	16.7	
Part-time employment (% total employment)	4.4	4.4	4.4	4.3	4.8	5.1	4.7 b	5.0	5.8	5.5	5.3	
Fixed term contracts (% total employees)	8.6 b	8.7	8.6	8.0	8.5	8.9	8.5 b	8.8	9.6	10.2	10.5	
Employment in Services (% total employment)	57.4	57.9	58.2	58.7	59.8	60.3	59.7	59.7	60.0	59.9	59.9	
Employment in Industry (% total employment)	38.9	38.6	38.4	38.0	36.9	36.6	37.1	37.1	36.7	36.6	36.6	
Employment in Agriculture (% total employment)	3.7	3.5	3.3	3.2	3.3	3.1	3.2	3.3	3.3	3.3	3.3	
Activity rate (% population aged 15-64)	70.4	70.3	69.9	69.7	70.1	70.2	70.5 b	71.6	72.9	73.5	74.0	
Activity rate (% population aged 15-24)	34.0	33.5	31.9	31.1	31.8	30.9	29.9 b	31.3	31.5	32.2	32.5	
Activity rate (% population aged 25-54)	88.3	88.2	87.8	87.3	87.7	87.8	88.0 b	88.4	89.1	88.8	88.6	
Activity rate (% population aged 55-64)	46.9	47.7	48.2	49.5	49.6	49.7	50.6 b	52.4	54.8	56.8	58.0	
Total unemployment (000)	410	371	276	230	352	384	351	367	370	324	268	
Unemployment rate (% labour force)	7.9	7.1	5.3	4.4	6.7	7.5	6.7	7.0	7.0	6.1	5.1	
Youth unemployment rate (% labour force 15-24)	19.3	17.5	10.7	9.9	16.6	18.3	18.1	19.5	18.9	15.9	12.6	
Long term unemployment rate (% labour force)	4.2	3.9	2.8	2.2	2.0	3.0	2.7	3.0	3.0	2.7	2.4	
Share of long term unemployment (% of total unemployment)												

Czech Republic		2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015
Labour Market Indicators - Male	Total population (000)	4971	4990	5011	5065	5117	5136	5147	5158	5164	5162	5177
	Population aged 15-64(000)	3631	3651	3670	3710	3737	3727	3706	3676	3640	3601	3577
	Total employment (000)	2706	2742	2806	2863	2824	2798	2778	2779	2794	2817	2837
	Employment aged 15-64 (000)	2671	2704	2764	2820	2777	2753	2733	2732	2742	2764	2775
	Employment rate (% population aged 20-64)	80.1	80.4	81.5	82.0	80.2	79.6	79.9	80.2	81.0	82.2	83.0
	Employment rate (% population aged 15-64)	73.3	73.7	74.8	75.4	73.8	73.5	74.0	74.6	75.7	77.0	77.9
	Employment rate (% population aged 15-24)	31.3	31.5	32.8	32.4	31.1	29.6	29.0	29.2	29.9	32.3	33.1
	Employment rate (% population aged 25-54)	89.8	90.4	91.7	92.1	90.5	90.5	90.9	90.9	91.2	91.5	91.9
	Employment rate (% population aged 55-64)	59.3	59.5	59.6	61.9	59.6	58.4	58.9	60.3	62.5	64.8	65.5
	FTE employment rate (% population aged 20-64)	80.1	80.4	81.4	81.9	79.9	79.4	79.7	79.9	80.6	81.7	82.7
	Self-employed (% total employment)	20.0	19.9	20.2	19.9	20.5	21.6	21.8	21.9	20.7	21.7	20.6
	Part-time employment (% total employment)	1.6	1.7	1.7	1.6	2.0	2.2	1.8	2.2	2.5	2.5	2.2
	Fixed term contracts (% total employees)	5.5	5.4	5.2	4.5	4.8	5.3	5.2	5.4	6.0	6.6	6.7
	Employment in Services (% total employment)	46.7	47.4	47.3	47.8	48.3	48.4	47.9	47.6	48.1	48.0	47.6
	Employment in Industry (% total employment)	48.9	48.4	48.6	48.3	47.6	47.5	48.0	48.2	47.8	47.6	47.5
	Employment in Agriculture (% total employment)	4.5	4.2	4.1	3.9	4.0	4.1	4.2	4.2	4.1	4.3	4.3
	Activity rate (% population aged 15-64)	78.4	78.3	78.1	78.1	78.5	78.6	78.7	79.5	80.5	81.2	81.4
	Activity rate (% population aged 15-24)	38.9	37.7	36.7	35.9	37.3	36.2	35.5	36.4	36.8	38.1	37.4
	Activity rate (% population aged 25-54)	94.8	94.8	95.0	94.8	95.1	95.5	95.3	95.5	95.8	95.6	95.4
	Activity rate (% population aged 55-64)	62.1	62.7	62.5	64.2	63.2	62.5	62.6	64.0	66.1	67.9	68.3
	Total unemployment (000)	187	169	124	103	125	191	171	178	176	151	125
	Unemployment rate (% labour force)	6.5	5.8	4.2	3.5	5.9	6.4	5.8	6.0	5.9	5.1	4.2
	Youth unemployment rate (% labour force 15-24)	19.4	16.6	10.6	9.8	16.6	18.2	18.2	19.9	18.7	15.0	11.3
	Long term unemployment rate (% labour force)	3.4	3.1	2.1	1.7	1.6	2.6	2.4	2.6	2.5	2.2	2.0
	Share of long term unemployment (% of total unemployment)	52.1	53.1	50.6	49.5	27.8	40.0	40.6	43.3	41.8	43.8	47.8
	Youth unemployment ratio (% population aged 15-24)	7.5	6.3	3.9	3.5	6.2	6.6	6.4	6.7	6.9	5.7	4.2
	Employment rate for low skilled 25-64 (ISCED 0-2)	49.4	52.6	56.3	57.4	53.6	53.1	50.7	48.6	52.5	53.5	52.6
	Employment rate for medium skilled 25-64 (ISCED 3-4)	84.2	84.5	85.2	85.9	84.0	83.3	83.5	84.3	85.9	86.5	86.3
	Employment rate for high skilled 25-64 (ISCED 5-8)	92.0	91.1	91.4	92.2	91.0	91.0	91.2	91.2	92.7	92.3	92.7
	Employment rate (Nationals aged 15-64)	73.2	73.6	74.7	75.3	73.7	73.3	73.9	74.4	75.5	76.8	77.7
	Employment rate (Other EU28 aged 15-64)	81.7	80.6	80.5	80.9	80.8	80.8	80.8	80.8	80.6	80.4	80.4
	Employment rate (Other than EU28 aged 15-64)	82.1	80.6	82.7	77.7	83.5	80.8	80.6	80.6	80.6	80.4	80.9
	Employment rate (Born in the same country aged 15-64)	73.3	73.7	74.8	75.4	73.8	73.4	73.9	74.5	75.5	76.8	77.7
Employment rate (Born in other EU28 aged 15-64)	66.3	73.8	75.5	73.7	78.2	78.9	75.2	76.3	76.5	80.4	79.7	
Employment rate (Born outside EU28 aged 15-64)	80.6	83.0	82.6	76.7	80.9	82.6	86.7	86.5	89.4	89.4	87.9	
Underemployment (% of labour force aged 15-74)	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.3	0.3	
Seeking but not available (% of labour force aged 15-74)	0.4	0.3	0.3	0.3	0.2	0.2	0.2	0.2	0.2	0.2	0.2	
Discouraged, available but not seeking (% of labour force aged 15-74)	0.8	0.9	0.6	0.5	0.8	0.8	0.9	0.9	0.9	0.8	0.7	
Labour Market Indicators - Female	Total population (000)	5228	5234	5244	5278	5309	5326	5340	5347	5352	5350	5361
	Population aged 15-64(000)	3611	3620	3628	3648	3655	3641	3622	3587	3548	3508	3479
	Total employment (000)	2059	2086	2116	2139	2111	2087	2095	2112	2143	2157	2205
	Employment aged 15-64 (000)	2039	2065	2092	2114	2081	2057	2064	2079	2104	2120	2159
	Employment rate (% population aged 20-64)	61.3	61.8	62.4	62.5	61.4	60.9	61.7	62.5	63.8	64.7	65.4
	Employment rate (% population aged 15-64)	56.3	56.8	57.3	57.6	56.7	56.3	57.2	58.2	59.6	60.7	62.4
	Employment rate (% population aged 15-24)	23.4	23.7	23.9	23.5	21.7	20.6	19.8	21.0	21.0	21.6	23.4
	Employment rate (% population aged 25-54)	74.0	74.5	74.9	75.2	74.1	73.4	74.3	74.6	75.5	75.7	76.7
	Employment rate (% population aged 55-64)	30.9	32.1	33.5	34.4	35.0	35.5	37.2	39.0	41.4	43.8	45.9
	FTE employment rate (% population aged 20-64)	59.7	60.2	60.5	60.7	59.6	58.8	59.8	60.5	61.3	62.5	64.2
	Self-employed (% total employment)	9.2	9.6	9.5	9.6	10.4	11.1	11.8	12.4	11.9	11.8	11.7
	Part-time employment (% total employment)	8.0	8.5	7.9	7.8	8.5	9.1	8.5	8.6	10.0	9.5	9.3
	Fixed term contracts (% total employees)	8.2	8.4	8.4	8.1	8.3	8.6	8.3	8.6	9.5	9.8	10.4
	Employment in Services (% total employment)	71.5	71.6	72.3	73.0	74.9	75.9	75.1	75.4	75.4	75.3	75.3
	Employment in Industry (% total employment)	26.0	25.8	25.3	24.7	22.8	22.1	22.9	22.6	22.3	22.7	22.7
	Employment in Agriculture (% total employment)	2.6	2.6	2.3	2.3	2.3	1.9	2.0	2.1	2.2	1.9	1.9
	Activity rate (% population aged 15-64)	62.4	62.3	61.5	61.0	61.5	61.5	62.2	63.5	65.1	65.6	66.5
	Activity rate (% population aged 15-24)	28.9	29.2	26.9	26.1	26.1	25.3	24.1	25.9	26.1	26.1	27.4
	Activity rate (% population aged 25-54)	81.6	81.3	80.5	80.6	79.9	79.9	80.4	80.9	81.6	81.6	81.4
	Activity rate (% population aged 55-64)	32.9	34.0	35.2	36.1	37.2	38.0	39.4	41.5	44.2	46.3	48.3
	Total unemployment (000)	223	202	153	127	177	193	180	189	194	172	143
	Unemployment rate (% labour force)	9.8	8.8	6.7	5.6	7.7	8.5	7.9	8.2	8.3	7.4	6.1
	Youth unemployment rate (% labour force 15-24)	19.1	18.7	11.0	9.9	16.7	18.5	18.0	19.0	19.3	17.1	14.4
	Long term unemployment rate (% labour force)	5.3	4.9	3.6	2.6	2.5	3.5	3.2	3.6	3.7	3.2	2.9
	Share of long term unemployment (% of total unemployment)	53.6	55.2	53.6	48.1	32.2	41.9	40.5	43.4	44.8	43.2	46.8
	Youth unemployment ratio (% population aged 15-24)	5.5	5.4	2.9	2.6	4.4	4.7	4.3	4.9	5.1	4.5	3.9
	Employment rate for low skilled 25-64 (ISCED 0-2)	37.4	39.8	40.6	41.3	39.1	38.3	38.0	36.1	35.7	37.1	35.6
	Employment rate for medium skilled 25-64 (ISCED 3-4)	66.2	66.1	66.4	66.6	65.5	65.0	66.2	66.8	67.9	68.7	70.7
	Employment rate for high skilled 25-64 (ISCED 5-8)	78.1	77.9	77.9	77.2	76.9	75.0	74.4	76.0	77.3	77.2	77.6
	Employment rate (Nationals aged 15-64)	56.3	56.7	57.2	57.5	56.6	56.2	57.2	58.3	59.6	60.7	62.4
	Employment rate (Other EU28 aged 15-64)	66.0	71.2	63.2	66.6	62.9	58.7	53.0	61.7	61.2	64.6	64.6
	Employment rate (Other than EU28 aged 15-64)	61.5	61.5	62.3	58.9	61.5	59.1	60.5	61.1	61.0	59.0	59.0
	Employment rate (Born in the same country aged 15-64)	56.4	56.9	57.3	57.6	56.7	56.3	57.3	58.3	59.6	60.7	62.5
Employment rate (Born in other EU28 aged 15-64)	49.1	56.7	52.7	54.2	55.1	49.5	49.6	55.4	58.3	57.5	57.5	
Employment rate (Born outside EU28 aged 15-64)	55.5	59.7	61.1	62.4	58.0	61.5	61.7	62.8	61.4	61.9	61.9	
Underemployment (% of labour force aged 15-74)	0.9	0.9	0.6	0.6	0.8	1.0	0.9	0.9	1.2	1.1	0.9	
Seeking but not available (% of labour force aged 15-74)	0.9	0.9	0.6	0.6	0.5	0.6	0.5	0.5	0.5	0.5	0.4	
Discouraged, available but not seeking (% of labour force aged 15-74)	1.7	1.6	1.1	1.0	1.3	1.4	1.3	1.5	1.7	1.4	1.2	

[Click here to download table.](#)

Czech Republic		2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	
Social Indicators	All	At-risk-of-poverty or exclusion (% of total population)	19.6	18.0	15.8	15.3	14.0	14.4	15.3	15.4	14.6	14.8	14.7
		At-risk-of-poverty (% of total population)	10.4	9.9	9.6	9.0	8.6	9.0	9.8	9.6	8.6	9.7	9.0
		At-risk-of-poverty threshold (PPS single person)	4585	4956	5305	5835	5666	5796	5993	6188	6481	6654	6991
		Poverty gap (%)	18.2	16.8	18.1	18.5	18.8	21.1	17.2	19.1	16.6	18.0	19.2
		Persistent at-risk-of-poverty (% of total population)	11.0	10.5	10.5	10.5	10.5	10.5	10.5	10.5	10.5	10.5	10.5
		At-risk-of-poverty before social transfers excl. pensions (% of total population)	21.2	21.6	20.1	20.0	17.9	18.1	18.0	17.6	16.6	17.2	16.8
		Impact of social transfers (excl. pensions) in reducing poverty (%)	50.9	54.2	52.2	55.0	52.0	50.3	45.6	45.5	48.2	45.6	42.3
		Severe Material Deprivation (% of total population)	11.8	9.6	7.4	6.8	6.1	6.2	6.1	6.6	6.6	6.7	5.6
		Share of people living in low work intensity households (% of people aged 0-59)	8.9	8.9	8.6	7.2	6.0	6.4	6.6	6.8	6.9	7.6	6.8
		Real Gross Household Disposable income (growth %)	4.5	5.5	3.3	2.4	2.0	0.2	-1.3	-1.2	-0.7	2.9	3.2
		Income quintile share ratio S80/S20	3.7	3.5	3.5	3.4	3.5	3.5	3.5	3.5	3.4	3.5	3.5
		GNI coefficient	26.0	25.3	25.3	24.7	25.1	24.9	25.2	24.9	24.6	25.1	25.0
	Early leavers from education and training (% of population aged 18-24)	6.2	5.1	5.2	5.6	5.4	4.9	4.9	5.5	5.4	5.5	6.2	
	NEET. Young people not in employment, education or training (% of total population aged 15-24)	13.3	9.2	6.9	6.7	8.5	8.8	8.3	8.9	9.1	8.1	7.5	
	Male	At-risk-of-poverty or exclusion (% of male population)	17.8	16.6	14.2								

## Denmark

Denmark		2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	
Macro Economic Indicators (Annual % growth)	Real GDP	2.3	3.9	0.9	-0.5	-4.9	1.9	1.3	0.2	0.9	1.7	1.6	
	Total employment	1.4	2.3	2.3	1.2	-3.2	-2.3	0.0	-0.7	0.0	1.0	1.3	
	Labour productivity	0.9	1.6	-1.4	-1.7	-1.8	4.3	1.4	1.0	1.0	0.7	0.3	
	Annual average hours worked per person employed	-0.5	0.3	-1.6	-0.2	-0.9	0.4	1.0	-0.9	0.2	-0.8	-0.1	
	Real productivity per hour worked	1.4	1.3	0.2	-1.5	-0.9	3.9	0.3	1.9	0.8	1.5	0.5	
	Harmonized CPI	1.7	1.8	1.7	3.6	1.0	2.2	2.7	2.4	0.5	0.4	0.2	
	Price deflator GDP	2.9	2.1	2.4	4.1	0.5	3.2	0.6	2.4	0.9	0.8	0.9	
	Nominal compensation per employee	3.4	3.5	3.7	3.9	2.8	3.3	1.4	1.9	1.6	1.5	1.5	
	Real compensation per employee (GDP deflator)	0.4	1.4	1.3	-0.2	2.2	0.0	0.7	-0.5	0.7	0.7	0.6	
	Real compensation per employee (private consumption deflator)	1.5	1.7	2.0	0.2	1.8	1.1	-1.2	-0.5	1.1	1.1	1.3	
	Nominal unit labour costs	2.4	1.9	5.2	5.7	4.7	-1.0	0.0	0.9	0.6	0.8	1.1	
	Real unit labour costs	-0.5	-0.2	2.7	1.5	4.1	-4.1	-0.6	-1.4	-0.3	0.1	0.2	
	Labour Market Indicators - Total	Total population (000)	5411	5427	5447	5476	5511	5555	5561	5581	5603	5627	5650
		Population aged 15-64 (000)	3591	3599	3598	3613	3628	3631	3632	3626	3626	3625	3646
Total employment (000)		2752	2805	2804	2853	2771	2706	2703	2689	2688	2714	2752	
Employment aged 15-64 (000)		2706	2762	2759	2807	2724	2654	2643	2621	2622	2640	2678	
Employment rate (% population aged 20-64)		78.0	79.4	79.0	79.7	77.5	75.8	75.7	75.4	75.6	75.9	76.5	
Employment rate (% population aged 15-64)		75.9	77.4	77.0	77.9	75.3	73.3	73.1	72.6	72.5	72.8	73.5	
Employment rate (% population aged 15-24)		62.3	64.6	65.3	66.4	62.5	58.1	57.5	55.0	53.7	53.7	55.4	
Employment rate (% population aged 25-54)		84.5	86.1	86.1	87.5	84.7	82.8	82.3	81.9	82.0	82.0	82.1	
Employment rate (% population aged 55-64)		59.9	60.7	58.9	58.1	58.4	58.4	59.5	60.8	61.7	63.2	64.7	
FTE employment rate (% population aged 20-64)		73.1 b	73.9	73.7 b	74.3	71.8	69.7	69.4	69.3	69.4	69.2	69.5	
Self-employed (% total employment)		8.1	8.4	8.4	8.4	9.0	8.8	8.9	8.9	8.8	8.7	8.4	
Part-time employment (% total employment)		21.5	22.9	23.0	23.8	25.2	25.6	25.1	24.8	24.7	24.6	24.7	
Fixed term contracts (% total employees)		9.8 b	8.9	9.1	8.5	8.7	8.4	8.8	8.5	8.8	8.5	8.6	
Employment in Services (% total employment)		76.8	77.0	77.0	77.1	78.7	79.8	79.9	79.9	80.2	80.2	80.2	
Employment in Industry (% total employment)		20.3	20.3	20.4	20.3	18.7	17.6	17.5	17.5	17.2	17.2	17.2	
Employment in Agriculture (% total employment)		2.9	2.7	2.6	2.6	2.5	2.5	2.5	2.5	2.6	2.6	2.6	
Activity rate (% population aged 15-64)		79.8	80.6	80.1	80.7	80.2	79.4	79.3	78.6	78.1	78.1	78.5	
Activity rate (% population aged 15-24)		68.1	69.9	70.6	72.2	70.9	67.5	67.1	64.1	61.7	61.5	62.1	
Activity rate (% population aged 25-54)		88.1	88.9	88.9	89.9	89.4	88.7	88.2	87.8	87.5	87.1	87.1	
Activity rate (% population aged 55-64)		62.8	63.2	61.0	59.9	60.8	61.8	63.2	64.4	65.0	66.4	67.6	
Total unemployment (000)		140	114.1	111	101	177	218	221	219	202	191	181	
Unemployment rate (% labour force)		4.8	3.9	3.8	3.4	6.0	7.5	7.6	7.5	7.0	6.6	6.2	
Youth unemployment rate (% labour force 15-24)		86	77.1	75	80	111.8	135.9	142	141.1	141.0	126	108	
Long term unemployment rate (% labour force)		1.1	0.8	0.6	0.5	0.6	1.5	1.8	2.1	1.8	1.7	1.7	
Share of long term unemployment (% of total unemployment)		23.4	20.8	16.1	13.5	9.5	20.2	24.4	28.0	25.5	25.2	26.9	
Youth unemployment ratio (% population aged 15-24)		5.9 b	5.4	5.3	5.8	8.4	9.4	9.6	9.1	8.1	7.8	6.7	
Employment rate for low skilled 25-64 (ISCED 0-2)		61.5 b	62.8	67.5 b	68.4	65.2	62.8	62.6	61.4	60.9	61.4 b	60.5	
Employment rate for medium skilled 25-64 (ISCED 3-4)		79.9 b	81.3	82.3 b	82.7	80.0	79.1	79.0	78.7	79.3	79.1 b	80.3	
Employment rate for high skilled 25-64 (ISCED 5-8)		86.4 b	87.4	87.2 b	88.5	86.8	85.7	85.8	86.4	86.5	86.0 b	85.9	
Employment rate (Nationals aged 15-64)		76.6 b	77.9	78.1	78.7	76.9	74.7	74.1	73.7	73.5	73.5	74.7	
Employment rate (Other EU28 aged 15-64)			76.6	75.0	80.8	80.2	75.4	72.4	71.7	72.3	75.7	75.9	
Employment rate (Other than EU28 aged 15-64)			59.2	54.0	57.4	58.5	54.2	53.7	52.5	56.0	54.6	54.9	
Employment rate (Born in the same country aged 15-64)		76.9 b	78.4	78.5	79.0	76.2	74.6	74.7	74.2	73.9	74.2	75.1	
Employment rate (Born in other EU28 aged 15-64)			70.9	75.7	78.8	77.6	73.5	71.0	71.8	73.3	76.1	75.4	
Employment rate (Born outside EU28 aged 15-64)		61.2	60.5	64.1	64.3	59.6	57.9	56.5	58.3	58.3	58.3		
Underemployment (% of labour force aged 15-74)				2.3	3.2	3.0	3.1	3.0	2.7	2.5	2.2		
Seeking but not available (% of labour force aged 15-74)	0.8	0.8	0.9	0.7	0.7	0.7	0.8	0.9	0.8	0.9	0.8		
Discouraged, available but not seeking (% of labour force aged 15-74)	1.5	1.2	1.8	1.6	1.9	2.0	2.6	2.4	2.3	1.9	1.5		

[Click here to download table.](#)

Denmark		2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015
Labour Market Indicators - Male	Total population (000)	2677	2686	2697	2713	2732	2743	2757	2767	2779	2792	2811
	Population aged 15-64(000)	1808	1812	1816	1823	1831	1830	1830	1826	1826	1830	1839
	Total employment (000)	1470	1496	1495	1485	1421	1415	1421	1418	1369	1365	1384
	Employment aged 15-64 (000)	1436	1464	1460	1484	1421	1378	1381	1369	1365	1365	1408
	Employment rate (% population aged 20-64)	82.3	83.8	83.2	83.9	80.5	78.6	79.0	78.6	78.7	79.5	80.2
	Employment rate (% population aged 15-64)	79.8	81.2	80.8	81.6	78.0	75.6	75.9	75.2	75.0	75.8	76.6
	Employment rate (% population aged 15-24)	63.9	65.0	66.5	67.4	62.2	56.7	56.6	54.6	52.3	52.7	54.6
	Employment rate (% population aged 25-54)	88.3	90.1	89.8	90.9	86.9	85.3	85.7	84.6	85.0	85.5	85.9
	Employment rate (% population aged 55-64)	65.6	67.1	64.9	65.2	64.9	63.3	63.8	65.9	66.5	68.9	69.8
	FTE employment rate (% population aged 20-64)	80.5 b	81.5	80.5 b	81.2	77.6	75.7	75.0	74.2	73.2	73.5	75.9
	Self-employed (% total employment)	11.7	11.7	11.9	11.9	12.6	12.2	12.3	12.2	12.0	11.7	11.3
	Part-time employment (% total employment)	11.7	12.3	12.4	13.3	14.3	14.0	14.2	14.8	14.8	15.2	15.6
	Fixed term contracts (% total employees)	7.4	7.0	6.8	6.7	6.9	7.2	7.4	7.0	7.2	7.3	7.1
	Employment in Services (% total employment)	66.3	66.2	66.9	66.9	68.5	69.5	69.7	70.0	70.1	70.4	70.4
	Employment in Industry (% total employment)	29.5	29.8	29.3	29.2	27.5	26.3	26.0	25.8	25.5	25.5	25.5
	Employment in Agriculture (% total employment)	4.3	4.1	3.8	4.0	4.0	4.2	4.0	4.0	4.1	4.1	4.1
	Activity rate (% population aged 15-64)	80.5	84.3	83.7	84.3	83.6	82.6	82.3	81.4	80.6	81.1	81.6
	Activity rate (% population aged 15-24)	70.0	70.5	72.0	72.8	71.7	70.7	70.8	64.1	61.1	61.0	61.7
	Activity rate (% population aged 25-54)	91.7	92.3	92.3	93.3	92.2	92.0	91.5	90.6	90.2	90.3	90.8
	Activity rate (% population aged 55-64)	68.7	69.6	66.9	66.9	68.1	67.8	68.3	69.9	70.2	72.6	72.7
	Total unemployment (000)	68	52	53	50	103	129	118	115	102	98	92
	Unemployment rate (% labour force)	4.4	3.3	3.4	3.2	6.6	8.4	7.7	7.5	6.7	6.4	5.9
	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
	Long term unemployment rate (% labour force)	1.1	0.7	0.5	0.5	0.6	1.8	2.0	2.1	1.6	1.7	1.6
	Share of long term unemployment (% of total unemployment)	24.0	20.7	15.6	14.2	9.5	21.9	24.2	28.5	23.5	25.9	27.5
	Youth unemployment ratio (% population aged 15-24)	6.1 b	5.6	5.5	5.4	9.5	10.9	10.5	9.5	8.7	8.4	7.2
	Employment rate for low skilled 25-64 (ISCED 0-2)	70.4 b	70.9	75.8 b	76.2	71.7	69.6	70.0	67.1	67.6	69.2 b	68.9
	Employment rate for medium skilled 25-64 (ISCED 3-4)	83.7 b	85.6	85.1 b	85.7	82.4	80.8	81.5	81.5	82.6	83.0 b	83.9
	Employment rate for high skilled 25-64 (ISCED 5-8)	88.9 b	90.0	89.6 b	90.6	88.7	87.5	88.2	89.2	88.4	89.2 b	89.4
	Employment rate (Nationals aged 15-64)	80.3 b	81.5	81.6	82.1	78.3	76.0	76.5	75.9	75.6	76.3	77.2
	Employment rate (Other EU28 aged 15-64)		80.5	81.5	87.6	84.8	77.5	76.0	75.8	77.8	78.8	82.4
	Employment rate (Other than EU28 aged 15-64)		71.4	61.6	64.7	63.0	61.4	59.7	57.6	61.0	61.2	62.4
	Employment rate (Born in the same country aged 15-64)	80.4 b	81.9	81.9	82.2	78.5	76.5	77.1	76.3	76.0	76.5	77.5
	Employment rate (Born in other EU28 aged 15-64)		75.8	83.4	84.5	82.2	72.9	73.5	77.5	78.3	78.2	82.5
Employment rate (Born outside EU28 aged 15-64)		68.8	66.7	72.6	69.6	64.6	63.2	61.2	62.3	65.2	64.4	
Underemployment (% of labour force aged 15-74)			1.6	2.4	2.2	2.3	2.1	2.0	1.8	1.5	1.5	
Seeking but not available (% of labour force aged 15-74)	0.5	0.7	0.7	0.6	0.6	0.6	0.8	0.7	0.8	0.7	0.6	
Discouraged, available but not seeking (% of labour force aged 15-74)	1.4	1.1	1.7	1.5	2.0	2.5	2.4	2.4	2.4	1.9	1.6	
Labour Market Indicators - Female	Total population (000)	2734	2742	2750	2763	2779	2791	2804	2814	2824	2835	2849
	Population aged 15-64(000)	1773	1777	1782	1790	1797	1800	1802	1800	1799	1802	1807
	Total employment (000)	1283	1309	1312	1336	1316	1292	1282	1276	1278	1282	1291
	Employment aged 15-64 (000)	1270	1297	1299	1323	1303	1276	12				

Denmark		2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	
Social indicators	All	At-risk-of-poverty or exclusion (% of total population)	17.2	16.7	16.8	16.3	17.6	18.3	17.5	18.3	17.9	17.7	
		At-risk-of-poverty (% of total population)	11.8	11.7	11.7	11.8	13.1	13.3	12.1	12.0	11.9	12.1	12.2
		At-risk-of-poverty threshold (PPS single person)	9513	9688	10121	10561	10751	10770	11510	11537	11846	11992	12231
		Poverty gap (%)	15.6	16.5	17.0	18.0	18.4	21.6	20.5	19.5	23.5	18.5	22.0
		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
		At-risk-of-poverty before social transfers excl. pensions (% of total population)	29.9	28.0	27.1	27.8	31.2	29.1	27.9	27.4	27.8	26.9	25.8
		Impact of social transfers (excl. pensions) in reducing poverty (%)	60.5	58.2	56.8	57.6	58.0	54.3	56.6	56.2	57.2	55.0	52.7
		Severe Material Deprivation (% of total population)	3.2	3.1	3.3	2.0	2.3	2.7	2.3	2.7	3.6	3.2	3.7
		Share of people living in low work intensity households (% of people aged 0-59)	10.1	9.6	10.1	8.5	8.8	10.6	10.5	10.2	11.9	12.2	11.6
		Real Gross Household Disposable income (growth %)	2.5	2.6	-0.3	-0.4	1.3	3.3	0.7	0.0	-1.0	1.5	7.3
		Income quintile share ratio S80/S20	3.5	3.4	3.7	3.6	4.6	4.4	4.0	3.9	4.0	4.1	4.1
		GINI coefficient	23.9	23.7	25.2	25.1	26.9	26.9	26.6	26.5	26.8	27.7	27.4
		Early leavers from education and training (% of population aged 18-24)	8.7	9.1	12.9	12.5	11.3	11.0	9.6	9.1	8.0	7.8	7.8
		NEET: Young people not in employment, education or training (% of total population aged 15-24)	15.6	14.5	14.2	12.7	14.0	15.1	14.7	14.9	15.4	14.5	15.7
		At-risk-of-poverty or exclusion (% of male population)	16.2	15.5	15.9	15.7	17.0	17.7	17.2	17.4	18.1	17.6	17.5
At-risk-of-poverty (% of male population)	11.6	11.4	11.3	11.7	12.8	13.1	12.1	12.0	12.0	12.4	12.5		
Poverty gap (%)	15.5	18.8	18.8	19.3	21.9	23.3	24.1	21.8	25.5	24.2	23.6		
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		
Severe Material Deprivation (% of male population)	3.1	2.8	2.9	1.5	2.2	2.8	1.7	2.7	3.5	3.2	3.5		
Share of people living in low work intensity households (% of males aged 0-59)	9.3	8.3	9.1	8.4	8.2	9.7	10.3	10.5	12.2	11.8	11.1		
Life expectancy at birth (years)	76.0	76.1	76.2	76.5	76.9	77.2	77.8	78.1	78.3	78.7	78.7		
Healthy life years at birth (years) - men	68.4	67.7	67.4	62.4	61.8	62.5	63.6	60.6	60.4	60.3	60.3		
Early leavers from education and training (% of males aged 18-24)	10.5	10.5	16.2	15.0	14.3	14.1	12.1	10.8	9.9	9.5	9.7		
NEET: Young people not in employment, education or training (% of males aged 15-24)	3.6	3.4	4.7	4.4	5.9	6.7	6.4	6.6	6.3	6.2	6.3		
At-risk-of-poverty or exclusion (% of female population)	18.3	17.9	17.7	17.0	18.2	19.0	18.0	17.5	18.6	18.2	18.0		
At-risk-of-poverty (% of female population)	12.1	12.0	12.0	12.0	13.4	13.4	12.0	11.9	11.8	11.8	11.9		
Poverty gap (%)	15.9	15.2	16.4	17.2	17.1	20.9	16.1	16.4	17.9	17.2	19.8		
Persistent at-risk-of-poverty (% of female population)													
Severe Material Deprivation (% of female population)	3.3	3.5	3.6	2.4	2.4	2.5	2.9	2.7	3.7	3.2	3.8		
Share of people living in low work intensity households (% of females aged 0-59)	11.0	11.0	11.1	8.6	9.4	11.4	10.8	9.9	11.5	12.6	12.0		
Life expectancy at birth (years)	80.5	80.7	80.6	81.0	81.1	81.4	81.9	82.1	82.4	82.8	82.8		
Healthy life years at birth (years) - women	68.4	67.2	67.4	60.8	60.4	61.4	59.4	61.4	59.1	61.4	61.4		
Early leavers from education and training (% of females aged 18-24)	6.9	7.7	9.5	10.0	8.1	7.7	7.0	7.4	6.2	6.1	5.7		
NEET: Young people not in employment, education or training (% of females aged 15-24)	5.1	3.8	3.8	4.2	4.9	5.4	6.1	6.7	5.8	5.4	6.1		
At-risk-of-poverty or exclusion of children (% of people aged 0-17)	10.4	9.9	9.6	9.1	10.6	10.9	10.3	10.4	9.1	9.2	10.4		
At-risk-of-poverty (% of Children population)	3.9	4.3	4.8	2.5	2.1	3.1	2.9	4.0	3.8	3.1	4.3		
Severe Material Deprivation (% of Children population)	7.5	7.1	6.9	4.3	5.5	7.4	7.9	5.3	7.8	7.5	7.3		
Share of children living in low work intensity households (% of Children population)	8.8	6.7	6.2	7.6	7.9	6.8	7.7	7.4	6.6	6.6	8.0		
Risk of poverty of children in households at work (Working Intensity > 0.2)	58.7	59.3	59.8	58.8	56.4	54.6	61.1	57.7	64.0	61.3	55.0		
Impact of social transfers (excl. pensions) in reducing poverty (0-17) (%)													
At-risk-of-poverty or exclusion (% of Working age population)	17.7	17.1	17.4	17.1	18.1	19.5	19.0	19.6	21.6	21.3	20.9		
At-risk-of-poverty (% of Working age population)	11.0	11.0	10.9	11.3	12.2	12.9	12.2	12.3	13.4	13.8	13.8		
Severe Material Deprivation (% of Working age population)	3.7	3.2	3.3	2.0	2.7	2.9	2.5	2.9	4.3	4.0	4.3		
Very low work intensity (18-59)	11.2	10.7	11.5	10.2	10.1	11.9	11.6	12.2	13.5	14.0	13.3		
In-work at-risk-of-poverty rate (% of persons employed 18-64)	4.8	4.5	4.2	5.0	5.9	6.3	6.3	5.3	5.4	4.8	5.1		
Impact of social transfers (excl. pensions) in reducing poverty (18-64) (%)	61.5	60.2	58.9	59.4	58.9	56.1	58.5	58.6	57.3	55.5	53.5		
At-risk-of-poverty or exclusion of elderly (% of people aged 65+)	17.8	18.3	18.3	18.6	20.6	18.4	14.6	13.2	10.8	10.8	9.9		
At-risk-of-poverty (% of Elderly population)	17.6	17.4	17.7	18.1	20.1	17.7	13.9	12.8	10.1	9.8	9.1		
Severe Material Deprivation (% of Elderly population)	0.2	1.1	0.8	0.9	0.9	0.9	1.1	0.6	1.1	0.9	0.9		
Relative median income of elderly (ratio with median income of people younger than 65)	0.70	0.71	0.70	0.70	0.71	0.71	0.74	0.75	0.76	0.78	0.77		
Aggregate replacement ratio (ratio)	0.35	0.37	0.39	0.41	0.42	0.44	0.43	0.42	0.44	0.45	0.45		
Sickness/Health care	5.9	6.0	6.0	6.2	6.9	6.7	6.6	6.6	6.5	6.4	6.4		
Disability	4.1	4.1	3.8	3.8	4.2	4.3	4.1	4.2	4.2	4.1	4.1		
Old age and survivors	10.7	10.5	11.9	11.9	13.2	12.7	12.8	12.7	13.5	14.3	14.3		
Family/Children	3.7	3.6	3.7	3.8	4.2	4.1	3.9	3.7	3.7	3.6	3.6		
Unemployment	2.5	2.0	1.2	1.0	1.6	2.0	1.9	1.9	1.9	1.7	1.7		
Housing and Social exclusion n.e.c.	1.7	1.5	1.3	1.3	1.5	1.8	1.9	1.9	2.0	2.1	2.1		
Total (including Admin and Other expenditures)	29.5	28.4	29.1	28.9	32.8	32.7	32.3	32.2	33.0	33.5	33.5		
of which: Means tested benefits	0.9	0.8	0.9	0.8	1.0	1.0	1.1	1.1	1.1	1.1	1.1		

Click here to download table.

## Germany

Germany		2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015
Macro Economic indicators (Annual % growth)	Real GDP	0.7	3.7	3.3	1.1	-5.6	4.1	3.7	0.5	0.5	1.6	1.7
	Total employment	0.0	0.8	1.7	1.3	0.1	0.3	1.4	1.2	0.6	0.8	0.9
	Labour productivity	0.7	2.9	1.5	-0.2	-5.7	3.8	2.3	-0.7	-0.1	0.8	0.8
	Annual average hours worked per person employed	-0.8	1.0	0.0	-0.4	-3.2	1.3	0.2	-1.3	-0.9	0.4	0.0
	Real productivity per hour worked	1.5	1.9	1.5	0.2	-2.6	2.5	2.1	0.6	0.8	0.4	0.8
	Harmonized CPI	1.9	1.8	2.5	2.8	0.2	1.1	2.5	2.1	1.5	0.8	0.1
	Price deflator GDP	0.6	0.3	1.7	0.8	1.8	0.8	1.1	1.5	2.0	1.8	2.0
	Nominal compensation per employee	0.2	1.0	0.9	2.1	0.2	2.6	3.0	2.5	1.8	2.8	2.4
	Real compensation per employee (GDP deflator)	-0.4	0.7	-0.8	1.3	-1.5	1.8	1.9	1.0	-0.2	1.0	0.4
	Real compensation per employee (private consumption deflator)	-1.6	-0.8	-1.4	-0.6	0.0	1.4	0.5	0.4	0.1	2.0	2.3
	Nominal unit labour costs	-0.5	-1.8	-0.6	2.3	6.3	-1.2	0.7	3.2	1.9	2.0	1.6
	Real unit labour costs	-1.1	-2.1	-2.3	1.5	4.5	-1.9	-0.4	1.6	0.0	0.2	-0.3
	Total population (000)	82501	82436	82315	82218	82002	81882	81822	81822	81822	81822	81822
	Population aged 15-64 (000)	55209	54918	54574	54417	54134	53878	52762	52951	53126	53272	53422
	Total employment (000)	35622	37172	37989	38542	38471	37993	38787	39127	39531	39871	40211
Employment aged 15-64 (000)	35845	36633	37997	37902	37808	37337	38045	38321	38640	38908	39176	
Employment rate (% population aged 20-64)	69.4	71.1	72.9	74.0	74.2	75.0	76.5	76.9	77.3	77.7	78.0	
Employment rate (% population aged 15-64)	65.5	67.2	69.0	70.1	70.3	71.3	72.7	73.0	73.5	73.8	74.0	
Employment rate (% population aged 15-24)	41.9	43.5	45.4	46.6	46.0	46.2	47.9	46.6	46.9	46.1	45.3	
Employment rate (% population aged 25-54)	77.4	78.8	80.3	80.9	80.8	81.6	83.0	83.3	83.4	83.5	83.7	
Employment rate (% population aged 55-64)	45.5	48.1	51.3	53.7	56.1	57.8	60.0	61.6	63.6	65.6	66.2	
FTE employment rate (% population aged 20-64)	60.4	61.4	62.9	64.1	64.4	65.0	66.0	66.5	66.8	67.3	67.5	
Self-employed (% total employment)	11.2	11.1	11.0	10.8	11.0	11.0	11.1	11.0	10.7	10.5	10.4	
Part-time employment (% total employment)	23.4	25.2	25.4	25.1	25.3	25.6	25.9	25.8	26.6	26.5	26.8	
Fixed term contracts (% total employees)	14.2	14.5	14.6	14.7	14.5	14.5	14.5	14.5	13.7	13.3	13.1	
Employment in Services (% total employment)	72.6	73.1	73.2	73.1	73.5	73.9	73.8	73.7	73.8	73.9	73.9	
Employment in Industry (% total employment)	25.7	25.2	25.2	25.3	24.8	24.5	24.6	24.7	24.7	24.6	24.6	
Employment in Agriculture (% total employment)	1.7	1.6	1.7	1.6	1.6	1.5	1.5	1.6	1.5	1.5	1.5	
Activity rate (% population aged 15-64)	73.8	74.9	75.6	75.9	76.3	76.7	77.3	77.2	77.6	77.7	77.6	
Activity rate (% population aged 15-24)	49.6	50.4	51.5	52.2	51.8	51.3	52.4	50.7	50.8	49.9	48.8	
Activity rate (% population aged 25-54)	86.4	87.1	87.2	87.0	87.1	87.3	87.7	87.7	87.7	87.6	87.6	
Activity rate (% population aged 55-64)	52.1	54.9	57.2	58.7	61.0	62.6	64.1	65.4	67.5	69.1	69.4	
Total unemployment (000)	45061	4104	3473	3018	3098	2821	2399	2224	2182	2090	1950	
Unemployment rate (% labour force)	11.2	10.1	8.5	7.4	7.6	7.0	5.8	5.4	5.2	5.0	4.6	
Youth unemployment												

Germany		2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015
Labour Market Indicators - Male	Total population (000)	40354	40540	40301	40274	40184	40104	39125 b	39230	39381	39557	39635
	Population aged 15-64(000)	27964	27808	27629	27541	27386	27249	26509 b	26631	26745	26847	26968
	Total employment (000)	19964	20336	20745	21033	20816	20423	20802	21019	21143	21301	21454
	Employment aged 15-64 (000)	19636	20000	20378	20631	20401	20019	20338	20512	20584	20698	20808
	Employment rate (% population aged 20-64)	75.6 b	77.2	79.1	80.1	79.6	80.4 b	81.7 b	82.1	82.1	82.2	82.3
	Employment rate (% population aged 15-64)	71.3 b	72.8	74.7	75.8	75.4	76.5 b	77.6 b	77.9	78.0	78.1	78.0
	Employment rate (% population aged 15-24)	43.6 b	45.3	47.2	48.7	47.5	47.9 b	49.2 b	49.4	49.4	49.7	49.7
	Employment rate (% population aged 25-54)	87.7 b	88.8	86.4	87.1	86.1	86.6 b	88.0 b	88.4	88.2	88.0	88.1
	Employment rate (% population aged 55-64)	53.6 b	56.1	59.4	61.7	63.8	65.2 b	67.1 b	68.6	69.9	71.4	71.3
	FTE employment rate (% population aged 20-64)	73.1 b	74.1	75.9	77.1	76.5	77.3 b	78.3 b	78.6	78.6	78.7	78.7
	Self-employed (% total employment)	14.3	14.1	13.9	13.6	14.0	14.0	14.1	14.0	13.6	13.3	13.1
	Part-time employment (% total employment)	6.9 b	8.5	8.5	8.3	8.6	8.5 b	8.9 b	8.9	9.1	9.2	9.3
	Fixed term contracts (% total employees)	12.4 b	12.7	12.7	12.8	12.5	12.4 b	12.5 b	11.9	11.6	11.4	11.5
	Employment in Services (% total employment)	61.5 b	62.1	62.0	61.6	61.9	62.4	62.0 b	61.9	62.1	62.1	62.1
	Employment in Industry (% total employment)	36.3 b	35.8	35.9	36.4	36.1	35.6	35.9 b	36.1	36.0	35.9	
	Employment in Agriculture (% total employment)	2.1 b	2.1	2.1	2.0	2.0	2.0	2.0 b	2.0	1.9	2.0	
	Activity rate (% population aged 15-64)	80.6 b	81.3	81.7	82.0	82.2	82.4 b	82.7 b	82.6	82.6	82.5	82.1
	Activity rate (% population aged 15-24)	52.4 b	53.1	54.0	54.7	54.3	53.7 b	54.8 b	53.2	52.9	52.0	50.5
	Activity rate (% population aged 25-54)	93.6 b	93.8	93.8	93.5	93.2	93.2 b	93.2 b	93.1	92.9	92.6	92.5
	Activity rate (% population aged 55-64)	61.2 b	63.7	65.8	67.2	69.3	70.8 b	71.8 b	73.1	74.5	75.5	75.3
	Total unemployment (000)	25221	22445	1855	1609	17447	16111	13356	12366	12311	11888	11623
	Unemployment rate (% labour force)	11.41	10.2	8.4	7.3	8.0	7.4	6.1	5.6	5.5	5.3	5.0
	Youth unemployment rate (% labour force 15-24)	16.61	14.6	12.4	10.8	12.2	10.6	9.2	8.7	8.5	8.3	7.9
	Long term unemployment rate (% labour force)	6.0	5.7	4.8	3.9	3.6	3.5	3.0	2.6	2.5	2.4	2.3
	Share of long term unemployment (% of total unemployment)	52.5	55.6	56.1	52.5	43.9	47.5	49.0	46.5	45.0	45.8	45.3
	Youth unemployment ratio (% population aged 15-24)	8.8 b	7.9	6.8	6.0	6.8	5.8 b	5.0 b	4.6	4.5	4.3	4.0
	Employment rate for low skilled 25-64 (ISCED 0-2)	62.2 b	64.6	65.5	66.3	64.9	65.7 b	67.0 b	67.8	67.8	67.4 b	68.0
	Employment rate for medium skilled 25-64 (ISCED 3-4)	76.3 b	77.8	80.0	81.0	80.3	81.0 b	82.3 b	82.9	82.1	83.1 b	83.5
	Employment rate for high skilled 25-64 (ISCED 5-8)	86.3 b	87.6	89.1	89.4	89.7	90.3 b	91.1 b	91.4	91.3	91.3 b	91.3
	Employment rate (Nationals aged 15-64)	72.3 b	73.9	75.8	76.8	76.5	77.1 b	78.3 b	78.5	78.6	78.7	78.7
	Employment rate (Other EU28 aged 15-64)		73.2	74.6	76.0	74.5	75.8 b	78.5 b	79.6	80.4	81.5	81.5
	Employment rate (Other than EU28 aged 15-64)		57.1	59.2	61.6	61.1	63.1 b	66.0 b	66.3	66.5	65.4	64.8
	Employment rate (Born in the same country aged 15-64)	72.6 b	74.0	75.7	76.7	76.3	76.8 b	77.9 b	78.1	78.1	78.3	78.2
Employment rate (Born in other EU28 aged 15-64)												
Employment rate (Born outside EU28 aged 15-64)				2.8	2.7	2.7 b	2.4 b	2.2	2.1	2.0	1.9	
Underemployment (% of labour force aged 15-74)												
Seeking but not available (% of labour force aged 15-74)	1.9 b	1.8	1.9	1.7	1.2	1.2 b	1.1 b	1.1	1.1	1.1	1.1	
Discouraged, available but not seeking (% of labour force aged 15-74)	1.2 b	0.9	1.0	1.0	1.2	1.0 b	1.1 b	1.0	1.0	1.0	1.1	
Labour Market Indicators - Female	Total population (000)	42147	42098	42014	41944	41818	41699	41097 b	41098	41143	41211	41362
	Population aged 15-64(000)	27245	27110	26945	26877	26748	26629	26253 b	26321	26381	26425	26454
	Total employment (000)	16398	16837	17244	17509	17655	17571	17986	18108	18389	18570	18757
	Employment aged 15-64 (000)	16209	16633	17019	17271	17407	17338	17708	17909	18056	18210	18368
	Employment rate (% population aged 20-64)	63.1 b	65.0	66.7	67.8	68.7	69.7 b	71.3 b	71.6	72.5	73.1	73.6
	Employment rate (% population aged 15-64)	59.6 b	61.5	63.2	64.3	65.2	66.2 b	67.8 b	68.1	69.0	69.5	69.9
	Employment rate (% population aged 15-24)	40.2 b	41.6	43.5	44.5	44.4	44.5 b	46.1 b	44.5	45.2	44.4	44.0
	Employment rate (% population aged 25-54)	71.0 b	72.7	74.0	74.7	75.4	76.4 b	77.9 b	78.2	78.6	78.8	79.2
	Employment rate (% population aged 55-64)	37.6 b	40.3	43.4	46.0	48.6	50.7 b	53.2 b	54.9	57.6	60.0	61.2
	FTE employment rate (% population aged 20-64)	48.3 b	49.4	50.6	51.8	52.8	53.5 b	54.7 b	55.2	55.8	56.7	57.1
	Self-employed (% total employment)	7.5	7.5	7.5	7.5	7.4	7.4	7.6	7.4	7.3	7.2	7.2
	Part-time employment (% total employment)	43.4 b	45.4	45.7	45.2	44.9	45.3 b	46.4 b	45.3	46.7	46.3	46.6
	Fixed term contracts (% total employees)	12.8 b	13.1	13.4	13.5	13.6	13.6 b	13.6 b	12.7	12.4	12.2	12.2
	Employment in Services (% total employment)	65.4 b	65.6	65.9	66.2	66.6	66.8	66.8 b	66.7	66.7	66.8	
	Employment in Industry (% total employment)	33.4 b	33.2	33.0	32.6	32.2	32.1	32.1 b	32.2	32.2	32.2	
	Employment in Agriculture (% total employment)	1.2 b	1.1	1.1	1.2	1.2	1.1	1.1 b	1.1	1.1	1.1	
	Activity rate (% population aged 15-64)	66.9 b	68.5	69.4	69.7	70.4	70.9 b	71.9 b	71.9	72.6	72.9	73.1
	Activity rate (% population aged 15-24)	46.7 b	47.6	49.0	49.5	49.2	49.8 b	50.0 b	48.0	48.7	47.7	47.1
	Activity rate (% population aged 25-54)	79.1 b	80.3	80.6	80.5	81.0	81.3 b	82.1 b	82.3	82.4	82.5	82.5
	Activity rate (% population aged 55-64)	43.2 b	46.3	48.9	50.5	52.9	54.6 b	56.8 b	58.2	60.8	62.9	63.8
	Total unemployment (000)	19851	18599	1618	1409	1350	1210	1063	989	951	902	827
	Unemployment rate (% labour force)	10.91	10.1	8.7	7.6	7.2	6.5	5.6	5.2	4.9	4.6	4.2
	Youth unemployment rate (% labour force 15-24)	14.01	12.5	11.0	9.9	9.7	8.8	7.8	7.3	7.1	7.1	6.5
	Long term unemployment rate (% labour force)	5.7	5.7	4.9	3.9	3.4	3.0	2.6	2.2	2.1	1.9	1.7
	Share of long term unemployment (% of total unemployment)	52.9	55.9	55.8	54.1	46.3	45.8	45.0	44.4	43.5	41.6	41.3
	Youth unemployment ratio (% population aged 15-24)	6.6 b	6.0	5.4	4.9	4.8	4.3 b	3.9 b	3.5	3.5	3.4	3.0
	Employment rate for low skilled 25-64 (ISCED 0-2)	44.7 b	46.4	47.3	47.7	48.0	48.3 b	49.5 b	50.4	51.1	50.9 b	51.5
	Employment rate for medium skilled 25-64 (ISCED 3-4)	65.2 b	67.3	68.9	69.8	70.7	71.8 b	73.0 b	73.6	74.6	76.0 b	76.5
	Employment rate for high skilled 25-64 (ISCED 5-8)	78.2 b	79.8	80.6	81.1	82.2	82.9 b	84.2 b	83.9	84.0	84.0 b	84.1
	Employment rate (Nationals aged 15-64)	61.5 b	63.5	65.2	66.4	67.2	68.2 b	69.7 b	69.9	70.9	71.5	72.1
	Employment rate (Other EU28 aged 15-64)		57.5	59.4	59.8	60.7	61.0 b	63.5 b	63.9	63.9	64.4	65.3
	Employment rate (Other than EU28 aged 15-64)		35.1	37.4	38.6	40.2	40.7 b	42.5 b	44.2	44.0	44.5	43.7
	Employment rate (Born in the same country aged 15-64)	62.1 b	63.9	65.6	66.7	67.4	68.2 b	69.7 b	69.8	70.8	71.4	72.1
Employment rate (Born in other EU28 aged 15-64)												
Employment rate (Born outside EU28 aged 15-64)												
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	
Seeking but not available (% of labour force aged 15-74)	2.7 b	2.8	2.6	2.4	1.5	1.5 b	1.4 b	1.3	1.3	1.2	1.2	
Discouraged, available but not seeking (% of labour force aged 15-74)	2.5 b	2.0	1.9	2.0	2.2	1.6 b	1.8 b	1.7	1.6	1.5	1.5	

[Click here to download table.](#)

Germany		2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	
Social Indicators	All	At-risk-of-poverty or exclusion (% of total population)	18.4	20.2	20.6	20.1	20.0	19.7	19.9	19.6	20.3	20.6	20.0
		At-risk-of-poverty (% of total population)	12.2	12.5	15.2	15.2	15.5	15.6	15.8	16.1	16.1	16.7	16.7
		At-risk-of-poverty threshold (PPS single person)	9391 b	9100	10395	10804	10770	10544	11037	11525	11687	11530	12219
		Poverty gap (%)	18.9	20.4	23.2	22.2	21.5	20.7	21.4	21.1	20.4	23.2	22.0
		Persistent at-risk-of-poverty (% of total population)											
		At-risk-of-poverty before social transfers excl. pensions (% of total population)	23.1	25.7	24.8	24.2	24.1	24.2	25.1	24.3	24.4	25.0	25.1
		Impact of social transfers (excl. pensions) in reducing poverty (%)	47.2	51.4	38.7	37.2	35.7	35.5	37.1	33.7	34.0	33.2	33.5
		Severe Material Deprivation (% of total population)	4.6	5.1	4.8	5.5	5.4	4.5	5.3	4.9	5.4	5.0	4.4
		Share of people living in low work intensity households (% of people aged 0-59)	12.0	13.6	11.5	11.7	10.9	11.2	11.2	9.9	9.9	10.0	9.8
		Real Gross Household Disposable income (growth %)	3.8	1.1	0.4	0.8	-0.4	0.4	1.0	1.1	0.7	1.4	2.5
		Income quintile share ratio S80S20	0.8	4.1	4.9	4.8	4.5	4.5	4.5	4.3	4.6	5.1	4.8
		Gini coefficient	26.1 b	26.8	25.4	24.4	24.1	24.0	23.1	23.0	23.1	23.7	30.7
	Early leavers from education and training (% of population aged 18-24)	13.5 b	13.7	12.5	11.8 b	11.1	11.8 b	11.6	10.5	9.8	9.5	10.1	
	NEET. Young people not in employment, education or training (% of total population aged 15-24)	10.9 b	9.6	8.9	8.4 b	8.8	8.3 b	7.5 b	7.1	6.3	6.4	6.2	
	Male	At-risk-of-poverty or exclusion (% of male population)	17.0	18.9	18.8	18.							

## Estonia

Estonia		2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	
Macro Economic Indicators (Annual % growth)	Real GDP	9.4	10.3	7.7	-5.4	-14.7	2.3	7.6	4.3	1.4	2.8	1.4	
	Total employment	2.3	4.9	0.2	-0.2	-10.2	-4.9	6.5	1.6	1.2	0.8	2.9	
	Labour productivity	6.9	5.1	7.5	-5.2	-5.0	7.6	1.0	2.6	0.2	2.0	-1.4	
	Annual average hours worked per person employed	1.1	-0.4	-0.1	-1.5	-6.9	2.3	2.4	-1.7	-1.1	-0.3	-0.4	
	Real productivity per hour worked	5.8	5.5	7.7	-3.7	2.0	5.1	-1.3	4.4	1.2	2.4	-1.0	
	Harmonized CPI	4.1	4.4	6.7	10.6	0.2	2.7	5.1	4.2	3.2	0.5	0.1	
	Price deflator GDP	6.1	8.9	11.5	7.5	0.4	1.7	5.3	5.2	3.9	1.7	1.0	
	Nominal compensation per employee	10.6	14.8	25.6	10.6	-3.0	2.7	0.8	6.6	4.6	4.3	5.7	
	Real compensation per employee (GDP deflator)	4.2	5.5	12.6	2.9	-3.4	0.9	-4.3	3.3	0.7	2.5	4.6	
	Real compensation per employee (private consumption deflator)	6.2	9.9	17.6	0.0	-3.1	-0.1	-4.1	2.2	1.3	3.8	5.6	
	Nominal unit labour costs	3.4	9.2	16.8	16.7	2.2	-4.6	-0.2	3.8	4.5	2.2	7.2	
	Real unit labour costs	-2.6	0.4	4.7	8.5	1.8	-6.2	-5.2	0.6	0.6	0.5	6.0	
	Labour Market Indicators - Total	Total population (000)	1359	1351	1343	1338	1336	1333	1330	1325	1320	1316	1313
		Population aged 15-64 (000)	925	920	911	906	903	899	894	885	875	866	857
Total employment (000)		616	652	658	656	594	568	603	615	621	625	641	
Employment aged 15-64 (000)		594	626	632	632	574	548	582	591	597	600	613	
Employment rate (% population aged 20-64)		72.0	75.9	76.9	77.1	70.0	66.8	70.6	72.2	73.3	74.3	76.5	
Employment rate (% population aged 15-64)		64.8	68.4	69.8	70.1	63.8	61.2	65.3	67.1	68.5	69.6	71.9	
Employment rate (% population aged 15-24)		30.7	31.4	34.1	35.9	28.3	25.3	31.1	32.3	32.4	33.3	36.3	
Employment rate (% population aged 25-54)		79.1	84.1	84.8	83.9	76.5	74.9	78.2	79.5	80.4	80.9	83.0	
Employment rate (% population aged 55-64)		65.7	58.4	59.9	62.3	60.3	53.6	57.5	60.9	62.6	64.0	64.5	
FTE employment rate (% population aged 20-64)		70.6 b	74.4	75.1	75.5	68.0	64.8	68.6	70.1	71.4	72.5	74.3	
Self-employed (% total employment)		7.7	8.0	8.9	7.7	8.2	8.3	8.5	8.6	8.9	8.9	9.2	
Part-time employment (% total employment)		6.8	6.8	7.1	6.4	9.4	9.8	9.3	9.2	8.9	8.3	9.5	
Fixed term contracts (% total employees)		2.7 b	2.7	2.1	2.4	2.5	3.7	4.5	3.7	3.5	3.2	3.5	
Employment in Services (% total employment)		61.5	62.4	61.0	61.7	65.5	66.9	64.6	65.7	66.6	67.4	68.8	
Employment in Industry (% total employment)		33.5	32.8	34.4	34.4	30.6	28.9	31.0	29.8	29.2	28.2	27.4	
Employment in Agriculture (% total employment)		5.0	4.8	4.6	4.5	3.9	4.2	4.4	4.5	4.2	4.2	3.7	
Activity rate (% population aged 15-64)		70.7	72.8	73.2	74.2	74.0	73.9	74.7	74.8	75.1	75.2	76.7	
Activity rate (% population aged 15-24)		36.2	35.7	37.9	40.8	39.0	37.8	40.0	40.8	39.8	39.2	41.8	
Activity rate (% population aged 25-54)		85.8	89.0	88.5	88.2	87.8	88.3	88.4	87.8	87.6	87.1	87.9	
Activity rate (% population aged 55-64)		58.9	61.0	62.2	65.0	66.5	64.3	65.1	65.1	66.6	67.7	68.7	
Total unemployment (000)		54	41	32	38	93	114	85	68	59	50	42	
Unemployment rate (% labour force)		8.0	5.9	4.6	5.5	13.5	16.7	12.3	10.0	8.6	7.4	6.2	
Youth unemployment rate (% labour force 15-24)		15.1	12.1	10.1	12.7	25.1	25.4	23.0	22.4	20.7	18.0	13.1	
Long term unemployment rate (% labour force)		4.4	2.9	2.3	1.7	3.7	7.6	7.1	5.5	3.8	3.3	2.4	
Share of long term unemployment (% of total unemployment)		54.2	48.6	49.8	31.1	27.3	45.3	57.3	54.7	44.5	45.3	38.3	
Youth unemployment ratio (% population aged 15-24)		5.5 b	4.3	3.8	4.9	10.7	12.4	9.0	8.5	7.4	5.9	5.5	
Employment rate for low skilled 25-64 (ISCED 0-2)		51.3 b	56.1	56.8	58.1	47.5	45.2	48.5	50.3	58.2	60.9 b	58.1	
Employment rate for medium skilled 25-64 (ISCED 3-4)		72.8 b	77.9	79.4	79.6	71.6	68.8	74.0	74.4	74.5	74.4 b	76.9	
Employment rate for high skilled 25-64 (ISCED 5-8)		84.3 b	87.6	87.3	85.8	82.7	79.7	79.9	82.3	83.0	84.0 b	85.7	
Employment rate (Nationals aged 15-64)		65.4 b	69.7	69.8	64.3	62.7	67.9	67.9	65.8	67.9	69.0	70.1	
Employment rate (Other EU28 aged 15-64)		65.9 u	64.0 u	64.0 u	64.0 u	62.6 u	62.6 u	58.8 u	58.3 u	63.2 u	63.2 u	63.2 u	
Employment rate (Other than EU28 aged 15-64)		67.6 u	70.3	71.1	61.3	56.1	62.6	63.4	65.4	64.8	64.8	68.4	
Employment rate (Born in the same country aged 15-64)		64.1 b	67.8	69.0	69.3	63.2	61.5	65.5	67.1	68.5	69.8	72.1	
Employment rate (Born in other EU28 aged 15-64)		65.5	76.2	77.2	74.0	61.4	61.9	59.2	62.6	71.7	67.7	66.8	
Employment rate (Born outside EU28 aged 15-64)		72.6	74.3	74.9	67.6	59.3	64.3	67.6	68.8	67.6	70.5	70.2	
Underemployment (% of labour force aged 15-74)					0.7	1.8	1.8	1.8	1.5	1.2	1.0	1.5	
Seeking but not available (% of labour force aged 15-74)				0.4	1.8	1.8	1.8	1.5	1.2	1.0	1.5		
Discouraged, available but not seeking (% of labour force aged 15-74)	6.5	4.6	4.2	3.4	5.4	6.0	6.4	6.0	5.1	4.8	4.1		

[Click here to download table.](#)

Estonia		2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015
Labour Market Indicators - Male	Total population (000)	632	628	624	622	621	621	620	618	616	615	614
	Population aged 15-64(000)	450	448	444	442	441	440	438	434	430	427	424
	Total employment (000)	354	350	350	348	303	278	309	316	320	325	338
	Employment aged 15-64 (000)	295	317	324	323	282	269	295	300	305	309	317
	Employment rate (% population aged 20-64)	74.6	79.5	81.4	81.5	71.0	67.8	73.5	75.1	76.7	78.3	80.5
	Employment rate (% population aged 15-64)	66.7	71.4	73.5	73.7	64.3	61.7	67.8	69.7	71.4	73.0	75.3
	Employment rate (% population aged 15-24)	34.5	36.8	38.2	38.9	30.0	26.5	33.1	34.2	34.0	33.4	39.4
	Employment rate (% population aged 25-54)	80.8	87.3	89.6	88.2	77.4	75.8	81.6	83.1	84.7	85.6	87.7
	Employment rate (% population aged 55-64)	56.5	57.3	59.0	64.7	59.3	51.9	57.2	59.2	61.4	65.1	63.1
	FTE employment rate (% population aged 20-64)	74.0 b	79.0	80.6	80.9	68.9	66.6	72.9	74.3	75.7	77.1	79.5
	Self-employed (% total employment)	10.8	11.3	12.5	10.6	11.4	11.5	11.9	12.3	12.1	12.2	11.9
	Part-time employment (% total employment)	4.5	3.8	3.9	3.6	6.2	6.1	5.0	5.1	5.5	5.7	6.0
	Fixed term contracts (% total employees)	3.1	2.8	2.4	3.1	2.7	4.4	5.0	4.1	3.6	2.9	3.4
	Employment in Services (% total employment)	49.4	49.0	46.5	47.7	51.6	52.7	49.6	50.7	52.0	54.1	56.7
	Employment in Industry (% total employment)	43.6	44.5	47.2	47.0	43.0	41.6	44.0	42.9	41.9	40.7	40.7
	Employment in Agriculture (% total employment)	7.0	6.6	6.3	5.4	5.4	5.7	6.4	6.5	6.1	5.3	5.3
	Activity rate (% population aged 15-64)	73.6	76.2	77.8	78.4	77.7	76.8	78.2	78.4	78.6	79.3	80.4
	Activity rate (% population aged 15-24)	41.2	40.9	43.5	44.5	45.8	41.2	43.4	44.3	41.4	41.4	45.7
	Activity rate (% population aged 25-54)	88.4	92.6	93.5	92.8	91.9	91.8	92.1	92.1	92.3	92.2	92.6
	Activity rate (% population aged 55-64)	60.5	61.5	63.4	68.3	67.3	64.3	67.0	65.3	66.9	69.1	67.7
	Total unemployment (000)	31	22	19	20	58	66	45	38	31	27	22
	Unemployment rate (% labour force)	9.2	6.2	5.4	5.8	16.7	19.3	13.1	10.9	9.1	7.9	6.2
	Youth unemployment rate (% labour force 15-24)	16.1	10.0	12.2	12.6	31.6	35.6	23.8	22.8	17.7	19.3	13.8
	Long term unemployment rate (% labour force)	4.5	3.2	2.9	2.0	4.4	9.5	7.9	6.1	4.2	3.9	2.5
	Share of long term unemployment (% of total unemployment)	51.4	49.0	53.3	35.5	26.6	48.3	60.5	55.5	46.6	50.2	40.8
	Youth unemployment ratio (% population aged 15-24)	6.6 b	4.1	5.3	5.6	13.8	14.7	10.3	10.1	7.3	8.0	6.3
	Employment rate for low skilled 25-64 (ISCED 0-2)	53.9 b	62.0	63.9	65.6	51.7	46.5	53.2	54.1	62.5	66.2 b	62.5
	Employment rate for medium skilled 25-64 (ISCED 3-4)	76.2 b	82.1	84.7	83.8	72.8	71.9	78.1	79.1	79.4	80.1 b	81.9
	Employment rate for high skilled 25-64 (ISCED 5-8)	87.0 b	90.8	91.5	92.4	87.3	81.1	84.3	86.2	87.6	89.5 b	91.0
	Employment rate (Nationals aged 15-64)	66.4 b	70.8	72.6	73.2	65.1	62.5	67.9	69.6	71.5	72.9	75.4
	Employment rate (Other EU28 aged 15-64)	63.1 u	67.4 u	67.4 u	66.3 u							
	Employment rate (Other than EU28 aged 15-64)	65.8 b	70.8	72.9	72.8	63.8	61.9	67.5	69.5	71.3	72.8	75.3
	Employment rate (Born in the same country aged 15-64)	65.8 b	70.8	72.9	72.8	63.8	61.9	67.5	69.5	71.3	72.8	75.3
	Employment rate (Born in other EU28 aged 15-64)	70.6 u	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	73.9
	Employment rate (Born outside EU28 aged 15-64)	75.5	77.1	79.6	68.1	60.7	71.0	71.8	73.1	74.7	75.8	75.8
	Underemployment (% of labour force aged 15-74)				0.6 u	1.7	1.3	1.0	1.1	1.0	0.9	0.8
Seeking but not available (% of labour force aged 15-74)											0.4 u	
Discouraged, available but not seeking (% of labour force aged 15-74)	7.0	4.3	4.3	3.5	5.5	5.7	6.1	6.0	4.7	4.3	3.5	
Labour Market Indicators - Female	Total population (000)	727	723	719	716	714	712	710	707	704	701	699
	Population aged 15-64(000)	475	472	467	464	462	459	456	451	445	439	434
	Total employment (000)	311	322	323	322	303	290	301	306	307	305	313
	Employment aged 15-64 (000)	299	309	309	309	292	279	287	291	292	291	296
	Employment rate (% population aged 20-64)	69.7	72									

Estonia		2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	
Social indicators	All	At-risk-of-poverty or exclusion (% of total population)	25.9	22.0	22.0	21.8	23.4	21.7	23.1	23.4	23.5	25.0	24.2
		At-risk-of-poverty (% of total population)	18.3	18.3	19.4	19.5	19.7	15.8	17.5	17.5	18.6	21.8	21.6
		At-risk-of-poverty threshold (PPS single person)	2835	3376	3895	4538	4861	4448	4491	4734	5164	5545	6259
		Poverty gap (%)	24.0	22.0	20.2	20.3	17.0	23.2	26.0	23.8	21.5	22.0	21.0
		Persistent at-risk-of-poverty (% of total population)			11.1	13.6	12.9	9.9	10.5	12.0	9.3	11.2	13.1
		At-risk-of-poverty before social transfers excl. pensions (% of total population)	24.2	24.6	25.2	24.7	25.9	24.9	24.9	24.8	25.4	28.4	27.8
		Impact of social transfers (excl. pensions) in reducing poverty (%)	24.4	25.6	25.0	21.1	23.9	36.6	29.7	29.4	26.8	23.2	22.3
		Severe Material Deprivation (% of total population)	12.4	7.0	5.6	4.9	6.2	9.0	8.7	9.4	7.6	6.2	4.5
		Share of people living in low work intensity households (% of people aged 0-59)	9.5	7.1	6.2	5.3	5.6	9.0	10.0	9.1	8.4	7.6	6.6
		Real Gross Household Disposable income (growth %)	9.6	10.2	11.1	4.6	-8.9	-4.0	3.0	2.1	0.6	6.6	4.3
		Income quintile share ratio S80/S20	5.9	5.5	5.5	5.0	5.0	5.0	5.3	5.4	5.5	6.5	6.2
		GINI coefficient	34.1	33.1	33.4	30.9	31.4	31.3	31.9	32.5	32.9	35.6	34.8
	Early leavers from education and training (% of population aged 18-24)	14.0	13.4	14.4	14.0	15.5	11.0	10.6	10.3	9.7	11.4	11.2	
	NEET: Young people not in employment, education or training (% of total population aged 15-24)	10.6	6.8	8.9	8.7	14.5	14.0	11.6	12.2	11.3	11.7	10.8	
	At-risk-of-poverty or exclusion (% of male population)	24.3	20.0	19.4	18.9	21.1	21.5	23.2	23.5	22.5	24.5	22.2	
	At-risk-of-poverty (% of male population)	17.4	16.3	16.7	16.5	17.5	15.4	17.6	16.8	17.2	20.1	19.6	
	Poverty gap (%)	28.6	26.5	24.2	23.8	20.7	25.9	27.9	27.6	27.4	29.4	28.3	
	Persistent at-risk-of-poverty (% of male population)			9.5	10.1	11.5	7.8	9.9	11.6	8.6	11.0	11.5	
	Severe Material Deprivation (% of male population)	12.1	6.8	5.4	4.8	6.2	9.3	8.8	9.5	8.1	6.2	4.3	
	Share of people living in low work intensity households (% of males aged 0-59)	9.6	7.7	6.6	6.0	6.5	9.7	10.9	9.6	9.5	8.6	7.3	
	Life expectancy at birth (years)	67.3	67.4	67.5	66.5	68.9	69.8	70.9	71.4	71.4	72.8	72.4	
	Healthy life years at birth (years) - men	48.3	49.6	49.8	53.1	55.0	54.2	54.3	53.1	53.9	53.2	52.2	
	Early leavers from education and training (% of males aged 18-24)	16.7	19.5	21.4	19.8	17.9	14.4	12.8	13.3	13.6	15.3	13.2	
	NEET: Young people not in employment, education or training (% of males aged 15-24)	8.2	6.6	8.5	8.0	14.4	14.6	11.8	11.2	10.8	11.8	9.0	
	At-risk-of-poverty or exclusion (% of female population)	27.3	23.7	24.2	24.3	25.5	22.0	22.9	24.4	24.4	27.3	26.0	
	At-risk-of-poverty (% of female population)	19.1	19.9	21.7	22.0	21.6	16.2	17.4	18.1	19.9	23.3	23.3	
	Poverty gap (%)	20.7	19.9	18.4	19.3	15.5	20.0	24.0	21.8	16.9	17.5	16.9	
	Persistent at-risk-of-poverty (% of female population)			12.5	16.5	13.9	11.7	11.0	12.3	9.9	11.4	14.4	
	Severe Material Deprivation (% of female population)	12.6	7.2	5.8	4.9	6.3	8.7	8.6	9.3	7.1	6.2	4.7	
	Share of people living in low work intensity households (% of females aged 0-59)	9.3	6.5	5.8	4.7	4.8	8.3	9.2	8.6	7.3	6.5	5.9	
	Life expectancy at birth (years)	78.1	78.6	78.9	79.5	80.2	80.8	81.3	81.5	81.7	81.9	81.9	
	Healthy life years at birth (years) - women	52.4	53.9	54.9	57.5	59.2	58.2	57.9	57.2	57.1	57.1	57.1	
	Early leavers from education and training (% of females aged 18-24)	11.2	6.9	7.2	8.3	9.1	7.6	8.4	7.3	5.8	7.5	9.0	
	NEET: Young people not in employment, education or training (% of females aged 15-24)	13.0	11.0	9.2	9.4	14.5	13.5	11.4	13.2	11.8	11.6	12.8	
	At-risk-of-poverty or exclusion of children (% of people aged 0-17)	28.4	24.1	20.1	19.4	24.5	24.0	24.8	22.4	22.3	23.8	22.5	
	At-risk-of-poverty (% of Children population)	21.3	20.1	18.2	17.1	20.6	17.3	19.5	17.0	18.1	19.7	20.0	
	Severe Material Deprivation (% of Children population)	12.7	7.6	4.1	5.3	7.0	10.7	9.1	9.2	7.0	5.7	3.9	
	Share of children living in low work intensity households (% of Children population)	9.8	6.5	4.6	3.8	4.5	8.4	9.2	6.9	6.6	6.5	5.2	
	Risk of poverty of children in households at work (Working Intensity > 0.2)	14.7	15.3	14.4	14.3	17.8	12.1	13.7	12.8	13.4	16.1	16.6	
	Impact of social transfers (excl. pensions) in reducing poverty (0-17) (%)	31.5	34.3	35.5	35.0	30.6	44.4	35.9	40.6	34.2	30.9	31.0	
At-risk-of-poverty or exclusion (% of Working age population)	24.2	19.8	19.1	17.5	19.9	21.8	24.2	24.2	22.7	24.0	21.0		
At-risk-of-poverty (% of Working age population)	16.9	15.9	16.1	15.0	15.8	15.6	18.0	17.7	17.3	19.4	17.9		
Severe Material Deprivation (% of Working age population)	11.6	6.8	5.5	4.5	6.1	9.1	9.3	10.0	8.0	6.3	4.4		
Very low work intensity (18-59)	9.3	7.3	6.8	5.8	5.9	9.1	10.3	9.8	9.0	7.9	7.0		
In-work at-risk-of-poverty rate (% of persons employed 18-64)	7.5	7.8	7.9	7.4	8.3	6.7	8.2	8.5	7.7	11.8	10.3		
Impact of social transfers (excl. pensions) in reducing poverty (18-64) (%)	25.0	27.4	25.1	24.6	28.2	37.6	30.2	28.9	28.8	25.7	26.3		
At-risk-of-poverty or exclusion of elderly (% of people aged 65+)	29.2	27.8	35.4	40.9	35.6	19.0	17.0	21.8	28.0	35.0	37.0		
At-risk-of-poverty (% of Elderly population)	20.3	25.1	33.2	39.0	33.9	15.1	13.1	17.2	24.4	32.6	35.8		
Severe Material Deprivation (% of Elderly population)	14.9	7.4	7.9	5.8	5.6	6.6	5.8	7.1	6.3	6.4	5.2		
Relative median income of elderly (ratio with median income of people younger than 65)	0.73	0.69	0.65	0.62	0.66	0.73	0.75	0.72	0.69	0.63	0.62		
Aggregate replacement ratio (ratio)	0.47	0.49	0.47	0.45	0.52	0.55	0.54	0.50	0.50	0.47	0.43		
Sickness/Health care	3.9	3.7	4.0	4.7	5.3	4.7	4.3	4.2	4.1	4.4	4.4		
Disability	1.2	1.1	1.1	1.4	1.8	1.9	1.8	1.7	1.8	1.8	1.8		
Old age and survivors	5.4	5.4	5.2	6.2	7.9	7.7	6.8	6.6	6.6	6.6	6.6		
Family/Children	1.5	1.4	1.4	1.7	2.2	2.2	1.9	1.7	1.6	1.6	1.6		
Unemployment	0.2	0.1	0.1	0.3	1.2	0.7	0.5	0.5	0.5	0.4	0.4		
Housing and Social exclusion n.e.c.	0.1	0.1	0.1	0.1	0.1	0.2	0.2	0.2	0.2	0.1	0.1		
Total (including Admin and Other expenditures)	12.5	12.0	12.0	14.7	18.8	17.6	15.6	15.0	14.9	15.1	15.1		
of which: Means tested benefits	0.1	0.1	0.1	0.1	0.1	0.1	0.2	0.1	0.1	0.1	0.1		

[Click here to download table.](#)

## Ireland

Ireland		2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015
Macro Economic indicators (Annual % growth)	Real GDP	5.8	5.9	3.8	-4.4	-4.6	2.0	0.0	-1.1	1.1	8.5	26.3
	Total employment	4.9	4.6	4.4	-0.6	-7.8	-4.1	-0.5	-0.6	2.5	1.7	2.5
	Labour productivity	0.8	1.2	-0.6	-3.8	3.6	6.3	0.5	-0.5	-1.4	6.7	23.2
	Annual average hours worked per person employed	0.4	-0.2	-0.7	-1.1	-1.7	-0.6	-5.5	0.3	0.7	0.7	0.6
	Real productivity per hour worked	0.4	1.4	0.2	-2.7	5.4	7.0	6.4	-0.8	-2.1	6.0	22.5
	Harmonized CPI	2.2	2.7	2.9	3.1	-1.7	-1.9	1.2	1.9	0.5	0.3	0.0
	Price deflator GDP	3.1	2.7	2.7	-0.5	-5.3	-3.5	3.6	2.7	1.4	-1.2	4.9
	Nominal compensation per employee	5.3	4.4	5.8	3.9	-1.1	-3.6	0.4	0.8	1.4	1.9	2.8
	Real compensation per employee (GDP deflator)	2.1	1.7	3.0	4.5	4.4	-0.1	-3.1	-1.8	0.0	3.1	-2.0
	Real compensation per employee (private consumption deflator)	3.0	1.7	2.8	0.7	0.6	-2.0	-0.9	-1.0	0.9	1.5	2.8
	Nominal unit labour costs	4.4	3.2	6.3	8.0	-4.5	-9.3	-0.1	1.3	2.8	-4.5	-16.5
	Real unit labour costs	1.3	0.5	3.6	8.5	0.8	-6.1	-3.6	-1.3	1.3	-5.4	-20.4
	Total population (000)	4112	4208	4340	4458	4521	4549	4571	4583	4591	4606	4629
	Population aged 15-64 (000)	2804	2884	2992	3070	3084	3086	3072	3049	3024	3011	3003
	Total employment (000)	1952	2044	2143	2128	1961	1882	1849	1838	1881	1914	1964
	Employment aged 15-64 (000)	1915	2005	2099	2081	1917	1838	1804	1790	1828	1856	1900
	Employment rate (% population aged 20-64)	72.6	73.4	73.8	72.2	66.9	64.6	63.8	63.7	65.5	67.0	68.7
	Employment rate (% population aged 15-64)	67.6	68.7	69.2	67.4	61.9	59.6	58.9	58.8	60.5	61.7	63.3
Employment rate (% population aged 15-24)	48.7	50.3	51.0	46.2	36.9	31.5	29.5	28.2	29.0	28.4	28.7	
Employment rate (% population aged 25-54)	77.9	78.3	78.6	77.3	71.9	70.3	69.3	69.5	71.0	72.6	74.1	
Employment rate (% population aged 55-64)	51.6	53.1	53.9	53.9	51.3	50.2	50.0	49.3	51.3	53.0	55.6	
FTE employment rate (% population aged 20-64)	68.8	68.0	68.2	66.5	60.6	57.9	56.8	56.7	58.5	60.0	61.9	
Self-employed (% total employment)	16.3	15.7	16.2	16.7	16.8	16.2	15.8	15.7	16.5	16.6	16.4	
Part-time employment (% total employment)	16.7	16.6	17.4	18.2	21.0	22.2	23.1	23.5	23.5	23.0	22.2	
Fixed term contracts (% total employees)	3.7	6.0	8.5	8.6	8.8	8.6	10.2	10.2	10.0	9.3	8.7	
Employment in Services (% total employment)	67.3	67.3	68.1	69.6	73.6	75.8	76.5	76.9	76.0	76.0	76.0	
Employment in Industry (% total employment)	27.0	27.3	26.7	25.0	21.5	19.6	19.0	18.4	18.3	18.3	18.3	
Employment in Agriculture (% total employment)	5.7	5.4	5.2	5.4	4.9	4.5	4.5	4.7	4.7	5.7	5.7	
Activity rate (% population aged 15-64)	70.8	71.9	72.6	72.1	70.6	69.4	69.2	69.2	69.8	69.8	70.0	
Activity rate (% population aged 15-24)	53.3	55.0	56.1	53.3	48.5	43.6	41.5	40.5	39.7	37.3	36.3	
Activity rate (% population aged 25-54)	80.9	81.4	82.0	81.9	81.1	80.5	80.2	80.4	80.8	81.0	81.1	
Activity rate (% population aged 55-64)	53.1	54.4	55.3	55.8	54.9	55.0	55.4	55.1	57.4	58.4	60.2	
Total unemployment (000)	90	97	105	146	268	303	317	316	282	243	204	
Unemployment rate (% labour force)	4.4	4.5	4.7	6.4	12.0							

Ireland		2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015
Labour Market Indicators - Male	Total population (000)	2049	2103	2173	2227	2253	2261	2269	2270	2273	2276 p	2287 p
	Population aged 15-64(000)	1412	1457	1514	1548	1553	1542	1532	1515	1502	1493 p	1486 p
	Total employment (000)	1124	1179	1222	1194	1064	1010	989	981	1016	1039	1067
	Employment aged 15-64 (000)	1095	1149	1188	1158	1031	977	956	946	978	997	1021
	Employment rate (% population aged 20-64)	82.8	83.4	82.9 b	80.2	72.1 b	69.1	68.2	68.1	70.9	73.0	75.1
	Employment rate (% population aged 15-64)	76.9	77.9	77.5 b	74.5	66.5 b	63.5	62.6	62.7	65.1	66.9	68.7
	Employment rate (% population aged 15-24)	52.5	53.9	53.9 b	47.0	34.6 b	29.6	27.8	26.5	28.5	28.5	28.3
	Employment rate (% population aged 25-54)	88.4	88.4	87.7 b	85.5	77.8 b	75.1	74.0	74.5	76.7	78.8	80.5
	Employment rate (% population aged 55-64)	65.7	66.9	67.9 b	66.4	61.2 b	58.2	57.1	55.8	59.3	61.4	64.9
	FTE employment rate (% population aged 20-64)	84.2 b	82.4	81.9 b	78.9	69.6 b	66.1	64.8	64.5	67.2	69.4	71.7
	Self-employed (% total employment)	23.8	22.8	23.7	24.6	25.4	24.2	23.7	23.6	24.4	24.5	24.1
	Part-time employment (% total employment)	5.9 e	6.0	6.5 b	7.3	10.2 b	11.4	12.5	13.3	13.5	13.1	12.2
	Fixed term contracts (% total employees)	2.4	4.0	5.4 b	5.5	5.8 b	6.8	7.5	7.6	7.7	7.0	6.7
	Employment in Services (% total employment)	52.5	52.1	52.5 b	54.7	60.2	63.5	64.7	65.6	64.3	64.3	64.2
	Employment in Industry (% total employment)	38.6	39.4	39.3 b	36.7	31.6	28.9	27.8	26.7	26.4	26.5	26.5
	Employment in Agriculture (% total employment)	9.0	8.5	8.2 b	8.6	8.2	7.6	7.5	7.7	9.3	9.2	
	Activity rate (% population aged 15-64)	80.6	81.7	81.7 b	80.8	78.5 b	77.0	76.6	76.6	77.0	77.1	77.4
	Activity rate (% population aged 15-24)	56.6	59.3	59.6 b	55.9	49.9 b	44.6	42.7	41.3	40.6	38.8	38.3
	Activity rate (% population aged 25-54)	92.1	92.1	91.8 b	91.6	90.3 b	89.5	89.0	89.3	89.2	89.6	89.6
	Activity rate (% population aged 55-64)	67.7	68.6	69.7 b	69.1	66.6 b	65.3	65.0	64.6	67.8	69.0	71.5
	Total unemployment (000)	55	58	64	97	187	207	215	210	179	153	129
	Unemployment rate (% labour force)	4.5	4.7	5.0	7.6	15.0	17.1	17.8	17.7	15.0	12.9	10.9
	Youth unemployment rate (% labour force 15-24)	9.2	9.0	9.9	16.0	30.7	33.7	35.0	36.4	29.8	26.6	23.6
	Long term unemployment rate (% labour force)	1.9	1.7	1.7	2.2	4.8	9.2	11.5	12.0	10.0	8.2	6.7
	Share of long term unemployment (% of total unemployment)	41.2	38.0	35.0	29.7	31.8	53.6	64.5	67.6	66.4	64.0	61.7
	Youth unemployment ratio (% population aged 15-24)	5.1 b	5.3	5.9 b	9.0	15.3 b	15.0	14.9	15.1	12.1	10.3	9.1
	Employment rate for low skilled 25-64 (ISCED 0-2)	74.3 b	74.4	73.5 b	69.8	60.9 b	56.8	54.2	52.5	57.1	58.1 b	61.1
	Employment rate for medium skilled 25-64 (ISCED 3-4)	89.4 b	89.4	89.0 b	86.6	77.2 b	73.2	71.7	72.3	73.6	76.4	77.8
	Employment rate for high skilled 25-64 (ISCED 5-8)	92.1 b	91.6	91.3 b	90.6	86.2 b	84.5	84.5	84.4	84.8	85.6 b	86.8
	Employment rate (Nationals aged 15-64)		77.2	76.6 b	73.7	66.0 b	63.2	62.1	62.3	64.6	65.5	68.3
	Employment rate (Other EU28 aged 15-64)		86.1	85.7 b	81.2	71.1 b	68.0	67.5	67.9	71.7	73.2	76.0
	Employment rate (Other than EU28 aged 15-64)		72.7	73.7 b	72.7	63.9 b	59.3	61.3	58.3	59.6	60.9	61.4
	Employment rate (Born in the same country aged 15-64)	76.6 b	77.1	76.6 b	73.7	66.1 b	63.3	62.3	62.3	64.6	66.5	68.4
Employment rate (Born in other EU28 aged 15-64)		84.6	84.1 b	79.9	69.4 b	66.3	65.0	65.5	70.1	71.0	73.6	
Employment rate (Born outside EU28 aged 15-64)		73.2	73.7 b	72.7	64.0 b	61.4	61.4	61.0	61.7	63.6	63.6	
Underemployment (% of labour force aged 15-74)				3.1 b	4.1	5.0	5.5	5.4	4.9	4.9	4.3	
Seeking but not available (% of labour force aged 15-74)		0.3	0.3 b	0.3	0.5 b	0.6	0.6	0.6	0.7	0.7	0.6	
Discouraged, available but not seeking (% of labour force aged 15-74)			0.6 b	0.7	1.9 b	2.3	2.4	2.2	2.0	1.5	1.1	
Labour Market Indicators - Female	Total population (000)	2062	2105	2167	2231	2269	2288	2301	2313	2318	2327 p	2342 p
	Population aged 15-64(000)	1392	1427	1478	1522	1541	1544	1540	1534	1523	1519 p	1518 p
	Total employment (000)	828	865	922	935	898	872	860	857	865	875	897
	Employment aged 15-64 (000)	820	855	911	923	885	860	847	844	851	859	879
	Employment rate (% population aged 20-64)	62.4	63.3	64.5 b	64.2	61.8 b	60.2	59.4	59.4	60.3	61.2	62.6
	Employment rate (% population aged 15-64)	58.3	59.3	60.6 b	60.1	57.4 b	55.8	55.1	55.1	55.9	56.7	57.9
	Employment rate (% population aged 15-24)	45.9	46.5	48.3 b	45.4	39.1 b	33.5	31.2	30.2	29.6	28.4	28.2
	Employment rate (% population aged 25-54)	67.3	68.0	69.4 b	69.1	66.8 b	65.5	64.6	64.6	65.6	66.6	68.1
	Employment rate (% population aged 55-64)	37.3	39.0	39.8 b	41.2	41.1 b	42.1	42.9	42.7	43.4	44.7	46.4
	FTE employment rate (% population aged 20-64)	54.1 b	54.4	55.4 b	55.0	52.5 b	50.7	50.0	50.0	50.8	51.8	53.4
	Self-employed (% total employment)	6.2	5.9	6.5 b	6.7	6.6 b	6.5	6.8	6.7	7.3	7.3	7.3
	Part-time employment (% total employment)	31.1 e	30.8	31.7 b	32.0	33.6 b	34.4	35.2	35.9	35.0	34.4	33.8
	Fixed term contracts (% total employees)	4.0	6.5	9.1 b	9.2	9.1 b	9.4	9.8	9.5	9.0	8.6	7.9
	Employment in Services (% total employment)	87.2	87.7	88.4 b	88.6	89.5	90.1	90.2	90.0	89.7	90.0	
	Employment in Industry (% total employment)	11.6	11.1	10.3 b	10.0	9.5	8.8	8.8	8.8	8.8	8.5	
	Employment in Agriculture (% total employment)	1.2	1.2	1.3 b	1.4	1.1	1.1	1.0	1.2	1.5	1.5	
	Activity rate (% population aged 15-64)	60.8	61.9	63.4 b	63.3	62.6 b	61.9	61.9	62.0	62.7	62.6	62.8
	Activity rate (% population aged 15-24)	49.9	50.6	51.5 b	50.6	47.1 b	42.5	40.5	39.7	38.7	35.8	34.2
	Activity rate (% population aged 25-64)	68.6	70.5	72.0 b	72.0	71.8 b	71.2	71.7	71.7	72.5	72.7	73.2
	Activity rate (% population aged 55-64)	38.2	40.0	40.6 b	42.3	42.9 b	44.6	45.7	45.6	47.1	48.0	49.0
	Total unemployment (000)	36	39	41	49	80	95	104	106	104	90	74
	Unemployment rate (% labour force)	4.1	4.3	4.3	4.9	8.2	9.9	10.8	11.0	10.7	9.4	7.7
	Youth unemployment rate (% labour force 15-24)	8.0	8.3	8.0	10.3	17.0	21.2	22.7	24.0	23.5	20.9	17.6
	Long term unemployment rate (% labour force)	0.8	0.9	0.9	0.9	1.8	3.8	5.0	5.3	5.2	4.5	3.6
	Share of long term unemployment (% of total unemployment)	40.0	41.1	42.2 b	5.2	8.0 b	9.0	9.1	9.5	9.1	7.5	6.0
	Employment rate for low skilled 25-64 (ISCED 0-2)	39.6 b	39.6	41.1 b	41.2	38.1 b	36.3	35.6	33.8	34.4	31.9 b	33.2
	Employment rate for medium skilled 25-64 (ISCED 3-4)	65.0 b	65.4	65.4 b	64.6	62.2 b	59.7	58.0	58.3	58.2	59.4 b	59.9
	Employment rate for high skilled 25-64 (ISCED 5-8)	82.0 b	81.3	82.2 b	80.7	78.5 b	78.0	77.2	76.5	76.3	77.4 b	78.4
	Employment rate (Nationals aged 15-64)		59.1	60.0 b	59.7	57.4 b	56.0	55.3	55.3	56.2	57.1	58.6
	Employment rate (Other EU28 aged 15-64)		64.7	68.2 b	65.5	60.1 b	57.3	57.4	58.4	59.1	58.9	59.0
	Employment rate (Other than EU28 aged 15-64)		54.0	51.7	54.5	44.5 b	44.2	46.5	44.1	44.1	44.6	46.4
	Employment rate (Born in the same country aged 15-64)	58.3 b	59.1	60.0 b	59.7	57.6 b	56.2	55.4	55.4	56.4	57.3	58.5
	Employment rate (Born in other EU28 aged 15-64)		63.1	66.3 b	63.8	58.8 b	56.5	56.8	57.1	57.6	58.1	59.5
Employment rate (Born outside EU28 aged 15-64)		52.8	55.4 b	55.8	50.0 b	47.3	47.2	46.6	47.3	47.3	50.1	
Underemployment (% of labour force aged 15-74)					6.3 b	6.6	8.0	8.5	8.5	7.2	6.2	
Seeking but not available (% of labour force aged 15-74)		0.3 u	0.5 b	0.5	0.4 b	0.5	0.6	0.6	0.6	0.7	0.6	
Discouraged, available but not seeking (% of labour force aged 15-74)			0.6 b	0.6	1.1 b	1.3	1.6	1.8	1.6	1.4	1.0	

[Click here to download table.](#)

Ireland		2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015
Social Indicators	All	At-risk-of-poverty or exclusion (% of total population)	25.0	23.3	23.1	23.7	25.7	27.3	29.4	30.0	29.5	27.6
		At-risk-of-poverty (% of total population)	19.7	18.5	17.2	15.5	15.0	15.2	15.2	15.7	14.1	15.6
		At-risk-of-poverty threshold (PPS single person)	9048	9563	10633	10901	10386	10102	9999	9622	9581	9598
		Poverty gap (%)	20.2	16.6	17.6	17.7	16.2	15.5	17.5	19.1	17.4	17.2
		Persistent at-risk-of-poverty (% of total population)			11.6						7.9	9.5
		At-risk-of-poverty before social transfers excl. pensions (% of total population)	32.3	32.8	33.1	34.0	37.5	39.9	39.6	39.3	38.5	37.2
		Impact of social transfers (excl. pensions) in reducing poverty (%)	39.0	43.6	48.0	54.4	60.0	61.9	61.6	60.1	63.4	58.1
		Severe Material Deprivation (% of total population)	5.1	4.8	4.5	5.5	6.1	5.7	7.8	9.8	9.9	8.4
		Share of people living in low work intensity households (% of people aged 0-59)	14.7	12.9	14.3	13.7	20.0	22.9	24.2	23.4	23.9	21.1
		Real Gross Household Disposable income (growth %)	8.0	5.1	5.2	4.3	-1.1	-2.0	-3.7	1.5	-2.0	2.2
		Income quintile share ratio S80/S20	5.0	4.9	4.8	4.4	4.2	4.7	4.6	4.7	4.5	4.8
		Gini coefficient	31.9	31.9	31.5	30.0	28.9	29.9	30.0	29.9	30.0	30.8
	Early leavers from education and training (% of population aged 18-24)	12.5	12.2 b	11.8 b	11.4	11.7 b	11.5	10.8	9.7	8.4	6.9 b	
	NEET: Young people not in employment, education or training (% of total population aged 15-24)	10.9	10.1 b	10.8 b	15.0	18.6 b	19.2	18.8	18.7	16.1	15.2	
	Male	At-risk-of-poverty or exclusion (% of male population)	24.1	22.0	21.6	22.7	25.0	26.5	29.0	29.7	28.8	27.2
		At-risk-of-poverty (% of male population)	18.9	17.5	16.0	14.5	14.9	14.6	15.4	15.6	14.0	15.2
		Poverty gap (%)	21.1	17.6	17.7	18.9	17.1	15.5	1			

## Greece

Greece		2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	
Macro Economic Indicators (Annual % growth)	Real GDP	0.6	5.7	3.3	-0.3	-4.3	-5.5	-9.1 p	-7.3 p	-3.2 p	0.4 p	-0.2 p	
	Total employment	0.9	1.8	1.3	1.3	-0.6	-6.9 p	-6.3 p	-2.6 p	-0.6 p	0.0 p	0.5 p	
	Labour productivity	-0.3	3.8	1.9	-1.6	-3.8	-3.0	-2.4 p	-1.1 p	-0.6 p	0.3 p	-0.7 p	
	Annual average hours worked per person employed	2.6	-0.5	-0.7	-0.2	-1.2	-3.0	0.9 p	0.9 p	0.2 p	-1.8 p	0.6 p	
	Real productivity per hour worked	-2.8	4.3	2.6	-1.4	-2.6	0.0	-3.3 p	-1.9 p	-0.8 p	2.2 p	-1.3 p	
	Harmonized CPI	3.5	3.3	3.0	4.2	1.3	4.7	3.1	1.0	-0.9	1.4	-1.1	
	Price deflator GDP	2.2	3.5	3.4	4.3	0.7	0.7	0.8 p	-0.4 p	-2.4 p	-1.8 p	-1.0 p	
	Nominal compensation per employee	8.5	3.1	4.6	3.7	3.1	-2.0	-3.8 p	-3.0 p	-7.5 p	-2.1 p	-2.9 p	
	Real compensation per employee (GDP deflator)	6.1	-0.4	1.1	-0.7	0.5	-2.6	-4.5 p	-2.7 p	-5.3 p	-0.3 p	-1.9 p	
	Real compensation per employee (private consumption deflator)	4.9	-0.2	1.5	-0.6	1.7	-6.4	-6.7 p	-4.0 p	-6.7 p	-0.7 p	-1.8 p	
	Nominal unit labour costs	8.9	-0.7	2.6	5.3	7.1	1.0	-1.4 p	-2.0 p	-6.9 p	-2.4 p	-2.2 p	
	Real unit labour costs	6.5	-3.9	-0.8	1.0	4.5	0.3	-2.2 p	-1.6 p	-4.7 p	-0.6 p	-1.1 p	
	Labour Market Indicators - Total	Total population (000)	10970	11005	11036	11061	11095	11119	11123	11086	11004	10927	10858
		Population aged 15-64 (000)	7310	7354	7357	7378	7398	7392	7349	7289	7180	7098	7011
Total employment (000)		4444	4528	4564	4611	4556	4390	4054	3695	3513	3536	3611	
Employment aged 15-64 (000)		4361	4440	4476	4523	4469	4306	3979	3636	3459	3480	3548	
Employment rate (% population aged 20-64)		64.4	65.6	65.8	66.3	65.6 b	63.8	59.6	55.0	52.9	53.3	54.9	
Employment rate (% population aged 15-64)		59.6	60.6	60.9	61.4	60.8 b	59.1	55.1	50.8	48.8	49.4	50.8	
Employment rate (% population aged 15-24)		25.0	24.2	24.0	23.5	22.8 b	20.1	16.1	13.0	11.8	13.3	13.0	
Employment rate (% population aged 25-54)		74.0	75.2	75.4	76.0	75.3 b	73.2	68.8	63.9	61.3	62.4	64.5	
Employment rate (% population aged 55-64)		42.0	42.5	42.7	43.0	42.4 b	42.4	39.5	36.6	35.6	34.0	34.8	
FTE employment rate (% population aged 20-64)		63.6 b	64.4	64.7	65.3	64.5 b	62.4	58.0	53.1	50.8	51.1	52.6	
Self-employed (% total employment)		29.7	29.5	29.0	29.1	29.4	29.9	30.7	31.6	32.1	31.3	30.6	
Part-time employment (% total employment)		4.8	5.5	5.4	5.4	5.9 b	6.3	6.7	7.7	8.4	9.3	9.4	
Fixed term contracts (% total employees)		119.9	108	110	116	123 b	126	118	102	101	11.7	11.9	
Employment in Services (% total employment)		68.7	69.3	69.5	69.7	70.0	71.5	72.8 p	72.9 p	73.4 p	73.9 p		
Employment in Industry (% total employment)		19.5	19.2	19.4	19.4	18.8	17.2	15.8 p	15.1 p	14.3 p	13.8 p		
Employment in Agriculture (% total employment)		19.2	11.5	11.9	11.2	11.9	11.2	11.4 p	12.0 p	12.4 p	12.0 p	12.2	
Activity rate (% population aged 15-64)		66.4	66.7	66.5	66.7	67.4 b	67.8	67.3	67.5	67.5	67.4	67.8	
Activity rate (% population aged 15-24)		33.7	32.2	31.0	30.1	30.7 b	30.0	29.1	29.1	28.4	28.0	26.0	
Activity rate (% population aged 25-54)		81.5	82.0	81.8	81.9	82.8 b	83.2	83.1	83.7	83.9	84.3	85.4	
Activity rate (% population aged 55-64)		43.6	44.2	44.2	44.4	44.4 b	45.2	43.1	42.1	42.4	41.1	41.6	
Total unemployment (000)		493	448	417	388	485	639	882	1195	1330	1274	1197	
Unemployment rate (% labour force)		10.0	9.0	8.4	7.8	9.6	12.7	17.9	24.5	27.5	26.5	24.9	
Youth unemployment rate (% labour force 15-24)		25.6	25.0	23.7	21.9	24.0	44.7	55.3	65.6	68.6	68.6	68.6	
Long term unemployment rate (% labour force)		5.2	4.9	4.2	3.7	3.9	5.7	8.8	14.5	18.5	19.5	18.2	
Share of long term unemployment (% of total unemployment)		51.9	54.1	49.7	47.1	40.4	44.6	49.3	59.1	67.1	73.5	73.1	
Youth unemployment ratio (% population aged 15-24)		8.7 b	8.0	7.0	6.6	7.9 b	9.9	13.0	16.1	16.5	14.7	12.9	
Employment rate for low skilled 25-64 (ISCED 0-2)		57.7 b	59.5	59.9	60.2	59.8 b	58.1	53.9	48.4	46.3	46.9 b	48.5	
Employment rate for medium skilled 25-64 (ISCED 3-4)		69.6 b	69.8	69.5	69.9	68.5 b	66.5	62.0	57.2	54.1	54.5 b	56.4	
Employment rate for high skilled 25-64 (ISCED 5-8)		82.2 b	85.4	85.0	85.0	82.5 b	80.0	75.1	71.4	69.1	68.5 b	68.7	
Employment rate (Nationals aged 15-64)		59.1 b	60.1	60.4	60.4	60.4 b	58.6	54.7	50.0	49.0	49.0	50.8	
Employment rate (Other EU28 aged 15-64)		64.0	62.2	61.6	63.0 b	64.3	61.7	53.7	49.7	51.9	54.0		
Employment rate (Other than EU28 aged 15-64)		68.8	68.4	69.9	67.2 b	63.9	58.0	47.9	45.4	50.0	50.4		
Employment rate (Born in the same country aged 15-64)		59.1 b	60.1	60.4	60.8	60.3 b	58.5	54.8	50.9	48.9	49.3	50.6	
Employment rate (Born in other EU28 aged 15-64)		63.7	62.7	62.4	62.6 b	64.3	60.6	53.3	50.6	53.3	56.2		
Employment rate (Born outside EU28 aged 15-64)		67.4	67.0	68.4	66.2 b	63.4	57.5	48.7	46.6	49.5	51.5		
Underemployment (% of labour force aged 15-74)					2.0	2.4 b	2.7	3.2	3.9	4.4	5.0	5.1	
Seeking but not available (% of labour force aged 15-74)	0.4	0.5	0.5	0.4	0.4 b	0.5	0.5	0.7	0.9	0.9	0.9		
Discouraged, available but not seeking (% of labour force aged 15-74)	0.8	0.9	0.8	0.9	1.1 b	1.1	1.3	1.9	2.0	1.9	2.1		

[Click here to download table.](#)

Greece		2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015
Labour Market Indicators - Male	Total population (000)	5418	5433	5442	5448	5456	5461	5453	5424	5366	5313	5268
	Population aged 15-64(000)	3685	3698	3704	3709	3707	3697	3673	3629	3564	3504	3456
	Total employment (000)	2734	2762	2777	2772	2660	2447	2390	2168	2065	2066	2068
	Employment aged 15-64 (000)	2672	2697	2713	2722	2660	2542	2334	2126	2027	2017	2048
	Employment rate (% population aged 20-64)	73.3	73.9	74.2	74.4	73.0 b	70.3	65.4	60.1	57.9	58.0	59.3
	Employment rate (% population aged 15-64)	29.9	29.5	29.1	28.3	27.3 b	24.2	19.4	16.1	14.6	15.8	15.2
	Employment rate (% population aged 15-24)	89.5	90.0	90.1	90.1	88.3 b	85.3	79.9	73.9	71.4	71.8	73.7
	Employment rate (% population aged 25-54)	58.8	59.2	59.1	59.2	57.8 b	56.5	52.3	47.7	46.0	44.0	44.9
	FTE employment rate (% population aged 20-64)	79.6 b	80.0	80.3	80.4	78.5 b	76.6	70.0	63.9	61.3	60.9	62.2
	Self-employed (% total employment)	35.4	35.1	34.6	34.5	35.1	35.5	36.2	37.3	37.7	37.0	35.9
	Part-time employment (% total employment)	2.2	2.7	2.5	2.6	2.9 b	3.5	4.3	4.7	5.4	6.5	6.7
	Fixed term contracts (% total employees)	6.4	5.7	5.8	6.3	6.7 b	6.9	6.6	5.4	5.6	6.7	7.0
	Employment in Services (% total employment)	62.2	62.8	62.5	62.1	62.1	64.0	66.3	66.7	67.8	68.3	
	Employment in Industry (% total employment)	26.6	26.3	26.8	27.2	26.6	24.6	22.4	21.2	19.6	18.9	
	Employment in Agriculture (% total employment)	11.2	10.9	10.7	10.7	11.3	11.4	11.3	12.1	12.6	12.8	
	Activity rate (% population aged 15-64)	78.4	78.5	78.4	78.4	78.4	77.2	76.9	76.9	76.9	76.0	75.9
	Activity rate (% population aged 15-24)	36.9	35.8	34.4	34.0	33.9 b	31.2	31.2	31.6	31.6	30.8	27.7
	Activity rate (% population aged 25-54)	94.6	94.7	94.6	94.4	94.4 b	94.2	93.5	93.6	93.6	93.1	93.1
	Activity rate (% population aged 55-64)	60.8	61.1	60.9	61.0	60.2 b	60.2	57.3	55.2	55.0	53.4	54.9
	Total unemployment (000)	181	167	154	151	204	290	426	595	669	635	579
	Unemployment rate (% labour force)	6.2	5.7	5.3	5.1	7.0	10.1	15.2	21.6	24.5	23.7	21.8
	Youth unemployment rate (% labour force 15-24)	18.9	17.6	15.5	16.9	19.5	26.8	38.8	48.5	53.8	47.4	45.2
	Long term unemployment rate (% labour force)	2.6	2.6	2.2	2.1	2.4	3.9	6.8	12.2	16.2	17.2	15.8
	Share of long term unemployment (% of total unemployment)	46.2	46.2	41.6	40.0	33.9	38.6	44.7	56.4	62.0	72.8	67.7
	Youth unemployment ratio (% population aged 15-24)	7.0 b	6.3	5.3	5.7	6.6 b	8.9	12.3	15.1	17.0	14.2	12.5
	Employment rate for low skilled 25-64 (ISCED 0-2)	78.7 b	79.7	79.9	80.0	78.1 b	74.7	68.5	61.5	58.2	58.6 b	60.2
	Employment rate for medium skilled 25-64 (ISCED 3-4)	85.5 b	85.7	85.6	85.5	83.0 b	80.6	75.6	69.5	66.8	67.0 b	68.9
	Employment rate for high skilled 25-64 (ISCED 5-8)	87.7 b	88.3	87.9	87.7	87.3 b	84.8	80.1	76.4	74.5	72.5 b	73.1
	Employment rate (Nationals aged 15-64)	72.6 b	73.2	73.4	73.3	72.1 b	69.7	64.9	60.3	58.1	57.8	59.2
	Employment rate (Other EU28 aged 15-64)	79.6 b	77.2	77.5	74.9 b	77.6	71.5	61.1	57.3	57.5	56.9	60.0
	Employment rate (Other than EU28 aged 15-64)	86.4	86.8	88.3	87.7 b	76.5	70.3	66.8	55.1	59.3	59.3	
	Employment rate (Born in the same country aged 15-64)	72.6 b	73.2	73.3	73.3	72.1 b	69.6	64.9	60.3	58.0	57.9	59.1
	Employment rate (Born in other EU28 aged 15-64)	80.2	78.8	77.1	74.5 b	78.0	71.2	61.6	56.7	61.8	68.8	
	Employment rate (Born outside EU28 aged 15-64)	83.9	85.2	86.4	81.2 b	76.0	69.5	57.4	55.9	58.2	59.2	
	Underemployment (% of labour force aged 15-74)				1.2	1.4 b	1.9	2.6	2.8	3.3	4.0	4.7
	Seeking but not available (% of labour force aged 15-74)	0.3	0.3	0.3	0.3	0.3 b	0.3	0.3	0.5	0.6	0.6	0.7
Discouraged, available but not seeking (% of labour force aged 15-74)	0.4	0.4	0.4	0.4	0.5 b	0.6	0.6	1.0	1.1	0.9	1.1	
Labour Market Indicators - Female	Total population (000)	5551	5571	5594	5613	5639	5668	5670	5663	5637	5614	5590
	Population aged 15-64(000)	3624	3637	3653	3669	3682	3684	3676	3651	3617	3584	3555
	Total employment (000)	1710	1765	1787	1824	1834	1789	1664	1527	1448	1480	1524
	Employment aged 15-64 (000)	1689	1743	1763	1							

Greece		2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015		
Social indicators	All	At-risk-of-poverty or exclusion (% of total population)	29.4	29.3	28.3	28.1	27.6	27.7	31.0	34.6	35.7	36.0	35.7	
		At-risk-of-poverty (% of total population)	19.6	20.5	20.3	20.1	19.7	20.1	21.4	23.1	23.1	22.1	21.4	
		At-risk-of-poverty threshold (PPS single person)	6450	6697	6873	7219	7521	7559	6976	6038	5427	5166	5281	
		Poverty gap (%)	23.9	25.8	26.0	24.7	24.1	23.4	26.1	29.9	32.7	31.3	30.6	
		Persistent at-risk-of-poverty (% of total population)			13.1	13.0	16.1	17.6	10.5	13.8	12.4	14.5		
		At-risk-of-poverty before social transfers excl. pensions (% of total population)	22.6	23.4	23.7	23.3	22.7	23.8	24.8	26.8	28.0	26.0	25.5	
		Impact of social transfers (excl. pensions) in reducing poverty (%)	13.3	12.4	14.4	13.7	13.2	15.6	13.7	13.8	17.5	15.0	16.1	
		Severe Material Deprivation (% of total population)	12.8	11.5	11.5	11.2	11.0	11.6	15.2	19.5	20.3	21.5	22.2 p	
		Share of people living in low work intensity households (% of people aged 0-59)	7.6	8.1	8.1	7.5	6.6	7.6	12.0	14.2	18.2	17.2	16.8	
		Real Gross Household Disposable income (growth %)	-0.7	5.7	2.9	1.1	0.9	-11.1	-10.6	-8.9	-6.6	0.8	-3.0	
		Income quintile share ratio S80/S20	5.8	6.1	6.0	5.9	5.8	5.6	6.0	6.6	6.6	6.5	6.5	
		GINI coefficient	33.2	34.3	34.3	33.4	33.1	32.9	33.5	34.3	34.4	34.4	34.5	34.2
		Early leavers from education and training (% of population aged 18-24)	13.3	15.1 b	14.3	14.4 b	14.2 b	13.5	12.9	11.3	10.1	9.0 b	7.9	
		NEET: Young people not in employment, education or training (% of total population aged 15-24)	15.9	17.0 b	11.3	11.4 b	12.4 b	14.8	17.4	20.2	20.4	19.1	17.2	
	At-risk-of-poverty or exclusion (% of male population)	27.1	27.5	26.8	26.3	26.1	26.0	29.6	33.9	34.6	35.3	34.8		
	At-risk-of-poverty (% of male population)	18.3	19.5	19.6	19.6	19.1	19.3	20.9	22.5	22.4	22.2	21.5		
	Poverty gap (%)	23.7	25.8	25.6	24.4	24.4	23.4	27.2	29.9	32.9	32.1	32.9		
	Persistent at-risk-of-poverty (% of male population)			12.4	11.3	15.6	16.3	10.4	14.0	11.7	13.5			
	Severe Material Deprivation (% of male population)	11.8	11.0	10.6	10.1	10.2	10.9	14.9	19.9	20.3	21.2	22.1 p		
	Share of people living in low work intensity households (% of males aged 0-59)	6.2	6.6	6.5	6.0	5.3	6.5	11.0	12.9	17.5	16.0	15.5		
	Life expectancy at birth (years)	76.8	77.2	76.9	75.5	77.8	78.0	78.0	78.0	78.0	78.7	78.9		
	Healthy life years at birth (years) - men	65.9	66.5	66.0	65.6 b	66.1	66.1	66.2	64.8	64.7	64.1			
	Early leavers from education and training (% of males aged 18-24)	17.1	19.6 b	18.2	18.0 b	17.9 b	16.4	15.9	13.7	12.7	11.5 b	9.4		
	NEET: Young people not in employment, education or training (% of males aged 15-24)	12.5	8.7 b	8.1	8.8 b	9.5 b	12.7	16.1	19.0	20.9	18.7	17.1		
	At-risk-of-poverty or exclusion (% of female population)	31.6	31.1	29.9	29.8	29.0	29.3	32.3	35.2	36.8	36.7	36.6		
	At-risk-of-poverty (% of female population)	20.9	21.4	20.9	20.7	20.2	20.9	21.9	23.6	23.8	22.0	21.2		
	Poverty gap (%)	23.9	25.7	26.3	25.0	24.1	23.4	25.6	29.1	32.6	30.8	28.3		
	Persistent at-risk-of-poverty (% of female population)			13.8	14.7	16.6	18.7	10.6	13.5	13.0	15.5			
	Severe Material Deprivation (% of female population)	13.8	11.9	12.3	12.2	11.7	12.2	15.4	19.1	20.3	21.8	22.2 p		
	Share of people living in low work intensity households (% of females aged 0-59)	9.0	9.7	9.8	9.0	8.0	8.6	13.0	15.6	18.9	18.4	18.0		
	Life expectancy at birth (years)	81.6	81.9	82.5	83.0 b	82.7	83.3	83.6	83.4	84.0	84.1			
	Healthy life years at birth (years) - women	67.4	68.1	67.6	66.2 b	66.8	67.7	66.9	64.9	65.1	64.8			
	Early leavers from education and training (% of females aged 18-24)	9.5	10.6 b	10.3	10.6 b	10.5 b	10.6	10.0	8.9	7.5	6.6 b	6.4		
	NEET: Young people not in employment, education or training (% of females aged 15-24)	19.4	15.3 b	14.5	14.1 b	15.2 b	16.9	18.7	21.3	20.0	19.6	17.2		
	At-risk-of-poverty or exclusion of children (% of people aged 0-17)	26.0	27.9	28.2	28.7	30.0	28.7	30.4	33.4	36.1	36.7	37.8		
	At-risk-of-poverty (% of Children population)	20.4	22.6	23.3	23.0	23.7	23.0	23.7	26.9	28.8	25.5	26.6		
	Severe Material Deprivation (% of Children population)	10.1	9.5	9.7	10.4	12.2	12.2	16.4	20.9	23.3	23.8	25.7 p		
	Share of children living in low work intensity households (% of Children population)	4.2	4.3	4.6	3.9	2.7	3.9	7.2	7.6	13.8	10.2	10.6		
	Risk of poverty of children in households at work (Working Intensity > 0.2)	17.8	20.5	21.3	21.4	22.8	21.6	19.2	22.1	20.4	20.6	21.2		
	Impact of social transfers (excl. pensions) in reducing poverty (0-17) (%)	9.7	9.2	14.0	10.9	6.0	10.9	10.6	9.7	18.2	17.7	18.4		
	At-risk-of-poverty or exclusion (% of Working age population)	27.9	28.4	27.8	27.9	27.1	27.7	31.6	37.7	39.1	40.1	39.4		
	At-risk-of-poverty (% of Working age population)	17.1	18.4	18.7	18.7	18.1	19.0	20.0	23.8	24.1	23.5	22.5		
Severe Material Deprivation (% of Working age population)	11.7	10.6	10.2	10.4	10.3	11.2	15.4	20.7	21.6	22.9	23.5 p			
Very low work intensity (18-59)	8.6	9.3	9.2	8.6	7.8	8.7	13.5	16.3	19.6	19.4	18.7			
In-work at-risk of poverty rate (% of persons employed 18-64)	12.7	13.7	14.1	14.2	13.7	13.9	11.9	15.1	13.0	13.2	13.4			
Impact of social transfers (excl. pensions) in reducing poverty (18-64) (%)	13.6	12.8	13.4	13.8	13.0	14.4	13.0	14.4	16.3	14.5	14.8			
At-risk-of-poverty or exclusion of elderly (% of people aged 65+)	37.9	33.8	30.6	28.1	26.8	26.7	29.3	23.5	23.1	23.0	22.8			
At-risk-of-poverty (% of Elderly population)	27.9	25.6	22.9	22.3	21.4	21.3	23.6	17.2	15.1	14.9	13.7			
Severe Material Deprivation (% of Elderly population)	19.4	16.4	17.4	14.8	12.1	12.4	13.1	14.5	13.7	15.5	15.2 p			
Relative median income of elderly (ratio with median income of people younger than 65)	0.79	0.82	0.83	0.86	0.86	0.84	0.81	1.01	1.04	1.0	1.04			
Aggregate replacement ratio (ratio)	0.49	0.49	0.40	0.41	0.41	0.42	0.45	0.52	0.60	0.60	0.61			
Sickness/Health care	5.7 p	5.6 p	5.8 p	6.3 p	6.9 p	7.1 p	6.5 p	6.1 p	5.7 p	5.0 p				
Disability	1.2 p	1.2 p	1.3 p	1.4 p	1.5 p	1.6 p	1.7 p	1.8 p	1.6 p	1.7 p				
Old age and survivors	11.5 p	11.4 p	11.7 p	12.6 p	13.7 p	14.3 p	16.0 p	16.2 p	16.2 p	16.6 p				
Family/Children	0.8 p	0.8 p	0.9 p	0.9 p	1.0 p	1.0 p	1.1 p	1.0 p	1.1 p	1.1 p				
Unemployment	0.7 p	1.1 p	1.0 p	1.2 p	1.4 p	1.6 p	1.7 p	1.4 p	1.3 p	1.1 p				
Housing and Social exclusion n.e.c.	0.1 p	0.1 p	0.1 p	0.1 p	0.1 p	0.1 p	0.1 p	0.1 p	0.1 p	0.1 p				
Total (including Admin and other expenditures)	20.4 p	20.6 p	21.3 p	22.8 p	25.1 p	26.2 p	27.7 p	28.2 p	26.7 p	26.0 p				
of which: Means tested benefits	0.7 p	0.7 p	0.8 p	0.8 p	0.8 p	0.9 p	0.9 p	0.9 p	1.2 p	1.2 p				

[Click here to download table.](#)

## Spain

Spain		2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015
Macro Economic indicators (Annual % growth)	Real GDP	4.7	4.2	3.8	1.1	-3.6	0.0	-1.0	-2.9	-1.7	1.4 p	3.2 p
	Total employment	4.3	4.2	3.3	0.2	-6.3	-1.7	-2.7	-4.0	-2.6	0.9 p	2.5 p
	Labour productivity	-0.5	0.0	0.5	0.9	2.9	1.8	1.7	1.1	0.9	0.5 p	0.7 p
	Annual average hours worked per person employed	-0.9	-0.6	-0.7	0.5	0.4	-0.5	0.3	-0.8	-0.5	0.2 p	0.3 p
	Real productivity per hour worked	0.4	0.6	1.2	0.4	2.5	2.3	1.4	2.0	1.4	0.3 p	0.4 p
	Harmonized CPI	3.4	3.6	2.8	4.1	-0.2	2.0	3.0	2.4	1.5	-0.7 p	-0.6
	Price deflator GDP	4.1	4.0	3.3	2.1	0.3	0.2	0.0	0.1	0.4	-0.3 p	0.5 p
	Nominal compensation per employee	2.9	3.3	4.6	6.7	4.5	0.2	0.7	-1.4	0.3	0.1 p	0.9 p
	Real compensation per employee (GDP deflator)	-1.2	-0.7	1.3	4.5	4.3	0.0	0.7	-1.5	0.0	0.4 p	0.4 p
	Real compensation per employee (private consumption deflator)	-0.4	-0.2	1.7	2.5	4.8	-1.9	-2.3	-3.8	-1.2	0.3 p	1.6 p
	Nominal unit labour costs	3.5	3.3	4.1	5.7	1.6	-1.6	-1.0	-2.6	-0.6	-0.3 p	0.2 p
	Real unit labour costs	-0.5	-0.7	0.7	3.5	1.3	-1.7	-1.0	-2.6	-1.0	-0.1 p	-0.3 p
	Total population (000)	43296	44010	44785	45669	46239	46487	46667	46818	46728	46512	46450
	Population aged 15-64 (000)	25865	30306	30852	31480	31746	31742	31670	31613	31376	31005	30808
Total employment (000)	19207	19939	20580	20470	19107	18825	18421	17633	17139	17344	17866	
Employment aged 15-64 (000)	19068	19792	20437	20317	18958	18574	18271	17477	17002	17211	17718	
Employment rate (% population aged 20-64)	67.5 b	69.0	69.7	68.5	64.0	62.8	62.0	59.6	58.6	59.9	62.0	
Employment rate (% population aged 15-64)	63.6 b	65.0	65.8	64.5	60.0	58.8	58.0	55.8	54.8	56.0	57.8	
Employment rate (% population aged 15-24)	38.5 b	39.6	39.2	36.0	28.0	25.0	22.0	18.4	16.8	16.7	17.9	
Employment rate (% population aged 25-54)	74.8 b	76.1	77.1	75.6	71.0	70.0	69.1	66.7	65.8	67.4	69.4	
Employment rate (% population aged 55-64)	43.1 b	44.1	44.5	45.5	44.0	43.5	44.5	43.9	43.2	44.3	46.9	
FTE employment rate (% population aged 20-64)	64.2 b	65.6	66.5	65.2	60.5	59.2	58.2	55.6	54.2	55.4	57.5	
Self-employed (% total employment)	16.4	16.4	16.4	16.5	15.9	15.9	15.6	16.6	17.2	17.0	16.7	
Part-time employment (% total employment)	12.0 b	11.6	11.4	11.6	12.4	12.9	13.5	14.4	15.7	15.8	15.6	
Fixed term contracts (% total employees)	33.4 b	34.0	31.6	29.1	25.2 b	24.7	25.1	23.4	23.1	24.0	25.1	
Employment in Services (% total employment)	67.4	68.3	69.0	70.8	73.5	74.6	75.9	77.1 p	77.8 p	78.2 p		
Employment in Industry (% total employment)	27.9	27.4	27.0	25.4	22.6	21.3	20.1	18.9 p	18.1 p	17.7 p		
Employment in Agriculture (% total employment)	4.7	4.2	4.0	3.8	3.9	4.0	4.0	4.0	4.1	4.0		
Activity rate (% population aged 15-64)	70.0 b	71.1	71.8	72.7	73.1	73.5	73.9	74.3	74.3	74.2	74.3	
Activity rate (% population aged 15-24)	47.9 b	48.2	47.9	47.7	45.0	42.7	40.9	39.0	37.8	35.7	34.7	
Activity rate (% population aged 25-54)	81.2 b	82.3	83.1	84.0	84.8	85.7	86.2	86.9	87.2	87.3	87.4	
Activity rate (% population aged 55-64)	46.0 b	46.8	47.4	49.1	50.0							

Spain		2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015
Labour Market Indicators - Male	Total population (000)	21355	21719	22119	22591	22881	22982	23049	23099	23018	22877	22827
	Population aged 15-64(000)	15097	15347	15632	15977	16112	16089	16033	15979	15824	15611	15490
	Total employment (000)	11485	11809	12067	11805	10733	10424	10153	9608	9316	9443	9766
	Employment aged 15-64 (000)	11391	11707	11968	11708	10643	10338	10068	9520	9237	9364	9676
	Employment rate (% population aged 20-64)	79.8 b	80.7	80.6	77.9	71.0	69.2	67.7	64.6	63.4	65.0	67.6
	Employment rate (% population aged 15-64)	75.1 b	76.1	76.1	73.3	66.5	64.8	63.4	60.3	59.2	60.7	62.9
	Employment rate (% population aged 15-24)	54.9 b	44.4	44.2	39.3	28.4	25.6	22.1	18.5	17.3	17.4	18.6
	Employment rate (% population aged 25-54)	86.8 b	87.5	87.5	84.2	77.3	75.9	74.6	71.3	70.4	72.5	75.1
	Employment rate (% population aged 55-64)	59.4 b	60.2	59.6	60.5	56.4	54.5	53.8	52.1	50.5	51.2	54.0
	FTE employment rate (% population aged 20-64)	79.1 b	80.0	80.1	77.2	70.0	68.0	66.3	62.9	61.4	63.0	65.5
	Self-employed (% total employment)	19.4	19.6	19.7	20.1	19.4	19.5	19.3	20.6	21.3	21.0	20.6
	Part-time employment (% total employment)	4.4 b	4.2	3.9	4.0	4.7	5.2	5.8	6.4	7.7	7.7	7.8
	Fixed term contracts (% total employees)	25.4 b	25.6	24.4	21.8	18.9	18.9	19.3	17.5	17.4	18.6	19.9
	Employment in Services (% total employment)	54.9 b	55.3	55.9	58.0	61.4	63.0	64.5	66.4	67.1	67.9	68.6
	Employment in Industry (% total employment)	39.3 b	39.4	39.1	37.1	33.4	31.6	30.1	28.1	27.0	26.4	26.0
	Employment in Agriculture (% total employment)	5.8 b	5.2	5.1	5.0	5.2	5.4	5.4	5.5	5.9	5.7	5.7
	Activity rate (% population aged 15-64)	80.9 b	81.2	81.4	81.6	80.8	80.6	80.4	80.1	79.8	79.5	79.5
	Activity rate (% population aged 15-24)	52.5 b	52.2	52.2	51.5	48.2	45.0	42.6	40.3	39.6	37.3	36.2
	Activity rate (% population aged 25-54)	92.3 b	92.4	92.5	92.4	92.2	92.4	92.5	92.6	92.4	92.6	92.6
	Activity rate (% population aged 55-64)	62.9 b	63.3	62.8	64.7	63.6	63.7	63.5	63.6	63.3	64.3	66.2
	Total unemployment (000)	882	801	826	1320	2300	2536	2706	3131	3206	2916	2559
	Unemployment rate (% labour force)	7.1	6.4	6.4	10.1	17.7	19.6	21.1	24.6	25.6	23.6	20.8
	Youth unemployment rate (% labour force 15-24)	16.7	15.0	15.2	23.6	39.1	43.1	48.2	54.1	56.2	53.4	48.6
	Long term unemployment rate (% labour force)	1.5	1.2	1.1	1.4	3.7	7.1	8.6	10.7	12.5	12.3	10.5
	Share of long term unemployment (% of total unemployment)	20.5	18.4	17.4	14.1	21.1	36.0	40.8	43.5	48.9	52.0	50.4
	Youth unemployment ratio (% population aged 15-24)	8.8 b	7.8	7.9	12.1	18.8	19.4	20.5	21.8	22.3	20.0	17.6
	Employment rate for low skilled 25-64 (ISCED 0-2)	77.6 b	77.9	77.4	73.8	65.5	63.2	61.6	57.0	55.8	57.4 b	60.5
	Employment rate for medium skilled 25-64 (ISCED 3-4)	85.9 b	86.6	85.4	83.6	77.1	75.9	74.4	71.9	69.9	71.5 b	73.9
	Employment rate for high skilled 25-64 (ISCED 5-8)	87.3 b	88.2	89.2	87.9	84.6	83.3	82.3	80.7	79.9	80.8 b	82.4
	Employment rate (Nationals aged 15-64)	74.7 b	75.5	75.8	73.5	67.7	65.7	64.4	61.3	60.2	61.4	63.4
	Employment rate (Other EU28 aged 15-64)	79.8	79.0	79.7	75.7	65.4	63.1	60.4	58.7	58.3	60.3	65.2
	Employment rate (Other than EU28 aged 15-64)	80.5	78.2	70.9	56.9	57.1	54.8	50.4	48.7	51.4	55.9	55.9
	Employment rate (Born in the same country aged 15-64)	74.5 b	75.4	75.6	73.4	67.6	65.6	64.4	61.4	60.3	61.5	63.4
Employment rate (Born in other EU28 aged 15-64)	80.6	79.7	76.6	67.4	64.7	62.3	60.2	59.7	61.6	66.5	66.5	
Employment rate (Born outside EU28 aged 15-64)	80.4	78.6	71.6	58.7	58.5	56.4	52.4	50.6	53.5	57.4	57.4	
Underemployment (% of labour force aged 15-74)	1.4	2.0	2.4	2.0	2.4	2.0	2.4	3.2	3.9	4.0	4.0	
Seeking but not available (% of labour force aged 15-74)	1.0 b	0.9	0.9	0.7	0.8	0.7	0.8	0.8	0.8	0.8	0.7	
Discouraged, available but not seeking (% of labour force aged 15-74)	2.3 b	1.8	1.5	1.7	2.3	2.5	2.4	2.8	3.0	3.0	2.6	
Total population (000)	21961	22291	22666	23077	23359	23504	23618	23719	23710	23635	23623	
Population aged 15-64(000)	14768	14959	15220	15504	15634	15633	15638	15618	15552	15395	15314	
Total employment (000)	7722	8131	8513	8665	8374	8301	8269	8025	7823	7902	8106	
Employment aged 15-64 (000)	7677	8065	8469	8608	8314	8236	8205	7957	7765	7847	8006	
Employment rate (% population aged 20-64)	55.1 b	57.1	58.6	58.9	56.8	56.3	56.1	54.6	53.8	54.8	56.4	
Employment rate (% population aged 15-64)	51.8 b	53.8	55.3	55.4	53.3	52.8	52.6	51.2	50.3	51.2	52.7	
Employment rate (% population aged 15-24)	33.0 b	34.5	34.0	32.6	26.7	24.3	22.0	18.3	16.3	16.0	17.3	
Employment rate (% population aged 25-54)	62.3 b	64.4	66.3	66.5	64.4	63.9	63.4	62.0	61.2	62.3	63.7	
Employment rate (% population aged 55-64)	27.7 b	28.9	30.2	31.2	32.1	33.1	35.6	36.0	36.3	37.8	40.2	
FTE employment rate (% population aged 20-64)	49.4 b	51.3	52.9	53.1	51.0	50.4	50.2	48.3	47.2	48.1	49.8	
Self-employed (% total employment)	11.9	11.7	11.8	11.8	11.5	11.5	11.8	11.8	12.3	12.2	12.1	
Part-time employment (% total employment)	23.4 b	22.4	22.1	21.9	22.3	22.6	22.6	23.9	25.2	25.5	25.1	
Fixed term contracts (% total employees)	30.6 b	31.7	28.6	27.2	23.8	23.0	23.3	21.8	21.1	21.4	22.1	
Employment in Services (% total employment)	65.4 b	66.5	66.9	67.6	68.6	68.9	69.6	69.5	70.2	70.3	70.3	
Employment in Industry (% total employment)	11.5 b	10.6	10.6	10.0	9.1	8.8	8.1	8.2	7.7	7.6	7.6	
Employment in Agriculture (% total employment)	3.1 b	2.8	2.6	2.4	2.3	2.3	2.3	2.3	2.1	2.1	2.1	
Activity rate (% population aged 15-64)	58.9 b	60.7	61.9	63.6	65.1	66.3	67.3	68.4	68.7	68.8	69.0	
Activity rate (% population aged 15-24)	43.0 b	44.0	43.4	43.7	41.7	40.2	39.2	37.6	35.9	34.0	33.2	
Activity rate (% population aged 25-64)	69.8 b	71.8	73.1	75.3	72.7	71.8	70.1	68.1	67.1	68.0	69.0	
Activity rate (% population aged 55-64)	29.9 b	31.2	32.7	34.2	37.1	38.4	41.8	43.9	45.2	46.9	49.4	
Total unemployment (000)	1052	1040	1020	1276	1854	2104	2307	2680	2846	2694	2497	
Unemployment rate (% labour force)	12.0	11.4	10.7	12.8	18.1	20.2	21.8	25.1	26.7	25.4	23.6	
Youth unemployment rate (% labour force 15-24)	23.4	21.5	21.7	25.5	36.1	39.6	44.0	51.4	54.6	52.9	48.0	
Long term unemployment rate (% labour force)	3.3	2.7	2.4	2.8	4.9	7.6	9.3	11.4	13.5	13.7	12.4	
Share of long term unemployment (% of total unemployment)	20.7	24.0	22.8	22.0	27.3	42.6	45.3	50.5	52.8	53.8	52.8	
Youth unemployment ratio (% population aged 15-24)	10.1 b	9.5	9.4	11.2	15.1	15.9	17.2	19.4	19.6	18.0	15.9	
Employment rate for low skilled 25-64 (ISCED 0-2)	39.6 b	41.4	43.2	43.8	41.9	42.1	42.3	40.8	40.1	40.7 b	41.7	
Employment rate for medium skilled 25-64 (ISCED 3-4)	64.3 b	65.7	67.2	67.1	64.7	62.5	61.4	60.8	59.2	60.1 b	61.3	
Employment rate for high skilled 25-64 (ISCED 5-8)	78.2 b	79.4	80.4	79.9	78.4	77.1	76.4	74.5	73.2	74.0 b	75.2	
Employment rate (Nationals aged 15-64)	50.9 b	52.9	54.6	54.9	53.1	52.7	52.8	51.6	50.8	51.8	53.1	
Employment rate (Other EU28 aged 15-64)	62.1	59.4	56.1	56.1	52.9	51.2	51.1	52.3	51.2	54.3		
Employment rate (Other than EU28 aged 15-64)	60.4	59.2	59.5	52.4	52.5	52.5	52.7	51.4	50.7	51.7		
Employment rate (Born in the same country aged 15-64)	50.7 b	52.6	54.3	54.5	52.8	52.5	52.7	51.4	50.7	51.3		
Employment rate (Born in other EU28 aged 15-64)	62.1	60.4	57.6	57.0	52.9	51.4	52.3	52.8	51.8	54.6		
Employment rate (Born outside EU28 aged 15-64)	61.0	60.8	60.6	55.0	54.9	52.1	49.0	46.7	47.9	49.5		
Underemployment (% of labour force aged 15-74)	6.4	7.4	7.8	8.3	9.3	10.0	10.3	9.7	9.7	9.7		
Seeking but not available (% of labour force aged 15-74)	1.9 b	1.8	1.8	1.5	1.4	1.3	1.3	1.3	1.2	1.2	1.2	
Discouraged, available but not seeking (% of labour force aged 15-74)	8.8 b	7.4	5.7	5.6	6.2	6.3	6.1	6.7	7.2	6.8	5.9	

[Click here to download table.](#)

Spain		2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	
Social Indicators	All	At-risk-of-poverty or exclusion (% of total population)	24.3	24.0	23.3	23.8 b	24.7	26.1	26.7	27.2	27.3	29.2	28.6
		At-risk-of-poverty (% of total population)	20.1	20.3	19.7	19.8 b	20.4	20.7	20.6	20.8	20.4	22.2	22.1
		At-risk-of-poverty threshold (PP5 single person)	6896	7335	7614	9026 b	9338	8967	8655	8582	8500	8517	8678
		Poverty gap (%)	25.6	26.4	25.9	25.6 b	25.7	26.8	27.4	30.6	30.9	31.6	33.8
		Persistent at-risk-of-poverty (% of total population)	11.3	11.2	10.9	12.0	12.5	12.7 b	13.3	15.1	15.2	14.5	15.8
		At-risk-of-poverty before social transfers excl. pensions (% of total population)	24.5	24.6	23.7	25.7 b	26.9	28.8	30.0	29.1	30.0	31.1	30.1
		Impact of social transfers (excl. pensions) in reducing poverty (%)	18.0	17.5	16.9	23.0 b	24.2	28.1	31.3	28.5	32.0	28.6	26.6
		Severe Material Deprivation (% of total population)	4.1	4.1	3.5	3.6	4.5	4.9	4.5	5.8	6.2	7.1	6.4 p
		Share of people living in low work intensity households (% of people aged 0-59)	6.9	6.4	6.8	6.6	7.6	10.8	13.4	14.3	15.7	17.1	15.4
		Real Gross Household Disposable income (growth %)	2.7	2.1	0.7	1.8	2.8	-3.4	-1.5	-5.7	-1.9	0.7	2.1
		Income quintile share ratio S80/S20	5.5	5.5	5.5	5.6 b	5.9	6.2	6.3	6.5	6.3	6.8	6.9
		Gini coefficient	32.2	31.9	31.8	32.0	32.9	34.0	34.2	33.7	35.2	34.7	34.6
		Early leavers from education and training (% of population aged 18-24)	31.0 b	30.3 b	30.8	31.7	30.9	28.2	26.3	24.7	23.6	21.9 b	20.0
		NEET: Young people not in employment, education or training (% of total population aged 15-24)	13.0										

## France

France		2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015
Macro Economic Indicators (Annual % growth)	Real GDP	1.6	2.4	2.4	0.2	-2.9	2.0	2.1	0.2	0.6	0.6	1.3
	Total employment	0.7	1.1	1.4	0.5	-1.1	0.1	0.8	0.3	0.3	0.5	0.5
	Labour productivity	0.9	1.3	0.9	-0.3	-1.8	1.8	1.3	-0.1	0.3	0.2	0.8
	Annual average hours worked per person employed	-0.4	-1.6	1.1	0.5	-1.2	0.3	0.2	-0.4	-1.2	-0.6	0.3
	Real productivity per hour worked	1.3	2.9	-0.2	-0.7	-0.6	1.5	1.1	0.3	1.5	0.8	0.5
	Harmonized CPI	1.9	1.9	1.6	3.2	0.1	1.7	2.3	2.2	1.0	0.6	0.1
	Price deflator GDP	1.9	2.2	2.6	2.4	0.1	1.1	0.8	1.2	0.8	0.5	0.6
	Nominal compensation per employee	3.1	3.2	2.5	2.6	1.6	2.8	2.3	2.2	1.6	1.1	1.1
	Real compensation per employee (GDP deflator)	1.1	1.0	0.0	0.3	1.5	1.7	1.3	1.0	0.8	0.6	0.5
	Real compensation per employee (private consumption deflator)	1.1	1.3	0.9	-0.5	1.5	1.1	0.0	0.0	0.6	0.5	1.0
	Nominal unit labour costs	2.1	1.9	1.6	2.9	3.5	1.0	1.0	2.3	1.2	0.9	0.3
	Real unit labour costs	0.1	-0.3	-0.9	0.5	3.4	-0.1	0.1	1.1	0.5	0.4	-0.4
	Total population (000)	62773	63230	63645	64007	64350	64659	64979	65277	65500	65889	66415
	Population aged 15-64 (000)	40827	41164	41469	41683	41809	41912	42033	41959	41885	41798	41846
	Total employment (000)	24984	25150	25587	25926	25674	25731	25759	25805	25779	26396	26424
Employment aged 15-64 (000)	24873	25050	25459	25793	25545	25561	25568	25540	26129	26119	26119	
Employment rate (% population aged 20-64)	69.4	69.4	69.9	70.5	69.5	69.3	69.2	69.4	69.5	69.8	70.0	
Employment rate (% population aged 15-64)	63.8	63.7	64.3	64.9	64.1	64.0	63.9	64.0	64.0	64.2	64.3	
Employment rate (% population aged 15-24)	30.4	30.0	31.2	31.4	30.5	30.1	29.6	28.6	28.4	28.4	28.4	
Employment rate (% population aged 25-54)	80.8	81.3	82.1	83.2	82.1	82.0	81.5	80.9	80.6	80.4	79.9	
Employment rate (% population aged 55-64)	38.5	38.1	38.2	38.2	38.9	39.7	41.4	42.9	43.6	43.6	43.6	
FTE employment rate (% population aged 20-64)	65.0	64.9	65.4	66.0	65.0	64.6	64.5	64.7	64.8	64.5	64.7	
Self-employed (% total employment)	9.9	10.4	10.3	10.0	10.3	10.9	11.1	11.0	10.8	11.2	11.2	
Part-time employment (% total employment)	17.1	17.1	17.2	16.8	17.2	17.6	17.6	17.7	18.1	18.5	18.3	
Fixed term contracts (% total employees)	13.9	14.8	15.1	15.1	14.5	15.1	15.4	15.3	15.4	15.4	16.1	
Employment in Services (% total employment)	77.1	77.4	77.6	77.7	78.0	78.6	78.9	79.1	79.3	79.6	79.6	
Employment in Industry (% total employment)	19.6	19.5	19.4	19.3	19.1	18.5	18.3	18.1	17.9	17.9	17.6	
Employment in Agriculture (% total employment)	3.3	3.2	3.2	3.2	2.9	2.8	2.8	2.8	2.8	2.8	2.8	
Activity rate (% population aged 15-64)	69.7	69.6	69.7	69.9	70.3	70.3	70.1	70.7	71.1	71.4	71.5	
Activity rate (% population aged 15-24)	38.1	38.1	38.4	38.5	39.6	38.9	37.9	37.4	37.4	37.1	37.3	
Activity rate (% population aged 25-54)	87.3	87.6	87.9	88.5	88.6	88.7	88.2	88.2	88.3	88.2	87.8	
Activity rate (% population aged 55-64)	40.4	40.1	40.0	39.8	41.2	42.2	43.9	47.4	49.0	50.7	52.6	
Total unemployment (000)	2478	2482	2268	2121	2622	2680	2665	2855	3032	3052	3054	
Unemployment rate (% labour force)	8.9	8.8	8.0	7.4	9.1	9.5	9.2	9.8	10.5	10.3	10.4	
Youth unemployment rate (% labour force 15-24)	21.0	22.0	19.0	18.5	22.7	24.4	23.9	24.4	25.6	26.0	24.7	
Long term unemployment rate (% labour force)	4.4	3.5	3.0	2.6	3.0	3.5	3.6	3.7	4.0	4.2	4.3	
Share of long term unemployment (% of total unemployment)	40.1	41.0	39.2	36.6	34.5	39.5	40.7	39.6	40.2	42.5	42.6	
Youth unemployment ratio (% population aged 15-24)	7.7	8.1	7.2	7.1	9.1	8.8	8.3	8.8	9.0	9.0	9.1	
Employment rate for low skilled 25-64 (ISCED 0-2)	58.6	58.1	57.9	57.7	56.4	55.8	55.9	55.7	54.3	53.3	52.2	
Employment rate for medium skilled 25-64 (ISCED 3-4)	75.6	75.5	75.7	75.8	74.9	74.6	73.7	73.6	73.2	72.5	72.6	
Employment rate for high skilled 25-64 (ISCED 5-8)	82.9	82.9	83.4	84.6	85.5	85.6	83.8	84.3	84.3	83.8	83.9	
Employment rate (Nationals aged 15-64)	64.4	64.4	65.0	65.5	64.8	64.7	64.6	64.8	64.8	64.8	64.8	
Employment rate (Other EU28 aged 15-64)	67.0	67.0	66.1	66.0	64.8	67.0	68.0	65.1	67.6	66.7	65.4	
Employment rate (Other than EU28 aged 15-64)	44.8	46.1	50.2	46.3	46.3	45.7	46.4	46.0	45.0	44.2	44.2	
Employment rate (Born in the same country aged 15-64)	64.6	64.5	65.2	65.6	65.0	64.8	64.8	65.0	65.1	64.9	65.1	
Employment rate (Born in other EU28 aged 15-64)	64.7	64.4	64.4	64.4	64.8	67.1	67.6	65.8	67.7	67.0	65.8	
Employment rate (Born outside EU28 aged 15-64)	54.2	55.7	58.3	55.3	54.8	54.1	54.8	53.4	53.0	53.5	52.5	
Underemployment (% of labour force aged 15-74)	1.8	1.7	1.6	1.5	1.6	1.7	1.8	1.9	1.8	1.8	1.8	
Seeking but not available (% of labour force aged 15-74)	1.3	1.4	1.3	1.3	1.4	1.4	1.4	1.2	1.2	2.3	2.4	

[Click here to download table.](#)

France		2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015
Labour Market Indicators - Total	Total population (000)	30386	30591	30803	30980	31148	31302	31463	31605	31773	31919	32180
	Population aged 15-64(000)	20214	20371	20521	20616	20669	20715	20771	20725	20685	20640	20665
	Total employment (000)	13387	13587	13820	13958	13820	13820	13820	13820	13820	13820	13820
	Employment aged 15-64 (000)	13294	13336	13468	13512	13406	13427	13415	13369	13293	13254	13248
	Employment rate (% population aged 20-64)	75.4	75.1	75.1	75.6	74.3	74.0	74.0	73.9	73.7	73.6	73.6
	Employment rate (% population aged 15-64)	69.3	69.0	69.2	69.7	68.4	68.3	68.2	68.1	67.9	67.7	67.5
	Employment rate (% population aged 15-24)	33.8	33.5	34.2	34.4	32.6	33.2	32.5	31.0	31.0	30.6	30.3
	Employment rate (% population aged 25-54)	87.7	88.0	88.4	89.3	87.7	87.4	86.8	86.0	85.2	84.9	84.1
	Employment rate (% population aged 55-64)	41.5	40.5	40.5	40.6	41.5	42.3	44.1	47.5	48.4	48.9	50.8
	FTE employment rate (% population aged 20-64)	74.1	73.8	74.0	74.5	72.9	72.9	74.0	72.3	72.9	74.0	71.4
	Self-employed (% total employment)	13.4	14.0	13.9	13.2	14.0	14.7	14.9	14.6	14.3	14.6	14.6
	Part-time employment (% total employment)	5.6	5.6	5.5	5.6	5.8	6.4	6.5	6.4	6.7	7.3	7.3
	Fixed term contracts (% total employees)	11.3	12.0	12.0	11.9	11.2	12.0	12.5	12.2	12.6	12.2	13.0
	Employment in Services (% total employment)	66.8	66.6	67.0	67.0	66.9	67.8	68.6	68.7	68.9	69.3	69.3
	Employment in Industry (% total employment)	28.7	28.9	28.8	29.1	29.1	28.3	27.6	27.5	27.2	26.7	26.7
Employment in Agriculture (% total employment)	4.5	4.4	4.2	3.9	3.9	3.9	3.8	3.8	3.9	3.9	3.9	
Activity rate (% population aged 15-64)	75.2	74.9	74.9	74.9	74.9	74.9	74.9	74.9	74.9	74.9	74.9	
Activity rate (% population aged 15-24)	41.9	42.0	41.9	42.2	42.9	41.9	41.9	40.8	40.8	40.5	40.5	
Activity rate (% population aged 25-54)	94.0	94.1	94.1	94.4	94.3	94.2	93.7	93.6	93.3	93.1	92.7	
Activity rate (% population aged 55-64)	43.6	42.7	42.5	42.4	44.0	45.0	46.8	50.8	52.3	53.1	55.1	
Total unemployment (000)	1209	1223	1132	1057	1360	1372	1344	1492	1589	1614	1654	
Unemployment rate (% labour force)	8.1	8.2	7.6	7.0	9.0	9.0	8.9	9.8	10.4	10.6	10.8	
Youth unemployment rate (% labour force 15-24)	20.1	21.1	19.0	19.2	24.7	22.9	22.1	24.8	24.7	25.2	25.8	
Long term unemployment rate (% labour force)	3.1	3.3	2.9	2.6	3.0	3.5	3.6	3.8	4.1	4.5	4.6	
Share of long term unemployment (% of total unemployment)	39.0	41.0	39.3	38.8	34.8	41.1	41.5	40.4	40.6	45.9	43.5	
Youth unemployment ratio (% population aged 15-24)	8.2	8.6	7.7	7.8	10.3	9.4	8.8	9.8	9.7	10.2	10.4	
Employment rate for low skilled 25-64 (ISCED 0-2)	67.0	65.8	65.3	65.9	64.1	62.9	63.0	63.3	61.9	60.4	58.9	
Employment rate for medium skilled 25-64 (ISCED 3-4)	81.1	80.7	80.5	80.3	79.1	78.8	78.1	77.6	76.7	76.1	76.2	
Employment rate for high skilled 25-64 (ISCED 5-8)	86.5	86.8	86.9	88.1	86.9	87.0	87.2	87.6	87.3	86.4	86.7	
Employment rate (Nationals aged 15-64)	69.5	69.2	69.5	69.9	68.8	68.5	68.4	68.4	68.1	67.6	67.6	
Employment rate (Other EU28 aged 15-64)	74.1	74.1	74.2	74.5	74.8	74.2	74.5	70.7	73.3	71.5	70.0	
Employment rate (Other than EU28 aged 15-64)	57.4	57.4	59.5	62.8	56.8	60.0	58.9	60.3	60.0	56.5	57.2	
Employment rate (Born in the same country aged 15-64)	69.5	69.2	69.4	69.8	68.8	68.5	68.6	68.4	68.1	67.8	67.8	
Employment rate (Born in other EU28 aged 15-64)	72.6	71.1	70.4	70.6	73.1	72.9	70.9	73.4	70.8	70.8	69.6	
Employment rate (Born outside EU28 aged 15-64)	64.9	66.2	68.3	63.8	64.5	63.4	64.6	64.0	61.6	61.0	61.0	
Underemployment (% of labour force aged 15-74)	1.4	1.2	1.1	1.1	1.2	1.3	1.4	1.5	1.5	1.5	1.5	
Seeking but not available (% of labour force aged 15-74)	0.9	1.0	0.9	0.9	1.0	1.0	1.0	1.0	1.0	1.0	1.0	
Discouraged, available but not seeking (% of labour force aged 15-74)	32.87	32.69	32.82	33.02	33.02	33.57	33.51	33.67	33.82	33.97	34.25	
Total population (000)	20613	20793	20948	21067	21139	21197	21262	21234	21198	21158	21182	
Population aged 15-64(000)	11625	11753	12042	12234	12189	12211	12228	12297	12346	12313	12266	
Total employment (000)	11580	11713	11992	12181	12139	12154	12149	12199	12247	12265		

France		2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	
Social indicators	All	At-risk-of-poverty or exclusion (% of total population)	18.9	18.8	19.0	18.5 b	18.5	19.2	19.3	19.1	18.1	18.5	17.7
		At-risk-of-poverty (% of total population)	13.0	13.2	13.1	12.5 b	12.9	13.3	14.0	14.1	13.7	13.3	13.6
		At-risk-of-poverty threshold (PPS single person)	8702	8989	9089	10496 b	10644	10669	10897	11271	11516	11584	11931
		Poverty gap (%)	16.5	18.5	17.9	14.5 b	18.2	19.5	17.1	16.2	16.8	16.6	15.7
		Persistent at-risk-of-poverty (% of total population)			6.4					7.0	8.3	7.9	8.5
		At-risk-of-poverty before social transfers excl. pensions (% of total population)	26.0	24.9	26.4	23.5 b	24.0	24.9	24.7	23.8	24.4	24.0	23.9
		Impact of social transfers (excl. pensions) in reducing poverty (%)	50.0	47.0	50.4	46.0 b	46.3	46.6	43.3	40.8	43.9	44.6	43.1
		Severe Material Deprivation (% of total population)	5.3	5.0	4.7	5.4	5.6	5.8	5.2	5.3	4.9	4.8	4.5
		Share of people living in low work intensity households (% of people aged 0-59)	8.7	9.1	9.6	8.8	8.4	9.9	9.4	8.4	8.1	9.6	8.6
		Real Gross Household Disposable income (growth %)	1.0	2.4	3.0	0.4	1.7	1.3	0.2	-0.8	-0.3	0.7	1.7
		Income quintile share ratio S80/S20	4.0	4.0	3.9	4.4 b	4.4	4.4	4.6	4.5	4.5	4.3	4.3
		GINI coefficient	27.7	27.3	26.6	29.8 b	29.9	29.8	30.8	30.5	30.1	29.2	29.2
	Early leavers from education and training (% of population aged 18-24)	12.5	12.7	12.8	11.8	12.4	12.7	12.3	11.8	9.7 b	9.0 b	9.2	
	NEET: Young people not in employment, education or training (% of total population aged 15-24)	11.2	11.3	10.7	10.5	12.7	12.7	12.3	12.5	11.2 b	11.4 b	12.0	
	At-risk-of-poverty or exclusion (% of male population)	12.3	12.3	12.8	11.7 b	11.9	12.7	13.5	13.6	13.1	12.6	13.2	
	At-risk-of-poverty (% of male population)	16.6	19.1	18.0	14.7 b	18.8	19.5	17.8	16.3	16.7	17.1	15.7	
	Poverty gap (%)			5.9					6.3	8.3	7.5	7.8	
	Persistent at-risk-of-poverty (% of male population)			5.9					6.3	8.3	7.5	7.8	
	Severe Material Deprivation (% of male population)	5.0	4.6	4.4	5.1	5.2	5.7	5.1	5.1	4.5	4.5	4.4	
	Share of people living in low work intensity households (% of males aged 0-59)	7.8	8.2	8.6	8.1	7.6	9.2	9.0	8.4	7.5	8.9	8.3	
	Life expectancy at birth (years)	76.7	77.3	77.6	77.8	78.0	78.2	78.7	78.7	78.7	79.0	79.5	
	Healthy life years at birth (years) - men	62.3	62.8	62.8	62.8	62.8	61.8	62.7	62.6	63.0	63.4	63.4	
	Early leavers from education and training (% of males aged 18-24)	14.3	14.6	15.2	13.8	14.5	15.3	14.1	13.7	10.7 b	10.2 b	10.1	
	NEET: Young people not in employment, education or training (% of males aged 15-24)	10.4	10.4	10.0	10.4	13.3	12.7	12.0	12.9	11.0 b	11.8 b	12.4	
	At-risk-of-poverty or exclusion (% of female population)	20.0	20.3	20.0	19.7 b	19.7	19.9	19.9	19.6	18.9	19.5	18.2	
	At-risk-of-poverty (% of female population)	13.7	14.0	13.4	13.3 b	13.8	13.9	14.5	14.6	14.3	14.1	13.9	
	Poverty gap (%)	16.5	18.4	17.7	14.4 b	18.0	19.7	16.4	16.2	16.8	16.1	15.7	
	Persistent at-risk-of-poverty (% of female population)			6.9					7.7	8.4	8.3	9.1	
	Severe Material Deprivation (% of female population)	5.5	5.3	5.0	5.7	5.9	5.8	5.4	5.5	5.4	5.1	4.7	
	Share of people living in low work intensity households (% of females aged 0-59)	9.5	10.0	10.6	9.6	9.1	10.5	9.7	8.5	8.6	10.4	8.8	
	Life expectancy at birth (years)	83.8	84.5	84.8	84.8	85.0	85.3	85.7	85.4	85.6	86.0	86.0	
	Healthy life years at birth (years) - women	64.6	64.4	64.4	64.5	63.5	63.4	63.6	63.8	64.4	64.2	64.2	
	Early leavers from education and training (% of females aged 18-24)	10.6	10.8	10.5	9.9	10.3	10.2	10.4	10.0	8.6 b	7.9 b	8.4	
	NEET: Young people not in employment, education or training (% of females aged 15-24)	12.0	12.3	11.3	10.7	12.1	12.6	12.6	12.1	11.4 b	11.0 b	11.5	
	At-risk-of-poverty or exclusion of children (% of people aged 0-17)	19.4	18.1	19.6	21.0 b	21.2	22.9	23.0	23.2	20.8	21.6	21.2	
	At-risk-of-poverty (% of Children population)	14.4	13.9	15.3	15.6 b	16.8	18.1	18.8	19.0	17.6	17.7	18.7	
	Severe Material Deprivation (% of Children population)	6.2	5.6	5.4	6.6	6.5	7.0	7.0	7.2	5.6	5.7	5.4	
	Share of children living in low work intensity households (% of Children population)	7.0	6.9	7.7	7.4	6.6	8.8	8.2	7.2	6.3	8.1	7.4	
	Risk of poverty of children in households at work (Working Intensity > 0.2)	10.5	9.2	10.6	11.5	12.8	12.7	13.6	14.3	13.5	12.6	13.3	
	Impact of social transfers (excl. pensions) in reducing poverty (0-17) (%)	57.7	54.9	58.5	55.3 b	51.5	50.0	47.5	44.3	48.1	48.4	45.2	
	At-risk-of-poverty or exclusion (% of Working age population)	18.8	19.4	19.7	18.8 b	18.9	19.9	20.1	19.8	19.3	19.9	19.0	
	At-risk-of-poverty (% of Working age population)	11.6	12.1	12.3	11.6 b	11.8	12.7	13.5	13.7	13.7	13.2	13.4	
Severe Material Deprivation (% of Working age population)	5.4	5.3	4.8	5.5	5.9	6.0	5.2	5.4	5.4	5.2	5.0		
Very low work intensity (18-59)	9.3	10.0	10.4	9.4	9.1	10.3	9.8	8.9	8.8	10.3	9.0		
In-work at-risk-of-poverty rate (% of persons employed 18-64)	6.1	6.0	6.4	6.5 b	6.6	6.5	7.6	8.0	7.8	8.0	7.5		
Impact of social transfers (excl. pensions) in reducing poverty (18-64) (%)	52.7	49.6	50.4	47.3 b	47.8	48.0	43.8	41.0	43.9	45.2	44.6		
At-risk-of-poverty or exclusion of elderly (% of people aged 65+)	18.5	17.5	15.2	14.1 b	13.4	11.8	11.5	11.1	10.8	10.1	9.3		
At-risk-of-poverty (% of Elderly population)	16.4	16.1	15.1	11.9 b	11.9	9.4	9.7	9.4	9.1	8.6	8.0		
Severe Material Deprivation (% of Elderly population)	3.5	2.9	3.4	3.5	3.2	3.4	2.9	2.4	2.6	2.4	1.9		
Relative median income of elderly (ratio with median income of people younger than 65)	0.90	0.88	0.91	0.95 b	0.96	0.98	1.01	1.0	1.03	1.02	1.04		
Aggregate replacement ratio (ratio)	0.57	0.58	0.60	0.65 b	0.66	0.65	0.64	0.65	0.66	0.69	0.69		
Sickness/Health care	8.6	8.5	8.4	8.4	8.0	8.9	8.8	9.0	9.0	9.2	9.2		
Disability	1.9	1.9	1.8	1.8	2.0	2.0	2.0	2.1	2.1	2.1	2.1		
Old age and survivors	12.4	12.5	12.6	12.9	13.8	13.9	14.0	14.3	14.5	14.6	14.6		
Family/Children	2.5	2.5	2.4	2.4	2.6	2.5	2.5	2.5	2.5	2.5	2.5		
Unemployment	2.0	1.7	1.6	1.5	1.9	1.9	1.9	2.0	2.0	2.0	1.9		
Housing and Social exclusion n.e.c.	1.4	1.5	1.5	1.6	1.8	1.7	1.7	1.7	1.7	1.8	1.8		
Total (including Admin and Other expenditures)	30.5	30.4	30.1	30.4	32.9	32.9	32.7	33.5	33.9	34.3	34.3		
of which: Means tested benefits	3.2	3.4	3.3	3.3	3.7	3.6	3.5	3.6	3.7	3.7	3.7		
Expenditure in social protection indicators (% of GDP)													

[Click here to download table.](#)

## Croatia

Croatia		2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015
Macro Economic indicators (Annual % growth)	Real GDP	4.2	4.8	5.2	2.1	-7.4	-1.7	-0.3	-2.2	-1.1	-0.5	1.6
	Total employment	0.7	3.9	9.7	3.8	-0.7	-3.8	-3.9	-3.5	-2.7	2.7	1.5
	Labour productivity	3.4	0.9	-4.1	-1.7	-6.7	2.1	3.8	1.4	1.7	-3.1	0.1
	Annual average hours worked per person employed					-0.2	0.7	0.0	-1.0	-0.5	-0.9	-3.4
	Real productivity per hour worked					-6.5	1.4	3.8	2.4	2.3	-2.2	3.7
	Harmonized CPI	3.0	3.3	2.7	5.8	2.2	1.1	2.2	1.4	2.3	0.2	-0.3
	Price deflator GDP	3.4	4.0	4.1	5.7	2.8	0.8	1.7	1.6	0.8	2.0	0.2
	Nominal compensation per employee	5.6	3.2	9.0	3.4	-0.3	2.2	4.4	0.1	-0.6	-5.4	-0.3
	Real compensation per employee (GDP deflator)	2.1	-0.8	4.7	-2.2	-3.0	1.4	2.7	-1.5	-1.4	-5.5	-0.4
	Real compensation per employee (private consumption deflator)	2.5	-0.1	6.1	-2.3	-2.4	1.1	2.2	-3.2	-2.9	-5.6	-0.1
	Nominal unit labour costs	2.1	2.3	13.6	5.2	6.9	0.1	0.6	-1.3	-2.3	-2.4	-0.5
	Real unit labour costs	-1.2	-1.7	9.2	-0.5	4.0	-0.7	-1.1	-2.8	-3.1	-2.3	-0.6
	Total population (000)	4311	4312	4314	4312	4310	4303	4296	4278	4276	4262	4247
	Population aged 15-64 (000)	2877	2876	2879	2875	2875	2875	2874	2865	2865	2852	2836
	Total employment (000)	1575	1586	1734	1771	1757	1690	1625	1566	1524	1566	1589
Employment aged 15-64 (000)	1512	1526	1694	1725	1708	1649	1584	1528	1494	1542	1564	
Employment rate (% population aged 20-64)	59.9 e	60.6 e	63.9	64.9	64.2	62.1	59.8	58.1	57.2	59.2	60.5	
Employment rate (% population aged 15-64)	55.0 e	55.6 e	59.0	60.0	59.4	57.4	55.2	53.5	52.5	54.6	55.8	
Employment rate (% population aged 15-24)	26.2 e	26.1 e	27.4	28.0	27.1	24.2	20.6	17.4	14.9	18.3	19.0	
Employment rate (% population aged 25-54)	71.7 e	72.1 e	74.5	76.0	74.7	72.6	70.6	69.2	68.3	71.2	72.2	
Employment rate (% population aged 55-64)	32.1 e	34.1 e	36.6	37.1	39.4	39.1	38.2	37.5	37.8	36.2	39.0	
FTE employment rate (% population aged 20-64)	58.7 b	59.2 b	62.6	63.6	62.8	60.5	58.2	56.9	56.0	58.1	59.2	
Self-employed (% total employment)	22.5	20.8	18.5	18.7	18.5	19.2	19.0	17.4	16.5	14.1	13.7	
Part-time employment (% total employment)	7.6 e	7.1 e	6.1	6.5	6.5	7.0	7.2	5.6	5.4	5.3	5.9	
Fixed term contracts (% total employees)	12.4 b	12.9	13.2	12.3	12.0	12.8	13.5	13.3	14.5	17.0 b	20.4	
Employment in Services (% total employment)			57.5	56.5	57.8	58.5	57.7	60.1	61.8	63.7	65.7	
Employment in Industry (% total employment)			28.9	30.7	28.9	27.3	27.8	27.8	27.5	26.9	26.9	
Employment in Agriculture (% total employment)			13.6	12.7	13.3	14.2	14.5	12.2	10.7	9.5	9.5	
Activity rate (% population aged 15-64)	63.3 e	63.0 e	65.7	65.8	65.6	65.1	64.1	63.9	63.7	66.1	66.8	
Activity rate (% population aged 15-24)	38.4 e	36.5 e	36.6	36.3	35.9	32.5	30.1	29.9	33.6	33.3	33.3	
Activity rate (% population aged 25-54)	80.6 e	80.1 e	81.6	81.9	81.2	80.8	80.6	80.9	80.8	84.1	84.4	
Activity rate (% population aged 55-64)	34.6 e	36.3 e	39.0	39.3	41.8	41.8	41.4	41.8	41.9	41.0	44.1	
Total unemployment (000)	240	215.1	191	165	178	222	257	297	318	327	309	
Unemployment rate (% labour force)	13.0	11.61	9.9	8.6	9.2							

Croatia		2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	
Labour Market Indicators - Male	Total population (000)	2072	2074	2076	2077	2077	2075	2069	2062	2056	2050	2039	
	Population aged 15-64(000)	1431	1432	1435	1435	1436	1436	1436	1432	1426	1419	1405	
	Total employment (000)	867	868	970	988	962	920	894	896	821	849	857	
	Employment aged 15-64 (000)	835	839	951	966	937	899	872	835	803	836	843	
	Employment rate (% population aged 20-64)	67.3 e	67.7 e	72.1	72.9	70.5	67.9	66.1	63.7	61.6	64.2	65.2	
	Employment rate (% population aged 15-64)	61.6 e	62.2 e	66.5	67.3	65.2	62.7	60.9	58.5	56.5	59.1	60.1	
	Employment rate (% population aged 15-24)	30.7 e	30.0 e	32.4	34.2	32.3	27.9	23.8	20.6	17.4	21.2	22.2	
	Employment rate (% population aged 25-54)	77.7 e	78.2 e	81.0	82.2	79.3	76.4	75.1	73.0	71.6	74.5	75.2	
	Employment rate (% population aged 55-64)	42.5 e	44.6 e	49.5	48.9	49.6	50.5	49.6	48.0	45.0	45.8	48.0	
	FTE employment rate (% population aged 20-64)	66.9 b	66.7 b	71.3	72.3	69.8	66.9	65.0	62.9	60.7	63.5	64.3	
	Self-employed (% total employment)	24.3	23.3	21.0	21.2	21.2	21.2	21.3	20.0	19.4	17.6	17.3	
	Part-time employment (% total employment)	5.3 e	5.6 e	4.6	4.9	4.9	5.1	5.6	4.6	4.6	4.2	4.7	
	Fixed term contracts (% total employees)	9.5 e	10.0 e	10.0	9.6	8.8	9.5	10.4	10.7	12.0	13.7	17.0	
	Employment in Services (% total employment)			48.8	47.3	48.1	49.0	48.8	50.8	50.6	52.5	52.5	
	Employment in Industry (% total employment)			38.5	40.9	39.3	37.8	37.3	37.0	38.0	36.7	37.0	
	Employment in Agriculture (% total employment)			12.6	11.8	12.6	13.1	13.9	12.2	11.5	10.8	10.7	
	Activity rate (% population aged 15-64)	700 e	693 e	730	725	710	706	707	698	689	709	715	
	Activity rate (% population aged 15-24)	43.4 e	40.8 e	41.6	43.1	42.4	40.7	37.8	34.6	34.7	38.5	38.3	
	Activity rate (% population aged 25-54)	85.9 e	85.1 e	87.4	86.9	84.5	84.1	85.4	85.2	84.7	86.6	86.8	
	Activity rate (% population aged 55-64)	46.6 e	48.0 e	53.2	52.1	52.7	54.4	54.2	53.9	51.0	52.1	54.7	
	Total unemployment (000)	119	102.1	95	75	83	114	141	162	176	167	159	
	Unemployment rate (% labour force)	11.8	10.21	8.8	7.1	7.9	11.1	13.7	16.0	17.7	16.5	15.7	
	Youth unemployment rate (% labour force 15-24)	29.6	26.61	22.2	20.6	23.7	31.5	37.0	42.1	49.9	44.9	41.9	
	Long term unemployment rate (% labour force)	5.9 e	5.4 e	5.0	4.2	3.9	5.9	8.4	10.2	11.3	9.6	10.1	
	Share of long term unemployment (% of total unemployment)	50.3 e	53.3 e	56.5	59.5	49.7	53.4	61.3	63.6	63.8	58.2	64.4	
	Youth unemployment ratio (% population aged 15-24)	130.0 b	109.9 b	9.2	8.9	10.1	12.8	14.0	14.6	17.3	17.3	16.0	
	Employment rate for low skilled 25-64 (ISCED 0-2)	590 b	556 b	592	613	605	581 b	54.2	51.2	49.8	47.6 b	49.9	
	Employment rate for medium skilled 25-64 (ISCED 3-4)	705 b	721 b	764	768	736	711 b	706	677	650	671 b	68.5	
	Employment rate for high skilled 25-64 (ISCED 5-8)	806 b	81.9 b	846	833	807 b	784	783	786	786	809 b	812	
	Employment rate (Nationals aged 15-64)			62.0 b	66.5	67.3	65.4	62.8	60.8	58.4	56.4	59.1	60.2
	Employment rate (Other EU28 aged 15-64)				60.1 u				80.1 u	89.1 u	85.8 u		
	Employment rate (Other than EU28 aged 15-64)									90.0 u	43.3 u		
	Employment rate (Born in the same country aged 15-64)			62.0 b	66.4	67.1	65.1	62.8	61.1	59.1	57.0	59.1	59.8
	Employment rate (Born in other EU28 aged 15-64)			64.9 b	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
Employment rate (Born outside EU28 aged 15-64)			61.4 b	66.8	68.7	65.6	60.9	58.7	52.4	59.0	52.4	52.4	
Underemployment (% of labour force aged 15-74)				1.7	2.0	2.3	2.2	1.8	1.9	1.4	2.1	2.1	
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	0.5 u	
Discouraged, available but not seeking (% of labour force aged 15-74)		4.3 e	3.7	3.6	4.5	4.5	4.6	6.0	8.2	7.4	7.1	7.1	
2239													
Total population (000)	2239	2239	2237	2235	2233	2228	2221	2214	2206	2197	2186		
Population aged 15-64(000)	1446	1444	1444	1440	1439	1438	1438	1438	1434	1426	1418	1404	
Total employment (000)	706	718	764	783	795	770	731	710	703	717	732		
Employment aged 15-64 (000)	676	687	743	759	772	749	711	695	690	706	724		
Employment rate (% population aged 20-64)	52.8 e	53.6 e	55.9	57.0	58.0	56.4	53.6	52.6	52.8	54.2	55.8		
Employment rate (% population aged 15-64)	48.6 e	49.3 e	51.6	52.7	53.7	52.1	49.5	48.5	48.5	50.0	51.5		
Employment rate (% population aged 15-24)	21.5 e	21.9 e	22.3	21.4	21.7	20.4	17.2	14.7	14.2	15.3	15.6		
Employment rate (% population aged 25-54)	65.8 e	66.1 e	67.9	69.7	70.1	68.8	66.1	65.2	64.9	67.9	69.1		
Employment rate (% population aged 55-64)	23.3 e	25.1 e	25.0	26.4	30.0	28.5	27.7	27.7	31.0	27.3	30.6		
FTE employment rate (% population aged 20-64)	508 b	51.9 b	540	550	560	541	51.5	50.9	51.4	52.7	54.1		
Self-employed (% total employment)	20.3	17.6	15.3	15.6	15.2	16.9	16.2	14.3	15.0	10.1	9.4		
Part-time employment (% total employment)	10.4 e	9.0 e	8.1	8.4	8.5	8.4	8.5	6.9	6.4	6.7	7.3		
Fixed term contracts (% total employees)	9.8 e	10.1 e	11.7	10.4	10.9	11.4	11.3	11.3	12.2	15.1	17.7		
Employment in Services (% total employment)			68.3	68.1	69.6	69.8	68.5	71.3	74.9	76.8	76.8		
Employment in Industry (% total employment)			16.9	17.9	16.3	14.8	16.2	16.7	15.3	15.3	15.3		
Employment in Agriculture (% total employment)			14.8	13.9	14.1	15.4	15.3	12.1	9.8	7.9	7.9		
Activity rate (% population aged 15-64)	56.8 e	56.8 e	58.4	59.0	60.3	59.6	57.6	58.0	58.5	61.3	62.2		
Activity rate (% population aged 15-24)	33.2 e	32.0 e	31.5	29.9	30.0	26.9	24.9	25.3	24.8	28.6	28.2		
Activity rate (% population aged 25-64)	70.6 e	71.1 e	75.4	76.9	77.8	77.4	75.8	76.8	76.8	81.5	81.9		
Activity rate (% population aged 55-64)	24.5 e	26.3 e	26.1	27.6	31.8	30.2	29.6	30.6	33.4	30.6	34.2		
Total unemployment (000)	121	113.1	98	90	95	108	116	135	142	160	150		
Unemployment rate (% labour force)	14.4	13.31	11.4	10.4	10.7	12.4	13.8	16.1	16.8	18.3	17.0		
Youth unemployment rate (% labour force 15-24)	35.0	31.81	29.3	28.3	27.5	33.6	36.1	42.0	50.2	46.4	44.5		
Long term unemployment rate (% labour force)	8.5 e	7.5 e	7.2	6.7	6.5	7.5	8.5	10.2	10.6	10.7	10.5		
Share of long term unemployment (% of total unemployment)	70.6 b	66.4 e	63.5	64.7	60.9	59.3	61.4	63.7	65.2	58.3	61.5		
Youth unemployment ratio (% population aged 15-24)	116.5 b	98.8 b	9.2	8.5	8.2	10.3	10.6	12.4	13.2	12.5	12.5		
Employment rate for low skilled 25-64 (ISCED 0-2)	372.2 b	346.2 b	370	385	40.7	390 b	36.5	34.5	32.0	32.7 b	33.7		
Employment rate for medium skilled 25-64 (ISCED 3-4)	584 b	60.2 b	624	626	603 b	576	56.4	57.2	56.6 b	58.3			
Employment rate for high skilled 25-64 (ISCED 5-8)	805 b	80.7 b	816	832	82.6	813 b	79.3	77.5	77.0	80.2 b	80.6		
Employment rate (Nationals aged 15-64)			49.5 b	51.6	52.8	53.7	52.2	49.6	48.6	48.6	50.0	51.5	
Employment rate (Other EU28 aged 15-64)													
Employment rate (Other than EU28 aged 15-64)						33.8 u	39.2 u	52.6	49.9	49.0	49.2	30.4 u	
Employment rate (Born in the same country aged 15-64)			50.6 b	52.4	53.4	54.1	52.6	49.9	49.0	49.2	50.3	51.7	
Employment rate (Born in other EU28 aged 15-64)			46.2 bu	51.0 u	59.8	70.5	60.5	59.3	52.7 u	55.7 u	51.8 u	56.2 u	
Employment rate (Born outside EU28 aged 15-64)			40.9 b	43.8	45.7	48.6	46.9	44.4	43.4	41.0	46.7	49.0	
Underemployment (% of labour force aged 15-74)				1.8	1.9	2.4	2.6	1.9	1.7	2.3	2.5		
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		
Discouraged, available but not seeking (% of labour force aged 15-74)			9.1 e	8.3	7.2	7.1	7.6	9.6	10.9	13.8	10.2	10.2	

[Click here to download table.](#)

Croatia		2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015
Social Indicators	All	At-risk-of-poverty or exclusion (% of total population)					31.1	32.6	32.6	29.9	29.3	29.1
		At-risk-of-poverty (% of total population)					20.6 b	20.9	20.4	19.5	19.4	20.0
		At-risk-of-poverty threshold (PPS single person)					4567 b	4454	4417	4448	4644	4956
		Poverty gap (%)					27.6	27.9	31.0	28.1	27.9	26.5
		Persistent at-risk-of-poverty (% of total population)									13.2	14.7
		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
		Impact of social transfers (excl. pensions) in reducing poverty (%)					31.3 b	31.9	33.3	34.3	35.1	35.5
		Severe Material Deprivation (% of total population)					14.3	15.2	15.9	14.7	13.9	13.7
		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
		Real Gross Household Disposable income (growth %)	1.5	2.7	3.0	2.7	-2.0	-0.7	-0.1	-2.7	-3.7	1.1
		Income quintile share ratio S80/S20					5.5 b	5.6	5.4	5.3	5.1	5.2
		GNI coefficient					31.6	31.2	30.9	30.9	30.2	30.6
	Early leavers from education and training (% of population aged 18-24)	15.1 bu	4.7 bu	4.5	4.4	5.2	5.2 b	5.0	5.1	4.5	2.7 b	2.8
	NEET: Young people not in employment, education or training (% of total population aged 15-24)	16.7 b	14.2 b	12.9	11.6	13.4	15.7	16.2	16.6	19.6	19.3	18.5
	NEET: Young people not in employment, education or training (% of males aged 15-24)											
	Male	At-risk-of-poverty or exclusion (% of male population)					30.1	31.7	31.8	29.6	28.6	28.5
		At-risk-of-poverty (% of male population)					19.7 b	19.7	19.4	18.8	18.7	19.3
		Poverty gap (%)					28.6	28.2	32.3	28.8	28.	

Italy

Italy		2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	
Macro Economic Indicators (Annual % growth)	Real GDP	0.9	2.0	1.5	-1.1	-5.5	1.7	0.6	-2.8	-1.7	0.1	0.7	
	Total employment	0.6	2.0	1.2	0.2	-1.7	-0.6	0.3	-0.3	-1.8	0.1	0.6	
	Labour productivity	0.4	0.0	0.2	-1.3	-3.9	2.3	0.3	-2.5	0.1	0.0	0.2	
	Annual average hours worked per person employed	-0.2	0.0	0.3	-0.6	-1.7	0.1	-0.2	-2.2	-0.9	-0.1	0.4	
	Real productivity per hour worked	0.6	0.0	-0.1	-0.7	-2.2	2.2	0.5	-0.3	0.9	0.2	-0.2	
	Harmonized CPI	2.2	2.2	2.0	3.5	0.8	1.6	2.9	3.5	1.2	0.2	0.1	
	Price deflator (GDP deflator)	1.9	1.9	2.4	2.5	2.0	0.3	1.5	1.4	1.2	0.9	0.6	
	Nominal compensation per employee	2.6	2.2	2.2	2.8	0.5	2.3	1.0	-1.1	0.8	0.1	0.8	
	Real compensation per employee (GDP deflator)	0.7	0.3	-0.2	0.4	-1.4	2.0	-0.5	-2.5	-0.4	-0.8	0.2	
	Real compensation per employee (private consumption deflator)	0.4	-0.1	0.2	-0.7	-0.2	0.6	-1.9	-4.2	-0.5	-0.1	0.7	
	Nominal unit labour costs	2.2	2.2	2.0	4.2	4.6	0.0	0.7	1.4	0.7	0.1	0.7	
	Real unit labour costs	0.3	0.4	-0.5	1.7	2.5	-0.3	-0.8	0.0	-0.4	-0.8	0.0	
	Labour Market Indicators - Total	Total population (000)	57875	58064	58224	58653	59001	59190	59365	59594	59885	60783	60796
		Population aged 15-64 (000)	38397	38335	38307	38553	38715	38764	38841	38960	38997	39220	39193
		Total employment (000)	22407	22758	22894	23090	22699	22527	22598	22566	22191	22279	22465
Employment aged 15-64 (000)		22060	22388	22517	22699	22324	22152	22215	22149	21755	21810	21973	
Employment rate (% population aged 20-64)		61.5	62.4	62.7	62.9	61.6	61.0	61.0	60.9	59.7	59.9	60.5	
Employment rate (% population aged 15-64)		57.6	58.3	58.6	58.6	57.4	56.8	56.8	56.6	55.5	55.7	56.3	
Employment rate (% population aged 15-24)		25.7	25.3	24.5	24.2	21.5	20.2	19.2	18.5	16.5	15.6	15.6	
Employment rate (% population aged 25-54)		72.3	73.2	73.4	73.4	71.8	71.1	71.1	70.4	68.5	67.9	68.2	
Employment rate (% population aged 55-64)		34.1	32.4	33.7	34.3	35.0	36.5	37.0	36.9	42.7	46.5	48.2	
FTE employment rate (% population aged 20-64)		58.1	58.9	59.0	59.0	57.9	57.1	57.0	56.4	55.0	55.1	55.6	
Self-employed (% total employment)		24.8	24.6	24.3	23.7	23.4	23.7	23.5	23.5	23.4	23.3	23.0	
Part-time employment (% total employment)		12.7	13.1	13.4	14.1	14.1	14.8	15.2	16.8	17.6	18.1	18.3	
Fixed term contracts (% total employees)		12.2	13.1	13.2	13.3	12.4	12.7	13.3	13.8	13.2	13.6	14.0	
Employment in Services (% total employment)		68.6	68.8	69.0	69.3	69.8	70.4	70.8	71.5	72.1	72.4	72.9	
Employment in Industry (% total employment)		27.3	27.1	27.1	26.9	26.4	25.8	25.4	24.8	24.2	23.9	23.5	
Employment in Agriculture (% total employment)		4.1	4.1	3.9	3.9	3.9	3.8	3.7	3.7	3.7	3.7	3.7	
Activity rate (% population aged 15-64)		62.5	62.6	62.4	62.9	62.3	62.0	62.1	63.5	63.4	63.9	64.0	
Activity rate (% population aged 15-24)		33.8	32.3	30.8	30.7	28.8	28.1	27.1	28.6	27.1	27.1	26.2	
Activity rate (% population aged 25-54)		77.4	77.8	77.5	78.1	77.2	76.9	76.9	77.8	77.1	77.0	76.8	
Activity rate (% population aged 55-64)		32.5	33.4	34.5	35.4	36.9	37.9	39.3	42.5	45.3	48.9	51.1	
Total unemployment (000)		1877	1654	1481	1664	1907	2056	2061	2091	3069	3236	3032	
Unemployment rate (% labour force)		7.7	6.8	6.1	6.7	7.7	8.4	8.4	10.7	12.1	12.7	11.9	
Youth unemployment rate (% labour force 15-24)		24.1	24.1	23.3	23.3	27.9	29.2	27.9	29.2	43.8	47.4	48.5	
Long term unemployment rate (% labour force)		3.7	3.3	2.9	3.0	3.4	4.0	4.3	5.6	6.9	7.7	6.9	
Share of long term unemployment (% of total unemployment)		48.1	48.5	46.9	45.2	44.3	48.0	51.4	52.6	56.4	60.8	58.1	
Youth unemployment ratio (% population aged 15-24)		8.2	7.0	6.3	6.5	7.3	7.8	7.9	10.1	10.9	11.6	10.6	
Employment rate for low skilled 25-64 (ISCED 0-2)		51.6	52.3	52.6	52.2	51.0	50.2	50.5	50.6	49.5	49.6	50.2	
Employment rate for medium skilled 25-64 (ISCED 3-4)		73.5	74.3	74.4	74.3	73.1	72.5	71.9	71.0	69.7	69.8	70.1	
Employment rate for high skilled 25-64 (ISCED 5-8)		80.5	80.6	80.2	80.7	79.4	78.4	79.2	78.8	78.1	77.8	78.5	
Employment rate (Nationals aged 15-64)		57.2	57.9	58.1	58.1	56.8	56.1	56.1	55.2	55.2	55.5	56.0	
Employment rate (Other EU28 aged 15-64)		68.9	70.2	69.5	69.5	68.1	66.5	66.5	65.6	63.3	62.6	63.3	
Employment rate (Other than EU28 aged 15-64)		66.7	66.1	66.0	62.6	60.8	60.5	58.5	56.1	56.7	56.9	57.3	
Employment rate (Born in the same country aged 15-64)		57.1	57.8	57.9	58.0	56.8	56.2	56.2	55.2	55.2	55.3	55.9	
Employment rate (Born in other EU28 aged 15-64)		63.1	63.3	64.5	63.9	63.8	62.7	61.8	60.1	60.1	60.1	60.8	
Employment rate (Born outside EU28 aged 15-64)		65.9	66.1	65.3	62.1	60.8	60.8	59.2	57.2	57.6	57.9	57.6	
Underemployment (% of labour force aged 15-74)		0.4	0.6	0.6	0.6	0.5	0.5	0.4	0.4	0.4	0.4	0.4	
Seeking but not available (% of labour force aged 15-74)		0.4	0.6	0.6	0.6	0.5	0.5	0.4	0.4	0.4	0.4	0.4	
Discouraged, available but not seeking (% of labour force aged 15-74)		8.9	9.0	10.3	10.5	10.5	11.1	11.6	11.7	12.1	13.2	13.6	

[Click here to download table.](#)

Italy		2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	
Labour Market Indicators - Male	Total population (000)	28044	28139	28212	28411	28570	28649	28715	28727	28890	29485	29502	
	Population aged 15-64(000)	19145	19114	19095	19198	19260	19262	19273	19211	19218	19566	19511	
	Total employment (000)	13745	13745	13745	13745	13375	13375	13375	13375	13375	13375	13375	
	Employment aged 15-64 (000)	13524	13463	13515	13513	13252	13088	13050	12873	12584	12590	12718	
	Employment rate (% population aged 20-64)	74.8	75.4	75.7	75.3	73.7	72.7	72.5	71.5	69.7	69.7	70.6	
	Employment rate (% population aged 15-64)	69.9	70.4	70.6	70.1	68.5	67.5	67.3	66.3	64.7	64.7	65.5	
	Employment rate (% population aged 15-24)	30.4	30.4	29.4	29.0	25.9	24.0	22.8	21.8	18.7	18.2	18.6	
	Employment rate (% population aged 25-54)	86.7	87.2	87.4	86.8	84.7	83.6	83.4	81.7	79.2	78.2	78.6	
	Employment rate (% population aged 55-64)	42.7	43.7	45.0	45.3	46.6	47.6	48.2	50.4	52.8	56.5	59.3	
	FTE employment rate (% population aged 20-64)	73.7	74.3	74.0	74.0	72.4	71.4	70.9	69.6	67.6	67.5	68.3	
	Self-employed (% total employment)	29.5	29.1	28.8	28.4	28.2	28.7	28.6	28.5	28.5	28.2	27.7	
	Part-time employment (% total employment)	4.3	4.3	4.6	4.8	4.7	5.1	5.4	6.6	7.4	7.8	8.0	
	Fixed term contracts (% total employees)	7.4	7.9	7.9	8.2	7.7	8.1	8.7	9.3	8.9	9.5	9.9	
	Employment in Services (% total employment)	59.8	59.8	59.8	59.7	59.8	60.1	60.8	61.4	62.2	62.3	62.3	
	Employment in Industry (% total employment)	35.5	35.5	35.7	35.8	35.6	35.2	34.6	34.1	33.2	33.0	33.0	
	Employment in Agriculture (% total employment)	4.7	4.7	4.5	4.5	4.6	4.7	4.6	4.6	4.6	4.7	4.7	
	Activity rate (% population aged 15-64)	74.7	74.5	74.5	74.5	73.5	73.5	73.5	72.8	72.5	73.5	74.1	
	Activity rate (% population aged 15-24)	38.8	37.6	36.0	35.7	33.5	32.8	31.2	32.9	30.7	31.0	30.4	
	Activity rate (% population aged 25-54)	91.3	91.3	91.0	91.0	90.0	89.4	89.2	89.4	88.3	87.7	87.7	
	Activity rate (% population aged 55-64)	44.3	45.0	46.2	46.8	48.4	49.5	50.5	53.6	56.6	60.2	63.3	
	Total unemployment (000)	894	788	708	804	976	1084	1084	1434	1674	1742	1670	
	Unemployment rate (% labour force)	6.2	5.4	4.9	5.5	6.7	7.5	7.5	9.8	11.5	11.9	11.3	
	Youth unemployment rate (% labour force 15-24)	21.6	19.2	18.4	18.8	23.2	26.9	27.1	33.7	39.0	41.3	38.8	
	Long term unemployment rate (% labour force)	2.8	2.8	2.8	2.8	3.5	3.8	3.5	5.0	6.5	7.1	6.6	
	Share of long term unemployment (% of total unemployment)	45.9	46.7	44.9	43.2	41.8	46.8	50.9	51.2	56.2	59.6	58.3	
	Youth unemployment ratio (% population aged 15-24)	8.4	7.2	6.6	6.7	7.8	8.8	8.5	11.1	12.0	12.8	11.8	
	Employment rate for low skilled 25-64 (ISCED 0-2)	70.7	71.3	71.4	70.5	69.0	67.8	67.7	66.5	64.4	64.1	64.9	
	Employment rate for medium skilled 25-64 (ISCED 3-4)	83.3	83.9	84.2	83.9	82.4	81.8	81.2	80.3	79.1	79.1	79.8	
	Employment rate for high skilled 25-64 (ISCED 5-8)	86.3	86.2	86.5	86.6	85.0	84.3	85.0	84.2	83.4	83.2	84.5	
	Employment rate (Nationals aged 15-64)	69.3	69.7	69.8	69.4	67.8	66.8	66.6	65.9	64.5	64.3	65.1	
	Employment rate (Other EU28 aged 15-64)	81.5	81.5	81.5	81.5	79.5	78.5	78.5	77.4	71.4	71.0	71.2	
	Employment rate (Other than EU28 aged 15-64)	83.7	83.0	81.7	76.5	74.9	75.0	70.6	66.9	67.0	67.0	68.7	
	Employment rate (Born in the same country aged 15-64)	69.2	69.5	69.6	69.2	67.6	66.6	66.3	65.6	64.2	64.1	64.9	
	Employment rate (Born in other EU28 aged 15-64)	81.0	81.9	80.5	78.2	77.1	75.6	72.5	69.2	69.3	69.3	70.3	
	Employment rate (Born outside EU28 aged 15-64)	82.5	82.6	81.1	76.9	75.6	75.6	72.2	68.4	68.5	69.9	69.9	
	Underemployment (% of labour force aged 15-74)	0.2	0.4	0.4	0.5	0.4	0.4	0.4	0.3	0.3	0.3	0.3	
	Seeking but not available (% of labour force aged 15-74)	0.2	0.4	0.4	0.5	0.4	0.4	0.4	0.3	0.3	0.3	0.3	
	Discouraged, available but not seeking (% of labour force aged 15-74)	4.9	5.0	5.9	6.2	6.5	7.9	7.6	9.5	11.8	13.1	12.4	
	Labour Market Indicators - Female	Total population (000)	29631	29926	30012	30242	30431	30541	30649	30668	30796	31298	31294
		Population aged 15-64(000)	19522	19220	19212	19354	19455	19501	19568	19488	19479	19753</	

Italy		2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	
Social indicators	All	At-risk-of-poverty or exclusion (% of total population)	25.6	25.9	26.0	25.5	24.9	25.0	28.1	29.9	28.5	28.3	28.7
		At-risk-of-poverty (% of total population)	19.2	19.3	19.5	18.9	18.4	18.7	19.8	19.5	19.3	19.4	19.9
		At-risk-of-poverty threshold (PPS single person)	8182	8344	8698	9158	9140	9135	9466	9299	9134	9165	9237
		Poverty gap (%)	24.0	24.1	22.7	23.2	23.1	24.8	26.6	26.0	28.2	28.2	29.3
		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
		At-risk-of-poverty before social transfers excl. pensions (% of total population)	23.6	23.7	23.7	23.5	23.3	23.7	24.6	24.5	24.6	24.7	25.4
		Impact of social transfers (excl. pensions) in reducing poverty (%)	18.6	18.6	17.7	19.6	21.0	21.1	19.5	20.4	22.2	22.1	21.7
		Severe Material Deprivation (% of total population)	6.8	6.4	7.0	7.5	7.3	7.4	11.1	14.5	13.5	11.6	11.5
		Share of people living in low work intensity households (% of people aged 0-59)	11.0	11.3	10.2	10.4	9.2	10.6	10.5	10.6	11.3	12.1	11.7
		Real Gross Household Disposable income (growth %)	0.7	1.1	1.4	-1.2	-2.0	-1.5	-0.3	-5.3	-0.8	0.3	0.8
		Income quintile share ratio S80/S20	5.6	5.4	5.4	5.2	5.3	5.4	5.7	5.6	5.8	5.8	5.8
		GINI coefficient	32.7	32.1	32.0	31.2	31.8	31.7	32.5	32.4	32.8	32.4	32.4
		Early leavers from education and training (% of population aged 18-24)	22.1	20.4 b	19.5	19.6	19.1	18.6	17.8	17.3	16.8	15.0 b	14.7
		NEET: Young people not in employment, education or training (% of total population aged 15-24)	17.1	16.0	16.1	16.6	17.6	19.0	19.7	21.0	22.2	22.1	21.4
	At-risk-of-poverty or exclusion (% of male population)	23.5	23.8	23.8	23.5	22.9	23.1	26.3	27.8	27.1	27.0	27.7	
	At-risk-of-poverty (% of male population)	17.6	17.7	18.1	17.4	16.9	17.3	18.4	18.1	18.3	18.4	19.0	
	Poverty gap (%)	24.8	24.7	23.3	23.0	22.8	25.2	28.1	27.3	29.3	29.4	30.4	
	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	
	Severe Material Deprivation (% of male population)	6.6	6.1	6.7	7.2	7.0	7.2	10.7	13.9	12.3	11.7	11.7	
	Share of people living in low work intensity households (% of males aged 0-59)	9.5	9.8	8.8	8.8	7.7	9.1	9.2	9.2	10.3	11.4	10.7	
	Life expectancy at birth (years)	78.0	78.5	78.8 b	78.9	79.4		80.1	79.8	80.3	80.7	81.5	
	Healthy life years at birth (years) - men	66.6	65.2 bd	63.4 b	62.9	63.4		63.5	62.1	61.8	62.5		
	Early leavers from education and training (% of males aged 18-24)	25.8	23.8 b	22.6	22.4	21.8	21.8	20.6	20.2	20.0	17.7 b	17.5	
	NEET: Young people not in employment, education or training (% of males aged 15-24)	15.4	15.4 b	15.2	15.2	17.0	18.9	19.4	21.1	22.8	22.7	21.9	
	At-risk-of-poverty or exclusion (% of female population)	27.6	27.9	28.0	27.4	26.7	26.8	29.8	31.9	29.8	29.5	29.6	
	At-risk-of-poverty (% of female population)	20.8	20.9	20.9	20.4	19.9	20.0	21.1	20.8	20.3	20.5	20.8	
	Poverty gap (%)	23.4	23.6	22.2	23.2	23.3	24.6	25.8	24.9	27.6	27.7	28.1	
	Persistent at-risk-of-poverty (% of female population)				13.7	14.1	13.3	12.7	14.8	14.6	13.7	15.7	
	Severe Material Deprivation (% of female population)	7.0	6.8	7.4	7.8	7.6	7.5	11.4	15.0	12.4	11.5	11.2	
	Share of people living in low work intensity households (% of females aged 0-59)	12.5	12.9	11.7	12.0	10.7	12.1	11.8	12.0	12.3	12.8	12.7	
	Life expectancy at birth (years)	83.6	84.2	84.2 b	84.2	84.6		85.3	84.8	85.2	85.6		
	Healthy life years at birth (years) - women	67.8	64.7 bd	62.6 b	61.8	62.6		62.7	61.5	60.9	62.3		
	Early leavers from education and training (% of females aged 18-24)	18.4	17.0 b	16.4	16.7	16.2	15.3	14.9	14.3	13.6	12.2 b	11.8	
	NEET: Young people not in employment, education or training (% of females aged 15-24)	18.9	18.3 b	17.2	18.0	18.1	19.0	19.9	20.8	21.4	21.4	20.8	
	At-risk-of-poverty or exclusion of children (% of people aged 0-17)	28.7	28.4	28.6	28.4	28.7	29.5	31.5	34.1	32.0	32.1	33.5	
	At-risk-of-poverty (% of Children population)	24.7	24.4	24.6	24.2	24.1	25.2	25.9	26.2	25.2	25.4	26.8	
	Severe Material Deprivation (% of Children population)	8.2	7.2	7.8	8.6	8.5	8.6	12.1	16.8	13.5	13.7	13.0	
	Share of children living in low work intensity households (% of Children population)	7.8	7.4	6.7	7.0	6.1	7.5	7.5	7.1	8.0	9.3	8.6	
	Risk of poverty of children in households at work (Working Intensity > 0.2)	20.3	20.3	20.5	20.0	20.9	20.6	21.6	22.1	20.6	19.5	21.6	
	Impact of social transfers (excl. pensions) in reducing poverty (0-17) (%)	21.6	23.3	20.9	21.9	24.2	23.2	21.0	22.0	25.4	23.9	22.1	
	At-risk-of-poverty or exclusion (% of Working age population)	24.8	25.5	25.3	25.0	24.4	25.3	28.5	30.4	29.7	30.0	30.4	
	At-risk-of-poverty (% of Working age population)	16.6	17.1	17.2	16.8	16.5	17.5	19.0	18.7	19.1	19.7	19.8	
Severe Material Deprivation (% of Working age population)	6.8	6.4	7.0	7.4	7.4	7.4	10.9	14.4	12.7	12.0	12.2		
Very low work intensity (18-59)	12.0	12.6	11.3	11.5	10.2	11.5	11.5	11.7	12.4	13.0	12.7		
In-work at-risk-of-poverty rate (% of persons employed 18-64)	8.8	9.0	9.4	9.1	10.2	9.7	11.1	11.1	11.2	11.1	11.6		
Impact of social transfers (excl. pensions) in reducing poverty (18-64) (%)	20.6	20.5	20.0	21.9	23.3	22.6	21.2	22.4	22.7	22.4	23.9		
At-risk-of-poverty or exclusion of elderly (% of people aged 65+)	25.5	24.8	25.5	24.4	22.9	20.4	24.0	24.7	22.0	20.2	19.9		
At-risk-of-poverty (% of Elderly population)	22.7	21.7	22.2	20.9	19.6	16.7	17.0	16.1	15.0	14.2	14.7		
Severe Material Deprivation (% of Elderly population)	5.6	6.1	6.5	6.7	5.9	6.3	10.8	12.7	10.3	9.8	8.2		
Relative median income of elderly (ratio with median income of people younger than 65)	0.85	0.87	0.86	0.88	0.89	0.92	0.92	0.96	0.97	0.99	0.99		
Aggregate replacement ratio (ratio)	0.58	0.58	0.49	0.51	0.51	0.53	0.55	0.59	0.62	0.64	0.66		
Sickness/Health care	6.5	6.6	6.4	6.7	7.0	7.0	6.8	6.8	6.8 p	6.8 p			
Disability	1.4	1.4	1.4	1.4	1.6	1.6	1.5	1.7	1.7 p	1.7 p			
Old age and survivors	14.9	15.0	14.5	14.9	15.9	16.3	16.2	16.6	17.0 p	16.9 p			
Family/Children	1.0	1.0	1.1	1.1	1.3	1.1	1.2	1.2	1.2 p	1.6 p			
Unemployment	0.5	0.5	1.1	1.1	1.5	1.5	1.6	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	0.2	0.2 p	0.2 p			
Total (including Admin and other expenditures)	25.3	25.6	25.7	26.7	28.8	28.9	28.5	29.3	29.8 p	30.0 p			
of which: Means tested benefits	1.4	1.4	1.5	1.5	1.8	1.6	1.6	1.6	1.6 p	2.0 p			

[Click here to download table.](#)

## Cyprus

Cyprus		2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015
Macro Economic indicators (Annual % growth)	Real GDP	3.7	4.5	4.8	3.9	-1.8	1.3	0.3	-3.2	-6.0	-1.5	1.7 p
	Total employment	3.6	1.9	4.4	3.5	0.0	0.5	0.0	-3.2	-5.9	-1.9 p	0.8 p
	Labour productivity	0.1	2.6	0.4	0.3	-1.8	0.8	0.3	0.0	0.0	0.4 p	0.9 p
	Annual average hours worked per person employed	-1.7	-0.8	1.6	1.1	-0.7	-0.7	-0.8	-0.4	-1.6	-0.6 p	-0.1 p
	Real productivity per hour worked	1.8	3.4	-1.2	-0.8	-1.2	1.6	1.1	0.4	1.6	1.1 p	1.0 p
	Harmonized CPI	2.0	2.2	2.2	4.4	0.2	2.6	3.5	3.1	0.4	-0.3	-1.5
	Price deflator GDP	3.1	3.3	4.4	4.5	0.0	2.0	1.9	1.9	-1.0	-1.3 p	
	Nominal compensation per employee	6.6	4.2	1.9	3.2	5.7	0.7	2.1	1.5	-5.4	-3.6 p	-0.6 p
	Real compensation per employee (GDP deflator)	3.4	0.9	-2.4	-1.2	5.7	-1.3	0.2	-0.4	-4.4	-2.1 p	0.7 p
	Real compensation per employee (private consumption deflator)	4.5	1.9	-0.3	-1.1	5.5	-1.9	-1.4	-1.5	-5.7	-3.4 p	1.0 p
	Nominal unit labour costs	6.5	1.6	1.5	2.9	7.7	-0.2	1.8	1.5	-5.4	-4.0 p	-1.5 p
	Real unit labour costs	3.3	-1.6	-2.8	-1.6	7.7	-2.2	-0.1	-0.4	-4.4	-2.5 p	-0.2 p
	Total population (000)	733	744	758	776	797	819	840	862	886	898	847
	Population aged 15-64 (000)	499	509	521	539	557	576	592	609	610	599	584
Total employment (000)	348	357	378	383	383	395	398	385	365	363	358	
Employment aged 15-64 (000)	338	348	368	371	371	382	386	375	357	355	350	
Employment rate (% population aged 20-64)	74.4	75.8	76.8	76.5	75.3 b	75.0	73.4	70.2	67.2	67.6	67.9	
Employment rate (% population aged 15-64)	68.5	69.6	71.0	70.9	69.0 b	68.9	67.6	64.6	61.7	62.1	62.7	
Employment rate (% population aged 15-24)	36.7	37.4	37.4	38.0	34.8 b	35.8	30.1	28.1	23.5	25.8	25.5	
Employment rate (% population aged 25-54)	81.8	82.6	83.8	83.7	82.3 b	82.2	61.3	78.4	75.5	76.2	76.5	
Employment rate (% population aged 55-64)	50.6	53.6	55.9	54.8	55.7 b	56.3	54.8	50.7	49.6	46.9	48.5	
FTE employment rate (% population aged 20-64)	72.6 b	74.3	75.2	74.9	73.3 b	72.4	70.6	67.1	63.2	63.1	63.5	
Self-employed (% total employment)	20.5	19.3	18.6	18.1	17.4	16.5	16.1	14.8	15.9	16.1	13.6	
Part-time employment (% total employment)	7.6	6.6	6.4	6.8	7.5 b	8.3	9.0	9.7	11.9	13.5	13.0	
Fixed term contracts (% total employees)	140.0 b	131.1	132.1	139.1	137.0 b	140.1	141.1	150.0	174.0	189.0	183.0	
Employment in Services (% total employment)	75.6	74.2	74.0	74.5	74.8	75.3	76.2	77.5	79.4	69.3 p		
Employment in Industry (% total employment)	21.4	21.6	21.5	21.2	20.4	20.0	19.5	18.0	16.4	27.1 p		
Employment in Agriculture (% total employment)	5.0	4.2	4.5	4.3	4.7	4.7	4.3	4.5	4.2	3.3 p		
Activity rate (% population aged 15-64)	72.4	73.0	73.9	73.6	73.0 b	73.6	73.5	73.5	73.6	74.3	73.9	
Activity rate (% population aged 15-24)	42.6	41.5	41.7	41.7	40.4 b	40.6	38.8	38.9	38.4	40.3	37.9	
Activity rate (% population aged 25-54)	85.7	86.2	86.7	86.5	86.3 b	86.9	87.3	87.6	87.7	88.4	87.9	
Activity rate (% population aged 55-64)	52.4	55.5	57.7	56.6	58.2 b	59.1	57.6	56.1	56.6	56.0	57.4	
Total unemployment (000)	19	17	15	15	22	26	34	52	69	70	63	
Unemployment rate (% labour force)	5.3	4.6	3.9									

Cyprus		2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015
Labour Market Indicators - Male	Total population (000)	359	365	372	380	390	400	409	419	421	418	412
	Population aged 15-64(000)	245	250	256	264	272	280	288	296	296	291	283
	Total employment (000)	197	200	210	212	205	209	209	202	190	185	184
	Employment aged 15-64 (000)	190	194	202	203	196	199	200	194	184	180	178
	Employment rate (% population aged 20-64)	85.5	86.2	86.4	85.2	82.8	81.7	79.6	76.1	72.6	71.6	72.3
	Employment rate (% population aged 15-64)	79.2	79.4	80.0	79.2	76.5	75.3	73.7	70.4	67.0	66.0	66.7
	Employment rate (% population aged 15-24)	40.5	41.0	39.1	39.4	36.4	34.4	32.4	30.4	28.0	25.8	24.0
	Employment rate (% population aged 25-64)	91.8	92.0	92.4	91.4	89.2	88.3	86.4	83.3	80.4	79.6	80.6
	Employment rate (% population aged 55-64)	70.8	71.6	72.5	70.9	71.2	70.5	69.2	63.5	61.1	57.1	57.8
	FTE employment rate (% population aged 20-64)	86.1	86.7	86.5	85.2	82.5	80.5	78.0	74.1	70.0	68.3	68.5
	Self-employed (% total employment)	27.5	25.6	25.2	24.7	23.4	22.1	21.8	20.5	21.9	21.6	16.9
	Part-time employment (% total employment)	3.2	2.8	3.0	3.4	4.0	5.1	6.1	6.4	8.4	10.3	10.3
	Fixed term contracts (% total employees)	6.6	6.0	5.8	6.3	5.9	5.6	5.6	7.5	8.1	10.3	11.0
	Employment in Services (% total employment)	62.9	63.7	62.3	63.0	63.7	64.4	64.2	65.4	69.0	69.0	65.9
	Employment in Industry (% total employment)	31.0	31.0	31.5	31.5	30.6	29.6	30.1	27.7	25.1	23.0	23.0
	Employment in Agriculture (% total employment)	6.1	5.3	6.2	5.6	5.7	6.1	5.8	5.9	5.9	5.1	5.1
	Activity rate (% population aged 15-64)	82.9	82.7	82.9	82.0	80.7	80.4	80.4	80.7	80.6	80.0	78.8
	Activity rate (% population aged 15-24)	46.6	45.0	43.9	43.1	42.1	40.9	41.4	42.8	40.8	41.2	36.8
	Activity rate (% population aged 25-64)	95.3	95.3	95.0	94.0	93.5	93.4	93.4	93.8	94.0	93.5	92.6
	Activity rate (% population aged 55-64)	75.2	74.1	74.8	73.0	74.4	74.3	72.9	71.2	71.2	69.9	70.0
	Total unemployment (000)	9	8	7	7	11	14	18	29	38	38	35
	Unemployment rate (% labour force)	4.4	3.9	3.4	3.2	5.3	6.2	8.1	12.6	16.6	17.1	15.1
	Youth unemployment rate (% labour force 15-24)	13.2	8.9	11.0	8.7	13.6	15.9	23.3	28.8	41.1	37.4	34.7
	Long term unemployment rate (% labour force)	0.9	0.7	0.8	0.5	0.6	1.3	1.7	3.9	6.5	8.3	7.4
	Share of long term unemployment (% of total unemployment)	19.3	17.0	23.0	16.1	10.4	20.9	21.4	31.4	39.1	48.6	49.2
	Youth unemployment ratio (% population aged 15-24)	6.1	4.0	4.8	3.7	5.7	6.5	9.6	12.3	16.8	15.4	12.8
	Employment rate for low skilled 25-64 (ISCED 0-2)	82.8	83.1	84.7	80.2	78.4	76.2	74.4	67.2	62.2	59.9	61.8
	Employment rate for medium skilled 25-64 (ISCED 3-4)	99.3	99.3	98.4	98.8	98.8	98.8	98.8	98.8	98.8	98.8	98.8
	Employment rate for high skilled 25-64 (ISCED 5-8)	90.7	91.5	92.0	90.9	89.2	88.8	87.0	85.5	82.9	83.8	84.8
	Employment rate (Nationals aged 15-64)	79.7	80.1	80.6	80.6	78.0	76.2	74.2	70.4	66.9	65.7	65.9
	Employment rate (Other EU28 aged 15-64)	75.4	75.4	75.4	75.4	72.9	71.9	71.9	72.9	72.9	72.9	70.8
	Employment rate (Other than EU28 aged 15-64)	72.7	72.7	72.7	72.7	70.8	69.8	69.8	70.8	70.8	70.8	70.2
	Employment rate (Born in the same country aged 15-64)	79.7	80.2	80.5	80.3	78.0	76.0	74.0	70.2	66.4	65.3	65.8
Employment rate (Born in other EU28 aged 15-64)	75.3	75.3	75.3	75.3	72.9	71.9	71.9	72.9	72.9	72.9	70.8	
Employment rate (Born outside EU28 aged 15-64)	74.4	74.4	74.4	74.4	71.9	70.9	70.9	71.9	71.9	71.9	70.8	
Underemployment (% of labour force aged 15-74)	1.2	1.0	1.0	1.2	1.7	2.0	3.2	3.9	5.0	6.5	7.0	
Seeking but not available (% of labour force aged 15-74)	0.4	0.4	0.2	0.3	0.5	0.6	0.4	0.8	0.7	0.8	0.6	
Discouraged, available but not seeking (% of labour force aged 15-74)	1.2	0.8	0.7	0.7	1.0	1.0	2.1	2.7	2.6	3.3	3.4	
Labour Market Indicators - Female	Total population (000)	374	379	386	396	407	420	431	443	445	440	435
	Population aged 15-64(000)	254	259	265	275	284	295	304	314	314	308	301
	Total employment (000)	151	157	169	171	178	187	189	184	175	178	175
	Employment aged 15-64 (000)	148	155	166	168	175	183	186	181	173	176	172
	Employment rate (% population aged 20-64)	63.8	65.9	67.7	68.2	68.3	68.8	67.7	64.8	62.2	63.9	64.0
	Employment rate (% population aged 15-64)	58.4	60.3	62.4	62.9	62.3	63.0	62.1	59.4	56.9	58.6	59.0
	Employment rate (% population aged 15-24)	33.2	34.1	36.0	36.7	33.3	33.3	28.7	26.1	23.0	25.9	26.8
	Employment rate (% population aged 25-64)	72.2	73.6	75.5	76.2	76.2	76.7	76.7	74.0	71.1	73.1	72.7
	Employment rate (% population aged 55-64)	31.5	36.6	40.3	39.4	40.6	42.5	40.8	38.2	38.3	36.9	39.5
	FTE employment rate (% population aged 20-64)	59.9	62.5	64.6	65.0	64.8	65.1	63.9	60.7	57.1	58.5	58.9
	Self-employed (% total employment)	11.3	11.3	10.5	10.5	10.6	10.2	9.7	8.7	9.4	10.3	10.2
	Part-time employment (% total employment)	13.2	11.3	10.1	10.8	11.5	11.1	11.1	13.1	15.6	16.8	15.8
	Fixed term contracts (% total employees)	16.6	16.4	16.8	17.6	17.5	18.3	18.6	18.9	21.7	21.5	20.9
	Employment in Services (% total employment)	87.1	87.5	88.4	88.5	87.4	87.7	89.3	89.5	90.7	85.4	85.4
	Employment in Industry (% total employment)	9.2	9.7	9.1	8.8	9.0	9.2	8.0	7.6	7.0	12.8	12.8
	Employment in Agriculture (% total employment)	3.6	2.9	2.5	2.7	3.6	3.1	2.7	2.9	2.3	1.9	1.9
	Activity rate (% population aged 15-64)	62.5	63.8	65.4	65.7	66.0	67.4	67.4	66.9	67.2	69.1	69.4
	Activity rate (% population aged 15-24)	39.0	39.3	39.7	40.5	38.8	40.2	39.7	38.3	36.3	39.5	38.9
	Activity rate (% population aged 25-64)	76.5	77.4	78.7	79.1	79.8	81.0	82.0	80.2	82.0	83.9	83.8
	Activity rate (% population aged 55-64)	32.8	37.8	41.6	41.0	42.3	44.3	42.7	41.3	42.3	42.5	45.3
	Total unemployment (000)	10	9	8	8	10	13	16	23	31	32	30
	Unemployment rate (% labour force)	6.5	5.4	4.6	4.3	5.5	6.4	7.7	11.1	15.2	15.1	14.8
	Youth unemployment rate (% labour force 15-24)	14.7	11.1	9.4	9.4	14.0	17.2	21.5	26.7	36.8	34.6	31.1
	Long term unemployment rate (% labour force)	1.8	1.2	0.7	0.5	0.6	1.1	1.5	3.1	5.6	7.0	6.2
	Share of long term unemployment (% of total unemployment)	27.0	21.3	14.6	11.9	11.9	20.0	19.7	32.6	46.6	46.6	41.8
	Youth unemployment ratio (% population aged 15-24)	5.7	4.3	3.7	3.8	5.4	6.9	7.9	9.5	13.3	13.7	12.1
	Employment rate for low skilled 25-64 (ISCED 0-2)	47.9	50.3	49.6	49.1	52.4	57.4	56.0	50.2	49.7	49.5	49.3
	Employment rate for medium skilled 25-64 (ISCED 3-4)	66.7	67.4	69.9	69.2	68.6	68.1	67.1	66.8	61.4	63.7	62.9
	Employment rate for high skilled 25-64 (ISCED 5-8)	82.4	82.6	83.4	84.5	83.6	81.1	80.5	76.9	75.7	76.5	76.8
	Employment rate (Nationals aged 15-64)	56.6	58.6	61.2	60.4	60.1	60.2	59.1	56.5	54.5	56.1	57.3
	Employment rate (Other EU28 aged 15-64)	57.6	57.6	57.6	57.6	54.9	54.9	54.9	56.2	55.8	58.7	57.8
	Employment rate (Other than EU28 aged 15-64)	56.5	56.5	56.5	56.5	54.9	54.9	54.9	56.2	55.8	58.7	57.8
	Employment rate (Born in the same country aged 15-64)	56.5	56.5	56.5	56.5	54.9	54.9	54.9	56.2	55.8	58.7	57.8
Employment rate (Born in other EU28 aged 15-64)	57.8	57.8	57.8	57.8	54.9	54.9	54.9	56.2	55.8	58.7	57.8	
Employment rate (Born outside EU28 aged 15-64)	75.5	75.5	75.5	75.5	72.9	72.9	72.9	72.9	72.9	72.9	70.7	
Underemployment (% of labour force aged 15-74)	0.4	0.6	0.4	0.6	0.7	0.7	0.5	0.7	0.8	0.8	0.7	
Seeking but not available (% of labour force aged 15-74)	0.4	0.6	0.4	0.6	0.7	0.7	0.5	0.7	0.8	0.8	0.7	
Discouraged, available but not seeking (% of labour force aged 15-74)	4.0	3.0	2.4	1.8	2.0	2.6	4.2	4.5	6.0	5.9	5.9	

Click here to download table.

Cyprus		2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	
Social Indicators	All	At-risk-of-poverty or exclusion (% of total population)	25.3	25.4	25.2	23.3	23.5	24.6	24.6	27.1	27.8	27.4	28.9
		At-risk-of-poverty (% of total population)	16.1	15.6	15.5	15.9	15.8	15.6	14.8	14.7	15.3	14.4	16.2
		At-risk-of-poverty threshold (PPS single person)	8866	9817	10951	10945	11256	10816	11497	11444	10299	9457	9188
		Poverty gap (%)	19.4	18.9	19.7	15.5	17.2	18.0	19.0	19.0	17.7	18.5	19.8
		Persistent at-risk-of-poverty (% of total population)	9.2	8.3	10.1	9.2	10.1	9.2	8.6	8.3	10.0	7.3	7.3
		At-risk-of-poverty before social transfers excl. pensions (% of total population)	21.7	21.6	21.0	22.9	23.6	23.5	23.5	23.5	24.3	24.6	25.4
		Impact of social transfers (excl. pensions) in reducing poverty (%)	25.8	27.8	26.2	30.6	33.1	33.6	37.0	37.5	37.0	41.5	36.2
		Severe Material Deprivation (% of total population)	12.2	12.6	13.3	9.1	9.5	11.2	11.7	15.0	16.1	15.3	15.4
		Share of people living in low work intensity households (% of people aged 0-59)	4.4	3.8	3.7	4.5	4.0	4.9	4.9	6.5	7.9	9.7	10.9
		Real Gross Household Disposable income (growth %)	6.6	5.1	4.2	6.5	-2.8	1.1	-0.8	-4.0	-5.4	-5.8	-3.8
		Income quintile share ratio S80/S20	4.3	4.3	4.4	4.3	4.4	4.5	4.3	4.7	4.9	5.4	5.2
		GNI coefficient	28.7	28.9	29.0	29.0	29.0	30.1	31.0	31.0	32.4	34.9	33.6
	Early leavers from education and training (% of population aged 18-24)	18.2	14.9	12.5	13.7	11.7	12.7	11.3	11.4	9.1	6.8	5.2	
	NEET. Young people not in employment, education or training (% of total population aged 15-24)	19.5	10.7	9.0	9.7	9.9	11.7	14.6	16.0	18.7	17.0	15.3	
	Male	At-risk-of-poverty or exclusion (% of male population)	23.9	23.3	22.7	20.5	20.9	22.8	22.8	25.1	26.8	26.0</	

## Latvia

Latvia		2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015
Macro Economic Indicators (Annual % growth)	Real GDP	10.7	11.9	9.9	-3.6	-14.3	-3.8	6.2	4.0	2.9	2.1	2.7
	Total employment	0.9	5.8	3.8	-0.8	-14.3	-6.7	1.5	1.4	2.3	-1.3	1.3
	Labour productivity	9.7	5.8	5.9	-2.8	0.0	3.1	4.6	2.5	0.6	3.5	1.4
	Annual average hours worked per person employed	1.4	0.1	-1.5	6.6	-2.5	-0.9	0.9	-0.9	-0.3	0.6	-1.5
	Real productivity per hour worked	8.2	5.7	7.5	-8.8	2.6	4.0	3.7	3.4	0.9	2.9	3.0
	Harmonized CPI	6.9	6.6	10.1	15.3	3.3	-1.2	4.2	2.3	0.0	2.7	0.2
	Price deflator GDP	11.2	12.4	20.1	11.8	-9.8	-1.0	6.4	3.6	1.3	1.5	0.4
	Nominal compensation per employee	26.3	22.5	34.9	17.7	-10.9	-6.6	2.4	7.7	5.5	8.6	6.9
	Real compensation per employee (GDP deflator)	13.6	9.0	12.2	5.2	-1.3	-5.7	-3.7	3.9	4.1	7.0	6.5
	Real compensation per employee (private consumption deflator)	18.2	15.0	22.5	2.1	-13.8	-5.5	-1.7	5.3	5.5	7.9	6.7
	Nominal unit labour costs	15.1	15.8	27.3	21.0	-10.9	-9.4	-2.1	5.0	4.9	4.9	5.4
	Real unit labour costs	3.7	2.9	6.0	8.3	-1.4	-8.5	-8.0	1.3	3.5	3.3	5.0
	Total population (000)	2250	2228	2209	2192	2163	2121	2075	2045	2024	2001	1986
	Population aged 15-64 (000)	1539	1526	1511	1499	1473	1436	1399	1375	1352	1325	1303
Total employment (000)	972	1051	1057	1055	909	851	862	876	894	885	896	
Employment aged 15-64 (000)	942	992	1016	1009	877	829	841	852	867	859	868	
Employment rate (% population aged 20-64)	69.1	73.2	75.2	75.4	66.6	64.3	66.3	68.1	69.7	70.7	72.5	
Employment rate (% population aged 15-64)	62.1	65.9	68.1	68.2	60.3	58.5	60.8	63.0	65.0	66.3	68.1	
Employment rate (% population aged 15-24)	32.2	35.3	38.1	37.0	27.5	25.4	25.8	28.7	30.2	32.5	34.5	
Employment rate (% population aged 25-54)	77.1	80.8	82.1	82.2	74.1	72.6	75.0	76.3	77.9	78.2	79.2	
Employment rate (% population aged 55-64)	91.5	93.4	94.0	94.1	87.5	84.4	85.5	86.5	87.4	87.4	88.4	
FTE employment rate (% population aged 20-64)	68.4 b	72.9	75.3	75.4	65.6	62.8	64.9	66.8	68.7	69.8	71.6	
Self-employed (% total employment)	9.3	10.1	9.3	8.9	10.0	10.1	10.2	10.5	10.7	10.7	11.8	
Part-time employment (% total employment)	7.6	5.9	5.6	5.9	8.2	9.3	8.8	8.9	7.5	6.8	7.2	
Fixed term contracts (% total employees)	8.7 b	7.1	4.1	3.4	4.3	7.1	6.6	4.7	4.4	3.3	3.8	
Employment in Services (% total employment)	64.4	62.4	64.9	65.3	67.8	68.8	68.2	68.1	68.4	68.8		
Employment in Industry (% total employment)	26.0	27.3	26.9	27.1	25.7	23.3	23.8	24.0	24.0	23.7		
Employment in Agriculture (% total employment)	9.5	10.3	8.1	7.6	8.4	7.0	7.8	7.4	7.4	7.4		
Activity rate (% population aged 15-64)	69.1	71.0	72.6	74.2	73.5	73.0	72.8	74.4	74.0	74.6	75.7	
Activity rate (% population aged 15-24)	38.0	40.9	42.6	42.8	41.2	39.7	37.5	40.1	39.4	40.4	41.3	
Activity rate (% population aged 25-54)	85.2	86.1	87.1	88.7	88.4	88.6	88.0	88.4	87.6	87.2	87.6	
Activity rate (% population aged 55-64)	53.1	57.3	60.7	63.0	60.9	56.9	59.4	61.8	61.3	62.6	65.5	
Total unemployment (000)	108	78	68	88	193	206	167	155	120	108	98	
Unemployment rate (% labour force)	10.0	7.0	6.1	7.7	17.5	19.5	16.2	15.0	11.9	10.8	9.9	
Youth unemployment rate (% labour force 15-24)	45.1	43.6	40.3	36.2	51.0	52.8	31.0	28.8	23.2	19.6	16.6	
Long term unemployment rate (% labour force)	1.5	2.4	1.6	1.9	4.5	8.8	8.8	7.8	5.7	4.6	4.5	
Share of long term unemployment (% of total unemployment)	44.6	34.0	27.0	24.1	25.8	45.0	54.5	52.1	48.4	42.9	45.3	
Youth unemployment ratio (% population aged 15-24)	5.8 b	5.6	4.5	5.8	13.7	14.4	11.6	11.5	9.1	7.9	6.7	
Employment rate for low skilled 25-64 (ISCED 0-2)	50.3 b	54.3	59.3	57.4	48.1	47.1	48.5	51.8	50.9	51.3 b	53.2	
Employment rate for medium skilled 25-64 (ISCED 3-4)	71.8 b	76.2	77.5	77.7	68.2	65.1	66.8	66.9	69.7	70.9 b	71.7	
Employment rate for high skilled 25-64 (ISCED 5-8)	85.9 b	86.6	87.8	87.4	85.5	80.7	84.4	86.2	85.2	84.2 b	85.8	
Employment rate (Nationals aged 15-64)	62.2 b	65.8	68.1	68.1 b	61.0	59.5	61.4	64.0	65.6	67.0	68.8	
Employment rate (Other EU28 aged 15-64)			80.8		63.2 u			76.7 u	76.6 u	78.9 u	77.4	
Employment rate (Other than EU28 aged 15-64)		76.4	64.2	69.1 b	56.6	53.3	57.5	57.6	59.2	61.6	63.4	
Employment rate (Born in the same country aged 15-64)	61.8 b	65.3	67.4	67.9	60.3	58.4	60.7	63.2	65.4	66.5	68.5	
Employment rate (Born in other EU28 aged 15-64)		62.2	67.0	59.3	48.5	53.7	57.2	53.0	59.1	62.3	62.1	
Employment rate (Born outside EU28 aged 15-64)		71.6	73.5	71.7	62.0	60.0	62.2	62.2	62.3	64.4	64.2	
Underemployment (% of labour force aged 15-74)				2.0	4.2	5.1	4.3	4.2	3.2	2.7	2.7	
Seeking but not available (% of labour force aged 15-74)	0.8	0.7	0.6	0.6	0.8	0.6	0.8	0.6	0.5	0.6	0.5	
Discouraged, available but not seeking (% of labour force aged 15-74)	8.9	6.9	6.1	4.7	7.7	8.1	7.6	6.4	6.1	5.0	4.4	

[Click here to download table.](#)

Latvia		2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015
Labour Market Indicators - Total	Total population (000)	1032	1022	1014	1007	993	971	948	935	927	917	911
	Population aged 15-64(000)	739	734	728	725	712	693	674	663	654	642	633
	Total employment (000)	497	535	540	531	428	416	428	447	441	439	443
	Employment aged 15-64 (000)	480	505	519	508	420	393	407	417	428	427	431
	Employment rate (% population aged 20-64)	74.3	78.4	80.5	79.3	66.8	64.0	67.5	70.0	71.9	73.1	74.6
	Employment rate (% population aged 15-64)	66.4	70.4	72.7	71.5	60.3	57.9	61.5	64.4	66.8	68.4	69.9
	Employment rate (% population aged 15-24)	38.3	41.8	43.8	42.1	29.5	26.5	28.3	31.8	33.3	36.5	37.1
	Employment rate (% population aged 25-54)	80.6	84.3	86.0	84.9	73.7	71.7	75.1	77.7	79.9	80.4	81.2
	Employment rate (% population aged 55-64)	53.5	59.3	64.3	62.8	51.8	46.9	51.7	53.2	55.2	56.3	60.1
	FTE employment rate (% population aged 20-64)	74.0 b	78.0	81.0	79.6	65.1	62.8	65.6	69.1	71.4	73.0	74.5
	Self-employed (% total employment)	10.8	11.7	11.3	11.4	12.9	12.4	12.6	12.8	12.8	13.3	14.8
	Part-time employment (% total employment)	5.6	4.4	4.1	4.3	6.8	7.6	7.0	6.7	5.6	4.7	4.5
	Fixed term contracts (% total employees)	9.8	7.9	4.9	4.2	5.1	8.1	6.9	5.5	4.5	3.7	3.9
	Employment in Services (% total employment)	52.0	49.0	50.3	51.6	55.3	55.2	54.9	54.7	54.5	54.6	
	Employment in Industry (% total employment)	35.3	38.0	39.6	38.6	33.5	34.0	33.7	34.1	34.8	34.9	
	Employment in Agriculture (% total employment)	12.8	13.0	10.2	9.8	11.2	10.8	11.4	11.2	10.7	10.5	
	Activity rate (% population aged 15-64)	73.9	76.1	77.9	78.3	76.6	75.3	75.8	77.1	76.6	77.8	78.9
	Activity rate (% population aged 15-24)	43.9	47.5	49.5	49.2	41.0	46.4	42.2	44.0	42.6	43.5	45.2
	Activity rate (% population aged 25-54)	89.1	90.2	91.6	92.0	91.1	91.0	90.8	91.2	90.6	90.5	90.6
	Activity rate (% population aged 55-64)	60.1	64.3	67.6	68.2	62.8	58.5	62.5	63.2	62.2	63.7	68.0
	Total unemployment (000)	56	41	38	49	115	119	95	83	64	59	55
	Unemployment rate (% labour force)	10.1	7.3	6.5	8.4	20.9	22.7	18.6	16.2	12.6	11.8	11.1
	Youth unemployment rate (% labour force 15-24)	12.8	11.9	11.0	14.0	36.4	37.3	31.3	27.8	21.8	19.4	18.0
	Long term unemployment rate (% labour force)	4.8	2.7	1.9	1.9	5.4	10.9	8.7	6.5	5.3	5.4	
	Share of long term unemployment (% of total unemployment)	48.0	37.0	29.3	25.1	25.9	48.3	59.0	53.5	51.9	44.7	48.5
	Youth unemployment ratio (% population aged 15-24)	5.6 b	5.7	5.4	6.9	16.9	15.8	12.9	12.2	9.3	8.8	8.2
	Employment rate for low skilled 25-64 (ISCED 0-2)	59.1 b	63.4	68.2	64.8	50.4	49.5	53.6	59.0	56.8	58.3 b	60.8
	Employment rate for medium skilled 25-64 (ISCED 3-4)	77.1 b	81.9	83.9	82.1	69.7	66.1	70.0	70.5	73.4	74.8 b	75.4
	Employment rate for high skilled 25-64 (ISCED 5-8)	87.3 b	90.4	89.8	90.7	85.8	81.9	84.2	87.7	88.7	86.6 b	88.9
	Employment rate (Nationals aged 15-64)	66.3 b	70.2	72.7	71.2 b	60.6	58.6	61.3	64.9	67.3	69.1	70.3
	Employment rate (Other than EU28 aged 15-64)			85.5 u								
	Employment rate (Other than EU28 aged 15-64)		89.2	89.2	72.8 b	58.5	54.4	62.0	61.6	63.5	64.0	67.1
	Employment rate (Born in the same country aged 15-64)	65.9 b	69.6	71.8	71.1	60.0	57.7	61.0	64.5	66.6	68.4	70.0
	Employment rate (Born in other EU28 aged 15-64)		72.7	68.7	70.0	58.8	52.1	58.1	58.2	68.1	61.8	60.4
Employment rate (Born outside EU28 aged 15-64)		78.6	80.4	75.0	63.1	60.4	65.9	64.2	68.0	69.1	70.2	
Underemployment (% of labour force aged 15-74)				1.7	3.9	4.1	3.8	3.3	2.6	2.0	1.8	
Seeking but not available (% of labour force aged 15-74)	0.6 u	0.5 u	0.4	0.4	0.4 u	0.7	0.7	0.6	0.4 u	0.4 u	0.3 u	
Discouraged, available but not seeking (% of labour force aged 15-74)	7.9	6.0	5.2	3.9	7.0	8.0	7.0	6.1	5.7	4.9	4.3	
Total population (000)	1218	1206	1195	1185	1170	1150	1127	1110	1097	1084	1075	
Population aged 15-64(000)	800	792	783	775	761	743	725	710	698	683	670	
Total employment (000)	476	505	517	524	474	448	445	447	453	446	452	
Employment aged 15-64 (000)	462	486	497	501	456	436	434	435	438	432	437	
Employment rate (% population aged 20-64)	64.5	68.4	70.3	71.9	66.5	64.5	65.3	66.4	67.7	68.5	70.5	
Employment rate												

Latvia		2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	
Social indicators	All	At-risk-of-poverty or exclusion (% of total population)	46.3	42.2	35.1	34.2 b	37.9	38.2	40.1	36.2	35.1	32.7	30.9
		At-risk-of-poverty (% of total population)	19.4	23.5	21.2	25.9	26.4	20.9	19.0	19.2	19.4	21.2	22.5
		At-risk-of-poverty threshold (PPS single person)	2347 b	2686	3352	4283	4279	3525	3566	3661	3868	4392	4855
		Poverty gap (%)	27.5	24.4	24.8	28.6	29.0	28.9	31.7	28.6	27.5	23.6	25.5
		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
		At-risk-of-poverty before social transfers excl. pensions (% of total population)	25.8	28.0	27.5	30.2	31.0	28.5	26.8	25.7	26.0	27.0	27.3
		Impact of social transfers (excl. pensions) in reducing poverty (%)	24.8	16.1	22.8	14.3	14.8	26.7	29.1	25.3	25.4	21.5	17.6
		Severe Material Deprivation (% of total population)	39.3	31.3	24.0	19.3	22.1	27.6	31.0	25.6	24.0	19.2	16.4
		Share of people living in low work intensity households (% of people aged 0-59)	8.3	7.1	6.2	5.4	7.4	12.6	12.6	11.7	10.0	9.6	7.8
		Real Gross Household Disposable income (growth %)	11.4	15.8	10.7	4.0	-15.1	-6.4	-4.7	3.0	4.4	1.3	4.8
		Income quintile share ratio S80/S20	6.7	7.8	6.4	7.3	7.4	6.8	6.5	6.5	6.3	6.5	6.5
		GINI coefficient	36.2 b	38.9	35.4	37.5	37.5	35.9	35.1	35.7	35.2	35.5	35.4
		Early leavers from education and training (% of population aged 18-24)	15.4	15.6 b	15.6	15.5	14.3	12.9	11.6	10.6	9.8	8.5 b	9.9
		NEET: Young people not in employment, education or training (% of total population aged 15-24)	10.6	11.5 b	11.9	14.1	17.5	17.8	15.0	14.9	13.0	12.0	10.5
		At-risk-of-poverty or exclusion (% of male population)	43.3	39.0	32.3	31.4 b	36.0	37.6	39.9	35.5	34.2	30.0	27.9
	At-risk-of-poverty (% of male population)	18.5	20.9	18.7	23.3	24.4	21.4	19.8	19.3	18.9	19.5	19.7	
	Poverty gap (%)	34.1	28.7	27.7	26.7	31.7	31.5	34.0	31.8	30.3	28.3	30.5	
	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	
	Severe Material Deprivation (% of male population)	36.4	29.2	22.1	17.6	21.3	26.9	30.4	24.7	23.1	18.1	15.4	
	Share of people living in low work intensity households (% of males aged 0-59)	8.4	6.7	5.9	5.7	7.9	13.8	13.3	12.6	10.4	10.2	8.2	
	Life expectancy at birth (years)	65.4	65.4	65.3	66.5	68.1	67.9	68.6	68.9	69.3 b	69.1	11.4	11.3
	Healthy life years at birth (years) - men	50.8 d	50.8 bd	51.4	51.6	52.6	53.1	53.6	54.6	51.7 b	51.5		
	Early leavers from education and training (% of males aged 18-24)	19.0	19.3 b	20.6	20.0	17.6	16.7	15.8	14.7	13.6	11.7 b	13.4	
	NEET: Young people not in employment, education or training (% of males aged 15-24)	8.6	7.9 b	9.5	10.2	18.6	18.7	16.1	15.1	12.6	11.3	9.4	
	At-risk-of-poverty or exclusion (% of female population)	48.7	44.8	37.4	36.6 b	39.4	38.6	40.3	36.8	35.9	34.4	33.4	
	At-risk-of-poverty (% of female population)	20.3	25.7	23.4	28.1	28.0	20.4	18.3	19.1	19.8	22.5	24.8	
	Poverty gap (%)	24.2	21.5	24.1	29.3	27.4	25.9	28.7	25.7	25.8	21.2	22.4	
	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	
	Severe Material Deprivation (% of female population)	41.9	33.1	25.6	20.6	22.8	28.3	31.5	26.5	24.7	20.1	17.3	
	Share of people living in low work intensity households (% of females aged 0-59)	8.2	7.5	6.5	5.2	7.0	11.4	12.0	10.8	9.6	9.1	7.4	
	Life expectancy at birth (years)	76.5	76.3	76.2	77.5	78.0	78.0	78.8	78.9	78.9 b	79.4		
	Healthy life years at birth (years) - women	53.2 d	52.5 bd	54.8	54.3	56.0	56.4	56.6	59.0	54.2 b	55.3		
	Early leavers from education and training (% of females aged 18-24)	11.8	11.5 b	10.5	10.8	11.0	9.0	7.5	6.3	5.8	5.1 b	6.2	
	NEET: Young people not in employment, education or training (% of females aged 15-24)	12.6	15.1 b	14.4	13.5	16.3	16.9	16.0	14.6	13.4	12.8	11.7	
	At-risk-of-poverty or exclusion of children (% of people aged 0-17)	45.7	42.7	32.8	32.4 b	38.4	42.2	44.1	40.0	38.4	35.3	31.3	
	At-risk-of-poverty (% of Children population)	22.0	25.9	19.8	23.6	26.3	26.3	24.7	24.4	23.4	24.3	23.2	
	Severe Material Deprivation (% of Children population)	36.8	30.2	20.5	19.2	24.6	30.7	32.4	27.3	25.4	19.9	17.0	
	Share of children living in low work intensity households (% of Children population)	7.9	6.9	5.5	4.6	6.9	12.4	12.6	10.4	9.2	9.6	7.4	
	Risk of poverty of children in households at work (Working Intensity > 0.2)	17.0	20.9	16.7	20.1	21.3	18.5	17.4	18.3	18.5	18.4	18.4	
	Impact of social transfers (excl. pensions) in reducing poverty (0-17) (%)	28.6	18.3	33.1	22.9	22.0	28.5	32.3	28.5	28.2	27.5	24.4	
	At-risk-of-poverty or exclusion (% of Working age population)	44.1	39.4	31.4	28.0 b	32.8	37.4	41.1	35.9	34.0	30.0	27.3	
	At-risk-of-poverty (% of Working age population)	19.2	20.9	17.7	19.4	20.5	20.4	20.2	19.3	18.8	18.4	18.6	
Severe Material Deprivation (% of Working age population)	37.5	29.8	21.8	16.7	20.5	26.8	31.2	25.0	22.9	18.2	15.7		
Very low work intensity (18-59)	8.5	7.2	6.4	5.7	7.6	12.6	12.6	12.1	10.2	9.6	7.9		
In-work at-risk-of-poverty rate (% of persons employed 18-64)	9.2	11.2	9.5	10.7	11.2	9.7	9.6	8.9	9.1	8.3	9.4		
Impact of social transfers (excl. pensions) in reducing poverty (18-64) (%)	24.8	17.7	25.3	17.5	18.0	27.1	28.9	25.2	25.4	23.0	20.2		
At-risk-of-poverty or exclusion of elderly (% of people aged 65+)	55.3	51.9	51.4	58.8 b	55.5	36.8	33.0	36.1	39.3	42.1	42.1		
At-risk-of-poverty (% of Elderly population)	21.1	30.4	35.6	52.0	47.6	17.2	9.1	13.9	17.6	27.6	34.6		
Severe Material Deprivation (% of Elderly population)	49.5	38.1	35.8	28.7	25.3	27.5	28.9	25.4	26.6	22.0	18.2		
Relative median income of elderly (ratio with median income of people younger than 65)	0.75 b	0.67	0.64	0.53	0.57	0.78	0.86	0.80	0.77	0.71	0.65		
Aggregate replacement ratio (ratio)	0.61	0.49	0.38	0.30	0.34	0.47	0.53	0.49	0.47	0.44	0.42		
Sickness/Health care	3.3	3.7	3.3	3.6	4.0	3.9	3.4	3.3	3.4	3.5	3.5		
Disability	0.8	0.8	0.7	0.9	1.3	1.4	1.3	1.2	1.2	1.3	1.3		
Old age and survivors	5.6	5.3	4.7	5.3	7.8	9.5	8.2	7.8	7.7	7.4	7.4		
Family/Children	1.2	1.1	1.1	1.3	1.7	1.5	1.1	1.0	1.2	1.3	1.3		
Unemployment	0.5	0.5	0.4	0.5	1.6	1.3	0.7	0.5	0.6	0.6	0.6		
Housing and Social exclusion n.e.c.	0.2	0.2	0.2	0.3	0.3	0.4	0.4	0.3	0.3	0.2	0.2		
Total (including Admin and Other expenditures)	12.2	11.9	10.6	12.1	16.8	18.3	15.4	14.4	14.6	14.5	14.5		
of which: Means tested benefits	0.2	0.2	0.2	0.2	0.3	0.7	0.7	0.4	0.3	0.2	0.2		
Expenditure in social protection indicators (% of GDP)													

[Click here to download table.](#)

## Lithuania

Lithuania		2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015
Macro Economic indicators (Annual % growth)	Real GDP	7.7	7.4	11.1	2.6	-14.8	1.6	6.0	3.8	3.5	3.5	1.8
	Total employment	0.8	-0.3	2.0	-1.3	-7.7	-5.3	0.5	1.8	1.3	2.0	1.3
	Labour productivity	6.9	7.7	8.9	4.0	-7.7	7.3	5.5	2.0	2.1	1.5	0.5
	Annual average hours worked per person employed	0.0	-0.3	1.6	1.6	-3.7	1.2	-1.4	-0.1	-0.9	-0.4	1.4
	Real productivity per hour worked	6.9	8.0	7.2	2.4	-4.2	6.1	7.0	2.1	3.0	1.9	-0.9
	Harmonized CPI	2.7	3.8	5.8	11.1	4.2	12.2	4.1	3.2	1.2	0.2	-0.7
	Price deflator GDP	6.9	6.7	8.6	9.7	-3.3	2.4	5.2	2.7	1.4	1.0	0.2
	Nominal compensation per employee	13.8	20.7	14.1	14.1	-9.3	-0.1	6.4	4.2	5.4	4.7	5.3
	Real compensation per employee (GDP deflator)	6.5	13.1	5.1	4.0	-6.2	-2.5	1.1	1.5	3.9	3.7	5.1
	Real compensation per employee (private consumption deflator)	10.9	16.4	7.8	2.7	-12.9	-1.3	2.1	1.1	4.1	4.5	6.1
	Nominal unit labour costs	6.4	12.1	4.8	9.7	-1.7	-7.0	0.8	2.2	3.1	3.2	4.8
	Real unit labour costs	-0.5	4.9	-3.4	-0.1	1.7	-9.1	-4.2	-0.5	1.7	2.2	4.6
	Total population (000)	3355	3290	3250	3213	3184	3162	3053	3004	2972	2943	2921
	Population aged 15-64 (000)	2250	2209	2188	2169	2154	2127	2053	2016	1993	1971	1949
	Total employment (000)	1434	1429	1452	1427	1317	1248	1254	1276	1293	1319	1335
Employment aged 15-64 (000)	1414	1405	1423	1397	1290	1224	1226	1244	1264	1288	1301	
Employment rate (% population aged 20-64)	70.7	71.3	72.7	72.0	67.0	64.3	66.9	68.5	69.9	71.8	73.3	
Employment rate (% population aged 15-64)	62.9	63.6	65.0	64.4	59.9	57.6	60.2	62.0	63.7	65.7	67.2	
Employment rate (% population aged 15-24)	21.2	23.7	24.8	26.0	20.6	18.3	19.0	21.5	24.6	27.6	28.3	
Employment rate (% population aged 25-54)	80.9	81.1	82.2	80.9	75.9	73.6	76.9	78.5	79.6	80.8	81.6	
Employment rate (% population aged 55-64)	49.6	49.7	53.2	53.0	51.2	48.3	50.2	51.7	53.4	56.2	60.4	
FTE employment rate (% population aged 20-64)	70.1 b	70.0	71.8	71.4	65.9	63.4	65.8	67.3	68.9	70.8	72.1	
Self-employed (% total employment)	14.2	14.2	12.6	10.2	10.4	9.3	9.2	9.7	10.6	10.8	11.1	
Part-time employment (% total employment)	6.9	10.0	8.6	6.5	7.9	7.8	8.3	8.9	8.4	8.6	7.6	
Fixed term contracts (% total employees)	5.4 b	4.6	3.8	2.4	2.3	2.4	2.7	2.6	2.7	2.8	2.1	
Employment in Services (% total employment)	56.5	55.6	59.2	61.5	64.2	66.6	67.0	66.1	66.1	66.1	66.1	
Employment in Industry (% total employment)	29.4	30.6	30.6	30.5	26.8	24.6	24.6	25.1	25.5	24.7	24.6	
Employment in Agriculture (% total employment)	14.1	13.8	10.1	8.0	9.0	8.8	8.5	8.8	8.4	9.2		
Activity rate (% population aged 15-64)	68.7	67.6	67.9	68.4	69.6	70.2	71.4	71.8	72.4	73.7	74.1	
Activity rate (% population aged 15-24)	25.2	26.3	27.1	30.0	29.3	28.4	28.2	29.3	31.5	34.2	33.8	
Activity rate (% population aged 25-54)	87.8	85.7	85.6	85.4	87.0	88.4	89.8	89.7	89.5	89.7	89.3	
Activity rate (% population aged 55-64)	53.2	52.9	55.3	55.4	57.2	56.5	58.0	58.7	60.1	63.0	66.2	

Lithuania		2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015
Labour Market Indicators - Male	Total population (000)	1562	1528	1507	1487	1473	1450	1407	1384	1369	1356	1346
	Population aged 15-64(000)	1086	1065	1054	1046	1040	1024	990	972	962	953	944
	Total employment (000)	732	720	736	720	630	591	604	618	636	647	654
	Employment aged 15-64 (000)	720	707	719	703	616	579	590	603	620	632	637
	Employment rate (% population aged 20-64)	75.0	74.9	76.6	75.6	66.8	63.5	67.2	69.1	71.2	73.1	74.6
	Employment rate (% population aged 15-64)	66.4	66.4	68.2	67.2	59.3	56.5	60.1	62.2	64.7	66.5	68.0
	Employment rate (% population aged 15-24)	24.9	26.2	29.4	30.1	21.2	19.1	20.9	22.8	27.6	31.0	30.8
	Employment rate (% population aged 25-54)	83.2	83.6	84.2	82.6	74.2	71.1	75.7	77.7	79.8	80.7	81.8
	Employment rate (% population aged 55-64)	59.5	55.5	60.7	60.2	55.5	52.1	54.1	55.9	56.1	58.8	62.4
	FTE employment rate (% population aged 20-64)	75.2 b	74.4	76.2	75.5	66.1	62.8	66.5	68.5	70.9	72.9	74.0
	Self-employed (% total employment)	17.4	17.5	16.2	13.4	13.5	11.8	11.3	12.1	13.1	12.9	13.7
	Part-time employment (% total employment)	5.1	8.0	7.0	4.8	6.7	6.4	6.7	6.9	6.4	6.4	5.5
	Fixed term contracts (% total employees)	6.1	5.5	4.5	2.6 u	2.6	2.9	3.2	3.0	3.0	3.1	2.1
	Employment in Services (% total employment)	45.9	43.2	46.1	48.0	51.6	55.2	56.0	54.0	54.0	54.7	54.7
	Employment in Industry (% total employment)	37.5	40.8	41.4	41.8	36.8	33.4	33.3	34.6	35.2	33.6	
	Employment in Agriculture (% total employment)	16.7	16.0	12.6	10.2	11.5	11.4	10.7	11.4	10.8	11.7	
	Activity rate (% population aged 15-64)	72.4	70.7	71.3	71.6	71.7	72.0	73.5	73.7	74.7	76.0	75.8
	Activity rate (% population aged 15-24)	29.6	29.1	31.6	34.6	32.7	31.3	32.1	32.4	35.8	38.6	36.7
	Activity rate (% population aged 25-54)	89.9	88.4	87.7	87.3	88.0	89.0	90.7	90.5	90.6	90.8	90.4
	Activity rate (% population aged 55-64)	64.2	59.8	63.3	62.9	63.3	62.6	64.3	64.6	65.2	68.2	69.8
	Total unemployment (000)	65	46	32	45	130	159	132	111	96	90	73
	Unemployment rate (% labour force)	8.1	6.0	4.2	6.0	17.1	21.2	17.9	15.2	13.1	12.2	10.1
	Youth unemployment rate (% labour force 15-24)	16.0	10.0	7.0	13.0	35.1	39.0	34.9	29.7	23.0	19.6	16.0
	Long term unemployment rate (% labour force)	4.2	2.6 u	1.5 u	1.1 u	3.7	9.0	9.4	7.4	5.5	5.4	4.4
	Share of long term unemployment (% of total unemployment)	51.4	44.4 u	34.9 u	17.6 u	21.7	42.6	52.4	48.9	42.2	44.3	43.6
	Youth unemployment ratio (% population aged 15-24)	4.7 b	2.9	2.2	4.5	11.4	12.2	11.2	9.6	8.2	7.6	5.9
	Employment rate for low skilled 25-64 (ISCED 0-2)	56.0 b	53.0	56.3	49.6	39.5	33.8	36.1	39.9	43.6	46.1 b	49.1
	Employment rate for medium skilled 25-64 (ISCED 3-4)	80.1 b	82.2	80.9	78.4	69.4	64.7	68.6	71.2	72.1	72.4 b	73.7
	Employment rate for high skilled 25-64 (ISCED 5-8)	89.5 b	89.5	90.5	91.4	86.3	86.5	88.0	87.8	89.6	91.2 b	92.0
	Employment rate (Nationals aged 15-64)	66.3 b	66.3	68.1	67.2	59.3	56.5	60.2	62.2	64.7	66.5	68.0
	Employment rate (Other EU28 aged 15-64)											
	Employment rate (Other than EU28 aged 15-64)			78.3 u								
	Employment rate (Born in the same country aged 15-64)	65.9 b	66.1	67.9	66.9	59.1	56.2	59.9	62.1	64.5	66.3	67.9
	Employment rate (Born in other EU28 aged 15-64)											
	Employment rate (Born outside EU28 aged 15-64)		72.7	76.2	76.0	66.2	63.9	66.4	68.0	71.3	71.6	72.8
	Underemployment (% of labour force aged 15-74)				0.9 u	2.0	1.8	2.1	2.0	2.0	1.7	1.1
	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
	Discouraged, available but not seeking (% of labour force aged 15-74)	2.0 u	1.9 u	1.7 u	2.4 u	3.2	2.2	1.4	1.5	1.1 u	0.8 u	1.1
	Total population (000)	1793	1761	1743	1725	1711	1692	1645	1620	1603	1587	1575
	Population aged 15-64(000)	1165	1144	1134	1123	1115	1103	1063	1044	1031	1017	1004
Total employment (000)	703	709	715	707	687	657	650	658	657	672	681	
Employment aged 15-64 (000)	694	698	703	694	674	646	636	642	644	656	663	
Employment rate (% population aged 20-64)	66.6	68.0	69.1	68.7	67.2	65.0	66.6	67.9	68.5	70.6	72.2	
Employment rate (% population aged 15-64)	59.6	61.0	62.0	61.8	60.4	58.5	60.2	61.8	62.8	64.9	66.5	
Employment rate (% population aged 15-24)	17.4	21.0	20.0	21.8	20.1	17.4	17.0	20.1	21.5	24.1	25.7	
Employment rate (% population aged 25-54)	78.6	78.7	80.2	79.4	77.5	75.9	78.1	79.1	79.4	80.9	81.4	
Employment rate (% population aged 55-64)	41.9	45.2	47.5	47.4	47.8	45.5	47.2	48.5	51.2	54.3	58.8	
FTE employment rate (% population aged 20-64)	65.5 b	66.2	67.7	67.7	65.8	63.9	65.1	66.2	67.2	69.0	70.5	
Self-employed (% total employment)	10.9	10.0	9.0	7.0	7.5	7.0	7.5	7.5	8.2	8.9	8.6	
Part-time employment (% total employment)	8.0	12.0	10.2	8.5	9.1	8.9	9.9	10.7	10.2	10.6	9.7	
Fixed term contracts (% total employees)	2.9 u	2.1 u	2.2 u	1.6 u	1.5	1.5	1.7	1.7	1.7	1.8	1.6	
Employment in Services (% total employment)	67.6	68.4	72.7	75.2	75.7	76.9	77.2	77.5	77.7	77.1		
Employment in Industry (% total employment)	21.1	20.1	19.7	18.9	17.6	16.6	16.4	16.1	16.2	16.2		
Employment in Agriculture (% total employment)	11.3	11.5	7.7	5.9	6.6	6.5	6.5	6.3	6.1	6.7		
Activity rate (% population aged 15-64)	65.2	64.6	64.9	65.5	67.6	68.6	69.4	70.1	70.3	71.6	72.5	
Activity rate (% population aged 15-24)	20.6	23.3	22.3	25.3	25.9	25.4	26.1	26.1	27.0	29.6	30.8	
Activity rate (% population aged 25-64)	85.8	83.2	83.8	83.6	80.0	87.8	88.9	89.0	88.4	88.7	88.2	
Activity rate (% population aged 55-64)	44.8	47.6	49.2	49.7	52.4	51.7	53.1	54.2	56.1	58.9	63.3	
Total unemployment (000)	66	42	32	42	81	112	96	86	77	68	61	
Unemployment rate (% labour force)	8.5	5.6	4.3	5.6	10.5	14.5	12.9	11.6	10.5	9.2	8.2	
Youth unemployment rate (% labour force 15-24)	15.5	10.0	10.4	13.9	22.4	31.6	29.4	22.7	20.4	18.7	16.6	
Long term unemployment rate (% labour force)	4.6	2.6 u	1.3 u	1.5 u	2.8	5.9	6.7	5.8	4.6	4.2	3.4	
Share of long term unemployment (% of total unemployment)	69.3	45.2 u	29.9 u	15.9 u	27.0	54.3	57.7	49.6	45.8	45.3	42.1	
Youth unemployment ratio (% population aged 15-24)	3.2 b	2.3	2.3	3.5	5.8	8.0	7.1	5.9	5.5	5.1		
Employment rate for low skilled 25-64 (ISCED 0-2)	35.8 b	38.9	39.2	32.9	36.0	29.2	29.3	30.9	32.7	39.1 b	38.8	
Employment rate for medium skilled 25-64 (ISCED 3-4)	69.6 b	68.8	70.4	69.3	65.8	62.0	63.0	63.6	64.3	66.2 b	67.6	
Employment rate for high skilled 25-64 (ISCED 5-8)	86.2 b	88.3	88.3	87.1	86.9	86.8	88.5	88.5	88.0	88.2 b	88.1	
Employment rate (Nationals aged 15-64)	59.6 b	61.0	62.1	61.8	60.5	58.6	60.3	61.8	62.8	64.8	66.5	
Employment rate (Other EU28 aged 15-64)												
Employment rate (Born in the same country aged 15-64)	59.6 b	60.8	61.9	61.6	60.4	58.5	60.3	61.8	62.7	64.8	66.5	
Employment rate (Born in other EU28 aged 15-64)												
Employment rate (Born outside EU28 aged 15-64)		66.5	64.9	65.7	61.6	61.6	58.9	61.8	64.4	66.0	66.4	
Underemployment (% of labour force aged 15-74)				1.5 u	2.2	2.9	2.9	2.9	2.8	2.5	2.0	
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	
Discouraged, available but not seeking (% of labour force aged 15-74)	1.9 u	2.1 u	2.1 u	2.4 u	2.2	1.5	1.1 u	0.7 u	0.7 u	0.7 u	0.6 u	

[Click here to download table.](#)

Lithuania		2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	
Social Indicators	All	At-risk-of-poverty or exclusion (% of total population)	41.0	35.9	28.7	28.3	29.6	34.0	33.1	32.5	30.8	27.3	29.3
		At-risk-of-poverty (% of total population)	20.5	20.0	19.1	20.9	20.3	20.5	19.2	18.6	20.6	19.1	22.2
		At-risk-of-poverty threshold (PPS single person)	2308 b	2772	3428	4111	4289	3611	3641	4034	4389	4557	4951
		Poverty gap (%)	28.4	29.1	25.7	25.6	23.8	32.6	29.0	22.6	24.8	22.7	26.0
		Persistent at-risk-of-poverty (% of total population)	7.4	6.5	5.0	10.9	11.4	7.4	5.9	4.2	10.2	16.0	
		At-risk-of-poverty before social transfers excl. pensions (% of total population)	26.1	26.6	25.5	27.4	28.6	31.3	30.2	28.4	30.3	27.5	28.6
		Impact of social transfers (excl. pensions) in reducing poverty (%)	21.5	24.8	25.1	23.7	29.0	34.5	36.4	34.5	32.0	30.6	22.4
		Severe Material Deprivation (% of total population)	32.6	25.3	16.6	12.5	15.6	19.9	19.0	19.8	16.0	13.6	13.9
		Share of people living in low work intensity households (% of people aged 0-59)	9.6	8.3	6.4	6.1	7.2	9.5	12.7	11.4	11.0	8.8	9.2
		Real Gross Household Disposable income (growth %)	7.0	10.0	2.0	7.5	-11.7	-0.4	1.1	0.3	4.4	1.6	2.8
		Income quintile share ratio S80/S20	6.9	6.3	5.9	6.1	6.4	7.5	5.8	5.3	6.1	6.1	7.5
		GINI coefficient	36.3 b	35.0	33.9	34.5	35.9	37.0	33.0	32.0	34.6	35.0	37.9
	Early leavers from education and training (% of population aged 18-24)	8.4	8.8 b	7.8	7.5	8.7	7.9	7.4	6.5	6.3	5.9 b	5.5	
	NEET. Young people not in employment, education or training (% of total population aged 15-24)	8.8	8.5 b	7.1	8.8	12.1	13.2	11.8	11.2	11.1	9.9	9.2	
	Male	At-risk-of-poverty or exclusion (% of male population)	38.9	33.9	26.3	25.9	27.5	33.7	33.0	31.4	28.3	25.5	28.2
		At-risk-of-poverty (% of male population)	19.7	19.1	16.7	18.5	18.9	21.2	19.1	18.1	19.4	17.8	21.8
		Poverty gap (%)	31.1	30.6	28.2	28.4	29.0	36.6	29.1	24.3	25.2	26.0	27.7
		Persistent at-risk-of-poverty (% of male population)	3.1	23.6	15.8	11.9	15.0	18.3	18.7	19.0	14.2	12.6	13.4</

## Luxembourg

Luxembourg		2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	
Macro Economic Indicators (Annual % growth)	Real GDP	32	51	84	-08	-54	58	20	00	42	47	35	
	Total employment	28	38	44	48	10	18	30	24	18	26	26	
	Labour productivity	04	12	38	-53	-64	39	-09	-24	23	20	09	
	Annual average hours worked per person employed	-15	01	09	00	-33	-01	-01	-05	-05	05	04	
	Real productivity per hour worked	20	11	29	-54	-32	41	-08	-19	28	15	01	
	Harmonized CPI	38	30	27	41	00	28	37	29	17	07	04	
	Price deflator GDP	41	63	15	33	18	43	52	24	13	15	04	
	Nominal compensation per employee	40	43	43	27	17	28	18	18	23	26	09	
	Real compensation per employee (GDP deflator)	-01	-25	28	-06	-02	-13	-32	-06	10	10	05	
	Real compensation per employee (private consumption deflator)	02	13	16	-14	16	00	-19	-11	06	19	09	
	Nominal unit labour costs	36	30	05	85	86	-11	27	43	00	05	01	
	Real unit labour costs	-05	-36	-10	50	67	-50	-24	18	-13	-10	-03	
	Labour Market Indicators - Total	Total population (000)	461	469	476	484	494	502	512	525 b	537	550	563
		Population aged 15-64 (000)	310	317	322	328	336	343	351	362	371	380	389
		Total employment (000)	194	195	203	202	217	221	225	236	239	246	258
Employment aged 15-64 (000)		193	195	203	202	215	219	222	234	236	243	255	
Employment rate (% population aged 20-64)		69.0	69.1	69.6 b	68.8	70.4 b	70.7	70.1	71.4	71.1	72.1	70.9 b	
Employment rate (% population aged 15-64)		63.6	63.6	64.2 b	63.4	65.2 b	65.2	64.6	65.8	65.7	66.6	66.1 b	
Employment rate (% population aged 15-24)		24.9	23.3	22.5 b	23.8	26.7 b	21.2	20.7	21.7	21.9	20.4	29.1 b	
Employment rate (% population aged 25-54)		80.7	81.0	81.9 b	80.0	81.2 b	82.3	82.0	83.1	82.9	83.7	82.6 b	
Employment rate (% population aged 55-64)		31.7	33.2	32.0 b	34.1	38.2 b	39.6	39.3	41.0	40.5	42.5	38.4 b	
FTE employment rate (% population aged 20-64)		63.2 b	63.7	63.9 b	63.2	64.7 b	65.3	64.7	65.9	65.8	66.8	65.7 b	
Self-employed (% total employment)		7.8	7.6	7.1	6.3	8.1	7.8	8.1	8.4	8.4	8.3	8.9	
Part-time employment (% total employment)		17.4	17.1	17.8 b	17.9	17.6 b	17.4	18.0	18.5	18.7	18.4	18.4 b	
Fixed term contracts (% total employees)		5.3 b	6.1	6.8 b	6.2	7.2 b	7.1	7.1	7.7	7.1	8.2	10.2 b	
Employment in Services (% total employment)		74.9	75.4	75.9	76.5	77.1	77.4	77.8	78.3	78.8	79.4		
Employment in Industry (% total employment)		25.6	25.2	22.7	22.2	21.6	21.2	20.9	20.5	20.0	19.5		
Employment in Agriculture (% total employment)		1.5	1.4	1.4	1.3	1.3	1.3	1.2	1.2	1.2	1.2		
Activity rate (% population aged 15-64)		66.6	66.7	66.9 b	66.8	68.7 b	68.2	67.9	69.4	69.9	70.8	70.9 b	
Activity rate (% population aged 15-24)		28.8	27.8	26.5 b	29.0	32.3 b	24.7	24.9	26.8	25.9	26.3	35.2 b	
Activity rate (% population aged 25-54)		83.9	84.5	84.7 b	83.4	84.8 b	85.7	85.6	87.0	87.5	88.0	87.7 b	
Activity rate (% population aged 55-64)		32.4	33.6	32.7 b	35.1	39.4 b	40.6	40.4	41.9	42.5	44.5	40.3 b	
Total unemployment (000)		9	9	9	10	12	11	11	13	15	16	18	
Unemployment rate (% labour force)		46	46	42	49	51	46	48	51	59	60	64	
Youth unemployment rate (% labour force 15-24)		146	151	156 b	164	165	158	164	180	168	163	166 b	
Long term unemployment rate (% labour force)		12	14	12	16	12	13	14	16	18	18	19	
Share of long term unemployment (% of total unemployment)		26.4	29.5	28.7	32.4	23.1	29.3	28.8	30.3	30.4	27.4	28.4	
Youth unemployment ratio (% population aged 15-24)		3.9 b	4.5	4.0 b	5.2	5.5 b	3.5	4.2	5.0	4.0	6.0	6.1 b	
Employment rate for low skilled 25-64 (ISCED 0-2)		61.8 b	60.8	62.3 b	61.1	61.6 b	61.9	62.0	63.0	61.8	60.9 b	60.8 b	
Employment rate for medium skilled 25-64 (ISCED 3-4)		71.7 b	73.4	73.9 b	70.7	70.2 b	72.1	70.4	71.9	70.8	72.1 b	70.9 b	
Employment rate for high skilled 25-64 (ISCED 5-8)		84.0 b	85.2	84.5 b	84.7	85.1 b	85.0	85.0	84.8	84.9	84.6 b	84.5 b	
Employment rate (National aged 15-64)		60.9 b	60.9	61.6 b	60.8	62.0 b	62.8	61.8	62.6	62.8	63.7	63.9 b	
Employment rate (Other EU28 aged 15-64)	69.0	69.9	69.1	69.6 b	69.5	69.7	70.9	70.0	71.4	70.1 b			
Employment rate (Other than EU28 aged 15-64)	46.5	55.2 b	37.1	53.2 b	56.6	55.1	56.7	58.7	53.5	54.5 b			
Employment rate (Born in the same country aged 15-64)	59.8 b	60.0	59.2 b	59.4	61.9 b	60.7	59.5	60.7	60.3	61.5	62.6 b		
Employment rate (Born in other EU28 aged 15-64)	71.0	73.0 b	72.2	71.1 b	72.2	72.5	73.6	73.6	74.0	71.8 b			
Employment rate (Born outside EU28 aged 15-64)	55.5	59.9 b	48.5	59.9 b	62.9	59.9	60.9	62.0	62.4	60.3 b			
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		
Seeking but not available (% of labour force aged 15-74)		0.4 u	0.3 bu		0.7	0.7	0.6	0.6	0.6	0.7	2.7 b		
Discouraged, available but not seeking (% of labour force aged 15-74)				0.4 u	5.1 b	4.7	4.9	5.1	5.9	5.8	5.1 b		

[Click here to download table.](#)

Luxembourg		2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015
Labour Market Indicators - Male	Total population (000)	228	232	236	240	245	249	255	262 b	268	275	282
	Population aged 15-64(000)	157	160	163	166	170	174	178	184	189	194	199
	Total employment (000)	111	114	114	116	124	125	127	132	134	136	141
	Employment aged 15-64 (000)	112	111	114	115	122	124	126	130	132	134	140
	Employment rate (% population aged 20-64)	79.4	78.9	78.3 b	77.2	79.0 b	79.2	78.1	78.5	78.0	78.4	76.7 b
	Employment rate (% population aged 15-64)	73.3	72.6	72.3 b	71.5	73.2 b	73.1	72.1	72.5	72.1	72.6	71.3 b
	Employment rate (% population aged 15-24)	28.4	25.4	26.5 b	27.0	29.1 b	22.1	22.8	23.4	24.2	21.9	29.4 b
	Employment rate (% population aged 25-54)	92.8	92.7	92.2 b	90.2	90.8 b	92.0	90.8	91.0	90.1	90.5	89.3 b
	Employment rate (% population aged 55-64)	38.3	38.7	35.6 b	38.7	46.5 b	47.7	47.0	47.4	48.3	49.8	43.0 b
	FTE employment rate (% population aged 20-64)	78.7 b	78.4	78.7 b	76.5	77.2 b	77.5	76.8	77.5	76.8	77.4	75.3 b
	Self-employed (% total employment)	8.7	8.9	8.1	6.6	9.8	9.0	9.2	9.2	9.3	9.5	10.0
	Part-time employment (% total employment)	2.4	2.6	2.6 b	2.7	4.5 b	3.4	4.3	4.7	5.1	4.7	5.6 b
	Fixed term contracts (% total employees)	4.5	5.2	5.7 b	5.5	5.7 b	5.6	5.7	6.5	5.1	6.4	9.1 b
	Employment in Services (% total employment)	64.5	64.4	64.8 b	67.4	67.3	68.1	68.0	68.4	69.7	70.7	
	Employment in Industry (% total employment)	33.7	33.9	33.5 b	31.1	31.1	30.3	30.5	30.1	28.8	27.8	
	Employment in Agriculture (% total employment)	1.8	1.7	1.7 b	1.6	1.6	1.6	1.5	1.5	1.5	1.5	
	Activity rate (% population aged 15-64)	76.0	75.3	75.0 b	74.7	75.0 b	75.0	74.7	75.9	76.3	77.2	76.0 b
	Activity rate (% population aged 15-24)	32.1	30.6	30.9 b	30.9	34.9 b	26.6	26.3	28.8	28.0	29.6	36.2 b
	Activity rate (% population aged 25-54)	95.5	95.3	94.9 b	93.7	94.1 b	94.8	93.9	94.6	94.4	94.9	93.9 b
	Activity rate (% population aged 55-64)	39.4	38.9	36.4 b	39.7	47.7 b	48.8	48.4	48.3	50.5	52.1	45.5 b
	Total unemployment (000)	4	4	4	5	6	5	6	6	8	8	9
	Unemployment rate (% labour force)	36	35	34	41	45	38	39	45	56	58	59
	Youth unemployment rate (% labour force 15-24)	126	160	138	134	150	172	151	186	188	251	179
	Long term unemployment rate (% labour force)	12	12	13	13	0.9	12	13	16	15	16	18
	Share of long term unemployment (% of total unemployment)	34	33.8	35.4	29.9	19.9	32.2	33.1	28.8	30.3	28.6	31.0
	Youth unemployment ratio (% population aged 15-24)	3.8 b	5.2	4.1 b	3.9	5.8 b	4.7	3.5	5.4	5.6	7.7	6.8 b
	Employment rate for low skilled 25-64 (ISCED 0-2)	77.1 b	76.6	75.7 b	75.2	74.9 b	74.6	74.9	73.1	72.8	70.0 b	69.6 b
	Employment rate for medium skilled 25-64 (ISCED 3-4)	82.3 b	82.5	82.4 b	78.3	79.2 b	81.1	79.0	79.3	78.6	79.8 b	77.3 b
	Employment rate for high skilled 25-64 (ISCED 5-8)	88.9 b	89.4	87.9 b	88.9	90.6 b	90.7	89.8	90.1	89.3	88.9 b	88.7 b
	Employment rate (National aged 15-64)	70.5 b	69.7	68.7 b	69.4	70.7 b	70.2	67.9	68.7	68.3	69.5	67.8 b
Employment rate (Other EU28 aged 15-64)	78.7 b	79.9	79.5 b	76.5	76.9 b	76.9	76.5	76.9 b	77.0	76.4	75.3 b	
Employment rate (Other than EU28 aged 15-64)	60.0	60.7	67.6 b	44.1	68.7 b	72.5	76.0	72.6	68.1	65.7	70.4 b	
Employment rate (Born in the same country aged 15-64)	68.8 b	68.1	67.3 b	68.2	69.2 b	68.4	65.9	66.3	65.3	66.6	66.7 b	
Employment rate (Born in other EU28 aged 15-64)	80.7	80.3 b	78.7	78.8 b	79.6	79.9	80.0	80.7	80.4	76.3 b		
Employment rate (Born outside EU28 aged 15-64)	69.8	72.7 b	57.4	74.3 b	74.7	73.5	74.7	72.1	70.7	71.7 b		
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	
Seeking but not available (% of labour force aged 15-74)				0.6 u	0.6 bu					0.5 u	2.0 b	
Discouraged, available but not seeking (% of labour force aged 15-74)							3.2	3.0	3.4	4.1	3.9 b	
Labour Market Indicators - Female	Total population (000)	233	237	240	244	249	253	257	263 b	269	275	281
	Population aged 15-64(000)	153	156	159	162	166	169	173	178	182	186	191
	Total employment (000)	81	84	89	87	93	96	98	104	105	110	116
	Employment aged 15-64 (000)	81	84	89	87	93	95	97	103	105	109	115
	Employment rate (% population aged 20-64)	58.4	59.4	61.0 b	60.1	61.5 b	62.0	61.9	64.1	63.9	65.5	65.0 b
	Employment rate (% population aged 15-64)	53.7	54.6	56.1 b	55.1	57.0 b	57.2	56.9	59.0	59.1	60.5	60.8 b

Luxembourg		2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015		
Social indicators	All	At-risk-of-poverty or exclusion (% of total population)	17.3	16.5	15.9	15.5	17.8	17.1	16.8	18.4	19.0	19.0	18.5	
		At-risk-of-poverty (% of total population)	13.7	14.1	13.5	13.4	14.9	14.5	13.6	15.1	15.9	16.4	15.3	
		At-risk-of-poverty threshold (PPS single person)	16538	15851	16108	16166	16265	15961	15961	15961	15948	16818	16962	17571
		Poverty gap (%)	18.6	19.7	18.8	16.6	17.6	18.6	15.7	15.0	17.5	16.3	17.4	
		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	
		At-risk-of-poverty before social transfers excl. pensions (% of total population)	23.8	23.6	23.4	23.6	27.0	29.1	27.2	29.0	29.4	27.6	27.2	
		Impact of social transfers (excl. pensions) in reducing poverty (%)	42.4	40.3	40.3	43.2	44.8	50.2	50.0	47.9	45.9	40.6	43.2	
		Severe Material Deprivation (% of total population)	1.8	1.1	0.8	0.7	1.1	0.5	1.2	1.3	1.8	1.4	2.0	
		Share of people living in low work intensity households (% of people aged 0-59)	5.7	5.2	5.0	4.7	6.3	5.5	5.8	6.1	6.6	6.1	5.7	
		Real Gross Household Disposable income (growth %)												
	Income quintile share ratio S80/S20	3.9	4.2	4.0	4.1	4.3	4.1	4.0	4.1	4.6	4.4	4.3		
	GINI coefficient	26.5	27.8	27.4	27.7	29.2	27.9	27.2	28.0	30.4	28.7	28.5		
	Early leavers from education and training (% of population aged 18-24)	13.5	14.0 b	12.5 b	13.4	7.7 b	7.1	6.2	8.1	6.1	6.1 b	6.1 b	9.3 b	
	NEET: Young people not in employment, education or training (% of total population aged 15-24)	76.7	76.6	76.7	78.1	78.1	77.9	78.5	79.1	79.8	79.4	79.4	82.6	
	At-risk-of-poverty or exclusion (% of male population)	16.2	15.8	15.0	14.2	16.0	16.5	15.6	17.3	18.6	18.5	17.7		
	At-risk-of-poverty (% of male population)	13.2	13.8	12.9	12.5	13.8	14.6	12.7	14.7	15.7	16.3	15.0		
	Poverty gap (%)	19.5	19.7	19.1	15.4	16.9	18.6	15.7	14.9	18.0	17.5	18.7		
	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		
	Severe Material Deprivation (% of male population)	2.1	0.9	0.8	0.6	0.9	0.4	1.3	1.3	1.5	1.4	1.8		
	Share of people living in low work intensity households (% of males aged 0-59)	5.0	4.5	4.3	3.8	4.9	4.8	5.1	5.1	6.5	5.6	5.5		
	Life expectancy at birth (years)	62.3	61.2	62.3	64.8	65.1	64.4	65.8	65.8	63.8	64.0			
	Healthy life years at birth (years) - men	17.0	17.6 b	16.6 b	15.8	8.9 b	8.0	7.6	10.7	8.4	8.3 b	10.5 b		
	Early leavers from education and training (% of males aged 18-24)	4.3	6.1 b	4.7 b	4.6	6.0 b	5.6	4.6	6.3	5.9	7.8	6.6 b		
	NEET: Young people not in employment, education or training (% of males aged 15-24)													
	At-risk-of-poverty or exclusion (% of female population)	18.3	17.1	16.9	16.7	19.6	17.7	18.0	19.4	19.4	19.5	19.3		
	At-risk-of-poverty (% of female population)	14.2	14.3	14.1	14.3	16.0	14.4	14.5	15.6	16.0	16.6	15.7		
	Poverty gap (%)	17.7	20.3	18.7	17.6	19.2	18.8	15.9	15.5	17.4	15.8	16.8		
	Persistent at-risk-of-poverty (% of female population)			9.8	9.2	9.9	6.9	7.5	7.9	9.8	10.3	12.6		
	Severe Material Deprivation (% of female population)	1.6	1.3	0.8	0.7	1.3	0.7	1.1	1.3	2.0	1.4	2.1		
	Share of people living in low work intensity households (% of females aged 0-59)	6.5	5.9	5.8	5.5	7.8	6.3	6.6	7.2	6.6	6.6	5.8		
	Life expectancy at birth (years)	82.3	81.9	82.2	83.1	83.3	83.5	83.6	83.8	83.9	85.2			
	Healthy life years at birth (years) - women	62.4	62.1	64.6	64.2	65.9	66.4	67.1	66.4	62.9	63.5			
	Early leavers from education and training (% of females aged 18-24)	9.6	10.4 b	8.4 b	10.9	6.6 b	6.0	4.8 u	5.5	3.7	3.7 b	8.1 b		
	NEET: Young people not in employment, education or training (% of females aged 15-24)	6.7	7.3 b	6.6 b	7.8	5.5 b	4.7	4.9	5.5	4.0	4.6	5.7 b		
	At-risk-of-poverty or exclusion of children (% of people aged 0-17)	22.8	20.4	21.2	20.9	23.7	22.5	21.7	24.6	26.0	26.4	23.0		
	At-risk-of-poverty (% of Children population)	20.2	19.6	19.9	19.8	22.3	21.4	20.3	22.6	23.9	25.4	21.5		
	Severe Material Deprivation (% of Children population)	3.3	1.6	0.7	0.9	1.2	0.2	1.2	1.7	2.4	1.8	3.0		
	Share of children living in low work intensity households (% of Children population)	3.0	3.1	3.5	3.2	4.1	3.2	2.9	4.0	4.5	4.2	2.6		
	Risk of poverty of children in households at work (Working Intensity > 0.2)	19.0	17.9	18.1	18.2	20.3	19.7	19.0	20.8	21.6	22.6	20.0		
	Impact of social transfers (excl. pensions) in reducing poverty (0-17) (%)	43.4	40.2	40.1	41.3	43.7	50.4	50.0	50.7	46.3	40.4	43.1		
At-risk-of-poverty or exclusion (% of Working age population)	17.3	16.8	16.0	15.8	18.2	17.5	17.6	18.8	19.0	19.4	19.2			
At-risk-of-poverty (% of Working age population)	12.8	13.5	12.7	12.9	14.2	13.9	13.1	14.5	15.0	15.8	14.9			
Severe Material Deprivation (% of Working age population)	1.7	1.1	0.9	0.7	1.3	0.7	1.4	1.4	1.7	1.5	2.0			
Very low work intensity (18-59)	6.7	5.9	5.6	5.2	7.1	6.4	6.9	6.8	7.4	6.8	6.7			
In-work at-risk of poverty rate (% of persons employed 18-64)	9.8	10.3	9.3	9.4	10.1	10.6	9.8	10.3	11.2	11.1	11.6			
Impact of social transfers (excl. pensions) in reducing poverty (18-64) (%)	43.4	42.3	44.8	44.9	46.2	50.5	50.8	47.3	46.8	41.3	45.2			
At-risk-of-poverty or exclusion of elderly (% of people aged 65+)	8.0	8.3	7.2	5.4	6.2	6.1	4.7	6.1	7.0	6.4	8.2			
At-risk-of-poverty (% of Elderly population)	7.8	7.9	7.2	5.4	6.0	5.9	4.7	6.1	6.2	6.3	7.9			
Severe Material Deprivation (% of Elderly population)	0.2	0.4	0.6	0.0	0.2	0.1	0.0	0.0	0.0	0.1	0.3			
Relative median income of elderly (ratio with median income of people younger than 65)	0.96	0.96	0.96	0.97	1.01	1.05	1.05	1.10	1.13	1.11	1.08			
Aggregate replacement ratio (ratio)	0.63	0.66	0.61	0.58	0.62	0.68	0.74	0.79	0.78	0.85	0.80			
Sickness/Health care	5.6	5.2	5.0	5.2	6.0	5.7	5.5	5.7	5.8	5.7	5.7			
Disability	2.8	2.7	2.4	2.4	2.7	2.5	2.5	2.5	2.5	2.5	2.5			
Old age and survivors	7.9	7.5	7.2	7.5	8.5	8.1	8.1	8.5	8.6	8.4	8.4			
Family/Children	3.7	3.4	3.2	4.1	4.2	4.0	3.6	3.6	3.6	3.5	3.5			
Unemployment	1.1	1.0	0.9	1.0	1.3	1.2	1.1	1.3	1.5	1.5	1.5			
Housing and Social exclusion n.e.c.	0.6	0.6	0.6	0.6	0.8	0.8	0.8	0.8	0.8	0.8	0.8			
Total (including Admin and Other expenditures)	22.1	20.8	19.7	21.2	23.8	22.7	21.9	22.8	23.2	22.7	22.7			
of which: Means tested benefits	0.6	0.6	0.6	0.6	0.9	0.8	0.8	0.8	0.8	0.8	0.8			

[Click here to download table.](#)

## Hungary

Hungary		2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015
Macro Economic indicators (Annual % growth)	Real GDP	4.4	3.9	0.4	0.9	-6.6	0.7	1.7	-1.6	2.1	4.0	3.1
	Total employment	-0.3	0.4	0.1	-2.0	-2.5	-1.1	0.0	0.2	1.1	4.8	2.2
	Labour productivity	4.7	3.4	0.3	2.9	-4.2	1.8	1.7	-1.8	1.0	-0.8	1.0
	Annual average hours worked per person employed	0.0	-0.2	-0.2	0.2	-0.9	-9.5 b	-0.4 b	-1.1	-0.3	0.4	-0.2
	Real productivity per hour worked	4.6	3.6	0.6	2.7	-3.3	1.2 b	2.1	-0.7	1.3	-1.2	1.7
	Harmonized CPI	3.5	4.0	7.9	6.0	4.0	4.7	3.9	5.7	1.7	0.0	0.1
	Price deflator GDP	2.4	3.5	5.4	5.0	4.0	2.3	2.2	3.4	2.9	3.4	1.2
	Nominal compensation per employee	7.6	5.3	5.6	7.3	-1.3	0.6	3.1	2.0	1.6	1.3	1.6
	Real compensation per employee (GDP deflator)	5.1	1.7	0.2	2.2	-5.1	-1.7	0.9	-1.4	-1.3	-2.0	-0.1
	Real compensation per employee (private consumption deflator)	4.0	1.2	-2.2	1.2	-5.2	-3.9	-0.8	-3.5	-0.1	1.3	1.6
	Nominal unit labour costs	2.8	1.8	5.3	4.3	3.0	-1.1	1.4	3.9	0.6	2.1	0.7
	Real unit labour costs	0.4	-1.6	-0.1	-0.7	-1.0	-3.3	-0.8	0.4	-2.3	-1.2	-1.1
	Total population (000)	10098	10077	10066	10045	10031	10014	9986	9932 b	9909	9877	9856
	Population aged 15-64 (000)	6940	6932	6931	6913	6898	6874	6857	6816	6776	6720	6664
	Total employment (000)	3902	3928	3902	3848	3748	3732	3759	3827	3893	4101	4211
Employment aged 15-64 (000)	3879	3904	3873	3818	3717	3701	3724	3793	3860	4070	4176	
Employment rate (% population aged 20-64)	62.2	62.6	62.3	61.5	60.1	59.9	60.4	61.6	63.0	66.7	68.9	
Employment rate (% population aged 15-64)	56.9	57.4	57.0	56.4	55.0	54.9	55.4	56.7	58.1	61.8	63.9	
Employment rate (% population aged 15-24)	21.8	21.6	21.1	20.2	18.1	18.3	18.0	18.4	20.1	23.5	25.7	
Employment rate (% population aged 25-54)	73.7	74.5	74.7	74.5	72.9	72.5	73.0	74.6	75.7	79.2	80.6	
Employment rate (% population aged 55-64)	33.0	33.2	32.2	30.9	31.9	33.6	35.3	36.1	37.9	41.7	45.3	
FTE employment rate (% population aged 20-64)	61.5 b	62.0	61.6	60.8	59.2	58.9	59.2	60.5	62.2	65.3	67.4	
Self-employed (% total employment)	13.3	12.2	12.0	11.9	12.2	12.0	11.7	11.4	10.9	10.6	10.6	
Part-time employment (% total employment)	3.9	3.7	3.9	4.3	5.2	5.5	6.4	6.7	6.4	6.0	5.7	
Fixed term contracts (% total employees)	7.0 b	6.9	7.3	7.9	8.5	9.8	9.1	9.5	10.9	10.8	11.4	
Employment in Services (% total employment)	60.7	61.0	61.7	62.0	63.0	63.5	63.3	63.9	65.8	65.8		
Employment in Industry (% total employment)	31.0	31.0	30.8	30.9	30.0	29.2	29.7	29.7	27.3	27.5		
Employment in Agriculture (% total employment)	8.3	8.0	7.5	7.1	7.1	7.2	6.9	7.2	6.9	6.7		
Activity rate (% population aged 15-64)	61.3	62.0	61.6	61.2	61.2	61.9	62.4	63.7	64.7	67.0	68.6	
Activity rate (% population aged 15-24)	27.1	26.7	25.7	25.1	24.7	24.8	24.3	25.7	27.4	29.5	31.0	
Activity rate (% population aged 25-54)	78.7	79.9	80.1	80.3	80.3	80.9	81.3	82.9	83.3	85.0	85.8	
Activity rate (% population aged 55-64)	34.3	34.5	33.7	32.6	34.1	36.5	38.8	39.5	41.2	44.6	48.1	
Total unemployment (000)	302	317	312	326.1	418	469	466	475	441	343	308	
Unemployment rate (% labour force)	7.2	7.5	7.4	7.8	10.0	11.2	11.0	11.0	10.2	7.7	6.8	
Youth unemployment rate (% labour force 15-24)	19.4	19.1	18.1	19.5								

Hungary		2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015
Labour Market Indicators - Male	Total population (000)	4793	4785	4779	4770	4763	4757	4744	4725 b	4715	4703	4696
	Population aged 15-64(000)	3407	3407	3408	3403	3398	3391	3385	3367	3351	3327	3303
	Total employment (000)	2116	2139	2129	2094	2025	1993	2021	2049	2104	2221	2284
	Employment aged 15-64 (000)	2101	2123	2112	2076	2007	1975	2001	2029	2085	2203	2264
	Employment rate (% population aged 20-64)	69.2	70.1	69.8	68.7	66.5	65.5	66.4	67.3	69.3	73.5	75.8
	Employment rate (% population aged 15-64)	63.1	63.9	63.7	62.7	60.7	59.9	60.7	61.6	63.7	67.8	70.3
	Employment rate (% population aged 15-24)	24.4	24.5	24.4	23.3	20.0	19.9	19.7	19.8	23.0	26.4	28.1
	Employment rate (% population aged 25-54)	80.3	81.3	81.6	81.3	79.1	78.0	79.5	80.2	81.4	85.3	86.8
	Employment rate (% population aged 55-64)	40.6	41.2	40.1	37.7	38.7	38.6	39.3	41.4	44.8	49.6	54.4
	FTE employment rate (% population aged 20-64)	68.9 b	69.8	69.5	68.3	66.0	65.0	65.7	66.7	69.0	72.6	74.8
	Self-employed (% total employment)	16.7	15.5	14.9	15.0	15.2	15.0	15.0	14.1	13.6	13.4	13.0
	Part-time employment (% total employment)	2.4	2.4	2.5	3.0	3.6	3.7	4.4	4.3	4.2	4.1	4.0
	Fixed term contracts (% total employees)	6.3	6.3	6.5	7.3	7.7	8.6	8.2	9.0	9.9	9.7	10.1
	Employment in Services (% total employment)	49.1	49.4	50.0	50.5	51.1	51.8	51.8	52.5	54.7	54.5	54.8
	Employment in Industry (% total employment)	39.6	39.7	39.6	39.6	39.3	38.0	38.6	37.6	35.7	36.3	35.7
	Employment in Agriculture (% total employment)	11.3	10.9	10.5	9.8	9.6	10.2	9.6	9.9	9.6	9.2	9.4
	Activity rate (% population aged 15-64)	67.9	68.9	68.6	68.0	67.7	67.8	68.4	69.6	71.0	73.4	75.3
	Activity rate (% population aged 15-24)	30.3	30.2	29.5	28.7	27.7	27.5	27.0	27.9	31.0	33.0	34.4
	Activity rate (% population aged 25-54)	85.5	86.9	87.2	87.3	87.1	87.3	88.2	89.4	89.5	91.2	92.0
	Activity rate (% population aged 55-64)	42.3	43.0	42.1	39.8	41.5	42.2	43.7	45.4	49.0	53.2	57.8
	Total unemployment (000)	159	165	164	1741	232	262	252	262	239	182	162
	Unemployment rate (% labour force)	7.0	7.2	7.1	7.7	10.3	11.6	11.1	11.3	10.2	7.6	6.6
	Youth unemployment rate (% labour force 15-24)	19.6	18.6	17.6	18.9	27.9	27.8	27.0	29.1	25.6	20.0	18.3
	Long term unemployment rate (% labour force)	3.2	3.3	3.3	3.6	4.3	5.7	5.2	5.2	5.0	3.6	3.1
	Share of long term unemployment (% of total unemployment)	46.2	46.2	46.3	47.3	41.4	49.4	47.3	45.5	48.6	48.0	47.1
	Youth unemployment ratio (% population aged 15-24)	6.0 b	5.6	5.1	5.4	7.7	7.6	7.3	8.1	7.9	6.6	6.3
	Employment rate for low skilled 25-64 (ISCED 0-2)	45.4 b	45.9	46.0	46.9	45.1	44.0	45.8	46.8	47.2	54.7 b	58.5
	Employment rate for medium skilled 25-64 (ISCED 3-4)	76.9 b	77.5	76.6	74.9	72.6	71.1	71.5	72.5	74.2	78.2 b	80.5
	Employment rate for high skilled 25-64 (ISCED 5-8)	87.5 b	86.7	86.2	84.6	83.3	82.8	84.7	85.7	86.8	88.4 b	89.8
	Employment rate (Nationals aged 15-64)	63.0 b	63.9	63.6	62.6	60.6	59.8	60.7	61.5	63.6	67.7	70.2
	Employment rate (Other EU28 aged 15-64)		73.2	78.8	78.8	76.4	72.6	75.1	80.4	83.0	84.0	76.1
	Employment rate (Other than EU28 aged 15-64)		81.3	75.0	80.8	72.0 u	56.9 u	60.6	69.0	77.9	92.5 u	77.5 u
	Employment rate (Born in the same country aged 15-64)	63.0 b	63.8	63.5	62.5	60.5	59.7	60.5	61.4	63.4	67.6	70.0
Employment rate (Born in other EU28 aged 15-64)		72.3	75.3	71.7	73.2	70.8	72.5	72.5	78.1	83.8	82.8	
Employment rate (Born outside EU28 aged 15-64)		72.7	72.1	76.1	71.1	64.3	68.0	72.7	79.1	79.4	81.3	
Underemployment (% of labour force aged 15-74)		0.1 u	0.1 u	0.1 u	1.0	1.1	1.4	1.4	1.6	1.5	1.2	
Seeking but not available (% of labour force aged 15-74)	0.2 u	0.2 u	0.2 u	0.2 u	0.3	0.2 u	0.2	0.2 u	0.2	0.2 u	0.2 u	
Discouraged, available but not seeking (% of labour force aged 15-74)	4.4	3.9	3.7	3.8	4.4	4.5	5.0	4.9	4.9	3.6	3.0	
Labour Market Indicators - Female	Total population (000)	5304	5292	5287	5276	5268	5257	5242	5207 b	5193	5174	5160
	Population aged 15-64(000)	3533	3525	3523	3510	3500	3483	3473	3449	3425	3393	3361
	Total employment (000)	1785	1790	1773	1755	1723	1740	1738	1778	1789	1880	1927
	Employment aged 15-64 (000)	1777	1781	1761	1742	1711	1725	1723	1764	1776	1867	1914
	Employment rate (% population aged 20-64)	55.6	55.6	55.2	54.8	54.0	54.6	54.7	56.2	56.9	60.2	62.1
	Employment rate (% population aged 15-64)	51.0	51.1	50.7	50.3	49.6	50.2	50.3	51.9	52.6	55.9	57.8
	Employment rate (% population aged 15-24)	19.2	18.6	17.7	17.1	16.2	16.2	17.0	17.0	20.5	23.1	
	Employment rate (% population aged 25-54)	67.2	67.8	67.9	67.9	66.9	67.0	66.6	69.0	70.0	73.2	74.4
	Employment rate (% population aged 55-64)	26.7	26.6	25.8	25.3	26.3	29.4	31.9	31.7	32.1	35.2	37.7
	FTE employment rate (% population aged 20-64)	54.6 b	54.6	54.2	53.7	52.7	53.2	53.0	54.6	55.6	58.3	60.3
	Self-employed (% total employment)	9.1	8.3	8.5	8.1	8.7	8.5	7.9	8.2	7.8	7.4	7.7
	Part-time employment (% total employment)	5.3	5.3	5.5	6.7	7.7	8.9	9.4	9.0	8.6	8.3	7.7
	Fixed term contracts (% total employees)	5.8	5.6	6.2	6.4	7.1	8.4	7.7	7.8	9.6	9.5	10.2
	Employment in Services (% total employment)	74.9	75.2	76.0	75.8	77.2	77.2	76.9	77.3	78.8	79.0	79.0
	Employment in Industry (% total employment)	20.6	20.3	20.2	20.3	18.8	19.1	19.3	18.6	17.4	17.2	17.2
	Employment in Agriculture (% total employment)	4.6	4.5	3.8	3.9	4.0	3.7	3.8	4.0	3.8	3.8	3.8
	Activity rate (% population aged 15-64)	55.1	55.5	54.9	54.7	55.0	56.3	56.6	58.0	58.6	60.7	62.2
	Activity rate (% population aged 15-24)	23.8	24.2	21.8	21.6	21.5	22.0	21.5	23.4	23.6	25.9	27.5
	Activity rate (% population aged 25-54)	72.1	73.1	73.5	73.4	73.6	74.1	74.7	74.5	77.1	78.8	78.6
	Activity rate (% population aged 55-64)	27.7	27.7	26.9	26.6	28.1	31.7	34.8	34.5	34.7	37.4	39.9
	Total unemployment (000)	143	152	148	153	186	208	214	211	202	162	146
	Unemployment rate (% labour force)	7.4	7.8	7.7	8.0	9.7	10.7	11.0	10.6	10.1	7.9	7.0
	Youth unemployment rate (% labour force 15-24)	19.1	19.8	18.6	20.4	24.5	24.7	24.7	27.1	27.9	20.9	16.0
	Long term unemployment rate (% labour force)	3.2	3.5	3.6	3.6	4.1	5.2	5.3	4.8	4.9	3.7	3.1
	Share of long term unemployment (% of total unemployment)	43.2	44.2	47.2	45.6	41.6	48.5	47.9	46.5	46.8	46.8	44.0
	Youth unemployment ratio (% population aged 15-24)	4.5 b	4.6	4.1	4.4	5.3	5.4	5.3	6.3	6.6	5.4	4.4
	Employment rate for low skilled 25-64 (ISCED 0-2)	33.2 b	32.6	32.1	32.3	31.4	32.2	31.5	31.8	33.4	38.1 b	39.9
	Employment rate for medium skilled 25-64 (ISCED 3-4)	63.3 b	62.8	62.6	61.1	59.5	59.8	59.6	61.6	62.0	64.6 b	66.1
	Employment rate for high skilled 25-64 (ISCED 5-8)	79.4 b	78.5	75.6	75.6	74.8	74.8	75.3	75.0	75.1	77.0 b	78.0
	Employment rate (Nationals aged 15-64)	51.0 b	51.1	50.7	50.3	49.6	50.2	50.4	51.9	52.6	55.9	57.8
	Employment rate (Other EU28 aged 15-64)		48.2	49.9	49.4	55.2	64.3	61.3	48.3	48.2	57.3	55.4
	Employment rate (Other than EU28 aged 15-64)		57.0 u	54.0 u	60.0	47.0 u	40.8 u	47.5 u	50.9 u	58.0 u	58.6 u	58.6 u
	Employment rate (Born in the same country aged 15-64)	50.9 b	51.1	50.6	50.2	49.4	50.0	50.2	51.7	52.5	55.8	57.7
Employment rate (Born in other EU28 aged 15-64)		52.1	55.3	57.5	59.0	64.3	57.8	61.4	58.8	62.1	59.5	
Employment rate (Born outside EU28 aged 15-64)		50.1	55.8	59.3	55.4	53.8	48.6	57.5	57.0	52.4	65.1	
Underemployment (% of labour force aged 15-74)		0.2 u	0.2 u	0.2 u	1.6	1.8	2.0	2.7	2.7	2.2	1.8	
Seeking but not available (% of labour force aged 15-74)	0.4	0.4	0.4	0.4	0.4	0.3	0.3	0.3	0.3	0.3	0.2	
Discouraged, available but not seeking (% of labour force aged 15-74)	4.3	4.1	3.9	4.4	4.9	5.1	5.5	5.5	5.6	4.3	3.4	

Click here to download table.

Hungary		2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015		
Social Indicators	All	At-risk-of-poverty or exclusion (% of total population)	32.1	31.4	29.4	28.2	29.6	29.9	31.5	33.5	34.8	31.8	28.2	
		At-risk-of-poverty (% of total population)	13.5	15.9	12.3	12.4	12.4	12.3	14.1	14.3	15.0	15.0	14.9	
		At-risk-of-poverty threshold (PPS single person)	3337 b	3646	3894	3958	4097	4025	4281	4563	4366	4535	4751	
		Poverty gap (%)	18.4	24.1	19.8	17.3	16.3	16.5	18.2	20.9	21.0	22.3	21.8	
		Persistent at-risk-of-poverty (% of total population)												
		At-risk-of-poverty before social transfers excl. pensions (% of total population)	29.4	29.6	29.3	30.4	28.9	28.4	29.0	27.3	27.0	26.6	25.7	
		Impact of social transfers (excl. pensions) in reducing poverty (%)	54.1	46.3	58.0	59.2	57.1	56.7	51.4	47.6	44.4	43.6	42.0	
		Severe Material Deprivation (% of total population)	22.9	20.9	19.9	17.9	20.3	21.6	23.4	26.3	27.8	24.0	19.4	
		Share of people living in low work intensity households (% of people aged 0-59)	9.5	13.1	11.3	12.0	11.3	11.9	12.8	13.5	13.6	12.8	9.4	
		Real Gross Household Disposable income (growth %)	3.9	1.9	-2.9	-2.3	-4.1	-2.5	3.8	-3.2	1.8	3.8	2.0	
		Income quintile share ratio S80/S20	4.0	5.5	3.7	3.6	3.5	3.4	3.9	4.0	4.3	4.3	4.3	
		GNI coefficient	27.6 b	33.3	25.6	26.2	24.7	24.1	26.9	27.2	28.3	28.6	28.2	
		Early leavers from education and training (% of population aged 18-24)	12.5	12.5 b	11.4	11.7	11.5	10.8	11.4	11.8	11.9	11.4 b	11.6 b	
		NEET. Young people not in employment, education or training (% of total population aged 15-24)	12.9	12.4 b	11.5	11.5	13.6	12.6	13.2	14.8	15.5	15.6	11.6 b	
		Male	At-risk-of-poverty or exclusion (% of male population)	31.3	31.1	28.6	27.							

Malta

Malta		2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	
Macro Economic Indicators (Annual % growth)	Real GDP	3.8	1.8	4.0	3.3	-2.5	3.5	1.4	2.7	4.6	8.4	7.4	
	Total employment	1.3	1.5	2.2	2.5	0.0	1.7	2.9	2.5	3.7	5.1	3.5	
	Labour productivity	2.5	0.3	1.7	0.8	-2.5	1.8	-1.5	0.2	0.8	3.1	3.8	
	Annual average hours worked per person employed	3.2	0.2	-0.4	0.5	0.3	-2.7	-2.8	-1.2	-0.9	-1.4	-0.3	
	Real productivity per hour worked	-0.7	0.1	2.2	0.3	-2.7	4.6	1.3	1.4	1.7	4.5	4.1	
	Harmonized CPI	2.5	2.6	0.7	4.7	1.8	2.0	2.5	3.2	1.0	0.8	1.2	
	Price deflator GDP	2.2	2.7	2.8	3.0	2.7	3.8	2.1	2.0	1.9	1.9	2.2	
	Nominal compensation per employee	1.3	4.4	3.7	4.1	3.0	2.0	3.3	3.6	2.0	1.4	3.8	
	Real compensation per employee (GDP deflator)	-0.9	1.7	0.9	1.0	0.3	-1.8	1.2	1.5	0.1	-0.5	1.6	
	Real compensation per employee (private consumption deflator)	-1.2	1.8	3.0	-0.6	1.1	-0.1	0.7	0.3	1.0	0.6	2.6	
	Nominal unit labour costs	-1.1	4.1	2.0	3.2	5.6	0.2	4.8	3.4	1.2	-1.6	0.0	
	Real unit labour costs	-3.3	1.3	-0.9	0.3	2.8	-3.5	2.7	1.3	-0.7	-3.4	-2.1	
	Labour Market Indicators - Total	Total population (000)	405	405	406	408	411	414	415	418	421	425	429
		Population aged 15-64 (000)	279	280	282	285	288	289	288	287	288	288	288
Total employment (000)		149	151	155	159	160	163	167	170	176	182	186	
Employment aged 15-64 (000)		148	150	155	158	158	161	164	168	173	178	182	
Employment rate (% population aged 20-64)		57.4 b	57.9	58.6	59.2	59.0	60.1	61.6	63.1	64.8	66.4	67.8	
Employment rate (% population aged 15-64)		53.6 b	53.9	55.0	55.5	55.3	56.2	57.9	59.1	60.8	62.4	63.9	
Employment rate (% population aged 15-24)		45.0 b	44.8	46.8	46.6	44.1	44.2	45.0	43.8	46.0	46.2	45.5	
Employment rate (% population aged 25-54)		63.1 b	64.4	66.2	67.2	68.1	68.6	70.6	72.6	74.0	75.9	77.4	
Employment rate (% population aged 55-64)		31.9 b	30.7	30.5	30.1	29.1	31.9	33.2	34.7	35.3	37.8	40.3	
FTE employment rate (% population aged 20-64)		56.2 b	56.4	56.9	57.4	57.1	58.1	59.3	60.5	61.8	62.8	64.5	
Self-employed (% total employment)		13.8	13.8	14.2	13.7	13.8	14.4	13.5	13.5	13.9	13.8	13.9	
Part-time employment (% total employment)		9.0 b	9.7	10.6	11.1	11.0	11.6	12.6	13.2	14.2	15.5	14.5	
Fixed term contracts (% total employees)		4.4 b	3.8	5.1	4.3	5.0	5.4	6.6	6.8	7.5	7.8	7.6	
Employment in Services (% total employment)		71.4	72.0	72.8	74.5	75.8	76.0	76.5 b	87.3	77.9	78.9 b		
Employment in Industry (% total employment)		26.3	25.8	25.0	25.5	22.0	21.8	21.5 b	11.6	20.2	19.4 b		
Employment in Agriculture (% total employment)		2.3	2.2	2.2	2.0	2.2	2.1	1.1	1.2	1.8	1.7	1.8	
Activity rate (% population aged 15-64)		57.6 b	57.9	58.8	59.1	59.4	60.4	61.8	63.1	65.0	66.3	67.6	
Activity rate (% population aged 15-24)		53.6 b	53.0	54.1	52.7	51.6	50.9	51.9	50.9	52.8	52.4	51.6	
Activity rate (% population aged 25-54)		66.4 b	67.9	69.8	70.7	71.9	72.9	74.7	76.5	78.1	79.6	81.0	
Activity rate (% population aged 55-64)		33.0 b	31.5	30.6	31.4	30.9	33.3	34.2	36.0	38.5	40.3	42.4	
Total unemployment (000)		11	11	11	10	12	12	11	11	12	11	11	
Unemployment rate (% labour force)		6.9	6.8	6.5	6.0	6.9	6.9	6.4	6.3	6.4	5.8	5.4	
Youth unemployment rate (% labour force 15-24)		16.1	15.5	13.5	12.7	13.5	14.1	13.5	14.1	13.0	11.7	11.8	
Long term unemployment rate (% labour force)		3.4	2.7	2.7	2.6	2.9	3.1	3.0	3.1	2.9	2.7	2.4	
Share of long term unemployment (% of total unemployment)		48.6	39.6	41.3	42.7	42.0	44.9	47.3	48.5	45.7	46.9	43.6	
Youth unemployment ratio (% population aged 15-24)		8.6 b	8.2	7.3	6.1	7.5	6.7	6.9	7.2	6.9	6.1	6.1	
Employment rate for low skilled 25-64 (ISCED 0-2)		46.7 b	46.7	47.3	47.9	47.2	47.6	49.1 b	49.5	50.9	52.6 b	54.2	
Employment rate for medium skilled 25-64 (ISCED 3-4)		82.4 b	82.8	81.4	79.8	79.8	79.5	77.6 b	80.9	80.4	81.8 b	82.3	
Employment rate for high skilled 25-64 (ISCED 5-8)		84.3 b	85.0	86.8	87.0	85.6	86.5	88.2 b	88.1	88.1	88.3 b	90.4	
Employment rate (Nationals aged 15-64)		53.6 b	54.0	55.1	55.6	56.2	57.9	59.0	60.9	62.9	65.0	67.3	
Employment rate (Other EU28 aged 15-64)			53.3	49.2	51.6	48.8	55.6	53.0	59.1	52.0	58.0	65.2	
Employment rate (Other than EU28 aged 15-64)			47.2	52.1	54.6	57.3	59.6	61.2	62.5	62.3	62.8	62.6	
Employment rate (Born in the same country aged 15-64)		53.5 b	53.9	54.8	55.3	55.0	56.0	57.7	58.9	60.8	62.3	63.6	
Employment rate (Born in other EU28 aged 15-64)			55.1	54.5	54.9	53.7	57.0	54.1	57.9	57.2	65.4	70.1	
Employment rate (Born outside EU28 aged 15-64)			53.5	59.1	63.7	62.3	63.3	65.1	64.8	63.4	64.2	64.7	
Underemployment (% of labour force aged 15-74)					1.8	1.9	2.5	2.4	2.2	2.7	2.4	2.2	
Seeking but not available (% of labour force aged 15-74)		0.4 b	0.8	0.8				0.2 u	0.2 u	0.2 u	0.2 u	0.2 u	
Discouraged, available but not seeking (% of labour force aged 15-74)		1.6 b		1.5	1.3	1.1	1.1	2.2	2.5	1.9	1.3	1.2	

[Click here to download table.](#)

Malta		2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	
Labour Market Indicators - Male	Total population (000)	200	201	202	203	205	206	206	208	210	212	215	
	Population aged 15-64(000)	140	142	143	145	147	147	146	146	147	147	148	
	Total employment (000)	104	105	105	106	106	106	108	108	110	110	113	
	Employment aged 15-64 (000)	103	104	105	105	104	105	106	106	106	107	109	
	Employment rate (% population aged 20-64)	79.7 b	79.6	79.0	78.5	77.5	78.2	79.0	79.2	79.4	80.4	81.4	
	Employment rate (% population aged 15-64)	73.5 b	73.6	73.5	72.9	71.9	72.5	73.8	74.1	74.9	76.2		
	Employment rate (% population aged 15-24)	46.7 b	47.5	48.9	48.0	45.8	45.9	48.0	46.7	47.5	45.7	45.9	
	Employment rate (% population aged 25-54)	89.1 b	89.7	90.3	89.5	89.3	89.1	90.0	89.7	89.6	90.6	91.3	
	Employment rate (% population aged 55-64)	52.0 b	50.6	47.4	47.9	46.3	50.0	51.5	53.1	53.9	55.7	58.8	
	FTE employment rate (% population aged 20-64)	80.1 b	80.0	79.5	79.7	78.9	77.6	78.9	78.8	79.8	80.9	83.9	
	Self-employed (% total employment)	17.2	17.4	17.7	17.5	17.5	18.7	17.6	17.6	18.5	18.1	18.3	
	Part-time employment (% total employment)	4.1 b	4.3	3.9	4.1	4.6	4.9	5.4	5.7	6.7	7.0	6.3	
	Fixed term contracts (% total employees)	3.0 b	2.2	3.1	2.8	3.1	3.4	4.6	5.1	5.6	5.5	5.3	
	Employment in Services (% total employment)	65.2 b	65.6	66.0	66.8	69.0	69.4	69.8	82.7	71.4	71.9		
	Employment in Industry (% total employment)	31.7 b	31.3	31.0	30.4	28.0	27.6	27.2	15.7	26.0	25.7		
	Employment in Agriculture (% total employment)	3.1 b	3.1	3.1	2.8	3.0	3.0	3.0	1.7	2.6	2.4		
	Activity rate (% population aged 15-64)	78.5 b	78.5	78.0	77.2	76.0	77.8	78.5	78.3	79.4	79.9	80.8	
	Activity rate (% population aged 15-24)	53.8 b	56.8	57.5	55.3	54.6	53.8	55.3	54.0	55.8	52.9	53.3	
	Activity rate (% population aged 25-54)	93.4 b	94.1	94.4	93.8	93.9	94.5	94.9	94.3	94.4	95.1	95.4	
	Activity rate (% population aged 55-64)	54.2 b	51.9	48.8	49.5	48.9	52.3	53.0	54.9	57.2	60.1	62.1	
	Total unemployment (000)	7	7	6	6	7	8	7	7	7	7	7	
	Unemployment rate (% labour force)	6.3	6.1	5.8	5.6	6.5	6.7	6.0	5.7	6.5	6.1	5.5	
	Youth unemployment rate (% labour force 15-24)	16.2	16.4	15.0	13.1	16.2	14.4	13.7	13.5	15.2	13.7	13.9	
	Long term unemployment rate (% labour force)	3.4	2.9	2.8	2.7	3.1	3.4	3.3	3.3	3.3	3.2	3.0	
	Share of long term unemployment (% of total unemployment)	54.2	46.4	48.2	47.7	47.8	49.9	55.5	57.8	51.0	52.2	54.4	
	Youth unemployment ratio (% population aged 15-24)	9.0 b	9.3	8.6	7.2	8.8	7.7	7.6	7.5	8.5	7.2	7.4	
	Employment rate for low skilled 25-64 (ISCED 0-2)	76.4 b	75.2	74.6	73.5	72.7	73.2	74.5 b	73.1	73.5	74.9 b	76.8	
	Employment rate for medium skilled 25-64 (ISCED 3-4)	91.9 b	92.8	90.8	90.2	88.6	88.7	87.4 b	90.3	88.6	90.3 b	90.6	
	Employment rate for high skilled 25-64 (ISCED 5-8)	89.0 b	91.0	92.2	92.8	91.9	91.5	92.5 b	92.4	92.9	92.4 b	93.1	
	Employment rate (Nationals aged 15-64)	73.6 b	73.8	73.7	72.8	72.1	72.6	73.9	73.6	74.5	75.0	76.1	
	Employment rate (Other EU28 aged 15-64)		54.3	59.0 u	71.5	58.9	71.5	69.3	61.1	69.5	74.0	76.5	
	Employment rate (Other than EU28 aged 15-64)		71.8	72.2	75.7	72.2	69.9	69.2	66.7	72.1	74.6	80.0	
	Employment rate (Born in the same country aged 15-64)	73.5 b	73.5	73.5	72.5	71.8	72.3	73.8	73.6	74.2	74.9	75.9	
	Employment rate (Born in other EU28 aged 15-64)		72.6	66.4	74.9	68.0	69.6	74.7	77.1	70.5	76.9	83.2	
	Employment rate (Born outside EU28 aged 15-64)		79.4	76.5	83.2	79.9	82.5	76.8	77.2	75.6	75.0	80.3	
	Underemployment (% of labour force aged 15-74)				1.0	1.4	1.7	1.5	1.4	1.8	1.5	1.6	
	Seeking but not available (% of labour force aged 15-74)		0.4 u	0.4 u				0.4 u	1.0	1.2	1.0	0.7 u	
	Discouraged, available but not seeking (% of labour force aged 15-74)	0.6 b			0.5 u	0.5 u	0.4 u					0.6 u	
	Labour Market Indicators - Female	Total population (000)	203	204	204	205	206	208	209	210	211	213	215
		Population aged 15-64(000)	138	138	139	141	142	142	141	141	141	141	141
		Total employment (000)	46	47	50	53	54	56	58	62	66	70	72
		Employment aged 15-64 (000)	46	46	50	53	54	56	58	62	66	69	71
Employment rate (% population aged 20-64)		34.8 b	35.7	37.7	39.4	40.0	41.6	43.8	46.6	49.8	52.0	53.6	
Employment rate (% population aged 1													

Malta		2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015
All	At-risk-of-poverty or exclusion (% of total population)	20.5	19.5	19.7	20.1	20.3	21.2	22.1	23.1	24.0	23.8	22.4
	At-risk-of-poverty (% of total population)	14.3	14.2	15.1	15.3	14.9	15.5	15.6	15.1	15.7	15.9	16.3
	At-risk-of-poverty threshold (PPS single person)	7054 b	7246	7465	7958	8146	8023	8417	8760	9034	9300	10009
	Poverty gap (%)	16.9	18.2	18.1	20.3	16.2	17.3	17.7	16.1	19.1	17.8	17.3
	Persistent at-risk-of-poverty (% of total population)				7.7	7.7	9.1	11.4	9.7	8.5	10.6	12.7
	At-risk-of-poverty before social transfers excl. pensions (% of total population)	20.1	21.3	21.5	22.9	22.9	23.5	23.2	24.0	23.3	23.8	23.7
	Impact of social transfers (excl. pensions) in reducing poverty (%)	26.9	33.3	26.8	35.2	34.9	34.0	32.8	37.1	32.6	33.2	31.2
	Severe Material Deprivation (% of total population)	3.9	3.9	4.4	4.3	5.0	6.5	6.6	9.2	9.5	10.2	8.1
	Share of people living in low work intensity households (% of people aged 0-59)	9.6	9.7	9.6	8.6	9.2	9.2	8.9	9.0	9.0	9.8	9.2
	Real Gross Household Disposable income (growth %)											
Income quintile share ratio S80/S20	3.9	4.0	3.9	4.3	4.0	4.3	4.0	3.9	4.1	4.0	4.2	
GINI coefficient	27.0 b	27.1	26.3	28.1	27.4	28.6	27.2	27.1	27.9	27.7	28.1	
Early leavers from education and training (% of population aged 18-24)	33.0 b	32.2 b	30.2	27.2	25.7	25.8	22.7 b	21.1	20.5	20.3 b	19.8	
NEET: Young people not in employment, education or training (% of total population aged 15-24)	11.9 b	10.3 b	11.5	8.3	9.9	9.9	10.2	10.6	9.9	10.5	10.4	
At-risk-of-poverty or exclusion (% of male population)	18.9	17.9	18.6	18.7	19.1	20.1	20.9	21.9	23.1	22.9	21.9	
At-risk-of-poverty (% of male population)	13.9	13.5	14.7	13.9	14.3	14.8	15.0	14.4	15.4	15.7	16.1	
Poverty gap (%)	16.8	18.3	16.7	21.7	15.9	17.7	17.1	16.7	19.0	18.5	18.3	
Persistent at-risk-of-poverty (% of male population)				7.7	6.3	8.4	10.2	10.0	7.2	10.6	13.6	
Severe Material Deprivation (% of male population)	5.2	3.6	4.0	4.1	4.8	6.3	6.4	8.6	9.4	9.9	8.2	
Share of people living in low work intensity households (% of males aged 0-59)	7.8	8.0	8.2	6.9	7.3	7.4	7.0	7.6	7.6	8.8	8.8	
Life expectancy at birth (years)	77.2	77.0	77.5	77.1	77.9	79.3	78.6	78.6	79.6	79.8	79.8	
Healthy life years at birth (years) - men	68.6 d	68.3	69.2	68.8	69.4	70.1	69.9	71.5	71.6	72.3	72.3	
Early leavers from education and training (% of males aged 18-24)	37.4 b	36.1 b	34.8	31.1	30.1	29.9	28.8 b	25.2	23.2	22.2 b	22.9	
NEET: Young people not in employment, education or training (% of males aged 15-24)	11.2 b	9.8 b	11.9	6.8	9.4	8.2	9.7	10.0	9.8	9.0	9.6	
At-risk-of-poverty or exclusion (% of female population)	22.0	21.1	20.9	21.5	21.6	22.4	23.2	24.3	24.9	24.7	23.0	
At-risk-of-poverty (% of female population)	14.8	14.9	15.5	16.7	15.5	16.2	16.1	15.8	16.1	16.0	16.6	
Poverty gap (%)	16.9	18.2	18.7	19.0	16.6	16.6	19.1	16.0	19.1	17.1	16.7	
Persistent at-risk-of-poverty (% of female population)				7.8	9.0	9.7	12.6	9.5	9.8	10.7	11.8	
Severe Material Deprivation (% of female population)	5.7	4.2	4.8	4.6	5.2	6.6	6.9	9.7	9.6	10.5	8.0	
Share of people living in low work intensity households (% of females aged 0-59)	11.4	11.5	11.1	10.4	11.3	11.0	10.9	10.5	10.4	10.7	9.7	
Life expectancy at birth (years)	81.4	81.9	82.2	82.3	82.7	83.6	83.0	83.0	84.0	84.2	84.2	
Healthy life years at birth (years) - women	70.4 d	69.5	71.1	72.1	71.0	71.3	70.7	72.2	72.7	74.3	74.3	
Early leavers from education and training (% of females aged 18-24)	28.3 b	28.1 b	25.3	23.2	21.1	17.4	16.3 b	16.8	17.7	18.3 b	16.6	
NEET: Young people not in employment, education or training (% of females aged 15-24)	12.7 b	10.9 b	11.2	9.8	10.4	10.9	10.7	11.3	10.1	12.0	11.1	
At-risk-of-poverty or exclusion of children (% of people aged 0-17)	23.3	22.2	23.9	25.0	26.5	26.7	27.8	28.0	31.0	32.0	31.3	
At-risk-of-poverty (% of Children population)	17.6	17.6	19.8	20.4	21.2	22.1	23.0	23.1	24.0	24.1	23.4	
Severe Material Deprivation (% of Children population)	6.1	4.9	6.4	6.3	7.2	7.7	7.7	12.3	11.8	13.9	10.4	
Share of children living in low work intensity households (% of Children population)	9.6	9.4	10.0	9.8	10.4	9.7	10.0	10.4	11.2	12.3	10.8	
Risk of poverty of children in households at work (Working Intensity > 0.2)	12.1	12.3	13.6	14.1	15.9	16.0	16.9	17.0	17.8	16.8	15.8	
Impact of social transfers (excl. pensions) in reducing poverty (0-17) (%)	32.3	36.5	31.0	33.6	35.0	31.4	29.9	36.0	28.8	25.9	24.3	
At-risk-of-poverty or exclusion (% of Working age population)	18.1	17.4	17.8	17.5	18.1	19.6	20.7	21.1	22.5	21.8	20.5	
At-risk-of-poverty (% of Working age population)	11.4	11.2	12.6	12.0	12.1	13.1	13.1	12.4	13.6	13.2	13.1	
Severe Material Deprivation (% of Working age population)	5.0	3.5	4.0	4.0	4.6	6.4	6.8	8.9	9.5	9.8	8.4	
Very low work intensity (18-59)	9.6	9.8	9.4	8.2	8.9	9.0	8.6	8.6	8.3	9.0	8.7	
In-work at-risk-of-poverty rate (% of persons employed 18-64)	4.3	4.1	4.6	5.1	5.4	5.8	6.1	5.2	5.9	5.7	5.3	
Impact of social transfers (excl. pensions) in reducing poverty (18-64) (%)	32.5	38.1	33.0	37.8	38.3	36.7	35.8	40.1	32.0	34.3	33.5	
At-risk-of-poverty or exclusion of elderly (% of people aged 65+)	27.1	25.7	22.8	26.0	22.2	21.7	21.0	22.3	20.8	23.3	23.7	
At-risk-of-poverty (% of Elderly population)	23.3	23.5	20.3	24.3	19.7	18.2	17.6	17.3	14.9	16.9	21.0	
Severe Material Deprivation (% of Elderly population)	6.3	4.4	3.1	3.1	4.1	5.0	4.7	6.4	7.1	8.1	4.7	
Relative median income of elderly (ratio with median income of people younger than 65)	0.75 b	0.80	0.78	0.73	0.77	0.81	0.79	0.80	0.79	0.78	0.75	
Aggregate replacement ratio (ratio)	0.47	0.45	0.47	0.41	0.45	0.44	0.48	0.46	0.56	0.56	0.54	
Sickness/Health care	5.5	5.4	5.5	5.7	6.3	6.0	5.8	5.9	6.0	6.2	6.2	
Disability	1.1	1.1	1.1	0.9	0.9	0.8	0.7	0.7	0.7	0.7	0.7	
Old age and survivors	8.8	9.0	8.9	9.1	9.9	10.2	9.9	10.2	9.8	9.7	9.7	
Family/Children	1.1	1.1	1.0	1.2	1.2	1.2	1.2	1.1	1.2	1.2	1.2	
Unemployment	0.6	0.6	0.5	0.5	0.6	0.5	0.5	0.5	0.6	0.5	0.5	
Housing and Social exclusion n.e.c.	0.4	0.5	0.6	0.6	0.5	0.5	0.5	0.5	0.3	0.3	0.4	
Total (including Admin and Other expenditures)	17.7	17.8	17.8	18.1	19.6	19.3	18.8	19.0	18.8	19.0	19.0	
of which: Means tested benefits	3.0	3.0	3.0	2.4	2.5	2.5	2.5	2.4	2.4	2.5	2.5	

[Click here to download table.](#)

## Netherlands

Netherlands		2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015
Macro Economic indicators (Annual % growth)	Real GDP	2.2	3.5	3.7	1.7	-3.8	1.4	1.7	-1.1	-0.2	1.4	2.0 p
	Total employment	0.7	2.2	3.0	1.6	-0.9	-0.7	0.9	-0.2	-1.2	-0.2 p	0.9 p
	Labour productivity	1.5	1.3	0.7	0.1	-2.9	2.1	0.8	-0.9	1.0	1.7 p	1.0 p
	Annual average hours worked per person employed	-1.0	-0.2	-0.1	0.0	-0.6	0.0	0.1	-0.7	0.3	0.8 p	-0.4 p
	Real productivity per hour worked	2.5	1.6	0.8	0.0	-2.4	2.1	0.7	-0.2	0.7	0.9 p	1.5 p
	Harmonized CPI	1.5	1.0	1.6	2.2	1.0	0.9	2.5	2.8	2.6	0.3	0.2
	Price deflator GDP	1.9	2.6	2.1	2.5	0.4	0.8	0.1	1.4	1.4	0.1	0.1 p
	Nominal compensation per employee	1.1	1.6	3.2	3.8	2.4	0.4	1.8	2.1	2.1	1.6 p	0.2 p
	Real compensation per employee (GDP deflator)	-0.9	-0.9	1.1	1.3	2.0	-0.4	1.6	0.7	0.7	1.4 p	0.1 p
	Real compensation per employee (private consumption deflator)	-0.4	0.0	1.6	1.5	1.4	-0.5	-0.7	-0.7	-0.4	1.3 p	0.0 p
	Nominal unit labour costs	-0.4	0.3	2.4	3.7	5.5	-1.7	1.0	3.0	1.1	-0.1 p	-0.8 p
	Real unit labour costs	-2.3	-2.2	0.3	1.3	5.1	-2.5	0.9	1.5	-0.2	-0.2 p	-0.9 p
	Total population (000)	16306	16334	16358	16405	16466	16576	16686	16730	16780	16828	16901
	Population aged 15-64 (000)	11008	11019	11031	11055	11091	11124	11154	11117	11077	11060	11066
	Total employment (000)	8111	8261	8464	8593	8596	8370	8291	8345	8285	8236	8319
Employment aged 15-64 (000)	8013	8152	8345	8468	8443	8227	8152	8175	8104	8029	8116	
Employment rate (% population aged 20-64)	75.1	76.3	77.8	78.9	78.8	76.8 b	76.4 b	76.6	75.9	75.4	76.4	
Employment rate (% population aged 15-64)	73.2	74.3	76.0	77.2	77.0	74.7 b	74.2 b	74.4	73.6	73.1	74.1	
Employment rate (% population aged 15-24)	65.2	66.2	68.4	69.3	68.0	63.0 b	61.3 b	61.1	60.1	58.8	60.8	
Employment rate (% population aged 25-54)	82.9	84.2	85.4	86.8	86.3	84.7 b	84.0 b	83.6	82.2	81.7	82.2	
Employment rate (% population aged 55-64)	46.1	47.7	50.9	53.0	55.1	53.7 b	52.2 b	57.6	59.2	59.9	61.7	
FTE employment rate (% population aged 20-64)	60.1 b	61.1	62.4	63.4	63.3	61.3 b	60.9 b	60.9	60.2	59.9	60.7	
Self-employed (% total employment)	11.9	12.2	12.6	12.7	13.1	14.4	14.5	14.8	15.6	16.1	16.3	
Part-time employment (% total employment)	45.7	45.8	46.3	46.8	47.7	48.3 b	48.3 b	49.0	49.8	49.6	50.0	
Fixed term contracts (% total employees)	15.5 b	16.6	18.1	18.2	18.2	18.5 b	18.3	19.4	20.5	21.5	20.2	
Employment in Services (% total employment)	80.2	80.7	81.0	81.2	81.5	81.9	82.2	82.4	82.7 p	82.9 p		
Employment in Industry (% total employment)	17.2	16.8	16.5	16.4	16.2	15.8	15.6	15.4	15.1 p	14.9 p		
Employment in Agriculture (% total employment)	2.6	2.5	2.4	2.3	2.3	2.3	2.3	2.2	2.2	2.2		
Activity rate (% population aged 15-64)	76.9	77.4	78.5	79.3	79.7	78.2 b	78.1 b	79.0	79.4	79.0	79.6	
Activity rate (% population aged 15-24)	71.0	70.8	72.7	73.2	72.8	69.0 b	68.1 b	69.2	69.2	67.4	68.5	
Activity rate (% population aged 25-54)	86.5	87.1	87.6	88.5	88.8	87.9 b	87.4 b	87.6	87.4	87.1	87.1	
Activity rate (% population aged 55-64)	48.1	49.6	52.8	54.7	56.8	55.9 b	57.9 b	60.8	63.5	64.9	67.1	
Total unemployment (000)	489	419	355	318	391	455	454	516	647	660	614	
Unemployment rate (% labour force)	5.9	5.0	4.2									

Netherlands		2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015
Labour Market Indicators - Male	Total population (000)	8066	8077	8089	8112	8156	8203	8243	8283	8307	8354	8373
	Population aged 15-64(000)	5562	5562	5563	5572	5589	5605	5616	5595	5571	5561	5563
	Total employment (000)	4483	4552	4631	4676	4648	4526	4475	4501	4459	4460	4482
	Employment aged 15-64 (000)	4411	4471	4547	4588	4540	4425	4377	4376	4324	4305	4336
	Employment rate (% population aged 20-64)	82.4	83.5	84.8	85.5	84.9	82.8	82.4	82.3	81.1	81.1	81.1
	Employment rate (% population aged 15-64)	79.9	80.9	82.2	85.2	82.4	80.0	79.3	79.3	78.2	78.1	79.0
	Employment rate (% population aged 15-24)	67.5	67.2	68.9	69.8	67.5	62.0	60.0	60.0	59.2	59.2	59.7
	Employment rate (% population aged 25-54)	90.3	91.4	92.1	93.0	92.0	90.0	89.8	89.1	88.6	88.6	89.7
	Employment rate (% population aged 55-64)	56.9	58.0	61.5	63.7	65.4	64.5	64.5	66.9	68.9	69.4	71.1
	FTE employment rate (% population aged 20-64)	77.1	77.9	79.2	79.9	79.0	76.7	76.2	75.9	74.5	74.4	75.2
	Self-employed (% total employment)	14.4	14.9	15.5	15.6	15.9	17.8	17.9	18.2	19.1	19.7	19.5
	Part-time employment (% total employment)	21.8	22.1	22.5	22.8	23.6	24.2	23.9	24.6	26.0	26.1	26.5
	Fixed term contracts (% total employees)	12.1	12.9	13.9	13.7	13.4	13.9	13.9	14.8	15.5	16.4	15.2
	Employment in Services (% total employment)	70.6	71.1	71.5	71.6	71.8	72.1	72.4	72.8	73.6	74.1	74.1
	Employment in Industry (% total employment)	25.9	25.6	25.2	25.3	25.1	24.7	24.5	24.1	23.4	22.9	22.9
	Employment in Agriculture (% total employment)	3.4	3.4	3.2	3.1	3.1	3.2	3.1	3.1	3.0	3.0	3.0
	Activity rate (% population aged 15-64)	83.7	83.9	84.6	85.3	85.3	83.7	83.9	83.9	84.3	84.2	84.6
	Activity rate (% population aged 15-24)	71.2	71.5	73.0	73.7	72.7	68.6	67.0	67.7	68.4	67.0	67.5
	Activity rate (% population aged 25-54)	93.8	94.1	94.0	94.5	94.4	93.3	93.0	93.0	92.3	92.2	92.1
	Activity rate (% population aged 55-64)	59.5	60.4	64.0	65.9	67.6	67.3	67.5	70.6	74.2	75.5	77.6
	Total unemployment (000)	235	188	154	141	184	215	216	260	346	345	313
	Unemployment rate (% labour force)	5.0	4.1	3.3	3.0	3.9	4.5	4.5	5.5	7.2	7.2	6.5
	Youth unemployment rate (% labour force 15-24)	12.7	10.0	9.4	9.3	11.4	12.0	10.5	11.8	13.5	12.4	11.3
	Long term unemployment rate (% labour force)	1.9	1.6	1.1	0.9	0.8	1.2	1.6	1.8	2.6	2.8	3.0
	Share of long term unemployment (% of total unemployment)	42.6	45.0	40.8	36.5	23.4	27.2	33.7	33.5	35.5	39.8	45.6
	Youth unemployment ratio (% population aged 15-24)	5.7	4.3	4.1	4.0	5.2	6.1	7.0	8.0	9.2	8.3	7.7
	Employment rate for low skilled 25-64 (ISCED 0-2)	75.2	76.6	77.6	78.4	77.7	74.8	74.4	74.1	71.7	70.9	71.8
	Employment rate for medium skilled 25-64 (ISCED 3-4)	84.1	84.8	85.9	87.2	86.8	85.4	84.6	84.9	83.6	83.0	83.7
	Employment rate for high skilled 25-64 (ISCED 5-8)	88.0	88.7	90.0	90.5	90.2	89.3	89.7	90.0	89.7	90.3	91.1
	Employment rate (Nationals aged 15-64)	80.7	81.5	82.7	83.5	82.8	80.5	79.9	79.7	78.8	78.6	79.5
	Employment rate (Other EU28 aged 15-64)	80.3	80.3	81.2	83.4	80.5	79.7	78.0	80.5	79.7	80.7	79.5
	Employment rate (Other than EU28 aged 15-64)	60.4	65.8	71.6	67.3	62.7	62.7	64.0	57.9	60.1	61.2	61.2
	Employment rate (Born in the same country aged 15-64)	81.5	82.4	83.5	84.2	83.5	81.2	80.6	80.5	79.5	79.4	80.3
Employment rate (Born in other EU28 aged 15-64)	78.4	80.0	80.2	80.2	79.3	77.5	79.1	79.1	79.8	80.6	79.0	
Employment rate (Born outside EU28 aged 15-64)	69.3	72.2	75.6	75.6	76.6	70.2	69.6	66.0	66.7	66.7	68.1	
Underemployment (% of labour force aged 15-74)	0.6	0.6	0.6	0.6	0.8	0.9	1.0	1.2	1.4	1.5	1.5	
Seeking but not available (% of labour force aged 15-74)	0.5	0.4	0.5	0.5	0.5	0.6	0.9	1.0	1.1	1.2	1.4	
Discouraged, available but not seeking (% of labour force aged 15-74)	3.2	3.1	2.7	2.6	2.7	3.2	3.1	3.3	3.6	3.5	3.3	
Labour Market Indicators - Female	Total population (000)	8240	8257	8269	8293	8329	8372	8412	8447	8472	8495	8528
	Population aged 15-64(000)	5446	5457	5468	5483	5502	5519	5538	5522	5506	5499	5503
	Total employment (000)	3628	3709	3832	3917	3948	3844	3816	3845	3827	3776	3856
	Employment aged 15-64 (000)	3603	3681	3798	3880	3903	3802	3775	3799	3780	3724	3793
	Employment rate (% population aged 20-64)	67.6	69.0	70.7	72.2	71.7	70.8	70.4	71.0	70.6	69.7	70.8
	Employment rate (% population aged 15-64)	65.4	67.7	69.6	71.1	71.5	69.3	68.9	69.4	69.0	68.1	69.2
	Employment rate (% population aged 15-24)	64.9	65.1	67.9	68.8	68.4	63.5	62.6	62.5	61.0	58.8	61.7
	Employment rate (% population aged 25-54)	75.5	77.0	78.7	80.5	80.7	79.3	78.1	78.1	77.5	76.5	77.0
	Employment rate (% population aged 55-64)	35.2	37.2	40.1	42.2	44.7	42.8	45.9	48.3	49.5	50.4	52.4
	FTE employment rate (% population aged 20-64)	44.5	46.0	47.3	48.7	49.3	47.8	47.6	47.4	47.5	46.9	47.6
	Self-employed (% total employment)	8.8	8.9	9.1	9.5	9.7	10.4	10.6	10.8	11.5	11.9	12.5
	Part-time employment (% total employment)	75.0	74.5	74.8	75.2	75.7	76.2	76.6	77.0	77.1	76.7	76.9
	Fixed term contracts (% total employees)	15.2	16.1	17.5	17.7	18.0	17.5	17.2	17.9	18.6	19.2	18.4
	Employment in Services (% total employment)	91.4	91.8	91.9	92.1	92.3	92.7	92.8	92.9	93.2	93.2	93.2
	Employment in Industry (% total employment)	6.9	6.6	6.6	6.4	6.3	5.9	5.9	5.8	5.5	5.4	5.3
	Employment in Agriculture (% total employment)	1.7	1.6	1.5	1.5	1.4	1.4	1.3	1.3	1.3	1.3	1.3
	Activity rate (% population aged 15-64)	70.0	70.7	72.2	73.3	74.1	72.6	72.9	74.0	74.4	73.8	74.7
	Activity rate (% population aged 15-24)	70.0	70.7	72.2	73.3	74.1	72.6	72.9	74.0	74.4	73.8	74.7
	Activity rate (% population aged 25-54)	79.0	80.1	81.2	82.5	83.0	82.4	81.8	82.3	82.6	81.9	82.1
	Activity rate (% population aged 55-64)	36.5	38.6	41.4	43.5	46.0	44.5	48.2	51.0	52.8	54.3	56.7
	Total unemployment (000)	256	231	201	176	197	222	218	255	301	317	301
	Unemployment rate (% labour force)	6.9	6.2	5.2	4.5	4.9	5.5	5.4	6.2	7.3	7.8	7.3
	Youth unemployment rate (% labour force 15-24)	11.0	10.1	9.3	7.8	9.0	10.1	9.5	11.6	12.9	13.1	11.2
	Long term unemployment rate (% labour force)	1.8	1.7	1.3	0.9	0.9	1.2	1.7	2.0	2.5	3.0	2.9
	Share of long term unemployment (% of total unemployment)	36.5	39.6	36.3	31.0	25.6	36.5	34.0	32.3	34.4	38.5	40.9
	Youth unemployment ratio (% population aged 15-24)	5.9	4.9	4.5	3.8	4.5	6.0	6.6	8.2	9.0	8.9	7.8
	Employment rate for low skilled 25-64 (ISCED 0-2)	47.1	47.4	48.9	51.2	51.2	49.4	50.3	50.4	50.0	47.8	49.0
	Employment rate for medium skilled 25-64 (ISCED 3-4)	71.5	73.2	74.4	75.7	76.6	75.3	74.3	74.5	72.6	72.5	72.6
	Employment rate for high skilled 25-64 (ISCED 5-8)	82.7	83.7	85.1	85.8	85.7	84.9	84.1	84.5	85.4	84.9	85.3
	Employment rate (Nationals aged 15-64)	67.5	68.5	70.5	72.0	72.3	70.1	69.8	70.2	69.9	69.0	70.3
	Employment rate (Other EU28 aged 15-64)	68.8	70.4	73.0	71.6	68.2	69.5	71.1	66.7	66.6	66.6	65.9
	Employment rate (Born in the same country aged 15-64)	66.9	68.8	71.7	70.8	71.6	68.4	68.4	68.4	68.4	68.4	68.4
	Employment rate (Born in other EU28 aged 15-64)	68.6	69.8	71.7	73.5	71.1	71.0	71.6	71.4	70.4	70.4	71.9
Employment rate (Born outside EU28 aged 15-64)	49.8	52.8	56.2	56.1	54.9	52.8	52.2	51.1	49.9	48.5	48.5	
Underemployment (% of labour force aged 15-74)	1.0	0.9	0.9	0.8	1.7	1.8	1.8	1.9	2.2	2.1	2.1	
Seeking but not available (% of labour force aged 15-74)	1.0	0.9	0.9	0.8	1.7	1.8	1.8	1.9	2.2	2.1	2.1	
Discouraged, available but not seeking (% of labour force aged 15-74)	4.6	4.7	3.9	3.4	3.5	3.9	3.6	3.8	4.4	4.8	4.5	

[Click here to download table.](#)

Netherlands		2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	
Social Indicators	All	At-risk-of-poverty or exclusion (% of total population)	16.7	16.0	15.7	14.9	15.1	15.1	15.7	15.0	15.9	16.5	16.8 p
		At-risk-of-poverty (% of total population)	10.7	9.7	10.2	10.5	11.1	10.3	11.0	10.1	10.4	11.6	12.1 p
		At-risk-of-poverty threshold (PPS single person)	9612 b	9897	10522	11485	11618	11300	11387	11536	11283	11557 p	
		Poverty gap (%)	20.9	16.9	17.0	14.9	16.5	16.2	15.5	17.3	16.5	16.9	17.3 p
		Persistent at-risk-of-poverty (% of total population)	8.2	7.7	7.7	6.4	6.7	6.4	6.5	6.5	6.7	6.5	6.7 p
		At-risk-of-poverty before social transfers excl. pensions (% of total population)	21.7	21.0	20.6	19.9	20.5	21.1	20.9	20.6	20.8	21.3	22.2 p
		Impact of social transfers (excl. pensions) in reducing poverty (%)	50.7	53.8	50.5	47.2	45.9	51.2	47.4	51.0	50.0	45.5	45.5 p
		Severe Material Deprivation (% of total population)	2.5	2.3	1.7	1.5	1.4	2.2	2.5	2.3	2.5	3.2	2.5 p
		Share of people living in low work intensity households (% of people aged 0-59)	9.8	10.9	9.7	8.2	8.5	8.4	8.9	8.9	9.3	10.2	10.2 p
		Real Gross Household Disposable income (growth %)	-0.4	0.4	1.9	-0.6	1.1	-0.6	0.1	-1.0	-1.4	-0.6	3.2
		Income quintile share ratio S80/S20	4.0	3.8	4.0	4.0	4.0	3.7	3.8	3.6	3.6	3.8	3.8 p
		Gini coefficient	26.9 b	26.4	27.6	27.6	27.6	27.2	25.8	24.4	25.1	26.2	26.4 p
	Early leavers from education and training (% of population aged 18-24)	13.5	12.6 b	11.7	11.4	10.9	10.0 b	9.2	8.9	9.3 b	8.7 b	8.2	
	NEET: Young people not in employment, education or training (% of total population aged 15-24)	5.3	4.0 b	3.5	3.4	4.1	4.3 b	4.3	4.9	5.6	5.5	4.7	
	Male	At-risk-of-poverty or exclusion (% of male population)	15.6	14.6	14.6	14.3	14.3	14.1	14.9	13.6	14.9	15.8	16.4 p

## Austria

Austria		2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	
Macro Economic Indicators (Annual % growth)	Real GDP	2.1	3.4	3.6	1.5	-3.8	1.9	2.8	0.7	0.1	0.6	1.0	
	Total employment	1.2	1.7	1.8	1.9	-0.4	0.7	1.6	1.0	0.3	0.9	0.6	
	Labour productivity	0.9	1.6	1.8	-0.4	-3.4	1.2	1.2	-0.3	-0.2	-0.3	0.3	
	Annual average hours worked per person employed	-1.3	-1.0	-0.6	-0.4	-3.2	-0.3	0.4	-1.3	-0.9	-0.6	-1.2	
	Real productivity per hour worked	2.2	2.6	2.4	0.1	-0.2	1.5	0.8	1.1	0.7	0.3	1.6	
	Harmonized CPI	2.1	1.7	2.2	3.2	0.4	1.7	3.6	2.6	2.1	1.5	0.8	
	Price deflator (GDP)	2.6	1.9	2.5	1.8	1.9	1.9	2.0	1.6	1.6	1.8	1.9	
	Nominal compensation per employee	2.1	3.1	3.0	3.3	1.6	1.1	2.1	2.7	2.1	1.9	1.9	
	Real compensation per employee (GDP deflator)	-0.5	1.2	0.7	1.5	-0.3	0.1	0.2	0.7	0.5	0.1	0.0	
	Real compensation per employee (private consumption deflator)	0.0	1.4	0.7	0.1	1.2	-0.6	-1.5	0.1	0.0	0.4	1.0	
	Nominal unit labour costs	1.1	1.5	1.2	3.7	5.2	-0.1	0.8	3.0	2.3	2.1	1.5	
	Real unit labour costs	-1.4	-0.5	-1.0	1.9	3.2	-1.1	-1.1	1.0	0.8	0.3	-0.3	
	Labour Market Indicators - Total	Total population (000)	8201	8254	8283	8308	8355	8352	8375	8408	8452	8507	8576
		Population aged 15-64 (000)	5570	5584	5589	5607	5625	5633	5663	5688	5705	5731	5767
Total employment (000)		3747	3826	3924	3994	3982	4017	4052	4085	4105	4113	4148	
Employment aged 15-64 (000)		3711	3783	3864	3929	3909	3944	3982	4013	4030	4034	4068	
Employment rate (% population aged 20-64)		70.4	71.6	72.8 b	73.8	73.4	73.9	74.2	74.4	74.6	74.2	74.3	
Employment rate (% population aged 15-64)		67.4	68.6	69.9 b	70.8	70.3	70.8	71.1	71.4	71.4	71.1	71.1	
Employment rate (% population aged 15-24)		51.6	52.3	53.8 b	54.4	53.1	52.8	53.9	53.7	53.1	52.1	51.3	
Employment rate (% population aged 25-54)		81.6	82.2	82.9 b	83.4	82.9	83.5	84.1	84.3	84.0	83.4	83.5	
Employment rate (% population aged 55-64)		29.9	30.0	30.6 b	30.8	29.4	29.4	29.9	30.6	30.6	30.6	30.6	
FTE employment rate (% population aged 20-64)		63.2 b	64.0	65.1 b	65.7	64.9	65.1	65.3	65.4	65.5	64.7	64.7	
Self-employed (% total employment)		11.6	11.6	11.3	11.2	11.2	11.2	11.3	11.2	11.4	11.3	11.4	
Part-time employment (% total employment)		21.0	21.5	22.0 b	22.7	23.9	24.4	24.5	25.2	26.0	26.9	27.3	
Fixed term contracts (% total employees)		9.0 b	8.9	8.8	8.9	9.1	9.4	9.5	9.3	9.2	9.1	9.1	
Employment in Services (% total employment)		69.8	70.5	70.5	70.7	71.3	71.8	71.9	72.2	72.5	72.5	72.7	
Employment in Industry (% total employment)		24.5	24.2	24.3	24.2	23.7	23.3	23.4	23.4	23.2	23.0	23.0	
Employment in Agriculture (% total employment)		5.6	5.3	5.0	4.7	4.7	4.7	4.6	4.4	4.3	4.4	4.4	
Activity rate (% population aged 15-64)		71.4	72.4	73.5 b	73.9	74.3	74.4	74.6	75.1	75.5	75.4	75.5	
Activity rate (% population aged 15-24)		58.0	57.9	59.4 b	59.5	59.5	58.3	59.2	58.8	58.0	57.4	57.5	
Activity rate (% population aged 25-54)		85.7	86.1	86.5 b	86.5	87.0	87.1	87.6	88.1	88.3	88.0	88.0	
Activity rate (% population aged 55-64)		31.2	34.3	37.2 b	39.7	40.5	42.2	41.4	43.1	45.5	46.9	48.6	
Total unemployment (000)		223	212	200	172	223	203	194	209	231	246	252	
Unemployment rate (% labour force)		5.6	5.3	4.9	4.1	5.3	4.8	4.6	4.9	5.4	5.6	5.7	
Youth unemployment rate (% labour force 15-24)		11.0	9.8	9.6	10.7	10.7	8.9	9.4	9.7	10.3	10.6	10.6	
Long term unemployment rate (% labour force)		1.4	1.5	1.3	1.0	1.2	1.2	1.2	1.2	1.3	1.3	1.7	
Share of long term unemployment (% of total unemployment)		25.6	28.0	27.2	24.3	21.7	25.4	26.3	24.9	24.6	27.2	29.2	
Youth unemployment ratio (% population aged 15-24)		6.4 b	5.7	5.6 b	5.1	6.4	5.5	5.3	5.6	5.7	6.0	6.1	
Employment rate for low skilled 25-64 (ISCED 0-2)		51.9 b	53.9 b	56.1 b	55.4	54.0	54.8	55.1	54.7	54.1	53.0 b	52.9	
Employment rate for medium skilled 25-64 (ISCED 3-4)		73.0 b	74.2 b	75.4 b	76.9	76.3	77.0	76.8	77.1	77.5	75.9 b	75.7	
Employment rate for high skilled 25-64 (ISCED 5-8)		85.9 b	85.1 b	86.0 b	85.6	85.8	85.3	85.9	86.7	86.0	85.3 b	85.4	
Employment rate (National aged 15-64)		68.2 b	70.7	71.9 b	71.9	71.6	72.7	72.6	73.1	73.5	72.7	72.5	
Employment rate (Other EU28 aged 15-64)		69.2	69.7 b	70.6	68.2	69.8	69.6	71.2	71.9	73.0	72.5	72.5	
Employment rate (Other than EU28 aged 15-64)		55.3	56.5 b	56.5	55.5	57.0	58.2	57.0	55.2	54.2	53.7	53.7	
Employment rate (Born in the same country aged 15-64)		68.7 b	70.0	71.2 b	72.3	71.9	72.0	72.3	72.7	72.8	72.6	72.8	
Employment rate (Born in other EU28 aged 15-64)		64.9	67.0 b	67.5	67.2	69.5	69.9	71.1	72.2	72.7	72.7	72.7	
Employment rate (Born outside EU28 aged 15-64)	59.5	61.2 b	61.3	60.3	62.4	63.0	62.0	60.7	59.5	59.0	59.0		
Underemployment (% of labour force aged 15-74)	0.9	0.8	0.7 b	0.8	0.9	0.9	1.0	0.9	1.0	0.9	1.0		
Seeking but not available (% of labour force aged 15-74)	0.9	0.8	0.7 b	0.8	0.9	0.9	1.0	0.9	1.0	0.9	1.0		
Discouraged, available but not seeking (% of labour force aged 15-74)	4.0	4.1	3.8 b	3.5	3.7	3.7	3.4	3.5	3.5	3.6	3.7		

[Click here to download table.](#)

Austria		2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015
Labour Market Indicators - Male	Total population (000)	3985	4014	4030	4042	4057	4066	4079	4098	4124	4156	4195
	Population aged 15-64(000)	2790	2797	2799	2807	2814	2818	2831	2844	2854	2870	2891
	Total employment (000)	2065	2168	2264	2364	2364	2408	2468	2517	2580	2640	2704
	Employment aged 15-64 (000)	2022	2058	2100	2122	2087	2104	2120	2125	2134	2126	2145
	Employment rate (% population aged 20-64)	76.9	78.1	79.5 b	80.1	78.7	79.0	79.2	79.3	79.1	78.3	78.4
	Employment rate (% population aged 15-64)	73.7	74.9	76.3 b	76.8	75.5	76.0	76.2	76.2	76.0	75.2	75.1
	Employment rate (% population aged 15-24)	54.8	55.8	57.0 b	57.6	55.8	56.6	58.0	57.1	56.4	54.3	54.0
	Employment rate (% population aged 25-54)	87.9	88.4	89.0 b	88.9	87.4	87.7	88.4	88.3	87.5	86.6	86.6
	Employment rate (% population aged 55-64)	38.5	41.9	46.0 b	48.9	49.1	49.9	48.2	50.2	52.8	54.3	54.1
	FTE employment rate (% population aged 20-64)	75.8 b	76.7	78.1 b	78.7	76.6	77.0	77.6	78.2	78.6	78.5	78.5
	Self-employed (% total employment)	14.1	14.2	13.6	13.6	13.9	14.2	13.7	13.5	13.8	13.8	13.8
	Part-time employment (% total employment)	7.7	7.9	8.2 b	7.0	7.5	8.0	7.8	8.0	8.0	8.0	8.0
	Fixed term contracts (% total employees)	5.9	7.7	7.4 b	7.5	7.8	8.3	8.3	7.9	8.1	7.9	7.8
	Employment in Services (% total employment)	58.3	59.0	59.1	59.3	59.7	60.3	60.4	60.6	61.3	61.3	61.3
	Employment in Industry (% total employment)	36.0	35.6	35.6	35.6	35.2	34.6	34.6	34.6	34.0	34.0	34.0
	Employment in Agriculture (% total employment)	5.7	5.4	5.2	5.1	5.1	5.1	5.0	4.8	4.7	4.7	4.7
	Activity rate (% population aged 15-64)	78.0	78.9	80.0 b	80.0	80.0	80.0	80.0	80.0	80.0	80.0	80.1
	Activity rate (% population aged 15-24)	62.0	61.8	62.9	62.9	62.9	62.9	63.6	63.1	62.3	60.7	60.7
	Activity rate (% population aged 25-54)	92.0	92.2	92.5 b	92.1	91.9	91.9	92.0	92.3	92.1	91.5	91.6
	Activity rate (% population aged 55-64)	40.4	44.1	47.6 b	49.9	50.5	51.4	50.4	52.2	55.1	56.8	57.4
	Total unemployment (000)	118	108	100	88	124	113	103	113	124	135	142
	Unemployment rate (% labour force)	5.4	5.0	4.5	3.9	5.5	5.0	4.6	5.0	5.4	5.9	6.1
	Youth unemployment rate (% labour force 15-24)	11.6	9.8	9.5	8.4	11.2	9.6	8.8	9.6	9.4	10.6	11.1
	Long term unemployment rate (% labour force)	1.4	1.5	1.4	1.1	1.4	1.2	1.1	1.1	1.4	1.7	1.9
	Share of long term unemployment (% of total unemployment)	26.0	30.0	26.9	26.0	22.0	27.9	27.8	26.0	25.9	28.2	31.8
	Youth unemployment ratio (% population aged 15-24)	7.2 b	6.1	5.8 b	5.3	7.0	6.0	5.6	6.0	5.8	6.4	6.7
	Employment rate for low skilled 25-64 (ISCED 0-2)	62.3 b	63.6 b	65.8 b	65.0	62.8	62.8	63.6	62.3	61.2	59.1 b	59.3
	Employment rate for medium skilled 25-64 (ISCED 3-4)	78.8 b	79.6 b	81.0 b	81.9	80.2	80.6	80.4	80.5	80.9	79.8 b	79.1
	Employment rate for high skilled 25-64 (ISCED 5-8)	85.7 b	87.7 b	89.1 b	88.7	88.6	88.8	89.0	89.6	88.6	87.2 b	87.4
	Employment rate (National aged 15-64)	74.3 b	75.5	76.9 b	77.4	76.4	76.7	76.8	76.8	76.8	76.2	76.0
	Employment rate (Other EU28 aged 15-64)	75.8 b	77.8	78.5 b	80.1	71.6	75.7	76.2	77.5	78.2	78.5	78.2
	Employment rate (Other than EU28 aged 15-64)	65.0	66.9	67.9	64.1	66.5	68.5	69.5	67.4	65.7	62.1	62.0
	Employment rate (Born in the same country aged 15-64)	74.6 b	75.9	77.1 b	77.7	76.5	76.7	76.8	76.8	76.7	76.2	76.0
	Employment rate (Born in other EU28 aged 15-64)	72.5	77.4 b	75.4	75.5	75.1	77.0	77.5	79.4	78.6	78.6	78.9
Employment rate (Born outside EU28 aged 15-64)	68.9	70.1 b	71.2	67.8	70.6	71.4	71.2	69.0	66.4	67.1		
Underemployment (% of labour force aged 15-74)	1.2	1.2	1.2	1.2	1.4	1.4	1.5	1.6	1.9	1.9	2.1	
Seeking but not available (% of labour force aged 15-74)	0.7	0.7	0.6 b	0.7	0.9	0.8	0.7	0.8	0.8	0.9	0.8	
Discouraged, available but not seeking (% of labour force aged 15-74)	3.5	3.5	3.2 b	2.9	3.2	3.2	3.2	3.2	3.0	3.4	3.5	
Labour Market Indicators - Female	Total population (000)	4216	4240	4253	4266	4278	4285	4296	4310	4338	4351	4381
	Population aged 15-64(000)	2781	2787	2790	2800	2811	2816	2832	2844	2852	2862	2877
	Total employment (000)	1701	1741	1786	1831	1849	1869	1890	1913	1925	1938</	

Austria		2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	
Social indicators	All	At-risk-of-poverty or exclusion (% of total population)	17.4	17.8	16.7	20.6 b	19.1	18.9	19.2	18.5	18.8	19.2	18.3
		At-risk-of-poverty (% of total population)	12.6	12.6	12.0	15.2 b	14.5	14.7	14.5	14.4	14.4	14.1	13.9
		At-risk-of-poverty threshold (PPS single person)	10317	10452	10686	11359 b	11683	11710	12255	12361	12542	12997	13070
		Poverty gap (%)	14.8	15.5	17.0	19.9 b	19.2	21.8	19.1	20.1	21.3	20.1	20.5
		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
		At-risk-of-poverty before social transfers excl. pensions (% of total population)	25.5	25.1	24.7	25.9 b	25.3	26.0	27.1	25.8	25.9	25.4	25.6
		Impact of social transfers (excl. pensions) in reducing poverty (%)	50.6	49.8	71.3	41.5 b	42.7	45.5	46.5	44.2	44.4	44.5	45.7
		Severe Material Deprivation (% of total population)	3.5	3.6	3.3	5.9	4.6	4.3	4.0	4.0	4.2	4.0	3.6
		Share of people living in low work intensity households (% of people aged 0-59)	7.3	8.1	8.2	7.4 b	7.1	7.8	8.6	7.7	7.8	9.1	8.2
		Real Gross Household Disposable income (growth %)	3.8	2.6	2.1	0.8	-0.2	-1.0	-0.2	1.3	-1.7	0.0	0.3
		Income quintile share ratio S80/S20	3.8	3.7	3.8	4.2 b	4.2	4.3	4.1	4.2	4.1	4.1	4.0
		GINI coefficient	26.3	25.3	26.2	27.7 b	27.5	28.3	27.4	27.6	27.0	27.6	27.2
		Early leavers from education and training (% of population aged 18-24)	9.3	10.0 b	10.8	10.2	8.8	8.3	8.5	7.8	7.5	7.0 b	7.3
		NEET: Young people not in employment, education or training (% of total population aged 15-24)	15.1	15.3	16.5	14.4	8.2	7.4	7.5	6.8	7.3	7.7	7.5
	Male	At-risk-of-poverty or exclusion (% of male population)	15.8	15.7	14.5	18.9 b	17.6	17.3	17.9	17.3	17.4	17.7	17.5
		At-risk-of-poverty (% of male population)	11.9	11.0	10.6	14.2 b	13.8	13.4	14.0	13.5	13.5	13.3	13.5
		Poverty gap (%)	15.8	17.5	18.7	21.0 b	19.1	22.2	19.1	20.4	22.7	19.9	20.8
		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
		Severe Material Deprivation (% of male population)	3.2	3.8	3.1	5.5	4.2	3.9	3.6	3.8	4.3	3.8	3.8
		Share of people living in low work intensity households (% of males aged 0-59)	6.2	7.0	6.6	6.1 b	5.5	6.7	7.5	6.7	7.0	7.8	7.3
		Life expectancy at birth (years)	76.6	77.1	77.4	77.7 b	77.6	77.8	78.3	78.4	78.6	79.1	79.6
		Healthy life years at birth (years) - men	58.2	58.7	58.7	58.5 b	59.5	59.4	59.5	60.2	59.7	57.6	57.6
		Early leavers from education and training (% of males aged 18-24)	9.7	10.5 b	11.5	10.4	8.6	8.4	9.0	8.0	7.9	7.6 b	7.8
		NEET: Young people not in employment, education or training (% of males aged 15-24)	8.4	7.5 b	7.0 b	6.8	7.7	7.2	7.3	6.6	7.2	8.0	7.7
		At-risk-of-poverty or exclusion (% of female population)	19.0	19.7	18.9	22.3 b	20.5	20.5	20.3	19.6	20.1	20.5	19.1
		At-risk-of-poverty (% of female population)	13.3	14.0	13.3	16.1 b	15.3	15.8	15.0	15.3	15.2	14.9	14.3
		Poverty gap (%)	14.2	14.1	15.9	18.7 b	19.2	21.6	19.1	20.0	20.7	20.1	19.6
		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
	Severe Material Deprivation (% of female population)	3.7	3.4	3.5	6.3	4.9	4.6	4.4	4.2	4.2	4.2	3.3	
	Share of people living in low work intensity households (% of females aged 0-59)	8.5	9.2	9.8	8.6 b	8.7	8.9	9.7	8.7	8.5	10.5	9.1	
	Life expectancy at birth (years)	82.2	82.8	83.1	83.3 b	83.2	83.5	83.8	83.6	83.8	84.0	84.0	
	Healthy life years at birth (years) - women	60.1	61.0	61.4	59.9 b	60.8	60.8	60.1	62.5	60.2	57.8	57.8	
	Early leavers from education and training (% of females aged 18-24)	8.9	9.8 b	10.2	9.9	8.9	8.3	8.0	7.6	7.1	6.5 b	6.8	
	NEET: Young people not in employment, education or training (% of females aged 15-24)	8.8	8.1 b	7.9 b	8.0	8.7	7.7	7.2	7.0	7.4	7.4	7.3	
	Children (0-17)	At-risk-of-poverty or exclusion of children (% of people aged 0-17)	15.3	14.7	14.8	18.1 b	17.1	19.0	17.8	17.5	18.6	18.2	17.8
		At-risk-of-poverty (% of Children population)	4.0	4.2	3.7	6.7	5.0	5.6	5.8	5.8	6.4	6.0	4.2
		Severe Material Deprivation (% of Children population)	5.7	7.0	6.3	5.5 b	5.7	5.9	7.0	6.1	7.2	8.6	7.5
		Share of children living in low work intensity households (% of Children population)	12.6	11.2	11.6	15.6 b	14.2	15.4	14.4	14.1	15.3	13.6	14.7
		Risk of poverty of children in households at work (Working Intensity > 0.2)	59.0	60.0	59.0	51.0 b	52.1	49.7	54.8	52.7	52.9	51.7	54.2
		Impact of social transfers (excl. pensions) in reducing poverty (0-17) (%)											
	Working age (18-64)	At-risk-of-poverty or exclusion (% of Working age population)	17.4	17.4	16.7	19.8 b	18.7	18.3	18.8	18.4	18.5	18.9	18.4
		At-risk-of-poverty (% of Working age population)	11.5	11.0	10.6	13.5 b	13.0	12.9	13.1	13.3	12.9	12.9	13.0
Severe Material Deprivation (% of Working age population)		3.6	3.8	3.4	6.0	4.9	4.5	4.0	4.1	4.3	4.0	4.0	
Very low work intensity (18-59)		7.9	8.4	8.8	8.0 b	7.5	8.4	9.1	8.2	7.9	9.3	8.4	
In-work at-risk-of-poverty rate (% of persons employed 18-64)		6.8	6.3	6.1	8.5 b	8.2	7.5	7.6	8.2	7.9	7.2	7.8	
Impact of social transfers (excl. pensions) in reducing poverty (18-64) (%)		52.3	52.6	54.5	44.1 b	45.2	47.1	48.6	45.5	46.3	46.9	47.6	
Elderly (65+)	At-risk-of-poverty or exclusion of elderly (% of people aged 65+)	15.5	17.3	15.1	21.2 b	18.6	17.4	17.4	16.2	16.2	15.7	14.0	
	At-risk-of-poverty (% of Elderly population)	13.9	16.2	14.0	18.9 b	17.4	16.8	16.2	15.1	15.4	14.2	13.2	
	Severe Material Deprivation (% of Elderly population)	2.1	2.1	2.1	4.4	2.8	1.9	2.1	1.9	1.8	2.0	1.4	
	Relative median income of elderly (ratio with median income of people younger than 65)	0.96	0.94	0.93	0.88 b	0.89	0.90	0.92	0.93	0.95	0.95	0.98	
	Aggregate replacement ratio (ratio)	0.69	0.65	0.62	0.61 b	0.56	0.57	0.59	0.58	0.59	0.60	0.62	
	Sickness/Health care	6.9	6.8	6.8	7.1	7.4	7.3	7.2	7.3	7.3	7.4	7.4	
Expenditure in social protection indicators (% of GDP)	Disability	2.3	2.2	2.0	2.0	2.1	2.2	2.1	2.1	2.1	2.0	2.0	
	Old age and survivors	12.9	13.0	12.8	13.1	14.1	14.2	14.0	14.3	14.6	14.8	14.8	
	Family/Children	3.0	2.9	2.8	2.9	3.1	3.1	2.9	2.8	2.8	2.8	2.8	
	Unemployment	1.6	1.6	1.4	1.3	1.7	1.6	1.5	1.5	1.6	1.6	1.6	
	Housing and Social exclusion n.e.c.	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.6	
	Total (including Admin and Other expenditures)	28.1	27.7	27.2	27.8	29.8	29.8	29.0	29.3	29.8	30.0	30.0	
	of which: Means tested benefits	2.1	2.1	2.0	2.1	2.3	2.4	2.3	2.3	2.4	2.5	2.5	

[Click here to download table.](#)

## Poland

Poland		2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015
Macro Economic indicators (Annual % growth)	Real GDP	3.5	6.2	7.0	4.2	2.8	3.6	5.0	1.6	1.4	3.3	3.9
	Total employment	2.2	3.2	4.5	3.8	0.4	-2.7 b	0.6	0.1	-0.1	1.7	1.5
	Labour productivity	1.3	2.9	2.4	0.4	2.4	6.4 b	4.4	1.5	1.5	1.5	2.4
	Annual average hours worked per person employed	-0.3	0.1	-0.1	-0.4	-0.8	-0.3 b	-0.3 b	-0.3	-0.2	0.3	0.4
	Real productivity per hour worked	1.6	2.8	2.6	0.8	3.2	6.7 b	4.7	1.7	1.6	1.2	2.0
	Harmonized CPI	2.2	1.3	2.6	4.2	4.0	2.6	3.9	3.7	3.2	3.0	0.1
	Price deflator GDP	2.6	1.7	3.7	3.9	3.8	1.7	3.2	2.3	0.3	0.5	0.6
	Nominal compensation per employee	2.0	2.1	5.7	8.3	3.4	8.9 b	5.3 b	3.6	1.7	2.2	1.1
	Real compensation per employee (GDP deflator)	-0.5	0.4	2.0	4.2	-0.4	7.2 b	2.0 b	1.2	1.4	1.7	0.5
	Real compensation per employee (private consumption deflator)	-0.1	0.9	3.1	3.9	-0.6	6.1 b	1.4 b	-0.1	0.9	2.1	1.8
	Nominal unit labour costs	0.7	-0.7	3.2	7.8	0.9	2.4 b	0.8	2.0	0.2	0.6	-1.2
	Real unit labour costs	-1.7	-2.3	-0.5	3.8	-2.7	0.7 b	-2.4 b	-0.3	-0.1	0.3	-1.9
	Total population (000)	38174	38157	38125	38116	38136	38023	38063	38064	38063	38018	38006
	Population aged 15-64 (000)	26778	26892	26987	27083	27160	27044	27077	26986	26843	26639	26431
	Total employment (000)	14116	14594	15241	15800	15868	15473	15562	15591	15568	15862	16084
	Employment aged 15-64 (000)	13834	14338	14997	15557	15630	15233	15313	15340	15313	15591	15812
	Employment rate (% population aged 20-64)	58.3	60.1	62.7	65.0	64.9	64.3 b	64.5	64.7	64.9	66.5	67.9
	Employment rate (% population aged 15-64)	52.8	54.5	57.0	59.2	59.3	58.9 b	59.3	59.7	60.0	61.7	62.8
Employment rate (% population aged 15-24)	22.5	24.0	25.8	27.3	26.8	26.4 b	24.9	24.7	24.2	25.8	26.0	
Employment rate (% population aged 25-54)	69.6	71.8	74.9	77.5	77.6	77.2 b	77.3	77.2	77.0	78.4	79.5	
Employment rate (% population aged 55-64)	27.2	28.1	29.7	31.6	32.3	34.1 b	36.9	38.7	40.6	42.5	44.3	
FTE employment rate (% population aged 20-64)	57.1 b	59.0	61.7	64.1	64.0	63.4 b	63.7	64.0	64.2	65.8	67.0	
Self-employed (% total employment)	20.5	19.9	19.2	18.8	18.8	19.1	19.1	18.9	18.5	18.3	18.3	
Part-time employment (% total employment)	9.8	8.9	8.5	7.7	7.7	7.7 b	7.3	7.2	7.1	7.1	6.8	
Fixed term contracts (% total employees)	25.7 b	27.3	28.2	27.0	26.5	27.3 b	26.9	26.9	26.9	28.4	28.0	
Employment in Services (% total employment)	53.2	54.1	54.5	54.3	55.8	56.9 b	56.7	57.3	57.8	58.3	58.3	
Employment in Industry (% total employment)	29.5	30.2	30.9	31.8	31.0	30.1 b	30.4	30.2	30.3	30.2	30.2	
Employment in Agriculture (% total employment)	17.3	15.7	14.6	14.0	13.3	13.0 b	12.9	12.6	12.0	11.5	11.5	
Activity rate (% population aged 15-64)	64.4	63.4	63.2	63.8	64.7	65.3 b	65.7	66.5	67.0	67.9	68.1	
Activity rate (% population aged 15-24)	35.7	34.2	33.0	33.1	33.8	34.6 b	33.5	33.6	33.3	33.9	32.8	
Activity rate (% population aged 25-54)	82.5	81.7	81.7	82.5	83.4	84.1 b	84.2	84.6	84.6	85.1	85.1	
Activity rate (% population aged 55-64)	30.5	30.7	31.8	33.3	34.5	36.7 b	39.6	41.8	44.0	45.6	46.9	
Total unemployment (000)	3018	2311	1579	1165	1399.1							

Poland		2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015
Labour Market Indicators - Male	Total population (000)	18470	18454	18427	18412	18415	18427	18430	18427	18426	18404	18357
	Population aged 15-64(000)	13305	13363	13406	13449	13485	13482	13496	13454	13388	13293	13196
	Total employment (000)	7809	8081	8403	8718	8722	8566	8648	8651	8641	8778	8867
	Employment aged 15-64 (000)	7643	7927	8258	8573	8578	8418	8496	8498	8486	8607	8690
	Employment rate (% population aged 20-64)	65.1	67.3	70.2	73.0	72.6	71.3 b	71.9	72.0	72.1	73.6	74.7
	Employment rate (% population aged 15-64)	58.9	60.9	63.6	66.3	66.1	65.3 b	66.0	66.3	66.6	68.2	69.2
	Employment rate (% population aged 15-24)	25.4	26.3	29.2	31.0	30.4	30.5 b	30.5	30.6	30.9	32.6	33.0
	Employment rate (% population aged 25-54)	76.1	78.3	81.1	84.0	83.7	82.5 b	83.0	82.9	82.7	83.9	84.9
	Employment rate (% population aged 55-64)	35.9	38.4	41.4	44.1	44.3	45.2 b	47.8	49.3	51.3	53.1	54.2
	FTE employment rate (% population aged 20-64)	65.0 b	67.2	70.3	73.3	72.8	71.6 b	72.1	72.4	72.6	74.1	75.0
	Self-employed (% total employment)	24.1	23.4	22.7	22.3	22.4	22.8	22.8	22.6	22.4	22.3	22.2
	Part-time employment (% total employment)	7.0	6.2	5.8	5.1	5.0	5.0 b	4.7	4.5	4.5	4.4	4.2
	Fixed term contracts (% total employees)	19.3	21.1	21.4	19.9	19.9	20.6 b	20.7	20.6	20.7	21.8	21.4
	Employment in Services (% total employment)	42.8	43.4	43.5	42.8	44.0	45.1 b	44.8	45.1	45.3	46.0	46.0
	Employment in Industry (% total employment)	39.4	40.3	41.4	43.1	42.6	41.5 b	41.8	41.6	41.8	41.5	41.5
	Employment in Agriculture (% total employment)	17.8	16.3	15.1	14.1	13.4	13.4 b	13.5	13.3	12.9	12.5	
	Activity rate (% population aged 15-64)	70.8	70.1	70.0	70.9	71.8	72.1 b	72.6	73.3	73.9	74.6	74.8
	Activity rate (% population aged 15-24)	39.5	37.5	36.5	36.5	38.1	39.3 b	38.7	38.5	38.4	38.8	38.4
	Activity rate (% population aged 25-54)	88.7	88.2	87.9	88.8	89.4	89.6 b	89.7	90.0	90.0	90.5	90.6
	Activity rate (% population aged 55-64)	40.9	42.6	44.7	46.8	47.5	48.9 b	51.6	53.5	55.9	57.2	57.5
	Total unemployment (000)	1543	1191	817	583	716	881	856	900	927	815	701
	Unemployment rate (% labour force)	16.7	13.0	9.0	6.4	7.8	9.4	9.0	9.4	9.7	8.5	7.3
	Youth unemployment rate (% labour force 15-24)	35.8	28.3	20.0	15.2	20.2	22.4	23.6	24.1	25.4	22.7	20.7
	Long term unemployment rate (% labour force)	9.4	7.2	4.7	2.1	2.2	2.9	3.3	3.7	4.0	3.7	2.9
	Share of long term unemployment (% of total unemployment)	56.5	55.2	51.7	32.6	28.6	30.8	36.3	39.0	41.5	42.9	39.6
	Youth unemployment ratio (% population aged 15-24)	14.1 b	10.6	7.3	5.6	7.7	8.8 b	9.1	9.3	9.7	8.8	7.9
	Employment rate for low skilled 25-64 (ISCED 0-2)	46.2 b	48.9	51.8	55.0	53.4	49.5 b	49.2	49.6	49.0	49.7 b	51.5
	Employment rate for medium skilled 25-64 (ISCED 3-4)	69.8 b	71.4	73.9	76.1	75.1	74.0 b	74.7	74.5	74.2	75.2 b	76.1
	Employment rate for high skilled 25-64 (ISCED 5-8)	86.2 b	86.8	88.3	89.2	89.9	88.6 b	88.9	89.1	89.5	90.9 b	91.5
	Employment rate (Nationals aged 15-64)	58.8 b	60.9	63.6	66.3	66.1	65.3 b	66.0	66.3	66.6	68.2	69.2
	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
	Employment rate (Other than EU28 aged 15-64)		61.0 u	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
	Employment rate (Born in the same country aged 15-64)	59.0 b	60.9	63.7	66.4	66.2	65.3 b	66.0	66.3	66.6	68.2	69.2
Employment rate (Born in other EU28 aged 15-64)		41.5 u	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	
Employment rate (Born outside EU28 aged 15-64)		43.5 u	51.9 u	51.9 u	60.9 u	68.4 bu	65.0 u	72.0 u	66.8 u	71.9 u	73.1 u	
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	
Seeking but not available (% of labour force aged 15-74)	0.8	0.7 b	0.6	0.5 b	0.5	0.5 b	0.5	0.5	0.4	0.4	0.5	
Discouraged, available but not seeking (% of labour force aged 15-74)	2.9	4.1	3.8	3.0	3.0	3.0 b	3.0	3.0	3.2	3.0	2.6	
Total population (000)	19704	19703	19699	19704	19721	19611	19633	19636	19636	19614	19608	
Population aged 15-64(000)	13474	13529	13580	13634	13675	13562	13580	13531	13455	13346	13235	
Total employment (000)	6306	6513	6838	7082	7147	6908	6914	6940	6927	7084	7217	
Employment aged 15-64 (000)	6191	6411	6730	6984	7052	6815	6817	6842	6828	6984	7121	
Employment rate (% population aged 20-64)	51.7	53.1	55.5	57.3	57.6	57.3 b	57.2	57.5	57.6	59.4	60.9	
Employment rate (% population aged 15-64)	46.8	48.2	50.6	52.4	52.8	52.6 b	52.7	53.1	53.4	55.2	56.6	
Employment rate (% population aged 15-24)	19.6	21.0	22.4	23.7	23.2	22.1 b	20.0	19.9	19.5	21.3	21.3	
Employment rate (% population aged 25-54)	63.1	65.3	68.8	71.0	71.6	71.7 b	71.5	71.5	71.2	72.7	73.9	
Employment rate (% population aged 55-64)	19.7	19.0	19.4	20.7	21.9	24.2 b	27.2	29.2	31.0	32.9	35.5	
FTE employment rate (% population aged 20-64)	49.6 b	51.2	53.6	55.4	55.7	55.4 b	55.5	55.8	56.0	57.6	59.2	
Self-employed (% total employment)	16.1	15.5	14.0	14.5	14.5	14.5 b	14.5	14.6	14.2	13.7	13.4	
Part-time employment (% total employment)	13.5	12.2	11.7	10.9	10.9	10.9 b	10.5	10.6	10.4	10.3	9.9	
Fixed term contracts (% total employees)	19.2	20.5	22.3	22.2	21.4	21.8 b	21.1	21.3	21.6	23.2	23.1	
Employment in Services (% total employment)	66.1	67.4	67.9	68.4	70.1	71.4 b	71.5	72.4	73.2	73.5		
Employment in Industry (% total employment)	17.3	17.6	18.0	17.8	16.7	15.9 b	16.3	15.9	15.9	16.3		
Employment in Agriculture (% total employment)	16.6	15.0	14.1	13.8	13.2	12.6 b	12.2	11.7	10.9	10.2		
Activity rate (% population aged 15-64)	58.1	56.8	56.5	57.0	57.8	58.5 b	58.9	59.7	60.1	61.1	61.4	
Activity rate (% population aged 15-24)	31.8	30.7	29.3	29.6	29.4	29.4 b	28.4	27.9	28.1	28.7	28.9	
Activity rate (% population aged 25-54)	76.4	75.4	75.5	76.3	75.5	76.6 b	76.6	76.6	76.6	78.6	78.6	
Activity rate (% population aged 55-64)	21.5	20.3	20.6	21.6	23.2	25.9 b	29.0	31.3	33.3	35.2	37.3	
Total unemployment (000)	1475	1120	763	582	644	769	802	850	866	752	603	
Unemployment rate (% labour force)	19.4	15.1	10.3	7.9	8.6	10.0	10.4	10.9	11.1	9.6	7.7	
Youth unemployment rate (% labour force 15-24)	38.4	31.6	23.7	19.7	21.1	25.4	28.8	30.0	30.1	25.5	20.9	
Long term unemployment rate (% labour force)	11.6	8.8	5.5	2.9	3.0	3.2	4.0	4.6	4.8	4.1	3.0	
Share of long term unemployment (% of total unemployment)	60.1	58.8	53.6	36.9	34.7	31.5	38.2	41.8	45.5	42.6	38.8	
Youth unemployment ratio (% population aged 15-24)	12.2 b	9.7	7.0	5.9	6.2	7.5 b	8.1	8.5	8.4	7.3	5.6	
Employment rate for low skilled 25-64 (ISCED 0-2)	29.8 b	29.7	31.6	32.4	31.1	30.8 b	30.7	30.2	28.3	29.0 b	29.8	
Employment rate for medium skilled 25-64 (ISCED 3-4)	53.1 b	53.8	56.1	57.4	56.9	56.0 b	55.8	55.4	55.0	55.9 b	57.1	
Employment rate for high skilled 25-64 (ISCED 5-8)	80.2 b	81.0	81.7	82.2	82.1	81.8 b	81.6	81.5	81.6	83.0 b	84.1	
Employment rate (Nationals aged 15-64)	46.8 b	48.2	50.6	52.4	52.7	52.6 b	52.7	53.1	53.4	55.2	56.6	
Employment rate (Other EU28 aged 15-64)		41.0 u	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	
Employment rate (Other than EU28 aged 15-64)		48.3 u	50.7 u	52.4 u	52.8 u	52.6 b	52.7 u	53.1 u	53.4 u	55.2 u	56.6 u	
Employment rate (Born in the same country aged 15-64)	47.0 b	48.3	50.7	52.4	52.8	52.6 b	52.7	53.1	53.4	55.2	56.6	
Employment rate (Born in other EU28 aged 15-64)		32.5 u		28.2 u								
Employment rate (Born outside EU28 aged 15-64)		27.4 u	29.4 u	39.8 u	45.8 u	45.6 bu	48.7 u	53.2 u	49.9 u	55.3	46.7	
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	
Seeking but not available (% of labour force aged 15-74)	1.5	1.0 b	0.9	0.8 b	0.8	0.8 b	0.8	0.7	0.7	0.7	0.7	
Discouraged, available but not seeking (% of labour force aged 15-74)	4.9	6.5	6.1	4.8	4.7	4.5 b	4.4	4.5	4.8	4.7	4.0	

[Click here to download table.](#)

Poland		2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015		
Social Indicators	All	At-risk-of-poverty or exclusion (% of total population)	45.3	39.5	34.4	30.5 b	27.8	27.8	27.2	26.7	25.8	24.7	23.4	
		At-risk-of-poverty (% of total population)	20.5	19.1	17.3	16.9	17.1	17.6	17.7	17.1	17.3	17.0	17.6	
		At-risk-of-poverty threshold (PPS single person)	2855 b	3057	3365	4039	4417	4547	4993	5181	5495	5726	5970	
		Poverty gap (%)	30.1	25.0	24.0	20.6	22.7	22.2	21.4	22.2	24.6	25.2	23.2	22.3
		Persistent at-risk-of-poverty (% of total population)	61.9	58.8	56.6	52.9	54.0	53.5	53.2	41.8	40.2	39.7	38.8	38.8
		At-risk-of-poverty before social transfers excl. pensions (% of total population)	29.8	28.6	26.5	25.1	23.6	24.4	24.1	22.9	23.0	23.1	22.9	
		Impact of social transfers (excl. pensions) in reducing poverty (%)	31.2	33.2	34.7	32.7	27.5	27.9	26.6	25.3	24.8	26.4	23.1	
		Severe Material Deprivation (% of total population)	33.8	27.6	22.3	17.7	15.0	14.2	13.0	13.5	11.9	10.4	8.1	
		Share of people living in low work intensity households (% of people aged 0-59)	14.3	12.4	10.1	8.0	6.9	7.3	6.9	6.9	7.2	7.3	6.9	
		Real Gross Household Disposable income (growth %)	1.1	4.4	5.4	4.0	5.7	2.7	0.4	1.1	1.3	2.7	3.6	
		Income quintile share ratio S80S20	6.6	5.6	5.3	5.1	5.0	5.0	5.0	4.9	4.9	4.9	4.9	
		GNI coefficient	35.6 b	33.3	32.2	32.0	31.1	31.0	30.9	30.7	30.7	30.8	30.6	
	Early leavers from education and training (% of population aged 18-24)	5.3	5.4	5.0	5.0 b	5.3	5.4 b	5.6	5.7	5.6 b	5.4 b	5.3		
	NEET: Young people not in employment, education or training (% of total population aged 15-24)	13.9												

## Portugal

Portugal		2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	
Macro Economic Indicators (Annual % growth)	Real GDP	0.8	1.6	2.5	0.2	-3.0	1.9	-1.8	-4.0	-1.1	0.9	1.6 e	
	Total employment	-0.5	0.4	0.0	0.4	-2.7	-1.4	-1.9	-4.1	-2.9	1.4	1.4 e	
	Labour productivity	1.2	1.2	2.5	-0.2	-0.3	3.4	0.1	0.1	1.8	-0.5	0.2 e	
	Annual average hours worked per person employed	0.1	-0.6	0.9	-0.7	0.0	0.1	-1.2	-0.9	0.6	0.4	0.1 e	
	Real productivity per hour worked	1.1	1.8	1.6	0.5	-0.3	3.2	1.4	1.0	1.2	-0.9	0.1 e	
	Harmonized CPI	2.1	3.0	2.4	2.7	-0.9	1.4	3.6	2.8	0.4	-0.2	0.5	
	Price deflator GDP	3.3	3.2	3.0	1.7	1.1	0.6	-0.3	-0.4	2.3	0.8	0.8	
	Nominal compensation per employee	4.7	1.8	3.5	2.6	2.4	2.1	-1.9	-3.1	3.6	-1.8	-0.3 e	
	Real compensation per employee (GDP deflator)	1.3	-1.3	0.5	0.9	1.3	1.4	-1.6	-2.7	1.3	-2.5	-2.3 e	
	Real compensation per employee (private consumption deflator)	2.5	-1.2	1.0	0.0	3.3	0.7	-5.2	-5.7	3.2	-1.6	-0.8 e	
	Nominal unit labour costs	3.4	0.7	1.0	2.8	2.7	-1.2	-2.0	-3.2	1.8	-1.3	-0.5 e	
	Real unit labour costs	0.1	-2.5	-2.0	1.1	1.6	-1.9	-1.7	-2.8	-0.5	-2.0	-2.5 e	
	Labour Market Indicators - Total	Total population (000)	10495	10512	10533	10553	10563	10573	10573	10542	10487	10427	10375 e
		Population aged 15-64 (000)	7015	7018	7028	7039	7034	7025	7001	6962	6904	6836	6779 e
Total employment (000)		5047	5079	5093	5117	4969	4898	4740	4547	4429	4500	4549	
Employment aged 15-64 (000)		4723	4751	4756	4786	4645	4577	4453	4256	4158	4255	4309	
Employment rate (% population aged 20-64)		72.2	72.6	72.5	73.1	71.1	70.3	68.8 b	66.3	65.4	67.6	69.1	
Employment rate (% population aged 15-64)		67.3	67.6	67.6	68.0	66.1	65.3	63.8 b	61.4	60.6	62.6	63.9	
Employment rate (% population aged 15-24)		35.3	34.8	34.4	34.1	30.8	27.9	26.6 b	23.0	21.7	22.4	22.8	
Employment rate (% population aged 25-54)		80.7	81.2	80.9	81.6	79.7	79.2	77.8 b	75.5	74.6	77.4	78.8	
Employment rate (% population aged 55-64)		50.4	50.5	51.0	50.7	49.7	49.5	47.8 b	46.5	46.9	47.8	49.9	
FTE employment rate (% population aged 20-64)		70.6 b	70.8	70.5	71.3	69.3	68.4	65.9 b	63.0	62.3	64.8	66.3	
Self-employed (% total employment)		24.4	23.5	23.7	23.4	23.2	22.2	20.9	21.4	21.3	19.2	17.9	
Part-time employment (% total employment)		8.2	8.2	8.9	8.8	8.5	8.5	10.3 b	11.2	11.1	10.1	9.8	
Fixed term contracts (% total employees)		19.4 b	20.4	22.3	22.7	22.0	22.8	22.0 b	20.5	21.4	21.4	22.0	
Employment in Services (% total employment)		59.2	59.9	60.4	61.4	62.8	63.7	64.4	65.0	65.7	65.9	65.9	
Employment in Industry (% total employment)		29.0	28.4	28.0	27.2	25.6	25.2	24.5	23.2	22.9	22.8	22.8	
Employment in Agriculture (% total employment)		11.8	11.6	11.6	11.4	11.1	11.1	11.1	11.1	11.1	11.3	11.3	
Activity rate (% population aged 15-64)		73.2	73.6	73.9	73.9	73.4	73.7	73.6 b	73.4	73.0	73.2	73.4	
Activity rate (% population aged 15-24)		42.1	41.7	41.3	40.9	38.7	36.1	38.2 b	37.1	35.0	34.3	33.5	
Activity rate (% population aged 25-54)		87.0	87.7	87.7	88.0	87.8	88.7	88.4 b	88.5	88.3	88.6	88.8	
Activity rate (% population aged 55-64)		53.7	53.4	54.6	54.3	53.8	54.3	53.6 b	53.3	54.4	55.3	57.0	
Total unemployment (000)		470	478	494	476	574	645	688	835	855	729	648	
Unemployment rate (% labour force)		8.8	8.9	9.1	8.8	10.7	12.0	12.9	15.8	16.4	14.1	12.6	
Youth unemployment rate (% labour force 15-24)		20.8	20.2	21.0	21.2	30.2	30.2	30.2	36.1	34.7	32.0	32.0	
Long term unemployment rate (% labour force)		3.7	3.9	3.8	3.6	4.2	5.7	6.2	7.7	8.3	8.4	7.2	
Share of long term unemployment (% of total unemployment)		43.5	45.7	43.0	43.0	40.0	47.6	48.4	48.8	56.4	59.6	57.4	
Youth unemployment ratio (% population aged 15-24)		6.8 b	6.9	6.9	6.8	7.9	8.2	11.5 b	14.1	13.3	11.9	10.7	
Employment rate for low skilled 25-64 (ISCED 0-2)		71.4 b	71.5	71.4	71.6	68.9	68.1	65.7 b	62.9	61.6	63.0 b	64.3	
Employment rate for medium skilled 25-64 (ISCED 3-4)		79.3 b	80.2	80.0	80.7	80.2	79.9	79.3 b	76.0	75.8	77.6 b	78.7	
Employment rate for high skilled 25-64 (ISCED 5-8)		87.3 b	86.4	86.0	86.7	86.6	85.4	83.6 b	82.1	80.5	82.7 b	83.7	
Employment rate (Nationals aged 15-64)		67.2 b	67.1	67.5	67.5	67.1	66.8	65.1 b	61.5	60.8	63.9	64.0	
Employment rate (Other EU28 aged 15-64)		69.2	71.1	71.0	70.7	64.2	70.0 b	63.6	56.7	60.7	60.7	70.2	
Employment rate (Other than EU28 aged 15-64)		71.1	71.5	72.0	65.7	65.4	62.4 b	57.5	54.4	59.0	58.9		
Employment rate (Born in the same country aged 15-64)		66.9 b	67.3	67.2	67.5	65.7	64.9	63.4 b	60.9	60.4	62.2	63.5	
Employment rate (Born in other EU28 aged 15-64)		68.2	70.8	73.9	73.0	71.6	75.6 b	71.3	67.2	73.8	75.1		
Employment rate (Born outside EU28 aged 15-64)	72.5	73.4	73.9	68.8	68.0	66.5 b	64.9	61.1	64.2	65.5			
Underemployment (% of labour force aged 15-74)	1.8	1.7	1.8	1.7	1.8	4.0 b	4.8	5.0	4.8	4.7			
Seeking but not available (% of labour force aged 15-74)	0.2	0.2	0.2	0.2	0.2	0.2	0.6 b	0.5	0.5	0.5	0.5		
Discouraged, available but not seeking (% of labour force aged 15-74)	1.4	1.6	1.4	1.3	1.3	1.3	3.2 b	4.3	5.3	5.3	5.1		

[Click here to download table.](#)

Portugal		2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015
Labour Market Indicators - Male	Total population (000)	5054	5059	5064	5070	5066	5064	5054	5030	4996	4958	4924 e
	Population aged 15-64 (000)	3442	3442	3446	3450	3442	3435	3419	3395	3361	3321	3286 e
	Total employment (000)	2007	2025	2025	2025	1989	1989	1989	1989	1989	1989	1989
	Employment aged 15-64 (000)	2522	2538	2539	2542	2436	2390	2306	2177	2116	2164	2182
	Employment rate (% population aged 20-64)	78.7	79.2	79.1	79.4	76.4	75.4	73.2 b	69.8	68.7	71.3	72.6
	Employment rate (% population aged 15-64)	73.3	73.7	73.6	73.8	70.8	69.8	67.7 b	64.5	63.5	65.8	66.9
	Employment rate (% population aged 15-24)	39.6	38.7	38.5	37.7	32.5	29.7	28.7 b	24.8	22.9	22.9	24.1
	Employment rate (% population aged 25-54)	86.8	87.5	87.2	87.6	84.7	84.1	81.7 b	78.6	77.1	80.6	81.8
	Employment rate (% population aged 55-64)	58.1	58.2	58.7	58.3	57.5	55.8	54.2 b	51.6	53.5	54.3	56.0
	FTE employment rate (% population aged 20-64)	79.0 b	79.1	79.1	79.1	76.1	74.8	71.5 b	67.6	65.8	68.6	70.8
	Self-employed (% total employment)	26.3	25.3	25.8	25.2	25.7	24.9	25.0	25.6	25.6	23.9	23.3
	Part-time employment (% total employment)	3.8	4.2	4.7	4.1	4.4	5.0	7.1 b	8.4	8.2	7.6	7.1
	Fixed term contracts (% total employees)	14.4	15.2	16.9	16.9	16.2	17.5	17.3 b	16.3	16.7	17.4	18.3
	Employment in Services (% total employment)	49.9	50.5	50.5	51.3	52.7	53.4	53.4 b	53.9	55.2	55.3	55.3
	Employment in Industry (% total employment)	39.1	38.1	38.3	37.7	35.9	35.1	34.1 b	32.3	30.9	30.6	
	Employment in Agriculture (% total employment)	11.1	11.4	11.3	11.0	11.5	11.5	12.6 b	13.8	13.9	14.1	14.1
	Activity rate (% population aged 15-64)	78.9	79.2	79.2	79.2	78.2	77.8	78.0 b	77.3	76.5	76.7	76.7
	Activity rate (% population aged 15-24)	46.0	45.5	44.7	43.6	40.1	38.0	40.4 b	39.2	38.2	34.8	34.2
	Activity rate (% population aged 25-54)	92.5	92.9	92.9	93.2	92.5	92.7	92.4 b	92.1	91.1	91.6	91.7
	Activity rate (% population aged 55-64)	62.4	62.7	63.2	62.9	62.6	62.0	61.6 b	60.4	62.7	64.0	65.0
	Total unemployment (000)	250	248	249	246	309	331	349	434	436	363	324
	Unemployment rate (% labour force)	8.7	8.6	8.7	8.6	11.0	11.9	12.6	15.9	16.3	13.8	12.4
	Youth unemployment rate (% labour force 15-24)	18.7	19.9	18.9	19.0	24.6	27.3	29.0	36.7	36.7	33.9	29.7
	Long term unemployment rate (% labour force)	3.2	3.4	3.2	3.2	4.6	6.1	7.8	9.4	9.4	8.4	7.3
	Share of long term unemployment (% of total unemployment)	39.8	42.9	39.9	40.8	34.3	43.5	48.0	48.8	57.6	60.8	58.8
	Youth unemployment ratio (% population aged 15-24)	6.4 b	6.8	6.2	5.9	7.7	8.2	11.7 b	14.4	13.3	11.9	10.1
	Employment rate for low skilled 25-64 (ISCED 0-2)	79.9 b	80.4	80.0	79.8	76.5	75.4	72.7 b	68.9	67.2	69.1 b	70.7
	Employment rate for medium skilled 25-64 (ISCED 3-4)	82.3 b	82.7	82.5	83.9	83.8	83.5	81.2 b	77.8	77.9	81.1 b	81.1
	Employment rate for high skilled 25-64 (ISCED 5-8)	88.9 b	88.5	89.3	90.3	87.6	86.1	83.7 b	82.6	82.7	85.5 b	85.2
	Employment rate (Nationals aged 15-64)	73.1 b	73.5	73.4	73.5	70.8	69.7	67.7 b	64.6	63.7	65.9	66.8
	Employment rate (Other EU28 aged 15-64)	79.0 b	79.1	79.1	79.1	76.1	74.8	71.5 b	67.6	65.8	68.6	70.8
	Employment rate (Other than EU28 aged 15-64)	78.1	78.0	78.3	70.2	71.7	68.3 b	64.4	54.9	59.4	67.9	
	Employment rate (Born in the same country aged 15-64)	72.9 b	73.5	73.2	73.2	70.5	69.4	67.5 b	64.2	63.4	65.4	66.5
	Employment rate (Born in other EU28 aged 15-64)	73.6	78.7	83.9	79.9	78.2	77.4 b	76.9	73.0	77.7	76.0	
Employment rate (Born outside EU28 aged 15-64)	77.4	79.2	79.3	73.1	72.8	68.6 b	65.4	61.2	66.6	69.8		
Underemployment (% of labour force aged 15-74)	0.9	0.9	0.9	0.9	0.9	2.8 b	3.6	3.7	3.6	3.4		
Seeking but not available (% of labour force aged 15-74)	0.0	0.0	0.0	0.0	0.0	0.0	0.4 b	0.5	0.4	0.5	0.4	
Discouraged, available but not seeking (% of labour force aged 15-74)	1.0	1.0	0.9	0.9	1.1	1.0	2.4 b	3.5	4.5	4.4	4.2	
Labour Market Indicators - Female	Total population (000)	5441	5453	5468	5484	5497	5510	5519	5512	5492	5469	5451 e
	Population aged 15-64 (000)	3573	3576	3582	3589	3591	3590	3582	3567	3544	3515	3493 e
	Total employment (000)	2341	2354	2367	2391	2357	2329	2253				

Portugal		2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	
Social indicators	All	At-risk-of-poverty or exclusion (% of total population)	26.1	25.0	25.0	26.0	24.9	25.3	24.4	25.3	27.5	27.5	26.6
		At-risk-of-poverty (% of total population)	19.4	18.5	18.1	18.5	17.9	17.9	18.0	17.9	18.7	19.5	19.5
		At-risk-of-poverty threshold (PPS single person)	4942	5157	5349	5702	5655	5837	5773	5877	5892	6075	6190
		Poverty gap (%)	26.0	23.5	24.3	23.2	23.6	22.7	23.2	24.1	27.4	30.3	29.0
		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
		At-risk-of-poverty before social transfers excl. pensions (% of total population)	25.7	25.1	24.2	24.9	24.3	26.4	25.4	25.3	25.5	26.7	26.4
		Impact of social transfers (excl. pensions) in reducing poverty (%)	24.5	26.3	25.2	25.7	26.3	32.2	29.1	29.3	26.7	27.0	26.1
		Severe Material Deprivation (% of total population)	9.3	9.1	9.6	9.7	9.1	9.0	8.3	8.6	10.9	10.6	9.6
		Share of people living in low work intensity households (% of people aged 0-59)	6.0	6.6	7.2	6.3	7.0	8.6	8.3	10.1	12.2	12.2	10.9
		Real Gross Household Disposable income (growth %)	0.8	0.2	1.4	1.2	1.5	1.0	-5.3	-5.3	-1.0	-0.5	1.7
		Income quintile share ratio S80/S20	7.0	6.7	6.5	6.1	6.0	5.6	5.7	5.8	6.0	6.2	6.0
		GINI coefficient	38.1	37.7	36.8	35.8	35.4	33.7	34.2	34.5	34.2	34.5	34.0
		Early leavers from education and training (% of population aged 18-24)	38.3	38.5 b	36.5	34.9	30.9	28.3	25.0 b	20.5	18.9	17.4 b	15.7
		NEET: Young people not in employment, education or training (% of total population aged 15-24)	11.1	10.6	11.2	10.2	11.2	11.4	12.6 b	13.9	14.1	12.0	13.2
	At-risk-of-poverty or exclusion (% of male population)	25.2	23.9	24.0	25.0	24.0	24.8	23.8	24.6	27.5	26.7	25.9	
	At-risk-of-poverty (% of male population)	18.7	17.7	17.2	17.9	17.3	17.3	17.6	17.5	18.8	18.9	18.8	
	Poverty gap (%)	25.6	22.4	24.3	22.5	24.9	23.1	23.4	25.3	28.4	31.2	30.1	
	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	
	Severe Material Deprivation (% of male population)	8.9	8.7	9.2	9.5	8.9	9.2	7.8	8.3	10.9	10.1	9.5 p	
	Share of people living in low work intensity households (% of males aged 0-59)	5.6	6.1	6.7	5.8	6.6	8.4	7.9	9.9	12.3	11.9	10.6	
	Life expectancy at birth (years)	74.9	75.5	75.9	76.2	76.5	76.8	77.5	77.3 b	77.6	78.0	78.0	
	Healthy life years at birth (years) - men	58.6 b	60.0	58.5	59.2	58.3	59.3	60.7	64.5 b	63.9	58.3		
	Early leavers from education and training (% of males aged 18-24)	46.2	46.1 b	42.8	41.4	35.8	32.4	28.1 b	26.9	23.4	20.7 b	16.4	
	NEET: Young people not in employment, education or training (% of males aged 15-24)	10.2	9.9 b	9.8	8.9	10.6	10.4	12.2 b	14.6	14.2	12.3	10.4	
	At-risk-of-poverty or exclusion (% of female population)	26.9	26.0	26.0	26.8	25.8	25.8	25.1	25.9	27.4	28.1	27.3	
	At-risk-of-poverty (% of female population)	20.1	19.1	19.0	19.1	18.4	18.4	18.4	18.2	18.7	20.0	20.1	
	Poverty gap (%)	26.5	23.9	24.2	23.6	23.0	22.6	23.0	23.2	27.0	29.3	28.7	
	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	
	Severe Material Deprivation (% of female population)	9.7	9.4	9.9	9.9	9.2	8.8	8.7	8.9	11.0	11.1	9.7 p	
	Share of people living in low work intensity households (% of females aged 0-59)	6.3	7.2	7.8	6.8	7.3	8.9	8.6	10.3	12.1	12.4	11.1	
	Life expectancy at birth (years)	81.3	82.3	82.5	82.7	82.6	83.2	83.8	83.6 b	84.0	84.4		
	Healthy life years at birth (years) - women	57.1 b	57.9	57.9	57.6	56.4	56.7	58.6	62.6 b	62.2	55.4		
	Early leavers from education and training (% of females aged 18-24)	30.2	30.7 b	30.0	28.2	25.8	24.0	17.7 b	14.0	14.3	14.1 b	11.0	
	NEET: Young people not in employment, education or training (% of females aged 15-24)	12.0	11.4 b	12.6	11.6	11.8	12.5	12.9 b	13.2	13.9	12.3	12.2	
	At-risk-of-poverty or exclusion of children (% of people aged 0-17)	28.8	25.5	26.9	28.7	28.7	28.7	28.6	27.8	31.7	31.4	28.6	
	At-risk-of-poverty (% of Children population)	23.7	20.8	20.9	22.8	22.9	22.4	22.4	21.8	24.4	25.6	24.8	
	Severe Material Deprivation (% of Children population)	9.9	9.6	11.8	11.8	10.5	10.8	11.3	10.3	13.9	12.9	11.0 p	
	Share of children living in low work intensity households (% of Children population)	3.8	4.4	5.1	5.9	6.2	8.0	7.2	8.5	9.7	9.8	8.7	
	Risk of poverty of children in households at work (Working Intensity > 0.2)	22.0	17.7	17.6	19.5	19.3	17.1	18.3	16.4	18.2	19.9	19.8	
	Impact of social transfers (excl. pensions) in reducing poverty (0-17) (%)	23.6	25.2	22.9	24.3	25.4	30.4	27.5	26.4	23.0	23.8	20.8	
	At-risk-of-poverty or exclusion (% of Working age population)	25.4	22.9	25.1	24.5	23.5	24.1	23.2	25.6	28.5	28.3	27.4	
	At-risk-of-poverty (% of Working age population)	15.9	15.7	15.2	16.3	15.8	15.7	16.2	16.9	18.4	19.1	18.8	
Severe Material Deprivation (% of Working age population)	8.0	7.7	8.6	8.9	8.3	7.6	8.2	10.7	10.3	9.6 p			
Very low work intensity (18-59)	6.7	7.3	7.9	6.5	7.2	8.8	8.6	10.6	13.0	12.9	11.6		
In-work at-risk-of-poverty rate (% of persons employed 18-64)	11.5	10.4	9.3	11.3	10.3	9.6	10.2	9.9	10.4	10.7	10.9		
Impact of social transfers (excl. pensions) in reducing poverty (18-64) (%)	29.3	31.1	30.9	30.3	30.7	37.7	33.6	34.0	30.0	30.3	30.6		
At-risk-of-poverty or exclusion of elderly (% of people aged 65+)	33.2	32.2	30.0	27.7	26.0	26.1	24.5	22.2	20.3	21.1	21.7		
At-risk-of-poverty (% of Elderly population)	27.6	26.1	25.5	22.3	20.1	21.0	20.0	17.4	14.6	15.1	17.0		
Severe Material Deprivation (% of Elderly population)	13.4	13.3	10.7	10.1	10.6	9.6	7.7	8.4	9.0	9.8	8.4 p		
Relative median income of elderly (ratio with median income of people younger than 65)	0.77	0.79	0.80	0.83	0.85	0.82	0.87	0.92	0.94	0.94	0.92		
Aggregate replacement ratio (ratio)	0.60	0.59	0.47	0.51	0.50	0.53	0.56	0.58	0.59	0.63	0.61		
Sickness/Health care	6.7	6.5	6.2	6.2	7.0	6.7	6.1	6.2	6.2	6.1			
Disability	2.2	2.2	2.2	2.1	2.0	2.0	2.0	1.8	2.0	1.9			
Old age and survivors	10.7	10.9	10.9	11.5	12.4	12.6	13.4	13.7	14.6	14.7			
Family/Children	1.1	1.1	1.1	1.2	1.4	1.3	1.2	1.2	1.2	1.2			
Unemployment	1.3	1.2	1.1	1.0	1.3	1.4	1.5	1.7	1.8	1.5			
Housing and Social exclusion n.e.c.	0.2	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.2			
Total (including Admin and Other expenditures)	23.8	23.7	23.0	23.4	25.8	25.8	25.8	26.4	27.6	26.9			
of which: Means tested benefits	2.4	2.1	2.0	2.2	2.5	2.4	2.1	2.2	2.2	2.1			

[Click here to download table.](#)

## Romania

Romania		2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	
Macro Economic indicators (Annual % growth)	Real GDP	4.2	8.1	6.9	8.5	-7.1	-0.8	1.1	0.6	3.5	3.1	3.7 p	
	Total employment	-1.5	0.7	0.4	0.0	-2.0	-0.3	-0.8	-4.8 b	-0.9	0.8	-0.9 p	
	Labour productivity	5.8	7.3	6.5	8.4	-5.2	-0.5	1.9	5.7 b	4.4	2.3	4.6 p	
	Annual average hours worked per person employed	0.4	0.9	0.5	0.0	-0.6	-0.4	1.8	-4.3 b	-0.3 b	-0.8	1.4 p	
	Real productivity per hour worked	5.4	6.4	6.0	8.4	-4.7	-0.1	0.1	10.5 b	4.7	3.1	3.2 p	
	Harmonized CPI	9.1	6.6	4.9	7.9	5.6	6.1	5.8	3.4	3.2	1.4	-0.4	
	Price deflator GDP	12.1	10.5	12.8	15.6	4.8	5.4	4.7	4.7	3.4	1.7	2.9 p	
	Nominal compensation per employee	29.1	12.4	16.0	32.2	-2.2	1.9	-4.1	9.4 b	3.8 b	6.8	1.3 p	
	Real compensation per employee (GDP deflator)	15.1	1.7	2.8	14.3	-6.6	-3.4	-8.4	4.5 b	0.4 b	5.0	-1.5 p	
	Real compensation per employee (private consumption deflator)	18.3	5.5	10.6	22.5	-7.4	-4.0	-9.3	5.8 b	0.6 b	5.3	1.8 p	
	Nominal unit labour costs	22.0	4.8	8.9	21.9	3.2	2.4	-5.8	3.5 b	-0.6	4.3	-3.1 p	
	Real unit labour costs	8.7	-5.2	-3.4	5.4	-1.5	-2.9	-10.1	-1.2 b	-3.9 b	2.6	-5.8 p	
	Total population (000)	21382	21267	21131	20935	20440	20295	20295	20295	20295	20295	19871 e	19871 e
	Population aged 15-64 (000)	14620	14535	14452	14076	13919	13814	13745	13669	13622	13556 e	13414 e	
	Total employment (000)	9115	9291	9353	9369	9244	8713	8528	8605	8549	8614	8535	
	Employment aged 15-64 (000)	8651	8838	8843	8882	8805	8307	8139	8222	8179	8254	8235	
	Employment rate (% population aged 20-64)	63.6	64.8	64.4	64.4	63.5	64.8 b	63.8	64.8	64.7	65.7	66.0	
Employment rate (% population aged 15-64)	57.6	58.8	58.8	59.0	58.6	60.2 b	59.3	60.2	60.1	61.0	61.4		
Employment rate (% population aged 15-24)	24.9	24.0	24.4	24.8	24.5	24.5 b	23.4	23.7	22.9	22.5	24.5		
Employment rate (% population aged 25-54)	73.3	74.7	74.6	74.4	73.7	76.8 b	75.8	76.6	76.3	77.1	77.4		
Employment rate (% population aged 55-64)	39.4	41.7	41.4	43.1	42.6	40.7 b	39.9	41.6	41.8	43.1	41.1		
FTE employment rate (% population aged 20-64)	62.7 b	63.8	63.7	63.5	62.6	63.5 b	62.5	63.5	63.3	64.2	64.3		
Self-employed (% total employment)	21.5	20.7	21.2	20.8	20.8	22.6	20.9	21.2	21.1	20.5	19.4		
Part-time employment (% total employment)	9.2	8.6	8.6	8.6	8.5	9.9 b	9.5	9.3	9.0	8.7	8.8		
Fixed term contracts (% total employees)	2.4 b	1.8	1.6	1.3	1.0	1.0 b	1.4	1.5	1.4	1.5	1.4		
Employment in Services (% total employment)	35.1	37.0	37.9	38.9	40.1	39.6	41.0	41.6 b	41.8	42.0 p			
Employment in Industry (% total employment)	32.0	32.3	31.5	31.5	29.8	28.8	29.1	27.8 b	28.0	28.6 p			
Employment in Agriculture (% total employment)	32.9	30.7	30.6	29.6	30.1	31.6	30.0	30.6 b	30.2	29.4 p			
Activity rate (% population aged 15-64)	62.3	63.6	63.0	62.9	63.1	64.9 b	64.1	64.8	64.9	65.7	66.1		
Activity rate (% population aged 15-24)	31.2	30.6	30.5	30.4	30.9	31.2 b	30.7	30.5	30.1	29.6	31.3		
Activity rate (% population aged 25-54)	78.2	79.9	79.0	78.3	78.5	81.9 b	80.9	81.5	81.5	82.1	82.5		
Activity rate (% population aged 55-64)	40.4	42.8	42.4	44.2	43.9	42.1 b	41.4	43.0	43.4	44.6	42.7		
Total unemployment (000)	701	719	634	549	624	652	659	627	65				

Romania		2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015
Labour Market Indicators - Male	Total population (000)	10417	10552	10290	10049	9952	9880	9833	9777	9761	9746 e	9705 e
	Population aged 15-64(000)	7251	7227	7185	7024	6967	6914	6879	6838	6839	6830 e	6764 e
	Total employment (000)	4979	5052	5116	5157	5101	4881	4734	4800	4791	4844	4848
	Employment aged 15-64 (000)	4760	4835	4863	4925	4890	4689	4555	4622	4621	4677	4704
	Employment rate (% population aged 20-64)	70.4	71.2	71.0	71.6	70.7	73.1 b	71.5	72.8	72.8	74.0	74.7
	Employment rate (% population aged 15-64)	65.7	64.6	64.8	65.7	65.2	67.9 b	66.3	67.6	67.6	68.7	69.5
	Employment rate (% population aged 15-24)	28.1	27.3	28.3	29.1	28.3	28.5	26.9	27.5	27.0	26.4	26.4
	Employment rate (% population aged 25-54)	80.0	80.8	80.6	80.9	80.5	84.8 b	83.1	84.1	83.8	84.6	85.2
	Employment rate (% population aged 55-64)	46.7	50.0	50.3	53.0	52.3	49.9 b	48.6	51.2	51.4	53.2	51.2
	FTE employment rate (% population aged 20-64)	69.6 b	70.4	70.5	70.9	70.1	72.0 b	70.5	71.8	71.6	72.7	73.1
	Self-employed (% total employment)	28.1	27.2	27.5	26.8	26.9	29.2	26.6	26.9	26.6	26.0	24.4
	Part-time employment (% total employment)	9.1	8.7	8.3	8.1	8.0	9.8 b	8.8	8.7	8.6	8.2	8.5
	Fixed term contracts (% total employees)	1.9	1.3	1.1	0.9	0.7	0.8 b	1.1	1.5	1.2	1.2	1.2
	Employment in Services (% total employment)	31.1	33.2	33.7	34.1	35.0	34.1 b	35.5	36.1	36.3	36.4	36.4
	Employment in Industry (% total employment)	36.9	36.9	37.0	37.8	36.3	35.4 b	36.1	34.3	34.3	35.0	35.0
	Employment in Agriculture (% total employment)	32.1	29.9	29.3	28.1	28.7	30.5 b	28.4	29.6	29.4	28.6	28.6
	Activity rate (% population aged 15-64)	69.4	70.7	70.1	70.6	70.9	73.7 b	72.1	73.2	73.4	74.3	75.3
	Activity rate (% population aged 15-24)	35.9	35.1	35.9	35.9	35.9	36.5 b	35.3	35.3	35.1	34.8	37.0
	Activity rate (% population aged 25-54)	85.8	87.1	85.9	85.8	86.3	90.9 b	89.0	89.9	90.0	90.5	91.6
	Activity rate (% population aged 55-64)	48.4	52.0	52.1	55.1	54.5	52.3 b	51.3	53.6	53.9	55.4	53.8
	Total unemployment (000)	423	452	405	362	398	399	397	381	400	384	395
	Unemployment rate (% labour force)	7.7	8.1	7.2	6.5	7.3	7.6	7.7	7.4	7.7	7.3	7.5
	Youth unemployment rate (% labour force 15-24)	19.9	20.5	20.3	17.7	20.5	22.1	24.0	22.2	23.2	23.6	20.6
	Long term unemployment rate (% labour force)	4.6	4.7	3.6	2.9	2.5	2.8	3.2	3.3	3.4	3.1	3.3
	Share of long term unemployment (% of total unemployment)	59.0	57.5	49.9	42.9	32.2	36.7	41.8	44.2	44.1	41.8	43.8
	Youth unemployment ratio (% population aged 15-24)	7.7 b	7.8	7.6	6.8	7.6	8.1 b	8.5	7.9	8.1	8.2	7.6
	Employment rate for low skilled 25-64 (ISCED 0-2)	64.6 b	65.7	66.3	67.2	67.2	70.0 b	62.9	65.2	66.7	67.9 b	69.0
	Employment rate for medium skilled 25-64 (ISCED 3-4)	75.1 b	75.8	75.2	75.7	75.2	77.2 b	76.7	77.7	78.1	78.5 b	77.5
	Employment rate for high skilled 25-64 (ISCED 5-8)	86.1 b	88.3	87.6	87.8	86.5	86.8 b	87.5	87.4	87.8	88.0 b	89.5
	Employment rate (Nationals aged 15-64)	63.7 b	64.6	64.8	65.6	65.2	67.9 b	66.3	67.6	67.6	68.7	69.5
	Employment rate (Other EU28 aged 15-64)											
	Employment rate (Other than EU28 aged 15-64)		76.2 u	71.6 u	72.3 u							
	Employment rate (Born in the same country aged 15-64)	63.7 b	64.6	64.8	65.6	65.2	67.9 b	66.3	67.6	67.6	68.7	69.5
Employment rate (Born in other EU28 aged 15-64)												
Employment rate (Born outside EU28 aged 15-64)												
Underemployment (% of labour force aged 15-74)				2.6	2.4	3.0 b	2.8	2.7	2.9	3.0	3.4	
Seeking but not available (% of labour force aged 15-74)												
Discouraged, available but not seeking (% of labour force aged 15-74)	4.2	2.1	1.8	1.0	1.8	3.0 b	4.1	3.9	3.9	3.7	3.0	
Labour Market Indicators - Female	Total population (000)	10965	10905	10841	10586	10488	10414	10366	10319	10259	10201 e	10164 e
	Population aged 15-64(000)	7369	7309	7267	7053	6952	6900	6866	6832	6783	6726 e	6650 e
	Total employment (000)	4135	4239	4237	4212	4143	3832	3794	3805	3758	3770	3687
	Employment aged 15-64 (000)	3891	4003	3980	3958	3915	3618	3584	3600	3558	3577	3531
	Employment rate (% population aged 20-64)	56.9	58.5	57.9	57.3	56.3	56.5 b	56.2	56.7	56.5	57.3	57.2
	Employment rate (% population aged 15-64)	51.5	53.0	52.8	52.5	52.0	52.5 b	52.3	52.8	52.6	53.3	53.2
	Employment rate (% population aged 15-24)	21.6	20.6	20.2	20.2	20.6	19.9 b	19.7	19.6	18.6	18.0	19.3
	Employment rate (% population aged 25-54)	66.5	68.6	68.5	67.8	66.9	68.6 b	68.3	68.9	68.6	69.3	69.2
	Employment rate (% population aged 55-64)	33.1	34.5	33.6	34.4	34.1	32.6 b	32.2	33.1	33.2	34.2	32.1
	FTE employment rate (% population aged 20-64)	55.8 b	57.3	56.9	56.0	55.1	55.1 b	54.5	55.2	55.0	55.7	55.4
	Self-employed (% total employment)	13.6	13.0	13.5	13.4	13.3	14.2	13.8	14.0	13.9	13.5	12.8
	Part-time employment (% total employment)	9.2	8.5	8.9	9.3	9.1	10.0 b	9.5	10.0	9.6	9.5	9.2
	Fixed term contracts (% total employees)	1.3	1.1	1.1	0.8	0.7	0.6 b	0.8	0.8	0.8	0.8	0.8
	Employment in Services (% total employment)	39.9	41.6	43.1	44.9	46.5	46.6 b	47.8	48.4	48.8	49.2	49.2
	Employment in Industry (% total employment)	26.2	26.7	24.7	23.8	21.8	20.3 b	20.3	19.7	19.8	20.4	20.4
	Employment in Agriculture (% total employment)	33.9	31.7	32.2	31.3	31.8	33.1 b	32.0	32.0	31.4	30.3	30.3
	Activity rate (% population aged 15-64)	55.3	56.6	56.0	55.2	55.4	56.2 b	56.1	56.4	56.3	56.9	56.7
	Activity rate (% population aged 15-24)	26.5	25.9	24.9	24.7	25.8	25.6 b	25.8	25.5	24.7	24.0	25.2
	Activity rate (% population aged 25-64)	70.7	72.6	72.0	70.7	70.6	72.7 b	72.6	72.7	72.9	73.3	73.9
	Activity rate (% population aged 55-64)	33.5	34.8	33.9	34.7	34.7	33.1 b	32.7	33.7	34.1	35.0	32.8
	Total unemployment (000)	277	266	229	187	226	252	262	246	253	245	229
	Unemployment rate (% labour force)	6.4	6.0	5.2	4.4	5.4	6.2	6.5	6.1	6.3	6.1	5.8
	Youth unemployment rate (% labour force 15-24)	17.8	19.7	17.6	17.3	19.2	22.1	23.7	23.0	24.6	24.7	23.4
	Long term unemployment rate (% labour force)	3.4	3.4	2.7	1.8	1.8	1.9	2.6	2.7	3.0	2.4	2.6
	Share of long term unemployment (% of total unemployment)	52.3	56.2	50.2	38.4	30.1	31.1	39.8	44.1	46.8	40.0	44.1
	Youth unemployment ratio (% population aged 15-24)	4.9 b	5.2	4.7	4.5	5.2	5.7 b	6.1	5.9	6.1	5.9	5.9
	Employment rate for low skilled 25-64 (ISCED 0-2)	45.8 b	45.3	45.8	46.1	46.0	45.8 b	44.0	45.1	44.5	45.2 b	41.1
	Employment rate for medium skilled 25-64 (ISCED 3-4)	63.2 b	65.6	64.3	62.6	61.0	60.9 b	60.6	60.5	59.7	61.2 b	60.9
	Employment rate for high skilled 25-64 (ISCED 5-8)	84.1 b	86.5	86.1	86.1	85.4	84.9 b	84.4	83.5	83.8	84.1 b	84.5
	Employment rate (Nationals aged 15-64)	51.5 b	53.0	52.7	52.5	52.0	52.5 b	52.3	52.8	52.6	53.3	53.2
	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)	51.5 b	53.0	52.8	52.5	52.0	52.5 b	52.3	52.8	52.6	53.3	53.2
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	
Seeking but not available (% of labour force aged 15-74)												
Discouraged, available but not seeking (% of labour force aged 15-74)	7.2	5.6	5.5	5.2	6.4	6.1 b	5.8	5.3	5.0	4.5	5.0	

[Click here to download table.](#)

Romania		2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	
Social Indicators	All	At-risk-of-poverty or exclusion (% of total population)		47.0	44.2	43.0	41.5	40.9	43.2	41.9	40.3	37.3	
		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	
		At-risk-of-poverty threshold (PPS single person)		1670	1837	2066	2122	2186	2226	2332	2408	2613	
		Poverty gap (%)		36.6	32.3	31.4	31.3	31.4	31.1	33.6	34.6	38.2	
		Persistent at-risk-of-poverty (% of total population)											
		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	
		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	
		Severe Material Deprivation (% of total population)		38.0	32.7	32.1	30.5	29.5	31.1	29.8	25.9	22.7	
		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	
		Real Gross Household Disposable income (growth %)	9.3	10.4	17.6	12.7	-6.7	-3.1	-3.1	-3.2	3.3	6.1	5.8
		Income quintile share ratio S80/S20			8.1	7.0	6.5	6.1	6.2	6.6	6.8	7.2	8.3
		GNI coefficient			38.3	35.9	34.5	33.5	34.0	34.6	35.0	37.4	
	Early leavers from education and training (% of population aged 18-24)	19.6	17.9 b	17.3	15.9	16.6	19.3 b	18.1	17.8	17.3	18.1 b	19.1	
	NEET: Young people not in employment, education or training (% of total population aged 15-24)	16.8	14.8 b	13.3	11.6	13.9	16.6 b	17.5	16.8	17.0	17.0	18.1	
	Male	At-risk-of-poverty or exclusion (% of male population)		46.1	43.0	41.8	40.5	39.9	42.5	41.3	40.0	36.5	
		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	
		Poverty gap (%)		36.6	32.9	31.7	31.9	33.5	31.8	35.1	38.3	39.1	
		Persistent at-risk-of-poverty (% of male population)											
		Severe Material Deprivation (% of male population)		37.6	32.2	31.7	30.0	29.3	31.3	30.3	26.6	23.1	
		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				

## Slovenia

Slovenia		2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	
Macro Economic Indicators (Annual % growth)	Real GDP	4.0	5.7	6.9	3.3	-7.8	1.2	0.6	-2.7	-1.1	3.1	2.3	
	Total employment	-0.5	1.6	3.4	2.6	-1.8	-2.1	-1.7	-0.9	-1.1	0.4	1.1	
	Labour productivity	4.5	4.0	3.5	0.7	-6.1	3.4	2.4	-1.8	0.0	2.7	1.2	
	Annual average hours worked per person employed	-2.3	-1.7	-0.8	1.1	0.3	0.1	-1.0	-1.1	1.1	1.2	0.4	
	Real productivity per hour worked	7.0	5.8	4.3	-0.4	-6.4	3.3	3.4	-0.6	-1.1	1.5	0.8	
	Harmonized CPI	2.5	2.5	3.8	5.5	0.9	2.1	2.1	2.8	1.9	0.4	-0.8	
	Price deflator GDP	1.6	2.2	4.2	4.5	3.4	-1.0	1.1	0.3	0.9	0.8	1.0	
	Nominal compensation per employee	6.0	5.4	6.2	7.2	1.8	4.0	1.5	-1.0	0.5	1.3	1.4	
	Real compensation per employee (GDP deflator)	4.4	3.1	1.9	2.6	-1.5	5.1	0.4	-1.3	-0.4	0.5	0.5	
	Real compensation per employee (private consumption deflator)	3.5	2.8	2.3	1.6	1.0	1.9	-0.5	-3.7	-1.4	0.9	2.2	
	Nominal unit labour costs	1.5	1.3	2.6	6.4	8.5	0.6	-0.8	0.8	0.4	-1.3	0.3	
	Real unit labour costs	-0.1	-1.0	-1.5	1.8	5.0	1.6	-1.9	0.5	-0.5	-2.1	-0.7	
	Labour Market Indicators - Total	Total population (000)	1998	2003	2010	2010 b	2052	2047	2050	2055	2059	2061	2063
		Population aged 15-64 (000)	1404	1407	1410	1403	1414	1421	1420	1416	1409	1400	1399
		Total employment (000)	949	961	985	996	981	966	936	924	906	917	917
Employment aged 15-64 (000)		925	937	957	975	955	942	915	907	888	893	902	
Employment rate (% population aged 20-64)		71.1	71.5	72.4	73.0	71.9	70.3	68.4	68.3	67.2	67.7	69.1	
Employment rate (% population aged 15-64)		66.0	66.6	67.8	68.6	67.5	66.2	64.4	64.1	63.3	63.9	65.2	
Employment rate (% population aged 15-24)		34.1	35.0	37.6	38.4	35.3	34.1	31.5	27.3	26.5	26.8	29.6	
Employment rate (% population aged 25-54)		83.8	84.2	85.3	86.8	84.8	83.7	83.1	83.3	81.9	81.9	82.9	
Employment rate (% population aged 55-64)		30.7	32.6	33.5	32.8	35.6	33.0	31.2	32.9	33.5	35.4	36.6	
FTE employment rate (% population aged 20-64)		69.5 b	69.9	71.0	71.6	69.9	68.1	66.4	66.4	65.2	65.7	66.9	
Self-employed (% total employment)		10.2	11.3	11.1	9.9	10.7	12.4	12.6	12.2	12.1	12.7	12.5	
Part-time employment (% total employment)		7.8	8.0	8.1	8.1	9.5	10.3	9.5	9.0	9.3	10.0	10.1	
Fixed term contracts (% total employees)		17.4 b	17.3	18.5	17.4	16.4	17.3	18.2	17.1	16.5	16.7	18.0	
Employment in Services (% total employment)		55.7	56.6	57.1	57.4	59.1	60.6	61.2	61.7	62.2	62.4	62.3	
Employment in Industry (% total employment)		34.6	34.2	34.2	34.3	32.6	31.1	30.6	30.0	29.5	29.5	29.4	
Employment in Agriculture (% total employment)		9.7	9.3	8.7	8.3	8.3	8.2	8.2	8.2	8.4	8.3	8.2	
Activity rate (% population aged 15-64)		70.7	70.9	71.3	71.8	71.8	71.5	70.3	70.4	70.5	70.9	71.8	
Activity rate (% population aged 15-24)		40.5	40.6	41.8	42.9	40.9	39.9	37.4	34.4	33.8	33.6	35.3	
Activity rate (% population aged 25-54)		88.8	89.0	89.3	90.1	89.6	90.0	90.1	90.8	90.7	90.3	90.8	
Activity rate (% population aged 55-64)		32.1	33.4	34.6	34.2	36.9	36.5	33.3	35.1	36.0	38.4	39.7	
Total unemployment (000)		66	61	50	46	61	75	83	90	102	98	90	
Unemployment rate (% labour force)		6.5	6.0	4.9	4.4	5.9	7.5	8.2	8.9	10.1	9.7	9.0	
Youth unemployment rate (% labour force 15-24)		15.9	13.9	10.1	10.1	15.7	20.6	15.7	20.6	21.6	20.9	19.6	
Long term unemployment rate (% labour force)		3.1	2.9	2.2	1.9	1.8	3.2	3.6	4.3	5.2	5.3	4.7	
Share of long term unemployment (% of total unemployment)		47.3	49.3	45.7	42.2	30.1	43.3	44.2	47.9	51.0	54.5	52.3	
Youth unemployment ratio (% population aged 15-24)		6.5 b	5.6	4.2	4.5	5.6	5.9	5.9	7.1	7.3	6.8	5.8	
Employment rate for low skilled 25-64 (ISCED 0-2)		56.1 b	55.9	56.2	55.0	53.7	51.1	46.7	47.2	45.5	48.5 b	49.0	
Employment rate for medium skilled 25-64 (ISCED 3-4)		74.6 b	74.1	75.1	76.4	74.6	73.0	70.6	70.7	69.5	69.5 b	69.7	
Employment rate for high skilled 25-64 (ISCED 5-8)		87.0 b	88.2	87.7	87.9	88.4	87.3	86.4	85.1	83.8	83.2 b	84.4	
Employment rate (Nationals aged 15-64)		66.0 b	67.0	67.8	68.6	67.1	66.5	64.7	64.6	63.1	63.1	65.2	
Employment rate (Other EU28 aged 15-64)		67.1 u	67.1 u	67.1 u	67.1 u	67.1 u	67.1 u	67.1 u	67.1 u	67.1 u	67.1 u	67.1 u	
Employment rate (Other than EU28 aged 15-64)		51.9 u	60.3	65.3	52.2	59.3	65.4	60.9	56.5	54.1	61.7	67.2	
Employment rate (Born in the same country aged 15-64)		65.9 b	66.6	67.8	68.6	67.7	66.3	64.7	64.1	63.5	64.5	65.7	
Employment rate (Born in other EU28 aged 15-64)		62.1	65.2	66.8	66.9	66.9	63.9	57.7	60.6	59.3	56.9	60.0	
Employment rate (Born outside EU28 aged 15-64)		69.5	69.2	69.0	65.7	65.8	63.4	64.9	61.0	58.6	61.7	61.7	
Underemployment (% of labour force aged 15-74)				1.3	1.8	1.9	1.9	1.8	2.3	2.5	3.1		
Seeking but not available (% of labour force aged 15-74)	0.5	0.5	0.4	0.4	0.4	0.5	0.4	0.4	0.4	0.4	0.4		
Discouraged, available but not seeking (% of labour force aged 15-74)	2.3	2.4	2.1	1.4	2.0	1.7	1.8	1.8	2.5	3.4	2.5		

[Click here to download table.](#)

Slovenia		2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015
Labour Market Indicators - Male	Total population (000)	977	981	987	987 b	1004	1014	1015	1017	1019	1021	1022
	Population aged 15-64(000)	714	716	719	715	727	733	731	728	724	720	714
	Total employment (000)	516	524	540	545	526	505	495	490	484	489	492
	Employment aged 15-64 (000)	502	510	525	532	516	509	495	490	484	489	492
	Employment rate (% population aged 20-64)	75.8	76.3	77.5	77.4	75.6	74.0	71.8	71.8	71.2	71.6	73.3
	Employment rate (% population aged 15-64)	70.4	71.1	72.7	72.7	71.0	69.6	67.7	67.4	67.1	67.5	69.2
	Employment rate (% population aged 15-24)	38.1	39.2	43.2	43.0	39.1	37.6	35.7	30.4	29.7	29.5	32.0
	Employment rate (% population aged 25-54)	86.4	87.1	88.1	88.6	86.4	85.2	84.8	85.4	84.3	84.6	86.1
	Employment rate (% population aged 55-64)	43.1	44.5	45.3	44.7	46.4	45.5	39.5	40.7	41.8	41.8	42.6
	FTE employment rate (% population aged 20-64)	75.0 b	75.6	77.0	76.8	74.6	73.0	71.0	71.6	70.3	70.3	73.2
	Self-employed (% total employment)	13.8	15.6	14.9	13.3	14.8	16.2	16.3	16.1	15.9	16.7	16.2
	Part-time employment (% total employment)	6.1	6.0	6.5	6.2	7.4	7.4	7.1	6.3	6.5	6.8	7.0
	Fixed term contracts (% total employees)	13.0	12.7	13.7	13.0	12.4	12.5	13.4	12.8	12.7	12.9	14.0
	Employment in Services (% total employment)	45.9	46.4	47.1	46.8	49.2	50.2	49.4	50.6	51.5	51.5	51.5
	Employment in Industry (% total employment)	44.3	44.0	44.4	44.7	42.3	41.2	41.8	40.7	39.9	40.1	40.1
	Employment in Agriculture (% total employment)	9.8	9.6	8.5	8.5	8.4	8.6	8.8	8.7	8.7	8.4	8.4
	Activity rate (% population aged 15-64)	75.1	74.9	75.8	75.8	75.6	75.4	73.9	73.7	74.2	74.3	75.4
	Activity rate (% population aged 15-24)	44.5	44.4	47.7	47.5	44.4	44.5	42.0	41.8	41.7	41.9	44.1
	Activity rate (% population aged 25-54)	91.1	91.0	91.3	91.6	91.3	91.7	91.8	92.4	92.6	92.2	92.9
	Activity rate (% population aged 55-64)	45.4	45.8	46.7	46.4	48.2	47.5	42.7	43.6	45.1	45.7	46.4
	Total unemployment (000)	33	27	22	23	33	42	45	46	51	49	44
	Unemployment rate (% labour force)	6.1	4.9	4.0	4.0	5.9	7.5	8.2	8.4	9.5	9.0	8.1
	Youth unemployment rate (% labour force 15-24)	14.5	11.6	9.4	9.9	13.8	15.2	15.0	20.3	20.1	19.4	17.7
	Long term unemployment rate (% labour force)	2.9	2.4	1.9	1.7	1.7	3.4	4.1	4.7	4.9	4.9	4.1
	Share of long term unemployment (% of total unemployment)	48.4	49.3	45.3	41.4	28.3	45.0	45.1	48.8	51.1	55.0	50.7
	Youth unemployment ratio (% population aged 15-24)	6.5 b	5.2	4.5	4.7	6.2	6.8	6.3	7.7	7.5	7.1	6.9
	Employment rate for low skilled 25-64 (ISCED 0-2)	65.3 b	64.1	65.4	63.4	62.5	60.8	55.5	56.1	55.1	55.6 b	56.9
	Employment rate for medium skilled 25-64 (ISCED 3-4)	78.8 b	79.3	80.2	80.8	78.0	76.1	74.0	74.5	73.9	73.5 b	74.2
	Employment rate for high skilled 25-64 (ISCED 5-8)	88.1 b	89.5	88.9	88.7	90.3	89.6	87.4	87.4	86.3	86.5 b	88.3
	Employment rate (Nationals aged 15-64)	70.4 b	71.2	72.6	72.4	70.9	69.6	67.4	66.9	66.7	67.3	68.6
	Employment rate (Other EU28 aged 15-64)	69.1 u										
	Employment rate (Other than EU28 aged 15-64)	69.1 u										
	Employment rate (Born in the same country aged 15-64)	70.2 b	71.1	72.6	72.6	71.0	69.6	67.6	67.0	66.6	67.6	69.2
	Employment rate (Born in other EU28 aged 15-64)	67.8	71.5	73.3	70.7	70.9	64.9	64.1	66.1	65.4	63.4	65.2
	Employment rate (Born outside EU28 aged 15-64)	73.0	75.4	74.3	70.9	70.0	69.7	73.3	72.9	67.8	70.0	70.0
Underemployment (% of labour force aged 15-74)				0.9	1.4	1.3	1.4	1.5	1.8	1.9	2.1	
Seeking but not available (% of labour force aged 15-74)	0.5 u	0.4 u	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	
Discouraged, available but not seeking (% of labour force aged 15-74)	1.9	2.0	1.9	1.1	1.5	1.5	1.5	1.5	2.3	3.0	2.1	
Labour Market Indicators - Female	Total population (000)	1021	1022	1023	1024 b	1028	1033	1036	1039	1040	1040	1041
	Population aged 15-64(000)	691	691	691	687	687	688	690	688	685	680	675
	Total employment (000)	434	438	446	453	450	443	420	416	404	407	410
	Employment aged 15-64 (000)	423	427	432	443	439	432</					

Slovenia		2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	
Social indicators	All	At-risk-of-poverty or exclusion (% of total population)	18.5	17.1	17.1	18.5	17.1	18.3	19.3	19.6	20.4	20.4	19.2
		At-risk-of-poverty (% of total population)	12.2	11.6	11.5	12.3	11.3	12.7	13.6	13.5	14.5	14.5	14.3
		At-risk-of-poverty threshold (PPS single person)	6946 b	7292	7753	8287	8599	8009	8364	8563	8527	8597	8961
		Poverty gap (%)	19.1	18.6	19.4	19.3	20.2	20.2	19.9	19.1	20.4	22.0	20.3
		Persistent at-risk-of-poverty (% of total population)				7.7	7.0	6.9	7.5	6.1	7.5	9.5	8.1
		At-risk-of-poverty before social transfers excl. pensions (% of total population)	25.9	24.2	23.1	23.0	22.0	24.2	24.2	25.2	25.3	25.1	24.8
		Impact of social transfers (excl. pensions) in reducing poverty (%)	52.9	52.1	50.2	46.5	48.6	47.5	43.8	46.4	42.7	42.2	42.3
		Severe Material Deprivation (% of total population)	5.1	5.1	5.1	6.7	6.1	5.9	6.1	6.6	6.7	6.6	5.8
		Share of people living in low work intensity households (% of people aged 0-59)	8.6	6.9	7.3	6.7	5.6	7.0	7.6	7.5	8.0	8.7	7.4
		Real Gross Household Disposable income (growth %)	4.8	3.1	4.5	2.6	-0.4	-0.4	0.1	-3.9	-1.7	1.8	2.2
		Income quintile share ratio S80/S20	3.4	3.4	3.3	3.4	3.2	3.4	3.5	3.4	3.6	3.7	3.6
		GINI coefficient	23.8 b	23.7	23.2	23.4	22.7	23.8	23.8	23.7	24.4	25.0	24.5
		Early leavers from education and training (% of population aged 18-24)	4.9	5.6 b	4.1	5.1	5.3	5.0	4.2	4.4	3.9	4.4 b	5.0
	NEET: Young people not in employment, education or training (% of total population aged 15-24)	8.9	8.5 b	6.7	6.5	7.5	7.1	9.3	9.2	9.2	9.4	9.5	
	At-risk-of-poverty or exclusion (% of male population)	16.4	15.3	15.0	16.6	15.1	16.5	17.4	18.3	19.4	19.3	17.5	
	At-risk-of-poverty (% of male population)	10.6	10.3	10.0	11.0	9.8	11.3	12.2	12.5	13.5	13.7	13.0	
	Poverty gap (%)	20.3	20.0	19.2	20.8	21.1	20.9	20.1	19.8	20.9	23.2	21.4	
	Persistent at-risk-of-poverty (% of male population)				6.3	5.8	5.6	5.9	4.9	5.7	8.5	7.0	
	Severe Material Deprivation (% of male population)	4.9	5.1	4.9	6.4	5.9	5.6	5.8	6.8	6.6	6.7	5.4	
	Share of people living in low work intensity households (% of males aged 0-59)	8.0	6.1	6.4	6.2	4.8	6.0	6.7	6.8	7.4	7.7	6.5	
	Life expectancy at birth (years)	73.9	74.5	74.6	75.5	75.9	76.4 b	76.8	77.1	77.2	78.2	78.4	
	Healthy life years at birth (years) - men	56.4 d	57.7	58.7	59.4	60.6	53.4 b	54.0	56.5	57.6	57.8	57.8	
	Early leavers from education and training (% of males aged 18-24)	6.5	7.1 b	5.8	7.2	7.2	6.4	5.7	5.4	5.0	6.0 b	6.4	
	NEET: Young people not in employment, education or training (% of males aged 15-24)	8.2	8.4 b	6.8	6.7	7.9	8.1	7.8	9.7	9.8	9.7	9.9	
	At-risk-of-poverty or exclusion (% of female population)	20.5	18.8	19.2	20.3	19.1	20.1	21.1	20.8	21.4	21.5	20.8	
	At-risk-of-poverty (% of female population)	13.7	12.9	12.9	13.6	12.8	14.1	15.0	14.6	15.4	15.2	15.6	
	Poverty gap (%)	18.5	18.3	19.7	18.7	20.2	19.1	19.5	18.4	20.1	20.8	19.4	
	Persistent at-risk-of-poverty (% of female population)				6.3	6.3	6.3	6.4	6.5	6.7	6.6	6.2	
	Severe Material Deprivation (% of female population)	5.4	5.1	5.3	6.9	6.3	6.3	6.4	6.5	6.7	6.6	6.2	
	Share of people living in low work intensity households (% of females aged 0-59)	9.2	7.7	8.2	7.3	6.5	8.0	8.6	8.3	8.5	9.8	8.3	
	Life expectancy at birth (years)	80.9	82.0	82.0	82.6	82.7	83.1 b	83.3	83.3	83.6	84.1	83.7	
	Healthy life years at birth (years) - women	60.1 d	61.0	62.3	60.9	61.5	54.6 b	53.8	55.6	59.5	59.6	59.6	
	Early leavers from education and training (% of females aged 18-24)	3.2 u	4.0 bu	2.2 u	2.6 u	3.2 u	3.3 u	2.5 u	3.2	2.6	2.7 b	3.4	
	NEET: Young people not in employment, education or training (% of females aged 15-24)	9.7	8.6 b	6.6	6.2	6.9	6.0	6.3	8.8	8.6	9.2	9.1	
	At-risk-of-poverty or exclusion of children (% of people aged 0-17)	15.3	14.3	14.7	15.3	15.1	15.2	17.3	16.4	17.5	17.7	16.6	
	At-risk-of-poverty (% of Children population)	12.1	11.5	11.3	11.6	11.2	12.6	14.7	13.5	14.7	14.8	14.2	
	Severe Material Deprivation (% of Children population)	4.2	3.9	4.4	5.2	5.4	5.1	5.3	5.9	6.0	4.9	4.7	
	Share of children living in low work intensity households (% of Children population)	4.1	3.5	4.5	3.7	2.5	3.4	4.4	3.2	4.0	4.6	3.7	
	Risk of poverty of children in households at work (Working Intensity > 0.2)	9.3	9.0	8.4	9.0	9.5	9.9	11.3	11.1	11.4	11.0	11.2	
	Impact of social transfers (excl. pensions) in reducing poverty (0-17) (%)	57.1	56.1	54.8	50.4	53.7	51.4	45.4	47.7	45.2	46.2	45.8	
At-risk-of-poverty or exclusion (% of Working age population)	18.2	16.5	16.6	18.0	16.2	18.1	18.7	19.7	20.6	21.3	19.7		
At-risk-of-poverty (% of Working age population)	10.4	9.7	9.9	10.5	9.2	11.0	11.7	12.2	13.0	13.7	13.6		
Severe Material Deprivation (% of Working age population)	5.0	5.1	5.0	6.9	6.2	6.1	6.2	6.9	6.8	7.1	6.0		
Very low work intensity (18-59)	9.9	7.9	8.1	7.7	6.5	8.0	8.6	8.8	9.2	10.1	8.6		
In-work at-risk-of-poverty rate (% of persons employed 18-64)	4.6	4.8	4.7	5.1	4.8	5.3	6.0	6.5	7.1	6.4	6.7		
Impact of social transfers (excl. pensions) in reducing poverty (18-64) (%)	56.1	55.5	53.3	49.0	52.1	49.8	45.8	49.0	44.9	42.7	43.1		
At-risk-of-poverty or exclusion of elderly (% of people aged 65+)	23.8	22.5	22.4	24.4	23.3	22.8	24.2	22.8	23.0	20.1	20.2		
At-risk-of-poverty (% of Elderly population)	20.3	19.9	19.4	21.3	20.0	20.2	20.9	19.6	20.5	17.1	17.2		
Severe Material Deprivation (% of Elderly population)	6.9	6.3	6.6	7.4	6.5	6.3	6.8	6.6	6.7	6.7	6.1		
Relative median income of elderly (ratio with median income of people younger than 65)	0.86 b	0.85	0.87	0.84	0.86	0.87	0.87	0.87	0.87	0.87	0.91		
Aggregate replacement ratio (ratio)	0.42	0.41	0.44	0.44	0.45	0.45	0.47	0.47	0.46	0.45	0.46		
Sickness/Health care	7.2	7.0	6.6	6.9	7.6	7.7	7.6	7.9	7.5	7.3 p			
Disability	1.9	1.8	1.7	1.6	1.7	1.7	1.7	1.6	1.5	1.4 p			
Old age and survivors	9.8	9.9	9.6	9.4	10.7	11.1	11.3	11.5	12.0	11.6 p			
Family/Children	1.9	1.9	1.7	1.7	2.1	2.1	2.1	2.1	2.0	1.9 p			
Unemployment	0.7	0.6	0.4	0.4	0.6	0.7	0.8	0.7	0.8	0.7 p			
Housing and Social exclusion n.e.c.	0.6	0.5	0.5	0.4	0.5	0.6	0.6	0.7	0.7	0.7 p			
Total (including Admin and other expenditures)	22.6	22.3	20.9	21.0	23.7	24.4	24.5	24.9	24.9	24.1 p			
of which: Means tested benefits	2.2	2.0	1.8	1.7	2.0	2.0	2.0	1.9	1.9	1.9 p			
Expenditure in social protection indicators (% of GDP)													

[Click here to download table.](#)

## Slovakia

Slovakia		2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015
Macro Economic indicators (Annual % growth)	Real GDP	6.8	8.5	10.8	5.6	-5.4	5.0	2.8	1.7	1.5	2.6	3.8
	Total employment	1.6	2.1	2.1	3.2	-2.0	-1.5	1.8	0.1	-0.8	1.4	2.0
	Labour productivity	5.1	6.2	8.5	2.3	-3.5	6.7	1.0	1.6	2.3	1.1	1.8
	Annual average hours worked per person employed	1.6	0.3	0.9	0.1	-0.7	1.4	-0.7	-0.2	-1.0	-0.7	-0.3
	Real productivity per hour worked	3.4	5.9	7.5	2.2	-2.8	5.2	1.7	1.8	3.3	1.8	2.1
	Harmonized CPI	2.8	4.3	1.9	3.9	0.9	0.7	4.1	3.7	1.5	-0.1	-0.3
	Price deflator GDP	2.4	2.9	1.1	2.8	-1.2	0.5	1.6	1.3	0.5	-0.2	-0.2
	Nominal compensation per employee	9.1	8.0	8.7	6.6	2.6	5.4	2.0	2.6	2.6	1.8	3.1
	Real compensation per employee (GDP deflator)	6.5	4.9	7.5	3.7	3.8	4.9	0.3	1.3	2.1	2.0	3.3
	Real compensation per employee (private consumption deflator)	6.2	3.6	6.7	2.6	1.6	4.7	-2.0	-1.1	1.1	1.9	3.5
	Nominal unit labour costs	3.9	1.6	0.2	4.2	6.3	-1.1	1.0	1.0	0.3	0.7	1.3
	Real unit labour costs	1.4	-1.2	-1.0	1.3	7.7	-1.7	-0.6	-0.4	-0.2	0.9	1.5
	Labour Market indicators - Total	Total population (000)	5373	5373	5373	5376	5382	5389	5392	5404	5411	5416
Population aged 15-64 (000)		3825	3842	3857	3871	3884	3885	3882	3881	3870	3853	3834
Total employment (000)		2215	2302	2358	2434	2366	2318	2315	2329	2329	2365	2424
Employment aged 15-64 (000)		2207	2295	2351	2423	2357	2307	2303	2317	2318	2349	2405
Employment rate (% population aged 20-64)		64.5	66.0	67.2	68.8	66.4	64.6	65.0 b	65.1	65.0	65.9	67.7
Employment rate (% population aged 15-64)		57.7	59.4	60.7	62.3	60.2	58.8	59.3 b	59.7	59.9	61.0	62.7
Employment rate (% population aged 15-24)		25.6	25.9	27.6	26.2	22.8	20.6	20.0 b	20.1	20.4	21.8	23.3
Employment rate (% population aged 25-54)		75.3	77.2	78.0	80.1	77.8	75.8	76.5 b	76.4	76.0	76.8	78.1
Employment rate (% population aged 55-64)		30.3	33.1	35.6	39.2	39.5	40.5	41.3 b	43.1	44.0	44.8	47.0
FTE employment rate (% population aged 20-64)		64.0 b	65.4	66.7	68.2	65.6	63.8	63.9 b	64.0	63.8	64.4	65.8
Self-employed (% total employment)		12.5	12.5	12.8	13.7	15.5	15.8	15.9	15.4	15.5	15.3	15.0
Part-time employment (% total employment)		2.4	2.7	2.5	2.5	3.4	3.8	4.0 b	4.0	4.5	5.1	5.8
Fixed term contracts (% total employees)		5.0 b	5.1	5.1	4.7	4.4	5.8	6.7 b	6.8	7.0	8.9	10.6
Employment in Services (% total employment)		61.5	62.0	62.3	62.0	63.9	64.6	64.7	65.3	65.4	65.6	
Employment in Industry (% total employment)		33.9	34.0	33.9	34.4	32.6	32.1	32.0	31.5	31.2	31.1	
Employment in Agriculture (% total employment)		4.6	4.0	3.8	3.6	3.5	3.4	3.3	3.2	3.4	3.3	
Activity rate (% population aged 15-64)		68.9	68.6	68.3	68.8	68.4	68.7	68.7 b	69.4	69.9	70.3	70.9
Activity rate (% population aged 15-24)		36.6	35.3	34.6	32.4	31.4	31.1	30.1 b	30.5	30.8	31.0	31.7
Activity rate (% population aged 25-54)		88.0	87.6	86.9	87.8	87.2	86.9	87.0 b	87.1	87.2	87.3	87.3
Activity rate (% population aged 55-64)		35.0	36.7	38.8	41.9	42.8	45.1	46.0 b	48.5	49.5	50.1	51.8
Total unemployment (000)		427	353	293	254	321	386	363 i	378	386	359	314
Unemployment rate (% labour force)		16.4	13.5	11.2	9.6	12.1	1					

Slovakia		2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	
Labour Market Indicators - Male	Total population (000)	2609	2610	2611	2614	2618	2624	2625	2632	2636	2639	2642	
	Population aged 15-64(000)	1905	1913	1923	1932	1941	1943	1944	1945	1941	1934	1926	
	Total employment (000)	1232	1292	1322	1364	1326	1285	1292	1304	1295	1316	1349	
	Employment aged 15-64 (000)	1227	1288	1319	1357	1320	1279	1285	1296	1288	1308	1337	
	Employment rate (% population aged 20-64)	72.5	74.6	76.0	77.4	74.6	71.9	72.5 b	72.8	72.2	73.2	75.0	
	Employment rate (% population aged 15-64)	64.6	67.0	68.4	70.0	67.6	65.2	66.1 b	66.7	66.4	67.6	69.5	
	Employment rate (% population aged 15-24)	28.1	29.2	30.9	30.8	26.8	24.8	24.1	24.4	24.4	26.8	28.4	
	Employment rate (% population aged 25-54)	81.4	84.1	85.0	86.4	84.2	81.4	82.5 b	83.0	82.2	83.2	85.1	
	Employment rate (% population aged 55-64)	47.8	49.8	52.5	56.7	54.9	54.0	52.5 b	53.6	53.3	53.1	53.6	
	FTE employment rate (% population aged 20-64)	72.3 b	74.4	75.9	77.2	74.0	71.2	71.7 b	71.9	71.2	72.0	73.6	
	Self-employed (% total employment)	17.1	16.7	17.2	18.4	20.2	21.2	20.8	19.8	20.1	19.7	18.9	
	Part-time employment (% total employment)	1.2	1.2	1.0	1.3	2.6	2.6	2.7 b	2.8	3.3	3.7	4.0	
	Fixed term contracts (% total employees)	4.1	4.1	4.0	3.6	3.6	4.3	5.0 b	5.1	5.3	7.2	8.0	
	Employment in Services (% total employment)	49.1	49.6	49.1	48.4	50.6	50.8	50.9 b	51.3	51.1	52.2	52.4	
	Employment in Industry (% total employment)	44.5	44.8	45.6	46.5	44.6	44.5	44.3 b	44.1	44.0	43.1		
	Employment in Agriculture (% total employment)	6.3	5.6	5.4	5.1	4.9	4.7	4.9 b	4.6	4.8	4.7		
	Activity rate (% population aged 15-64)	76.5	76.4	75.9	76.4	76.3	76.1	76.6 b	77.1	77.2	77.6	77.5	
	Activity rate (% population aged 15-24)	40.7	39.7	38.9	37.8	37.1	36.4	37.2 b	37.1	37.6	38.0	38.3	
	Activity rate (% population aged 25-54)	93.8	94.0	93.1	93.4	93.6	92.9	93.5 b	93.8	93.6	94.0	93.6	
	Activity rate (% population aged 55-64)	55.1	55.2	57.0	59.9	58.7	59.7	58.8 b	60.3	59.5	58.9	58.4	
	Total unemployment (000)	224	180	144	124	169	211	205 i	204	210	194	155	
	Unemployment rate (% labour force)	15.6	12.4	10.0	8.4	11.5	14.3	13.7 i	13.5	14.0	12.8	10.3	
	Youth unemployment rate (% labour force 15-24)	31.2	26.6	20.6	18.6	27.9	34.8	33.3 i	35.0	34.9	29.5	25.8	
	Long term unemployment rate (% labour force)	11.3	9.5	7.5	5.9	9.1	9.1	9.5	9.3	10.0	9.4	6.9	
	Share of long term unemployment (% of total unemployment)	72.7	77.1	75.6	69.5	51.2	63.5	69.5	68.8	71.7	72.9	66.9	
	Youth unemployment ratio (% population aged 15-24)	12.6 b	10.5	7.9	7.0	10.3	12.6	12.3 b	13.0	13.1	11.2	9.9	
	Employment rate for low skilled 25-64 (ISCED 0-2)	29.8 b	32.5	33.6	39.1	39.0	37.0	35.3 b	36.0	36.9	37.0 b	39.8	
	Employment rate for medium skilled 25-64 (ISCED 3-4)	78.5 b	80.5	82.1	82.9	80.0	77.2	77.5 b	78.1	78.9	78.1 b	79.4	
	Employment rate for high skilled 25-64 (ISCED 5-8)	89.7 b	90.8	89.9	91.7	89.5	88.1	87.1 b	85.9	85.7	87.4 b	88.2	
	Employment rate (Nationals aged 15-64)	64.6 b	67.0	68.4	69.9	67.5	65.2	66.1 b	66.7	66.3	67.6	69.4	
	Employment rate (Other EU28 aged 15-64)		97.4 u		90.3 u	93.5 u	82.0 u	75.4 bu		84.0 u	100.0	87.9 u	
	Employment rate (Other than EU28 aged 15-64)												
	Employment rate (Born in the same country aged 15-64)	64.6 b	67.0	68.4	69.9	67.5	65.2	66.1 b	66.7	66.3	67.6	69.5	
	Employment rate (Born in other EU28 aged 15-64)		66.7	75.0	79.5	73.7	71.1	67.8 b	64.5	67.9	77.5	65.9	
	Employment rate (Born outside EU28 aged 15-64)				68.6 u		87.8 u	84.2 bu	75.8 u	85.7 u	81.6 u	81.6 u	
	Underemployment (% of labour force aged 15-74)				0.5	0.8	1.2	1.2 b	1.3	1.5	1.4	1.6	
	Seeking but not available (% of labour force aged 15-74)	0.3	0.3	0.2	0.2 u	0.3	0.4	0.4 b	0.4	0.4	0.4	0.4	
	Discouraged, available but not seeking (% of labour force aged 15-74)	1.3	1.4	1.7	1.6	1.4	1.3	1.3 b	1.1	1.5	1.3	1.6	
	Total population (000)	2764	2763	2763	2762	2764	2764	2767	2767	2773	2775	2777	2779
	Population aged 15-64(000)	1922	1929	1935	1939	1942	1941	1939	1939	1937	1929	1919	1908
Total employment (000)	983	1010	1036	1070	1040	1033	1023	1026	1034	1047	1075		
Employment aged 15-64 (000)	980	1008	1032	1066	1036	1029	1018	1021	1029	1041	1068		
Employment rate (% population aged 20-64)	56.7	57.5	58.7	60.3	58.2	57.4	57.4	57.3	57.8	58.6	60.3		
Employment rate (% population aged 15-64)	50.9	51.9	53.0	54.6	52.8	52.3	52.5 b	52.7	53.4	54.3	55.9		
Employment rate (% population aged 15-24)	23.1	22.5	24.1	21.5	18.7	17.4	15.0 b	15.9	16.2	16.5	18.0		
Employment rate (% population aged 25-54)	69.2	70.2	71.0	73.7	71.2	70.1	70.4 b	69.6	69.6	70.2	70.9		
Employment rate (% population aged 55-64)	15.6	18.9	21.2	24.2	26.1	28.7	31.4 b	33.6	35.7	37.2	41.0		
FTE employment rate (% population aged 20-64)	55.9 b	56.6	57.8	59.4	57.3	56.4	56.1 b	56.0	56.3	56.9	58.0		
Self-employed (% total employment)	6.8	7.3	7.2	7.7	9.6	9.2	9.7	9.8	9.7	9.8	10.1		
Part-time employment (% total employment)	3.9	4.5	4.3	4.1	4.9	4.5	5.6 b	5.5	6.2	6.8	8.4		
Fixed term contracts (% total employees)	4.4	4.6	4.7	4.3	3.7	5.2	6.1 b	6.4	6.3	7.7	10.1		
Employment in Services (% total employment)	76.2	76.9	77.9	78.0	79.7	80.6	81.0 b	81.7	82.2	81.6			
Employment in Industry (% total employment)	21.4	21.0	20.1	20.1	18.4	17.6	17.5 b	16.8	16.2	16.9			
Employment in Agriculture (% total employment)	2.4	2.1	2.0	1.9	1.9	1.8	1.5 b	1.6	1.6	1.5			
Activity rate (% population aged 15-64)	61.5	60.9	60.8	61.3	60.6	61.3	60.8 b	61.7	62.5	62.9	64.3		
Activity rate (% population aged 15-24)	32.4	30.9	30.2	26.4	25.5	22.7 b	23.6	23.7	23.6	24.9	24.9		
Activity rate (% population aged 25-64)	82.1	81.2	80.7	82.1	80.7	80.4	80.4 b	80.4	80.4	80.4	80.8		
Activity rate (% population aged 55-64)	18.1	20.9	23.3	26.4	29.0	32.3	34.6 b	38.0	40.4	42.1	45.8		
Total unemployment (000)	203	173	149	130	152	175	160 i	174	176	165	159		
Unemployment rate (% labour force)	17.4	14.8	12.8	11.0	12.9	14.7	13.7 i	14.5	14.5	13.6	12.9		
Youth unemployment rate (% labour force 15-24)	29.4	27.5	20.7	20.3	27.1	32.6	34.3 i	32.5	31.6	30.1	27.5		
Long term unemployment rate (% labour force)	12.5	11.4	9.4	7.8	7.5	9.7	9.1	9.5	10.0	9.1	8.3		
Share of long term unemployment (% of total unemployment)	62.1	76.5	74.0	70.6	57.9	65.7	65.8	65.4	68.5	67.1	64.7		
Youth unemployment ratio (% population aged 15-24)	9.3 b	8.3	6.1	5.3	6.7	8.1	7.7 b	7.7	7.5	7.1	6.8		
Employment rate for low skilled 25-64 (ISCED 0-2)	24.3 b	27.0	26.4	28.5	25.2	24.9	27.1 b	27.3	27.7	29.6 b	30.5		
Employment rate for medium skilled 25-64 (ISCED 3-4)	62.7 b	63.0	66.2	63.5	62.1	62.1 b	61.4	62.2	63.3 b	64.8			
Employment rate for high skilled 25-64 (ISCED 5-8)	77.9 b	78.5	79.0	79.7	77.7	77.5	76.9 b	75.6	74.4	73.9 b	74.2		
Employment rate (Nationals aged 15-64)	50.9 b	51.9	53.0	54.6	52.8	52.4	52.5 b	52.7	53.3	54.3	55.9		
Employment rate (Other EU28 aged 15-64)													
Employment rate (Other than EU28 aged 15-64)				58.2 u	69.2 u								
Employment rate (Born in the same country aged 15-64)	51.0 b	52.0	53.0	54.6	52.8	52.4	52.6 b	52.7	53.3	54.3	56.0		
Employment rate (Born in other EU28 aged 15-64)		40.8	61.0	61.0	45.4	37.2	42.1 bu	64.0	63.6	52.3	46.6		
Employment rate (Born outside EU28 aged 15-64)										60.8 u	69.7 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		
Seeking but not available (% of labour force aged 15-74)	0.7	0.8	0.5	0.5	0.7	0.7	0.6 b	0.6	0.9	0.8	0.6		
Discouraged, available but not seeking (% of labour force aged 15-74)	2.0	2.7	2.7	2.1	2.1	2.2	1.9 b	2.0	2.2	2.1	2.5		

Click here to download table.

Slovakia		2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	
Social Indicators	All	At-risk-of-poverty or exclusion (% of total population)	13.0	26.7	21.4	20.6	19.6	20.6	20.6	20.5	19.8	18.4	18.4
		At-risk-of-poverty (% of total population)	32.0	11.6	10.6	10.9	11.0	12.0	13.0	13.2	12.8	12.6	12.3
		At-risk-of-poverty threshold (PPS single person)	2394 b	2772	3365	4058	4694	5016	5385	5879	5743	5883	6132
		Poverty gap (%)	25.5	20.0	19.2	18.1	23.2	25.7	22.8	20.5	24.1	29.0	28.9
		Persistent at-risk-of-poverty (% of total population)											
		At-risk-of-poverty before social transfers excl. pensions (% of total population)	21.9	20.0	18.2	18.4	17.1	19.8	19.5	20.0	20.1	19.6	19.0
		Impact of social transfers (excl. pensions) in reducing poverty (%)	39.3	42.0	41.8	40.8	35.7	39.4	33.3	34.0	36.3	35.7	35.3
		Severe Material Deprivation (% of total population)	22.1	18.2	13.7	11.8	11.1	11.4	10.6	10.5	10.2	9.9	9.0
		Share of people living in low work intensity households (% of people aged 0-59)	6.6	6.2	6.4	5.2	5.6	7.9	7.7	7.2	7.6	7.1	7.1
		Real Gross Household Disposable income (growth %)	5.6	3.5	9.2	4.9	1.4	0.5	-1.9	-0.6	0.1	2.6	4.0
		Income quintile share ratio S80/S20	3.9	4.1	3.5	3.4	3.6	3.8	3.8	3.7	3.6	3.9	3.5
		Gini coefficient	26.2 b	28.1	24.5	23.7	24.8	25.7	24.8	25.7	25.3	24.2	26.1
	Early leavers from education and training (% of population aged 18-24)	6.3	6.6 b	6.5	6.0	4.9	4.7	5.1 b	5.3	6.4	6.7 b	6.9	
	NEET: Young people not in employment, education or training (% of total population aged 15-24)	15.8	14.4 b	12.5	11.1	12.5	14.1	13.8 b	13.8	13.7	12.8	13.7	
	Male	At-risk-of-poverty or exclusion (% of male population)	30.7	25.6	19.4	18.9	18.0	19.6	19.5	19.7	19.3	18.1	18.1
		At-risk-of-poverty (% of male population)	13.2	11.8	9.9	10.1	10.1	11.7	12.8	13.2	12.8	12.7	

## Finland

Finland		2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	
Macro Economic Indicators (Annual % growth)	Real GDP	2.8	4.1	5.2	0.7	-8.3	3.0	2.6	-1.4	-0.8	-0.7	0.2	
	Total employment	1.6	1.8	2.1	2.2	-2.4	-0.7	1.3	0.9	-0.7	-0.5	-0.4	
	Labour productivity	1.2	2.2	3.0	-1.5	-6.0	3.7	1.3	-2.3	0.0	-0.2	0.6	
	Annual average hours worked per person employed	-0.6	-0.3	-0.1	-0.4	-1.4	0.4	-0.3	-0.7	-0.7	-0.2	0.3	
	Real productivity per hour worked	1.8	2.4	3.1	-1.1	-4.7	3.3	1.6	-1.6	0.6	0.0	0.3	
	Harmonized CPI	0.8	1.3	1.6	3.9	1.6	1.7	3.3	3.2	2.2	1.2	-0.2	
	Price deflator GDP	0.9	0.9	2.8	3.1	1.9	0.4	2.6	3.0	2.6	1.7	1.6	
	Nominal compensation per employee	3.5	3.4	3.3	4.3	2.0	2.2	3.6	2.8	1.4	1.0	1.6	
	Real compensation per employee (GDP deflator)	2.5	2.5	0.6	1.2	0.1	1.9	1.0	-0.2	-1.2	-0.7	0.0	
	Real compensation per employee (private consumption deflator)	2.7	2.1	1.7	0.3	0.4	0.5	0.3	-0.4	-0.9	-0.3	1.8	
	Nominal unit labour costs	2.3	1.2	0.3	5.8	8.5	-1.4	2.3	5.2	1.4	1.2	1.0	
	Real unit labour costs	1.3	0.4	-2.5	2.7	6.5	-1.7	-0.3	2.2	-1.1	-0.5	-0.7	
	Labour Market Indicators - Total	Total population (000)	5257	5256	5277	5300	5326	5351	5375	5401	5427	5451	5472
		Population aged 15-64 (000)	3491	3508	3507	3531	3543	3553	3547	3533	3517	3500	3484
		Total employment (000)	2401	2444	2492	2531	2457	2448	2474	2483	2457	2447	2437
Employment aged 15-64 (000)		2378	2416	2459	2497	2423	2410	2429	2431	2403	2386	2368	
Employment rate (% population aged 20-64)		73.0	73.9	74.8	75.8	73.5	73.0	73.8	74.0	73.3	73.1	72.9	
Employment rate (% population aged 15-64)		68.4	69.3	70.3	71.1	68.7	68.1	69.0	69.4	68.9	68.7	68.5	
Employment rate (% population aged 15-24)		40.5	42.1	44.6	44.7	39.6	38.8	40.4	41.8	41.5	41.4	40.5	
Employment rate (% population aged 25-54)		81.7	82.4	83.4	84.3	82.4	81.6	82.3	82.0	81.0	80.5	80.0	
Employment rate (% population aged 55-64)		52.7	54.5	55.0	56.5	55.5	56.2	57.0	58.2	58.5	58.5	59.0	
FTE employment rate (% population aged 20-64)		69.9 b	70.7	71.7	72.6 b	70.2	69.6	70.2	70.4	69.9	69.6	69.4	
Self-employed (% total employment)		12.1	12.3	12.0	12.3	13.1	12.8	12.9	13.1	13.0	13.5	13.8	
Part-time employment (% total employment)		13.2	13.5	13.4	12.7	13.3	13.8	14.1	14.1	14.0	14.1	14.1	
Fixed term contracts (% total employees)		16.5 b	16.4	15.9	15.0	14.6	15.5	15.6	15.6	15.5	15.5	15.3	
Employment in Services (% total employment)		69.4	69.5	69.5	69.6	71.1	71.6	71.8	72.1	72.7	73.1	73.1	
Employment in Industry (% total employment)		25.5	25.5	25.6	25.6	24.1	23.6	23.6	23.4	22.9	22.4	22.4	
Employment in Agriculture (% total employment)		4.1	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	
Activity rate (% population aged 15-64)		74.7	75.2	75.6	76.0	75.0	74.5	74.9	75.2	75.2	75.4	75.8	
Activity rate (% population aged 15-24)		50.7	51.8	53.4	53.5	50.4	49.4	50.5	51.6	51.8	52.1	52.2	
Activity rate (% population aged 25-54)		87.7	87.8	88.0	88.6	88.2	87.5	87.7	87.3	86.8	86.6	86.6	
Activity rate (% population aged 55-64)		56.6	58.5	58.8	59.7	59.1	60.2	60.9	62.3	62.9	63.8	65.2	
Total unemployment (000)		220	204	183	172	221	224	209	207	219	232	252	
Unemployment rate (% labour force)		8.4	7.7	6.9	6.4	8.2	8.4	7.8	7.7	8.2	8.7	9.4	
Youth unemployment rate (% labour force 15-24)		20.1	18.7	16.5	16.5	21.1	21.4	19.7	19.9	20.0	20.4	20.4	
Long term unemployment rate (% labour force)		2.1	1.9	1.5	1.2	1.4	2.0	1.7	1.6	1.7	1.9	2.3	
Share of long term unemployment (% of total unemployment)		25.6	24.9	22.6	18.2	16.7	23.8	22.0	21.2	20.6	22.1	24.4	
Youth unemployment ratio (% population aged 15-24)		10.2 b	9.7	8.8	8.8 b	10.9	10.6	10.1	9.8	10.3	10.7	11.7	
Employment rate for low skilled 25-64 (ISCED 0-2)		57.9 b	58.4	58.6	59.3 b	56.8	55.0	55.5	55.2	54.1	53.5 b	53.1	
Employment rate for medium skilled 25-64 (ISCED 3-4)		75.2 b	75.6	76.2	77.3 b	74.8	74.1	74.7	74.6	73.6	73.2 b	72.7	
Employment rate for high skilled 25-64 (ISCED 5-8)		84.1 b	85.0	85.2	85.6 b	84.4	84.1	84.3	84.4	83.8	83.5 b	83.1	
Employment rate (Nationals aged 15-64)		68.7 b	69.6	70.5	71.6 b	68.9	68.6	69.2	69.6	69.2	69.2	69.0	
Employment rate (Other EU28 aged 15-64)		68.7	68.7	73.9	76.2 b	72.0	70.7	70.8	73.8	69.5	70.7	70.4	
Employment rate (Other than EU28 aged 15-64)		47.7	49.4	51.6 b	51.5	46.9	47.4	48.8	50.9	47.6	45.9	45.9	
Employment rate (Born in the same country aged 15-64)		68.8 b	69.7	70.5	71.3 b	68.9	68.5	69.4	69.6	69.2	69.2	69.2	
Employment rate (Born in other EU28 aged 15-64)		69.5	74.7	75.9 b	72.9	71.6	71.9	75.5	74.0	72.4	70.1	70.1	
Employment rate (Born outside EU28 aged 15-64)		53.3	55.8	58.3 b	57.9	53.5	54.1	55.9	56.3	54.0	52.7		
Underemployment (% of labour force aged 15-74)	2.7	2.7	2.7	2.7	3.0	3.0	2.9	2.8	2.8	3.4	3.7		
Seeking but not available (% of labour force aged 15-74)	2.3	2.3	2.3	2.1	2.1	2.3	2.4	2.3	2.3	2.4	2.4		
Discouraged, available but not seeking (% of labour force aged 15-74)	3.4	3.4	3.0	2.8	3.4	3.7	3.7	4.1	4.6	5.1	5.3		

[Click here to download table.](#)

Finland		2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015
Labour Market Indicators - Male	Total population (000)	2562	2572	2584	2597	2612	2625	2638	2653	2667	2680	2692
	Population aged 15-64(000)	1765	1773	1773	1785	1791	1796	1793	1787	1779	1771	1763
	Total employment (000)	1255	1266	1269	1269	1259	1278	1278	1278	1244	1228	1215
	Employment aged 15-64 (000)	1228	1249	1268	1291	1233	1234	1249	1244	1228	1215	1206
	Employment rate (% population aged 20-64)	75.1	76.3	77.2	78.4	74.7	74.5	75.6	75.5	74.7	74.0	73.9
	Employment rate (% population aged 15-64)	70.3	71.4	72.1	73.1	69.5	69.4	70.6	70.5	69.9	69.5	69.3
	Employment rate (% population aged 15-24)	40.4	42.6	44.5	44.3	37.7	37.7	39.5	41.0	39.1	39.8	38.1
	Employment rate (% population aged 25-54)	84.4	85.2	86.0	87.3	84.3	83.9	84.8	84.4	83.9	82.7	82.5
	Employment rate (% population aged 55-64)	52.8	54.8	55.1	57.1	54.6	55.6	56.8	56.6	56.5	56.8	57.4
	FTE employment rate (% population aged 20-64)	73.5 b	74.6	75.5	76.5 b	72.8	72.6	73.5	73.4	72.8	71.9	71.8
	Self-employed (% total employment)	15.9	16.4	16.0	16.1	17.3	17.0	17.1	17.4	17.3	17.9	18.2
	Part-time employment (% total employment)	8.6	8.6	8.3	7.9	8.3	8.9	9.4	9.1	8.8	9.2	9.7
	Fixed term contracts (% total employees)	10.8	10.5	10.3	9.4	8.7	10.2	10.5	10.5	10.2	10.2	10.2
	Employment in Services (% total employment)	55.1	54.9	54.4	54.2	56.0	57.3	57.1	57.2	57.8	58.4	58.7
	Employment in Industry (% total employment)	37.9	38.2	38.7	39.2	37.4	36.2	36.5	36.4	35.8	35.2	35.2
	Employment in Agriculture (% total employment)	7.0	6.9	6.9	6.5	6.6	6.5	6.4	6.4	6.4	6.4	6.4
	Activity rate (% population aged 15-64)	76.6	77.1	77.2	77.9	76.4	76.4	77.1	76.8	76.8	76.8	77.2
	Activity rate (% population aged 15-24)	50.9	52.6	53.5	53.4	49.7	49.4	50.5	51.2	50.8	51.5	51.1
	Activity rate (% population aged 25-54)	90.3	90.3	90.4	91.2	90.6	90.5	90.9	90.4	90.1	89.5	89.6
	Activity rate (% population aged 55-64)	56.9	58.9	59.1	60.6	58.7	60.1	61.4	61.6	61.5	61.9	63.2
	Total unemployment (000)	111	101	90	85	122	126	117	115	122	129	137
	Unemployment rate (% labour force)	8.2	7.4	6.5	6.1	8.9	9.1	8.4	8.3	8.8	9.3	9.9
	Youth unemployment rate (% labour force 15-24)	20.6	19.0	16.4	17.1	24.1	23.8	21.8	19.9	22.9	22.8	25.4
	Long term unemployment rate (% labour force)	2.3	2.1	1.7	1.2	1.6	2.2	1.6	1.6	1.6	2.2	2.7
	Share of long term unemployment (% of total unemployment)	28.7	28.6	26.0	20.3	18.2	27.6	26.0	24.9	23.3	24.1	27.8
	Youth unemployment ratio (% population aged 15-24)	10.5 b	10.0	8.8	9.2 b	12.0	11.8	11.0	10.2	11.6	11.7	13.0
	Employment rate for low skilled 25-64 (ISCED 0-2)	61.4 b	62.4	62.7	63.5 b	60.0	59.1	60.3	59.0	58.2	58.1 b	58.4
	Employment rate for medium skilled 25-64 (ISCED 3-4)	78.4 b	78.5	79.1	80.4 b	76.6	76.1	77.3	76.9	76.3	75.0 b	75.1
	Employment rate for high skilled 25-64 (ISCED 5-8)	86.4 b	87.7	87.5	88.8 b	86.9	86.8	87.2	86.9	86.3	85.6 b	84.8
	Employment rate (Nationals aged 15-64)	70.4 b	71.5	72.2	73.2 b	69.6	69.5	70.7	70.7	70.1	69.6	69.5
	Employment rate (Other EU28 aged 15-64)	73.1	74.0	78.1	79.9 b	72.0	74.1	75.0	76.8	70.9	73.0	73.0
	Employment rate (Other than EU28 aged 15-64)	59.6	60.7	63.9 b	60.4	56.9	57.5	58.1	60.8	60.1	60.1	58.6
	Employment rate (Born in the same country aged 15-64)	70.5 b	71.5	72.2	73.2 b	69.6	69.5	70.8	70.6	70.0	69.7	69.6
	Employment rate (Born in other EU28 aged 15-64)	74.8	78.6	76.7 b	71.5	73.1	74.7	78.5	75.4	72.6	73.7	
	Employment rate (Born outside EU28 aged 15-64)	60.7	62.0	66.7 b	65.0	61.6	61.1	62.2	64.4	62.1	59.7	
Underemployment (% of labour force aged 15-74)	2.0	2.0	2.0	1.6	2.0	2.0	1.9	1.9	2.0	2.4	2.7	
Seeking but not available (% of labour force aged 15-74)	2.0	2.0	2.0	1.8	1.9	1.9	2.0	2.0	2.1	2.1	2.1	
Discouraged, available but not seeking (% of labour force aged 15-74)	3.3	3.3	3.0	2.9	3.9	4.4	4.3	4.9	5.5	5.5	5.6	
Labour Market Indicators - Female	Total population (000)	2675	2683	2693	2704	2715	2726	2737	2749	2760	2771	2780
	Population aged 15-64(000)	1727	1735	1734	1746	1752	1757	1753	1746	1738	1729	1720
	Total employment (000)	1158	1178	1202	1216	1202	1188	1196	1206			

Finland		2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015		
Social indicators	All	At-risk-of-poverty or exclusion (% of total population)	17.2	17.1	17.4	17.4	16.9	16.9	17.9	17.2	16.0	17.3	16.8	
		At-risk-of-poverty (% of total population)	11.7	12.6	13.0	13.6	13.8	13.1	13.7	13.2	11.8	12.8	12.4	
		At-risk-of-poverty threshold (PPS single person)	8474	8886	9145	9933	10421	10327	10760	11146	11507	11550	11658	
		Poverty gap (%)	13.8	14.5	14.1	15.7	15.1	13.8	13.5	15.0	15.0	13.9	13.2	
		Persistent at-risk-of-poverty (% of total population)			7.6	6.8	6.5	7.7	7.5	7.4	7.0	7.0	8.0	8.3
		At-risk-of-poverty before social transfers excl. pensions (% of total population)	28.0	28.6	28.9	27.3	26.2	27.0	27.4	26.9	26.4	27.6	26.8	26.8
		Impact of social transfers (excl. pensions) in reducing poverty (%)	58.2	55.9	55.0	50.2	47.3	51.5	50.0	50.9	55.3	53.6	53.7	53.7
		Severe Material Deprivation (% of total population)	3.8	3.3	3.6	3.5	2.8	2.8	3.2	2.9	2.5	2.8	2.2	2.2
		Share of people living in low work intensity households (% of people aged 0-59)	10.0	9.1	8.8	7.5	8.4	9.3	10.0	9.5	9.0	10.0	10.0	10.8
		Real Gross Household Disposable income (growth %)	1.6	2.8	3.8	2.4	0.8	2.5	1.1	0.1	0.4	-0.8	1.0	1.0
		Income quintile share ratio S80/S20	3.6	3.6	3.7	3.8	3.7	3.6	3.7	3.7	3.7	3.6	3.6	3.6
		GINI coefficient	26.0	25.9	26.2	26.3	25.9	25.4	25.8	25.9	25.4	25.6	25.6	25.2
		Early leavers from education and training (% of population aged 18-24)	10.5	9.7	9.1	9.8	9.9	10.3	9.8	8.9	9.5	9.5	9.5	9.2
		NEET: Young people not in employment, education or training (% of total population aged 15-24)	16.2	16.3	15.8	15.9	15.8	16.0	17.3	17.0	15.7	16.9	16.8	16.8
	At-risk-of-poverty or exclusion (% of male population)	10.6	12.0	12.1	12.7	12.9	12.4	13.2	12.9	11.3	12.3	12.2	12.2	
	Poverty gap (%)	15.1	14.6	14.7	17.1	16.6	14.7	15.2	16.4	17.2	15.3	15.3	15.3	
	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	7.6	
	Severe Material Deprivation (% of male population)	3.8	3.0	3.0	3.2	2.9	2.6	3.2	3.0	2.5	2.7	2.1	2.1	
	Share of people living in low work intensity households (% of males aged 0-59)	10.3	9.3	8.6	7.5	8.7	9.6	10.4	10.2	10.0	11.0	11.9	11.9	
	Life expectancy at birth (years)	75.6	75.9	76.0	76.5	76.6	76.9	77.3	77.7	78.4	78.4	78.4	78.9	
	Healthy life years at birth (years) - men	51.7	53.2	56.9	58.6	58.2	58.5	57.7	57.3	58.7	58.7	58.7	58.7	
	Early leavers from education and training (% of males aged 18-24)	12.4	11.8	11.2	12.1	10.7	11.6	11.2	9.8	10.4	11.9	10.6	10.6	
	NEET: Young people not in employment, education or training (% of males aged 15-24)	7.9	7.2	6.4	7.7	10.5	9.4	8.7	8.6	10.6	11.9	11.5	11.5	
	At-risk-of-poverty or exclusion (% of female population)	18.1	17.9	19.0	18.9	17.9	17.7	18.5	17.4	16.2	17.6	16.8	16.8	
	At-risk-of-poverty (% of female population)	12.8	13.1	13.8	14.5	14.7	13.8	14.2	13.6	12.3	13.3	12.6	12.6	
	Poverty gap (%)	13.2	14.1	13.5	14.1	14.6	12.9	12.4	13.9	13.2	13.0	12.3	12.3	
	Persistent at-risk-of-poverty (% of female population)			7.8	7.5	7.4	7.7	8.1	8.1	8.1	7.4	7.3	8.9	
	Severe Material Deprivation (% of female population)	3.8	3.6	4.1	3.8	2.7	3.1	3.2	2.9	2.5	2.9	2.3	2.3	
	Share of people living in low work intensity households (% of females aged 0-59)	9.7	8.8	9.0	7.6	8.0	9.0	9.5	8.3	8.0	9.0	9.6	9.6	
	Life expectancy at birth (years)	82.5	83.1	83.1	83.3	83.5	83.5	83.8	83.7	84.1	84.1	84.1	84.1	
	Healthy life years at birth (years) - women	52.5	52.8	58.0	59.5	58.6	57.9	58.3	56.2	57.5	57.5	57.5	57.5	
	Early leavers from education and training (% of females aged 18-24)	8.2	7.8	7.2	7.7	9.0	9.0	8.4	8.1	8.3	7.2	7.9	7.9	
	NEET: Young people not in employment, education or training (% of females aged 15-24)	7.8	8.1	7.7	7.9	9.2	8.6	8.2	8.6	8.1	8.5	8.5	8.5	
	At-risk-of-poverty or exclusion of children (% of people aged 0-17)	15.0	13.8	15.1	15.1	14.0	14.2	16.1	14.9	15.0	15.6	14.9	14.9	
	At-risk-of-poverty (% of Children population)	10.0	9.8	10.9	12.0	12.1	11.4	11.8	11.1	9.3	10.9	10.0	10.0	
	Severe Material Deprivation (% of Children population)	3.8	2.6	3.4	3.1	2.5	2.3	3.2	2.8	1.8	2.0	2.0	2.0	
	Share of children living in low work intensity households (% of Children population)	7.5	6.5	6.0	4.9	5.8	5.9	7.6	5.9	6.1	6.6	7.2	7.2	
	Risk of poverty of children in households at work (Working Intensity > 0.2)	6.1	6.5	8.2	9.1	7.9	7.6	7.5	7.7	6.3	8.5	7.2	7.2	
	Impact of social transfers (excl. pensions) in reducing poverty (0-17) (%)	67.6	67.3	65.3	59.6	56.5	61.6	60.9	63.0	68.2	66.3	67.3	67.3	
	At-risk-of-poverty or exclusion (% of Working age population)	17.2	16.8	16.8	16.5	16.2	17.1	18.0	17.3	16.7	17.9	18.1	18.1	
	At-risk-of-poverty (% of Working age population)	10.5	11.2	11.5	11.9	12.2	12.3	12.8	12.4	11.3	12.5	12.7	12.7	
	Severe Material Deprivation (% of Working age population)	4.1	3.8	3.9	3.7	3.1	3.3	3.5	3.4	3.1	3.4	2.6	2.6	
Very low work intensity (1.8-5.9)	10.9	10.0	9.8	8.4	9.3	10.6	10.9	10.6	10.1	11.3	12.1	12.1		
In-work at-risk of poverty rate (% of persons employed 18-64)	3.7	4.4	5.0	5.1	3.7	3.7	3.9	3.8	3.8	3.7	3.5	3.5		
Impact of social transfers (excl. pensions) in reducing poverty (18-64) (%)	61.4	59.3	58.2	54.1	50.8	53.8	52.9	53.4	57.8	54.9	54.5	54.5		
At-risk-of-poverty or exclusion of elderly (% of people aged 65+)	20.1	23.0	23.1	23.9	23.1	19.5	19.8	19.5	16.8	17.0	14.5	14.5		
At-risk-of-poverty (% of Elderly population)	18.7	21.8	21.6	22.5	22.1	18.3	18.9	18.4	16.1	16.0	13.8	13.8		
Severe Material Deprivation (% of Elderly population)	2.5	2.2	2.6	3.2	2.2	1.7	2.1	1.5	1.1	1.7	1.2	1.2		
Relative median income of elderly (ratio with median income of people younger than 65)	0.74	0.73	0.74	0.72	0.73	0.78	0.78	0.78	0.78	0.78	0.71	0.71		
Aggregate replacement ratio (ratio)	0.46	0.47	0.47	0.49	0.48	0.50	0.50	0.49	0.49	0.51	0.52	0.52		
Sickness/Health care	6.4	6.4	6.2	6.5	7.2	7.2	7.2	7.4	7.5	7.5	7.5	7.5		
Disability	3.2	3.1	3.0	3.1	3.4	3.4	3.3	3.4	3.4	3.4	3.4	3.4		
Old age and survivors	9.2	9.3	9.1	9.2	10.9	11.2	11.2	11.9	12.5	13.0	13.0	13.0		
Family/Children	2.9	2.8	2.8	2.8	3.2	3.2	3.1	3.2	3.3	3.2	3.2	3.2		
Unemployment	2.3	2.1	1.8	1.7	2.3	2.3	2.0	2.0	2.3	2.6	2.6	2.6		
Housing and Social exclusion n.e.c.	0.8	0.8	0.8	1.0	1.2	1.3	1.3	1.4	1.5	1.5	1.5	1.5		
Total (including Admin and Other expenditures)	25.6	25.4	24.5	25.1	29.0	29.3	28.9	30.1	31.1	31.9	31.9	31.9		
of which: Means tested benefits	1.3	1.2	1.1	1.0	1.2	1.2	1.3	1.5	1.6	1.8	1.8	1.8		

Click here to download table.

## Sweden

Sweden		2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015
Macro Economic indicators (Annual % growth)	Real GDP	2.8	4.7	3.4	-0.6	-5.2	6.0	2.7	-0.3	1.2	2.6	4.1
	Total employment	0.3	1.7	2.3	0.9	-2.4	1.0	2.1	0.7	1.0	1.4	1.5
	Labour productivity	2.5	2.9	1.1	-1.4	-2.8	5.0	0.5	-1.0	0.3	1.2	2.5
	Annual average hours worked per person employed	0.0	-0.4	0.8	0.3	-0.5	1.6	-0.2	-0.9	-0.6	0.0	0.1
	Real productivity per hour worked	2.6	3.3	0.3	-1.8	-2.4	3.3	0.7	-0.1	0.9	1.1	2.4
	Harmonized CPI	0.8	1.5	1.7	3.3	1.9	1.9	1.4	0.9	0.4	0.2	0.7
	Price deflator GDP	0.8	1.8	2.9	3.3	2.4	1.0	1.2	1.1	1.1	1.8	2.0
	Nominal compensation per employee	3.1	3.1	5.3	3.7	2.7	2.2	3.2	3.1	1.9	2.2	3.5
	Real compensation per employee (GDP deflator)	2.3	1.3	2.4	0.3	0.3	1.2	2.0	2.0	0.9	0.4	1.4
	Real compensation per employee (private consumption deflator)	2.2	1.6	3.6	0.3	0.8	0.3	1.8	2.1	1.5	2.0	2.7
	Nominal unit labour costs	0.5	0.2	4.2	5.2	5.7	-2.6	2.6	4.1	1.7	1.0	0.9
	Real unit labour costs	-0.2	-1.7	1.4	1.8	3.2	-3.6	1.4	3.1	0.5	-0.8	-1.0
	Total population (000)	9011	9046	9113	9183	9256	9341	9415	9483	9556	9645	9747
	Population aged 15-64 (000)	5875	5922	5982	6033	6069	6100	6113	6114	6116	6127	6152
	Total employment (000)	4347	4429	4541	4593	4499	4524	4626	4657	4705	4772	4837
	Employment aged 15-64 (000)	4272	4352	4453	4494	4391	4403	4498	4510	4554	4598	4660
	Employment rate (% population aged 20-64)	77.9	78.8	80.1	80.4	78.3	78.1	79.4	79.4	79.8	80.0	80.5
	Employment rate (% population aged 15-64)	72.3	73.1	74.2	74.3	72.2	72.1	73.6	73.8	74.4	74.9	75.5
	Employment rate (% population aged 15-24)	39.0	40.3	42.2	42.2	38.3	38.8	40.9	40.2	41.7	42.8	43.9
	Employment rate (% population aged 25-54)	83.5	84.7	86.1	86.5	84.5	84.0	85.1	85.2	85.4	85.4	85.6
Employment rate (% population aged 55-64)	69.5	69.6	70.0	70.1	70.0	70.4	72.0	73.0	73.6	74.0	74.5	
FTE employment rate (% population aged 20-64)	72.2	72.6	74.0	74.3	72.6	72.2	73.6	73.9	74.3	74.8	75.2	
Self-employed (% total employment)	10.3	10.4	10.3	10.2	10.5	10.7	10.2	10.2	10.4	10.1	10.0	
Part-time employment (% total employment)	23.5	23.6	23.5	25.7	26.0	25.8	25.2	25.0	24.7	24.5	24.3	
Fixed term contracts (% total employees)	16.0	17.3	17.5	16.1	15.3	16.4	17.0	16.4	16.9	17.5	17.2	
Employment in Services (% total employment)	75.5	75.8	75.5	75.2	76.1	76.3	76.1	76.3	76.7	77.1	77.1	
Employment in Industry (% total employment)	22.3	22.1	22.5	22.8	21.8	21.5	21.6	21.3	20.9	20.6	20.6	
Employment in Agriculture (% total employment)	2.2	2.1	2.0	2.0	2.1	2.2	2.3	2.3	2.3	2.3	2.3	
Activity rate (% population aged 15-64)	78.2	78.8	79.1	79.3	78.9	79.1	79.9	80.3	81.1	81.5	81.7	
Activity rate (% population aged 15-24)	49.9	51.3	52.2	52.8	51.0	51.6	53.0	52.6	54.5	55.4	55.1	
Activity rate (% population aged 25-54)	88.8	89.4	90.0	90.4	90.0	89.8	90.3	90.6				

Sweden		2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	
Labour Market Indicators - Male	Total population (000)	4466	4487	4524	4564	4604	4627	4650	4690	4727	4765	4814	4872
	Population aged 15-64(000)	2983	3008	3040	3067	3084	3100	3107	3107	3108	3114	3114	3131
	Total employment (000)	2281	2331	2390	2422	2359	2394	2438	2442	2468	2502	2502	2530
	Employment aged 15-64 (000)	2228	2280	2333	2357	2291	2312	2355	2350	2373	2391	2420	2420
	Employment rate (% population aged 20-64)	80.5 b	81.7	83.1	83.5	80.9	81.1	82.1	81.9	82.2	82.2	82.2	82.5
	Employment rate (% population aged 15-64)	74.3 b	75.5	76.5	76.7	74.2	74.6	75.8	75.6	76.3	76.5	76.5	77.0
	Employment rate (% population aged 15-24)	38.2 b	40.2	42.0	42.2	37.7	38.2	39.8	40.8	40.5	41.6	41.6	42.4
	Employment rate (% population aged 25-54)	86.1 b	87.8	89.1	89.4	86.9	87.0	87.9	87.8	88.0	87.8	87.8	87.9
	Employment rate (% population aged 55-64)	72.4 b	72.3	72.9	73.4	73.2	74.0	75.2	76.3	76.9	76.5	76.5	76.8
	FTE employment rate (% population aged 20-64)	78.4 b	79.2	80.7	81.1	78.6	78.6	79.7	79.5	79.9	80.0	80.1	80.1
	Self-employed (% total employment)	14.7	14.8	14.6	14.2	14.6	14.7	14.2	14.3	14.3	13.9	13.9	13.7
	Part-time employment (% total employment)	10.4 b	10.3	10.3	11.9	12.6	12.7	12.3	12.5	12.8	12.8	13.2	13.2
	Fixed term contracts (% total employees)	11.7 b	12.9	12.7	11.5	10.9	12.2	12.6	12.0	12.2	12.9	13.1	13.1
	Employment in Services (% total employment)	62.9 b	63.2	62.8	62.0	63.3	63.9	63.5	64.0	64.8	65.1	65.1	65.3
	Employment in Industry (% total employment)	33.9 b	33.6	34.1	34.9	33.7	32.9	33.1	32.6	31.8	31.6	31.6	31.6
	Employment in Agriculture (% total employment)	3.3 b	3.2	3.1	3.1	3.1	3.2	3.4	3.4	3.4	3.4	3.3	3.3
	Activity rate (% population aged 15-64)	80.5 b	81.2	81.4	81.7	81.4	81.9	82.4	82.6	83.3	83.6	83.6	83.5
	Activity rate (% population aged 15-24)	49.0 b	50.8	51.8	52.6	51.1	52.0	53.2	51.8	53.9	54.9	53.8	53.8
	Activity rate (% population aged 25-54)	91.7 b	92.5	92.9	93.1	92.8	92.9	93.2	93.5	93.6	93.6	93.5	93.3
	Activity rate (% population aged 55-64)	76.4 b	76.0	76.2	76.5	77.8	79.3	79.9	80.9	81.6	81.5	81.8	81.8
	Total unemployment (000)	161	173	149	152	222	227	207	218	220	222	226	206
	Unemployment rate (% labour force)	7.7	6.9	5.9	5.9	8.6	8.7	7.8	8.2	8.2	8.2	8.2	7.5
	Youth unemployment rate (% labour force 15-24)	22.6	21.0	18.7	19.7	26.3	25.9	23.3	25.0	24.8	24.3	21.3	21.3
	Long term unemployment rate (% labour force)	1.3 e	1.1 e	0.9	0.8	1.2	1.7	1.6	1.7	1.6	1.6	1.6	1.7
	Share of long term unemployment (% of total unemployment)	16.7 e	16.5 e	15.5	13.9	13.6	20.1	21.0	20.1	19.5	19.5	21.9	21.9
	Youth unemployment ratio (% population aged 15-24)	11.4 b	10.7	9.7	10.4	13.4	13.4	12.4	13.0	13.3	13.3	11.4	11.4
	Employment rate for low skilled 25-64 (ISCED 0-2)	73.0 b	74.5 b	74.6	74.6	71.6	72.6	73.1	72.8	71.5	71.0 b	71.1	71.1
	Employment rate for medium skilled 25-64 (ISCED 3-4)	84.4 b	86.0 b	87.3	87.3	85.1	85.1	85.8	86.3	86.9	87.2	87.1	87.3
	Employment rate for high skilled 25-64 (ISCED 5-8)	88.1 b	87.9 b	89.3	90.2	89.2	88.8	89.4	89.7	90.4	90.2 b	90.2	90.2
	Employment rate (Nationals aged 15-64)	75.1 b	76.1	77.1	77.2	74.7	75.1	76.6	76.6	77.3	77.5	78.1	78.1
	Employment rate (Other EU28 aged 15-64)	73.1	73.0	73.0	73.0	72.7	73.1	73.0	73.0	73.0	73.0	73.0	73.0
	Employment rate (Other than EU28 aged 15-64)	54.7	57.6	59.3	55.4	54.9	53.9	52.5	54.0	55.6	53.1	53.1	53.1
	Employment rate (Born in the same country aged 15-64)	76.2 b	77.1	78.0	77.9	75.6	76.0	77.5	77.4	78.3	78.5	79.3	79.3
	Employment rate (Born in other EU28 aged 15-64)	75.9	76.1	77.3	76.1	76.8	77.1	77.7	77.7	77.6	78.2	79.8	79.8
	Employment rate (Born outside EU28 aged 15-64)	61.0	64.8	66.5	62.8	63.3	63.9	63.8	64.7	65.8	64.7	63.9	63.9
	Underemployment (% of labour force aged 15-74)	2.2	2.2	2.2	2.2	2.2	2.2	2.2	2.2	2.2	2.2	2.2	2.2
	Seeking but not available (% of labour force aged 15-74)	1.6	1.7	1.6	1.6	1.6	1.7	1.7	1.8	1.7	1.7	1.7	1.9
	Discouraged, available but not seeking (% of labour force aged 15-74)	2.5 b	2.3	1.9	2.0	2.6	2.5	2.2	2.5	2.7	2.5	2.3	2.3
	Total population (000)	4545	4561	4590	4619	4653	4692	4725	4756	4790	4831	4875	4919
	Population aged 15-64(000)	2890	2914	2943	2966	2985	3001	3007	3007	3008	3012	3021	3021
Total employment (000)	2066	2099	2150	2171	2140	2130	2188	2215	2237	2270	2307	2307	
Employment aged 15-64 (000)	2044	2072	2121	2137	2101	2092	2145	2160	2181	2207	2240	2240	
Employment rate (% population aged 20-64)	75.2 b	75.8	77.1	77.2	75.7	75.0	76.5	76.8	77.2	77.6	78.3	78.3	
Employment rate (% population aged 15-64)	70.2 b	70.7	71.8	71.8	70.2	69.7	71.3	71.8	72.5	73.1	74.0	74.0	
Employment rate (% population aged 15-24)	39.7 b	40.4	42.3	42.1	38.9	39.2	41.0	41.6	42.9	44.0	45.5	45.5	
Employment rate (% population aged 25-54)	80.8 b	81.5	83.0	83.5	81.9	80.9	82.2	82.5	82.7	82.8	83.3	83.3	
Employment rate (% population aged 55-64)	66.7 b	66.9	67.0	66.7	66.7	66.9	68.9	69.6	70.3	71.5	72.1	72.1	
FTE employment rate (% population aged 20-64)	67.4 b	67.2	68.4	68.7	67.5	66.8	68.4	69.1	69.6	70.2	70.9	70.9	
Self-employed (% total employment)	5.4	5.5	5.5	5.6	5.5	5.6	5.8	5.7	6.0	6.0	6.0	6.0	
Part-time employment (% total employment)	37.7 b	38.3	38.0	40.8	40.5	40.3	39.3	39.6	37.7	37.2	36.3	36.3	
Fixed term contracts (% total employees)	16.7 b	17.9	18.6	17.5	16.3	16.8	17.5	17.0	17.5	17.8	17.2	17.2	
Employment in Services (% total employment)	68.5 b	69.7	69.6	70.2	70.6	70.6	70.6	70.3	70.3	70.8	70.8	70.8	
Employment in Industry (% total employment)	9.5 b	9.4	9.5	8.9	8.4	8.3	8.3	8.5	8.6	8.1	8.1	8.1	
Employment in Agriculture (% total employment)	1.0 b	0.9	0.9	0.8	0.9	1.0	1.1	1.1	1.1	1.1	1.1	1.1	
Activity rate (% population aged 15-64)	75.9 b	76.3	76.8	76.9	76.4	76.2	77.3	77.9	78.8	79.3	79.9	79.9	
Activity rate (% population aged 15-24)	50.8 b	51.9	52.7	53.1	51.0	51.3	52.8	53.4	55.2	56.5	58.5	58.5	
Activity rate (% population aged 25-54)	85.9 b	86.3	87.1	87.6	87.1	86.6	87.6	87.6	88.1	88.0	88.4	88.4	
Activity rate (% population aged 55-64)	69.0 b	69.6	69.4	69.0	69.9	70.2	72.1	73.0	73.4	74.9	75.5	75.5	
Total unemployment (000)	170	164	148	152	186	198	184	185	191	189	180	180	
Unemployment rate (% labour force)	7.6	7.2	6.5	6.6	8.0	8.5	7.7	7.7	7.9	7.7	7.3	7.3	
Youth unemployment rate (% labour force 15-24)	22.5	22.0	19.8	20.8	23.7	23.6	22.2	22.3	22.3	21.5	19.5	19.5	
Long term unemployment rate (% labour force)	1.0 e	0.9 e	0.8	0.7	1.0	1.3	1.3	1.2	1.2	1.3	1.2	1.2	
Share of long term unemployment (% of total unemployment)	12.7 b	12.7 b	10.7	10.8	12.5	15.8	16.7	16.0	15.5	16.6	17.0	17.0	
Youth unemployment ratio (% population aged 15-24)	11.5 b	11.4	10.4	11.0	12.1	12.1	11.8	11.9	12.3	12.0	11.1	11.1	
Employment rate for low skilled 25-64 (ISCED 0-2)	56.6 b	61.7 b	61.4	60.5	58.7	56.7	58.2	57.3	55.2	55.2 b	54.0	54.0	
Employment rate for medium skilled 25-64 (ISCED 3-4)	77.7 b	79.1 b	80.4	80.7	79.3	78.4	80.2	80.4	80.9	81.1 b	81.8	81.8	
Employment rate for high skilled 25-64 (ISCED 5-8)	86.7 b	86.8 b	87.9	88.4	87.2	86.8	87.4	88.0	88.3	88.0 b	88.6	88.6	
Employment rate (Nationals aged 15-64)	71.5 b	71.6	72.7	72.8	71.3	71.1	72.9	73.5	74.1	74.9	75.9	75.9	
Employment rate (Other EU28 aged 15-64)	68.3	67.1	69.0	70.5	67.1	66.4	67.1	68.6	69.3	69.1	69.1	69.1	
Employment rate (Other than EU28 aged 15-64)	41.9	42.1	39.4	34.8	34.2	34.5	36.1	36.4	36.4	36.0	40.2	40.2	
Employment rate (Born in the same country aged 15-64)	72.6 b	73.1	74.3	74.5	72.8	72.8	74.4	75.0	75.9	76.8	77.7	77.7	
Employment rate (Born in other EU28 aged 15-64)	68.8	69.4	67.8	70.5	69.1	70.1	70.5	72.1	72.1	72.1	72.2	72.2	
Employment rate (Born outside EU28 aged 15-64)	52.2	53.3	55.1	52.5	50.5	52.9	53.7	53.2	54.4	56.7	56.7	56.7	
Underemployment (% of labour force aged 15-74)	6.8	6.8	6.8	6.8	6.8	6.6	6.7	6.7	6.7	6.4	5.5	5.5	
Seeking but not available (% of labour force aged 15-74)	2.3	2.2	2.0	2.1	2.2	2.3	2.3	2.2	2.3	2.4	2.3	2.3	
Discouraged, available but not seeking (% of labour force aged 15-74)	2.8 b	2.6	2.4	2.3	3.0	2.9	2.7	2.8	3.0	2.8	2.4	2.4	

[Click here to download table.](#)

Sweden		2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	
Social Indicators	All	At-risk-of-poverty or exclusion (% of total population)	14.4	16.3	13.9	14.9	15.9	15.0	16.1	15.6	16.4	16.9	16.0
		At-risk-of-poverty (% of total population)	9.5	12.3	10.5	12.2	13.3	12.9	14.0	14.1	14.8	15.1	14.5
		At-risk-of-poverty threshold (PPS single person)	8648	9068	9545	10680	11295	10987	11284	11799	12310	12368	12730
		Poverty gap (%)	17.9	22.7	20.3	18.0	20.3	19.7	18.5	18.9	19.8	20.4	20.0
		Persistent at-risk-of-poverty (% of total population)	10.1	12.7	11.1	10.8	12.5	12.5	12.7	12.7	12.7	12.7	12.7
		At-risk-of-poverty before social transfers excl. pensions (% of total population)	28.7	29.0	27.5	28.5	26.6	26.7	27.9	27.4	27.1	28.5	26.9
		Impact of social transfers (excl. pensions) in reducing poverty (%)	66.9	57.6	61.8	57.2	50.0	51.7	49.8	48.5	45.4	47.0	46.1
		Severe Material Deprivation (% of total population)	2.3	2.1	2.2	1.4	1.6	1.3	1.2	1.3	1.4		

## United Kingdom

United Kingdom		2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015
Macro Economic Indicators (Annual % growth)	Real GDP	3.0	2.5	2.6	-0.6	-4.3	1.9	1.5	1.3	1.9	3.1	2.2
	Total employment	1.1	1.0	0.8	0.8	-1.6	0.2	0.5	1.1	1.2	2.4	1.8
	Labour productivity	1.8	1.5	1.7	-1.5	-2.8	1.7	1.0	0.2	0.7	0.7	0.5
	Annual average hours worked per person employed	1.1	-0.3	0.1	-1.3	-0.3	-0.7	0.8	0.9	0.6	0.4	-1.0
	Real productivity per hour worked	0.8	1.8	1.6	-0.2	-2.4	2.4	0.2	-0.7	0.1	0.3	1.5
	Harmonized CPI	2.1	2.3	2.3	3.6	2.2	3.3	4.5	2.8	2.6	1.5	0.0
	Price deflator GDP	2.7	2.9	2.5	2.8	1.5	2.0	1.5	2.0	1.5	1.9	1.6
	Nominal compensation per employee	3.4	5.9	5.4	0.6	2.4	3.3	1.1	1.7	2.1	0.4	1.1
	Real compensation per employee (GDP deflator)	0.8	2.9	2.8	-2.2	0.8	1.7	-0.9	0.2	0.2	-1.3	0.7
	Real compensation per employee (private consumption deflator)	1.3	3.6	2.9	-2.9	0.1	0.0	-3.3	-1.1	-0.4	-1.1	1.1
	Nominal unit labour costs	1.6	4.4	3.6	2.0	5.3	1.6	0.1	1.5	1.3	-0.3	0.6
	Real unit labour costs	-1.0	1.4	1.0	-0.8	3.8	0.0	-1.9	0.0	-0.6	-1.9	0.2
	Labour Market Indicators - Total	Total population (000)	60182	60620	61073	61572	62042	62510	63023	63495	63905	64351
Population aged 15-64 (000)		39677	40098	40498	40842	41100	41325	41577	41861	42158	42474	42808 e
Total employment (000)		28759	29041	29261	29520	29059	29125	29382	29596	29954	30672	31205
Employment aged 15-64 (000)		28162	28417	28622	28827	28319	28290	28404	28650	28917	29560	30028
Employment rate (% population aged 20-64)		75.2	75.2	75.2 b	75.2 b	73.9	73.5	73.5	74.1	74.8	76.2	76.8
Employment rate (% population aged 15-64)		71.8	71.6	71.5 b	71.5 b	69.9	69.4	69.3	69.9	70.5	71.9	72.7
Employment rate (% population aged 15-24)		54.3	53.6	52.6 b	52.0 b	47.9	46.8	45.8	46.2	46.3	48.0	50.1
Employment rate (% population aged 25-54)		81.2	81.2	81.3 b	81.3 b	80.1	79.8	80.1	80.5	80.8	82.1	82.4
Employment rate (% population aged 55-64)		56.8	57.5	57.4 b	58.0 b	57.5	57.2	56.7	58.1	59.5	61.0	62.2
FTE employment rate (% population aged 20-64)		66.5 b	66.5	66.5 b	66.6 b	65.0	64.5	64.4	64.8	65.5	66.9	67.8
Self-employed (% total employment)		12.7	12.9	13.0	13.0	13.3	13.7	13.8	14.3	14.2	14.9	14.6
Part-time employment (% total employment)		24.2	24.2	24.1 b	24.1 b	24.9	25.6	25.5	25.9	25.6	25.3	25.1
Fixed term contracts (% total employees)		5.8 b	5.8	5.8 b	5.4 b	5.6	6.1	6.2	6.3	6.2	6.4	6.2
Employment in Services (% total employment)		80.4	80.6	80.8	81.1	81.7	82.3	82.4	82.5	82.9	83.0	83.6
Employment in Industry (% total employment)		18.4	18.2	18.0	17.6	17.0	16.4	16.3	16.2	15.9	15.6	15.6
Employment in Agriculture (% total employment)		1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.4
Activity rate (% population aged 15-64)		75.4	75.7	75.5 b	75.8 b	75.7	75.4	75.5	76.1	76.4	76.7	76.9
Activity rate (% population aged 15-24)		62.2	62.3	61.4 b	61.2 b	59.2	58.4	58.2	58.6	58.3	57.8	58.6
Activity rate (% population aged 25-54)		84.1	84.5	84.5 b	84.8 b	85.0	84.9	85.3	85.5	85.7	86.0	85.8
Activity rate (% population aged 55-64)		58.4	59.1	59.3 b	59.8 b	60.3	60.0	59.7	61.1	62.8	63.5	64.4
Total unemployment (000)		1441	1640	1624	1757	2369	2459	2559	2534	2438	1996	1747
Unemployment rate (% labour force)		4.8	5.4	5.3	5.6	7.6	7.8	8.1	7.9	7.6	6.1	5.3
Youth unemployment rate (% labour force 15-24)		12.8	14.7	14.3 b	14.3 b	19.1	19.9	21.3	21.7	20.7	17.0	14.6
Long term unemployment rate (% labour force)		1.0	1.2	1.3	1.4	1.9	2.5	2.7	2.7	2.7	2.2	1.6
Share of long term unemployment (% of total unemployment)		21.1	22.3	23.8	24.1	24.5	32.5	33.4	34.7	36.1	35.8	30.7
Youth unemployment ratio (% population aged 15-24)		7.9 b	8.7	8.8 b	9.2 b	11.3	11.6	12.4	12.4	12.1	9.8	8.6
Employment rate for low skilled 25-64 (ISCED 0-2)		64.8 b	64.4	64.2 b	64.2 b	63.4	63.4	63.4	63.4	63.4	63.4	63.4
Employment rate for medium skilled 25-64 (ISCED 3-4)		81.1 b	80.8	81.1 b	81.1 b	77.3	77.3	77.3	77.3	77.3	78.8 b	79.1
Employment rate for high skilled 25-64 (ISCED 5-8)		88.2 b	88.1	88.0 b	88.0 b	85.4	85.1 b	85.1 b	84.1	84.9	85.2 b	85.5
Employment rate (National aged 15-64)		72.3 b	72.0	72.0 b	72.0 b	69.6	69.7	69.6	70.2	70.9	72.0	72.9
Employment rate (Other EU28 aged 15-64)		75.0	75.0	75.0 b	75.0 b	75.6	74.9	75.7	75.7	76.5	77.9	78.8
Employment rate (Other than EU28 aged 15-64)		62.1	60.4 b	61.7 b	60.0	60.1	59.7	58.9	59.0	59.0	59.9	60.9
Employment rate (Born in the same country aged 15-64)		72.6 b	72.3	72.2 b	72.1 b	70.5	70.0	69.8	70.6	71.1	72.4	73.2
Employment rate (Born in other EU28 aged 15-64)		75.5	75.9 b	76.8 b	75.5	74.6	75.5	74.7	75.9	77.9	79.1	79.1
Employment rate (Born outside EU28 aged 15-64)		62.9	62.8 b	63.5 b	61.9	62.3	62.0	62.4	63.4	63.0	65.0	65.5
Underemployment (% of labour force aged 15-74)		0.9	0.9	1.0 b	0.9 b	1.0	1.1	1.0	1.1	1.0	1.1	1.1
Seeking but not available (% of labour force aged 15-74)		0.9	0.9	1.0 b	0.9 b	1.0	1.1	1.0	1.1	1.0	1.1	1.1
Discouraged, available but not seeking (% of labour force aged 15-74)	2.1	2.2	2.1 b	2.3 b	2.5	2.7	2.5	2.5	2.4	2.1	2.1	

[Click here to download table.](#)

United Kingdom		2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015
Labour Market Indicators - Male	Total population (000)	29419	29651	29895	30164	30417	30669	30951	31206	31424	31663	31947 e
	Population aged 15-64(000)	19729	19937	20137	20312	20441	20556	20694	20752	20741	20780	20880 e
	Total employment (000)	15130	15247	15385	15447	15037	15027	15089	15233	15332	15662	15903
	Employment aged 15-64 (000)	14820	14917	15012	15081	14719	14719	14819	14919	15019	15319	15560
	Employment rate (% population aged 20-64)	77.8	77.6	77.6 b	77.4 b	74.9	74.4	74.3	75.0	75.4	76.8	77.6
	Employment rate (% population aged 15-64)	55.8	54.7	54.0 b	53.3 b	47.9	47.6	46.3	46.4	46.4	48.2	50.4
	Employment rate (% population aged 15-24)	35.8	35.8	35.8 b	35.8 b	35.8	35.8	35.8	35.8	35.8	35.8	35.8
	Employment rate (% population aged 25-54)	65.9	65.9	66.2 b	67.2 b	66.1	65.1	64.1	65.4	66.8	67.8	68.7
	FTE employment rate (% population aged 20-64)	79.4 b	79.4	79.4 b	79.4 b	76.6	75.7	75.7	76.1	76.5	76.5	76.5
	Self-employed (% total employment)	17.2	17.4	17.5	17.6	17.8	18.1	18.2	18.6	18.5	19.1	18.7
	Part-time employment (% total employment)	9.0	9.1	9.3 b	9.7 b	10.3	11.0	10.9	11.6	11.5	11.2	11.2
	Fixed term contracts (% total employees)	4.2	4.1	4.2 b	3.8 b	4.1	4.6	4.6	4.6	4.6	4.7	4.6
	Employment in Services (% total employment)	70.0	70.4	70.7	71.4	71.7	72.4	72.7	73.1	73.7	73.9	73.9
	Employment in Industry (% total employment)	28.2	27.8	27.6	27.0	26.5	25.7	25.4	25.1	24.6	24.1	24.1
	Employment in Agriculture (% total employment)	1.8	1.8	1.7	1.6	1.8	2.0	1.9	1.8	1.7	2.0	2.2
	Activity rate (% population aged 15-64)	82.1	82.3	82.2 b	82.4 b	82.0	81.5	82.0	81.5	82.0	82.1	82.2
	Activity rate (% population aged 15-24)	65.2	64.9	64.9 b	64.9 b	61.3	60.7	60.7	60.9	60.2	59.5	60.1
	Activity rate (% population aged 25-54)	91.1	91.7	91.6 b	91.6 b	91.7	91.4	91.7	92.0	92.0	92.2	91.9
	Activity rate (% population aged 55-64)	68.2	68.3	68.9 b	69.8 b	70.3	69.2	68.4	69.5	70.6	70.9	71.4
	Total unemployment (000)	841	943	921	1026	1437	1455	1477	1434	1377	1109	959
	Unemployment rate (% labour force)	5.2	5.7	5.5	6.1	8.5	8.6	8.7	8.4	8.0	6.4	5.5
	Youth unemployment rate (% labour force 15-24)	14.3	15.6	15.8	17.1	21.9	22.0	23.8	23.9	23.0	18.9	16.2
	Long term unemployment rate (% labour force)	1.3	1.5	1.6	1.7	2.3	3.2	3.2	3.2	3.2	2.2	1.9
	Share of long term unemployment (% of total unemployment)	25.3	28.4	28.5	28.4	26.5	37.1	37.8	38.0	39.5	40.2	34.3
	Youth unemployment ratio (% population aged 15-24)	9.3 b	10.2	10.2 b	11.0 b	13.4	13.4	14.4	14.6	13.9	11.3	9.7
	Employment rate for low skilled 25-64 (ISCED 0-2)	71.0 b	70.7	70.8 b	70.5 b	68.3	68.3 b	66.9 b	67.8	68.0	70.3 b	70.3
	Employment rate for medium skilled 25-64 (ISCED 3-4)	85.0 b	84.7	85.1 b	85.0 b	82.4	81.8 b	82.4 b	82.8	83.5	84.5 b	85.0
	Employment rate for high skilled 25-64 (ISCED 5-8)	89.9 b	90.0	89.9 b	89.7 b	88.8	88.6 b	87.9 b	88.7	88.9	89.4 b	89.7
	Employment rate (National aged 15-64)	78.2 b	77.6	77.6 b	77.5 b	74.8	74.4	74.2	74.8	75.3	76.6	77.4
	Employment rate (Other EU28 aged 15-64)	79.4 b	79.5	79.5 b	79.5 b	76.6	75.9	75.9	76.5	76.5	76.5	76.5
	Employment rate (Other than EU28 aged 15-64)	72.9	72.9	72.9 b	72.9 b	69.4	70.0	70.2	70.8	69.0	71.8	71.5
	Employment rate (Born in the same country aged 15-64)	78.3 b	77.7	77.6 b	77.3 b	74.8	74.4	74.1	74.7	75.2	76.4	77.3
	Employment rate (Born in other EU28 aged 15-64)	82.3	84.1 b	85.2 b	82.9	80.7	81.3	82.1	83.3	84.6	84.4	84.4
	Employment rate (Born outside EU28 aged 15-64)	74.8	74.7 b	74.6 b	72.1	72.3	72.7	74.1	73.6	76.2	76.2	
	Underemployment (% of labour force aged 15-74)	0.7	0.7	0.8 b	0.7 b	0.8	0.8	0.8	0.9	0.8	0.8	0.8
	Seeking but not available (% of labour force aged 15-74)	1.7	1.8	1.9 b	1.7 b	2.1	2.2	2.1	2.2	2.1	1.9	1.9
	Discouraged, available but not seeking (% of labour force aged 15-74)	0.7	0.7	0.8 b	0.7 b	0.8	0.8	0.8	0.9	0.8	0.8	0.8
Labour Market Indicators - Female	Total population (000)	30763	30969	31178	31407	31626	31841	32071	32289	32481	32688	32928 e
	Population aged 15-64(000)	19240	20161	20361	20530	20559	20769	20883	20929	20917	20944	21019 e
	Total employment (000)	13250										

United Kingdom		2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015		
Social indicators	All	At-risk-of-poverty or exclusion (% of total population)	248	237	226	232	220	232	227	241 b	248	241	235	
		At-risk-of-poverty (% of total population)	190	190	186	187	173	171	162	160 b	159	168	167	
		At-risk-of-poverty threshold (PPS single person)	10137 b	10578	11267	11126	10091	9521	9466	9868 b	10060	10138	10627	
		Poverty gap (%)	22.3	22.8	22.4	21.0	20.6	21.4	21.3	20.9 b	19.6	19.4	20.2	
		Persistent at-risk-of-poverty (% of total population)				8.5	8.0	7.4	6.9	8.6	7.8	6.5		
		At-risk-of-poverty before social transfers excl. pensions (% of total population)	30.6	30.1	29.7	28.9	30.4	31.0	30.5	29.7 b	30.1	29.4	29.2	
		Impact of social transfers (excl. pensions) in reducing poverty (%)	37.9	36.9	37.4	35.3	45.1	44.8	46.9	46.1 b	47.2	42.9	42.8	
		Severe Material Deprivation (% of total population)	5.3	4.5	4.2	4.5	3.3 u	4.8	5.1	7.8	8.3	7.4	6.1	
		Share of people living in low work intensity households (% of people aged 0-59)	12.9	12.0	10.4	10.4	12.7	13.2	11.5	13.0 b	13.2	12.3	11.9	
		Real Gross Household Disposable income (growth %)	2.0	1.6	2.7	-0.9	2.2	1.0	-2.1	2.2	-0.1	1.5	3.4	
		Income quintile share ratio S80/S20	5.9	5.4	5.3	5.6	5.3	5.4	5.3	5.0 b	4.6	5.1	5.2	
		GINI coefficient	34.6 b	32.5	32.6	33.9	32.4	32.9	33.0	31.3 b	30.2	31.6	32.4	
		Early leavers from education and training (% of population aged 18-24)	11.5	11.2	16.6 b	16.9 b	15.7	14.8 b	14.9 b	13.4	12.4	11.8 b	10.8	
		NEET: Young people not in employment, education or training (% of total population aged 15-24)	8.4	8.6	11.9 b	12.1 b	13.2	13.6	14.2	13.9	13.2	11.9	11.1	
	At-risk-of-poverty or exclusion (% of male population)	18.6	18.0	17.6	17.4	16.7	16.4	14.8	15.8 b	15.4	16.0	16.2		
	Poverty gap (%)	23.9	22.8	22.9	21.1	20.9	23.0	22.2	21.9 b	19.9	19.6	20.9		
	Persistent at-risk-of-poverty (% of male population)				7.7	7.6	7.0	6.1	8.1	7.0	5.7			
	Severe Material Deprivation (% of male population)	4.9	4.4	3.9	4.3	3.4 u	4.8	5.0	7.5	8.0	7.3	5.8		
	Share of people living in low work intensity households (% of males aged 0-59)	11.9	10.8	9.6	9.7	12.0	12.5	10.8	12.5 b	12.5	11.9	11.2		
	Life expectancy at birth (years)	77.1	77.3	77.6	77.7	78.3	78.6	79.0	79.1	79.2	79.5	79.5		
	Healthy life years at birth (years) - men	64.2 d	64.8	64.6	65.0	65.0	64.9	65.2	64.6	64.4	63.4			
	Early leavers from education and training (% of males aged 18-24)	12.6	12.3	17.6 b	18.2 b	16.9	15.6 b	16.1 b	14.5	13.6	12.9 b	11.7		
	NEET: Young people not in employment, education or training (% of males aged 15-24)	7.3	7.5	10.1 b	10.1 b	11.9	12.1	13.1	12.8	12.1	10.7	9.8		
	At-risk-of-poverty or exclusion (% of female population)	25.9	25.4	24.1	24.7	22.8	24.2	24.1	24.9 b	25.8	25.2	24.4		
	At-risk-of-poverty (% of female population)	19.4	19.9	19.6	20.0	17.8	17.8	17.6	16.3 b	16.4	17.6	17.2		
	Poverty gap (%)	21.5	22.7	21.9	20.9	20.5	19.3	20.5	19.5 b	19.2	19.4	20.0		
	Persistent at-risk-of-poverty (% of female population)				9.2	8.3	7.7	7.8	9.1	8.6	7.2			
	Severe Material Deprivation (% of female population)	5.6	4.7	4.4	4.8	3.2 u	4.9	5.1	8.1	8.6	7.5	6.4		
	Share of people living in low work intensity households (% of females aged 0-59)	14.0	13.2	11.1	11.2	13.4	13.9	12.3	13.6 b	14.0	12.7	12.7		
	Life expectancy at birth (years)	81.3	81.7	81.8	81.8	82.5	82.6	83.0	82.8	82.9	83.2			
	Healthy life years at birth (years) - women	65.5 d	64.9	66.0	66.3	66.1	65.6	65.2	64.5	64.8	64.2			
	Early leavers from education and training (% of females aged 18-24)	10.5	10.2	15.6 b	15.6 b	14.5	13.9 b	13.8 b	12.2	11.1	10.8 b	9.9		
	NEET: Young people not in employment, education or training (% of females aged 15-24)	9.6	9.6	13.7 b	14.1 b	14.5	15.1	15.4	15.0	14.4	13.1	12.4		
	At-risk-of-poverty or exclusion of children (% of people aged 0-17)	31.2	30.1	27.6	29.6	27.4	29.7	26.9	31.2 b	32.6	31.2	30.3		
	At-risk-of-poverty (% of Children population)	22.9	23.8	23.0	24.0	20.7	20.4	18.0	18.0 b	18.9	19.7	19.8		
	Severe Material Deprivation (% of Children population)	8.0	7.1	6.3	6.5	4.4 u	7.3	7.1	12.5	12.3	10.8	9.6		
	Share of children living in low work intensity households (% of Children population)	16.7	15.4	13.8	13.9	16.1	17.1	14.1	16.3 b	16.7	15.1	14.8		
	Risk of poverty of children in households at work (Working Intensity > 0.2)	14.4	15.1	14.7	16.2	12.2	12.7	12.1	13.2 b	14.8	15.1	14.7		
	Impact of social transfers (excl. pensions) in reducing poverty (0-17) (%)	44.7	42.8	43.6	39.6	51.6	54.2	57.6	57.0 b	57.2	53.8	54.0		
	At-risk-of-poverty or exclusion (% of Working age population)	22.2	20.7	19.6	19.7	19.8	21.2	21.4	23.7 b	24.1	25.2	22.9		
	At-risk-of-poverty (% of Working age population)	16.2	15.5	15.1	14.7	14.8	14.9	14.1	15.3 b	14.7	15.6	15.7		
	Severe Material Deprivation (% of Working age population)	5.2	4.3	4.0	4.7	3.6 u	5.0	5.5	8.0	8.7	7.9	6.3		
Very low work intensity (18-59)	11.5	10.8	9.1	9.2	11.4	11.7	10.6	11.9 b	12.0	11.3	10.9			
In-work at-risk-of-poverty rate (% of persons employed 18-64)	8.1	7.7	7.9	8.0	6.3	6.7	7.8	8.7 b	8.2	8.8	8.3			
Impact of social transfers (excl. pensions) in reducing poverty (18-64) (%)	37.7	38.3	38.9	38.0	44.4	45.2	48.0	44.0 b	46.6	41.4	40.8			
At-risk-of-poverty or exclusion of elderly (% of people aged 65+)	25.9	27.5	27.9	28.5	23.1	22.3	22.7	17.3 b	18.1	19.0	17.7			
At-risk-of-poverty (% of Elderly population)	24.8	26.1	26.5	27.3	22.3	21.3	21.8	16.4 b	16.6	17.7	16.4			
Severe Material Deprivation (% of Elderly population)	1.8	2.1	1.9	1.4	1.2 u	1.5	1.4	2.1	2.1	1.9	1.6			
Relative median income of elderly (ratio with median income of people younger than 65)	0.74 b	0.73	0.74	0.74	0.80	0.81	0.81	0.88 b	0.87	0.87	0.88			
Aggregate replacement ratio (ratio)	0.42	0.45	0.44	0.43	0.44	0.48	0.48	0.50 b	0.53	0.51	0.50			
Sickness/Health care	7.2	7.3	7.2	7.3	8.1	8.3	8.8	8.8	8.7	8.6 p				
Disability	2.1	2.2	1.8	1.8	2.0	2.0	1.9	1.8	1.7	1.5 p				
Old age and survivors	10.6	10.3	10.1	10.6	11.7	11.8	11.9	12.2	12.1	11.7 p				
Family/Children	2.2	2.2	2.5	2.7	3.0	3.2	3.1	3.1	2.9	2.8 p				
Unemployment	0.6	0.6	0.5	0.6	0.8	0.7	0.7	0.7	0.6	0.5 p				
Housing and Social exclusion n.e.c.	2.1	2.2	1.9	2.1	2.4	2.4	2.3	2.3	2.2	2.1 p				
Total (including Admin and Other expenditures)	25.3	25.3	24.8	25.9	28.8	29.1	29.1	29.2	28.4	27.4 p				
of which: Means tested benefits	3.9	3.9	3.5	3.7	4.2	4.3	4.2	4.2	3.8	3.4 p				

Click here to download table.

## 2. SELECTED INDICATORS<sup>(375)</sup>

### Real GDP (yearly growth)

	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015
European Union 28	2.1	3.3	3.1	0.4	-4.4	2.1	1.7	-0.5	0.2	1.6	2.2
Euro Area 19	1.7	3.2	3.0	0.4	-4.5	2.1	1.5	-0.9	-0.3	1.2	2.0
Belgium	2.1	2.5	3.4	0.7	-2.3	2.7	1.8	0.1	-0.1	1.7	1.5
Bulgaria	7.1	6.9	7.3	6.0	-3.6	1.3	1.9	0.0	0.9	1.3	3.6
Czech Republic	6.4	6.9	5.5	2.7	-4.8	2.3	2.0	-0.8	-0.5	2.7	4.5
Denmark	2.3	3.9	0.9	-0.5	-4.9	1.9	1.3	0.2	0.9	1.7	1.6
Germany	0.7	3.7	3.3	1.1	-5.6	4.1	3.7	0.5	0.5	1.6	1.7
Estonia	9.4	10.3	7.7	-5.4	-14.7	2.3	7.6	4.3	1.4	2.8	1.4
Ireland	5.8	5.9	3.8	-4.4	-4.6	2.0	0.0	-1.1	1.1	8.5	26.3
Greece	0.6	5.7	3.3	-0.3	-4.3	-5.5	-9.1 p	-7.3 p	-3.2 p	0.4 p	-0.2 p
Spain	3.7	4.2	3.8	1.1	-3.6	0.0	-1.0	-2.9	-1.7	1.4 p	3.2 p
France	1.6	2.4	2.4	0.2	-2.9	2.0	2.1	0.2	0.6	0.6 p	1.3 p
Croatia	4.2	4.8	5.2	2.1	-7.4	-1.7	-0.3	-2.2	-1.1	-0.5	1.6
Italy	0.9	2.0	1.5	-1.1	-5.5	1.7	0.6	-2.8	-1.7	0.1	0.7
Cyprus	3.7	4.5	4.8	3.9	-1.8	1.3	0.3	-3.2	-6.0	-1.5	1.7 p
Latvia	10.7	11.9	9.9	-3.6	-14.3	-3.8	6.2	4.0	2.9	2.1	2.7
Lithuania	7.7	7.4	11.1	2.6	-14.8	1.6	6.0	3.8	3.5	3.5	1.8
Luxembourg	3.2	5.1	8.4	-0.8	-5.4	5.8	2.0	0.0	4.2	4.7	3.5
Hungary	4.4	3.9	0.4	0.9	-6.6	0.7	1.7	-1.6	2.1	4.0	3.1
Malta	3.8	1.8	4.0	3.3	-2.5	3.5	1.4	2.7	4.6	8.4	7.4
Netherlands	2.2	3.5	3.7	1.7	-3.8	1.4	1.7	-1.1	-0.2	1.4	2.0 p
Austria	2.1	3.4	3.6	1.5	-3.8	1.9	2.8	0.7	0.1	0.6	1.0
Poland	3.5	6.2	7.0	4.2	2.8	3.6	5.0	1.6	1.4	3.3	3.9
Portugal	0.8	1.6	2.5	0.2	-3.0	1.9	-1.8	-4.0	-1.1	0.9	1.6 e
Romania	4.2	8.1	6.9	8.5	-7.1	-0.8	1.1	0.6	3.5	3.1	3.7 p
Slovenia	4.0	5.7	6.9	3.3	-7.8	1.2	0.6	-2.7	-1.1	3.1	2.3
Slovakia	6.8	8.5	10.8	5.6	-5.4	5.0	2.8	1.7	1.5	2.6	3.8
Finland	2.8	4.1	5.2	0.7	-8.3	3.0	2.6	-1.4	-0.8	-0.7	0.2
Sweden	2.8	4.7	3.4	-0.6	-5.2	6.0	2.7	-0.3	1.2	2.6	4.1
United Kingdom	3.0	2.5	2.6	-0.6	-4.3	1.9	1.5	1.3	1.9	3.1	2.2

[Click here to download table.](#)

### Employment rate (% population aged 20-64)

	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015
European Union 28	67.9	68.9	69.8	70.3	69.0	68.6	68.6	68.4	68.4	69.2	70.1
Euro Area 19	67.9	69.0	69.9	70.2	68.8	68.4	68.4	68.0	67.7	68.2	69.0
Belgium	66.5	66.5	67.7	68.0	67.1	67.6	67.3	67.2	67.2	67.3	67.2
Bulgaria	61.9	65.1	68.4	70.7	68.8	64.7 b	62.9 b	63.0	63.5	65.1	67.1
Czech Republic	70.7	71.2	72.0	72.4	70.9	70.4	70.9 b	71.5	72.5	73.5	74.8
Denmark	78.0	79.4	79.0	79.7	77.5	75.8	75.7	75.4	75.6	75.9	76.5
Germany	69.4 b	71.1	72.9	74.0	74.2	75.0 b	76.5 b	76.9	77.3	77.7	78.0
Estonia	72.0	75.9	76.9	77.1	70.0	66.8	70.6	72.2	73.3	74.3	76.5
Ireland	72.6	73.4	73.8 b	72.2	66.9 b	64.6	63.8	63.7	65.5	67.0	68.7
Greece	64.4	65.6	65.8	66.3	65.6 b	63.8	59.6	55.0	52.9	53.3	54.9
Spain	67.5 b	69.0	69.7	68.5	64.0	62.8	62.0	59.6	58.6	59.9	62.0
France	69.4	69.4	69.9	70.5	69.5	69.3	69.2	69.4	69.5	69.8	70.0
Croatia	59.9 e	60.6 e	63.9	64.9	64.2	62.1	59.8	58.1	57.2	59.2	60.5
Italy	61.5	62.4	62.7	62.9	61.6	61.0	61.0	60.9	59.7	59.9	60.5
Cyprus	74.4	75.8	76.8	76.5	75.3 b	75.0	73.4	70.2	67.2	67.6	67.9
Latvia	69.1	73.2	75.2	75.4	66.6	64.3	66.3	68.1	69.7	70.7	72.5
Lithuania	70.7	71.3	72.7	72.0	67.0	64.3	66.9	68.5	69.9	71.8	73.3
Luxembourg	69.0	69.1	69.6 b	68.8	70.4 b	70.7	70.1	71.4	71.1	72.1	70.9 b
Hungary	62.2	62.6	62.3	61.5	60.1	59.9	60.4	61.6	63.0	66.7	68.9
Malta	57.4 b	57.9	58.6	59.2	59.0	60.1	61.6	63.1	64.8	66.4	67.8
Netherlands	75.1	76.3	77.8	78.9	78.8	76.8 b	76.4 b	76.6	75.9	75.4	76.4
Austria	70.4	71.6	72.8 b	73.8	73.4	73.9	74.2	74.4	74.6	74.2	74.3
Poland	58.3	60.1	62.7	65.0	64.9	64.3 b	64.5	64.7	64.9	66.5	67.8
Portugal	72.2	72.6	72.5	73.1	71.1	70.3	68.8 b	66.3	65.4	67.6	69.1
Romania	63.6	64.8	64.4	64.4	63.5	64.8 b	63.8	64.8	64.7	65.7	66.0
Slovenia	71.1	71.5	72.4	73.0	71.9	70.3	68.4	68.3	67.2	67.7	69.1
Slovakia	64.5	66.0	67.2	68.8	66.4	64.6	65.0 b	65.1	65.0	65.9	67.7
Finland	73.0	73.9	74.8	75.8	73.5	73.0	73.8	74.0	73.3	73.1	72.9
Sweden	77.9 b	78.8	80.1	80.4	78.3	78.1	79.4	79.4	79.8	80.0	80.5
United Kingdom	75.2	75.2	75.2 b	75.2 b	73.9	73.5	73.5	74.1	74.8	76.2	76.8

[Click here to download table.](#)

<sup>(375)</sup> Data extracted 12<sup>th</sup> December 2016

## Activity rate (% population aged 15-64)

	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015
European Union 28	69.7	70.1	70.3	70.7	70.8	71.0	71.1	71.7	72.0	72.3	72.5
Euro Area 19	69.9	70.4	70.8	71.2	71.3	71.3	71.4	72.0	72.2	72.4	72.5
Belgium	66.7	66.5	67.1	67.1	66.9	67.7	66.7	66.9	67.5	67.7	67.6
Bulgaria	62.1	64.5	66.3	67.8	67.2	66.7 b	65.9 b	67.1	68.4	69.0	69.3
Czech Republic	70.4	70.3	69.9	69.7	70.1	70.2	70.5 b	71.6	72.9	73.5	74.0
Denmark	79.8	80.6	80.1	80.7	80.2	79.4	79.3	78.6	78.1	78.1	78.5
Germany	73.8 b	74.9	75.6	75.9	76.3	76.7 b	77.3 b	77.2	77.6	77.7	77.6
Estonia	70.7	72.8	73.2	74.2	74.0	73.9	74.7	74.8	75.1	75.2	76.7
Ireland	70.8	71.9	72.6 b	72.1	70.6 b	69.4	69.2	69.2	69.8	69.8	70.0
Greece	66.4	66.7	66.5	66.7	67.4 b	67.8	67.3	67.5	67.5	67.4	67.8
Spain	70.0 b	71.1	71.8	72.7	73.1	73.5	73.9	74.3	74.3	74.2	74.3
France	69.7	69.6	69.7	69.9	70.3	70.3	70.1	70.7	71.1	71.4	71.5
Croatia	63.3 e	63.0 e	65.7	65.8	65.6	65.1	64.1	63.9	63.7	66.1	66.8
Italy	62.5	62.6	62.4	62.9	62.3	62.0	62.1	63.5	63.4	63.9	64.0
Cyprus	72.4	73.0	73.9	73.6	73.0 b	73.6	73.5	73.5	73.6	74.3	73.9
Latvia	69.1	71.0	72.6	74.2	73.5	73.0	72.8	74.4	74.0	74.6	75.7
Lithuania	68.7	67.6	67.9	68.4	69.6	70.2	71.4	71.8	72.4	73.7	74.1
Luxembourg	66.6	66.7	66.9 b	66.8	68.7 b	68.2	67.9	69.4	69.9	70.8	70.9 b
Hungary	61.3	62.0	61.6	61.2	61.2	61.9	62.4	63.7	64.7	67.0	68.6
Malta	57.6 b	57.9	58.8	59.1	59.4	60.4	61.8	63.1	65.0	66.3	67.6
Netherlands	76.9	77.4	78.5	79.3	79.7	78.2 b	78.1 b	79.0	79.4	79.0	79.6
Austria	71.4	72.4	73.5 b	73.9	74.3	74.4	74.6	75.1	75.5	75.4	75.5
Poland	64.4	63.4	63.2	63.8	64.7	65.3 b	65.7	66.5	67.0	67.9	68.1
Portugal	73.2	73.6	73.9	73.9	73.4	73.7	73.6 b	73.4	73.0	73.2	73.4
Romania	62.3	63.6	63.0	62.9	63.1	64.9 b	64.1	64.8	64.9	65.7	66.1
Slovenia	70.7	70.9	71.3	71.8	71.8	71.5	70.3	70.4	70.5	70.9	71.8
Slovakia	68.9	68.6	68.3	68.8	68.4	68.7	68.7 b	69.4	69.9	70.3	70.9
Finland	74.7	75.2	75.6	76.0	75.0	74.5	74.9	75.2	75.2	75.4	75.8
Sweden	78.2 b	78.8	79.1	79.3	78.9	79.1	79.9	80.3	81.1	81.5	81.7
United Kingdom	75.4	75.7	75.5 b	75.8 b	75.7	75.4	75.5	76.1	76.4	76.7	76.9

[Click here to download table.](#)

## Unemployment rate (% labour force)

	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015
European Union 28	9.0	8.2	7.2	7.0	9.0	9.6	9.7	10.5	10.9	10.2	9.4
Euro Area 19	9.1	8.4	7.5	7.6	9.6	10.2	10.2	11.4	12.0	11.6	10.9
Belgium	8.5	8.3	7.5	7.0	7.9	8.3	7.2	7.6	8.4	8.5	8.5
Bulgaria	10.1	9.0	6.9	5.6	6.8	10.3 i	11.3	12.3	13.0	11.4	9.2
Czech Republic	7.9	7.1	5.3	4.4	6.7	7.3	6.7	7.0	7.0	6.1	5.1
Denmark	4.8	3.9 i	3.8	3.4	6.0	7.5	7.6	7.5	7.0	6.6	6.2
Germany	11.2 i	10.1	8.5	7.4	7.6	7.0	5.8	5.4	5.2	5.0	4.6
Estonia	8.0	5.9	4.6	5.5 i	13.5	16.7	12.3	10.0	8.6	7.4	6.2
Ireland	4.4	4.5	4.7	6.4	12.0	13.9	14.7	14.7	13.1	11.3	9.4
Greece	10.0	9.0	8.4	7.8	9.6	12.7	17.9	24.5	27.5	26.5	24.9
Spain	9.2	8.5	8.2	11.3	17.9	19.9	21.4	24.8	26.1	24.5	22.1
France	8.9	8.8	8.0	7.4	9.1	9.3	9.2	9.8	10.3	10.3	10.4
Croatia	13.0	11.6 i	9.9	8.6	9.2	11.7	13.7	16.0	17.3	17.3	16.3
Italy	7.7	6.8	6.1	6.7	7.7	8.4	8.4	10.7	12.1	12.7	11.9
Cyprus	5.3	4.6	3.9	3.7	5.4	6.3	7.9	11.9	15.9	16.1	15.0
Latvia	10.0	7.0	6.1	7.7	17.5	19.5	16.2	15.0	11.9	10.8	9.9
Lithuania	8.3	5.8	4.3	5.8	13.8	17.8	15.4	13.4	11.8	10.7	9.1
Luxembourg	4.6	4.6 i	4.2	4.9	5.1	4.6	4.8	5.1	5.9	6.0	6.4
Hungary	7.2	7.5	7.4	7.8 i	10.0	11.2	11.0	11.0	10.2	7.7	6.8
Malta	6.9	6.8	6.5	6.0	6.9	6.9	6.4	6.3	6.4	5.8	5.4
Netherlands	5.9	5.0	4.2	3.7	4.4	5.0	5.0	5.8	7.3	7.4	6.9
Austria	5.6	5.3	4.9	4.1	5.3	4.8	4.6	4.9	5.4	5.6	5.7
Poland	17.9	13.9	9.6	7.1	8.1 i	9.7	9.7	10.1	10.3	9.0	7.5
Portugal	8.8	8.9	9.1	8.8	10.7	12.0	12.9	15.8	16.4	14.1	12.6
Romania	7.1	7.2	6.4	5.6	6.5	7.0	7.2	6.8	7.1	6.8	6.8
Slovenia	6.5	6.0	4.9	4.4	5.9	7.3	8.2	8.9	10.1	9.7	9.0
Slovakia	16.4	13.5	11.2	9.6	12.1	14.5	13.7 i	14.0	14.2	13.2	11.5
Finland	8.4	7.7	6.9	6.4	8.2	8.4	7.8	7.7	8.2	8.7	9.4
Sweden	7.7	7.1	6.1	6.2	8.3	8.6	7.8	8.0	8.0	7.9	7.4
United Kingdom	4.8	5.4	5.3	5.6	7.6	7.8	8.1	7.9	7.6	6.1	5.3

[Click here to download table.](#)

### Youth unemployment rate (% labour force 15-24)

	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015
European Union 28	19.0	17.7	15.9	15.9	20.3	21.4	21.7	23.3	23.7	22.2	20.3
Euro Area 19	18.5	17.2	15.6	16.1	20.7	21.4	21.3	23.6	24.4	23.8	22.4
Belgium	21.5	20.5	18.8	18.0	21.9	22.4	18.7	19.8	23.7	23.2	22.1
Bulgaria	21.0	18.3	14.1	11.9	15.1	21.9 i	25.0	28.1	28.4	23.8	21.6
Czech Republic	19.3	17.5	10.7	9.9	16.6	18.3	18.1	19.5	18.9	15.9	12.6
Denmark	8.6	7.7 i	7.5	8.0	11.8	13.9	14.2	14.1	13.0	12.6	10.8
Germany	15.4 i	13.6	11.8	10.4	11.1	9.8	8.5	8.0	7.8	7.7	7.2
Estonia	15.1	12.1	10.1	12.0 i	27.4	32.9	22.4	20.9	18.7	15.0	13.1
Ireland	8.7	8.7	9.1	13.3	24.0	27.6	29.1	30.4	26.8	23.9	20.9
Greece	25.8	25.0	22.7	21.9	25.7	33.0	44.7	55.3	58.3	52.4	49.8
Spain	19.6	17.9	18.1	24.5	37.7	41.5	46.2	52.9	55.5	53.2	48.3
France	21.0	22.0	19.5	19.0	23.6	23.3	22.7	24.4	24.9	24.2	24.7
Croatia	31.9	28.8 i	25.2	23.7	25.2	32.4	36.7	42.1	50.0	45.5	43.0
Italy	24.1	21.8	20.4	21.2	25.3	27.9	29.2	35.3	40.0	42.7	40.3
Cyprus	13.9	10.0	10.2	9.0	13.8	16.6	22.4	27.7	38.9	36.0	32.8
Latvia	15.1	13.6	10.6	13.6	33.3	36.2	31.0	28.5	23.2	19.6	16.3
Lithuania	15.8	10.0	8.4	13.3	29.6	35.7	32.6	26.7	21.9	19.3	16.3
Luxembourg	14.6	15.5 i	15.6	17.3	16.5	15.8	16.4	18.0	16.9	22.3	16.6
Hungary	19.4	19.1	18.1	19.5 i	26.4	26.4	26.0	28.2	26.6	20.4	17.3
Malta	16.1	15.5	13.5	11.7	14.5	13.2	13.3	14.1	13.0	11.7	11.8
Netherlands	11.8	10.0	9.4	8.6	10.2	11.1	10.0	11.7	13.2	12.7	11.3
Austria	11.0	9.8	9.4	8.5	10.7	9.5	8.9	9.4	9.7	10.3	10.6
Poland	36.9	29.8	21.6	17.2	20.6 i	23.7	25.8	26.5	27.3	23.9	20.8
Portugal	20.8	21.2	21.4	21.6	25.3	28.2	30.2	38.0	38.1	34.7	32.0
Romania	19.1	20.2	19.3	17.6	20.0	22.1	23.9	22.6	23.7	24.0	21.7
Slovenia	15.9	13.9	10.1	10.4	13.6	14.7	15.7	20.6	21.6	20.2	16.3
Slovakia	30.4	27.0	20.6	19.3	27.6	33.9	33.7 i	34.0	33.7	29.7	26.5
Finland	20.1	18.7	16.5	16.5	21.5	21.4	20.1	19.0	19.9	20.5	22.4
Sweden	22.6	21.5	19.2	20.2	25.0	24.8	22.8	23.7	23.6	22.9	20.4
United Kingdom	12.8	13.9	14.3	15.0	19.1	19.9	21.3	21.2	20.7	17.0	14.6

[Click here to download table.](#)

### Long term unemployment rate (% labour force)

	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015
European Union 28	4.0	3.7	3.0	2.6	3.0	3.8	4.1	4.6	5.1	5.0	4.5
Euro Area 19	4.0	3.8	3.2	2.9	3.3	4.3	4.6	5.2	5.9	6.0	5.5
Belgium	4.4	4.2	3.8	3.3	3.5	4.0	3.5	3.4	3.9	4.3	4.4
Bulgaria	6.0	5.0	4.0	2.9	2.9	4.7	6.3	6.8	7.4	6.9	5.6
Czech Republic	4.2	3.9	2.8	2.2	2.0	3.0	2.7	3.0	3.0	2.7	2.4
Denmark	1.1	0.8	0.6	0.5	0.6	1.5	1.8	2.1	1.8	1.7	1.7
Germany	5.9	5.7	4.9	3.9	3.5	3.3	2.8	2.4	2.3	2.2	2.0
Estonia	4.4	2.9	2.3	1.7	3.7	7.6	7.1	5.5	3.8	3.3	2.4
Ireland	1.4	1.4	1.4	1.7	3.5	6.8	8.6	9.0	7.8	6.6	5.3
Greece	5.2	4.9	4.2	3.7	3.9	5.7	8.8	14.5	18.5	19.5	18.2
Spain	2.2	1.8	1.7	2.0	4.3	7.3	8.9	11.0	13.0	12.9	11.4
France	3.4	3.5	3.0	2.6	3.0	3.5	3.6	3.7	4.0	4.2	4.3
Croatia	7.0 e	6.4 e	6.0	5.3	5.1	6.6	8.4	10.2	11.0	10.1	10.3
Italy	3.7	3.3	2.9	3.0	3.4	4.0	4.3	5.6	6.9	7.7	6.9
Cyprus	1.3	0.9	0.7	0.5	0.6	1.3	1.6	3.6	6.1	7.7	6.8
Latvia	4.5	2.4	1.6	1.9	4.5	8.8	8.8	7.8	5.7	4.6	4.5
Lithuania	4.4	2.6	1.4 u	1.3 u	3.3	7.4	8.0	6.6	5.1	4.8	3.9
Luxembourg	1.2	1.4	1.2	1.6	1.2	1.3	1.4	1.6	1.8	1.6	1.9
Hungary	3.2	3.4	3.5	3.6	4.2	5.5	5.2	5.0	4.9	3.7	3.1
Malta	3.4	2.7	2.7	2.6	2.9	3.1	3.0	3.1	2.9	2.7	2.4
Netherlands	1.9	1.7	1.2	0.9	0.8	1.2	1.6	1.9	2.5	2.9	3.0
Austria	1.4	1.5	1.3	1.0	1.2	1.2	1.2	1.2	1.3	1.5	1.7
Poland	10.4	7.9	5.1	2.5	2.6	3.0	3.6	4.1	4.4	3.8	3.0
Portugal	3.7	3.9	3.8	3.6	4.2	5.7	6.2	7.7	9.3	8.4	7.2
Romania	4.0	4.1	3.2	2.4	2.2	2.4	2.9	3.0	3.2	2.8	3.0
Slovenia	3.1	2.9	2.2	1.9	1.8	3.2	3.6	4.3	5.2	5.3	4.7
Slovakia	11.9	10.3	8.4	6.7	6.6	9.3	9.3	9.4	10.0	9.3	7.6
Finland	2.1	1.9	1.5	1.2	1.4	2.0	1.7	1.6	1.7	1.9	2.3
Sweden	1.1 e	1.0 e	0.8	0.8	1.1	1.6	1.5	1.5	1.4	1.4	1.5
United Kingdom	1.0	1.2	1.3	1.4	1.9	2.5	2.7	2.7	2.7	2.2	1.6

[Click here to download table.](#)

## At-risk-of-poverty or exclusion (% of total population)

	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015
European Union 28						23.7	24.3	24.7	24.6	24.4	23.7 e
Euro Area 19	22.0	22.1	21.9	21.7	21.6	22.0	22.9	23.3	23.1	23.5	23.0 e
Belgium	22.6	21.5	21.6	20.8	20.2	20.8	21.0	21.6	20.8	21.2	21.1
Bulgaria		61.3	60.7	44.8 b	46.2	49.2	49.1	49.3	48.0	40.1 b	41.3
Czech Republic	19.6	18.0	15.8	15.3	14.0	14.4	15.3	15.4	14.6	14.8	14.0
Denmark	17.2	16.7	16.8	16.3	17.6	18.3	17.6 b	17.5	18.3	17.9	17.7
Germany	18.4	20.2	20.6	20.1	20.0	19.7	19.9	19.6	20.3	20.6	20.0
Estonia	25.9	22.0	22.0	21.8	23.4	21.7	23.1	23.4	23.5	26.0 b	24.2
Ireland	25.0	23.3	23.1	23.7	25.7	27.3	29.4	30.0	29.5	27.6	
Greece	29.4	29.3	28.3	28.1	27.6	27.7	31.0	34.6	35.7	36.0	35.7
Spain	24.3	24.0	23.3	23.8 b	24.7	26.1	26.7	27.2	27.3	29.2	28.6
France	18.9	18.8	19.0	18.5 b	18.5	19.2	19.3	19.1	18.1	18.5	17.7
Croatia						31.1	32.6	32.6	29.9	29.3	29.1
Italy	25.6	25.9	26.0	25.5	24.9	25.0	28.1	29.9	28.5	28.3	28.7
Cyprus	25.3	25.4	25.2	23.3 b	23.5	24.6	24.6	27.1	27.8	27.4	28.9
Latvia	46.3	42.2	35.1	34.2 b	37.9	38.2	40.1	36.2	35.1	32.7	30.9
Lithuania	41.0	35.9	28.7	28.3	29.6	34.0	33.1	32.5	30.8	27.3	29.3
Luxembourg	17.3	16.5	15.9	15.5	17.8	17.1	16.8	18.4	19.0	19.0	18.5
Hungary	32.1	31.4	29.4	28.2	29.6	29.9	31.5	33.5	34.8	31.8	28.2
Malta	20.5	19.5	19.7	20.1	20.3	21.2	22.1	23.1	24.0	23.8	22.4
Netherlands	16.7	16.0	15.7	14.9	15.1	15.1	15.7	15.0	15.9	16.5	16.8 p
Austria	17.4	17.8	16.7	20.6 b	19.1	18.9	19.2	18.5	18.8	19.2	18.3
Poland	45.3	39.5	34.4	30.5 b	27.8	27.8	27.2	26.7	25.8	24.7	23.4
Portugal	26.1	25.0	25.0	26.0	24.9	25.3	24.4	25.3	27.5	27.5	26.6
Romania			47.0	44.2	43.0	41.5	40.9	43.2	41.9	40.3	37.3
Slovenia	18.5	17.1	17.1	18.5	17.1	18.3	19.3	19.6	20.4	20.4	19.2
Slovakia	32.0	26.7	21.4	20.6	19.6	20.6	20.6	20.5	19.8	18.4	18.4
Finland	17.2	17.1	17.4	17.4	16.9	16.9	17.9	17.2	16.0	17.3	16.8
Sweden	14.4	16.3	13.9	14.9	15.9	15.0	16.1	15.6	16.4	16.9	16.0
United Kingdom	24.8	23.7	22.6	23.2	22.0	23.2	22.7	24.1 b	24.8	24.1	23.5

[Click here to download table.](#)

## At-risk-of-poverty (% of total population)

	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015
European Union 28						16.5	16.8	16.8	16.7	17.2	17.3 e
Euro Area 19	15.5	15.6	16.1	16.1	16.2	16.3	16.8	16.8	16.7	17.1	17.3 e
Belgium	14.8	14.7	15.2	14.7	14.6	14.6	15.3	15.3	15.1	15.5	14.9
Bulgaria		18.4	22.0	21.4	21.8	20.7	22.2	21.2	21.0	21.8	22.0
Czech Republic	10.4	9.9	9.6	9.0	8.6	9.0	9.8	9.6	8.6	9.7	9.7
Denmark	11.8	11.7	11.7	11.8	13.1	13.3	12.1 b	12.0	11.9	12.1	12.2
Germany	12.2	12.5	15.2	15.2	15.5	15.6	15.8	16.1	16.1	16.7	16.7
Estonia	18.3	18.3	19.4	19.5	19.7	15.8	17.5	17.5	18.6	21.8 b	21.6
Ireland	19.7	18.5	17.2	15.5	15.0	15.2	15.2	15.7	14.1	15.6	
Greece	19.6	20.5	20.3	20.1	19.7	20.1	21.4	23.1	23.1	22.1	21.4
Spain	20.1	20.3	19.7	19.8 b	20.4	20.7	20.6	20.8	20.4	22.2	22.1
France	13.0	13.2	13.1	12.5 b	12.9	13.3	14.0	14.1	13.7	13.3	13.6
Croatia						20.6 b	20.9	20.4	19.5	19.4	20.0
Italy	19.2	19.3	19.5	18.9	18.4	18.7	19.8	19.5	19.3	19.4	19.9
Cyprus	16.1	15.6	15.5	15.9 b	15.8	15.6	14.8	14.7	15.3	14.4	16.2
Latvia	19.4	23.5	21.2	25.9	26.4	20.9	19.0	19.2	19.4	21.2	22.5
Lithuania	20.5	20.0	19.1	20.9	20.3	20.5	19.2	18.6	20.6	19.1	22.2
Luxembourg	13.7	14.1	13.5	13.4	14.9	14.5	13.6	15.1	15.9	16.4	15.3
Hungary	13.5	15.9	12.3	12.4	12.4	12.3	14.1	14.3	15.0	15.0	14.9
Malta	14.3	14.2	15.1	15.3	14.9	15.5	15.6	15.1	15.7	15.9	16.3
Netherlands	10.7	9.7	10.2	10.5	11.1	10.3	11.0	10.1	10.4	11.6	12.1 p
Austria	12.6	12.6	12.0	15.2 b	14.5	14.7	14.5	14.4	14.4	14.1	13.9
Poland	20.5	19.1	17.3	16.9	17.1	17.6	17.7	17.1	17.3	17.0	17.6
Portugal	19.4	18.5	18.1	18.5	17.9	17.9	18.0	17.9	18.7	19.5	19.5
Romania			24.6	23.6	22.1	21.6	22.3	22.9	23.0	25.1	25.4
Slovenia	12.2	11.6	11.5	12.3	11.3	12.7	13.6	13.5	14.5	14.5	14.3
Slovakia	13.3	11.6	10.6	10.9	11.0	12.0	13.0	13.2	12.8	12.6	12.3
Finland	11.7	12.6	13.0	13.6	13.8	13.1	13.7	13.2	11.8	12.8	12.4
Sweden	9.5	12.3	10.5	12.2	13.3	12.9	14.0	14.1	14.8	15.1	14.5
United Kingdom	19.0	19.0	18.6	18.7	17.3	17.1	16.2	16.0 b	15.9	16.8	16.7

[Click here to download table.](#)

## Severe Material Deprivation (% of total population)

	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015
European Union 28						8.4	8.8	9.9	9.6	8.9	8.1 e
Euro Area 19	6.3	6.0	5.6	5.9	6.0	6.1	6.9	7.8	7.5	7.4	6.9 e
Belgium	6.5	6.4	5.7	5.6	5.2	5.9	5.7	6.3	5.1	5.9	5.8
Bulgaria		57.7	57.6	41.2	41.9	45.7	43.6	44.1	43.0	33.1	34.2
Czech Republic	11.8	9.6	7.4	6.8	6.1	6.2	6.1	6.6	6.6	6.7	5.6
Denmark	3.2	3.1	3.3	2.0	2.3	2.7	2.3	2.7	3.6	3.2	3.7
Germany	4.6	5.1	4.8	5.5	5.4	4.5	5.3	4.9	5.4	5.0	4.4
Estonia	12.4	7.0	5.6	4.9	6.2	9.0	8.7	9.4	7.6	6.2	4.5
Ireland	5.1	4.8	4.5	5.5	6.1	5.7	7.8	9.8	9.9	8.4	
Greece	12.8	11.5	11.5	11.2	11.0	11.6	15.2	19.5	20.3	21.5	22.2 p
Spain	4.1	4.1	3.5	3.6	4.5	4.9	4.5	5.8	6.2	7.1	6.4 p
France	5.3	5.0	4.7	5.4	5.6	5.8	5.2	5.3	4.9	4.8	4.5
Croatia						14.3	15.2	15.9	14.7	13.9	13.7
Italy	6.8	6.4	7.0	7.5	7.3	7.4	11.1	14.5	12.3	11.6	11.5
Cyprus	12.2	12.6	13.3	9.1	9.5	11.2	11.7	15.0	16.1	15.3	15.4
Latvia	39.3	31.3	24.0	19.3	22.1	27.6	31.0	25.6	24.0	19.2	16.4
Lithuania	32.6	25.3	16.6	12.5	15.6	19.9	19.0	19.8	16.0	13.6	13.9
Luxembourg	1.8	1.1	0.8	0.7	1.1	0.5	1.2	1.3	1.8	1.4	2.0
Hungary	22.9	20.9	19.9	17.9	20.3	21.6	23.4	26.3	27.8	24.0	19.4
Malta	5.4	3.9	4.4	4.3	5.0	6.5	6.6	9.2	9.5	10.2	8.1
Netherlands	2.5	2.3	1.7	1.5	1.4	2.2	2.5	2.3	2.5	3.2	2.5 p
Austria	3.5	3.6	3.3	5.9	4.6	4.3	4.0	4.0	4.2	4.0	3.6
Poland	33.8	27.6	22.3	17.7	15.0	14.2	13.0	13.5	11.9	10.4	8.1
Portugal	9.3	9.1	9.6	9.7	9.1	9.0	8.3	8.6	10.9	10.6	9.6 p
Romania			38.0	32.7	32.1	30.5	29.5	31.1	29.8	25.9	22.7
Slovenia	5.1	5.1	5.1	6.7	6.1	5.9	6.1	6.6	6.7	6.6	5.8
Slovakia	22.1	18.2	13.7	11.8	11.1	11.4	10.6	10.5	10.2	9.9	9.0
Finland	3.8	3.3	3.6	3.5	2.8	2.8	3.2	2.9	2.5	2.8	2.2 p
Sweden	2.3	2.1	2.2	1.4	1.6	1.3	1.2	1.3	1.4	0.7	0.7
United Kingdom	5.3	4.5	4.2	4.5	3.3 u	4.8	5.1	7.8	8.3	7.4	6.1

[Click here to download table.](#)

## Share of people living in low work intensity households (% of people aged 0-59)

	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015
European Union 28						10.3	10.5	10.5	10.9	11.2	10.5 e
Euro Area 19	9.8	10.3	9.7	9.3	9.1	10.4	11.0	10.7	11.2	11.9	11.1 e
Belgium	15.1	14.3	13.8	11.7	12.3	12.7	13.8	13.9	14.0	14.6	14.9
Bulgaria		14.7	16.0	8.1 b	6.9	8.0	11.0	12.5	13.0	12.1	11.6
Czech Republic	8.9	8.9	8.6	7.2	6.0	6.4	6.6	6.8	6.9	7.6	6.8
Denmark	10.1	9.6	10.1	8.5	8.8	10.6	10.5	10.2	11.9	12.2	11.6
Germany	12.0	13.6	11.5	11.7	10.9	11.2	11.2	9.9	9.9	10.0	9.8
Estonia	9.5	7.1	6.2	5.3	5.6	9.0	10.0	9.1	8.4	7.6 b	6.6
Ireland	14.7	12.9	14.3	13.7	20.0	22.9	24.2	23.4	23.9	21.1	
Greece	7.6	8.1	8.1	7.5	6.6	7.6	12.0	14.2	18.2	17.2	16.8
Spain	6.9	6.4	6.8	6.6	7.6	10.8	13.4	14.3	15.7	17.1	15.4
France	8.7	9.1	9.6	8.8	8.4	9.9	9.4	8.4	8.1	9.6	8.6
Croatia						13.9	15.9	16.8	14.8	14.7	14.4
Italy	11.0	11.3	10.2	10.4	9.2	10.6	10.5	10.6	11.3	12.1	11.7
Cyprus	4.4	3.8	3.7	4.5 b	4.0	4.9	4.9	6.5	7.9	9.7	10.9
Latvia	8.3	7.1	6.2	5.4	7.4	12.6	12.6	11.7	10.0	9.6	7.8
Lithuania	9.6	8.3	6.4	6.1	7.2	9.5	12.7	11.4	11.0	8.8	9.2
Luxembourg	5.7	5.2	5.0	4.7	6.3	5.5	5.8	6.1	6.6	6.1	5.7
Hungary	9.5	13.1	11.3	12.0	11.3	11.9	12.8	13.5	13.6	12.8	9.4
Malta	9.6	9.7	9.6	8.6	9.2	9.2	8.9	9.0	9.0	9.8	9.2
Netherlands	9.8	10.9	9.7	8.2	8.5	8.4	8.9	8.9	9.3	10.2	10.2
Austria	7.3	8.1	8.2	7.4 b	7.1	7.8	8.6	7.7	7.8	9.1	8.2
Poland	14.3	12.4	10.1	8.0	6.9	7.3	6.9	6.9	7.2	7.3	6.9
Portugal	6.0	6.6	7.2	6.3	7.0	8.6	8.3	10.1	12.2	12.2	10.9
Romania			9.9	8.5	8.1	7.7	7.3	7.9	7.6	7.2	7.9
Slovenia	8.6	6.9	7.3	6.7	5.6	7.0	7.6	7.5	8.0	8.7	7.4
Slovakia	6.6	6.2	6.4	5.2	5.6	7.9	7.7	7.2	7.6	7.1	7.1
Finland	10.0	9.1	8.8	7.5	8.4	9.3	10.0	9.3	9.0	10.0	10.8
Sweden	7.6	6.8	6.0	5.5	6.4	6.0	6.9	5.7	7.1	6.4	5.8
United Kingdom	12.9	12.0	10.4	10.4	12.7	13.2	11.5	13.0 b	13.2	12.3	11.9

[Click here to download table.](#)

## Income quintile share ratio S80/S20

	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015
European Union 28						4.9	5.0	5.0	5.0	5.2	5.2
Euro Area 19	4.7	4.7	4.8	4.9	4.9	4.9	5.0	5.0	5.0	5.2	5.2
Belgium	4.0	4.2	3.9	4.1	3.9	3.9	3.9	4.0	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
Czech Republic	3.7	3.5	3.5	3.4	3.5	3.5	3.5	3.5	3.4	3.5	3.5
Denmark	3.5	3.4	3.7	3.6	4.6	4.4 b	4.0 b	3.9	4.0	4.1	4.1
Germany	3.8	4.1	4.9	4.8	4.5	4.5	4.5	4.3	4.6	5.1	4.8
Estonia	5.9	5.5	5.5	5.0	5.0	5.0	5.3	5.4	5.5	6.5 b	6.2
Ireland	5.0	4.9	4.8	4.4	4.2	4.7	4.6	4.7	4.5	4.8	
Greece	5.8	6.1	6.0	5.9	5.8	5.6	6.0	6.6	6.6	6.5	6.5
Spain	5.5	5.5	5.5	5.6 b	5.9	6.2	6.3	6.5	6.3	6.8	6.9
France	4.0	4.0	3.9	4.4 b	4.4	4.4	4.6	4.5	4.5	4.3	4.3
Croatia						5.5 b	5.6	5.4	5.3	5.1	5.2
Italy	5.6	5.4	5.4	5.2	5.3	5.4	5.7	5.6	5.8	5.8	5.8
Cyprus	4.3	4.3	4.4	4.3 b	4.4	4.5	4.3	4.7	4.9	5.4	5.2
Latvia	6.7	7.8	6.4	7.3	7.4	6.8	6.5	6.5	6.3	6.5	6.5
Lithuania	6.9	6.3	5.9	6.1	6.4	7.3	5.8	5.3	6.1	6.1	7.5
Luxembourg	3.9	4.2	4.0	4.1	4.3	4.1	4.0	4.1	4.6	4.4	4.3
Hungary	4.0	5.5	3.7	3.6	3.5	3.4	3.9	4.0	4.3	4.3	4.3
Malta	3.9	4.0	3.9	4.3	4.0	4.3	4.0	3.9	4.1	4.0	4.2
Netherlands	4.0	3.8	4.0	4.0	4.0	3.7	3.8	3.6	3.6	3.8	3.8 p
Austria	3.8	3.7	3.8	4.2 b	4.2	4.3	4.1	4.2	4.1	4.1	4.0
Poland	6.6	5.6	5.3	5.1	5.0	5.0	5.0	4.9	4.9	4.9	4.9
Portugal	7.0	6.7	6.5	6.1	6.0	5.6	5.7	5.8	6.0	6.2	6.0
Romania			8.1	7.0	6.5	6.1	6.2	6.6	6.8	7.2	8.3
Slovenia	3.4	3.4	3.3	3.4	3.2	3.4	3.5	3.4	3.6	3.7	3.6
Slovakia	3.9	4.1	3.5	3.4	3.6	3.8	3.8	3.7	3.6	3.9	3.5
Finland	3.6	3.6	3.7	3.8	3.7	3.6	3.7	3.7	3.6	3.6	3.6
Sweden	3.3	3.6	3.3	3.5	3.7	3.5	3.6	3.7	3.7	3.9	3.8
United Kingdom	5.9	5.4	5.3	5.6	5.3	5.4	5.3	5.0 b	4.6	5.1	5.2

[Click here to download table.](#)

## NEET: Young people not in employment, education or training (% of total population aged 15-24)

	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015
European Union 28	12.7	11.7 b	11.0	10.9	12.4	12.8	12.9	13.2	13.0	12.5	12.0
Euro Area 19	12.1	11.3 b	10.8	11.0	12.6	12.8	12.7	13.1	12.9	12.6	12.2
Belgium	13.0	11.2 b	11.2	10.1	11.1	10.9	11.8 b	12.3	12.7	12.0	12.2
Bulgaria	25.1	22.2 b	19.1	17.4 b	19.5	21.0 b	21.8	21.5	21.6	20.2	19.3
Czech Republic	13.3	9.2 b	6.9	6.7	8.5	8.8	8.3 b	8.9	9.1 b	8.1	7.5
Denmark	4.3	3.6	4.3 b	4.3	5.4	6.0	6.3	6.6	6.0	5.8	6.2
Germany	10.9 b	9.6	8.9	8.4 b	8.8	8.3 b	7.5 b	7.1	6.3	6.4	6.2
Estonia	10.6	8.8	8.9	8.7	14.5 b	14.0	11.6	12.2	11.3	11.7	10.8
Ireland	10.9	10.1 b	10.8 b	15.0	18.6 b	19.2	18.8	18.7	16.1	15.2	14.3
Greece	15.9	12.0 b	11.3	11.4 b	12.4 b	14.8	17.4	20.2	20.4	19.1	17.2
Spain	13.0 b	11.8 b	12.0	14.3	18.1	17.8	18.2	18.6	18.6	17.1 b	15.6
France	11.2	11.3	10.7	10.5	12.7	12.7	12.3	12.5	11.2 b	11.4 b	12.0
Croatia	16.7 b	14.2 b	12.9	11.6	13.4	15.7	16.2	16.6	19.6	19.3	18.5
Italy	17.1	16.8 b	16.1	16.6	17.6	19.0	19.7	21.0	22.2	22.1	21.4
Cyprus	19.5	10.7 b	9.0	9.7	9.9 b	11.7	14.6	16.0	18.7	17.0	15.3
Latvia	10.6	11.5 b	11.9	11.8	17.5	17.8	16.0	14.9	13.0	12.0	10.5
Lithuania	8.8	8.3 b	7.1	8.8	12.1	13.2	11.8	11.2	11.1	9.9	9.2
Luxembourg	5.5	6.7 b	5.7 b	6.2	5.8 b	5.1	4.7	5.9	5.0	6.3	6.2 b
Hungary	12.9	12.4 b	11.5	11.5	13.6	12.6	13.2	14.8	15.5	13.6	11.6 b
Malta	11.9 b	10.3 b	11.5	8.3	9.9	9.5	10.2	10.6	9.9	10.5	10.4
Netherlands	5.3	4.0 b	3.5	3.4	4.1	4.3 b	4.3	4.9	5.6 b	5.5	4.7
Austria	8.6	7.8 b	7.4 b	7.4	8.2	7.4	7.3	6.8	7.3	7.7	7.5
Poland	13.9	12.6	10.6	9.0 b	10.1	10.8 b	11.5	11.8	12.2 b	12.0	11.0
Portugal	11.1	10.6 b	11.2	10.2	11.2	11.4	12.6 b	13.9	14.1	12.3	11.3
Romania	16.8	14.8 b	13.3	11.6	13.9	16.6 b	17.5	16.8	17.0	17.0	18.1
Slovenia	8.9	8.5 b	6.7	6.5	7.5	7.1	7.1	9.3	9.2	9.4	9.5
Slovakia	15.8	14.4 b	12.5	11.1	12.5	14.1	13.8 b	13.8	13.7	12.8	13.7
Finland	7.8	7.7	7.0	7.8	9.9	9.0	8.4	8.6	9.3	10.2	10.6
Sweden	10.5 b	9.3 b	7.5 b	7.8 b	9.6	7.7	7.5	7.8	7.5	7.2	6.7
United Kingdom	8.4	8.6	11.9 b	12.1 b	13.2	13.6	14.2	13.9	13.2	11.9	11.1

[Click here to download table.](#)

### 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)
- Social 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 gender and age. The EU-LFS covers all EU Member States as well as Macedonia 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 skills 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). The recent changeover to ESA2010 could produce some changes in relation with previous years. 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.

### 1.1. Definitions and data sources of macro-economic indicators

1. Real GDP: Gross Domestic Product (GDP), volume, annual change (Source: Eurostat, ESA2010 National Accounts).
2. Total employment: Employment, total economy, annual change (Source: Eurostat, ESA2010 National Accounts).
3. Labour productivity: GDP volume per person employed, annual change (Source: Eurostat, ESA2010 National Accounts).
4. Annual average hours worked per person employed, annual change (Source: Eurostat, ESA2010 National Accounts).
5. Productivity per hour worked: GDP volume per hour worked, annual change (Source: Eurostat, ESA2010 National Accounts).
6. Harmonised CPI: harmonised consumer price index, annual change (Source: Eurostat, HCIP).
7. Price deflator GDP: Implicit price deflator of GDP, annual change (Source: Eurostat, ESA2010 National Accounts).
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).
12. Real unit labour costs: Real compensation per employee divided by labour productivity, annual change (Source: Eurostat, ESA2010 National Accounts and DG EMPL calculations).

### 1.2. Definitions and data sources of key employment indicators

1. Total population in 1000s, excluding population living in institutional households (Source: Eurostat, demographics).
2. Total population aged 15-64 (the 'working age population') in 1 000s (Source: Eurostat, Demographics).
3. Total employment in 000s (Source: Eurostat, LFS).
4. Population in employment aged 15-64 in 1 000s (Source: Eurostat, EU-LFS).

- 5-9. Employment rates: calculated by the number of employed divided by the population in the corresponding age bracket (Source: Eurostat, EU-LFS).
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).
11. Self-employed in total employment: number of self-employed as a share of total employment (Source: Eurostat, EU-LFS, 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).
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).
14. Employment in services: employed in services (NACE Rev. 2 sections G-U) as a share of total employment (Source: Eurostat, EU-LFS).
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).
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).
- 17-20. Activity rates: labour force (employed and unemployed) as a share of total population in the corresponding age group (Source: Eurostat, EU-LFS).
21. Total unemployment in 1 000s (Source: Eurostat, EU-LFS).
- 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).
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).
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).
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).
- 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).
36. Underemployment, persons in part-time jobs that would like to work more hours (Source: Eurostat, EU-LFS).
37. Seeking but not available, persons seeking a job but not available to work immediately (Source: Eurostat, EU-LFS).
38. Discouraged, available but not seeking persons available to work but not seeking job at the moment (Source: Eurostat, EU-LFS).

### 1.3. Definitions and data sources of key social indicators

- At-risk-of-poverty-or-exclusion. 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)
- At-risk-of-poverty. 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)

- At-risk-of-poverty threshold. 60 % of the national median equivalised disposable income after social transfers (Eurostat, EU-SILC)
- 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)
- Persistent at-risk-of-poverty. 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)
- At-risk-of-poverty before social transfers excl. pensions. Share of people having an equivalised disposable income before social transfers that is below the at-risk-of-poverty threshold calculated after social transfers (Eurostat, EU-SILC)
- Impact of social transfers. Computed indicator (Eurostat, EU-SILC), formula:  $100 \cdot (B-A)/B$ , where:
  - B: At-risk-of-poverty before social transfers excl. pensions
  - A: At-risk-of-poverty
- Severe Material Deprivation. 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)
- 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.(Eurostat, EU-SILC). 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
- 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)
- 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)
- 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)
- Healthy life years at birth. Number of years that a person is expected to continue to live in a healthy condition (Eurostat)
- Early leavers from education and training. Early leaver from education and training, previously named early school leaver, 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 education or training; their number can be expressed as a percentage of the total population aged 18 to 24. (Eurostat)
- NEET: Young people not in employment, education or training. Share of people aged 15 to 24 who are unemployed, not engaged in housework, not enrolled in school or work-related training, and not seeking work(Eurostat, EU-LFS)
- 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)
- 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)

- 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)
- 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)
- Social indicators expenditure. Percentage of expenditure in different social protection areas in relation with the GDP (Eurostat, ESSPROS)

## HOW TO OBTAIN EU PUBLICATIONS

### Free publications:

- one copy:  
via EU Bookshop (<http://bookshop.europa.eu>);
- more than one copy or posters/maps:  
from the European Union's representations ([http://ec.europa.eu/represent\\_en.htm](http://ec.europa.eu/represent_en.htm));  
from the delegations in non-EU countries  
([http://eeas.europa.eu/delegations/index\\_en.htm](http://eeas.europa.eu/delegations/index_en.htm));  
by contacting the Europe Direct service ([http://europa.eu/europedirect/index\\_en.htm](http://europa.eu/europedirect/index_en.htm))  
or calling 00 800 6 7 8 9 10 11 (freephone number from anywhere in the EU) (\*).

(\*). The information given is free, as are most calls (though some operators, phone boxes or hotels may charge you).

### Priced publications:

- via EU Bookshop (<http://bookshop.europa.eu>).

### Priced subscriptions:

- via one of the sales agents of the Publications Office of the European Union  
([http://publications.europa.eu/others/agents/index\\_en.htm](http://publications.europa.eu/others/agents/index_en.htm)).

You can download this publication on



doi: 10.2767/062945 (web)