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Social inequalities in Europe: Facing the challenge

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Social Inequalities in Europe: Facing the challenge

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Social Inequalities in Europe: Facing the challenge

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Abstract

**Social Inequalities in Europe: Facing the challenge**

by Jutta Allmendinger and Ellen von den Driesch

This discussion paper describes the extent of social inequalities both within and between the countries of the European Union. In the first three chapters we address the micro level of individual life courses: education, employment and income. The following chapters analyse the societal consequences of inequalities. Chapter 4 looks at the unequal distribution of financial resources, while chapter 5 addresses the social and political outcomes of financial inequalities.

In sum, there is mounting scientific evidence that various forms of educational, employment and financial inequalities increase over time. Moreover, societal exclusion is likely to lead to forms of political exclusion that is, a depoliticisation of socially excluded groups or to various forms of political extremism. This is an alarming sign for the future of European democracies and is in glaring contradiction to the democratic political values of equality enshrined in the Treaties.

*Keywords: Europe, Social inequalities, Income, Education, Employment, Returns to Education*

*JEL Klassifikation: D31, I24, I26, I30, J21, J31*
Outline

Introduction: Social Inequality Matters................................................................. 1
1. Education and Inequalities: The Need to Reduce Educational Poverty ........ 5
   1.1 How do we measure education? And what does educational attainment tell us? ................................................................. 7
   1.2 Who gets a chance? Educational attainment in Europe ....................... 7
   1.3 Conclusion ......................................................................................... 17
2. Employment and Inequalities ........................................................................... 19
   2.1 From education to employment: or how to fight youth unemployment effectively? ................................................................. 20
   2.2 Employment rates: one objective, many national realities ............... 24
   2.3 In search of quality of employment .................................................. 29
   2.4 Conclusion ......................................................................................... 38
3. Income, Education and Employment ............................................................... 40
   3.1 Education still provides income provided there is education ............ 40
   3.2 Income and gender: the need to change family life and income distribution ................................................................................. 46
   3.3 Conclusion ......................................................................................... 51
4. Financial Inequalities ....................................................................................... 52
   4.1 The large variety of gross and net incomes in EU countries .......... 53
   4.2 The challenge of rising income inequality ....................................... 56
   4.3 The alarming concentration of wealth in Europe ............................ 63
   4.4 On the dark side: poverty in the EU ............................................... 68
   4.5 Material deprivation in Europe .......................................................... 72
   4.6 The low-wage sector ........................................................................ 74
   4.7 The working poor ............................................................................ 79
   4.8 Conclusion ......................................................................................... 85
5. Social and Political Outcomes of Financial Inequalities .............................. 87
   5.1 Financial inequality and health ............................................................ 88
   5.2 Financial inequality and political outcomes: democracy in threat? ................................................................................................. 92
   5.3 Conclusion ......................................................................................... 96
Conclusion: The Need for the EU to Adopt Policies to Fight Inequalities ....... 97
References .......................................................................................................... 101
Introduction: Social Inequality Matters

Europe faces many challenges. On the global stage, the European Union (EU) has to speak with one voice to counter a plethora of political, military and economic crises. Internally, it needs to foster cohesion in spite of the many events that threaten the European project at its core. In this context, do social issues matter at all?

If we look at the evolution of the EU over the past decades, substantial progress has been made in terms of building an internal market and an economic and monetary union, albeit not without problems, as the 2008 crisis has shown. But a European social union, even at a small scale, is still out of sight. On the contrary, the race to economic growth and the liberalisation of labour markets seem to imperil a common social Europe. It looks actually as if the EU and its member States were mostly thinking in economic terms, hoping that economic solutions will fix all social problems at once. Of course the EU has adopted a number of relevant and ambitious social policies under the Europe 2020 agenda and more recently, through initiatives like the European Employment Strategy (European Commission, 2012) and notably the Social Investment Package (European Commission, 2013) which contains a wealth of information and useful policy recommendations on the social dimension of Europe. However, social policies in the EU remain by far a national competence and the EU institutions themselves can only "encourage" member states to adapt their social policies (see Titles IX and X of the Treaty on the EU). The overall impact of such efforts is thus likely to remain limited unless these policies are really adopted and implemented at State level. In a recent survey Frazer et al. (2014: 5) actually observe: "there is a growing consensus that the social dimension of the Europe 2020 Strategy has been disappointing".

To negate the importance of social issues is to undermine the foundations of the EU. The crises that have been shaking Europe have shown that an economic union is impossible without a social union and that a social investment state is impossible without a protective welfare state (Vandenbroucke, 2014; Schraad-Tischler and Kroll, 2014). In the GUSTO European research project, C. Crouch states that the EU integration requires both, a marketisation and a European social citizenship process. Marketisation itself leads to insecurity and weakens EU stability. Hence, the extension of markets increases the need for non-market institutions (Crouch, 2013; Sandel, 2012).
Many politicians and economists believe, and would like us to believe, that economic growth replaces or diminishes the need for social policies. But, as this Review will demonstrate, growth in Europe over the last decades has been accompanied by an increase in inequalities in many European countries as very well illustrated for instance by the European research project GINI (Salverda et al., 2014). Inequalities threaten social cohesion and they also threaten growth. As Stiglitz (2013) has noted, an unequal distribution of income reduces aggregate demand and limits economic growth. Poor people have too little money to consume and rich people have too much money to make up for poor people’s low consumption rates. What is more, there is scientific evidence that in countries with a high degree of social inequality, many people do not have access to key resources such as education and employment, even though these people could be highly productive. By denying these resources to them, valuable human capital, and hence growth, is destroyed. Furthermore, countries with a high degree of social inequality need much higher growth rates than countries with low levels of inequality to be able to reduce poverty in the first place. Or put conversely, the lower the degree of material inequality in a country, the better is the chance that economic growth will benefit everyone. ‘High inequality is bad for poverty, high inequality is bad for poverty reduction, and high inequality is not good for growth.’ (Hvistendahl, 2014: 835). In this context, the implementation of the call by President-elect Jean-Claude Juncker for a "fairer" EU deserves attention in the months to come.

The second important issue is political. After all, the EU Member States and the EU itself are built on democratic principles, which mean that our European democracies are looking for and after equality. No serious politician in Europe has ever said: ‘Democracies should encourage social and economic inequalities!’ This is why rising inequalities in Europe are not only social and economic problems; they are also potential tests for our democratic systems.

If such concerns are correct, it is essential not only to build institutional structures for a European social union but also to map social inequalities in Europe, much in the way researchers in the GINI research project funded by the European Commission have recently done. Getting a clear picture of the extent of social inequalities both within and between the countries of the EU is a necessary first step. The second step is to think about policies for addressing these inequalities. This is exactly what the present Review seeks to accomplish by drawing on the high quality research work carried out by projects funded by the
European Commission and also, very recently, by other researchers from various disciplines like sociology (Dubet, 2014), philosophy (Sandel, 2012) and economics (Piketty, 2014).

This Review addresses social inequalities both between and within EU Member States. Departing from a life course perspective, it first covers three major pillars: educational attainment (Chapter 1), the extent and quality of employment (Chapter 2) and the financial returns to education and employment (Chapter 3). In all three chapters, differences by gender and age are systematically pointed out.¹

Chapter 1 addresses inequalities in educational attainment. Education is understood comprehensively, being measured in both degrees and cognitive competencies. In addition to describing the level of educational attainment and comparing educational outcomes within and between the countries of the EU, Chapter 1 also shows the extent to which the various education measures are linked to each other. The findings are clear: most EU Member States continue to have too many people with too little or no education.

Chapter 2 deals with inequalities in employment. First, it covers the transition from school to work, highlighting the key role that school and vocational training systems play in this process. It then turns to employment rates and the conditions under which people are employed in order to further relevant comparative analyses. How many hours do people work? Are they employed on fixed-term contracts or do they have permanent contracts? What are the opportunities for people with low levels of education and what differences emerge with respect to gender and age? The evidence is clear: persons with little or no education are increasingly deprived of opportunities to find work; likewise, the inclusion of women in the workforce is not as advanced as it should be in many countries.

Chapter 3 discusses inequalities in financial returns to education and employment. In a context of educational expansion, the value of education is increasing in most countries and income differentials by educational attainment are rising as well. And yet, rational explanations of educational investments are difficult to uphold given the large variety of national situations in the EU; for

¹ Unfortunately, a third group will not be given special attention: people with a migration background. Across Europe, we are speaking about very different groups that cannot be easily compared or combined due to major differences between these groups. In Germany, for example, the majority of immigrants come from Turkey; in France, from Algeria; in Poland, from Ukraine; in the UK, from Ireland; and in Finland, from Estonia. This makes comparative analyses especially difficult.
instance, returns to education are extremely low in most Scandinavian countries. The financial situation of women remains alarming. Due to their many other commitments in society, women cannot fully translate their education into employment. But even if they are employed, their lifetime earnings remain considerably below those of men.

While the first three Chapters address the micro level of individual life courses, Chapters 4 and 5 analyse the societal consequences of inequalities. Chapter 4 thus looks at the standard of living, measured by income and wealth, and at the unequal distribution of financial resources. It focuses on social imbalances and hence on those groups of the population most in need of a social Europe: i.e. individuals who are poor, who work for low wages and who belong to the category of the working poor.

Chapter 5 addresses the social and political outcomes of financial inequalities. Whereas researchers have provided strong empirical evidence of causal links between individual poverty and low life expectancy and low political participation, the impact of societal inequality on individual life expectancy and individual voting behaviour has not yet been clarified in a satisfactory manner. Nevertheless, there is mounting scientific evidence that various forms of educational, employment and financial exclusion are likely to lead to forms of political exclusion that is, a depoliticisation of socially excluded groups or to various forms of political extremism. This is an alarming sign for the future of European democracies and is in glaring contradiction to the democratic political values of equality enshrined in the Treaties.
1. Education and Inequalities: The Need to Reduce Educational Poverty

Education is considered to be crucial for personal growth, employment opportunities, good work, good health and a long life, as well as for happiness and satisfaction. Opening access to education and improving the quality of education, therefore, have always been among the most important goals and responsibilities of modern governments. At the European level, the fight against educational inequalities and educational poverty has taken the shape of various recommendations to member States to reform their educational systems, notably by strengthening the acquisition of skills and competences, better integrating migrant children, improving access to pre-school education and supporting teachers in their recruitment and careers. Under the Europe 2020 initiative, the European Commission has also issued several policy recommendations on tackling early school leaving (European Commission, 2011). However, despite much analysis and many recommendations, educational inequalities on the ground remain pervasive as the WORKABLE European research project shows.

In fact, as very well demonstrated in several key publications by the EQUALSOC European research project, education is as much about individual empowerment as it is about societal and economic needs. Individual empowerment means enabling people to become active members of their communities and society. To this end, cognitive, social and emotional contents are being passed on in families, personal networks, kindergartens, schools, universities and companies providing vocational training. Understood in that broad sense, education enables people to participate in social and political affairs.

Education also responds to new societal and economic needs. In particular, all European countries have seen their labour markets shift towards high-skilled jobs while being challenged by massive global competition. At the same time, European economies are struggling with the transition from growing to shrinking populations, a rising average age and rising life expectancy as well as immigration and the concomitant challenges of diversity. Having a well-educated population helps societies keep pace with these rapid and massive changes which require both technological and social innovations.

If good education is needed more than ever, it is especially important to reduce educational poverty. As shall be seen, such poverty continues to exist despite the major educational expansion of recent decades. To claim that educa-
tional attainment below secondary level II has reached a saturation point, as some authors have done (Checchi et al., 2014), is far from the truth. Especially if we compare educational attainment across the EU, we clearly see that the scope for reducing educational poverty is enormous. Such individual low educational attainment must be considered to be mostly the result of institutional arrangements rather than the result of individual shortcomings. Nevertheless, due to their focus on tertiary education, existing research and national policies often fail to address educational poverty, thus ignoring one of the major sources of low wages, inequalities and serious poverty in Europe.

Protecting people against educational poverty does not necessarily mean reaching high national average educational attainment levels. It does not even imply to reduce inequality in educational outcomes (Allmendinger and Leibfried, 2003). But the extent of educational poverty does tell us how many people are just left behind. The empirical question addressed in this Review is whether countries manage to reduce educational poverty, reach a high average level of educational attainment and reduce social inequality. In trying to answer this question, notably by building on the European research projects funded by the European Commission (such as EQUALSOC, GOETE, INCLUD-ED, EDUMIGROM, YIPPEE, EUMARGINS, WORKABLE) and on the large and rich tradition of research on educational inequalities in Europe dating back to the 1960s at least (for recent publications see, for instance, Ballas et al., 2012; Felouzis, 2014; Baker et al., 2009)\(^2\), this Review would develop a solid foundation for fighting social inequality.

The answer to this question also provides the basis for all subsequent Chapters because of the close connections between education, employment, income and wealth in all countries. Fighting social inequalities at school is thus a priority in the fight against inequalities.

This chapter first discusses methods of measuring education, which have significantly improved in recent years. It then goes on to look at educational outcomes in terms of the quantity and quality of education. It ends up showing the extent to which educational attainment is socially structured by gender and family background. The following Chapters will show how much education matters for employment, income and wealth.

\(^2\) For a wealth of information on inequalities in education, beyond the European projects cited, see also the publications of the Network of Experts in Social Sciences of Education and Training (http://www.nesse.fr/nesse) and of the networks of the European Educational Research Association (http://www.eera-eceer.de/).
1.1 How do we measure education? And what does educational attainment tell us?

To measure education, researchers used to simply count the years people had spent in educational and vocational training institutions or the degrees they had earned, that is, the certificates awarded by schools and vocational training providers. In recent years, they have also collected data on cognitive competencies (i.e. what people really know or can do with their knowledge), which are being measured globally via standardized tests among different age groups and with regard to different cognitive areas, such as mathematics, reading and science³.

For the time being, comparison is limited to two measures. The first is formal education, as measured by degrees and codified by the International Standard Classification of Education (ISCED). The second is cognitive competencies as measured at the age of 15 by the Programme for International Student Assessment (PISA) and in adulthood by the Programme for International Adult Competencies (PIAAC). As for PISA and PIAAC, this Review will concentrate only on reading comprehension.

Educational poverty can be defined on the basis of the information on degrees and acquired competencies. In terms of degrees, poorly educated people are those below secondary level II. In terms of competencies, their level of competence remains below level 2. Highly educated people are those who have been awarded a tertiary degree or have reached competence levels 5 and 6.⁴

1.2 Who gets a chance? Educational attainment in Europe

Looking at the distribution of degrees awarded, vast differences in educational attainment across the EU countries can be seen, as demonstrated by the EQUALSOC, INCLUDE-ED and WORKABLE European research projects. For instance, the percentage of the young population in educational poverty (below secondary level II) ranges from 41% in Malta to 6% in Poland, the Czech Republic and Slo-

---

³ Although progress has been made, as degrees and cognitive competencies cover many aspects of education, the full complexity of education is not yet understood. What still needs to be developed are data on emotional, social and global competencies. There can be no doubt that these competencies are increasingly important in an interconnected world and that they have to be regarded as an educational good.

⁴ In the recent past, graduates of vocational apprenticeship programs have come to be included in the tertiary sector, or at the very least those who have successfully completed master craftsman certification.
vakia (see Figure 1). Despite considerable progress over the years, educational poverty remains one of Europe's greatest challenges.

**Figure 1: Population without secondary education, by age group, 2013**

(in per cent)


At secondary level II the levels for 25– to 34-year-olds in 2013 ranged between 25% and 68%, making the spread between the countries equally high. Again, there is clear progress over time. The speed at which the population’s education levels can improve is exemplified by Portugal’s unparalleled development. Among the 54- to 65-year-olds, only 9% have a secondary level II qualification, whereas 30% of 25- to 34-year-olds have a similar qualification.

In tertiary education, the countries education levels also differ dramatically (Figure 2). In Italy and Romania, 23% of 25- to 34-year-olds have a tertiary degree; in Cyprus, Ireland, Lithuania and Luxemburg, it is closer to 50%. In Poland, the recent expansion of the tertiary sector has been particularly quick: the increase here is approximately 28 percentage points. There has also been great progress in Cyprus, Lithuania, Ireland and France (increases of between 24 to 27 percentage points). In Germany, the proportion of people with a tertiary degree has only minimally increased, from 27% to 30%. A glance beyond the borders of the EU at some Asian countries shows, however, that despite all the progress, further efforts are urgently needed. Within a short period of time, South Korea has succeeded in increasing tertiary education levels from 12% (among 55- to
64-year-olds) to 65% (among 25- to 34-year-olds); in Japan tertiary attainment has increased from 30% to 55%.

**Figure 2: Population with tertiary education attainment, by age group, 2013**

(in per cent)


Moving on to **cognitive competencies**, the second measure of education, one can analyse the reading performance of 15-year-old school students (Figure 3). At EU level, 20% of 15-year-olds have low competence levels and 7% have high competence levels. The largest proportion of low achievers can be found in Bulgaria, Romania and Cyprus, where over 30% of the population fall into this category; the lowest levels are in Ireland and Estonia, with proportions of 10%. Finland boasts the greatest proportion of high achievers, followed by France, Belgium, Ireland and Poland with more than 10% each; at the lower end lies Romania, which has fewer than 2%. Here, too, casting a comparative eye beyond Europe’s borders is worthwhile. In Shanghai and Singapore, 40% of school pupils reach the highest level.

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5 For further information on PISA and PIAAC competence levels, see Annex I.
In addition to the performance of 15-year-olds, competencies measures for the population aged between 16 and 64 years (PIAAC) have recently become available. When respondents are grouped into five age categories, it becomes clear that in most countries the scores continue to rise between the ages of 16 and 24 and then decrease from the age of 25 (Figure 4). Italy is at the bottom of the table in almost all age groups in European comparison. Only among the 55- to 64-year-olds in Spain do we see worse average scores. With the exception of the highest age group, Finland and the Netherlands have by far the highest competence values in all age groups. These distributions can be explained by various phenomena. First, they are surely the outcome of educational expansion, nicely illustrating the point in time at which this process began in each country. Second, cognitive competencies in most cases decline at an advanced age. This is not the case with degrees, which remain valid throughout people's lives, even if the knowledge associated with the degree has for long been lost.

Unfortunately it is not possible to compare these two large and costly studies, PISA and PIAAC, directly with each other, as the measurement concepts used were not adequately aligned with each other. In PISA, participants were assigned to six competence levels, whereas PIAAC participants were assigned to five; in PISA, 26 EU countries participated, while PIAAC included only 17 EU countries. What this means is that we cannot track gains and losses in competencies between the 15-year-olds (PISA) and the older cohorts (PIAAC).
Now it is time to address the question posed at the beginning: do we find countries that manage to achieve a high average level of educational attainment with only minor differences between people's educational outcomes? In other words, is it possible to provide (nearly) all children with a good education? This question can be answered by comparing 1) national average levels and 2) the national distribution of educational outcomes.

1. In this comparison, the national average educational attainment level represents the competence level that people achieve on average, and thus the quality of an educational system as a whole. Levels vary strongly with education expenditures, the training of teachers, curricula and the extent of educational expansion.

2. The distribution of educational outcomes represents the degree to which children receive different kinds of support. Distribution is driven by the organisational and regional patterning of the educational system and is especially pronounced where tracking is emphasized and where selection for these tracks takes place early (Allmendinger, 1989; Allmendinger and Leibfried, 2003).
Along the two axes, we can distinguish four fields (Table 1): egalitarian countries at a high versus low level of competence, and inequalitarian countries at a high versus low level of competence. The table only shows countries that can be clearly assigned to one of these profiles. All other countries are situated somewhere in the middle section of the two axes. Regarding the 15-year-olds, the countries that reach a high level and a low spread are Ireland, Poland and Estonia (Box 1). France, in contrast, is more elitist in that regard (Box 3): average competence levels are high, but the spread is much wider than it is in Ireland, Poland or Estonia.

Table 1: Distribution and level: Institutional educational profiles (illustrated by the most outstanding countries), PISA 2012

<table>
<thead>
<tr>
<th>Distribution of competencies</th>
<th>Level of competencies</th>
<th>Ireland (286/523)</th>
<th>Poland (289/518)</th>
<th>Estonia (263/516)</th>
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</table>

Notes:

a The distribution of competencies can be considered high in this context when the score is 350 points or higher (upper quartile) and low when it falls to 290 or less (lower quartile).

b The level of competencies is defined as high when surpassing 505 points (upper quartile) or low when it is at 481 (lower quartile) or less.

c The first number reported in the brackets refers to the variance, the spread, between the 95th and 5th percentile (equality/inequality). The second number reports mean national competence (level/plateau).

Source: OECD, PISA 2012 Database.

The two other boxes represent countries with a low level of educational attainment: Lithuania provides a low-level, low-spread education (Box 2); Bulgaria

7 A corresponding comparison could also be made by referring to the population aged between 16 and 64 years (PIAAC). However, since all countries have seen strong developments in recent years (see Fig. 4), and because cohort and age effects intersect, doing so would make little sense. The differences within single countries are often larger than those between countries.
has a low level of education with a considerable dispersion below and above the average (Box 4). In view of these findings, the European Commission would be well-advised to consider not only the competence levels achieved but also the question of how high competence levels can be ensured for the whole population in education.

**Degrees and competencies: Do measures of education converge?**

Normally, degrees and competencies are placed alongside each other and remain unconnected. Behind this, the implicit assumption is that both indicators measure something comparable and those countries whose populations achieve high degrees will also have high cognitive competence scores. For a long time, the only way to test this assumption was to compare the competencies of 15-year-olds (PISA) with the degrees earned by 25- to 34-year-olds. The new PIAAC data now allow comparing the competencies of 25- to 34-year-olds with the degrees of those in the same age group.

**Figure 5: Distribution of low-level competencies (PIAAC) and low-level degrees, 2012**

(in per cent)

Sources:
Proportion of low-level competencies: OECD, PIAAC 2012 Database.
As for educational poverty (Figure 5), the correlation between low-level competencies and low-level degrees is very high. Spain and Italy at the lower end and Finland and the Czech Republic at the upper end are the best examples here. There are few countries with low-level competencies and high-level degrees or vice versa. One example is Belgium, a country where few people lack basic competencies but relatively many hold only few or no educational degrees. We find the inverse pattern in Poland. Here, many people lack basic competencies but few lack the most basic educational degrees.

Figure 6: Distribution of high-level competencies (PIAAC) and high-level degrees, 2012
(in per cent)

Sources:
Proportion of high-level competencies: OECD, PIAAC 2012 Database.

However, there are more disturbing results. The somewhat comforting finding that low competence levels and low degree levels by and large overlap does not hold true for the higher educational levels. In all countries, there is a sub-

\[ R^2 = 0.43, \text{p-value: 0.002} \]
\[ R^2 = -0.02, \text{p-value: 0.429} \]
stantially higher proportion of 29- to 34-year-olds with a tertiary degree than the proportion of people with high-level competencies (Figure 6). The most extreme case is Cyprus where over half of the population in this age group has a tertiary qualification (54%) but only 7% of this same age group score at competence levels 4 and 5. Only in Finland do the proportions of people with tertiary qualifications (40%) roughly equal the proportion of high-competence individuals (37%). This discrepancy is an alarming sign. Europe has made the free movement of labour a top priority. Employers look at degrees but only rarely screen the competencies that lie behind them. When degrees lose their meaning, this weakens the confidence of the employers but also the mobility on the European labour market.

Stratification in educational attainment

Are there groups in the population that are systematically able to reach a higher or lower level of education than other groups? To what extent can we assume that, aside from these differences, there is a systematic social structuring?

As already seen, educational outcomes differ by age. These differences are primarily cohort effects resulting from educational expansion. Looking at cognitive competencies, it is also expected that age effects should involve a decrease of cognitive competencies as people grow older, albeit with strong variations within each age group.

In addition to age, gender plays a role. When it comes to qualifications, women have caught up with men and have even managed to outperform them in some respects over time. This also applies to countries where women have had a higher education level than men for some time (OECD, 2013: 36). As far as cognitive competencies are concerned, between mathematical and reading competencies must be distinguished. In most countries, men have higher mathematical competencies than women; the exceptions are Latvia, Finland and Sweden. Regarding language-related competencies, women perform better and achieve clear competence advantages over time. In Poland, the level of 15-year-old women with high competence levels (PISA, levels 5 and 6) increased by more than 7 percentage points between 2000 and 2012. While the advantages men enjoy in mathematics remain evident over the life course, a finding confirmed by the results of PISA and PIAAC, this is not the case for literacy. 15-year-old women do better than men (PISA), whereas in the higher age groups men have
better competencies than women. Whether this is due to the different measurement instruments used in PISA and PIAAC, or whether it is due to actual gains and losses in competencies, is an open question.

The strongest determinant of educational success in almost all EU countries is social origin. This applies to both degrees and competencies. Differences between member States are striking. With respect to degrees, social origin plays a much less substantial role in Denmark, Estonia, Finland, Luxemburg and Sweden than it does in the other EU Member States (European Commission, 2013). As for cognitive competencies, the difference in the number of PISA points scored by children from the bottom 25% of PISA’s socio-economic index and children from the upper quartile is at times more than 100 points. Again, a comparison of the EU States shows that the level of this social structuring varies greatly. In Bulgaria, Slovakia, Hungary, France, Luxemburg, Portugal and Germany, cognitive competencies depend to a particularly large extent on family background. By contrast, Finland and Estonia exhibit only small differences by social origin.

Likewise, as clearly shown by several European research projects such as YIPPEE, EDUMIGROM, INCLUD-ED and EUMARGINS, in almost all EU countries the competencies of individuals who come from immigrant families and backgrounds are markedly lower than they are for other population groups. Second-generation immigrants—those born in the host society—generally achieve better educational results than the first generation. In this context, the educational differences between migrants and non-migrants can largely be explained by differences in social origins. However, different migration patterns and immigration policies in place in different countries have a considerable influence on educational success. Migrants and their descendants have a particularly hard time in the Scandinavian countries and in France, whereas differences are smaller in Latvia, Croatia and England.

Finally, the continuing reforms of educational systems in many European countries also play a significant role in shaping (non-)access to education. The GOETE European research project, for instance, shows very well how underlying trends towards individualism in society at large but also more and more in educational systems reinforce the social exclusion of already fragile young people. "Evidence of a powerful discourse of individualism was found putting students under pressure. They believe to be alone responsible for success or failure in their educational trajectories. They feel especially burdened with decision-making at transition points which implies that more and better guidance and counselling are needed. However, formal support measures suffer from little trust by students. Four
times more students refer to informal sources of support in case of school or transition problems rather than to teachers or other professionals. Informal support in turn suffers from a lack of recognition from institutional actors. In fact, findings reveal a “blaming game” between school and parents.” (Parreira do Amaral et al., 2013).

1.3 Conclusion

Educational attainment is distributed very unequally, both between the EU countries and within individual countries, regardless of whether we take qualifications or competencies as a measure. Among the societal challenges Europe faces, the greatest one lies in reducing educational poverty. Poorly educated young people will have a hard time finding a job and living an independent life, as will be shown in the Chapters to follow. An average of 8% of the young cohort lacks a general school-leaving certificate. Worse even, an average of 19% of 15-year-old boys and girls are considered ‘functionally illiterate or innumerate’ because their cognitive reading or mathematical understanding is very low. These young people have been denied a good start in life and an opportunity to find a good job. Reducing educational poverty must be made a priority in all EU countries.

The data have shown that it is possible to reduce educational poverty without endangering the overall quality of education. It is wrong to assume that a policy aimed at reducing educational poverty would water down the quality of education and lead to a one-size-fits-all low-level education. In fact, there is now ample scientific evidence that some countries successfully manage to reach a high average level of educational attainment without increasing inequality in educational outcomes.

An important key to improving the quality and equality of educational outcomes is to promote more equal access to education. Parents’ social status structures educational opportunities in almost all countries. Much can be done to give children from socially disadvantaged groups or migrant families a good start at school and in life. Highly stratified school systems in particular are not sustainable. The international comparison shows that educational systems have a great influence on the level and distribution of education. The countries that have markedly improved their performance over time are those that have opened their education systems and sort students only at a much later stage. Teacher training in these countries has also been substantially improved through incentive systems, higher wages and further education. Targeted measures for weaker
students have been introduced and the autonomy of schools has been increased (Allmendinger, 2013).

While there can be no doubt that reducing educational poverty and increasing equal opportunity in educational outcomes must be a key goal, it is unclear to what extent tertiary education must be expanded and whether it can bring all the competencies needed now and in the future in the European labour market. Some countries boast an excellent performance at secondary level II but have not expanded their tertiary sector in similar ways. They have chosen the policy not to expand their higher education sector and instead emphasize post-secondary vocational education (Austria, Germany and Central and East European countries such as Slovakia, Slovenia, the Czech Republic and Hungary). This concerns national policies in the transition from school to work and will be taken up in more detail in Chapter 2.

This chapter has also identified a number of methodological problems. In particular, we pointed out three areas. First, it is important to note that existing measures of education remain deficient. We urgently need data to assess social, emotional and global competencies. Schools need to teach such competencies. Reducing education to factual knowledge and cognitive competencies will not do justice to the individual and societal meaning of education. Doing so also fails to take account of important changes in the labour market, which relies more and more on diversity, self-managing teams and self-regulating workers. Second, the education measures used by the OECD and the European Commission paint a very different picture of educational success and of the distribution of education in various countries. High degrees in particular are too often unrelated to cognitive competencies. It might be suspected that while the EU-wide benchmarks (related to degrees) have caused Member States to adapt to these benchmarks by lowering the requirements needed, the same is not possible with regard to competencies which follow standardized tests. Awarding high-level degrees without teaching the underlying competencies is highly problematic, as it threatens the European Qualifications Framework (EQF). This problem has yet to be addressed by the European Commission. Third, for the purpose of determining educational success, the EU uses indicators that are uniformly applied to all countries (ISCED, PISA, PIAAC). Given the different demands of national labour markets, considerable can be asked whether applying such a uniform approach makes sense or not.
2. Employment and Inequalities

Today, employment is increasingly seen as a panacea for all social ills. Driven by demographic change and supported by a transformation of the Welfare State into a social investment State, large-scale activation schemes now aim to get as many people of working age as possible into employment and ensure they remain employed. The European Commission has supported this objective for more than a decade. As part of the Lisbon Strategy, the EU in 2000 stated the following goals for 2010: an overall employment rate of 70%, a female employment rate of 60% and an employment rate for older workers (aged 55–64) of 50%. For 2020 the overall employment target has been increased to 75% as part of the so-called Europe 2020 strategy. In recent years, under the so-called European Employment Strategy, the establishment of the Annual Growth Survey and of the European Semester have given the EU and its member States much improved tools such as the Employment Guidelines, the Joint Employment Report and the National Reform Programmes, which allow a refined monitoring of the employment situation in the EU countries.

Nevertheless, the impressive transformations of work patterns and of the labour markets in Europe over the last decades have left policymakers with many puzzles as to how to steer their employment policies. The common reasoning behind the existing employment objectives goes something like this: paid work determines who is included and who is excluded, who enjoys recognition and self-respect and who does not. Employment protects people from poverty and helps them to avoid having to rely on state transfers and financial support from personal relationships. It also allows people to shape their own lives, integrate into society and build up and retain their own networks. But is that truly the case? Or is that reading nothing but a popular myth?

The truth is complex and somewhere in between. We need a more nuanced approach, as a recent scientific Review of the Commission on “jobs and skills” underlined (European Commission, 2012). High employment rates for instance do not as such say anything about the quality of employment: do we want everybody employed but in many poor-quality jobs? Certainly not: the EU has actually always pressed for “more and better jobs”. Therefore there is no reason to believe that employment is THE exclusive solution to economic and social problems: as also shown in Chapter 4, many Europeans are trapped in the low-wage sector, many belong to the working poor, others have insecure jobs and often
work in small-scale, part-time employment with little or no prospects for better-paid jobs.

It is thus important to distinguish two employment measures: employment rates and types of employment.

1. The employment rate shows how many people of working age are in employment.

2. Analysing the type of employment, by contrast, gives answers to questions like: How many hours do people work? How secure are their jobs? This Review follows the latter approach and asks about the types of employment.

This Chapter is based on the finding of several European research projects such as NEUJOBS, YOUNEX, WALQING and FLOWS as well as other research results. It begins by describing a very specific stage in people’s lives: the difficult transitions between education, training and employment. In many EU countries, young people fail to get access to employment and thus begin their working lives in precarious employment, unemployment or inactivity. How can we explain the differences between Member States? Why do young people in some countries gain quicker and more effective access to the labour market than those in others? It then addresses employment rates and the important issue of the quality of jobs before offering concluding remarks.

2.1 From education to employment: or how to fight youth unemployment effectively?

High youth unemployment in many European countries is one of the central challenges of our time. Empirical studies agree that early-career unemployment has particularly long-term consequences. Individuals who are unemployed early in adulthood are considerably more likely to be unemployed later in their lives. When they eventually start working after a period of unemployment, their starting salaries are often low and then increase very little. Eventually, after 25 years, their job satisfaction is still markedly lower than that of individuals with comparable qualifications who have not experienced a period of early-career unemployment (Arulampalam, 2001). As amply shown by the YOUNEX European research project, scars remain.

However, any examination of the transition from education into employment has to consider more than ‘just’ unemployment. This is especially true if transitional experiences are attributed to specific age cohorts. That is why
statements such as ‘Every second Spaniard under the age of 30 is not employed’, or ‘Half of all young people in Greece are out of work’, as important as they are, should be interpreted with caution. In a best-case scenario, young people in this age group are not available for employment because they are still in education or training. Others are indeed unemployed, which means by definition they are looking for jobs. Many others may have already lost hope and are inactive. But others are considered as “employed”, they actually have a job but they do not earn enough for a decent standard of living.

Young people who are ‘not employed, not in education, not in training’ are called NEETs. The average proportion of NEETs across the EU-28 in 2013 was 15.9%, of which 8% are unemployed and 7.9% are inactive. However, this estimate of the proportion of NEETs may be conservative. In some countries, many young people with low education levels are enrolled in training courses. This means they are not considered NEETs even though they typically continue to face poor employment prospects when entering the labour market and are thus likely to join the NEETs.

There are dramatic differences between countries in the proportions and composition of the NEET group (Figure 7). For example, the proportion of inactivity ranges from 4% in Luxembourg, Sweden and the Netherlands to 17% in Bulgaria.

**Figure 7: Education and employment among 15–29-year-olds, 2013**

<table>
<thead>
<tr>
<th>Country</th>
<th>In education</th>
<th>Not in education</th>
<th>Not in training</th>
<th>Not employed</th>
</tr>
</thead>
<tbody>
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<td>90%</td>
<td>0%</td>
<td>0%</td>
<td>0%</td>
</tr>
<tr>
<td>Sweden</td>
<td>90%</td>
<td>0%</td>
<td>0%</td>
<td>0%</td>
</tr>
<tr>
<td>Netherlands</td>
<td>90%</td>
<td>0%</td>
<td>0%</td>
<td>0%</td>
</tr>
<tr>
<td>Austria</td>
<td>69%</td>
<td>20%</td>
<td>11%</td>
<td>0%</td>
</tr>
<tr>
<td>Belgium</td>
<td>69%</td>
<td>20%</td>
<td>11%</td>
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<tr>
<td>Bulgaria</td>
<td>69%</td>
<td>20%</td>
<td>11%</td>
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<tr>
<td>Czech Republic</td>
<td>69%</td>
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<td>Germany</td>
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<tr>
<td>Italy</td>
<td>69%</td>
<td>20%</td>
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<tr>
<td>Portugal</td>
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<tr>
<td>Spain</td>
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<td>Poland</td>
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<td>Austria</td>
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<td>Germany</td>
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<td>Italy</td>
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<td>Portugal</td>
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<td>Greece</td>
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<td>Poland</td>
<td>69%</td>
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<td>11%</td>
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</tbody>
</table>

*Source: Eurostat–Online 2014, EU Labour Force Survey (EU–LFS).*
Youth unemployment ranges from 3% in Denmark and the Netherlands to 22% in Greece. In many countries in Europe, youth unemployment skyrocketed with the financial and euro crisis and the accompanying economic collapse. There are only two EU countries in which youth unemployment has fallen: Germany and Austria.

The great differences in the proportion of NEETs between EU Member States cannot be ascribed to a single cause. Before the crisis, youth unemployment was often explained by structural components, like structural changes in industries, mismatches in qualifications or (risk)-group-specific characteristics (Dietrich, 2012). Since the beginning of the 2000s, the business cycle has emerged as an explanatory factor in macro-analytical models of youth unemployment. These models show that youth unemployment is more sensitive to business cycle conditions than adult unemployment (Blanchflower and Freeman, 2000; Jimeno and Rodríguez-Palanzuela, 2002).

The discussion has also begun to address a broad set of institutionally driven individual factors that prevent young people from entering the labour market or increase their risk of becoming unemployed. These include a lack of seniority, firm-specific human capital and labour market experience as well as a greater likelihood of working on short-term contracts and in other forms of precarious employment (Dietrich, 2012). In other words, many young Europeans seem to be trapped into a vicious circle where, ironically, their lack of experience is often the main reason for not giving them access to the labour market. The organisation of precarious employment or unemployment has thus become a long-term feature of European economics—a feature that, it seems, policymakers and employers have failed to address with effective action and determination for more than 30 years.

It is often emphasized that the proportion of NEETs is systematically connected to demographic developments. The higher the share of young people, the higher the youth unemployment rate. This intuitively plausible relationship was observed within the countries of the EU prior to the Euro crisis. In 2003, the unemployment rate for 15-24-year-olds was highest in Poland—the country with the highest share of young people among the EU-27 countries. In contrast, Denmark, Germany and Luxemburg, with a smaller share of young people, had comparatively low unemployment rates among this population. However, this explanation did not prove sustainable in subsequent years. In many countries, the proportion of 15- to 24-year-olds fell between 2003 and 2012; and yet, youth unemployment rates continued to rise over the same period. Only in Belgium,
Finland, Germany, Malta and Poland did the share of 15- to 24-year-olds and the youth unemployment rate fall between 2003 and 2012.

Even if cultural norms, such as the norm of non-employment of women, help explain the vast differences between NEET populations, it is the type of occupational training and the concomitant structured transition between school and work that have received the most attention from scholars and policymakers. This Review will therefore explore institutional sources in particular detail. Across Europe, systems of vocational training differ greatly. In the UK and Ireland, a liberal market model dominates: training takes place on the job. The skills that are taught are largely practical and very company specific; therefore they are difficult to transfer from one company to another. In the Scandinavian countries and in France, by contrast, training is principally delivered in a full-time school setting. The contents taught tend to be theoretical in nature, highly standardised and not particularly tailored to the needs of individual companies. The third type, the cooperative dual model can be found in Switzerland (60% of young people are in a dual apprenticeship), Denmark (48%), Germany (43%) and Austria (35%) (Ebner, 2013). This model combines the characteristics of the other two systems. The combination of classroom learning and workplace training results in an apprenticeship that is both theoretical and practical and therefore likely to be more transferable.

These three training regimes shape the transitions from training to working life. Many studies show that training on the job does facilitate a speedy transition between education and employment but that it is not sustainable over time. Most of the knowledge communicated is too fragmentary and company-specific to be used elsewhere than in the company providing the training. In contrast, in full-time school-based training systems, transitions take comparatively long. The knowledge of young people from these schools is often broad but fails to meet the full needs of employers who wish to avoid a long introductory phase. The dual apprenticeship system, which attempts to combine both advantages, leads to quick and usually sustainable transitions. There are two reasons for this. First, the apprentices are already a part of the company before the transition; they are insiders, not strangers. The company has already invested a lot in its apprentices, knowing that it will recoup this training investment in a few years. Second, the classroom training modules help ensure that the apprenticeship is broad-based and standardised, meaning that the new employees are not too dependent on the company that trained them. Due to their high level of standardisation, vocational training degrees signal to all employers what the new worker is capable of doing. In other words, employers of young apprentice-
ship graduates see a match between certificates and skills. For many young people in countries with a dual apprenticeship system, this form of training is anything but a second-best option after university. Interestingly, in these countries an increasing number of young people eligible for university study still choose a dual apprenticeship, expecting to find employment more easily. The corollary is that these countries have seen only been limited attempts to expand tertiary education on a larger scale (see Chapter 1, Figure 2).

Is the dual apprenticeship system transferable? There are certain structural challenges that need to be addressed. These relate to the intersections between schools, tertiary institutions and further education. Countries where dual apprenticeship systems are in place, such as Switzerland, Denmark and Austria, have met these challenges (Ebner, 2013). There are 350 training occupations in Germany, 250 in Austria and Switzerland, and 150 in Denmark. The fact that there are fewer occupations in the latter three countries means that those occupations are more broad-based, giving young people more mobility in their occupations.

Austria and Denmark offer a kind of ‘general apprenticeship’ in the first year, allowing trainees to get a sense of the occupation they are drawn to before deciding in favour of a specific occupational field. In such systems, it is crucial to allow young people to move between jobs in order to find a proper career that suits them. The same applies to ensuring greater mobility between the occupational training and the tertiary sectors. With its vocational education colleges, Austria has broken new ground. The time pupils spend at school is extended by one year, enabling them to earn a double qualification: a university entrance diploma and a vocational diploma. Similarly, the Swiss vocational baccalaureate leads from an apprenticeship to a degree at a tertiary-level institution (Ebner, 2013; Graf, 2013).

In conclusion, the dual apprenticeship has proven its value in easing the transition between education and employment. Nevertheless, it must be acknowledged that the higher demands of the labour market will not leave this dual system unchanged.

2.2 Employment rates: one objective, many national realities

Employment rates and conditions differ greatly between the EU Member States. Between 2002 and 2012, employment across all EU countries rose slightly from 67% to 69%. Behind this average there are large differences in country-specific employment rates and trends. In Greece and Croatia, the employment
rate in 2012 was around 55%; in Sweden it was almost 80%. Despite the economic and financial crisis there were increases in employment in some countries in the same 2002-2012 period, such as in Germany (plus 8 percentage points), Poland and Bulgaria (plus 7 percentage points) and Malta (plus 5 percentage points).

Figure 8: Employment rates, 20-64-year-olds, 2002, 2007 and 2012
(in per cent)

![Figure 8: Employment rates, 20-64-year-olds, 2002, 2007 and 2012](image)


However, other countries witnessed a collapse in employment, such as Greece, Ireland and Portugal (a fall of 7 percentage points each). Comparing the 2002 and 2012 figures, we see that the differences between countries regarding their employment rates did not change so much, with of course some important exceptions in countries most hit by the crisis after 2008 (Figure 8).

Age structures employment in all countries. In general, employment trajectories over the life course are characterized by low employment rates at the beginning and at the end of the working life, while employment rates reach their peak between the ages of 35 and 45 years. Differences at the start of the working life can be explained by the varying length of education and training, as well as by phases of military service and difficulties with finding jobs, especially among the low skilled. The low employment rates at the end of the working life are related to the fact that many people in several European countries leave the workforce due to early retirement schemes. The consequences are sub-
stantial. In virtually all countries, retirement benefits are linked to the number of years in employment. As a result, delayed entries into employment and early exits from employment also determine people's financial situation – and hence financial inequality in old age.

Figure 9: Employment rates in Europe, total population and 20-24-year-olds, 2012
(in per cent)

![Figure 9: Employment rates in Europe, total population and 20-24-year-olds, 2012](image)

Data Source: Eurostat; Authors Calculations.

If we concentrate on senior individuals (aged 55-64) in 2012, only 10 of the EU-27 countries reached the 'full-employment' target that was set for this age group under the Lisbon Strategy for Growth and Jobs (50%). Senior women especially fall short of this target, with noticeable exceptions in the Scandinavian countries and Germany, Latvia and Estonia. However, most countries, except Greece and Portugal, succeeded in raising the employment rate of senior people between 2002 and 2012. Germany, the Netherlands and Austria showed a considerable increase of about 23, 17 and 15 percentage points, respectively. Impressive increases can also be seen for some of the new Member States, such as Slovakia and Bulgaria, with about 19 and 15 percentage points in employment. These large-scale country differences between the employment rates of 55- to 64-year-olds are partly explained by the variations in pension schemes and labour market situations (Hartlapp and Schmid, 2008).
Variations in actual retirement age are huge, even between countries that have the same statutory pension age. In the majority of the EU-28 countries, the official pension age is 65. In Belgium and Luxemburg, the average age for men and women to leave the labour force is below 60. Women and men from the Baltic States, as well as Romania and Portugal, tend to leave the labour force (on average) later than the official pension age. The effective pension age is generally determined by many factors but retirement schemes certainly have a huge impact (OECD, 2011). Social and individual factors also influence the decision to retire. Research shows that the greater people’s private wealth, the earlier they retire, as wealth ensures that the current living standard can be maintained after retirement (Skirbekk et al., 2012). There is also ample evidence that the boom of the 1990s caused a decrease in retirement age by capital holders (Corando and Perozek, 2003). Moreover, a survey during the financial crisis (2008–2009) indicates that the majority of those aged 45 and more who lost money during the crisis expected to delay their retirement (Skirbekk et al., 2012). However, higher income is also associated with higher education, which leads to the possible explanation that wealthier people might work longer because they entered the labour market later than those with less education.
income and education are inversely correlated with mortality, higher educated people retire later because they have a higher life expectancy. Early inequalities thus have a strong impact over the life course.

Levels of education and employment rate

Education is by far the most important factor impacting on employment. This is vividly illustrated in Figure 11. It shows the differences in employment rates between people with a tertiary education and a medium-level education (represented by blue bars) and the differences between people with a low and a medium-level education (represented by the green bars).

**Figure 11: Relative employment rate of 20–64-year-old workers, by educational attainment, 2012**
(in percentage points)

![Relative employment rate of 20–64-year-old workers, by educational attainment, 2012](image)


In all countries: the higher the education, the higher the employment rates. On average for the EU–28 countries, the disadvantages experienced by people without qualifications are higher (minus 25%) than the advantages of tertiary-level graduates (plus 18%). Nevertheless, there are still important differences between countries. Some countries provide equal access to employment for people from all qualification groups (Portugal, Cyprus). In other countries, there is a split between the low-education group and the rest of the population (Slovakia, the Czech Republic, Hungary, Poland, Belgium, Bulgaria), while another group of
countries offers highly educated individuals particularly good employment opportunities (Lithuania, Croatia and Greece).

**Female employment is still lagging behind**

As analysed by the FLOWS European research project, employment rates also differ systematically for men and women. In all EU-27 countries, men had markedly higher employment rates than women; the average EU-27 difference between male and female employment rates is 12 percentage points. However, variations between countries are again important. In Malta, the difference is 32 percentage points, in Finland it is 3 percentage points, and in Lithuania it is only 1% (Figure 12).

**Figure 12: Employment rate of 20-64-year-olds, by gender, 2012**

(in per cent)

![Bar chart showing employment rates by gender across EU countries](source: Eurostat-Online 2014, EU Labour Force Survey (EU-LFS))

**2.3 In search of quality of employment**

A job is good but a good job is even better. The quality of jobs has been analysed in particular by the WALQING European research project which stresses that employment rates certainly matter, but so does the type of employment. The fundamental question in this context is: what is a good job? Often, a ‘good job’ is still synonymous with the so-called typical employment relationship: an uninterrupted full-time job requiring social insurance contributions with a pre-
defined career path and corresponding salary increases over the life course. Work that deviates from this model (i.e. part-time work, fixed-term contracts, agency-based employment or (solo) self-employment) is described as atypical (and thus lower-quality) employment. The practice of calling one typical employment relationship ‘standard’ and other diverse types of employment ‘atypical’ deserves to be questioned. For women, for instance, typical employment was never ‘typical’; it was the exception rather than the rule. Women’s employment careers are in fact characterized by interruptions and by long periods of part-time work. The concept of the standard full-time employment relationship historically emerged in countries in which one such job was understood to be enough to ensure the well-being of an entire household. Things have changed tremendously since then.

There are many different types of employment. Not all atypical jobs are precarious: open-ended part-time jobs involving substantial hours and social insurance contributions are one example. But there are also many different kinds of marginal fixed-term jobs exempt from social insurance contributions and associated with low hourly wages in Europe (European Commission, 2010). Therefore, this Review suggests a precise analysis of the differences between ‘typical’ and ‘atypical’ types of employment.

Before discussing the various forms of atypical employment in the EU Member States, one can first take a look at typical work hours, as shown in Table 2. There is considerable variation within the EU, with weekly work hours ranging from 38.8 in Denmark to 43.1 in Austria. This means that the number of hours people typically work is higher than what has been set down in collective bargaining agreements in all EU countries. The differences are rather small in the Eastern Europe countries, but in the UK and Austria, that ‘extra work’ adds up to no less than five hours per week.10

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10 Table 2 also takes account of the differences in actual work hours between men and women. Only working women have been included, however. The fact that gender differences are quite small in some cases should not obscure the fact that the working hours of men and women with children (not shown here) diverge much more widely.
Table 2: Collectively agreed and actual full-time work hours in Europe, 2013

<table>
<thead>
<tr>
<th>Country</th>
<th>Actual full-time work hours (total population)</th>
<th>Gender differences in actual full-time work hours</th>
<th>Collectively agreed full-time work hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>France</td>
<td>40.7</td>
<td>2.7</td>
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<tr>
<td>Denmark</td>
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<td>37.0</td>
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Sources:
Collectively agreed full-time work hours: European Industrial Relations Observatory (EIRO).
* No collective agreements on full-time.

To illustrate the various forms of employment, the entire working-age population (15- to 64-year-old) can be divided into ten groups: people in standard employment, substantial part-time, marginal part-time, fixed-term employment
part-time, fixed-term employment, solo self-employment, self-employment, unemployment, inactivity, and inactivity in education.11

In addition to indicating the 2011 percentages, the trends that have occurred for each group since 1996 are also shown. As an example, Figure 13 shows the composition of employment in two countries with very different employment profiles, Hungary and the Netherlands.12 In 2011, 55% of the working-age population in Hungary was employed, of which 42% were in full-time employment and 13% in various forms of atypical employment. The rest of the population (45%) was not employed. Of these, 13% were still in education, 25% were inactive, and 7% were unemployed. Little has changed over the course of the past 15 years: the proportion of ‘inactive’ people has fallen slightly and the proportion of unemployed people has risen slightly. The situation in the Netherlands is entirely different. There, 75% of the working-age population are in employment, a much higher rate than in Hungary; however, the proportion of people in full-time employment (28%) is markedly lower. When we look at the breakdown of the various types of employment, it is evident that atypical employment is ‘typical’ in the Netherlands. It is practised by over half of employees. Over the last 15 years, two particularly noteworthy developments have occurred in that country: the proportion of people in employment has fallen by 6 percentage points and the proportion of people in ‘small full-time employment’ has increased by 6 percentage points. Today there are also fewer ‘inactive’ people in the Netherlands; however, more people are in precarious employment situations.

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11 The results described here are drawn from the study by Allmendinger et al. (2013). The sample included all people who were of working age (between 15 and 64 years) at the time of the survey, excluding those living in collective living quarters (monasteries/ convents, hospitals, etc.) and those doing compulsory military service. A person was considered employed if they were working in the private or public sector, either in a dependent or self-employed capacity, for at least one hour a week, and receiving a salary, wage or other monetary remuneration for that work. Individuals were considered unemployed if they were not employed but actively seeking work and available to the labour market, or if they were entering employment within the following three months. Those who were neither employed nor unemployed were considered economically inactive. Inactive individuals who were in education or training were assigned to the inactive in education or training category. A standard employment relationship exists when an individual is in a dependent employment relationship for at least 35 hours per week and has a permanent employment contract. Marginal part-time employment is employment with fewer than 20 hours per week. Substantial part-time employment is employment with 20 hours and more per week but fewer than 35 hours per week. Fixed-term employment exists when the period during which a contract is valid is limited. We differentiate between fixed-term employment (35 hours and more per week) and fixed-term part-time employment (fewer than 35 hours per week). Self-employment exists when an individual’s main economic activity is not dependent employment. Solo self-employment refers to self-employed individuals without employees.

12 Profiles of the other EU countries can be found in Allmendinger et al., 2013.
What role does atypical employment play? Are increases in employment linked to increases in atypical employment? Is atypical employment even replacing ‘good’ work? There are no clear patterns. In the Netherlands, Austria, Germany and Italy, increasing employment rates have been accompanied by an increase in atypical employment. In the UK, France and the Scandinavian countries, employment rates are rising without an increase in atypical employment. Interestingly, Romania has even registered an increase in employment with a simultaneous decrease in atypical employment. The duration of atypical employment also varies considerably, as the European research project GUSTO shows for the Nordic countries. After one year, 24.5% of Finns have moved from a fixed-term contract to a permanent contract, compared to 49.5% of Norwegians (Berglund and Furåker, 2010).

As with employment rates, the various types of employment differ systematically by age, education and gender. Likewise, the differences between the EU countries are enormous. Given the limited scope of this Review, only a few glimpses of this wide-ranging diversity can be provided.

Figure 14 shows types of employment by age. The examples of Finland and Belgium are instructive. In both countries, the 2011 employment rates in the middle age category (30 to 49 years) are high at 84% and 82%, respectively. However, the percentage of ‘inactive’ people in Belgium is more than twice as high as in Finland (although the last couple of years have seen a significant increase in all modes of employment). It is also clear that Belgium and Finland have a com-
pletely different approach to senior (above 49 years-old) employment. This points to the importance of national environments.

**Figure 14: Forms of employment in Finland and Belgium, by age, 1996–2011**
(in per cent)

Source: Allmendinger et al. (2013). *Data Source: EU Labour Force Survey (EU-LFS).*
With regard to education, Figure 15 gives a breakdown of employment for each of the three qualification levels.\(^\text{13}\)

**Figure 15: Forms of employment in Germany and Italy, by education, 1996–2011**

*(in per cent)*

Source: Allmendinger et al. (2013), Data Source: EU Labour Force Survey (EU-LFS).

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\(^{13}\) The ‘low’, ‘medium’ and ‘high’ education groups are based on the UNESCO International Standard Classification of Education (ISCED). The ‘low’ education level covers ISCED groups 1, 2 and 3c, that is, those individuals who left the education system no later than the end of the second phase of basic education and did not participate in any additional formal education beyond this. The ‘medium’ category includes ISCED groups 3 and 4 (excluding 3c) and therefore encompasses all those who completed upper secondary education or an apprenticeship, as well as those who completed a programme in preparation for tertiary education. ‘Highly’ qualified individuals are those in ISCED groups 5 and 6. These are people with a tertiary-level qualification.
It shows two countries, Italy and Germany, characterized by entirely different patterns. In Germany, the standard employment rate is extremely low among low-skilled workers (19%). Among people with mid-level and high-level qualifications, the same rate is almost twice as high, with no great differences between the two (44% and 52%). Therefore, the German vocational training system proves its worth beyond the transition from education to employment. The gap between the various groups increased between 1996 and 2011. It is thus clear that in Germany poorly qualified individuals have increasingly become isolated from the other groups. In Italy, standard employment rates are at a similarly low level among individuals of all three qualification levels. Differences emerge, however, once we look at the types of employment: Atypical employment, for instance, is much more prevalent among university graduates than among low-skilled workers. Few differences have emerged between the three groups over time. Within the group of medium and high-skilled workers, the proportion of people in solo self-employment has risen markedly, however. This indicates a certain mismatch between education and employment, which could almost certainly be improved by a dual apprenticeship system. In conclusion, well-educated people have significantly better chances of finding and retaining a job. Their position in the labour market is better than that of the other groups. Nevertheless, atypical employment for this group has also become a new significant feature.

Women are found in atypical employment more often than men. But again, there are major differences between countries, which illustrates how gender regimes can be influenced politically. This is evident from Figure 16. In the Netherlands, 80% of men and 70% of women are in employment (2011). But 44% of men work full time, compared to only 12% of women. The situation in Finland is quite different. Here, 72% of men and 68% of women are in employment. The differences in standard employment rates are similarly small: 47% of men and 40% of women work in permanent full-time jobs. Even if forms of atypical employment differ between genders—self-employment is more common among men than among women, whereas women are more frequently engaged in substantial and marginal part-time employment—Finland does achieve considerably higher levels of gender equality.
Figure 16: Forms of employment in the Netherlands and Finland, by gender, 1996–2011
(in per cent)


Source: Allmendinger et al. (2013), Data Source: EU Labour Force Survey (EU–LFS).

Employment in Finland by Gender (1996–2011).

Source: Allmendinger et al. (2013), Data Source: EU Labour Force Survey (EU–LFS).
2.4 Conclusion

Employment rates have risen in most European countries. But that does not make the differences between countries any smaller. This is true of both employment rates and types of employment. In some countries the employment rate is low but all those in employment have full-time jobs; in other countries employment rates are high but people are engaged in multiple forms of atypical employment with potentially limited resources (as will be seen in Chapter 4). Thus the link between rising employment rates and atypical employment is anything but automatic.

The EU has to open up to this discussion. It keeps formulating objectives that refer to employment and unemployment rates while still insufficiently addressing the various forms of employment. This too easily suggests that any kind of paid work is better than no paid work at all. Much more than in the past, the EU has to define qualitative goals for ‘good work’, in line with its previous policy of "more and better jobs". In this context, what is needed is not just an employment policy but also a time policy. Which ratio between paid work and unpaid work is appropriate over a person’s entire life course? How do we reorganise periods of paid work and unpaid work (parental and/or child care, housework)? How do we reorganise periods of inactivity? A recent research Review of the European Commission entitled ‘New skills and jobs in Europe: Pathways towards full employment’ (2012) already pointed out to these issues as well as to the important need to address them at European and national levels. The NEUJOB European research project is full with excellent scientific analyses and sober policy recommendations on how to try to remedy the employment and unemployment problems in the EU (Beblavý, et al., 2014).

Social inequality is rising when it comes to accessing employment. Whereas persons with high-level professional qualifications and a tertiary degree experience high employment rates, persons with low-level qualifications are increasingly excluded from employment. This finding applies to all forms of employment. At the same time, both typical and atypical employment relationships are more common among persons with high-level qualifications; they are by no means characteristic of persons with low-level qualifications.

Nevertheless, people with low qualifications find it harder and harder to find stable and quality jobs. The increasing exclusion of persons with low-level qualifications is especially alarming because the marriage and partnership market has changed over time. Assortative mating—that is, marriage between individuals who are similar to each other in terms of their education—is much more
prevalent today (Blossfeld, 2009). As a consequence, being in partnership significantly increases individual risks instead of reducing them. Entire households and families are thus either being excluded from employment or benefit from their access to (dual) employment. Young people with low-level qualifications hardly have a chance even in countries with a low degree of fertility. The highly qualified, by contrast, do not experience any disadvantages from educational expansion. More and more, they are pushing the less qualified out of the labour market. The permanent exclusion of persons with low-level qualifications creates individual problems that are also passed on to the next generation, causing tremendous damage to society in the longer term. This is where strong policy action is needed, both in preventive ways through education and in compensatory ways through continuing education opportunities in later life. Much more than in the past, such opportunities must be offered in individualised forms and supported in equal measure by all social partners.
3. Income, Education and Employment

When speaking about social inequalities, income is a major factor to consider. As much as education and employment matter, at the end of the day people need enough money to live. Income thus constitutes the third axis of social inequality—three axes that need to be analysed independently of each other, despite the fact that they are highly correlated. This chapter focuses on earnings, in particular the social structuring of people’s earnings by education and gender. In Chapter 4, the Review will then go on to discuss the distribution of incomes and wealth, including issues of poverty and deprivation arising from this distribution.

3.1 Education still provides income provided there is education

Education does pay off in all EU countries. The earnings of university graduates are above those of persons with mid-level qualifications, who in turn mostly earn more than persons without a vocational training degree (Figure 17). Across the EU-27, persons with low-level qualifications earn on average 15% less than persons with mid-level qualifications. Such income differentials are especially pronounced in Germany, Slovakia and Austria. This illustrates the downsides of the dual vocational training system. Dual training programmes help people find employment and serve to reinforce the income gap between those with mid-level and low-level qualifications. In countries as different as Denmark, Finland, Sweden, Greece, Cyprus and Lithuania, income differentials between persons with low and mid-level qualifications are comparatively small.14

Figure 17 also shows that income differentials between persons with high and mid-level qualifications are much higher than between persons with mid and low-level qualifications. Across the EU, persons with high levels of education earn on average 44% more than persons with mid-level qualifications. Educational returns are especially high in Portugal, Poland and Cyprus, where persons with high levels of education make more than twice as much income as persons with mid-level qualifications. Another finding that stands out is that university-based education and dual vocational training are far from equal, at least in Germany and Austria. In Germany, persons with a university degree earn 70% more than persons who completed a vocational training programme;

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14 To be precise, labour force participation among persons with mid-level qualifications is higher than it among those with low-level qualifications in these countries as well, but if persons with low qualifications do find a job, the conditions are quite similar.
in Austria, that figure is 50%. This runs counter to political messages in these countries claiming that academic and vocational training are of equal worth.

**Figure 17: Relative hourly earnings of 25-64-year-old workers, by educational attainment, 2010**

*Source: Eurostat–Online 2014, Structure of Earnings Survey (SES).*

*Note: Data refer to enterprises with 10 employees or more and to NACE Rev.2 sections B to S excluding O.*

An impressive finding emerges for Sweden, Denmark and Finland, where income differentials by educational attainment are extremely small. This presents a challenge to functionalist and economic theories claiming that a high level of educational attainment in the population can only be achieved by providing suitable financial incentives. Denmark is of particular interest for another reason: it runs a vocational training system without excluding the low skilled and without favouring academic over occupational careers.

All in all, however, one has to agree with the results of the European research projects INEQ and PROFIT: over the last decades, a polarisation of income by education has been noticed in most EU Member States. This polarisation can generally be explained by the transition from manufacturing to services in a knowledge-based economy, in which value is created through innovation—a fact that does not benefit all groups of society but mostly those with high-level qualifications. In more recent years, however, income differentials by qualification evolved in diverging ways (Figure 18). Germany for instance, between 2006
and 2010, saw a widening of the income gap between persons with low qualifications and those with high qualifications; people with low qualifications lost 11 percentage points compared to persons with mid-level qualifications, whereas those with high qualifications gained 9 percentage points compared to persons with mid-level qualifications. However, a completely different picture emerges for the United Kingdom, for example. There, between 2006 and 2010, the gap between people with low and mid-level qualifications decreased by 13 percentage points while the gap between those with mid-level and high qualifications even dropped by 21 percentage points.

**Figure 18: Changes in returns to education, 2006 and 2010**

(in percentage points)

Note: Data refer to enterprises with 10 or more employees and to NACE Rev.2 sections B to S excluding O.

How can these divergent developments across the EU-27 countries be explained? A first approach is to ask: do people’s incomes depend on their competences, rather than on their degrees, in some countries? Have degrees lost their power in matching people to jobs? A second approach would try to assess whether educational returns depend on the overall level of educational attainment in a given society. In other words, do returns to education decrease, especially for people with a university degree, when many people have a tertiary-level education?

*Is the age of degrees over? Are people’s earnings driven much more by their cognitive competences rather than by their certificates or diplomas?*
The information on the level and distribution of competences available for some of the EU-27 countries (OECD, 2013a) can be systematically connected to their earnings. In Figure 19, the horizontal line represents the income of persons with a medium level of competence (defined by the PIAAC consortium as skill level 2). The earnings of persons with very low competences (level 1) and those of persons with higher (level 3) and very high competences (levels 4 and 5) are then projected in relation to the horizontal line.

Figure 19: Relative hourly earnings, by PIAAC literacy competences, 2011 (in percentage points)

A clear structure emerges for all countries covered by PIAAC: earnings and competences are closely connected. The extent of that connection, however, varies widely between countries. In the UK and Poland, the earnings of persons with very high competences (levels 4 and 5) are 65% higher than those with medium skills (level 2). In Sweden, Denmark, Belgium and Finland, the difference is only about 20%. At the lowest skill levels, people with low competences in Germany earn 19% less than persons who scored at skill level 2; in Finland, by contrast, they only make 9% less.

If we compare formal educational certificates and competences and their relationships with earnings, a largely coherent picture emerges. In Sweden, Denmark, Belgium and Finland, income differentials by education are small, regardless of whether we look at formal degrees or competences. Likewise, income differentials by education (whether degrees or actual competences) are relatively large in the UK, Poland and Germany. Only one country, Spain, does not fit.
this pattern. There, income is strongly driven by competences and not by degrees. It can thus be concluded that degrees have not lost their value; they continue to serve as an important valid signal for employers. Nevertheless, it emerges from these data that degrees and competences do not correspond to each other, especially at higher levels. Degrees are not a 'proxy' for competences. That is why future research has to work with both measures in order to understand the selection processes of education into employment.

**Does education lose its value if many people are well educated?**

It is often argued that returns to education are particularly high if there are only few highly educated people. In economic terms, too much education would affect returns to education negatively since a good possessed by only a few is a valuable asset in the labour market. Accordingly, the returns to education should be low in countries with a high percentage of university-educated individuals. Is this hypothesis confirmed empirically? Figure 20 illustrates the relationship between returns to education and the percentage of university graduates. Cyprus, Luxemburg and the UK, even though they have a high percentage of university graduates, still witness very high returns to education. Likewise, returns to education in Malta, Austria and Italy are not particularly high, the small percentage of university graduates in these countries notwithstanding. Sweden, Denmark, Finland and Belgium do match the predicted outcome: these countries have a high percentage of university graduates but extraordinarily small returns to education. Portugal and Romania have few university graduates reaping high returns to their education. Despite these differences, however, there is no reason to fear that getting a university degree will no longer pay off if many people are highly educated. Similar conclusions emerge when competences are considered. Again, one might expect the returns to competences to be particularly high if the number of people with high-level competences is small. But this is not the case. In Belgium, for example, 12.4% of the population scored at skill levels 4 and 5 in the PIAAC study, and their return to competence is 21%. In the UK, the share of highly skilled individuals is 13.1%; their return to competence is about 66%. It can be concluded that the institutional context counts more than the share of graduates in explaining how much education pays off.
Contrariwise, do income differentials widen if more low-skilled persons participate in the labour force?

The link between income differentials and the labour force participation of low-skilled individuals has been pointed out multiple times in comparisons between Germany and the United States. Both Katz and Murphy (1992) and Levy and Murnane (1992) found that Americans with low levels of education do find a job in most cases—albeit only at miserable wages. Accordingly, wage differentials in the US are quite high. In Germany, persons with low qualifications are downright excluded from the labour market. They are inactive or in long-term unemployment and therefore receive welfare benefits from the government. If these low-skilled persons do find their way into the workforce, however, they benefit from the conditions of a regulated labour market, earning the wages fixed by collective bargaining agreements and being much better off than when they are on welfare. Given the Agenda 2010 reforms in Germany, which loos-
ened labour market regulations and therefore the guarantee for decent pay, one may wonder whether this is still the case. Moreover, can these results be transferred to the EU-27? Analyses show that the sharp increase of income differentials in some EU-27 countries, notably Germany, is not linked to rising labour market participation among the low-skilled population. On the contrary, their employment rates have declined over time, reinforcing exclusion. In conclusion, it is not the labour market participation of low-skilled individuals that shapes the extent of social inequality. It seems that in some countries, the low skilled are excluded from work and supported by the government while people with medium skills take their low-wage jobs, thus increasing social declassification.

3.2 Income and gender: the need to change family life and income distribution

Today, there are fewer women than men with low-level educational degrees and competences. Likewise, more women than men have a high-level education and high-level competences in many of the EU-27 countries. Another important improvement is that more and more women now translate their education into employment. And yet the labour force participation of women is lower than that of men in all EU-27 Member States (see Chapter 2, Figure 12). Likewise, as shown earlier, there are vast differences in the types of employment that men and women engage in (see Chapter 2, Figure 16). Besides, in all EU countries, women are more likely than men to interrupt their careers (periods of so-called 'inactivity') and work in atypical forms of employment (especially part-time work and fixed-term contracts). What is also clear is that women retire earlier than men, thereby further reducing their total time of employment, with profoundly negative effects on their lifetime earnings and the size of their retirement pensions.

The mean gender hourly wage gap in the EU is 16% (Figure 21). At the beginning of people’s working lives, earnings differences between men and women are rather small but then keep growing over time. In Germany and Finland, for example, the gender wage gap at the age of 25–29 is 4%; at the age of 40–44 it is 22%; and at 55–59 years it is 31% (OECD, 2013b: 145). Moreover, the gender wage gap is particularly wide in the upper income brackets, meaning that women in leadership positions earn significantly lower hourly wages than men in the same leadership positions.
How can the wage gap be explained?

Researchers have identified a whole array of causes. There are many occupations that are primarily performed by men; others are primarily performed by women (horizontal segregation). In particular, women are highly overrepresented in the public sector. Typical female occupations are characterised by low entry salaries in most cases, but more importantly, salary progression in these occupations is flatter than that in ‘typical’ male occupations (OECD, 2013b: 132; Flabbi and Tejada, 2012). Whereas the right to ‘equal pay for equal work’ has been firmly established in most countries, the principle of ‘equal pay for comparable work’ is not yet put into practice although this principle has been stated in the European treaties for decades (Treaty of Amsterdam 1997; see CJCE case Defrenne II, 1976). What is more, all EU-28 countries have significantly more men than women in leadership positions (vertical segregation), where income differentials are particularly high. One of the reasons for this is that interruptions in employment and a reduction of working hours are severely punished in financial terms (accordingly, the gender wage gap is smaller if we only look at full-time workers, OECD, 2013b: 143). Interruptions in employment cause women’s careers to stall: once they are working part time, they are no longer offered...
leadership positions nor wages comparable to those of men (Breen and Cooke, 2005).

However, the gender wage gap cannot be fully explained by pointing to employment careers, occupational characteristics, work hours or education. Some unexplained variance remains. The scope of this ‘variance’ varies widely between the EU-28 countries (OECD, 2013b: Table 13.5; Arulampalam et al., 2007) and can be explained in part by country-specific differences in family policy, labour policy and taxation. For instance, the wage gap decreases along with the percentage of children who attend formal caregiving institutions ($R^2=0.56$; OECD, 2013b: 147). Conversely, the wage gap increases along with the number of weeks of paid parental leave ($R^2=0.604$; OECD, 2013b: 148). Likewise, countries with unregulated labour markets are characterized by significantly higher wage differentials than countries with regulated labour markets.

Employment careers also determine people’s material situation in retirement, as most pensions are based on employment duration and average earnings. The gender wage gap thus turns into a gender pension gap—a gap that persists for many years: on average, women at the age of 60 can expect to live for another 22.5 years, compared to 18.5 years for men who have reached the same age (OECD, 2011: 29). In a comprehensive study conducted on behalf of the European Commission, Francesca Bettio, Platon Tinios and Gianni Betti (2013) have looked at the gender pension gap in detail. The picture that emerges is a dark one. From the wealth of the authors’ findings, one can highlight three key results: the gender pension gap, the concentration of women in the low-pension segment and the evolution of the gender pension gap over time.

Across the EU-27, the average gender pension gap is 39%. The gap is especially wide in Luxemburg (47%), Germany (44%) and the UK (43%); it is extraordinarily small in Eastern European countries such as Estonia (4%), Slovakia (8%) and Latvia (9%). If we calculate the pension gap without taking widowed women into account (thereby excluding widow’s pensions), the average EU-27 gender pension gap increases from 39% to 53%.

15 Bettio et al. (2013) refer to the EU-SILC data while also using the SHARE data for validation purposes.
16 It is important to point out that the EU-SILC data do not allow for providing separate information for people’s own old-age pensions (i.e. pensions earned through their own employment) and widow’s pensions (i.e. pensions earned as a result of marriage). Furthermore, statutory pensions and employer-sponsored pensions are lumped together in EU-SILC. Private pensions are shown separately, but their share is very small in most countries. The SHARE data illustrate that
Figure 22 shows both the gender pension gap (above the horizontal axis) and the gender pay gap (below the horizontal axis). Even if we include widow’s pensions, the gender pension gap is significantly larger than the gender pay gap and the gap in mean annual gross earnings, as supplied by Eurostat. Two groups of countries can be clearly distinguished. Estonia, Slovakia, Latvia, the Czech Republic and Denmark are characterized by a small pension gap despite a large pay gap.

**Figure 22: Gender gap in pensions and gender pay gap, pensioners over 65 years, 2010**

(in per cent)

![Figure showing gender gap in pensions and gender pay gap](image)

Source: EU-SILC, Bettio et al (2013): The gender gap in pensions in the EU. P. 37 (here Figure 1.5).

In these countries, we find pension systems that include some kind of age pension. In the second group of countries, gender pension gaps are much wider than gender pay gaps. These are the countries in which the pension system follows the social insurance principle and thus reproduces or even intensifies the labour market situation. In addition to the relation between male and female pensions, the size of people’s pensions is also very important. If we sort men according to the size of their pension benefits, we can form three groups: one-third of men receive the lowest pensions, another third the highest pensions; the rest is somewhere in the middle. Now how many women do we find in the lower third of the distribution scale defined above? Across the EU-27, an average the distribution of employer-sponsored pensions between men and women is especially unequal, significantly increasing the gender pension gap.
of 64% of all women receives pensions that fall into the bracket that includes the 33% of men with the lowest pensions. In other words, there are 1.9 times as many pension-poor women as pension-poor men. The group of high-income pensioners includes only 11% women. For every three pension-rich men there is less than one pension-rich woman. These are average values. The differences in pensions sizes are especially pronounced in Germany, the Netherlands, Norway, Sweden and Bulgaria. In Denmark, by contrast, the lowest pension group includes more men than women; then again, women are almost as underrepresented in the highest pension group in Denmark as they are in other countries.

Now how do pension payments evolve over time? Considering the growing workforce participation of women, one might expect the gender pension gap to decrease over the years. Conversely, however, one might also suspect that the growth in part-time employment and deregulated labour markets leads to an even wider pension gap. As Bettio et al. (2013) point out: 'If the pension gap is the result of past injustices we may expect things to get better. If pension gaps are premonitions of future problems, they may be getting worse.' The result is clear: the gender pension gap has widened over time. Among men and women aged between 65 and 80 years, the average gap is 41%, compared to only 33% in the group of those older than 80.\footnote{Alternative calculations, such as comparing the 2005 and 2010 pension gaps, yield the same result.} The differences are particularly pronounced in countries in which female part-time work has long been as much a fact of life as women's independent financial security. More detailed analyses show that the older cohorts were still able to benefit from widow's pensions, which however have been phased out over the years. This loss could not be compensated for by women's growing workforce participation. Essentially, women's pay, income and pension gaps result from deviations from a key norm in today's world of work: constant availability in the labour market (Goldin, 2014). Whereas the majority of men work full time, women tend to interrupt their careers and work part time. As a consequence, women experience much more severe pay loss than they would if the employment careers of men and women were more similar to each other. This goal might be accomplished if all working-age individuals had an uninterrupted employment career that spanned their entire lifetime. This would also help reduce pay differences between men and women and make quotas unnecessary after a while. However, following that path would also mean calling for changes to accepted views on family time. Unless there are dramatic and promising changes in the distribution of family tasks between men and women,
this Review suggests taking a different path towards more gender equity in terms of earnings, namely a policy of reducing the gainful employment of men in order to redistribute paid and unpaid work between men and women.

3.3 Conclusion

Education is the primary gateway to (good) jobs and a good income. Low-skilled individuals face increasingly tougher times. At this point, the Scandinavian countries are the only ones to successfully provide opportunities for low-skilled workers to enter the workforce while at the same time offering wages high enough to make a decent living. The growing marginalisation of the educationally deprived will also become clear in the following Chapter, which will look at the links between education, the low-wage sector and the working poor. But before getting there, it should be emphasized again that any talk about educational attainment levels in Europe having reached a saturation point with regard to secondary level II and tertiary education completely misses the point. Quite the contrary, the EU has to do everything it can to eliminate one of the key sources of social inequality by further reducing the number of persons without sufficient education and training.

Another important challenge for the EU is the gender wage and income gap. The EU, in principle, pursues the same values and increasingly demands that women join the workforce and get their own social security benefits. However, women still run a disproportionate risk of working in the low-wage sector and have to cope with insufficient pensions in old age. Public policies to help parents balance work and family responsibilities, such as parental leave payments or part-time work, must be designed in a way that men also become the primary beneficiaries of these policies. But this requires sea changes in social behaviours across Europe. Therefore, a policy of reducing the gainful employment of men in order to redistribute paid and unpaid work between men and women is also needed.
4. Financial Inequalities

So far the Review has discussed educational attainment, employment and income in a life course perspective. It now turns from the individual to the societal level. The focus of this Chapter is on financial inequalities, i.e. on the extent to which incomes and wealth are distributed unevenly across and within the EU Member States. This is an area where most governments in Europe and elsewhere have been reluctant to intervene, although they have in their tool box traditional powerful instruments such as taxation. Policymakers have avoided setting limits to high and very high earning and wealth accumulation. As several European research projects such as EQUALSOC, IMPROVE and COPE have demonstrated, they have rather focused, with more or less capacity and efficiency, on reforming their Welfare State in order to maximise the impact of social and financial transfers to those in need, as well as fighting the increase in poverty and social exclusion, especially for targeted vulnerable groups. At the European level for instance, a key initiative of the European Commission, within the Europe 2020 agenda, has been the "Platform against poverty and social exclusion" (European Commission, 2010). More recently, the European Commission adopted what is known as the "Social Investment Package" which tries to convince member states to modernise their Welfare state through a better targeting of social and financial transfers to populations in need and new operating policy modes which attempt to "activate" people in order to keep them away from social exclusion (European Commission, 2013). Finally, it has continued to use the European Social Fund and more recently the EU Programme for Employment and Social Innovation in order to promote a high level of quality and sustainable employment, guarantee adequate and decent social protection, combat social exclusion and poverty and improve working conditions.

Before turning to the efficiency of policies, one has to ask: What is the real extent of financial inequalities? In Europe and elsewhere, there is currently much controversy about financial inequalities. Before assessing the consequences of such inequalities, it is crucially important to ascertain the facts as the European research GINI projects, in particular, has done with an unprecedented wealth of details (Salverda, 2014).

This Chapter begins by looking at mean annual earnings and median wealth across the EU. Although these measures provide an idea of the average standard of living, they do not speak of the distribution of resources. We therefore turn to relative measurements relating to each country’s national context, such as the
Gini coefficient or the proportion of income and wealth in the top decile of the income distribution. Since relative measures do not say anything about the standards of living, we need to connect information on the standard of living to measures of inequality. As will be seen, there are countries with low inequality, but people there can also be very poor; likewise, some countries may raise the average standard of living and yet may become more unequal in social terms. When looking at the development of financial inequality, therefore, one needs to pay equal attention to the level and to the distribution of income and wealth.

The Review proceeds with looking at the bottom of the income and wealth distribution, referring to poverty, deprivation, low wage earners and the working poor in order to explain the state of inequalities in Europe before offering a short conclusion.

4.1 The large variety of gross and net incomes in EU countries

Giving a precise account of income is a challenge in itself. Often there is a significant difference between gross income and disposable income. Most studies refer to net incomes, which take account of the various redistribution mechanisms in each country’s taxes and welfare system, as well as transfer payments, such as child, sickness, nursing care and unemployment benefits. The effects of indirect taxes and in-kind transfer payments, however, are not considered in this approach. Furthermore, we need to distinguish between an individual person’s income and the household income. Someone with a low individual income may still enjoy a relatively high standard of living if other members of the household are well off financially. As will be seen, statistics on workers earning low wages and the working poor follow two very distinct concepts.

The mean annual gross income in all EU-27 countries is 31,000 euros. Based on the available income statistics, the differences between the countries are immense. In Denmark the mean annual gross income is 55,000 euros, compared to 5,000 euros in Bulgaria (Figure 23). However, given that the size and scope of the shadow economy is particularly pronounced in countries with a low gross domestic product, drawing conclusions about the standard of living based on income is not always reliable.
Do these differences become smaller if we look at annual net earnings—that is, the income that people actually have available to buy goods and services? Making general statements in this regard is not possible. Net earnings always refer to the respective household situation. To illustrate this variety, let’s consider two married couples, with both partners in the workforce and earning the mean annual income of men and women. In the first case, the couple has no children (Figure 24a); in the second case, the couple has two children (Figure 24b). It is clear that the range of net earnings in the EU-27 is about as large as the range of gross earnings. Despite (or because of) the widely varying taxes and transfer systems, there is no convergence of incomes in Europe. Among married couples without children, taxes and social security contributions range from 17.5% in Malta to as much as 42.8% in Belgium. Taxes and contributions for couples with children are lower, ranging from 12.8% in Ireland to 37.3% in Belgium. There is only minor correlation between the level of gross earnings and the rate of taxes and contributions.
Figure 24a: Annual gross and net earnings of a two-earner married couple, both at 100% of average wage, with no children, 2012
(in thousands)

![Graph showing annual gross and net earnings of a two-earner married couple, both at 100% of average wage, with no children, 2012.](source)

Source: Eurostat–Online 2014, OECD annual publications “Taxing Wages” and “Benefits and Wages”.

Figure 24b: Annual gross and net earnings of a two-earner married couple, both at 100% of average wage, with two children, 2012
(in thousands)

![Graph showing annual gross and net earnings of a two-earner married couple, both at 100% of average wage, with two children, 2012.](source)

Source: Eurostat–Online 2014, OECD annual publications “Taxing Wages” and “Benefits and Wages”.

More recent member States of the EU tend to have lower rates of taxes and contributions than older members. Country-specific social policy regimes cannot be easily identified. Although the Scandinavian countries offer substantial tax cuts for families with children, this is by no means a unique feature of social democratic types of countries. Liberal and social democratic welfare states, too,
offer significant benefits for couples with children. The United Kingdom, for example, ranks at 7 when comparing the EU-27 with regard to gross earnings but comes out at 3 with regard to the net earnings of couples with two children.

For couples with children, incentives and disincentives for both spouses to work are as important as benefits. Do couples in which one partner earns the average wage while the other earns 'only' one-third of the average wage (e.g. due to part-time employment) receive disproportionately high tax cuts or not? Disproportionally high tax cuts for such couples can be observed in countries like Germany and Belgium, which first pool the earnings of both spouses and then split them. For example, if a husband earns 3,000 euros but his wife only earns 1,000 euros, they are both taxed for an income of 2,000 euros each. The man saves taxes; the woman pays higher taxes. Together, however, they pay fewer taxes than they would pay if each of their incomes were taxed separately—thanks to progressive taxation. In most Scandinavian countries, but elsewhere as well (e.g. Spain), this pooling and splitting of taxes is unknown. Tax 'incentives' such as those in Germany and Belgium weaken the position of women and, as will be shown, put their independent social security entitlements at risk.

4.2 The challenge of rising income inequality

Income distribution is commonly calculated based on disposable income and its distribution within each of the EU-27 countries. The disposable income includes income from work and wealth as well as monetary transfers. To measure its distribution, and thus the range of inequalities, the Gini coefficient is commonly used. It ranges from 0 to 1, with 1 corresponding to an extremely high level of income inequality and 0 corresponding to an equal distribution of income (Atkinson, 1970). For the year 2010, Figure 25 shows that the income divide in disposable income (blue dots) is higher in the UK, in Southern European countries (Portugal, Greece) and in Eastern European countries such as Latvia, Romania, Lithuania, Bulgaria and Poland (scores between 0.34 and 0.36). It is lower in the Nordic countries (Sweden, Denmark and Finland), in some continental countries such as Belgium, France, Luxembourg and Austria, as well as in Slovakia, the Czech Republic, Slovenia and Ireland (scores between 0.22 and 0.25). The distribution of disposable income can also be compared with the distribution of gross income (Figure 25, red squares). The difference between the two distributions gives the redistributive effect of taxes and benefits (Boadway and Keen, 2000). It can be observed that tax-benefit systems play an important
role in reducing inequalities in all countries, in particular in Belgium, Hungary, Germany, France and Ireland. The effect of tax-benefit redistributive systems is smallest in Cyprus, Latvia, Lithuania and the Netherlands.

**Figure 25: Gini coefficients before and after taxes and transfers, 2010**

(Gini scale from 0 to 100)

These basic representations of financial inequality give rise to further questions. The first one concerns the aforementioned link between the unequal income distribution and the size of people's average incomes, that is, the link between distribution effects and level effects. Are countries with a high average income also countries with a higher level of inequality? The second question goes in a similar direction but addresses the link between financial inequality and inequality of educational attainment in a country. Does educational inequality translate into income inequality? The third question concerns the way financial inequalities change over time. Do we see uniform patterns of increasing or decreasing financial inequalities in all EU countries? The fourth question is based on measuring the concentration of income in the top decile of the income distribution. What can be said about the extent of inequality using that meas-
What are the primary factors driving this concentration of income? The Review attempts to answer these questions one after the other.

The link between financial inequality and average earnings in the EU countries

If we compare mean gross earnings to the distribution of disposable income in the countries (Figure 26), we find a slightly negative correlation. In other words, countries with high average earnings tend to be characterized by a lower degree of social inequality.

Figure 26: Gross income and Gini coefficient of equivalized disposable income, 2010
(Gini scale from 0 to 100)

Sources:

Finland, Belgium, Sweden, Austria and the Netherlands provide a good illustration: these countries achieve a high gross income while at the same time

\[ R^2 = 0.1139, \text{ p-value: 0.04116.} \]
having a comparatively equal distribution of net earnings. By contrast, Latvia, Lithuania, Bulgaria and Romania are countries characterized by a very low average standard of living but also by a particularly sharp divide between the poor and the rich. Such correlations show that it is by no means impossible for policymakers to remedy the distribution of financial inequality. A look at the correlation between financial inequality and inequality of educational attainment in the EU-27 countries suggests the same conclusion.

Financial inequality and educational inequality

The strong links between education, employment and earnings at the individual level suggest that there is also a connection between the distribution of educational outcomes and financial inequality.

Figure 27: Financial and educational inequality, 2012
(Gini scale from 0 to 100)

![Figure 27: Financial and educational inequality, 2012](image)

Sources:
Literacy Competencies inequality (9th/1st decile): OECD, PIAAC 2012 Database.

Such an assumption is investigated in Figure 27, using the distribution of PIACC competences as a measure of educational outcomes. We see a slightly posi-
ative association ($R^2=0.23$): the lower the level of educational inequality, the lower the level of financial inequality. Evidence for this correlation is provided by Slovakia and the Czech Republic on the one hand (little financial and educational inequality) and Spain, UK, Italy, Poland and France on the other hand (high financial and educational inequality). However, when assessing this correlation it is important to always consider a country’s general standard of living as well. Slovakia’s Gini score, for example, is extraordinarily low, even though labour market participation and education levels are not particularly high and the standard of living is comparatively low. Sweden’s Gini score is roughly the same as that of Slovakia, but Sweden is a very wealthy country with high employment rates and high educational attainment.

**Change in financial inequalities over time**

Have financial inequalities increased in the EU over the last decades? A look at more recent (2005–2012) data reveals that the EU average Gini coefficient remained unchanged at 0.30. However, massive shifts between countries occurred underneath this apparent stability. Lithuania, Poland and Ireland were able to level the distribution of disposable income significantly, whereas Bulgaria, Spain and Romania saw a strong increase in inequality (Figure 28).

**Figure 28: Change in Gini coefficient of equa\lized disposable income, 2005, 2008 and 2012**

(Gini scale from 0 to 100)

This may only be attributed in part to the economic and financial crisis: indeed, an increase in earnings inequality can also be witnessed in countries that weathered the crisis relatively well, such as Germany, Denmark, Luxemburg and Sweden. Likewise, there is no evidence to support the assumption that it is especially countries with a low 2005 Gini coefficient that have become more unequal over the years. Finland, the Czech Republic and Slovenia could keep their Gini scores at a low level, whereas Denmark, Bulgaria and Germany have in part seen a pronounced increase in inequality. Comparative research has shown that there are several reasons for these developments: changes in the underlying size of people’s earnings, changes in the general welfare state set-up and changes in collective bargaining agreements. Countries with a high degree of unionisation are characterised by low wage differentials; rising inequality, therefore, as it is more and more suggested, may also point to a decline in collective bargaining commitment (OECD, 2001: 149; OECD, 2013).

The concentration of money at the top: Decile income shares

Decile income shares, namely the concentration of income among the top decile of the population with the highest income constitute an alternative indicator to measure income inequality. Based on administrative data (income tax data), Thomas Piketty and his team of international economists compiled the World Top Incomes Database (WTID), which allows researchers to study the evolution of incomes and wealth over a long period of time for many countries (Piketty, 2014).

Figure 29: Top decile income shares, 1910–2010

One of the most important findings of the WTID is 'the pronounced U-shaped evolution of top income shares in the US over the past century. The share of total market income going to the top decile was as large as 50% at the eve of the 1929 Great Depression, fell sharply during the 1930s and during World War 2, and stabilized below 35% between the 1940s and the 1970s. It then rose gradually since the late 1970s–early 1980s, and is now close to 50% once again.' (Piketty and Saez, 2013: 2). This development shows that over the past thirty years, more than 15% of the US national income was shifted from the bottom 90% to the top 10%. The top 1 per cent almost exclusively absorbed nearly 60% of aggregate US income growth between 1976 and 2007.

Figure 29 also shows that even though economic and monetary crises led to minor declines in income concentration, it never took very long for that concentration to rebound to its previous high level. However, it is striking to observe that in contrast to the 1930s, when governments responded to income inequality with massive tax increases (in the US, the marginal tax rate increased from 24% in 1929 to 63% in 1932 and reached its peak in 1945 with 94%), today's US policy makers have chosen not to counter imbalances with similar political correctives.

Can these trends be shown for Europe as well? In part. A less pronounced U-shaped curve emerges for the UK; in Germany, that trend is even weaker. In France, income concentration fell from 47% to 29% between the late 1930s and the early 1940s, whereas the 1960s saw it rebound to 37%, a rate higher than that in the US during those years. Between 1960 and 1980, income concentration declined again and has since been stable at about 33%—the lowest rate among the four countries. In 2010, the top income decile earned 47% of income in the US, 42% in the UK, 36% in Germany and 33% in France. The fact that countries such as France, Germany, the US and the UK, that have evolved in very similar ways in terms of technology and productivity, eventually show such different patterns of income inequality supports the view that institutional and policy differences play a key role. The tax system is one of the crucial factors in this regard. The marginal tax rate in France is 49% and thus significantly higher than in Germany (45%), the UK (40%) and the US (35%, see Figure 30). Taxing high incomes has historically proven to be a powerful instrument of equality and should therefore be considered again by policy makers as a useful tool if they are serious about their intentions to fight inequalities.
4.3 The alarming concentration of wealth in Europe

Wealth is defined as the total of financial and real assets less the sum of liabilities (European Central Bank, 2013: 107). According to the European Central Bank’s Eurosystem Household Finance and Consumption Survey, which reports on the wealth of private households for 2012 (European Central Bank, 2013), the median figure is 109,200 euros in the euro area, whereas the mean net wealth of all households is 230,000 euros. This discrepancy between mean and median clearly shows how unevenly wealth is distributed in Europe. Average values differ considerably from country to country. For the median, the extremes lie between 51,400 euros in Germany and 397,800 euros in Luxembourg; for the mean, the differences are even higher, ranging from 79,700 euros to 710,100 euros. These differences are explained by a number of factors, notably homeownership, income, and institutional framework conditions such as tax systems. At the individual level, age must also be included: wealth is highest in households where the reference person is aged between 55 and 64, and lowest in households where the reference person is under the age of 35. Moreover, pensioners hold a 34.8% share in total wealth but account for only 31.7% of the population.

Home ownership

The average wealth of home owners is 217,600 euros, compared to 9,100 euros among non-homeowners. An average 60.1% of households in the EU own
their home. The figure is 90% in Slovakia, 82% in Slovenia and 83% in Spain. In Germany and Austria, by contrast, fewer than half of all households own an apartment or a house. This high variation is due to a number of institutional factors. For instance, the absence of provision of social housing, the lack of depreciation allowances or the lack of secure provision for old age lower the rate of home ownership. Countries with pay-as-you-go pensions have less wealth than countries that have developed account-based pension systems. For sure, a strong link between wealth and home ownership can prove problematic: Homes are goods traded mainly on the domestic market and are thus strongly subject to business cycles and economic fluctuations. The share of wealth accordingly shifts between home owners and renters and thus between young people (saving to buy a home) and older people who already own their home. In countries with high rates of ownership and correspondingly fewer rental homes, the high share of home owners also proves to be an obstacle to mobility, since young people live at home longer than elsewhere, not moving to areas with better job opportunities. They also tend to start a family only when they have saved enough to buy their own home.

**Income and wealth**

Income correlates systematically with wealth, albeit with marked differences between countries (see Figure 31). Incomes are high in Germany, Austria, Finland, and the Netherlands, but wealth in these countries is much below average. In Malta and Cyprus, for instance, wealth is much higher than incomes. Again, homeownership and household size are major reasons for this relationship. Most recently, the issue of wealth has been propelled to the forefront of scientific and public scene. The GINI European research project gives detailed information on this phenomenon. As Thomas Piketty (2014) has shown, wealth has grown faster than the gross domestic product in many countries, meaning larger inequalities. In the US and many European countries, it wealth rather than hard work that pays off, leading to a situation of rising inequalities which recalls the worst times of inequalities before the Second World War. While the top 10% of all households earn 31% of the total income, this top 10% own over 50% of the total wealth. Another comparison: those in the top 5% of the income distribution earn 20% of the total income but hold 37% of the total wealth (European Central Bank, 2013). Wealth inequality varies considerably across countries. The lowest inequality (Gini between .4 and .6) is found in Slovakia, Slovenia and Greece, the highest in Austria and Germany (Gini over .7).
Figure 31: Median wealth and median household gross income, 2010

Source: ECB Statistics Paper Series No 2 / April 2013, P. 86 (here Chart 4.8).

Thus, even though these two countries have low levels of wealth (Figure 31), the share of wealth held by the richest is quite high (Sierminska and Medgyesi, 2013: 10). As shown in Figure 32, in Germany and Austria the richest 5% hold about 45% of the wealth, while the bottom 50% hold less than 3%.
As with income, inequality in wealth has risen considerably over time. This also shows in the aggregate wealth-to-income ratio, which can be calculated using the WTID database (Piketty, 2014; Piketty and Zucman, 2013). Piketty and Zucman have analysed wealth accumulation in Australia, Canada, France, Germany, Italy, Japan, the UK, and the US for the years 1970 to 2010, using long-term, homogeneous information on national wealth based on balance sheets.\(^{19}\) For France, Germany, the UK and the US, the authors were able to extend their series as far back as the nineteenth century. From then until 1950, private wealth-national income ratios of the European countries under study decreased from about 700% to 200–400%. Since the mid-twentieth century, wealth-income-ratios have increased in all European countries included in the study, from 200–300% to 300–600%, despite considerable changes in the nature of wealth (see Figure 33). The U-shaped pattern of European wealth-income ratios

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\(^{19}\) They use measurements such as the market value of all financial and non-financial assets and liabilities by households, government and corporations. The information on retrospective national stock accounts (including consistent and annual balance sheets) for each sector of the economy is reported by the statistical institutes of most developed countries and published on balance sheets that follow new international guidelines.
can be explained by the long-term swing in relative asset prices, which are driven by changes in capital policies. The constant ratios until the First World War are attributable to the unfettered run of capital markets. Between 1914 and the 1970s, several anti-capital policies were put into place, thus depressing asset prices. The increase in wealth-income ratios since the 1980s is due to an asset price recovery resulting from financial globalization and deregulation and large wealth transfers from public to private hands through privatisations. In fact, the rise of private wealth is partly due to a decline of government wealth (Piketty and Saez, 2013: 9).

**Figure 33: Private wealth/national income ratios, 1870–2010**

![Graph showing private wealth/national income ratios from 1870 to 2010 for Germany, France, and the UK.]

*Source: Piketty and Zucman (2013): Capital is Back: Wealth–Income Ratios in Rich Countries 1700–2010 (here Figure 2).*

Moreover, a slowdown in population growth and productivity has also led to an increase in the wealth-income ratio since the end of the 1970s. Comparing the long-term development of income concentration and wealth concentration, the US has been seeing a marked concentration of income that is far higher than wealth accumulation. In Europe the concentration of income is less pronounced than in the US, whereas wealth accumulation is higher. This rise in high wealth-income ratios over past decades prompts new questions about capital taxation and regulation which, given the international nature of capital mobility, should be core concerns of the EU (Piketty, 2014; Piketty and Zucman, 2013).
4.4 On the dark side: poverty in the EU

Back in 1985, the EU Council of Ministers agreed on a definition of poverty according to which the poor are the persons whose resources (material, cultural and social) are so limited as to exclude them from the minimum acceptable way of life in the member State to which they belong. This definition is relative and includes both outcome elements (‘the exclusion of minimum acceptable way of life...’) and input elements (‘...due to a lack of resources’) (Fusco et al., 2010: 9). As shown by the AMELI, IMPROVE and COPE European research projects, the measurement of poverty and social inclusion has given birth in Europe to strong scientific developments which are explained below.

In the new Europe 2020 Strategy which has replaced the 2000–2010 Lisbon Strategy since June 2010, the European Commission has agreed on three indicators for measuring poverty: a relative definition that corresponds to the 60% threshold of a country's median income; an absolute definition that measures material deprivation; and the number of households in which all members are without a job (European Commission, 2010). This Chapter discusses the relative poverty measure.

Relative poverty describes men and women earning an equivalent annual disposable household income below 60% of the national median level. This threshold reflects the minimum level of income considered necessary to have an acceptable standard of living relative to the society in which a person lives. Persons with incomes below that threshold are defined as being ‘at risk of poverty’. The term poor is not used in this context because there are other factors besides income that contribute to social exclusion. In addition to the 60% threshold, some studies also refer to more rigorous (40% and 50% of the median income) and softer (70% of the median income) thresholds. This wide range of definitions suggests that the 60% threshold set by the European Commission is ultimately an arbitrary marker (Bradshaw and Mayhew, 2010). No matter how the threshold is defined, it is always crucial to look at the development of the household income. Doing so reveals, for example, that over the years, the income level marked by this 60% threshold has grown significantly in many countries, as the national mean income has increasingly been driven by the incomes of households in which both adults work. Assortative mating, a phenomenon mentioned earlier—well-educated employed individuals increasingly marry other well-

20 Another interesting figure in this context is the at-risk-of-poverty gap, which indicates the extent to which people live below the respective poverty line.
educated employed individuals—causes the 60% mark to rise even more, as the income opportunities associated with education turn one good income into two good incomes.

In 2012, 84 million EU-citizens (17%) lived below the risk-of-poverty line, in 2010 the number was at 81 million, in 2005 at 79 million. This is a tremendous increase. Today, Europe has about five million people more at-risk-of-poverty than the United States with 74 million, although the risk-of-poverty-rate is with 17% considerably lower than in the United States with 24% (OECD, 2014).

Figure 34 gives a picture of the 2012 at-risk-of-poverty rate. Compared to the EU-27 average, the rates are much higher (at 20-plus per cent) in Greece, Romania, Spain, Bulgaria and Croatia. In the Netherlands and the Czech Republic, by contrast, the rates are below 10%. Although the at-risk-of-poverty-rate of Germany is below EU-average, the country faces the highest total number of people at-risk-of-poverty: 13 million in 2012.

**Figure 34: Change in at-risk-of-poverty rate, 2005, 2008 and 2012**

![Graph showing at-risk-of-poverty rates](source)

*Source: Eurostat–Online 2014, Survey of Income and Living Conditions (EU-SILC). Note: At risk of poverty rate (cut-off point: 60% of median equalized income after social transfers).*

This is an increase of 3 million compared to 2005. It is clear from Figure 35 that in most of the EU-27 countries the number of people at-risk-of-poverty has
increased. The risk of slipping into poverty is shaped by many factors. In addition to characteristics such as gender, education and age, it is the composition of the household, the size of income replacement benefits as well as labour market policies that are particularly important in this regard (Lohmann, 2009; Eurofound, 2010).

**Figure 35: Total number of people at-risk-of-poverty, 2005, 2008 and 2012**

(in millions)

![Graph showing the total number of people at-risk-of-poverty, 2005, 2008 and 2012](image)

*Note: At risk of poverty rate (cut-off point: 60% of median equalized income after social transfers).*

**Individual characteristics** correspond to the general risk factors. Individuals with low levels of education face a much greater risk of being poor than well-educated individuals. Young persons have a higher risk of being poor than older persons.

**Composition of the household.** Even if people do not have an income of their own, they are often protected against poverty by members of their family. This is typically the case for children and spouses who are not working. But single persons with children (mostly women) also face a higher risk than persons in households with two adults and dependent children.

**Generosity of the welfare State.** If the family is unable to compensate for a lack of income, family support may be replaced by welfare State benefits which

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21 In Canada, the risk-of-poverty is at 6.5 million (2012, risk-of-poverty-rate: 19.6%), in Australia the risk is at 4.7 million (2010, risk-of-poverty-rate: 21.6%) (OECD, 2014).
are provided if individuals are unable to earn a market income of their own—whether because of illness, invalidity, unemployment or age. In many countries, there are also public subsidies for employment contracts involving wages below a certain threshold (government top-ups, partial unemployment). Benefits paid for household members who cannot be expected to work or are not allowed to do so constitute another form of transfer payments. They include, most importantly, benefits paid for children but also benefits paid for family members who do not work, or only work part time, especially mothers.

Besides the generosity of the welfare State, which as such can motivate people to find work or, on the contrary, provide disincentives to work (early retirement, taxation of dual income families etc.), the risk of slipping into poverty also depends on labour market policy (see below) and on the overall economic situation, of course. High unemployment rates reduce the likelihood of households being able to benefit from two incomes; likewise, the proportion of atypical employment increases at the expense of standard work. Moreover, the size and duration of income replacement benefits is likely to go down as unemployment rises.

Up to this point, poverty has been defined in relation to the national distribution of disposable incomes. This approach is not undisputed, though. In rich countries, the risk-of-poverty threshold can be relatively high, meaning that people are considered poor but, despite earning only a small income compared to others, are still able to afford most goods of daily life. The reverse case, however, is much more worrying. In countries with a low GNP, the risk-of-poverty rate is so low that it fails to capture the full extent of material deprivation. In those countries, even people who are above the poverty line often cannot afford many of the goods essential for life. There is another aspect that is important. Poverty is commonly understood to be a hot-button social issue if it is persistent and if people can barely escape it. The risk-of-poverty rate does not provide any indication in this regard, referring only to the financial situation compared to the national distribution in the previous year.

That is why researchers have suggested that poverty should also be measured in absolute terms, based on people's physical needs. That way, measurements are no longer relative to the specific circumstances in a given country but are the same for all countries. Thus they may be compared much more easily to common European standards for education, vocational training and employment, which are the same in all countries.
Over the years, a variety of measures has been developed to define physical poverty in absolute terms. The World Bank, for example, continues to use its ‘one dollar a day’ poverty line (defined in 1985), which however is mainly used for the World Development Plan (Revillion et al., 2008). In a certain way, the US poverty line is an absolute measure as well. It was established in 1960 and since then has only been adjusted to the impacts of inflation. Unlike the EU’s 60% median threshold, it does not adapt to changes in the standard of living. Absolute definitions, which in one way or another are based on baskets of consumer goods, are also found in many EU member States whose national poverty lines are guided by the minimum income or the welfare eligibility threshold. None of these measures has gained widespread acceptance at the EU level, however. The ‘one dollar a day’ line is far too low for rich countries; poverty lines that do not adapt to rising standards of living are obsolete; and nationally fixed minimum income thresholds allow far too much room for political manipulation (Bradshaw and Mayhew, 2010: 176).

Instead, the EU now uses an indicator measuring ‘material deprivation’. This approach defines a number of items of daily life that are generally considered important and looks at the number of people who would like to own these items but cannot afford them. The material deprivation concept is based on a study by Guio (2009), which identified three core areas of potential material deprivation: economic strain, durables and housing. The EU indicator on material deprivation commonly used today is based on nine specific poverty aspects within these three areas (facing unexpected expenses; being able to afford a one-week holiday away from home; being able to pay for arrears; having a meal with meat, chicken or fish every second day; being able to keep home adequately warm; having a washing machine; having a colour TV; having a telephone; and having a personal car). The EU deprivation rate is defined as the proportion of people living in households who lack at least 3 out of these 9 items because they cannot afford them. In other words, this is not about a voluntary decision to do without these things but about an enforced lack (Fusco et al., 2010: 11; Guio, 2009; European Commission, 2011).

Figure 36 shows the deprivation rate, contrasting it with the at-risk-of-poverty rate shown in Figure 34. When interpreting this graph, it is important to

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22 A second indicator measures the intensity of deprivation, that is, the mean number of items (from 0 to 9) that people lack.
note that aspects of deprivation may also be found among persons who live above the 60% poverty threshold. Their share, however, is far below the share of poor persons in all EU countries. The range across countries in terms of the percentage of materially deprived persons is wide—from 1% in Sweden and Luxembourg to 45% in Bulgaria. The EU average is 10%. This range is much wider than that of the EU poverty rate, which ranges from 10% in the Czech Republic and the Netherlands to 23% in Greece and Romania, with an EU average of 17%. In five countries (Bulgaria, Hungary, Romania, Latvia and Lithuania), material deprivation is much higher than the poverty rate. Conversely, material deprivation is significantly lower than the poverty rate in crisis-ridden countries such as Spain and Portugal.

**Figure 36: National material deprivation rates and at-risk-of-poverty rates, 2012**

![Graph showing material deprivation and at-risk-of-poverty rates](source)


It is not surprising, therefore, that national deprivation rates are only weakly correlated with national poverty rates (in 2010, the correlation was 0.31). This is evidence of the vast differences in living conditions across the EU. The correlation is much stronger, however, if we compare national deprivation rates to a poverty threshold calculated for all of Europe ($R^2=0.80$) (Fusco et al., 2010: 15).

The strong differences between the at-risk-of-poverty threshold and the extent of material deprivation result from the different frames of reference (na-
tional vs. European) but also from the duration of poverty. It is safe to assume that the deprivation rate tends to measure long-term deprivation, whereas the poverty rate should be more subject to annual variation.

4.6 The low-wage sector

In the discussions about the extent and the evolution of poverty, the focus has increasingly shifted to work and employment. Activation policies are based on the assumption that getting people into paid work is the same as lifting people out of welfare and poverty. As already alluded to above in Chapter 2, such an assumption has become more and more difficult to sustain. It is absolutely essential, therefore, to take a closer look at the development of two phenomena: the percentage of people who work in the low-wage sector and, as will be seen in the following section 4.7, the percentage of people who belong to the working poor.

What is the percentage of people whose wages are low? Who is part of the low-wage sector and why? What are the main differences between the EU-27 countries in this regard?

The low-wage sector is measured by referring to the national distribution of wage income. Persons who earn less than two-thirds of the median wage are called low-wage earners. The low-wage rate shows the proportion of low-wage earners among all employees.

The average low-wage threshold across the EU-27 is 11.90 euros per hour. In Bulgaria, you are a low-wage earner if you earn less than 1.50 euros per hour; in Denmark, you need to make less than 16.60 euros per hour to fall into that category. A total of about 21 million employees in the EU-27 earn a low wage (excluding apprentices). Almost 5 million live in Germany and another 5 million in the UK (Figure 38). The proportion of low-wage earners varies considerably. On average, 17% of all employees in the EU-27 earn a low wage. In Bulgaria, that figure is 22% (the highest rate, at 28%, is found in Latvia); in Denmark, by con-

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23 Both concepts are relative measures referring to the national context: therefore, a step beyond national borders may be as much a step out of the low-wage sector and out of poverty as it may be a step into the low-wage sector and into poverty.

24 Earning low wages is not the same as income poverty because income from transfer payments, redistributive taxation and the household context is not taken into account. For a single person household, a low income may be sufficient, but surely not for a larger family with only one earner.
In all countries, the low-wage sector is populated by certain social groups, albeit to widely varying degrees: low-skilled workers, women and young people. Working hours are a crucial aspect. Part-time hourly wages often fall far below those for full-time employment; accordingly, the low-wage sector features a higher proportion of people working part time. In Germany, the low-wage rate among part-time workers is 40%; among full-time workers, it is 18% (Rhein, 2013). In Denmark, the part-time penalty is much lower, with a low-wage rate of 14% among part timers and 9.5% among full timers.

The differences in low-wage employment are particularly pronounced if we look at education. Figure 37 provides a striking illustration. Whereas the EU-27 average for low-wage employment is 17%, it is 30% among persons with low qualifications, 19% among persons with mid-level qualifications and 6% among persons with high qualifications. Education-based differences are especially large in Germany, where the low-wage rate among those with low qualifications is 55%, compared to 19% among those with mid-level qualifications and 2% among those with a university degree. Education provides protection against low-wage employment. Conversely, however, these numbers also illustrate the
triple burden of persons with low qualifications. Many of them never had a chance of getting a good education simply because of their socioeconomic background. Many of them have a hard time finding jobs. And more than half of those who do find a job earn only a low wage.

**Figure 38: Total number of low-wage earners, 2010**

(in millions)

Women face a much higher risk of working in the low-wage sector than men, simply because they are much more likely than men to work part time. In the EU-27, 13% of men but 21% of women are low-wage earners. In Germany and the UK, the low-wage rate is 17% for men and 29% for women. But it does not have to be that way. Sweden—also a country with a high share of part-time workers—boasts a low-wage rate of 3% (women) and 2% (men).

In addition to women and low-skilled workers, young employees under the age of 30 also face a high risk of working in low-pay employment in all of the EU-27 countries (Figure 39). 30% of them earn wages below the low-wage threshold, compared to 12% among employees aged between 30 and 49, and 13% among employees aged over 50. What aggravates this situation is that many young people do not have any job at all and belong to the group of NEETs—that is, those who are not in education, employment or training (see also Chapter 2).
Figure 39: Proportion of low-wage earners by age, 2010
(in per cent)

How can we explain these vast differences within the EU countries regarding the proportion of low-wage earners and the social structure of the low-wage sector? What is the impact of minimum wages, the prevalence of collective bargaining agreements and labour market institutions? Ten of the EU-27 countries have a national statutory minimum wage: Belgium, Bulgaria, France, Greece, Hungary, Lithuania, the Netherlands, Poland, Slovenia and the UK. Most of these countries have a high proportion of low-wage earners. In all of these countries, with the exception of France, the minimum wage is below the low-wage threshold. In the Scandinavian countries, by contrast, the low-wage sector is extremely small despite the fact that there is no minimum wage. And yet, minimum wages do help employees because they keep wage differentials at the lower end from widening even more. In other words, minimum wages do help reduce income-based social inequality to some degree but they seldom provide protection against low wages.

Nationwide collective bargaining agreements tend to protect workers from low wages (Schmitt, 2012). Especially for employees with a low income, collective pay negotiations lead to better outcomes than individual agreements. Figure 40 shows the low-wage rate as it relates to the percentage of employees working at firms bound by collective bargaining agreements.

25 From 1 January 2015, Germany will also have a general statutory minimum wage.
Figure 40: Low-wage rates and prevalence of collective bargaining agreements
(in per cents)

Sources:
Note: Low-wage earners as a proportion of all employees excluding apprentices.

Countries with a high percentage of collective bargaining agreements and a low percentage of low-wage earners appear at the bottom right; countries with a low percentage of collective bargaining agreements and a high percentage of low-wage earners are found at the top left.

Although the connection between collective bargaining agreements and low-wage employment is clear, we have to keep in mind that collective bargaining deals are often accompanied by other protective policies, such as protection against dismissal, a good education policy and a high level of social security (Rhein, 2013; OECD, 2013). That is why one cannot speak of a causal connection here—a fact that is illustrated by countries such as Germany, Austria and Slovenia, which have a high proportion of low-wage earners despite the existence of comparatively strong collective bargaining regimes. In the case of Germany, it can be shown that the loosening of collective bargaining has served to increase
wage differentials: one-third of the increased wage differentiation in the lower half of the wage pyramid among West German full-time employees can be explained by a decrease in collective bargaining rights (Dustmann et al., 2009).

In many EU countries, therefore, the most plausible explanation for the growth of low-wage sectors is the decreasing competitiveness of low-skilled labour due to technological change (Rhein, 2013). As a consequence, reducing educational deprivation and providing better training and continuing education opportunities is key.

4.7 The working poor

The COPE European research project provides very useful information on in-work poverty. What is in-work poverty in the first place? We have already defined one component, poverty. But how do we define 'in-work', that is, employment? The Eurostat indicators classify employment by referring to people’s most frequent activity status—that is, if they work at least seven months per year. One may easily object that this definition is much too unspecific, as it includes all kinds of employment, ranging from forms of low-pay and fixed-term employment all the way to non-fixed-term, full-time employment covering a full year. This definitional breadth turns out to be an advantage, however. If we were to use a more limited definition involving specific forms of employment, the proportion of the working poor would be attributable to labour market policy or the overall economic situation. The differences between working poor and low pay would be marginal. If we used an even broader definition, for instance by dropping the seven-month period, much more explanatory power would reside in the household situation. That is why the Eurostat definition has proven its worth as a compromise solution, and it is increasingly being used in research (Horemans and Marx, 2013, see also the contributions by members of the GUSTO European research project).

A total of about 21 million employees earn a low wage (excluding apprentices). The total number of working poor in the EU today amounts to about 18 million (including apprentices) (EU-27, 2010). Figure 42 shows that the total number of working poor varies greatly across countries. In Germany, more than 3 mil-

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26 Likewise, recent labour market reforms in Germany (deregulation of fixed-term and temporary employment, introduction of so-called 'mini jobs', Hartz IV) cannot be considered to have caused the growth of the low-wage sector, as they were used more in response to rising wage differentiation. Nevertheless, their introduction in 2005 has not stopped the low-wage sector from growing (Kalina and Weinkopf, 2013).
lion people live in-work-at-risk-of-poverty (2012). This is an increase of more than 1 million since 2005. Although there is a link between low pay and working poor, that link is extremely weak (Marx and Nolan, 2012; Horemans and Marx, 2013). Latvia, for example, has a 28% rate of low-wage earners but ‘only’ 10% working poor. In Sweden, the situation is very different: there, there are 2% low-wage earners and 7% working poor. But even if the two proportions were roughly the same—as they are in Spain (15/13) or Luxemburg (13/11), for example—that would not mean that these are the same persons (Figure 41).

**Figure 41: In-work at-risk-of-poverty rate and proportion of low-wage earners, 2010**

(in per cent)

Sources:
Note: Low-wage earners as a proportion of all employees excluding apprentices.

Which groups of the population face an above-average risk of living in poverty despite being employed? Why do we see such striking differences between the EU countries? Beyond the well-known individual characteristics, there are four factors that have a crucial impact on the risk of belonging to the working poor: family policy benefits, the tax system, labour market institutions and of course household composition (Lohmann, 2009; Eurofound, 2010; Marx and Nolan, 2012; Horeman and Marx, 2013).
Figure 42: Total number of people in-work at-risk-of-poverty, 2005, 2008 and 2012
(in millions)

Sources:
Note: At risk of poverty rate (cut-off point: 60% of median equalized income after social transfers).

Family policy benefits include all those measures designed to reduce the costs that households incur for children. This is done via transfer payments such as child allowances or wage replacement benefits during the first few months after a child is born. Likewise, the availability of high-quality and free childcare services outside home, as well as all-day schools, are major factors because they enable mothers to seek employment in the first place.

The tax system is essential in so far as many countries privilege household constellations in which one partner works full time while the second person only earns an ‘additional income’. This is the case with the spousal income splitting regime in Germany, for example, or the UK Child and Working Tax Credit System, which significantly reduce the net earnings from a full-time job to create incentives for part-time employment. The various types of employment play a key role as well, especially regarding the composition of atypical employment (see Chapter 2) and the material security associated with it. In countries with a high part-time penalty, part-time workers are much more at a disadvantage than in countries where fewer working hours are not automatically accompanied by lower hourly wages. Finally, household composition is of major im-
importance as well. Having a full-time worker in the household reduces the risk of belonging to the working poor.

The interplay of these factors becomes clear in a number of studies recently published by several European research projects such as ImPRovE (poverty, social policy and innovation), Bien (Basic income European network), RECWOWE (Reconciliation of Work and Welfare in Europe) and GINI (Growing inequalities impacts). Horemans and Marx (2013), for instance, draw on the EU-SILC data to examine the links between part-time employment and poverty.

The first thing to notice is that in most countries women have a lower risk of belonging to the working poor than men, with the notable exception of Estonia, Cyprus, Germany, Lithuania and Latvia (Figure 43). This may seem paradoxical at first glance. As we have seen, women earn significantly less than men, are more likely to be found in the low-wage sector and work part time in highly disproportionate numbers.

**Figure 43: In-work at-risk-of-poverty rate of employed persons aged 18–64, by gender, 2012**

(in per cent)

This effect can mainly be attributed to the fact that household composition is of special importance when it comes to women’s financial situation. Single-parent households are mostly headed by women, and it is this type of household that carries the highest risk of poverty, as illustrated by Figure 44. In households with more than one adult, women benefit more than men from sharing a household with a working spouse. Men are much less likely to live with a partner who is working full time and therefore enjoy less protection against poverty. This effect is especially pronounced in Southern European countries, where 36% of male part-time workers but only 16% of female part-time workers belong to the working poor. When interpreting these findings, we need to keep reminding ourselves that these gender effects are caused by the very definition of working poor, as poverty always refers to the disposable income (Peña-Casas and Ghailani, 2011). Moreover, we must not forget that this kind of protection is discontinued in the case of divorce, causing many women to slip into poverty.

**Figure 44: In-work at-risk-of-poverty rate of employed persons aged 18–64, by household type, 2011**
(in per cent)

![Figure 44: In-work at-risk-of-poverty rate of employed persons aged 18–64, by household type, 2011](image)


Second, full-time employment provides a much better protection against poverty than part-time employment in most countries (Table 3). In France, 4% of all men working full time belong to the working poor, compared to 22% of all
men working part time; among French women, the corresponding figures are 3% (full time) and 12% (part time). Likewise, part-time workers in Austria and Belgium are four times more likely to slip into poverty than full-time workers.

Now the fact that the working poor population is heavily influenced by household composition and working hours may easily suggest that full-time employment is the only suitable remedy against working poverty. In that scenario, women working full time would protect their husbands against poverty risks while at the same time avoid the danger of part-time penalties for themselves. Such an argument is open to several objections. First, universal full-time employment is not a realistic option in many countries due to the current labour market situation. Moreover, it would push the poverty line to a new peak and thus create new poverty. But more importantly, even the most flexible 40-hour/week full-time employment model for both partners may threaten family relationships by cutting back on the time that people need and want to spend with their families. That is why the path chosen by the Netherlands, Denmark and Finland—extending part-time employment and the regulations accompanying it—seems to be more convincing. In these countries, there is no part-time penalty. Men and women working part time do not face a higher risk of in-work poverty than those working full time (Table 3).

### Table 3: At-risk-of-poverty rate, full-year full-time workers (FYFT) and full-year part-time workers (FYPT), individuals aged 18–64, 2010

<table>
<thead>
<tr>
<th></th>
<th>Men FYFT</th>
<th>Men FYPT</th>
<th>Women FYFT</th>
<th>Women FYPT</th>
</tr>
</thead>
<tbody>
<tr>
<td>Austria</td>
<td>3</td>
<td>15.4</td>
<td>**1.5</td>
<td>**6.1</td>
</tr>
<tr>
<td>Belgium</td>
<td>1.7</td>
<td>7.2</td>
<td>(*)1.1</td>
<td>**5.7</td>
</tr>
<tr>
<td>Germany</td>
<td>3.8</td>
<td>23</td>
<td>***3.6</td>
<td>**9.9</td>
</tr>
<tr>
<td>Denmark</td>
<td>2.8</td>
<td>13.6</td>
<td>2.7</td>
<td>6.5</td>
</tr>
<tr>
<td>Greece</td>
<td>5.3</td>
<td>36.1</td>
<td>**4.2</td>
<td>14.3</td>
</tr>
<tr>
<td>Spain</td>
<td>5.3</td>
<td>20.4</td>
<td>***4.1</td>
<td>17.3</td>
</tr>
<tr>
<td>Finland</td>
<td>0.9</td>
<td>4.2</td>
<td>0.9</td>
<td>3.3</td>
</tr>
<tr>
<td>France</td>
<td>4</td>
<td>21.6</td>
<td>***2.9</td>
<td>12.3</td>
</tr>
<tr>
<td>Ireland</td>
<td>0.7</td>
<td>5.9</td>
<td>(*)1.3</td>
<td>4.6</td>
</tr>
<tr>
<td>Italy</td>
<td>7.8</td>
<td>35.8</td>
<td>***5</td>
<td>16</td>
</tr>
<tr>
<td>Luxembourg</td>
<td>7.1</td>
<td>2</td>
<td>**7.6</td>
<td>12.5</td>
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<td>2.4</td>
<td>1.5</td>
<td>3.1</td>
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<td>25.8</td>
<td>*5.4</td>
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</tr>
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<td>21.1</td>
<td>***2.6</td>
<td>7.4</td>
</tr>
<tr>
<td>United Kingdom</td>
<td>3.2</td>
<td>15</td>
<td>**2.9</td>
<td>10.5</td>
</tr>
</tbody>
</table>

Source: Horemans and Marx 2013, P. 12 (here Table 5).
Note: t-test significance levels H0: IWP FT = IWP PT: (*) p < 0.1, *p < 0.05, ** p <0.01, *** p<0.001

84
In a shared effort, governments, unions and employers have made sure that part-time and full-time workers enjoy the same rights, benefits and earnings (Visser, 2002). Part-time work is high-quality work; unlike in other countries, it is a voluntary option rather than one forced on people due to a lack of childcare services and other general circumstances (Horemans and Marx, 2013).

These new time regimes combine the inclusion of all adults into the workforce with broad-based support services for children through childcare provision, financial support and parental leave schemes targeted towards both mothers and fathers. Crettaz and Bonoli (2010), as well as Marx and Nolan (2012), emphasize that these approaches are much more effective than minimum wages, in-work benefits or tax credits. Minimum wages, now implemented or underway in many EU Member States, cannot protect one-breadwinner models against poverty, especially if there are children to look after. In-work benefits and tax credits are viewed critically because they are strongly targeted, ‘which implies a potential cost in terms of mobility traps and wage erosion’ (Marx and Nolan, 2012: 37). Providing better support for children is also the preferred approach of Strengmann-Kuhn (2002), who calls for a basic income for children to eliminate the risk of slipping into poverty because of having children.

4.8 Conclusion

This Chapter has highlighted the enormous differences in incomes and wealth between and within the EU member states. The evolution of the Gini coefficient has been uneven across the EU Member States. Although this Review does not agree with all the current analyses of financial inequalities, it is clear that Europe and other continents or countries share a similar problem: can we let inequalities increase and what are acceptable levels? If one looks at the income of the top 10 per cent for instance, an increasing concentration of income and especially wealth is clearly evident. Some of the recent EU policy initiatives, such as the "Platform against Poverty and Social Exclusion" and "the Social Investment State" go in the right direction but are not sufficient to tackle inequalities per se. Reducing the high level of financial inequality must definitely become a top priority for the European Commission and all EU member States. Depending on the country and the respective political and institutional set-up, several tools are clearly available, provided there is political will and enough support among society. Taxation, union representation, labour regulation on wages and social transfers to children, for instance, are decisive factors to correct inequalities in this context, but so are the level and the distribution of edu-
cation and employment for children and young people at the beginning of their lives.

In recent years, more and better data on the evolution of wealth distribution have become available. Unlike with the Gini coefficient, concentration effects are also evident in the growing income-wealth ratio. Such growth is linked to the increase in income, and especially wealth, concentration in the top decile of earners. The most effective remedy against this trend, in addition to fighting the underlying situation, is to introduce higher taxes on capital gains.

Finally, a look at the lower end of the income distribution shows that the extent of poverty continues to be alarming. What is more, the findings of this Review show that looking only at income can fail to identify individuals who may be excluded from the minimum acceptable way of life in the Member States to which they belong and that looking only at deprivation can fail to identify poor people. The findings also suggest an urgent need to include in the analysis of inequalities both poverty rates and national income poverty thresholds. They should also accompany the national material deprivation rates.

The European Union’s activation policies assume that employment provides protection against poverty. That, however, is not always the case. In many EU countries, people are poor despite the fact that they work. If we look at the low-wage sector, the prevalence of precarious living conditions is almost frightening, especially because young people and people with little education are particularly hard hit. This trend provides further illustration of the fact that a one-sided activation strategy cannot be the goal that policy makers should pursue. The modern "Social Investment State" in Europe thus needs two legs: good, preventive education policies and effective and courageous social policies designed to foster social equity. This should be the goal of the new Commission appointed in 2014.
5. Social and Political Outcomes of Financial Inequalities

To which extent does the increase in social and economic inequalities affect the cohesion of society, the future of our democratic systems and the grand project of Europeanisation? There is more to a good life than money and material wealth. Health, happiness and mutual trust, the sense of living in a society that brings opportunities for personal development and a sense of commonality are at least as important. Likewise, nobody would question the fact that the existence of democratic societies where people are free to choose, think and express themselves, certain that a predictable rule of law and justice will always prevail, is part of a good life. As P. Rosanvallon (2011) argues, inequalities are not only economic and social phenomena, they also signal our political capacities to live together (or not). This means also to think equality historically, not along the principles of independence, citizenship and similarity inherited from our democratic traditions, but rather along other modern lines of reinvented democracy such as singularity (being recognised as a specific individual in a community), reciprocity (being able to exchange equally along common norms and rules) and commonality (being able to share common political destinies across social groups). This is also the message that we get from over the Atlantic Ocean. The "era of market triumphalism" where "everything is for sale" actually reinforces inequalities and separates people rather than aggregates them, thus weakening solidarities and eventually democracy too (Sandel, 2012). On both continents however there is more and more a feeling that inequalities are unavoidable and cannot be limited; it seems that the political institutions in our democracies have become powerless and let inequalities grow (Dubet, 2014).

In the current context, one may wonder: to what extent is active democratic citizenship related to individual income, to a country's wealth and to the degree of financial equality? Over time, the EU countries have witnessed an increase of income and wealth, fundamental medical progress, the almost complete elimination of hunger and widening access to health care services for more and more people. Life expectancy and what is more, healthy life expectancy, have risen considerably in all EU member States while the once large differences between the countries have become smaller over time (United Nations, 2013). Democracy has flourished despite dire dictatorial and even totalitarian periods, wars have stopped. Unprecedented economic growth in Europe after 1945 has generally led to higher levels of material and social satisfaction, a capitalist lifestyle 'imitated' by Central and Eastern European countries joining the EU after the fall of the
Berlin Wall at a time when inequalities in Western Europe and elsewhere were increasing\textsuperscript{27}.

Behind these intuitively plausible connections, however, there is a series of intriguing questions that need to be looked at separately concerning well-being at large and political participation. This Review cannot take up all the issues raised in recent years notably by the research on the links (or rather the correlations) between inequalities and other negative social and political outcomes (Wilkinson and Pickett, 2009). This research has created ample scientific (and ideological) disagreements on the extent of inequalities and especially on whether degrees of inequalities are not only tolerable but defendable in democratic societies given that full equality can, in essence, be anti-democratic. Such disagreements tend to escape other lessons of social sciences and humanities and notably history and philosophy, which have shown for long that democracy, since the XVIIIth century, has always had a rather subtle and complex, if not at times ambiguous, understanding of equality. This Review thus limits itself to debating these questions with caution and from two more empirical angles. First, it looks at the connections between people’s financial status, financial inequality and health in order to illustrate the social consequences of income inequalities. Secondly, it focuses on the links between inequalities and political outcomes, especially on voter turnout and people’s attitudes to democracy.

5.1 Financial inequality and health

At the EU level, there has been a clear recognition that health inequalities in Europe are much more important than previously thought, not only between countries but also notably within countries and even at local levels within regions, rural areas or cities or even neighbourhoods (European Commission, 2009). In the framework of its recent Social Investment Package, the European Commission has suggested specific solutions to "reduce inequalities in health" (European Commission, 2013).

However, beyond the current generous policy initiatives, many unanswered and still, fundamental, questions remain on the exact links between health inequalities and other types of inequalities, including financial ones. The link between income and health provides a good example to illustrate the conceptual, theoretical and methodological complexity of these issues. As these diverse con-

\textsuperscript{27} A new European Review by the European Commission (DG RTD) is due soon to analyse the effects of 25 years of market economy and democracy in the Central and Eastern European countries 25 years after the fall of the Berlin Wall.
nections are frequently not presented and studied in a precise fashion in the existing literature, it is useful to approach the issue in four steps.

The first question is: do persons with a high income, high levels of education and a high socioeconomic status have a higher life expectancy than persons with a low income, low levels of education and a low status? What is observed at the individual level does not necessarily have to apply to countries as a whole. Therefore, it is important to consider the extent to which such differences emerge at country level. The second question is: do countries with a high GDP and high average educational attainment boast of an equally high average level of good health and life expectancy? The next question is at aggregate level: do countries with lower levels of income inequality also see less inequality in terms of health? Finally, this Review is interested in the interconnections between income levels and the national income distribution and their impact on individual health. The fourth question then is: does a person’s life expectancy depend on the national income distribution? More bluntly, does it make a difference in personal life expectancy whether people live in England, a country characterized by relatively high financial inequality, or in Sweden where financial inequality is much lower?

The existing research does not systematically address these questions, which eventually leads to major methodological and theoretical problems. Therefore this Review can only sketch a few of the challenges here, as researched by the GINI European project in particular (Nolan and Whelan, 2014; McKnight and Cowell, 2014).

(1) Do rich and highly educated persons lead healthier lives than poor persons with low levels of education? Health, measured in terms of mortality, morbidity and perceived health, is linked to educational attainment and socioeconomic status in all EU countries (Eikemo et al., 2008; Mackenbach et al., 1997, 2008; van Oorti et al., 2009; European Commission, 2009; OECD, 2012). In the lower income groups, the effect of income on life expectancy is stronger than it is in the higher income groups, meaning the relationship between education and income on the one hand and life expectancy on the other hand is not a linear one (Backlund et al., 1996; Fritzell et al., 2012). This may be due to less favourable working conditions in low-paid jobs (Benach et al., 2009; Cottini and Lucifora, 2013); such a connection, however, is still an open debate between researchers (McKnight and Cowell, 2014: 194). Furthermore, there is evidence to suggest that, in rich countries, it is relative income (rather than absolute income) that makes a difference when people assess their own state of health (Blázquez et al., 2012).
(2) Do countries with a high GDP also have a high life expectancy? As soon as scientific research looks at differences between countries rather than between individuals, clear connections between wealth and life expectancy begin to blur. GDP and life expectancy are not causally linked. The wealthy countries of Scandinavia, which boast high GDPs, high levels of educational attainment and a high-quality healthcare system for all, are not those with the highest life expectancy. The UK and Germany, despite lower scores in the same areas, do much better in this regard. At the same time, however, it is true that the Baltic and Southern European countries with a low GDP also have a low average life expectancy. So far, there is no satisfying explanation for this unexpected result, as we will also show below (Eikemo et al., 2008; Mackenbach et al., 1997, 2008).

(3) Do countries with lower levels of income inequality also see less inequality in terms of health? The answer is clearly a qualified “no”. The extent of income inequality does not relate to the extent of health inequality. Sweden and Denmark, for example, although characterized by low levels of income inequality, have comparatively high levels of inequality with regard to life expectancy. Essentially, this is explained by referring to reasons such as migration and inter-generational mobility, but they do not sufficiently explain why, comparatively, life expectancy differentials in the UK are low despite the country’s high degree of income inequality.

(4) Does a person’s life expectancy depend on the financial inequality in the country they live in? This question combines the individual situation with inequalities in society at large, thereby addressing a classical micro-macro problem. Wilkinson and Pickett (2006, 2009) argue that at a certain level of wealth, it is the distribution of incomes rather than the size of the national GDP that affects people’s health. Van Ourti et al. (2009) show that life expectancy increases in countries whose economies develop well over time. This correlation is particularly strong when economic growth is accompanied by increasing social equality.

Various lines of argument may support this income inequality–health hypothesis. Psychologists and cultural theorists (McKnight and Cowell, 2014: 170) claim that in unequal societies the pressure of competition is greater and people have to struggle to maintain, let alone improve, their position. They are under constant stress and pressure, thereby causing harm to themselves and their children as well. It is precisely these arguments that are sometimes used to explain the comparatively low life expectancy rates in the Scandinavian countries.
Institutional explanations likewise are not completely satisfactory. Are socially unequal countries also countries with an underdeveloped social welfare system? One could hypothesize that when people have no health insurance and cannot secure the necessary financial resources, they take fewer precautions and consult doctors less frequently, which in turn lowers their own life expectancy and that of their children. This, however, would suggest that countries with a comprehensive healthcare system have a higher life expectancy (and low life expectancy differentials). Yet, as seen above, this is not the case in Scandinavian countries.

Overall, research on the links between income and health is still in its early phases, both in terms of theory and methodology. As long as we do not have any data providing information on health and income over the life course in longitudinal and international comparisons, linking life course information to conditions in society at large, assessments and explanations regarding the income inequality–health hypothesis will remain inconclusive.

Besides health, other possible social outcomes of financial inequality such as stress, fertility, crime, solidarity, trust and happiness have been studied (Nolan and Whelan, 2014; McKnight and Cowell, 2014). For each of these areas, the GINI European research project finds that 'tracing causal relationships with any degree of confidence is extremely challenging' (Nolan and Whelan, 2014: 166). Researchers in that project acknowledge the importance of the debates sparked by the widely quoted work of Wilkinson and Pickett (2006, 2009) on the relationships between inequalities and social phenomena such as crime, violence or health, but argue that Wilkinson and Pickett’s work is mostly based on correlations insufficiently backed up by empirical evidence. Accordingly, the GINI European research project concludes its assessment of the social impacts of income inequality with caution: 'Overall, the evidence that income inequality plays the central role sometimes proposed for it across a range of social outcomes is relatively weak.' (Nolan and Whelan, 2014: 168) This summary of the state of research is not to be misinterpreted. Social inequalities, the researchers say, do make a difference, but in order to capture that difference, we need a better operationalisation of the underlying theoretical concepts and methodologies. Taking on this challenge is an important task for future research.

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28 It is expected that the SHARE European infrastructure project will be able to give further results in this area of research.
5.2 Financial inequality and political outcomes: democracy in threat?

A long political philosophy tradition since Aristotle has linked democracy with restricted inequalities; societies of extremes, it is said, are little prone to the development of a sense of community and of shared past and future. However, these links are difficult to prove empirically even though research shows very clearly how some categories of citizens, like youth, women and migrants for instance have lower levels of political participation. As analysed by the PIDOP and MYPLACE European research projects, the links between income, voter turnout, institutional factors, psychological factors and other forms of democratic participation and citizenship are particularly complex. At the individual level, the empirical evidence is clear. People with a good income and a good education are more likely to vote and pursue democratic values than persons with a low income and low levels of education. But again, the interesting question is whether the degree of financial inequality in a country has an additional impact. Do inequalities widen the voting gap between persons with high social status, incomes or wealth and persons with low social status, incomes and wealth?

Most theories are based on the assumption that richer individuals are more likely to be opposed to redistributing wealth from rich to poor whereas poorer individuals are likely to push for that kind of redistribution (Tóth and Keller, 2011; Corneo and Grüner, 2002; McCarty and Pontusson, 2009; Guillaud, 2013). This argument might be called the ‘pure material self-interest’ (Tóth and Keller, 2011) or the ‘homo economicus’ effect (Corneo and Grüner, 2002). From this we might conclude that total voter turnout should be higher in countries with a high level of social inequalities than in countries with a low level of social inequalities. Historically, however, the rise in inequalities has coincided with a decline in voter turnout in most Western democracies. In other words, it would rather seem that in unequal societies people at the bottom of society are less involved in politics than people at the top of society. This observation also leads to the puzzling question of why, at least in Western democracies, voting rates decline even though education levels increase?

Research results on the links between inequalities and electoral participation do not paint a clear picture. On a simple bivariate level, no correlation between voter turnout and the Gini index is observed. In European elections, for example (Figure 45), there is not obvious link between the Gini coefficient and electoral turnout.
Although minor links do emerge for national elections (Figure 46), there is no consistent pattern there either. Some multivariate studies, dating back to the 1960s, show that economic inequalities do affect voting rates in negative ways (Solt, 2010). This may be explained by the fact that poorly educated citizens tend to vote less frequently than highly educated citizens (Gallego, 2010). However, as the same authors note, voting behaviour by education varies a lot from one country to another. A recent meta-analysis of 90 empirical studies of individual voter turnout in national elections published in ten leading journals during 2000–2010 and covering more than 170 different independent variables, does not find any clear pattern between income, occupational status, occupational type, social status and voting rates, although ‘those from higher social classes indeed systematically turn out at higher rates’ (Smets and van Ham, 2013: 350).
The same study also observes that ‘there is no consensus on a “core model” of voter turnout [...] authors rarely include the same control variables in their models’ (ibid.:356). This sociological remark clearly means that competition in this scientific field can work at the expense of knowledge on democracy.

Therefore, there is no clear empirical evidence that inequalities negatively affect electoral participation. Again, these rather simple observations, based on quantitative correlations rather than elaborate qualitative observations, do not mean that inequalities do not matter. They rather suggest that, as pointed out above with regard to health, people’s financial status or the degree of material inequality are far too rough indicators. Other theoretical approaches involving status and class have more explanatory power (see Svalfors, 1997; Kumlin and Svalfors, 2008; Tóth et al., 2014: 198). However, Tóth et al. (2014), for instance,
arrive at the conclusion that it is far from clear ‘whether increasing inequality reduces turnout or diminishing turnout increases inequality’ (Tóth et al., 2014: 216).

But it is not only elections that matter in democracy. Political science has a very long tradition of studying ‘civic culture’ and social participation. As analysed by the PIDOD European research project, civic culture refers to various non-electoral forms of political participation embedded in democratic life, such as voluntary membership in parties or various civil organizations. Social participation refers to attitudes towards others, including trust in particular. Here, research seems to point more clearly to a link between inequalities and such attitudes to broader political participation. In a comparative study of 24 European countries, the GINI European research project concludes that ‘civic participation is indeed negatively affected by inequalities’ (Lancee and Van de Werfhorst, 2012). The MYPLACE European research project studies how young people become (or not) politicised and come to share far right and populist ideologies given the social and political environments they live in. Political interest and engagement corresponds closely with young people’s economic, social and cultural capital. This sets significant equality challenges for policy makers and suggests the need for a differentiated policy approach that takes account of social structural inequality and diversity. If the relatively good news is that on the whole young people, if in socially differentiated ways, have a fairly substantial interest in politics and political issues, the worrying concern is that this does not translate into comparable levels of engagement with formal politics and the political system. The most important reason that appears to emerge from the research to date is the low level of trust and high level of cynicism that exists in most European countries towards politics, politicians and the political system. While on the whole there is support for democracy as a system, many young people seem to feel that it is not working well for them. A significant number of young people think that politicians are corrupt, and the majority of respondents in most countries felt that politicians are not interested in young people like them. Besides, it appears that non-institutionalized forms of participation (such as attending demonstrations or signing petitions) reinforce education-based inequalities: poorly educated citizens tend to be excluded from such increasing non-electoral democratic practices (Marien and al., 2010). This also has to be linked to the fact that higher economic inequality is correlated to an underrepresentation of the poor in both party and government affairs (Rosset and al., 2013). Finally, research on attitudes has provided evidence that income inequality is negatively related to solidarity. The more inequality there is in a society, the less people
are willing to improve the living conditions of others in their community (e.g. older, sick and disabled persons) (Paskov and Dewilde, 2012).

Overall, there is mounting scientific evidence that various forms of educational, employment and financial exclusion are likely to lead to various forms of political exclusion—that is, a depoliticisation of socially excluded groups. This is obviously an alarming sign for the future of European democracies and is in glaring contradiction to the democratic political values enshrined in the Treaties.

5.3 Conclusion

This brief discussion of the social and political outcomes of social inequalities has shown that, given the current conclusions of quantitative research approaches, there are still open questions. Without doubt, an individual's material situation makes a big difference—and that fact alone is reason enough for policymakers to do everything they can to address the exclusion of socially disadvantaged persons and households in the long term.

Whether the degree of inequality is causally related to a range of negative social and political outcomes such as health inequalities and voting rates is still an open scientific question. However, recent research on the relationships between inequalities and other types of political and social participation point to more evidence that inequalities are related to a weakening of what one might call 'thick democracy' in Europe, that is, democratic attitudes and practices beyond voting. This observation in itself should suffice to mobilise politicians, policymakers and active citizens to defend our common good, democracy. However, as Rosanvallon (2011) and Dubet (2014) remark, we are caught in a paradox: the more we speak about inequalities, the less we fight them, and the less our democracies seem capable of fighting them. Combatting inequalities within the current unsatisfactory democratic systems in Europe may thus not be enough. What might be necessary is a much more critical assessment of our current democratic practices, theories and institutions in order to re-found a ‘total democracy’ and a ‘society of equals’ (Rosanvallon, 2011).
Conclusion: The Need for the EU to Adopt Policies to Fight Inequalities

Let us focus on five major issues about social inequalities that require determined action at EU and also at national level.

1) As a general principle, it is important to note that many differences among people in Europe are ‘created’ by society and are systematically linked to life chances. As this Review has shown, educational attainment depends to a large extent on the region or country where people live and on their parents’ socioeconomic status. Far from all citizens of Europe have access to the same educational opportunities, even if—and this is the crucial point—they have the same abilities. Access to good employment and income opportunities is closely connected to success in education, meaning it is once again firmly anchored in existing structures. This is even more true for individuals who live on capital gains rather than on their market income. Europe will always be characterized by the many differences between its various regions—and often this diversity is something to celebrate. Systematic inequalities in people’s access to resources, however, are unacceptable and must also be addressed at the supranational level by means of a determined European policy on education: tackling inequalities in Europe first means tackling inequalities at an early age, which means making education accessible to all with adequate policies to give to the least advantaged populations opportunities for life.

2) Considerable inequality exists in Europe with regard to the standard of living and the distribution of income and wealth. Take Poland and Germany in 2012, for example. The poverty rates in both countries are quite similar: in Poland, 16.3% of the population is considered poor; in Germany, it is 15.3%. The annual income threshold demarcating poverty is 3,036 euros in Poland; in Germany it is 11,757 euros. In a common Europe, the political agenda must not only include the reduction of social inequalities but also the differences in income between countries. This Review has shown that average annual earnings in Europe do not converge over time; on the contrary they are drifting further apart. This is harmful for a common European economic space and runs counter to the creation of a European social union. Likewise, in many EU Member States, inequalities in income and/or wealth distribution have largely increased over the last 35 years, putting a test on the EU’s so-called social model. The unprecedented accumulation of wealth among
the already rich and, at the other end of the social scale, the growing number of poor people give rise to harsh questions such as: can the EU help reduce such inequalities? Do the political and economic elites in the EU and its member States have the will and the means to fight for the cause of equality or are they satisfied with the current and possibly future levels of inequalities?

3) A European social policy must address differences resulting from an increasing pluralisation of lifestyles and social security models. This Review has shown the huge difference between the proportion of people working in the low-wage sector (individual income) and those that make up the working poor (household income). The daily reality of women provides a striking example in this regard. Those working in the low-wage sector are mostly women. But when we look at the group of the working poor—that is, those whose incomes fall below a given poverty line even though they have a job—we see it consists mostly of men. Although women often work in ‘bad’ jobs not covered by collective bargaining agreements, they are protected against poverty if they are married or live in households. This is ‘reassuring’ only at first glance. Most EU Member States do not have any policies to help women earn their own social security benefits; they rather rely on women to gain financial security through their husbands. In view of the longstanding trend towards fewer marriages and rising divorce rates because of individualistic and freedom trends in society, this is a very risky road to take. Will in particular the EU institutions and the EU member States take last gender equality seriously and propose policies that take women’s situation into account and try to improve the position of women in society regarding employment, income, welfare and retirement? Indeed, providing individual security not only means designing social policies towards that end but also improving women’s opportunities in the labour market. Starting here means introducing minimum wages across Europe, creating equal collective bargaining agreements and regulations for male- and female-dominated occupations, resolutely addressing the part-time penalty gap, and implementing a diverse array of measures to enable women to pursue gainful employment beyond marginal part-time work. Besides providing childcare services and all-day schools, this includes a cultural transformation towards a situation where unpaid work, too, is divided evenly between men and women. The Scandinavian countries have been particularly successful developing in that direction.
4) In all European countries, one can witness processes of social closure resulting from assortative mating: social mobility through marriage or long-term partnerships has dropped dramatically over the years. This creates a social gap between households facing a double poverty risk and households enjoying a double safety net. On one side, both partners have low levels of education and poor prospects in the labour market, complemented by a weak degree of social security. On the other side, richer households consist of dual earner couples earning high incomes, enabling them to afford private social security in addition to government benefits. Very importantly, this is not a momentary snapshot; its consequences will affect several generations: children will get the corresponding education, and (grand-) parents will receive the corresponding care when they are old and frail. Through inheritance, the opportunities and risks accumulate dramatically on both sides. Is this the dual society that Europe wants?

5) This leads the European citizens to consider the evolution of the middle classes in our democracies. An interesting hypothesis of our modern times is: are increasing inequalities and growing polarization between ‘rich’ and ‘poor’ likely to lead to a strong erosion of the middle classes? Indeed there are signs of downward mobility among the middle classes in many Western countries. For instance, as this Review has underlined, while unskilled people are excluded from the workforce, their unskilled jobs are taken up by skilled individuals from the middle classes, who then are less likely to obtain quality jobs and a good income. The main problem is that Western democracies have thrived on affluent middle classes with more or less stable political preferences, supported by stable government parties. If the middle classes shrink and experience downward mobility, then support for our traditional democratic governments is likely to drop because of growing political exclusion and apathy among larger segments of society on the one hand and because of increased political and potentially anti-democratic radicalism among citizens who do not accept such changes on the other hand. On the scientific front, evidence of the decline of the middle class is still mixed (Gornick and Jäntti, 2013). However, the debate also unveils a problem regarding the relevance and quality of political and policy supply in our democratic systems.

The only way for Europe to meet these challenges is not only to strengthen economic growth policies through a broad-based economic programme promoting marketisation but also by resolutely pushing for the expansion of a Social Union which has always been part of the European model, but not so strongly in
recent years. A modern and successful Europe must resist the call for short term economic growth solutions to acute social problems like inequalities. As this Review has shown extensively, increasing selection at an early age in educational systems, cutting back on government benefits, deregulating labour markets and pretending to ignore that the number of working poor develop, allowing wealth accumulation without adequate EU taxation, ignoring the political exclusion of people at the bottom of societies because of weak policies in favour of active citizenship, definitely increase inequalities and weaken Europe as a continent for social progress. Europe's most powerful countries must put equal emphasis on employment and welfare, stress future-oriented educational investments, make sure their education and labour market policies are highly efficient and offer a comprehensive spectrum of services and likewise pursue active social policies. The Scandinavian countries, for example, boast an extraordinarily strong profile in that regard, combining a high level of educational attainment reached by most citizens and a high level of social security to protect against unemployment, illness and old age. If their cultural environment is different from other EU countries, their achievement cannot be ignored or assessed as irrelevant since these countries show that inequalities are not a fate but a series of policies.

This Review has tried to show that inequalities in Europe are not a recent phenomenon and that they have in general increased over recent times in most EU countries although with many national and historical variations. The important issue for Europe is not whether inequalities are acceptable in democracies since European (and other) democracies have from the beginning lived with acceptable levels of inequalities in society. The issue is rather what levels of inequalities are acceptable and who is able to take decision as to what limits there should be to inequalities: this is the fundamental political question for our democracies at national and EU levels.
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Introduction


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105


Chapter 5


**Conclusion**

**Annex I: Description for the competence levels of proficiency in print reading (PISA) and literacy (PIAAC)**

<table>
<thead>
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<th>PISA: reading</th>
<th>PIAAC: literacy</th>
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### Below Level 1

**Lower score limit 262**

Tasks at this level require the reader to locate a single piece of explicitly stated information in a prominent position in a short, syntactically simple text with a familiar context and text type, such as a narrative or a simple list. The text typically provides support to the reader, such as repetition of information, pictures or familiar symbols. There is minimal competing information. In tasks requiring interpretation the reader may need to make simple connections between adjacent pieces of information.

**Below 176 points**

The tasks at this level require the respondent to read brief texts on familiar topics to locate a single piece of specific information. There is seldom any competing information in the text and the requested information is identical in form to information in the question or directive. The respondent may be required to locate information in short continuous texts. However, in this case, the information can be located as if the text was non-continuous in format. Only basic vocabulary knowledge is required, and the reader is not required to understand the structure of sentences or paragraphs or make use of other text features. Tasks below Level 1 do not make use of any features specific to digital texts.

### Level 1

**Lower score limit 335**

Tasks at this level require the reader to locate one or more independent pieces of explicitly stated information; to recognise the main theme or author’s purpose in a text about a familiar topic, or to make a simple connection between information in the text and common, everyday knowledge. Typically the required information in the text is prominent and there is little, if any, competing information. The reader is explicitly directed to consider relevant factors in the task and in the text.

**176 to less than 226 points**

Most of the tasks at this level require the respondent to read relatively short digital or print continuous, noncontinuous, or mixed texts to locate a single piece of information that is identical to or synonymous with the information given in the question or directive. Some tasks, such as those involving non-continuous texts, may require the respondent to enter personal information onto a document. Little, if any, competing information is present. Some tasks may require simple cycling through more than one piece of information. Knowledge and skill in recognising basic vocabulary determining the meaning of sentences, and reading paragraphs of text is expected.
### Level 2

**Lower score limit 407**

Some tasks at this level require the reader to locate one or more pieces of information, which may need to be inferred and may need to meet several conditions. Others require recognizing the main idea in a text, understanding relationships, or construing meaning within a limited part of the text when the information is not prominent and the reader must make low level inferences. Tasks at this level may involve comparisons or contrasts based on a single feature in the text. Typical reflective tasks at this level require readers to make a comparison or several connections between the text and outside knowledge, by drawing on personal experience and attitudes.

**226 to less than 276 points**

At this level, the medium of texts may be digital or printed, and texts may comprise continuous, non-continuous, or mixed types. Tasks at this level require respondents to make matches between the text and information, and may require paraphrasing or low-level inferences. Some competing pieces of information may be present. Some tasks require the respondent to:
- cycle through or integrate two or more pieces of information based on criteria;
- compare and contrast or reason about information requested in the question; or
- navigate within digital texts to access-and-identify information from various parts of a document.

### Level 3

**Lower score limit 480**

Tasks at this level require the reader to locate, and in some cases recognise the relationship between, several pieces of information that must meet multiple conditions. Interpretative tasks at this level require the reader to integrate several parts of a text in order to identify a main idea, understand a relationship or construe the meaning of a word or phrase. They need to take into account many features in comparing, contrasting or categorising. Often the required information is not prominent or there is much competing information; or there are other text obstacles, such as ideas that are contrary to expectation or negatively worded. Reflective tasks at this level may require connections, comparisons, and explanations, or they may require the reader to evaluate a feature of the text. Some reflective tasks require readers to demonstrate a fine understanding of the text in relation to familiar, everyday knowledge. Other tasks do not require detailed text comprehension but require the reader to draw on less common knowledge.

**276 to less than 326 points**

Texts at this level are often dense or lengthy, and include continuous, non-continuous, mixed, or multiple pages of text. Understanding text and rhetorical structures become more central to successfully completing tasks, especially navigating complex digital texts. Tasks require the respondent to identify, interpret, or evaluate one or more pieces of information, and often require varying levels of inference. Many tasks require the respondent to construct meaning across larger chunks of text or perform multi-step operations in order to identify and formulate responses. Often tasks also demand that the respondent disregard irrelevant or inappropriate content to answer accurately. Competing information is often present, but it is not more prominent than the correct information.
<table>
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<th>Level 4</th>
<th>Level 5</th>
<th>Level 6</th>
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<td><strong>Lower score limit 553</strong></td>
<td><strong>Lower score limit 626</strong></td>
<td><strong>Lower score limit 698</strong></td>
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<td>Tasks at this level that involve retrieving information require the reader to locate and organize several pieces of embedded information. Some tasks at this level require interpreting the meaning of nuances of language in a section of text by taking into account the text as a whole. Other interpretative tasks require understanding and applying categories in an unfamiliar context. Reflective tasks at this level require readers to use formal or public knowledge to hypothesize about or critically evaluate a text. Readers must demonstrate an accurate understanding of long or complex texts whose content or form may be unfamiliar.</td>
<td>Tasks at this level that involve retrieving information require the reader to locate and organize several pieces of deeply embedded information, inferring which information in the text is relevant. Reflective tasks require critical evaluation or hypothesis, drawing on specialized knowledge. Both interpretative and reflective tasks require a full and detailed understanding of a text whose content or form is unfamiliar. For all aspects of reading, tasks at this level typically involve dealing with concepts that are contrary to expectations.</td>
<td>Tasks at this level typically require the reader to make multiple inferences, comparisons and contrasts that are both detailed and precise. They require demonstration of a full and detailed understanding of one or more texts and may involve integrating information from more than one text. Tasks may require the reader to deal with unfamiliar ideas, in the</td>
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<td><strong>326 to less than 376 points</strong></td>
<td><strong>Equal to or higher than 376 points</strong></td>
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<td>Tasks at this level often require respondents to perform multiple-step operations to integrate, interpret, or synthesize information from complex or lengthy continuous, non-continuous, mixed, or multiple type texts. Complex inferences and application of background knowledge may be needed to perform the task successfully. Many tasks require identifying and understanding one or more specific, non-central idea(s) in the text in order to interpret or evaluate subtle evidence claim or persuasive discourse relationships. Conditional information is frequently present in tasks at this level and must be taken into consideration by the respondent. Competing information is present and sometimes seemingly as prominent as correct information.</td>
<td>At this level, tasks may require the respondent to search for and integrate information across multiple, dense texts; construct syntheses of similar and contrasting ideas or points of view; or evaluate evidence based arguments. Application and evaluation of logical and conceptual models of ideas may be required to accomplish tasks. Evaluating reliability of evidentiary sources and selecting key information is frequently a requirement. Tasks often require respondents to be aware of subtle, rhetorical cues and to make high-level inferences or use specialized background knowledge.</td>
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presence of prominent competing information, and to generate abstract categories for interpretations. Reflect and evaluate tasks may require the reader to hypothesise about or critically evaluate a complex text on an unfamiliar topic, taking into account multiple criteria or perspectives, and applying sophisticated understandings from beyond the text. A salient condition for access and retrieve tasks at this level is precision of analysis and fine attention to detail that is inconspicuous in the texts.
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