As we will see in this chapter, there has been some improvement in the European Labour market in the last couple of years. However, unemployment remains high, especially long-term and youth unemployment. This raises the question of human capital depreciation, stigmatisation and unemployment hysteresis. At the same time both inequality and poverty are continuing have increased since the crisis started.

European economic policy barely takes into account the academic consensus that measurement of economic performance and social progress is necessary and has to go beyond GDP. To facilitate evidence-based well-being oriented economic policy, we need to reform the European Economic Governance and to establish some kind of sustainable development indicators (SDI) to measure progress beyond economic growth. The SDIs should take into account the protection of the natural capital and social justice to help define and improve policies. SDIs show reasons for optimism in some areas, while substantial progress needs to be done in other areas, including poverty.

The chapter shows a very heterogeneous Europe in terms of unemployment, inequality and sustainability. Therefore, both EU as a whole and the dispersion between countries are analyzed in this chapter.

2.1. European labour market

The fact that the European labour market has suffered through the crisis is far from new. The good news is that the number of unemployed persons has fallen during the last couple of years, but the bad news is that we are still far from the pre-crisis (2008) level. Also in terms of employment, the EU has hardly regained its pre-crisis employment level by 2015.
In 2015, around 22.9 million people in the EU were unemployed. This is more than 3 million fewer than the high of 26.3 million in 2013, but it is still far from the 16.8 million unemployed in 2008 before the crisis kicked in. When it comes to long-term unemployment (defined as 12 months or more of unemployment), the level is of course lower. In 2015, 10.9 million people were long-term unemployed in the EU. Considering an even longer time horizon, 6.8 million people belong to the category “very long-term unemployed” (defined as 24 months or more of unemployment). In the following, we dig deeper into the different types of unemployment in the EU and the euro area.

The employment rate in the EU-28 and the EA-18 were almost identical from 2008 to 2011, where both areas first experienced a decrease and thereafter a stagnation. However, from 2011 to 2013 the stagnation continued for the EU-28, while the euro area experienced yet another decrease. From 2013, the rates seem to follow each other again in a decrease but there is a gap between them. This picture is confirmed by the unemployment rate in Figure 19.

![Figure 19. Unemployment rate in the EU and the Eurozone](image)

*Note:* percentage of active population. Long term unemployment is defined as unemployment of 12 months or more, while very long term unemployment is defined as unemployment of 24 months or more. The unemployment rates have been seasonally adjusted.

*Source:* Eurostat.

While unemployment finally is decreasing, the euro area was hit particularly hard by the crisis, as Figure 19 shows. For all the depicted types of unemployment, the euro area has a higher rate than the EU-28. While unemployment
and long-term unemployment for both the euro area and the EU have decreased from a high around 2013, the very long-term unemployment rate remains remarkably high in the 2nd quarter of 2016 (latest quarter for which data is available). Figure 19 also shows that despite the decreases, the current level is high for all the depicted rates when considering the entire period from 2005 to 2016. This is especially worrying for long-term and very long-term unemployment because people that are unemployed for a longer period of time, tend to lose touch with the labour market and their skills become outdated. As employers tend to see unemployment duration as a signal for low employability, the vicious circle of long term unemployment is accelerating further. This means that they will move further and further back in the queue for new jobs.

The unemployment rate for the EU has fallen, but it was still as high as 8.5 pct. in the 3rd quarter of 2016. In the 2nd quarter of 2016, the level of long-term unemployment was 4 pct., while the very long-term unemployment was 2.6 pct. As Figure 19 shows, the unemployment must continue decreasing for quite some time before we can expect to get close to the pre-crisis levels.

**Figure 20. Long term unemployment rates**

The picture provided by Figure 19, covers big differences among the European countries which will be investigated further in the following. Focusing on the
long-term unemployment rate, all countries but Germany and Malta have experienced increases in the rate from the start of the crisis in 2008 until 2015, which can be seen in Figure 20. Especially countries in Southern Europe have been affected by the crisis; e.g. Greece and Spain have experienced increases of 14.5 and 9.4 percentage points from relatively low levels.

Even though the unemployment rates have been decreasing, they are currently decreasing quite slowly. This can be seen in Figure 21, where the number of years it will take to reach the 2007 rate of unemployment, at the current speed of reduction, is shown. After a low level during the end of 2015 and the beginning of 2016, the rate has increased steeply since the summer of 2016. In September 2016, the EU-28 would be back to the 2007—level after 4 years, while it would take the euro area more than 6 years. This indicates that the necessary measures to speed up recovery have not been taken.

Figure 21. Number of years to reach 2007 rate of unemployment at current speed of reduction

Figure 22 depicts unemployed (ILO), people willing to work but not actually seeking a job and people who work part time, but who are willing to work more. The figure shows that despite a decrease the last couple of years the levels for all 3 categories are still at a high level when considering the last decade. Labour underutilization (summing up people willing to work, but not
searching and those working part time, who wish to work more) follows the development on the labour market (Figure 19). However, the figure gives a picture of a labour market labour underutilization is a real issue. This is worth keeping in mind when considering the unemployment rate because it shows that there is a group of people that want to work (more) that are not a part of the general unemployment statistics.

Just as unemployment over a longer period of time is of special interest, so is youth unemployment. In the very worst case, there is a risk that young people who start out being unemployed may never really become an integral part of the labour market. This has serious consequences not only for the persons involved, but also for society overall.

The youth unemployment (considering people aged 15-24) in both the EU and the euro area peaked in 2013 and has decreased since then. From 2013 to 2015, youth unemployment in the EU fell by more than 900,000 people. This does not mean that employment has risen by the same number because e.g. some young people have chosen to start studying or have left the labour force for other reasons. For the euro area, the decrease in youth unemployment in the same period was a little over 400,000 persons. Therefore, in 2015, the levels
of youth unemployment were 4.6 million and 3.2 million for the EU and the euro area, respectively. As for the general level of unemployment, there is still some way to the pre-crisis level.

The youth unemployment ratio (in contrast to rate) is the number of unemployed young people as a share of the total population aged 15-24. The ratio can be seen in Figure 23. While the ratio for youth unemployment has decreased notably from 2013, the ratio for long-term youth unemployment has decreased less. Recent decreases are very welcome improvements, but both ratios remain quite far from the low level of 2008. In 2016, still around 1/3 of the young unemployed in Europe were unemployed long-term.

![Figure 23. Youth unemployment ratio in the EU and the Eurozone](image)

Note: Age 15-24. The youth unemployment ratio is defined as the number of unemployed of the age 15-24 relative to the total population of the same age. This is different from the youth unemployment rate which is defined as the number of unemployed of the age 15-24 relative to the number of people in the labour force of the same age. The numbers are seasonally adjusted.

Source: Eurostat.

Figure 24 shows the youth unemployment rates in different European countries prior to the crisis and today. The rates are higher than the ratios, because they measure the number of young unemployed relative to the labour force (and not the total population as it is the case for the ratio). The figure makes it clear that youth unemployment is a big problem and that most countries have experienced increases in the rates since the crisis began. Some countries such as Spain
and Greece are currently at extreme levels of almost 50 percent. On the other hand, Germany is one of the few countries that has experienced a decrease since 2008 and is currently at a level below 10 percent.

The youth unemployment rate covers young people who are a part of the labour force and search for a job, but they can be studying at the same time. The NEET-rate takes this ambiguity into account and stands for Not in Employment nor in Education or Training. In 2015, the average of the EU-28 was 12 percent, but that covers big differences among the European countries. Especially, the South European countries have high NEET-rates of up to 21.4 percent in the case of Italy. In the other end of the scale, the Netherlands is at 4.7 percent. Compared to the very high youth unemployment rates, the NEET-rate indicates that many of the young people that are considered unemployed are also in education. Those who fall into the NEET-category are—as the name indicates—not studying, not working and not in training and it should be a priority to have as few young people as possible in this category.

Figure 25 shows the correlation between the NEET-rates and the unemployment rates in 2015. From the figure, it is clear that there is a positive correlation between the two, which is also to be expected. As the 45-degree line shows,
most countries have a higher NEET-rate than general unemployment rate. This is especially the case for Italy, Bulgaria and Romania. This indicates that even compared to the level of unemployment, there is a big group of young people who are neither working nor under education. As mentioned, this group should receive special attention. On the other hand, the figure shows that Greece and Spain must fight with both a high unemployment rate and a high NEET-rate.

Figure 25. Correlation between the NEET-rate and the unemployment rate in 2015

Just as different age groups have experienced the crisis and its aftermath differently, men and women have been affected differently by it. This is considered in further detail in box 1.

Box 1. Gender equality challenged by austerity policies

The gendered effect of the crisis is well known (see amongst others Rubery and Karamessini, 2014; Eydoux, Math and Périvier ed., 2015). In general, the recession stage has affected more deeply male employment than female one, due to sex sectorial segregation. This so-called “He-Cession” phenomenon should be looked at with care: in some countries, like in the UK for instance, the share of women per sector has changed in the sense that they have been
more affected relatively than men (see Périévier, 2016). The austerity phase is not gender neutral: fiscal consolidation policies have jeopardized or stop the dynamic of narrowing the gender inequalities through different channels (Périévier 2016).

Employment losses in female dominated sector. Cuts in public spending have implied a reduction in public employment; freeze (or decrease) in wages and social rights for civil servants (Theodoropoulou and Watt, 2011; Leschke and Jepsen, 2011; Smith, 2009; Karamessini, 2014). For the same reason the He-Cession emerged during the recession phase, some countries experienced a She-Austerity : sectors in front line of austerity are dominated by female workers, cuts in public spending lead to job destructions for women. Female unemployment or under-unemployment has increased in consequence.

Austerity policies induce a decrease in generosity in work-life balance policies (childcare system, support for elderly …), due to cuts in public services. Women are the main users of these services; they are affected in their daily life through tougher constraints in work-life balance.

This effect is reinforced by the impact of deregulations of labour markets. This trend increases the difficulties for women to articulate their professional and family life, and it strengthens the complexities to synchronize social times for women, especially with young children. The degree of flexibility of labour market has grown through amongst others the suppression of regulations like limiting commercial shop opening hours (as in Greece and Spain for instance). The increasing power of employers to make substantial changes to individual or collective contracts and to change working hours (LABREF database, EC). Women are over-represented in the sectors that are the most sensitive to these changes in labour regulations (retail and services).

The reduction of social rights affects more deeply women than men, because of gender gap in careers and wages. Therefore, the withdrawal of specific compensations of these inequalities worsens the situation of women in precarious conditions. The degradation of work-life balance described previously will increase career interruptions for mothers, and consequently their social rights. In this respect, pensions’ reforms are particularly harsh for women. The retirement age limit differentials between men and women retirees have been abolished and the retirement age for both sexes have been increased. Women have to work longer before being retired, the possibility for younger women with children to rely on family solidarity, as it is common in South countries, will be limited in the future (Verashchagina and Capparucci, 2014).

The role of family leaves in reducing the degree of sexual division of labour within families has been modified by austerity policies. In Spain (2013), the implementation of the extension of paternity leave has been delayed. In France, the reform of the parental leave (2014) presented as promoting gender equality imposes a sharing rule of the length of the leave. The reform aims to dedicate one year (out of three) of the leave to the father. But in the same time, the level of the lump sum allowance has been reduced (to reach the level of one third of the minimum wage). This new scheme remains unat-
tractive for fathers. The likely high non-take-up rate of fathers will reduce the cost of the parental leave for public finance.

In some countries gender equality and women’s rights have been directly jeopardized by a reduction in the support to equality bodies. In Spain, some of the monitoring bodies for gender equality have been closed. In the UK (2011 and 2012), cuts in the budget of the Equal Human Rights Commission (EHRC) have been decided (see Karamessini and Rubery, 2014). These measures decrease the possibility to monitor gender equality.

The austerity measures induce a modification of the structure of European welfare states and gender regimes through a decrease in the degree of defamilialization and in the degree of decommodification of welfare states. Gender equality has been relegated to the background (Smith and Villa, 2014).

2.2. A glance at income inequality, poverty and social conditions

This part of the chapter looks into inequality measured in different ways e.g. in order to consider movements in the income distribution in further detail. In many cases, higher inequality is a result of the crisis with decreasing living standards and other severe consequences. The crisis has not hit the European countries the same way and within the countries, people have not been hit equally hard. It turns out that especially Southern Europe has been under pressure the last 8 years, while Eastern Europe has progressed. Considering different
age groups instead of countries, the tendency is an increase in the number of poor young people, while older people have fewer difficulties.

a) Income inequality

Income inequality can be measured in different ways and in Figure 26, we consider income inequality by comparing different parts of the income distribution, in particular the 1st, 6th and 10th decile. This means that we are able to decompose changes in inequality into what is driven by the bottom, middle and top of the income distribution. For most countries, the S6/S1 has increased since 2008. This can be due to different scenarios explained in the figure note, but either way, the interpretation is clear; people at the bottom of the income distribution are poorer now relative to the people in the middle of the income distribution than they were in 2008. Especially Spain, Greece and other south European countries, but also Germany (despite a decrease in unemployment), have experienced big increases, so the gap between the poor and the middle

Figure 26. Evolution between 2008 and 2015 of share of national equivalised income

Note: (*) Latest data from 2014. BGR, DK and EST have been left out due to break in time series which shortened the period that could be considered to a degree that made it meaningless. This figure considers the share of national equivalised disposable income.

Here is an example of how to interpret the fractions: S6/S1 is the share of income received by the 6th decile divided by the one received by the 1st decile. An increase in this ratio means that the 6th decile has increased relative to the 1st decile or that the 1st decile has fallen relative to the 6th or both.

Source: Eurostat.
class in those countries has widened. In other words; the crisis mainly hit those who were already poor. When it comes to S10/S6, the ratio between the top and the middle of the distribution, most countries have not experienced that big changes over the period. Cyprus stands out with a big increase, while some other countries, e.g. Portugal and The Netherlands, have experienced decreases, which means that the economic distance between the richest and the middle class has decreased during the crisis.

To consider the overall level of inequality of disposable income in Europe, we consider averages of national Gini coefficients, according to Eurostat, a Global Gini coefficient and a Global Theil index (Figure 27). The two last compare all households regardless of residence. The Gini coefficient is a measure that represents the income distribution of a country in a single number between zero and one and it is higher, the higher the inequality. The difference between the Eurostat Gini coefficient and the Global Gini coefficient arises because the statistic calculated by Eurostat does not take inequalities between the countries into account, but averages inequality within each country. Therefore, the inequality is at a lower level than for the Global Gini.

The newest available data allows us to consider until 2014. In the EU, inequality measured by the Global Gini and Theil index has increased from 2013 to 2014 and so has the average Gini, which is on a much lower level because this
statistic, calculated by the Eurostat, does not take inequalities between European countries into account, but averages inequality within each country. For the Euro zone, inequality measured by the Gini coefficient and Theil index remain high compared to the 2008-level, however, the Theil rate has decreased slightly from 2013 to 2014. Finally, one should note that the Global Gini is more or less the same in the US and the EU in 2014.

Besides income inequality, the concentration of wealth in the Eurozone has gained considerable attention of economists and policy makers in the recent past. In particular, the 2010 dataset of the Household Finance and Consumption Survey (HFCS) by the ECB revealed that wealth inequality is by far higher than income inequality: the Gini coefficients for household wealth vary between roughly 0.45 and 0.75 across the Eurozone countries. Unfortunately, except for the ECB data there is a distinct dearth of information on private household wealth. The second wave of the HFCS has been conducted in 2014 and first results on the wealth distribution in the Eurozone are expected in spring 2017.

b) Regional convergence slowed

Income inequality can also be approached by considering if GDP levels in different European countries converge or diverge. This is the traditional way to investigate how inequality across the European Union evolves. Figure 28 shows that between 2005 and 2008, there was sign of regional convergence in the sense that the regions in countries that experienced the highest growth rates in GDP per capita tended to be the ones who initially had the lowest level of GDP.

On the other hand, Figure 29 shows a picture with no trend towards regional convergence in the EU. From 2008-2014, it is less the case that the poorest countries have experienced the highest growth rates.

c) Increasing poverty since the crisis

Both inequality and poverty have increased since the crisis started. When investigating changes in poverty over time, a preferred measure is the anchored risk-of-poverty rate. People with equalized disposable household incomes below 60 pct. of the median income after social transfers in their country are defined as at risk-of-poverty. Figure 30 shows how the rate has evolved in the EU and the euro area since 2008 with the risk-of-poverty rate anchored to median earnings in 2008. It is very concerning that the anchored poverty rate has increased to such an extent as it means that substantially more people today have less than 60% of the real median income in 2008. One might also have expected the rate to
Figure 28. Regional convergence in the EU 2005-2008

Sources: Eurostat, iAGS calculations.

Figure 29. Regional convergence in the EU 2008-2014

Sources: Eurostat, iAGS calculations.
increase rapidly from 2008, but this was not the case. The rate was quite flat for both the EU and the euro area until 2010, where a sharp increase started, which seems to be correlated with austerity policies. The increase has been larger for the euro area, which in 2014 (the latest year for which data is available), has a rate of risk-of-poverty of 20.7 percent. For the EU, the rate was 19.4 percent.

Figure 31 shows the change in the anchored risk-of-poverty rate from 2008-2015 with the rate anchored in 2008. Most countries have experienced an increase in the rate during the period and especially Greece and Cyprus have suffered since 2008. In Greece, the rate has increased by as much as 27.9 percentage points. On the other hand, a number of countries have actually experienced decreases. Examples are Poland and Bulgaria, where the rate has decreased by 5.6 and 6.9 percentage points, respectively. Without a decisive policy change, the Europe 2020 target of reducing the number of Europeans living below national poverty lines by 25 percent until the end of the century will be clearly missed.
Figure 32 holds the change in the anchored risk-of-poverty rate from 2008-2015 up against the change in the unemployment rate during the same period. Most countries belong to the group that have experienced increases in the anchored poverty rate of less than 10 percent and increases in the unemployment rate of less than 6 percent. However, as earlier, South European countries such as Greece, Cyprus and Spain stand out with remarkable increases in both rates during the crisis.

Within the countries depicted above, different age groups have been affected differently. Figure 33 shows the percentage of people at risk-of-poverty and social exclusion by age groups in the EU-27. The risk-of-poverty here is not anchored, which means that the median income differs from year to year. As the figure shows, there is a clear difference between the age groups. The group of people aged 16-24 has the highest risk of poverty and since 2010, the group of people above 65 years have had the lowest risk of poverty. Since 2008, the people above 65 years of age have experienced a decrease in the rate of risk of poverty, while most of the other age groups have experienced increases. This is especially true for the young people aged 16-24. In 2014, which is the latest year for which data is available, the difference between people aged 65 and...
above and people from 16-24 years old, was a much as 14 percentage points. The difference was only 6 percentage points in 2008. The youth unemployment is higher than for the employment overall, combined with the fact that more young people are being enrolled in education, are both explanatory factors as to why the risk-of-poverty rate is higher for those aged 16-24 than those aged 25-49.

It is worth to notice that from 2010, the prime-age parts of the labour market (the 25-54 years old) have had a higher risk of poverty and social exclusion than those of the age 65 or above. Many of those aged 65 or above receive a fixed pension benefit and the decrease in the rate of risk of poverty for them does not have to mean that they feel richer, but might be due to pensions being a relatively stable income. If unemployment increases (which it has during the crisis), it means that an unchanged pension will be worth more relative to the median income and therefore, a number of people above 65 of age can find themselves above the risk-of-poverty limit without actually having a larger disposable income.

Figure 32. Correlation between change in the anchored risk of poverty and change in unemployment from 2008-2015

Note: For the anchored risk-of-poverty rate: (*) Latest data from 2014. (**) Data from 2011-2015 due to break in time series. (***) Data from 2008-2013 due to break in time series. (****) From 2012-2014 due to break in time series. The bubbles depend on the population size in the different countries.

Source: Eurostat.
Finally, the risk-of-poverty for children younger than 16 years old is the second highest of those depicted in Figure 33. The rate has increased 1.3 percentage points since 2008. According to Eurostat, child poverty is mainly affected by the labour market situation of the child’s parents, the composition of the household the child grows up in and the efficiency of government intervention through e.g. income support for parents with low income. A childhood in poverty can be very problematic and may have consequences for many years.

The countries with a high level of social protection benefits tend to have low levels of poverty as Figure 34 shows. Here it is countries as Denmark and the Netherlands, where the poverty rate is low and social protection expenditures are high, while Romania and Latvia have high levels of poverty and little spending on social protection. Keeping this link in mind, it is no wonder that poverty has risen (as e.g. Figure 31 shows) with the latest years of austerity.

d) Other measures of poverty

While both the anchored risk-of-poverty and the risk-of-poverty is based on income, the severe material deprivation rate measures to what degree individuals experience inadequate access to basic amenities. In particular, the rate is defined as the declared inability to pay for a certain number of necessary items such as rent and utility bills.
Figure 35 shows the change in the severe material deprivation rate from 2008 to 2015 for both children and a total of both children and adults. It shows that around half of the countries have experienced decreases in the severe material deprivation rate, while the other half have experienced increases. Again, it is especially south European countries that have felt the crisis. Greece stands out with an increase of 11 percentage points for the total, while the rate has increased by over 15 percentage points for children. In most cases, the increases for children are a bit higher than for the total. This indicates that families with children have been more seriously affected negatively by the crisis than adults when it comes to access to basic amenities. A higher level of deprivation among children is serious and this lack of opportunities during childhood is likely to have long-term consequences for the concerned individuals as well as for society as a whole.

To look at regional trends within the EU from a somewhat long-term perspective, we calculated, an average rate of severe material deprivation weighted by the population of the countries in each category for Southern Europe, Eastern
Europe and North-western Europe in Figure 36. The starting point is 2004, where Czech Republic, Estonia, Hungary, Latvia, Lithuania, Poland, Slovakia and Slovenia joined the union.

The severe material deprivation rate in Eastern Europe decreased rapidly in the years after the eight East European countries joined the EU, but in the wake of the crisis in 2008, the rate flattened. Since 2012, the rate has decreased, but by a smaller rate than before. On the other hand, while the rate was quite flat for Southern Europe from 2004 to 2008, the rate almost doubled from 2008 to 2012. Since then, the rate has not changed much which means that the two rates are quite close each other now. North-eastern Europe is at the lowest level of the three groups and has remained around 5 pct. during the entire period. Eastern Europe had a severe material deprivation rate of 14.1 pct. in 2015, while it was 10.4 for Southern Europe and only 4.7 pct. for North-western Europe. Even with the large improvement, Eastern Europe is still at a higher level than Southern Europe.

**Note:** (*) Latest data from 2014. The severe material deprivation rate is an EU-SILC indicator defined as the inability to do at least four of the following: to pay rent, mortgage or utility bills, to keep their home adequately warm, to face unexpected expenses, to eat meat or proteins on a regular basis, to go on holiday, to have a television set, a washing machine, a car and a telephone. The indicator distinguishes between individuals who cannot afford a certain good or service, and those who do not have this good or service for another reason, e.g. because they do not want or do not need it. Source: Eurostat.
2.3. Inequality: What can be done?

Inequality is many-faceted. Income differences between regions, gender, generations, and between capital and labour impact people and the economy in different ways. A growing body of literature recognizes that the widening inequality has detrimental effects on growth, social cohesion, and on the individual livelihoods (Berg and Ostry 2011, Ostry et al. 2014, Corak 2013, OECD 2015).

Addressing inequality requires intervention both ex-ante at the source and ex-post to attenuate market outcomes. A comprehensive package will thus comprise a kaleidoscope of measures that, first, affect the framework within which market economies function; second, strengthen the redistributive function of the European welfare state by more progressive taxation and sufficient public expenditure. These measures need to be conceived beyond the national level in order to address the inequality across member states. The financial and economic crisis since 2008 has made this imperative all the more pressing, since it has, if anything, cemented the decades-old trends of increasing inequality.
Regarding the first point, iAGS 2016 highlighted the imbalances in the relation between capital and labour in more detail. The report showed the long-term trend of falling wage shares and rising income shares of the top 1% across European countries in the last three decades. While we focused on the growth-inhibiting effects of rising inequality in iAGS 2016, these long-term trends also point to imbalances in the power structure between capital owners and employees. There are first signs of a more equable balance in countries like Germany due to the specific form of crisis management seeking consensus including social partners, and government measures to stabilize labour relations like the introduction of a minimum wage. However in peripheral countries, increasing economic pressure (especially due to high unemployment) enforced by a “new European interventionism in the area of wages” (Schulten and Müller 2012) led to a strong deterioration of industrial relations. In order to tackle this issue and improve the feasibility of wage coordination as an important element within a monetary union, a reversal of the one-sided European policies by promoting trade union representation, ensuring workers’ rights, good jobs and living wages for all is required, as has been shown by many researchers (e.g. Checchi and García-Peñalosa 2008).

As a result of this policy, wages in the Eurozone as a whole did not increase sufficiently to reach the inflation target in the aftermath of the crisis (see chapter 1). With a considerable pay rise in the European Union as whole (and very likely the Eurozone as well), the positive effect on internal demand is expected to be larger than the negative effect on exports, leading to an overall positive effect on aggregate demand (Onaran and Obst 2016). Furthermore, an increase in wages helps to rebalance the large current account surplus of the Eurozone on a global level and ends the trend of decreasing or stagnating real wages, which hinders the economic recovery in the European Union, since lacking demand of private households hampers economic activity. As wage coordination on a supranational level still hardly exists, national collective bargaining institutions and/or statutory minimum wages could be tools to spur demand and ensure decent living standards for all workers. However, as current account imbalances were a major force aggravating the crisis in the Eurozone, wage increases should be differentiated (see chapter 4), e.g. stronger in countries with high import deficits and current account surpluses respectively.

Furthermore, labour market outcomes need to be improved by reducing unemployment and increasing job security. Fighting unemployment and creating not only more but also better jobs both in the public and the private sector, must be a number one priority for policy makers. In particular, the simple employment rate should be complemented by a target corrected for precarious work.
Given the direct influence of working time and unemployment on income and material deprivation, the overall economic workload has to be distributed more equally within the labour force in order to smooth income imbalances and prevent the negative consequences of excessive working time. Although it was the latter argument which was the major reason that led to the European Working Time Directive in 2003, distributional issues should become a focus for its upcoming revision. There is an increasing chasm between the under-employed on the one hand, and the over-worked—both in intensity and in the extent of working hours—on the other hand. Continuing the long-term reduction in work time, which has taken place since the mid-19th century, can be one way to counter many of the pernicious effects of the financial and economic crisis since 2008. It may contribute to lowering unemployment rates and to distribute paid work more equally. Improved work-life balance, positive health effects, and increased productivity count among its advantages on the individual level.

Procedurally, work time reduction is a flexible instrument that can be achieved in several ways in the varying national systems of employment relations: It can be negotiated within collective bargaining systems or by legislation. Increasing the overtime premium paid by employers and putting all-in-contracts under strong legislative control can contribute to effectively reducing working hours. Meanwhile temporary reductions in work time can have positive effects, for instance in weathering transient output shocks (Herzog-Stein et al. 2013).

The persistent gender gaps and labour market segregation need to be addressed (see European Commission 2016). Women face lower hourly incomes and are employed in part-time work and in non-standard occupations more often than men. They are concentrated in low-pay sectors. They carry a disproportionate share of unpaid care work. Deep labour market segregation still persists, contributing to gender gaps in pay, pensions, decision-making, and wealth. Even though the financial and economic crisis since 2008 affected men more strongly initially, in the medium run women were hit harder by weak labour markets, as well as by the effects of austerity and cutbacks in social security systems. Legislation thus has to contribute to establishing equal working conditions and equal pay for the same work in all sectors and professions. Regulating wage transparency and conducting pay audits on the company level can play an important role for this goal. Women are not only over represented in part-time positions, but generally in low-wage and non-standard occupations. Although increasing minimum wages can help reduce income inequality and decrease poverty, more has to be done. Both men and women need to be able to combine a (shorter) full-time work position with care responsibilities, in order to combat the gender gaps in full-time and part-time positions. Parental leave...
arrangements for the exclusive use of fathers have to be intensified. Additionally, public investment in childcare opportunities and all-day schools can lay the basis for the opportunity to participate in the labour market.

On the second point concerning public finances the role of the welfare state needs to be strengthened and the progressivity of tax systems increased.

Taxation and spending policies are essential tools to reduce inequality in market incomes and to stabilise growth in times of economic crises. Regarding the nexus between government spending and inequality, this chapter has shown that material deprivation increased particularly in those European countries with rigorous austerity measures and spending cuts after the crisis. Since the economic downturn has tightened the fiscal leeway across Europe, maintaining essential social services has become increasingly challenging. This underlines the importance of combatting poverty and material deprivation by the fiscal redistribution of income and wealth without damping economic growth. Both the OECD and the IMF (2015) attest that redistribution via taxes and transfers can foster, or at least does not harm, economic growth. Yet, tax structures in European countries are less progressive today compared to some decades ago. Increased progressivity in the taxation of incomes is not only a question of introducing higher marginal tax rates on high incomes; the tax base also needs to be broadened. Most of the tax exemptions and deductions in place today disproportionately benefit high-income and wealthy households. In order to re-balance the contribution of capital and labour to financing the welfare state, and with the aim of broadening the tax base, these exemptions should be abolished. Additionally, tax compliance has to be improved across Europe.

Abolishing bank secrecy and implementing systems for the automatic exchange of information on asset ownership between European countries are necessary preconditions for an effective taxation of undeclared income and of wealth. Globalisation and digitalisation have made it easier for companies and individuals to shift their tax base in order to avoid tax payments—often legally. Due to profit shifting, particularly by multinational companies, the EU lacks billions of Euros in their budgets each year. However, illicit activities like money laundering, extortion, or terrorism financing also benefit from secrecy jurisdictions. The ETUC calls for establishing a European Tax Investigation Agency, and full support of the OECD’s Base Erosion and Profit Shifting (BEPS) initiative by European Union countries. In order to ensure a fair and effective taxation of income and wealth that makes wealthy individuals and corporations pay their share, international cooperation and transparency have to be strengthened.
On the expenditure side, social spending needs to increase to counteract rising poverty rates and rates of material deprivation since the financial and economic crisis. As the related Europe 2020 headline indicator has become even worse since the beginning of the crisis, the coverage of social protection has to be extended and benefit levels raised to guarantee a standard of living above the poverty line. It is the essence of the European welfare state to provide social transfers and especially social services to the whole population and not only to the poor. Thereby it ensures social insurance over the life cycle, combats poverty effectively and secures the willingness to contribute to the welfare system. Although expenditures for social security, health and education are particularly effective in combating inequality (see for example Guger/Rocha-Akis 2016), the narrow fiscal leeway and austerity policies hamper the important welfare state objective of a fair distribution.

Wealth inequality has to be reduced. Wealth is much more unequally distributed than income and there is no evidence of an upcoming trend reversal. On the contrary, intergenerational wealth transfers, higher returns on larger wealth, and imbalances in the taxation between labour and capital might even increase and reinforce wealth inequality in the future (Piketty 2014). Wealth concentration does not only have detrimental effects for economic growth, but also for social stability. Taxing wealth is particularly well-suited to improve distributive justice, finance government spending, and strengthen economic growth at the same time. The OECD, the IMF and the European Commission (2015) recognize recurrent taxes on residential properties as an underexploited, yet growth-enhancing, revenue source with a tax base that is hard to move and to conceal. Furthermore, property taxes can easily be made progressive, for example via exceptions or by raising the tax rate with the value of the property. From an administrative point of view, transaction taxes are appealing, as transactions are easy to observe and the IMF emphasizes that, as a consequence, compliance rates are expected to be high. The most prominent proposal with respect to reducing wealth inequality has been made by Thomas Piketty (2014). He suggests a global tax on capital ownership, by which he refers to an annual tax that uses net wealth as the tax base.

Finally, social mobility should be enhanced through taxes on inheritances. In particular in order to promote intergenerational mobility, inheritance taxes are an effective measure. Substantive taxes on large inheritances contribute to decreasing wealth and income inequality and to equalizing opportunities for the next generation. While most European countries do levy inheritance taxes, there is room for improvement in other member countries.
All in all, Europe needs more and better employment, a higher wage share to stabilize growth, and a lower dispersion of incomes. Additionally, financing redistributive welfare states via the taxation of high wealth and income, and inheritances promotes economic growth and increases social stability of societies.

2.4. Special topic: How to foster a strong European social model which enables sustainable prosperity?

The increasing frustration of many citizens with the outcome of European economic policy becomes more and more visible. A watershed moment for this sentiment was the Brexit referendum. A few years before, the former French President Nicholas Sarkozy had already sensed that feeling and launched the “Commission on the Measurement of Economic Performance and Social Progress” (CMEPSP, see Stiglitz et al. 2009), led by Joseph Stiglitz, Amartya Sen and Jean-Paul Fitoussi. The basic assumption was that a growth-oriented economic policy was not sufficient to obtain social progress and individual well-being. The implicit question raised by the CMEPSP was: “How to facilitate evidence/indicator-based well-being oriented economic policy?” And the answer was that we need a broader set of societally relevant targets, measured by a new set of indicators.

The CMEPSP’s final report kick-started various projects whose aim was to overcome the predominantly narrow approach of economic policy: The OECD launched the “How’s Life?” Initiative (2011), the European Commission published a communication titled “GDP and Beyond” (2009), leading to intensive work by Eurostat to provide a new dataset on “Measuring Progress, Well-Being and Sustainable Development” (2011). At the national level, various related projects were initiated, for example the joint report of the French and German economic expert councils (CC 2010), a commission of the German Parliament (2013) or the Austrian yearly report “How’s Austria?”, first published in 2013 (Statistik Austria 2013). In parallel, on the global level, the UN launched a process in 2010 to improve the millennium development goals targeted at developing countries, which had started in 2000 to enable “people across the world to improve their lives and their future prospects” (UN 2015: 3). In 2013 this process was brought together with the sustainability agenda known as “Rio +20”, leading to the “SDGs”, the Sustainable Development Goals. At the European level, the European Council launched the EU Sustainable Development Strategy already in 2001. To monitor the continuous improvement of quality of life for current and future generations, Eurostat publishes a report every two
years (the last one in 2015, see Eurostat 2015) containing a large set of Sustainable Development Indicators, which will be analysed below in more detail.

All of these initiatives share the assumption that we need to overcome the predominant, narrow focus on specific economic goals like GDP growth, and aim instead at a broader set of economic, social and environmental targets. The CMEPSP highlights the importance of bringing these dimensions together by suggesting that “those attempting to guide the economy and our societies are like pilots trying to steering a course without a reliable compass” (Stiglitz et al. 2009: 9). If we had had better metrics at our disposal, we could have avoided some of the financial bubbles which triggered the economic crisis and we would be more conscious of the looming social and environmental crises. Regarding “the pilots’ destination”, the CMEPSP argues for high and sustainable well-being. While “economic resources” and “non-economic aspects of peoples’ life” are decisive for current well-being, sustainability “depends on whether stocks of capital that matter for our lives (natural, physical, human, social) are passed on to future generations” (ibid.: 11). Furthermore, “diversity of peoples’ experiences” has to be captured by taking into account distributional issues and not only measuring the average levels of well-being.

As a consequence, the metrics should be selected based on these assumptions. However, the CMEPSP is rather vague regarding the process of how to reach the destination (policies) and the means to get there (governance). However, these issues – destination, course, metrics and means – are highly interrelated. Consider, for instance, the current setup in the European Union: The destination is laid out by the Treaty on European Union (TEU), where the overall goal is stated as “the well-being of its peoples” (Art. 3 (1)). This is further specified in paragraph 3, which contains parallels to the CMEPSP (sustainable development of Europe, social progress, quality of the environment). It should be noted here, however, that this paragraph already contains the problematic logic which made the CMEPSP necessary, since it implicitly assumes that economic growth already covers material well-being which only needs to be augmented by other targets (price stability and a highly competitive social market economy). Besides the TEU, there are further objectives that are politically set, such as the European 2020 targets, fiscal targets, the annual priorities set out in the Annual Growth Survey (AGS) and others, none of which are directly linked to the well-being of the people but rather constitute constraints for sustainable economic development. Especially since the economic crisis, European policy makers tend to focus less on the overall objectives and more on the obstacles to macroeconomic stability, leading to a situation in which metrics such as the Scoreboard to detect macroeconomic imbalances and fiscal indicators receive far more
attention than indicators of well-being. As the Lisbon goals and the targets set out in the TEU enjoy much higher public support than the technocratic criteria of the Scoreboard, such a focus is particularly dangerous for the political backing of European institutions as a whole, which depend more on output-legitimacy than national institutions.

In such a setting, it is likely that, in practice, economic policy-making does not pay sufficient attention to the most important objective of high and sustainable well-being. We therefore need governance reforms that put well-being first. This needs to be further specified by a framework of more concrete goals, backed by indicators to measure progress and a process to set discretionary priorities based on the current economic and social situation. At least in Germany a similar economic policy framework used to exist (the Stability and Growth Law put in place in 1967), which was called the “magic square” and based on four main policy goals: steady economic growth, price stability, a high level of employment, and balanced economic relations with other economies. Since some targets are in tension with others (most prominently low inflation and full employment), the “magic” task is to achieve these goals at the same time as much as possible, while taking into account the current economic situation.

Today, the magic square needs an update. For Germany, Sebastian Dullien and Till van Treeck proposed a magic square to foster sustainability, with the overarching policy goals economic, fiscal, ecological and social sustainability (Dullien and van Treeck 2013). In order to focus on well-being, we propose here a magic polygon that takes into account 1) the critique of GDP raised by the CMEPSP, 2) the financial crisis, 3) the higher concern regarding public debt and 4) the higher demand for job quality. We thus propose the following goals as the main policy goals: fairly distributed material well-being, full employment and good jobs, quality of life and ecological sustainability. Furthermore, we propose four other subsidiary targets that aim at providing a stable economic framework: financial stability, stable state activity (a stable or increasing level of public assets and long-term stability of public finances, see Dullien and Van Treeck 2013), price stability and an external balance.

The next step is to identify indicators that can measure the progress for each goal. To some extent we can draw on the Europe 2020 indicators for the four main policy goals and the Scoreboard to measure macroeconomic imbalances for the other targets addressing economic constraints. Statistik Austria has developed a viable set of 30 indicators to operationalize the CMEPSP recommendations and include Europe 2020 in a long process with a lot of national stakeholders. This set could be adapted to measure the main policy goals of the
Magic Polygon (Feigl 2016). Concerning the other four goals, the indicators on the current account balance, net international investment position (both on external balance), private sector debt and total financial sector liabilities (both on financial stability) can be taken from the Scoreboard. They should be complemented by the unadjusted equity to assets ratios of banks, the public structural balance with and without net investment, the consumer price index and/or GDP deflator and a structural current account balance.

Maybe the most important step is to find an economic governance structure which allows to make the appropriate decisions in regard to economic, social and environmental conditions. Some progress has been achieved here with the introduction of the European Semester. What is missing is a broad debate at the beginning of the European Semester, that is, starting already before the AGS, at least within the Parliament, the European Economic and Social Committee, the Macroeconomic Dialogue and the Council, based on the proposed indicator set provided by Eurostat. The aim is to overcome the narrow view on national economies and complicated, to some extent counter-productive rules focused on a tiny segment of the overall magic polygon and its indicators. Instead, the focus would shift to a policy which is oriented towards well-being for the EU as a whole. Instead of further narrowing the economic debate by creating expert councils responsible only for specific areas of economic policy, a council responsible for well-being with economic, social and environmental experts could
enrich the debate by providing a report with a qualitative assessment of the targets, indicators and the current situation.

Taken together, the proposals would allow for a much more coherent policy focused on the overall goal of well-being. However, as the SDGs are some kind of mixture between the four main policy goals proposed plus some of its indicators lifted to the goal-level instead of “only” being an indicator, our proposal can be easily modified to better suit the SDGs. A similar exercise has been done by Costanza et al. (2016), who try to transform the SDGs into a hybrid Sustainable Wellbeing Index as an alternative to GDP, underpinned by a “model of the entire system of the economy-in-society-in-nature” to achieve the SDGs at both the national and global level. As Europe is getting more globalized and the SDGs gain momentum at the global level, such an adoption could help to focus attention on an integrated policy that fosters well-being and social progress. However, as we are sceptical concerning indices aggregating a lot of different information to just one number which cannot be interpreted easily; as global governance is and will continue to be much weaker than the European one; and as the SDGs do not take the growing importance of goals linked to economic constraints (which have been at the centre of the European Governance reform the last years) into account, a Europe-specific approach as described above seems to have better changes of bringing a reorientation towards well-being and social progress in the EU. Finally, since the predecessors of the SDGs already date back to the 1970’s and failed to gain importance due to a lack of political support, and enforcing mechanisms by the UN as well as technical problems (see Feigl et al. 2013), there is the danger that political support will not go beyond lip service.

a) Eurostat’s Sustainable Development indicators

Out of 130 indicators, Eurostat has chosen 10 headline indicators in order to monitor sustainable development. Figure 38 and Figure 39 show the evolution of these indicators between 2000 and 2015 for the European Union. Of course, the trajectories of these indicators should not be compared to each other as the goals differ.

Out of the 10 indicators, 3 show a deterioration since 2008: the risk-of-poverty or social exclusion is increasing between 2008 and 2014 after a decrease between 2000 and 2008; the common bird index, which measures the population abundance and the diversity of a selection of common bird species is decreasing between 2008 and 2014 after a stagnation between 2000 and
2014; development assistance as share of gross national income has also been decreasing since 2008.

Figure 38. Evolution of headline sustainable development indicators, 2000-2015

Source: Eurostat.

Figure 39. Evolution of headline sustainable development indicators, 2000-2015

Source: Eurostat.
The other 7 indicators show some signs of improvement. Economic development has improved. Real GDP per capita has recovered from its 2008-2009 decline. Moreover, there has been a decoupling of economic growth from resource use which shows in the rapid rise of resource productivity between 2000 and 2015. Likewise, greenhouse gas emissions have been on the decline since 2000 putting the EU on track to surpassing its 2020 emissions target (-20% since 1990). Primary energy consumption has also declined since 2008 after a rise between 2002 and 2006. Figure 38 also shows that energy consumption of transport has been on the decline since 2000. Despite increasing risk of poverty or social exclusion, other social development indicators have improved. Older (55-64) worker employment rate has greatly increased between 2001 and 2015 from 37.7% of this population to 53.3%. Moreover, life expectancy has increased moderately since 2000: between 2002 and 2014, a girl born in the EU gained almost three years of life expectancy from 80.9 years to 83.6 while a boy gained three and a half years from 74.5 years to 78.1.

Average European Union statistics can hide important differences between EU countries. The following figures show cross country evolution of some of the most important headline indicators.

Figure 40 shows a scatter plot of the evolution of poverty or social exclusion and real GDP per capita between 2008 and 2014. The figure shows that countries which experienced a strong decrease in real GDP per capita (Greece, Cyprus, Spain) also experienced an increase in poverty or social exclusion. However, countries which experienced relatively strong increase in GDP per capita differ in the evolution of poverty and social exclusion: on one hand, Sweden, Estonia and Malta have seen poverty or social exclusion increase by between 13 and 19%; on the other hand, Bulgaria, Slovakia and Poland have seen poverty or social exclusion decrease by more than 10%. Overall, one can see, as expected, a negative relationship between the evolution of real GDP and the evolution of risk of poverty or social exclusion across EU countries.

Figure 41 shows a scatterplot of the evolution of greenhouse gas emissions and primary energy consumption across European countries between 2008 and 2014. Unsurprisingly, both are correlated. Estonia appears to be an outlier with increasing emissions and primary energy consumption. The evolution of both indicators is negatively correlated to the evolution of real GDP, which partly explains why it appears that Greece is doing so well. Other countries with a

1. Note that this is not the anchored risk of poverty and therefore, the median income changes from year to year.
positive evolution on these environmental indicators are Italy, Romania and Croatia. On the other side, Germany, Poland, Latvia and Malta have not decreased emissions or energy consumption by much.

Figure 40. Evolution of real GDP per capita & risk of poverty or social exclusion, 2008-2014

Figure 41. Evolution of greenhouse gas emissions and primary energy consumption, 2008-2014

Note: The bubbles depend on the population size in the different countries.
Source: Eurostat.
Figure 42 shows the evolution of senior employment (55-64 years) and real GDP between 2008 and 2014. Countries with higher GDP growth tended to increase senior employment the most. The causality can run both ways: higher GDP growth facilitates employment growth but on the other side the increase in senior employment directly affects growth.

Figure 42. Evolution of real GDP per capita and senior employment, 2008-2014

Note: The bubbles depend on the population size in the different countries.
Source: Eurostat.