1. INTRODUCTION

The issue of inequality has risen in importance in recent years. The effects of the economic crisis on Europe have been profound, reversing years of convergence in living standards and putting considerable strain on social protection systems. Inequality has risen in a majority of Member States, triggering concerns both for the sustainability of growth and for social cohesion.

Concern exists also about the inclusiveness of growth. When the income produced in a country, as measured by GDP, is growing faster than the incomes received by that country’s households, this suggests that growth is not inclusive and that its benefits are not being felt by all households. For example, evidence shows that GDP growth in recent years in the United States has almost exclusively benefitted the highest income households.

While the Europe 2020 strategy focuses on reducing poverty, the challenge of reducing poverty risk is linked to the inequality debate.

The European Pillar of Social Rights presented by the European Commission in April 2017 addresses income inequality more explicitly. The third principle of the Pillar sets out the right to equal opportunities for all. Of the 14 headline indicators in the accompanying Social Scoreboard, one relates directly to income inequality, while several others address policy areas closely related to combating rising income inequality and providing more equal chances.

This document aims to provide a brief overview on two key dimensions of the inequality challenge in the European Union, that of income inequality and inequality of opportunity.

Thematic factsheets providing further insight into this policy area include those on: Active Labour Market Policies; Adequacy and Sustainability of Pensions; Health and Health Systems; Skills for the Labour Market; Poverty and Social Inclusion; Tax Systems And Tax Administration; Wage Setting Systems.

2 Poverty is measured as the percentage of people living in households with income below a threshold linked to median household income. If poverty falls, this implies less income inequality as well.

3 The countries covered by the data in this factsheet are the EU28, unless otherwise specified.
2. DEFINING AND MEASURING INEQUALITY

Inequality is a multidimensional challenge. While inequalities can be considered in many different dimensions, two key concepts are inequality of outcome (income and wealth) and inequality of opportunity.

Inequality of income: This refers to how the income earned in an economy is distributed across the population. It is usually calculated at household level (i.e. by pooling income for all household members), weighted for the number of household members and their age.

Inequality of wealth: In some countries, such as Austria, the Netherlands and Germany, while income inequality is not particularly high, wealth inequality has been increasing in recent years. Overall, wealth tends to be more unequally distributed than income, due to the role of inheritance and rising property prices.

Inequality of opportunity: Income inequality measures outcomes, but this is a mix of (i) the opportunities afforded to an individual at birth, (ii) the choices she or he made in life, and (iii) luck. While more difficult to measure, ensuring individuals have an equal opportunity to succeed is a policy goal for which there is a clearer consensus to act, than for achieving equal outcomes.

Inequality of opportunity can contribute to inequality of income, and vice versa. A lack of equal opportunities leads to higher income inequality, as the next generation's skills and earning potential pull further apart due to their different starting positions. Conversely, if incomes are distributed too unequally, this can result in less equality of opportunity for the next generation, as family advantages that result from higher income and wealth are more easily passed on to the next generation. This mutually reinforcing effect points to the important role of policy in breaking the cycle of disadvantage (see section 4).

It is generally considered that some inequality may provide incentives to invest in human capital, promote mobility and stimulate innovation. Economic incentives — important for growth — rely on the possibility for an individual to achieve better outcomes through her or his own hard work.

However, when inequality becomes too large, it can threaten growth. This is especially true when it is driven by increased poverty at the bottom of the income distribution. Where individuals at the bottom of the income (or wealth) distribution lack the resources to invest in their skills and education, they may be unable to reach their full potential, which is harmful for overall growth. Moreover, income redistribution can also help stimulate demand in the economy, as low income households tend to spend more.

Inequality also undermines social fairness. If the resources of the economy are too unevenly distributed, it may threaten social cohesion and a common sense of belonging. Both these effects can be particularly evident if the high levels of inequality are driven by greater numbers of people living in poverty. These people may be facing increased deprivation, homelessness or social exclusion.

Measuring inequality

Inequality of income can be measured using a range of indicators. Some of the most commonly used ones are the S80/S20 share ratio and the Gini coefficient.

4 Another important dimension of inequality is gender inequality. This is dealt with in a separate thematic factsheet on Labour Force Participation of Women.

5 This is known as an equivalence scale. The Commission uses the 'OECD modified equivalence scale', which assigns a weight value of 1 for the head of household, 0.5 for each additional adult, and 0.3 for each child.

6 From 2011 to 2014, wealth inequality increased in a majority of Euro Area countries, as measured by the Gini coefficient of net wealth.
The S80/S20 share ratio measures the annual income of the richest 20 per cent of households, compared to the poorest 20 per cent of households. This is the headline indicator for measuring inequality in the Social Scoreboard. So, for example, an S80/S20 of 5.0 means that the richest 20% of households receive five times as much income in a year as the poorest 20%.

A higher S80/S20 implies more income inequality; a lower number implies less inequality. An S80/S20 of 1.0 would imply perfect equality of income — i.e. all households would have the same annual income. For the EU7, the S80/S20 is around 5.1 (2015) (see Figure 1).

---

**Figure 1: Income inequality as measured by the S80/S20 ratio, 2007-2015**

![Figure 1: Income inequality as measured by the S80/S20 ratio, 2007-2015](image)

**Figure 2: Income inequality as measured by the Gini index, 2007-2015**

![Figure 2: Income inequality as measured by the Gini index, 2007-2015](image)

---

7 EU refers to the 28 Member States of the Union; values are a weighted average.
The Gini Coefficient is the most common measure of income inequality internationally. It measures income distribution by comparing each household’s income position to that of all other households. By construction, the coefficient is expressed as a percentage value between 0 and 100. A Gini of 0 would imply perfect equality of income; a Gini of 100 would imply that all the income in the economy was accruing to just one household, implying perfect inequality of income. For the EU, the Gini Coefficient is around 31 (2015) (see Figure 2).

Inequality of opportunity cannot be directly measured using standard indicators. As only one person’s outcomes can be directly observed, in order to gain an insight into how unequal opportunities are, certain assumptions must to be made and proxy indicators need to be used to measure equality of opportunity.

Proxies for measuring opportunity are focused on young people. Because an individual’s situation results from choices made, and luck experienced, over her or his life, it can be assumed that for younger people, observed well-being (including income) is less associated with an individual's life choices, and more so with the opportunities afforded to them. For this reason, poverty or social exclusion risk for children is an important indicator of unequal opportunities (see Figure 3).

Figure 3: Children (<16 years of age) at risk of poverty or social exclusion, 2007-2015
Inequality of opportunity is also linked to disadvantage being passed from one generation to the next. Another important indicator of equality of opportunity is the relationship between adolescents’ educational outcomes and their parents’ socioeconomic status. Where there is a high correlation between low educational performance and low parental skills achievement, this suggests public services (in particular education) are not as successful in promoting equal chances for all children, regardless of their social backgrounds⁸. (See Figure 4)

Inequality state of play in EU countries

Across the EU, income inequality has been rising somewhat. In 2016, the S80/S20 ratio was 5.1 for the EU, having risen from 4.9 in 2010, reflecting an increase in many, but not all Member States. The Gini coefficient shows a similar evolution, increasing from 30.5 to 31.0⁹ over the same period. The increase is more pronounced for market income inequality (that is, the inequality before taking into account taxes and social transfers), as the tax and benefit system has an equalising effect.

Inequality results from low income growth among poorer households. While growing inequality results both from faster income growth at the top of the distribution and slower than average growth at the bottom, it is the slow growth at the bottom that has had the biggest effect on overall inequality in the years following the crisis. This effect has been particularly strong in Romania and Portugal, but also in Italy and Germany¹⁰.

Figure 4: Variation in school performance (science) by parental socio-economic background for children (15 years old), 2006-2015

---

⁸ The variation in school performance explained by students’ socio-economic status is a secondary indicator of the Social Scoreboard.

¹⁰ This is the average of Ginis for EU countries, and not the Gini of the EU population taken as a whole. This is illustrated by the change from 2010 to 2015 in the S50/S10 income share ratio, which shows strong increases in these countries, indicating a falling share of income for the poorest households.
The EU average hides considerable and growing variation across countries. While for Slovakia, the S80/S20 has fallen since the crisis and is one of the lowest in the EU (at 3.5 in 2015), in Romania it has been increasing seriously and is the highest (at 8.3). Market income inequality has increased the most in Portugal, Greece and Bulgaria; however, in many Member States it has hardly changed at all (Hungary and France), while in some it has even fallen (Ireland, Luxembourg, Italy)\(^\text{11}\).

More children are living in poverty as a result of the crisis from 2007 to 2010, but the number has fallen in most Member States in the years up to 2015. Poland and Bulgaria stand out as having recorded the biggest drop in child poverty, while in Greece, Cyprus and Spain the problem has persisted and even worsened (see Figure 3).

3. DRIVERS OF INEQUALITY

Drivers of income inequality differ across Member States. While unemployment is a factor in inequality in most EU countries, in some cases (such as Bulgaria, Cyprus, Estonia, Lithuania and Latvia) the weak redistributive effect of taxes and benefits plays a key role. In others, high income inequality is the result of unemployment combined with an uneven distribution of market incomes (Greece, Spain and Portugal). In the UK and Ireland, market incomes are also extremely unequally distributed. However the British and Irish welfare states do an above average job in reducing pre-tax and benefit inequalities (see Figure 5), resulting in inequality outcomes close to the EU average, in terms of disposable income.

Figure 5: Inequality reducing effect of taxes and transfers (2015)

\[^\text{†}^\text{simple average, data for DE is for 2014}\]

\(^\text{11}\) Commission calculations, based on European Union Statistics on Income and Living Conditions (EU-SILC) data.
Increases in technological change have increased income inequality. While positive for economic growth overall, technological progress increases the spread of wages (‘wage dispersion’) by rewarding high skills, in particular in high-value sectors of the economy like Information and Communications Technology (ICT). At the same time, automation tends to displace workers at lower and medium skill levels.

However, the evidence on the effect of globalisation on inequality is mixed. Theory based on traditional trade models suggests more trade leads to higher inequality in rich countries. However, empirical studies have found contradictory results. Crucially, how labour market institutions and policymakers respond can determine whether trade creates more or less inequality.

The effects of labour market institutions are also often ambiguous. Rigid labour market institutions do not necessarily reduce inequality, because although they may lead to higher wages for those in work, they also can also result in higher unemployment.

Other factors, such as demographics and household composition, also affect inequality. The increase in the share of single-person households can increase inequality by reducing their capacity to pool resources. Falling household size, coupled with higher rates of immigration, can also increase inequality — in particular inequality of opportunity — by leading to a higher concentration of assets among the native-born population.

4. POLICY LEVERS TO ADDRESS THE INEQUALITY CHALLENGE

Preventing and reducing inequality largely depends on Member State action and reforms. The EU's role is to support and complement the Member States' policies in the fields of social inclusion and social protection, through policy guidance and financial support for reforms.

A number of policy levers are available to Member States to improve equality of incomes and equal opportunities. However, the appropriate policy response will depend on:

- a careful reading of the drivers of inequality in each Member State;
- country specific factors, such as the rate of unemployment, the sectoral composition of the economy, labour market institutions and the design of the social protection system.

Investment in education and skills is a key policy tool for reducing inequality and promoting equal opportunities. In particular, as a response to changing work practices caused by technology, up-skilling of low-skilled workers has the most potential to counteract wage dispersion, while also creating more jobs. For children and young people, education is effective at creating more equal opportunities as long as all children have access to high quality education, regardless of their background.

The tax and benefit system is the key policy lever for addressing income inequality. While policies to address skills deficits are useful in the medium to long run, changes to the tax and benefit system can have a more immediate effect. Some countries such as Ireland, Hungary and Denmark, use the tax and benefit system effectively to reduce very high market income inequalities. In others, such as Cyprus, Bulgaria, Latvia, Lithuania and Estonia, this effect is much weaker (see Figure 5).

The inequality reducing effect of social spending depends on how well it is designed. Reducing the withdrawal of benefits for those returning to work, and the tax burden on low earners are both important policies which ensure that unemployed and inactive people always have a positive economic incentive to engage in paid employment.

12 See also the Thematic Factsheet on Tax Systems and Tax Administration.
Since the crisis, the capacity of the tax benefit system to counter-balance rising market inequality has weakened. In some countries, tight fiscal space and the need to restore sustainability of public finances has reduced the State's capacity to redistribute income. The personal income tax system has not become more progressive, with a number of EU Member States operating a flat tax system, for example, Latvia, Lithuania, Estonia, Bulgaria and Romania.

Wealth inequality may be curbed through well-designed taxes. Capital taxation (including property and inheritance taxation) may be a relevant means to ensure fairness in opportunities and a more equal distribution of wealth, with due consideration for efficiency aspects.

The provision of quality social services is an essential tool in combatting rising inequality of opportunity. Essential levers for breaking the transfer of disadvantage from one generation to the next are:

- high quality and accessible childcare,
- social housing,
- education,
- healthcare.

Availability of child- and long term care are also key to enabling greater female participation in the labour market, which can help reduce gender inequality. Where there is a spatial dimension to inequality, including a significant divide between rural and urban areas as in Romania and Bulgaria, investment in transport and digital accessibility can also play an important role.

Date: 22.11.2017
## ANNEX

### Table 1 — Gini Coefficient before and after taxes and transfers (2015, source: EU-SILC)

<table>
<thead>
<tr>
<th></th>
<th>Gross Market Income Gini*</th>
<th>Net Gini**</th>
<th>Inequality reducing effect of taxes and transfers</th>
</tr>
</thead>
<tbody>
<tr>
<td>IE</td>
<td>55.4</td>
<td>29.8</td>
<td>25.7</td>
</tr>
<tr>
<td>FI</td>
<td>49.6</td>
<td>25.2</td>
<td>24.4</td>
</tr>
<tr>
<td>BE</td>
<td>49.9</td>
<td>26.2</td>
<td>23.7</td>
</tr>
<tr>
<td>UK</td>
<td>55.9</td>
<td>32.4</td>
<td>23.6</td>
</tr>
<tr>
<td>DK</td>
<td>50.7</td>
<td>27.4</td>
<td>23.3</td>
</tr>
<tr>
<td>AT</td>
<td>50.3</td>
<td>27.2</td>
<td>23.1</td>
</tr>
<tr>
<td>EL</td>
<td>56.6</td>
<td>34.2</td>
<td>22.4</td>
</tr>
<tr>
<td>NL</td>
<td>49.0</td>
<td>26.7</td>
<td>22.3</td>
</tr>
<tr>
<td>SI</td>
<td>46.7</td>
<td>24.5</td>
<td>22.2</td>
</tr>
<tr>
<td>HU</td>
<td>49.9</td>
<td>28.2</td>
<td>21.6</td>
</tr>
<tr>
<td>PT</td>
<td>55.5</td>
<td>34.0</td>
<td>21.5</td>
</tr>
<tr>
<td>CZ</td>
<td>46.2</td>
<td>25.0</td>
<td>21.2</td>
</tr>
<tr>
<td>DE</td>
<td>51.6</td>
<td>30.7</td>
<td>20.9</td>
</tr>
<tr>
<td>HR</td>
<td>51.0</td>
<td>30.6</td>
<td>20.4</td>
</tr>
<tr>
<td>SE</td>
<td>45.2</td>
<td>25.2</td>
<td>20.0</td>
</tr>
<tr>
<td>FR</td>
<td>49.0</td>
<td>29.2</td>
<td>19.8</td>
</tr>
<tr>
<td>LU</td>
<td>48.1</td>
<td>28.5</td>
<td>19.6</td>
</tr>
<tr>
<td>IT</td>
<td>51.3</td>
<td>32.4</td>
<td>18.9</td>
</tr>
<tr>
<td>ES</td>
<td>53.4</td>
<td>34.6</td>
<td>18.8</td>
</tr>
<tr>
<td>MT</td>
<td>45.7</td>
<td>28.1</td>
<td>17.6</td>
</tr>
<tr>
<td>PL</td>
<td>47.9</td>
<td>30.6</td>
<td>17.3</td>
</tr>
<tr>
<td>RO</td>
<td>54.1</td>
<td>37.4</td>
<td>16.7</td>
</tr>
<tr>
<td>SK</td>
<td>39.8</td>
<td>23.7</td>
<td>16.1</td>
</tr>
<tr>
<td>LT</td>
<td>54.0</td>
<td>37.9</td>
<td>16.1</td>
</tr>
<tr>
<td>EE</td>
<td>49.8</td>
<td>34.8</td>
<td>15.0</td>
</tr>
<tr>
<td>LV</td>
<td>49.8</td>
<td>35.4</td>
<td>14.5</td>
</tr>
<tr>
<td>CY</td>
<td>47.5</td>
<td>33.6</td>
<td>14.0</td>
</tr>
<tr>
<td>BG</td>
<td>50.2</td>
<td>37.0</td>
<td>13.2</td>
</tr>
</tbody>
</table>

**EU28†**

|      | 50.2                      | 30.4       | 19.8                                             |

Source: Own calculations based on EU-SILC, 2014 survey data, DE: 2014
*Gini, gross of taxes and without transfers
**Gini calculated after all direct taxes and social transfers (including pensions)
†Unweighted average