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Fairness, inequality and intergenerational mobility - Summary report

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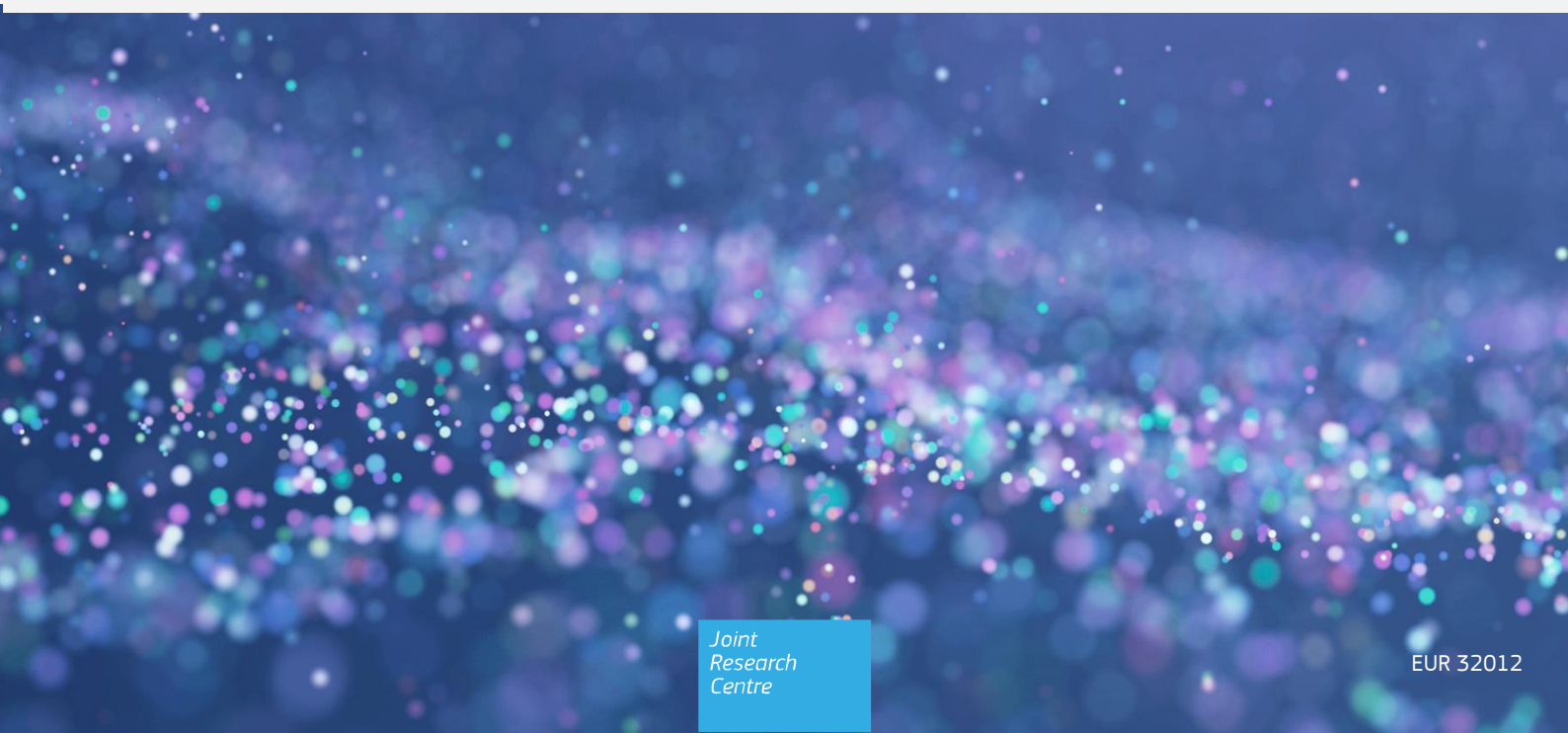

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Contents

Abstract

Increasing inequalities in multiple dimensions have played a role in fostering a feeling of injustice and triggering social dissatisfaction. While fairness is subjective, the far-reaching impact of perceptions of unfairness necessitates a more thorough examination and thoughtful consideration of some of the factors and fundamental dynamics influencing both inequalities and fairness perceptions. This report contributes to the public discourse on fairness and provides evidence to support the European political agenda on social fairness. This report presents JRC research findings on perceptions of fairness, income inequality, equality of opportunity, social policies and taxation based on the 2022 edition of the "Eurobarometer Survey on Fairness, Inequality and Inter-generational mobility".

Acknowledgements

We would like to thank colleagues from Directorate-General for Employment, Social Affairs and Inclusion Unit D.1 for their feedback on the policy briefs collected in this report, Emanuele Ciani, Johanna Mollerstrom, and Dietmar Fehr for their active participation in the work of the Community of Practice on Fairness and for their insightful suggestions in the analysis conducted in the policy briefs.

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Executive summary

Policy context

Fairness is high on the EU political agenda, but what is known about the perception of fairness in European societies? Many Europeans enjoy high living standards, paired with – when compared internationally – low income inequality and high levels of government redistribution. Nevertheless, many Europeans perceive their lives as being unfair. This perception is likely to undermine trust in traditional institutions and gives rise to social discontent. The European Commission monitors EU citizens' perceptions of fairness and equality, their attitudes towards meritocracy and redistributive policies, and intergenerational social mobility. Two Eurobarometer surveys were conducted (in 2017 and 2022), thereby providing a baseline for trend analysis in a historical perspective.

The high levels of concern about income inequalities and the decline in perceptions of fairness highlight the importance of continued support for addressing poverty and income inequality, and supporting fairness and social cohesion across the EU (*see Chapter 2*).

The high levels of concern about income inequalities are mirrored in the demand for redistribution. Support for more social spending is high, with more than half of the people in the EU being in favour of additional spending on social policies (*see Chapter 3*).

People do not always have full and correct information about the relative income of their household. Systematic misperceptions might have substantial implications on how different policies are viewed by Europeans (*see Chapter 5*).

Barriers preventing access to – and completion of – tertiary education are an important concern, both for policy-makers and for society in general. Despite a general decline in inequality of opportunity in tertiary-education achievement, the persistent contribution of initial disadvantages to individuals' achievements later in life and to inequality has implications for both current and future generations. In particular, the relevance of pre-school attendance and access to key basic necessities for equality of opportunity shows the need to continue efforts to achieve universal access to affordable and good quality childcare (and other key services) during childhood (*see Chapter 4*).

Key conclusions

- Concerns about high income inequality have slightly decreased (by 4 pp) over the past 5 years in the EU. Yet, the great majority of EU citizens continue to agree or strongly agree (81%) that income differences are too high. The increasing cost of living in the uncertain geopolitical environment highlights the importance of designing policies that prevent the widening of income differences in the near future.
- Fairness perceptions decreased by 13 pp. This drop is especially notable for young people and students. This highlights the need to provide particular support to young people including in the area of education and employment
- Support for more redistribution varies depending on personal characteristics and attitudes towards the government. Support for more social spending is high, with more than half of the people in the EU being in favour of additional spending on seven of the eight social policies considered in the survey. Support is highest for increased spending on long-term care, health and pensions. Preferences for social policies are in line with self-interest – e.g. support for more spending on education is higher among students.
- Childhood circumstances have vastly improved between successive birth cohorts over the past 80 years, but it also shows that these circumstances still vary greatly between EU macro-regions.
- Educational attainment of parents is the single strongest factor influencing both the likelihood of completing tertiary education and in shaping inequality of opportunity in tertiary educational attainment (except in southern Europe for the latter).
- Intensive pre-school attendance and access to key basic necessities remain, other things being equal, significant drivers of tertiary attainment, once the home environment during childhood is accounted for.

Main findings

Chapter 2

- 81% of EU citizens perceive income inequalities as too great. While remaining high, the level of concern about income inequality is slightly lower than in 2017 (85%).
- Despite the COVID-19 crisis, income inequality concerns decreased for most socio-economic groups. This drop was largest for older individuals and those living in rural areas.
- In contrast, the perception of life fairness has declined in the past 5 years: the share of individuals agreeing that things that happen in their life are fair decreased from 51% in 2017 to 38% in 2022.
- Fairness perceptions diminished especially among young people and students, but less so among lower-educated individuals and those with financial difficulties.
- The direct economic consequences of the COVID-19 pandemic do not seem to be the major cause of the decrease in fairness perceptions. Potential drivers include uncertainties about the future, perceived inequality of opportunity, and discontent with measures taken to contain the COVID-19 pandemic.

Chapter 3

- Support for greater redistribution is high (77% of EU citizens) and correlates with perceived inequalities and preferences for more spending in social policies.
- Most EU citizens favour additional spending on social policies, especially in southern EU countries.
- Increased spending on healthcare and long-term care is the top priority in almost all countries, followed by education, pensions, housing and then income support and family and unemployment benefits.
- Most believe that additional social spending should be financed by increasing households' tax burden (51%), with alternatives being reducing other public expenditure (15%), increasing public deficits (12%) or not increasing social spending (16%).

Chapter 4

- Childhood circumstances have vastly improved throughout birth cohorts but yet vary greatly between EU countries, and are key to explain tertiary educational attainment with parental education having the highest influence.
- Pre-school attendance is a significant driver of tertiary attainment, even after accounting for the home environment during childhood.
- Northern and Southern European countries exhibit respectively the lowest and highest levels of inequality of opportunities in tertiary education.
- Inequality of opportunities have decreased over time with the largest drop observed where it was initially highest, i.e. in Southern Europe.

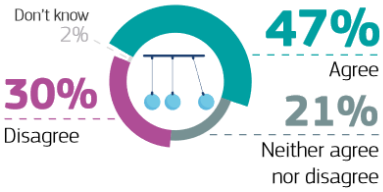
Chapter 5

- More than 40% of EU citizens believe that they are poorer, compared to others, than they actually are. Respondents tend to place themselves closer to the middle of their country's income distribution than they actually are. This tendency holds across all countries.
- Misperceptions about one's position in the country's income distribution tend to be larger in less developed countries and in countries that have experienced faster income growth in recent years.
- Misperceptions are correlated with many socio-demographic characteristics. For example, younger people, women and less educated people misperceive their income position more on average.
- Respondents who *overestimate* their income position report higher life fairness perceptions, are less concerned about income inequality and are less likely to favour a spending increase on income support policies. Correspondingly, those who *underestimate* their income position are more concerned about inequality and are more supportive of income redistribution.

Key infographics

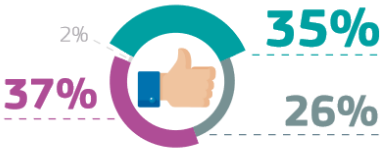
Less than half of Europeans believe that society is fair and equal

Almost half of Europeans think they have **equal opportunities** for getting ahead in life, like everyone else



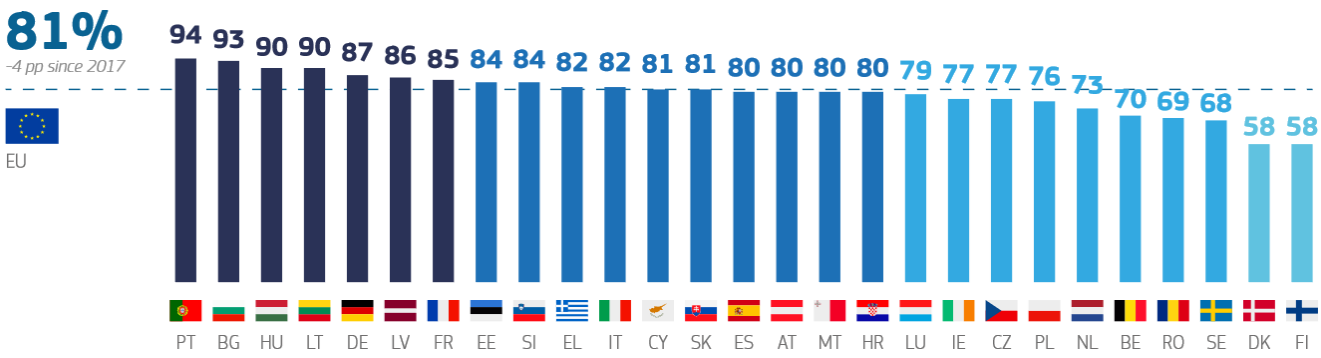
Around **four in ten** believe that most of the **things that happen in their life are fair**

Only a third believe that, by and large, people **get what they deserve** in their country



A vast majority of Europeans believe that differences in incomes are too great in their country

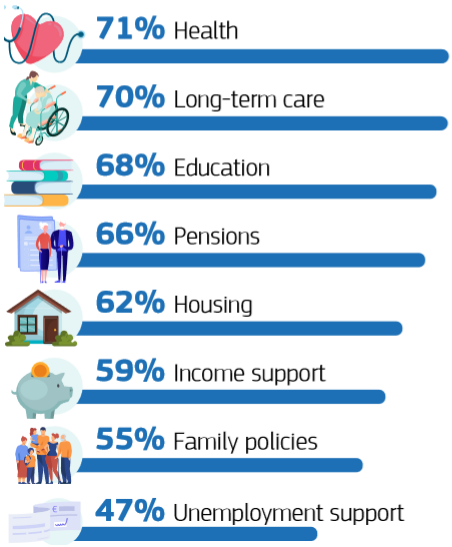
% Believe differences in incomes are too great in their country



Preference for spending more on social policies

Europeans think that their governments **should spend more** on the following **social policy areas**

% Think that more must be spent on...



78% of Europeans believe that overall public spending on key social policies should increase, though their **views on how to finance the additional cost are diverse**

- 21% The additional cost should be **mainly borne by wealthy households**
- 20% The additional cost should be **distributed proportionally** to household income
- 10% The additional cost should be **distributed equally** among households
- 15% The budget for other public programmes **should be reduced**
- 12% The budget **deficit should be increased**

Related and future JRC work

This report summarises the main findings of the project "Second Eurobarometer Survey on Fairness, Inequality and Inter-generational mobility" part of the administrative agreement *JRC No.36251 Fairness survey* between Directorate General for Employment, Social Affairs and Inclusion (DG EMPL) and the Joint Research Centre (JRC). As such it complements the 2022 report of Kantar Media Eurobarometer Special 529 "Fairness, inequality and inter-generational mobility" that can be found on https://europa.eu/eurobarometer/surveys/detail/2652

JRC commissioned in 2017 a first Eurobarometer Survey on "Fairness, Inequality and Inter-generational mobility" within a multi-annual transversal project to study different aspects of fairness. The survey has been critical to document fairness and inequality perceptions as well as multigenerational social mobility across Europe.

5 years later, in 2022, DG EMPL and JRC launched a follow-up survey to provide recent figures and monitor social mobility progress over time as well as developments in inequality and fairness perceptions. The survey also included new questions related to fairness and inequality perceptions, as well as support for redistributive policies. In particular, these questions permit to elicit preferences on policies aimed at reducing inequality and increasing fairness, to highlight new channels of social mobility across three generations, as well as investigate perceptions on important fairness aspects that have not been considered in the previous survey.

More information about publications containing analysis and results based on the 2022 Special Eurobarometer survey on fairness, inequality and inter-generational mobility can be found on: https://joint-research-centre.ec.europa.eu/crosscutting-activities/fairness_en.

JRC research findings were disseminated through a series of Science for Policy Briefs on Fairness. JRC carried out several activities to disseminate the results of the four policy brief drafted based on the survey results. In particular, a news announcement was published on EU Science Hub in February 2023 to present the key results of the first 2 policy briefs (corresponding *Chapter 2* and *Chapter 3* of this report) and of the survey more in general. Moreover, on 30 March 2023, JRC organized a webinar within the Community of Practice on Fairness on "Perceptions of inequality and fairness: recent developments in the EU". Community of Practice on Fairness engages policymakers and academics in a dialogue on fairness-related topics. In the webinar, the main results of the first two policy briefs have been presented by JRC and commented by Emanuele Ciani (Bank of Italy), who was one of the main authors of the 2021 OECD report "Does inequality matter?". Finally, another news announcement and second Community of Practice on Fairness webinar are planned to disseminate the results of policy brief 3 (corresponding *Chapter 4* of this report) and policy brief 4 (corresponding *Chapter 5* of this report).

Quick guide

Chapters of this report correspond to the following Science for Policy Briefs on Fairness

Chapter 2

Berlingieri F., Casabianca E., d'Hombres B., Kovacic M., Mauri C., Nurminen M., Schnepf S., Stepanova E. (2023). Perceptions of inequality and fairness: what has changed over the past 5 years? *Fairness Policy Brief 1/2023*. European Commission - Joint Research Centre, JRC131980.

Chapter 3

Berlingieri F., Casabianca E., d'Hombres B., Kovacic M., Mauri C., Nurminen M., Schnepf S., Stepanova E. (2023). Preferences for redistribution and social policies in the EU. *Fairness Policy Brief 2/2023*. European Commission - Joint Research Centre, JRC131983

Chapter 4

Berlingieri F., Casabianca E., d'Hombres B., Kovacic M., Mauri C., Nurminen M., Schnepf S., Stepanova E. (2023). Towards a more inclusive social Europe: early-life conditions and educational achievements. *Fairness Policy Brief 3/2023*. European Commission - Joint Research Centre, JRC134845

Chapter 5

Berlingieri F., d'Hombres B., Mauri C., Mollerstrom J., Stepanova E. (2023). Income position misperceptions in the EU. *Fairness policy brief 6/2023*. European Commission - Joint Research Centre, JRC135209.

1. Introduction

Fairness is high on the political agenda. However, what do we know about the perception of fairness? To shed light on this issue as well as on perceptions of income inequality, equality of opportunity, social policies and taxation DG EMPL and JRC launched in 2022 the "Second Eurobarometer Survey on Fairness, Inequality and Intergenerational Mobility", which follows up its first edition in 2017. This report presents JRC's research findings based on the surveys. It is organised as follows.

Chapter 2 compares data from the 2022 and 2017 Eurobarometer surveys on Fairness to investigate how perceptions and attitudes towards fairness and inequality have changed over the past five years. The COVID-19 pandemic and the containment measures adopted to limit the spread of the virus provide a relevant setting for this purpose. In 2022, 81% of EU citizens believe that income inequality is too high. While remaining high, the level of concern about income inequality is slightly lower than in 2017 (85%). Despite the COVID-19 crisis, income inequality concerns decreased for most socio-economic groups. This drop was largest for older individuals and those living in rural areas. In contrast, the perception of life fairness has declined in the past 5 years: the share of individuals agreeing that things that happen in life are fair decreased from 51% in 2017 to 38% in 2022. Fairness perceptions diminished especially among young people and students, but less so among lower-educated individuals and those with financial difficulties. Population groups most affected by the COVID-19 crisis in terms of employment and income were those whose fairness perceptions declined less. Thus, the direct economic consequences of the COVID-19 pandemic do not seem to be the major cause of the decrease in fairness perceptions. The chapter then investigates and discusses the role of other potential drivers of this decline including uncertainties about the future, perceived inequality of opportunity, and discontent with measures taken to contain the COVID-19 pandemic.

BOX 1 Eurobarometer survey data

The main data used in this policy brief comes from the Special Eurobarometer 471 and Special Eurobarometer 529 on fairness, inequality and inter-generational mobility. The first survey (n=26 693 for the EU-27) was conducted in December 2017 and commissioned by the JRC. The second one (n=26 395) was conducted in May/June 2022 and commissioned by the JRC and the DG EMPL. The sample of each survey covers approximately 1 000 participants per country, except for Germany (ca. 1 500) and Cyprus, Luxembourg and Malta (ca. 500 each). The target population in each country is the population of EU citizens aged 15 years and over. Both surveys are based on random (probability) sampling. However, while the 2017 survey is based on face-to-face interviews only, the 2022 survey was partly conducted online through computer-assisted web interviewing in 10 countries (Belgium, Czechia, Denmark, Estonia, Latvia, Malta, the Netherlands, Slovenia, Finland and Sweden). More information about the surveys can be found in the reports available on the Eurobarometer website (https://europa.eu/eurobarometer).

Chapter 3 examines support for redistribution, which is very high (77% of EU citizens demand more redistribution) and mirrors high perceived inequalities. Differences are observed across countries and a range of social policies in terms of EU citizens' preferences for additional spending. Healthcare and long-term care are top priorities in almost all countries. The chapter also investigates the preferred way of financing additional spending on social policies, with most citizens agreeing that there should be an increase in households' tax burden. However, opinions differ on whether wealthier households should pay more or if costs should be distributed proportionally to income.

Chapter 4 examines the importance of childhood circumstances on inequality of opportunities. It first shows that childhood circumstances have vastly improved between birth cohorts in the past 80 years or so, but there are still large differences between EU countries. The second part of *Chapter 4* shows that childhood circumstances are key to explaining tertiary educational attainment, with parental education having the greatest influence. Pre-school attendance is also a significant driver of tertiary attainment, even after accounting for the home environment during childhood. Macro-regional patterns suggest that northern and southern European countries exhibit the lowest and highest levels of inequality of opportunities in tertiary education, respectively. Finally, over time, there has been a reduction in inequality of opportunities, particularly in southern Europe where it was first most pronounced.

Chapter 5 quantifies the extent of misperceptions that EU citizens have about their position in their country's income distribution. Respondents tend to place themselves closer to the middle of their country's income distribution than they actually are. This finding confirms the so-called middle-income bias and is in line with a wide literature on the topic. The chapter proceeds to investigate individuals' socio-demographic characteristics correlated with misperceptions. It then studies the macroeconomic correlates of misperceptions. Finally, the chapter examines how misperceptions are associated with views on income inequality, fairness in life, and support for redistribution.

2. Perceptions of inequality and fairness: what has changed over the past 5 years?

HIGHLIGHTS

- → According to a recent Eurobarometer survey, 81% of EU citizens believe that income inequality is too high. While remaining high, the level of concern about income inequality is slightly lower than in 2017 (85%).
- → Despite the COVID-19 crisis, income inequality concerns decreased for most socio-economic groups. This drop was largest for older individuals and those living in rural areas.
- → In contrast, the perception of life fairness has declined in the past 5 years: the share of individuals agreeing that things that happen in their life are fair decreased from 51% in 2017 to 38% in 2022.
- → Fairness perceptions diminished especially among young people and students, but less so among lower-educated individuals and those with financial difficulties.
- → The direct economic consequences of the COVID-19 pandemic do not seem to be the major cause of the decrease in fairness perceptions. Potential drivers include uncertainties about the future, perceived inequality of opportunity, and discontent with measures taken to contain the COVID-19 pandemic.

Background

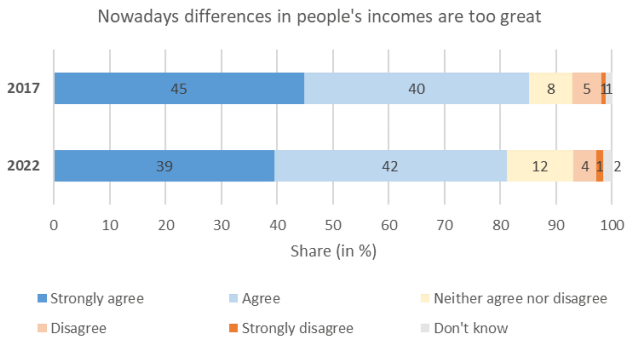
The past 3 years have been particularly turbulent for the economy and living conditions of the EU population. First, the health impacts of COVID-19 and the containment measures adopted to mitigate the spread of the virus, such as closures of businesses and schools, have affected labour markets and households in an unprecedented way. Second, Russia's invasion of Ukraine has brought further insecurity and challenges together with a substantial rise in energy prices. This rise has the potential to dramatically affect the budget of households, in particular of those with lower incomes.

While the early impact of the COVID-19 crisis on income inequality and poverty has been addressed in previous research, many important questions have not yet been answered [1, 2]. The pandemic not only led to the implementation of unprecedented policy support instruments, but also to restrictions in many countries that might have been perceived as unfair by the population. This context provides a relevant setting to examine whether perceptions of and attitudes towards fairness and inequality have changed over time. This chapter uses data from two Eurobarometer surveys carried out in 2017 and 2022 to address these questions.

Concerns about income inequality have slightly declined since 2017 but remain high

Despite the COVID-19 crisis and the exceptional geopolitical context, slightly fewer people in the EU think that income inequality is too large (compared to 2017). There has been a slight decrease of 4 percentage points (pp) in the share of people agreeing or strongly agreeing that income differences are too great (see Figure **2.1**). Still, the vast majority of EU citizens think that inequalities in income are too great (81% in 2022 vs 85% in 2017). This trend is common to most EU countries. Concerns about income disparities have increased in only five countries (Bulgaria, France, Greece, Malta and the Netherlands).

Figure 2.1– Change in concerns about income inequality

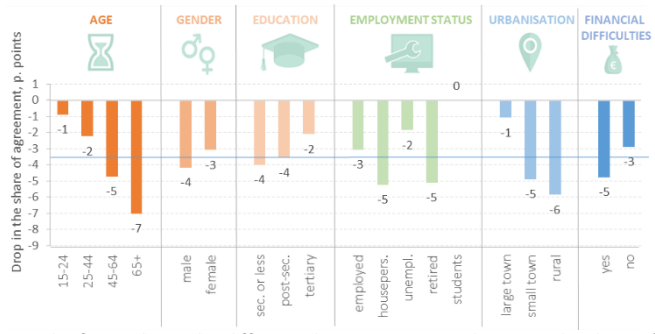


Note: share of respondents by answer category in a given year, EU-27 (EU population weights are applied).

The reduction in income inequality concerns is common to all socio-economic groups considered, with the exception of students, i.e. people aged 15 or more who were in any kind of

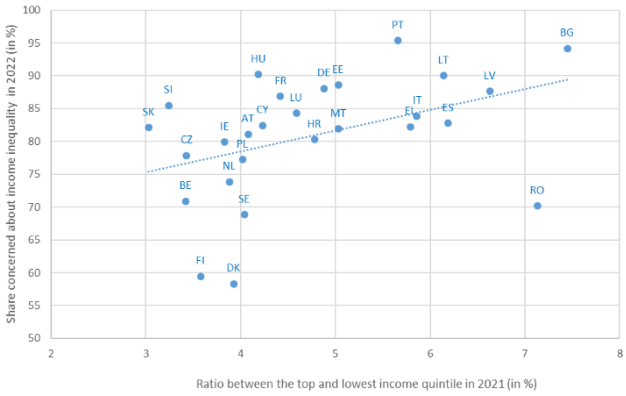
education at the time of the interview, whose perceptions of inequality remained unchanged (see **Figure 2.2**). The drop in perceptions is particularly large among some of the groups that deemed inequalities as being very high in 2017, such as older adults (from 89% in 2017 to 82% in 2022), those living in rural areas (87% to 81%), and those with financial difficulties (88% to 83%). Surprisingly, this perception also declined among socio-economic groups that were more likely to be hit hard during the crisis in economic terms, such as those experiencing financial difficulties and the unemployed.

Figure 2.2 - Change in inequality concerns by socio-demographics



Note: the figure shows the difference between 2017 and 2022 in the share of agreement with the statement (answer categories 'Strongly agree' and 'Agree') for each socio-demographic group, EU-27 (EU population weights are applied). The blue line shows the average change. See the Quick Guide for definitions of the socio-demographic variables.

Figure 2.3 - Actual income inequality and inequality concerns



Note: the dots represent the 27 EU Member States, while the dotted line is the linear fit. The y-axis shows the share of respondents agreeing with income differences being too great.

The small decline in income inequality concerns can be related to the fact that inequalities have not increased despite the impact of the pandemic. Inequality in incomes before taxes increased in most EU countries during the COVID-19 pandemic, but inequality in disposable incomes remained broadly stable thanks to monetary compensation, short-time work, job retention schemes, and other policy measures adopted in response to the crisis [1, 3, 4]. According to Eurostat data, between 2016 and 2021, the ratio between the total disposable income of the 20% of households with the highest incomes and that of the 20% of households with the lowest incomes (i.e. the income quintile share ratio or the S80/S20 ratio) dropped by 4%.

If individuals have a correct perception of the level of income inequality in their country, concerns about inequality may reflect the actual level of income inequality. Indeed, there is some evidence that individuals are less concerned about income inequalities when their actual level is lower. Figure **2.3** shows that at country level, there was a positive relationship between actual income inequality and concern about inequality being too high in 2022 (correlation coefficient: 0.40). A similar relationship was found for 2017 (correlation coefficient: 0.47).

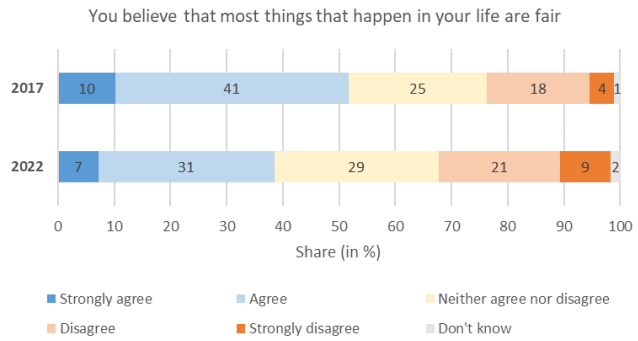
Moreover, there is some evidence that the crisis has made people more tolerant of inequalities due to unfortunate circumstances or luck (i.e. people are less likely to consider it unfair if luck determines people's economic situation) [5]. This could also partially explain the slight decline in inequality concerns. However, this decline may be a temporary effect of the pandemic, and therefore it is difficult to assess whether this pattern will persist in the future.

Fairness perceptions dropped substantially

While people are slightly less concerned about income inequality, their fairness perceptions have substantially decreased over the past 5 years. The share of individuals agreeing that things that happen in their life are fair (i.e. 'fairness of life') decreased from 51% in 2017 to 38% in 2022 (see Figure **2.4**). The decline in the share of respondents perceiving life as fair is consistent across all countries in the EU. Furthermore, the share of individuals disagreeing that things that happen in life are fair increased by 8 pp from 2017 to 2022.

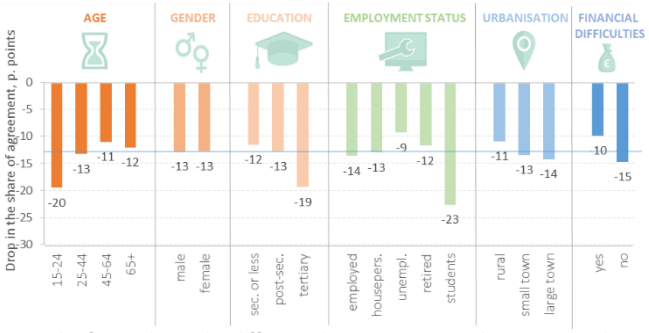
Fairness perceptions may reflect concerns about inequality to a certain extent, given that high income inequality can be perceived as unfair [6,7]. Indeed, people who believe that income inequality is too large are less likely to report that things that happen in life are fair. However, overall, people were not more concerned about high inequality in 2022 compared to 2017. Thus, other factors drive the decline in fairness perceptions. The next parts explore this in more detail.

Figure 2.4 - Change in perceptions of fairness of life



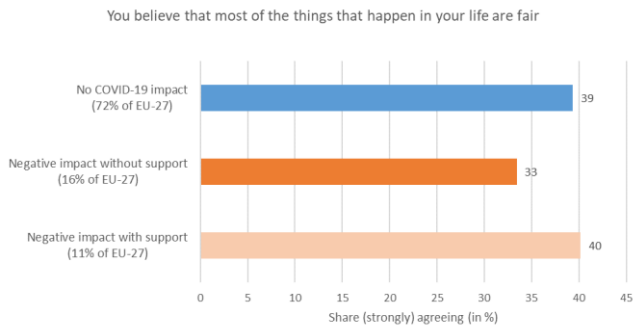
Note: share of respondents by answer category in a given year, EU-27 (EU population weights are applied).

Figure 2.5 - Change in fairness perceptions by socio-demographics



Note: the figure shows the difference between 2017 and 2022 in the share of agreement with the statement (answer categories 'Strongly agree' and 'Agree') for each socio-demographic group, EU-27 (EU population weights are applied). The blue line shows the average change. See the Quick Guide for definitions of the socio-demographic variables.

Figure 2.6 - COVID-19 impact and fairness perceptions



Note: respondents in the 'negative impact' categories include those reporting a job-related impact (job loss, reduction in income / working hours, furlough scheme) or negative impact on their physical or mental health. Public support includes unemployment benefits, wage support, paid sick leave and State aid. EU-27 population weights are applied.

Whose perception of fairness declined?

Figure 2.5 shows the change in the share of individuals believing that most things that happen in life are fair over the past 5 years by socio-economic group. While fairness perceptions have declined substantially for all socio-economic groups, the drop was largest for students and for young people in general. Conversely, it was smaller for older, less educated and unemployed individuals, and for those experiencing financial difficulties. These groups were the ones that, on average, perceived a lower level of fairness in 2017, so differences in current fairness perceptions among people with varying backgrounds are more homogenous in 2022 than in 2017. In spite of this tendency towards a convergence of perceptions, the differences in fairness perceptions between socio-economic groups remained great in 2022.

Interestingly, population groups most affected by the COVID-19 crisis in terms of employment and income were those whose fairness perceptions declined less. This could indicate that even though the economic consequences of the crisis were dire, labour and social policies (such as unemployment benefits and job retention schemes) implemented during the crisis played an important role. They may have helped avert a rise in income inequalities and an even larger decrease in perceived fairness.

To investigate this further, Figure **2.6** shows the differences in fairness perception among those that have experienced health, employment or economic hardship during the COVID-19 crisis differentiated by whether they received public support during the crisis or not. Of all individuals who report that their health or job was negatively affected by the COVID-19 pandemic, those who did not receive public support are less likely to perceive fairness in life (33%) than those who did receive support (40%). For the second group, levels are close to the average. This finding further underlines the important role played by public policies during the crisis. These results hold true in a multivariate context, i.e. when comparing individuals with similar socio-economic characteristics. However, the data does not make it possible to examine the causal impact of specific policies on perceptions.

What could explain the decrease in fairness perceptions?

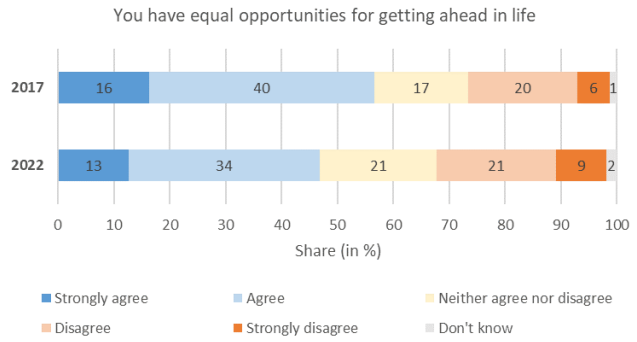
The evidence above suggests that the direct economic consequences of the crisis may not have been a major driver of decreased fairness perceptions. Hence, there is a need to consider also other explanations.

A first potential explanation, consistent with the fact that especially young people and students perceive lower fairness in life, may be the pandemic's specific direct impact on young people's education, work and social life. The COVID-19 crisis had a strong negative impact on labour market outcomes of young people in the EU [4]. Moreover, the pandemic and the current uncertainties may have influenced expectations about future outcomes. On students specifically, evidence from the US shows that the pandemic not only led to a higher risk of losing a job or

a job opportunity, but it also negatively affected the future earnings expectations of almost one third of students [8].

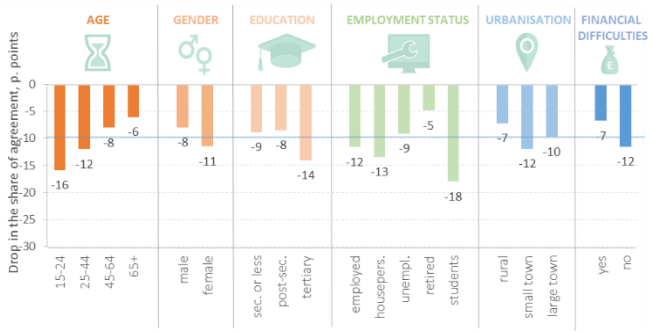
A second explanation, and closely linked to the first one, is that fairness perceptions may be related to perceptions of equality of opportunity. The pandemic may have changed perceptions of whether different socio-economic groups have equal opportunities to succeed in life. Figure **2.7**a shows that there has indeed also been a substantial drop in perceptions of equality of opportunity. The share of EU citizens agreeing or strongly agreeing that they have equal opportunities for getting ahead in life decreased from 57% to 47% (-10 pp) between 2017 and 2022. At the same time, the share of individuals who disagree or strongly disagree that they have equal opportunities increased by 4 pp. Figure **2.7**b shows that the drop in perceptions of equality of opportunity was largest for individuals in education (-18 pp) and those aged 15-24 (-16 pp). This suggests that especially perceived inequalities of opportunities between age cohorts may explain the observed patterns.

Figure 2.7 (a) – Change in perceptions of equality of opportunity



Note: share of respondents by answer category in a given year, EU-27 (EU population weights are applied).

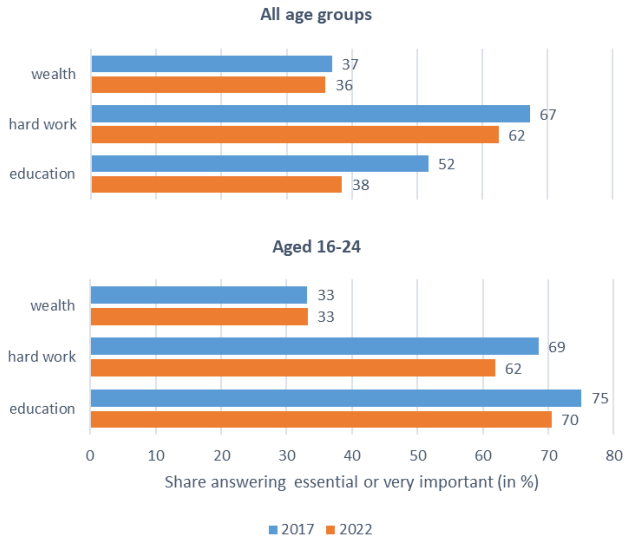
(b) – Change in opportunity perceptions by socio-demographics



Note: the figure shows the difference between 2017 and 2022 in the share of agreement with the statement (answer categories 'Strongly agree' and 'Agree') for each socio-demographic group, EU-27 (EU population weights are applied). The blue line shows the average change. See the Quick Guide for definitions of the socio-demographic variables.

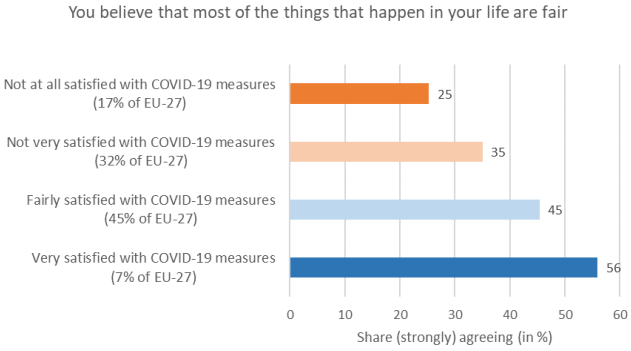
Equality of opportunity corresponds to a situation in which individuals that exert the same effort achieve similar outcomes independently of circumstances beyond their control (e.g. inherited wealth) [9]. Therefore, variables on perceived importance of hard work, education and wealth to succeed in life can be used to further test this second explanation. Figure **2.8** shows that, over the past 5 years, the share of individuals believing that education and hard work is important to get ahead in life has slightly dropped in the EU (by 2 and 5 pp, respectively). This decrease was more substantial for people below age 24, for which the perceived importance of education and hard work dropped by 5 and 7 pp, respectively. Conversely, on average, the perceived importance of wealth did not change significantly. Although not reported for the sake of brevity, the Eurobarometer data shows that individuals who believe that hard work is important to get ahead in life are more likely to perceive that life is fair. Therefore, the drop in the perceived importance of hard work provides further support to the hypothesis that perceived inequality of opportunity is an important driver of the decline in fairness perceptions, especially for young people.

Figure 2.8 - Perceived importance of education, hard work and wealth



Note: the figure shows the share of respondents answering that a given aspect is essential or very important for getting ahead in life in a given year in the EU-27 (EU population weights are applied).

Figure 2.9 - Satisfaction with COVID-19 measures and perceived fairness of life



Note: the figure shows the share of individuals agreeing or strongly agreeing with the statement in 2022 for the EU-27 by their degree of satisfaction with the measures to address the socio-economic consequences of the pandemic taken by the national government.

Another potential explanation could be that individuals have perceived the situation induced by the COVID-19 pandemic as unfair and/or that there has been a discontent with the set of public measures implemented to contain the pandemic, either because they were perceived as too stringent (e.g. limiting personal freedom more than necessary), too lenient, or ineffective. Figure **2.9** shows the differences in life fairness perceptions in 2022 by degree of satisfaction with the COVID-19 measures taken by the national government. Those who were not very satisfied or not satisfied at all are more likely to report lower fairness perceptions. This result is remarkably stable when holding socio-economic characteristics, political preferences, trust in the government, and interpersonal trust constant.

Conclusions

Concerns about high income inequality have slightly decreased (by 4 pp) over the past 5 years in the EU. This may be due to the stabilising impact of measures taken during the pandemic on incomes and income inequalities. Yet, the great majority of EU citizens continue to agree or strongly agree (81%) that income differences are too high. The increasing cost of living in the uncertain geopolitical environment highlights the importance of designing policies that prevent the widening of income differences in the near future.

While concerns over income inequality did not increase with the pandemic, over the same period, fairness perceptions decreased by 13 pp. This drop is especially notable for young people and students. This highlights the need to provide particular support to young people including in the area of education and employment to enable post-crisis recovery and to prevent longer-term scarring impacts of the pandemic.

The last few years have brought about unprecedented challenges for the economy, labour markets, living conditions and the health of people in the EU. Based on the statistics reported here, the direct economic consequences of the COVID-19 crisis do not seem to be a major cause of the drop in fairness perceptions. This illustrates the power of supportive labour market and social policies implemented during the crisis, although no causal inference can be drawn from the statistical analysis presented.

While it is not easy to identify factors that caused the lower fairness perceptions observed in 2022 compared to 2017, several aspects may be at play, such as the direct impact of the pandemic on living conditions and the resulting increased uncertainties about future outcomes; the drop in the perceived equality of opportunity; and, for some groups of people, discontent with the COVID-19 measures implemented over the last few years.

Moving forward, the high levels of concern about income inequalities and the decline in perceptions of fairness highlight the importance of continued support for addressing poverty and income inequality, and supporting fairness and social cohesion across the EU.

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[9] Roemer, J. E. (1998). Equality of Opportunity. Harvard University Press.

QUICK GUIDE – In addition to the Eurobarometer surveys, data from Eurostat on income inequality at country level is used to supplement the analysis in ***Figure 2.3***.

The Eurobarometer statistics reported are weighted by age, gender, urbanisation and region of residence using sampling weights based on the EU-27 population. The binary variables on inequality concerns, fairness perceptions and importance of various aspects to get ahead in life include the 'don't know' answer in the reference category (i.e. values equal to 0). All numbers are rounded to the closest integer. In few cases, the statistics presented slightly differ from those in other publications on Special Eurobarometer 529, where other rounding methods are applied.

The variables depicted in each figure are described in the figure notes, apart from the socio-demographic characteristics displayed in ***Figure 2.2*** and ***Figure 2.5***. While the gender and age variables are self-explanatory, the other variables are described here. The 'post-secondary education' variable includes those who have completed post-secondary vocational studies, or higher education to bachelor level or equivalent, while 'tertiary education' refers to those holding master or doctoral degrees. The 'houseperson' employment status category includes respondents who are not seeking employment. 'Students' are people aged 15 or more who were in any kind of education at the time of the interview. The 'urbanisation' variable is constructed based on the region of residence (NUTS 2 or equivalent). The 'financial difficulties' variable is based on a question asking whether respondents experienced difficulties to pay bills at the end of the month during the last year: 'yes' refers to answer categories 'most of the times' and 'from time to time'; 'no' refers to answer category 'almost never'. Non-response categories ('don't know' or invalid answers) of socio-demographic variables are excluded from ***Figure 2.2*** and ***Figure 2.5***. However, we do not observe any non-response for most variables, apart from education (0.5% of the sample) and financial difficulties (1.8% of the sample).

3. Preferences for redistribution and social policies in the EU

HIGHLIGHTS

- → According to a recent Eurobarometer, 81% of EU citizens perceive income inequalities as too great.
- → Support for greater redistribution is high (77% of EU citizens) and correlates with perceived inequalities and preferences for more spending in social policies.
- → Most EU citizens favour additional spending on social policies, especially in southern EU countries.
- → Increased spending on healthcare and long-term care is the top priority in almost all countries, followed by education, pensions, housing and then income support and family and unemployment benefits.
- → Most believe that additional social spending should be financed by increasing households' tax burden (51%), with alternatives being reducing other public expenditure (15%), increasing public deficits (12%) or not increasing social spending (16%).

Background

Redistribution[1] is central to policy debates across the EU including those on aid for households and businesses in response to the pandemic and the energy crisis, spending on climate change mitigation, the management of government debt, and the design of social reforms. In all these contexts, governments have to reconcile spending priorities, decisions on burden sharing, and deficit control.

Understanding people's views on inequality, fairness and spending priorities can help in this context. Data collected as part of the 2022 Eurobarometer survey on fairness provides some insight about preferences for redistribution and spending on social policies.

Perceptions of inequality and demand for greater redistribution remain high

In all EU countries, most respondents are concerned about the level of income inequality. The share of those agreeing that 'differences in peoples' incomes are too great' amounts to 81% in the EU-27. It is highest in Portugal at 94% and lowest in Denmark at 57% (Figure **3.1**). At the same time, the share of respondents who perceive inequality as too high has slightly dropped over the last 5 years [1][2].

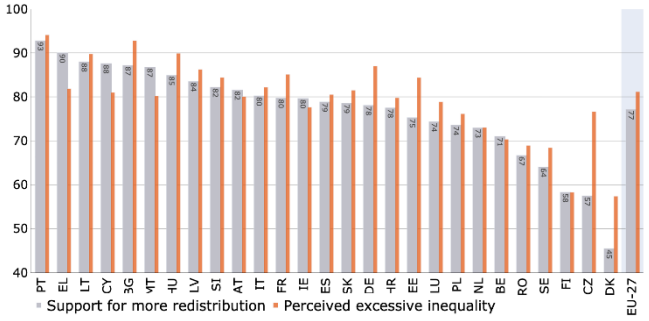
This is mirrored in the high demand among respondents for policies that reduce income inequalities. In the EU-27, 77% agree that 'the national government should take measures to reduce differences in income levels', and 73% agree that 'the EU institutions should support the national government to reduce the difference in income levels'. As with the perception of inequality, demand for more redistribution is highest in Portugal and lowest in Denmark (Figure **3.1**).

The share of people in the EU demanding more redistribution is 5 percentage points (pp) lower than 5 years ago. This decline is not uniform across countries. While in most Member States, there has been a decline, Malta (+9 pp), the Netherlands (+8 pp), Bulgaria (+7 pp), Greece (+5 pp) and France (+2 pp) saw an increase in the demand for greater redistribution.

[1] For simplicity, this document will use the term 'redistribution' to refer to measures addressing both pre- and post-tax inequalities.

[2] The previous edition of the Eurobarometer survey on fairness was conducted in 2017. The questions on preferences for greater redistribution and on perceptions of inequality were identical to those in the 2022 edition. See [1] for additional information on the development of inequality and fairness perceptions in the EU.

Figure 3.1 - Support for more redistribution and perceived excessive inequality by country in 2022



Note: the figure shows the share of respondents who agree or strongly agree with the statement 'national government should take measures to reduce differences in income levels' (grey bar) and with the statement 'Nowadays in [your country] differences in people's incomes are too great' (orange bar). On the y-axis, values are in per cent.

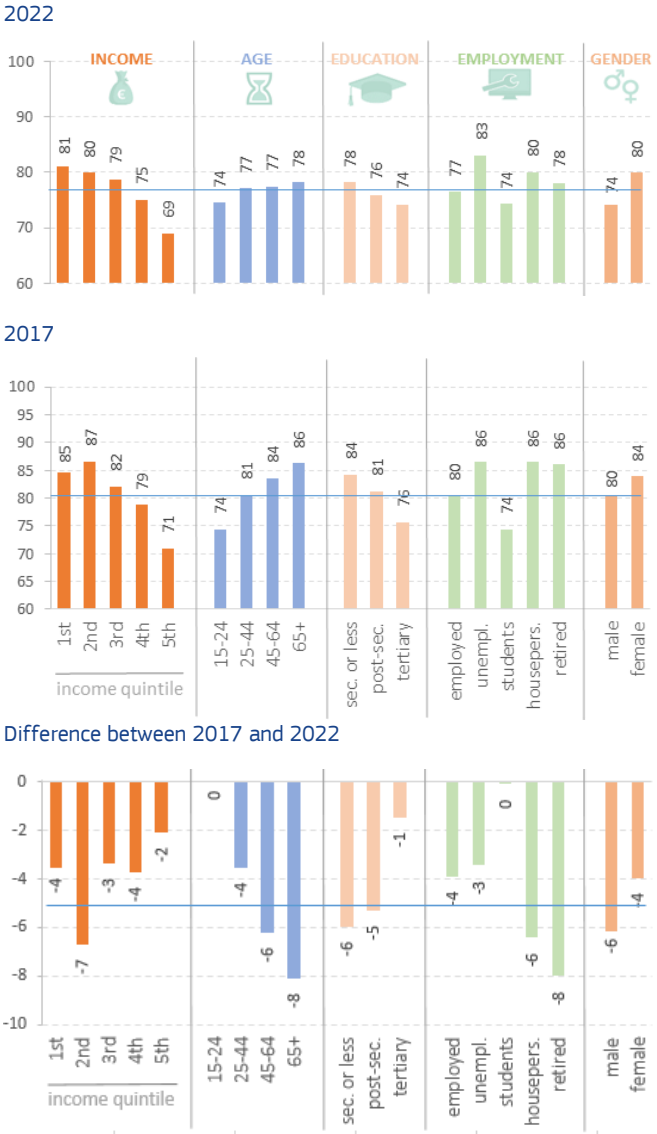
Differences between demographic groups regarding their demand for greater redistribution are consistent with economic theory and previous findings [2]: higher income is associated with lower demand, fewer men are in favour of more redistribution than women, and the unemployed and those not seeking employment favour greater redistribution than the employed.

The drop in demand for more redistribution is larger for respondents in the highest age group (+65) and in the second-lowest fifth (or 'quintile') in terms of income. In 2022, we observed a convergence of levels of support for redistribution across age and socio-economic groups (Figure **3.2**).

Findings from the literature suggest that a higher level of income inequality and greater concern about income inequality are reflected in higher support for redistribution [3,4]. Indeed, we observe that the demand for greater redistribution is positively correlated with the actual level of inequality in a country as measured by the ratio between the top and bottom income quintiles (a correlation of 0.42). However, its correlation with the perception of inequality is even higher (0.83). Therefore, the observed drop in support for redistribution may well be explained by a slight decrease in the inequality concerns in the EU-27 between 2017 and 2022 [1].

Respondents who feel that 'the national government takes into account the views of people like [them] when designing or reforming public benefits programmes and services' report higher demand for redistribution compared to those reporting more negative attitudes towards the government (in the EU-27, a correlation of 0.68). This is in line with the idea that support for redistribution increases with trust in the ability of governments to redistribute effectively [5].

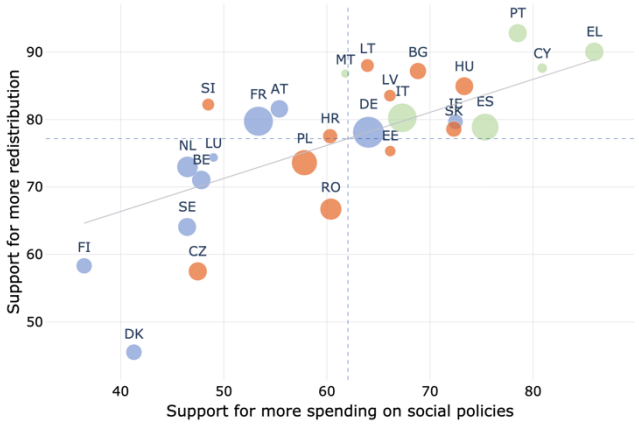
Figure 3.2– Support for greater redistribution by socio-demographic group



Note: the first two figures show the share of respondents who agree or strongly agree with the statement 'national government should take measures to reduce differences in income levels' broken down by subpopulation. On the y-axis, values are in per cent. See the Quick Guide for additional information on the definition of the socio-demographics characteristics.

Support for greater redistribution correlates with preferences for further spending on social policies, as shown in Figure **3.3**. Indeed, higher demand for redistribution at country level is associated with increased support for additional spending on social policies across eight different policy areas considered in the survey, namely health, long-term care, education, pensions, housing, income support, family support, and unemployment support. At individual level, between respondents agreeing that the government should take measures to reduce differences in income levels and that spending should be raised, the correlation is highest for income support (0.20) and lowest for education (0.12). The following sections explore some of the determinants of support for increased spending on these social policies and of preferences on how to finance it.

Figure 3.3 -Support for more redistribution and spending on social policies in 2022



Note: on the y-axis, the figure shows the share of respondents who agree or strongly agree with the statement 'national government should take measures to reduce differences in income levels'. On the x-axis, the figure shows the share of respondents who want to spend 'more' or 'much more' on social policies (i.e. the average of eight different social policies). For each country, the size of the bubble is proportional to the country's population. On both axes, values are in per cent. Central and eastern EU countries are in red, northern and western EU countries are in blue, and southern EU countries are in green. The blue dashed lines show the EU averages.

Support for more social spending is high, and preferences for specific social policies are broadly similar across countries and across socio-demographic groups

Most people in the EU support more spending on seven out of eight key social policies. The only social policy for which support is below 50% of the total population is unemployment benefits (47%). On average in the EU, support for greater spending on health and long-term care is especially high. For each of these two policies, 71% of respondents agree that more or much more spending would be needed. Greater spending on education and pensions is supported by 68% and 66% of respondents, respectively. Increased spending on housing, income and family support are slightly less popular but support is still above 50% for each of these policies. The fact that health and long-term care rank highest in most countries does not seem to be due to the recent COVID-19 pandemic: in most Organisation for Economic Co-operation and Development (OECD) countries, health and long-term care were also among the top priorities in 2018 and 2020 [4,6].

People of different social groups and in different EU countries have broadly similar priorities with regard to increasing spending on social policies. Figure **3.4** shows the share of individuals who would like to spend more or much more on each social policy area by country (Figure **3.4**a) and by social group (Figure **3.4**b). Among the eight policies considered, health or long-term care are the top priorities in most countries and socio-demographic groups. Conversely, unemployment support comes last in most cases.

Nevertheless, some notable differences exist across countries. In southern EU countries, support for more spending on all eight policies tends to be higher than elsewhere. In these countries, the difference across policies is relatively small and majorities favour increased spending on all policies. In contrast, in the north-western part of the EU, there are larger percentage point differences across policies, with a large spread between top and bottom priorities.

Countries also differ in the order of priorities. In some central and eastern EU countries, there is more support for increasing spending on pensions (Bulgaria, Croatia and Slovakia), while in a few north-western EU countries, support is highest for housing (Luxembourg and Ireland) or education (Germany).

Some of the observed country patterns are in line with the fact that support for redistribution tends to be higher in countries where inequalities and concerns over inequality are higher, as described in the previous section. Interestingly, at country level, the correlation between income inequality (as measured by the ratio between the top and bottom income quintiles) and support for spending more on social policies is highest for safety-net policies such as unemployment and income support. Conversely, the correlation is lowest for policies that are beneficial to most people such as education or health[3].

Moreover, for almost all social policies, there is a negative and significant relationship between current spending as a share of gross domestic product (GDP) and preferences for greater spending on the policy under scrutiny (Figure **3.5**): where spending is already higher, the desire to increase it further is lower. This correlation is significant for family support, education, health, long-term care, income support and housing.

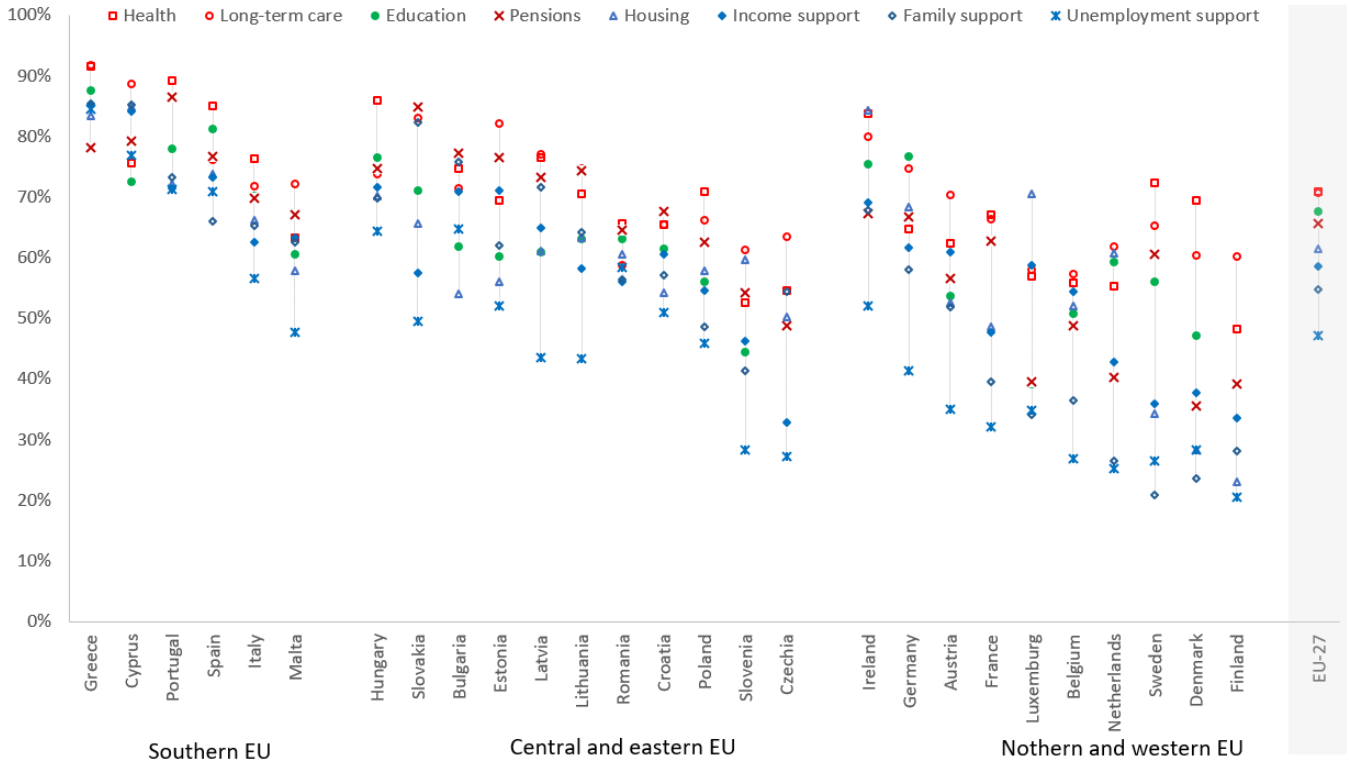
When looking at socio-demographic profiles of preferences for social policies, some interesting patterns emerge. The preferences of different groups are generally in line with the current self-interest of individuals although differences are relatively small (see Figure **3.4**b). Support for more spending on pensions, long-term care and health gradually increases with age, while support for additional spending on family reaches its peak in the 25-34 and 35-44 age groups and then gradually decreases. Individuals in education prioritise education among other social spending programmes, while households with children prioritise family support and education more, compared to households without children. The unemployed prioritise unemployment and income support much more than any other social group.

Overall, respondent's education correlates positively with support for more spending on education, while the opposite pattern is observed for spending on pensions, housing, income and unemployment support. In addition, perhaps surprisingly, differences in preferences by income decile of the respondent are rather limited. Higher spending on pensions, unemployment, and income support is more supported by lower income groups. On the other hand, spending more on education ranks higher among high-income respondents. However, the difference in support between the highest and lowest income quintiles is below 10 pp for all policies but pensions.

[3] For the sake of brevity, these correlations are not reported but are available upon request.

Figure 3.4 - Support for increasing expenditure on social policies in 2022

(a) by country

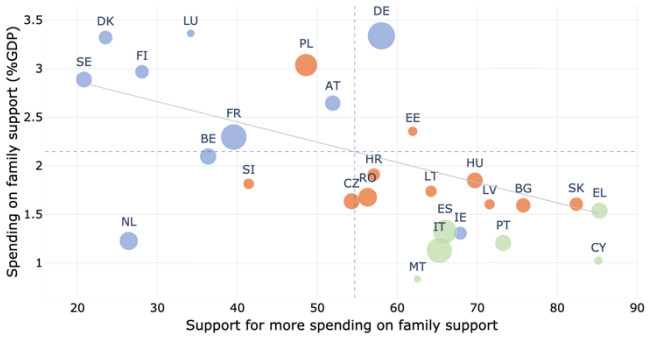


(b) by socio-demographic group

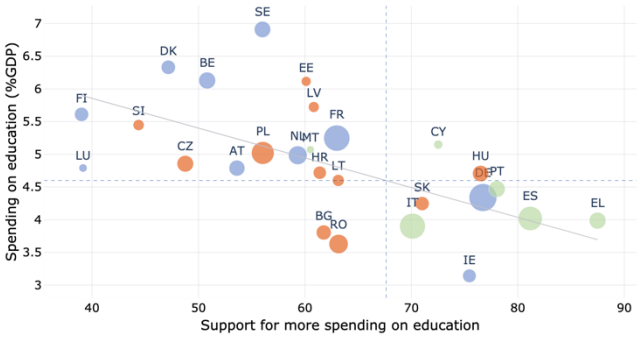
Note: the figure shows the share of respondents who want to spend 'more' or 'much more' on a policy. See the Quick Guide for additional information on the definition of the socio-demographics characteristics.

Figure 3.5 - Actual public spending versus support for additional spending on specific social policies in 2022

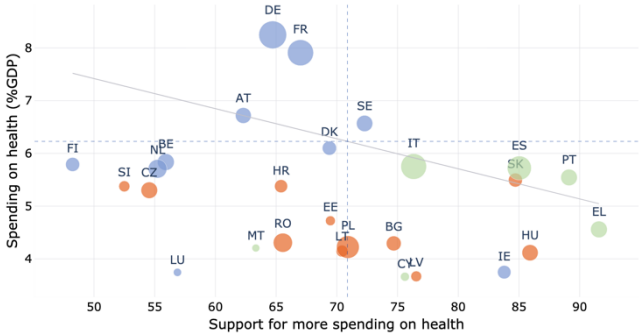
Family support (correlation: -0.36)



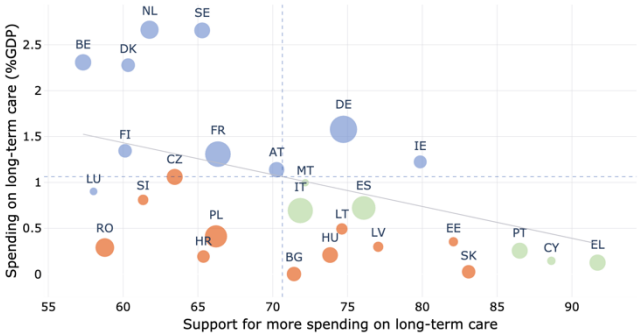
Education (correlation: -0.66)



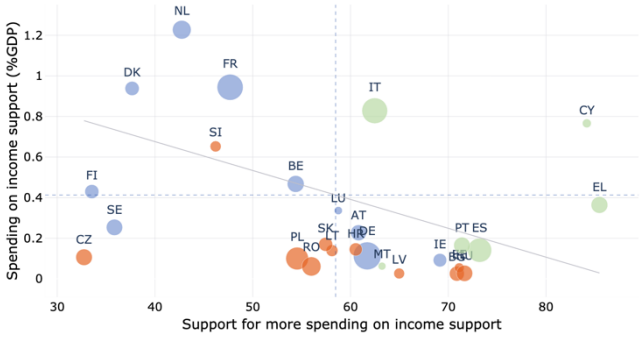
Health (correlation: -0.38)



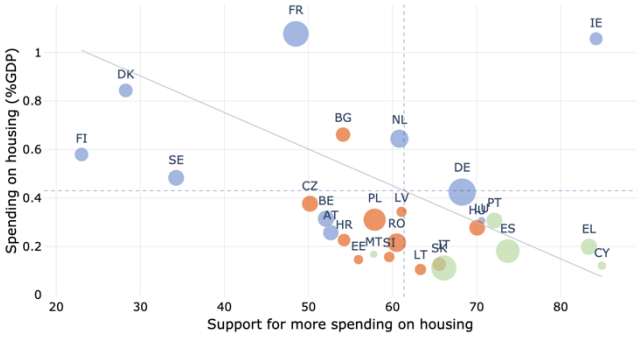
Long-term care (correlation: -0.36)



Income support (correlation: -0.42)



Housing (correlation: -0.55)



Note: the figures show the share of respondents who want to spend 'more' or 'much more' on a policy (x-axis) and the actual spending on the policy (y-axis). Actual spending on each of the policies is expressed in per cent of GDP. See the Quick Guide for additional information on the sources of the data on actual spending. For each country, the size of the bubble is proportional to the country's population. On both axes of each figure, values are in per cent. Central and eastern EU countries are in red, northern and western EU countries are in blue, and southern EU countries are in green. Grey lines are from a weighted ordinary least squares regression. The blue dashed lines show, in each figure, the EU averages.

We visualise relations only for social policies for which the relationship between current spending as a share of GDP and preferences for greater spending on the policy is statistically significant.

Widespread support for tax increases to finance additional spending on social policies

A large majority of people in the EU would like to see an increase in public spending on social policies. Around half of the respondents (51%) favour increasing taxes or social security contributions to finance this additional spending (Figure 3.6a). However, respondents differ on the preferred degree of progressivity of this additional taxation: 21% favour a relatively higher burden on richer households, 20% advocate an increase of taxes proportional to households' income, and 10% opt for an equal contribution of all households. Instead of raising taxes, around 12% of respondents would like to finance this additional spending by increasing the budget deficit, while 15% would reshuffle the budget and reduce expenditures for other public programmes. Finally, only 16% of respondents

would prefer not to increase public spending on social policies, and 6% have no opinion.

In all EU countries, most respondents favour an increase in government expenditure to finance additional spending on social policies, ranging from 68% in Romania to 90% in Cyprus (this corresponds to the sum of the blue area in Figure **3.6**a).

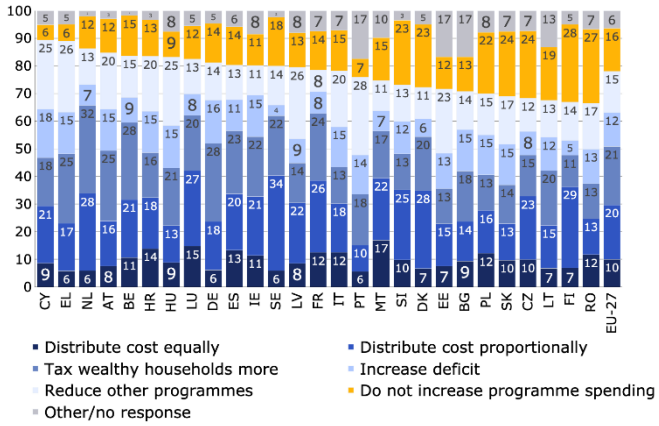
At country level, there are some interesting differences among those not willing to increase budget expenditure (orange area in Figure **3.6**a). In some southern EU countries like Portugal, Cyprus and Greece, many are in favour of reshuffling budget expenditure to allow greater spending on social policies. By contrast, in Finland and Romania, more than one quarter of respondents do not favour any increase in spending on social policies.

There are also some noticeable differences among countries in terms of the desired progressivity of any additional taxation to finance more social spending. In some western EU countries like Belgium, Germany and the Netherlands, there is a higher preference for a larger contribution by wealthy households, while in northern countries (Denmark, Finland and Sweden), people tend to prefer a contribution that is proportional to income earned. In all countries, only a small share of people would like to finance the additional spending by increasing the budget deficit.

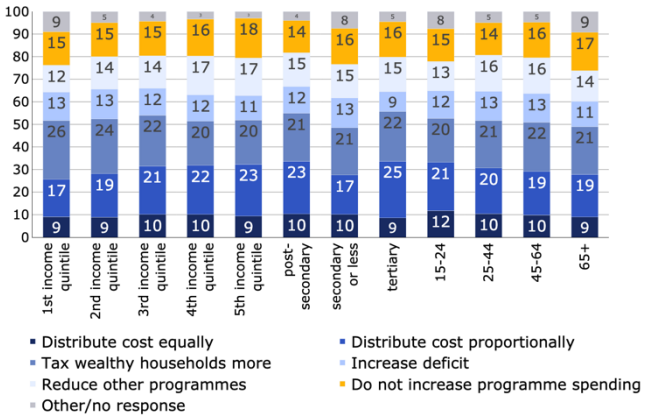
Preferences on how to finance additional spending on social policies are relatively similar across socio-economic groups (Figure **3.6**b). Around half of the respondents across all income quintiles favour increasing taxes. But as expected, individuals in the highest income quintile are less in favour of putting a higher burden on wealthy households (20%) than those in the lowest income quintile (26%). They are more in favour of a contribution that is proportional to income earned (23% in the highest income quintile) than those in the lowest income quintile (17%). Individuals in the high-education group are more in favour of a contribution that is proportional to income earned (25%) than those in the low-education group (17%). Individuals in the low-education group have a greater preference for financing additional spending by increasing the budget deficit (13%) than individuals in the high-education group (9%).

Figure 3.6 - Preferences for financing additional spending on social policies in 2022

(a) by country



(b) by socio-demographic group



Note: the figures show all possible answers to the question 'Some people might want to increase the government spending on several programmes. If you think that the overall spending should increase, how should the additional cost be financed?' and their relative popularity. See the Quick Guide for additional information on the question. On the y-axis, values are in per cent.

Conclusions

Concerns over inequality remain high in the EU and are mirrored by high support for more redistribution. In all countries, except Denmark, most respondents favour measures to reduce income inequality. However, support for more redistribution varies depending on personal characteristics and attitudes towards the government – e.g. it decreases with income and education level, it increases with age, and is higher for female respondents and for those with a positive attitude towards the government.

Demand for redistribution is also correlated with demand for greater spending on social policies. Support for more social spending is high, with more than half of the people in the EU being in favour of additional spending on seven of the eight social policies considered in the survey. Support is highest for increased spending on long-term care, health and pensions. The exceptions are Germany and Luxembourg, where support is

greatest for increasing spending on education and housing, respectively. Conversely, support is lowest for extra spending on unemployment support in most countries, with support across the EU just short of a majority. Preferences on policies are also in line with self-interest – e.g. support for more spending on education is higher among students.

There is widespread support for more spending on social policies. When asked about financing, 15% of respondents favour a reduction of spending on other programmes, and around half of respondents favour raising taxes or social security contributions. Of this last group, most think that the additional cost should be borne by wealthy households or distributed proportionally to household income. Another 12% of respondents report not wanting to increase spending. Preferences do not vary substantially across countries or socio-demographic groups.

These findings are relevant for both researchers and policymakers. The observed levels of dissatisfaction with inequality are concerning, even if the trend in these perceptions is improving. Results point to strong preferences for redistributive policies and increases in spending on social policies.

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QUICK GUIDE – In addition to the Eurobarometer surveys, 2019 country-level data from Eurostat on GDP and public spending on specific policy areas is used to supplement the analysis (**Figure 3.5**). The figures on public spending on specific policy areas are extracted from the European System of integrated Social Protection Statistics (ESSPROS) for pensions, family policies, unemployment support and income support, from the Classification of the Functions of Government (COFOG) for education and housing, and from the System of Health Accounts (SHA) for health and long-term care.

The Eurobarometer statistics reported are weighted by age, gender, urbanisation and region of residence using sampling weights based on the EU-27 population. The binary variables on inequality concerns, support for greater redistribution, and support for greater spending on various social policies include the 'don't know' answer in the reference category (i.e. values equal to 0). All numbers are rounded to the closest integer. In few cases, the statistics presented slightly differ from those in other publications on Special Eurobarometer 529, where other rounding methods are applied.

The variables depicted in each figure are described in the figure notes, apart from the socio-demographic characteristics displayed in **Figure 3.2**, **Figure 3.4** and **Figure 3.6**. The gender, age and parental status variables are self-explanatory. The 'houseperson' employment status category includes respondents who are not seeking employment. 'Students' are people aged 15 or more who were in any kind of education at the time of the interview. The 'post-secondary education' variable includes those who have completed post-secondary vocational studies, or higher education to bachelor level or equivalent, while 'tertiary education' refers to those holding master or doctoral degrees. Income quintiles refer to income quintiles at country level, and are based on Eurostat's 2019 EU statistics on income and living conditions. Respondents' attribution to an income quintile is based on self-reported total disposable household income. Non-response categories ('don't know' or invalid answers) of socio-demographic variables are excluded from **Figure 3.2**, **Figure 3.4** and **Figure 3.6**. However, we do not observe any non-responses for most socio-demographic variables, apart from income quintiles (17.5% of the sample) and education (0.5% of the sample).

For the question 'Thinking about the taxes and social security contributions you might have to pay, would you like to see the (NATIONALITY) government spend less, spend the same, or spend more in each of the following areas?', respondents were shown the current annual spending figures per inhabitant for each of the eight social policies on the same screen. These figures are based on Eurostat data from ESSPROS, COFOG and SHA. Respondents were presented with the following examples to explain each policy: 'Health - public hospitals, subsidised health insurance, mental health services'; 'Long-term care - nursing care assistance for older persons at home or in nursing homes'; 'Education - schools, universities, adult education services'; 'Pensions -old age pensions, disability pensions, survivors' pensions'; 'Housing - social housing services, housing benefit, housing development'; 'Income support - cash benefits for low-income earners and socially excluded persons'; 'Family support - parental leave, childcare benefits'; and 'Unemployment support - unemployment benefits, training schemes for the unemployed'.

Preferences on how to finance social policies were asked using the following question: 'Some people might want to increase the government spending on several programmes. If you think that the overall spending should increase, how should the additional cost be financed?'. Respondents were presented with the following single-choice set of answer options: (1) 'No, you don't think the overall spending should increase'; (2) 'The budget for other public programmes should be reduced and no additional effort should be asked of households'; (3) 'The additional cost should be distributed equally among households'; (4) 'The additional cost should be distributed proportionally to household income'; (5) 'The additional cost should be mainly asked of wealthy households'; (6) 'The budget deficit should be increased and no additional effort should be asked of households'; (7) 'Other'; and (8) 'Don't know'.

4. Towards a more inclusive social Europe: early-life conditions and educational attainment

HIGHLIGHTS

- → According to a recent Eurobarometer survey, childhood circumstances have vastly improved between birth cohorts in the past 80 years or so, but there are still large differences between EU countries.
- → Childhood circumstances are key to explaining tertiary educational attainment, with parental education having the greatest influence.
- → Pre-school attendance is a significant driver of tertiary attainment, even after accounting for the home environment during childhood.
- → Northern European countries have the lowest levels of inequality of opportunity in tertiary education, while southern European countries have the highest levels of inequality in tertiary education.
- → Inequality of opportunity has decreased over time with the largest declines observed where it was initially highest, i.e. in southern Europe.

Background

Equality of opportunity is extensively discussed within the domain of social policy in Europe. Since the adoption of the first EU employment strategy in 1993, a number of initiatives at EU level have been adopted to strengthen welfare systems. Building upon these previous initiatives (e.g. the Lisbon strategy and the European investment package), the European Pillar of Social Rights, along with its corresponding action plan and the priorities of the Von der Leyen Commission, aim at achieving a strong social Europe that is **fair, inclusive, and full of opportunity**. The European child guarantee adopted in 2021 sets out clear recommendations to prevent social exclusion and guarantee equal opportunities for all children.

The imperative of tackling socio-economic disadvantages and guaranteeing fair socio-economic outcomes irrespective of one's social background is underpinned by both moral and economic considerations. Inequality of opportunity can be the result of many causes. For example, it may be linked to an inability to access different resources based on parental socio/-economic background. But it can also be linked to key early childhood experiences, such as access to pre-school education and basic necessities. These factors have been shown to matter substantially for later educational and labour-market outcomes [1, 2].

This chapter relies on data from a special Eurobarometer survey carried out in 2022, and provides insights into the influence of the home environment, pre-school attendance, and other factors outside an individual's control in shaping educational attainment and inequality of opportunity.

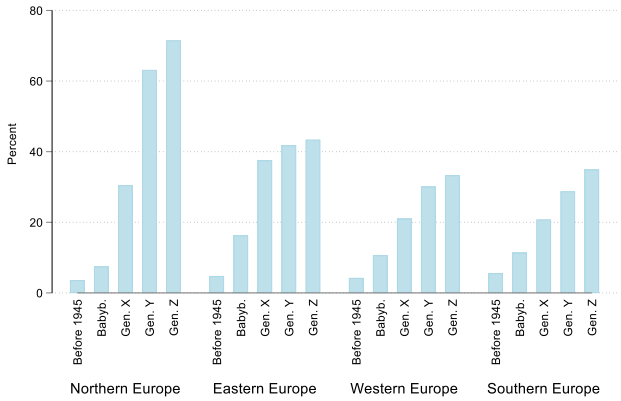
The conditions of childhood have vastly improved across birth cohorts, but there are still large differences between EU macro-regions

Figure **4.1** - Figure **4.4** illustrate how key childhood conditions vary across EU macro-regions and how these childhood conditions have changed over time.

Figure **4.1** shows the proportion of respondents who reported spending most of their time during daily hours (e.g. between 9 a.m. and 5 p.m.) in a nursery or pre-school when they were aged 4 (referred to as 'intensive' pre-school attendance hereafter)[4]. Intensive pre-school attendance ranges from close to 36% in northern Europe to around 20% in southern and western Europe.

4 This indicator is distinct from those used to track the Barcelona targets. The Barcelona targets indicate the proportions of children aged 0 to 2 years and between age 3 and the age they start compulsory education who are cared for by formal arrangements other than the family for 1 hour or more per week.

Figure 4.1.– Access to intensive pre-school at age 4, by EU macro-region and cohort

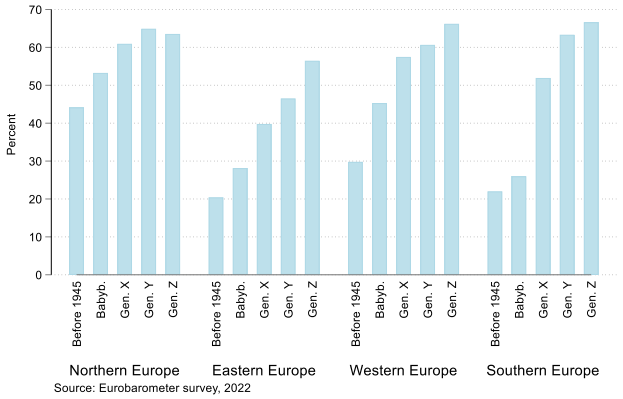


Note: Eurobarometer survey 2022. See the Quick Guide for the definition of birth cohorts and macro-regions.

Pre-school attendance has increased significantly since the generation born before the second world war were children, but it remains below 50% in most EU macro-regions. For example, a mere 5% of people born before 1945 attended pre-school intensively, whereas 38% of those belonging to generation Z (i.e. those born after 1995) attended pre-school intensively. Countries in northern Europe have seen major improvements since the pre-war period, with pre-school coverage in these countries increasing from negligible levels for those born before 1945 to over 70% for the youngest cohort. Intensive pre-school attendance has also substantially increased in other EU countries, albeit at a slower pace. This is not surprising given that pre-school programmes expanded substantially in the second half of the 20th century. High quality pre-school education has been linked to a variety of favourable outcomes, including greater learning achievement, greater female participation in the labour force, and greater equality of opportunity [3].

According to the Council recommendation establishing the European child guarantee, ensuring universal access to fundamental necessities during childhood is essential for providing everyone with an equal start. Figure **4.2** shows the percentage of respondents who said they had access to five basic necessities when they were children: (i) medical check-ups on a regular basis; (ii) healthy food on a daily basis; (iii) adequate housing; (iv) books to read at home; and (v) a safe and stimulating learning environment at school. For the sake of simplicity, we refer to this as having 'universal' access to basic necessities. Overall, more than 6 out of 10 respondents in generation Z across the EU had universal access to these necessities when they were children. However, universal access of this sort was only the case for approximately 27% of survey respondents belonging to the oldest cohorts born before 1945.

Figure 4.2.– 'Universal' access to five basic necessities by EU macro-region and cohort

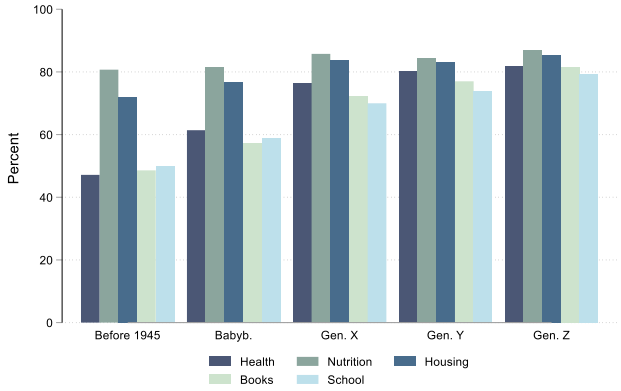


Note: Eurobarometer survey 2022. Share of respondents having had access as a child to the five basic necessities. See the Quick Guide for the definition of birth cohorts and macro-regions.

Southern Europe, followed by eastern Europe, has seen the greatest improvement in childhood conditions across birth cohorts. Only 2 out of 10 respondents born before 1945 had access to these five basic necessities in both EU macro-regions, whereas this was the case for five and six out of ten respondents from generation Z in southern Europe and eastern Europe, respectively. While the improvement observed across cohorts was gradual in eastern Europe, in southern Europe, the main changes were seen between the 'baby boomers' (those born in the 20 years or so after the end of the second world war) and respondents from generation X (those born between 1965 and 1980).

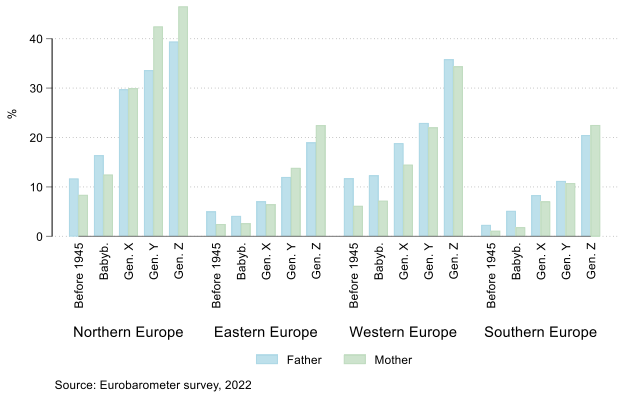
Figure **4.3** shows the percentage of respondents with access to each of the five basic necessities *separately*. It is interesting to note that, among respondents born before 1945, access to daily healthy food and adequate housing was already high (81% and 72%, respectively). In contrast, less than half of respondents from this older generation had access to regular medical check-ups when they were children, whereas 82% of respondents from generation Z did. Across the five birth cohorts, access to books to read at home and a secure and stimulating learning environment at school increased by more than 20 percentage points between the pre-war generation and generation Z. Although not reported graphically for the sake of brevity, this pattern – namely a vast improvement across birth cohorts in access to regular medical exams, books, and an adequate learning environment – can be observed in each of the macro-regions.

Figure 4.3.– Access to each of the five basic necessities by cohort



Note: Eurobarometer survey 2022. Share of respondents having had access as a child to each of the five basic necessities. See the Quick Guide for the definition of birth cohorts.

Figure 4.4.– Parental education: completed tertiary education by EU macro-region and cohort



Source: Eurobarometer survey, 2022

Note: Eurobarometer survey 2022. The graph shows the percentage of respondents whose mother and father have completed tertiary education. See the Quick Guide for the definition of birth cohorts and macro-regions.

The socio-economic status of respondents' parents is a third key element of the home environment which substantially impacts future life outcomes [3][5]. Overall, 14% of respondents' fathers and 12% of respondents' mothers had/have a tertiary education. As expected, given the expansion in tertiary education in the last few decades, the proportion of the youngest cohorts with highly educated parents is more than 20 percentage points greater than the proportion of the oldest cohorts with highly educated parents (Figure **4.4**). In the generation of the parents, the proportions of women and men with a tertiary education are relatively comparable.

Parental education is the highest in northern Europe, with over one third of survey respondents having highly educated parents. This is true for less than one-tenth of respondents in both eastern and southern Europe. Almost no respondents from southern Europe born before 1945 had parents with a tertiary education. The share of generation Z in this macro-region with at least one highly educated parent is above 20%, which is almost half the figure corresponding to the parents' education of respondents from generation Z in northern Europe (almost 40%). In fact, even previous generations in northern Europe had a greater share of children whose parents had a higher level of education than generation Z in southern Europe.

The educational attainment of parents has the greatest influence of any factor on the likelihood of a child attaining tertiary education

Research has consistently shown that family background and pre-school attainment have a significant impact on academic achievement. Figure **4.5** illustrates the significance of various family and childhood factors on the probability of completing a tertiary education. More specifically, the circles represent the percentage-point differences in higher education achievement between a person with the family or childhood characteristics reported on the y-axis (such as having a father who completed tertiary education) and its reference group (in the same example, a father with a lower level of education). The percentage-point differences for each characteristic are reported after accounting both for the other characteristics reported in the graph and additional factors such as gender, age, and country of residence.

Attending pre-school increases the likelihood of completing a tertiary education by 3.7 percentage points. This finding is consistent with existing research: nursery attendance or pre-school education can support social and emotional development, as well as language and cognitive development or preparation for formal education [1]. It is interesting that the effect of nursery/pre-school attendance is stronger than the effect of family environment during childhood.

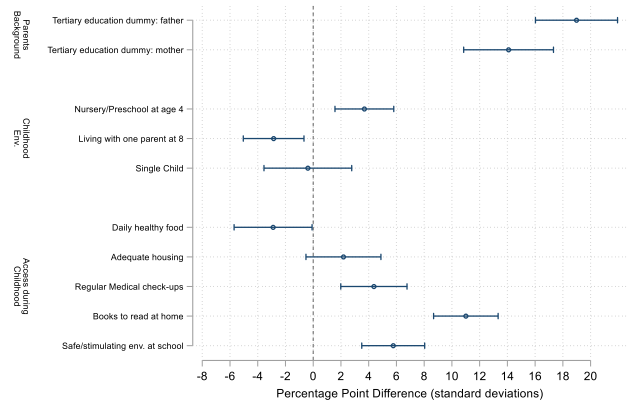
However, the education level of parents shows the strongest influence of all. Having a father who completed tertiary education increases the likelihood of attaining a similar educational level by 19 percentage points. The mother's educational level is also crucial.

People who had access to books at home and a stimulating learning environment in school as children typically performed better academically. In a similar vein, routine medical check-ups during childhood also promote academic performance. Overall, a respondent who benefited from the five categories of basic necessities described earlier has a nearly 13-percentage-point higher chance of completing a tertiary degree

[5] There are different ways to measure parental background. This chapter focuses on the completion of tertiary education.

than a counterpart who did not have access to any of these necessities during childhood[6].

Figure 4.5– Determinants of tertiary-education completion – EU-based estimate



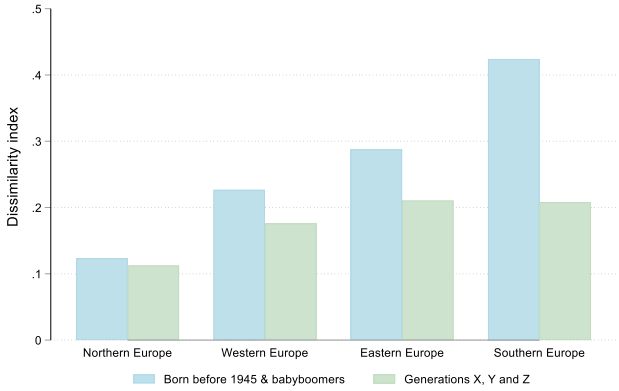
Note: Eurobarometer survey 2022. The estimate includes country, cohort and survey mode fixed effects and a gender dummy. The blue lines show 95% confidence intervals. When the confidence interval crosses the value 0 (denoted by the vertical dashed line), the individual characteristic in question is unlikely to be associated with the probability of completing tertiary education. See the Quick Guide for additional information.

Inequality of opportunity is the lowest in northern Europe and has declined across birth cohorts

The previous set of findings evidenced the associations between childhood circumstances and the probability of completing tertiary education. However, it did not explain how these circumstances are distributed across society and to what extent they matter for equality of opportunity in the EU. This question is investigated by analysing inequality in access to tertiary education, which has been shown to significantly impact future careers and several other socio-economic outcomes [5]. Increasing opportunities for higher education is therefore the basis of a more socially mobile and equitable society.

Figure **4.6** shows the extent of inequality of opportunity in accessing tertiary education in the EU by macro-region and birth cohort. High inequality of opportunity implies that initial circumstances (i.e. favourable versus unfavourable backgrounds) are not equally distributed across individuals. The extent of inequality of opportunity in tertiary education is measured by a dissimilarity index, with larger values of the index indicating greater inequality of opportunity in the society (see the Quick Guide for additional information). There is significant variation across the four macro-regions. On average, inequality of opportunity is lowest in northern European countries and higher in southern and eastern European countries. This finding is in line with the existing literature on this subject [5].

Figure 4.6– Inequality of opportunity in tertiary education by macro-region and cohort – EU-based estimate



Note: Eurobarometer survey 2022. The graph shows the value of inequality of opportunity as measured by a dissimilarity index ranging between 0 and 1, with larger values corresponding to greater inequality of opportunity. See the Quick Guide for the definition of birth cohorts and macro-regions.

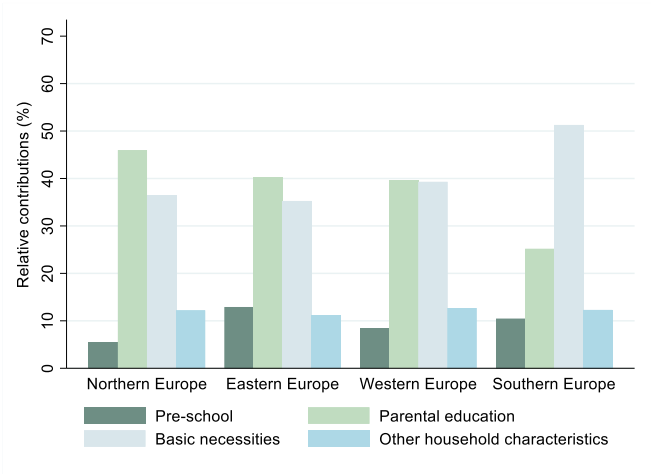
Inequality of opportunity is lower for younger cohorts (i.e. those born after 1965) in all macro-regions[7]. Decreasing associations between individual backgrounds and educational attainment across time has been widely documented in the literature [7, 8]. The largest variations are observed for groups of countries with the highest 'initial' inequality of opportunity, i.e. countries in southern and eastern Europe. However, these countries still lag behind their northern European peers.

To provide a clearer picture of the drivers of inequality of opportunity, in Figure **4.7** we report the results of the decomposition of inequality of opportunity by the main categories of circumstances. The relative contribution of parental education and basic necessities during childhood is the greatest among all the circumstances considered. Parental education is slightly more important than basic needs in northern and eastern Europe, whereas in southern Europe access to adequate healthcare, nutrition, housing, books, and schooling during childhood is the main driver of inequality of opportunity. This result may indicate that southern European countries were particularly unequal in terms of these specific factors compared with the rest of Europe. Combined with a generally lower level of – and more equally distributed – parental tertiary education, this resulted in a relatively stronger contribution of basic necessities in southern Europe.

[6] The effect of each necessity on improving the likelihood of completing tertiary education is seen in Figure 4.5. The text mentions the overall effect of having access to all five necessities. Having access to all five necessities is not the same as the sum of the effect of each necessity individually. This is because of the strong correlation between having access to the five necessities.

[7] For computational reasons, it was not possible to compute inequality of opportunity indices for each of the four birth cohorts.

Figure 4.7– Inequality of opportunity in tertiary education, relative contribution of childhood circumstance by EU-macro-region-based estimate

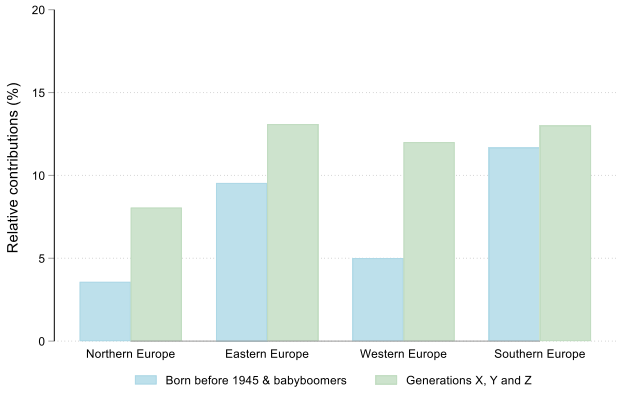


Note: Eurobarometer survey 2022. The graph shows the relative contribution of each circumstance category to inequality of opportunity across EU macro-regions. Other household characteristics include having lived with only one parent at age 8 and being a single child. See the Quick Guide for the definition of macro-regions.

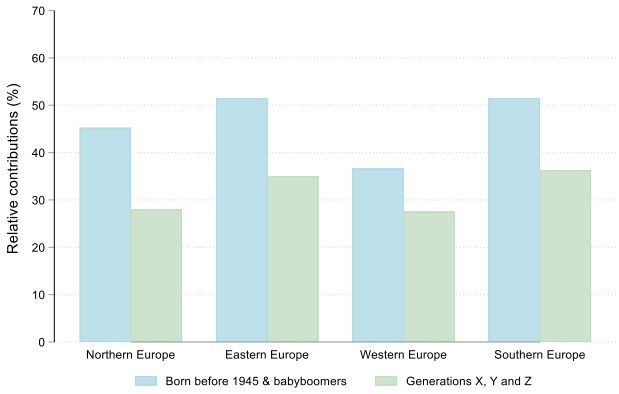
Pre-school attendance plays a significant role in determining the distribution of opportunities across Europe. In addition to the significant association between pre-school attendance and tertiary-education completion documented in the previous section, access to pre-school has an effect on inequality of opportunity in tertiary education, ranging between 12% in eastern Europe and around 5% in northern Europe. This is a significant result since it complements the previously reported and well-established association between pre-school attendance and the probability of completing tertiary education.

Figure 4.8 - Contribution of different circumstances to inequality of opportunity, by cohort and EU-macro-region-based estimate

Intensive pre-school attendance



Basic necessities



Note: Eurobarometer survey 2022. The graph shows the relative contribution of pre-school attendance and basic necessities to inequality of opportunity across EU macro-regions and birth cohorts. See the Quick Guide for the definition of birth cohorts and macro-regions.

Interestingly, the contribution of pre-school attendance is generally greater for younger cohorts than it is for older cohorts (Figure **4.8**, panel a). This is not a surprising result since pre-school before 1965 was generally less available and more evenly distributed across European countries. Starting in the mid-1960s and early 1970s, a confluence of rapid economic growth, increasing social protection, and women working in paid employment led to a significant expansion of early childhood care and education programmes [9]. Nevertheless, both the diffusion of pre-school education and its quality varied significantly across countries and between socio-economic groups, generally resulting in higher overall inequality in post-1970 pre-school attendance. As a result of this, the contribution of this particular circumstance to inequality in the distribution of opportunities is greater for younger cohorts.

Favourable economic conditions, increasing female participation in the labour market, and the decline in the birth rate led to an improvement in general living conditions, which

in turn led to a general convergence in access to essentials across Europe. The contribution of this set of circumstances is therefore less for younger cohorts, despite remaining above than 20% in all 4 EU macro-regions (Figure **4.8**, panel b).

Conclusions

The European Commission places social policies at the forefront of its priorities. This is reflected in the European Pillar of Social Rights and the number of initiatives recently introduced, including the new European care strategy, the European child guarantee, the revision of the Barcelona targets on early childhood education, the recommendation on minimum income, and a broader reflection on the future of welfare states. The European Commission is committed to a pluralistic, equal, and inclusive society. Several equality strategies and action plans have been adopted by the European Commission, e.g. in the fields of gender, disability, race and LGBTIQ rights. The Commission also has a dedicated task force on equality, which seeks to integrate the push for equality into all policy areas.

Ensuring a social and inclusive Europe, and promoting equality of opportunity requires several actions. Among other things, it requires a level playing field, i.e. it means ensuring that the home environment during childhood has a limited influence on the future opportunities of individuals. This chapter evaluated the extent to which the childhood environment in Europe has developed across birth cohorts and varies within Europe. Given that people's financial well-being is still largely dependent on the skills they acquire through education, it then also examined the influence of these childhood circumstances on tertiary-education attainment and on inequality of opportunity.

The 2022 Eurobarometer survey on fairness offers some insightful information. Firstly, it shows that childhood circumstances have vastly improved between successive birth cohorts over the past 80 years, but it also shows that these circumstances still vary greatly between EU macro-regions. Pre-school attendance, access to key necessities during childhood, and levels of parental education are more favourable in northern Europe than in southern Europe. However, southern Europe has generally seen the greatest improvement in childhood conditions across birth cohorts. Secondly, the Eurobarometer survey showed that the educational attainment of parents is the single strongest factor influencing both the likelihood of completing tertiary education and in shaping inequality of opportunity in tertiary educational attainment (except in southern Europe for the latter). Thirdly, the Eurobarometer survey showed that intensive pre-school attendance and access to key basic necessities remain, other things being equal, significant drivers of tertiary attainment, once the home environment during childhood is accounted for. Intensive pre-school attendance and access to key basic necessities also have a considerable effect on inequality of opportunity in tertiary education. Fourthly, the Eurobarometer survey showed that recent generations have witnessed a decline in inequality of opportunity. While the relative contribution of key basic necessities to inequality of opportunity has decreased from each generation to the next, the relative contribution of pre-school to preventing inequality of opportunity is generally greater for younger cohorts than it is for the older ones. This is to be expected as pre-school attendance was lower overall and more evenly distributed throughout European countries before 1965.

Barriers preventing access to – and completion of – tertiary education are an important concern, both for policy-makers and for society in general. Despite a general decline in inequality of opportunity in tertiary-education achievement, the persistent contribution of initial disadvantages to individuals' achievements later in life and to inequality has implications for both current and future generations. In particular, the relevance of pre-school attendance and access to key basic necessities for equality of opportunity shows the need to continue efforts to achieve universal access to affordable and good quality childcare (and other key services) during childhood. Finally, the contribution of childhood circumstances to inequality of opportunity can only be estimated for individuals in their adulthood. Findings from the same Eurobarometer survey show that perceived equality of opportunity has decreased over the past 5 years [10]. This calls for continued monitoring of future trends in inequality of opportunity together with its drivers and perceptions in the EU.

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QUICK GUIDE -

The Eurobarometer statistics reported are weighted by age, gender, urbanisation and region of residence using sampling weights based on the EU-27 population. Birth cohorts are defined as follows 'Born before 1945', 'Baby-boomers' (i.e. birth cohorts 1945-1965), 'Gen. X' (birth cohorts 1965-1980), 'Gen. Y' (birth cohorts 1981-1995), and 'Gen. Z' (birth cohorts after 1995). EU macro-regions are: (1) northern EU (Finland, Denmark and Sweden); (2) eastern EU (Bulgaria, Croatia, Czechia, Estonia, Hungary, Latvia, Lithuania, Poland, Romania, Slovakia and Slovenia); (3) western EU (Austria, Belgium, France, Germany, Ireland, Luxembourg, and the Netherlands); and (4) southern EU (Cyprus, Greece, Italy, Malta, Portugal and Spain).

The childhood circumstances variables depicted in

Figure **4.1** - Figure **4.4** are described in the figure notes or in the text. Figure **4.5** is based on a logit model estimation. The dependent variable is a discrete variable with a value of 1 if the respondent indicated completion of tertiary education and a value of 0 otherwise. Figure 4.5 includes two additional discrete variables to capture the home environment during childhood, in addition to the circumstance variables from

Figure **4.1** - Figure **4.4**. The first variable indicates whether the respondent was living with only one parent at age 8, and the second signals whether the respondent is an only child. The logit estimate additionally includes a gender dummy, as well as fixed effects for country, birth cohorts, and survey mode.

Figure **4.6**-Figure **4.8** rely on the same circumstance variables as the estimation model that underpins Figure **4.5**. The circumstances are regrouped into 4 categories: (i) intensive pre-school attendance; (ii) basic necessities; (iii) parental education; and (iv) other household characteristics (e.g. only child, single-parent family). Inequality of opportunity is measured by means of a dissimilarity index, which is defined as the absolute difference in circumstances between individuals with positive outcomes (i.e. who have completed tertiary education) and those with a negative outcome (i.e. those with less than tertiary education). Smaller values for the index indicate that the two categories of individuals are very similar in terms of circumstances, while larger values indicate that the difference is larger. The estimates are performed at the country level and consequently aggregated by macro-region and/or birth cohort. Due to specificities of the analysis which is very 'data hungry', individuals are grouped into two cohorts: (i) those born before 1945 and 'baby boomers'; and (ii) those belonging to generations X, Y and Z.

Items in the survey on childhood circumstances are based on retrospective information. Such retrospective data presents limitations. When respondents are requested to recall prior episodes, they may not recollect them or they may provide inaccurate answers.

5. Income position misperceptions in Europe

HIGHLIGHTS

- → According to estimations based on a recent Eurobarometer survey, more than 40% of EU citizens underestimate their income position, while circa 15% overestimate it.
- → Respondents tend to place themselves closer to the middle of their country's income distribution than they actually are. In other words, lower income households tend to overestimate their income position, while higher income households tend to underestimate it. This tendency holds across all countries.
- → Misperceptions about one's position in the country's income distribution tend to be larger in lower income countries, in countries that have experienced faster income growth in recent years and in countries with higher inequality.
- → Misperceptions are correlated with several socio-demographic characteristics. For example, younger people, women and less educated people misperceive their income position more on average.
- → Respondents who *overestimate* their income position report higher life fairness perceptions, are less concerned about income inequality and are less likely to favour a spending increase on income support policies. Correspondingly, those who *underestimate* their income position are more concerned about inequality and are more supportive of income redistribution.

Background

According to the 2022 Eurobarometer survey on fairness, about 80% of Europeans believe that income inequality is too high and that the national government should take measures to reduce differences in income levels [1]. But to what extent are people aware about the level of income inequality in their country and their own position in the income distribution?

Previous studies from individual countries have shown that most people believe they belong to the middle class and that this has implications for perceptions of inequality and preferences for redistribution [2, 4]. This chapter employs representative data for all 27 EU countries to investigate the incidence and correlates of relative income misperceptions.

A high share of EU citizen believe they are poorer than they actually are

To what extent do EU citizens misperceive their relative income? In what follows, misperceptions are estimated based on data from the above-mentioned Eurobarometer survey, covering perceptions of the income position of one's household. In particular, the income position (mis)perception is calculated as the difference between a respondent's perceived position in the national income distribution (in deciles) and self-reported income converted into deciles using recent statistics from Eurostat (see the *Quick Guide* for details).

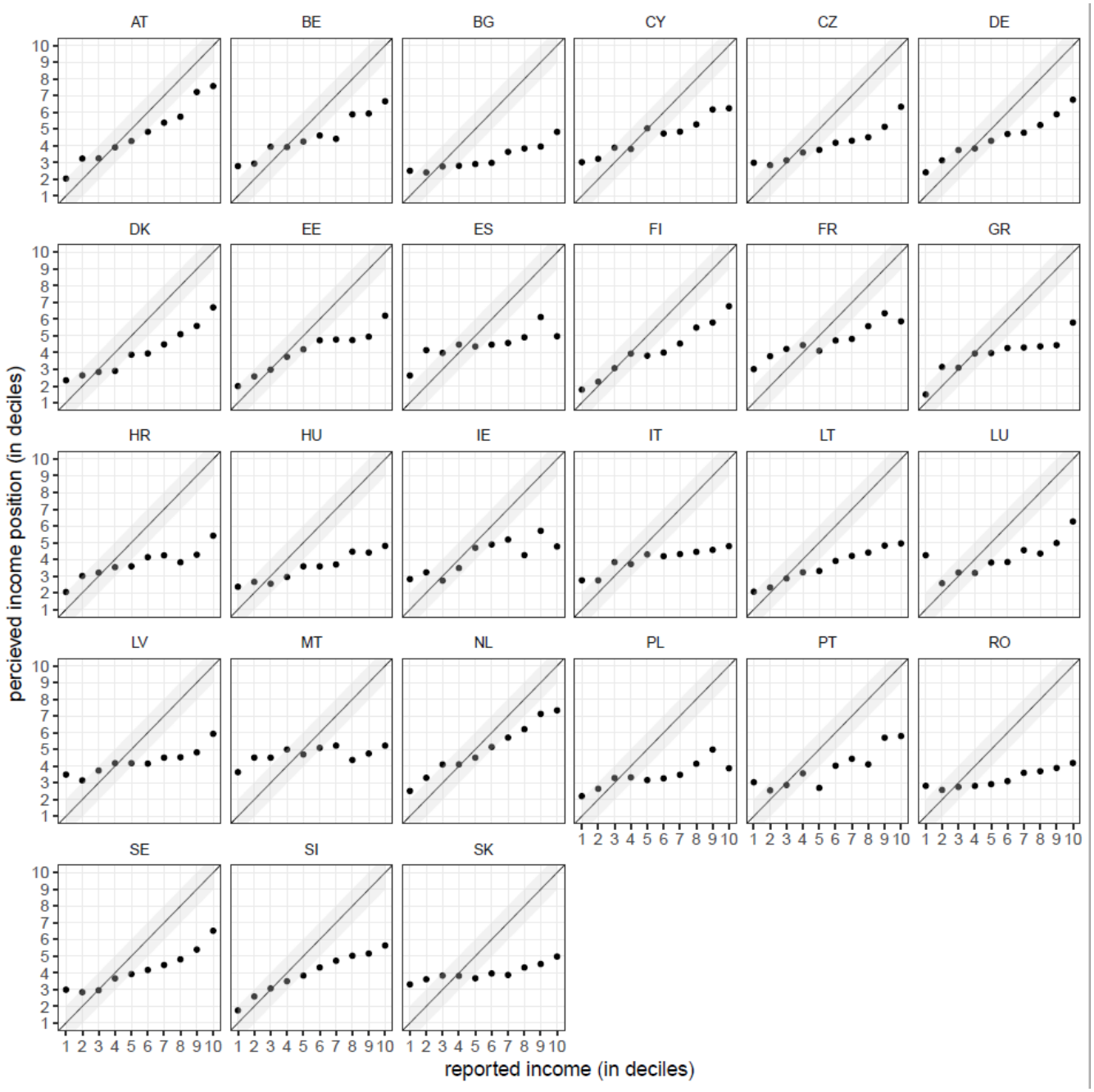
Respondents for whom this difference is negative consider themselves to be in a lower position than they actually are, i.e. they underestimate their position. The opposite is true for respondents with a positive difference; they overestimate their position. Based on this calculation, 15% of respondents overestimate their income position by at least two deciles, 44% underestimate their income position by at least two deciles, while approximately 41% of respondents place their household's income within one decile of the correct position. Hence, a relative majority of EU citizens believe they are poorer than they actually are.[8]

At the same time, people tend to place themselves closer to the middle of the income distribution than they actually are, which has been referred to as a *middle-class bias* [3]. This tendency holds across all countries, as shown by Figure **5.1**. The figure indicates the perceived income position in relation to the actual income position that corresponds to their self-reported income by country. The 45-degree line corresponds to the case

8 These results should be treated with caution, due to possible mismeasurements of the correct income decile, systematic income misreporting and the cognitive complexity of the exercise. In particular, individuals may prefer not to report incomes from the informal sector, which could increase the imprecision of estimated misperceptions. Moreover, despite the clarity of the questions (see the *Quick Guide*), respondents might mix the notion of income and wealth. However, previous studies using administrative income data also find that most respondents tend to underestimate their income position [2, 5].

of correct perception of one's income position in the national income distribution. Being above the line means an *over*estimation of one's income position, while being below the line means an *under*estimation.

Figure 5.1– Estimated actual income decile versus perceived income decile, pattern across countries



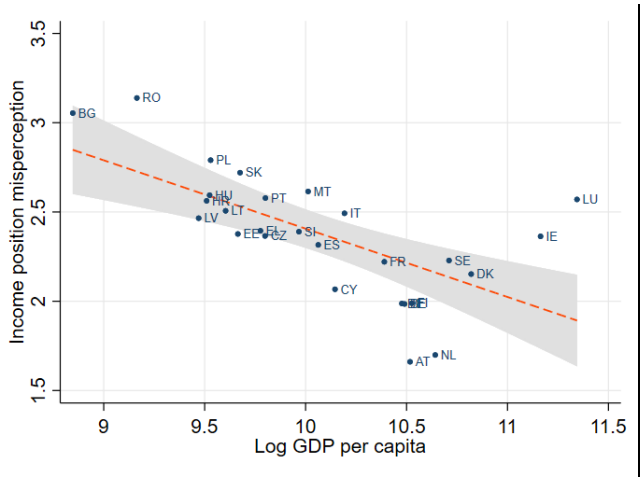
Note: average perceived income decile across respondents belonging to a given income decile. The solid 45-degree line illustrates correct perception. The shaded area around the 45-degree line illustrates cases where a respondent's perception is off by one decile from the accurate assessment.

In all EU countries, respondents in the lowest two income deciles on average *over*estimate their income rank, while those above the fifth income decile *under*estimate it. A possible explanation for this finding is that people tend to compare themselves to people they know (i.e. acquaintances, co-workers, friends, family members, etc.) and use this reference group as a proxy for the full population when assessing their income position [4]. If reference groups bundle people of similar income levels, then the prediction is that people with richer reference groups tend to *under*estimate their income rank, whereas those with poorer reference groups *over*estimate their rank.

Country-level correlates of income position misperceptions

Misperceptions differ systematically between countries. The following results are based on the absolute value of the misperception, to investigate differences in the average misperception by country independently of its direction. However, given that the income position misperception is negative on average in all EU countries, results are conceptually similar when using the abovementioned signed variable. Figure **5.2** shows that misperceptions are lower in high-income countries than in countries with lower income, as measured by GDP per capita (correlation coefficient of -0.65). This association also holds when economic prosperity is measured by a country's average wage (Figure **5.3**).

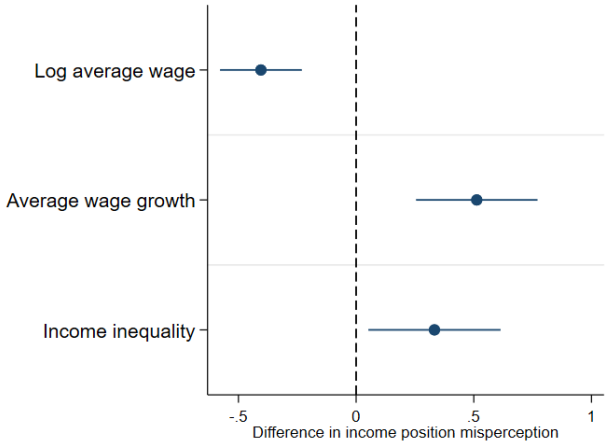
Figure 5.2– Average level of the income position misperception versus country's economic prosperity



Note: the y-axis refers to the absolute value of the income position misperception (0-9 index). The dashed line displays a linear regression fit. The grey area is a 95% confidence band. R-squared: 0.43

Moreover, misperceptions are higher if a country has been experiencing rapid income growth over the past decade that can create staggered income perceptions (Figure **5.3**). In countries with higher income inequality, the average income position misperception is also higher. A potential explanation of this finding is that people tend to compare themselves to those that are close to them in terms of income rather than to the overall country population.

Figure 5.3– Difference in the income position misperception by country characteristics

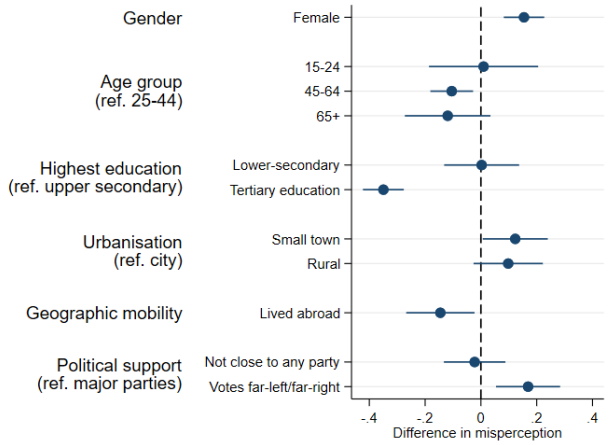


Note: coefficients from separate OLS regressions with the absolute value of the income position misperception (0-9 index) as the dependent variable. The lines show 95% confidence intervals. See the Quick Guide for details on the estimation.

Individual-level correlates of income position misperceptions

While relative income misperceptions differ across countries and along the income distribution, they also differ across socio-demographic groups. Figure **5.4** presents the results from regressing the misperception on individual characteristics. The actual position in the income distribution is added as a control, so that the specification only exploits variation in the perceived position.

Figure 5.4– Difference in income position misperception, by socio-demographic characteristics



Note: coefficients from an OLS regression with the absolute value of the income position misperception (0-9 index) as the dependent variable. A negative (positive) difference shows that the group has a smaller (bigger) misperception than the reference group indicated in parenthesis. The lines show 95% confidence intervals. See the Quick Guide for details on the estimation.

The results show that in the EU, on average, income misperceptions decrease with education and with age. Respondents with a university degree are more informed in the sense that they have an average misperception that is smaller than those with lower educational qualifications. The fact that older people are better at estimating their position in the income distribution might be driven by better information on the incomes of other households, acquired over their lifespan.

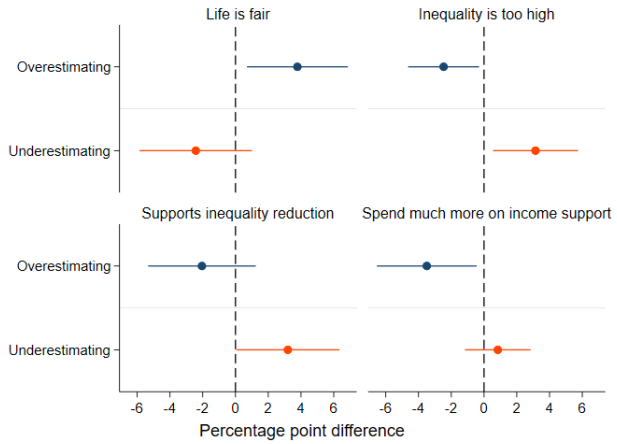
Respondents living in bigger cities tend to have a smaller misperception compared to those living in small towns and rural areas, possibly because they are more likely to be in contact with people from different socioeconomic groups and hence form their perceptions based on a more representative reference group. Respondents who were geographically more mobile also display smaller misperceptions compared to the general population.

Finally, we document differences in misperceptions depending on the political party the person supports or feels close to. Respondents voting for far-right or far-left parties are more likely to misperceive their income position than those who report political preferences in the centre of the political spectrum.

Income position misperceptions and demand for government intervention

Figure **5.5** shows that income position misperceptions are related to fairness perceptions, concerns over inequality and preferences for redistributive policies. In particular, the group of respondents who *over*estimate their income position report on average a 3 percentage point (pp) higher perceived fairness (i.e. the share of people *agreeing or strongly agreeing that things that happen in their life are fair)* compared to the group of respondents who correctly perceived their income position.

Figure 5.5– Relation of income position misperception to fairness perceptions, inequality concerns and demand for redistribution



Note: each column displays the percentage point difference for a given variable between respondents who correctly positioned themselves on a national income distribution (reference group) and those overestimating (in red) or underestimating (in blue) their income position. Results are based on multivariate OLS regressions. The lines show 95% confidence intervals. See the Quick Guide for details on the estimation.

Differences between the two groups are also evident in their perception of income inequality, with the group *under*estimating their income position having a 3 pp higher share of people *agreeing or strongly agreeing that income differences are too great*. On the other hand, the group *over*estimating their income position has a 2 pp lower share of people agreeing or strongly agreeing with this statement.

A similar pattern is observed in terms of support for redistribution. The group *under*estimating their income position has a higher share of people *agreeing or strongly agreeing that the national government should implement measures to reduce income disparities*, whereas the group *over*estimating their income position expresses less support for such measures. Additionally, the latter group is less likely to support a significant increase in spending on safety net social policies like income support.

Conclusions and policy implications

People do not always have full and correct information about the relative income of their household. Systematic misperceptions are found depending on their position in the income distribution, with low-income people tending to overestimate their ranking and those with high income tending to underestimate it. These misperceptions differ notably by country, as well as by socio-demographic characteristics of respondents.

Having distorted views on one's income position might have substantial implications for personal opinions and policy views. Demand for redistribution is the most evident example. If people have biased perceptions of their own rank in the income distribution, their evaluations of how state redistributive schemes will affect them are likely to be inaccurate. Self-interested individuals who overestimate their own ranking in the overall distribution may erroneously believe that they would not benefit from further income redistribution when they actually would. Indeed, those who overestimate their income position are less likely to support a shift in the tax burden towards richer households and an increase in public spending on income benefits.

A review of the experimental evidence suggests that providing correct information about people's position in the income distribution increases demand for redistribution for those who previously overestimated their position and decreases it for those who underestimated their position [7]. Future research is needed to understand whether this result holds consistently across different countries.

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QUICK GUIDE – Eurobarometer statistics reported are weighted by age, gender, urbanisation, region of residence and household disposable income, using sampling weights based on the country's population. **Figure 5.2** and **Figure 5.3** also include the following country-level variables: GDP per capita, average wage, average wage growth in the previous 10 years and income inequality (Gini index). These are based on Eurostat statistics for the year 2021.

Respondents are asked to report their income in the form of free input question formulated in the following way:

> *Could you please tell me what is the total disposable (net) monthly income of your household counting all wages, salaries, pensions, public benefits (e.g. unemployment benefits, family benefits) and other income (e.g. income from capital) that come in? If you don't know the exact figure, please give an estimate. Note: by disposable income, we mean after taxes and social insurance contributions. By household, we mean all members of your household, regardless of whether or not they are a member of your family.*

Respondents who did not answer this question were able to subsequently select one of ten income categories. These correspond to income decile estimates, calculated based on the 2019 EU-SILC (EU statistics on income and living conditions) and adjusted for the country-specific inflation rate between 2019 and 2022. Free input answers were converted into deciles of the national income distribution in the same way.

Perceptions of one's position in the income distribution were asked to respondents who reported their income in the following way:

> *You indicated that your household's total disposable (net) monthly income is [XX EUR]. We are now interested in your assessment of how your household income relates to the income of other households. Please, give the most accurate and truthful assessment. What is the proportion of households in [YOUR COUNTRY] who have a lower disposable (net) monthly income than your household? Please enter your answer in percent. 0 percent means your household is the poorest in [YOUR COUNTRY]. 100 percent means your household is the richest in [YOUR COUNTRY].*

The free input answers were converted into deciles to allow a comparison with self-reported income. The income position misperception is then calculated as the difference between this variable (in deciles) and the actual income decile estimated on the basis of self-reported income. It is available for a subsample of 19 198 respondents providing information on both variables. See [6] for a more detailed description of the methodology applied.

Figure 5.3 and **Figure 5.4** show coefficients from multivariate OLS regressions with the absolute value of the income position misperception (0-9 index) as the dependent variable. Explanatory variables include income decile dummies, a dummy for the type of income question responded, age, gender, highest education, urbanisation, household size, whether children live in the household and country fixed effects. **Figure 5.4** also includes party support (i.e. which political party respondents feel close to) and whether the respondent has been living abroad. Standard errors are clustered by country. Non-response categories ('don't know' or invalid answers) of all variables employed are excluded from the figures. The sample size is 19 161 in **Figure 5.3** and 15 889 in **Figure 5.4** (due to 5% non-response to the party support question and because the party could not be categorised in the political spectrum in 12% of cases).

Figure 5.5 reports coefficients from multivariate OLS regressions with different dependent variables. The variable *overestimating* refers to those with an income position misperception greater than 1, the variable *underestimating* to those with a misperception lower than -1. Other explanatory variables included are as in **Figure 5.3** and **Figure 5.4**. For the question *"Thinking about the taxes and social security contributions you might have to pay, would you like to see the (NATIONALITY) government spend less, spend the same, or spend more or much more in each of the following areas?"*, respondents were shown the current annual spending figures per inhabitant for each of the social policies on the same screen. They were presented the following text as an example of an income support policy: *cash benefits for low-income earners and socially excluded persons*. The sample size is 18 372.

6. Conclusion

In 2022 DG EMPL and the JRC launched the "Second Eurobarometer Survey on Fairness, Inequality and Intergenerational Mobility" to shed light on perceptions of fairness, income inequality, equality of opportunity, social policies and taxation. Its predecessor dates back to 2017. This report presents key results of JRC's research based on the surveys. The main findings can be summarised as follows.

Fairness perceptions decreased by 13 pp. over the past 5 years. The share of individuals agreeing that things that happen in their life are fair (i.e. 'fairness of life') decreased from 51% in 2017 to 38% in 2022. These average figures conceal substantial differences across socio-economic groups and European macro-regions. People who are unemployed or have low income seldom agree that their life is fair. In Southern and Eastern Europe, the perception that life is fair is rather low. These perceptions of limited fairness need to be heard and acted upon since fairness is linked to general well-being.

While it is not easy to identify factors that caused the lower fairness perceptions observed in 2022 compared to 2017, several aspects may be at play, such as the direct impact of the pandemic on living conditions and the resulting increased uncertainties about future outcomes; the drop in the perceived equality of opportunity; and, for some groups of people, discontent with the COVID-19 measures implemented over the last few years.

Concerns about high income inequality have slightly decreased (by 4 pp). Yet, the great majority of EU citizens continue to agree or strongly agree (81%) that income differences are too high. These concerns are mirrored by high support for more redistribution. The support varies depending on personal characteristics and attitudes towards the government – e.g. it decreases with income and education level, it increases with age, and is higher for female respondents and for those with a positive attitude towards the government.

There is widespread support for more spending on social policies. When asked about financing of additional spending on social policies, 15% of respondents favour a reduction of spending on other programmes, and around half of respondents favour raising taxes or social security contributions. Of this last group, most think that the additional cost should be borne by wealthy households or distributed proportionally to household income. Another 12% of respondents report not wanting to increase spending. Preferences do not vary substantially across countries or socio-demographic groups.

Childhood circumstances have vastly improved between successive birth cohorts over the past 80 years, but it also shows that these circumstances still vary greatly between EU macro-regions. Despite a general decline in inequality of opportunity in tertiary-education achievement, the persistent contribution of initial disadvantages to individuals' achievements later in life and to inequality has implications for both current and future generations. At the same time, perceived equality of opportunity has decreased over the past 5 years. This calls for continued monitoring of future trends in inequality of opportunity together with its drivers and perceptions in the EU.

Overall, these findings provide key insights to topics related to perceptions of fairness that are relevant for both research and policy making at EU level.

List of Figures

A. Appendix

Tables Chapter 2

Table corresponding to **Figure 2.1**– Change in concerns about income inequality, ***Figure 2.4*** *- Change in perceptions of fairness of life,* ***Figure 2.7 (a)*** *– Change in perceptions of equality of opportunity*

	Nowadays differences in people's incomes are too great		You believe that most things that happen in your life are fair		You have equal opportunities for getting ahead in life	
	2017	2022	2017	2022	2017	2022
Strongly agree	45	39	10	7	16	13
Agree	40	42	41	31	40	34
Neither agree nor disagree	8	12	25	29	17	21
Disagree	5	4	18	21	20	21
Strongly disagree	1	1	4	9	6	9
Don't know	1	2	1	2	1	2

Note: share of respondents by answer category in a given year to a given statement, EU-27 (EU population weights are applied).

Table corresponding to **Figure 2.2** - Change in inequality concerns by socio-demographics

		2017	2022	pp change
Age	15-24	78	77	-1
	25-44	84	81	-2
	45-64	87	82	-5
	65+	89	82	-7
Gender	male	84	80	-4
	female	88	85	-3
Education	secondary or less	88	83	-4
	post-secondary	85	81	-4
	tertiary	82	80	-2
Employment status	employed	85	82	-3
	houseperson	88	83	-5
	unemployed	88	86	-2
	retired	90	85	-5
	students	79	79	0
Urbanisation	large town	85	84	-1
	small town	87	82	-5
	rural	87	81	-6
Financial difficulties	yes	88	83	-5
	no	85	82	-3
Overall		**86**	**82**	**-4**

Note: the table reports the share of agreement with the statement "Nowadays differences in people's incomes are too great" (answer categories 'Strongly agree' and 'Agree') for different socio-demographic groups, EU-27 (EU population weights are applied). See the Quick Guide for definitions of the socio-demographic variables.

Table corresponding to **Figure 2.3** - Actual income inequality and inequality concerns

Country label	Income inequality		Inequality concern	
	2016	2021	2017	2022
AT	4.09	4.08	85	81
BE	3.85	3.42	82	71
BG	7.69	7.45	93	94
CY	4.88	4.23	83	82
CZ	3.5	3.43	82	78
DE	4.62	4.88	93	88
DK	4.06	3.93	64	58
EE	5.56	5.03	90	89
EL	6.55	5.79	80	82
ES	6.6	6.19	92	83
FI	3.58	3.58	73	59
FR	4.32	4.42	86	87
HR	5	4.78	87	80

HU	4.26	4.19	91	90
IE	4.45	3.83	82	80
IT	6.27	5.86	89	84
LT	7.06	6.14	93	90
LU	4.62	4.59	87	84
LV	6.2	6.63	90	88
MT	4.22	5.03	77	82
NL	3.93	3.88	59	74
PL	4.76	4.02	83	77
PT	5.88	5.66	96	95
RO	7.2	7.13	79	70
SE	4.25	4.04	70	69
SI	3.56	3.24	91	85
SK	3.63	3.03	92	82

Note: Income inequality refers to the ratio between the top and lowest quintile of household disposable income (source: Eurostat). Inequality concern refers to the share of respondents that agree or strongly agree with income differences being too great.

Table corresponding to **Figure 2.5** - Change in fairness perceptions by socio-demographics

		2017	2022	pp change
Age	15-24	61	42	-20
	25-44	55	42	-13
	45-64	48	37	-11
	65+	47	35	-12
Gender	male	54	41	-13
	female	50	37	-13
Education	secondary or less	48	37	-12
	post-secondary	56	43	-13
	tertiary	64	45	-19
Employment status	employed	56	42	-14
	houseperson	41	28	-13
	unemployed	37	28	-9
	retired	47	35	-12
	students	66	43	-23
Urbanisation	large town	50	39	-11
	small town	52	39	-13
	rural	54	40	-14
Financial difficulties	yes	40	30	-10
	no	59	44	-15
Overall		**52**	**39**	**-13**

Note: the table reports the share of agreement with the statement "You believe that most things that happen in your life are fair" (answer categories 'Strongly agree' and 'Agree') for different socio-demographic groups, EU-27 (EU population weights are applied). See the Quick Guide for definitions of the socio-demographic variables.

Table corresponding to **Figure 2.6** - COVID-19 impact and fairness perceptions**Figure *2.6*** - COVID-19 impact and fairness perceptions

		You believe that most of the things that happen in your life are fair	% of population
Negative impact with support	(11% of EU-27)	40	11
Negative impact without support	(16% of EU-27)	33	16
No COVID-19 impact	(72% of EU-27)	39	72

Table corresponding to **Figure 2.8** - Perceived importance of education, hard work and wealth

Panel A: all age groups			
	education	hard work	wealth
2017	76	67	37
2022	74	62	36
change	-2	-5	-1
Panel B: aged 16-24			
	education	hard work	wealth
2017	75	69	33
2022	70	62	33
change	-5	-7	0

Note: share of respondents answering that a given aspect is essential or very important for getting ahead in life in a given year in the EU-27 (EU population weights are applied).

Table corresponding to **Figure 2.9** - Satisfaction with COVID-19 measures and perceived fairness of life

		You believe that most of the things that happen in your life are fair	**% of population**
Very satisfied with COVID-19 measures	(7% of EU-27)	56	7
Fairly satisfied with COVID-19 measures	(45% of EU-27)	45	45
Not very satisfied with COVID-19 measures	(32% of EU-27)	35	32
Not at all satisfied with COVID-19 measures	(17% of EU-27)	25	17

Tables Chapter 3

Table corresponding to **Figure 3.1** - Support for more redistribution and perceived excessive inequality by country in 2022

country	**support for more redistribution**	**perceived excessive inequality**
AT	81.6	80.1
BE	71.0	70.3
BG	87.2	92.8
CY	87.6	81.0
CZ	57.5	76.7
DE	78.1	87.0
DK	45.5	57.4
EE	75.3	84.4
EL	90.0	81.9
ES	78.9	80.5
EU-27	77.2	81.1
FI	58.3	58.3
FR	79.8	85.1
HR	77.5	79.8
HU	84.9	89.9
IE	79.7	77.6
IT	80.3	82.2
LT	88.0	89.8
LU	74.4	78.9
LV	83.6	86.2
MT	86.8	80.2
NL	73.0	73.0
PL	73.6	76.1
PT	92.8	94.1
RO	66.7	68.9
SE	64.1	68.4
SI	82.2	84.4
SK	78.6	81.5

Table corresponding to **Figure 3.2**– Support for greater redistribution by socio-demographic group

		2017	2022	pp change
Income quintile	1st	85	81	-4
	2nd	87	80	-7
	3rd	82	79	-3
	4th	79	75	-4
	5th	71	69	-2
Age	15-24	74	74	0
	25-44	81	77	-4
	45-64	84	77	-6
	65+	86	78	-8
Education	sec. or less	84	78	-6
	post-sec.	81	76	-5
	tertiary	76	74	-1
Employment status	employed	80	77	-4
	unempl.	86	83	-3
	students	74	74	0
	housepers.	86	80	-6
	retired	86	78	-8
Gender	male	80	74	-6
	female	84	80	-4
Overall	EU27	83	79	-4

Table corresponding to **Figure 3.3** -Support for more redistribution and spending on social policies in 2022

Country	Country weights	Support for more spending on social policies (average across policies)	Support for more redistribution
AT	527.4	55.4	81.6
BE	666.7	47.8	71.0
BG	409.8	68.8	87.2
CY	51.1	80.9	87.6
CZ	617.9	47.5	57.5
DE	4986.4	64.0	78.1
DK	335.8	41.3	45.5
EE	77.0	66.1	75.3
EL	643.4	85.9	90.0
ES	2825.5	75.3	78.9
EU-27	26395.0	62.0	77.2
FI	323.1	36.5	58.3
FR	3869.7	53.4	79.8
HR	240.0	60.3	77.5
HU	574.7	73.3	84.9
IE	271.6	72.5	79.7
IT	3637.7	67.3	80.3
LT	164.4	63.9	88.0
LU	36.2	49.0	74.4
LV	110.9	66.1	83.6
MT	30.6	61.8	86.8
NL	1013.1	46.5	73.0
PL	2212.4	57.8	73.6
PT	620.0	78.5	92.8
RO	1122.9	60.4	66.7
SE	588.7	46.4	64.1
SI	123.3	48.5	82.2
SK	314.5	72.3	78.6

Table corresponding to **Figure 3.4** - Support for increasing expenditure on social policies in 2022

Country	Health	Long-term care	Education	Pensions	Housing	Income support	Family support	Unemployment support	maximum	average
Greece	92%	92%	87%	78%	83%	85%	85%	84%	92%	**86%**
Cyprus	76%	89%	73%	79%	85%	84%	85%	77%	89%	**81%**
Portugal	89%	87%	78%	86%	72%	71%	73%	71%	89%	**80%**
Spain	85%	76%	81%	77%	74%	73%	66%	71%	85%	**76%**
Italy	76%	72%	70%	70%	66%	62%	65%	57%	76%	**69%**
Malta	63%	72%	61%	67%	58%	63%	63%	48%	72%	**64%**
Hungary	86%	74%	77%	75%	70%	72%	70%	64%	86%	**73%**
Slovakia	85%	83%	71%	**85%**	66%	57%	82%	49%	85%	**72%**
Bulgaria	75%	71%	62%	**77%**	54%	71%	76%	65%	77%	**69%**
Estonia	69%	82%	60%	76%	56%	71%	62%	52%	82%	**66%**
Latvia	77%	77%	61%	73%	61%	65%	72%	44%	77%	**66%**
Lithuania	70%	75%	63%	74%	63%	58%	64%	43%	75%	**64%**
Romania	66%	59%	63%	64%	60%	56%	56%	58%	66%	**60%**
Croatia	65%	65%	61%	**68%**	54%	61%	57%	51%	68%	**60%**
Poland	71%	66%	56%	63%	58%	55%	49%	46%	71%	**58%**
Slovenia	52%	61%	44%	54%	60%	46%	41%	28%	61%	**48%**
Czechia	55%	63%	49%	49%	50%	33%	54%	27%	63%	**47%**
Ireland	84%	80%	75%	67%	**84%**	69%	68%	52%	84%	**72%**
Germany	65%	75%	**77%**	67%	68%	62%	58%	41%	77%	**64%**
Austria	62%	70%	54%	57%	53%	61%	52%	35%	70%	**55%**
France	67%	66%	63%	63%	49%	48%	40%	32%	67%	**53%**
Luxemburg	57%	58%	39%	40%	**71%**	59%	34%	35%	71%	**49%**
Belgium	56%	57%	51%	49%	52%	54%	36%	27%	57%	**48%**
Netherlands	55%	62%	59%	40%	61%	43%	26%	25%	62%	**46%**
Sweden	72%	65%	56%	61%	34%	36%	21%	26%	72%	**46%**
Denmark	69%	60%	47%	36%	28%	38%	24%	28%	69%	**41%**
Finland	48%	60%	39%	39%	23%	34%	28%	21%	60%	**36%**
EU-27	71%	71%	68%	66%	61%	58%	55%	47%		

		Health	Long-term care	Education	Pensions	Housing	Income support	Family support	Unemployment support	maximum	average
Income quintile	1st	70%	72%	65%	70%	65%	61%	54%	48%	72%	**63%**
	2nd	72%	73%	67%	69%	62%	59%	55%	47%	73%	**63%**
	3rd	70%	70%	68%	66%	61%	58%	55%	47%	70%	**62%**
	4th	71%	70%	69%	62%	60%	55%	53%	45%	71%	**61%**
	5th	71%	70%	72%	59%	58%	55%	53%	42%	72%	**60%**
Age	15-24	66%	65%	67%	55%	61%	58%	54%	48%	67%	**59%**
	25-44	71%	69%	69%	63%	63%	59%	58%	49%	71%	**63%**
	45-64	71%	72%	69%	67%	62%	60%	55%	48%	72%	**63%**
	65+	72%	74%	65%	71%	59%	56%	50%	43%	74%	**61%**
Education	sec. or less	72%	71%	66%	69%	62%	59%	57%	49%	72%	**63%**
	post-sec.	71%	72%	69%	62%	60%	59%	52%	46%	72%	**61%**
	tertiary	67%	67%	72%	55%	60%	53%	50%	40%	72%	**58%**
Employment status	employed	71%	70%	68%	64%	62%	58%	56%	47%	71%	**62%**
	unempl.	69%	69%	63%	65%	69%	66%	60%	67%	69%	**66%**
	students	67%	66%	71%	54%	62%	60%	54%	48%	71%	**61%**
	housepers.	74%	76%	69%	71%	64%	63%	60%	56%	76%	**67%**
	retired	71%	73%	65%	71%	58%	57%	50%	41%	73%	**61%**
Gender	male	71%	70%	69%	66%	62%	59%	55%	48%	71%	**62%**
	female	75%	76%	71%	70%	65%	63%	59%	50%	76%	**66%**
Household type	no children	71%	71%	67%	66%	62%	59%	53%	47%	71%	**62%**
	with children	71%	69%	71%	63%	61%	57%	60%	46%	71%	**62%**

Table corresponding to **Figure 3.5** - Actual public spending versus support for additional spending on specific social policies in 2022

		Support for more spending on social policies								Actual public spending on a policy as percent of GDP							
Country	Country weights	Family support	Education	Unemployment support	Income support	Health	Long-term care	Pensions	Housing	Family support	Education	Unemployment support	Income support	Health	Long-term care	Pensions	Housing
AT	527.4	51.9	53.6	35.0	60.8	62.3	70.3	56.6	52.7	2.6	4.8	1.5	0.2	6.7	1.1	14.1	0.3
BE	666.7	36.4	50.8	26.9	54.4	55.9	57.3	48.7	52.1	2.1	6.1	1.5	0.5	5.8	2.3	12.6	0.3
BG	409.8	75.8	61.8	64.7	70.9	74.7	71.4	77.3	54.1	1.6	3.8	0.5	0.0	4.3	0.0	7.5	0.7
CY	51.1	85.2	72.5	76.9	84.2	75.6	88.6	79.2	84.9	1.0	5.1	0.9	0.8	3.7	0.1	8.8	0.1
CZ	617.9	54.3	48.8	27.2	32.7	54.6	63.4	48.7	50.2	1.6	4.9	0.4	0.1	5.3	1.1	8.3	0.4
DE	4986.4	58.0	76.7	41.4	61.7	64.7	74.7	66.8	68.3	3.3	4.3	0.9	0.1	8.2	1.6	11.9	0.4
DK	335.8	23.5	47.2	28.4	37.7	69.4	60.3	35.6	28.3	3.3	6.3	1.3	0.9	6.1	2.3	12.6	0.8
EE	77.0	61.9	60.1	52.0	71.1	69.5	82.1	76.5	55.9	2.4	6.1	0.5	0.1	4.7	0.4	7.8	0.1
EL	643.4	85.3	87.5	84.5	85.5	91.6	91.7	78.1	83.4	1.5	4.0	1.0	0.4	4.6	0.1	16.1	0.2
ES	2825.5	66.0	81.2	70.9	73.2	85.0	76.1	76.7	73.7	1.3	4.0	1.7	0.1	5.7	0.7	12.7	0.2
EU-27	26395.0	54.7	67.6	47.1	58.5	70.9	70.6	65.6	61.4	2.1	4.6	1.1	0.4	6.2	1.1	12.4	0.4
FI	323.1	28.1	39.0	20.5	33.5	48.2	60.1	39.1	23.0	3.0	5.6	1.6	0.4	5.8	1.3	13.3	0.6
FR	3869.7	39.5	63.0	32.1	47.7	67.0	66.3	62.7	48.5	2.3	5.2	1.9	0.9	7.9	1.3	14.7	1.1
HR	240.0	57.1	61.4	51.0	60.5	65.4	65.4	67.5	54.2	1.9	4.7	0.6	0.1	5.4	0.2	9.9	0.2
HU	574.7	69.7	76.5	64.3	71.7	85.9	73.8	74.7	70.1	1.8	4.7	0.3	0.0	4.1	0.2	7.3	0.3
IE	271.6	67.9	75.5	52.1	69.1	83.8	79.9	67.3	84.2	1.3	3.1	0.8	0.1	3.7	1.2	5.0	1.1
IT	3637.7	65.3	70.1	56.5	62.5	76.3	71.8	69.9	66.1	1.1	3.9	1.6	0.8	5.8	0.7	16.0	0.1
LT	164.4	64.2	63.1	43.3	58.1	70.4	74.6	74.3	63.3	1.7	4.6	0.7	0.1	4.1	0.5	7.0	0.1
LU	36.2	34.2	39.2	34.9	58.8	56.9	58.0	39.6	70.6	3.4	4.8	1.2	0.3	3.7	0.9	9.5	0.3
LV	110.9	71.5	60.8	43.6	65.0	76.5	77.1	73.3	61.1	1.6	5.7	0.6	0.0	3.7	0.3	7.5	0.3
MT	30.6	62.5	60.5	47.7	63.2	63.3	72.2	67.1	57.8	0.8	5.1	0.2	0.1	4.2	1.0	6.2	0.2
NL	1013.1	26.4	59.3	25.3	42.7	55.2	61.8	40.2	60.8	1.2	5.0	0.8	1.2	5.7	2.7	12.0	0.6
PL	2212.4	48.6	56.0	45.8	54.5	70.9	66.2	62.6	57.9	3.0	5.0	0.2	0.1	4.2	0.4	10.9	0.3
PT	620.0	73.2	78.0	71.2	71.4	89.1	86.5	86.5	72.1	1.2	4.5	0.7	0.2	5.5	0.3	13.7	0.3
RO	1122.9	56.3	63.2	58.4	56.0	65.6	58.8	64.5	60.5	1.7	3.6	0.0	0.1	4.3	0.3	7.8	0.2
SE	588.7	20.8	56.0	26.4	35.9	72.3	65.3	60.6	34.3	2.9	6.9	0.8	0.3	6.6	2.7	10.7	0.5
SI	123.3	41.4	44.4	28.3	46.2	52.5	61.3	54.2	59.6	1.8	5.4	0.5	0.7	5.4	0.8	9.6	0.2
SK	314.5	82.4	71.0	49.4	57.5	84.7	83.1	84.9	65.6	1.6	4.2	0.5	0.2	5.5	0.0	8.3	0.1

Table corresponding to **Figure 3.6** - Preferences for financing additional spending on social policies in 2022

Country	Distribute cost equally	Distribute cost proportionally	Do not increase programme spending	Increase deficit	Other/no response	Reduce other programmes	Tax wealthy households more
AT	7.53	16.37	12.38	14.98	2.87	20.43	25.45
BE	10.62	21.02	14.64	9.10	1.76	14.96	27.91
BG	9.34	14.28	12.55	14.93	16.68	13.88	18.35
CY	8.61	20.66	5.56	17.55	5.02	25.05	17.54
CZ	9.92	22.88	24.42	8.46	7.27	12.08	14.97
DE	6.11	17.54	14.23	15.68	4.58	13.55	28.31
DK	6.66	28.14	22.78	6.43	4.94	11.48	19.57
EE	7.44	15.40	11.62	12.86	16.72	23.25	12.72
EL	5.76	17.19	6.16	15.09	4.87	25.67	25.26
ES	13.29	20.42	13.89	11.20	5.81	12.57	22.82
EU-27	9.99	19.72	15.53	12.32	6.37	14.94	21.13
FI	6.89	29.38	28.13	5.39	4.97	13.84	11.40
FR	12.50	26.06	14.13	7.89	7.39	7.83	24.21
HR	13.89	18.47	13.18	15.02	3.26	19.96	16.22
HU	8.87	13.33	9.19	15.43	7.57	24.77	20.84
IE	11.39	21.40	11.43	14.93	8.44	10.80	21.61
IT	12.45	17.71	14.71	14.60	7.06	20.26	13.22
LT	6.78	15.47	19.26	12.03	13.17	13.42	19.85
LU	14.75	27.29	12.03	7.78	5.43	12.66	20.07
LV	8.49	21.96	12.52	8.74	7.95	25.91	14.43
MT	16.95	22.41	15.46	7.39	9.77	10.95	17.06
NL	5.88	27.89	11.78	7.47	1.95	13.09	31.95
PL	12.14	15.51	22.31	14.51	7.81	14.82	12.91
PT	5.56	9.56	6.64	14.28	17.37	28.23	18.36
RO	11.65	12.98	26.75	12.52	6.69	16.66	12.74
SE	5.95	34.44	17.68	3.87	2.30	14.17	21.59
SI	9.77	25.35	23.42	11.84	3.43	13.14	13.06
SK	9.68	13.20	23.51	14.62	7.50	17.42	14.08

Table corresponding to

Figure 4.1.– Access to intensive pre-school at age 4, by EU macro-region and cohort

cohort	EU - macro region	% access pre-school
Before 1945	Northern Europe	3.576
Babyb.	Northern Europe	7.456
Gen. X	Northern Europe	30.452
Gen. Y	Northern Europe	63.125
Gen. Z	Northern Europe	71.511
Before 1945	Eastern Europe	4.747
Babyb.	Eastern Europe	16.252
Gen. X	Eastern Europe	37.520
Gen. Y	Eastern Europe	41.763
Gen. Z	Eastern Europe	43.373
Before 1945	Western Europe	4.243
Babyb.	Western Europe	10.630
Gen. X	Western Europe	20.984
Gen. Y	Western Europe	30.035
Gen. Z	Western Europe	33.278
Before 1945	Southern Europe	5.554
Babyb.	Southern Europe	11.330
Gen. X	Southern Europe	20.771
Gen. Y	Southern Europe	28.759
Gen. Z	Southern Europe	34.919

Table corresponding to **Figure 4.2.**– 'Universal' access to five basic necessities by EU macro-region and cohort

cohort	EU - macro region	% universal necessities
Before 1945	Northern Europe	44.122
Babyb.	Northern Europe	53.219
Gen. X	Northern Europe	60.907
Gen. Y	Northern Europe	64.886
Gen. Z	Northern Europe	63.507
Before 1945	Eastern Europe	20.389
Babyb.	Eastern Europe	28.101
Gen. X	Eastern Europe	39.751
Gen. Y	Eastern Europe	46.481
Gen. Z	Eastern Europe	56.443
Before 1945	Western Europe	29.760
Babyb.	Western Europe	45.271
Gen. X	Western Europe	57.439
Gen. Y	Western Europe	60.630
Gen. Z	Western Europe	66.190
Before 1945	Southern Europe	21.965
Babyb.	Southern Europe	25.942
Gen. X	Southern Europe	51.886
Gen. Y	Southern Europe	63.298
Gen. Z	Southern Europe	66.599

Table corresponding to **Figure 4.3.**– Access to each of the five basic necessities by cohort

	Before 1945	Babyboomer	Gen. X	Gen. Y	Gen. Z
Health	47.1	61.4	76.4	80.4	82
Nutrition	80.7	81.6	85.8	84.6	86.9
Housing	72	76.7	83.7	83	85.5
Book	48.6	57.1	72.2	77	81.7
School	49.9	59	70	73.9	79.2

Table corresponding to **Figure 4.4.**– Parental education: completed tertiary education by EU macro-region and cohort

cohort	EU - macro region	% father	% mother
Before 1945	Northern Europe	11.679	8.374
Babyboomer	Northern Europe	16.380	12.469
Gen. X	Northern Europe	29.712	29.943
Gen. Y	Northern Europe	33.594	42.441
Gen. Z	Northern Europe	39.387	46.498
Before 1945	Eastern Europe	4.997	2.448
Babyboomer	Eastern Europe	4.114	2.612
Gen. X	Eastern Europe	7.053	6.454
Gen. Y	Eastern Europe	11.986	13.836
Gen. Z	Eastern Europe	18.966	22.454
Before 1945	Western Europe	11.719	6.161
Babyboomer	Western Europe	12.313	7.202
Gen. X	Western Europe	18.827	14.499
Gen. Y	Western Europe	22.914	22.008
Gen. Z	Western Europe	35.794	34.355
Before 1945	Southern Europe	2.296	1.123
Babyboomer	Southern Europe	5.142	1.813
Gen. X	Southern Europe	8.292	7.034
Gen. Y	Southern Europe	11.188	10.734
Gen. Z	Southern Europe	20.457	22.501

Table corresponding to **Figure 4.5–** Determinants of tertiary-education completion – EU-based estimate

Tertiary education dummy: father	0.190
Tertiary education dummy: mother	0.141
Nursery/Preschool at age 4	0.037
Living with on parents at 8	-0.029
Single Child	-0.004
Daily healthy food	-0.029
Adequate housing	0.022
Regular Medical check-ups	0.044
Books to read at home	0.110
Safe/stimulating env. at school	0.058

Table corresponding to **Figure 4.6**– Inequality of opportunity in tertiary education by macro-region and cohort – EU-based estimate

EU - macro region	born before 1945 and babyboomers	Generations X, Y and Z
Northern Europe	0.124	0.113
Eastern Europe	0.274	0.205
Western Europe	0.221	0.173
Southern Europe	0.425	0.208

Table corresponding to **Figure 4.7**– Inequality of opportunity in tertiary education, relative contribution of childhood circumstance by EU-macro-region-based estimate

	Northern Europe	Eastern Europe	Western Europe	Southern Europe
Pre-school	5.8	11.3	8.5	12.3
Basic necessities	36.6	43.2	46.9	43.9
Parental education	45.6	34.2	32	29
Other HH characteristics	11.9	11	12.6	14.5

Table corresponding to **Figure 4.8** - Contribution of different circumstances to inequality of opportunity, by cohort and EU-macro-region-based estimate

Intensive pre-school attendance		
EU - macro region	**born before 1945 and babyboomers**	**generations X, Y and Z**
Northern Europe	3.577	8.056
Eastern Europe	9.545	13.092
Western Europe	5.005	12.007
Southern Europe	11.674	13.007
Basic necessities		
EU - macro region	**born before 1945 and babyboomers**	**generations X, Y and Z**
Northern Europe	45.268	28.000
Eastern Europe	51.501	34.999
Western Europe	36.551	27.470
Southern Europe	51.521	36.304

Tables Chapter 5

Table corresponding to **Figure 5.1**– Estimated actual income decile versus perceived income decile, pattern across countries

	Actual income Decile									
Country	**1**	**2**	**3**	**4**	**5**	**6**	**7**	**8**	**9**	**10**
AT	2.04	3.24	3.25	3.91	4.28	4.84	5.38	5.74	7.22	7.57
BE	2.79	2.94	3.94	3.92	4.26	4.62	4.41	5.88	5.93	6.67
DE	2.41	3.13	3.74	3.84	4.3	4.71	4.78	5.24	5.89	6.76
DK	2.34	2.64	2.84	2.9	3.88	3.95	4.49	5.1	5.6	6.7
ES	2.63	4.15	3.98	4.48	4.37	4.48	4.58	4.91	6.12	4.98
FI	1.78	2.26	3.07	3.94	3.82	4	4.54	5.5	5.8	6.78
FR	3.01	3.78	4.22	4.45	4.11	4.72	4.82	5.58	6.36	5.87
IE	2.82	3.22	2.73	3.48	4.69	4.89	5.18	4.25	5.71	4.77
IT	2.75	2.75	3.83	3.72	4.29	4.19	4.31	4.45	4.57	4.79
LU	4.25	2.57	3.21	3.19	3.81	3.84	4.55	4.35	4.97	6.27
NL	2.52	3.3	4.1	4.11	4.51	5.15	5.71	6.21	7.13	7.34
PT	3.04	2.55	2.87	3.57	2.7	4.03	4.44	4.11	5.7	5.8
SE	2.99	2.84	2.96	3.67	3.93	4.18	4.47	4.81	5.4	6.52
BG	2.51	2.4	2.76	2.81	2.91	2.98	3.64	3.84	3.96	4.83
CY	3.02	3.22	3.89	3.81	5.04	4.74	4.85	5.28	6.17	6.25
CZ	2.99	2.84	3.13	3.6	3.76	4.18	4.3	4.51	5.14	6.34
EE	1.99	2.57	2.98	3.75	4.2	4.73	4.78	4.75	4.95	6.21
GR	1.49	3.14	3.1	3.95	3.97	4.27	4.31	4.37	4.44	5.8
HR	2.05	3.01	3.21	3.53	3.59	4.13	4.24	3.82	4.28	5.42
HU	2.36	2.65	2.55	2.94	3.58	3.58	3.69	4.46	4.4	4.8
LT	2.07	2.32	2.86	3.23	3.31	3.91	4.21	4.4	4.82	4.95
LV	3.49	3.15	3.74	4.18	4.18	4.15	4.51	4.53	4.82	5.93
MT	3.64	4.51	4.51	5	4.7	5.1	5.23	4.37	4.75	5.22
PL	2.2	2.64	3.29	3.33	3.17	3.27	3.48	4.14	4.99	3.87
RO	2.82	2.57	2.75	2.82	2.92	3.1	3.6	3.69	3.89	4.19
SI	1.76	2.59	3.07	3.5	3.84	4.32	4.72	5.03	5.16	5.64
SK	3.31	3.62	3.84	3.82	3.68	3.97	3.87	4.32	4.53	4.98

Table corresponding to **Figure 5.2**– Average level of the income position misperception versus country's economic prosperity

country	level of misperception	log-GDP
AT	1.661	10.517
BE	1.985	10.490
BG	3.054	8.846
CY	2.067	10.146
CZ	2.366	9.799
DE	1.987	10.477
DK	2.152	10.820
EE	2.377	9.665
GR	2.395	9.776
ES	2.316	10.063
FI	1.989	10.526
FR	2.221	10.390
HR	2.562	9.510
HU	2.594	9.524
IE	2.364	11.164
IT	2.493	10.193
LT	2.506	9.604
LU	2.570	11.344
LV	2.465	9.470
MT	2.615	10.012
NL	1.699	10.642
PL	2.790	9.530
PT	2.578	9.801
RO	3.138	9.164
SE	2.228	10.710
SI	2.390	9.967
SK	2.720	9.675

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