To Have and Have Not – How to Bridge the Gap in Opportunities

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Foreword

Promoting social mobility, rewarding effort and providing everyone with an equal opportunity to succeed in life are fundamental principles of democracy and core values that are shared by all OECD Members. They also constitute key elements for fostering resilient economic growth, social cohesion and trust in government, as documented by the OECD's longstanding work on the trends, causes and effects of inequality. In this context, the landmark 2018 publication *A Broken Social Elevator?* provided a comprehensive empirical review of the trends and drivers of social mobility across OECD and non-OECD countries. This review helped identify patterns of social mobility across countries, as well as the barriers – both shared and specific – that they face. It made a strong case for policy interventions to address these barriers early in life, to break the cycle of disadvantage, and throughout the life-cycle to equip people with the skills and resources needed to adapt to a changing socio-economic and technological landscape. Finally, it outlined an agenda for further research on social mobility and equality of opportunity.

To Have and Have Not: How to Bridge the Gap in Opportunities is the seventh in a series of flagship reports on inequality that started with the publication of *Growing Unequal?* in 2008. It is also the first in this series to be released under the *OECD Observatory on Social Mobility and Equal Opportunity*. The Observatory was created in 2022 to consolidate the OECD's efforts to collect evidence, provide analysis and support effective policies in these priority areas. The report aims to move the research agenda forward by extending the analysis conducted in *A Broken Social Elevator?* along two lines that are of high relevance to policy.

- First of all, the report develops a new measure of inequality of opportunity based on recent methodological advances. This measure can support policy by providing (i) a clearer picture of the extent to which disparities in outcomes are due to uneven opportunities and to circumstances that are beyond an individual's control; and (ii) an indicator that aligns more closely with the way in which citizens understand economic fairness and evaluate policies designed to ensure a more level-playing field for all.
- Secondly, the report disaggregates the analysis and explores the geographic dimensions of economic fairness through the crucial role that *place* has in shaping opportunities. In order to do so, it looks at within-country disparities in terms of access to some of the key drivers of social mobility, including education, employment opportunities and essential services.

From there, the report assesses the new insights that can be drawn from these analytical extensions, as well as their implications for policies designed to promote greater opportunities, foster social mobility and ensure a more level playing field for all.

Reflecting the cross-cutting nature of the agenda and the high priority given to the promotion of social mobility and equal opportunity, this report was prepared by a team of analysts from the OECD's Centre on Well-Being, Inclusion, Sustainability and Equal Opportunity (WISE), Directorate for Employment, Labour and Social Affairs (ELS) and Centre for Entrepreneurship, SMEs, Regions and Cities (CFE).

Carlotta Balestra, Head of the Inequalities Unit (WISE), coordinated the project and supervised the preparation of the report. Chapters 1 and 2 were co-authored by Carlotta Balestra, Guillaume Cohen and Neil Martin (WISE), with statistical support and input from Alessandro Facchini (WISE) and Carmen

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Editorial

Bridging the gap in opportunities will make our economies, societies and democracies stronger and more resilient

Ensuring that everyone has an opportunity to succeed in life, independently of their background, is a fundamental promise of our democracies. It also contributes to stronger economic growth and innovation while fostering social cohesion and a shared sense of citizenship. Conversely, when inherited circumstances create barriers to education, jobs or entrepreneurial opportunities, talent is wasted, resources are misallocated, and opportunities are left unrealised at great cost to individuals and society more broadly.

To Have and Have Not – How to Bridge the Gap in Opportunities is the latest in a series of OECD reports on equality of opportunity – and the first to be released under the *Observatory on Social Mobility and Equal Opportunity* which the OECD created in 2022. It provides an overview of the state of opportunities in OECD countries, as measured for market income, and how they are distributed across the population.

On average, the report finds that over a quarter of total disparities in market income can be attributed to circumstances and factors that are beyond an individual's control such as sex, place of birth and parental socio-economic background. These results suggest that some economic advantages and disadvantages are inherited rather than the result of individual effort and talent.

Looking at recent trends for the OECD as a whole, the report observes a slight decrease in equality of opportunity on average. At country-level, however, the data show that top performers are exhibiting a decline while countries with lower equality of opportunity are improving.

The comparison between trends in income inequality and in equality of opportunity suggests that, over the past 15 years, policies may have been more effective in reducing disparities in outcomes than in addressing long-term barriers to equality of opportunity, with implied risks for future social mobility and economic growth.

Disparities in opportunities have many causes and can emerge throughout the life cycle. Where a person grows up has an essential and lasting influence on their life chances. Students in rural areas, for example, systematically underperform their peers in urban areas and tend to experience a more challenging school-to-work transition. Significant regional gaps also remain in terms of access to health services, internet and public transport. Bridging these gaps will require a broad and balanced range of policies.

This report helps pave the way for more comprehensive efforts to promote equality of opportunity by highlighting the need for effective policies that (i) promote greater access to the key drivers of economic opportunities, such as education and training, employment and essential services; (ii) increase the availability of opportunities by fostering economic dynamism; and (iii) ensure opportunities are more evenly distributed across territories by reducing geographic disparities.

Renewed efforts to ensure a more level playing field will help individuals pursue their aspirations, and unlock the full talent and potential in our societies for a more prosperous and inclusive future.

Mathias Cormann,

OECD Secretary-General

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Executive Summary

Understanding how to promote social mobility and equal opportunity remains an important priority for governments and citizens. The OECD has helped inform policy debates and support member-countries' efforts in these areas by providing them with a strong empirical basis and by enabling meaningful international comparison and peer learning. The influential 2018 report *A Broken Social Elevator?* notably documented the different patterns in social mobility across countries, the specific challenges they face as well as possible means to address them. By developing a robust and comparable measure of how opportunities are distributed across the population, this new report constitutes an important new step for this work and a valuable complement to existing measures of social mobility. It provides policymakers with:

- Deeper insights into the role that inherited circumstances and other factors beyond an individual's control play in shaping economic outcomes. This in turn can help improve policies for promoting social mobility through a better identification of the barriers people encounter and the type of support they need to realise the opportunities available to them.
- Data and evidence that align more closely with the way in which people evaluate the fairness of socio-economic outcomes. This in turn sheds light on the extent to which disparities in outcomes are perceived to be justified or not in different national contexts, as well as the need for policies to address these disparities and ensure a more level playing field.

For the OECD, advancing the measurement and research agenda serves a practical and policy-oriented purpose. A richer "three-dimensional" picture of the state of inequality covering outcomes, social mobility and opportunities can better reflect the specificities of national contexts, institutions and histories. This can pave the way for more effective and tailored policies to reduce inequality, promote social mobility, ensure more equal opportunities for all and help address possible trade-offs between these different dimensions.

This report extends previous OECD work in two areas that are of high relevance to policy:

First, it uses an innovative approach to develop a measure of inequality of opportunity. Chapter 1 explains why and how this measure should be designed. Chapter 2 applies the measure to a large subset of OECD countries for which comparable data are available. It analyses the levels and trends in inequality of opportunity across countries, as well as the relative importance of different circumstances in shaping economic outcomes and their impact on different population groups, with a focus on generational and gender differences.

The approach taken is solidly grounded both in conceptual and methodological terms. It draws on recent advances in machine-learning techniques and on the theory of "luck egalitarianism" which has been used by the economic literature to operationalise the concept of equal opportunity. Luck egalitarianism views equal opportunity as the central component of economic fairness and seeks to balance distributive justice with considerations of individual responsibility and merit. In this perspective, a key role for policy consists in ensuring a more level playing field by correcting or compensating for inequalities that derive from circumstances that are *beyond* an individual's control.

The measure developed presents several advantages: (i) it offers a lower-bound estimate of actual levels of inequality of opportunity that is robust and comparable across countries; (ii) it covers a wider set of circumstances than traditional approaches and takes account of their joint effect on economic outcomes; and (iii) it can be adapted to reflect the specific conditions of different population groups.

Second, the report provides a more detailed focus on the important links between opportunities and "place". Drawing on recent OECD research, Chapter 3 documents and analyses geographic disparities in access to key drivers of social mobility including education, employment and essential services.

The analysis conducted in the report sheds light on several important questions:

- ***What share of inequality in outcomes is attributable to inequality of opportunity?:*** On average across OECD countries, over a quarter at least of total inequality in market income can be attributed to inherited circumstances including gender, place of birth and parental socio-economic background. The extent to which inherited circumstances shape outcomes varies significantly, ranging from less than 15% in some countries to over 35% in others (see Figure 2.1). Recent patterns in inequality of opportunity show a slight increase on average as well as a degree of convergence, with levels tending to rise in countries where inequality of opportunity is low and to fall in countries where it is high (see Figure 2.4). The comparison between trends in income inequality and in inequality of opportunity suggests that, over the past 15 years, policies may have been more effective in reducing disparities in outcomes than in addressing long-term barriers to equal opportunity, with implied risks for future social mobility and economic growth (see Figure 2.5).
- ***What are the main drivers of inequality of opportunity?:*** Parental socio-economic background continues to play a key role in shaping life chances. In a majority of countries, it contributes to over 60% of inequality of opportunity observed at household level and in some cases over 75% (see Figure 2.10). However, it is not the only significant factor and its relative importance varies across countries, as well as the aspect of parental background that matters most.
- ***How are different populations affected and what are the barriers they encounter?:*** Even in countries where overall levels of inequality of opportunity are low, significant disparities can still be observed between groups. For example, gender differences in opportunities remain limited when measured in terms of household market income, as resource pooling and sharing *within* the household partly offset individual disparities in outcomes. However, the effects of gender become much more pronounced when inequality of opportunity is measured in terms of individual earnings rather than at the household level (see Figure 2.14). Similarly, for differences between cohorts, in a large majority of OECD countries younger generations have tended to experience higher levels of inequality of opportunity than previous generations at the same age (see Figure 2.12).
- ***What role do place-based factors play in shaping opportunities?:*** Where a person grows up has a lasting influence on their life chances. This reflects the fact that people born in lower-income regions (i) face persistent barriers to education, employment and upward mobility; and (ii) are less likely to relocate due to greater social and financial constraints. In some OECD countries, people living in deprived regions may be six-to-ten times more likely to be poor than peers living in more advantaged regions (see Figure 3.1). Geographic inequalities affect educational and labour market opportunities throughout life. Students in rural areas systematically underperform their peers in urban areas (see Figure 3.7). Similarly, young people's prospects for a successful school-to-work transition partly depend on their place of residence. On average in OECD countries, the share of 18-24 year-olds who are not in employment, education or training (NEET) differs by 13 percentage points between best- and worst-performing regions (see Figure 3.11). Finally, significant regional gaps remain in terms of access to health services, internet and public transport (see Figure 3.15).

Policy can contribute to a more level playing field by fostering economic dynamism and strengthening individuals' capacity to realise opportunities. When designing effective policies for promoting equal opportunity, a key challenge consists in ensuring that responses are adapted to the barriers that individuals and their families encounter and provide them with the right support. Chapter 4 reviews a selected range of measures designed to enhance human capital, economic resources and social infrastructure as part of comprehensive policy responses. While not exhaustive, these measures can help address sources of disadvantage throughout the life cycle and expand access to opportunities regardless of individual circumstances. Besides policies specifically aimed at increasing opportunities, the review underlines the important contribution that tax-benefit systems make towards levelling the playing field in many OECD countries. On average across the OECD, taxes and transfers are associated with a reduction in inequality of opportunity of around a quarter with significant variation between countries (see Figure 4.6).

1. Opportunities and the fairness of economic outcomes – Why is it important to measure them and what methods can allow us to do so?

This introductory chapter presents a new measure of inequality of opportunity designed to assess the extent to which disparities in outcomes are due to circumstances beyond individuals' control. It highlights the value that a complementary focus on opportunities adds to existing OECD analysis of inequality in outcomes and social mobility. It explains why and how a robust and comparable measure of inequality of opportunity can be developed, providing conceptual and methodological groundings for the approach used. It defines the main welfare concept (household market income) and a set of relevant circumstances for the analysis, based on data availability, comparability and accuracy. Finally, the chapter provides a stylised illustration of how the measure works and discusses its use, implications for the broader questions of equal opportunity and economic fairness, as well as the interpretation of its results. The chapter notably underlines the fact that the measure constitutes a lower-bound estimate of actual levels of inequality of opportunity.

1.1. Why measure opportunities and the fairness of economic outcomes?

1.1.1. What does this report add to OECD analysis of inequality and social mobility?

The landmark 2018 report *A Broken Social Elevator?* has provided a strong empirical basis for the OECD's work on social mobility and helped outline the key challenges for policy. *A Broken Social Elevator?* reviewed the trends and drivers of social mobility in OECD countries and major emerging economies (OECD, 2018[1]). In doing so, it identified different patterns of social mobility across countries, as well as the main barriers and areas for action. Overall, it also showed that the scope for social mobility tends to be relatively limited, as differences in key socio-economic outcomes – such as income, occupation and education – exhibit significant persistence over the course of an individual's life and across generations. The main findings from OECD (2018[1]) are summarised in Box 1.1. Based on these findings, OECD (2018[1]) underlined several important conclusions.

Social mobility and economic inequality do not go hand-in-hand. First important conclusion, the empirical results confirmed that inequality in outcomes is not a necessary condition or the price to pay for ensuring all people have an equal opportunity to succeed in life. While some of the countries studied in OECD (2018[1]) exhibited low levels of both income inequality and income mobility, no country combined high levels of income inequality with high levels of intergenerational mobility. In this respect, the idea that policymakers face a trade-off between promoting greater equality of outcomes and greater equality of opportunity is not supported by the evidence.

There is a strong case for promoting social mobility and ensuring a more level playing field for all. This case does not rest on economic grounds alone. Second important conclusion, low social mobility may also have an impact on the broader political economy. This impact should matter to policymakers. The negative socio-economic consequences of low social mobility are well established (OECD, 2018[2]; 2018[3]; 2015[4]). Using survey data, OECD (2018[1]) shows that perceptions and attitudes have tended to evolve in line with changes in actual levels of social mobility, as measured by conventional statistical indicators. Moreover, where people perceive social mobility to be declining, they also express lower levels of belief in meritocracy, as well as greater concern regarding opportunities to improve their position in life and the role played by inherited circumstances in determining outcomes. This issue is made more salient by the fact that the risk of downward mobility has tended to be higher for the middle class.

Promoting opportunities and social mobility remains a high priority for governments and citizens across the OECD. Disadvantage in childhood has an outsized effect on opportunities and mobility throughout life along a wide range of well-being outcomes (OECD, 2022[5]). Recent crises stemming from the COVID-19 pandemic and the impact of high inflation have disproportionately affected vulnerable populations. In doing so, they have put added pressure on governments to intervene to address present inequalities and preserve the potential for future mobility (Caisl et al., 2023[6]; Case and Deaton, 2022[7]). Furthermore, these measures have often been framed in the broader context of the green and digital transitions. This indicates a recognition of the new risks that weigh on social mobility and the fact that people will need to be equipped with appropriate skills, resources and capacity to adapt in order to maintain a level playing field in a changing socio-economic and technological landscape. Concerns about these risks are also reflected in public views, with two-thirds of respondents to the 2022 wave of the *OECD Risks that Matter* cross-national survey saying that "more" or "much more" should be done to promote equal opportunities (OECD, 2023[8]). To help address these challenges, the OECD has created the *Observatory on Social Mobility and Equal Opportunity* in 2022.[1]

This report extends existing OECD analysis along two dimensions that are of high relevance to policy. First, it uses an innovative approach to develop a robust and comparable measure of inequality of opportunity. This approach allows the analysis to account for the circumstances that individuals encounter and their influence in shaping economic outcomes. This chapter presents the measure, including the

rationale for its development, as well as the conceptual and methodological groundings of the approach used. Chapter 2 applies the measure in an international perspective to a large subset of OECD countries with available and comparable data. In doing so, it goes beyond the distribution and persistence of outcomes to shed light on the opportunities that are available to individuals and the way in which they shape economic outcomes throughout the life cycle. Secondly, the report provides a more detailed focus on the important geographic dimensions of opportunities. Chapter 3 looks at regional disparities in access to key drivers of social mobility – including education, employment and essential services – building on the most recent OECD research.[2] Chapter 4 concludes by assessing the additional insights that can be drawn from these analytical extensions and how they can be used to inform effective policies for promoting opportunities and ensuring a more level playing field.

Box 1.1. *A Broken Social Elevator?* – Key findings and stylised facts

The 2018 report *A Broken Social Elevator?* (OECD[1]) constitutes both a landmark contribution to the OECD's research on social mobility and an important reference for the policy debate on how to promote it. The report provides a comprehensive empirical review of the trends and drivers of social mobility across OECD countries and major emerging economies. It looks at social mobility for a number of key socio-economic variables (education, occupation, income and earnings, health) and from a number of different perspectives: *(i)* both by comparing the outcomes of parents and children (*intergenerational mobility*) and by comparing an individual's own outcomes over the course of their life (*intragenerational mobility*); and *(ii)* in terms of *absolute mobility* (which measures overall improvements in living standards) and *relative mobility* (which measures changes in an individual's position within the distribution of outcomes). Analysis in *A Broken Social Elevator?* focuses primarily on intergenerational mobility and relative mobility on the grounds that these measures correspond more closely to the way in which people think about social mobility.

Among its key findings, it showed that:

- **Overall, the scope for social mobility tends to be relatively limited:** Gaps in socio-economic outcomes tend to persist over time and shape opportunities across generations. For example, on average across the countries studied, the intergenerational elasticity of earnings is 38% – meaning that 38% of the relative difference in earnings between adults in one generation is transmitted to the next generation. This ranges from below 20% in the Nordic countries to over 70% in some highly unequal emerging economies. On this basis and given current levels of inequality, OECD calculations suggest that, in a typical country, it would take 4-5 generations on average for a child born into the bottom decile to reach the mean level of income. In parallel, public perceptions and attitudes have also evolved, with survey data showing a growing sense that social mobility has fallen and a decline in the belief in meritocracy. These perceptions square somewhat with levels of actual social mobility as measured along various dimensions.
- **"Sticky floors", "sticky ceilings" and pressures on the middle class pose distinct challenges for social mobility at all levels of the distribution:** Mobility tends to be lower at both the bottom and the top of the distribution, with significant negative socio-economic consequences for individuals and for society as a whole. Focus must also be put on protecting the middle class from risks of downward mobility, notably linked to income shocks and a rising cost of living.
    - **"Sticky floors" at the bottom of the distribution:** Children from a disadvantaged background struggle to move up the ladder, which implies wasted potential, a misallocation of resources and unrealised opportunities. For example, across the OECD, four-in-ten people with low-educated parents have lower secondary education themselves, and only one-in-ten continue on to tertiary education – compared to two-thirds of children with high-educated parents.

- "**Sticky ceilings" at the top of the distribution:** Similarly, lack of mobility at the top gives rise to persistent rents, reduced competition and forms of "opportunity hoarding" that are inefficient from an economic point of view and entrench advantage and disadvantage. For example, children from affluent backgrounds tend to end up in similar occupations as their parents. Across the OECD, half of children whose parents are in managerial positions become managers themselves, compared to less than a quarter of children of manual workers.
- **Pressures on the middle class:** Opportunities and risks tend to concentrate on the middle class, where income mobility is higher. Middle-income households face a substantial risk of downward mobility: on average, one-in-seven middle-class households fell into the bottom 20% over a four-year period, with the share rising to one-in-five for lower middle-income households. In a number of countries, a divide can be seen within the middle class with the risk of downward mobility increasing to a greater extent for the bottom 40% of the distribution than for the upper-middle class.

- **Countries exhibit different patterns of social mobility and encounter different challenges:** The main barriers to social mobility vary across countries. Some general patterns are nonetheless observed when considering mobility across generations:
  - Social mobility, notably in terms of earnings, occupation and education, is high in most Nordic countries and rather low in many Continental European countries, especially in terms of earnings, as well as in emerging economies.
  - Most Southern European countries also show relatively low mobility in terms of education or occupation, but fare somewhat better in terms of earnings mobility.
  - Some English-speaking countries fare relatively well in terms of earnings mobility (Canada, New Zealand) or occupation (the United Kingdom, the United States), but performance varies greatly along the other dimensions.
  - In Japan and Korea, educational mobility is high but earnings mobility is around average. Both sticky floors and sticky ceilings, in terms of earnings persistence over generations, are more pronounced in Germany and in the United States than in other countries.
  - As a result, the type of outcome that policy solutions focus on and the level at which they are applied should reflect these different patterns of social mobility and the challenges they imply.

1.1.2. Why go beyond traditional measures of social mobility to assess opportunities and the way in which they are distributed across the population?

Measures of intergenerational mobility are imperfect proxies for opportunity, on conceptual and methodological grounds as well as due to limitations relating to measurement and data. Traditional measures of intergenerational mobility typically focus on the transmission of one specific outcome. For instance, OECD (2018[1]) looks at the distribution and persistence of a range of socio-economic outcomes including education, occupation and income, as measured by so-called "intergenerational elasticities" (i.e., a measure of the persistence in outcomes across generations). This approach is useful for understanding intergenerational social mobility along these key dimensions and for identifying patterns and barriers that are specific to countries. However, it also has several limitations:

- ***The estimation of intergenerational elasticities restricts the analysis in terms of what can be measured and for whom***. Data availability issues mean that the intergenerational link in earnings can often only be modelled for fathers and sons and for full-time employees. Furthermore, direct intergenerational comparison between the income of parents and children would require long-term panel surveys spanning several generations. As these data are rarely available, intergenerational elasticities generally rely on a comparison with predicted – as opposed to actual – parental income.[3]

- ***At a methodological level, measures of intergenerational mobility only cover the transmission of one specific indicator in isolation***. Transmission is measured through the strength of the correlation between the outcomes of parents and children and may be applied to a range of different variables: income or earnings, occupation, educational attainment… In doing so, these measures separate the effect of other confounding factors and circumstances (such as parents' country of birth) on outcomes. To properly measure opportunity and economic fairness, the analysis must be able to take account of a wider range of variables and the joint effect they may have on outcomes.
- ***Measures of intergenerational mobility do not fully reflect the way in which people think about opportunities and economic fairness***. Most notably, these measures fail to capture the distinction between circumstances *within* and *beyond* an individual's control. As argued in the current section (see below), this distinction has a significant influence on how people perceive outcomes and whether they evaluate them as being "fair" or not. In doing so, it also influences the extent to which people believe that policy responses are needed to ensure a level-playing field and justified in reducing inequalities in outcomes.

This report starts from the premise that people care about outcomes and their distribution, but also about the process through which they are achieved. While useful for assessing levels of social mobility and identifying patterns, measures that focus on the transmission of outcomes do not say anything about the circumstances that individuals encountered, the opportunities they were provided with to succeed and the decisions they made.[4] These elements matter as they play a key part in people's evaluation of the fairness of socio-economic outcomes, of the extent to which inequalities in the distribution of these outcomes are justified or not, as well as of the need for and acceptability of policies designed to reduce inequalities.[5] Consequently, there are several advantages to developing a robust and comparable measure that can capture the role played by different types of circumstances in shaping individual outcomes. Doing so would provide additional insights into individual opportunities and their distribution across the population which can complement traditional measures of social mobility. It would also provide data and evidence that are closer to people's perceptions and evaluation of outcomes and may therefore be more effective in informing public views.

At a conceptual level, there is a crucial distinction to be made between outcomes that result from decisions and circumstances within an individual's control and those that do not. As a formal principle of justice and human right, equal opportunity plays a fundamental role both in theory (Rawls, 1971[9]) and in law (UNDP, 2023[10]). Its objective is often presented and understood as ensuring a "level playing field" in which everyone has an equal chance to freely pursue and achieve their own goals (Ikeda, 2022[11]; Mason, 2006[12]). Defining what constitutes equal opportunity in practice requires that several challenges be addressed. First of all, the effects that different types of circumstances have on individuals' decisions and outcomes need to be specified. Secondly, it must also be possible to distinguish between those effects that are considered to be "fair" (i.e., circumstances do not unduly constrain opportunities or decisions and individuals can be held responsible for the outcomes of their actions) and those that are considered to be "unfair" (i.e., individuals were by necessity at an unusual advantage or disadvantage that affected their outcome and should be compensated for). In this respect, the notion of equal opportunity is closely tied to a reflection on personal agency, the role of circumstances and individual responsibility.

Economics has drawn on resources from moral philosophy to operationalise this distinction and notably from the literature on "luck egalitarianism". From an analytical perspective, specifying the full range of relevant circumstances that may influence the opportunities available to people, the choices they make and the outcomes they achieve represents a highly complex and possibly intractable task. Similarly, defining the scope of individual responsibility and distinguishing between fair and unfair circumstances would require difficult and normative judgements. At a practical level however, these problems are more easily solved. Most notably, this can be seen in the context of everyday moral evaluations of actions and outcomes, where individuals make this distinction routinely and intuitively. The literature on "luck egalitarianism" has built on this fact and formalised it as an essential distinction between what can be

attributed to "luck" and what can be attributed to "effort".[6] In doing so, luck egalitarianism seeks to balance the requirements of distributive justice with common moral intuitions on individual responsibility to provide a meaningful definition of equal opportunity. This definition contains a concrete principle for assessing whether inequality of outcomes is likely to be considered as fair or not (see Box 1.2 for further detail). Moral philosophy develops other applied definitions of equal opportunity that may differ from that of luck egalitarianism (Thompson, 2022[13]; Segall, 2016[14]). Luck egalitarianism is given specific emphasis here in light of the fact that many applied economic formalisations of equal opportunity, including the method used in this report, have drawn on this theory for conceptual foundations (see Section 1. .2). This emphasis also reflects the fact that, as a theory of distributive justice, luck egalitarianism proposes to define economic fairness primarily around the notion of equal opportunity.[7]

Having a robust measure of opportunities can help inform policy, but also public debates on inequality and social mobility. One advantage of this type of measure consists in capturing the link between individual circumstances and outcomes more broadly and effectively than traditional measures of social mobility. On this basis, more targeted policies can be designed by identifying the relevant circumstances that promote or hinder opportunities and taking account of the relative importance of these circumstances. Furthermore, measuring opportunities in this way would provide policymakers with a statistical estimate that better aligns with people's understanding of economic fairness and can help shed light on changes in public views on inequality and social mobility, as well as their implications for policy.[8] It may also provide an effective means for improving public communication on these topics. In this respect, a measure that captures inequality of opportunity may potentially have a deeper impact on public views than other relevant indicators, such as income inequality or intergenerational mobility.[9] This would notably be consistent with the evidence showing that beliefs about equality of opportunity are deeply held, play a structuring role in shaping policy preferences and do not adjust to information in a straightforward manner (OECD, 2025[15]; Alesina, Stantcheva and Teso, 2018[16]).

Box 1.2. Conceptual foundations for the analysis and measurement of opportunities and economic fairness: The theory of Luck Egalitarianism

What is luck egalitarianism?

Luck egalitarianism is a particular tradition in the theory of distributive justice. From a conceptual point of view, its main specificities are tied to the fact that it seeks to design principles for a fair repartition of resources that are sensitive to considerations of individual responsibility and merit (Arneson, 2004[17]; 1999[18]; Dworkin, 2000[19]; 1981[20]; Cohen, 1989[21]). Luck egalitarianism was developed as a response to Rawls (1971[9]) regarding the practical implications of the principle of equality of opportunity and as an attempt to solve some of the problems raised by Rawls' solution (the Difference Principle). Compared to Rawls (1971[9]), luck egalitarianism places emphasis on the role played by circumstances and the effect they have on the distribution of opportunities, as opposed to defining the conditions under which inequalities in outcomes can be justified.

What are its main implications for economic analysis and public policy?

Luck egalitarianism draws on insights from the ethical literature on "moral luck" to establish reasonable and widely acceptable criteria for defining what constitutes equality of opportunity in practice. This implies addressing a central normative question: how to distinguish which factors of success should be viewed as appropriate and which should not. From there, it notably proceeds to determine *(i)* under what conditions opportunities can be considered to be equal; and *(ii)* when the resulting inequality in outcomes can be justified on the grounds that it was produced by a "fair" process where everyone had an equal chance. Broadly put, the literature on "moral luck" examines the way in which common moral intuitions evaluate external circumstances and the role they play in assigning

responsibility to individuals for the outcomes and consequences of their voluntary actions (Nussbaum, 1986[22]; Williams, 1981[23]; Nagel, 1979[24]).

More specifically, luck egalitarianism builds on the distinction between the broad categories of "luck" and "effort", which the ethical literature identifies as a key element in empirical moral assessments. It uses this distinction to provide a concrete definition of equality of opportunity. On this basis, luck egalitarianism defines a just society as one that seeks, as far as possible, to:

1. Reduce the influence of structural and arbitrary factors on the set of opportunities available to people (i.e., reducing the scope of "luck" – embodied by factors such as parental background and inherited circumstances, advantages linked to social capital and interpersonal connections…); and
2. Ensure that their outcomes reflect factors that are under individuals' control and can be attributed to their choices (i.e., factors for which they can reasonably be held responsible, such as effort, risk-taking, their level of investment in their own human capital including skills and education; or that they freely adhere to, such as their personal values and goals…).

Put differently, for luck egalitarianism, a just society is one that allows each individual to freely pursue their own goals (within the limits set by fundamental rights and the respect due to others) and provides everyone with an equal opportunity to achieve these goals to the fullest extent of their ability.

In turn, economic theory has sought to operationalise key conceptual insights from luck egalitarianism. This notably includes *(i)* insights on the role that circumstances should play in determining the set of opportunities available to people; and *(ii)* the extent to which public policy is justified in addressing the effects of circumstances, either ex ante (through measures designed to expand the opportunity set of individuals who are unfairly disadvantaged by circumstances) or ex post (through compensatory measures designed to improve the outcomes of individuals who are unfairly disadvantaged by circumstances). To do so, economic theory has developed measures that seek to capture the distinction between "luck" and "effort" made in common moral assessments (Lefranc and Trannoy, 2017[25]; Roemer and Trannoy, 2016[26]; Bradbury and Triest, 2016[27]; Roemer, 1989[28]). In some cases, this has involved criticism and further specification of the conceptual foundations provided by luck egalitarianism, as for example in Fleurbaey (2001[29]). The distinction between "luck" and "effort" is also widely used in survey questionnaires designed to elicit perceptions of and attitudes towards equal opportunity (OECD, 2023[8]).

Is the theory of luck egalitarianism consistent with the available empirical evidence?

The basic assumptions of luck egalitarianism are supported by empirical evidence, including survey data. In this respect, principles of fairness tend *(i)* to be broadly shared, with some variation across countries; and *(ii)* to combine merit-based considerations with distributive concerns about excessive and unjustified inequalities, giving rise to a form of egalitarianism that is sensitive to considerations of "individual responsibility" (Almås, Hufe and Weishaar, 2023[30]; Cappelen et al., 2022[31]; European Commission / DG EMPL, 2020[32]).

Evidence on public perceptions and attitudes towards opportunities tends to confirm the importance of the distinction between "luck" and "effort". For instance, data collected through the Opportunities module of the 2022 OECD *Risks that Matter* survey show that:

- On average across the 27 OECD countries covered, around 60% of respondents believe that factors linked to "effort" (such as "hard work") are essential or very important in determining one's chances to get ahead in life. However, among this group, only a small proportion – one-fifth on average – consider that it is the sole factor of success.
- Factors relating to "luck" (such as socio-economic background and individual characteristics relating to identity) are also perceived as important determinants of success by a large share of

respondents. Furthermore, significant divides can be observed between different groups in terms of their beliefs about equality of opportunity. For example, younger respondents and minorities are much more likely to view traits linked to identity as key determinants of success (OECD, 2023[8]).

Similarly, some experimental studies have tested and confirmed the relevance of the distinction between "luck" and "effort" for individual decisions relating to the allocation and redistribution of resources (Tinghög, Andersson and Västfjäll, 2017[33]; Möllerström, Reme and Sørensen, 2015[34]).

1.2. How can opportunities and the fairness of economic outcomes be measured?

1.2.1. What are the main approaches and challenges for measurement?

The recent economic literature has developed robust approaches for modelling inequality of opportunity. While these approaches differ in terms of the proposed methodologies for measurement and evaluation, they have a common conceptual basis and a same goal which consists in identifying the share of the inequality of outcomes (or total inequality) that is due to circumstances beyond an individual's control and may justifiably call for compensation. Building on the insights from luck egalitarianism (see Section 1.1.2 above), it is assumed that all determinants of an individual's outcome can be classified as *(i)* structural factors for which an individual cannot reasonably be held responsible (i.e., "*circumstances*"); or *(ii)* controllable factors for which they can (i.e., personal agency and "*efforts*"). Box 1.3 provides a brief review of this literature.

Box 1.3. Approaches to measuring inequality of opportunity in economics

Ex ante and ex post approaches to measuring inequality of opportunity

The existing economic literature has followed two main approaches when seeking to measure inequality of opportunity: an *ex ante* and an *ex post* approach (Fleurbaey and Peragine, 2013[35]). These approaches differ in terms of methodology and of the definition of equal opportunity they rely on.

- The *ex ante* approach proceeds by partitioning the population into different groups, with each group consisting of individuals who share the same set of circumstances (these groups are also referred to as "types"). The group-specific distribution of outcomes is interpreted as the opportunity set for individuals with a similar background. Equality of opportunity is achieved when differences in the average outcomes of groups facing different circumstances are eliminated. In this context, focus is put on reducing inequality *between* groups, while inequality within groups is taken as given and a reflection of differences in factors relating to individual choice, including the level of effort. Equality of opportunity consists in ensuring that people from different backgrounds have similar prospects at their starting point (i.e., ex ante). As such, ***the ex ante approach views equality of opportunity primarily as a matter of "levelling the playing field"*** by reducing the influence of circumstances on economic outcomes.
- The *ex post* approach starts instead from the level of effort exerted by individuals and the extent to which it is rewarded. To do so, it seeks to measure inequalities of outcomes *within* groups of individuals who display the same level of effort (these groups are also referred to as "tranches"). Differences between these groups are seen as resulting from a factor – the level of effort – that is under individuals' control and do not therefore require compensation. In this context, equality of opportunity consists in a state where individuals with a similar level of effort achieve similar

outcomes (i.e., ex post). As such, ***the ex post approach views equality of opportunity primarily as a matter of ensuring that, as far as possible, outcomes reflect individual choice and merit-based factors***. As mentioned in the previous section, the notions of "effort" and "merit" do not fully coincide, with the former covering a broader range of factors than the latter (see note 6 at the end of this chapter).

Both of these approaches are valid from a conceptual point of view as they represent ways to operationalise the same distinction between "circumstances" and "effort". However, there are significant differences between them. Ex ante approaches do not directly estimate the level of effort produced by individuals, but focus instead on different measurable aspects of their background. Conversely, ex post approaches require that all variables, including individual levels of effort, be measured and introduce additional methodological assumptions in order to do so. At an empirical level, the ex ante approach has proven easier to implement than the ex post approach. As a result, empirical applications have focused mainly on ex ante inequality of opportunity.

Methods and challenges

Researchers have proposed two methods to assess ex ante inequality of opportunity: parametric and non-parametric. While each method has respective strengths and limitations, they face a common constraint: not all of the relevant circumstances affecting individual outcomes can be observed or even specified. This results in biased estimates of inequality of opportunity. Overfitted models produce an upward bias, whereas underfitted models reinforce the downward bias caused by partial observability (Brunori, Peragine and Serlenga, 2019[36]; Ferreira and Gignoux, 2011[37]). Under some assumptions discussed in the literature, it can be shown that the sign of the bias is negative. This explains why ex ante estimates should generally be interpreted as lower-bound estimates of the "real" level of inequality of opportunity measured in a given society.

To address this challenge, recent studies have relied on the use of machine learning techniques, specifically conditional inference regression trees and forests (Brunori, Hufe and Mahler, 2023[38]). In contrast to conventional methodologies, these algorithms are capable of autonomously identifying intricate relationships within data sets without the need for pre-established assumptions regarding interaction patterns. This method has the advantage of minimising both types of bias and can thus provide more robust estimates of inequality of opportunity. Conditional inference trees offer a clear advantage in elucidating how specific circumstances shape individual opportunities and are well aligned with the theoretical frameworks used to conceptualise inequality of opportunity (Roemer, 1989[28]). Conditional inference forests enhance predictive accuracy by aggregating multiple trees, making them particularly effective for estimating counterfactual distributions in various social contexts (Athey and Imbens, 2019[39]). More information can be found in Annex 1.A.

Empirical applications of these approaches differ in terms of the welfare concept used and the set of circumstances included in the analysis. They also depend on the availability of relevant data. Inequality of opportunity has been computed for a range of relevant outcomes, such as education (Palmisano, Biagi and Peragine, 2022[40]), health (Jusot, Tubeuf and Trannoy, 2013[41]) and even subjective well-being (Kreiner and Olufsen, 2022[42]). However, most of the economic research has focused on economic outcomes, most notably income or earnings, because they offer a good proxy for standard of living and because the availability of international statistical standards facilitates cross-country comparison.[10] Ideally, lifetime income would be the preferred metric, since individual income can fluctuate from year to year (OECD, 2023[43]) and follow different trajectories over the lifecycle.[11] The ideal datasets for analysing inequality of opportunity are rarely available in practice. Most applications rely either on administrative records, notably for the United States and Nordic countries (Mitnik, Helsø and Bryant, 2020[44]; Eriksen and Munk, 2020[45]; Owens and Candipan, 2019[46]; Landersø and Heckman, 2016[47];

Chetty et al., 2014[48]), or on household surveys that include retrospective questions about parental status answered by the adult children (Brunori, Hufe and Mahler, 2018[49]; Fajardo-Gonzalez, 2016[50]; Jusot, Tubeuf and Trannoy, 2013[41]). While administrative data do not suffer from the same limitations as survey-based sources,[12] they only include a limited set of circumstances. This can lead to a downward bias in the estimation of inequality of opportunity and limit the policy relevance of the results. Conversely, retrospective questions in household surveys offer insight on a large set of past circumstances but may be affected by *(i)* memory bias, whereby respondents' ability to accurately remember and report past events may be flawed; and *(ii)* social desirability bias, whereby respondents may adapt the views expressed in line with what they consider to be expected or socially acceptable, notably on sensitive or personal topics.

For ex ante approaches, defining an appropriate set of circumstances is an important consideration as it will directly affect the estimation of inequality of opportunity. Under this type of approach, a counterfactual distribution of the outcome of interest (e.g., income) is derived as a means to quantify the "unfair" part of inequality for the outcome considered. The counterfactual distribution aims to reproduce only the share of inequality that is due to the measured circumstances and to leave out the share of inequality that can be attributed to factors relating to personal agency and individual choices (see Box 1.3 above). However, it is not possible to observe the entire set of relevant circumstances, as information on a large number of determinants of inequality of opportunity are rarely available in large-scale comparable datasets.[13] Here, it is important to bear in mind that ex ante measures of inequality of opportunity only ever account for the role of a subset of the circumstances influencing outcomes. For this reason, they are best understood as providing a lower-bound estimate of actual levels of inequality of opportunity in a given society, as the influence of other relevant circumstances may not be accounted for.

1.2.2. What does the measure developed in this report consist in?

In line with most of the literature, this report takes an ex ante approach to measuring inequality of opportunity. The choice of this type of approach is driven by methodological considerations relating to empirical applicability and data availability (see Box 1.3). As highlighted previously, ex ante approaches are designed to provide insights on the role that circumstances play in shaping economic outcomes and how policy can help ensure a more level playing field for individuals facing different sets of initial circumstances. In order to build a measure of inequality of opportunity, a set of relevant circumstances is defined based on the available data (see below) and the population is split into non-overlapping groups, with each group being homogeneous in terms of the circumstances selected. A counterfactual distribution of outcomes that only reflects the differences between these groups – i.e., differences in outcomes that are due to the selected circumstances – is then computed (see Box 1.4 for an illustration of how the measure works in practice; see also Annex 1.A for a more in-depth technical presentation of the proposed measure and how it is designed).

Household market income is used as the main welfare concept for analysis. Throughout most of the analysis conducted in Chapter 2, inequality of opportunity is estimated for individuals between the ages of 25 and 59 and measured in terms of the child's household equivalised market income as an adult.[14] Market income is selected as the main variable of interest, instead of disposable income, in order to capture income-generating capacity and the inequalities of opportunity that arise from labour market dynamics.[15] Similarly, the household is used as the unit of analysis, rather than the individual, to take account of income pooling, sharing and economies of scale within the household as doing so is likely to provide a better estimate of an individual's standard of living. However, this household-based approach may potentially affect the measurement of intergenerational disadvantage at the individual level, as it also accounts for factors like assortative mating and fertility decisions at the household level and assumes that resources are equally shared among household members. This concern is particularly relevant when analysing inequality from a gender perspective.[16]

The set of circumstances has been selected based on data availability, comparability and accuracy of measurement, as well as the policy relevance of the insights that can be drawn. Based on the existing literature, a distinction is made between the factors that contribute to inequality of opportunity and those that do not (see Box 1.2). These factors will be referred to under the broad categories of "circumstances" and "effort" respectively throughout the rest of the chapter, bearing in mind the necessary caveats regarding the content, meaning and use of these categories in describing the factors analysed (see Box 1.3). A wide range of circumstances must be covered in order to account for the complex role that an individual's background plays in shaping their opportunities and to properly understand the different channels through which advantage and disadvantage are transmitted across generations. The measure of inequality of opportunity developed in this report is based on a wider set of circumstances than is typically used in most studies.[17] In addition to standard individual factors (such as gender and country of birth),[18] parents' migration status and socio-economic background (including parents' educational level and occupation when the respondent was 14),[19] the analysis also considers childhood environment factors, such as parental presence, housing tenure and the degree of urbanisation of the area of residence at age 14, to roughly differentiate between urban and rural areas.[20] However, to accommodate varying levels of available information over time, trends in inequality of opportunity are based on a more limited set of circumstances (see Table 1.1).[21] Annex 1.B provides more detailed information on the set of circumstances included in the analysis and the data sources used to elicit them.

The inclusion of factors relating to childhood environment reflects recent and innovative developments in the study of intergenerational inequality. For instance, there is evidence of increasing intergenerational persistence in homeownership for recent cohorts. In the United Kingdom, between 2000 and 2017, the gap in homeownership rates between those who grew up in rented accommodation compared to owner-occupied homes has doubled (Blanden, Eyles and Machin, 2023[51]). Similarly, there is a growing body of evidence suggesting that particular home environments (i.e., those with family stability and positive parental investments) are associated with higher chances of long-term success in life (Heckman and Mosso, 2014[52]). Finally, methodological advances and the use of rich administrative records have highlighted significant spatial variation in the transmission of outcomes across generations (Chetty et al., 2014[48]), partly reflecting geographical disparities in the access to quality services. This aspect of inequality of opportunity is covered in greater detail in Chapter 3 of this report.

Table 1.1. Set of circumstances included when measuring inequality of opportunity in this report

	Available for 2019 only	Available for trend analysis
Individual factors		
Sex	X	X
Country of birth	X	X
Parent's migrant status		
Father's country of birth	X	
Mother's country of birth	X	
Parent's socio-economic background at age 14		
Father's education	X	X
Mother's education	X	X
Father's occupation	X	
Mother's occupation	X	
Childhood environment factors at age 14		
Presence of parents	X	X
Homeownership status	X	
Degree of urbanisation of the area of residence	X	

Box 1.4. A new measure of inequality of opportunity – How does it work?

Traditionally, the analysis of inequality has focused on measuring differences in key outcomes of interest, such as income disparities for example. The approach developed in this report takes these differences in outcomes as a starting point. From there, it seeks to assess the extent to which the observed differences in outcomes may be attributed to differences in opportunities stemming from a set of key circumstances that are beyond individuals' control and may as a result skew the level playing field. The analysis follows an ex ante approach, as explained in Box 1.3.

To measure the extent to which opportunities are evenly distributed or not, the approach uses machine learning to divide the population into groups based on particular characteristics or circumstances. On this basis, it creates a counterfactual distribution of outcomes that only reflects the differences between these groups (i.e., differences in outcomes that are due to the selected circumstances). Doing so provides insight into the role and influence of specific external factors in shaping outcomes and the extent to which they allow for a level playing field.

Figure 1.1 below provides a visual illustration of the way in which the measure functions by applying it to a simplified example.

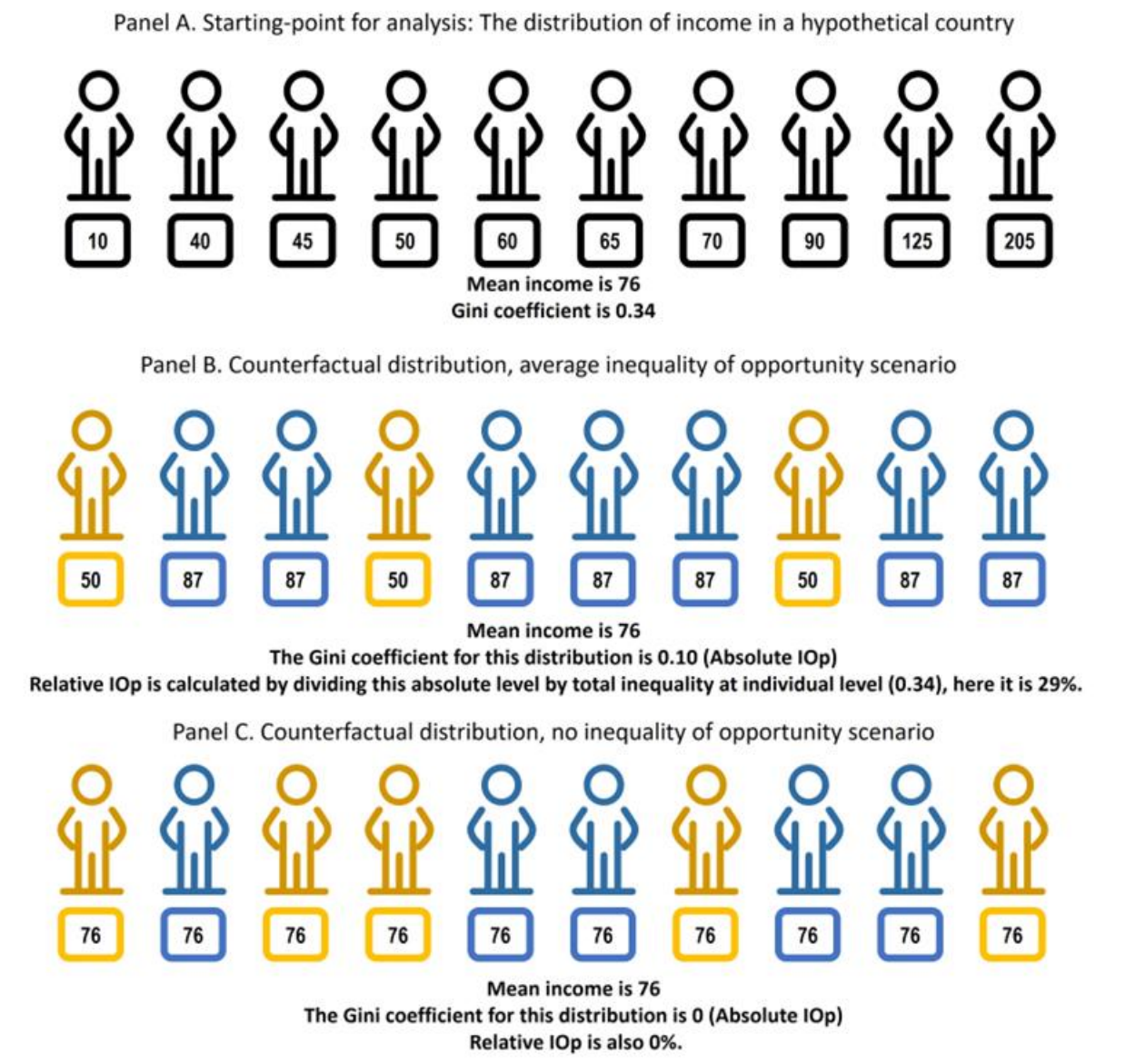
- Panel A shows the distribution of income for the population of a fictional country, with individual incomes expressed in a given currency. While the currency is fictional and its value arbitrarily defined, the level of inequality observed (Gini coefficient of 0.34) is similar to that seen in many OECD countries.
- Panel B takes the population and distribution of income shown in Panel A and considers a hypothetical case where there is only one relevant circumstance that can take two possible values (blue or yellow). Instead of examining the distribution of income among individuals (as done in Panel A), the measure calculates average incomes for the different groups defined by the set of circumstance selected. In this simple case, that means the population is now composed of two groups ("blue" and "yellow") with respective average incomes of 87 and 50. The average incomes for these groups form a counterfactual distribution, which reflects the role played by the selected circumstances in shaping individual outcomes.
- The distribution presented in Panel B, while highly stylised, is nonetheless comparable to what can be observed in an average OECD country: individuals who face "penalising" circumstances (in this case "yellow") are mainly concentrated at the lower end of the income distribution, with some represented at higher levels but rarely at the very top.
- The mean income for the overall population remains unchanged from Panel A at 76. However, the Gini coefficient for the counterfactual distribution in Panel B differs: it is now 0.10, representing absolute inequality of opportunity (IOp). Relative IOp is calculated by dividing the Gini of the counterfactual distribution (absolute IOp) by the observed Gini for individual income (total inequality). In this simple case, relative IOp represents 29% of total inequality (i.e., 0.10 / 0.34).

Measuring inequality of opportunity yields important insights that are not captured by the distribution of outcomes. A same distribution of individual outcomes may reflect significant differences in terms of opportunities and how they are distributed across the population. Panel C illustrates this by showing a situation where the income distribution in Panel A is consistent with full equality of opportunity and reflects a level playing field despite differences in individual outcomes.

- Panel C once again takes the same population and distribution of income shown in Panel A and supposes instead that a slightly different set of individuals form the two groups ("blue" and "yellow") based on the selected circumstance. In this case, the picture in terms of opportunities is quite different from the one in Panel B. In immediate and visible terms, the "yellow" group is larger and, while individuals who face that particular circumstance are still mainly concentrated at the lower end of the

income distribution, they are also represented at the very top. Furthermore, for the same overall distribution at individual level, the counterfactual distribution now shows identical average incomes for all groups (i.e., absolute IOp is reduced to 0 and relative IOp is also 0%). Here, the selected circumstances seem to have no effect on potential income and no significant differences in terms of opportunities can be attributed to them.

Figure 1.1. Measuring inequality of opportunity – A visual illustration



Source: OECD Secretariat.

1.2.3. How should the measure be used and interpreted? Some key considerations

The measure developed in this report presents several advantages from an analytical point of view. Machine learning algorithms based on conditional inference regression trees and forests can help analysts minimise potential sources of bias that may be linked to discretionary decisions, such as model selection and the choice of circumstances to include in the analysis (Brunori, Hufe and Mahler, 2023[38]).[22] The measure offers a rich perspective on inequality of opportunity in terms of the range of circumstances that can be covered. It can also be used to shed light on different aspects of inequality of opportunity. For example, most of the analysis in Chapter 2 focuses on *relative inequality of opportunity* – i.e., the share of the total inequality of outcomes that can be attributed to circumstances. However, where relevant, estimates of *absolute inequality of opportunity* – i.e., the level of inequality that would prevail if outcomes only reflected the influence of the selected set of circumstances, as measured by the counterfactual distribution – are also presented and discussed in order to contextualise the results for relative inequality of opportunity. This allows the analysis to reflect the fact that the level of inequality of outcomes differs across OECD countries. Finally, the measure offers flexibility in terms of its application and can be adapted to reflect the conditions of specific groups. For example, in Section 2.3, a change in the income concept is needed to properly capture the effects of gender on inequality of opportunity. The measure is then computed for individual earnings rather than household market income.

It is important to bear in mind that, despite the broader scope provided by this type of measure, the analysis does not capture the effect of all relevant circumstances. Consequently, the measure is likely to produce conservative estimates and should be viewed as a lower-bound of the actual levels of inequality of opportunity experienced by individuals, as mentioned previously (see Section 1.2.1).[23] For the same reason, the remaining share of inequality that is not explained by the measure constitutes a residual variable and does not provide a direct proxy for or outcome of individual effort. While it is loosely referred to as "*effort*" in contrast to "*circumstances*" in line with part of the literature, this unexplained share of inequality is best understood as a broad category that captures the effect of different factors, including individual effort but also non-measured circumstances. In this respect, ex ante approaches provide a comparable measure of the lower bounds of inequality of opportunity. They do not provide a measure of equality of opportunity.

Similarly, while the analysis distinguishes between factors *within* and *beyond* individuals' control, both types of factors tend to interact in practice. The distinction between "effort" and "circumstances" is meaningful at a conceptual level and plays a significant role in people's evaluation of outcomes. However, this distinction is not always straightforward to make and its application to concrete cases may sometimes appear arbitrary or conventional. Factors that depend on individual choice are often influenced by external circumstances and background elements that are beyond the control of individuals. For instance, values, attitudes and aspirations that contribute to shape an individual's level of effort may be transmitted through various channels – such as parental presence, the degree of parental engagement in school activities or the time a child spends on extracurricular activities (Pansacala et al., 2024[53]) – or influenced by the social context.[24] Furthermore, different circumstances and prospects for success may lead individuals to adapt their preferences and expectations in ways that can affect their motivation, levels of aspiration and efforts. For example, the barriers faced by young people from disadvantaged backgrounds may give rise to a sense of having less control over their future and of relative deprivation in terms of opportunities and expected rewards. In turn, this can negatively impact on the extent to which they pursue and realise opportunities, for example through lower engagement in higher education (ONS, 2023[54]). On the other hand, those same barriers may in some cases spur people from disadvantaged backgrounds to exert more effort because they believe they will need to work harder than others to make up for unfavourable initial circumstances (Jin, 2024[55]).

The effects and role played by circumstances may be difficult to interpret, particularly over the longer-term. For example, one person's effort can become another person's circumstance (Fishkin, 2014[56]). This can notably be the case for parental income, as parents' efforts contribute to provide a better start in life for their children. Furthermore, certain types of circumstances are taken as given and are not viewed as a legitimate source of advantage or disadvantage. This is the case for instance of age. While it is clearly a factor beyond people's control, most studies do not consider it to be a circumstance whose effects should be compensated for.[25] This may notably be due to the fact that ageing constitutes a natural process that affects everyone, even if at different rates, and whose effects balance out over time as individuals experience different stages of life. Reflecting these possible ambiguities, a conservative approach has been taken throughout this report when selecting the set of circumstances to include in the analysis (see Table 1.1 above). To minimise bias and avoid conflating circumstances with individual choices, the set used here focuses on variables that represent key aspects of an individual's background and are undoubtedly exogenous, such as country of birth and parental characteristics. Disability status has been left out of the set of circumstances for this reason, though it may constitute a significant factor to include in future analysis given its importance and relevance for policy.

As a final point to consider, inequality of opportunity is an inherently dynamic concept that analysis can only capture "through the rear-view mirror". Opportunities and their distribution are measured at a point in time, yet they reflect complex trajectories that are shaped by multiple factors over a long period of time. The analysis only observes the adult outcomes for children (and their parents) who grew up in a more or less distant past, not the events and processes that led to these outcomes. Caution should therefore be exerted when seeking to explain observed levels and trends in inequality of opportunity. First of all, it may be difficult to separate the effect of structural factors on inequality of opportunity from that of cyclical factors and short-term shocks or even one-off events such as changes in policy settings. Secondly, policies have a long-term and complex impact on the distribution of opportunities which may reduce inequalities for one generation but increase them for the next.[26] Consequently, analysis of inequality of opportunity at country-level will require a more fine-grained and qualitative approach in order to properly account for national specificities, including institutional, historical and socio-cultural factors, and help determine which circumstances are most relevant in this particular context. As far as possible, the analysis in Chapter 2 seeks to take account of these challenges when examining the observed inequality of opportunity and discussing possible underlying mechanisms that can help explain the current state of opportunities within and across OECD countries.

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Annex 1.A. Measuring inequality of opportunity

This annex outlines the methodology proposed by Brunori, Hufe and Mahler (2023[38]) for estimating inequality of opportunity and the intergenerational transmission of advantage and disadvantage using regression trees and forests. Brunori, Hufe and Mahler (2023[38]) identifies two main advantages in using regression trees and forests to study of inequality of opportunity. First, this method is well aligned with Roemer's theoretical framework for monitoring inequality of opportunity. Secondly, regression trees and forests address the issue of model selection, thereby reducing researcher-induced bias and enabling a more objective and data-driven approach to measuring inequality of opportunity.

Using conditional inference regression trees to estimate inequality of opportunity

Regression trees and forests are supervised machine learning techniques designed to make accurate out-of-sample predictions of a dependent variable based on multiple observable predictors. In the context of inequality of opportunity, the outcome, y_i, is the income received by an individual i, while the input variables, x_i=(x_(i,1),…,x_(i,n)), represent a set of n circumstances of the individual i – factors such as sex, parental socio-economic background or place of birth – over which they have no control.

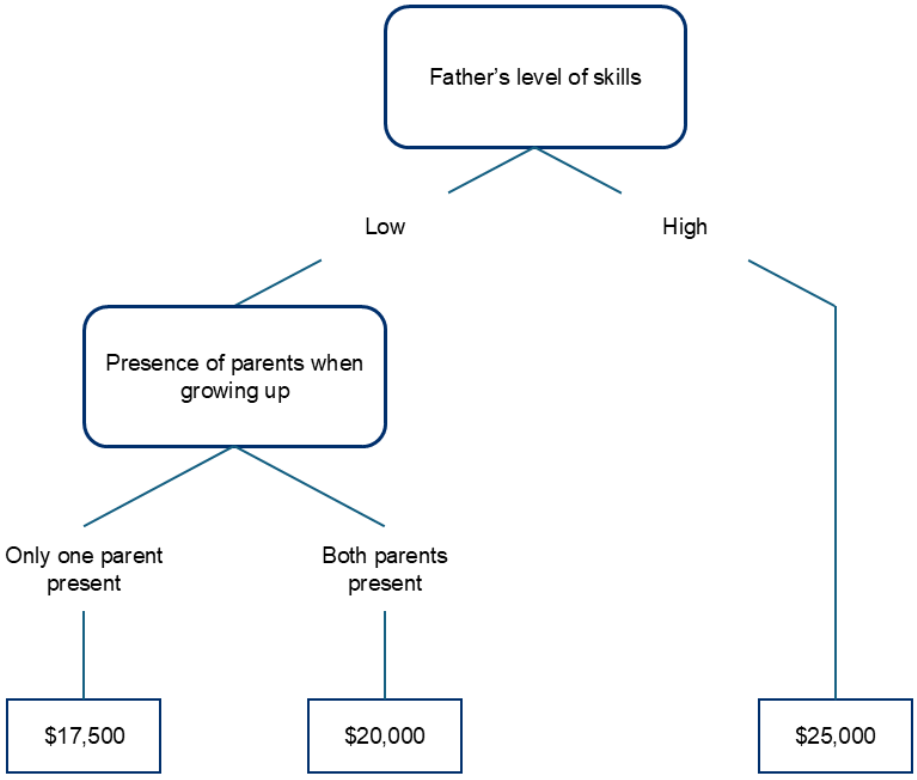
Specifically, trees make predictions by partitioning the population S= {(x_i,y_i)}_(i=1)^S into M non-overlapping groups G=(g_1,…,g_M), where each group g_m is homogeneous with respect to a particular set of circumstances. Each resulting group can thus be interpreted as a specific circumstance type. The expected outcome y_i=f(x_i), for each individual i is estimated by the mean outcome of the group to which they belong to:

$$\hat{f}(x_i) = \frac{1}{N_m} \sum_{j \in g_m} y_j$$

The counterfactual distribution, represented by the vector of predicted incomes y ̂=(f ̂(x_1),…,f ̂(x_N)), serves as a benchmark for what individuals' incomes would be if they were determined solely by the individual's specific circumstances. By isolating the impact of circumstances and removing the influence of individual effort, talent or choices, this distribution reflects the variation in income attributable purely to differences in circumstances. Consequently, a highly skewed counterfactual distribution indicates that circumstances play a significant role in determining income, which corresponds to a high level of inequality of opportunity. Conversely, if the counterfactual distribution is constant and equal to the average income, this indicates that circumstances play no role in determining income and therefore that there is full equality of opportunity (under the set of circumstances included in the model).

Put differently, regression trees partition the sample into M types by recursive binary splitting. Conditional inference starts by a series of univariate hypothesis tests. The circumstance that is most related to the outcome is chosen as the potential splitting variable. If the dependence between the outcome and the splitting variable is sufficiently strong, then a split is made. If not, no split is made. Whenever a circumstance can be split in several ways, the sample is split into two sub-samples such that the dependence with the outcome variable is maximised. This procedure is repeated in each of the two sub-samples until no circumstance in any sub-sample is sufficiently related to the outcome variable (Annex Figure 1.A.1).

Annex Figure 1.A.1. Illustrative regression tree



Note: Hypothetical example of a regression tree. The values in the white boxes show the predicted market income associated with each type.
Source: Adapted from Brunori, Hufe and Mahler (2018[49]), The Roots of Inequality: Estimating Inequality of Opportunity from Regression Trees, https://documents1.worldbank.org/curated/en/502141519144475516/pdf/WPS8349.pdf.

Regression trees offer a simple and reliable method for segmenting a population into distinct types, effectively addressing the challenge of model selection. However, it should be noted that they do have limitations, with Brunori, Hufe and Mahler (2018[49]) underlining the fact that:

- The structure of regression trees, and thus the counterfactual distribution of income, can be highly sensitive to variation in the data sample. This sensitivity is particularly pronounced when multiple circumstances are competing to define the initial splits (Friedman, Tibshirani and Hastie, 2009[57]).
- Regression trees assume a non-linear data-generating process, which emphasises interactions between variables while neglecting any potential linear effects of circumstances.
- Regression trees may be sub-optimal in their use of available information by overlooking specific circumstances. This can become an issue if two or more circumstances are highly correlated. Once a split is made based on one of these circumstances, the others are unlikely to provide sufficient additional information to justify further splits.

Random forests address these issues by creating many trees on random sub-samples and by using only a random subset of circumstances before averaging over all of these when making predictions. This approach is more robust and comprehensive (Biau and Scornet, 2016[58]; Breiman, 2001[59]). In our empirical application, the forests are made of 500 trees.

Measuring the contribution of individual circumstances to overall inequality of opportunity

In addition to measuring inequality of opportunity, the analysis conducted in Chapter 2 also examines the relative importance of the different observed circumstances in contributing to total inequality of opportunity. While the measures of inequality of opportunity and their decompositions cannot be interpreted causally as they omit various factors beyond a few key circumstances such as parental background, the observed circumstances do contribute differently to the overall estimate of inequality. The quantification of these contributions offers valuable descriptive insights, thereby facilitating the identification of the factors that exert the most significant influence on inequality of opportunity.

The Shapley-Shorrocks decomposition, as outlined by Brunori, Hufe and Mahler (2023[38]), provides a robust framework for quantifying the individual contribution of each observed circumstance to total inequality of opportunity. The concept was initially proposed by Shapley (1953[60]) and subsequently refined by Shorrocks (2013[61]). The Shapley-Shorrocks decomposition is the only decomposition that satisfies two crucial properties. First, the decomposition is exact under the addition, whereby the estimated sub-components can be interpreted as the proportion of total inequality of opportunity that can be attributed to a specific factor. Second, the decomposition is symmetric with respect to the order of the arguments. Put differently, the Shapley decomposition calculates the contribution of each variable by assessing the impact on the outcome function when that variable is excluded from all possible combinations of other variables. This is achieved by averaging the marginal contributions of the variable across all possible sequences of exclusion, thereby ensuring that contributions are fairly distributed and accounting for interactions between variables. The R program used to compute the Shapley decomposition was kindly provided by Paolo Brunori and Pedro Salas-Rojo (*International Inequalities Institute, LSE*).

Annex 1.B. Data sources

The analysis presented in this chapter is based on a comprehensive set of data sources that, in addition to providing detailed information on income and demographic characteristics at the national level, also include retrospective questions on parental background and living arrangements during the respondents' childhood and formative teenage years.[27] These questions (see Annex Table 1.B.1) enable the definition of a set of individual-level factors that are relevant for understanding their opportunities, decisions and outcomes – i.e., the set of so-called "circumstances". In particular, Chapter 2 draws upon the following four sources of data, which were harmonised ex post to generate comparable estimates across countries:

- The European Statistics on Incomes and Living Conditions Survey (EU-SILC)
- The Panel Survey of Income Dynamics (PSID)
- The Household, Income and Labour Dynamics in Australia Survey (HILDA)
- The British Household Panel Survey and UK Household Longitudinal Study (BHPS-UKHLS)
- The National Socioeconomic Characterization Survey (CASEN)

The European Union Statistics on Incomes and Living Conditions (EU-SILC) Survey

The European Union Statistics on Incomes and Living Conditions (EU-SILC) Survey is a comprehensive data collection and harmonisation initiative that encompasses information on income, social exclusion and living conditions collected across individuals and households in all EU Member States, as well as in Iceland, Norway, Switzerland, and Türkiye. This chapter draws upon data from the 2005, 2011 and 2019 waves of the EU-SILC survey which included an ad-hoc module on the intergenerational transmission of disadvantages. The modules focused on respondents aged 25 to 59 and included a series of retrospective questions that gathered information on parental background and family circumstances when respondents were 14 years old.

The Panel Survey of Income Dynamics (PSID)

The Panel Survey of Income Dynamics (PSID) conducted by the University of Michigan is a longitudinal household survey that has provided insights into the economic, social and demographic conditions of United States families for over five decades. The PSID was originally constituted with an initial sample of over 18 000 individuals in 5 000 families and has since collected extensive data on these individuals and their descendants. This chapter makes use of two principal PSID data files, covering the period from 1968 to 2021: the *Family Files* and the *Cross-Year Individual Files*. The *Family Files* contain the majority of PSID variables, including family-level data on income, working hours, wages, wealth and consumption, as well as comprehensive information about the reference person and their spouse or partner. The *Cross-Year Individual Files* provide a record for each individual present in an interviewed family in a given survey year, including both respondents and non-respondents. PSID only collects retrospective questions for household heads and their partners. For the purpose of the analysis, individuals classified as "other family unit members" have therefore been excluded from the sample.

The ex-post harmonisation was based on the Comparative Panel File (CPF) (Turek, Kalmijn and Leopold, 2020[62]). The CPF is an open-source project that provides a blueprint for harmonising seven of the world's largest panel surveys, including three of the five datasets used to produce the estimates in Chapter 2.

The Household, Income and Labour Dynamics in Australia (HILDA) Survey

The Household, Income and Labour Dynamics in Australia (HILDA) Survey conducted by the Melbourne Institute is an ongoing household-based panel study that annually collects detailed data from over 17 000 Australians. Initiated in 2001, the HILDA survey offers a comprehensive longitudinal dataset covering a diverse range of topics, including education, family background, employment, income, health and life satisfaction. Over time, the survey has introduced questions on various special topics. For the purposes of the analysis in this chapter, the HILDA Waves 5, 8, 11, 12, 15, 19 and 21 were used. These modules provide insights into the socio-economic backgrounds of respondents through retrospective questions on respondents' parental history and status, capturing key variables such as parental educational level, occupation and living conditions during childhood.

The Understanding Society UK Household Longitudinal Study (UKHLS)

The Understanding Society UK Household Longitudinal Study (UKHLS) is a longitudinal study conducted by the Institute for Social and Economic Research at the University of Essex. It builds upon the British Household Panel Survey (BHPS), which started in 1991 and collected data on UK households until 2008. The UKHLS, which was initiated in 2009, shares numerous similarities with the BHPS in terms of design, content and the type of data collected. Chapter 2 primarily draws upon more recent UKHLS data as some key income variables used in the chapter are only available in this survey. Yet, it also incorporates retrospective information from the BHPS. A harmonised BHPS-UKHLS dataset, developed by the Institute for Social and Economic Research, allows for seamless integration, as the vast majority of BHPS participants continued with the Understanding Society survey.

The National Socioeconomic Characterization Survey (CASEN)

The National Socioeconomic Characterization Survey (*Encuesta de Caracterización Socioeconómica Nacional*, CASEN) is a multi-wave cross-sectional survey conducted by the Ministry of Social Development and Family (*Ministerio de Desarrollo Social y Familia*) to collect information that allows for a regular assessment of the socio-economic conditions of the population and evaluation of the effectiveness of social policies. The survey targets households residing in occupied private dwellings across the national territory, excluding certain municipalities or segments of municipalities classified as special areas by the National Statistics Institute (INE). Since its inception in 1990, the CASEN survey has been conducted on a biannual or triennial basis. Chapter 2 draws on data from the 2006, 2009, and 2011 waves, which offer detailed information on demographics, education, health, housing, employment and income. Moreover, retrospective questions allow for the capture of key variables such as parental educational level, occupation and living conditions during childhood. To construct the outcome variable, micro-simulation techniques were used to generate respondent-level estimates of individual wages, household market income and household disposable income. These models simulate the effects of taxes and social contributions on various income sources – both gross and net – for employees, self-employed, pensioners and capital income recipients. In most of the analysis in Chapter 2, the 2009 wave of CASEN is used, as it includes a larger set of circumstances than the 2011 wave.

Annex Table 1.B.1. Additional information on the circumstances included in the analysis, by survey

	EU-SILC	PSID	HILDA	BHPS-UKHLS	CASEN
Sex	1 - Men 2 - Women	1 - Men 2 - Women	1 - Men 2 - Women	1 - Men 2 - Women	1 - Men 2 - Women
Respondent's country of birth	1 - Country of birth and country of residence are the same 2 - Country of birth is another EU country; country of birth is a country outside of the European Union	1 - Born in a US state 2 - Born in US territory or outside of the US	1 - Born in Australia 2 - Born outside of Australia	1 - Born in the United Kingdom 2 - Born outside of the United Kingdom	1 - Born in Chile 2 - Born outside of Chile
Father's country of birth	0 - Father not present and no contact or deceased 1 - Father born in respondent's present country of residence 2 - Father born in country other than respondent's present country of residence	0 - Don't know; not answered; refused to answer 1 - Father born in a US state 2 - Father born in US territory or outside of the US	0 - Don't know; respondent refused to answer/not stated; not able to be determined; non-responding person 1 - Father born in Australia 2 - Father born outside of Australia	0 - Don't know; missing, inapplicable, refused to answer 1 - Father born in the United Kingdom 2 - Father born outside of the United Kingdom	Not available
Mother's country of birth	0 - Mother not present and no contact or deceased 1 - Mother born in respondent's present country of residence 2 - Mother born in country other than respondent's present country of residence	0 - Don't know; not answered; refused to answer 1 - Mother born in a US state 2 - Mother born in US territory or outside of the US	0 - Don't know; respondent refused to answer/not stated; not able to be determined; non-responding person 1 - Mother born in Australia 2 - Mother born outside of Australia	0 - Don't know; missing, inapplicable, refused to answer 1 - Mother born in the United Kingdom 2 - Mother born outside of the United Kingdom	Not available
Presence of parents in the household when the respondent was 14	0 - Did not live with either parent (or persons considered as parents); lived in a collective household or institution; lived in a private household without any parent 1 - Lived with either father (or person considered as a father) or mother (or person considered as a mother) 2 - Lived with both parents (or persons considered as parents)	1 - Did not live with both natural parents most of the time until age 16 2 - Lived with both natural parents most of the time until age 16	0 - Did not live with either parent at around 14 years old 1 - Lived with either father or mother at around 14 years old 2 - Lived with both parents at around 14 years old	0 - Did not live with either father or mother figure at age 14; lived in local authority care/foster home; don't know; refused to answer 1 - Lived with either a mother (or adoptive mother) or father (or adoptive father) at age 14 2 - Lived with both a mother and father figure at age 14; reports to stop living with biological parents at age 16 or before	0 - Did not live with either parent before 15 years old 1 - Lived with either father or mother before 15 years old 2 - Lived with both parents before 15 years old

	EU-SILC	PSID	HILDA	BHPS-UKHLS	CASEN
Father's educational level when the respondent was 14	0 - Unknown; father not present and no contact or deceased 1 - Father could neither read nor write in any language; Low level (pre-primary, primary education or lower secondary education) 2 - Father attained medium level (upper secondary education or lower secondary education) 3 - Father attained high level (first and second stage of tertiary education)	0 - Don't know; N/A; refused to answer 1 - Does not know father's highest level of education but mentions father could read and write; completed 6th-8th grades; grade school 2 - Father completed high school; some college; completed Associate's degree 3 - Father completed at least 15-16 years of education; completed college, advanced or professional degree	0 - Don't know; not able to be determined; refused/not stated 1 - No education; father completed primary school only; father completed some secondary school, but no more than year 10 2 - Father completed year 11-12 or equivalent 3 - Father's highest-level qualification obtained from University, Teacher's college, or Institute of technology	0 - Don't know; refused to answer 1 - Father did not go to school at all; left school with no qualifications or certificates 2 - Father left school with some qualifications or certificates; gained further qualifications or certificates after leaving school 3 - Father gained a university degree or higher degree	0 - Don't know; don't remember 1 - No education; pre-primary; primary (not more than 8th grade) [Educación Parvularia, Preparatoria, Educación Básica, Humanidades (Sist. antiguo)] 2 - Secondary education [Educación media científico humanista, Técnica, comercial, industrial o normalista, Educación media técnica profesional, Centro de formación técnica (CFT), Instituto Profesional] 3 - University degree [Universitario]
Mother's educational level when the respondent was 14	0 - Unknown; mother not present and no contact or deceased 1 - Mother could neither read nor write in any language; Low level (pre-primary, primary education or lower secondary education) 2 - Mother attained medium level (upper secondary education or lower secondary education) 3 - Mother attained high level (first and second stage of tertiary education)	0 - Don't know; N/A; refused to answer 1 - Does not know mother's highest level of education but mentions mother could read and write; completed 6th-8th grades; grade school 2 - Mother completed high school; some college; completed Associate's degree 3 - Mother completed at least 15-16 years of education; completed college, advanced or professional degree	0 - Don't know; not able to be determined; refused/not stated 1 - No education; mother completed primary school only; mother completed some secondary school, but no more than year 10 2 - Mother completed year 11-12 or equivalent 3 - Mother's highest-level qualification obtained from University, Teacher's college, or Institute of technology	0 - Don't know; refused to answer 1 - Mother did not go to school at all; left school with no qualifications or certificates 2 - Mother left school with some qualifications or certificates; gained further qualifications or certificates after leaving school 3 - Mother gained a university degree or higher degree	0 - Don't know; don't remember 1 - No education; pre-primary; primary (not more than 8th grade) [Educación Parvularia, Preparatoria, Educación Básica, Humanidades (Sist. antiguo)] 2 - Secondary education [Educación media científico humanista, Técnica, comercial, industrial o normalista, Educación media técnica profesional, Centro de formación técnica (CFT), Instituto Profesional] 3 - University degree [Universitario]

	EU-SILC	PSID	HILDA	BHPS-UKHLS	CASEN
Father's occupation when the respondent was 14	0 - Father in Armed Forces occupations; don't know; father not present and no contact or deceased; father not working 1 - Elementary occupations 2 - Clerical support, services and sales, skilled agricultural, forestry, and fishery workers, craft and related trades workers, or plant and machine operation assemblers 3 - Managers, professionals, and technicians and associate professionals	Based on father's usual occupation when growing up. 0 - Father in Armed Forces occupations; no father/surrogate; deceased; disabled; never worked 1 - Elementary occupations 2 - Clerical support, services and sales, skilled agricultural, forestry, and fishery workers, craft and related trades workers, or plant and machine operation assemblers 3 - Managers, professionals, and technicians and associate professionals	0 - Father in Armed Forces occupations; don't know; impossible to be determined; refused to answer or not stated; not asked 1 - Elementary occupations 2 - Clerical support, services and sales, skilled agricultural, forestry, and fishery workers, craft and related trades workers, or plant and machine operation assemblers 3 - Managers, professionals, and technicians and associate professionals	Original SOC10 codes were transformed to ISCO-08 codes based on the following crosswalk[1] referenced by UKHLS. 0 - Don't know; refused to answer; father not working, deceased, or not living with respondent, so don't know 1 - Elementary occupations 2 - Clerical support, services and sales, skilled agricultural, forestry, and fishery workers, craft and related trades workers, or plant and machine operation assemblers 3 - Managers, professionals, and technicians and associate professionals	Only available for 2006 and 2009 waves. 0 - Armed Forces occupations; never worked; don't know; don't remember 1 - Domestic worker; employee or laborer 2 - Self-employed 3 - Employer or business owner
Mother's occupation when the respondent was 14	0 - Armed Forces occupations; don't know; mother not present and no contact or deceased; mother not working 1 -: Elementary occupations 2 - Clerical support, services and sales, skilled agricultural, forestry, and fishery workers, craft and related trades workers, or plant and machine operation assemblers 3 - Managers, professionals, and technicians and associate professionals	Based on mother's usual occupation when growing up. 0 - Mother in Armed Forces occupations; no mother/surrogate; deceased; disabled; never worked 1 - Elementary occupations 2 - Clerical support, services and sales, skilled agricultural, forestry, and fishery workers, craft and related trades workers, or plant and machine operation assemblers 3 - Managers, professionals, and technicians and associate professionals	0 - Mother in Armed Forces occupations; do not know; impossible to be determined; refused to answer or not stated; not asked 1 - Elementary occupations 2 - Clerical support, services and sales, skilled agricultural, forestry, and fishery workers, craft and related trades workers, or plant and machine operation assemblers 3 - Managers, professionals, and technicians and associate professionals	Original SOC10 codes were transformed to ISCO-08 codes based on the following crosswalk[1] referenced by UKHLS 0 - Don't know; refused to answer; mother not working, deceased, or not living with respondent, so don't know. 1 - Elementary occupations 2 - Clerical support, services and sales, skilled agricultural, forestry, and fishery workers, craft and related trades workers, or plant and machine operation assemblers 3 - Managers, professionals, and technicians and associate professionals	Only available for 2006 and 2009 waves. 0 - Armed Forces occupations; never worked; don't know; don't remember 1 - Domestic worker; employee or laborer 2 - Self-employed 3 - Employer or business owner
Housing tenure when the respondent was 14	Only available for 2011 and 2019 waves. 0 - Rented; accommodation was provided free 1 - Owned	**Not a retrospective question** – derived from the housing tenure status when respondent is 13-15 years old. 0 - Pays rent; neither owns nor rents	Not available[2]	Not available[2]	Not available

	EU-SILC	PSID	HILDA	BHPS-UKHLS	CASEN
		1 - Any family-unit member owns or is buying (fully or jointly); mobile homeowners who rent lots are included here			
Degree of urbanisation of the area of residence when the respondent was 14	Only available for 2019 wave, all countries except Iceland and Slovenia. 1 - City (more than 100,000 inhabitants) 2 - Town or suburb (10 000 to 100 000 inhabitants) 3 - Rural area, small town or village (less than 10 000 inhabitants)	1 - Grew up in a large city 2 - Grew up in a small town or suburb 3 - Grew up in a farm or in the country	Not available[2]	1 - Mostly lived in an inner-city area when young 2 - Mostly lived in a suburban area, a town, or a village when young 3 - Mostly lived in a rural area or in the countryside when growing up	Only available for 2009 wave. Prevalent area type before the respondent turned 15 years old: 1 - Urban (probably including both cities and towns) 3 - Rural
Current household market income	Derived as the sum of individual earnings, self-employed income (including goods produced for own consumption), capital income and the balance between the transfers received from non-profit institutions and other households and the transfers paid to non-profit institutions and other households.	Derived from Reference Person's and Spouse's/Partner's Total Taxable Income in the previous tax year (this variable includes Reference Person's and Spouse's/Partner's income from assets, earnings, and net profit from farm or business) plus the total taxable income of all other family unit members (not prorated).	Derived as the sum of individual earnings, self-employed income, capital income and the balance between the transfers received from non-profit institutions and other households and the transfers paid to non-profit institutions and other households.	Derived as follows: Monthly gross household income (fihhmngrs_dv) net of monthly public transfers (fimnsben_dv) are subtracted. The resulting amount is multiplied by 12. **fihhmngrs_dv:** Total household gross income in the month before the interview. It is the sum of gross monthly incomes from all household members (including proxies and within household non-respondents). **fimnsben_dv**: includes receipts reported in income record where w_ficode equals [1] "state retirement (old age) pension", [5] "a widow's or war widow's pension", [6] "a widowed mother's allowance / widowed parent's allowance", [7] "pension credit (includes guarantee credit & saving credit)", [8] "severe disablement allowance", [9] "industrial injury disablement allowance", [10] "disability living allowance", [11] "attendance allowance", [12] "carer's allowance (formerly invalid care	Derived as the sum of individual earnings, self-employed income (including goods produced for own consumption), capital and property income, as well as the transfers received from employment-related social insurance schemes, non-profit institutions and other households.

	EU-SILC	PSID	HILDA	BHPS-UKHLS	CASEN
				allowance)", [13] "war disablement pension", [14] "incapacity benefit", [15] "income support", [16] "job seeker's allowance", [18] "child benefit (including lone-parent child benefit payments)", [19] "child tax credit", [20] "working tax credit (includes disabled person's tax credit)", [21] "maternity allowance", [22] "housing benefit", [23] "council tax benefit", [30] "foster allowance / guardian allowance", [31] "rent rebate (NI only)", [32] "rate rebate (NI only – offset against rates)", [33] "employment and support allowance", [34] "return to work credit", [36] "in-work credit for lone parents", [37] "other disability related benefit or payment", [39] "income from any other state benefit (not asked in Wave 1), [40] "universal credit" (from Wave 4), [41] "personal independence payments" (from Wave 4). This is assumed to be reported net of tax.	

Notes: [1] See: https://www.ons.gov.uk/methodology/classificationsandstandards/standardoccupationalclassificationsoc/soc2010; [2] Although the variable is included in the dataset, it could not be used in the analysis because the information is only available for younger generations. This limitation stems from the variable's retrospective nature and short time series.

Notes

[1] The activities of the *OECD Observatory on Social Mobility and Equal Opportunity* are organised around three main objectives: *(i)* collecting new data and improving the measurement of social mobility and equal opportunity to better understand their drivers; *(ii)* providing insight on the challenges to social mobility and equal opportunity and the policies that can effectively address them; and *(iii)* analysing the role played by civil society and the private sector in fostering equal opportunity and how to effectively align it with policy action. Under the Observatory, the OECD has also deepened the analysis of the political economy dimensions of social mobility and equal opportunity highlighted in OECD (2018[1]). In doing so, it has collected and analysed data on public perceptions, attitudes and preferences relating to equal opportunity, notably through the Opportunities module in the 2022 wave of the *OECD Risks that Matter* cross-national survey (OECD, 2023[8]; 2023[80]; 2024[79]). Further OECD analysis has confirmed the important role that public perceptions and attitudes towards inequality play in shaping policy preferences. It has also underlined the valuable insights that can be drawn from the comparison between "objective" measures of actual inequality and "subjective" measures of perceived inequality (OECD, 2025[15]; 2021[81]). More information on the *OECD Observatory on Social Mobility and Equal Opportunity* can be found here: https://www.oecd.org/en/about/programmes/observatory-on-social-mobility-and-equal-opportunity.html

Important innovations in data collection and analysis have also taken place outside the OECD. For example, the *Global Estimates of Opportunity and Mobility* (GEOM) project provides comparable cross-country evidence and data visualisation on inequality of opportunity and its drivers. As such, it constitutes a useful resource that can contribute to inform policy debates and public perceptions. More information on the GEOM project can be found here: https://geom.ecineq.org/

[2] Both of these analytical extensions correspond to priority areas identified in the programme of work of the OECD *Observatory on Social Mobility and Equal Opportunity* (Balestra and Ciani, 2022[78]).

[3] The prediction of parental income rests in turn on a series of hypotheses and assumptions which may potentially affect accuracy. One of the advantages of the measure presented in this chapter is that it does not require any modelling of parental income and avoids thereby one potential source of bias in the results.

[4] This holds whether the analysis focuses on comparing outcomes from an intergenerational perspective (i.e., comparison between an individual's outcome and that of their parents) or from an intragenerational perspective (i.e., comparison of an individual's outcome over their life course).

[5] Recent OECD research has sought to provide a more realistic understanding of the role that perceptions of and attitudes towards inequality play in the formation of policy preferences (OECD, 2025[15]; 2021[81]). In doing so, it has highlighted *(i)* the potential gaps that may emerge between actual inequality as measured by outcome-based indicators and perceived inequality as measured by survey data; and *(ii)* the crucial importance of the latter in driving public support for policy and political behaviour. The literature on political discontent has notably underlined the case of the Arab Spring of 2010-2012 as a recent topical example illustrating these points. In many of the countries affected, the uprisings took place in a context where income inequality was moderate and declining, but dissatisfaction with a perceived lack of economic opportunities and lack of fairness of public institutions was growing (Devarajan and Ianchovichina, 2017[63]; Verme, 2014[64]).

[6] "Luck" can be broadly understood as covering circumstances and factors that are not chosen by individuals, but affect their prospects for success in a way that leads to differences in outcomes which are

not compatible with equal opportunity. This includes, for example, inherited traits or resources, such as parental wealth and education, and essential characteristics that are not chosen by individuals but may affect their opportunities and outcomes, such as their ethnic and racial origin or place of birth. "Effort" can be broadly understood as covering circumstances and factors that are attributable to individuals' freely-made and responsible choices, do not imply differential prospects for success and allow for equal opportunity though they may lead to unequal outcomes. This includes elements over which individuals can be deemed to have direct control, such as, for example, hard work and their level of effort per se. It also includes "accidental" outcomes which may nonetheless be considered fair because they result from an individual's freely-made and responsible choices, such as, for example, the outcomes of deliberate gambles and their level of risk-taking. Further moral distinctions apply to these different types of "effort". In the former case, "effort" (strictly understood) is generally assessed in terms of merit. In the latter case, "effort" (broadly understood) is generally assessed in terms of fortune. For a more in-depth discussion of the distinction between "luck" and "effort", see for example Hirose (2015[66]) and Butt (2012[65]).

[7] In a review of its work on education policy, Bøyum (2014[77]) finds that the OECD's approach to "fairness in education" has been consistently underpinned by a similar and often implicit principle centred around equal opportunity. Bøyum (2014[77]) argues that this approach is notably visible in the OECD's analysis of the relation between socio-economic background and educational outcomes, as well as the role of education policy in addressing gaps in these outcomes. Bøyum (2014[77]) also calls for greater and more explicit links to be made between the OECD's approach to "fairness in education" and its analysis of other forms of inequality. The methodology and conceptual background presented in this report can contribute to do so.

[8] The value of this type of analysis and comparison between objective and subjective measures has notably been demonstrated in the case of income inequality (OECD, 2021[81]) and of intergenerational income mobility (Alesina, Stantcheva and Teso, 2018[16]). It can notably contribute to shed light on *(i)* the extent to which public perceptions are aligned or not with actual measures of social mobility; and *(ii)* the impact that changing patterns of social mobility are having on public attitudes, such as belief in meritocracy, and on the broader political economy. Reflecting this, the robustness of the proposed measure is tested against some commonly used perceptual indicators in Chapter 2.

[9] The current debate on the policy implications of inequality of opportunity in China, spurred by recent survey data showing significant changes in public perceptions and attitudes, provides a topical illustration of this (Yang, Liu and Li, 2025[69]; Rozelle, Alisky and Whyte, 2024[67]). For evidence on the broader empirical link between social mobility and socio-political stability, see Houle (2017[68]).

[10] Despite the large set of outcomes considered by the literature and recent attempts to account for the multi-dimensional nature of inequality of opportunity, most research treats each dimension independently, neglecting interdependencies (Kobus, Kapera and Peragine, 2020[70]).

[11] The ideal dataset would contain several years of income, both for individuals and their parents, preferably observed at mid-career. However, these data are not easily obtainable and most studies have therefore used single-year measures as proxies for lifetime income instead. While estimates of inequality of opportunity based on current income may be potentially biased, Aaberge, Mogstad and Peragine (2011[71]) show that analyses drawing on snapshots of income can approximate results based on lifetime income by using panel data from Norway on individuals' incomes over their working life span.

[12] Such as under-reporting, small sample sizes and declining response rates.

[13] These unobserved "circumstances" may include, for instance, IQ and genetic endowments, parenting styles, the extent and quality personal networks and social connections.

[14] That is, income from market sources (i.e., the wage and salary income of the household members, excluding employers' contributions to social security, but including publicly-funded sick pay, self-employment income, as well as capital and property income streams) net of public cash transfers and household taxes and adjusted by the square root of the household size. Negative or nil market incomes are set to 1.

[15] Section 4.2.2 in Chapter 4 compares inequality of opportunity for market income and disposable income as a way to assess the effectiveness of tax and benefit systems in reducing inequality of opportunity and ensuring a more level playing field.

[16] Section 2.3 in Chapter 2 complements this analysis by offering estimates of inequality of opportunity based on individual earnings when looking at gender dimensions.

[17] Issues of data availability and comparability remain a significant constraint for the cross-country analysis of inequality of opportunity and impose trade-offs. For example, detailed information on country of birth may be available for some countries and in some years. However, one of the main sources of data used in this report – the Eurostat *European Statistics on Incomes and Living Conditions Survey* (EU-SILC) – uses broader and highly specific categories (i.e., by asking whether an individual was born in their current country of residence, in another EU country or in a country outside the EU), limiting comparability to a simple born inside the country/born outside the country dummy (See Annex Table 1.B.1). Furthermore, accuracy of measurement may require that certain variables be collapsed at the expense of finer-grained detail. For instance, the United States has used different job classifications over time. Collapsing job categories and using an aggregate classification of occupation is likely to improve confidence in the results obtained by avoiding problems and potential biases that may occur in translating these classifications.

[18] Although country of birth is treated as a circumstance in this analysis, the nature of the choices involved implies a more nuanced and less dichotomous understanding of this factor. In many cases, it can safely be assumed that, for a significant proportion of individuals born outside the country of residence, their status reflects a conscious decision to relocate (for instance, for work-related or personal reasons) and therefore a degree of agency. However, this decision itself may frequently be constrained by factors such as limited opportunities or social inequality in the country of birth. As a result, the decision to migrate or change country can be more accurately described as a response to external pressures, rather than as a purely free choice. In the country of destination, foreign-born individuals may still encounter systemic barriers such as discrimination or restricted access to services, which impact their opportunities. The case of forced migration, driven by factors such as conflict, economic crises or environmental disasters, underlines to an even greater extent the fact that the country of residence is not always a matter of voluntary choice or a factor over which individuals have significant control. The age at which an individual moves to a new country introduces additional nuances. Migrating as a child, often as a result of a household decision, presents different challenges and opportunities compared to moving as an adult, when an individual is more likely to have a say and may have already established certain skills or networks. These factors further complicate the analysis of the role played by country of birth in determining life outcomes. Overall, while it recognises the complexities attached to this factor and differences between cases, for the purpose of the analysis this report considers country of birth as a circumstance when measuring inequality of opportunity, based on the fact that in many cases it reflects conditions beyond an individual's control.

[19] In most countries, retrospective information refers to the respondent's situation at age 14. However, in some cases, the reference age is 15 or 16. For further details, see Annex Table 1.B.1.

[20] In line with most research, age is not included in the set of circumstances. Instead, it is examined separately in Section 2.3, with a focus on the level of inequality of opportunity across birth cohorts and throughout the life-course.

[21] Not all the circumstances listed for 2019 are available for every country included in the analysis. For details on country-specific availability see Annex Table 1.B.1 and the note to Figure 2.1 in Chapter 2.

[22] Tree construction involves recursive binary splitting based on the most influential circumstance variables, chosen via permutation tests. While effective, single trees may suffer from sensitivity to data variations, non-linear assumptions, and underutilisation of circumstances not selected for splits. The use of random forests addresses these issues by averaging predictions across multiple trees and taking random subsets of the total population (and by limiting the splits to a random subset of circumstances), which enhances the robustness and predictive power of the model. The fact that machine learning techniques can help address certain sources of bias does not imply however that they are always preferable to other methods or that researchers should seek to avoid making choices regarding the modelling and design of the analysis. For example, applied knowledge of national contexts and their specificities may be needed in order to identify and select the relevant circumstances that may affect opportunities and help explain differences in outcomes.

[23] See Niehues and Peichl (2014[72]) and Carranza (2023[73]) for an attempt to estimate the upper bounds of inequality of opportunity, using fixed effects models applied to panel data.

[24] Some empirical evidence from Sweden on the intergenerational transmission of beliefs suggests that parents tend to emphasise the value of effort when teaching their children about the relative importance of luck and effort in determining life outcomes. Interestingly, this tendency is largely independent of parents' own beliefs (in a "bootstrapping effect") and widely shared, with only limited differences in terms of parents' gender and level of income and education (Gärtner, Möllerström and Seim, 2023[74]).

[25] Roemer and Trannoy (2016[26]) state for example that males should not be considered "disadvantaged with respect to females if, due to innate biological factors, their life expectancy is shorter [on average]". Evidence suggests that a similar specific view of age may also be prevalent in public attitudes and corporate practices. In this respect, a recent study covering 5 European countries found that only 8% of companies surveyed included age among the grounds covered by their diversity strategies (PwC, 2023[76]).

[26] Nybom and Stuhler (2024[75]) provides an illustration of this through the study of the long-term and differentiated impact on mobility trends of an education reform in Sweden.

[27] In some cases, retrospective questions may not be available, but the panel component of some of the surveys included in the analysis allows for the collection of information on specific childhood environment factors.

2. Levels and trends in inequality of opportunity: How fairly are opportunities distributed in OECD countries?

This chapter applies the measure developed in Chapter 1 to a large subset of OECD Member and accession countries for which comparable data are available. It assesses levels and recent trends in inequality of opportunity across these countries. The chapter also provides evidence on *which circumstances matter most* as determinants of economic opportunity. In order to do so, it analyses the relative importance of different key inherited and individual factors (e.g., country of birth, parents' socioeconomic status, family composition at age 14…) in shaping income. Furthermore, the chapter considers *for whom these circumstances matter* by looking at the way in which opportunities vary across different population groups, with a specific focus on generational differences and differences between men and women.

2.1. Analysis of levels and trends in inequality of opportunity

2.1.1. Levels and trends in inequality of opportunity in OECD countries

This chapter presents and discusses new evidence on inequality of opportunity across a large subset of OECD countries, based on the measure developed in this report (see Chapter 1). The analysis in this chapter covers 29 OECD Member countries and 3 accession countries.[1] While the estimates are based on different data sources and questions (see Annex 1.B for further detail), efforts have been made to enhance ex post cross-country comparability. The chapter is organised as follows. Section 2.1 presents the observed levels and trends in inequality of opportunity across the OECD countries studied. Section 2.2 examines the relative importance of different circumstances (e.g., parents' socioeconomic status, family composition…) in shaping opportunities. Section 2.3 analyses the variation in opportunities across different population groups, with a focus on generational differences and differences between men and women. Finally, Section 2.4 provides a summary of the chapter's key findings.

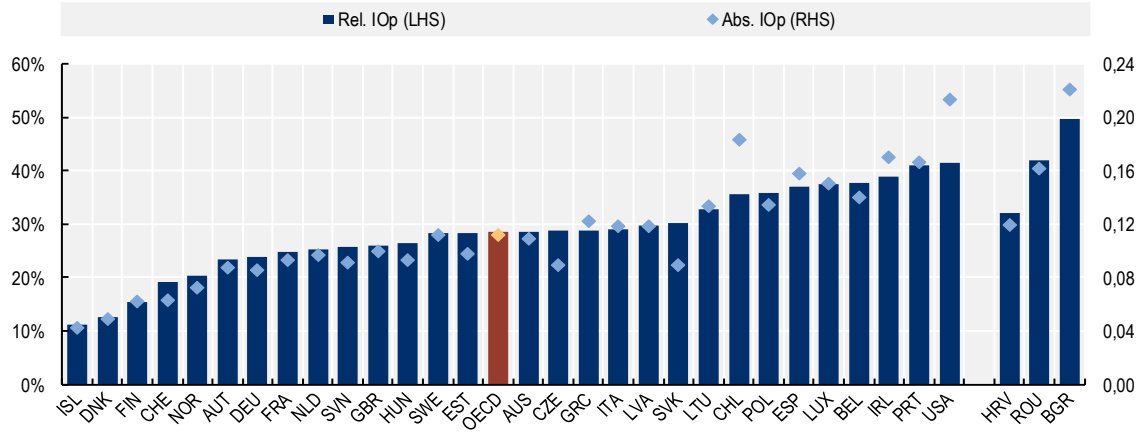
On average, across the OECD, over a quarter *at least* of today's inequality in household market income can be attributed to circumstances beyond people's control, such as their sex and country of birth or their parents' socio-economic background (see bars in Figure 2.1).[2] This suggests that a significant share of income disparity is shaped by factors that individuals inherit rather than by factors that reflect their own efforts or merit. This result confirms the persistent influence of socio-economic background on life outcomes, as highlighted in previous OECD work (OECD, 2018[1]). In doing so, it underlines the importance of effective policy responses to promote opportunities and ensure a more level playing field. As discussed in the chapter, it also points to the role that societal attitudes have to play in achieving these goals.

There is considerable variation across OECD countries in terms of the extent of inequality of opportunity. Switzerland and several Nordic countries have the lowest levels of relative inequality of opportunity, with shares below 15%. By contrast, inequality of opportunity tends to be higher in Southern and Eastern Europe, as well as some non-EU countries. In countries including Belgium, Chile, Ireland, Luxembourg, Poland, Portugal, Spain and the United States, the share is above 35% of total income inequality. These results are in line with previous estimates (Brunori, Hufe and Mahler, 2023[2]). Country rankings remain largely consistent when moving from relative levels of inequality of opportunity (represented by bars in Figure 2.1) to absolute levels of inequality of opportunity (represented by diamonds) – that is, the level of inequality that would prevail in a given country if outcomes were determined *only* by the set of circumstances measured.[3]

While absolute and relative inequality of opportunity tend to be aligned, discrepancies may nonetheless be observed for countries with comparatively high or low levels of income inequality. For instance, some countries with higher-than-average market income inequality (e.g., the United States and Chile) exhibit lower relative inequality of opportunity than would be expected based on their absolute levels. Conversely, some countries with lower-than-average market income inequality (e.g., Czechia and the Slovak Republic) display comparatively higher levels of relative inequality of opportunity than expected based on absolute levels. What these latter cases show is that, where income disparity is low, even modest levels of absolute inequality of opportunity may represent a large share of total inequality. This in turn will translate into high levels of relative inequality of opportunity. These differences underline the value of considering absolute *and* relative measures when assessing inequality of opportunity.[4] Taking account of both type of measure offers a more balanced view of the intergenerational transmission of advantage and disadvantage. It can also help identify priority areas for policy intervention – a point further illustrated in the discussion of trends below.

Figure 2.1. Inequality of opportunity in household market income varies greatly in OECD countries

Relative and absolute inequality of opportunity, individuals aged 25-59, by country, 2019 or latest available year



Note: LHS: left-hand side axis. RHS: right-hand side axis. Estimates refer to 2019 except for the United Kingdom (2023), Australia and the United States (2021), Iceland (2011) and Chile (2009). Bars refer to the share of inequality of opportunity in total inequality (%, LHS), while diamonds refer to absolute inequality of opportunity (measured as the Gini index of the counterfactual distribution on a 0-1 scale, RHS). Countries are ranked in ascending order of relative inequality of opportunity. Estimates are based on a large set of circumstances, including the respondent's sex and country of birth, the country of birth of the respondent's parents, the presence of parents at age 14, the parents' educational level and occupation when the respondent was 14, as well as the household's homeownership status when the respondent was 14 and the degree of urbanisation of the area where the respondent lived at age 14. Estimates for Australia, Chile and the United Kingdom do not control for homeownership status; estimates for Australia, Iceland and Slovenia do not control for degree of urbanisation; estimates for Chile do not control for the country of birth of the respondent's parents. In the case of the United States, the sample is restricted to household heads and their partners; homeownership status at 14 is measured directly using the panel component of the survey and is not based on a retrospective question. 'OECD' is the simple average of the OECD countries displayed in the chart.

Source: OECD calculations based on the *European Union Statistics on Income and Living Conditions* (EU-SILC), https://ec.europa.eu/eurostat/web/microdata/european-union-statistics-on-income-and-living-conditions; the *Household, Income and Labour Dynamics in Australia* (HILDA) Survey, https://melbourneinstitute.unimelb.edu.au/hilda; the *UK Household Longitudinal Study* (UKHLS), https://www.understandingsociety.ac.uk/; the *US Panel Study on Income Dynamics* (PSID), https://simba.isr.umich.edu/data/data.aspx; and the *Encuesta de Caracterización Socioeconómica Nacional* (CASEN), https://observatorio.ministeriodesarrollosocial.gob.cl/encuesta-casen.

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National averages may hide significant within-country differences in the distribution of opportunities and resulting inequality. While most of the available sub-national evidence focuses on the experience of the United States (Chetty et al., 2014[3]), Box 2.1 extends the analysis of inequality of opportunity to a subset of OECD countries. The large variation in regional levels of inequality of opportunity depicted in Figure 2.2 and Figure 2.3 reflects economic differences, as well as differences in the degree of regional autonomy in education and health policy. As discussed in Chapter 3, regions and places with stronger economies often have more resources and therefore greater means to improve access to quality public services.

Box 2.1. Going beyond national averages

As discussed at greater length in Chapter 3 of this report, geographic location is an important source of inequality of opportunity. Local contextual factors – and differences between them across regions, but also within cities – play an important role during childhood and continue to affect people's opportunities over the life-cycle through their access to public services and job, training and digital opportunities. If people were able to freely move without constraint and according to their preferences, geographic differences

would be the result of residential self-selection: people would live where locally available facilities and resources suit their preferred lifestyle. However, several factors – including high housing prices and family ties – often limit people's ability to move to areas with better opportunities, thereby constraining the extent to which geographic mobility can help overcome spatial inequalities.

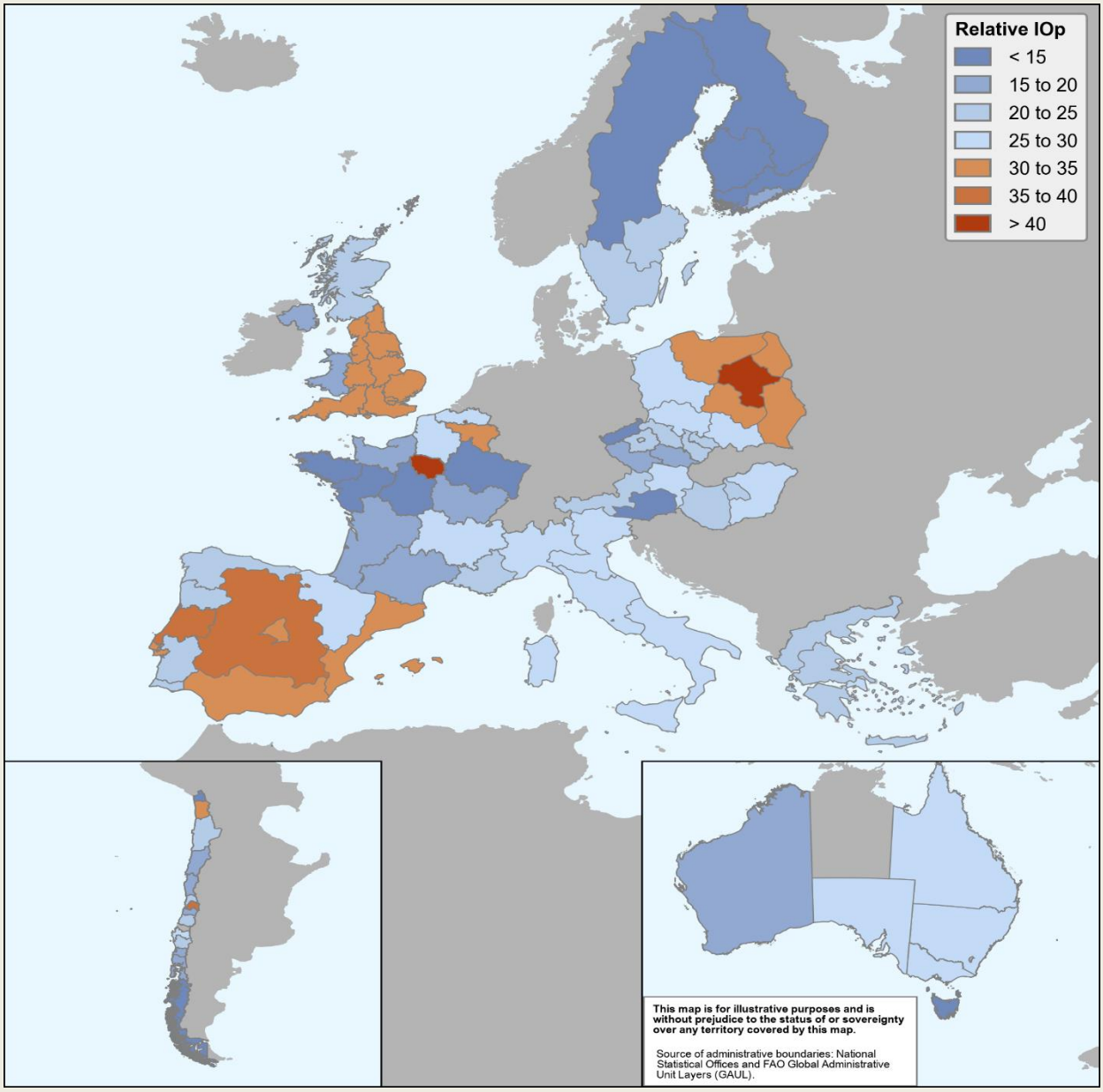
Within-country comparisons are therefore important for informing policy decisions and for monitoring, as they can help identify where the key barriers lie and which local factors need to be targeted as a priority. Ideally, the analysis would draw on a very fine-grained territorial grid (possibly down to the neighbourhood-level). However, data sources are rarely designed to allow for such granular territorial disaggregation. Additionally, the focus should be on the place of residence during childhood, not only because children have no control over where they grow up, but also due to the "dosage effect" described in Chetty and Hendren (2018[4]). This effect posits that the younger children are when they move to a high-opportunity area, the stronger their chance of moving up the income ladder as adults. In practice, however, retrospective questions available in large and comparable surveys typically do not include information on the place of residence at age 14. While the analysis below highlights regional variation in inequality of opportunity, it is important to note that a change in the territorial framework could yield different results. This is because the influence of location on opportunities varies depending on the context – e.g., the neighbourhood level may be more relevant than the regional level when it comes to analysing access to education.

Figure 2.2 shows differences in levels of relative inequality of opportunity within regions for countries with available geographical information. The geographical grid used varies depending on the size of the regional samples. Although the estimates are computed for the *current* region of residence, the latter can serve as a proxy for the place of residence at age 14. Even though the region of residence in adulthood is typically a matter of choice, many people stay close to their birthplace throughout their adult life, as noted in Chapter 3, and internal mobility has been declining in a number of OECD European countries (Alvarez, Bernard and Lieske, 2021[5]).

Figure 2.2 reveals significant cross-country differences in regional inequality of opportunity, which points to the role played by factors operating at territorial level. Inequality of opportunity is particularly high in several Spanish and Polish regions, reflecting the relatively high national levels in these countries. It is also pronounced in the French regions of Ile de France, Hauts-de-France and Auvergne-Rhône-Alpes, as well as in the Brussels-Capital region in Belgium. Generally, larger European countries exhibit wider cross-regional disparities, with the exception of Belgium where relative inequality of opportunity in the Brussels-Capital region is nearly double that in Flanders. In Figure 2.2 each region is considered as a separate jurisdiction. An analysis of the way in which opportunities are distributed between regions can shed light on the importance of geographic location relative to other key determinants of inequality of opportunity.

Figure 2.2. Geographical variation in inequality of opportunity can be large within countries

Relative inequality of opportunity (as a % of total inequality right vertical axis), by region, selected OECD countries, 2019



Note: Estimates of relative inequality of opportunity in household equivalised market income are based on a restricted set of circumstances, including the respondent's sex and country of birth, the country of birth of the respondent's parents (except for Chile), their educational level and occupation when the respondent was 14, and their presence in the household when the respondent was 14. Estimates refer to individuals aged 25 to 59 and are reported at the macro-region level, except for Australia, Chile, Czechia, Finland, France and Portugal, where they are reported at the TL2 level (see: https://www.oecd.org/en/data/datasets/oecd-geographical-definitions.html). Estimates for Chile refer to 2009.

Source: OECD calculations based on the *European Union Statistics on Income and Living Conditions* (EU-SILC), https://ec.europa.eu/eurostat/web/microdata/european-union-statistics-on-income-and-living-conditions; the *Household, Income and Labour Dynamics in Australia* (HILDA) Survey, https://melbourneinstitute.unimelb.edu.au/hilda; the *UK Household Longitudinal Study* (UKHLS), https://www.understandingsociety.ac.uk/; and the *Encuesta de Caracterización Socioeconómica Nacional* (CASEN), https://observatorio.ministeriodesarrollosocial.gob.cl/encuesta-casen.

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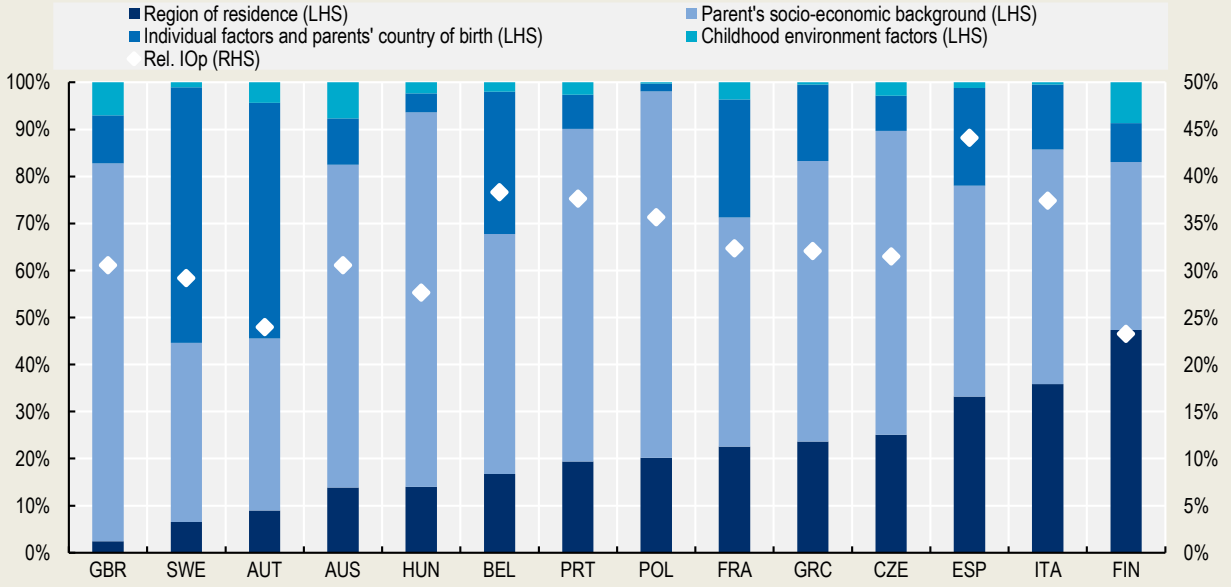
In Figure 2.3, the region of residence is also considered when measuring inequality of opportunity. Although this analysis is exploratory and limited to a selection of countries with large regional samples, it highlights the critical role that territorial factors play in shaping inequality of opportunity. When including region of residence among the set of circumstances, levels of relative inequality of opportunity increase significantly in some countries. For instance, in Finland, France, Italy and Spain, the level rises by over 8 percentage points, compared to the baseline scenario in which region of residence is not considered. Moreover, in terms of relative importance, the effect of region of residence in France is comparable to the combined effect of individual factors and parents' country of birth, and in Finland it exceeds the effect of parental background (Figure 2.3). See Section 2.2 below for further analysis and discussion of the role of different circumstances.

Figure 2.3. The region of residence has a significant impact on inequality of opportunity

Relative inequality of opportunity (% of total inequality, diamonds, RHS) and Shapley-Shorrocks decomposition of the relative (predictive) importance of different circumstances (%, LHS), 2019



Note: LHS: left-hand side axis. RHS: right-hand side axis. White diamonds (right vertical axis) represent the level of relative inequality of opportunity in household equivalised market income (Rel. IOp) resulting from the respondent's sex and country of birth (individual factors), the country of birth of the respondent's parents, the parents' educational level and occupation when the respondent was 14 (parent's socio-economic background), as well as their presence in the household when the respondent was 14 (childhood environment factors) and the respondent's current region of residence as defined in Figure 2.2.

Source: OECD calculations based on the *European Union Statistics on Income and Living Conditions* (EU-SILC), https://ec.europa.eu/eurostat/web/microdata/european-union-statistics-on-income-and-living-conditions; the *Household, Income and Labour Dynamics in Australia* (HILDA) Survey, https://melbourneinstitute.unimelb.edu.au/hilda; the *UK Household Longitudinal Study* (UKHLS), https://www.understandingsociety.ac.uk/; and the *Encuesta de Caracterización Socioeconómica Nacional* (CASEN), https://observatorio.ministeriodesarrollosocial.gob.cl/encuesta-casen.

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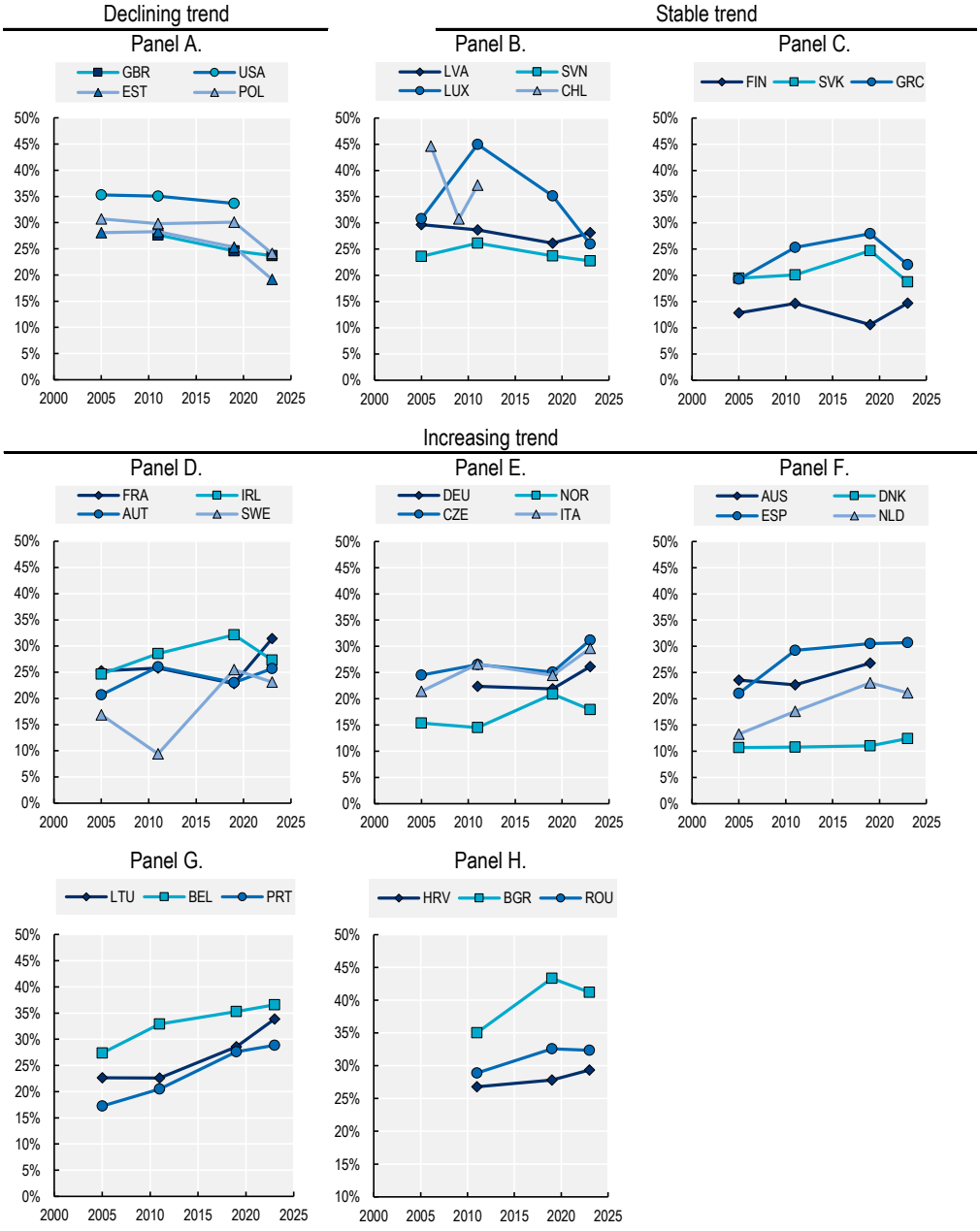
It is important to consider both inter-regional and intra-regional inequality when assessing the distribution of opportunities at the sub-national level. Italy is an interesting case in point. Although inequality of opportunity within regions is more uniform in Italy than in other countries that exhibit similar or even lower levels of inequality of opportunity, such as France (see Figure 2.2), the disparity between Italian regions is significant. This is reflected in the substantial impact that the respondent's current large region of residence has on inequality of opportunity.

Figure 2.4. Across countries, inequality of opportunity in household market income has converged towards a higher average level

Relative inequality of opportunity (% of total inequality), individuals aged 25-59, by country and year



Note: Estimates of relative inequality of opportunity (IOp) in household equivalised market income are computed on a restricted set of circumstances, including the respondent's sex and country of birth, the educational level of the respondent's parents, and their presence in the household when the respondent was 14. Countries are grouped based on how IOp has changed over time (using correlation between level of IOp and years). Panel A includes countries where IOp has decreased. Panels B and C include countries where IOp has remained around the same level. Panels D to G include countries where IOp has increased. Panel H includes OECD accession countries.

Source: OECD calculations based on the *European Union Statistics on Income and Living Conditions* (EU-SILC), https://ec.europa.eu/eurostat/web/microdata/european-union-statistics-on-income-and-living-conditions; the *Household, Income and Labour Dynamics in Australia* (HILDA) Survey, https://melbourneinstitute.unimelb.edu.au/hilda; the *UK Household Longitudinal Study* (UKHLS), https://www.understandingsociety.ac.uk/; the *US Panel Study on Income Dynamics* (PSID), https://simba.isr.umich.edu/data/data.aspx; and the *Encuesta de Caracterización Socioeconómica Nacional* (CASEN), https://observatorio.ministeriodesarrollosocial.gob.cl/encuesta-casen.

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Trends in relative inequality of opportunity vary considerably across OECD countries. Recent patterns suggest a general convergence towards higher levels. While available data do not allow for long-run cross-country comparisons,[5] Figure 2.4 shows that countries where relative inequality of opportunity has increased, such as Austria, the Netherlands, Portugal, Spain and some of the Nordic countries, also tended to start from lower initial levels – typically below 30% of total inequality in the mid-2000s (see Panels D to G). Conversely, countries that experienced a decline in inequality of opportunity tended to start from higher baseline levels, as can be seen for Estonia, Poland, the United Kingdom and the United States (Panel A). Overall, this has translated into a general upward convergence in inequality of opportunity across countries.[6] Specifically, the median increase in inequality of opportunity is of 7 percentage points, compared to a median decrease of 3 percentage points. As a result, on average, relative inequality of opportunity is higher today than it was 20 years ago.

Available country data on long-term trends suggest that inequality of opportunity is affected both by cyclical and structural factors. The short-term trends observed here may illustrate how cyclical factors, such as economic crises and their policy responses, can influence existing inequalities of opportunity. Research focusing on the role played by the Global Financial Crisis also provides evidence suggesting that it has had a significant impact on trends in inequality of opportunity, particularly by affecting the most vulnerable segments of society. For instance, Brzezinski (2015[6]) confirms an overall increase in inequality of opportunity in Europe in the immediate aftermath of the Global Financial Crisis, while highlighting strong regional differences. Looking at its effects on vulnerable populations, Brzezinski (2015[6]) notably finds that in Belgium, which experienced a significant increase in inequality of opportunity between 2005 and 2011, the relative position of migrants deteriorated even further over that period, despite already being among the worst-off prior to the crisis.

Research on the medium- to long-term evolution of inequality of opportunity has been conducted in a small number of countries where data are available. These data confirm that intergenerational mobility is also influenced by structural changes. For example, the decline in intergenerational mobility observed in Denmark since the late 1950s can be attributed primarily to demographic changes, including an increase in single parenthood and delayed childbearing among higher-income parents. These factors have had a negative impact on mobility. Delayed childbearing allows parents to accumulate more financial resources and stability, enabling greater investments in their children's education and well-being. Furthermore, wealthier parents tend to have fewer children overall, allowing for a more concentrated allocation of resources and attention, which enhances the developmental outcomes of their children. These disparities in investment between higher- and lower-income families also widen gaps in educational outcomes by socio-economic background, thereby entrenching inequality across generations. As an additional element to consider, changes in work experience and in economic policies may have contributed to further disadvantage low-income families (Harding and Munk, 2019[7]).

Intergenerational mobility also depends on how income and skills are distributed among the parents' generation. While the initial impact of a change in social and demographic dynamics may not be significant for the first generation, its effects can become stronger and more significant for future generations (Harding and Munk, 2019[7]). For instance, a shift towards a more meritocratic society – where the influence of one's own skill and effort becomes more important relative to that of parental background – will benefit talented children from poor families. However, while mobility increases in the first generation affected, it is likely to decline again in subsequent generations if the more highly rewarded skills of the upwardly mobile are passed on to their children.

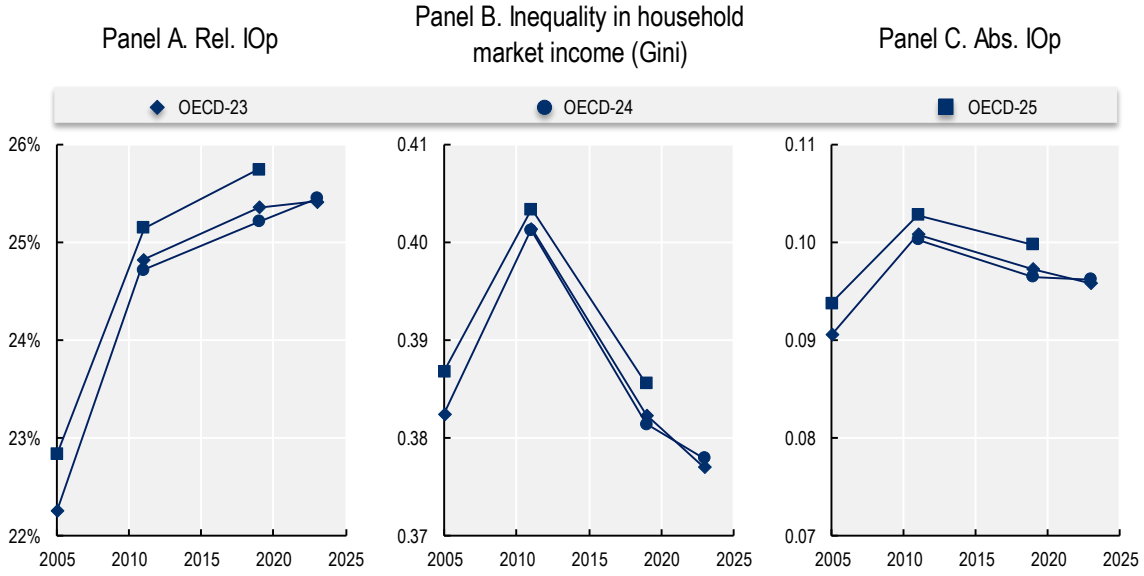
Also of interest, the observed increase in the average level of inequality of opportunity across OECD countries has come at a time when inequality of outcomes has tended to fall. A decomposition of inequality trends suggests that inequality of outcomes and inequality of opportunities have diverged in the period following the Global Financial Crisis (see Figure 2.5). Different dynamics can be observed when comparing trends in income inequality (Panel B) and in absolute inequality of opportunity (Panel C) over this period. Both measures rose markedly in the immediate aftermath of the crisis. However, the rate at

which they have declined from their post-crisis peak has differed significantly. Whereas income inequality quickly returned to pre-crisis levels and continued to decline, the decrease in absolute levels of inequality of opportunity from peak levels has been more gradual and limited. As a result of these divergent trends, relative levels of inequality of opportunity have risen (Panel A), suggesting that, overall, the role of inherited circumstances in shaping outcomes has increased and continues to increase despite the observed fall in inequality of outcomes. These results confirm previous OECD research which indicated a long-term decline in equality of opportunity.[7]

Further research is needed to explain the different dynamics observed in the recovery between inequality of outcomes and inequality of opportunity. Possible explanations could include the following. The post-crisis job recovery may have helped reduce income inequality without addressing the structural barriers affecting opportunities. Furthermore, the stabilisation policies put in place during the crisis may have been effective in supporting income and limiting disparities in outcomes but may have placed less emphasis on longer-term measures to promote opportunities, such as investment in education. Alternatively, rising inequality of opportunity may primarily reflect the effects of long-term structural trends that are largely independent of the post-crisis recovery, such as digitalisation and changing patterns in employment.

Figure 2.5. Inequality in household market income and inequality of opportunity have diverged following the Global Financial Crisis

Relative inequality of opportunity (% of total inequality) (Rel. IOp, Panel A), Gini at household market income (Panel B) and absolute inequality of opportunity (Abs IOp, Panel C), individuals aged 25-59, OECD average



Note: Estimates of inequality of opportunity in household equivalised market income are computed on a restricted set of circumstances, including the respondent's sex and country of birth, the educational level of the respondent's parents, and their presence in the household when the respondent was 14. The Gini index at household market income is calculated on the same underlying micro-data used to compute inequality of opportunity and may therefore differ from the estimates of the *OECD Income Distribution Database*. OECD-23 includes Austria, Belgium, Czechia, Denmark, Estonia, Finland, France, Greece, Hungary, Ireland, Italy, Lithuania, Luxembourg, Latvia, the Netherlands, Norway, Poland, Portugal, the Slovak Republic, Slovenia, Spain, Sweden and the United Kingdom; OECD-24 also includes Germany; while OECD-25 also includes Australia and the United States, but excludes Germany.

Source: OECD calculations based on the *European Union Statistics on Income and Living Conditions* (EU-SILC), https://ec.europa.eu/eurostat/web/microdata/european-union-statistics-on-income-and-living-conditions; the *Household, Income and Labour Dynamics in Australia* (HILDA) Survey, https://melbourneinstitute.unimelb.edu.au/hilda; the *UK Household Longitudinal Study* (UKHLS), https://www.understandingsociety.ac.uk/; and the *US Panel Study on Income Dynamics* (PSID), https://simba.isr.umich.edu/data/data.aspx.

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Box 2.2. Long-term trend in inequality of opportunity: The case of the United States

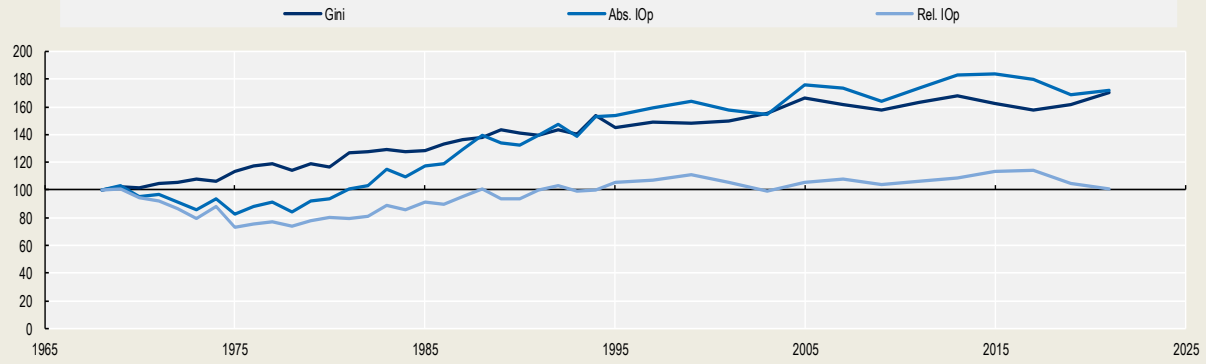
The *Panel Study of Income Dynamics* (PSID) is the longest-running longitudinal household survey in the world (see Annex 1.B for more detail). It provides a consistent and reliable source of information for monitoring the evolution of inequality in outcomes and opportunity over an extended period of time. The PSID has helped document the long-term rise in income inequality in the United States, as covered extensively in the economic literature (Saez and Zucman, 2020[8]).

Income inequality has been on a consistent upward trajectory since the late 1960s, peaking in the mid-2000s and remaining stable over the following decades. Prior to the mid-1970s, inequality of opportunity was declining, even as income inequality continued to rise. However, from the mid-1980s onwards, income inequality and absolute inequality of opportunity have increased in parallel and at a similar pace. This resulted in a period where relative inequality of opportunity remained stable (see Figure 2.6).

Part of the observed evolution in inequality of opportunity may reflect long-term developments in income mobility between groups, which have been shaped by major historical events. For example, mobility increased significantly among individuals born between the 1910s and 1940s, with the narrowing of Black-White income gaps accounting for approximately half of this improvement (Jácome, Kuziemko and Naidu, 2021[9]). This rise in mobility coincided with the Great Northward Migration, during which around 6 million African Americans relocated from rural Southern states to other regions of the United States over the periods 1910-1940 and 1945-1970 (Kelly-Hall and Ruggles, 2004[10]). However, mobility trends for cohorts born after the 1940s are less clear and more complex to interpret. While a short-term improvement was observed in the late 1960s, possibly related to the 1964 Civil Rights Act, it is important to note that race is not included among the circumstances used to estimate inequality of opportunity in Figure 2.6.

Figure 2.6. Over the past half century in the United States, inequality in household market income and inequality of opportunity have tended to rise hand in hand

Household market income inequality (Gini) and absolute (Abs. IOp) and relative (Rel. IOp) measures of inequality of opportunity in household market income in the United States, individuals aged 25-59, 1968 = 100



Note: Estimates of inequality of opportunity in household equivalised market income are based on the following circumstances: the respondent's sex and country of birth; the country of birth of the respondent's parents; the presence of parents at age 14; the parents' educational level and occupation when the respondent was 14; the degree of urbanisation of area where the respondent lived at age 14; and the household's homeownership status when the respondent was 14 (measured directly using the panel component of the survey). The sample is restricted to household heads and their partners. The Gini index at household market income is calculated on the same underlying micro-data used to compute inequality of opportunity and may therefore differ from the estimates of the *OECD Income Distribution Database*.
Source: OECD calculations based on US *Panel Study on Income Dynamics* (PSID), https://simba.isr.umich.edu/data/data.aspx.

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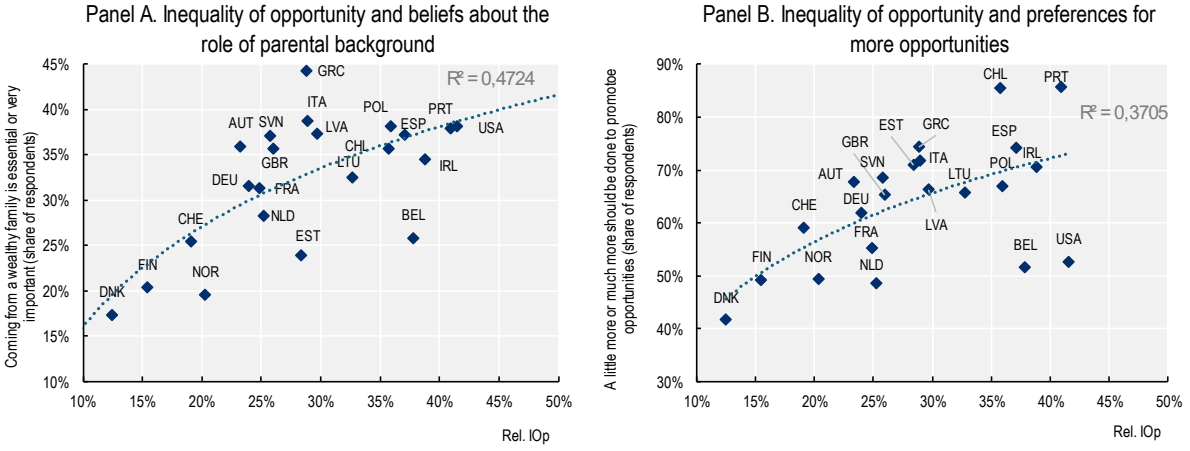
2.1.2. Interpretation of the results

Public perceptions align closely with the levels of inequality of opportunity observed in the analysis. As highlighted in OECD (2018[1]), the comparison with perceptual indicators can help contextualise the evidence collected on levels and trends in inequality of opportunity across countries. It can also help explore the impact they may have on the broader political economy. Figure 2.7 shows that inequality of opportunity is positively correlated with the perception that coming from a wealthy family matters for success (Panel A), as well as with preferences for greater action to promote opportunities (Panel B). These correlations underline the consistency of the proposed measure with established findings in the empirical literature on public perceptions and attitudes towards inequality of opportunity (OECD, 2023[11]; 2023[12]; 2023[13]).[8]

Figure 2.7. Measuring inequality of opportunity can shed light on cross-country differences in public attitudes and preferences

Relation between relative inequality of opportunity (as % of total inequality) and beliefs on the role of parental socio-economic background in getting ahead in life (Panel A) and preference for more opportunities (Panel B), by country, 2019 or latest available year



Note: In both panels, relative inequality of opportunity in household equivalised market income (Rel. IOp) is computed on the set of circumstances listed in the note to Figure 2.1. Estimates of inequality of opportunity are computed on individuals aged 25 to 59 and refer to 2019, except for the United Kingdom (2023), Australia and the United States (2021), Iceland (2011) and Chile (2009). Panel A: Respondents to the Opportunities module of the *OECD Risks that Matter Survey* were asked the question: "*In your country, nowadays, how important do you think coming from a wealthy family is for an individual to get ahead in life?*", with response options: *essential*; *very important*; *fairly important*; *not very important*; *not important at all; can't choose*. Panel B: Respondents were asked the question: "*How much should be done to make sure that everyone has an equal opportunity to get ahead in life?*", with response options: *much less; a little less; about the same; a little more; much more; can't choose*.
Source: OECD calculations based on the *European Union Statistics on Income and Living Conditions* (EU-SILC), https://ec.europa.eu/eurostat/web/microdata/european-union-statistics-on-income-and-living-conditions; the *UK Household Longitudinal Study* (UKHLS), https://www.understandingsociety.ac.uk/; the *US Panel Study on Income Dynamics* (PSID), https://simba.isr.umich.edu/data/data.aspx; the *Encuesta de Caracterización Socioeconómica Nacional* (CASEN), https://observatorio.ministeriodesarrollosocial.gob.cl/encuesta-casen; and the Opportunities module of the *OECD Risks that Matter Survey* 2022, http://oe.cd/rtm.

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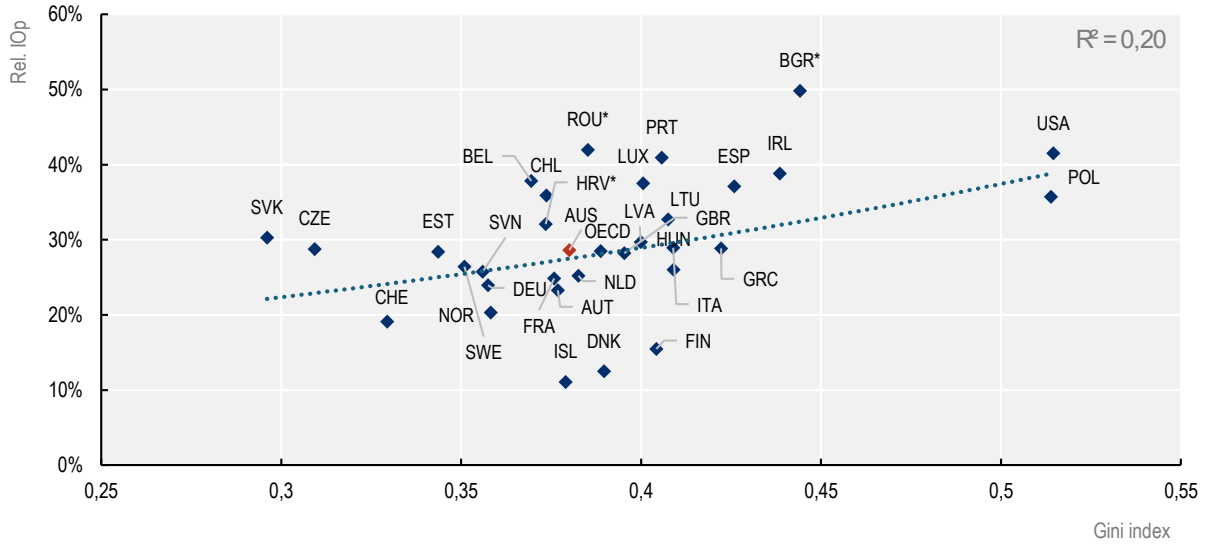
Inequality of outcomes and inequality of opportunity often go hand in hand. The so-called "Great Gatsby Curve" helps visually illustrate the negative relation between intergenerational mobility and income inequality across countries.[9] It shows that income mobility (proxied by earnings mobility between fathers and sons) is lower where inequality of outcomes (proxied by Gini coefficients of income inequality) is higher. There is no clear and established theoretical link between income mobility across generations, inequality of opportunity and income inequality at a point in time (Durlauf, Kourtellos and Tan, 2022[14]).

However, Figure 2.8 does confirm that the Great Gatsby Curve holds when moving from intergenerational income persistence to inequality of opportunity, even though the relative homogeneity of OECD countries may weaken the strength of this relation.[10] The observed correlation does not prove that there is a causal relation between inequality of outcomes and inequality of opportunity, but its strength and stability suggest a link. One possible explanation is that societies with high income inequality may also exhibit structural features that impede social mobility. Recent research suggests the possibility of a cyclical dynamic: high inequality in the present can result in reduced mobility in subsequent generations, thereby further intensifying inequality in the future (Durlauf, Kourtellos and Tan, 2022[14]; Narayan et al., 2018[15]). Despite this correlation, there are a number of notable exceptions. In the Nordic countries, for instance, market income inequality appears to be mid-range, while inequality of opportunity is much lower than in the majority of other countries. Conversely, in Bulgaria and Romania, the opposite is true, with inequality of opportunity being much higher than expected given their level of market income inequality.

Figure 2.8. More unequal countries also exhibit higher inequality of opportunity

Relative inequality of opportunity (as % of total inequality) and household market income inequality (Gini), individuals aged 25-59, 2019 or latest available year



Note: A * denotes OECD accession countries. Both the Gini index (defined on a 0 to 1 range) and relative inequality of opportunity (Rel. IOp) are computed at household equivalised market income and refer to individuals aged 25 to 59. Relative inequality of opportunity is computed on the set of circumstances listed in the note to Figure 2.1. Estimates refer to 2019, except for the United Kingdom (2023), Australia and the United States (2021), Iceland (2011) and Chile (2009). The Gini index is calculated on the same underlying micro-data used to compute inequality of opportunity and may therefore differ from the estimates of the *OECD Income Distribution Database*. 'OECD' is the simple average of the OECD countries displayed in the chart.

Source: OECD calculations based on the *European Union Statistics on Income and Living Conditions* (EU-SILC), https://ec.europa.eu/eurostat/web/microdata/european-union-statistics-on-income-and-living-conditions; the *Household, Income and Labour Dynamics in Australia* (HILDA) Survey, https://melbourneinstitute.unimelb.edu.au/hilda; the *UK Household Longitudinal Study* (UKHLS), https://www.understandingsociety.ac.uk/; the *US Panel Study on Income Dynamics* (PSID), https://simba.isr.umich.edu/data/data.aspx; and the *Encuesta de Caracterización Socioeconómica Nacional* (CASEN), https://observatorio.ministeriodesarrollosocial.gob.cl/encuesta-casen.

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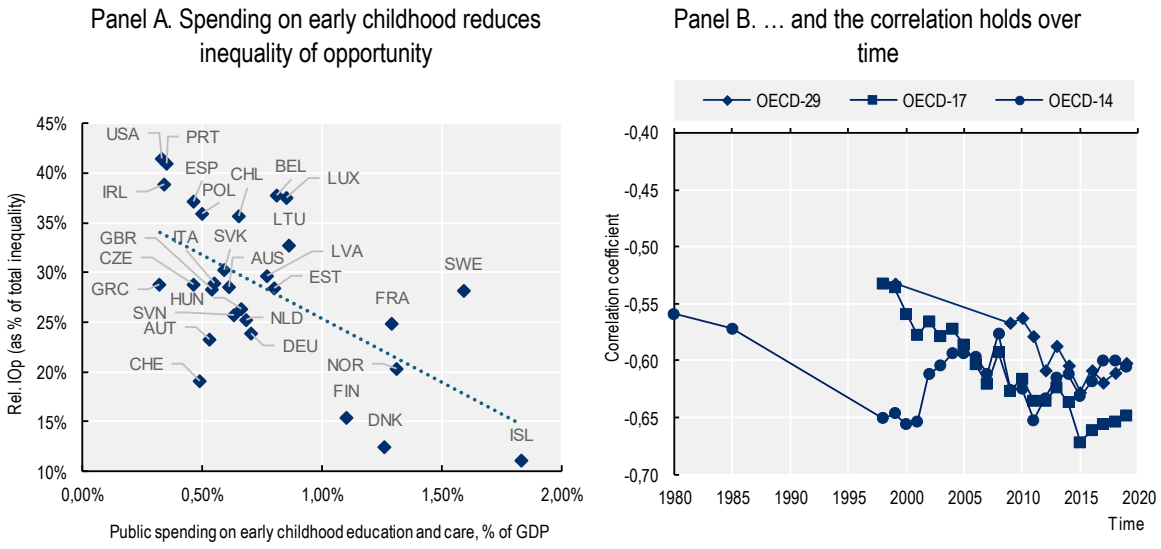
Differences in policy frameworks and labour market structures can help explain some of the variation in inequality of opportunity across OECD countries. Prior research has underlined the pivotal role of early childhood in human development. Findings indicate that investment in early childhood education not only generates substantial long-term benefits but also contributes to mitigate the impact of family background on students' academic performance by the eighth grade (OECD, 2017[16]). As shown in Figure 2.9, relative inequality of opportunity in household market income is negatively related to *current* public spending in early childhood education and care (ECEC) as a share of GDP (Panel A). This underlines the importance of early investment in setting children up for success and reducing intergenerational disadvantage. This negative correlation is also observed when looking at public investment in ECEC since the early 1980s (Panel B). However, explaining the long-term correlation would require further analysis. The fact that it holds over time could reflect the *dynamic* nature of inequality of opportunity and the long-term benefits of investment in early education and care on labour market outcomes. It may also reflect continuity in levels of investment by countries (i.e., relative stability in the country ranking in terms of public spending on early childhood education and care).

Figure 2.9. Public spending on early childhood education and care is associated with lower levels of inequality of opportunity



Note: In both panels, relative inequality of opportunity (Rel. IOp) in household equivalised market income is computed on the set of circumstances listed in the note to Figure 2.1 and refers to individuals aged 25 to 59. Panel A: Rel. IOp estimates refer to 2019, except for the United Kingdom (2023), Australia and the United States (2021), Iceland (2011) and Chile (2009). Information on public spending on early childhood education and care refers to public expenditure on childcare and pre-primary education and total public expenditure on early childhood education and care, as a % of GDP in 2018. Panel B: OECD-14 includes Australia, Austria, Belgium, Denmark, Finland, France, Germany, Ireland, Italy, Luxembourg, Norway, Portugal, Spain and Sweden; OECD-17 includes the same countries as well as Iceland, Switzerland and United States; OECD-29 also includes Chile, Czechia, Estonia, Greece, Hungary, Latvia, Lithuania, the Netherlands, Poland, the Slovak Republic, Slovenia and the United Kingdom.

Source: OECD calculations based on the *European Union Statistics on Income and Living Conditions* (EU-SILC), https://ec.europa.eu/eurostat/web/microdata/european-union-statistics-on-income-and-living-conditions; the *Household, Income and Labour Dynamics in Australia* (HILDA) Survey, https://melbourneinstitute.unimelb.edu.au/hilda; the *UK Household Longitudinal Study* (UKHLS), https://www.understandingsociety.ac.uk/; the *US Panel Study on Income Dynamics* (PSID), https://simba.isr.umich.edu/data/data.aspx; the *Encuesta de Caracterización Socioeconómica Nacional* (CASEN), https://observatorio.ministeriodesarrollosocial.gob.cl/encuesta-casen; and the *OECD Family Database*, oe.cd/fdb.

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2.2. Decomposing inequality of opportunity: Which circumstances matter most in life?

Understanding the relative importance of different circumstances is crucial to design effective and targeted policies for promoting opportunities and ensuring a more level playing field. The evidence presented below does not identify the channels through which circumstances affect the distribution of household market income and only highlights patterns rather than cause-and-effect relationships.[11] However, it still offers valuable insights into how inherited disadvantage is transmitted and can inform opportunity-enhancing policies.

The analysis confirms that *parents' socio-economic background* is a key driver of inequality of opportunity. In around half of the countries studied, parents' educational level and parents' occupation each account for one-sixth of total inequality of opportunity, significantly more than the 9% rate that would be expected if all the factors considered were of equal importance (see Figure 2.10, Panel A). In three-quarters of the countries, over 60% of the observed inequality of opportunity can be attributed to the total combined effect of these factors[12] and in a quarter of countries that total exceeds 75% (see Figure 2.10, Panel B). Overall, paternal educational background tends to play a slightly larger role, with a median importance of 19%, while maternal occupational background has a slightly lower influence, with a median impact of 13%. However, this difference may simply reflect the weaker labour market ties for women in previous generations.

By contrast, the impact of *individual factors* and *parents' country of birth* on inequality of opportunity is less pronounced overall. For example, the measured effect of gender on inequality of opportunity is minimal in most OECD countries (Panel A). While this result may seem counterintuitive, it partly reflects the fact that the welfare concept used – household market income – does not account for intra-household inequality in earnings and the allocation of resources and duties. To investigate the role of gender in greater depth, Section 2.3 below complements this analysis by computing measures of inequality of opportunity in individual earnings (i.e., wages) for full-time employees. Finally, *childhood environment factors* offer a more mixed picture. The presence of parents and homeownership status have a minimal impact in most countries. The relative importance of the degree of urbanisation of the childhood environment varies across countries. While it has an average importance in half of the countries studied (with a median of 9%), it contributes to more than 20% of inequality of opportunity in some cases.

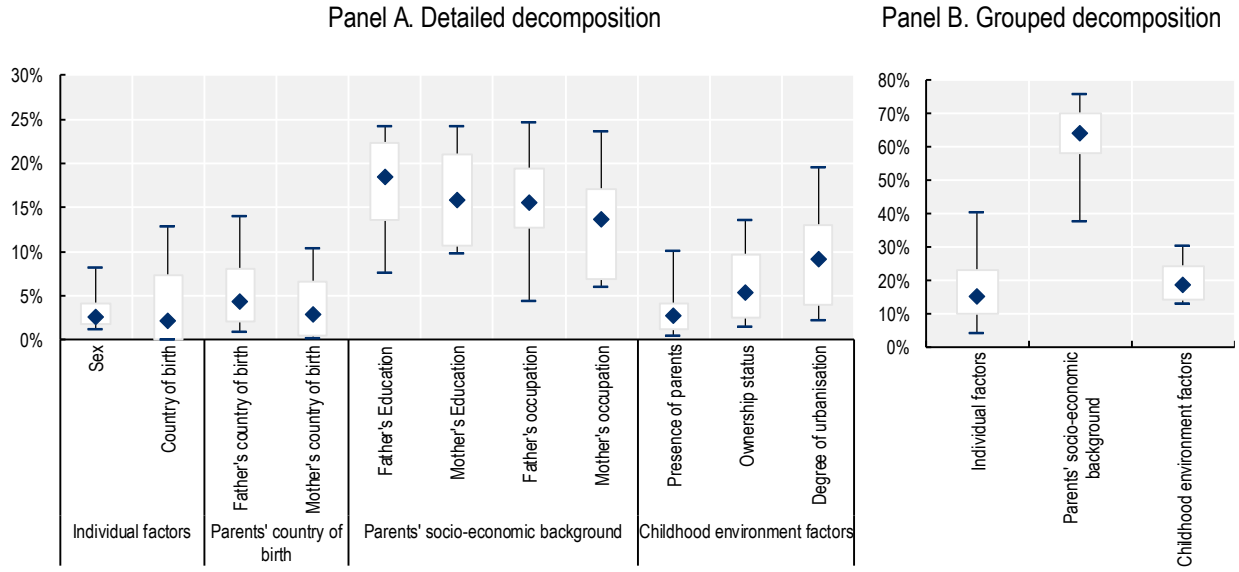
The relative importance of the different factors in shaping inequality of opportunity varies considerably between countries. Figure 2.11 shows that in Norway less than 30% of overall inequality of opportunity can be attributed to parental background, whereas in Hungary it accounts for over 80%. A cluster analysis identifies four distinct groups:

3. The first group (Group 1 in Figure 2.11), which includes Austria, Belgium, Norway, Spain and Sweden, is characterised by a strong impact of individual factors and parents' country of birth on inequality of opportunity. Furthermore, for countries in this group, maternal background plays a larger role than paternal background, both in terms of education and occupation.
4. The second group (Group 2 in the chart), which includes Denmark, Finland and Portugal is characterised by the high importance of both parents' occupation in shaping inequality of opportunity, as well as by the influence of childhood environment factors, particularly homeownership status and the degree of urbanisation.
5. The third group (Group 3 in the chart), which includes Lithuania and Eastern and Central European countries, is characterised by the key influence of parental background (both father's and mother's) and the degree of urbanisation of the area where individuals grew up. Conversely, in these countries, individual circumstances and parents' country of birth only play a marginal role.
6. Finally, a last group (Group 4 in the chart), including all remaining OECD EU countries and the United States, is characterised by a higher-than-average influence of paternal background (both in

terms of educational level and occupation), along with a moderate effect of individual factors and parents' country of birth. These results align with previous research (Brunori, Hufe and Mahler, 2023[2])

Figure 2.10. Parents' background explains most of the inequality of opportunity in household market income

Distribution of the Shapley-Shorrocks decomposition (percentages) of the relative (predictive) contribution of different circumstances to inequality of opportunity in household market income, OECD 24, 2019



Note: Relative inequality of opportunity in household equivalised market income is computed on the set of circumstances listed in the note to Figure 2.1, for individuals aged 25 to 59. In Panel B, circumstances displayed in Panel A are grouped by type and the cumulative impact is shown. In both panels, diamonds refer to the OECD median share. Box boundaries indicate the first and third quartiles of the country distribution. Whiskers indicate the 10th and 90th percentiles of the country distribution. The analysis does not include Australia, Chile, Iceland, Slovenia and the United Kingdom due to lack of information about some of the circumstances considered in the analysis (see the note to Figure 2.1).
Source: OECD calculations based on the *European Union Statistics on Income and Living Conditions* (EU-SILC), https://ec.europa.eu/eurostat/web/microdata/european-union-statistics-on-income-and-living-conditions; and the US Panel Study on Income Dynamics (PSID), https://simba.isr.umich.edu/data/data.aspx.

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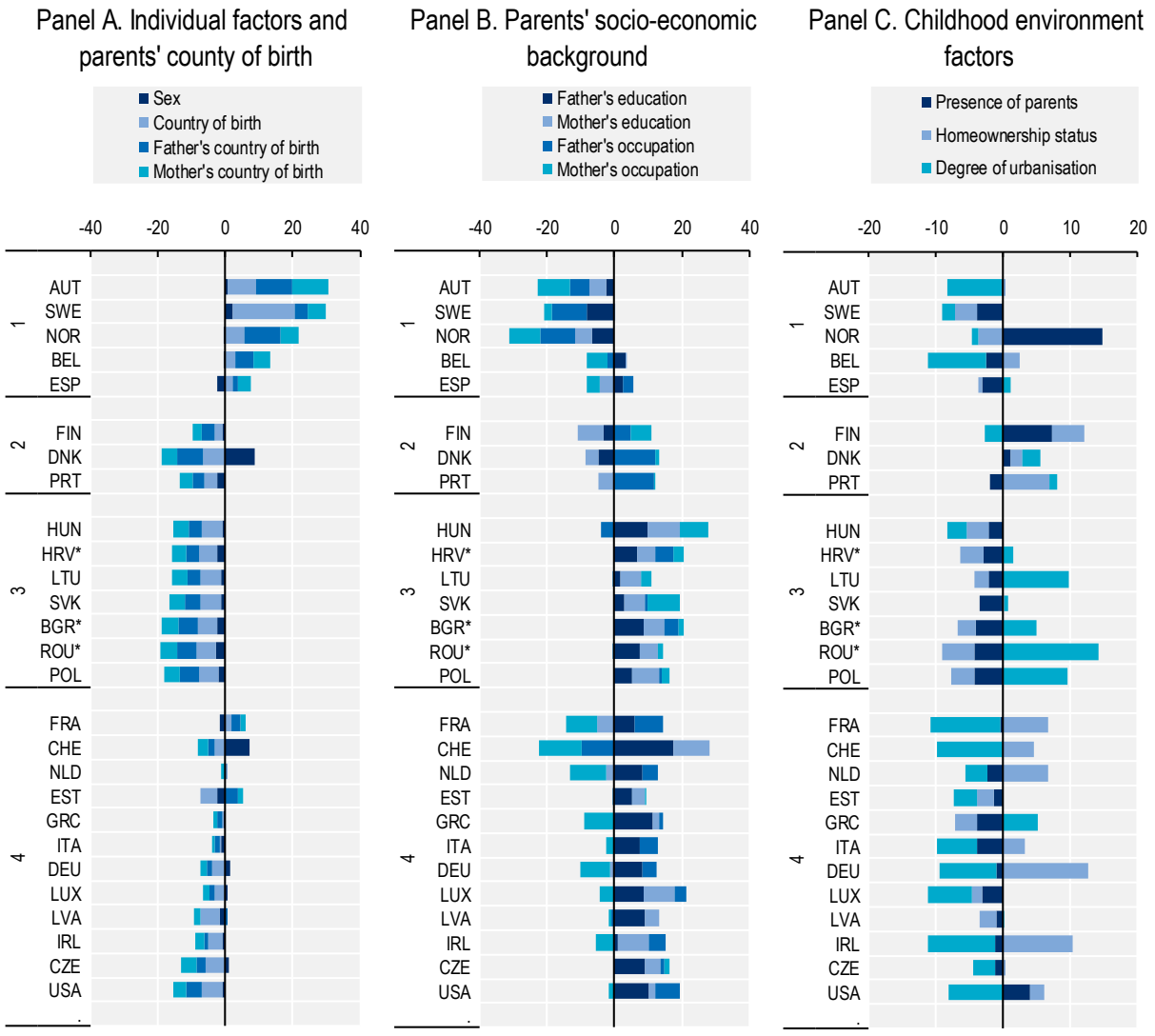
The relative importance of different circumstances varies with the overall level of inequality of opportunity. Examining the correlation at country-level between the contribution of these various factors and the measured level of inequality of opportunity suggests that the relative importance of the respondent's sex and of the presence of parents is higher in countries with lower levels of inequality of opportunity. Similarly, the relative contribution of parents' background increases as inequality of opportunity grows larger. These patterns may reflect the fact that the effects of certain factors are harder to address through policy means alone. Progress in reducing overall levels of inequality of opportunity may therefore often result from successful efforts to address systemic issues and compensate for the effect of external circumstances in areas where effective policy levers exist, such as education and skills, social policy, urban and territorial development. This may include, for example, efforts to reduce inequalities in access, such as investing in affordable quality education to limit the influence of parental background on individual outcomes. Conversely, the remaining drivers of inequality of opportunity tend to be less tractable for policy in the short-term as they involve more deeply rooted factors, such as personal characteristics and the effect of social norms (for instance on gender roles and household decisions). Finally, it should be noted that the observed variation across countries may also be driven by differences in societal structures.

Figure 2.11. The role of various factors in shaping inequality of opportunity differs considerably between countries

Shapley-Shorrocks decomposition (percentages points difference to the OECD average) of the relative (predictive) contribution of different circumstances to inequality of opportunity in household market income, by country, 2019



Note: A * denotes OECD accession countries. The chart displays the difference to the OECD average of the relative contribution of the different circumstances underpinning the estimates of inequality of opportunity shown in Figure 2.1, with countries sorted in descending order of the relative contribution of individual factors and parents' country of birth. *Individual factors* include the respondent's sex and country of birth; *childhood environment factors* include parental presence, housing tenure, and degree of urbanisation of the area of residence at age 14. Australia, Chile, Iceland, Slovenia and the United Kingdom are not shown in the chart due to lack of information about some of the circumstances considered in the analysis (see note to Figure 2.1). In the case of the United States, the sample is restricted to household heads and their partners.

Source: OECD calculations based on the *European Union Statistics on Income and Living Conditions* (EU-SILC), https://ec.europa.eu/eurostat/web/microdata/european-union-statistics-on-income-and-living-conditions; and the *US Panel Study on Income Dynamics* (PSID), https://simba.isr.umich.edu/data/data.aspx.

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2.3. Inequality of opportunity across demographic groups: For whom do specific circumstances matter most?

Aggregate measures of inequality of opportunity can mask disparities in individual outcomes and circumstances across various demographic groups, including gender and age. This section supplements the evidence discussed above by delving deeper into how different cohorts and genders experience inequality of opportunity.

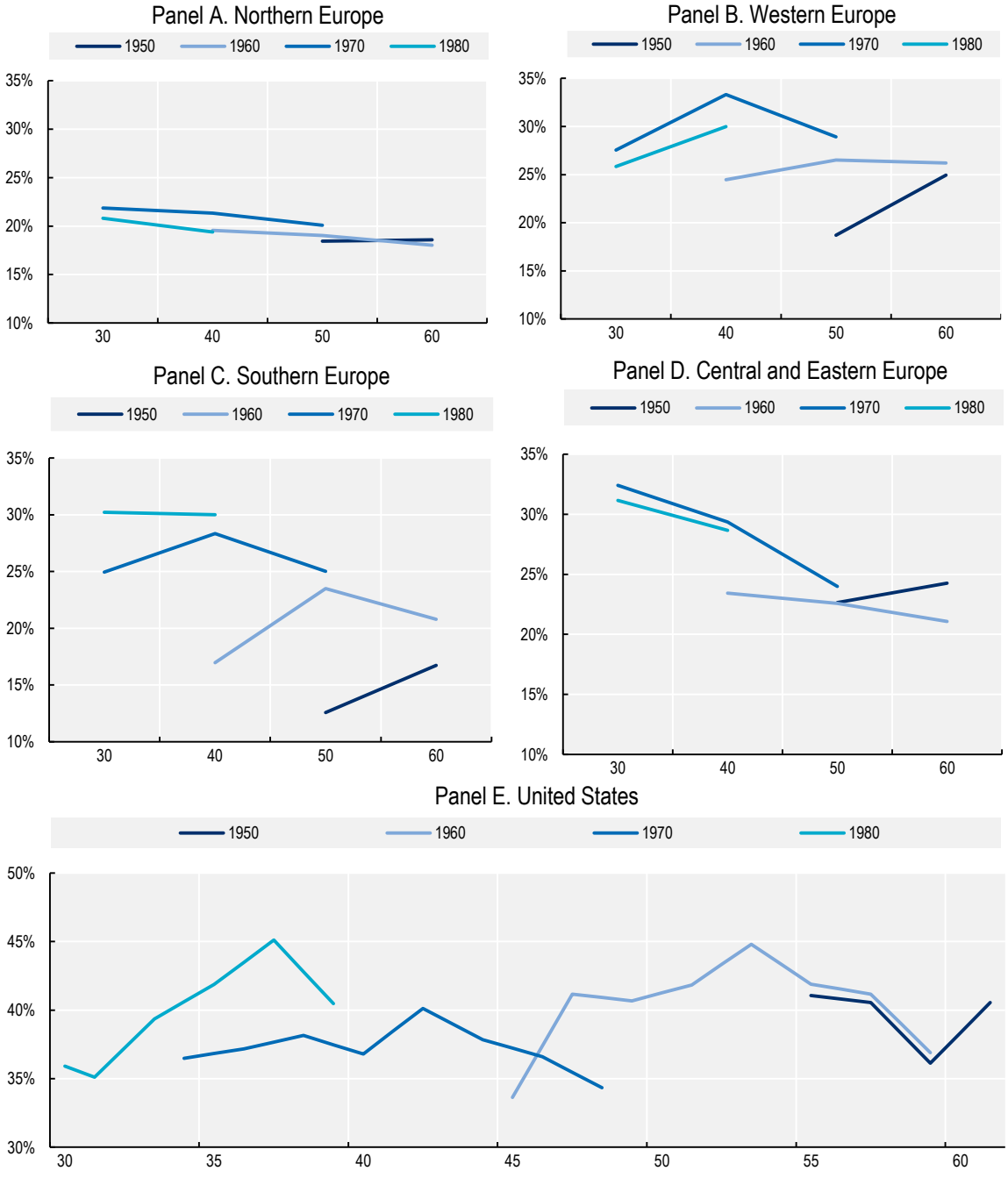
2.3.1. Inequality of opportunity across generations and over time

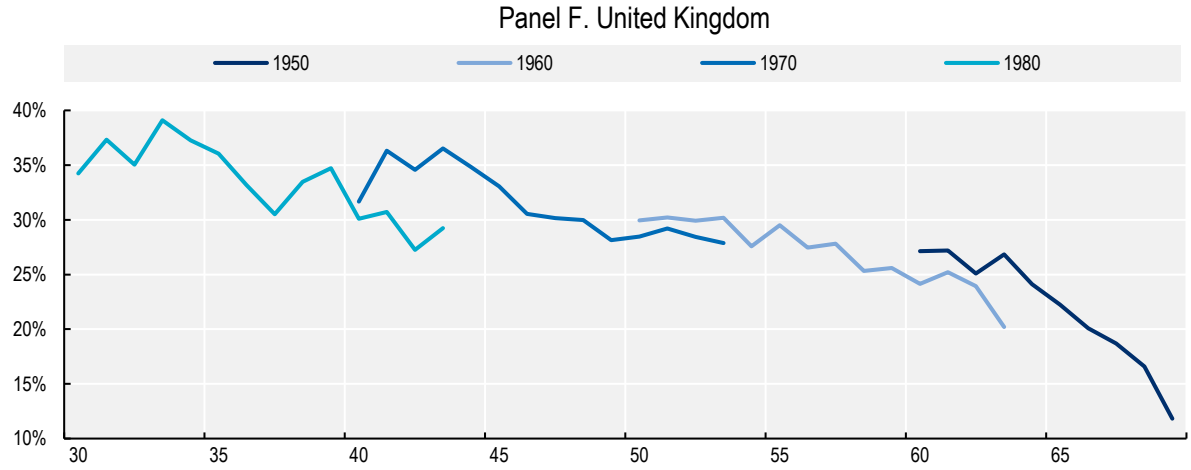
Age and cohort effects influence inequality of opportunity in distinct and interacting ways. First, inequality of opportunity can be expected to differ between age groups, due to age-related income dynamics (OECD, 2018[1]) and the gradual weakening of intergenerational disadvantage as people grow older. Second, different levels of inequality of opportunity are also likely to be observed across generations, as people born in different periods experience distinct economic and social conditions. Structural and cyclical factors, such as changes in policy settings or economic crises, can affect opportunities differently across cohorts. For instance, while younger generations have benefitted from expanded access to education, they may also face new challenges arising from increased competition or precarious labour market conditions. Finally, demographic shifts, including population ageing and declining fertility rates, may have differentiated effects on opportunities. For example, population ageing puts pressure on public finances (OECD, 2021[17]; Rawdanowicz et al., 2021[18]), which can in turn limit the resources available for investment in areas of social spending that are key to fostering equal opportunity, such as early child education and care and higher education.

The interplay between age and cohort effects is complex, making their combined impact on inequality of opportunity difficult to predict. To shed light on the way in which inequality of opportunity, measured in terms of household market income, varies at different ages and across cohorts, the sample is split into four 10-year birth cohorts, from those born after 1949 to those born before 1991.[13] As a general caveat, it should be noted that, due to the short timeframe over which repeated cross-sectional data are available (mainly from 2005 to 2023), the analysis does not allow for the computation of complete age profiles (i.e., how inequality of opportunity evolves over the life cycle) for any of the cohorts studied. In particular, the more recent the cohort, the shorter the observation window on their working lives will be. Moreover, comparisons across cohorts are limited to two data points (around the ages of 30 and 40 for the 1980 and the 1970 cohorts; around 40 and 50 for the 1970 and the 1960 cohorts; and around 50 and 60 for the 1960 and the 1950 cohorts). Despite these limitations, the analysis can help shed light on some of the mechanisms affecting inequality of opportunity across generations (see Figure 2.12). To ensure sufficient sample sizes, OECD EU countries are grouped into four regional clusters: Northern, Western, Southern, and Central and Eastern Europe.

Figure 2.12. In a majority of countries, inequality of opportunity is higher for younger cohorts

Relative inequality of opportunity (% of total inequality) by cohort and age





Note: In each panel, relative inequality of opportunity is measured on the vertical axis, and age on the horizontal axis. For OECD EU countries, estimates of inequality of opportunity in household equivalised market income are based on a restricted set of circumstances, including the respondent's sex and country of birth, parents' educational level when the respondent was 14, and their presence in the household when the respondent was 14. For the United States, the set also includes parents' country of birth and their occupation when the respondent was 14. In addition to these circumstances, for the United Kingdom the set also includes the degree of urbanisation of the area where the respondent lived at age 14. Cross-country comparisons should be avoided, due to variation in the set of circumstances included in the analysis. In the case of the United States, the sample is restricted to household heads and their partners. The analysis covers 2005-2023 for OECD EU countries, 2010-2023 for the United Kingdom, and 2005-2019 for the United States. Only countries with complete information over the entire period and with sufficiently large sample sizes are included in the analysis. Panel A: Northern European countries include Denmark, Estonia, Finland, Latvia, Lithuania and Norway. Panel B: Western European countries include Austria, Belgium, France, Ireland, Luxembourg and the Netherlands. Panel C: Southern European countries include Greece, Italy, Portugal, Slovenia and Spain. Panel D: Central and Eastern European countries include Czechia, Hungary, Poland and the Slovak Republic. The 1950 birth cohort includes respondents born between 1950 and 1959; the 1960 birth cohort includes those born between 1960 and 1969; the 1970 birth cohort includes those born between 1970 and 1979; and the 1980 birth cohort includes those born between 1980 and 1989. For the United States, the sample is restricted to household heads and their partners.
Source: OECD calculations based on the *European Union Statistics on Income and Living Conditions* (EU-SILC), https://ec.europa.eu/eurostat/web/microdata/european-union-statistics-on-income-and-living-conditions; the *UK Household Longitudinal Study* (UKHLS), https://www.understandingsociety.ac.uk/; and the US *Panel Study on Income Dynamics* (PSID), https://simba.isr.umich.edu/data/data.aspx.

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Several trajectories are possible when considering how inequality of opportunity evolves with age.[14] To understand these patterns, it is important to contextualise them within the broader socio-economic developments that influence opportunities over time. Economic shocks can introduce long-term discontinuities in income trajectories, especially for cohorts entering the labour market during downturns (Karonen and Niemelä, 2020[19]). Japan's "lost generation" of the 1990s, for example, provides an illustration of how economic downturns can lead to lasting disadvantage. While some cohorts may eventually "catch up" and avoid permanent scarring effects (Freedman, 2024[20]), within-cohort inequality tends to increase as people age (OECD, 2017[21]) – a process that may be exacerbated by severe business cycle fluctuations (Crystal, 2021[22]).

Looking at the evolution of inequality of opportunity over the life cycle, different cohort- and region-specific patterns emerge, as highlighted in Figure 2.12:

- In Northern European countries, (shown in Panel A), inequality of opportunity has remained relatively stable at a low level for the cohort born in the 1960s, suggesting that age has had a constant effect for that cohort. Conversely, for the cohort born in the 1970s, there are signs of a scarring effect, with relative inequality of opportunity increasing by about 7% between ages 30 and 50 – a period which coincides with the Global Financial Crisis.
- In Western European countries (Panel B), trends in inequality of opportunity for the cohort born in the 1970s exhibit a pronounced inverted U-shaped effect. Here, an increase in inequality of

opportunity is initially observed, peaking around the time of the Global Financial Crisis, and followed by a relative decrease in inequality of opportunity, though the overall effect results in higher inequality of opportunity at older ages compared to earlier years.

- A similar pattern is observed for the 1960s and 1970s cohorts in Southern Europe (Panel C), while the effect of age remains relatively constant for the 1980s cohort during their 30s and 40s.
- In Central and Eastern European countries (Panel D), a compensation effect is observed, with inequality of opportunity steadily declining with age for most generations.
- In the United States (Panel E), inequality of opportunity for the cohorts born in the 1960s and 1970s also exhibits an inverted U-shaped effect.
- By contrast, in the United Kingdom (Panel F), inequality of opportunity declines markedly with age for all cohorts.

However, across areas there is a relatively homogeneous trend towards rising inequality of opportunity over time. With a few exceptions, younger generations tend to exhibit higher levels of inequality of opportunity at a specific age than preceding generations. For instance, in Southern European countries, at age 40, people born in the 1970s faced levels of inequality of opportunity over 60% higher than for the previous cohort at the same age.[15] Similarly, in the United States and in Southern Europe, at age 30, the 1980s cohort faced greater inequality than the 1970s cohort, with differences as large as 20% (see Figure 2.12).

The expansion of higher education could have been expected to result in lower inequality of opportunity for younger generations, but other factors may have counterbalanced its effects. Greater access to tertiary education has also meant that younger generations tend to spend more time in school, with many delaying their entry into full-time employment until their 30s (Häusermann and Schwander, 2010[23]).[16] Here again, it is important to consider broader labour market dynamics and issues of timing when analysing trends in inequality of opportunity. For example, structural changes in the labour market, such as the rise in non-standard work, have predominantly affected younger workers.[17] Moreover, higher levels of inequality of opportunity among younger cohorts may be due to the specific timing of economic shocks. For instance, a large share of the cohort born in the 1980s entered the labour market during or in the immediate aftermath of the Global Financial Crisis. While economic downturns affect all workers, they tend to have a stronger impact on young people's ability to find or stay in work, as they are more likely to have temporary contracts and fewer company-specific skills (Escalonilla, Cueto and Pérez-Villadóniga, 2022[24]; Karonen and Niemelä, 2020[19]; Carcillo et al., 2015[25]).

Survey data provide some evidence of cohort effects, with changes in opportunities giving rise to significant differences in perceptions and attitudes between generations. Data collected through the Opportunities Module of the 2022 *OECD Risks that Matter Survey* reveal age-related differences in meritocratic beliefs. These findings align with the analysis conducted in this section, which shows that younger generations experience higher levels of inequality of opportunity in several countries. Younger respondents were more likely to view individual factors as important determinants for success in life and to place less emphasis on factors related to effort and merit in determining life outcomes (OECD, 2023[11]). The importance of early experience in shaping core beliefs about inequality throughout life is widely recognised in the literature on the formation of attitudes (Mijs, 2018[26]; Almås et al., 2010[27]).

2.3.2. The gender dimensions of inequality of opportunity

Gender dimensions have been a relative blind-spot in the analysis of inequality of opportunity for theoretical and methodological reasons. At a conceptual level, luck egalitarianism has been criticised for the limited ability of its central distinction between luck and effort to account for the experience of women and the structural factors that shape their opportunities and outcomes (Stark, 2020[28]; Anderson, 1999[29]). At a methodological level, research on the intergenerational persistence of earnings has largely been

based on analysis of the relation between fathers and sons. This uneven focus is due to issues of data availability and to the historical structure of the labour market. Extending the analysis to cover the gender dimensions of inequality of opportunity requires a tailored strategy for measurement. In order to do so, the measure of inequality of opportunity used in this chapter has been adapted in a way that can help address these challenges and better capture gender differences in opportunities. This notably implies *(i)* a change in the observation unit, from the household to the individual level[18]; and *(ii)* a change in the welfare metric, from market income to earnings. The method used in this sub-section is presented in Box 2.3.

Box 2.3. Understanding better how opportunities vary between women and men – What should be measured and how?

In the remainder of the analysis, inequality of opportunity is measured for individual earnings instead of household market income, as was the case up to this point throughout the chapter. The changes introduced in the observation unit (from the household to the individual) and in the primary welfare metric (from market income to earnings) are designed to capture important gender-specific dimensions that are lost when measuring inequality of opportunity in terms of household market income. These changes also illustrate the broader point that the measurement of inequality of opportunity needs to be adapted to the populations studied and to the type of question asked and policy insights sought.

Shifting the analysis from household market income to individual earnings provides a clearer picture of gender differences and their impact on economic outcomes: The approach used in previous sections *(i)* focuses on inequality of opportunity as measured by market income, in order to capture income-generating capacity and inequalities of opportunity that relate to the labour market; and *(ii)* takes account of income pooling and economies of scale within the household, which provides a more accurate estimation of an individual's standard of living. Despite its advantages, allowing for income pooling at the household level is much less appropriate for analysing inequality from a gender perspective, where disparities *within the household* are of key importance. It assumes that resources are shared equally among household members and that joint decisions such as those relating to childcare and labour supply, which significantly affect individuals' opportunities and economic outcomes, are made on an equal basis. Capturing these dynamics requires "opening the black box" of the household and focusing on incomes generated at the individual level. In turn, this implies a change in the welfare metric from market income to earnings, for reasons of data availability and comparability.

While it sheds valuable light on the gender dimensions of inequality of opportunity, this approach also has some limitations:

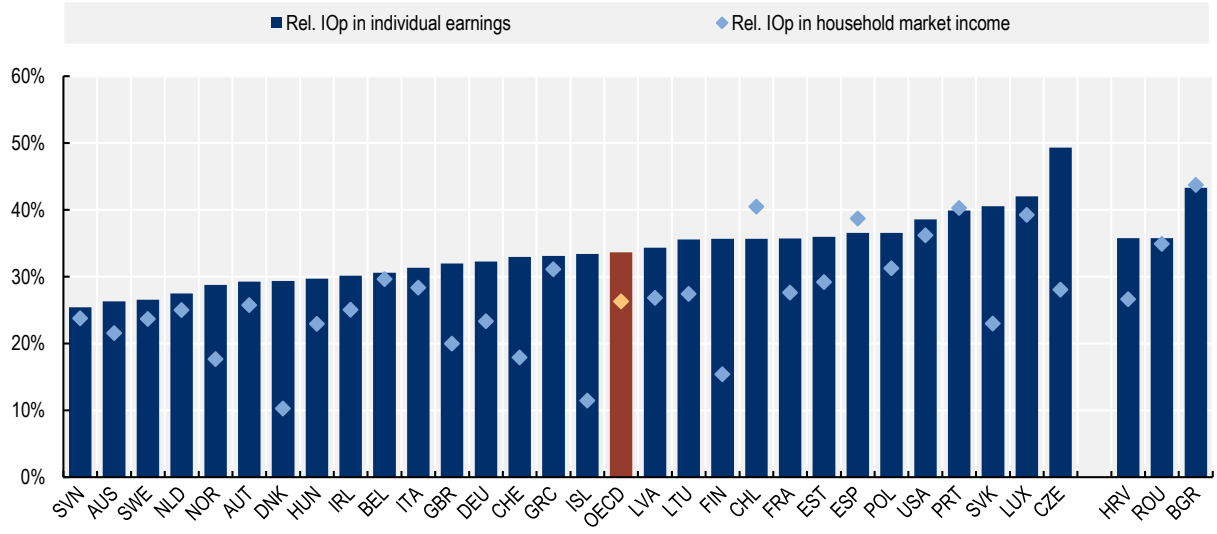
- ***First, individual earnings provide a narrower metric of economic welfare than market income and exclude several important sources of income from the analysis.*** These sources of income – such as self-employment income, capital gains and property income streams – may represent substantial shares of overall economic resources, especially among wealthier individuals or households.
- ***Second, the analysis is limited to full-time employees, meaning that part-time workers, the unemployed and those outside the labour force are excluded.*** Another consequence of shifting to individual earnings is a reduction in the scope of the population considered. This is particularly relevant from a gender perspective, as women are more likely to work part-time, experience career interruptions, or exit the labour force due to caregiving responsibilities. By excluding these groups, the analysis runs the risk of *(i)* introducing a self-selection bias by looking only at employed women;[19] and *(ii)* overlooking key aspects of gender inequality that may be experienced by those who are unable to engage in full-time work.[1]

1. One approach that can enable the inclusion of part-time workers in the analysis would be to use hourly earnings as a measure of welfare. However, due to data limitations and inconsistencies in the measurement and reference periods for income and hours worked, this would lead to reduced country coverage, lower accuracy of estimates and reduced cross-country comparability.

Overall, measures based on individual earnings reveal higher levels of inequality of opportunity. In a large majority of OECD countries, the share of total inequality explained by circumstances beyond individuals' control is higher when measured in terms of individual earnings rather than for household market income (Figure 2.13). This finding suggests that disparities in individual earnings capture deeper structural issues that relate to gender differences in labour market opportunities, such as differences in female labour market participation or unequal access to high-paying jobs.[20] Some of these individual disparities are partly offset at the household level, through income pooling and a more equal distribution of resources within the family unit. However, the results confirm the analytical value of focusing on individually generated income as done in this section.

Figure 2.13. Inequality of opportunity is higher when measured at the individual level

Relative inequality of opportunity (Rel. IOp), as percentage of total inequality in household market income and individual earnings, full-time employees aged 25-59, by country, 2019 or latest available year



Note: Both measures of inequality of opportunity are computed on the set of circumstances listed in the note to Figure 2.1. Countries are ranked in ascending order of relative inequality of opportunity in individual earnings. Estimates refer to 2019 except for the United Kingdom (2022), Australia and the United States (2021), Iceland (2011) and Chile (2009). In the case of the United States, the sample is restricted to household heads and their partners. "OECD" is the simple average of the OECD countries displayed in the chart.
Source: OECD calculations based on the *European Union Statistics on Income and Living Conditions* (EU-SILC), https://ec.europa.eu/eurostat/web/microdata/european-union-statistics-on-income-and-living-conditions; the *Household, Income and Labour Dynamics in Australia* (HILDA) Survey, https://melbourneinstitute.unimelb.edu.au/hilda; the *UK Household Longitudinal Study* (UKHLS), https://www.understandingsociety.ac.uk/; the *US Panel Study on Income Dynamics* (PSID), https://simba.isr.umich.edu/data/data.aspx; and the *Encuesta de Caracterización Socioeconómica Nacional* (CASEN), https://observatorio.ministeriodesarrollosocial.gob.cl/encuesta-casen.

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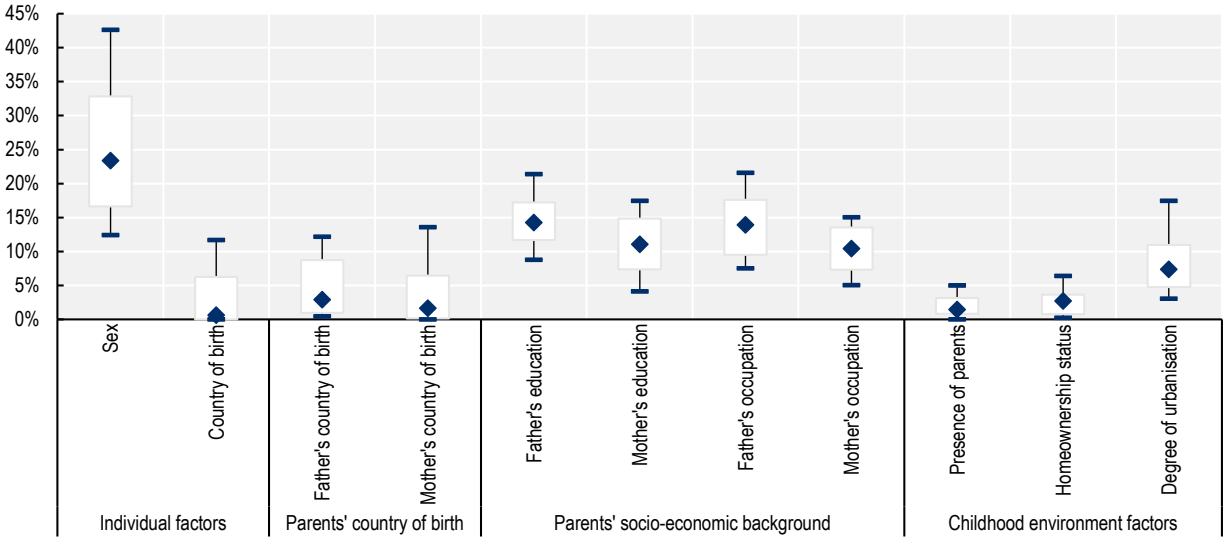
Gender is the most significant single factor explaining inequality of opportunity in earnings. Overall, its effect surpasses that of the different components of *parental socioeconomic background*, which were typically the largest contributors to inequality of opportunity when measured in terms of household market income (Figure 2.14). In the median OECD country covered in the analysis, gender accounts for a quarter of inequality of opportunity in earnings – a tenfold increase compared to the share observed when

using household market income (see Figure 2.10 above). In some countries, gender contributes nearly half of the total inequality of opportunity in earnings. This increase in the relative importance of gender reduces the influence of other factors, notably parental education and household homeownership status when the respondent was 14. These findings indicate that a substantial portion of the disparities in earnings between men and women is driven by gender-related factors, such as occupational segregation, biases in hiring and promotion practices, and socio-cultural norms that shape career choices and opportunities.

Figure 2.14. In a large majority of countries, gender is the most significant single factor explaining inequality of opportunity in individual earnings

Shapley-Shorrocks decomposition (percentages) of the relative (predictive) contribution of different circumstances to inequality of opportunity in individual earnings, full-time employees aged 25-59, OECD 24, 2019



Note: Relative inequality of opportunity in individual earnings is computed on the set of circumstances listed in the note to Figure 2.1. Diamonds refer to the OECD median share. Box boundaries indicate the first and third quartiles of the country distribution. Whiskers indicate the 10th and 90th percentiles of the country distribution. The analysis does not include Australia, Chile, Iceland, Slovenia and the United Kingdom due to lack of information about some of the circumstances considered in the analysis (see the note to Figure 2.1).
Source: OECD calculations based on the *European Union Statistics on Income and Living Conditions* (EU-SILC), https://ec.europa.eu/eurostat/web/microdata/european-union-statistics-on-income-and-living-conditions; and the *US Panel Study on Income Dynamics* (PSID), https://simba.isr.umich.edu/data/data.aspx.

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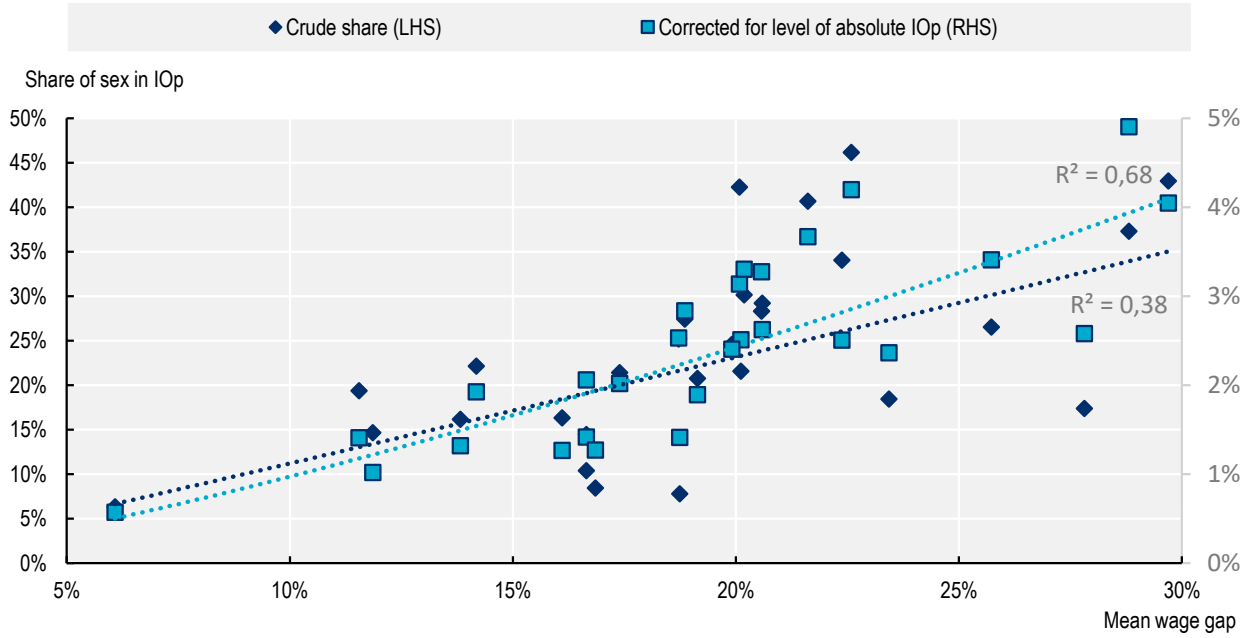
Gender gaps in opportunities and wages go hand in hand. As expected, Figure 2.15 confirms that the relative importance of gender as a driver of inequality of opportunity (light blue squares) is closely linked to gender disparities in full-time wages. In countries with larger gender wage gaps, gender also accounts for a greater share of inequality of opportunity in earnings. Adjusting for the absolute level of inequality of opportunity (blue diamonds) reinforces this association.[21] This suggest that further progress in reducing inequality of opportunity is contingent on addressing gender-based disparities in the labour market. This also lends support to the hypothesis, discussed in Section 2.2 above, that countries with lower inequality of opportunity have been more successful in addressing systemic issues such as access to education, skills development and territorial development, while remaining disparities are more likely to stem from deep-seated structural factors, such as social norms and gender roles, that are less tractable for policy intervention alone.

Figure 2.15. Gender disparities account for a larger share of inequality of opportunity in countries where the gender wage gap is higher

Relative contribution of sex to inequality of opportunity in individual earnings and mean gender wage gap, full-time employees aged 25-59, 2019



Note: LHS: left-hand side axis. RHS: right-hand side axis. Relative inequality of opportunity in individual earnings is computed on the set of circumstances listed in the note to Figure 2.1. The relative contribution of sex to inequality of opportunity is computed through the Shapley-Shorrocks decomposition. The average gap and relative inequality of opportunity in individual earnings are computed on the same micro-data. Australia, Chile, Iceland, Slovenia and the United Kingdom are not shown in the chart due to lack of information about some of the circumstances considered in the analysis (see the note to Figure 2.1).

Source: OECD calculations based on the *European Union Statistics on Income and Living Conditions* (EU-SILC), https://ec.europa.eu/eurostat/web/microdata/european-union-statistics-on-income-and-living-conditions; and the *US Panel Study on Income Dynamics* (PSID), https://simba.isr.umich.edu/data/data.aspx.

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2.4. Conclusion

This chapter introduces a new and robust measure of inequality of opportunity that aligns well with public perceptions of fairness and with the insights from contemporary theories of distributive justice. It confirms that socio-economic inequalities are deeply entrenched across generations. On average, *at least* over one-quarter of household market income inequality in OECD countries is due to factors beyond an individual's control, such as their sex, country of birth or parents' socio-economic background. These results underscore the fact that, in many countries, a large proportion of both economic advantage and disadvantage are inherited rather than earned. However, the extent of inequality of opportunity varies considerably across countries. Some Nordic countries and Switzerland report the lowest levels with rates below 15% of total inequality, while Southern and Central and Eastern European countries, along with Chile and the United States, often have shares exceeding 35%. These persistent inequalities highlight the structural barriers faced by different groups and challenge the fundamental principle of equality of opportunity, which is a core component of the social contract in liberal democracies.

Understanding the relative importance of inherited and personal circumstances is crucial for designing policies that can effectively ensure a more level playing field for all. Although the evidence does not establish direct causality, it offers valuable insights into how advantage and disadvantage are

transmitted across generations, and into the extent to which these differences in outcomes are likely to be perceived as fair and acceptable or not. In most OECD countries, parental socio-economic background – i.e., their educational level and occupation – accounts for more than 60% of inequality of opportunity in household market income and in some countries over 75%. By contrast, individual factors, such as sex and country of birth, have a much smaller impact. However, shifting the focus from household income to individual earnings tells a different story. Inequality of opportunity is generally higher when measured by individual earnings than by household market income, as income pooling within households offsets some inequalities. When focusing on individuals rather than households, gender emerges as the main driver of inequality of opportunity. In the median OECD country, gender accounts for about a quarter of inequality of opportunity in earnings, and in some cases nearly half.

Reducing inequality of opportunity requires ensuring universal access to essential services. Promoting human capital development from early childhood and throughout an individual's life is key to lessening the influence of parental background on a child's future. Addressing regional and local disparities in access to education, healthcare and economic resources is also critical, as unequal access can exacerbate inequalities in rural and economically underserved areas. Expanding these services in disadvantaged regions is essential for creating a more level playing field and mitigating the impact of socio-economic background on economic outcomes. Chapter 3 provides a more detailed focus on the important geographic dimensions of equal opportunity.

Improving access is a necessary condition for equal opportunity, but not a sufficient one. Addressing the role played by other structural factors, such as social norms and discrimination, is also essential to ensure a more level playing field. Countries with low levels of inequality of opportunity have often implemented comprehensive policies covering key areas such as education, skills and territorial development. Yet, even in these contexts, persistent disparities remain. Here, barriers to further progress may be related to social norms related to gender and individual characteristics rather than to issues of access. Taking account of these underlying cultural and structural factors is essential to understand how a more equitable distribution of opportunities can be achieved in specific national contexts and what role policy can play in doing so. In this perspective, Chapter 4 considers a broad range of policies that can suit the different challenges encountered by countries and help develop comprehensive strategies for promoting equal opportunity.

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Notes

[1] The analysis includes all of the European OECD Member countries (Austria; Belgium; Czechia; Denmark; Estonia; Finland; France; Germany; Greece; Hungary; Iceland; Ireland; Italy; Latvia; Lithuania; Luxembourg; the Netherlands; Norway; Poland; Portugal; the Slovak Republic; Slovenia; Spain; Sweden; Switzerland; the United Kingdom), 3 non-European OECD Member countries for which comparable data are available (Australia; Chile; the United States) and three European OECD accession countries (Bulgaria; Croatia; Romania).

[2] The caveat "over a quarter *at least*" is necessary given that the measure only captures the effect of a selected set of circumstances and therefore represents a lower-bound estimate of actual levels of inequality of opportunity (see Section 1.2.3 in the previous chapter). Market income inequality and absolute inequality of opportunity are measured here using the Gini index (on a 0-1 scale). It is important to note that the lack of exact disaggregation of the Gini coefficient by population subgroups is not a significant limitation in this context. For further discussion of the merits of using the Gini index to assess inequality of opportunity, see Brunori, Palmisano and Peragine (2019[30]).

[3] Absolute inequality of opportunity is calculated as the Gini coefficient for the counterfactual distribution. Relative inequality of opportunity is calculated by dividing the Gini of the counterfactual distribution (absolute inequality of opportunity) by the observed Gini for equivalised household market income (total inequality). Relative inequality of opportunity represents the share of the total inequality of outcomes that can be attributed to circumstances. See Box 1.4 in the previous chapter for further detail. The rank correlation between the two is above 0.90.

[4] As mentioned in Chapter 1, *absolute* inequality of opportunity provides a direct measure of the impact of the set of selected circumstances on inequality of outcomes, while *relative* inequality of opportunity helps contextualise this impact within a country's broader inequality landscape.

[5] For a case study, see Box 2.2.

[6] The relative standard deviation of relative inequality of opportunity, a measure (also known as sigma-convergence) used to assess how disparities among countries have evolved over time, fell from 0.29 in 2005 to 0.24 in 2019.

[7] For example, OECD (2018[1]) finds that there has been a general tendency for income positions to become more persistent since the 1990s, particularly at the lower and upper ends of the distribution (see Box 1.1 for further detail).

[8] Both Spearman rank correlations exceed 0.5 (0.63 for the perception that a wealthier background is needed to get ahead and 0.52 for the preference for more opportunities). Furthermore, when outliers such as Belgium and the United States are excluded, the rank correlation for preferences for more opportunities increases significantly, approaching 0.80. The results offer some empirical validation for the use of machine learning techniques as a reliable method for understanding inequality of opportunity in OECD countries.

[9] The relation was originally formulated by Corak (2006[31]). The term "Great Gatsby Curve", which it came to be popularly known by, was later coined by Alan Krueger, then-Chair of the White House Council of Economic Advisers.

[10] The rank correlation between income inequality (as measured by the Gini coefficient) and relative inequality of opportunity, as computed in Figure 2.1, is 0.39. While this number may seem low, it should be borne in mind that the relative homogeneity of OECD countries may lower the significance of the relationship between total inequality and inequality in opportunities. For instance, in OECD (2018[1]), the correlation between intergenerational earnings persistence and income inequality jumps from 0.45, when restricting the analysis to OECD countries, up to 0.74, when including Argentina, Brazil, China, India and South Africa.

[11] The relative contribution of each circumstance is computed through the Shapley-Shorrocks decomposition method (Brunori, Ferreira and Salas-Rojo, 2024[32]), which calculates the reduction in inequality of opportunity arising from the exclusion of a given circumstance from the prediction model (Shorrocks, 2013[34]; Shapley, 1953[33]). This is the only method that meets two essential criteria: first, the decomposition is an exact decomposition under addition (the sum of the relative effect of circumstances adds up to 100%); and secondly, the decomposition is symmetric with respect to the order of the arguments (the order in which circumstances are removed has no impact). See Annex 1.A for further detail. The authors are thankful to Paolo Brunori and Pedro Salas-Rojo for sharing the R code used to compute the Shapley-Shorrocks decomposition.

[12] That is, father's educational level and occupation and mother's educational level and occupation.

[13] To distinguish between age and cohort effects, a longitudinal sample would be ideal, allowing for the direct tracking of income inequality as it evolves throughout the life cycle of individuals from the same cohort. However, this option is rarely available over an extended timeframe. A feasible alternative involves treating repeated cross-sectional surveys as a pseudo-panel: if each survey is a random sample of the population, then each birth cohort within those surveys can be considered comparable across different survey waves.

[14] Among plausible scenarios, age could notably have a *constant effect* over time, implying that the effect of initial disadvantages faced by a cohort remains constant as the cohort gets older. Conversely, its effects could differ over time, potentially giving rise to *(i)* a *compensation effect*, when the effect weakens as the cohort ages; *(ii)* a *scarring effect*, when unequal beginnings lead to cumulative disadvantage over the lifecycle; or *(iii)* an *inverted U-shaped effect*, with a scarring effect in younger years followed by a compensation effect later in life.

[15] However, inequality of opportunity increased steeply with age for the cohort born in the 1960s, while it declined slightly for those born in the 1970s. As a result, both cohorts reached similar levels of inequality of opportunity around the age of 50.

[16] Skill-biased demand for labour means that the returns on higher education remain substantial in terms of employment and earnings (OECD, 2022[40]). However, evidence suggests that increase in the supply of skilled labour may also contribute to diminish these returns, as the wage premium accruing to the tertiary-educated tends to be highest where their share is low (OECD, 2018[35]).

[17] Looking forward to possible future trends, the changes brought about by Artificial Intelligence may expand opportunities for younger generations. However, at present the significant wage premium associated with specialised AI skills does not disproportionally benefit young workers. The share of young workers in the AI workforce is no larger than for the employed population with a tertiary degree (OECD, 2023[37]).

[18] While using the household as a unit of observation presents several important advantages for analysis, it relies on the central assumption that resources are shared equally among household members. This assumption needs to be relaxed in order to account for intra-household disparities in earnings and allocation of resources and duties, which are of crucial importance for understanding gender differences in the opportunities available to men and women. See Section 1.2.2. in the previous chapter and Annex 1.B for a discussion on the implications of using the household as unit of analysis.

[19] Although self-selection is a significant issue when considering labour force participation by women in past periods, its relevance has tended to decrease in recent times. It is therefore less restrictive to focus the analysis only on employed women when studying inequality of opportunity for the more recent generations. The rising trend in labour force participation among women observed in many countries means that problems of self-selection and representativeness should be lesser, although significant gender gaps still remain and affect labour market participation decisions by younger cohorts (OECD, 2023[36]; 2017[39]). If the decision to participate in the labour market is influenced by the perceived extent of inequality of opportunity – i.e., if a woman is less likely to enter into the labour market when she expects to be discriminated against on the basis of her socio-economic background, then the measure obtained by focusing on individual earnings will represent a lower bound of actual inequality of opportunity. To estimate the mobility of employed women, the analysis only considers education and occupation in the mother's generation – not earnings, as would be required for the calculation of elasticities, for which the bias is likely to be stronger.

[20] It should be noted, however, that some of these differences arise within the context of the household. For example, unequal participation in the labour market may reflect a joint decision by the couple.

[21] This is done by multiplying the relative importance of a specific circumstance by the measured level of inequality of opportunity. From this perspective, a country where absolute inequality of opportunity (measured as Gini index of the counterfactual distribution) is 0.1 and where 50% of inequality of opportunity relates to gender would be considered similar to a country where absolute inequality of opportunity is 0.5 and where 10% of inequality of opportunity relates to gender. In this sense, adjusting for the absolute level of inequality means that the influence of a specific factor is less significant in countries with lower overall inequality of opportunity.

3. Geographic inequalities in access to opportunities

This chapter examines how the place where people are born and grow up shapes their opportunities in life. Opportunities to access quality education, jobs, and services vary significantly across and within countries. These differences matter, because most people stay close to their birthplace well into adulthood. Residents of metropolitan and higher-income regions tend to have better access to services, infrastructure, and employment, which leads to better educational and labour market outcomes. In contrast, people in poorer or remote regions face persistent disadvantages. The chapter documents these disparities drawing on regional and urban typologies based on OECD territorial definitions. It shows how place shapes opportunity and contributes to long-term inequalities in life outcomes.

3.1. Introduction

Addressing inequalities in opportunities, understood as disparities in people's life chances that arise from circumstances beyond their control rather than individual effort (see Chapter 1), **remains a significant challenge across OECD countries**. As shown in Chapter 2, on average across OECD countries, over a quarter at least of observed inequalities in household market incomes can be attributed to circumstances beyond people's control, such as their sex and country of birth or the country of birth and socioeconomic status of their parents. The reason is that these circumstances can reduce access to opportunities and drive discriminatory behaviour, impacting lifetime educational attainment and labour market trajectories (Adema, Fluchtmann and Patrini, 2023[1]; Akee, Jones and Porter, 2019[2]; O'Connell, 2019[3]) and thereby determining incomes and living standards.

This chapter provides evidence on another crucial factor that affects people's opportunities in life: the place where they are born and live. Geographic location matters for inequality of opportunities because people have no control over where they are born and raised. As this chapter shows, opportunities in access to education, services and jobs can vary significantly within countries, and relocating later in life to areas where opportunities – such as well-paid jobs – are greater, requires overcoming significant barriers. These include the financial costs associated with switching homes, particularly when moving into higher-income areas (Ganong and Shoag, 2017[4]; Ferreira, Gyourko and Tracy, 2010[5]), job search costs (Gobillon and Selod, 2021[6]), a desire to remain close to established social networks (Spring, Gillespie and Mulder, 2023[7]), and responsibilities for caregiving (Artamonova and Syse, 2021[8]). As a result, many people stay close to their birthplace during their adult life. For instance, over half of Swedish people still live in their municipality of birth by age 30 (Thomassen, Lundholm and Malmberg, 2023[9]), and half of the UK population have never worked outside the local authority in which they were born (Bosquet and Overman, 2019[10]). Moreover, geographic mobility has declined in several large OECD countries over the last decades, including in Australia, Canada, Japan, Korea, Poland, and the United States (Alvarez, Bernard and Lieske, 2021[11]).

The characteristics of the places where people grow up significantly influence their later-life outcomes, notably educational attainment and lifetime earnings, as documented in recent studies for Australia (Deutscher, 2020[12]), the United Kingdom (McNeil, Luca and Lee, 2023[13]) and the United States (Chetty and Hendren, 2018[14]). Public perception aligns with these findings: two-thirds of respondents in the latest wave of the OECD's *Risks that Matter* survey, which assesses people's perceptions of the social and economic risks they face, report that the neighbourhood where people grow up impacts on their ability to get ahead in life (OECD, 2023[15]).

This chapter documents that, across the OECD, people in the same country face unequal access to education, employment, essential services and infrastructure, depending on where they live. This, in turn, contributes to persistent geographic disparities in economic opportunities and living standards. Metropolitan and higher-income regions provide greater physical accessibility to essential services, such as childcare facilities and schools (Almeida et al., 2024[16]), as well as better digital and transport infrastructure (OECD, 2023[17]). Although they tend to be more expensive, cities also tend to offer greater opportunities for employment (Ormerod, 2013[18]) and earnings progression (Roca and Puga, 2016[19]). A handful of large cities, often capital cities, concentrate most of the innovation (Paunov et al., 2019[20]; Cantwell and Zaman, 2024[21]). Substantial differences in opportunities also exist at finer geographic scales. Within cities, poorer neighbourhoods offer fewer and lower-quality services, such as schools (Owens and Candipan, 2019[22]) and public transport (Nie et al., 2024[23]). Such regional and local disparities in opportunities matter for people's outcomes: the inhabitants of metropolitan and higher-income regions, and those living in higher-income neighbourhoods, benefit from higher upward mobility, both across generations (Chetty et al., 2014[24]) and throughout their adult lives (Aghion et al., 2023[25]; Roca and Puga, 2016[19]).

As significant differences in opportunities also exist *within* regions, the scale at which inequality of opportunity is measured matters. Smaller geographical units make spatial differences more visible, while larger units obscure these differences by averaging out smaller-scale variation. Inequalities in access may be felt most strongly in the places where people spend most of their daily lives (e.g., the neighbourhoods or functional urban areas they live in). Still, measuring inequalities at larger scales, such as at regional level, matters – e.g., because it can inform the redistribution of funds within countries and the design of place-based policies.

Because internationally comparable data on measures of opportunity at smaller scales are often unavailable, this chapter mainly provides evidence on disparities in people's opportunities across regions and functional urban areas. It classifies "places" using OECD territorial definitions, including small regions (*Territorial Level 3*, TL3), distinguished by their access to cities (Fadic et al., 2019[26]) and the degree of urbanisation (OECD et al., 2021[27]), as well as large regions (*Territorial Level 2*, TL2). For further information on different geographical units and typologies used in this chapter, see Annex 3.A.

The remainder of this chapter is organised as follows. Section 3.2 discusses the uneven geography of income poverty and financial fragility risk. Section 3.3 explains how location matters for access to, and quality of, educational opportunities, and Section 3.4 provides evidence on geographic inequalities in labour market opportunities. Section 3.5 documents geographic disparities in access to healthcare and other essential services.

3.2. Place matters for income poverty and financial fragility

Where a person grows up or lives plays a critical role in shaping their life chances. Higher-income people are more likely to live in regions with better schools, healthcare and job opportunities. This spatial concentration of advantage reinforces existing socio-economic inequalities (van Ham, Manley and Tammaru, 2024[28]). In contrast, people living in poorer regions often face weaker public services and limited access to quality jobs. This reduces their prospects and can trap individuals in cycles of disadvantage (OECD, 2018[29]; Banzhaf and Walsh, 2008[30]).

3.2.1. People's risk of facing income poverty varies greatly across regions

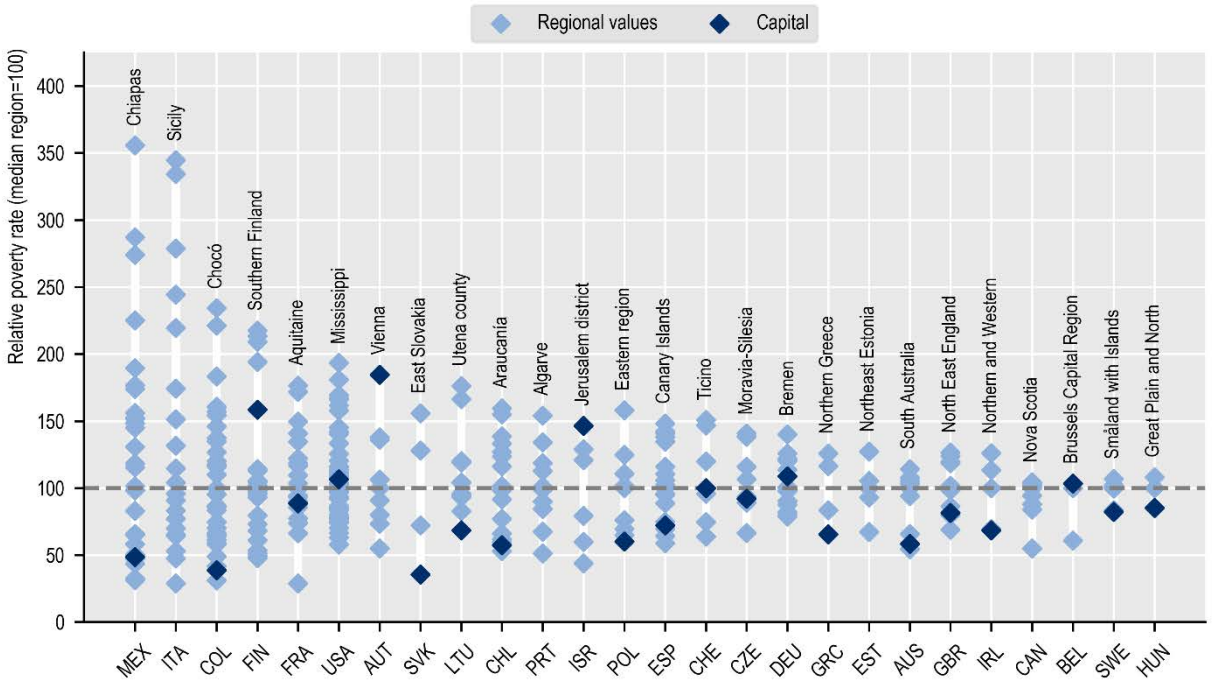
Poverty rates vary widely across regions within countries, pointing to persistent regional inequalities in income and opportunity in some countries. In 2022, 15% of people in OECD regions lived in relative income poverty, i.e., in a household with an income below 50% of the national median after adjusting for household size. However, this average conceals large territorial differences.

Some countries show deep regional divides in poverty, while others are more equal. For example, Mexico, the country where differences are widest, shows more than a tenfold difference in poverty rates across regions – a gap of around 35 percentage points – with a regional poverty rate in Baja California Norte at around 30% of the median region against 355% of the median region for Chiapas (Figure 3.1). Similarly, in Colombia and Italy, the gap between the regions with the highest and lowest poverty rates exceeds 30 percentage points, which corresponds to a factor of six to ten. In contrast, differences are smaller in countries like Hungary and Sweden, where the gap between the regions with the highest and lowest poverty rate is less than 25 percentage points.[1]

People's chances to move up from the bottom of the income distribution are also influenced by where they live. Evidence from tax records in Belgium, Estonia and Spain suggests that people in higher-income regions experience greater upward mobility over five years than those in lower-income regions (Box 3.1)

Figure 3.1. Regional poverty rates vary significantly in some countries

Relative income poverty rates in TL2 regions (median region = 100), in 2022 or latest available year



Note: The figure shows relative income poverty rates for TL2 regions in 26 countries, based on the most recent data available between 2016 and 2022. Poverty rates are normalised so that each country's median regional rate equals 100. Values above 100 indicate regions with higher-than-median poverty rates, while values below 100 indicate lower-than-median poverty rates. Countries are sorted by the size of the interregional gap in poverty rates in descending order. A person is considered poor if they live in a household with an equivalised disposable income below 50% of the national median. Equivalised disposable income refers to household income net of taxes and social security contributions, adjusted by dividing by the square root of household size. Data refer to 2022 for Mexico; 2021 for Belgium, Czech Republic, Spain, Finland, Greece, Hungary, Israel, Poland, Portugal, Sweden, United Kingdom, and United States; 2020 for Austria, Colombia, Italy, and Lithuania; 2019 for Canada, Switzerland, Germany, and Ireland; 2018 for Australia, France, and Slovak Republic; 2017 for Chile; and 2016 for Estonia.
Source: OECD calculations based on the *European Union Statistics on Income and Living Conditions* (EU-SILC), https://ec.europa.eu/eurostat/web/microdata/european-union-statistics-on-income-and-living-conditions; and the *Luxembourg Income Study Database*, https://www.lisdatacenter.org/.

StatLink https://stat.link/zguswn

Box 3.1. Geographic inequalities in short-term income mobility: Evidence from Belgium, Estonia and Spain using tax-record data

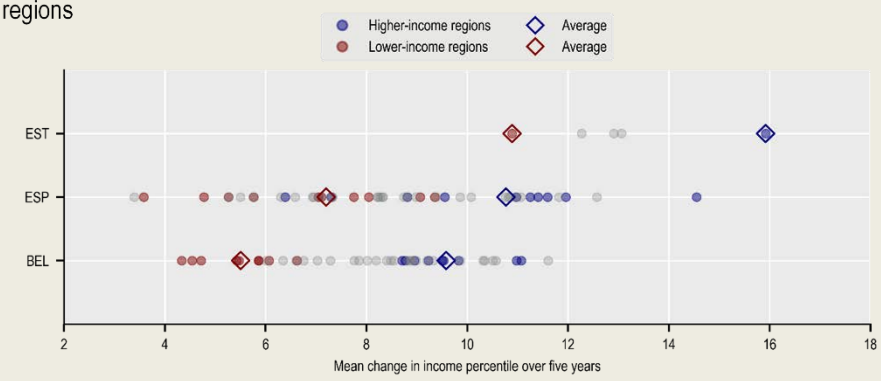
People's risk of living in poverty varies substantially depending on where they live (see Figure 3.1). Beyond comparing regional income levels, it is much harder to show, for lack of data, that there are also regional differences in the extent to which low incomes are *persistent over time*, i.e., in income mobility over the life course. This box presents evidence on short-term income mobility in Belgium, Estonia and Spain. The analysis draws on tax record data from an ongoing project that uses administrative microdata to study income dynamics (Königs and Terrero-Dávila, 2025[31]). Specifically, this box examines disparities in upward mobility across regions for working-age people in the lower part of the income distribution,[1] looking at *(i)* the average change in people's position in the income distribution over five years; and *(ii)* the share of people who move up the income distribution over that period.

People in lower-income regions find it harder to move up the income distribution

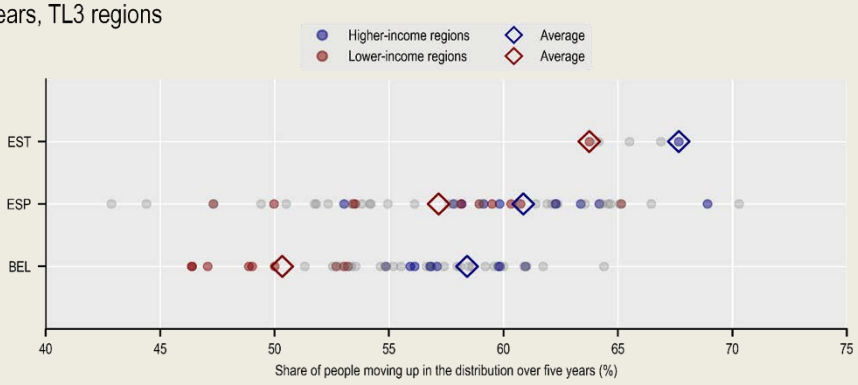
In Belgium, Estonia and Spain, people face unequal prospects for climbing the income ladder depending on where they live. For those starting around the 15th percentile of the national income distribution, mobility over five years varies substantially by region. This holds both for people's average advancement along the distribution (Figure 3.2, Panel A), as well as for the share of people who experience upward mobility (Figure 3.2, Panel B).[2] In Spain, for example, working-age people who start off around the 15th percentile of the income distribution move up, on average, by 4 percentiles in regions where upward mobility is weakest, compared to more than 10 percentiles in regions where mobility is stronger. Likewise, in both Belgium and Spain, rates of upward mobility differ widely: in some regions, less than half of working-age people starting around the 15th percentile move up over the period, while in others more than two-thirds do. In Estonia, where relative income mobility is higher and where there are fewer regions, regional disparities are somewhat narrower.

Figure 3.2. People in lower-income regions exhibit less favourable mobility outcomes

Panel A. Mean change in income percentile over five years for people initially around the 15th percentile, TL3 regions



Panel B. Share of people initially around the 15th income percentile who move up the distribution over five years, TL3 regions



Note: Calculations are for working-age individuals (25-54 in the initial year) between the 13th and 17th percentile of the national distribution of equivalised disposable household income. Countries are sorted by the average change in the income percentile in descending order. To smooth fluctuations, incomes have been averaged over two years at both the initial and final points (2016/17 and 2020/21 for Belgium; 2017/18 and 2021/22 for Estonia and Spain). Each dot represents a region. Regions in red are among the bottom 20% of regions in their country by median income; regions in blue are among the top 20%. The diamonds represent the population-weighted average across regions in each group. The regions of Verviers and Bezirk Verviers (Belgium) have been grouped into one as they cannot be identified separately in the data. Teruel and Soria (Spain) have also been grouped due to small sample sizes. The island regions of El Hierro, Fuerteventura, La Gomera, La Palma, and Lanzarote, and the mainland regions of Navarre, Álava, Guipúzcoa, and Vizcaya (Spain) are not included in the analysis due to lacking data.

Source: OECD calculations based on tax and benefit income administrative microdata provided by *StatBel* (BEL), *Statistics Estonia* (EST) and the *Institute for Fiscal Studies* (ESP).

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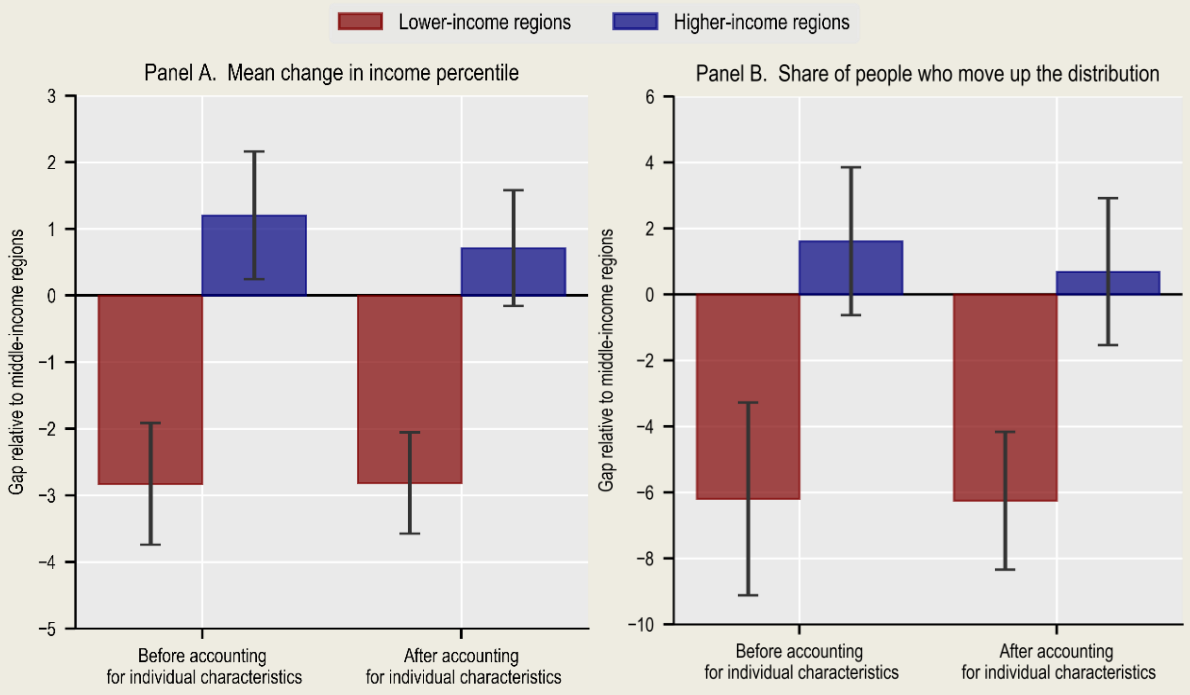
Regional income levels help explain part of these disparities. Across the three countries, people living in higher-income regions generally face better prospects for upward mobility than those in lower-income regions. While some of these regional differences may reflect the sorting of individuals with different characteristics (see the discussion about urban-rural divides in test scores in Section 3.3), evidence from Belgium suggests that regional income levels may play a role even after accounting for such differences. Figure 3.3 shows the gap in mobility outcomes for people living in regions with different income levels, measured relative to residents of middle-income regions, both before and after accounting for individual characteristics. Among working-age people starting around the 15th percentile with the same age, gender, household type, employment status and education, those living in lower-income regions advance 3 percentiles less (Figure 3.3, Panel A), and are 6 percentage points less likely to experience upward mobility (Figure 3.3, Panel B). As discussed in the remainder of this chapter, higher-income regions provide better infrastructure, as well as more employment and education opportunities, which are key to fostering upward mobility.

Figure 3.3. Regional disparities in mobility outcomes persist even after accounting for individual characteristics

Gaps in five-year mobility outcomes for people in lower- and higher-income regions relative to those in middle-income regions around the 15th income percentile, before and after accounting for individual characteristics, in Belgium, TL3 level



Note: Calculations are for working-age individuals (25-54 in the initial year) between the 13th and 17th percentile of the national distribution of equivalised disposable household income in Belgium. To smooth fluctuations, income is averaged over two years at both the initial and final points (2016/17 and 2020/21). Estimates of mobility outcomes come from ordinary least squares (OLS) regressions at the individual level, both without and with controls for individual characteristics such as age, gender, education, employment status, household type, and whether the person moved across regions during the period. People in lower-income regions are those living in the bottom 20% of regions in their country by median income; people in higher-income regions are those living in the top 20% of regions.
Source: OECD calculations based on tax and benefit income administrative microdata provided by *StatBel* (BEL).

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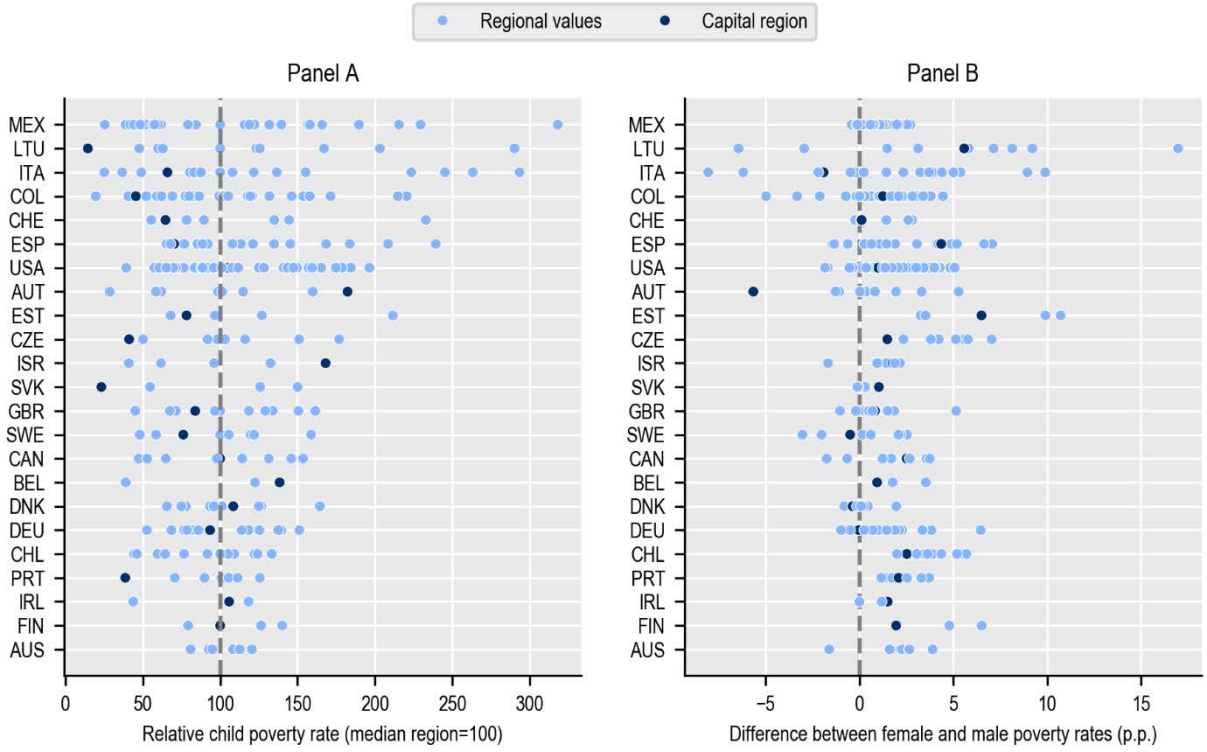
1. It is important to note that the analysis measures income mobility relative to the national income distribution. Differences in regional price levels and consumption baskets, as well as the shape of regional income distributions, may also influence how changes in income positions translate into people's living standards.
2. On average, incomes regress toward the mean: people starting with lower incomes, on average, move up the income distribution, while those starting with higher incomes move down. Consequently, people around the 15th percentile on average show upward mobility.

Figure 3.4. Child poverty rates and the gender gap in poverty both vary widely within countries

Relative child poverty rate (Panel A) and difference between adult female and male relative poverty rates (Panel B), in TL2 regions, in 2022 or latest available year



Note: The figure presents the most recent data available for 23 countries and captures two dimensions of poverty at the TL2 regional level. Panel A shows relative child poverty rates, normalised so that each country's median regional value equals 100. Values above 100 indicate regions with higher-than-median poverty rates, while values below 100 indicate lower-than-median poverty rates. Child poverty refers to individuals aged under 18 living in households with income below the national poverty threshold. Panel B displays the absolute gap in poverty rates (percentage points) between women and men aged 18 or older. A person is considered poor if they live in a household with an equivalised disposable income below 50% of the national median. Equivalised disposable income refers to household income net of taxes and social security contributions, adjusted by dividing by the square root of household size. Countries are ordered by the size of the interregional poverty gap in Panel A, in descending order. Both panels use the most recent data available. Data refer to 2022 for Colombia, Denmark, Greece, Mexico, the United States; 2021 for Austria, Belgium, Czechia, Finland, Germany, Ireland, Israel, Portugal, Spain, Sweden, the United Kingdom; 2020 for Italy, Lithuania; 2019 for Canada, Switzerland; 2018 for Australia, France, the Slovak Republic; 2017 for Chile; and 2016 for Estonia.
Source: OECD calculations based on the *European Union Statistics on Income and Living Conditions* (EU-SILC), https://ec.europa.eu/eurostat/web/microdata/european-union-statistics-on-income-and-living-conditions; and the *Luxembourg Income Study Database*, https://www.lisdatacenter.org/.

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Children's exposure to poverty varies also depending on where they grow up. In OECD regions with available data, the average child poverty rate is 17%, but differences within countries are wide. Mexico and Lithuania show the largest regional gaps, each exceeding 30 percentage points, with poverty rates for children in the poorest regions more than eleven times higher than in the least poor regions (Figure 3.4, Panel A). Child poverty rates tend to be lower in capital-city regions. In 15 out of 23 countries, the rate in the capital-city region is below the median region. Across all 23 countries, capital-city regions report an average child poverty rate of around 11%, which is about 3 percentage points lower than the national average.

Gender inequalities in poverty rates are also evident across regions, with women being, on average, more likely to live on very low incomes than men.[2] Out of 323 regions with available data, 267 show higher poverty rates for women than for men. In countries such as Belgium, Chile, Czechia, Estonia, Finland and Portugal, every region reports a positive gender gap. In contrast, countries like Italy, Lithuania and Colombia display large within-country variation. For example in Italy, in the Basilicata region, the poverty rate for women exceeds that of men by 10 percentage points, while in Molise, it is 8 points lower (Figure 3.4, Panel B). Gender gaps in poverty rates tend to be lower in capital-city regions. Across the 23 countries with available data, capital-city regions report an average gender poverty gap of 1.3 percentage points, a little more than half the national average of 2 percentage points.

Gender disparities in poverty may translate into unequal access to economic opportunities, for instance if living in poverty creates obstacles to obtaining education and training, or if it is compounded by poorer access to essential services, such as childcare. For women in capital-city regions, gender gaps in poverty rates are lower, possibly due to selection effects, better job opportunities, greater access to services and stronger social support systems. However, higher living costs in capital-city regions could offset some of these potential benefits.

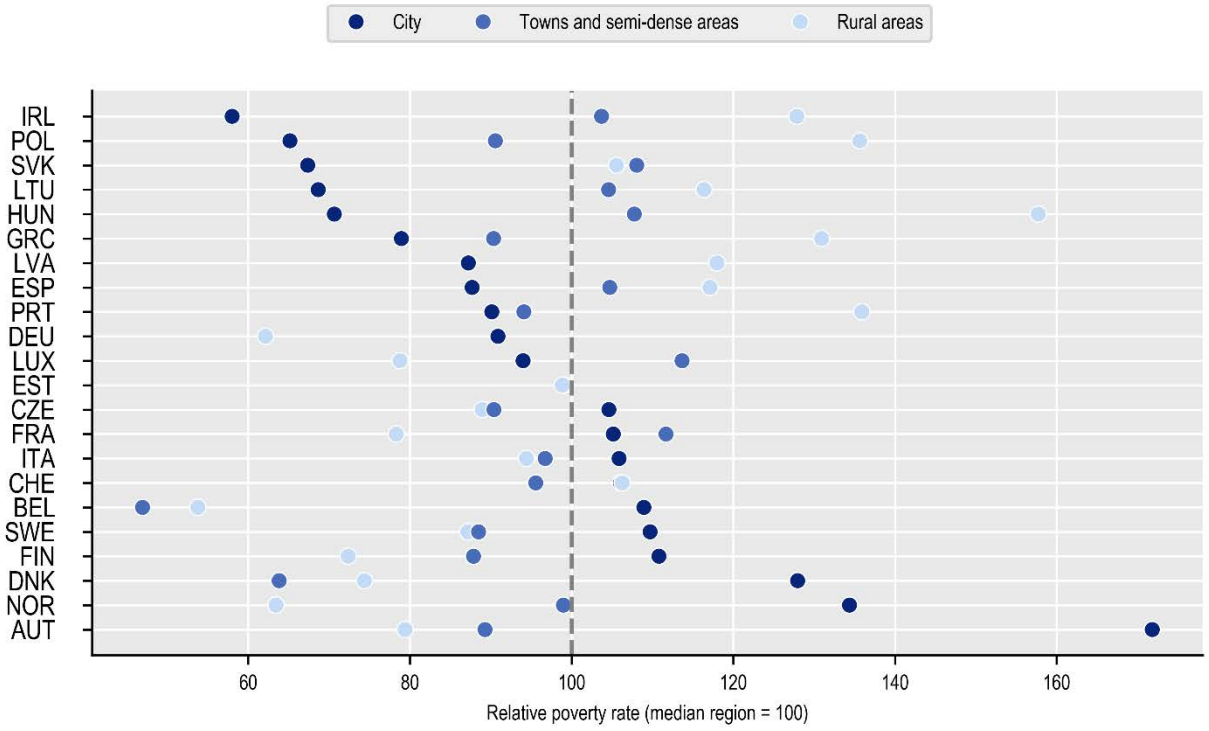
3.2.2. Poverty rates vary substantially across cities and rural areas

Aggregations by large regions may mask important differences in poverty between cities and rural areas. Although cities, especially large ones, typically provide better employment options, education and services, these advantages usually come at a price of higher living costs, especially housing, and more competition for access to services. Meanwhile, rural areas face distinct challenges, including longer travel times to services and higher per capita costs of provision (OECD, 2021[32]).

Poverty gaps between cities and rural areas vary significantly across countries. In Austria, Belgium and Denmark, the share of people living in relative poverty is higher in cities than in towns, semi-dense, or rural areas (Figure 3.5). For example, poverty rate in Austrian cities is 172% of the national median, while it is 79% of the median in rural areas. By contrast, in Hungary, Lithuania and Poland, poverty is more prevalent in rural areas. In Hungary, the difference is particularly large: the poverty rate in rural areas is 160% of the national median, while in cities it is 70%.

Figure 3.5. Poverty rates are higher in cities

Relative poverty rate by degree of urbanisation (median region = 100), in 2023 or latest available year



Note: The figure shows relative poverty rates in cities, towns and semi-dense areas and rural areas, based on the most recent data available for 22 countries. Poverty rates are normalised so that each country's median regional value equals 100. Values above 100 indicate areas with above-median poverty; values below 100 indicate below-median levels. It reports the relative poverty rate with a poverty line defined as 50% of median disposable income per equivalised household. The data are for 2022 for Switzerland and for 2023 for all other countries. Countries are ordered from top to bottom by the relative poverty rate in cities, from highest to lowest.

Source: OECD calculations based on the *European Union Statistics on Income and Living Conditions* (EU-SILC), https://ec.europa.eu/eurostat/web/microdata/european-union-statistics-on-income-and-living-conditions.

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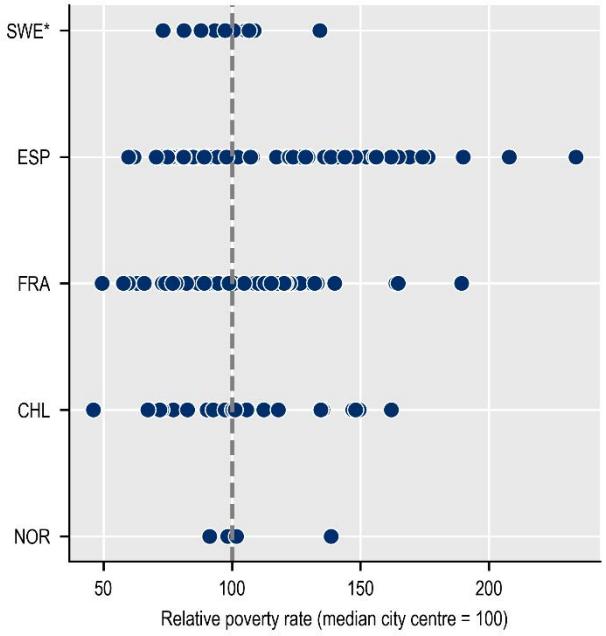
Poverty rates also differ substantially across city centres – the densely populated cores of Functional Urban Areas (FUAs). Across the five countries with available data, differences between city centres can be large (Figure 3.6). In Spain, for example, the poverty rate in the city centre of Torrevieja is 234% of the median city centre, the largest gap among countries with available data. In contrast, disparities are smaller in Norway, where the city centre of Asker, the most deprived, has a poverty rate just 139% of the median. These patterns point to considerable disparities in poverty within cities, underscoring the importance of place-based strategies in addressing urban deprivation.

Figure 3.6. Poverty rates in city centres of Functional Urban Areas differ substantially

Relative poverty rate by city centre (median city centre = 100), in 2022 or latest available year



Note: The figure shows relative income poverty rates in the city centres of Functional Urban Areas (FUAs), based on the most recent data available for 5 countries. Poverty rates are normalised so that each country's median city centre equals 100. Values above 100 indicate city centres with above-median poverty; values below 100 indicate below-median poverty. A person is considered poor if they live in a household with equivalised disposable income below 50% of the national median this threshold is 60% for Sweden. Countries, except for Sweden, are ranked according to the size of their interregional poverty gap. Equivalised disposable income includes both monetary and non-monetary income, net of taxes and social security contributions, and is adjusted for household size using the square root scale. Data refer to 2022 for Chile, Norway, Sweden; 2021 for France and Spain.
Source: OECD calculations based on *OECD Database on Regions, Cities and Local Areas*, http://oe.cd/geostats (accessed in June 2025).

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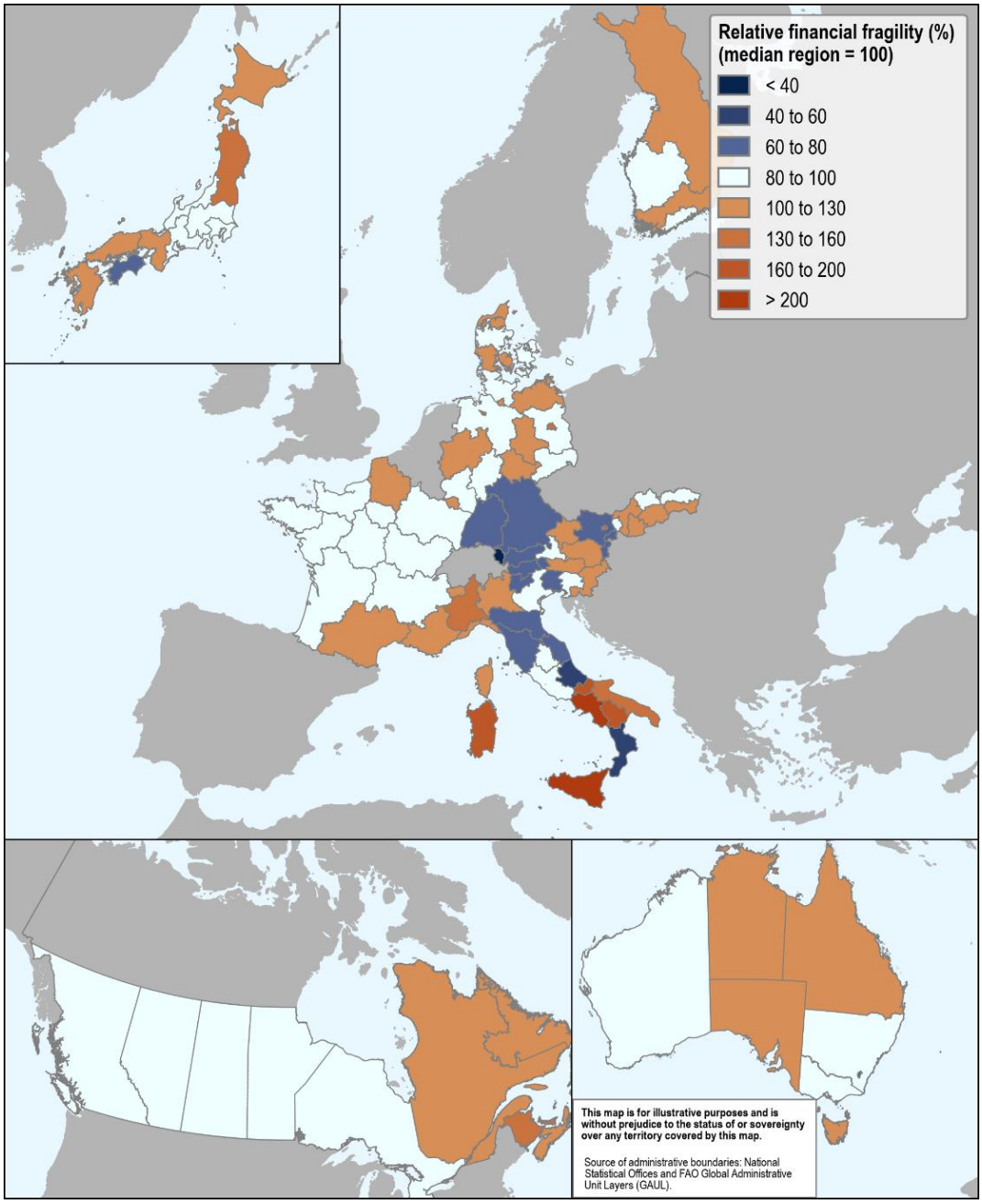
3.2.3. Households in capital-city regions are less likely to face financial fragility

Financial fragility, defined as living without sufficient financial assets equivalent to three months of income at the national poverty line, **significantly undermines people's opportunities** by reducing their capacity to handle economic shocks, invest in education, and secure better housing or business opportunities. Regions with higher levels of financial fragility often show lower intergenerational mobility, reinforcing inequality over time (OECD, 2021[33]; Chetty et al., 2014[24]). Additionally, limited financial assets restrict access to credit, which can play an essential role for upward mobility and entrepreneurship (Balestra and Oehler, 2023[34]; Mian, Sufi and Verner, 2017[35]). This financial fragility perpetuates intergenerational inequality, as families without resources are less able to invest in their children's education and well-being, widening socio-economic gaps (OECD, 2023[36]; Fagereng et al., 2020[37]).

Like poverty, the share of individuals considered financially fragile also differs significantly across regions within countries (Figure 3.7). It is lower in capital-city regions than in the rest of the country, by 7 percentage points on average across countries with available data (36% vs 43%). Italy, the country with the widest differences, shows a nearly fivefold difference in the share of individuals considered financially fragile across regions, with Abruzzo at around 43% of the median region while Campania is at 260% of the median region. In Austria, Canada, Germany and Japan, certain regions also face substantially higher levels of financial fragility than the rest of the country.[3]

Figure 3.7. Cross-regional variation in financial fragility is substantial in some OECD countries

Relative share of people in financial fragility by TL2 and TL3 regions (median region=100), 2022 or latest available year



Notes: The figure shows the share of individuals considered financially fragile, defined as living in a household with financial assets below 25% of the national income poverty line. Financial assets include the market value of financial investments, deposit accounts, cash, and other financial holdings owned by household members. The poverty line is based on equivalised disposable income, except in Austria, the Slovak Republic and Slovenia, where gross income was used due to data limitations. Disposable income is net of income taxes and social security contributions; gross income is measured before these deductions. All income and wealth measures are adjusted for household size using the square root scale. Data refer to 2022 for Denmark; 2021 for Austria, Japan, the Slovak Republic and Slovenia; 2020 for Australia, France and Italy; 2019 for Canada and Finland; and 2017 for Germany.

Source: OECD calculations based on the *Luxembourg Wealth Study* (LWS) Database, https://www.lisdatacenter.org/.

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3.3. Geographic inequalities in access to and quality of educational opportunities

Education and training are essential for helping people from lower socio-economic backgrounds improve their economic standing by increasing their earnings potential and building resilience to financial challenges. As highlighted in Chapter 2, parental socio-economic background is an important driver of inequality of opportunity. Children whose parents have lower levels of education often face disadvantages because their families have fewer resources to support learning. Highly educated parents tend to place greater resources to do so. As discussed in Chapter 4, early childhood education can help bridge these gaps and help equalise opportunities later in life (Heckman, 2006[38]).

However, individuals face unequal access to good-quality education not just in those crucial early stages, but at all stages in life, depending on where they are born and live. Unequal access to quality education can contribute to perpetuate disparities in skills and socio-economic outcomes, as families will usually be bound to education options in their surrounding areas (OECD, 2021[32]). This has greater implications in cities where socio-economic segregation is higher, and in rural areas where access may be difficult.

Beyond the family background, where children grow up also contribute to shape their attitudes towards education, their social networks and access to opportunities (van Ham, Manley and Tammaru, 2024[28]). In disadvantaged regions, schools often have fewer resources, less experienced staff and weaker support systems. These challenges affect all students but hit low-income families hardest.

Moreover, children in these schools may have limited exposure to diverse role models or career paths, which can lower aspirations and reduce the likelihood of completing upper secondary or tertiary education (OECD, 2024[39]). In contrast, children in wealthier regions tend to attend better-resourced schools and benefit from additional support outside the classroom. These early differences contribute to unequal life chances.

3.3.1. Lower test scores in rural areas largely reflect family background

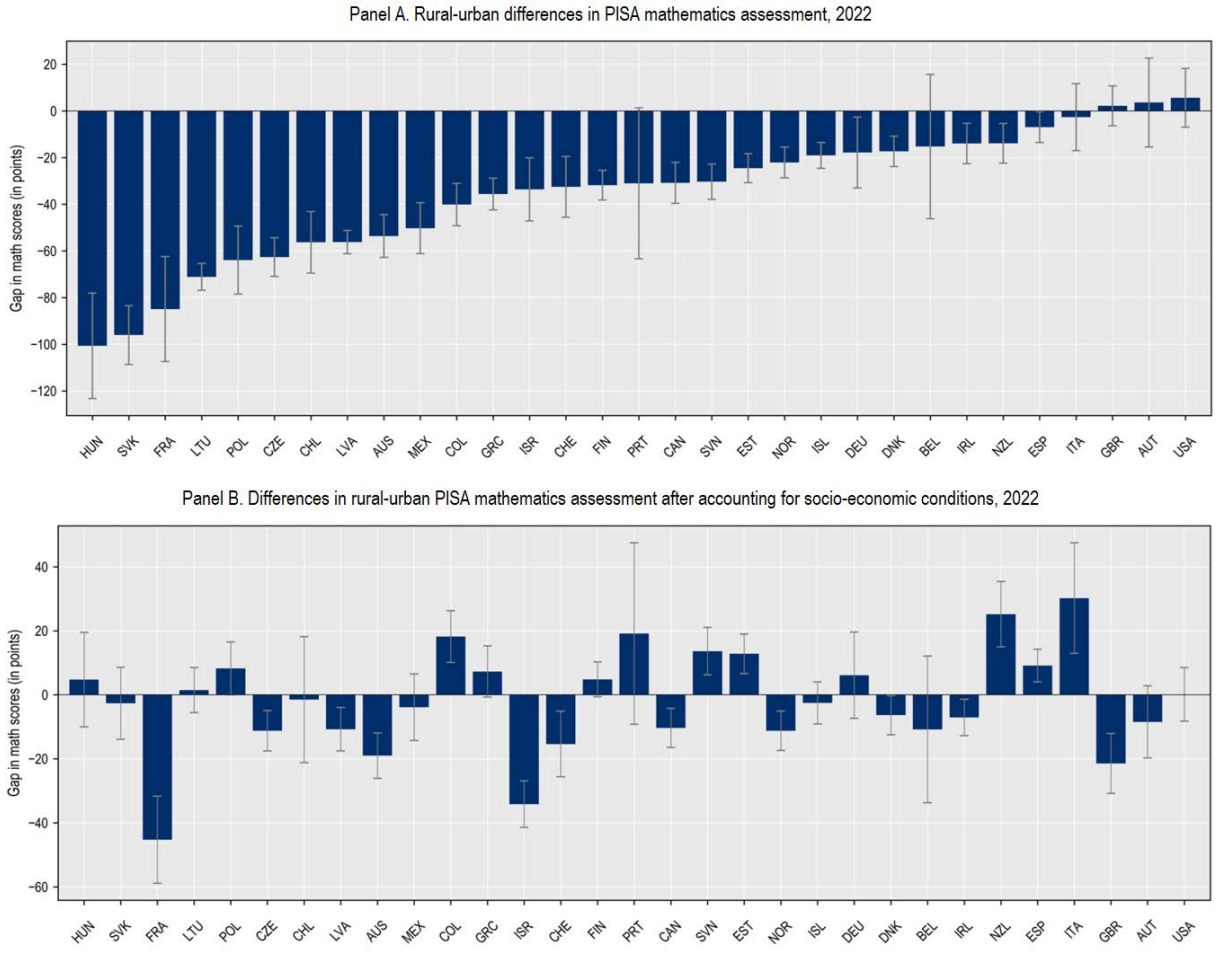
School quality is crucial for ensuring equal opportunities for all students. Differences in resources, teacher qualifications and facilities can greatly impact students' learning and career prospects. Not all public schools get appropriate funding, modern facilities and experienced teachers (OECD, 2017[40]). Schools in poorer and remote areas often struggle with limited resources, outdated infrastructure, high teacher turnover and difficulty attracting good teachers. These disparities can affect academic achievement and perpetuate socio-economic inequalities by limiting students' opportunities for personal and professional growth. While it is not possible to measure differences in school quality within cities, this section reviews available evidence on quality differences across schools depending on the size of the settlement where they are located (see Annex 3.A for further details on the geographical units).

***OECD Programme for International Student Assessment* (PISA) results show wide geographic differences in student performance, partly linked to where families live**. In mathematics, for instance, students in settlements with fewer than 3 000 residents (*rural settlements*) tend to score lower than those in settlements with more than 100 000 residents (*urban areas*) in 28 out of 31 OECD countries with available data (Figure 3.8, Panel A).[4] However, when accounting for parental socio-economic background, a statistically significant disadvantage for rural students remains in only 10 countries; the rural-urban gap disappears in 10 countries, and it even reverses in 8 (Figure 3.8, Panel B).

While these results highlight the important role of the socio-economic composition of parents in explaining differences in learning outcomes of students across places**, some regional differences in student performance persist even after accounting for parental background**. This suggests that other place-based factors, such as school quality, learning environments, infrastructure, or teacher experience, also play a role. These factors are often linked to remoteness and may reflect deeper structural inequalities

that are not fully captured by individual characteristics. Moreover, people do not randomly "sort" into places: families may choose where to live based on school quality or other unobserved advantages, making it difficult to fully isolate the effect of location.

Figure 3.8. Rural-urban gaps in test scores are partly explained by differences in socio-economic status



Note: The figure shows the gap in mathematics scores between students attending schools in urban settlements (more than 100 000 inhabitants) and those in rural settlements (fewer than 3 000 inhabitants), based on PISA 2022 data. Estimates are derived from ordinary least squares (OLS) regressions at the individual level. Panel A presents raw differences, while Panel B includes controls for parents' socio-economic background. Each column reflects the rural-urban score gap in each country. The territorial classification of settlements in PISA does not align with the Degree of Urbanisation (see Annex 3.A for further details). Error bars indicate 95% confidence intervals. Countries are ordered from left to right by the size of the rural–urban score gap in mathematics before accounting for socio-economic conditions (Panel A), from largest negative to largest positive gaps.

Source: OECD calculations based on the *PISA 2022 Database*, https://www.oecd.org/en/data/datasets/pisa-2022-database.html (accessed in July 2024).

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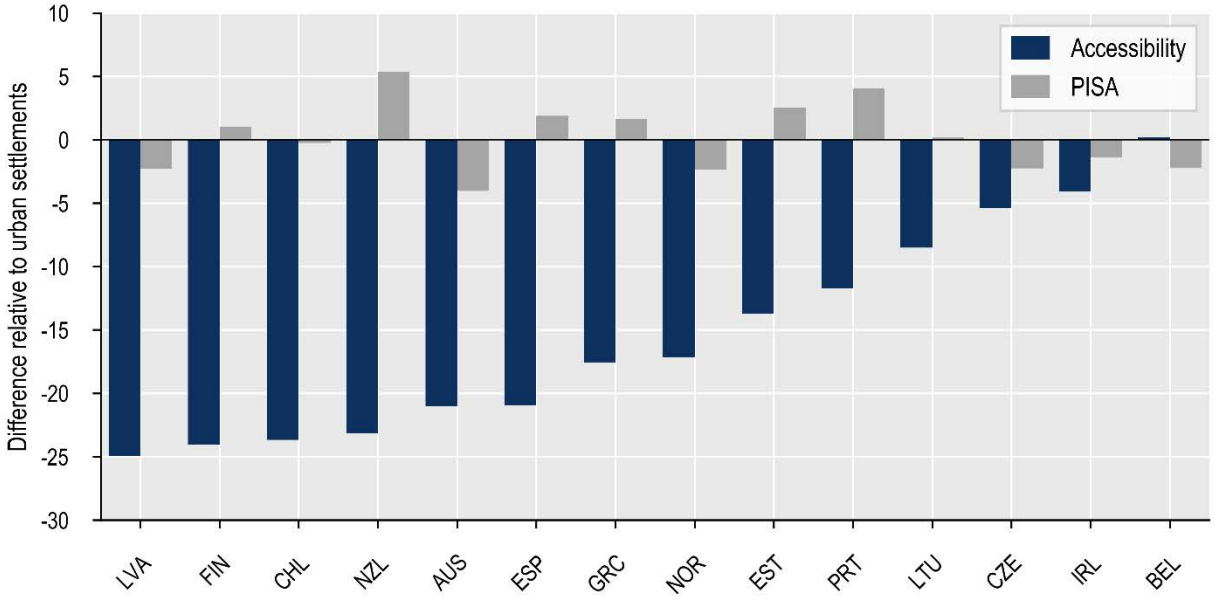
3.3.2. Promoting equal educational opportunities for rural students through better accessibility and resources

Students in rural areas often encounter distinct challenges, such as longer travel times to school. These distances could negatively impact attendance, academic performance and progression to higher education, especially where public transport is limited (OECD, 2021[32]). Rural-urban inequalities in accessibility are especially pronounced for primary school students, such that access to a motor vehicle or school bus services are often essential to transport kids from and to school (Almeida et al., 2024[16]). Even for families with access to a motor vehicle, long distances to school impose additional costs, which weigh on the budgets of low-income households. Transport barriers can also affect educational outcomes beyond test scores. Long commutes increase the risk of absenteeism and early school leaving, especially where public transport does not offer a viable alternative. The extra time and effort required for travel may lead to fatigue and reduced engagement with school (OECD, 2022[41]).

Still, in OECD countries with available data, there is no evidence that students in rural settlements do worse than those in cities. After accounting for parental socio-economic characteristics, students do not perform systematically worse in countries where rural schools are on average less accessible relative to urban schools (Figure 3.9). In some countries, including Estonia, New Zealand and Portugal, students in rural settlements *outperform* their urban peers in mathematics. This is true even though, in these countries, the share of people with access to a school within a 15-minute drive is much lower in rural settlements than in cities (by at least 10 percentage points). Conversely, in Australia, Czechia, Ireland, Latvia and Norway, rural students tend to score lower and face accessibility gaps compared to students in cities.

Figure 3.9. Geographic disparities in school accessibility can be large, but this is not always reflected in test scores

The rural-urban gap in PISA assessment in mathematics after accounting for socio-economic conditions and share of population with access to a school within a 15-minute drive in rural settlements relative to urban settlements, in 2022 or latest available year



Note: The figure shows the rural-urban gap for two indicators, expressed relative to values in urban settlements (more than 100 000 inhabitants). The first indicator reflects the difference in mathematics scores between students attending schools in urban and rural settlements (fewer than 3 000 inhabitants), based on PISA 2022 data. The second indicator shows the difference in the share of the population with access to a school within a 15-minute drive. Estimates for mathematics scores are obtained through ordinary least squares (OLS) regressions at the individual level, controlling for parents' socio-economic background. Countries are ordered from left to right by the size of the rural–urban gap in PISA scores after accounting for socio-economic conditions in ascending order. The territorial classification of settlements in PISA does not correspond to the Degree of Urbanisation (see Annex 3.A for further details).

Source: OECD calculations based on the *PISA 2022 Database*, https://www.oecd.org/en/data/datasets/pisa-2022-database.html (accessed in October 2024).

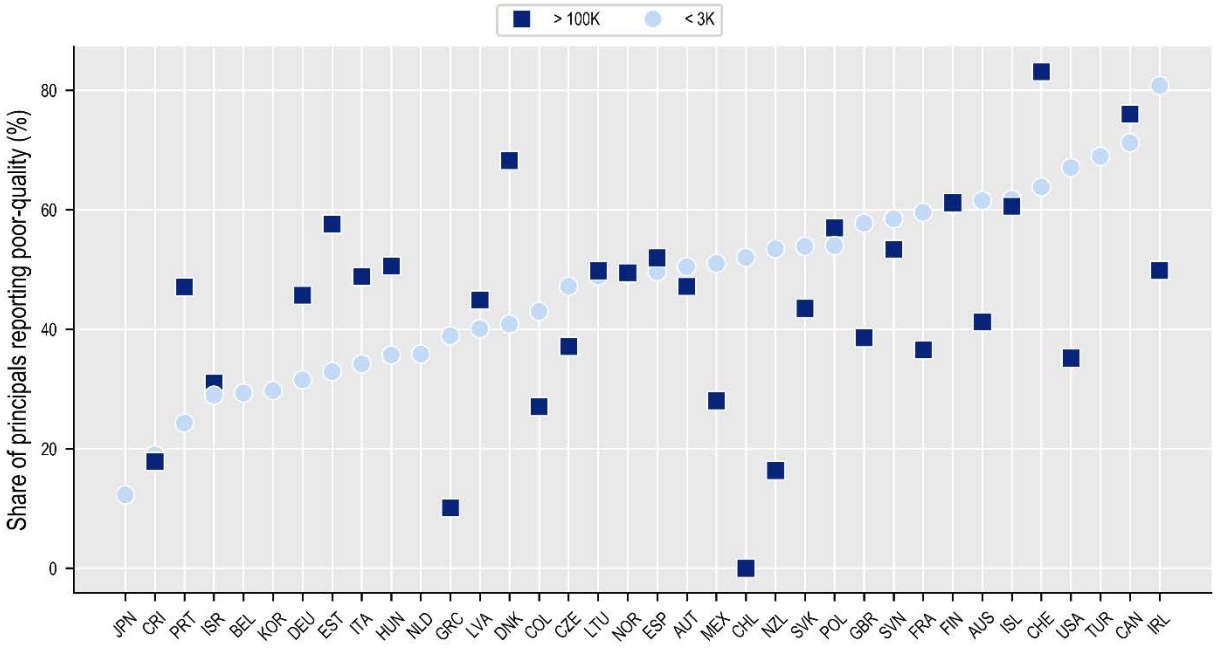
StatLink https://stat.link/iwypjt

Redistributive policies play a key role in addressing the challenges faced by rural schools. Targeted funding helps improve infrastructure and attract qualified teachers. Complementary policies, such as incentives for rural teaching placements, investments in digital learning and stronger local transport networks, are also essential. These measures help ensure that students in rural areas have access to a similar quality of education as those in urban settings (OECD, 2022[42]).

Rural schools often face more infrastructure challenges than urban ones, though patterns vary across countries. In 21 of 33 OECD countries with available data, a higher share of rural school principals report that poor-quality infrastructure is a barrier to effective instruction (Figure 3.10). This is the case for countries including Colombia, Mexico and the United Kingdom. In others – such as Estonia, Latvia and Switzerland – urban schools are more likely to report infrastructure issues. These differences suggest that the quality of school infrastructure reflects not only the type of settlement, but also national policies and investment choices.

Figure 3.10. Rural schools are more likely to have inadequate or poor-quality physical infrastructure

Share of school principals expressing concerns about the quality of physical infrastructure by school location, in 2022 or latest available year



Note: The figure shows the share of school principals who report that instruction is severely hindered by inadequate or poor-quality physical infrastructure. Schools are classified according to the PISA territorial typology as located in either rural settlements (fewer than 3 000 inhabitants) or urban settlements (more than 100 000 inhabitants). Results reflect school-level responses from PISA 2022 and are reported separately for each country. Countries are ordered from left to right by the share of school principals in rural schools (<3 000 inhabitants) reporting poor-quality infrastructure, in ascending order.

Source: OECD calculations based on the *PISA 2022 Database*, https://www.oecd.org/en/data/datasets/pisa-2022-database.html (accessed in September 2024).

StatLink https://stat.link/0lu6re

Box 3.2. Role of neighbourhoods for receiving social assistance benefits: Evidence from the Netherlands

Low-income people, including recipients of means-tested social assistance benefits, often cluster in certain neighbourhoods, for instance because of the availability of affordable (social) housing. This spatial concentration can make existing inequalities (e.g., labour market outcomes, education) stronger, so that living in a neighbourhood with a higher local concentration of social assistance benefit recipients may result in a higher likelihood of relying on social assistance benefits oneself. This may occur through multiple channels, including peer effects that lower the risk of stigmatisation; reduced informational costs of accessing benefits; weaker employment networks; labour market discrimination; and lower-quality local services.

Measuring the role of high benefit receipt in neighbourhoods on their residents is challenging precisely due to selection effects. Since people do not randomly choose where they live, those living in poorer neighbourhoods may also face disadvantages related to their education, employment or health. As a result, any association observed in the data between residents' outcomes and the type of neighbourhood they live in may partly reflect who chooses to live where, rather than the *causal* impact of place on people's life outcomes. In other words: there is likely a problem of endogeneity, as individual and household characteristics that influence people's incomes also drive residential location choices. Addressing this challenge, also known as *spatial sorting*, requires methods that separate neighbourhood influences from individual traits.

Recent OECD analysis asks whether neighbourhood-level social assistance receipt is associated with an individual's likelihood of relying on means-tested benefits (Moreno Monroy et al., 2025, forthcoming[43]). The analysis draws on rich longitudinal administrative records covering all working-age individuals in the Netherlands between 1999 and 2019 (over 7 million people), with precise geographic information. This data makes it possible to account for unobserved, time-invariant characteristics such as preferences, ability, or long-term disadvantage through individual fixed effects, as well as both time-invariant and available time-varying neighbourhood characteristics. The analysis examines whether changes in the neighbourhood share of benefit recipients are linked to changes in an individual's likelihood of receiving benefits, while also controlling for other observable time-varying neighbourhood effects. It further tests whether these associations differ by labour market size or by type of area, such as cities compared to rural regions. However, the analysis cannot control for individual-level shocks (e.g., sudden job loss or divorce) that may both increase the likelihood of benefit receipt and trigger moves to poorer neighbourhoods. For this reason, the results should not be interpreted as causal.

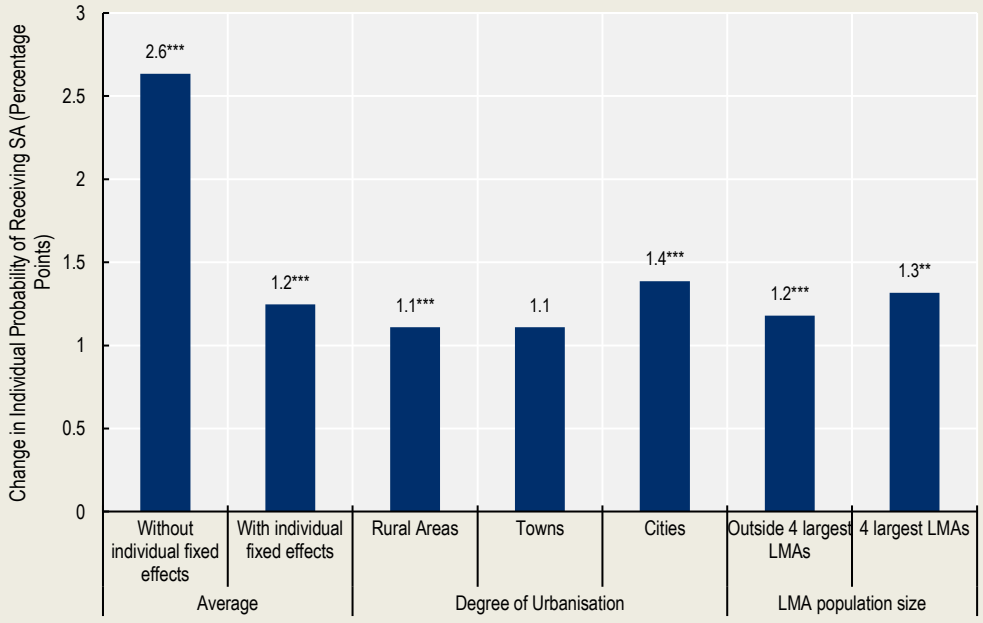
The results indicate that living in a neighbourhood where social assistance benefit receipt is widespread is associated with a higher likelihood of an individual relying on social assistance. This effect is significant even after accounting for individual and household characteristics, and spatial sorting. On average, individuals living in a neighbourhood with twice the rate of social assistance receipt have a benefit receipt rate that is 2.6 percentage points larger (Figure 3.11, Bar 1). After accounting for individual characteristics and residential sorting, this difference falls to 1.2 percentage points, a 13% rise relative to the 9% average rate of social assistance receipt in the sample (Figure 3.11, Bar 2).

Densely populated cities, particularly those within the four largest labour-market areas, show the strongest association between neighbourhood- and individual-level benefit receipt, suggesting that population density plays a part. The neighbourhood's role is most pronounced in cities and weaker in towns and rural areas (Figure 3.11, Bars 3-5). Similarly, the effect is stronger in large urban labour markets – particularly in cities such as Amsterdam, Rotterdam, The Hague and Utrecht – than in smaller ones (Bars 6-7).

These findings suggest policies should address both individual needs and place-based disadvantages. Policies that strengthen neighbourhood conditions while supporting vulnerable individuals are likely to be most effective in supporting individuals at the bottom of the income ladder.

Figure 3.11. Neighbourhood share of benefits recipients matter for the individual probability of receiving benefits in the Netherlands (1999-2019)

Marginal effects from a linear probability model



Note: The dependent variable is a binary indicator equal to 1 if an individual receives social assistance benefits. The main explanatory variable is the share of working-age individuals receiving social assistance in the same neighbourhood (buurt). All models include year and neighbourhood fixed effects, as well as time-varying individual and neighbourhood controls: age squared, household composition (single person, couple without children, couple with children, single parent, other), homeownership, the neighbourhood average share of non-Western migrants, and average housing value. Models without individual fixed effects additionally control for age, sex, and migration background (native, other Western countries, Türkiye, Morocco, Suriname, Dutch Caribbean and Antilles, other non-Western countries). Estimates are based on individual-level regressions using an unbalanced panel covering the full population of working-age individuals (20-65 years old) in the Netherlands between 1999 and 2019, excluding those enrolled in education during the calendar year. All coefficients are statistically significant at the 99% confidence level, except the estimate for social assistance benefit effects in towns, which is not significantly different from that in rural areas, and the estimate for the four largest LMAs, which is significant at the 95% confidence level.
Source: OECD calculations using non-public microdata from *Statistics Netherlands* (CBS) and (Moreno Monroy et al., 2025, forthcoming[43]).

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3.4. Geographic inequalities in labour market opportunities

The employment opportunities available for young people when leaving education have a strong impact on their later careers. Empirical evidence suggests that early-career joblessness can have long-term scarring effects, including a higher probability of later unemployment (Schmillen and Umkehrer, 2017[44]; Brandt and Hank, 2014[45]) and lower future earnings (De Fraja, Lemos and Rockey, 2021[46]). Throughout adulthood, factors such as the local availability and quality of jobs, training opportunities and access to employment support can all have an impact on participation and earnings, as well as on overall well-being. However, these opportunities differ widely across places.

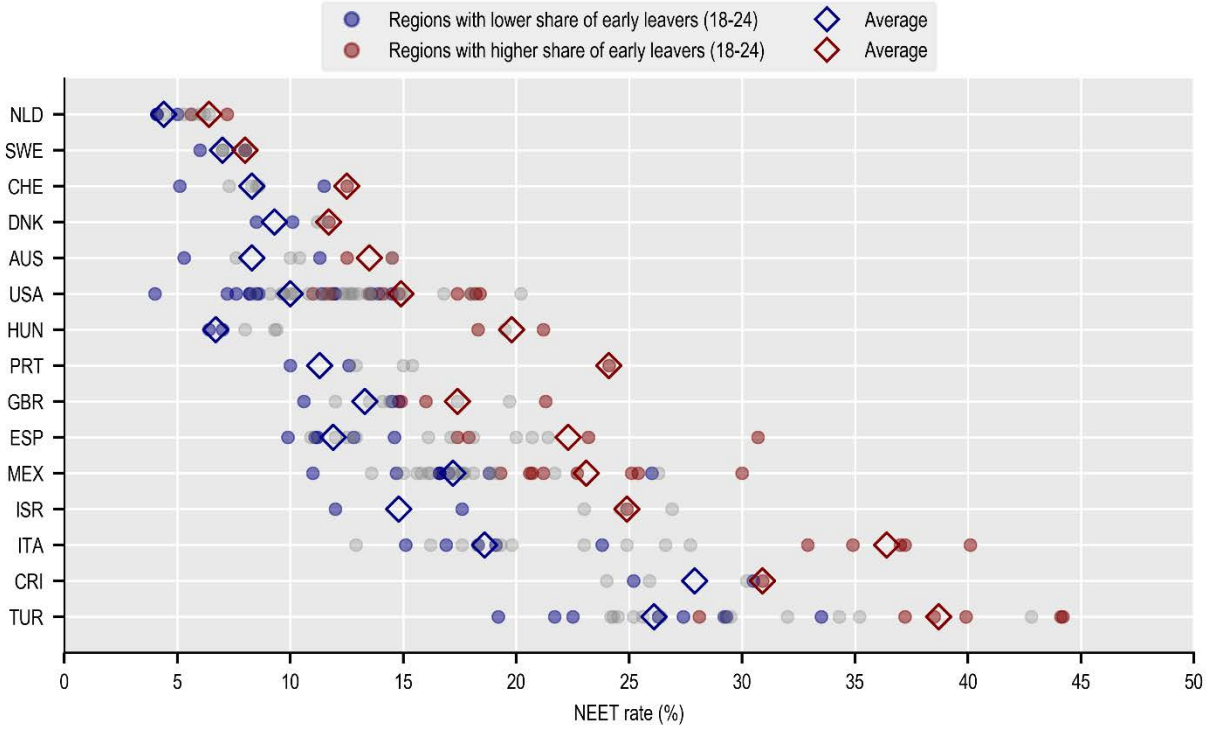
3.4.1. Young people's career opportunities depend on where they grow up

Young people face unequal prospects for a successful school-to-work transition depending on where they live. Across countries where data are available, the share of young people aged 18 to 24 not in employment, education, or training (NEET) differs by an average of 12.7 percentage points between the best- and worst-performing regions. The gap is substantially wider in some Southern European countries and in Mexico, exceeding 20 percentage points (Figure 3.12). In several regions in these countries, one in four young people or more are NEET. By contrast, Nordic countries have low NEET rates and limited regional disparities.

These differences in school-to-work transitions mirror geographic inequalities in educational outcomes: young people are more likely to be NEET in regions with a higher share of early school leavers, i.e., those aged 18 to 24 who have completed no more than lower secondary education (Figure 3.12). Although there may be some overlap, early school leavers and NEET young people are not always the same group: early school leavers may find work even without having obtained a formal qualification, while many NEETs do have upper-secondary education or more (Carcillo et al., 2015[47]). In the quartile of regions with the highest shares of early school leavers, NEET rates are, on average, 7 percentage points higher than in the quartile of regions with the lowest shares. The gap is most pronounced in countries where school-to-work transitions are particularly challenging, such as Italy and Türkiye, but can also be substantial in countries with low national NEET rates, such as Australia and Hungary. The results suggest that certain regions, often those with lower GDP per capita, struggle both to retain students in school and to provide adequate employment opportunities for young people.

Figure 3.12. Geographic inequalities in educational outcomes carry over into school-to-work transitions

Early school leavers and young people not in employment, education or training (NEET), TL2 regions, 2023 or latest available year



Note: Early school leavers are defined as young people aged 18-24 who have completed at most a lower secondary education and were not in further education or training. NEETs are young people aged 18-24 not in employment, education or training. Each dot in the graph represents a region. Regions coloured in red are in the quartile with the highest share of early leavers within each country. Regions coloured in blue are in the quartile with the lowest share of early leavers within each country. The diamonds represent the average across regions of each group. Countries with less than four regions and those where data are missing for a substantial number of regions are excluded. Data refer to 2023, except for Australia, Israel, Switzerland and the United States (2022); Portugal (2019); and Denmark, Hungary, Italy, the Netherlands, Spain and Sweden (2018). The regions of Aos Valley (Italy), Zeeland (Netherlands) and Autonomous Region of Madeira (Portugal) are not included in the analysis due to lacking data.

Source: OECD calculations based on the *OECD Database on Regions, Cities and Local Areas*, http://oe.cd/geostats (accessed in September 2025).

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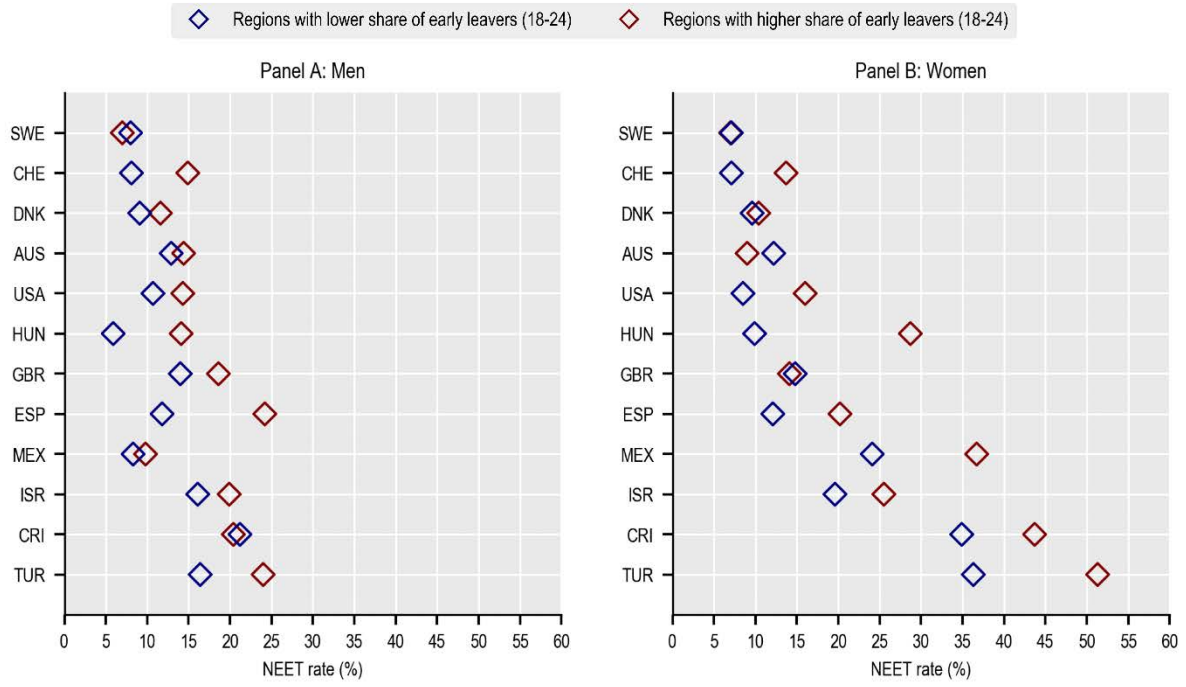
In countries with lower GDP per capita, young women face greater regional inequalities in their school-to-work transition, and their labour market outcomes are more strongly linked with geographic inequalities in educational outcomes than those of young men. Specifically, in countries such as Costa Rica, Mexico and Türkiye, young women are significantly less likely to transition successfully from school to work in regions where a greater share of them did not complete upper secondary education (Figure 3.13, Panel B). For young men, this association is much less pronounced (Figure 3.13, Panel A). Although gender disparities also exist in some larger economies, such as the United States, their magnitude is substantially smaller. Cross-country studies suggest that, even in OECD countries, lower GDP per capita is associated with an earlier age at marriage for women, as well as with higher fertility rates (Jelnov, 2021[48]; Campisi et al., 2020[49]; Abeynayake, Bomhoff and Lee, 2012[50]). Both factors negatively affect the educational and labour market outcomes of women (Villalobos-Hernández et al., 2015[51]; İlkkaracan, 2012[52]).

Figure 3.13. Gender disparities in school-to-work transition can be large

Early school leavers and young people not in employment, education or training (NEET) by gender, TL2 regions, 2023 or latest available year



Note: Early school leavers are defined as young people aged 18-24 who have completed at most a lower secondary education and were not in further education or training. NEETs are young people aged 18 to 24 neither in employment, nor in education nor training. Diamonds in red and blue represent, respectively, the average NEET rate of regions in the quartile with the highest and the lowest share of early leavers within each country. Countries with less than four regions and those where data are missing for a significant number of regions are excluded. Data refer to 2023, except for Australia, Israel, Switzerland and the United States (2022); and Denmark and Spain (2018). The regions Ceuta and Melilla (Spain) are not included in the analysis due to lacking data.

Source: OECD calculations based on the *OECD Database on Regions, Cities and Local Areas*, http://oe.cd/geostats (accessed in September 2025).

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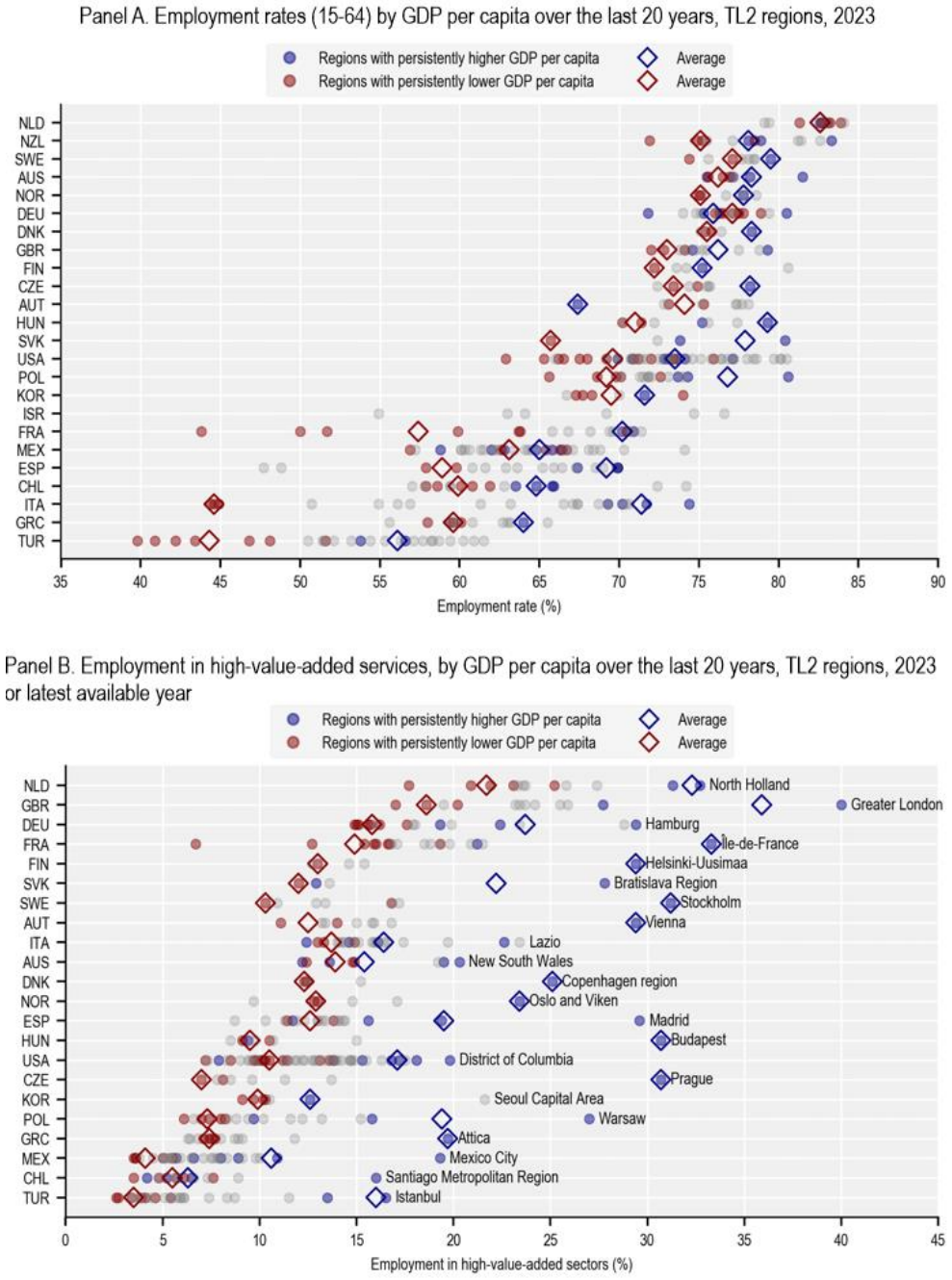
3.4.2. People living in lower-GDP-per-capita regions have fewer employment opportunities

Geographic disparities in young people's employment outcomes continue throughout adulthood, with people in regions with lower GDP per capita having systematically fewer employment opportunities. Regions that have had persistently lower GDP per capita over the last 20 years exhibit systematically lower employment rates (Figure 3.14, Panel A). One reason for these employment disparities is that firms tend to establish themselves in higher-income, higher-productivity regions more rapidly than workers can relocate to those same areas (Bilal, 2023[53]; Lindenlaub, Oh and Peters, 2022[54]). Higher-income regions also offer a deeper pool of skilled workers, reducing costs for firms in finding adequately skilled candidates, which can boost job creation (Di Cataldo and Rodríguez-Pose, 2017[55]). Differences in employment rates between lower- and higher-GDP-per-capita regions *within* countries are often larger than differences *across* countries for regions with a similar GDP per capita. The gap can exceed 10 percentage points in some countries, particularly those where national employment rates are relatively low, such as France, Italy, Spain and Türkiye. The gap tends to be smaller in countries with high employment rates, such as Australia, the Netherlands and Sweden. People in lower-GDP per capita regions also have less access to jobs in high-value-added sectors. In most OECD countries, such employment opportunities are disproportionately located in a few high-income regions, often those hosting capital cities (Figure 3.14, Panel B).

Figure 3.14. Regions with lower-GDP-per-capita also have lower employment rates and host fewer high-value-added employment opportunities



Note: Each dot in the graph represents a region. Regions coloured in red are those that have consistently remained in the bottom 20% of regions in their country in terms of GDP per capita for all or almost all of the last 20 years. Regions coloured in blue are those that have consistently remained in the top 20% of regions in their country in terms of GDP per capita for all or almost all of the last 20 years. The diamonds represent the population-weighted average across regions in each group. High-value-added services include information and communication, financial and insurance activities, and professional, scientific, technical, administrative, support service activities. Countries with less than four regions and those where data are missing for a significant number of regions are excluded from the analysis. The regions of Mayotte (France), and Hawke's Bay and West Cost (New Zealand), and Yukon, Northwest Territories and Nunavut (Canada) are excluded from the analysis due to lacking data. In Panel B, data refer to 2023, except for Czechia, Denmark, France, Hungary and Spain (2022); Austria, Finland, Germany, Greece, Italy, the Netherlands, Poland, the Slovak Republic, Sweden and the United Kingdom (2021); and the United States (2019).
Source: OECD calculations based on the *OECD Database on Regions, Cities and Local Areas*, http://oe.cd/geostats (accessed in September 2025).

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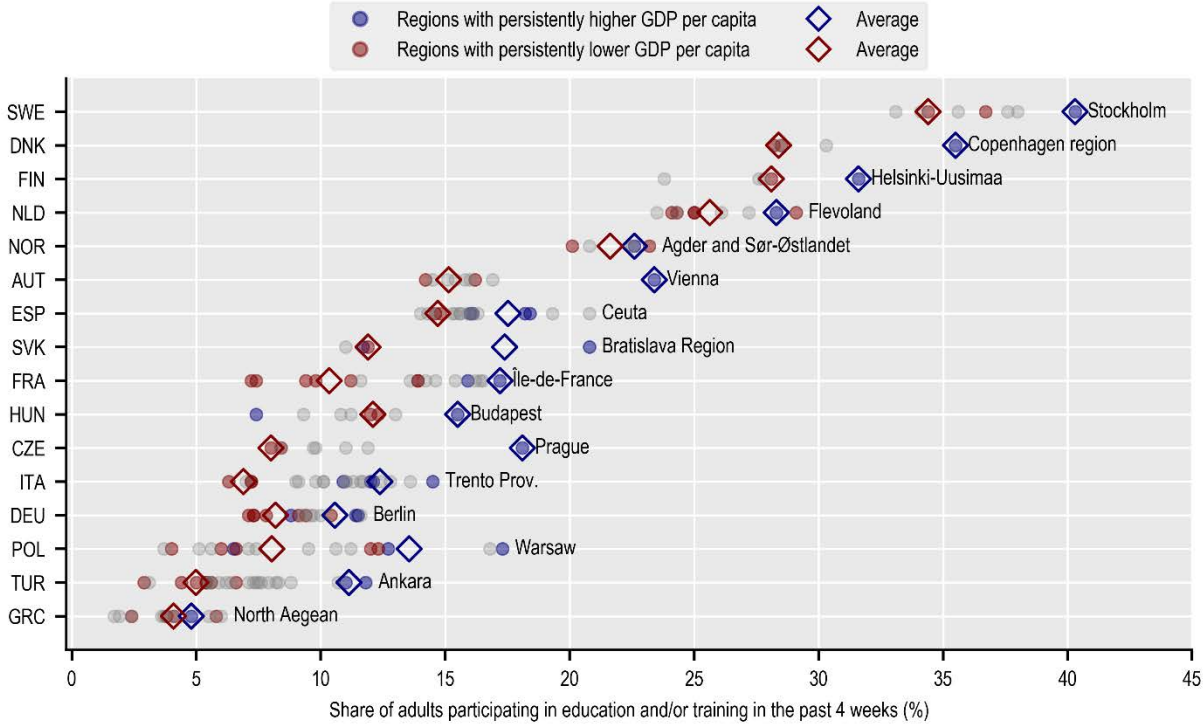
3.4.3. People living in lower-GDP-per-capita regions also have less access to employment services and training

Public employment services (PES) play a key role in connecting workers with employment opportunities by providing job search assistance, individualised employment support and potentially training (Dromundo, Lüske and Tuccio, 2023[56]). The geographic inequalities in employment opportunities presented in Figure 3.14 coincide with, and may be reinforced by, disparities in access to such employment support and training. Results from a recent project, which collected and exploited geolocation data on PES centres, show that the accessibility of PES centres – measured in terms of travel times – is lower for people in regions with lower GDP per capita. This holds true even after accounting for factors such as population density, the degree of access to cities, and regional unemployment (Box 3.3).

Adults in regions with lower GDP per capita are also significantly less likely to participate in training, which limits their chances to acquire new skills, progress in their careers and build resilience against economic shocks. Historically, regions in the bottom 20% of GDP per capita over the last 20 years exhibit systematically lower rates of adult participation in formal and/or non-formal training and education (Figure 3.15). Across countries where data are available, adults in regions with persistently higher GDP per capita are on average almost 5 percentage points more likely to have participated in training and education in the past four weeks than those with persistently lower GDP per capita. This regional gap is independent of overall training opportunities in the country: the largest disparities are observed in Austria, Czechia, Denmark and France – countries with very different overall rates of adult participation in training and education. The regions with the highest adult training rates are typically those with the greater share of jobs in high value-added sectors – i.e., large metropolitan regions, and often those hosting capital cities. These tend to be also regions with a higher proportion of skilled workers, which highlights the challenge of providing training and education opportunities to lower-skilled workers, for whom the benefits of training may be largest.

Figure 3.15. Adults in regions with lower GDP per capita are less likely to participate in education or training

Share of adults (25-64) participating in training and/or education in the past four weeks, by GDP per capita over the last 20 years, TL2 regions, 2023



Note: Both formal and non-formal education and training are considered. Each dot in the graph represents a region. Regions coloured in red are those that have consistently remained in the bottom 20% of regions in their country in terms of GDP per capita for all or almost all of the last 20 years. Regions coloured in blue are those that have consistently remained in the top 20% of regions in their country in terms of GDP per capita for all or almost all of the last 20 years. The diamonds represent the population-weighted average of each group of regions. Countries with less than four regions and those where data are missing for a substantial number of regions are excluded from the analysis. The regions of Mayotte (France), Utrecht and South Holland (Netherlands) and Jan Mayen and Svalbard (Norway) are excluded from the analysis due to lacking data.

Source: OECD calculations based on *Eurostat*, https://ec.europa.eu/eurostat/databrowser/view/trng_lfse_04/default/table?lang=en (accessed in September 2025), and the *OECD Database on Regions, Cities and Local Areas*, http://oe.cd/geostats, (accessed in September 2025).

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Box 3.3. Geographic accessibility of PES centres: cross-country evidence from geolocation data

Cross-country evidence on the physical accessibility of public employment services (PES) is limited, as there is no centralised, publicly available repository of the locations of PES centres across countries. A recent OECD project gathered data on the location of these services in over 30 countries and provided a first assessment of their accessibility across different regions (Almeida et al., 2024[57]).

This box summarises some main findings.

Methodology

To assess the regional characteristics associated with PES accessibility, the study uses the following OLS regression model:

$$Y_{rc} = \alpha + \beta_1 Unemployment_{rc} + \beta_2 GDP\ per\ capita_{rc} + \beta_3 Demographics_{rc} + \beta_4 Metropolitan_{rc} + \beta_5 Population\ density_{rc} + \varphi_c + \varepsilon_{rc}$$

where Y_{rc} captures the share of the population in region *r,* country *c,* who can access a PES centre within 15 minutes by motor vehicle.[1] $Unemployment_{rc}$ captures the unemployment rate in each region. $GDP\ per\ capita_{rc}$ is a vector measuring both the level and growth in regional GDP per capita, while $Demographics_{rc}$ captures both the level and growth in the regional population. $Metropolitan_{rc}$ is a categorical variable with five outcomes capturing the degree of access to cities, as defined in Annex 3.A. $Population\ density_{rc}$ captures the regional population density. φ_c are country fixed effects, which account, for instance, for cross-country differences in GDP per capita and institutional arrangements, including national employment policy. In the estimation, regions are given equal relative weight *within countries*, such that all countries carry equal weight in the regression.

Results

Three key findings can be derived from the analysis (Table 3.1):

- ***PES are more accessible in regions with higher GDP per capita, even when accounting for other regional characteristics.*** The magnitude is relevant: a 10% higher GDP per capita is associated with a 2 percentage-point greater share of people who can reach a PES centre within 15 minutes by motor vehicle.
- ***Metropolitan regions offer higher PES accessibility than non-metropolitan regions, even after accounting for demographic and economic characteristics***. In large metropolitan regions, the share of people who can reach a PES centre within 15 minutes by motor vehicle is nearly 10 percentage points higher than in non-metropolitan remote regions.
- ***PES accessibility is greater in regions with higher unemployment, after accounting for other regional characteristics.*** This could be interpreted as tentative evidence that governments may adjust service provision to meet regional demand. This may partly be offset by an effect working in the opposite direction*:* a PES centre in a region may contribute to a better matching of jobseekers to vacancies, which would lower regional unemployment.

Table 3.1. Regression estimates of regional PES accessibility on regional characteristics

	% of people within 15 minutes to nearest PES by motor vehicle			
	(1)	(2)	(3)	(4)
Unemployment rate in 2019 (%)	0.233			0.807***
	(0.307)			(0.253)
Children aged 5 to 9 in 2022 (%)				
GDP p.c. in 2019 (Ln)		23.389***		20.531***
		(2.920)		(4.029)
Annual GDP p.c. growth 2005-2019 (%)		-2.951***		-4.028***
		(0.866)		(0.987)
Total population in 2022 (Ln)			8.744***	0.480
			(0.755)	(1.331)
Annual population growth 2015-2022 (%)			2.325	-7.631***
			(1.467)	(2.021)
Population density in 2022 (Ln)				6.615***
				(1.157)
2. Metropolitan – Medium				-2.797
				(3.153)
3. Non-metropolitan – Medium				-4.510
				(3.838)
4. Non-metropolitan – Small				-3.867
				(4.017)
5. Non-metropolitan – Remote				-9.723**
				(4.557)
Country FE	YES	YES	YES	YES
Observations	692	922	1612	661
Number of countries	18	25	32	16
Adjusted R-squared	0.383	0.455	0.546	0.617

Note: Robust standard errors in parentheses *** p<0.01, ** p<0.05, * p<0.1. The number of countries included in the regressions varies across models depending on data availability. Regional observations are weighted by the inverse of the number of regions within a country, such that all countries carry equal weight. The island regions Gotland (SWE), Eivissa y Formentera (ESP) and Mayotte (FRA) are not included in the analysis. GDP per capita and unemployment data are measured in 2019 to avoid potential distortions because of the COVID-19 crisis. The reference category for access to cities is large metropolitan regions (see Annex 3.A).
Source: Accessibility data derived from OECD calculations based on location data obtained from national authorities. Data on regional characteristics are retrieved from the *OECD Regional Statistics* database: https://www.oecd.org/regional/regional-statistics/.

1. 15 minutes is the time threshold that maximises regional variation in the share of people who can access PES centres by motor vehicle.

3.4.4. Geographic inequalities in labour market opportunities persist over time

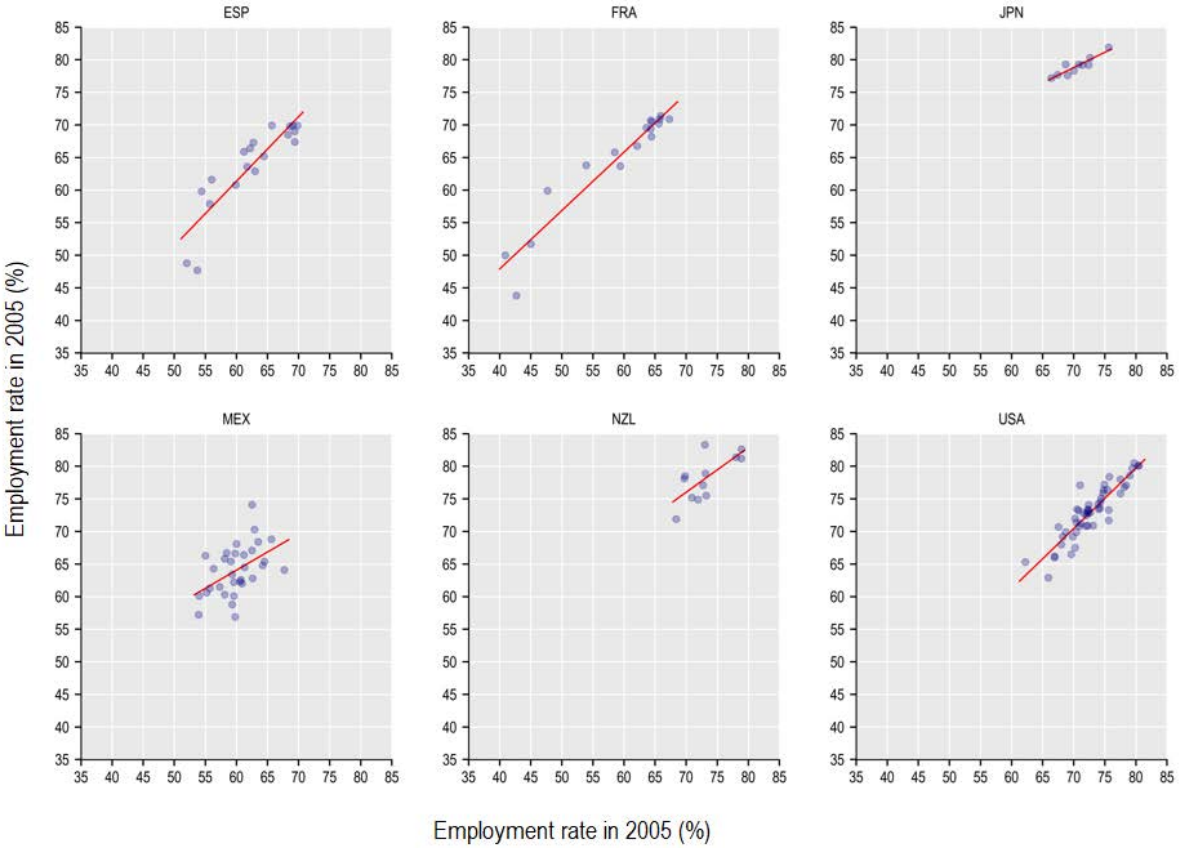
Lower access to training and employment support contributes to the persistence of labour market disadvantage in economically lagging regions. In most OECD countries, regions with low employment rates two decades ago, i.e., in the mid-2000s, continue to have low employment rates today (Figure 3.16). NEET rates and the share of jobs in high value-added sectors show similar persistence over time. This suggests that people who stay in regions with weaker labour markets may benefit from fewer job opportunities and reduced potential for career progression throughout their lives. These results align with previous evidence highlighting limited regional employment convergence in labour market outcomes in OECD economies since the 1990s, as observed in Japan and the United States (Kondo, 2015[58]),

EU countries (Iammarino, Rodriguez-Pose and Storper, 2018[59]) and Türkiye (Gil-Alana, Ozdemir and Tansel, 2018[60]).

Employment barriers, fewer jobs in high value-added sectors and limited training opportunities can hinder earnings progression for residents in disadvantaged regions, unless they move elsewhere. Empirical evidence suggests not only that disparities in earnings across regions are large (Overman and Xu, 2024[61]; Balauz et al., 2023[62]), but also that skilled workers in large cities accumulate more valuable work experience over time, which translates into faster earnings' progression (Roca and Puga, 2016[19]).

Figure 3.16. Regional disparities in employment are highly persistent over time

Correlation between employment rates in 2005 and 2023, selection of countries



Note: The figure shows six out of several OECD countries for which data on employment rates are available at the TL2 level for both 2005 and 2023, but the pattern generalises to the others. Employment data in 2005 are chosen for convenience, as regional employment data for some large OECD economies are not available for previous years. However, the pattern holds when choosing other years or when averaging across several initial and final years. The regions of Mayotte (France) and Hawke's Bay and West Cost (New Zealand) are excluded from the analysis due to lacking data.

Source: OECD calculations based on the *OECD Database on Regions, Cities and Local Areas*, http://oe.cd/geostats (accessed in September 2025.

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3.5. Inequalities in access to essential infrastructure and services

Good health supports people's ability to work, learn, and participate in society. It improves job performance, reduces absenteeism and lowers healthcare costs for individuals and for the wider economy. Health also contributes to social mobility: healthier individuals are more likely to complete education, enter stable employment, and progress in their careers.

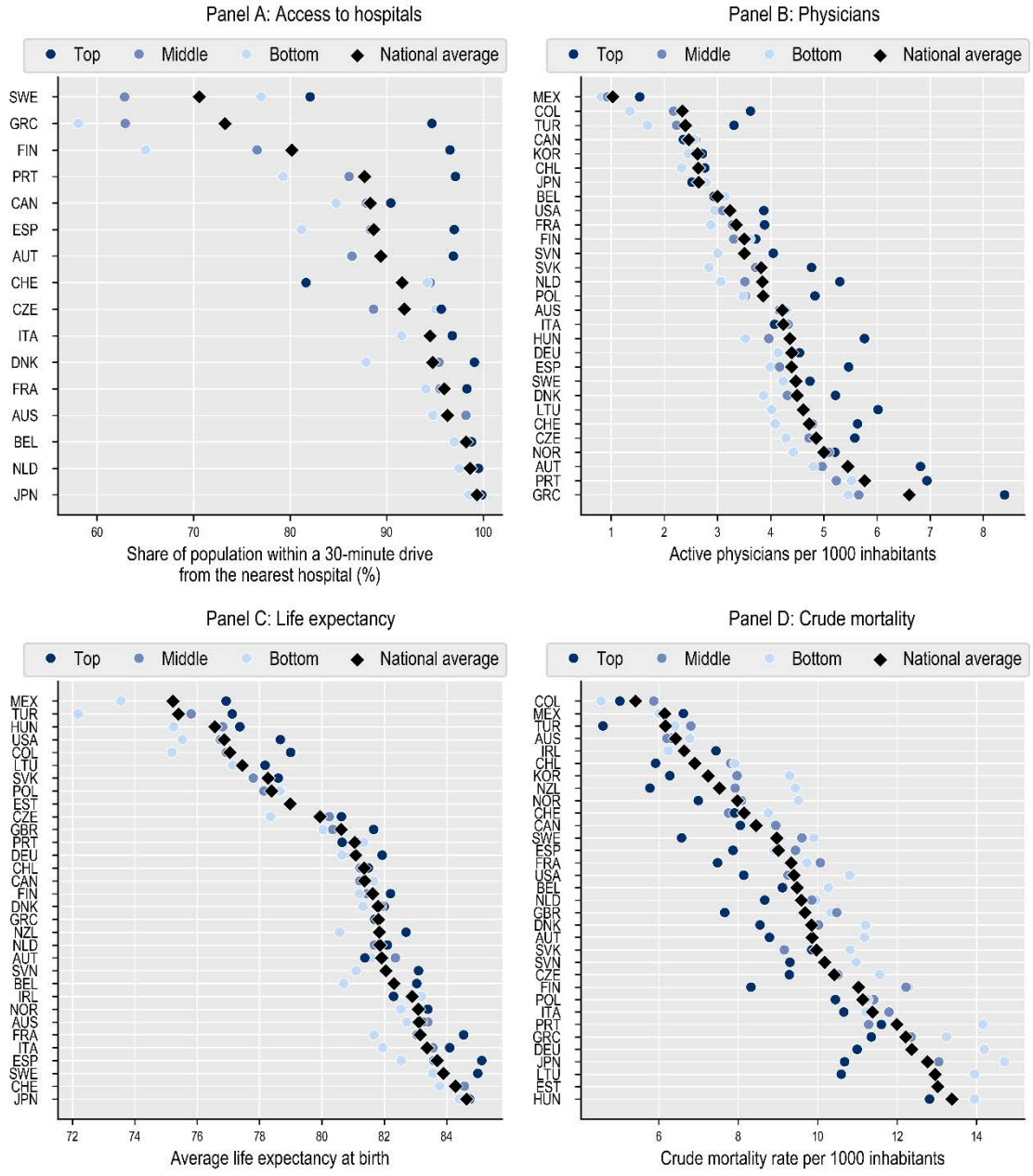
People living in higher-income regions and those with higher levels of education tend to experience better health, which in turn supports further economic opportunity. These advantages reflect not only socio-economic conditions but also differences in access to health services. Well-equipped regions enable residents to maintain good health more easily, while people in regions with limited access to care may face persistent barriers that affect both their well-being and participation in the labour market (OECD/European Union, 2020[63])**.**

Access to hospitals is one of several factors driving these regional gaps. Most people in OECD countries live within 30 minutes of a general hospital. In large regions (TL2) that have consistently ranked in the top 20% of GDP per capita over the past 20 years, 96% of the population can reach a hospital within 30 minutes, compared to 92% in the bottom 20% (Figure 3.17, Panel A). While this overall difference is modest, country-level gaps can be much larger – reaching 37 percentage points in Greece, 32 in Finland, and 18 in Portugal. In remote or mountainous regions, distance and terrain further limit access.

Regions with higher GDP per capita also tend to have more physician per inhabitant, reinforcing healthcare disparities. These regions average 3.5 physicians per 1 000 inhabitants, compared to 2.9 in regions with the lowest GDP per capita (Figure 3.17, Panel B). In most OECD countries, the physician-to-population ratio increases with regional GDP per capita. This contributes to a cycle where regions with fewer economic resources also face weaker healthcare capacity. The gaps are particularly pronounced in Colombia, Mexico and Türkiye, where regions with lower GDP per capita have fewer than 2 physicians per 1 000 inhabitants, limiting both access to care and the quality of services.

Differences in service provision contribute to unequal health outcomes across regions. People in regions with higher GDP per capita tend to live longer and report better overall health. Across OECD countries, life expectancy in the top 20% of regions by GDP per capita is, on average, two years higher than in the bottom 20% within the same country (Figure 3.17, Panels C and D). Most countries show cross-regional gaps, but they are particularly wide in Colombia, Mexico and the United States, where the differences exceed three years. These patterns point to a persistent link between regional economic conditions and population health.

Figure 3.17. Health outcomes and healthcare infrastructure are better in regions with higher GDP per capita



Note: This figure presents regional disparities in four key indicators of health outcomes and healthcare infrastructure. Panel A shows relative access to hospitals, measured by the share of the population within a 30-minute drive of the nearest hospital. Panel B reports the number of active physicians per 1 000 inhabitants. Panel C displays relative life expectancy at birth, and Panel D presents relative crude mortality rates. Countries sorted from lowest to highest national average in the indicator shown. See Annex 3.B for further details on indicator definitions, data sources and reference years.

Source: OECD calculations based on the *OECD Database on Regions, cities and local areas*, http://oe.cd/geostats (accessed in June 2025).

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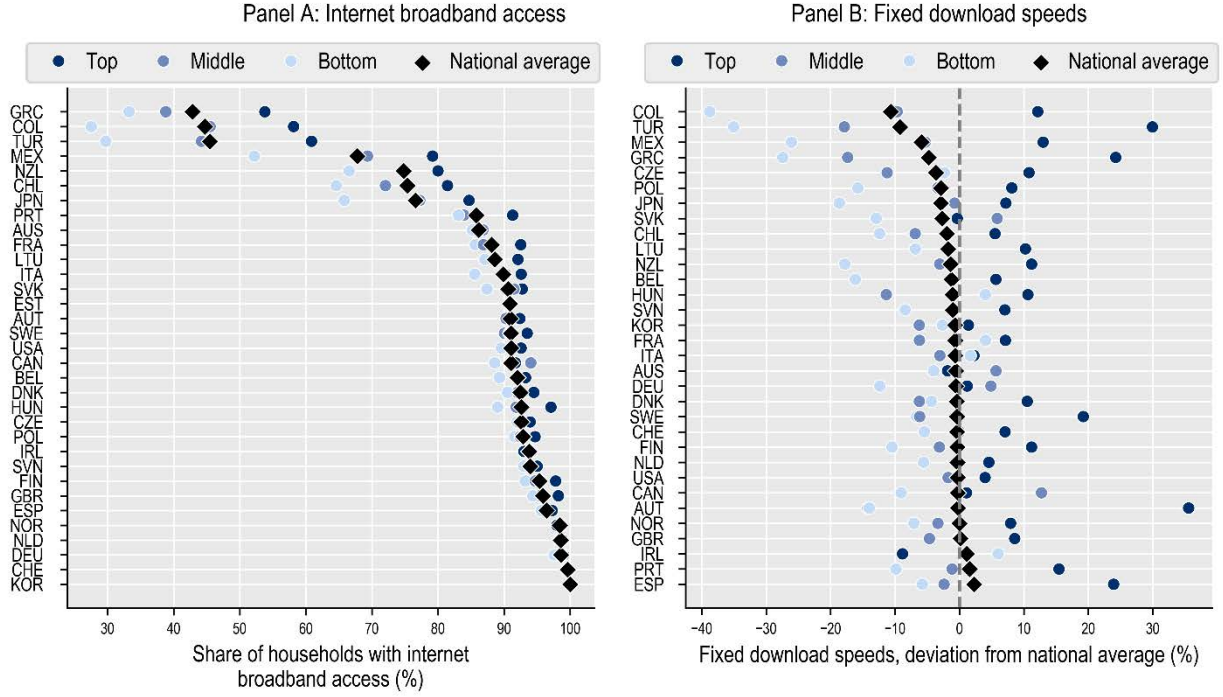
3.5.1. People in regions with lower GDP per capita face poorer digital connectivity

Fast and reliable internet has become essential for full participation in economic and social life. It enables people to search for jobs, work remotely, pursue online education, and start or grow businesses. In this way, digital infrastructure directly shapes opportunities for employment, learning and entrepreneurship, making it a critical factor for economic mobility.

Yet, digital access remains uneven across regions. Gaps in internet quality and coverage – especially between urban and rural areas, and between higher- and lower-income regions – continue to limit the ability of some communities to benefit from the digital economy. These disparities compound other forms of disadvantage and can undermine efforts to promote digital inclusion (OECD, 2021[64]).

Despite progress in broadband coverage and adoption, significant regional differences persist. In large regions (TL2) that have consistently ranked in the top 20% of GDP per capita over the past 20 years, access to broadband tends to be higher than in other regions (Figure 3.18, Panel A). However, the extent of these regional gaps varies across countries, with the largest regional disparities observed in countries where broadband access remains low. In Colombia, Greece and Türkiye, the gap in broadband coverage between the best- and worst-performing regions exceeds 14.7 percentage points. Differences in broadband *speed* further widen this divide: top regions enjoy average download speeds 8% above the national average, while speeds in bottom regions lag by 10% (Figure 3.18, Panel B). This digital divide constrains access to education, remote work and essential services in less connected places.

Figure 3.18. Digital infrastructure is more developed in regions with higher GDP per capita



Note: The figure illustrates regional disparities in digital infrastructure across countries. Panel A shows the relative share of households with broadband internet access, while Panel B displays regional deviations in fixed broadband download speeds relative to the national average. Countries are sorted from lowest to highest national average in the indicator shown in each panel. See Annex 3.B for further details on indicator definitions, data sources, and reference years.

Source: OECD calculations based on the *OECD Database on Regions, Cities and Local Areas*, http://oe.cd/geostats (accessed in June 2025).

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Bridging this gap requires more than investment in physical infrastructure. It also demands policy approaches that account for local needs, such as supporting digital skills, offering affordable connectivity, and ensuring that digital services are accessible in remote areas. Without such efforts, regional disparities in internet access risk becoming a lasting barrier that may hinder economic opportunities for certain populations and prevent a more level playing field across territories.

3.5.2. Accessible public transport is key for economic opportunities in urban agglomerations

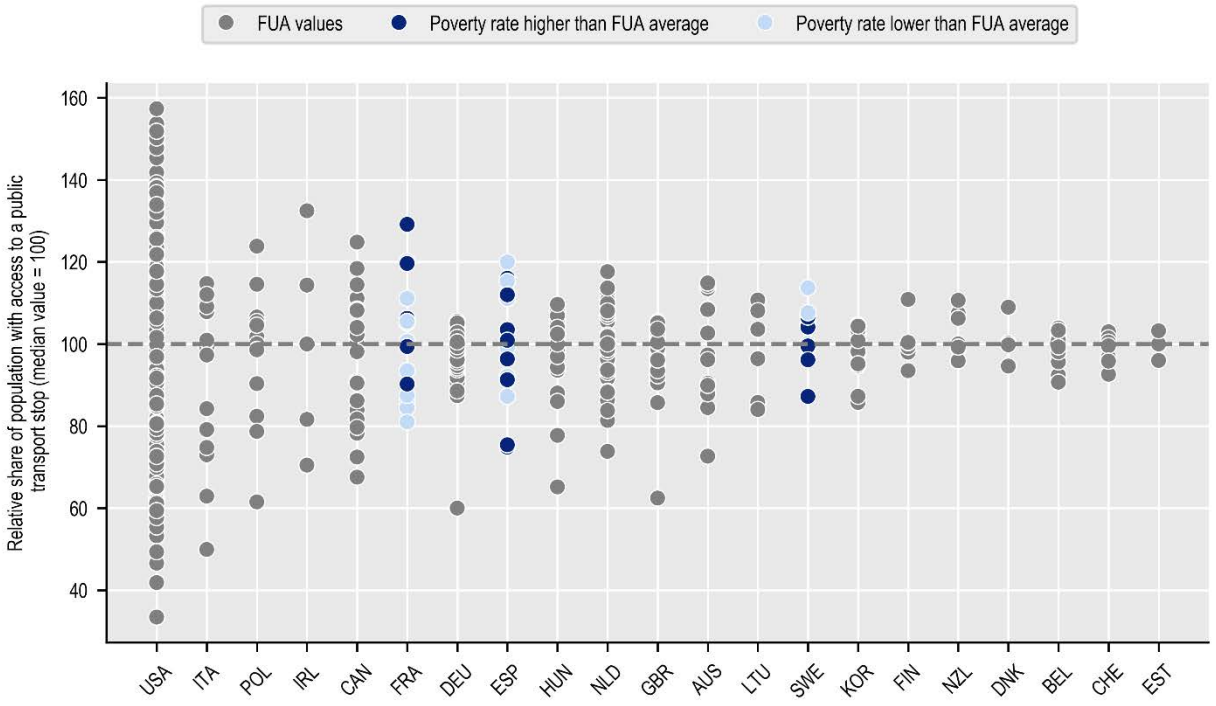
Public transport is essential for ensuring access to jobs, education, and services in urban areas. A well-connected network allows people to commute efficiently, broadens the range of job opportunities they can reach and supports more inclusive labour markets (Glaeser, Kahn and Rappaport, 2008[65]). In contrast, limited public transport restricts mobility and can reinforce spatial inequalities, particularly for those without access to private vehicles.

Access to public transport remains uneven across and within countries. On average, about two in three residents in mid-size and large Functional Urban Areas (FUAs) live within a 10-minute walk of a public transport stop. In countries like Australia, Czechia, Germany and Switzerland, this share approaches 90%. In contrast, fewer than half of residents have such access in Mexico and the United States. In the United States, accessibility to public transport varies more across functional urban areas (FUAs) than in any other OECD country. For example, in 2023, Hamilton (Tennessee) scored just 33% of the national median, while Sonoma (California) reached 185% – a gap of more than 150 percentage points. (Figure 3.19). Other countries show much narrower internal differences, with most FUAs clustering closer to the national median. These differences underscore the uneven geography of transport access, even within the same country.

Transport gaps are particularly challenging for low-income households, who often rely on affordable public mobility. Yet the relationship between poverty and transport access is not straightforward. In some countries, lower-income areas receive less investment due to funding constraints or low population density. In others, targeted policies improve access in high-poverty neighbourhoods. For example, FUAs with higher poverty rates tend to have poorer access to public transport in Spain, while the opposite is true in France (Figure 3.19).

Figure 3.19. Accessibility to public transport varies across cities

Relative share of the population with access to public transport within a 10-minute walk (median value =100), FUAs, 2023



Note: The figure shows relative access to public transport in mid-size and large Functional Urban Areas (FUAs) with available data. Access is measured by the share of the population that can reach at least one public transport stop – bus, tram, or metro – within a 10-minute walk. Values are normalised so that each country's median FUA equals 100; values above 100 indicate better-than-median access, while values below 100 indicate worse-than-median access. Countries are sorted in descending order based on the size of the access gap between FUAs. See Annex 3.B for details on methodology, data sources and reference years.

Source: OECD calculations based on the *OECD Database on Regions, cities and local areas*, http://oe.cd/geostats (accessed in June 2025).

StatLink https://stat.link/9fj0iv

3.6. Conclusion

Opportunities in life are not only shaped by individual and family circumstances. Important differences are also observed at regional and local level in terms of access to some of the key drivers of economic opportunity including quality education, employment, services and infrastructure. Many people continue to live near the places where they were born, because of significant barriers to mobility such as existing social ties and local caregiving responsibilities, as well as the financial costs of moving. As a result, the quality of local services and infrastructure, including childcare, schools, transport, and digital connectivity, is a key determinant of people's life outcomes.

This chapter showed that metropolitan and higher-income regions tend to provide better access to economic opportunities and support greater upward mobility. In contrast, people living in poorer or more remote regions, as well as in disadvantaged neighbourhoods within cities, face persistent challenges that limit their prospects and skew the level playing field. By doing so, the chapter highlighted the importance of measuring inequalities at multiple spatial scales. While smaller geographical units can reveal fine-grained differences, regional-level indicators are essential for informing national policies and the allocation of resources. Despite limitations in data availability, especially at the local level, the evidence presented here points to the significant role that place plays in shaping people's opportunities. Reducing these place-based disparities remains essential for promoting more equal opportunities and equitable outcomes across OECD countries.

Future work could deepen the analysis of spatial inequalities by exploring additional factors such as exposure to environmental risks, social capital or the quality of local institutions. More granular and comparable data at the local level would support more comprehensive analysis of how neighbourhood conditions affect people's life chances. In particular, administrative data with geographic indicators can help uncover the long-term impacts of growing up in disadvantaged areas. These efforts will support the design of more targeted policies to address geographic dimensions of equal opportunity.

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Annex 3.A. Typologies for regions, cities, and other areas

TL2 and TL3 regions

Within the 38 OECD countries, regions are classified into two territorial levels mirroring countries' administrative structure (OECD, 2022[66]). The 433 OECD "Territorial Level 2" (TL2) regions represent the uppermost subnational administrative tier, such as federal states in Germany. The 2 414 OECD "Territorial Level 3" (TL3) regions denote lower administrative divisions, except in Australia, Canada and the United States.

Degree of urbanisation

The degree of urbanisation classification defines territorial units on an urban-rural continuum, as cities, towns and semi-dense areas, and rural areas. This methodology was jointly developed by six organisations – the European Commission, the Food and Agriculture Organization of the United Nations (FAO), the United Nations Human Settlements Programme (UN-Habitat), the International Labour Organization (ILO), the Organisation for Economic Co-operation and Development (OECD) and The World Bank. For further explanations, see Dijkstra et al. (2021[67]).

Functional urban areas composed of local administrative units

People's daily lives often span multiple locations that do not match administrative boundaries. They may live in one region, commute to work in another and spend leisure time elsewhere. Flows of people, goods and services – through commuting, business networks, and production linkages – create functional connections between regions. These interactions frequently cross administrative borders and reflect the real geography of economic and social activity.

To reflect these functional connections, the European Commission and the OECD jointly developed a harmonised definition of functional urban areas (FUAs) (Dijkstra, Poelman and Veneri, 2019[68]). FUAs are defined for nearly all OECD countries and consist of a city and its surrounding commuting zone. This approach captures the true economic and functional footprint of cities, based on daily movements of people. For urban areas, FUAs offer a more accurate basis for planning infrastructure, transport, housing, education and recreational spaces. They support better policy design by aligning public investment and services with how people live and move, rather than with administrative borders.

Settlement sizes in the OECD PISA survey

The OECD PISA survey classifies schools across six territorial units based on their population size (OECD, 2023[69]). School principals are asked to fill out a questionnaire where they also indicate the size of the settlement where their school is located. The spatial units are as follows:

- Fewer than 3 000 people: Village, hamlet or rural area
- 3 000 to about 15 000 people: Small town
- 15 000 to about 100 000 people: Town

- 100 000 to about 1 000 000 people: City
- 1 000 000 to about 10 000 000 people: Large city
- More than 10 000 000 people: Megacity.

Annex 3.B. Measuring the healthcare and essential infrastructure

Annex Table 3.B.1. Measuring healthcare outcomes and essential infrastructure

Life Expectancy	Figure 3.17 shows relative average life expectancy at birth across small regions (TL3) in 30 countries, based on the most recent data available. Life expectancy at birth represents the average number of years a newborn can expect to live if current age-specific mortality rates persist throughout their lifetime. Data refer to 2022 for AUS, CZE, DNK, ESP, EST, FIN, FRA, HUN, LTU, LVA, PRT; 2021 for GBR, ITA, NOR, SWE; 2020 for DEU, JPN, KOR, TUR; and 2018 for NZL. Source: OECD calculations based on OECD (2024), Life Expectancy – Regions database (accessed in June 2025).
Mortality	Figure 3.17 shows relative crude mortality rates across small regions (TL3) in 34 countries, based on the most recent data available. Crude mortality rate is defined as the number of deaths per 1 000 inhabitants in a given year. Source: OECD calculations based on the *OECD Database on Regions, Cities and Local Areas,* http://oe.cd/geostats (accessed in June 2025).
Health access	Figure 3.17 shows relative access to hospitals across small regions (TL3) in 16 countries, based on the most recent data available. Values represent the share of the population within a 30-minute drive of the nearest hospital. Access was estimated using point of interest (POI) data, 1-kilometre resolution population grids (Schiavina et al., 2023[70]) combined with high-resolution settlement grids (Schiavina, Melchiorri and Peseresi, 2023[71]) and urbanisation levels, applying the Mapbox Isochrone API. For countries where hospital data was available only as postal addresses, these were converted into geographic coordinates using the *geocoder* Python package (ArcGIS provider https://developers.arcgis.com/rest/geocode/api-reference/overview-world-geocoding-service.htm). Data refer to 2022 for CHE, CZE, FRA, HUN, JPN, KOR, LTU, LVA, MEX, PRT, SVK, SVN; 2021 for AUS, DEU, EST, NOR, SWE, TUR; 2020 for FIN; 2019 for NZL; and 2011 for ESP. Source: OECD calculations using geospatial methods based on Schiavina et al. (2023[72]) (accessed in June 2025).
Doctors	Figure 3.17 shows the number of physicians across TL3 regions, based on the most recent data available. Physicians include generalists, who provide continuing care to individuals and families, and specialists such as paediatricians, obstetricians/gynaecologists, psychiatrists, medical specialists, and surgical specialists. Data refer to 2022 for CHE, CZE, FRA, HUN, JPN, KOR, LTU, LVA, MEX, PRT, SVK, SVN; 2021 for AUS, DEU, EST, NOR, SWE, TUR; 2020 for FIN; 2019 for NZL; and 2011 for ESP. Source: OECD calculations based on the *OECD Database on Regions, Cities and Local Areas* http://oe.cd/geostats (accessed in June 2025).
Broadband internet	Figure 3.18 shows the most recent data on the share of households with access to broadband internet, defined as a download speed of at least 256 kilobits per second. Data refer to 2023 for most countries, 2022 for COL, 2021 for USA and ISL, 2020 for GBR, and 2017 for CHL. Source: OECD calculations based on national household survey data and communications regulators.
Fixed internet speed	Figure 3.18 shows fixed download speed for 32 countries. Fixed download speed estimates are measured in megabits per second (Mbps) and are based on user-performed tests from Speedtest by Ookla between 2019 Q1 and 2023 Q2. Data may be subject to testing biases (e.g., faster connections being tested more frequently) or strategic testing by internet service providers in specific markets. As speed-testing methodologies can vary across providers, regional indicators are presented as deviations from the national average (in %). Source: OECD calculations based on Speedtest® by Ookla® Global Fixed and Mobile Network Performance Maps. Based on analysis by Ookla of Speedtest Intelligence® data for 2019Q1-2023Q2. Provided by Ookla (accessed August 2023).

Notes

[1] These poverty rates have been calculated based on nominal incomes, i.e., they do not consider regional differences in price levels. Gaps in living standards may be narrower than the differences in poverty rates suggest to the extent that the cost of living, and notably housing, is lower in lower-income regions.

[2] The analysis calculates poverty rates as the share of adult women and men living in households with incomes below the poverty line, hence mirroring the approach used for the child poverty indicator. This way of calculating poverty rates implicitly assumes the equal sharing of resources within households, i.e., it does not try to attribute the various components of household income to different household members.

[3] For more results on financial fragility and asset poverty at the regional level, see Espasa Reig et al. (2025[73]).

[4] PISA assessments ask school principals to identify the type of settlement where their school is located. The analysis presented calculates average PISA scores across settlements using this information. PISA does not report data on the location of students' homes or on the size or geographical location of the settlement where the school is located, so the analysis assumes that students live in the same type of settlement where their school is located, and relevant factors to differentiate settlements, such as their proximity, to cities are ignored. This means that the role of location is only roughly controlled for in this analysis, and further analysis using better proxies for location may result in different findings with respect to the role of place on educational outcomes.

4. Informing Policy: What can be done to ensure a more level playing field?

This chapter concludes the report by drawing the policy implications from the preceding chapters and discussing how the insights provided can be harnessed to ensure a more level playing field in applied contexts. It proposes a framework as a possible device for informing effective policy responses, based on the barriers to equal opportunity identified in the analysis. This framework relies on two key channels to ensure a more level playing field: *(i)* policies designed to increase the overall supply of economic opportunities; and *(ii)* policies designed to support individuals' capacity to realise the opportunities available to them. Focusing on the second channel, the chapter defines three types of endowments that are necessary for individuals to pursue and realise opportunities: *(i) human capital*; *(ii) economic resources*; and (*iii) social infrastructure*. For each type of endowment, it provides a selected review of policies that can form part of comprehensive packages for promoting equal opportunity. The review notably includes an assessment of the impact of taxes and transfers across countries to shed light on the instruments that may be most effective for achieving this goal.

4.1. Promoting equal opportunities by design

4.1.1. Moving from the analysis of inequality of opportunity to policies for ensuring a more level playing field

This report's main contribution consists in analysing inequality of opportunity using a new methodology that can support effective policy interventions. In order to do so, the report extends the analysis of social mobility conducted in OECD (2018[1]) along two dimensions that are of high relevance to policy. First of all, it operationalises an innovative approach for measuring inequality of opportunity to better account for the circumstances that individuals encounter and their influence in shaping outcomes (see Chapters 1 and 2). This approach draws on machine-learning techniques and is solidly grounded both in conceptual and methodological terms (Brunori, Hufe and Mahler, 2023[2]; Roemer and Trannoy, 2016[3]; Fleurbaey and Peragine, 2013[4]). Its application allows the analysis to go beyond the distribution and persistence of outcomes and shed light on the opportunities that are available to individuals and shape their outcomes throughout the life cycle. Secondly, the report provides a more detailed focus on the important geographic dimensions of opportunities by looking at regional disparities in access to key drivers of social mobility including education, employment and essential services (Chapter 3). Here, it draws on the most recent OECD research (OECD, 2025[5]; Almeida et al., 2024[6]).

To help organise and apply the insights from the analysis, this chapter introduces a general framework that can inform policies designed to ensure a more level playing field. The framework is intended as a heuristic device that policymakers can use to make the link between the analysis and its implications for policy. In order to do so, it articulates the main principles for policy intervention. Specific measures can be selected on the basis of the challenges identified by the analysis and of the specificities of national contexts. Figure 4.5 at the end of this section provides a visual representation of the framework.

The proposed framework distinguishes two key channels through which policy can contribute to ensure a more level playing field: *economic dynamics* and *endowments*.

From a policy perspective, this distinction can be understood along the following lines:

- **The economic dynamics channel deals with *the capacity of the economy to provide opportunities for individuals*.** This channel focuses on the aggregate level, on the supply of opportunities and on their distribution across territories. Relevant levers for action include policies designed to increase the overall supply of economic opportunities (macroeconomic policy, trade, competition and regulatory policies…), improve access to opportunities or reduce disparities in their geographic distribution (policies on service provision across levels of government, territorial development policies, local employment and entrepreneurship policies, infrastructure…).

  The geographic mobility of individuals constitutes another relevant issue to consider when seeking to address territorial disparities in the supply of economic opportunities. This issue helps underline the importance of place-based policies in ensuring a more level playing field (OECD, 2011, pp. 167-223[7]). Place-based policies are needed to promote opportunities at a local level in contexts where geographic mobility is low and people are likely to have access to a narrower pool of economic opportunities.[1] Place-based policies also have an essential role to play in managing transitions effectively in contexts where geographic mobility is high. Geographic mobility creates a need for additional investment in the places to which people relocate, notably to expand the supply of housing and services. It also implies a need for additional investment in the places from which people are moving to compensate for the economic effects of population loss and prevent decline in "shrinking" cities and regions (OECD, 2025[8]).[2]
- The endowments channel deals with *the capabilities and resources that individuals need to realise the opportunities available to them*. This channel is complementary to the previous one and provides a focus on the individual level, on the demand for opportunities and on measures that can

strengthen it. Relevant levers for action include policies that promote equal opportunity by investing in the capabilities of individuals themselves or in the material resources they need to realise them, and by addressing potential gaps in these "endowments" that are due to circumstances beyond individuals' control and may prevent them from freely pursuing available opportunities.

The framework identifies three broad types of endowments that are necessary for individuals to freely pursue and realise the opportunities available to them: *(i) human capital*; *(ii) economic resources*; and *(iii) social infrastructure*. While not exhaustive, this taxonomy of endowments covers the critical domains that shape opportunities at the individual level as generally established in the economic and sociological literatures (Becker, 1996[9]; 1964[10]; Bourdieu, 1986[11]; 1972[12]).

As defined in this framework, there are two fundamental objectives for policy: *(i)* to promote the creation of opportunities throughout the economy; and *(ii)* to support individuals' capacity to realise available opportunities, including by reducing sources of disadvantage. The framework proposed in this chapter is not prescriptive and offers broad scope for policymakers to set objectives in line with their own priorities, with societal preferences and with the specificities of their national contexts. Nonetheless, it takes as a basic premise *(i)* that *economic dynamics* and *endowments* constitute essential conditions for equal opportunity; and *(ii)* that policy cannot achieve this goal without seeking to address both aspects.[3] Furthermore, while the framework distinguishes between different types of endowments for analytical reasons, it is the combination of and interaction between these endowments that enables individuals to realise in practice the opportunities available to them. Also, from an intergenerational perspective, the endowments of parents contribute to shape the opportunities that children have and will have in the future as adults, as highlighted in previous chapters. Policies identified under this channel should therefore have a broader scope and aim to support individuals in developing all of the different endowments they need to realise opportunities. This implies reducing the sources of disadvantage that may prevent individuals from freely pursuing and realising opportunities or restrict those of their children, notably when these sources of disadvantage are associated with a lack of endowments.

This chapter provides a specific focus on the endowments channel as a lever for ensuring a more level playing field. The OECD has developed a significant body of evidence and studies on the policies that can strengthen the economy's capacity to deliver opportunities for individuals and bridge territorial divides.[4] As such, this chapter concentrates on the endowments channel with the aim of complementing existing work and filling knowledge gaps. The following section analyses the role played by the different endowments identified in the framework – *human capital*; *economic resources*; and *social infrastructure* – as drivers of economic opportunities and their implications for policy. For each type of endowment, it seeks to *(i)* identify appropriate welfare concepts for analysis; *(ii)* determine the set of relevant circumstances that shape these endowments and should be included in the analysis; *(iii)* define possible challenges and barriers to equal opportunity that the analysis may highlight; and *(iv)* map these challenges to key policy areas and measures that can be taken to address them. A number of relevant policy options are discussed in Section 4.2 below.

4.1.2. Taking stock of endowments as key channels for ensuring a more level playing field

Human Capital

The role of human capital as a key determinant of economic opportunities and social mobility is well documented. In line with standard OECD definitions, human capital is understood here as "*the stock of knowledge, skills, and other personal characteristics embodied in people that helps them to be productive*" (Égert, de la Maisonneuve and Turner, 2022[13]; Botev et al., 2019[14]). This definition covers a wide range of attributes acquired through education, personal experience and the family environment.

These attributes include technical, cognitive and socio-emotional skills; knowledge; health; and cultural understanding. Specific components of human capital can be distinguished, such as:

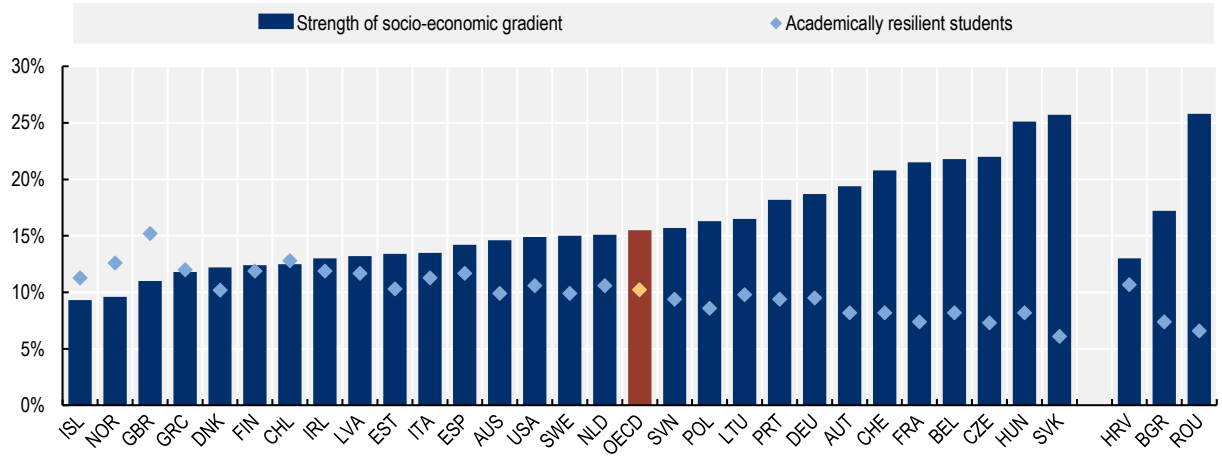
- *Cultural capital*, which covers the general values and norms that help individuals adapt to educational and professional environments;
- *Educational capital*, which covers formal academic skills, cognitive ability, credentials and networks that promote social and economic mobility; and
- *Physical and mental health*, which act as enabling conditions for learning and the acquisition of skills, particularly early in life.

Human capital and its different components directly affect a person's employability, position in the labour market and earning potential. Policies that promote educational opportunities and support individuals' capacity to develop their human capital have a central role to play in ensuring a more level playing field, as highlighted in OECD (2018, pp. 298-307[1]).

Socio-economic background and other circumstances shape human capital and the opportunities to develop it. Socio-economic background has a strong influence on educational outcomes. In the latest round of the *OECD Programme for International Student Assessment* (PISA) survey conducted in 2022, students with a higher socio-economic background – as measured by the PISA index of *Economic, Social and Cultural Status* (ESCS) – performed better than their more disadvantaged peers in all countries. On average in OECD countries, disadvantaged students are seven times more likely than advantaged students to not have achieved basic proficiency in mathematics and in science at age 15 (OECD, 2023[15]). While the effect of socio-economic background is consistent, the degree to which variance in educational outcomes can be attributed to socio-economic factors – the so-called "intensity of the social gradient" – varies across countries. Conversely, on average across the OECD, 10% of disadvantaged students were "academically resilient" in mathematics, meaning that they scored in the top quarter of mathematics performance in their own country in PISA 2022 (see Figure 4.1) and 11% were resilient in reading and science. Health outcomes are also shaped by socio-economic factors. For example, in many OECD European countries, "health penalties" can be observed for individuals with parents with lower educational backgrounds. The risk of long-standing illness is 7 percentage points higher on average across OECD European countries for individuals whose parents have lower educational attainment and the probability of experiencing unmet medical needs is also 1.7 percentage points higher overall (see Figure 4.2).

Figure 4.1. Traditional measures of equality of opportunity show that there is scope for promoting a more level playing field in education in many OECD countries

Disparities in performance in mathematics by socio-economic background and share of disadvantaged students who are top performers in mathematics, by country, 2022



Note: The set of OECD Member and accession countries covered is the same as in Figure 2.1, with the exception of Luxembourg which did not take part in the 2022 PISA Survey. Countries are ranked in ascending order of the strength of socio-economic gradient. 'Strength of socio-economic gradient' refers to the percentage of variance in PISA 2022 mathematics performance explained by students' socio-economic status, as measured by the PISA index of economic, social and cultural status (ESCS). 'Academically resilient students' refers to the percentage of disadvantaged students who score in the top quarter of performance in mathematics in their own country. 'OECD' is the simple average of the OECD countries displayed in the chart.

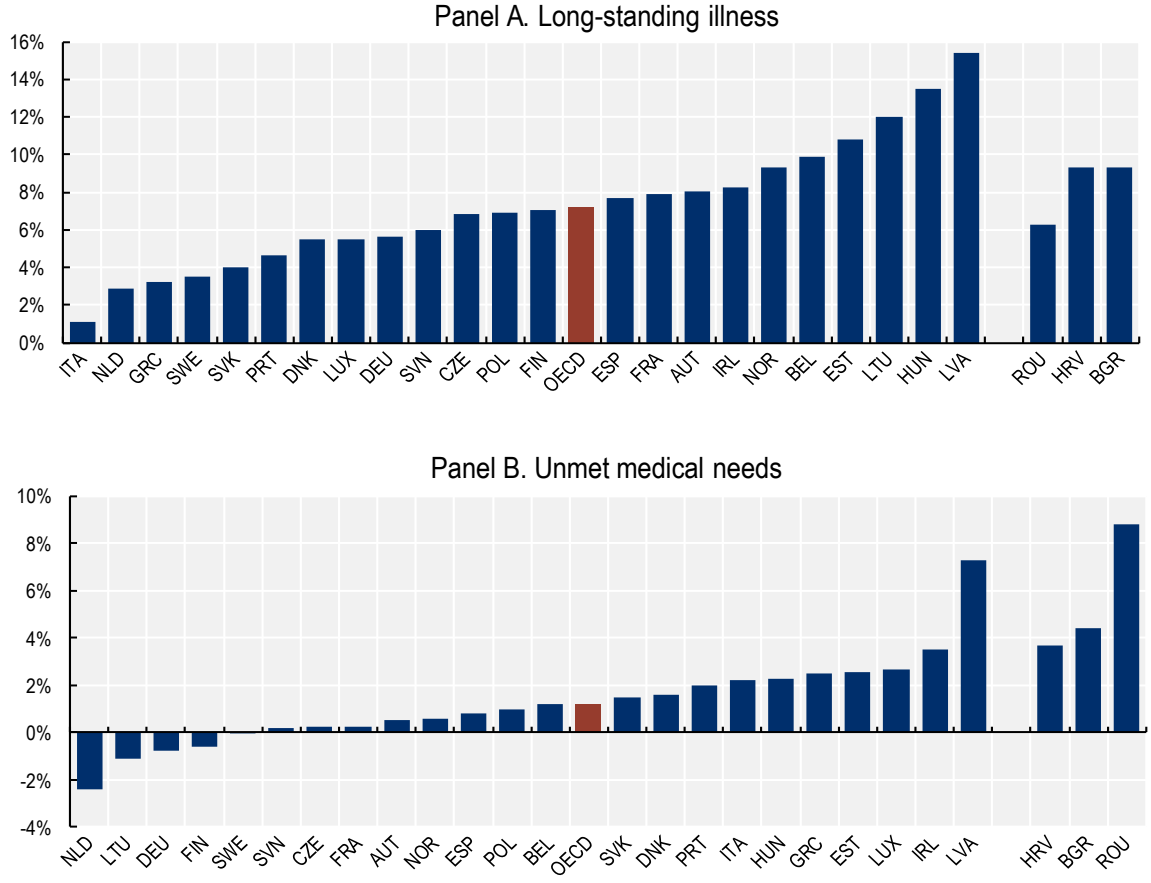
Source: OECD (2023[15]), *PISA 2022 Results (Volume I): The State of Learning and Equity in Education*, OECD Publishing, Paris, https://doi.org/10.1787/53f23881-en.

StatLink https://stat.link/1fqg30

Identifying and addressing barriers to equal opportunity in education can help ensure a more level playing field and increase overall investment in human capital by enabling more students to reach high levels of proficiency in core skills. Understanding what drives the observed gaps in educational outcomes between advantaged and disadvantaged students (socio-economic gradient) and conversely what factors allow students to overcome them (academic resilience) is of high value to policy. Socio-economic background, while important, is not the only factor explaining these gaps. Analysis conducted in OECD (2018[1]) confirms first of all that school quality has a significant effect on the intensity of the social gradient. Similarly, it shows that motivational factors – including confidence in one's academic abilities, self-efficacy and lower levels of test anxiety – are among the strongest predictors of academic resilience (OECD, 2018, pp. 263-269[1]). Applying the methodology used in the report to these outcomes, as was done for income in Chapter 2, may yield further relevant insights by taking account of a broader range of factors and by highlighting the role played by factors beyond individuals' control. Similarly, the analysis in Chapter 3 sheds light on the spatial dimensions of educational opportunities and quality.[5]

Figure 4.2. On average, across OECD European countries, individuals with parents with lower educational backgrounds tend to suffer health penalties

Differences in health outcomes between individuals with low and high parental educational background among the population aged 25-59, by country, 2023



Note: In both panels, differences in health outcomes (%) are computed based on a linear probability model controlling for parental educational background. Lower educational background is defined as having no more than one parent with at most secondary education level. Higher educational background is defined as having at least one parent with tertiary education. Chronic illness includes any long-standing condition. Unmet needs reflect restricted access to medical care based on an individual's assessment of needed but unreceived, delayed or unrequested treatment. Panel A: "Long-standing illness" refers to the probability of reporting any chronic illness or condition. Panel B: "Unmet medical needs" refers to the probability of not receiving a medical examination or treatment at least once in the 12 months prior to the survey, despite needing it. "OECD" is the simple average of the OECD European countries displayed in the chart.
Source: OECD calculations based on the *European Union Statistics on Income and Living Conditions* (EU-SILC), https://ec.europa.eu/eurostat/web/microdata/european-union-statistics-on-income-and-living-conditions.

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Economic Resources

People need sufficient economic resources to be able to invest in their own human capital and that of their children. "Economic resources" are understood in a broad sense as the financial and material means that individuals and households can use to invest in human capital, support personal development and pursue opportunities. Economic resources are a key determinant of opportunities and social mobility at the individual level. They enable the development of human capital and offer protection from adverse shocks (OECD, 2023[16]; 2018[1]; 2015[17]). Economic resources play an equally important role from an intergenerational perspective. They allow parents to meet educational expenses including the purchase of

books, tutoring, school and university fees, as well as extra-curricular activities, and to provide the financial support necessary for decisions such as starting a business or purchasing a home. Similarly, they can help individuals meet health expenses and ensure that children receive necessary medical care, proper nutrition and physical well-being, which are foundational for the realisation of children's full potential. Conversely, families experiencing income poverty, material deprivation or financial stress face significant barriers to investment in their children's human capital, with lasting consequences in terms of the latter's opportunities, outcomes and prospects for social mobility (OECD, 2021[18]; 2018[1]).

Policies designed to ensure a more level playing field can benefit from a clearer picture of the circumstances that prevent individuals from accruing sufficient levels of economic resources. As shown in Chapter 2 for income, economic resources may be shaped to a significant extent by factors that are beyond individuals' control. Applying the same methodology to other measures of economic resources, notably wealth, can yield additional insights for addressing sources of disadvantage and supporting individuals' capacity to pursue and realise opportunities. Wealth plays a highly important role as a financial buffer against economic shocks.[6] From an intergenerational perspective, wealth is also a key circumstance determining opportunities. Parental wealth ensures higher living standards for children, provides them with greater financial security during their upbringing and enables sufficient investment in their human capital which leads in turn to higher educational attainment (Eurofound, 2021[19]). Furthermore, OECD evidence shows large divides in the distribution of household net wealth.[7] In the average OECD country, the wealthiest 10% of households own over half of all household wealth, while the bottom 40% hold only around 4% (Balestra, Caisl and Hermida, 2025[20]).

Understanding the main channels for the accumulation of wealth and the barriers that may prevent individuals from accruing sufficient levels can help ensure a more level playing field. Two channels in the transmission of wealth may be of particular interest, given current trends in the distribution of household wealth in OECD countries and the role these channels play in shaping opportunities throughout life. These channels are: *(i)* gifts and inheritance; and *(ii)* the transmission of homeownership (Balestra, Caisl and Hermida, 2025[20]).[8] The effects of both these channels on the distribution of economic resources and opportunities are significant. Around 2021, around one in three households headed by someone in their 60s in OECD EU countries had received at least one inheritance or gift. The largest 10% of transfers were equivalent in value to approximately six years of median gross income (OECD, forthcoming[21]). In several EU countries, being the recipient of a substantial gift or inheritance during one's lifetime has been found to have a stronger effect on average net wealth than the premium associated with having a university degree compared to a primary-level education for non-recipient peers (Eurofound, 2021[19]). Furthermore, intergenerational transfers tend to have a strong and cumulative impact on asset building. As shown in Figure 4.3, among households headed by individuals aged 60-79, those that received a transfer at any point in their lifetime show a significant wealth premium relative to non-recipients. However, the size of this premium varies markedly depending on the timing of receipt, with earlier transfers associated with substantially larger gains. Recipients who inherited or received major gifts before the age of 30 exhibit the highest long-term wealth gains (OECD, forthcoming[21]). This highlights how early financial support can accelerate wealth accumulation at a critical stage of life.

Figure 4.3. On average, wealth transfers are associated with a larger wealth premium when they are received earlier in life

Average wealth gap between recipients and non-recipients aged 60-79 by the age at which the transfer was received, OECD-14 average, around 2021

Note: The model controls for the sex, age and education of the household head, as well as household structure and country fixed effects. The resulting wealth premia are smoothed using a moving average (+/- 5 years) and shown alongside a 95% confidence interval. The analysis is based on pooled data from all OECD EU countries for which data are available in the latest wave of the *Household Finance and Consumption Survey* (i.e., Austria, Belgium, Estonia, France, Germany, Greece, Hungary, Ireland, Latvia, Lithuania, the Netherlands, Portugal, the Slovak Republic and Slovenia). Wealth values are expressed in 2015 USD by, first, establishing values in prices for the same year (2015) through consumer price indices and, second, by converting national values into a common currency through the use of purchasing power parities for household consumption.

Source: OECD calculations based on the *Eurosystem Household Finance and Consumption Survey* (HFCS), https://www.ecb.europa.eu/stats/ecb_surveys/hfcs/html/index.en.html; OECD (forthcoming), *Unequal Fortunes: Intergenerational wealth transfers in OECD EU countries*, OECD Publishing, Paris.

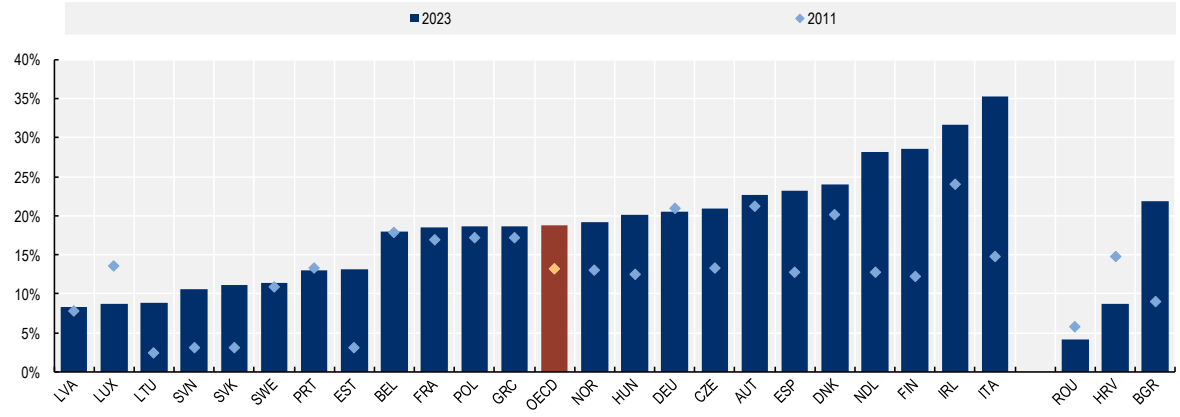
StatLink https://stat.link/cyhwb9

Facilitating the access to homeownership constitutes an important lever through which policy can reduce disparities in wealth, though trade-offs with other policy objectives and other sources of household saving need to be taken into account (Causa, Woloszko and Leite, 2019[22]). Housing constitutes the primary store of wealth and main liability for a large majority of households in OECD countries. Recent OECD evidence shows that rising house prices have made homeownership less accessible for the bottom 40% of households in terms of net wealth and for younger cohorts, in particular those from low-income households (Balestra, Caisl and Hermida, 2025[20]; OECD, 2025[23]). Furthermore, from an intergenerational perspective, parental homeownership significantly influences the likelihood of children becoming homeowners themselves, even when controlling for wealth levels – either through direct inheritance or by facilitating access to mortgages.[9] This is particularly relevant in a context where the relation between parental homeownership and current homeownership has strengthened in many countries. For example, across OECD European countries in 2023, having homeowning parents increased the likelihood of owning a home oneself – whether outright or with a mortgage – by age 38-46 by 18.7% compared to peers whose parents were renters, up from 12.7% in 2011 (see Figure 4.4).[10] Moreover, the parental advantage in access to homeownership tends to be more pronounced in regions with rising house prices, particularly in terms of securing mortgages (Filauro and Parolin, forthcoming[24]). Spatial dimensions also matter here, as the location of housing can influence access to opportunities. As discussed in

Section 4.2.3 below, well-designed social housing policies have a role to play in striking a balance between providing security and enabling mobility.

Figure 4.4. The intergenerational transmission of homeownership has increased in many OECD European countries in the decade following the Global Financial Crisis

Persistence of homeownership across generations (comparing current owners aged 38 to 46 and their parents), by country, 2011 and 2023



Note: The persistence rate measures the likelihood, in percentages, that individuals are homeowners (either outright owners or mortgage holders) if their parents were also homeowners. Countries are ranked in ascending order of the intergenerational persistence of homeownership in 2023. "OECD" is the simple average of the OECD European countries displayed in the chart.
Source: Filauro and Parolin (forthcoming[24]), "*The Intergenerational Persistence of Homeownership in Europe*", calculations based on the *European Union Statistics on Income and Living Conditions* (EU-SILC), https://ec.europa.eu/eurostat/web/microdata/european-union-statistics-on-income-and-living-conditions.

StatLink https://stat.link/3cal1u

Social Infrastructure

Individuals need more than just human capital and economic resources to realise the opportunities available to them. Non-material resources also play an essential role in enabling effort and human capital to translate into actual outcomes. For example, the services, networks, relationships, trust and shared norms that exist within a community are widely recognised as a form of "social capital" (Chetty et al., 2022[25]; Stiglitz, Fitoussi and Durand, 2018[26]; Scrivens and Smith, 2013[27]; Putnam, 2001[28]). These resources provide individuals with information and support. They connect them to jobs and other economic opportunities that may otherwise have remained inaccessible. They also constitute a safety net that can mitigate the effects of adverse circumstances and life events. Here, the broader notion of "social infrastructure" is used to emphasise the characteristics of the "place" where individuals live (i.e., neighbourhood, community…) and its impact on their capacity to realise the opportunities available to them, in addition to the elements of "social capital" that may be embodied in the individuals themselves.[11] Physical institutions, facilities and systems are key components of social infrastructure (Van de Ven, 2021[29]). However, non-material elements are equally important. For example, the extent and quality of social networks are strong enablers of career and educational opportunities (Gemar, 2024[30]; Fabrique Spinoza, 2024[31]; Cox, Steinbugler and Quinn, 2021[32]).

Current OECD research can shed light on the material and non-material elements that contribute to social infrastructure. The OECD has an extensive body of work on the different aspects of social capital and how they contribute to individual well-being and social cohesion. This notably includes work on trust in public institutions (OECD, 2024[33]) and on loneliness and social connectedness (OECD, forthcoming[34]; Mahoney et al., 2024[35]). Evidence confirms that social cohesion, sense of belonging to

society and civic engagement have a positive influence on children's mental and physical health outcomes, long-term socio-economic outcomes and academic resilience (Schleicher and Scarpetta, 2024[36]; Marquez et al., 2024[37]; Jagannathan et al., 2023[38]; Wang et al., 2023[39]; Minh et al., 2017[40]). Furthermore, case studies suggest that, at least in some countries, children from deprived backgrounds face higher barriers to participation in the structured forms of activity, such as volunteering, that contribute most to community cohesion and developing social capital (Camia, Zimmermann and Lischke, 2024[41]). Similarly, the physical components of social infrastructure, including essential services and the facilities that provide them, play an important role in supporting individual well-being, social cohesion and trust (OECD, 2023[42]; 2023[43]; Algan, Malgouyres and Senik, 2020[44]). In this perspective, housing is not only a store of wealth but also an important component of social infrastructure. Policies designed to promote affordable housing constitute a lever for enabling access to economic opportunities and for building social cohesion (OECD, 2023[45]; 2020[46]; Holm, 2024[47]; Hulse and Stone, 2006[48]).

Territorial disparities in social infrastructure limit opportunities for large segments of the population and due focus must be given to the importance of "place".[12] First of all, as highlighted in Chapter 3, territorial disparities in access to opportunities partly reflect differences in levels and quality of social infrastructure. This can notably be seen when looking at ease of access to essential services and the "hard" physical components of social infrastructure that support their provision, including schools and educational facilities, hospitals and employment centres. For example, most people are within walking distance of early childhood education and care (ECEC) centres, with walking times of 20 minutes or less for the median person in a large majority of European regions. However, access remains more limited in some remote or underserved regions and non-negligible differences may exist between accessibility for kindergartens and nurseries (Almeida et al., 2024[6]). Similar results are found for access to paediatric medical services at the neighbourhood level (OECD, 2025[49]).

The Social and Solidarity Economy can help reduce spatial inequalities by leveraging and strengthening social infrastructure. In a number of OECD countries, the Social and Solidarity Economy (SSE) plays a significant role in promoting opportunities for vulnerable populations and reducing spatial inequalities (OECD, 2024[50]).[13] The SSE builds on and contributes to reinforce "softer" non-physical forms of social infrastructure, such as family and community networks, which also vary across locations.[14] As highlighted in Chapter 3, the appropriate scale for analysing the link between social infrastructure and "place" may vary depending on the particular component studied. Family and community networks, for instance, mainly operate at the neighbourhood-level where they contribute to foster social capital and influence its intergenerational transmission (Hout, 2012[51]; Dika and Singh, 2002[52]). Also supporting this argument, a number of studies have emphasised the role of neighbourhoods in shaping life trajectories, opportunities and social capital (Moreno-Monroy et al., 2025, forthcoming[53]; Soria and Medina, 2025[54]; Chetty and Hendren, 2018[55]; Sharkey and Faber, 2014[56]). These findings emphasise the importance of policies aimed at improving neighbourhood conditions (OECD, 2025[49]; Parolin et al., 2025[57]).

Place affects opportunities directly and through its influence on access to essential resources and services. Place is a circumstance that affects the overall childhood environment and continues to shape opportunities throughout life. Where one grows up is a feature that is largely beyond an individual's control and, even in adulthood, a majority of citizens in OECD countries continue to reside near the place where they were born (OECD, 2025[5]). Illustrating this, *region of residence* is found to account for a significant part of the variation in inequality of opportunity in income when it is included in the set of circumstances in Chapter 2 (see Box 2.1 and Figure 2.3). Place is also important insofar as it interacts with other circumstances and either amplifies or dampens their effect on the pool of opportunities and individuals' ability to realise them.

Identifying the Challenges, relevant Circumstances and Policies to address them

When designing policies that focus on endowments, it is important to consider the nature of the challenges that individuals encounter. Different types of barriers may limit individuals' capacity to realise the economic opportunities available to them. These barriers may relate first of all to a lack of endowments and require policies that can support their development. This may reflect for example a lack of or mismatch in skills that restrict economic opportunities, insufficient material or financial resources to invest in human capital, as well as limited social infrastructure connecting individuals to opportunities. Other factors may also need to be considered beyond the individual and their immediate environment. Structural barriers may influence individual endowments and the extent to which they translate into actual outcomes. Stigma and discrimination, where they are present, can negatively impact on the assessment of an individual's skills and limit their opportunities despite adequate human capital (OECD, 2025[58]; 2022[59]; 2010[60]; Hardy and Schraepen, 2024[61]; Valfort, 2020[62]; OECD, 2008[63]). Similarly, spatial segregation or financial fragility can reduce individuals' ability to leverage available social infrastructure and economic resources to improve their prospects (OECD, 2023[16]; 2018[64]). Not all barriers to equal opportunity may be amenable to policy. While issues of access and endowments can often be addressed directly through targeted interventions, overcoming structural challenges may require broader forms of action, including attitudinal or institutional change. While they are important to underline, addressing structural challenges of this kind remains largely beyond the scope of the discussion and review of policies conducted in this chapter.

The set of relevant circumstances must also be properly defined in order to understand what shapes individual endowments and their evolution over time. Chapters 1 and 2 use a defined set of circumstances to assess inequality of opportunity in terms of income (see Table 1.1). In the context of this report, the selection of circumstances is partly constrained by issues of data availability and comparability. When applying the same methodology to other outcomes and types of endowment, the set of relevant circumstances would need to be expanded to reflect their specificities. Box 4.1 below outlines possible circumstances that could be considered in an expanded set and used to analyse a wider range of endowments that are key for understanding individuals' capacity to realise opportunities. This includes circumstances that are part of the set listed in Table 1.1, for which comparable data are available, as well as additional relevant circumstances for which this may not be the case.

Box 4.1. Analysing individual endowments: What circumstances are relevant?

Many different types of circumstances are relevant for understanding how endowments are shaped and whether individuals are able to leverage them to realise opportunities. In addition to the set of key circumstances already identified in Chapter 1, other key factors contribute to the formation of individual endowments. Identifying these circumstances and factors can inform policy interventions in relevant ways and at various levels (e.g., early childhood education and care policies recognise the importance of investing in human capital from early age; inclusive educational policies are designed to provide the best educational opportunities to disabled children and children with medical conditions…).

A non-exhaustive list of key circumstances for assessing individual endowments includes:

Individual characteristics

Circumstances already included in the analysis:

- *Sex*: The analysis in Chapter 2 highlights the significant contribution of gender to inequality of opportunity in earnings. Gender disparities are also well documented in human capital endowments (OECD, 2023[15]).

- *Country of birth and migrant parentage*: Migrants and the children of migrants can encounter additional barriers to the development of human capital and access to social infrastructure. For example, upper secondary completion rates are lower for students who are migrants themselves or children of migrants. Similarly, 20% fewer students who are migrants or have migrant parentage achieved a level of proficiency in mathematics on average in PISA 2022 (OECD, 2024[65]; 2023[15]).

Key additional circumstances to consider:

- *Health conditions in early age*: Low birth weight and other conditions emerging in early years can have a lasting impact on development. Similarly, exposure to adverse experiences, particularly in childhood, can undermine emotional well-being and affect long-term economic outcomes (OECD, 2021[18]).
- *Disability status*: Disability has a direct impact on economic outcomes by limiting individuals' access to education, skills programmes and health-improving schemes, and in some cases by preventing or precluding the acquisition of certain skills. It may also have an additional indirect impact in situations where disabled populations encounter discrimination and stigma (OECD, 2025[58]; 2022[66]; Hardy and Schraepen, 2024[61]).
- *Minority or indigenous status*: Minority and indigenous status can be considered as a relevant circumstance in situations where there is discrimination and minority or indigenous populations suffer from worse economic outcomes and more limited opportunities (OECD, 2019[67]).

Parents' socio-economic background

Circumstances already included in the analysis:

- *Parental education and occupation*: The analysis in Chapter 2 underlines the role that parental socio-economic background plays as a determinant of income disparities and the importance of considering both maternal and paternal background. Parental socio-economic background plays a similar key role in shaping other types of endowments and outcomes (see above).

Key additional circumstances to consider:

- *Parental wealth*: Parental wealth was not included in the analysis in Chapter 2 due to issues of data availability. It constitutes an important factor shaping opportunity, as well as a priority area for future work (Balestra, Caisl and Hermida, 2025[20]).

Childhood environment

Circumstances already included in the analysis:

- *Homeownership status of parents*: Exposure to homeownership growing up may have a positive impact on economic and educational outcomes independent of household wealth, as has been observed in some countries (Aarland et al., 2021[68]).
- *Parental presence and parenting style*: Different dimensions of parenting affect children's outcomes (Ulferts, 2020[69]). Parental presence may for example guarantee greater economic stability and family support. Parenting style may also influence child learning and the formation of human capital.
- *Degree of urbanisation of the region of residence*: As highlighted in Chapter 2, degree of urbanisation explains close to 10% of inequality of opportunity in terms of income on average across countries. Chapter 3 also underlines the importance of territorial divides in determining access to key drivers of economic opportunities.

- *Place of residence*: In Chapter 2, region of residence is taken as an imperfect proxy for the broader question of access to infrastructure, affordable quality education and healthcare (see Box 2.1). Building on the analysis conducted in Chapter 3, efforts could be strengthened to develop comparable data on disparities and opportunities at fine territorial scales including local areas and neighbourhoods.

Key additional circumstances to consider:

- *Language spoken at home*: The language spoken at home is a further circumstance that can affect school readiness and the ability to integrate into primary language environments (OECD, 2018[70]).
- *Household size and structure*: The number of dependents in a household and the household structure affect the time and resources parents can allocate to children's education and development. As such, they may disadvantage children in larger or non-traditional households (OECD, 2011[71]; Chapple, 2009[72]).
- *Interpersonal trust and social norms*: These elements of social infrastructure can influence economic outcomes, notably by shaping attitudes towards education, gender roles and career aspirations.
- *Community cohesion and public safety*: Strong and cohesive communities provide safety and collective support. Social cohesion and community participation within a neighbourhood can offer children opportunities to explore personal interests, engage in social activities and build relationships with peers and adults outside their homes (McKendrick, 2014[73]). Public safety directly impacts mental well-being and the ability to realise opportunities (Marquez et al., 2024[37]; Wang et al., 2023[39]).

Reflection may be needed to determine at what point in the life cycle of an individual different circumstances should be measured to best capture their influence on opportunities. For example, as argued in Chapter 1, focusing on disability early in life may be most relevant from the perspective of inequality of opportunity, as it would be most clearly distinct from individual choices and therefore likely to be beyond an individual's control.

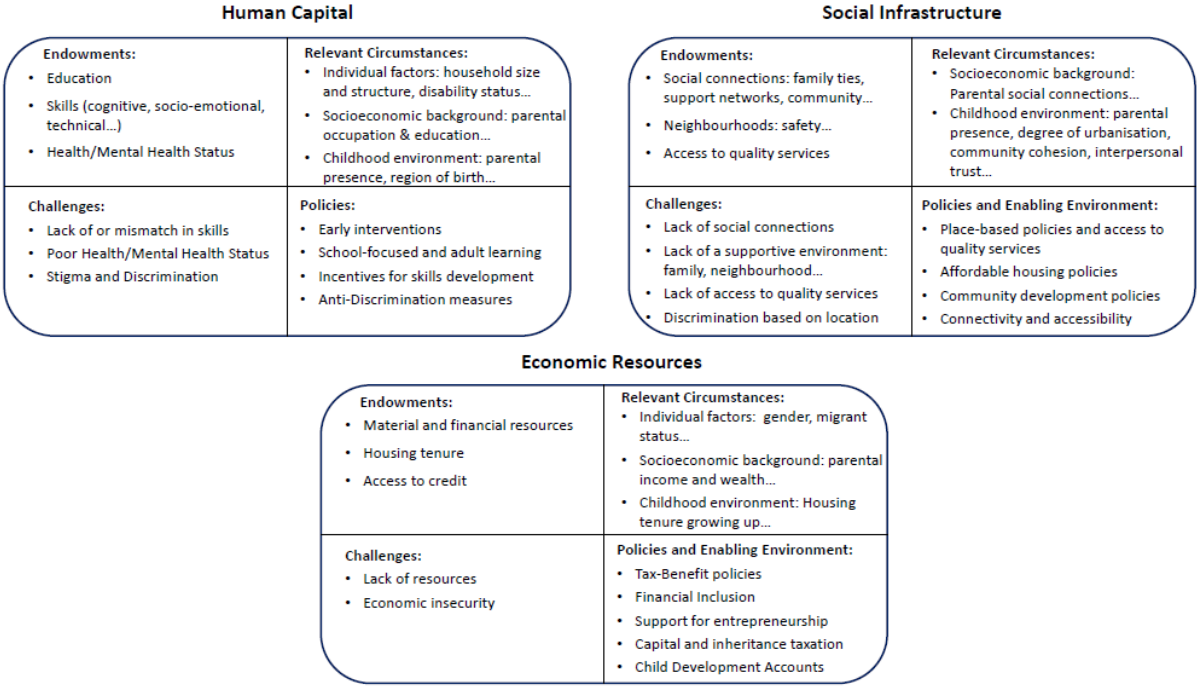
The policy framework proposed in this section is designed to support policymakers in identifying effective responses for ensuring a more level playing field. Figure 4.5 provides a visual representation. This framework recognises that inequality of opportunity arises from a combination of different causes. These causes notably include a limited supply of opportunities, uneven access to those that are available and inadequate endowments that may prevent individuals from realising them. The resulting barriers to equal opportunity contribute to skew the playing field by increasing the influence of inherited circumstances and limiting the extent to which individual outcomes are shaped by factors related to personal agency. On this basis, the framework seeks to identify policies that can help address these challenges and develop effective and comprehensive strategies for ensuring a more level playing field. The following section discusses a broad and balanced range of measures, focusing on the different types of endowments covered by the framework. As such, the discussion in this chapter aims more specifically to strengthen the capacity of all individuals to realise the opportunities available to them by enhancing human capital, economic resources and social infrastructure.

Figure 4.5. A framework for informing effective policies to ensure a more level playing field

Equal Opportunity:
Ensuring a more level-playing field

Preliminary Analysis:
Identify the extent to which outcomes are shaped by circumstances beyond an individual's control, which circumstances matter most and for whom

Policy objectives:
Economic Dynamics: *Increasing the supply of opportunities available to individuals*
Endowments: *Providing individuals with the resources they need to realise the opportunities available to them*



The following section proposes to review a selection of policies that can help address the potential barriers to a level playing field identified in the course of the analysis. Several points should be borne in mind here. First, as already mentioned, the discussion in this chapter will focus on the *endowments* channel and on policies designed to support individuals' capacity to realise available opportunities and address sources of disadvantage that may prevent them from doing so. The *economic dynamics* channel and policies designed to increase the overall supply of opportunities are treated in greater detail in other OECD publications. Second, the range of policy drivers that contribute to shape individual endowments, and through them the capacity to pursue and realise opportunities, is extremely broad and diverse.

The discussion in this section does not aim to cover the full range of these policies. Its scope is more modest and intended to provide a *selected review* of policy options for addressing challenges that may be identified based on the analysis. The options discussed have been chosen with a view to their relevance and to complementing existing OECD policy recommendations. For example, policies designed to ensure a more level playing field by promoting the development of *human capital* have already been extensively studied and their benefits highlighted, notably in OECD (2018, pp. 289-307[1]). Greater attention is therefore given to policies that focus on other types of endowment – i.e., *economic resources* and *social infrastructure*. The selection of policies includes a combination of *(i)* traditional "core" policies that have been identified by the literature as effective for promoting opportunities and ensuring a more level playing field; and *(ii)* more innovative "new" measures that have been highlighted in the literature or in policy debates as promising options to explore further.[15] The aim in doing so is to provide an overview of policy options that is both grounded in the established experience of "what works" and forward-looking.

Where possible, the potential downsides of proposed policies will be taken into account to ensure the discussion is relevant for policy and can help identify measures that are effective. Measures that contribute to a more level playing field bring large benefits, but they may also have "downsides" which need to be considered when designing effective policy responses, as underlined for example in Peragine and Biagi (2019[74]).

The "downsides" considered in the discussion are mainly of three types:

- *The fiscal implications of measures to ensure a more level playing field*: Many of the proposed policy options imply increased public spending in the form of grants, subsidies and cash transfers or the direct provision of goods and services. An important part of the discussion relates to the fiscal cost of these policies, the measures that can be taken to cover them (for example, through higher taxes, increased levels of public debt or spending cuts in other areas) and the direct or indirect impact these measures may in turn have on equal opportunity. While decisions concerning appropriate funding mechanisms for these policies are the responsibility of national governments and are therefore not an object of discussion in this section, some of the measures reviewed constitute potentially effective sources of revenue, as well as levers for ensuring a more level playing field. This is notably the case for the discussion of wealth and inheritance taxes in Section 4.2.2 below. More broadly, current research on the "return on investment" for social policy[16] and the creation of the *OECD Joint Network of Senior Budget Officials and Senior Social Protection Officials* can provide valuable support on this issue. In particular, they can help policymakers determine how to address spending pressures on social protection most effectively and identify high-impact areas for social investment. The analysis of the effects of tax-benefit instruments on inequality of opportunity conducted in Section 4.2.2 also provides an example of the insights that can be drawn from the methodology used in this report.
- *Political economy constraints*: The political feasibility of the proposed measures constitutes another important element to take into account for policy guidance. While conditions and barriers vary depending on national contexts, the implementation of certain types of measures has proven consistently difficult across countries due to limited public support for these measures. Political economy constraints are discussed in the case of wealth and inheritance taxes, one type of measure where constraints of this kind have proven topical (OECD, 2021[75]). More broadly, current OECD work on participatory processes, public communication and the public acceptability of reforms can provide policymakers with guidance on how to reflect and address these constraints in the design and implementation of policies (OECD, 2025[76]; 2023[77]; 2022[78]).
- *The motivational aspects of policies*: The potential impact of policies on individual motivations and the extent to which they contribute to incentivise effort or not are an important part of the debate on equal opportunities (Fleurbaey, 2008[79]).[17] As detailed in Chapter 1, the indicator of inequality of opportunity developed in this report relies on an ex ante approach (see Box 1.3). As such, it does not measure levels of effort directly and does not shed light on motivational issues. While the following sections will not provide a systematic discussion of these issues, where possible, they will be highlighted and addressed in specific cases.

4.2. A review and discussion of policies to ensure a more level playing field

This section discusses and reviews policies relating to the different types of endowment covered by the framework: *human capital* (Section 4.2.1); *economic resources* (Section 4.2.2); and *social infrastructure* (Section 4.2.3). The objective in doing so is to identify policies that can contribute to level the playing field by strengthening individuals' capacity to realise the opportunities available to them.

4.2.1. Policies for promoting equal opportunities by building human capital

Addressing the circumstances that limit the development of human capital requires coherent policy responses that can span multiple domains. Governments must seek to establish skills systems that equip individuals with the right competences, promote adult learning and provide individuals with opportunities to develop and fully utilise their human capital throughout the life cycle. As emphasised in the updated *OECD Skills Strategy*, coordination and collaboration across all levels of government, as well as between government and stakeholders, are crucial to achieve this objective (OECD, 2019[80]). Particular focus should be put on policies targeting the early formative years of life, given the high returns on early investment in human capital and the strong influence that the early age environment has in shaping life outcomes, and notably disadvantage, in key areas including education and health (OECD, 2021[18]; 2019[81]; 2018[1]; Attanasio, Cattan and Meghir, 2022[82]; Heckman and Carneiro, 2003[83]). Early childhood interventions need to be sustained throughout later stages of education to have a lasting effect (OECD, 2022[84]; 2002[85]). This underlines the importance of school-focused policies and of policies aimed at supporting learning environments beyond school, notably family, firm and community-based. Throughout the working life, effectively designed policies can promote skills development and adult learning to enhance individuals' economic opportunities and facilitate job transitions (OECD, 2024[86]; 2017[87]). Finally, where structural barriers impede the development and rewarding of human capital, additional measures may be needed to address their effects and ensure a more level playing field (OECD, 2025[58]; 2023[88]).

Early interventions

Evidence confirms that investing in early childhood education and care (ECEC) services has positive returns for the formation of skills and capabilities, as well as health outcomes. Childcare programmes have been shown to improve children's well-being, educational performance and socio-economic outcomes in young adulthood (OECD, 2025[89]). Their impact tends to be particularly strong for children from disadvantaged backgrounds, thereby compensating for the effects of adverse circumstances and enabling a larger share of the population to develop adequate levels of human capital (OECD, 2021[18]; 2016[90]; van Huizen and Plantenga, 2018[91]; Havnes and Mogstad, 2015[92]). The evidence on the value of investing in ECEC is well established and will not be covered in greater detail here. Relevant policy recommendations in this area include reducing barriers to access to ECEC, notably in terms of the cost, proximity and availability of quality ECEC facilities, as well as addressing information gaps regarding ECEC services (OECD, 2025[89]; 2017[93]).

Supporting broader learning environments beyond school is also essential to build human capital. While formal schooling plays a central role in child development, human capital is significantly influenced by factors outside the school environment (Björklund, Lindahl and Lindquist, 2010[94]). In this perspective, the home learning environment and community-based forms of learning should also be considered as important and complementary sources of educational opportunities. Home learning environments can be effectively supported through measures such as evidence-based parenting programmes, home visits for at-risk households and financial subsidies. These measures can help families create the enabling conditions necessary to their children's educational success and to overcome adverse circumstances (OECD, 2011[71]). For example, mentoring programmes that include a focus on engagement with parents can help improve the educational outcomes of children and strengthen support at community-level by

building family-school relations (OECD, 2021[95]; Agostinelli, Avitabile and Bobba, 2025[96]).[18] A variety of behavioural interventions have also proven effective in helping families reduce gaps associated with socio-economic status and address barriers to the development and transmission of human capital. These interventions range from simple text-based nudges to conditional forms of cash transfer.[19]

School-focused and adult learning policies

Governments in OECD countries have used school funding equity policies to promote educational opportunities. School funding policies allocate additional financial and human resources to the schools that need them most. This includes schools in remote areas, given the gaps in educational outcomes between urban and rural schools highlighted in Chapter 3.[20] Doing so can reduce the impact of inherited circumstances on the educational outcomes of students with less advantaged backgrounds and ensure broader access to high-quality education and training (OECD, 2021[97]; 2016[98]). Available evidence suggests that traditional measures of educational equity, such as the student/teacher ratio and levels of school segregation, are also correlated with inequality of opportunity – with higher ratios associated with higher levels of inequality in EU countries (Palmisano, Biagi and Peragine, 2022[99]). Two main approaches are used to address the differing needs of schools: *(i)* integrating additional resources into regular funding, such as weighted formulas for specific student groups; or *(ii)* targeted programmes and grants for specific students, schools or regions, such as extra funding for socio-economic disadvantage. Many school systems that provide additional resources for disadvantaged schools use a mix of both, often supplemented with "in-kind" support such as additional teaching hours or staff. Partnerships and networks of collaboration between high-performing and low-performing schools can also improve overall performance (OECD, 2012[100]).

School choice policies have also been implemented in many OECD countries as a means to empower parents and promote educational opportunities. A key challenge here consists in effectively balancing the opportunities that school choice provides for students and parents with the possible negative impact they may have on the outcomes and opportunities across the school system as a whole, notably by crowding out disadvantaged and low-performing students (OECD, 2019[101]).[21] The design of school choice policies plays a crucial role in maintaining this balance. OECD evidence suggests for example that two types of school choice programmes – flexible enrolment schemes and programmes using a weighted funding formula – can be compatible with equity considerations when designed properly (Musset, 2012[102]).[22]

Effective teaching strategies can help students overcome the penalising effects of adverse circumstances. Motivational factors play an important role in improving educational performance and in fostering academic resilience in students from disadvantaged backgrounds (OECD, 2018, pp. 263-269[1]). Teaching strategies that help promote positive attitudes, student engagement and self-efficacy may therefore lead to enhanced educational performance, with students from less advantaged backgrounds being likely to benefit most. Effective monitoring processes to identify struggling students and targeted interventions to support them are essential levers for promoting educational opportunities and reducing the risk of dropout and early school leaving (Lyche, 2010[103]). In this respect, grade repetition may prove costly in terms of educational opportunities and outcomes.[23] Inclusive admission strategies in teacher education institutions may also help better engage with and cater to the specific needs of students from disadvantaged backgrounds by ensuring greater diversity among the teaching staff (Brussino, 2021[104]). Active parental engagement also constitutes an important element in supporting students' progress, as highlighted above.

School and career guidance systems can help shape motivation and increase career preparation, particularly for students with disadvantaged backgrounds. Students with lower prospects for a successful transition into the labour market also tend to be less likely to engage in career development and preparation during secondary education (OECD, 2019[105]). Furthermore, circumstances such as

gender, migrant background and parental background influence career ambition and expectations, even for similar levels of education. For example, students with low socio-economic backgrounds are more likely to underestimate the need for tertiary education to achieve their career goals and less likely to participate in school-managed career development activities compared to their peers. Similarly, girls and migrant students both tend to engage less in career development activities that are strongly linked to better employment outcomes, particularly those involving direct contact with employers. While both groups are more ambitious than boys and native-born students, their career plans tend to focus on a limited range of jobs, highlighting the need for more effective career guidance with an emphasis on the exploration of a broader range of career options.[24]

Underperforming students who faced unfavourable circumstances during early childhood should be provided with "second chance" learning opportunities as adults. For disadvantaged students entering the labour market, targeted support should be deployed to facilitate access to adult education and training. Adult education constitutes a source of learning and skills development opportunities, as well as a means to address the effects of early disadvantage that may not have been overcome during schooling years. Well-designed adult learning programmes tend to focus on four key objectives (OECD, 2017[93]). First, they rely on a combination of education, training and practical job experience to enhance employability. Second, they offer targeted support for adults with low educational attainment, particularly those lacking basic literacy and numeracy skills.[25] Third, they actively seek to facilitate participation in adult education and remove barriers through financial mechanisms such as co-financing, tax credits and allowances. Finally, delivery methods need to take account of the specific constraints affecting target populations to enable broader and more inclusive access to learning opportunities, through flexible and behaviourally-informed design. Existing monitoring frameworks can help ensure that adult learning systems are effective and contribute to a more level playing field (Sekmokas et al., 2024[106]).

Financial incentives for skills development

Financial incentives are essential for promoting education and training, particularly for low-skilled and displaced workers. Increasing existing levels of adult learning constitutes a high priority for many OECD countries.[26] Governments use a range of incentivising measures – such as subsidies, tax credits and subsidised loans – to steer education and training decisions, increase investment in human capital and achieve a better match between the supply of and demand for skills. Experience from OECD countries confirms that incentivising measures are more successful when they are adapted to individual circumstances. Furthermore, several challenges need to be addressed when designing effective and inclusive financial incentives for skills development. Market failures relating to capital, education and training may disproportionately reduce the access to upskilling opportunities for individuals with disadvantaged backgrounds and low-educated workers. These disparities in skills acquisition compound existing inequalities in labour market outcomes by limiting lifelong learning opportunities for those who would need and benefit from them the most.[27] In addition to their instrumental value in improving labour market outcomes, financial incentives for education and training contribute to the broader aims of expanding opportunities, enhancing overall well-being, reducing inequalities and promoting greater social cohesion (OECD, 2017[93]).

Traditional cash transfer programmes can also play a critical role in improving the home learning environment by alleviating the financial pressures that may weight on families. Experimental studies and evaluation of measures taken in several OECD countries confirm that cash transfer programmes have positive effects on the educational outcomes of young children. Furthermore, these effects are most beneficial for the development of the linguistic, cognitive and socio-emotional skills of children with disadvantaged backgrounds (Jones, Milligan and Stabile, 2019[107]; Dahl and Lochner, 2012[108]). Experimental evidence suggests that, by relieving budget constraints and sources of psychological pressure, cash transfers allow families to spend more on nutritious foods, books and toys. This effect is

stronger when transfers are accompanied by measures designed to facilitate behavioural change (Premand and Barry, 2022[109]; Macours, Schady and Vakis, 2012[110]) and to provide support to parents.

Individual Learning and Training Accounts (ILAs/ITAs) have been implemented in several OECD countries to facilitate participation by adults in education and training opportunities. ILAs/ITAs are personalised, portable financial accounts or schemes that aim to promote lifelong learning by providing individuals with financial resources to enhance their skills, adapt to changing labour market demands or pursue personal development. ILAs/ITAs are designed to promote skills development and ensure more equitable access to training opportunities. In order to do so effectively, programmes must address several potential challenges. These challenges include *(i)* bias in participation which may limit enrolment by populations that may benefit the most, such as low-skilled workers, the self-employed and employees in small firms; *(ii)* limited awareness of the programmes; and *(iii)* barriers to the access and effective utilisation of funds. Targeting mechanisms can help reduce participation bias and deadweight losses but may also imply associated costs, such as increased administrative complexity and the risk of excluding eligible individuals. Accompanying measures are therefore needed to ensure greater participation among under-represented groups and provide them with appropriate support to overcome the specific challenges they face. Recommended accompanying measures include tailored guidance, information campaigns and mentoring. When designed with these considerations in mind, ILAs/ITAs can foster opportunities by enabling broader and fairer access to education and skills development.[28]

Anti-discrimination policies and measures

Many OECD countries have promoted broad societal measures to foster diversity and equal opportunities. Structural barriers can prevent individuals from fully developing and making use of their human capital. For instance, while individuals may possess the necessary skills and qualifications, stigma or discrimination attached to particular characteristics may impact negatively on the way in which their abilities are assessed, thereby limiting their capacity to realise opportunities available to them. Full implementation and enforcement of anti-discrimination legislation is necessary to ensure that effort and investment in human capital are properly rewarded, in addition to other economic, social, legal and moral arguments for doing so (OECD, 2025[58]; 2020[111]). However, active engagement from individuals, civil society and the private sector is also needed to foster inclusive societies and workplaces. Many OECD countries encourage diversity in the skills acquisition process through initiatives that reward firms for their commitment to inclusion, such as diversity labels and awards (OECD, 2022[59]; 2016[112]). Financial incentives, including subsidies and tax breaks, are also used to support businesses that hire individuals from diverse or disadvantaged backgrounds. Additionally, public procurement policies increasingly promote supplier diversity. Over the past decade, OECD EU countries have introduced sector- or position-specific quotas, notably benefitting women and people with disabilities.

However, existing diversity policies often overlook socio-economic disadvantage. Research on access to higher education suggests that diversity measures tend to benefit the most privileged within minority groups – for example, those from higher-income families or with greater educational resources – while failing to support the most disadvantaged (OECD, 2020[111]). To ensure a more level playing field, policies must address all forms of disadvantage and ensure that support extends to individuals from lower socio-economic backgrounds regardless of whether they belong to a recognised minority group or not. Moreover, policymakers must consider the risk that targeting specific groups may exclude individuals that do not fit into the criteria used, with the potential effect of undermining support for these measures as well as social cohesion more broadly. Therefore, diversity policies are more likely to be effective if they are part of a comprehensive and inclusive strategy designed to foster opportunities for all members of society.[29]

4.2.2. Policies for promoting equal opportunities by providing sufficient economic resources

Governments can rely on many different policy instruments to provide individuals with the economic resources they need to realise available opportunities. Tax-benefit policies are widely recognised as a key tool for supporting social mobility, particularly among the middle-class, as confirmed by the evidence in OECD (2018[1]). For instance, adequate income support schemes and family benefits play an important role in protecting individuals and households from the potentially adverse effects of life events (e.g., loss of employment, childbirth, divorce, illness…) which might otherwise result in downward mobility. To shed further light on the issue, this section assesses the impact of taxes and benefits on inequality of opportunity in a broad range of OECD European countries by comparing estimated results from the indicator for market income and disposable income (see Box 4.2). Beyond taxes and benefits, policymakers can rely on a number of other levers to help equip individuals with sufficient economic resources to realise opportunities. This includes well-established policies, such as measures designed to promote financial inclusion or support entrepreneurship and self-employment. Policymakers may also consider several innovative measures that have been pioneered by some OECD countries or have featured in recent policy and public debates. These measures notably include child development accounts, as well as the possible use of wealth and inheritance taxes as means to reduce large gaps in economic resources and limit opportunity hoarding.

Box 4.2. Assessing the role of taxes and benefits in reducing inequality of opportunity

To assess the role of taxes and benefits in reducing inequality of opportunity (IOp – as measured by the indicator developed in Chapter 1), this section proposes to follow the same type of analysis traditionally used to assess the effect of taxes and benefits on income inequality (OECD, 2011[113]; 2008[114]). As described in Annex 1.A, IOp is estimated using an *ex ante* approach based on regression tree and forest techniques. It reflects the inequality level, as expressed by the Gini index, of a counterfactual distribution of outcomes that only captures differences that are due to a set of selected circumstances (Absolute IOp – see Box 1.4 in Chapter 1).

Following the standard analysis, the overall mitigating effect of taxes and cash benefits on IOp is taken here as the percentage difference between the measure computed for household equivalised market income and for household equivalised disposable income:

$$\frac{IOp\left(\hat{y}_{disposable}\right) - IOp\left(\hat{y}_{market}\right)}{IOp\left(\hat{y}_{market}\right)}$$

where $IOp\left(\hat{y}_{disposable}\right)$ and $IOp\left(\hat{y}_{market}\right)$ are, respectively, absolute IOp for household equivalised disposable income and for household equivalised market income.

In turn, the mitigating effect of each transfer type is calibrated as the percentage difference between the measure computed for household equivalised disposable income and for household equivalised disposable income excluding that specific transfer:

$$\frac{IOp\left(\hat{y}_{disposable}\right) - IOp\left(\hat{y}_{disposable\ without\ tax/transfer\ k}\right)}{IOp\left(\hat{y}_{disposable\ without\ tax/transfer\ k}\right)}$$

- The k tax/transfer types covered here are: child benefits; disability benefits; education allowances; housing allowances; social exclusion benefits; old-age benefits; unemployment benefits; and income and wealth taxes.

- Disposable income is defined as the sum of income from market sources (i.e., the wage and salary income of the household members, excluding employers' contributions to social security, but including publicly-funded sick pay, self-employment income, as well as capital and property income streams) and the k tax/transfers above. Negative or nil market incomes are set to 1. In-kind benefits are excluded from the definition of disposable income.
- The list of circumstances controlled for using the available data (see Table 1.1 in Chapter 1) comprises: the individual's sex and country of birth; parental background (education and occupation) when the individual was 14; parents' country of birth; the household's homeownership status when the individual was 14; and the degree of urbanisation of the childhood environment.

Tax-benefit policies are expected to have a mitigating effect on IOp, as taxes and transfers affect the current distribution of income and can contribute to correct inequalities in market income that reflect circumstances beyond an individual's control. The method used here does not allow for analysis of the mitigating effect of current tax-benefit policies on IOp throughout the life cycle. Doing so would require a longer-term perspective, as the influence of early-age circumstances can only be assessed once the current cohort of children enter the labour market and their future outcomes are observed.

Assessing the effect of current taxes and transfers on IOp, as done in this section, is useful nonetheless to shed light on *(i)* the extent to which circumstances beyond individuals' control influence the generation of pre- and post-transfers income; and *(ii)* how effective taxes and cash benefits are in correcting their influence by reaching the populations that are affected by these circumstances and, as far as possible, equalising opportunities for income generation. A similar type of assessment is conducted for the UK tax and transfer system in Groot, van der Linde and Vincent (2019[115]), using a different methodology and data from the British Household Panel Survey over the period 1991-2008.

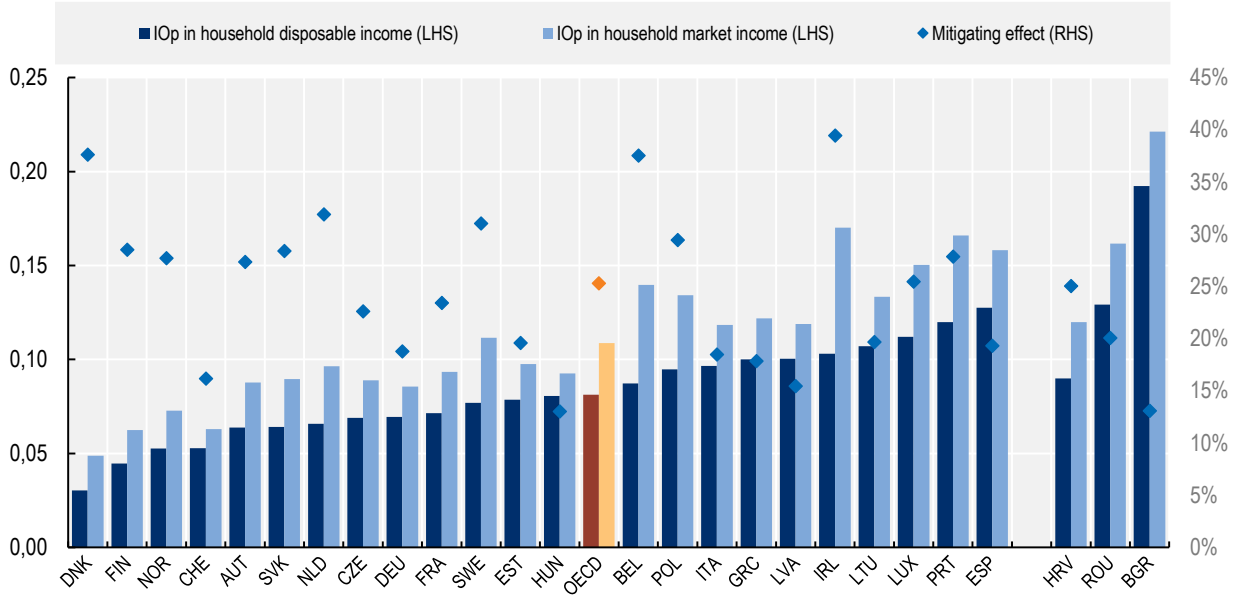
Tax-benefit policies

Tax and transfer systems play an important role in reducing inequality of opportunity in OECD countries. On average, taxes and transfers are associated with a reduction in inequality of opportunity of 25% in OECD countries in 2019, but with significant cross-country variation (see Figure 4.6). These results suggest that taxes and transfers play an important role in compensating for the effect on market income of circumstances such as individual characteristics, parental socio-economic background and childhood environment. For example, in Belgium, Denmark and Ireland, the measured level of inequality of opportunity is reduced by over 35% following taxes and transfers. By contrast, the tax and transfer system has less impact on inequality of opportunity in countries such as Hungary, Latvia and Switzerland, where the observed mitigating effect is of 10% or less. Furthermore, there is a high level of correlation between the mitigating effect of tax and benefit systems on inequality of opportunity and on income inequality, with a cross-country correlation of 80%. In this respect, the analysis suggests that more redistributive tax-benefit systems may also be more effective in reducing inequality of opportunity.[30]

Tax-benefit policies differ in terms of the associated mitigating effect on inequality of opportunity, with significant variation between types of taxes and transfers and across countries. The observed effectiveness of specific types of taxes and transfers in reducing inequality of opportunity[31] varies significantly across countries, underlining the importance of proper design, targeting and generosity-level of benefits.[32] Furthermore, the impact of specific tax-benefit policies (including unemployment benefits, education allowances and income taxes) on inequality of opportunity and on income inequality are strongly correlated (see Table 4.1 below).

Figure 4.6. Taxes and transfers contribute to reduce inequality of opportunity in OECD European countries, though to varying degrees

Absolute inequality of opportunity in household disposable and in market income and mitigating effect of transfers in reducing inequality of opportunity, by country, individuals aged 25-59, 2019



Note: LHS: left-hand side axis. RHS: right-hand side axis. Absolute inequality of opportunity (IOp) is measured as the Gini index of the counterfactual distribution of income where differences in outcomes result entirely from the set of circumstances covered in Figure 2.1. For better readability, the mitigating effect is shown in the chart as the percentage difference between IOp in household equivalised market income and IOp in household equivalised disposable income. Countries are ranked in ascending order of absolute inequality of opportunity in household equivalised disposable income. "OECD" is the simple average of the OECD European countries displayed in the chart.
Source: OECD calculations based on the *European Union Statistics on Income and Living Conditions* (EU-SILC), https://ec.europa.eu/eurostat/web/microdata/european-union-statistics-on-income-and-living-conditions.

StatLink https://stat.link/5b0rv9

Table 4.1. The effect of cash benefits and taxes on inequality of opportunity is highly correlated with their impact on income inequality

	Mitigating effect on inequality of opportunity	Correlation with the mitigating effect on income inequality
Child benefits	-3%	0.47
Disability benefits	-6%	0.49
Education allowances	-1%	0.87
Housing allowances	-1%	0.62
Old-age benefits	-3%	0.36
Social exclusion benefits	-2%	0.61
Unemployment benefits	-4%	0.91
Income and wealth taxes	-12%	0.84

Note: The mitigating effect of each tax/transfer is calculated as the reduction in inequality of opportunity (or inequality of outcomes) resulting from the inclusion of that tax or transfer, relative to the level of inequality of opportunity (or inequality of outcomes) observed without it. For more detail on the calculation of the mitigating effect of taxes and transfers, see Box 4.2. The sample is restricted to individuals aged 25 to 59 and covers the OECD countries shown in Figure 4.6. The mitigating effects on inequality of opportunity are calculated as the average across the OECD countries in the sample. *Child benefits* refer to benefits that provide financial support to households for bringing up children, as well as benefits that provide financial assistance to people who support relatives other than children. *Disability benefits* refer to benefits that provide an income to persons below the standard retirement age whose ability to work and earn is impaired beyond a minimum level laid down by legislation by a physical or mental disability. *Education allowances* refer to grants, scholarships and other assistance for education that is received by students. *Housing allowances* refer to means-tested transfers granted by a public authority to tenants and owner-occupiers to alleviate housing costs. *Social exclusion benefits* refer to income support (regardless of its duration) and other cash benefits for people with insufficient resources. *Old-age benefits* cover benefits that provide a replacement income when the person retires from the labour market or that guarantee a certain income when a person has reached a prescribed age. They also include survivors' benefits – i.e., benefits that provide temporary or permanent income to people below retirement age who have lost a spouse, partner, or close relative who was usually their main breadwinner. *Unemployment benefits* replace, in whole or in part, income lost by a worker who loses their job or retires early due to employer downsizing. They also cover benefits that help with training or re-training, or with travel and relocation costs for jobseekers. *Income and wealth taxes* include taxes on taxes on income, profits and capital gains, as well as regular taxes on net wealth. They also include social insurance contributions.
Source: OECD calculations based on the *European Union Statistics on Income and Living Conditions* (EU-SILC), https://ec.europa.eu/eurostat/web/microdata/european-union-statistics-on-income-and-living-conditions.

Several lessons can be drawn by looking at tax and transfer policies individually and assessing their respective correlation with inequality of opportunity. First of all, income and wealth taxes seem to play a crucial role in ensuring a more level playing field. Well-designed progressive tax schemes contribute to reduce inequality of opportunity in most countries, as reflected by the lesser influence of circumstances on disposable income compared to market income. On average across the OECD European countries covered, the share of income inequality attributable to circumstances beyond individuals' control is lower by 12% following income and wealth taxes. In countries such as Belgium, Ireland, Portugal and Sweden, that share rises to over 20% (see Figure 4.7, Panel A). This strong mitigating effect is likely related to the fact that income and wealth taxes tend to be progressive and are primarily paid by households that are less affected by disadvantageous circumstances.

Unemployment benefits are associated with a reduction in inequality of opportunity of 4% on average. This effect is twice as strong or more in countries such as Austria, Finland and Sweden, and particularly pronounced in the case of Denmark, where unemployment benefits reduce inequality of opportunity by over 20% (see Figure 4.7, Panel B). Again, the strength of the associated impact on inequality of opportunity may be due to composition effects and targeting, with individuals facing disadvantageous circumstances benefitting more from unemployment benefits. By contrast, the associated impact appears to be lower in Eastern Europe and in some Southern European countries. This may also partly reflect the differing composition of the labour force in these countries. Women and individuals from disadvantaged backgrounds may, for instance, be more likely to encounter high initial barriers to entry on the labour market, leading to higher rates of inactivity for these populations and ineligibility for

unemployment benefits.[33] Previous studies have found that other policy-amenable features of the labour market can influence inequality of opportunity. For example, a lower unemployment benefit replacement rate is correlated with higher inequality of opportunity and high trade union density is associated with low inequality of opportunity. It remains difficult however to establish a direct causal link between these variables (Checchi, Peragine and Serlenga, 2016[116]).

In addition to "unemployment benefits, evidence suggests that well-designed active labour market policies may also contribute to reduce inequality of opportunity. Active labour market policies (ALMPs) are measures that provide employment services designed to motivate jobseekers, improve skills, help employers meet their skill needs and create employment opportunities (e.g., job-search assistance, hiring subsidies, training, public sector employment programmes...). These measures are generally targeted at groups that are vulnerable on the labour market (i.e., jobseekers and those at-risk of job loss) and more likely to have faced disadvantageous circumstances such as low parental education, migrant parentage or residence in deprived areas. These groups include discouraged workers and other inactive individuals who are willing and able to work, people in low-paid jobs and at risk of job loss, as well as those who are at or beyond pension age and wish to continue working. Overall, the evidence on the effectiveness of ALMPs in promoting employment for disadvantaged jobseekers is mixed. Not all AMLPs are equally effective and, even when they do help people into work, additional support may be needed to ensure they remain in work and experience career progression (OECD/European Commission, 2025[117]; Martin, 2015[118]; Martin and Grubb, 2001[119]). Well-designed and targeted ALMPs can however be effective in promoting employment for disadvantaged workers, as highlighted for example by recent evidence from Greece, Ireland and Lithuania (OECD, 2024[120]; 2022[121]; OECD/Department of Social Protection, Ireland/EC-JRC, 2024[122]).

Disability benefits are associated with a 6% reduction in inequality of opportunity on average. While the effect of social exclusion benefits is smaller at 2%, it remains important in some countries. Disability benefits have a strong effect in Belgium, Denmark, Estonia, Ireland, Norway and the Slovak Republic, where they are associated with a reduction in inequality of opportunity of over 10% (see Figure 4.7, Panel C). Challenges relating to fiscal cost and the motivational aspects of these benefits need to be carefully considered (Hemmings and Prinz, 2020[123]). Social exclusion benefits are strongly correlated with a reduction in inequality of opportunity in some countries but not in others. In the Netherlands, Norway and Sweden, for example, their mitigating effect is substantial and amounts to over 5% (see Figure 4.7, Panel D). This likely reflects the fact that these types of benefits are targeted by design at groups that face disadvantageous circumstances, such as single-parent households, individual with low-income or migrant parentage and households residing in rural areas or in rental housing.

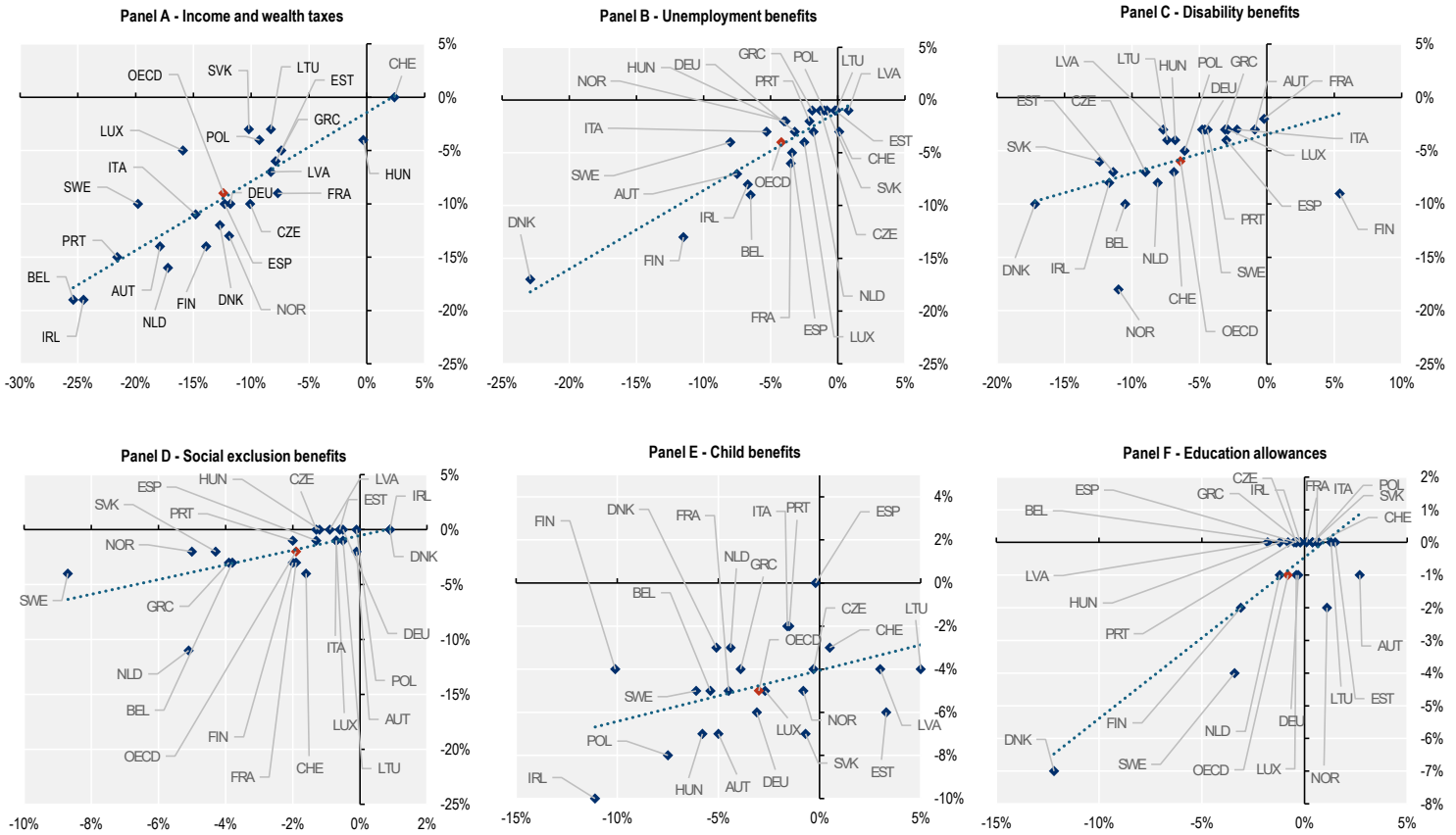
It is important to bear in mind that social exclusion benefits differ across countries in terms of their key design features. This notably includes how they balance the objective of poverty alleviation with challenges relating to fiscal cost and with the motivational aspects of these benefits such as potential work disincentives (Immervoll, 2010[124]). A number of countries combine low generosity with low benefit withdrawal rates, thereby prioritising employment incentives over the objective of poverty alleviation (Coady et al., 2021[125]).The evaluation of social exclusion benefits often covers both their effectiveness in alleviating poverty and their impact on a range of other outcomes that contribute to enhance individuals' opportunities, such as health and education. The measure of inequality of opportunity introduced in this report and the type of analysis conducted in this section can further support the monitoring and evaluation of social exclusion and disability transfers. Their contribution consists in helping quantify the impact of these transfers on the opportunities of individuals in disadvantaged circumstances.

Child benefits are associated with a reduction of inequality of opportunity of 3% on average, again with significant variation across countries. In countries such as Finland and Ireland, child benefits are correlated with a reduction in inequality of opportunity of over 10% (see Figure 4.7, Panel E). Similarly, while, on average, education allowances are only weakly correlated with a reduction in inequality of opportunity, they have a much stronger effect in some countries. For instance, the association rises to

around 12% in Denmark (see Figure 4.7, Panel F). Child benefits remain an important tool for promoting opportunities. Around half of OECD countries offer universal child benefits, with others providing fully means-tested or partially-targeted benefits based on income.[34] Evidence suggests that additional expenditure on children has a large and lasting impact on their development and well-being, with the effect particularly strong for children from lower-income households (OECD, 2019[81]; McEwen and Stewart, 2014[126]). Child benefits are effective in providing income support to disadvantaged families and can help promote social mobility, particularly when they are targeted towards low-income families (OECD, 2018[1]). In doing so, these benefits play an important role in helping compensate for early-life disadvantage and mitigate its effects throughout the lifecycle.

Figure 4.7. Income and wealth taxes have the largest effect on inequality of opportunity, ahead of disability, unemployment and child benefits

Percentage reduction in IOp (x-axis) and in income inequality (y-axis), by tax/transfer type and country, 2019



Note: For more detail on the calculation of the mitigating effect of taxes and transfers, see Box 4.2. The mitigating effects of housing allowances and old-age benefits are not shown.

Source: OECD calculations based on the *European Union Statistics on Income and Living Conditions* (EU-SILC), https://ec.europa.eu/eurostat/web/microdata/european-union-statistics-on-income-and-living-conditions.

StatLink https://stat.link/8n1tc0

The motivational aspects of taxes and benefits must also be taken into account and properly managed to promote equal opportunity. The impact of tax and benefit schemes on the behaviour and motivation of recipients should also be considered and evaluated, notably in the case of policies aimed at increasing activation and labour market participation. The OECD's *Faces of Joblessness* project provides a detailed and people-centred approach to the specific barriers to employment encountered at country-level, including behavioural barriers, as well as recommendations for overcoming them. For example, in a recent study of Switzerland, lack of recent work experience and substantial non-labour or partner income are identified as key barriers (Georgieff, 2024[127]). Partner income is a barrier in particular for women and may help explain why a significant share of women leave stable employment at childbearing age, alongside low supply and high cost of early childhood education and care programmes. In turn, high marginal taxation of second earners' incomes is likely to contribute to the unequal division of earnings between main earners and their partners. At the institutional level, policy coherence and coordination are identified as essential conditions for unlocking sources of employment growth.

To sum up, different benefits can be used in combination to reduce inequality of opportunity effectively and ensure a more level playing field. Countries with highly redistributive systems also tend to have tax-benefit systems that are more effective in reducing the impact of circumstances beyond individuals' control on their outcomes.[35] Although this report focuses mainly on inequality of opportunities as measured by market income (see Chapter 2), the analysis in the present section suggests that tax-transfer policies may also provide tools to counterbalance the effects of disadvantageous circumstances on people's access to paid employment opportunities.[36] Post-market redistributive policies should therefore be seen as necessary but non-sufficient tools for addressing inequality of opportunity that can be used in complement to in-market policies. In this perspective, eliminating occupational barriers to labour market entry and increasing access for disadvantaged individuals, as recommended in OECD (2018[1]), constitutes the first step towards ensuring a more level playing field where everyone has a fair chance to realise the economic opportunities available to them and outcomes are not predominantly determined by circumstances beyond individuals' control.

Capital and inheritance taxation

Large inequality in wealth tends to give rise to forms of concentration and deprivation that undermine equal opportunity, economic growth and social cohesion. Wealth matters significantly for the material well-being of individuals and households. Savings can help weather unexpected income shocks, smooth consumption over the life cycle and manage risks. Assets can generate capital income or serve as collateral to secure credit, purchase durable or capital goods and invest in high-yield financial instruments (Balestra, Caisl and Hermida, 2025[20]; Balestra and Oehler, 2023[128]). As highlighted in OECD (2018[1]), the uneven distribution of wealth contributes to the transmission of advantage and disadvantage and constitutes an important barrier to social mobility. A lack of wealth can lead to "sticky floors" at the bottom of the distribution, preventing people from participating fully in the economy and realising available opportunities. At the aggregate level, this limits the overall potential pool of talent and dampens the innovation and entrepreneurship that drive long-term economic growth. Similarly, excessive concentration of wealth at the top of the distribution can lead to the emergence of "sticky ceilings". In these contexts, access to resources and opportunities are more likely to be determined by family background and inherited circumstances rather than by personal agency and effort. This in turn may undermine public perceptions of fairness, expectations of upward mobility and overall social cohesion.[37] Inheritance and lifetime transfers of wealth, including *inter vivos* gifts, play a crucial role in the dynamics of wealth accumulation and the effective taxation of these transfers has been identified as an important lever for promoting opportunities and social mobility (OECD, 2018, pp. 318-319[1]). This section explores some of the benefits and challenges associated with these forms of taxation in terms of their possible contribution to promoting equal opportunity.

Several tax reforms have been proposed as a means to address excessive gaps in wealth, including wealth and inheritance taxes or a tax on lifetime wealth transfers. Several proposals have been made to use inheritance taxation to address inequality of opportunity (Piketty, Saez and Zucman, 2023[129]; Morelli and Granaglia, 2022[130]). While the specifics of these proposals vary, they generally underline the advantages that inheritance taxation presents over other taxes in terms of efficiency, equity and administrative costs (see Box 4.3 for a short review of the theory and evidence on this issue). The OECD has also analysed countries' experience with inheritance taxation and the role it can play in promoting equal opportunity. In doing so, it has identified effective ways to improve the efficiency and equity of inheritance taxation. This notably includes making the inheritance tax recipient-based, exempting small inheritances and maintaining broad tax bases (OECD, 2021[75]).

Box 4.3. Theory and evidence on the efficiency of inheritance taxation

How does inheritance taxation affect savings and labour market incentives?

Overall, the empirical literature suggests that inheritance taxation can be expected to:

- Reduce savings incentives for donors, though evidence also suggests that inheritance taxation may lead to increased charitable giving by donors, motivated in part by the preferential tax treatment generally applied to charitable giving (OECD, 2021[75]; Bakija and Gale, 2003[131]).
- Increase savings incentives and labour market participation for heirs, with *(i)* evidence of a positive impact on labour supply in Germany, Sweden and the United States, as inheritance receipts tend to reduce incentives to work via the income effect (OECD, 2021[75]); and *(ii)* some studies finding that inheritance taxation also encourages potential heirs to save more (Akgun, Cournède and Fournier, 2017[132]).

Unless they are properly designed, inheritance taxes may also negatively affect entrepreneurship by heirs and family business successions (Tsoutsoura, 2015[133]). Inheritance taxes influence the decision to sell or retain a firm within the family following the death of the business owner and heirs may not always have sufficient liquid assets to pay the tax. Allowing generous business asset relief under inheritance and estate taxes or the option to defer payment until the asset is sold can help address the issues created by these specific liquidity pressures. However, counter-arguments have been made based on evidence of the underperformance of businesses managed by heirs (Bennedsen et al., 2007[134]; Pérez-González, 2006[135]). In this perspective, inheritance taxation would also contribute to enhance overall efficiency by reducing skills-capital mismatches.

It should be noted furthermore that, while the effects discussed above are important, the overall impact and efficiency of inheritance taxation depends on a much wider range of behavioural responses (see the main text below).

Is inheritance taxation efficient in terms of administrative costs?

While inheritance taxation does involve significant administrative costs, it presents a number of relative advantages in this respect compared to wealth taxation (OECD, 2021[75]; 2018[136]). For example, inheritance taxes are only levied once, as opposed to annually in the case of most taxes on wealth, which helps mitigate key challenges such as the need for annual valuations. Inheritance taxes are also levied at a time when the tax administration can observe inherited assets *more easily* and when these assets may need to be valued anyway (OECD, 2021[75]). Furthermore, progress on international tax transparency is also contributing to enhance countries' ability to tax capital effectively (OECD, 2024[137]).

What does the theory and evidence suggest in terms of the design of inheritance taxes?

From a theoretical perspective, optimal tax models do not provide clear recommendations on the design of inheritance taxes (OECD, 2021[75]). The results drawn from these models vary significantly, depending on their assumptions. While some models suggest that bequests should not be taxed, others recommend that they be subsidised and others still find optimal tax rates to be positive.

If ensuring a more level playing field is the main objective of inheritance taxation, there is a strong case to be made in favour of a recipient-based inheritance tax rather than an estate tax levied on donors. From the perspective of reducing gaps in opportunities, it is the amount of wealth received by each recipient that should matter most rather than the overall amount bequeathed by the donor (OECD, 2021[75]; Adam et al., 2011[138]). Furthermore, a recipient-based inheritance tax encourages the division of estates and may contribute thereby to reduce excessive concentrations of wealth.

In this same perspective, avoiding the taxation of small inheritances may have an equalising effect, at least in the short run. A tax exemption threshold that allows small inheritances to be passed on free of tax, combined with a progressive inheritance tax rate schedule, may reduce absolute and relative levels of inequality in wealth and opportunities.

Countries' experience with inheritance taxation underlines several important challenges. A first issue concerns the size of the revenue raised. By taxing high-value transfers, inheritance taxation can enhance equality of opportunity and reduce the concentration of wealth. However, introducing and implementing inheritance taxation has proven consistently difficult across countries. First, while taxes on wealth transfers – including inheritance, estate and gift taxes – are levied in around two-thirds of OECD countries, they play a limited role in terms of overall revenue raised. In 2018, these taxes contributed around 0.5% of total tax revenue on average for the countries that levied them, exceeding 1% of total revenue in only four OECD countries (Belgium, France, Japan, and Korea) (OECD, 2021[75]). These low levels reflect narrow tax bases due to preferential tax treatment for transfers to close relatives, relief provided for specific assets (e.g., main residence, business and farm assets, pension assets and life insurance policies) and tax planning through *inter vivos* gifts (OECD, 2021[75]; Fize, Grimprel and Landais, 2022[139]).[38] Overall, while some countries have abolished inheritance taxes, the level of revenue raised through this form of taxation has been rising in other countries due in part to the ageing profile of populations.[39]

Second, behavioural responses create uncertainty and may undermine the effectiveness of inheritance taxation if they are strong enough. The outcomes of inheritance taxation depend on how it affects a wide range of behaviours, in addition to those already covered in Box 4.3. The empirical literature has notably studied the impact of inheritance taxation on wealth accumulation and residential choice, on tax planning and avoidance, and on *inter vivos* transfers. While many existing studies find that behavioural responses to inheritance taxation tend to be modest overall and considerable gaps in research remain, there is some evidence suggesting that particular groups may react strongly to the introduction of inheritances taxes and changes in their rates, rules or thresholds. This is notably the case for older individuals and for the very wealthy (Schratzenstaller, 2025[140]). The evidence on inheritance tax planning shows that there is significant use of *inter vivos* gifts as a form of wealth transfer when these transfers benefit from more favourable tax treatment. Moreover, tax relief, tax planning and tax evasion opportunities tend to mostly benefit wealthy individuals. As such, they have contributed to lower the overall tax burden on the very wealthy in some countries, in addition to significantly reducing potential revenue and generating distortions (OECD, 2021[75]). Conversely, there is little evidence of international migration by the wealthy in response to inheritance taxation. However, higher sensitivity at the very top of the distribution may increase within-country mobility where taxation differs across states or regions, as is the case for example in Spain and the United States.[40]

Finally, public acceptability constitutes an important constraint for inheritance taxation. Inheritance and estate taxes are also difficult to implement because they tend to be unpopular with the general public (OECD, 2021[75]; Goss, 2024[141]). Here, public views may need to be studied and "unpacked" in greater detail. While the taxation of modest inheritances tends to be universally unpopular, available studies suggest that there is strong demand for policy action to reduce inequality of opportunity and that individuals are willing to support higher tax rates on inherited wealth than on self-made wealth (OECD, 2023[142]; Fisman et al., 2020[143]). This should in theory create scope for introducing taxation on large inheritances. Several studies have argued on this basis that providing information about the importance of inherited wealth and its impact on opportunities, as well as correcting misperceptions regarding the extent of inheritance tax exemptions, could contribute to increase public support for inheritance taxation.[41] Evidence from a number of countries including Germany, Sweden and the United States indicates that this may be the case, at least in experimental settings (Bellani et al., 2024[144]; Bastani and Waldenström, 2021[145]; Stantcheva, 2021[146]).[42]

On balance, while inheritance taxation can be an important tool for ensuring a more level playing field, it should not be seen as a silver bullet. Better design and more effective reform strategies can help improve inheritance taxes and address some of the barriers to implementation, including those relating to public acceptability (OECD, 2025[76]; 2021, pp. 128-130[75]; Fize, Grimprel and Landais, 2022[139]). However, even well-designed inheritance, estate and gift taxes are likely to remain relatively limited sources of revenue compared to other sources of taxation including labour, income and consumption.

Child Development Accounts

Proposals have been made to provide every young adult with a capital endowment enabling them to pursue and realise opportunities. Atkinson (2015[147]) constitutes a notable example of this type of proposal. Atkinson makes the argument for a universal endowment designed to ensure that all citizens begin their adult lives with a minimum level of financial security and opportunity. A capital endowment of this kind would help ensure a more level playing field by mitigating the disadvantages faced by individuals from less affluent backgrounds who may lack the financial resources to invest in their human capital and realise the economic opportunities available to them.[43] This section discusses a specific type of measure – child development accounts (CDAs) – that has been put forward and implemented in a number of OECD countries as a possible option for achieving this objective. In this perspective, CDAs are designed to promote opportunities by providing a minimum endowment for all citizens at adulthood, supporting the accumulation of wealth by individuals from disadvantaged backgrounds and incentivising saving and investment.

Child development accounts (CDAs), also known as "baby bonds", are government-issued savings accounts or trusts established for children at birth. The purpose of these accounts is to provide all children with an initial "seed" deposit to be invested in their future education and long-term development (Brown et al., 2023[148]). As such, CDAs are meant to support investment in human capital and promote economic opportunities for children from disadvantaged backgrounds. They are also viewed as measures that contribute to reduce wealth inequality by encouraging saving behaviour and asset-building among low-income families (Huang et al., 2021[149]). Several OECD countries have active CDA policies, including Canada, Hungary, Israel, Korea and the United States. Annex 4.A offers an overview of the main CDA programmes in OECD countries (Annex Table 4.A.1), at sub-national level in the United States (Annex Table 4.A.2) and in non-OECD countries (Annex Table 4.A.3).[44]

Universal eligibility, automatic enrolment and a publicly-funded initial deposit are common features that help ensure CDA programmes are inclusive and efficient. In OECD countries, CDA programmes tend to be universal and typically extend to all children with no specific eligibility requirement other than citizenship or residency.[45] In the case of Israel's ongoing *Saving for Every Child Programme* (SECP) and

of the United Kingdom's *Child Trust Fund* (CTF) which ran over the period 2005-2011, universal eligibility was combined with automatic enrolment for all newborns, with the accounts being opened by the institutions responsible for the programme. Automatic enrolment is designed to ensure that minorities and disadvantaged groups are effectively covered, such as for example Arab Israelis and Haredi Jews in the case of the SECP (Grinstein-Weiss et al., 2019[150]). Starting the programme at birth also improves its economic efficiency by allowing more time for the asset to accumulate. In most cases, CDAs include an initial government deposit designed to help "kickstart" the account.[46] While the initial deposits are usually modest, they can nevertheless be effective in this role, especially if the CDA is opened at birth and small contributions are made over time (Beverly, Elliott and Sherraden, 2013[151]). Most CDA programmes also allow for matching or complementary private contributions to the account, though these are often capped or restricted to avoid deepening inequalities in wealth and opportunities. In most cases, CDAs are funded through public expenditure and can be expensive, which limits their potential for expansion. For instance, the cost of the United Kingdom's CTF is estimated at around GBP 2 billion in total over the lifetime of the programme (McKay, Tian and Lymer, 2024[152]).

Available evidence suggests that CDAs can have a positive impact on the financial outcomes of disadvantaged children and families. Empirical assessments of the effectiveness of CDAs have been limited given the recency and long-term nature of these policy tools. Most of the existing evidence on CDAs has come from studies of the now-discontinued CTF in the United Kingdom and of pilot initiatives, notably in the United States (see Box 4.4). Birkenmaier, Kim and Maynard (2023[153]) provides a recent review of the evidence from randomised and quasi-experimental studies on the financial outcomes of participants in CDA programmes. Where available, these studies highlight the financial benefits associated with CDAs. CDAs tend to have a small but positive impact on asset-building, though they do not significantly alter family saving behaviour.[47] Furthermore, children and parents participating in CDA programmes also benefitted from greater exposure to financial institutions and services. In the case of the Michigan MI-SEED programme, participation was shown to have a small but statistically significant positive impact on financial skills – including savings and budgeting – and access to financial products for both children and parents from disadvantaged backgrounds (Birkenmaier, Kim and Maynard, 2023[153]).[48]

CDAs may also benefit children and families through important non-financial channels. CDAs have been shown to improve the academic performance of participating children and foster positive attitudes towards higher education. This notably translates into increased enrolment rates in post-secondary education, in particular for male participants from disadvantaged backgrounds (Grinstein-Weiss et al., 2019[150]; Frenette, 2017[154]). There is also evidence of positive effects on the family environment, including improved mental health outcomes for parents (notably reduced levels of maternal depression) and enhanced social-emotional development for children from disadvantaged backgrounds (Huang, Sherraden and Purnell, 2014[155]). In some cases, improved intergenerational communication and family bonding have been shown to play an important role in the programmes' success, as children and parents supported and encouraged each other throughout the asset accumulation process (Deng, 2019[156]).

Lessons from countries' experience with CDAs suggest that several key design features can improve their effectiveness. First of all, restrictions on the use and withdrawal of funds can help ensure that CDAs achieve their objectives in terms of educational or personal development and asset building. Typically, the funds cannot be withdrawn before a specific age and can only be allocated for specific purposes.[49] Targeted awareness and information campaigns, as well as financial education resources, can help increase understanding of the benefits of CDAs, facilitate engagement with the financial products and services proposed and improve decisions about the investment strategy selected and use of the funds once they are withdrawn. This type of support is particularly important for low-income households, who tend to encounter additional barriers to enrolment and asset accumulation due to administrative burden, resource and time constraints as well as limited financial literacy. In order to be effective, information and support should be provided to children and to parents.[50] Similarly, targeted measures can be considered to ensure CDAs contribute to greater financial equity. This can include, for example, the allocation of larger

public deposits or higher-value vouchers to the accounts of children from disadvantaged backgrounds. Finally, CDA funds should be excluded from the calculation of household assets when determining eligibility for means-tested benefits, as including them would undermine the policy's objectives (Markoff, Radcliffe and Hamilton, 2024[157]; Sherraden et al., 2018[158]). Similarly, ensuring that CDA funds are not taxed, even after they are withdrawn, can help increase participation rates and prevent penalties for those who participate in the programme (Sherraden et al., 2018[158]).

Box 4.4. CDA initiatives at the sub-national level: Examples from the United States

In the United States, the *One Big Beautiful Bill Act* (OBBB), which was passed by the 119th Congress and signed into law in July 2025, provides for the creation of a tax-favoured federal child savings account programme. This follows several similar attempts to introduce federal legislation on CDA, including the *American Opportunity Accounts Act* (AOAA) proposed during the previous 118th Congress. In addition to these federal initiatives, the US also has established experience with CDA at sub-national level.

Several US states, districts and cities have adopted CDA policies, including Connecticut and the District of Columbia (DC). Other states, such as California, have approved CDA programmes, appropriated state funding and are in the process of finalising conditions for eligibility and restrictions (see the California HOPE for Children Trust Account Program: https://www.treasurer.ca.gov/hope/). This box examines selected key features of the CDA programmes in the state of Connecticut, the District of Columbia, and in the cities of Oakland (CA) and St. Louis (MO). An overview of these initiatives can be found in Annex Table 4.A.2.

All of these programmes include automatic enrolment and an initial deposit. However, Connecticut and the District of Columbia have introduced innovative additional elements. For instance, Connecticut's *CT Baby Bonds* programme and the District of Columbia's *Child Trust Fund* do not allow for family contributions. This reflects a specific goal and feature of these programmes: they are designed to contribute to asset accumulation by adulthood for all children and in a uniform way. In DC, the local government also makes annual deposits into each account, with the amount varying based on the family's income (Brown et al., 2023[148]). This income-sensitive approach acknowledges the additional challenges faced by lower-income households in saving for their children (Markoff, Radcliffe and Hamilton, 2024[157]). Moreover, all programmes offer financial literacy courses for parents. In Connecticut, for example, attending a financial literacy course is mandatory before withdrawing funds, to ensure that beneficiaries are in a position to make well-informed decisions. Oakland's *Brilliant Kids* programme also provides parents and guardians with training to strengthen their financial skills.

To increase engagement, St. Louis' *College Kids* programme offers rewards of up to USD 500 to encourage parents to save in their child's account. Parents can earn USD 30 for each year the child attends school and the first USD 100 deposited into the child's account are matched by the Treasurer's Office (St Louis Office of Financial Empowerment, 2024[159]). These incentives are effective in promoting active parental involvement. Furthermore, unlike other programmes, the accumulated funds in the *College Kids* programme are excluded from the household's asset calculations for means-tested benefits, ensuring that the family's eligibility for public assistance remains unaffected (St Louis Office of Financial Empowerment, 2024[159]).

Financial Inclusion

Limited financial inclusion remains a significant barrier to wealth accumulation and access to economic opportunities for many groups. Women tend to have lower access to credit and financial resources and to face a higher risk of economic insecurity (OECD, 2023[16]). This contributes to limit their capacity to accumulate wealth and realise economic opportunities, including entrepreneurship and business creation (see the following section). On average across the OECD, single men hold approximately USD 43 000 (around EUR 37 000) more wealth than single women, with large gender wealth gaps recorded in a third of countries. Wealth gaps between native and migrant populations are even larger. On average across 20 OECD countries with available data, migrant households hold USD 136 000 (EUR 118 000) less net wealth than native-born households, even after controlling for factors such as age, education and number of adults in the household (Balestra, Caisl and Hermida, 2025[20]). Women are also less likely to start or manage new businesses across the OECD (OECD, 2023[160]; OECD/European Commission, 2023[161]). Similarly, migrant parentage may reduce access to credit and business creation in some countries. For example, in two-thirds of OECD countries, migrant entrepreneurs are more likely than native-born ones to be own-account self-employed and this gap is neither explained by individual characteristics, such as education level, nor by the sector of activity (OECD, 2024, pp. 121-165[162]).

Several financial inclusion policies have been shown to be effective in promoting household wealth accumulation and in helping support historically disadvantaged groups. Measures that aim to promote financial inclusion can also provide opportunities for wealth accumulation by increasing household savings, improving financial literacy and facilitating access to financial advice. Various government-backed saving schemes are designed to help households build their financial buffers, as detailed in (OECD, 2023[16]).[51] These schemes notably include tax incentives (such as removing tax on the interest earned on savings); matching people's savings; index-linked bonds or guaranteed minimum interest rates; and prize-linked savings accounts, whereby higher interest rates, cash prizes or in-kind benefits are randomly distributed to savers.[52]

Savings and matching schemes have been widely implemented in OECD countries, with scope to improve the targeting of savings incentives. Matching schemes are more effective if they are tailored to household circumstances, for example by linking contribution rates and thresholds to individual income and restricting eligibility to low-income households. Atkinson (2015[147]) has proposed inflation-indexed savings certificates for small savers based on examples from several countries, including Ireland, the United States and the United Kingdom's *Granny Bonds* which were limited to people over retirement age. This targeted approach can contribute to attract more low-income participants and enhance the schemes' progressivity (Azzolini, McKernan and Martinchek, 2020[163]). The United Kingdom's *Help to Save* scheme, for instance, is accessible only to individuals receiving social benefits, such as the *Working Tax Credit*, *Child Tax Credit* or *Universal Credit*. Similarly, Canada's *Learn$ave* pilot programme combined a matched savings account with case management services and financial literacy training, enhancing its effectiveness for lower-income participants (Leckie et al., 2010[164]). At sub-national level, US states have implemented a variety of *Individual Development Accounts* (IDAs) to help low-to-moderate-income individuals accumulate savings, increase financial literacy and invest in long-term assets such as homes, businesses and education (Sherraden, 2000[165]).

Long-term savings and investment initiatives can target specific groups and improve their financial security. Olsen and Whitman (2011[166]) provides an overview of several long-term savings and investment initiatives targeted at minority populations and women in the United States. Similarly, Postmus, Hetling and Höge (2015[167]) and Sanders, Weaver and Schnabel (2007[168]) examine programmes that are developed specifically for victims of violence against women. These studies underline the importance of high-quality financial education, information and guidance to help vulnerable individuals better plan for their

future financial needs. Key characteristics of effective initiatives include delivery in the workplace and integration with opportunities and incentives to save, such as IDAs, as discussed above.

Finally, access to high-quality financial advice and improved financial literacy constitute important levers for providing economic opportunities to low-income households. Vulnerable households may face resource constraints or lack sufficient financial knowledge to seek out effective support (Lusardi, Michaud and Mitchell, 2017[169]). Although recent regulatory changes have sought to lower financial advisory fees, reduce conflicts of interest (e.g., commission-based advice) and encourage digital advisory options (OECD, 2022[170]), the cost of financial services remains prohibitive for many low-income households. As a result, these households are less likely to use advisory services for financial planning or investments (Burke and Hung, 2021[171]). To address this gap, targeted financial support, such as rebates for those with low incomes or limited wealth, could significantly expand access to financial advice, which is particularly vital for managing debt and building financial stability (Krishnamurti et al., 2022[172]).

Support for entrepreneurship

Policies designed to support and encourage "missing entrepreneurs" among underrepresented groups can help promote greater opportunities and economic dynamism. Different populations often face specific barriers to business creation and growth. In the case of women, these barriers and the resulting gender gaps in entrepreneurship are well documented. For example, if women participated in early-stage entrepreneurship at the same rate as men aged 30 to 49, there would be an additional 24.8 million women entrepreneurs across the OECD. Furthermore, women entrepreneurs are less likely to benefit from international trade. According to a survey of firms in OECD countries with a presence on Facebook, in 2022 only 11% of women-led small and medium enterprises (SMEs) exported, compared to 19% of SMEs led by men. The potential gains from closing these gaps are substantial, both for individuals and for the economy as a whole. Recent estimates from Canada and the United Kingdom suggest these gains could translate into an increase of around 6% to 12% of GDP if women were as active as men in starting and growing businesses (OECD/European Commission, 2023[161]).

Motivation and education are primary barriers that must be addressed in order to foster an entrepreneurial mindset and culture. Aspiration levels tend to be lower among women entrepreneurs and contribute to widen gender gaps in business creation and growth. Over the period 2018 to 2022, only 11% of women entrepreneurs in the OECD reported that they expect their business to create at least 19 jobs over the next five years, compared to 16% of men. Women are also 25% less likely than men to report that they have the skills and knowledge needed to start a business and their entrepreneurial networks are typically smaller and more informal than those of men (OECD/European Commission, 2023[161]). As a result, support measures should also focus on building human capital and enabling social infrastructure.

Access to finance constitutes an important additional barrier. Women are generally less likely to successfully secure debt and equity financing than men and, when they do, they typically receive less funding, pay higher interest rates and are required to provide more collateral (Guzman and Kacperczyk, 2019[173]; Lassébie et al., 2019[174]; Thébaud and Sharkey, 2016[175]). The OECD has highlighted a growing range of effective policies for narrowing the gender gap in entrepreneurial finance and promoting opportunities for female entrepreneurship (OECD/European Commission, 2023[161]; 2021[176]). Traditional policy responses include loan guarantees, grants and investor readiness training. For instance, government-backed loan guarantees for women-owned businesses can reduce the perceived risk for financial institutions. Beyond these measures, governments can explore additional approaches to address specific barriers for women entrepreneurs on financial markets. These approaches are aimed both at the supply-side (e.g., under-representation of female decision makers and mismatch of financial products and services) and at the demand-side (e.g., low levels of financial literacy). In this respect, increased access

to finance through microfinance, fintech and direct investment can play a significant role in promoting greater entrepreneurship among women (see Box 4.5).

Box 4.5. The role of microfinance and fintech in enhancing access to credit for female entrepreneurs

Microloans can be valuable tools for supporting female entrepreneurs

Microloans, often provided without collateral, are especially valuable for female entrepreneurs. Three additional measures can further increase their effectiveness (OECD, 2023[160]).

- First, ***strengthening microfinance markets*** can help meet the high demand for microloans, especially in the EU, where the gap is expected to reach EUR 17 billion by 2027 (Drexler et al., 2020[177]).
- Second, ***increasing guarantees for microfinance agencies*** can encourage more lending by these institutions and attract new entrants into the microfinance market (OECD/European Commission, 2021[176]). This action can be complemented by providing funds for microfinance with more favourable conditions (e.g., longer term maturities) and offering relief to microfinance agencies by deferring non-critical supervisory processes.
- Third, ***bundling microloans with non-financial services*** such as training and coaching to improve business performance can increase rates of microloan repayment. Evaluations show that these non-financial services are effective (OECD/European Commission, 2021[176]), though many offerings are relatively basic and less commonly provided by microfinance institutions in some countries, such as for example in Eastern Europe (Drexler et al., 2020[177]; Diriker, Landoni and Benaglio, 2018[178]). These services often have a large positive impact for women entrepreneurs who tend to face greater skills gaps and may lack sufficient access to professional networks (Halabisky, 2015[179]).

Fintech and Venture Capital funds should be designed to promote financial inclusion and enable women entrepreneurs to leverage new fintech opportunities

Although companies with women-only founders received just 2% of VC funding in 2020, crowdfunding and fintech have contributed to support women-led business ventures. Thus, policy action can also be directed towards *(i)* monitoring developments in fintech to ensure that they contribute to financial inclusion, *(ii)* investing in the financial literacy training of female entrepreneurs, and *(iii)* counteracting potential sources of bias and disadvantage that may emerge from greater reliance on algorithms in decision-making by lenders and investors (Halabisky, 2015[179]).

Three recent projects aim to empower female entrepreneurs through a focus on Research and Regulation Support, Training and Networking Opportunities and Support for Existing Infrastructure

- First, the *Swedish Innovation Agency* (VINNOVA) supports research projects that monitor and measure discrimination in the financial sector. These projects help financial regulators balance consumer protection with financial innovation.
- Second, the *Power for Female Entrepreneurs* programme in Spain enables women entrepreneurs to participate in e-commerce and digital marketing bootcamps. This programme provides learning and networking opportunities, equipping women with essential skills for the digital economy.
- Finally, the WILLA *Women in Fintech* accelerator programme in France was established to assist women entrepreneurs already in fintech fields. It came after research showed that start-

ups with at least one female founder performed 63% better than those founded exclusively by men, despite only 1 in 10 fintech start-ups being founded by women in 2018 (WILLA, 2019[180]).

Funds specifically targeted at female-led startups represent another tool to bridge existing gender gaps in entrepreneurship finance

Strategies of this kind can play an important role in supporting a more diverse and inclusive pipeline of entrepreneurs by doing more to address the gender gap in business finance. For example, Canada's *Women in Technology Venture Fund* (launched in 2018) and Australia's *Female Founders Initiative* (launched in 2020) aim to promote diversity and inclusion within the entrepreneurial ecosystem. Ireland's *Competitive Start Fund for Female Entrepreneurs* has seen significant upscaling in recent years, providing further support for women-led ventures in high-growth sectors (OECD, 2023[160]).

Inclusive entrepreneurship policies are crucial for supporting business creation among under-represented groups who often face disadvantageous circumstances.[53] The primary objectives for inclusive entrepreneurship policies are twofold. On one hand, they should raise awareness and motivation, ensuring that people in underrepresented groups understand the potential of entrepreneurship as a viable labour market activity and encourage them to pursue it. On the other hand, they must contribute to address existing market failures and tackle institutional and behavioural barriers that may disproportionately affect disadvantaged groups. This includes reducing barriers to access to financial markets, supporting the development of entrepreneurship skills, fostering entrepreneurship networks and promoting an entrepreneurial culture.

Inclusive entrepreneurship policies vary across countries in terms of their focus and implementation. In the EU, for example, more than half of Member-States have strategies that *(i)* support entrepreneurship among youth, women and the unemployed; and *(ii)* help individuals develop entrepreneurial mindsets and adapt to flexible work environments. While governments provide tailored entrepreneurship support schemes in many OECD countries, notably for women, there is scope to strengthen policy frameworks in order to ensure greater continuity, more efficient resource allocation and improved cohesiveness in these schemes. A promising example is Germany's 2023 Action Plan for "*More Female Entrepreneurs for Small and Medium-Sized Enterprises*", which includes over 40 actions structured around several pillars (BMWK, 2023[181]). Moreover, governments could better leverage the potential of migrant entrepreneurs, an essential yet often underutilised source of innovation and job creation, by adjusting support schemes to reflect the growth in migrant entrepreneurship. For instance, offering stronger networking opportunities can help migrant entrepreneurs integrate into local entrepreneurship ecosystems and increase their chances of success (OECD, 2024, pp. 121-165[162]). Other successful examples of programmes designed to address barriers to entrepreneurship can be found across OECD countries.[54]

4.2.3. Policies for promoting equal opportunities by investing in social infrastructure

Place-based policy instruments can foster investment in social infrastructure and enable individuals to realise the opportunities available to them, both in growing and lagging regions (OECD, 2025[5]; McCann, 2023[182]; Solé-Ollé, 2023[183]).[55] The effects of mega-trends – including climate change, digital transformation, globalisation and demographic shifts – risk exacerbating existing disparities between regions in terms of economic, social and environmental outcomes. They may also create new economic opportunities across territories, for example through the spread of remote work. Managing these risks and harnessing the opportunities will require investment in social infrastructure and an emphasis on the provision of accessible quality services at the local level.[56] Policies for promoting digital inclusion will be needed, for example, to enable lagging regions to harness the opportunities created by remote work

(OECD, 2021[184]; 2021[185]). Policy interventions can also support community development and forms of activity such as volunteering which strengthen social connectedness, quality of life and economic growth at the local level (OECD, 2025[49]; Mahoney et al., 2024[35]; OECD/ICOM, 2019[186]). Providing affordable quality housing is also a key condition for access to economic opportunities. Measures designed to improve social infrastructure, including social housing policies, have an important role to play in achieving this objective (OECD, 2024[187]; 2020[46]). Finally, transport and urban policies provide means to better connect people with economic opportunities, independently of their background or place of residence (OECD, 2023[43]; 2020[188]).

Place-based policies and access to quality services

Place-based policies provide intentional and targeted support to specific areas with the aim of improving long-term economic development and well-being outcomes. Well-designed place-based policies aim to address market failures in a targeted and efficient manner. They are often directed at multiple complementary goals that may relate to productivity, environmental sustainability and social inclusion (OECD, 2025[5]). These policies include spatially-targeted investment in public services, such as education, skills, healthcare and policing, as well as investments in local infrastructure such as transport, housing and recreational facilities. They also rely on effective multi-level governance structures, recognising that successful economic development requires strong collaboration across different tiers of government. Intergovernmental fiscal transfers and frameworks play an important role in this context, as many core services are provided at local level by sub-national governments (OECD, 2021[189]).[57] Although place-based policies are relevant for all territories, they are especially vital in areas that are experiencing persistent economic or social challenges and where public services are likely to be overstretched.

Facilitating access, delivery and integration of quality services at local level constitutes a priority for spatially-targeted policies. As highlighted in Chapter 3, ensuring a more level playing field means addressing significant and persistent territorial disparities in terms of access to essential services and to economic opportunities. Challenges and service delivery conditions differ across types of regions,[58] though accessibility tends to be lower for people in non-metropolitan and low-income regions (Almeida et al., 2024[6]). To reduce these gaps, governments can strengthen the provision of essential local services such as elementary schools and primary medical care in a cost-efficient way – for instance, through service co-location. Greater integration of employment, social and education services at the local level can also help promote opportunities for all citizens, and in particular for vulnerable populations, by facilitating effective labour market transitions and skills development (OECD, 2023[190]). At the same time, feasible digital or mobile alternatives should be explored, while specialised services may be consolidated in nearby regional centres. However, though electronic service delivery has a strong potential to improve access, it is not always an effective substitute, especially where the service requires some form of physical intervention, such as surgical interventions in hospitals for example. Moreover, the parameters within which national and local governments operate when providing these services are also undergoing significant change notably due to the effects of demographic transition, with many regions across OECD countries either losing population already or facing substantial ageing in the near future.

If handled well, the increased digitalisation of essential services will create opportunities to enhance place-based policies and reduce disparities in social infrastructure. Going forward, an increasing number of towns and villages across the OECD are projected to experience population decline and ageing. In this context, the provision of essential services will need to be complemented by targeted and coherent development strategies to help smaller places remain attractive. Digital inclusion should be promoted as it can bring large benefits to lagging territories. Remote work provides opportunities for economic development for these territories, though reaping the benefits from these opportunities will likely depend on regions' capacity to attract the right set of industries and workers (Özgüzel, Luca and Wei, 2023[191]). The potential impact of the spread of remote work on social capital and social infrastructure also needs to be taken into account (OECD, 2021[185]; Algan, Malgouyres and Senik, 2020[44]).

Conversely, broader diffusion and use of Generative AI could change the exposure of regional labour markets to the risk of automation and exacerbate skills mismatches. Up till now, technology-led automation has mainly tended to affect non-metropolitan and manufacturing regions. Moving forward, regions that specialise in industries such as education, ICT, or finance – which have been less exposed to the risk of automation – may also face greater pressure due to the labour market effects of Generative AI (OECD, 2024[192]; 2023[193]). Several key policy measures can help ensure that digital transformation contributes to reduce regional disparities rather than deepening existing divides. Public-private sector collaboration can facilitate the adoption of AI tools. This could help raise regional labour productivity, mitigate labour shortages and offer new means to alleviate the effects of demographic ageing in regions experiencing significant population decline. Regional policymakers should also consider the new opportunities that AI tools may bring, such as promoting efficiency gains and enhancing the quality of regional public services or facilitating the labour market inclusion of people with disabilities. Collaboration with the social partners to monitor job quality and workers' rights should accompany these efforts to ensure that the risks associated with AI tools are managed and mitigated (OECD, 2024[192]; 2023[193]; Krämer and Cazes, 2022[194]).

Housing policies, allowances and social housing

Housing policies can promote opportunities and help break the cycle of intergenerational disadvantage by expanding the supply of affordable housing and access to homeownership. Housing policy can support the development of social infrastructure by contributing to expand the supply of quality affordable housing (OECD, 2021[195]; 2020[46]). Trends in housing investment have been uneven across the OECD, with a sharp decline in public investment following the Global Financial Crisis. Overall, public investment in housing development has shrunk from 0.17% of GDP in 2001 to 0.06% of GDP in 2018 on average across OECD countries (OECD, 2021[195]). Furthermore, long-term challenges affecting the supply of and access to housing have been exacerbated by the effects of recent crises, most notably the COVID-19 pandemic and rising inflation (OECD, 2023[196]).[59] In this context, factors such as rising construction costs, labour shortages, high land prices and restrictive regulations have constrained the housing supply, leading to affordability issues and barriers to access for many vulnerable groups, including youth and low-income families. Moreover, housing taxation often benefits owner-occupied housing more than rentals, which can undermine affordability and inclusion goals (Dewilde and Waitkus, 2023[197]).

Governments have a range of policy tools to promote access to homeownership and affordable housing for vulnerable groups, though trade-offs should be carefully considered. Social housing, housing allowances and support for homeownership are among the most widely used housing policy measures for addressing problems of access and supply in OECD countries (OECD, 2021[195]; 2020[46]).[60] These tools can prove effective but may also imply trade-offs that need to be taken into account. The development of social housing offers a tool that can directly expand the supply of quality affordable housing for vulnerable groups (OECD, 2020[198]). Housing allowances help support demand for housing. However, they can contribute to upward pressure on housing prices in places where supply is constrained, undermining affordability objectives. Similarly, other demand-side measures, such as support for homeownership, need to be properly targeted towards vulnerable groups as they may otherwise end up mainly benefitting better-off households and contributing to a rise in housing prices. Among other possible measures, governments can rely on and strengthen first-time homeownership programmes to better target those in need, explore shared equity and ownership models and develop mortgage eligibility programmes for workers on temporary contracts. Expanding support in the private rental market, maintaining and upgrading social housing quality and fostering cooperative living arrangements can help young people gain access to stable quality housing.

Social housing can enhance opportunities for vulnerable groups, despite well-known challenges such as segregation and limited mobility. Effective social housing policies can improve housing affordability, increase access to housing and promote greater residential mobility. However, this implies

properly addressing some of the potential risks associated with these policies, such as fostering segregation and trapping residents in cycles of limited opportunity (OECD, 2020[198]; Causa and Pichelmann, 2020[199]). Housing decisions reflect a historical legacy, with past policies often prioritising large developments on inexpensive land far from city centres. Housing segregation, characterised by the geographic concentration of households based on socio-economic, ethnic or racial factors, constitutes a challenge in many cities and regions across the OECD and a barrier to opportunities for economic, educational and social mobility (OECD, 2018[1]).

Preventing the spatial concentration of poverty within social housing estates constitutes a core objective for social housing policies. The sector has increasingly become home to lower-income and vulnerable tenants, with a narrower range of income levels.[61] In some countries, this may notably be due to the sector's "residualisation", tenure conversion schemes, choice-based letting systems and the tightening of eligibility criteria, as highlighted by evidence from the EU and the UK (Angel, 2018[200]; Manley and Van Ham, 2011[201]). Addressing these trends and challenges is essential to ensure the economic sustainability of the sector and reduce the spatial concentration of poverty and disadvantage. The relative size of the social housing sector has been shrinking in recent years in a majority of OECD countries (OECD, 2020[46]).[62] However, there are substantial cross-country differences in the definition, size, scope, target population and types of social housing providers. For example, social rental housing makes up less than 10% of the total housing stock in most OECD and EU countries, but more than 20% in some cases.

Policies must take account of and reduce the negative effects of social housing tenure on mobility. Social housing tenants tend to be less mobile than private renters, though more mobile than homeowners. This lower mobility may be due to a process of self-selection in which less-mobile individuals are more likely to reside in social housing, or from "lock-in" effects driven by below-market rents (Causa and Pichelmann, 2020[199]). Lock-in effects occur when tenants lack incentives to relocate, even if moving would improve their employment prospects and income stability. This is notably the case under the following conditions: *(i)* a significant rent gap exists between social housing and the private market; and *(ii)* there is a shortage of social housing in other areas. At a broader level, lock-in effects may contribute to the observed correlation between social housing tenure and higher unemployment rates, prolonged unemployment spells and reduced mobility towards distant job markets, though evidence varies by country (Gregoir and Maury, 2018[202]; Battu, Ma and Phimister, 2008[203]; Flatau, Forbes and Hendershott, 2003[204]). Social spending on housing can significantly increase residential mobility among tenants when eligibility rules are designed to avoid lock-in effects (Causa and Pichelmann, 2020[199]). A larger social housing stock would increase the likelihood of relocating households (e.g., for employment reasons or due to life changes) being able to secure new social housing. Beyond financial support or in combination with it, other types of intervention including information provision and search assistance have been shown to promote greater residential mobility for low-income households (Bergman et al., 2024[205]).

Community development, volunteering and cultural policies

A comprehensive approach to community development can help strengthen social infrastructure at the local level. Comprehensive and well-designed local development policies, such as civic engagement initiatives and neighbourhood revitalisation programmes, can help ensure a more level playing field by increasing the stock of social infrastructure and providing equitable access to it for all, including vulnerable populations.[63] This requires proper identification, targeting and monitoring of the infrastructure and characteristics (both physical and non-physical) that matter at the local level (OECD, 2025[49]). On the physical infrastructure side, transport and urban connectivity policies, along with policies aimed at improving access to services, represent particularly important levers and are discussed below. On the non-physical infrastructure side, volunteering and cultural policies are also explored in this section. Community capacity building (CCB) is another effective lever for which there is an established body of evidence and good practices (Noya, Clarence and Craig, 2009[206]). CCB helps promote social cohesion and active community participation and, in doing so, contributes to empower individuals to shape their own

futures. In turn, neighbourhoods with a stronger sense of community can mitigate some of the negative effects of socio-economic disadvantage, such as lower perceptions of safety. Social cohesion – marked by shared norms, trust, and neighbourly support – has been associated with improved emotional development for children in disadvantaged neighbourhoods (OECD, 2025[207]).

Promoting volunteering activities and other forms of associative life also constitutes an effective way to build communities. The 2022 OECD Recommendation on the Social and Solidarity Economy and Social Innovation underlines the valuable contribution that civil society organisations and associations make in helping governments at all level promote opportunities for vulnerable populations and build communities.[64] Children's participation in community activities is influenced by the socio-economic composition of their neighbourhoods, particularly in relation to family structure and socio-economic status (OECD, 2025[49]; Gottschalk and Borhan, 2023[208]). Volunteering initiatives and solidarity programmes encourage interaction and cooperation among residents, which contributes to improve social capital and reduce disadvantages tied to individual backgrounds. For instance, financial constraints constitute an important additional barrier that can prevent children from lower-income families from participating in the extra-curricular activities that are critical for building social capital (Hjalmarsson, 2022[209]).

Several examples of impactful initiatives can be highlighted. In Canada, the *Canada Service Corps* (CSC) has made concerted efforts to sign contribution agreements with organisations that specialise in improving participation of Indigenous and underserved young people in volunteer service placements, with the aim of fostering a more inclusive service.[65] Similarly, France, Italy and the Netherlands have developed programmes to enhance diversity and inclusion among volunteers (Gagliardi, Pérez-Raynaud and Robinson, 2024[210]). Countries can also implement targeted measures to ensure young people with disadvantaged backgrounds have the necessary capacity and resources to engage in organised volunteering opportunities. For example, in the *European Solidarity Corps*, individuals with fewer opportunities may receive increased financial support to cover specific expenses and needs.

Cultural policies can help improve social inclusion and cultivate skills and entrepreneurship, thereby strengthening social infrastructure and expanding opportunities. Cultural and creative sectors can be a powerful lever for local economic development, notably when they are supported by coherent place-based strategies and investments in cultural infrastructure and activities (OECD, 2022[211]; OECD/ICOM, 2019[186]). Cultural participation rates vary between and within countries and between people with different socio-economic characteristics. Overall, they tend to be higher in countries with higher public expenditure on culture, with likely mutually reinforcing effects between the two (OECD, 2022[212]). Within countries, participation is higher among people with greater levels of education and income, raising challenges for social inclusion. Various measures can be taken to address these barriers and fully capitalise on the potential of cultural participation for enhancing opportunities at national and local level. This includes better integrating cultural participation into wider policy agendas around health, societal changes, research and innovation, the environment and education.

Stronger collaboration between cultural and non-cultural institutions and strategies for culture-led regeneration can also bring economic benefits and enhance social cohesion.[66] Local-level cultural policies can target cultural participation initiatives to marginalised communities, for instance through specific projects developed with local community groups (such as museum exhibitions or small festivals), reduced pricing or vouchers for certain groups (e.g., youth or low-income households), or efforts to improve cultural access in remote areas and disadvantaged neighbourhoods. Other options include strengthening connections between actors in the local cultural and creative sectors (CCS) – such as universities, schools, businesses, freelancers, not-for-profit and voluntary organisations – and reallocating unused spaces (e.g., former industrial districts and vacant warehouses) for cultural and creative purposes within integrated urban planning schemes.

Transport, connectivity and accessibility

More accessible and better-connected cities, towns and regional centres also mean greater access to essential services and to economic opportunities for everyone. Transport and connectivity are essential elements that contribute to the economic benefits of agglomeration, notably by helping foster positive spillovers between places (Ahrend et al., 2014[213]; ITF, 2008[214]). They also play a critical role in addressing inequalities of opportunity by reducing barriers to mobility linked to circumstances such as area of birth, gender and social background. Effective transport policies can help break patterns of segregation, improve access to opportunities and prevent the perpetuation of disadvantage. Addressing inequalities of opportunity through transport policies requires a holistic approach that integrates urban planning, housing and social policies. By enhancing accessibility, promoting inclusive urban forms and responding to the specific needs of vulnerable groups, transport systems can contribute to significantly reduce barriers to opportunities that relate to circumstances such as region of birth, gender and socio-economic background (OECD, 2020[188]).

Key recommendations for the improvement of urban accessibility focus on increasing capacity, speed and frequency. A reliable public transport system reduces commute times and expands access to better employment and education opportunities, particularly for low-income individuals (OECD, 2024[187]; Giuliano and Hanson, 2017[215]). For example, Prague and Warsaw have implemented integrated transport networks, making travel more seamless and affordable by encouraging public transport use. In turn, Madrid's *Intermodal Transport System* ensures that the various forms of transport complement each other effectively, thereby enhancing connectivity. In the UK, a review of evidence for the Department for Transport emphasises the impact of reliable and affordable transport access on individuals' ability to reach employment, education and essential services. Among its recommendations, the review underlines the important role that improved public transport can play in mitigating inequalities by enhancing access to opportunities across socio-economic groups (Gates et al., 2019[216]).

Expanding regional transport networks to connect urban centres can help reduce regional disparities. Expanding transport networks lessens reliance on long commutes and fosters more inclusive cities by ensuring that people in less advantaged areas have better access to opportunities (OECD, 2025[217]; 2020[188]). Additionally, doing so can contribute to more liveable densities and facilitate mixed-use urban development, which can be designed to bring opportunities closer to disadvantaged populations. Ensuring the availability of sufficient affordable housing near transit hubs is a crucial condition for connectivity to benefit all citizens independently of socio-economic background. Focus should be put here on transit-oriented affordable housing to avoid displacing disadvantaged groups from accessible urban areas as a result of increased housing prices. Finally, accessibility needs to be planned and fostered with due consideration given to the needs of all populations, including people with disabilities, to connect all people to opportunities (OECD/ITF, 2024[218]). Furthermore, well-designed development patterns and compact urban form can contribute to improve accessibility, increase social cohesion and promote well-being in urban areas. As a result, urban policies constitute a powerful lever to complement other measures for ensuring a more level playing field, including housing, employment and local development policies (Ahlfeldt et al., 2018[219]).

4.3. Conclusion

Ensuring a more level playing field is an important priority in a context marked by profound transformation, as well as an essential condition for promoting social mobility and reducing inequalities. Building on the landmark contribution made by OECD (2018[1]), this report seeks to extend existing OECD analysis and advice on how to ensure a more level playing field. In order to do so, it uses an innovative methodology and draws on the latest OECD research to provide an in-depth assessment of *(i)* the role that inherited circumstances and factors beyond an individual's control, as opposed to personal agency and effort, play in shaping economic outcomes; and *(ii)* the extent to which opportunities are evenly shared, or not, across the population. In this perspective, the report has developed an indicator for measuring inequality of opportunity which is in line with the economic and conceptual literatures (see Chapter 1). As such, it complements existing OECD indicators on the distribution of outcomes and on intergenerational mobility. The broader aim in doing so is to provide a richer "three-dimensional" picture of inequality that takes better account of countries' specificities and can help guide policy more effectively.

The report shows that significant challenges remain in terms of the overall influence of circumstances beyond individuals' control and of access to some of the key drivers of opportunity. The analysis highlights the fact that in OECD countries individuals' outcomes are shaped to a significant degree by circumstances beyond their control (Chapter 2). Cross-country comparison suggests however that there is plenty of scope for peer learning and identifying relevant good practices from the comparison of national experiences on how countries seek to ensure a more level playing field. Similarly, access to the key drivers of economic opportunity, including education, health and employment, are subject to persistent and sometimes large territorial disparities in OECD countries (Chapter 3).

To help put these insights into action, the report proposes a framework as a possible device for informing effective policy responses. This framework follows the objective set out in the conclusion to *A Broken Social Elevator?* of providing policymakers with a "roadmap" for promoting social mobility and equal opportunities (OECD, 2018, p. 332[1]). This framework is organised around two connected goals for policy: *(i)* increasing the economy's capacity to provide opportunities for individuals (*Economic dynamism*); and *(ii)* increasing individuals' capacity to realise the opportunities available to them (*Endowments*). When considering the *endowments* channel, the focus is extended beyond *human capital* and encompasses other types of endowment that are essential for realising opportunities: *economic resources* and *social infrastructure*.

In doing so, the framework underlines the importance of:

- *Strengthening early childhood interventions and sustaining them throughout the educational lifecycle*. Here, the aim consists in ensuring equitable access to human capital development opportunities and supporting the full development of skills within a lifelong learning framework.
- *Providing financial support and targeted programmes to equip individuals with the economic resources they need to realise opportunities and overcome disadvantageous circumstances*. Here, particular emphasis is put on building economic resources and facilitating access to credit, as well as on the development of effective tax-benefit and housing policies to address the effects of disadvantage on opportunities.
- *Enhancing physical and non-physical social infrastructure to promote community cohesion and accessibility of services*. Here, attention is given to measures that can improve access to key physical infrastructure, to fostering norms and networks that can help people connect to economic opportunities and to overcoming geographic barriers to opportunities, notably for underserved regions and disadvantaged neighbourhoods.

The premise is that when individuals can fully develop their human capital, mobilise sufficient economic resources and have access to enabling social infrastructure, they are better positioned to realise opportunities on the labour market, achieve economic mobility and break cycles of poverty and social exclusion. Finally, this chapter reviews a selection of policy options for achieving this objective.

A broad range of policies can help equip individuals with the endowments they need to freely pursue and realise the opportunities available to them. The challenge consists in ensuring that policy responses are adapted to the barriers encountered and comprehensively address the different types of endowments that contribute to strengthen individuals' capacity to realise opportunities. The framework provides a means to map potential barriers to policies. The review discusses a select range of policies that may be effective for addressing these barriers. The policies reviewed include:

- *Early interventions in education and health*
- *School-focused and adult-learning policies*
- *Financial incentives for skills development*
- *Anti-discrimination policies and measures*
- *Tax-benefit policies*
- *Capital and inheritance taxation*
- *Child Development Accounts*
- *Financial Inclusion*
- *Support for entrepreneurship*
- *Place-based policies and access to quality services*
- *Housing policies, allowances and social housing*
- *Community development, volunteering and cultural policies*
- *Transport, connectivity and accessibility*

Although they are not exhaustive, these policies outline a broad range of established options and innovative interventions for enhancing human capital, economic resources and social infrastructure as part of comprehensive responses. By supporting the development of these endowments, addressing sources of disadvantage and expanding access to opportunities regardless of individual circumstances, effective policy responses can help ensure a more level playing field and create more equitable societies where everyone has a fair chance to thrive and reach their full potential.

Building on this report, the OECD is exploring some possible next steps to further deepen the analysis of social mobility and equal opportunity. Continued data innovation and development of the statistical infrastructure are necessary to improve the measurement of social mobility and equal opportunity, as well as to fully leverage the insights that can be gained from comparative analysis both within and across countries. Here, the OECD is notably seeking to extend the country coverage and collect more granular data to develop evidence at a finer territorial scale. Doing so can help guide policy at a local and regional level – including municipalities and small regions – and address key territorial challenges, such as those relating to rural-urban divides or to neighbourhood effects. Efforts are also being made to broaden the analysis by complementing survey data with additional sources, including administrative data and registries. Doing so will provide a more precise picture of individual outcomes, conditions and trajectories that can help improve policymakers' and the public's understanding of what drives social mobility and opportunities and how they differ across population groups. The *OECD Observatory on Social Mobility and Equal Opportunity* has a key role to play in consolidating these efforts. (https://www.oecd.org/en/about/programmes/observatory-on-social-mobility-and-equal-opportunity.html).

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Annex 4.A. Overview of Child Development Account Policies

Annex Table 4.A.1. CDA initiatives in OECD countries

Country	Initiative	Starting year	Source of funding	Eligibility and enrolment	Withdrawals and use of funds	Initial incentives	Matching contributions
Canada	Canada Education Savings Program (CESP)	1998	State Funds (Federal and provincial)	Any Canadian child with a Registered Education Savings Plan (RESP) is eligible, before reaching age 18. An application for the funds is required.	The funds accumulated can be used for post-secondary educational purposes for the beneficiary or transferred to a sibling.	The Canada Learning Bond (CLB) gives an initial incentive of CAD 525 to low-income families to save for the children's post-secondary education, when a RESP is opened. An additional amount of CAD 100 is paid for each year of eligibility, up to age 15, reaching a maximum total of CAD 2 000.	The Canada Education Savings Grant (CESG) supplies a 20% match on the initial CAD 2 500 contributed to the RESP annually. Low-income families can receive an additional 20% match on the first CAD 500 deposited annually. The CESG lifetime limit is CAD 7 200 per beneficiary.
Hungary	FÉTÁM (Youth Start-Of-Life Support)	2006	State Treasury	Every child born of Hungarian nationality receives a start-of-life allowance. The parents need to request the opening of the account.	The account can be opened at any time until the age 18. The funds can be withdrawn when the beneficiary turns 18, but not before the third year after the creation of the account.	The State Treasury deposits HUF 42 500 for every newborn and the amount is increased annually with an interest rate subsidy equal to inflation. Then, a second and third deposit of the same amount is made to the child's account respectively at age 7 and age 14.	Parents and family members can contribute to the savings and a 10% state subsidy is paid on these contributions, up to HUF 12 000 per year. If the child is eligible to regular child protection allowance and lives in Hungary, the state subsidy is set at 20%, up to HUF 24 000 per year.
Israel	Saving for Every Child Program (SECP)	2017	State funds	Every child born with Israeli residency is eligible to the account. This includes Israeli citizens and Palestinian children in East Jerusalem. The accounts are opened automatically. The parents	The beneficiary can decide to withdraw the amount at age 18 with parental approval or at age 21 without any approval. The use of the funds is not restricted to specific uses.	NIS 57 are deposited every month. Parents can decide to double the amount, contributing an additional NIS 57 per month from the Child Allowance Funds. Children born from 2017 onwards receive	None

Country	Initiative	Starting year	Source of funding	Eligibility and enrolment	Withdrawals and use of funds	Initial incentives	Matching contributions
				have six months to select an investment profile, otherwise a default option is selected.		three bonuses: NIS 284 at age 3, NIS 284 at age 12 for girls and 13 for boy, and NIS 568 at age 21.	
Korea	Didim Seed Savings Account	2007	State funds	Until age 17, Korean children residing in child welfare institutions or households receiving welfare benefits, with incomes at or below 50% of the median, are eligible. The family needs to apply.	At age 18, beneficiaries can withdraw the funds for educational, housing, medical and business purposes, but also for personal events, such as marriage. After age 24, the funds can be used without any restriction.	None	Parents and family members contribute to the account and the government matches at a 1:2 rate, up to KRW 100 000 per month.
United Kingdom	Child Trust Fund (CTF)	2005 (Ended in 2011)	State funds	All children born in the United Kingdom are eligible to a long-term tax-free savings account. The account is automatically opened by the state, if the parents did not do so within one year.	At age 16, children can start managing their account, and at age 18, they can start withdrawing funds. The funds' purposes are not restricted.	The first voucher of GBP 250 is deposited at the account opening, then other GBP 250 at age 7. Children from low-income families receive GBP 500 vouchers both times.	Parents and family members can contribute with additional deposits up to GBP 9 000 per year.
United States of America	529 College Savings Plan	Between 1988 and 2018 (Conditions for the 529 College Savings plan were revised in 2018 as part of a rewrite of the tax code [Internal Revenue Code] by Congress)	None	Every family member of an American child can open an account, serving as a framework for the accumulation of assets designated for post-secondary education expenses.	Withdrawals can only be made to pay for higher education expenses in any college or university, also outside of the USA. Up to USD 10 000 per person can be withdrawn annually for educational purposes.	None	None. Any family member can contribute to the account.

Annex Table 4.A.2. CDA initiatives at the sub-national level in the United States

State/City	Initiative	Eligibility and enrolment	Withdrawals and use of funds	Initial incentives	Matching contributions
Connecticut	CT Baby Bonds	The policy is limited to low-income children (born under the HUSKY health insurance coverage [Medicaid]) and the enrolment is automatic.	The funds are restricted to education, housing, business or retirement saving purposes. The funds can be accessed at age 18.	Initial deposit of USD 3 200 to all accounts.	None (no family contributions allowed).
District of Columbia	Child Wealth Building Emergency Act	The policy is limited to children born in households eligible to Medicaid, and with an income inferior to 300% of the Federal Poverty Level. Enrolment is automatic.	The funds are restricted to education, housing, business or retirement saving purposes. The funds can be accessed at age 18.	Initial deposit of USD 500 is provided to all accounts. Additional annual deposits are made, depending on the family's income.	None (no family contributions allowed).
Oakland (California)	Brilliant Baby	The programme is limited to low-income children.	The programme relies on 529 college savings account.	Initial deposit of USD 500 when a 529 college savings account is opened.	None
St. Louis (Missouri)	College Kids	The programme is limited to children starting kindergarten in a public school. Enrolment is automatic.	The funds are restricted to post-secondary education expenses.	Initial deposit of USD 50 to all savings account. Additional incentives are provided if parents take part in financial literacy classes and for every additional year of school attended by the child.	Up to USD 100.

Annex Table 4.A.3. CDA initiatives in non-OECD countries

Country	Initiative	Starting year	Source of funding	Eligibility and enrolment	Withdrawals and use of funds	Initial incentives	Matching contributions
Kazakhstan	National Fund for Children	2024	State funds	All citizens of Kazakhstan born after 2006 are eligible, even if born abroad. The account is opened automatically for each child.	The funds can be withdrawn when the beneficiary turns 18. If no withdrawal is made after a period of 10 years, the funds will be transferred to an individual pension account as voluntary contribution. The main purpose of the funds is for education purposes and housing.	The National Fund will deposit USD 100.52 in each account. The amount is set to increase annually, as the National Fund will allocate 50% of its annual investment income to the accounts.	None
Singapore	Baby Bonus Cash Gift (BBCG)	2001	State funds	The account can be opened for any Singaporean citizen whose parents are lawfully married. The parents need to apply online registering the child's birth.	The funds can be used for child-related expenses until primary school.	The programme provides SGD 11 000 for the first and second children, SGD 3 000 for subsequent children. The funds are disbursed on the Child Savings Account (CSA).	None
	Baby Bonus Child Development	2001	State funds	The account can be opened for any	The funds can be used for child-care, health expenses and	A CDA First Step Grant of SGD 5 000 is	The Government matches 100% of parents'

Country	Initiative	Starting year	Source of funding	Eligibility and enrolment	Withdrawals and use of funds	Initial incentives	Matching contributions
	Account (CDA)			Singaporean citizen whose parents are lawfully married. The parents need to apply online.	education, until the child turns 12. The funds left in the account are automatically transferred to the Post-Secondary Education Account.	automatically deposited in the account of children in all birth orders.	contribution, up to a co-matching cap that goes from SGD 4 000 to SGD 15 000 depending on the child's birth order.
	Post-Secondary Education Account (PSEA)	2007	State funds	The account is automatically opened for all eligible Singaporean citizens. To be eligible, children must have a balance in their CDA or Edusave, or be eligible for other social benefits.	The funds can be used for post-secondary education costs at approved programmes and institutions. At age 31, the account is closed and the remaining funds transferred to the Central Provident Fund account.	Some public contributions are occasionally made according to budget availability, depending on the eligibility of the beneficiary.	Parents can contribute to the account, receiving 100% government matching up to the CDA's matching cap.
	Edusave	1993	State funds	An account is automatically created for every Singaporean citizen.	The use of funds depends on whether the school is funded by the Ministry of Education or not. Generally, the use is restricted to school fees and approved personal development programmes.	The Ministry disburses an annual contribution for children between the ages of 7 and 16. Primary school students receive SGD 230, secondary school students receive SGD 290.	None
Taiwan	Children Future Education and Development Accounts (CFEDAs)	2018	State funds	Children from middle- and low-income families are eligible, including children in welfare institutions. The family has to request the opening of the account from birth, but a review of the application is done according to further criteria.	The purpose of the funds is restricted to higher education, training and business start-up costs. Funds cannot be withdrawn before age 18.	At the opening of the account, the government deposits TWD 10 000.	For each annual deposit made into the account, the government will add a matching sum, capped at TWD 15 000.

Notes

[1] The annual rate of inter-regional migration across the OECD is low. It stands currently at around 3% of the population each year and at less than 1% in some OECD countries (OECD, 2025[5]).

[2] Furthermore, high levels of geographic mobility, particularly among younger populations, may reflect a lack of educational or job opportunities in their regions of origin and an insufficient focus on the local interventions needed to promote them.

[3] In the context of this framework, the distinction between economic dynamics and endowments is made for heuristic and practical purposes. These channels allow for the identification of different types of barriers to equal opportunity, as well as different policy levers for addressing them. From a conceptual perspective, they can be understood as referring to two specific but complementary aspects of a common goal. As such, these two channels may receive different emphasis when designing policy responses depending on the nature of the challenges encountered or on policymakers' priorities. However, to ensure a more level playing field, it is essential that both of these channels and the aspects they cover be taken into account: the capacity of the economy to produce opportunities *and* the capacity of individuals to realise them; ensuring opportunities are as evenly distributed across territories as possible *and* ensuring everyone is in position to realise them.

It should also be noted that there are strong potential synergies between the two channels. Greater economic dynamism can improve access to opportunities, resulting in increased endowments and a stronger capacity by individuals to realise opportunities. Similarly, reducing inequality of opportunity by investing in individuals' endowments can also contribute to greater economic dynamism. While this issue is not covered extensively in this chapter, it has been addressed in other OECD work, as well as in the broader literature on inclusive growth and on the economic returns on social investment. See for example OECD (OECD, 2018[220]; 2018[247]), European Council (2024[221]), Hemerijck et al. (2024[222]) and Llena-Nozal, Martin and Murtin (2019[248])

[4] See, for example, OECD (2024[250]; 2023[42]; 2018[249]; 2018[220]; 2018[247]) and Tsvetkova et al. (2020[251]).

[5] PISA data across 31 OECD countries show that, before adjusting for socio-economic background, urban students outperform rural students in reading by an average of 45 points – equivalent to more than a full year of schooling (OECD, 2025[252]). This partly reflects the higher costs of education provision in sparsely populated areas. For example, OECD calculations find that annual costs per student in sparse rural areas are 20% higher on average (EUR 720) compared to cities for primary schools and 11% (EUR 681) higher for secondary schools. The cost difference rises above 40% for primary schools in some cases, such as Estonia, Finland and Latvia (OECD/EC-JRC, 2021[264]).

[6] Asset poverty is an important measure of economic resources and the extent to which these resources offer protection against income shocks. For example, in 2017, 50% of people in middle-income households in OECD EU countries, and even 20% of those in high-income households were considered to be "financially fragile" – meaning that they had insufficient liquid assets to stay above the poverty line for at least three months in case of a sudden loss of income (OECD, 2023[16]).

[7] Household net wealth, as defined in the *OECD Guidelines for Micro Statistics on Household Wealth* OECD (2013[253]), consists in the value of marketable financial and non-financial assets net of the value of liabilities held by private households residing in the country.

[8] A recent study by the *Netherlands Bureau for Economic Policy Analysis* (CPB) provides an interesting example at national level (Schulenberg et al., 2024[223]). This study confirms that the children of wealthy parents are on average wealthier than their peers. It also identifies the main direct and indirect channels through which financial position is transmitted from parents to children. Among the direct channels, this includes start-up capital at the beginning of adult life, gifts and financial support in purchasing a home. Among the indirect channels, parental wealth is shown to contribute to the development of children's human capital through assistance with education and the development of skills that increase future income and wealth. More broadly, the role played by the intergenerational transmission of wealth in shaping opportunities has also become a salient topic in public debates, as highlighted for example in The Economist (2025[224]).

[9] Some evidence also suggests that children of homeowners tend to achieve better educational outcomes and later perform better in the labour market compared to those whose parents were renters (Haurin, Parcel and Haurin, 2002[225]).

[10] A similar analysis conducted in Balestra, Caisl and Hermida (2025[20]) reveals consistent upward trends in several OECD EU countries.

[11] On the different definitions and approaches to social infrastructure, see OECD (forthcoming[34]) and Renner, Plank and Getzner (2024[244]).

[12] As highlighted throughout the report, “place” plays a crucial role in shaping individuals’ opportunities. The effects of territorial disparities and place-based factors on opportunities are cross-cutting and affect individuals’ capacity to access, develop and use other fundamental types of endowment (i.e., *human capital* and *economic resources*) as well as *social infrastructure*. For the purpose of this chapter, place-based policies receive a separate discussion in relation to social infrastructure in order to emphasise the role these policies play in enhancing social connectedness and sense of community and in connecting individuals to opportunities at the local level. The choice to emphasise this particular channel does not imply that the role of place-based policies is limited to addressing disparities in social infrastructure or that social infrastructure should be given priority when using place-based policies to ensure a more level playing field.

[13] Ongoing efforts are also being made to measure and quantify the impact of the Social and Solidarity Economy on a broad range of economic, social and well-being outcomes (OECD/European Union, 2024[254]; OECD, 2021[255]).

[14] This can be seen for example in differences in levels of trust and citizen participation, in the presence of associations, volunteering and grassroots entities, or in cultural activity and social innovation.

[15] Examples of “core” policies reviewed in Section 4.2 include: education and skills, taxes and benefits, place-based policies, housing policy… Examples of “new” policies include: inheritance taxation, child development accounts, connectivity…

[16] See, for example, European Council (2024[221]), Hemerijck et al. (2024[222]) and Llena-Nozal, Martin and Murtin (2019[248]).

[17] This point is often raised by conservative thinkers in the discussion of equal opportunities and economic fairness. See, for example, Azerrad (2025[226]).

[18] The value of mentoring programmes is also underlined in the 2021 OECD Recommendation on Creating Better Opportunities for Young People.

[19] For example, texting-based initiatives designed to encourage at-home reading and improve school attendance have been applied and assessed in a number of countries, including France, the United Kingdom and the United States. Evidence from these experiments suggests that they contributed to increase the amount of time parents spent reading with their children, thereby promoting early literacy and school readiness (Barone et al., 2018[246]; Damgaard and Nielsen, 2018[227]; Miller et al., 2016[228]).

[20] See OECD (2025[252]) for examples of effective policies targeted at rural areas.

[21] Greater competition among schools can lead to increased sorting of students by ability and socio-economic status. Furthermore, school segregation can deprive children of opportunities to learn, play and communicate with other children from different social, cultural and ethnic backgrounds, which may reduce social cohesion.

[22] School choice design should also take account of geographic differences, as policies that works well in urban contexts may not be effective in rural areas.

[23] Grade repetition tends to disproportionately affect students from disadvantaged backgrounds, who are nearly twice as likely to repeat a grade compared to their peers even after accounting for differences in academic performance. Furthermore, it may have a negative impact on motivation, can delay the identification of struggling students and does not necessarily lead to improved learning outcomes (OECD, 2013[256]; 2013[257]).

[24] The Canadian province of New Brunswick has recently developed an innovative career education framework in partnership with the OECD. This framework enables high-school students to participate in a four-year career development and higher education planning programme. Evaluation based on a randomised control trial offers strong evidence of long-term benefits from career guidance intervention (OECD, 2024[263]).

[25] Here, specific attention should be given to the situation and needs of populations that are particularly vulnerable on the labour market, such as young adults not in employment, education or training (NEET), women who have left the labour market due to care responsibilities, single mothers and immigrant populations.

[26] See for example, the European Union's European Agenda for Adult Learning 2021-2030*:* https://eur-lex.europa.eu/legal-content/EN/TXT/PDF/?uri=CELEX:32021G1214(01)*.*

[27] This so-called "Matthew effect" is a well-recognised feature in adult training and learning and an important challenge to overcome in order to promote lifelong learning opportunities for all (Martin, 2018[229]).

[28] The evaluation of France's *Compte Personnel de Formation* (CPF) provides a topical example (Perez and Vourc'h, 2020[258]). The primary objectives of the CPF consist in: *(i)* encouraging and implementing personal autonomy in selecting and undertaking training; *(ii)* improving skill levels by guiding individuals towards qualifying training programmes; and *(iii)* reducing inequalities in access to training. The evaluation highlighted several issues that disproportionately affect disadvantaged workers. These include a lack of awareness about the scheme's existence, leaving many workers unaware of the opportunities available to

them, and insufficient information to make informed training choices, particularly regarding labour market demands, prospects in specific trades and the quality of training providers. A final limitation relates to individuals' limited capacity to accurately assess their suitability for certain training programmes or career paths. These barriers suggest that providing financial resources alone will not be sufficient to address inequalities in opportunities for training and skills development.

[29] Here, OECD (2020[111]) proposes a 10-point checklist for public initiatives aimed at fostering diversity and reducing structural barriers which can serve as a starting-point or template.

[30] When assessing the impact of tax and transfer systems, fiscal decentralisation and the role of intergovernmental transfers should also be taken into account. While the analysis in this section focuses on the national level, sub-national governments have considerable responsibility for providing health and education services, as well as infrastructure. For example, the latest OECD data available show that, in 2023, they managed 55% of public investment on average and two-thirds of climate-related public investment (OECD, 2025[230]).

[31] "Effectiveness" is understood here in terms of the observed reduction in inequality of opportunity associated with each type of measure. The analysis conducted in this section does not allow for the identification of causal relations.

[32] An analysis of cross-country data for 2019 reveals only a weak relationship between net total social expenditure in % GDP, as available in the *OECD Social Expenditure Database*, and the overall mitigating effect of the tax-benefit system on inequality of opportunity (correlation coefficient of 0.17).

[33] Similarly, in a context of high unemployment, disadvantaged jobseekers who do qualify for unemployment benefits may be more likely to exhaust their entitlements without finding work.

[34] See the OECD Child Well-Being Data Portal: https://www.oecd.org/en/data/datasets/oecd-child-well-being-data-portal.html.

[35] For example, a recent study on the persistence of poverty across generations finds that taxes and transfers in Australia, Denmark and the UK are more effective in reducing intergenerational poverty than the tax-and-transfer system in the United States (Parolin et al., 2025[57]).

[36] Other existing studies also support this conclusion, see for example Filauro, Palmisano and Peragine (2023[231]). Here again, it should be noted that intergovernmental transfers can add to the effect of people-centred policies by helping address regional disparities and ensuring appropriate funding for infrastructure and services in all regions.

[37] Across the 27 countries covered in the *Opportunities Module* of the 2022 round of the *OECD Risks that Matter Survey*, over 60% of respondents believe that coming from a wealthy family shapes an individual's chances to get ahead in life (OECD, 2023[142]). On the impact and consequences of inequality of opportunity on public perceptions and attitudes, see also Chapter 1.

[38] *Inter vivos* gifts (i.e., lifetime gifts) are particularly relevant for opportunity and economic fairness as they can be targeted to support individual at critical points and milestones during their life-cycle. See the analysis on wealth transfers in Section 4.1.2 and in particular Figure 4.3.

[39] For example, inheritance tax in the UK is forecast to generate GBP 8.3 billion in revenue in 2024-25 – equivalent to 0.7% of all tax receipts and 0.3% of national income. This reflects an upward trend that is

also driven by recent policy changes (i.e., limiting inheritance tax relief on business property) and is expected to continue, with receipts estimated to reach GBP 13.9 billion by 2029-30 according to the Office for Budget Responsibility's (OBR) October 2024 Economic and Fiscal Outlook (https://obr.uk/forecasts-in-depth/tax-by-tax-spend-by-spend/inheritance-tax/). The OBR estimates that these changes could contribute to raise GBP 500 million annually from 2027-28, reflecting both policy adjustments and broader economic factors, despite the uncertainty associated with potential behavioural responses from tax-payers. This trend may also be meaningful in light of empirical evidence suggesting that the limited size of the revenue generated leaves inheritance taxes vulnerable to repeal. In this respect, as inheritance taxes play a larger role in the national revenue system over time, they may also tend to become more robust and legitimate (Genschel, Limberg and Seelkopf, 2023[232]).

[40] Moretti and Wilson (2023[233]) finds significant mobility responses to differences in estate taxation across US states among billionaires, especially as they grow older. Similarly in the case of Spain, Agrawal, Foremny and Martínez-Toledano (2025[234]) finds that following the decentralisation of wealth taxation in 2011, which saw all regions except Madrid levy positive tax rates, the region of Madrid experienced an influx of wealthy individuals. In this case, tax competition and increased wealth mobility led to a significant overall loss in total regional tax revenue.

[41] Knowledge gaps tend to be particularly large in the case of inheritance and estate taxes, suggesting there may be scope to increase support through the provision of information. For example, results from large-scale surveys studying the public's understanding of inheritance taxation show that US respondents overestimate the share of households who pay the estate tax by several orders of magnitude (an estimated 36% on average against an actual share of less than 0.1%) (Stantcheva, 2021[146]).

[42] Stantcheva (2021[146]) finds however that, in the case of the United States, respondents for whom perception gaps are largest also tend to be those who are least open to information. This suggests that other psychological or socio-political processes may be at play, such as information avoidance or polarisation of views. If so, there may be limits to the effectiveness of information provision in shifting perceptions and building support for inheritance taxation. Broader strategies and a greater focus on the conditions for public acceptability may therefore be needed to successfully implement inheritance taxation reform (OECD, 2025[76]; 2021[75]; Goss, 2024[141]).

[43] Atkinson's proposal consists in a universal endowment awarded to all young adults upon reaching a certain age, in the form of a lump-sum payment. The endowment aims to lessen the wealth constraints imposed by family origin and ensure a fair start in adult life. In line with this aim, the capital endowment would need to be substantial enough to serve as a "seed" capital and enable significant life investments such as education and training, starting a business, or other essential expenses which many recipients would not be in position to undertake without the endowment.

[44] The United States' 529 college savings plan is included as an example in Annex Table 4.A.1, though it differs from typical CDA programmes in several respects. Most notably, the 529 plan does not include any state contribution of any kind, although private contributions to these plans are given preferential tax treatment. All 50 US states and the District of Columbia sponsor at least one type of 529 plan dedicated to education-related expenses. Due to its recency and the timeline for the report, the details of the new federal CDA programme introduced in July 2025 through the *One Big Beautiful Bill Act* (OBBB) were not included among the examples in Annex Table 4.A.1. This new CDA programme is however mentioned in Box 4.4.

[45] Korea constitutes an exception, having implemented targeted CDA programmes that cover low-income households and children in child welfare institutions.

[46] These initial deposits may be targeted specifically to low-income households, as with the *Canada Learning Bond* (CLB) for example.

[47] For example, in the case of the UK CTF, low-income families enrolled under the programme saved an extra GBP 517 compared to non-CTF-eligible children with a similar background. 88% of participating parents reported however that the CTF did not motivate them to save more for their other non-eligible children (McKay, Tian and Lymer, 2024[152]). In the case of Michigan's MI-SEED pilot programme, the financial benefits were more noticeable, with participants accumulating USD 1 851 on average in 529 accounts for post-secondary education, compared to USD 323 for a control group (Huang et al., 2021[149]).

[48] Similar results were also found in the case of pilot CDA programmes implemented in the Chinese province of Shanxi (Deng, 2019[156]).

[49] See Annex 4.A for further detail. All CDA initiatives in OECD countries impose some form of restriction on access to the accumulated funds. Regarding age restrictions, all programmes set a minimum age for withdrawal at 18 years old, with Israel's SECP offering an added financial incentive to postpone withdrawal until 21 years old. In relation to the use of funds, CDA savings can typically be withdrawn to support post-secondary education, but also in some cases to cover medical expenses or finance business endeavours.

[50] For example, at the start of the CTF programme in the United Kingdom, financial education was included as part of the secondary school curriculum to help strengthen children's financial literacy and awareness of the asset-building process (McKay, Tian and Lymer, 2024[152]). Effective default options for investment plans, notably gradual age-based strategies, can also help ensure CDAs deliver effective returns while limiting financial risk (Clancy, Sherraden and Beverly, 2019[235]).

[51] See also OECD (2023, p. 85[16]) for a review of the various government programmes that can help build financial literacy and resilience, as well as McKnight and Rucci (2020[237]). Critics of this approach have argued that it contributes to shift part of the burden of risk from the state to individuals and their families, see for example Hacker (2008[236]).

[52] To maximise the potential for reducing inequality of opportunity, prize-linked schemes, matched savings programmes and index-linked bonds are generally more effective than tax-based incentives. Low-income households have lower participation rates in tax-incentivised programmes, which can also lead to a reallocation of assets rather than an increase in new savings (OECD, 2018[1]; Fadejeva and Tkacevs, 2022[245]; Breunig and Sobeck, 2020[238]).

[53] Inclusive entrepreneurship policies are explicitly aimed at ensuring a more level playing field in business creation. These policies, along with the schemes and measures used to implement them, focus on supporting groups that are underrepresented in entrepreneurship – such as women, migrants, youth, seniors, the unemployed and people with disabilities. By doing so, they contribute to ensure that everyone has an equal chance to start and run a business, regardless of their personal characteristics or background.

[54] Programmes such as the UK's *Start Up Loans* initiative provide access to credit and enable self-employment opportunities regardless of background or inherited circumstances. Similarly, broader EU initiatives aim to foster entrepreneurship, such as those under the *European Social Fund* (ESF), which

supports training and skills development to improve self-employment prospects, and *Erasmus for Young Entrepreneurs*, which offers aspiring entrepreneurs the opportunity to learn from experienced business owners. Moreover, the *Next Generation EU Economic Recovery Package* includes dedicated start-up funds for young entrepreneurs as part of broader post-pandemic recovery efforts. Comprehensive overviews of these and other initiatives have been compiled by the *EU Youth Wiki*, highlighting the wide range of support available to young and aspiring business owners: https://national-policies.eacea.ec.europa.eu/youthwiki/policy-fields/3-employment-entrepreneurship

[55] The OECD and the European Commission organised a series of High-Level Expert Workshops in 2023 as part of a project on "*Place-Based Policies for the Future*". The outcomes of these workshops can be found on the following link: https://www.oecd.org/en/about/projects/place-based-policies-for-the-future.html

[56] For detailed analysis of the impact that regional disparities in access to quality services have on opportunities, see Chapter 3 and Box 2.1 in Chapter 2.

[57] In 2023, sub-national governments managed 38% of total public expenditures and 55% of total public investment in OECD countries (OECD, 2025[230]).

[58] For example, rural areas tend to face longer travel times and higher costs of provision, while urban areas may have to contend with issues of congestion and quality of services.

[59] The European Commission provides similar findings for EU countries. Before the COVID-19 pandemic, the estimated investment gap in social and affordable housing sector in Europe was estimated at EUR 57 billion annually. This gap would require the equivalent of a 25% increase in investment to be filled (Fransen, del Bufalo and Reviglio, 2018[239]).

[60] See the OECD Affordable Housing Database for detailed data on a wide range of housing policy tools, including those discussed here (https://www.oecd.org/en/data/datasets/oecd-affordable-housing-database.html).

[61] For instance, the concentration of social housing in specific neighbourhoods and higher levels of ethnic segregation are strongly correlated in most Nordic countries (Andersen et al., 2016[241]). In France, social housing – which increasingly accommodates blue-collar workers and non-European immigrants – remains more segregated than private rental or owner-occupied housing.

[62] Reduced public investment is also observed in countries – such as Austria, Denmark and the Netherlands – where social housing has traditionally formed a key "third sector" in the housing market.

[63] Notable examples include Copenhagen's policies on social bonds for the revitalisation of declining neighbourhoods, the UK's *Big Local* programme, which funds local projects to improve community areas, and the *AmeriCorps* programme in the United States, which promotes community service and offers educational awards for volunteering (OECD, 2024[261]; 2024[262]; Gagliardi, Pérez-Raynaud and Robinson, 2024[210]).

[64] See https://www.oecd.org/en/topics/sub-issues/social-economy-and-social-innovation.html.

[65] During the CSC's 2023 programme intake, organisations meeting specific diversity-related criteria were prioritised for funding. These criteria included having leadership or governance bodies representative of the youth populations they serve or of youth-led organisations (Employment and Social Development

Canada, 2024[242]). Moreover, the CSC mandates that at least 50% of total youth participants in all projects identify as Indigenous youth, underserved youth or both.

[66] "Place-making" aims to make cities and regions more attractive for work and living by encouraging inward investment, labour flows, higher productivity and increased tourism. Culture-led regeneration and development policies focus on fostering economic and social growth by promoting cultural and creative activities. However, these approaches also come with various risks of gentrification, impoverishment and inequality in large cities, as shown for example in Tozzi (2023[243]) in the case of Milan.

To Have and Have Not – How to Bridge the Gap in Opportunities

Over several decades, the OECD has documented the trends, drivers and consequences of inequality in outcomes, as well as the policies for addressing them. In the landmark 2018 report *A Broken Social Elevator?*, it examined effective ways to promote social mobility. However, people do not only care about outcomes and mobility. They also care about the process through which outcomes are achieved and the extent to which everyone is given a fair chance to succeed in life.

To Have and Have Not makes another important contribution to the research and policy agenda by looking at opportunities and how they are distributed across societies. To do so, it applies an innovative methodology to measure the extent to which outcomes are shaped by inherited factors and other circumstances beyond an individual's control. The report explores how the role and influence of these circumstances differ across countries and population groups. It also provides a detailed focus on the relations between opportunities and "place" through an analysis of geographic disparities in access to education, employment and essential services. Finally, it identifies various policy options and interventions that can help ensure a more level playing field for all.

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